



Social Indicators Study of Alaskan Coastal Villages

IV. Postspill Key Informant Summaries

Schedule C Communities, Part 1 (Cordova, Tatitlek, Valdez)

Social and Economic Studies



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Alaska OCS Environmental Studies Program

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IV. Postspill Key Informant Summaries. Schedule C Communities, Part 1.

Human Relations Area Files
New Haven, Connecticut

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Acronyms

AANHHS	Alaska Area Native Health Service
ABE	Adult Basic Education
ACES	Alaska Community Engineering Services
ADCRA	Alaska Department of Community and Regional Affairs
ADF&G	Alaska Department of Fish and Game
ADH&SS	Alaska Department of Health and Social Services
ADOC	Alaska Department of Corrections
ADOT&PF	Alaska Department of Transportation and Public Facilities
ADOL	Alaska Department of Labor
AEWC	Alaska Eskimo Whaling Commission
AFN	Alaska Federation of Natives
AMSA's	Areas Meriting Special Attention
ANA	Administration for Native Americans
ANCSA	Alaska Native Claim Settlement Act
ANILCA	Alaska National Interest Lands Conservation Act
ANWR	Alaska National Wildlife Refuge
AOSIS	Alaska Outer Continental Shelf Social Indicators Study
ASHA	Alaska State Housing Authority
ASRC	Arctic Slope Regional Corporation
AVCP	Association of Village Council Presidents
AWIC	Arctic Women in Crisis
BBAHC	Bristol Bay Area Health Corporation
BBHA	Bristol Bay Housing Authority
BBNA	Bristol Bay Native Association
BBNC	Bristol Bay Native Corporation
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BSNA	Bering Straits Native Association
BSNC	Bering Straits Native Corporation
BSSD	Bering Strait School District
BVNC	Bethel Village Native Corporation
ca.	circa
CETA	Comprehensive Employment and Training Act
CHA	Community Health Aide
CIP	Capital Improvements Program
CIRT	Crisis Intervention Response Team
CMC	Coastal Management Corporation
CPI	Consumer Price Index

Acronyms (continued)

CRSA	Coastal Resource Service Area
DOL	U.S. Department of Labor
DWI	driving while intoxicated
EDA	Economic Development Administration
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
F.I.R.E.	Finance, Insurance, and Real Estate
FAA	Federal Aviation Administration
FCZ	Fisheries Conservation Zone
FTE	Full-time equivalent
FWS	U.S. Fish and Wildlife Service
FY	Fiscal Year
HESS	Health, Education, and Social Services (Task Force)
HS	High School
HUD	Housing and Urban Development (U.S.)
ICAS	Inupiat Community of the Arctic Slope
ICWA	Indian Child Welfare Act
IHS	Indian Health Service
IRA	<i>Indian Reorganization Act</i>
ISER	Institute of Social and Economic Research
KANA	Kodiak Area Native Association
KCA	Kodiak Council on Alcoholism
KCC	Kuskokwim Community College
KDC	Kikiktagruk Development Corporation
KI	Key Informant
KIC	Kikiktagruk Inupiat Corporation
KTC	Kodiak Tribal Council
KVSN	Kodiak Village Services Network
MMS	Minerals Management Service
NAB	Northwest Arctic Borough
NANA	Northwest Alaska Native Association Corporation
NOL's	Net Operating Losses
NSB	North Slope Borough
NSHC	Norton Sound Health Corporation
NWASD	Northwest Arctic School District
NWTC	Northwest Tribal Council
OCS	Outer Continental Shelf
OED	Office of Economic Development (U.S.)
OEDP	Overall Economic Development Plan
P.L.	Public Law
PHS	Public Health Service

Acronyms (continued)

QI	Questionnaire Informant
REAA	Rural Education Attendance Area
RELI	Resident Employment and Living Improvements (program)
S.A.F.E.	Safe and Fear-Free Environment
SIC	Standard Industrial Classification
SOS	State-Operated School
SRC	Social Rehabilitation Center
SWAMC	Southwest Alaska Municipal Conference
U.S.	United States
U.S.S.R.	Union of Soviet Socialist Republics
UIC	<i>Unemployment Insurance Compensation</i>
UIC	Ukpeagvik Inupiat Corporation
USCG	U.S. Coast Guard
USDOI	United States Department of the Interior
VECO	VECO, Inc.
VPSO	Village Public Safety Officer
XCED	Cross-Cultural Education Development (program)
YKHC	Yukon-Kuskokwim Health Corporation

Glossary

Affines	Kin who are related through marriage; "in-laws" without a blood-relationship.
Avunculate	A privileged relationship with an uncle (often including residence in an uncle's home).
Bilateral	A non-lineal kinship system in which the families of the mother and father are not differentiated, nor are the children of brothers and sisters.
Cohort	In social science terminology, a group of persons who comprise a distinct sample defined by properties such as age.
Collaterals	Siblings of core members of a kinship group (such as a nuclear family) and children of one's own siblings.
Consanguines	Kin who are related by blood (in contrast to affines).
Deme	An intermarrying population that forms a sociopolitical unit.
Dendrogram	A "tree diagram" that depicts relative degrees of relatedness and distance.
Emic	Refers to facts that are defined in terms of their cultural classifications.
Endogamy	Intermarriage within one's own bounded social group.
Etic	Refers to objective facts whose reality is independent of cultural classifications.
Exogamy	Marriage outside one's own bounded social group.

Glossary (continued)

Glottochronology	A technique for dating divergence of languages or dialects, based on rates of retention of common words.
Kashim	An Eskimo mens' house, usually used also for ceremonial purposes; this term is associated with Yupik societies (the Iñupiaq variant is usually rendered as qargi).
Kindred	A group of persons related to a common ego in a <u>cognatic</u> descent system; such persons are not all related to one another inasmuch as they are defined in terms of their relationship to a single person (i.e., such a system is ego-focused as opposed to ancestor-focused systems).
Matrilineal	A unilineal descent (kinship) system that defines relatedness and group membership by common descent through females.
Matrilocal	Post-marriage residence with or close to a woman's mother's kin.
Neolocal	Unrestricted post-marriage residence (i.e., spouses may reside where they choose).
Otitis media	Inflammation of the middle ear.
Patriclan	A corporate descent group, usually named, often consisting of several lineages and jointly <i>controlling property and/or privileges, defined</i> by common descent through males.
Patrideme	An intermarrying population that forms a sociopolitical unit organized around patrilineal kin groups.
Patrilineal	A unilineal descent (kinship) system that defines relatedness and group membership by common descent through males.

Glossary (continued)

Patrilocal	Postmarriage residence with or close to a man's father's kin.
Sodality	An association or society (note: <u>society</u> in lay or generic terms, not <u>society</u> in social science terms).
Syncretic	Refers to the merging or fusion of differing concepts, principles, or philosophies.
Virilocal	Postmarriage residence with or close to husband's kin.

Postspill Key Informant Summaries

Introduction

Steven McNabb

INTRODUCTION

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¹This table of contents (TOC) reflects only the Key Informant (KI) summaries for Schedule C communities in Part 1. There is a separate TOC as a guide to the KI summaries of the other Schedule C communities in Part 2 (Kenai, Seldovia, Tyonek, Kodiak City, Karluk, Old Harbor, and Chignik Bay).

Introduction

I. OVERVIEW

I.A. General

Two years before the infamous foundering of the Exxon Valdez on Bligh Reef, the Minerals Management Service contracted a large social indicators project among 30 coastal Alaskan villages from Kodiak Island in the south to Kaktovik on the arctic coast. The research team created a sampling design for this large study with the sole intention of providing valid analyses of the consequences of exogenous factors, including oil-related factors, on village economies, societies, and households. *The design is complex, embracing several data sets drawn from several samples interviewed over four research waves. The design is simplified here for quick comprehension.*¹

In 1988, while conducting the second year of field research pursuant to the original research design, we made our first research visits below the Alaska Peninsula, conducting interviews in the villages of Kodiak City and Old Harbor. We returned to those villages again in the winter of 1989, completing our second wave of research there only days before the North Slope crude oil began spewing from the ruptured hull of the Exxon Valdez. The oil slick and blobs of oil began washing up on Kodiak Island beaches only 3 weeks after the foundering. None of the Prince William Sound, Cook Inlet, and Alaska Peninsula villages directly affected by the oil, other than Kodiak City and Old Harbor, were included in our 30-village sample.

On an emergency basis, the Minerals Management Service moved as fast as possible to secure funds to study the affected villages. As a consequence, our research assignments increased in size and became more complex. Our research design was modified and our inquiry expanded to determine the consequences of the spill to the residents of the affected villages.^(Endnote 1)

¹The research designs for the original Social Indicators project begun in 1987 and for the Exxon Valdez spill area project begun in 1989 are explicated fully in Social Indicators Project II. Research Methodology: Design, Sampling, Reliability, and Validity (1993), and Social Indicators Project V. Research Methodology: Design, Sampling, Reliability, and Validity for Villages Affected by the Exxon Valdez Oil Spill (1993).

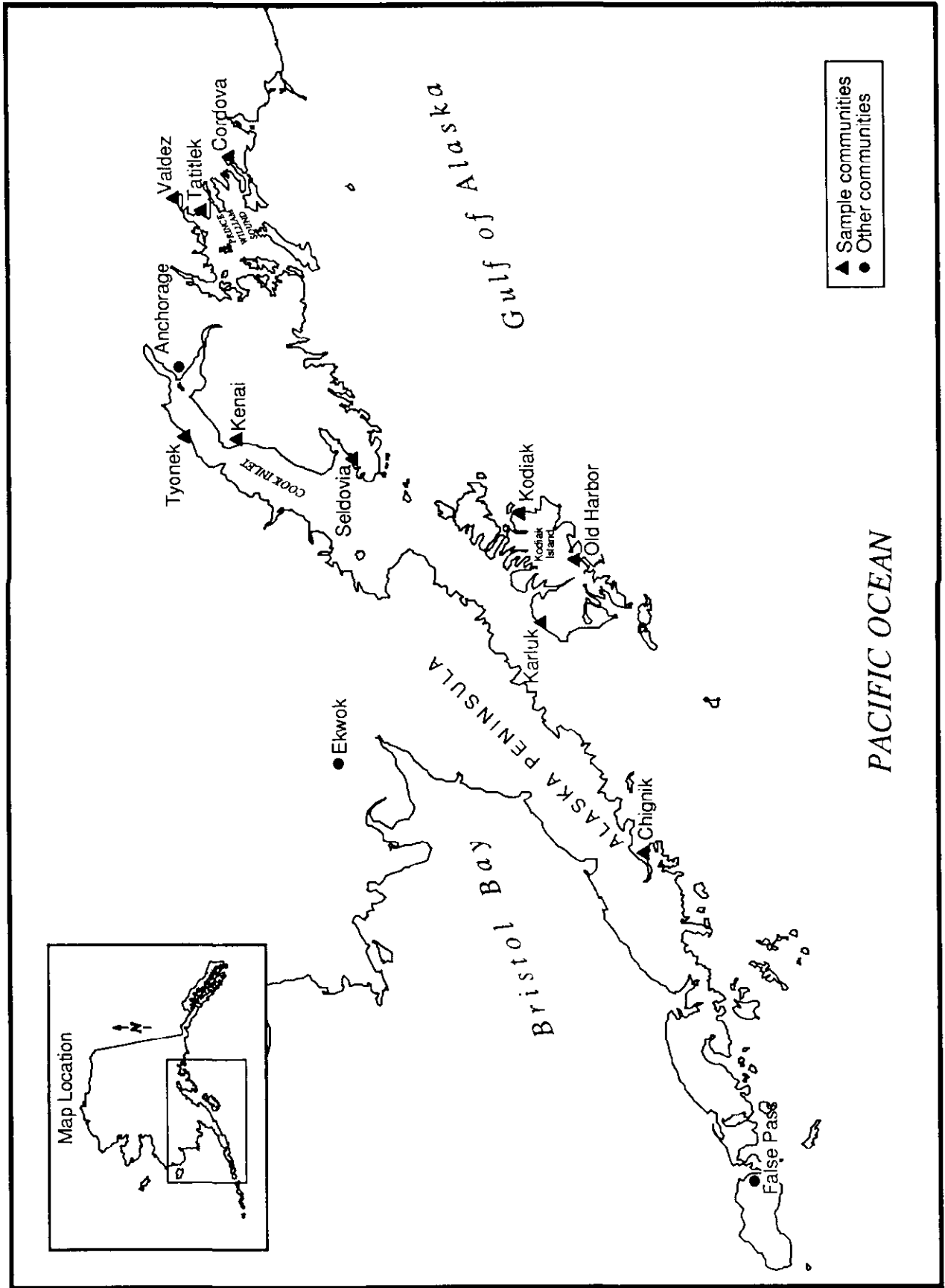
Although we had been to the Kodiak Island villages in February, we returned in the summer of 1989. We also studied eight Cook Inlet, Prince William Sound, and Alaska Peninsula villages and--as control groups--two small villages that had not been directly affected by the spill, one in the Aleutians and one up the Nushagak River in Bristol Bay. The data we had collected in Kodiak City and Old Harbor prior to the spill provide an important baseline for the postspill analysis of Kodiak Island communities. We were not so fortunate for other villages in the spill area.

In the initial phase of the Social Indicators Study, we established Schedule A and B datasets. Schedule A consists of sample communities in the North Slope, NANA, Calista, and Aleutian-Pribilof Islands regions. Schedule B consists of sample communities in the Bering Straits, Bristol Bay, and Kodiak regions (see Human Relations Area Files 1992a and b). Comprising Schedule C are communities in the Kodiak, Prince William Sound, and Cook Inlet regions that are part of the oil-spill component of the study. The Schedule C reports (Part 1 and 2) present ethnographic summaries of selected communities in the spill zone. Map 1 depicts the Schedule C study area.

This introduction describes the political-economic contexts of the State and the regions in which Schedule C communities are located. The political-economic contexts are instrumental in allowing us to account for several key social and economic relations that shape Schedule C communities. The KI summaries that follow the introduction are descriptive ethnographies of spill-affected villages that provide substantial detail beyond the information provided here. We do, however, provide some results from the first wave of research in Schedule C communities subsequent to the spill in 1989 that will facilitate understanding of the village ethnographies that follow.

The sample communities of Schedule C are Valdez, Cordova, Tatitlek, Seldovia, Kodiak, Old Harbor, Chignik, Sand Point, Unalaska, Saint Paul, False Pass, Nikolski, Atka, Dillingham, Togiak, Manokotak, Naknek, Kenai, Tyonek, and Ekwok. Karluk, on Kodiak Island, was added during 1990. Tatitlek was studied only once in 1989. The communities identified above that are in the Bristol Bay and Aleutian-Pribilof Islands regions north of the Alaska Peninsula were sampled mainly as "controls" for the oil-

Map 1
SCHEDULE C STUDY REGION



affected villages. They are separated from the villages most intensely affected by the physical oil spill. The villages north of the Alaska Peninsula could be viewed as having not received the "intervention" or "treatment" (i.e., physical oil spill) in experimental terms, although such a view would disregard social and economic consequences to persons residing in areas adjacent to the spill. Two new control communities (Ekwok and False Pass) were added in 1989; the other control communities (Sand Point, Unalaska, St. Paul, Nikolski, Atka, Dillingham, Togiak, Manokotak, and Naknek) were drawn from existing Schedule A and B samples. In our subsequent waves of research, the control communities were eliminated for logistical, cost, and scientific reasons.² Schedule C communities can be divided into groups on the basis of geographic proximity and administrative boundaries (see Map 1). Prince William Sound communities are identified as Cordova, Valdez, and Tatitlek. Cook Inlet communities are Tyonek, Seldovia, and Kenai. Kodiak communities are Kodiak, Old Harbor, Karluk, and Chignik.³

I.B. Alaska Social Indicators Research Design

Each village is studied at several points in time to determine whether changes have occurred among the items that we measure between research waves. To select villages for our samples, we classified all villages in the spill area by several "theoretical contrasts." This is called "stratifying" a universe that we intend to sample. We wanted to make sure that each of the village types we considered to be theoretically important would be included in our sample. For example, commercial fishing is extremely important in some villages in the spill area, but not all.

² The study team quickly discovered that the social and economic effects of the spill extended far beyond the area of physical contamination. The ANCSA regional corporation that secured the greatest volume of oil-spill-cleanup employment, for example, was NANA in northwest Alaska. Other evidence (such as the shipment of subsistence salmon to affected communities from Togiak and possible commercial-fishing impacts as far north as Unalakleet) supports our concern that the definition of "control" communities is quite complex. We abandoned the concept as a feature of Schedule C research design, although we continue to examine the characteristics of communities distant from the spill from time to time.

³ Chignik is not aligned with Kodiak Island in an institutional sense, but it is adjacent to this area.

To account for these differences in villages, one of the primary features we used to classify villages before selecting our sample was whether they gained more than 60 percent or whether they gained less than 40 percent (there was nothing in between) of their total incomes from commercial fishing-related businesses. We refer to the different types of villages as "theoretical contrasts" between Commercial Fishing and Noncommercial Fishing villages. We also classified as Hubs villages that (1) had well-developed transportation services and complex and well-developed infrastructures and (2) provided many services; and we contrasted these Hubs with Periphery villages that had (1) poorly developed transportation services, (2) modest infrastructures, and (3) few services. We classified villages along other dimensions, but those we have mentioned should make the point. Every village in the spill area was classified along each of the above dimensions we created as "theoretical contrasts." When we selected villages for our sample, we assured that each half of each theoretical contrast (for instance, Commercial Fishing/Noncommercial Fishing and Hub/Periphery) was represented by several villages. The contrasts allowed us to determine whether the oil spill affected similar types of villages in similar ways, and possibly why those effects would be similar (or different).

The research design also calls for a "Pretest" sample comprising respondents interviewed once and only once, and a "Posttest" sample--conducted at a later date--comprising respondents who have not been interviewed previously and who are interviewed once and only once.

To accomplish this, in the summer of 1989--after selecting the sample villages--we entered each study village, mapped all of the housing structures in the village, and assigned a number to each house. Next, we consulted a table of random numbers and selected a sample from all of the occupied housing structures; and then we interviewed an adult in each house. During that first research wave after the spill, we carefully noted each household that was selected for the sample by location and number. We did so because the postspill sample of 1989 is actually a "Pretest Sample" in our research design. To call a sample a "Pretest" (even though it is postspill), anticipates that we will draw a "Posttest Sample" at a later date. In our research design, we took care to make

sure that persons drawn for the "Pretest" sample were not selected again and interviewed in the "Posttest" sample.

We assured that pretest respondents did not appear in the posttest samples by "not replacing" the pretest households into the population from which we drew our posttest sample. This was easily accomplished by checking our original maps and not selecting any house that had been selected for the pretest sample. Additionally, if a pretest respondent had relocated and that person's household was then selected for the posttest sample, we simply did not reinterview that person or anyone else in the house. This procedure is called "sampling without replacement": once interviewed, a person is not returned to the sample to be selected again. We followed this procedure so that we could avert the problem of "reactivity," meaning that a person's response may be conditioned by a previous response to the same question--hence introducing subjective bias into the results.

It is important to note that although we have just claimed that we selected a "Posttest" sample from a population that excluded all "Pretest" respondents, we also took care to interview some respondents as many as four times, others three, and some two. Persons selected for reinterview comprise "Panels." We created our panels through the following process: We had the names and house locations of each respondent in each pretest sample, so when we returned to a village to select and interview a posttest sample, we both selected the posttest sample and drew at random a small sample of respondents from the pretest sample that we had interviewed the previous year. The small samples, or panels, comprise about 30 percent of the original pretest respondents. We asked these 30 percent the identical questions we had asked them the previous year. And if we returned a third time, we asked these identical respondents the identical questions for a third time. In this fashion we could determine whether changes had occurred to a subsample of respondents from our original pretest sample. But we couldn't know whether any differences we discovered represented changes that had occurred, unless we could compare responses of panel members with responses of persons interviewed in the posttest samples. The comparisons of panels with pretest and posttest samples, then, gave us a means to test threats to validity posed by reactivity,

regression, and other factors. If those threats do not materialize, we are able to account for change.

Our research design, which employs an objective instrument--a forced-choice questionnaire--also employs a more subjective instrument--which is a rather open-ended protocol, or list of topics about which informants respond. Respondents to questionnaires must choose among a set of predetermined choices for each question, but the protocol respondent can provide expansive answers to questions. It is incumbent upon the researcher to classify the responses of the persons they interview. It is evident that the protocol is more subjective than the questionnaire, but it is also deeper and allows for greater understanding than the questionnaire. The objective strength of a *questionnaire can be lessened through the trivializing of topics*. In our design, we compensate for the weaknesses of the questionnaire with the strengths of the protocol, and vice versa.

II. ORGANIZATION OF THE KI SUMMARIES

The Schedule C KI summaries are organized as two documents. One is devoted to Prince William Sound and the other to Cook Inlet and the Kodiak Island area. These summaries focus on communities (in contrast to Schedule A and B summaries for the first phase of the MMS Social Indicators study, which focused on samples of communities within regions). In part, this organization of reports is merely convenient. The summaries are too long to collect in a single document, and two documents make packaging easier. The organization also is logical: one document focuses on communities adjacent to the Exxon Valdez spill itself, and another addresses communities some hundreds of kilometers away. This section also explains in more detail the aspect of organization described in Section I--the division of communities into Hubs and Periphery villages. Additionally, Native and Mixed villages are discussed.

Schedule A and B Social Indicator research clearly showed that Hubs and Periphery villages behaved differently along many parameters. As stated in Section I, this contrast (Hub versus Periphery) is one of the principal theoretical contrasts used in our analysis. Hubs are centers of administrative and economic infrastructure. They are socially complex in terms of ethnic and economic cross-sections; generally display greater

internal diversity as well as disparity at domestic and institutional levels; and control larger shares of regional resources, especially jobs and revenues. Periphery villages tend to be more homogeneous; are more likely to have large Alaska Native populations; are served by hubs in terms of utilities, transportation, and services; and are relatively impoverished compared to hubs. Hubs tend to be villages whose populations are more than 25 percent non-Native (Mixed), and Periphery villages tend to be more than 75 percent Native (Native). The Native versus Mixed contrast is therefore similar, but empirically the contrast produces somewhat different (though complementary) distinctions. Analyses of Native villages expose pronounced economic, environmental, and cultural differences rooted in Alaska Native ideologies about the land, resources and their uses (most notably, sharing of those resources), and social cooperation. Those distinctions are evident in Periphery villages because they are often Native villages, but they are not defining features of the periphery.

The sizes of the KI summaries for Hubs and Mixed communities (such as Kenai and Valdez) are immense in comparison with the reports for smaller villages. We are concerned that this difference in sheer volume may suggest that the large communities are somehow more important. This is not so; the larger communities required a longer term of field research because they are larger, hence the results of that field effort (more interviews, more observations, and more collected reports and other secondary data from the community) require longer descriptive reports. To give appropriate attention to the Native and Periphery communities, the KI summaries for those villages are assembled separately in each volume, resulting in a tandem and balanced organization of text despite the uneven sizes of the individual reports. So for each area in the Schedule C region, we have created a parallel set of chapters. For Prince William Sound (Part 1), chapters for Valdez (Hub, Mixed) and Cordova (Periphery, Mixed) are matched by a separate chapter for Tatitlek (Periphery, Native); for Cook Inlet and Kodiak (Part 2), chapters for Kodiak City and Kenai (Hub, Mixed) are matched by separate chapters for Tyonek, Seldovia, Karluk, Old Harbor, and Chignik (Periphery, Native).

III. SOCIOECONOMIC CHARACTERISTICS OF SCHEDULE C COMMUNITIES

Social impacts are seldom experienced uniformly. Social categories that generally are salient in social systems often are salient in specific instances of social change; in this case, change prompted by an industrial disaster. For example, social impacts often vary by age and sex (Freudenburg 1984). To the extent that impacts place strains on domestic income, affect patterns of expenditures, or impose stress on municipal services and infrastructures, one would expect to detect differential impacts on persons, households, and communities that vary along those dimensions. Analyses of our data already have revealed clear differences in the effects of government policies and programs in site communities that correlate with socioeconomic characteristics of those communities (McNabb 1990). Thus, it seems reasonable to examine the characteristics of sites before seeking to interpret social impacts. Here we offer some general observations about Schedule C communities based on our research.

There is one common denominator among the Schedule C communities, and that is the role of household transfers--welfare, such as Aid to Families with Dependent Children (AFDC)--and government funds that support transfer jobs--the cook in the school kitchen, the postmaster, the teacher's aide. Oil revenues collected by the State pay for most of these jobs. Yet Schedule C communities also exhibit great economic diversity. Most importantly, there are fundamental differences among these communities based on private enterprise. Where private-sector opportunities are abundant and private-sector incomes are high, commercial fisheries are often prominent. Commercial fishing and private-sector enterprise are closely related in much of rural Alaska. Some *communities with significant petroleum-industry employment--such as Valdez and Kenai--* have notable commercial fisheries, but they are minor compared with other private-sector economic activity. Our analyses show that the "oil towns" (Kenai and Valdez) are sociologically distinct from other sample communities.

Differences in the local, prevailing mix of private-sector and public-sector opportunities are underlined by differences in the distribution of unemployment compensation in rural Alaska. Bear in mind that unemployment insurance compensation (UIC) is paid only to persons who worked during specified annual quarters, hence not all

unemployed persons are classed as unemployed.⁴ Unemployment compensation is a measure of the breadth and diversity of local economies in rural Alaska. If people don't have the opportunity to work for several quarters, they won't receive UIC, even if they are unemployed. Transfers that fund many of the most desirable jobs in rural towns--the school janitor, cook, teachers' aides, health aides, postmaster--comprise a relatively uniform common denominator among all villages. If those persons are laid off or fired, they will receive UIC. But their numbers are low overall. The UIC levels represent levels of unemployment only in the presence of a strong and stable private sector. Most rural villages do not have strong and stable private sectors, but the larger hubs with *relatively significant fisheries economies--such as Cordova and Kodiak--and "oil towns"--* such as Kenai and Valdez--show higher levels of UIC (controlling for population differences) (see Alaska Department of Revenue 1985, 1988). The fisheries economy per se (or the petroleum industry) does not account for this pattern alone. Rather, the secondary and tertiary industries supported through or related to fisheries or petroleum do. These include chandlery operations, repair and services, groceries, tourism, construction, light manufacturing, and miscellaneous services ranging from barbers to veterinarians.

Government transfers are a crucial source of funds that support both private- and public-sector activity, and those transfers are not uniform among the villages, nor are they uniform for any one village over time (Alaska Department of Community and Regional Affairs 1989). These fluctuations are predictable. State revenues underwrite a wide range of activities and services. The rather uniform common denominator among revenues received by all communities--municipal assistance and other entitlement programs funded on a per capita basis--doesn't lead to a common pattern of funding overall. The reason for the variation is that entitlement programs comprise a relatively

⁴ See McNabb (1989). This study contrasts "real" and "official" unemployment in northwest Alaska, showing that both discouraged unemployed persons and some unemployed persons who are seeking employment are eliminated from the official rolls of the "unemployed." Those official rolls always ignore the discouraged unemployed who no longer seek employment, but active job seekers are supposed to be classed as unemployed.

modest source of funds. In these comparisons, they are counterbalanced by substantial revenues that are subject to the great fluctuation: capital-improvement grants.

These grants pay for airport improvements, new roads and schools, utility services, municipal buildings, flood-control projects, and a wide range of other improvements with a high front-end cost that few if any communities can afford without assistance. These improvements are funded in pulses by the legislature and are tightly governed by the availability of oil revenues. In addition, they represent political decisions and powerful constituencies that may be better positioned to advocate and then secure large capital improvements. Finally, and perhaps most importantly, these improvements also provide jobs. It is one of the fascinating ironies of life in Alaska that residents receive free in-kind transfers (new schools, utilities, and the like) and, in some communities, get paid to install them, too.⁵ Although capital-improvement grants are erratic and one small village may receive far in excess of its pro rated share one year, larger communities tend to receive disproportionate capital revenues and operating expenses (including entitlements).

In sociological terms, Alaskan hubs are "central places" that exhibit "urban bias," which entails disproportionate growth in the tertiary (administrative, government support) sector and a pattern of reinforcing feedback in the economy that tends to increase their domination of periphery communities and place ever higher demands on State coffers. The basic dilemma of economic life in rural Alaska is very limited real and sustainable economic growth; perpetual reliance on transfers and (indirectly) oil revenues; and uneven, erratic patterns of opportunity in rural communities that have only the slightest connection to concrete economic assets, such as a labor force or demand for goods and services. Where they exist in any abundance, private-sector opportunities tend to be secondary offshoots of public-sector activity or the one key private-sector industry:

⁵ In small villages, the available labor force may not be used for a variety of reasons, and this indirect benefit probably is most pronounced in large towns and cities.

fishing. The fishing communities are therefore in a unique category for our purposes.⁶ This brings us to the rationale for the Schedule C program: the Exxon Valdez oil spill.

IV. SCHEDULE C SOCIAL INDICATORS ANALYSIS: SELECTED RESULTS OF EXXON VALDEZ ITEMS

Several questionnaire items seek to measure self-reported changes that are directly associated with the Exxon Valdez spill. Because commercial fishing sustains the economies in many sites and also because subsistence harvests and distributions of renewable resources support and reinforce Alaska Native social systems and provide important sources of food, reported opinions about changes in fish and game populations warrant attention.

Of the respondents, 30 percent indicated that game populations had diminished since the oil spill, and 44 percent indicated that fish populations had decreased (only 3% and 13%, respectively, offered the opinion that the populations had increased).⁷ When the same respondents were asked to review the previous 5 years and respond to the same question, 26 percent suggested that game populations had decreased over this interval, whereas 22 percent noted a decline in the fish populations. Respondents therefore register greater perceived decreases in these resources subsequent to the spill. This pattern is not uniform across communities, as Table 1 demonstrates.

This pattern suggests that proximity to the spill alone does not account for perceived exposure, resource impacts, or risk: small communities (Tatitlek and Chignik, for instance), communities close to the most pronounced visible effects of the spill (Valdez, Cordova, and Tatitlek), and communities with dominant fishing economies (for instance, Cordova) are most apt to register perceived decreases. When those factors coincide, the tendency to perceive decreases appears amplified. The two control sites distant from the spill (False Pass and Ekwok) apparently are not immune from this pattern, although the proportion of responses indicating decreases is relatively low. The

⁶ In fact, one analytic contrast we employ is commercial-fishing versus noncommercial-fishing communities.

⁷ These are not dichotomous items. Respondents may offer opinions of decrease, increase, no change, or no decision.

difference between test and control communities is statistically significant in the case of perceived reductions in fish populations.⁸

Table 1

PERCENT^a OF RESPONDENTS WHO PERCEIVED CHANGE OF GAME AND FISH POPULATIONS AFTER EXXON VALDEZ SPILL AND OVER A 5-YEAR INTERVAL

Community	Game Decrease Since Spill	Fish Decrease Since Spill	Game Decrease Over 5 yrs.	Fish Decrease Over 5 yrs.
Kodiak	50	36	29	14
Old Harbor	25	50	50	50
Tyonek	27	47	27	33
Kenai	15	27	36	13
Seldovia	25	31	13	19
Valdez	35	52	26	25
Cordova	40	69	6	10
Tatitlek	71	79	14	7
False Pass	0	30	40	70
Ekwok	35	18	29	24
Chignik	40	53	40	60
Karluk	29	43	17	50

Source: AOSIS schedule C questionnaire data.

^a Numbers refer to percent of respondents who indicated "yes."

Some social impacts of the spill have received ample documentation, notably those related to cleanup employment, which mitigates some direct economic impacts but also may introduce tensions due to differential employment or perceived collusion or collaboration on the part of cleanup workers and damages for direct losses (see Impact

⁸ In this Introduction, differences are considered significant if the probability of the occurrence due to chance is less than or equal to 5 percent based on Chi-square tests.

Assessment, Inc. 1990). We sought to assess these economic impacts and attendant dislocations that were occasionally incurred by inquiring whether (1) respondents gained employment as a result of the spill; (2) respondents relocated for work associated with the spill; (3) respondents lost employment consequent to the spill; and (4) property was lost or damaged as a result of the spill and, if so--or if other losses occurred (related to employment or commercial fishing)--how adequate was the compensation (if any) received from Exxon.

Table 2 summarizes these responses by community.⁹ Differences between test and control sites are statistically significant for cleanup relocation and perceived adequacy of compensation for losses.

Note that the communities displaying the more pronounced pattern of economic impact (cleanup jobs, relocation, losses, etc.) tend to be located in close proximity to the spill; tend to be smaller; and tend to be communities (chiefly small ones) dominated by commercial-fishing economies and, moreover, boasting the least diversified economies. Leaving fine nuances and exceptions aside for now, the picture that begins to emerge is one of vulnerability, despite some economic cushion provided by oil-spill work, for smaller communities with undiversified resource-export economies.

There is some evidence that perceptions of responsibility or allocation of blame may differ between natural and industrial disasters; and, in any case, those perceptions may influence opinions about impact severity, potential for mitigation, and effectiveness of mitigation measures. They also may influence confidence in institutions and the course of the psychosocial or "therapeutic" resolution of the disaster among affected populations (see Button 1990).¹⁰ The questionnaire sought to assess perceived

⁹ Some instances of lost work are due to restrictions on commercial fishing. In some communities (Chignik, for example), most or all instances are due to these restrictions.

¹⁰ There is no consensus on this issue, however, and the relationships between natural and industrial disasters are by no means clear. Some evidence suggests a clear distinction, mainly in terms of the greater likelihood of sociocultural disruption and corrosive rather than integrative tendencies in the post-disaster period. This is an argument that now is frequently posed in litigation by plaintiffs in technological disaster cases.

Table 2
**PERCENT^a OF RESPONDENTS REPORTING
 DOMESTIC ECONOMIC CONSEQUENCES OF THE SPILL**

Community	No Spill Work	Relocate for Work	Lost Work	Loss- Damage	Inadequate Payment
Kodiak	93	0	14	0	21
Old Harbor	75	0	0	0	0
Tyonek	60	40	0	0	100
Kenai	87	8	16	3	32
Seldovia	56	31	19	6	25
Valdez	52	13	9	0	67
Cordova	50	15	35	6	69
Tatitlek	29	64	36	0	43
False Pass	100	0	0	0	0
Ekwok	88	12	0	0	0
Chignik	73	20	47	7	67
Karluk	43	43	43	0	43

Source: AOSIS schedule C questionnaire data.

^a Numbers refer to percent of respondents who indicated "yes."

responsibility by permitting respondents to identify all parties (singly and jointly) thought to be responsible for the spill. The responses included "unavoidable accident," "captain (Hazelwood)," "technology," "Exxon," "State of Alaska," "Federal Government," and combinations of factors. The State of Alaska was identified most often as the responsible agent, but this response was most pronounced in communities closest to the spill (Valdez, Cordova, and Tatitlek). Responses in communities farther removed from the spill emphasized Exxon negligence and errors on the part of the ship's captain. Differences between test and control communities are statistically significant. (Similarities in scores may not be due to the same factors. For example, Valdez is an "oil town," and residents may have blamed the State of Alaska due to loyalties to the oil

industry; Cordova residents may have blamed the State of Alaska for other reasons, such as failure to protect the local environment. These are hypotheses.)

The discussion of socioeconomic characteristics of site communities showed that these communities are far from uniform despite some common features that may introduce common backdrops against which spill impacts may operate. Our preliminary examinations suggest that all socioeconomic variables are not equally salient in this connection. Several variables warrant attention: respondent age, race, and sex; household size and household type; employment history, and employer industry. The following observations summarize some of our initial analyses of Schedule C data. Comparisons of cross-sectional contrasts and perceived spill impacts show that:

1. Younger respondents are more apt to identify decreases in fish populations consequent to the spill, they are more apt to report mixed feelings about the benefits of oil exploration, and they are less apt to report positive benefits of oil exploration.
2. If they secured cleanup work, Alaska Natives were more likely than non-Natives to be relocated for work; and, in any event, they were more likely to lose work as a result of the spill than were non-Natives. They are slightly more apt to report losses associated with the spill, they are far more skeptical of the potential benefits of oil exploration, and they are more likely both to assign blame for the spill to the skipper of the ship and to identify multiple responsibilities for the disaster.
3. No distinctions based on sex are evident.
4. Respondents representing larger households are more apt than others to report decreases in game populations. They also are more apt to report employment associated with the spill for themselves or other household members and are more likely to report relocation for that work. On the other hand, they are more likely to report employment losses in the household as a result of the spill.
5. Households that generally can be considered unstable or decaying (e.g., at a terminal point in the domestic cycle) are more apt to report decreases in game populations after the spill, and also are more apt to have household members relocate for spill employment, but they are less likely to have lost employment as a result of the spill.

6. Respondents with relatively little work over the preceding year are less likely to have secured spill employment and, if they secured employment, are less likely to have relocated for that work. (But these relationships are somewhat curvilinear, such that underemployed and fully employed respondents are similar in their responses.)
7. Respondents employed in government, Native organizations, local trade and construction, and fishing are more apt to report relocation for spill-related work, but private-sector workers (notably in fisheries work) are most apt to have lost work as a result of the spill. Private-sector employees are more apt to report poor compensation for losses. Non-Federal public-sector employees and fisheries workers are most likely to express skepticism about the potential benefits of oil exploration.

V. DISCUSSION

Preliminary analysis shows that spill proximity and perceived or actual exposure and associated impacts are not perfectly correlated. Although this and other research does detect that relationship (which is pronounced in the case of subsistence harvesting activity; see Fall 1990), it probably is mediated and occasionally counterbalanced by other factors. Perceived declines in natural resources are most often registered in small communities, communities closest to the spill, and communities with relatively dominant fisheries economies. When those factors coincide, the tendency to perceive decreases is amplified. Although smaller communities are more often than not predominantly Alaska Native, race or ethnicity per se does not account for this pattern.

Similarly, spill-related economic impacts (spill cleanup and related employment, job relocations, losses of employment, property damages, compensation for damages) tend to cluster in communities close to the spill, which are smaller, dominated by commercial-fisheries economies, and have the least diversified economies. This situation poses benefits and risks. On the one hand, these communities are presumed to have been impacted, and they were subject to mitigation measures and attendant economic benefits, mainly jobs. On the other hand, mitigation measures and economic benefits often may entail costs, such as relocation for work and other dislocations. It appears that larger, diversified communities are better situated to evade or avoid some effects of this disaster and, for whatever reasons, their inhabitants tend to perceive less severe or less widespread biological impacts than those perceived by residents in periphery

communities. This is because (1) the main body of socioeconomic literature documents the domination of hubs (regional centers) with well-developed service, trade, and administrative infrastructures and (2) hubs therefore are more economically diversified than other communities even if they too have prominent fisheries economies.

The political-economic dimensions of this "impact dilemma" of structured inequality in spill consequences also are revealed in the response patterns of several respondent classes. Younger respondents are more likely to note fish reductions and to express pessimism about oil exploration. Natives are most apt to be relocated if they secure work, more apt to lose employment, more apt to face property losses, and are far more skeptical than others about the benefits of petroleum development. Larger households report both employment gains and losses, which may be predictable because membership (hence vulnerability to changes of this sort) is larger.

Relatively unstable households, such as single-parent households, are more likely to report relocation associated with spill-related work. One may argue that residents of unstable households seek economic resources for good reason, because they typically are underendowed in an economic sense. For some of these households, however, relocation may be synonymous with dislocation. For instance, half of all the single parents in our sample relocated for cleanup work, meaning that most of their children were placed in transitional-care situations that may introduce stress. Our field teams observed that some residents were evicted so their landlords could charge higher rents to nonresidents, hence relocation may have been involuntary in some cases.

Respondents with meager work histories were less likely to secure spill-related employment; hence those with the most employment assets received more benefits than others, and existing inequalities were reinforced. This and related factors undoubtedly are responsible for the sense of relative impoverishment decried by many area residents in the popular press and in documentary films. Despite the fact that residents with spotty work histories may be the least qualified and least reliable, their failure to obtain "equal opportunity" created public and private dilemmas in impacted communities. Respondents employed in public-sector and fishing occupations reported more relocation for spill-related employment; but private-sector workers more often lost work, and when

they reported property or other losses, they were apt to express dissatisfaction with compensation.

The blend of public-sector and limited private-sector skepticism, work relocation, and employment loss is partly explained by the following observations. First, in small communities (which already have been identified as vulnerable), spill employment drew away some local government officials and bureaucrats, placing immense service and administrative burdens on those who remained, who now dealt not only with routine matters but also the bureaucratic impacts of the largest oil spill in U.S. history. Commercial fishing was restricted, leading some commercial-fishing workers to assume jobs with parties directly or indirectly affiliated with Exxon. Moreover, tensions between those who accepted spill jobs and those who eschewed such jobs tended to disrupt customary social networks, which often are key channels of mutual support and collaborative assistance, especially in small and predominantly Native communities.

Cataclysmic and radical social change seldom occurs. More often than not, those events and situations that catalyze profound change rework the existing social structure and create a variation on a theme. This background analysis hints that the Exxon Valdez spill may be reproducing an existing or latent social reality--in a sense, replaying an "old script"--that now is characterized by underdevelopment in the rural regions, dominance of urban centers that are able to mobilize great resources, and marginalization of Native and un- or underemployed residents who lack substantial political power. Because similar patterns have emerged in many of the accounts of great technological disasters (Bhopal, Chernobyl, etc.), this is not at all surprising. It is likely, however, that the documentation of the Exxon Valdez spill will reveal that an interpretive framework for detection of the social impacts of the spill must be as much political as it is economic or biological.

Endnote

In somewhat more formal terms than appear in the text, our research design is a "multi-trait, multi-method" model that employs multiple indicators and multiple methods to counterbalance the deficits of single techniques and optimize the strengths of all design features. A forced-choice standardized questionnaire was administered to randomly sampled adults in households in site communities. Site samples were roughly proportional to resident populations. Approximately two-thirds of these respondents also were administered an open-ended protocol designed to probe responses without the restrictions of a forced-choice instrument. Each instrument contained a few similar variables, permitting an evaluation of interinstrument reliability. The subsample responding to the protocol also completed genealogies extending two degrees in both lineal and collateral dimensions so that interdependence of responses could be assessed. Approximately two-thirds of the questionnaire respondents and all of the protocol respondents were sampled twice (1989, 1991), and a new sample nearly as large as the initial 1989 sample was developed in 1991. This analysis addresses only the preliminary wave in the Schedule C sites that were added subsequent to the spill but includes the two Kodiak Island sites that were first sampled in 1988 (Kodiak City and Old Harbor). The Schedule C sample comprises four waves of interviews for two communities, three waves for two communities (Chignik and Tyonek), and two waves for the remaining sites (Valdez, Kenai, Seldovia, Cordova, and Karluk). False Pass and Ekwok were sampled only once as controls. During the 1989 season, 330 questionnaire interviews and 216 protocol interviews were completed. Table A describes sample sizes and some characteristics of the samples.

Prior to any substantive analysis, the data were subjected to a wide range of tests to measure reliability, stationariness, interinstrument (questionnaire versus protocol) reliability, and testing artifacts. The final analysis uses a *variety of metric and nonmetric multivariate techniques to analyze longitudinal change and variance among* groups of sites classified on the basis on theoretical contrasts. The methodology is described and the reliability and validity tests appear in Social Indicators Project VI: Analysis of the Exxon Valdez Spill Communities.

Table A
SCHEDULE C SAMPLE CHARACTERISTICS, QUESTIONNAIRE ONLY

Community	Sample Size	Alaska Native %	Female %
Kodiak	14	14	57
Old Harbor	4	100	75
Tyonek	15	93	47
Kenai	92	15	58
Seldovia	16	13	38
Valdez	69	1	48
Cordova	52	6	54
Tatitlek	14	93	50
False Pass	10	70	40
Ekwok	17	82	35
Chignik	15	73	47
Karluk	12	83	50

Source: AOSIS Schedule C questionnaire data.

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Mixed Communities

Valdez Key Informant Summary

Ed Robbins

VALDEZ

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Valdez

I. OVERVIEW

I.A. History

The present situation in Valdez may be best understood in light of three major interventions, two of which were major disasters, in its recent history: (1) the earthquake of March 27, 1964; (2) the building of the oil pipeline; and (3) the oil spill of March 27, 1989. All of these interventions--which had critical impacts on the economy, social constitution, and form of Valdez--had a role in changing its very nature. Ironically, each of the two disasters, the earthquake and the oil spill, had an impact on Valdez that was in many ways as economically positive as was the pipeline.

There is little written about the history of Valdez. Sources such as the Valdez library and the Valdez historical society do not have much in the way of either primary or secondary source material. The best summary to date, as Heasley (1991) notes, is in the Valdez Coastal Management report of 1984, and this is at best a cursory treatment. A summary of Valdez's history by the Heritage Center provides some information, and a little more can be found in various brochures published by the Chamber of Commerce for the Valdez Gold Rush Days. Additionally, interviews with some of the citizens of Valdez resident there before the earthquake have added some greater insight into the *development of the town as we know it today*.

I.B. Early History to the Earthquake

While the area surrounding Prince William Sound (PWS) has been inhabited by Eskimos (Chugach, Yupik) and Indians (Athapaskan, Eyak, and Tatitlek), there is no evidence of any Native settlements in the area in which Valdez is now situated.

Although first charted by Captain James Cook in 1778, it was the Spanish who undertook the first important exploration of the PWS area. In 1780, Don Salvador Fidalgo--in search of the Northwest Passage--entered PWS and more thoroughly investigated the Sound than Cook, mapping much of the coast and naming such areas as Galena Bay and Cordova. There is some evidence that Fidalgo may have ventured down the Valdez Arm, a natural fjord that reaches 12 miles down from PWS, and reached Valdez Bay. Whatever the case, he is credited with naming Valdez after the Minister of

Marine for Spain, Valdez y Barca. Fidalgo left PWS after he realized it would not yield the route for which he had been searching.

During the period of Russian ownership of Valdez, there was little European activity in the PWS. The Russians did try to do some trading with the Native peoples of the Copper River Flats, but according to the Valdez Miner of December 14, 1934,¹ the Russian party ran into trouble. As reported in the Valdez Miner, Nicola Offmarinoff, a member of a Russian party of 24 that was sent to trade with the Copper River Indians in 1863, told of that party being virtually annihilated; the few remaining survivors married among the Native peoples of the area. As a result, little Russian activity is evident after 1863, while Native trade over the Valdez Glacier and along the Valdez coast between coastal and inland Natives appears to have gone on apace.

Valdez owed its foundation as a townsite to its location, which made it an *accessible terminus for miners going to the gold fields of the Klondike*. Fifteen years after the sale of Alaska to the United States, prospectors began using Valdez as a gateway into the interior. From then on, the town prospered because of its location and its potential for both real and imagined transportational links. The location of Valdez and the real and imagined projects for transportation that have been associated with it, along with the series of major disasters that periodically have affected Valdez, have produced both boom and bust. Boom and bust thus have become the central features of Valdez's history from its founding until the present.

By the 1890's, the U.S. Army had begun extensive explorations out of Valdez, and a trading post was built in 1896. However, it was the Klondike gold rush of 1897-98 that created the conditions for significant settlement. Valdez became the terminus for what was advertised throughout the U.S. as the "All-American Route" into Alaska's interior. Although there was no permanent town, about 4,000 miners passed through Valdez, and a tent city developed. Some who had come for gold remained in Valdez and established stores and other businesses.

¹Cited in the Valdez Gold Rush Days (Valdez Chamber of Commerce 1989b).

What made Valdez a reasonable site for access into the interior was the road through Keystone Canyon built by William Abercrombie after 1896, which established access into the interior along what was called the Valdez-Eagle Trail. This road was followed by the Washington-Alaska Military Telegraph System in 1902 and a submarine cable to Sitka in 1905. During this period, Valdez became what it is today--a hub for transportation, albeit on a smaller scale--housing as Valdez did the Alaska Road Commission. At this time too, Valdez housed the Third Judicial District of Alaska. It also was home to the military, which required the road to the interior and established Fort Liscum across the bay from Valdez on what is now the site of the Alyeska oil terminal.

Given its importance as a hub of sorts in the early 1900's, a railroad was contemplated to speed the movement of goods in and out of Valdez. As an example of the relative isolation of Valdez, the record for moving mail from Copper Center to Valdez in 1904 was 35 hours, the average being closer to 75 hours.²

In 1899, Edward Gillette drew up plans for a railroad that would run through Keystone Canyon, on over Thompson Pass, and then on to the interior of the Copper River area. On March 6, 1902, the Valdez Prospector announced claims for \$1,100,000, which assured the building of the railroad. Legal suits over the possession of the claims and the discovery of coal and oil in Katella as well as the involvement of copper interests led to a major "gun battle" over who would get the railroad in 1907. The military had to intervene, and the railroad out of Valdez was finally abandoned. H. D. Reynolds, who owned the railroad and much of Valdez, and who had persuaded a large segment of the population of Valdez to invest in his railroad, left Valdez at this time with a considerable amount of the investments of Valdez's citizens. As their resources dwindled, many of the residents of Valdez began to leave, and much of the new investment in the PWS area went to other communities, e.g., Cordova eventually got the railroad.

By 1920, the population of Valdez was down to about 400 to It would remain at about this number for the next 50 years or so because mining was no longer viable and

²Valdez Gold Rush Days (Valdez Chamber of Commerce, 1989b).

investment had moved elsewhere, especially Cordova--a memory and a competitive relationship that still rankles the residents of Valdez today. As boom turned to bust, the town settled into a series of activities that would remain fairly constant and would sustain a small community until the announcement of the pipeline in 1969. A sense of what life was like in this period between the late 1920's until the 1970's can be gleaned from the memories of some of those who have been in Valdez since that period.

The recollections of long-time resident Walter Day are a good example. In 1928, when Walter Day arrived in Valdez with his father, people in town worked for the most part either at the Coast House--a small cannery processing fish caught by local Native peoples using salmon traps--or on the Richardson Highway because Valdez remained the site of the Alaska Road Commission, later to become the Department of Transportation (DOT). In the early 1930's, the Coast House closed but was replaced by the Dayville Packing Company, a cannery that was located where the present oil terminal is today and was owned and run by Day's father. The Dayville Packing Company was a small cannery at first, owning three or four boats worked by local Indians, but it grew over time and provided work in Valdez until 1954 when it folded as a result of the PWS being closed to fishing.

In the 1940's, freight traffic from Valdez to Fairbanks over the Richardson Highway increased. Even though freight handling decreased after World War II, the completion of the ALCAN Highway during the same period and the development of other new roads brought tourism to Valdez. Tourism from then on has been a small but staple part of the economy.

With the completion of Harbor View Hospital, a State facility for the mentally impaired, and the continued presence of the DOT and facilities for highway maintenance plus consistent freight handling and tourism, the early 1960's was a period of reasonably stable employment for the 400 to 500 residents of Valdez.

This was disrupted by the earthquake of March 27, 1964, which devastated the town, built as it was on soft, muddy ground with a high water table. (Ironically, the muddy land initially was a boon to Valdez because boats could ground at low tide and offload onto a dock and then leave at high tide--a relatively inexpensive mode of freight

handling.) After the earthquake, the town was rebuilt 5 miles west on ground that was more solid. This land had been laid out for a townsite earlier in Valdez's history and belonged for the most part to Owen Meals, a major figure in Valdez at the time. The shift of the townsite and the use of the old town's mile markers is why mile 0 of the new town actually is mile 5.

The quake also had a profound impact on the population of Valdez. According to both Dorothy Clifton and Walter Day, a considerable number of Valdez's citizens left town after the quake, but many did not return after Valdez was rebuilt. A 1964 Civil Defense list of residents and their locations just after the quake reveals that less than 25 percent of the local adult population and their children remained in Valdez as it was being rebuilt. How many of those had lived in what is called the "Old Town" and returned to the new town of Valdez is not exactly clear, but old-time residents suggest that there was a significant change in the population of Valdez after the new town was rebuilt. Many who had lived in Valdez before the earthquake did not return, and a number of those who helped build the new town remained. According to Dorothy Clifton, who has kept a number of records on the comings and goings of the pre-quake residents of Valdez, at least 40 percent of the residents of the new town were newcomers. By 1967, this number was increased with the addition of the Valdez Community Hospital to Harbor View.

Physically, the new town differed from the old. Laid out and designed by Paul Finfer Associates of Chicago, the design allowed for bigger houses and also for more cul-de-sacs located along a long and parallel set of major avenues going both north-south and east-west. What stands out in the plan and still is notable today is the absence of any central plaza or square or any other central place in the new town.

By 1969, the miniboom brought on by the construction of the new town was over, and Valdez--as it had been in the past--was once again economically stagnant. Government services like the hospital, a little tourism, and a little fishing made up the basis of what little work there was. The freight business that was so important to Valdez before the earthquake was virtually nonexistent after the town was rebuilt, even though some refueling and fuel shipping as well as the Highway Department remained.

When the pipeline terminus was announced, the town actively sought its being located in Valdez. According to Walter Day, who was mayor at the time and who testified in front of Congress in support of locating the pipeline terminus in Valdez, the issue of where to put the terminus was moot because Valdez Harbor was the only harbor in the area that was deep enough to accommodate the tankers that would need to access the terminal. Once again, Valdez's location and a major event over which Valdez had no control would lead to a remaking of the town both physically, with the expansion of *the population and townsite, and socioeconomically, with a significant shift in the economic underpinnings of the town.*

With the construction of the pipeline in the 1970's, Valdez would no longer be a sleepy little town but a full-fledged oil boomtown dependent on the international oil economy. The population exploded, reaching a high of about 9,000 to 10,000 in 1976, the height of the construction period for the pipeline. After 1976, the town became more stable once again with a population of 3,000 to 4,000 (which rises to 5,000 or so each summer as a result of employment provided by tourism, the fish-processing plants, construction, and commercial fishing).

The coming of the pipeline and a whole new population to Valdez also changed the social life of the town. Old-time residents observe that with the creation of new *schools, gyms, bars, hotels, and restaurants social life became more public and replaced* the more familial and private social world of earlier times. Life became livelier, more energetic, and more in tune with lifeways in more central and larger urban areas of the State. With the pipeline also came two radio stations, an airport, and daily flights to Anchorage. These new services transformed social and cultural life in Valdez.

By the late 1980's, however, even with the development of two new fish processing plants, Valdez once again was experiencing a degree of economic stagnation and downturn because of a dip in the oil economy. The spill of March 27 (ironically the same day as that of the earthquake), 1989, was for Valdez both a catastrophe and an economic godsend, depending on how one would look at it.

Evidence from gross bar receipts at one of the major bars in town with the spill year as a base (see Table 1) gives a sense of the up-and-down nature of Valdez's

economy over the last two decades and its reliance on major events controlled from the outside.

Table 1
BAR REVENUES, VALDEZ, 1974-1990^a

Year	Revenue	Year	Revenue
1974	.32	1982	.51
1975	1.20	1983	.41
1976	1.40	1984	.55
1977	1.45	1985	.45
1978	.80	1986	.35
1979	.19	1987	.36
1980	.30	1988	.37
1981	.63	1989	1.00
		1990	.69

Source: Manager of a local bar in Valdez.

^a1989 Base Year = 1.00.

While bar revenues measure only a particular sector of the total expenditures in Valdez, the chart above does give some sense of the ups and downs of its economy. The chart also is indicative of the influence of major interventions like the pipeline and the spill on the economic and social life of the community--a community that also has undergone rapid shifts related to the ups and downs of the economy and the demographic swings that these shifts have implied. (An example is the increase in single men and women during the pipeline-construction days and the spill-cleanup period.)

Whatever one's views about the overall impact of the spill on Valdez in particular and the area in general, the spill brought an economic windfall, a fact disputed by few if anyone in Valdez, no matter what their attitudes about the spill in general. It also resulted in significant changes in the form of new jobs associated with SERVS (Ship

Escort Response Vehicle Service) and other spill-prevention activities--changes brought about once again by a major intervention over which the citizens of the town had no control. During the height of the spill cleanup, over 10,000 people came to Valdez. They put extraordinary pressures on the town's infrastructure, but they also brought in extraordinary amounts of money. If not all in the town benefited from the spill--the effects on different economic sectors in Valdez, as we shall see, were uneven--there were two overall economic benefits from: (1) the new monies the spill cleanup brought in and (2) the new jobs, about 200 or so, created as a result of the spill. However, as we shall also see, the spill had other effects on Valdez, as well as both social and political effects, that have changed the town irrevocably.

This short history of Valdez, while incomplete owing to a lack of historical resources readily available, reveals a town subject to boom and stagnation resulting from major interventions over which the community has had little or no control. It is a town to a great extent defined by events from the outside, but a town now trying to appropriate those events into its own fabric and to find a way to define an economy and a social reality over which the townspeople have more control. An example is the recent Valdez Comprehensive Development Plan by Darbyshire & Associates (1991) and commissioned by the city to find ways to stabilize the economy and bring more local control. As John Devens, the former Mayor of Valdez and President of Prince William Sound Community College, stated in a recent speech:

Shortly after the completion of TAPS, the community leaders of Valdez recognized the finite nature of the oil industry and the importance of using the new taxbase to diversify our economy and provide for our future. At the time, we invested some of the tax revenues in developing our fisheries industry, promoting tourism, building our transportation infrastructure and further developing our human services industry.

At the time, this meant floating a loan for the construction of a major dock and storage facility, which has yet to bring the revenues expected and has added a considerable debt load for the city. Today, this development revolves around a plan to expand the small-boat docking facility in town--a plan that received mixed reviews from

residents and puts the town in conflict with Alyeska over the sighting of the dock. Even though the larger plans have not met with success, the issue the town faces as it heads for the next century is that no matter how successful efforts to stabilize the economy and social composition of Valdez might be, its dependence on oil transport looms and, for the foreseeable future, will still loom over the psyche and material reality that defines living in Valdez. Many people not only feel their relation to Valdez is impermanent, *they also feel what one informant aptly called a "psychological transiency."*

I.C. Valdez: Descriptive Overview³

Incorporated before statehood, Valdez is now a home rule city; it is not located in any organized borough. There are a city council of seven members and a mayor; but with a city manager form of government, it is the city manager who is responsible for the day-to-day running of the city's administration and who carries out the policy of the city council. Along with the city manager, there are 13 city departments that include--along with the usual city police, fire, and parks departments--a Department of Community Development with a full-time planner, a Counseling Center, and a Heritage Center, among others. Assisting these departments are a number of citizens' boards and commissions, e.g., a Planning Commission, Heritage Board, etc.

The city is supported by taxes on real property of 16.21 mills proposed for 1991 and a hotel/motel room tax of 6 percent. The town's 1991 projected debt expenditure was \$12,856,054, which they plan to retire by 2001.⁴

The population that is centered around Valdez lives in three major residential communities, i.e., Valdez itself, Alpine Woods/Nordic Subdivision, and Robe River Subdivision, as well as in a number of smaller enclaves that spread along the Richardson Highway as far out as at least mile 26. I have been told that some individuals who work in Valdez live as far away as mile 56 on the Richardson Highway.

³Much of the information for this section comes from the Valdez Comprehensive Plan, Chapter 5, by George J. Cannelos, B&B Environmental, Inc. (Cannelos 1991) and the Valdez Business Directory by the Valdez Chamber of Commerce (1989a).

⁴City of Valdez, Budget Projection for Future Years, 1991 Budget Model, in the City of Valdez Financial Report (City of Valdez 1991).

Housing, at least according to city counts,⁵ consists of 583 single-family units, 225 multifamily units, 617 mobile homes, group quarters that house 93, and other places that house 222.

What is notable about the physical layout and form of Valdez is the interspersing of mobile homes with stick-built houses throughout most of the town. Among the exceptions are Mineral Creek, which is zoned for stick-built houses of high quality, and several subdivisions that are comprised of only mobile homes, e.g., Alpine Village. The commercial buildings vary in quality from brick structures to wood structures with unfinished facades. On the one hand, the design and appearance of the government buildings suggest *real permanence*; but on the other hand, the variety and intermixture of other building types suggest a sense of impermanence and uncertainty about what the town is and will be. All this gives Valdez the look of a town that has experienced boom and bust and is not sure exactly which--the boom or the bust--will eventually win out.

No matter what appearance it gives, for so small a town, Valdez is extremely well endowed with local public facilities and services. The Police Department has 21 full-time employees, 13 of whom are full-time police officers; 9 vehicles; and a jail house that can accommodate 16. According to the Chief, the officers comprise "a well-trained group of officers--often sent to training courses in the lower 48--to do just about anything that a big-city police force is able to." The Fire Department has 9 full-time employees and 19 volunteers, owns 5 engines and 2 tankers, and is able to respond to most contingencies including avalanches and saltwater and mountain rescue. It also has a dive-rescue team, has at its disposal 3 ambulances and a rescue truck, and can contract *for a local aviation service when necessary*.

Educational needs are provided for by the Valdez City School District, which employs 6 administrators, 65 teachers, and 59 support staff. There is an elementary school with an enrollment of 425, a junior high school with 122 students, and a high school with 211 students. There also is a school for special-needs students at

⁵As noted earlier, pending the results from the latest U.S. Census, statistics in Valdez are rough approximations. Given the nature of this report, they provide a sufficient if not entirely exact picture of the community.

Harborview with an enrollment of 62. In addition, Valdez has a 2-year college--Prince William Sound Community College, formed in 1978 as part of the University of Alaska system--with a number of 1-year degree programs and one 4-year degree program offered in the Rural Alaska Teacher Education Program.

There also is a library housed in a 15,000-square-foot building in the city center that includes a conference room, audiovisual room, study tables, and carrels and booths for listening and typing. Since 1982, the library has acted as a support for the Prince William Sound Community College. Along with the library, Valdez has opened a Heritage Center, which has a museum and an historical archive and is charged with enhancing knowledge of local history for both the schools and for citizens at large.⁶

Other social services include the Valdez Counseling Center, Harborview Hospital, Valdez Community Hospital, and a Seniors' Center. The counseling center provides a program of community mental health services as well as alcohol and drug abuse programs and is staffed by a Director, two counselors, and a clerk/typist. Harborview is a State-run facility for the mentally impaired; the community hospital, which is run by the Lutheran Home Services Management Company, is a fully staffed hospital with 3 physicians in residence, 35 other employees, 15 beds, and an emergency room. The Seniors' Center provides rooms, meals, a bus service, and recreational and social activities for senior citizens in the community.

There are at least 11 churches in Valdez.⁷ They include a Catholic, a Baptist, and a Church of Jesus Christ of the Latter-Day Saints; several evangelical and pentecostal groups; and a number of nondenominational Christian Fellowships.

The Parks and Recreation Department employs 25 people, and the city's recreational facilities are quite extensive. Comprising these facilities are:

⁶There is some dispute over the Heritage Center. Many older residents are critical of its performance, while others in city government have been quite pleased with its performance. Except for a brief descriptive piece on Valdez's history, we (myself and my assistant Michael Howard) found it not overly useful as a research tool or center.

⁷There is no definitive list of churches in the community, and several of the churches are run out of homes.

- the Black Gold Recreational Center, originally built by Alyeska as a construction camp building but now used as a multipurpose recreational facility with game rooms and hosting a number of activities such as dancing;
- the Teen Center;
- the Valdez High School, which offers public swimming, an indoor rifle range, and an outdoor track;
- the Herman Hutchens Elementary School, which offers gym facilities, racquetball courts, and a hydrotherapy pool; and
- the Valdez Civic Center, which includes 10,000 square feet of meeting and exhibition space, a 487-seat theater, banquet facilities, and conference rooms. It also has a series of campgrounds, groomed cross-country trails, outdoor tennis courts, and softball fields.

Complementing the recreational activities provided by the city are a private health club with full workout facilities, 6 bars and lounges, 4 hotels and motels, about 25 bed and breakfasts, and 10 restaurants as well as 3 fraternal societies that offer facilities for drinking and entertainment. In addition, there are over 35 nonprofit and private clubs in Valdez ranging from the Veterans of Foreign Wars and American Legion to the PWS Conservation Alliance and Advocates for Victims of Violence. Valdez also is served by two radio stations, one private and one a member of the Public Broadcasting System, and a cable television service.

One can get in and out of town by way of an all-weather road connecting Valdez to Anchorage 305 miles away and Fairbanks 365 miles away. Valdez also has an airport, a boat harbor, and the port. The airport serves two airlines, both with daily flights to Anchorage; and it houses three car rental agencies, a gift shop, restaurant, and offices. There also are 18 hangers containing space for private planes. The boat harbor has 513 boat slips with full facilities at most slips, e.g., electricity, water, and telephone. There is a long waiting list for slips, and a move to enlarge the boat harbor (a capital-improvements project of about \$35 million) has generated heated discussion within the town and between the town and Alyeska. Given the town's experience with a previous

capital expansion--the Port of Valdez, which runs at a significant loss--people are a bit suspicious of every new capital-improvements project costing so much.

Valdez also supplies water, sewage, and garbage disposal. Electricity is supplied by the Copper Valley Electric Association and telephone service by the Copper Valley Telephone Company.

II. THE ECONOMY

II.A. The Valdez Economy: Brief Overview

A brief overview of Valdez's economic makeup reveals a complex mix of structural interdependencies and socioeconomic tensions and conflicts. Four aspects of the economy underlie the mix of interdependencies and conflicts: (1) the complex economic structure related to the transport of oil; (2) the social and economic divisions between those associated with high-paying economic sectors, most notably oil and government; (3) the divisions between winter and summer economic pursuits and full-time and transient residents and workers; and (4) the division between outside and local economic sectors. All four of these factors, as we shall see in later sections of this report, manifest themselves in a number of complex and important ways in relation to local attitudes and understandings regarding the economy, the society, and the culture of Valdez.

Looking at these four economic areas, we find that:

- *Valdez clearly is dependent on oil and its transport through the activities of Alyeska and associated companies for its economic well-being and for the infrastructural and administrative amenities that Valdez can afford to provide its citizens.*
- The transport of oil and the oil economy are effectively beyond the reach of local control and, unless the oil companies decide to increase their exploration of the North Slope, are economically unstable over the long term. Oil transport presents a nonrenewable resource base and the threat of a declining source of both

individual incomes and tax support for the city (the latter threat may be in the process of becoming a reality).⁸

- If oil transport does remain at its present scale or is at an expanded scale in Valdez, it presents a threat both real and imagined in the form of possible ecological damage and disaster like the spill of 1989. It also potentially threatens more stable and more locally controllable economic activities--albeit within the framework of a world market--like fishing, fish processing, and tourism.
- While Valdez offers a large number of very high-paying jobs, it offers an equal number of quite low-paying jobs. This division in incomes and living standards presents a number of important social problems and social tensions to the town and a series, over the long term, of serious problems for city government in relation to such issues as housing, infrastructural supports, and the social well-being of Valdez.
- The split between the 3,000 to 4,000 permanent residents and the 1,000 to 2,000 extra transient residents of summer--as well as the split between industries based on year-round employment versus those based on transient employment--does create rifts and tensions in the town. Over the long term, infrastructural issues that were exaggerated during the spill year of 1989 have remained and will continue to do so, given the boom and bust quality of the economy. For example, a new boom could occur if the gas pipeline is built or ANWR is developed. A new boom would bring new economic and social pressures to bear on Valdez.

In a 1989 survey done by Darbyshire & Associates of Anchorage for the City of Valdez, a population figure of 3,686, based on the City of Valdez Financial Report, was estimated for the city with a mean annual employment rate of about 1,861.⁹ With a resident per capita income of \$19,937, a figure above both National and State averages,

⁸See the City of Valdez, Budget Projection for Future Years, 1991 Budget Model, in City of Valdez Financial Report (City of Valdez 1991).

⁹The estimates on population are very rough. In a later survey for 1990, the same group found a population of 4,419. These are estimates based on assumptions about household composition and not on actual census data. The census bureau has an estimated population of 3,951 for 1990. All numbers in this report are therefore estimates but are useful nonetheless for the relationships that they provide between various sectors.

Valdez clearly is a relatively affluent town. If we look at the nature of employment offered by Valdez, we can see why it is such an affluent place.¹⁰

This affluence, though, is mitigated to some degree by the nature of employment in Valdez and the split between high-paying and low-paying jobs and the split between stable and seasonal employment. Employment in Valdez stays at about 1,000 jobs between October and March. It rises slowly in April, May, and June to a high of 2,500 jobs in July and August and then falls rapidly to 1,000 jobs in September. The added 1,500 jobs are in the areas of fishing, tourism, fish processing, and construction. Except for fish processing, which tends to employ Native peoples in May and June and college students in July and August, many of the jobs in construction and fishing and some in tourism are held by people who attempt to live in Valdez year-round. Those who cannot find work in winter find the going tough and earn significantly less than those steadily employed in the oil or government sectors of the economy. According to our sample, a larger number of seasonal workers remain in Valdez year-round than is generally recognized, although figures on this segment of the population are not available and do not appear as an issue in the survey of Valdez's economic situation used extensively in this report.

Broken down by sector share of employment in order of size, we get the profile for Valdez in 1988, the last year for which such figures are available, that is shown in Table 2.

When aggregated, we can see that Valdez's economy has three critical areas of employment: (1) public-sector-funded activities, which account for roughly 35 percent of those employed in Valdez when direct government, education, and health are aggregated; (2) transport, of which Alyeska's activities through the pipeline terminal and associated industries make up about 87 percent of the total or 20 percent of the

¹⁰Much of the data for this section comes from interviews with various city officials and a draft report to the city by George J. Cannelos of B&B Environmental, Inc., and Darbyshire & Associates for the Valdez Comprehensive Development Plan, 1991, hereafter cited as CVCDP (City of Valdez Comprehensive Development Plan). Statistics are based on statistics from the Darbyshire Business Survey cited extensively in Chapter 7, "Valdez Economic Base Study," CVCDP, also by Darbyshire & Associates. The analysis is my own, as are any of the mistakes in it.

Table 2
PROFILE OF EMPLOYMENT BY SECTOR, VALDEZ, 1988

Sector	Components	Employment Share
Transportation	Pipeline Terminal, Airline and Boat Charter, Ship Provisioning, Stevedoring, Car Rentals, Bus and Taxi Service	22.5%
Education/Health	Public Schools, Community College, Harborview and Community Hospitals, Medical Services	17.5%
Government	City, State, and Federal Offices, Agencies, and Services	17.2%
Manufacturing ^a	Fish Processing and Other Small Manufacturers, e.g., Printing, Computer Assembly	11.5%
Hotel/Restaurant	Hotels, Bed and Breakfasts, Bars	11.2%
Trade	Fuel Wholesaling and Retail, Retail Stores, Campers, Bars	8.7%
Personal Services	Professional Services, <i>Entertainment, Community Services</i>	4.6%
Construction	Building Contractors, Excavation, Earthwork, Sand and Gravel, Masonry, Carpentry	1.9%
Utilities	Electric, Telephone, Garbage	1.9%
Finance	Banks, Insurance, Realty	1.6%
Fishing	Commercial Fishing	1.5%

Source: The figures are based on the City of Valdez Financial Report (City of Valdez 1991) and the CVCDP (1991). The sectors are those defined by Darbyshire & Associates.

^a Fish processing makes up over 95 percent of this category.

employment share in Valdez; and (3) tourism and commercial fishing, which comprise roughly 15 percent of the total employment share but which are for the most part seasonal. All other businesses and economic pursuits are clearly dependent on these three sectors for their survival.¹¹

Revenue share by sectors also makes it clear just how much oil dominates Valdez and just how dependent Valdez is on forces that reside outside its own economic and political domain of influence. A good example is oil transport, which made up about 28 percent of all revenues in Valdez in 1988. Government and education made up about 14 percent and 11 percent, respectively, in 1988. Given the following three factors, Valdez's dependence on oil in 1988 becomes quite clear: (1) the assessed value of oil property is 10 times that of nonoil property and the property tax is a critical component of the town's revenues; (2) a large number of the most highly assessed properties belong to oil-company employees and a considerable number of students in the schools come from families employed by Alyeska;¹² and (3) as noted above, government and education are major employers. It can be argued that dependence has only grown with the increase in oil-related jobs as a result of the spill, which has led to a significant increase of jobs--estimated by most at about 200 or so--in the spill-prevention sector of oil transport such as SERVS.

This dependence on oil transport and on decisions made outside the community is even greater than the numbers illustrate. Revenues from oil that Valdez receives are based on the terms of an agreement worked out between the pipeline owners and the State of Alaska. This agreement sets up a mechanism whereby the pipeline is depreciated over time. As a result, the town of Valdez will over the next 10 years or so see the taxable assessed value of oil property fall from \$1,139,761,160 in 1990 to

¹¹These figures are aggregated from the figures offered in the CVCDP (1991). Some of the numbers are a rough estimation, as the survey does not divide economic sectors precisely the way I did. For example, under fishing I include fish processing. If not completely accurate, my figures are in the ballpark and are accurate enough for the point I am trying to make.

¹²Exact numbers are not known or readily available, but because Alyeska employs 20 percent of all those in town and indirectly supports a number of other businesses in town, one can see the impact of Alyeska on the school population.

\$413,672,000 in the year 2003. The ratio of oil-property value assessed for taxation to nonoil property assessed for taxation will fall from roughly 12 to 1 to less than 4 to 1. If net expenditures subject to property tax fall roughly 40 percent, the rise in millage on property still will have to rise over 50 percent, even assuming only a 2-percent rise in overall expenditures per year. New projects that might renew the Valdez tax base will be based on decisions made in Washington regarding ANWR and by oil and gas companies located in the lower 48.

From the perspectives of value-added contributed to Valdez's economy, too, oil again is the dominant factor in the economy if value-added is seen as the real basis for investment in a community. Transportation, in 1988, made up about 35 percent of the value-added contributed to the economy in Valdez. The other crucial contributors to value-added were government services and education, which respectively accounted for 25 percent and 28 percent of the total value-added in Valdez--but these latter sectors are dependent on oil revenues to a critical extent, as was noted earlier. Table 3 depicts the economic contribution to Valdez by each sector in 1988.

Attempts so far to overcome the dependence on oil transport have come to nil. A dock and a grain elevator were built to transport grain from proposed farming in the interior of Alaska. But this scheme never took off, and Valdez was left with a dock and grain elevators that hardly have been used and which also have left the town with a debt of something over \$9 million.

Today, discussion goes forward for the expansion of the dock facilities in the harbor for small boats to increase the potential for commercial fishing, sport fishing, and tourism and thus hopefully diminish dependence on oil transport. (These plans, given previous experiences, have come under some fire.) Other new projects for the expansion *of the economy in Valdez involve oil--such as the refinery that Mark Air has proposed* putting in Valdez and of course the possible expansion of the oil terminal if ANWR drilling or proposed drilling for gas occur. Valdez also offers the only federally designated "foreign free trade zone" in Alaska, which has been useful to various industries in the area (e.g., the canneries, which ship to Japan), and the city has about

Table 3

PERCENT ECONOMIC CONTRIBUTION TO VALDEZ BY SECTOR, 1988

Sector	Revenue	Value-Added	Income
Transport	32.1 ^a	40.3 ^a	21.2
Education/Health	10.5	12.6	20.8
Government	14.3	16.2	26.7
Manufacturing	13.1	6.3	2.8
Hotel/Restaurant/Bar	4.0	3.3	3.3
Trade	12.2	5.0	6.8
Personal Services	2.4	2.7	4.4
Construction	1.6	1.6	2.0
Utilities	4.1	4.0	4.4
Finance	2.8	4.1	4.6
Fishing	2.9	3.9	2.8

Source: CVCDP (1991)

^a Oil is 87 percent of the total of the transport sector.

3,000 acres zoned for industrial development. None of these various opportunities and facilities, though, has yet to diminish Valdez's dependence on oil transport.

The dependence on oil also creates a clear division within the economy between high-end and low-end income sectors. Individuals holding oil, government, and education/health sector jobs make up roughly 55 percent of all jobs in Valdez but earn 66 percent of the total income share for residents. Those holding jobs in the manufacturing, hotel/restaurant/bar, and trade sectors comprise 31 percent of all the jobs in Valdez but share in only 13 percent of the total income earned. When one adds to that the fact that a significant portion of manufacturing income is earned by transient summer workers, the divisions in earning capacity for people who live in town the year-round become even more glaring. Two areas of employment, although making up a

small percentage of the total, add to the already clear division in the community between high-end and low-end incomes. These areas, fishing and finance, employ only 3 percent of the total but comprise a little over 7 percent of the total income share in Valdez. Surprisingly, with the exception of finance and fishing, government reveals the biggest positive differential between employment share and income share and, as we will see later, the attitudes toward both oil workers and government employees at times is based on their incomes compared with others in the town.

It might be important to add that while the government and education/health sectors receive a significant share of the total income, their contribution to the local economy, according to the Darbyshire Business Survey (1991), as measured by the amount of income retained in Valdez and recycled back into the economy, is significantly higher than any other sector--especially that of oil-based income, which is higher by a factor of about three. The issue of what individuals actually contribute to the local economy and to the local social and cultural well-being and development of Valdez is a constant and divisive issue in the community. However, this is based not so much on statistical knowledge but on general social observations by those in the community. What is of note is the degree to which some of the "common knowledge" about the town is not that far off from more statistically based conclusions. The figures on income retention, which are shown in Table 4, also reveal the extent to which most of the significant private companies in Valdez are owned by individuals and corporations that reside outside of Valdez or are dependent on resources that must be bought outside the community.

What we see in Valdez is an affluent community whose affluence is dependent on oil transport and one that must deal with clear economic divisions between the various sectors that make up the economy. While these conclusions are not surprising for a community the size of Valdez with the kind of economic history and profile with which it is characterized, they should be kept in mind as we move to a description and analysis of the social, attitudinal, and cultural realities of Valdez.

Table 4
INCOME RETENTION BY SECTOR, VALDEZ

Sector	Cents to the Dollar
Transportation	0.24
Education/Health	0.71
Government	0.67
Manufacturing	0.08
Hotel/Restaurant/Bar	0.29
Trade	0.20
Personal Services	0.67
Construction	0.46
Utilities	0.38
Finance	0.58
Fishing	0.34

Source: Based on the Darbyshire Business Survey in the CVCDP (1991).

Before that, a brief discussion of some the important sectors of the economy is in order. It will give us a sense of the everyday economic and social realities that face the residents of Valdez and will illustrate the opportunities and problems that define the city's economy. In examining various sectors of the economy, we can also begin to understand the ways in which the spill of 1989 affected both attitudes and economic activities in Valdez.¹³

II.B. Transport

Transport--which includes the pipeline terminal, the port of Valdez, air and boat charter, the airport, and the car rental agencies--accounts for 23 percent of the jobs in Valdez. Next to government, it is the largest source of jobs in the area. As noted earlier, 87 percent of all transport jobs or 20 percent of all jobs are associated with oil transport.

¹³Some of the discussion about economic sectors will repeat data from the above discussion of the economy in general. The discussion of sectors puts a different light on the same economic reality. Moreover, the sectors do not necessarily repeat those found in the CVCDP (1991).

About 328 people, of which about 210 are year-round residents and work full time, are employed by the oil-transport industry. In 1988, this industry spent about \$52 million for operations in Valdez.¹⁴

Additionally, as noted above, oil transport is the sector of the economy that fuels Valdez. When it is hot, the town's economy is hot; when it is cold, as it was just before the spill, the town's economy is cold. It also is an industry that while fueling the Valdez economy, remains effectively outside the control of the people of Valdez. Not only is oil ruled by world market forces, but the specific agreements that define tax liability, e.g., issues of depreciation, are controlled by the State of Alaska-Alyeska agreements.

New oil exploration and piping would be controlled by the same groups and also by the Federal Government. Thus, as discussed above, the town of Valdez is faced with a decreasing tax base from oil as a result of agreements over which it had no say. Moreover, the supply of oil through the pipeline is of limited duration, and new exploration may not bring the revenues that have been brought by the Prudhoe Bay development. Thus, Valdez faces a future either without any oil at all or possibly with an oil-transport industry but lower or different revenues. Even if ANWR goes ahead, it still is not clear exactly how Valdez will benefit, although townspeople all look forward to such a development with hope for the future.

At best, oil transport is a lucrative but uncertain base for Valdez now and in the future, although it is the critical base to the town's economic prosperity. While most people interviewed do not think of the future of the oil economy, clearly those in key economic and civic positions in the town do, looking as they are for a greater range of industrial and service-based activities (such as fishing, boating, and tourism) upon which to build the town's economy.

¹⁴Most statistical information is based on the Darbyshire Business Survey and on interviews with informants. Executives at Alyeska refused access to their area of operations and also refused to be interviewed, citing the current litigation with the government as a reason. Although asked repeatedly, Alyeska, except in informal interviews with some of their employees or either Questionnaire Instruments (QI's) or Key Informants (KI's), did not participate in the study. It is also interesting to note that Alyeska's executive employees were, on the whole, the most unwilling to be interviewed in our random survey of the town.

The oil spill of 1989 has in the eyes of most people interviewed had a positive overall economic effect on Valdez, even though it did have negative effects on some economic activities in town, e.g., tourism.¹⁵ As a result of new safety measures taken by Alyeska, there are at least 200 new jobs in Valdez, all associated with spill prevention or cleanup in such areas as SERVS and other spill and safety activities associated with loading the oil into the boats.

However, while this has brought new jobs to Valdez, they are not all filled by Valdez residents. A significant number of the new employees employed by SERVS are from Louisiana on contract to Alyeska. Crews and boats come to Valdez for a specified contract period and return to their home base in Louisiana when their term is completed. While other jobs that resulted from the spill are held by residents of Valdez, a number of these jobs have been cut back in the year since the spill. According to a number of informants, at least 16 employees working on the safe-loading tankers were dismissed during the period of research in February and March, 1990. So while most interviewed felt the spill had added significantly to the local economy, a few had a suspicion that the additional jobs associated with safety either would go the way of such jobs in the past, i.e., as no major accidents occurred they would be eliminated, or they would be contracted out to individuals not resident in Valdez.¹⁶

The organization of work at Alyeska also has critical effects on Valdez. Many, if not most, workers at Alyeska work a 7-day-on and 7-day-off shift. This allows the workers the option of leaving Valdez each week they are off. It also prevents them from having much to do in town when they are on shift, given the long hours they work during this period. Thus, according to informants, quite a number of the Alyeska employees opt to leave Valdez during their week off and live in Anchorage--some even keep second homes there. They do most of their shopping and entertaining in Anchorage and thus make a much smaller contribution to the Valdez economy than might be suspected, given their incomes. As a result, the commercial sector in Valdez, according to a

¹⁵Other attitudes about the spill and oil will be dealt with later.

¹⁶As no figures were available from Alyeska, it is difficult to argue which scenario is more appropriate.

number of local merchants, is neither as large nor as profitable as the gross income of Valdez would have us expect.

This movement in and out of Valdez by its residents that is made possible by Alyeska's work schedules and the fact that only about 25 cents of every dollar in the oil-transport industry remains in Valdez effectively makes the oil-transport industry's contribution to the economy less than it might appear from gross statistics. As the tax contribution to Valdez diminishes--and it is through tax revenues that oil transport makes its biggest contribution to Valdez--the contributions to the economy made by oil will become, in my estimation, a mixed blessing. Valdez would not be the town it has become without the oil industry. If the contribution from oil is lowered, Valdez may suffer from economic problems such as high individual rather than corporate taxation, brought on by its requirements to provide the services and maintain the lifestyle it offers today. It may fail to meet these requirements.

Other areas of transport make up less than 10 percent of the income brought to Valdez through transport and only about 2 percent of its total income. Only the port has the potential for sufficient growth to serve as a counterbalance to oil transport. However, generally idle now, the port presently has only added a large debt burden--around \$9 million--for the town; and it shows no evidence of a growth in economic *activity or impact*.

Thus, while oil transport is critical to Valdez, comprising 42 percent of private-sector revenue and 32 percent of total revenue, its effects on Valdez are complex and over the long term somewhat uncertain. How the industry will or will not grow, how it organizes its labor, the agreements it comes to in the future with State and Federal authorities, and the extent to which it will remain a safe and nonpolluting industry all are critical factors in trying to come to grips with Valdez as it exists today and as it will or might exist in the future.

II.C. Commercial Fishing

Although fishing has been a part of the Valdez economy on and off since at least the 1920's, it has never been the dominant economic activity that it has been in other communities on PWS. Ironically, fishing, as measured by the gross revenues, has

increased since the introduction of the oil-transport industry to Valdez. So while gross revenues have risen, the net effect of fishing on the local economy of Valdez has diminished.

Nevertheless, the nature of commercial fishing and its associated manufacture, i.e., fish processing, does have a significant social and political as well as economic impact on Valdez. Many who fish are members of families who have lived in Valdez since before the earthquake and are energetic participants in the town's life. A number of those associated with either the nuclear or extended families in which at least one member fishes for a living own stores in town or hold important positions in the town government, and at least one member of the six-person council fishes for a living. The creation of the Valdez Fisheries Development Corporation with its hatchery and the three fish-processing plants--two of which are economically stable--and the associated boating and repair services provide Valdez with one important, if limited, and relatively stable alternative to oil. Moreover, the seasonal nature of the fishing and fish-processing industries has important impacts on the social life of Valdez.

Commercial fishing makes up about 1.5 percent of the employment share and 2.8 percent of the income share of Valdez's residents as previously noted, but the commercial-fishing industry itself is larger than these figures reveal. With 94 fishing boats remaining in the harbor year-round, they make up only a third of the 280 boats registered in Valdez and resident in Valdez for brief periods during the height of the fishing season. Most of the 60 or so that do not dock in Valdez year-round are comprised of boats owned by fishermen resident in Washington.¹⁷

Valdez itself makes up only a small portion of the fishing that occurs on PWS. With revenues of \$5.4 million, the boats out of Valdez comprise a little less than 5 percent of the aggregate fishing in PWS. According to informants, Valdez residents hold about 20 of the 610 gillnet permits available and 12 of the 260 seine-net permits.

¹⁷Boat numbers are from the Harbormaster's Office, and other numbers on fishing are from various fishermen respondents.

Fishing itself is highly seasonal. The peak of the season is in July and August, and only a few jobs remain year-round. Many of the fishermen resident in Valdez fish only as a part-time pursuit with about seven or eight, according to informants, devoted to fishing on a full-time basis.¹⁸

Most fishermen in Valdez own between one and three boats. For the most part, they fish for pink salmon. Halibut, which has a 2-day season; cod; herring; and shrimp also are fished commercially. According to informants, in a good year a fisherman can gross about \$1/2 to 3/4 million while those who work mainly as tenders can gross about \$1/3 to 1/2 million. No large fleets fish out of Valdez.

Fishing offers a lucrative if hard life for those who choose to make their living as fishermen. The risk in fishing, of course, is that the price of fish can drop precipitously and immediately, fluctuating dramatically in a single season. Local fishermen have no control over fish prices, and the life is hard and dangerous during the period one fishes. Moreover, another oil disaster like the Exxon Valdez spill poses a significant threat to continued fishing on PWS.

Following the spill, fishermen played an active role in the cleanup. Fishermen along with some tour-boat operators in Valdez were among the first out to the spill. Most worked at spill cleanup from the beginning; and although many worked initially without thinking of compensation, most earned significant income in the process.

The spill and the cleanup that followed have given fishermen strong opinions about the risks oil poses to PWS. Of those interviewed, there was considerable agreement that Valdez could not and should not lose the oil-transport industry given its central importance to the town; Valdez would not be the place it is without that industry. Nonetheless, they all felt that to some degree or another oil transport is a potential threat to their industry and the overall well-being of PWS. Because of what they believe to be the why's and how's of the spill and what they saw as the general disorganization and incompetence during the initial and most critical stages of the cleanup, there is a

¹⁸There is little exact information on the number of fishermen who are full time. The numbers are an amalgam of the view of the three fishermen I spoke with while in Valdez.

strongly held suspicion that even with the changes wrought as a result of the spill and lessons learned by Alyeska and Exxon, past history has shown that vigilance decreases as time goes by. As a result, the fishermen interviewed believe that while cleanup efforts might be better organized and while at least for now greater attention is being paid to safety, the chances of another spill still pose a threat to PWS and the fisheries industry. While noting that the fish from the Valdez hatchery have been unaffected by the spill as far as is now known, there is an unease about the effects of the spill on the stores and health of wild salmon over the long term. This is because the salmon affected by the spill have yet to return, given their normal cycle of movement.

Only two of the fishermen resident in Valdez did not participate in the spill cleanup. One of these two fishermen did not participate by choice. The boat of the other fisherman was, at least in Exxon's estimation, not up to the task of the cleanup. Both fishermen argue that they lost considerable income because of the shortened season (one boat was a tender and the other a small fishing vessel).

Those who participated in the cleanup earned as much if not more than their annual earnings from fishing. Ironically, although the season was shorter than usual, it resulted in record catches and revenues. If any of those involved in commercial fishing were adversely affected by the spill, it was those who ran tenders and who lost income, according to informants, because of the shortened season. As many fishermen both fished and worked the cleanup, profits for the summer of 1989 were for the most part high.¹⁹

If the spill did not directly affect the profits of most fishermen for 1989 in a negative way, the spill and cleanup did have important and, some would claim, potentially adverse effects on the industry. For one, the excess profits earned by many during the spill led a number of fishermen to add to their fleet and to buy new boats with the latest in fishing technology. These new boats and expanded fleets gave those who were able to benefit from the spill a competitive edge over those who were not. All

¹⁹Exact numbers are not forthcoming for individual fishermen. The claims here are based on a composite of the discussions I held with a number of fishermen in Valdez.

those who participated in the cleanup benefited by such participation, but they benefited unevenly because contracts were negotiated individually. Depending on when one got involved in the cleanup and the politics of the spill at the moment, contracts--according to many--varied considerably.

According to a number of informants, the spill may destabilize the industry over time in a number of ways and create new tensions among fishermen both within Valdez itself and on PWS in general. The greater number of boats, many of these with a greater capacity and more efficient technology for catching fish, will severely affect distribution of the catch as well as the availability of resources. The likely effect this will have on fishermen who do not have large, fast, well-equipped boats and on the price of fish is uncertain. What is clear is that increased tensions resulting from the uneven benefits of the spill have created greater social conflict in the industry. Moreover, the uneven gains from the spill have increased traditional tensions between fishermen, particularly between the towns of Valdez and Cordova. Each town's fishermen claim that the other town's fishermen received greater benefits from the spill.

Further destabilization may yet occur as the industry shakes out from the impacts of the spill. A number who bought new boats were neither full time nor necessarily experienced fishermen. Some of these may have miscalculated the overall cost-benefit equation involved in fishing. Some bought boats on the assumption that the spill cleanup would continue in 1990 as it did in 1989 and calculated costs on the basis of that assumption. According to most of my informants, others may not have held back funds to pay their Federal taxes from their cleanup income, purchasing boats with money owed to the Federal Government. As a result, a number may find themselves in financial trouble over the next few years as tax obligations are assessed and come due.

All of these issues give a sense of instability to the fishing industry right now as people wait to see how the effects of the spill ecologically, economically, and socially work themselves out. Whether accurate or not, the perceptions of instability are widespread. Add to these perceptions fears about the current state of world prices for salmon and the overall effects of oil transport on the ecology of PWS and salmon over time, and it is apparent that the fishing industry in Valdez has been noticeably affected

by the spill in particular and the oil industry in general. Nevertheless, almost all the informants argued that whatever perceptions and fears they have now were not important to them before the spill. Furthermore, the economic impacts of the spill certainly changed the technical and economic makeup of the fishing industry. Just what those changes will bring is still open to question and a source of concern for most fishermen.

II.D. Fish Processing

Fish processing, which comprises 95 percent of the manufacturing sector of Valdez, grew significantly in the 1980's. Previous to the development of Valdez's infrastructure and growth with the coming of the oil pipeline, fish processing had been a small part of Valdez's economy for most of the time since the 1920's. There are some exceptions to this generalization, e.g., there was no fish processing during the period the PWS was closed to commercial fishing. Today, there are three processors in Valdez. Two are stable processors and one is not so stable. The two stable processors are Sea Hawk, which came to Valdez about a decade ago and mostly processes fresh and frozen fish, and Peter Pan, which entered Valdez in the late 1980's and mostly processes canned salmon. The market for fish processed in Valdez is predominately Japan, with Europe second and the United States last. As a result, the fish-processing industry takes full advantage of the "foreign free-trade zone" at the airport.

While the industry grosses about \$23 million a year, an amount much greater than any industry generated in Valdez before the coming of the oil pipeline, and employs about 625 people at its peak in the summer, its direct effect on the economy of Valdez is small. Fish processing makes up about 13 percent of the revenues in Valdez but only 2.8 percent of the income of the residents. Only about 6 cents of every dollar of gross revenue is earned by Valdez residents, and the plants are not owned or operated by Valdez residents. Moreover, in 1988, less than 14 percent of the fish processed in Valdez came from fishermen who resided there.²⁰ Many who fish out of and are resident in Valdez sell their fish to processors elsewhere on PWS.

²⁰These figures are from the CVCDP (1991).

Given the seasonal and intensive nature of the employment in the processing industry, most who work for the processors in Valdez come from outside the area. Predominately college students, they come to work in the peak months of July and August and live, for the most part, in barracks provided by the processors. The industry suffers from a great deal of turnover. In one company, turnover is over 100 percent, with about 800 people needed to fill the 325 jobs available throughout the peak months of July and August.²¹ In May and June, jobs in this company usually are filled by area Native peoples until the arrival of the college students who work in Valdez during the summer.

Some pressure is put on the infrastructure of Valdez each summer with the influx of the processing employees and others who work only in summer. It is not that the town cannot handle this influx, predictable as it has been over the last number of years, but the coming of summer workers is a mixed blessing at best. It is not clear exactly how much these residents actually spend in Valdez, living as they do in barracks and coming mostly to save money for expenses such as college tuitions. Whatever the cost and benefits, informants feel that processors do provide an alternative to oil for Valdez and a base from which to hopefully build more industry that is independent of oil.

Of all the economic activities in Valdez, the processing industry was affected as much as any economic pursuit in Valdez by the oil spill of 1989. Not only was the season shortened by the spill, it also was extremely difficult to keep employees, especially experienced employees, from joining the spill-cleanup workforce, given the much higher wages paid by VECO, the company given responsibility for the cleanup jobs. While understandable to those who managed the processing plants, it made their work that much more difficult and economically costly during the spill year.

Furthermore, there is some fear about the long-term effects on the worldwide perception of Alaska's fish stock and the effects this perception might have on the salmon market. According to one respondent close to the industry, there is some evidence that sales of Alaska salmon were down in Europe and the United States owing

²¹These figures are from a number of informants associated with the fish-processing industry.

to fears about polluted fish. Whether true or not, these fears add instability to what is an inherently unstable industry, dependent as it is on whole market prices and the willingness of fishermen to work within the parameters of that market. For example, from a record price for fish in the spill year, there has been a significant drop in the price of fish and reports of a reluctance of fishermen to fish for that price in the summer of 1991. Commercial fishing and fish processing operating in a fluctuating world market are nonetheless an alternative to oil but a highly unstable one.

The overall effects of fish processing on Valdez, however, are subtle. We must recall that the owners of the fish-processing plants reside outside Valdez, as do most of the boat owners who supply the processing plants. In general, the profits from PWS go, primarily, to people who do not live in Valdez. However, the indirect effects of these profits, while subtle, are also important to the overall economic health of the town.

There is, with the help of the Valdez hatchery, development research going forward on new ways to market fish, e.g., microwave portions for the U.S. market, in order to build more stability and long-term profitability into the processing and thus commercial-fishing industries. The irony is that the hatchery spawns fish for fishermen from Seattle as well as Valdez, the former being the majority of the fishermen working out of Valdez.

II.E. Food and Lodging/Tourism/Boat Charter

This category includes an amalgam of activities²² that are related to the extent that they form an important if not yet entirely developed alternative to oil transport within Valdez's economy. While food and lodging serve residents, traveling business people, workers, and especially employees in the public sector, tourism underwrites the economic well-being of the hotel industry as well as an important part of the food-service sector in Valdez.²³

The food and lodging sector of the economy is a major contributor to employment in Valdez, but work in this sector is for the most part low paying in comparison with

²²I have not included bars in the discussion here because little information other than what I have already presented was available, and most of the bars are dependent moreso on residents and transient workers than they are on tourists.

²³No exact numbers were available on the hotel and food-service sectors of the economy.

either the oil-transport industry or government. As noted above, this sector provides roughly 11 percent of employment but only 3 percent of the income to those working in Valdez. Moreover, a significant number of persons employed by this sector are transient, working only during the peak summer months of July and August.

There are 4 hotels and 25 bed and breakfasts in Valdez. The bed and breakfasts make up only a very small proportion of hotel revenues. The Westmark, the largest of the hotels, alone earns in a peak month more than all the bed and breakfasts together. The latter, run out of private homes, account for only about \$200,000 (CVCDP 1991), most of which is earned during the peak summer months. The hotels also earn most of their income during these months serving the tourists as well as people in Valdez on business or other work-related activities such as construction. One hotel is open only during the peak months.

A significant number of those who visit Valdez as tourists come with the many tours that travel to Alaska during July and August. The Westmark Hotel itself is owned by Holland-America Lines and serves the tours that this company brings to the area during visits to the PWS. There is some fear, however, that as cruise lines are able to bring larger boats into the Sound, they will no longer need the services of either the port or the hotels of Valdez. This potentially would lower the number of tourists who would actually set foot in Valdez and spend money there.

Winter tourism, an activity being promoted by the hotels and tourist bureau, has yet to take off. Japanese and Korean tours comprise the largest, if not the total, market *for winter tourism, coming in small groups throughout the winter.* A new international ski competition in April and a carnival are events that those involved with tourism hope will bring Valdez to the attention of tourists and tour promoters in order to increase winter tourism.

Tourism not only provides employment directly in the hotels and restaurants that serve tourists, it also provides indirectly to the employment provided by the over 10 stores that sell crafts and other tourist items. Moreover, along with the real estate taxes

paid by hotels, restaurants, and stores, the hotels contribute about \$130,000 a year in bed taxes to the town.²⁴

The spill had critical effects on the tourist industry as well as the food industry. Clearly, given the rise in population during the cleanup, hotels and restaurants made an economic killing--they were completely full throughout the cleanup period. But the cleanup put great stress on the reputation of Valdez as a reliable place to visit as well as on the management of these services.

The influx of workers during the cleanup and Exxon's need for space for its employees to live throughout the cleanup period led to the cancellation of almost all reservations made for tourists in the summer of 1989.²⁵ In the case of one hotel, Exxon effectively booked all the rooms for the entire peak summer months of the cleanup, making rooms unavailable to anyone but Exxon personnel.

While the hotels clearly profited from such arrangements, what effects they will have on Valdez's reputation among tourists and tour operators have yet to be seen. Given that the spill also may have turned people away from visiting PWS, the added complication wrought by cancellations adds to an already uncertain future for tourism in Valdez. However, at the same time, Exxon has underwritten a considerable public-relations campaign to overcome the adverse publicity generated by the spill, and the spill itself has brought Valdez such extraordinary name recognition that its adverse effects may be overcome by the positive effects of the public-relations campaign. Indeed, according to informants, there is evidence that the spill has generated a whole new type of tourist in Valdez, i.e., those who come to see the spill and its effects.

The evidence about tourism is not yet in. Some informants argue that it is down while others say that it really has not been affected. Figures from the largest hotel in Valdez, the Westmark, suggest a slight dip in overall revenues after the spill but not enough to conclusively state that tourism is down. In July 1988, revenues at the Westmark were \$264,000. In July 1989, the summer of the spill, they were \$273,000. In

²⁴The tax figure is from the CVCDP (1991).

²⁵According to city officials, accommodation was found for those tourists who visit Valdez on a regular basis.

July 1990, they were \$255,000.²⁶ The roughly 7-percent drop in revenues is not considered by the hotel management to be significant, looking as they are to a growth year in the summer of 1991. However, the fall in revenues must be looked at in light of a 7-percent rise in Alaskan tourism overall for the year 1990.²⁷

The spill had other effects on the tourist industry as well. The turnover of employees during the cleanup, most of whom worked in the higher paying cleanup jobs *at one time or another*, was "drastic" according to one hotel manager. This led to a great amount of stress among those who managed food and lodging services during this period. However, all stabilized in the year following the spill, and the sector is back to normalcy.

The longer term effects on tourism in Valdez are threefold: (1) the potential shift of tour operators to tour strategies that would not involve a stop in Valdez, (2) the long-term threat of another ecological disaster despoiling the Sound further, and (3) the general U.S. economy. In 1991, the war in the Persian Gulf prompted high hopes for a strong tourist season as Americans shifted away from travel overseas to travel at home. How the recession of 1991 will affect this travel is still an open question.

Charter and tour boats make up a small but important segment of the tourist industry in Valdez. About 25 charter boats and 6 glacier tour boats operate out of Valdez. Of these, 3 of the tour boats and 20 of the charter boats dock year-round in Valdez. The remainder are owned and operated by individuals who do not reside in Valdez. Only two of the charter boat operators who reside in Valdez operate full time. The remainder operate boats mostly in the peak summer months as a sideline to their main occupations.²⁸

The spill had profound effects on this segment of the industry. Tourism was down during the summer of 1989 because of the hotel cancellations and the bad publicity and also because much of PWS was off limits to tour boats during the cleanup. A number of

²⁶These are dollar amounts from the office of the Westmark Hotel.

²⁷The figure for Alaska is from the boat charter association.

²⁸These figures are from informants.

the boat operators were able to make up the loss of income by working the spill, and in fact earned more from this work than they conceivably could from their normal charters.

While overall the cleanup was profitable to boat owners, the effects on tourism remain to be seen. The 1990 season for individuals operating glacier tours was down, although Alaskan tourism in general was up. Calls for tours were up. How the industry will shake out is still uncertain. As one tour boat operator observed, "I can no longer advertise a pristine Sound nor a pristine boat after the spill."

The spill also has changed the boat charter industry. During the spill-cleanup period, the wages and salaries of those who worked the boats rose considerably. These new wage rates, while not remaining at spill-summer levels, have remained above what they were before the spill and have raised the costs of operating a charter boat. For example, for a job that paid \$6 an hour before the spill, operators now pay \$10 an hour. These new costs plus, as in the case of commercial fishing, the numbers of new boats that have come on the scene because of cleanup profits have led to some uncertainty about whether the industry can sustain this new expansion profitably.

Like tourism in general, charter boating is to a great extent dependent on the oil-transport industry for the infrastructure in Valdez: its hotels and restaurants, the airport, medical facilities, public services, and the like. It is also threatened by that same industry given the dependence of boat charters and glacier tours on a clean and nonpolluted sound. Like many in Valdez, the relationship of those in the tourist industry both structurally and attitudinally to the oil-transport industry is both complex and ambivalent.

It is my impression that the tourist industry, although an alternative to oil transport, is dependent on it. The levels of services Valdez offers and the economic viability of the hotels on a year-round basis--as it is only one opens in summer--would be questionable without an oil-transport industry. While a tourist industry could survive the loss of oil transport--tourism was a part of Valdez before the pipeline--it is doubtful that all of the hotels and the many restaurants would survive. The loss of oil transport would substantially change the size and nature of tourism in Valdez. Moreover, tourism also is

dependent on the oil-transport industry remaining free of any more disasters that might make Valdez and the PWS a less-than-attractive destination for tourists.

II.F. The Public Sector

Oil transport generates the greatest gross and net revenues in Valdez and drives the economy, but the public sector provides the greatest share of employment (25%) and resident income (47%).

In a way, one could argue that oil drives the economy but the public sector, which *oil's revenues help to generate, supports it. Public-sector employment (especially government, which comprises 27% of all resident income and where the ratio of income to the number of jobs is 3 to 2) provides one of the highest per capita incomes by sector in Valdez. This is possibly explained by a greater number of employees with professional training, although no figures are available. Additionally, while they provide such a high income level, public-sector revenues also provide the highest percentage of revenue (roughly 70 cents for every dollar earned) that remains in Valdez. Thus, while public sectors are well rewarded and public-sector revenues high, their contribution to the economic well-being of Valdez in direct spending also is very high in comparison with, for example, oil transport, which also is a high-paying sector of the economy.*

During the spill, the public sector did suffer as did other areas from some employee turnover. Some individuals with lower paying jobs left to work on the spill cleanup. For the most part though, the effects of the spill were not so much economic but psychological as the stress and fatigue of the demands forced on this sector, especially government, by the spill became palpable. Overall, informants in this sector spoke of stress and fatigue but could think of no one who actually left government because of burnout related to the spill. Of all sectors of the economy, this sector was least affected economically. The only significant effects were costs both direct and indirect that the cleanup necessitated but which have yet to be paid back to the city.²⁹

²⁹No figures are available on this issue.

II.G. Small Businesses

This category includes all those activities that were labeled manufacturing minus fish processing, construction, personal services, and trade and finance (F.I.R.E.), above, and which are composed of a number of relatively small establishments in comparison with the main economic activities in Valdez. Together and in total these activities comprise about a 16-percent share of employment, income, and revenue in Valdez. This 16 percent is divided among over 150 small firms,³⁰ most of which employ one or two people. The effects on the economy of Valdez of each of the areas discussed here vary significantly. For example, while the ratio of income to employment in the finance area is one the highest in Valdez, it is one of the lowest in the trade sector of the economy. Trade also returns one of the lowest amounts of all its revenues to the Valdez economy (20 cents to the dollar), while personal services and finance return about 50 cents to the dollar.³¹

Manufacturing, if you factor out fish processing, contributes only about eight jobs annually to Valdez and is an inconsequential factor in the economy. Given the foreign *free-trade zone at the airport, though, there are those in the city who would like to see* this area of the economy expand and take advantage of the zone because it would provide a genuine and conceivably important alternative to oil transport. Yet when calculating the possible effects of the airport free-trade zone on the economy of Valdez, the fact that traffic at the airport is dependent on the continued existence of the oil industry in Valdez is often forgotten.

Construction in Valdez comprises mostly small subcontractors and a number of larger companies that reside outside Valdez but come to town when construction is booming; and it exists, except in boom times, on home construction and improvements, public-works maintenance, and small capital-improvements projects.³² In 1988, there

³⁰These figures are from the Valdez Business Directory (Valdez Chamber of Commerce 1989a).

³¹The figures that follow are from the CVCDP (1991) except where otherwise noted.

³²Information on construction is from the CVCDP (1991) and the responses of a number of individuals who work in the industry.

were only two contractors in town who owned their own equipment while 29 rented equipment when necessary. Aside from general contractors, there are carpenters as well as electrical, plumbing, and heating and other specialized contractors in Valdez. There also is a company supplying sand and gravel.

Construction is by nature seasonal and very much affected by the weather. For small operations and for resident construction workers, bad weather can create significant economic problems. For example, a number of respondents who work construction spoke of the winter of 1991 as problematic because there was little snow and thus little work shoveling snow--a job many take during the slow winter period. This slowdown in winter work brought economic hardship to a number of construction workers who chose to live in Valdez year-round.

Year-round residents who work various seasonal jobs such as fishing and boating make up a part of the population of Valdez that is often hidden because they are not part of the economic success story that underlies the growth of Valdez. For those in important and necessary economic sectors who are either not able to work year-round or who are not as well paid as those in the public sector or oil transport, Valdez is a difficult and expensive place to make do.³³

Personal services is made up of a number of small professional or technical services such as law offices and engineering consultants; community services such as churches; personal care services such as beauty shops, pet grooming shops, travel agencies, and barber shops; manpower services such as janitorial services; and media services such as radio, cable, and newspapers. According to the Valdez Business Directory (1989a), there were over 75 such services in Valdez in 1988.

Most of these services are run by one or two people, with the largest employing only six to seven. When aggregated, the personal-services sector employs about 4.5 percent of the workforce and provides a greater percentage of residents' income than either fishing or tourism. Moreover, the great variety of personal services available in Valdez provides a greater range of possibilities to the town than would be typical for a

³³We will look at the social issues this raises in Section III of this study.

community of the size of Valdez. This range of services also attests to the large aggregate disposable income in Valdez both corporate and individual.

Trade, which comprises 8 percent of the employment share and 12 percent of the revenue share, provides only 6.8 percent of the income of Valdez residents (CVCDP 1991). Made up of a number of small businesses of which Foremost supermarket is the largest, it ranges from stores that sell arts and crafts to individuals marketing window coverings and includes among others a health food store, clothing shops, a pharmacy, and a sports equipment shop. Most stores are in the areas of art sales, curio shops, and liquor stores. A significant number of the stores sell curios and other tourist items.

Prices in Valdez are influenced by the transport costs because all items sold come from either Seattle or Anchorage. Given the higher prices this generates--although storekeepers claim prices are not substantially higher than those in Anchorage--many people who live in Valdez do the bulk of their shopping in Anchorage because (1) people feel that prices and choice are better in Anchorage; (2) many feel it is necessary to escape Valdez, especially in winter, and once in Anchorage one might as well shop; and (3) those engaged in shift work who have the 7 days off often have second homes in Anchorage or, even if they do not, spend a good deal of time there. Thus, they do most of their shopping in Anchorage given the variety, convenience, and lower prices. In summer, shops in Valdez do better because of tourism and also because of the large number of transient workers living in town.

Finance in Valdez consists of two banks, five real estate brokerages and appraisers, eight rental agencies, and an insurance company (CVCDP 1991). With the exception of the banks, financial services in Valdez are single-person operations, some with only one employee. As most large business and commercial loans are negotiated in Anchorage, the banks profit from lending services, home equity loans, and other small loans to local businesses and individuals. The other financial services profit from local transactions in housing and insurance. This sector is relatively lucrative for those working within it, providing only 1.6 percent of all jobs in Valdez but 4.6 percent of all residents' incomes.

All the businesses in this sector were affected by the oil spill of 1989, but the effects varied considerably. Small-business informants suggest that employed people

were affected in a number of ways. Two examples follow: (1) loss of employees to the cleanup effort and relative instability in regard to employment throughout the period of the cleanup and (2) the need to raise salaries during the cleanup period, which added to the cost of running the business.

For many, the spill not only brought higher costs but also a loss of revenues resulting from lower sales. For example, some of those in the tourist trade complained that not only did they lose out from lowered rates of tourism, but they also lost potential sales from cleanup workers because Exxon bussed those working the spill directly out of Valdez upon their return from their jobs in PWS. Other businesses confronted the problems associated with employment instability and costs and were able to make significant profit from the spill in the form of sales to the cleanup workers and other transients who came to town and also from contracts given to them by Exxon to supply aspects of the cleanup effort.

Overall, what we have called the small-business sector of Valdez--while offering a significant arena for individual opportunity outside the direct control of either the oil-transport industry or the public sector and also while providing a range of services that enriches town life--still is dependent on the income generated by oil transport and the public sector for its survival. As of yet, none of the small businesses, with the possible exception of those devoted to tourism, has been able to generate a basis of support outside the immediate community of Valdez.

II.H. Housing

While housing is not included within the "Economic Base Study" for the City of Valdez Comprehensive Development Plan, we will review it here because it is part of the economic realities of Valdez--a part that affects and is affected by the social attitudes discussed in Section III of this report.

Housing is a critical issue in Valdez. Faced by a shortage of housing in general and a lopsided distribution of income groups to housing types, the city government of Valdez is developing its housing stock and working on plans in cooperation with Alyeska to further the production of upscale housing.

Prices for houses and trailers range considerably.³⁴ Trailers normally can be bought for between \$12,000 to \$15,000, while houses in the popular price range run between \$90,000 and \$110,000. Larger and better quality houses in more expensive and controlled areas of town--for example those built in Mineral Creek subdivision, which controls the design and appearance of houses built within its boundaries--normally cost anywhere from \$135,000 to \$150,000. The most expensive houses bring upwards of \$180,000. Townhouses run about \$120,000.

Rents vary as the prices of housing units vary. A low-end one-bedroom trailer will cost \$500 a month plus utilities; two-bedroom trailers run about \$900 a month plus utilities. Modular townhouse units range from \$1,200 to \$1,600 a month plus utilities; apartments range, depending on their size, from \$700 to \$1,200 a month plus utilities. On average, a low-end apartment or trailer will run about \$950 a month including utilities.

As of today, trailers outnumber stick-built single-family homes by over 100 units and are interspersed throughout the community, with stick-built homes often on the same street. Even so, the apparent wide availability of trailers does not necessarily provide sufficient low-cost and low-end housing for the residents of Valdez who can barely afford such housing, according to a number of informants.

The large number of trailer and trailer-type units that remain from the pipeline-construction period when Alyeska sought to provide sufficient housing and brought in trailers to do so has created a housing imbalance in Valdez. On the one hand, Valdez, in the eyes of city authorities, does not have enough upper end stick-built, single-family dwellings, which leads many upper income families to buy or rent trailers. On the other hand, because the market for trailers includes upper income families, there is a shortage of housing for those of lower incomes. It is of note that at least two of the respondents on the QI sample were effectively homeless, residing as they were either with friends on a temporary basis or living in their car and using a friend's house for kitchen and bath

³⁴This information is based on interviews with realtors, bankers, and city officials.

facilities. The imbalances in housing have been made more pressing by the expansion of higher paying jobs associated with SERVS and other spill-prevention activities.

As a result, the city, Alyeska, and a developer are cooperating in developing 35 lots for upper income housing to rectify the imbalances that face Valdez residents. They seek to provide needed upper income housing, thereby freeing a similar number of lower cost units for those in lower income brackets. It is hoped these new units will enable the town to rid itself of the more unsightly units left over from the pipeline days and dispel its image as a boom town. New upscale housing also will provide investment opportunities for those with upper incomes--many of whom city authorities argue complain about the lack of investment opportunities in Valdez--so that they can develop a greater sense of commitment to the town.

However, the plan has come under much fire from residents. Some argue that the project will not succeed because there is little incentive for upper income families to give up their lower cost housing, especially as many also have homes in Anchorage where they spend their time off work. Moreover, because many residents in Valdez see themselves as *impermanent*, there is little reason for them to invest in upscale housing. Ironically, although the project to build the new housing is one of the first cooperative economic endeavors between the town and Alyeska, a number of individuals who work for Alyeska are the project's biggest critics.

Respondents who favor the project argue that much of the opposition comes from landlords who will no longer be able to get high rents for inferior housing if the project succeeds or who are afraid that the new houses will lower the value of their own homes. Whatever the case, the project reveals the many and varied economic interests that run through the town and spin a web of interlocking, yet conflicting, economic loyalties and ties. For example, Alyeska employees, who on most issues are fiercely loyal to Alyeska, have become major stumbling blocks to a project that Alyeska and the city see as necessary to the economic and social well-being of Valdez. Another example is that of lower income respondents who are ambivalent about the project. They oppose the city helping to develop upscale housing but feel that if it will open the less expensive units to those with lower incomes then it might serve some good. Finally, there is an irony that

is at the core of most of the citizens of Valdez who clamor for greater action on the housing front while generally distrusting any large-scale intervention by government or large corporations on behalf of the citizenry.

The spill in both the short and the long terms had a number of effects on the housing market. Some families and individuals (the exact number is not known or not available) were hurt by the miniboom in housing created by cleanup activities. While many deny it, there is evidence of families being evicted from housing because landlords felt they could get better rents from those involved in the cleanup. A number of informants did observe that Exxon tried not to rent units from which people had been evicted, but others might not have been so inclined. Moreover, the cleanup did raise rents and house prices, although the upward spiral of housing costs had begun in 1986 after a period from 1984 to 1986 of stagnation in the real estate market. Some informants set the rise during the cleanup at about 7 percent overall, but there are no specific figures to back this up. Whatever the case, there is a feeling that the cleanup did lead to problems with housing shortages and a rise in prices. These problems have become more long term in effect as those associated with SERVS and other new safety-related jobs become resident in Valdez.

Until Valdez can correct the housing and income imbalances and generate a better range of appropriate housing types both in terms of design and price, the housing problem in Valdez will remain, and the appearance and sense of Valdez as something of a boom town will remain.

II.I. Conclusion

When we look at Valdez and its various economic activities, what we see is a picture of dependency but with some potentials for alleviating at least some of this dependency. Oil transport and the large public sector it supports account for 70 percent of the value-added in Valdez. Even tourism, which in principle is independent of oil transport, depends to some extent on oil revenues and the infrastructure it makes possible for its existence. If oil revenues were not available, the hotels and restaurants so critical to tourism would have to downsize or reformulate the nature of their activity,

especially in winter. Recall that the largest hotel was built for the pipeline and not for tourism.

Nonetheless, Valdez is located in a most beautiful spot and already has a good transportation infrastructure. Thus, there is the potential to build new industries and expand its tourist and fishing base. The success of such potential endeavors is questionable. It is clear that for the town to retain its infrastructure, businesses, and activities, it requires a vibrant oil-transport industry that will expand over the next 20 years or so. Without oil transport, the citizens of Valdez would have to rethink their town and create a different and downsized economic and social reality. Oil is what made Valdez what it is today, and it stands at the center of any discussion of the economic and the social and cultural life and ethos of Valdez.

Overall, for a community of its size, Valdez--because of the existence of the oil-transport industry and what it is able to directly and indirectly support--is well endowed with social, recreational, and educational infrastructure and supports. Today, it is by national standards a well-to-do town with a strong and active economy. Whether this provides a sufficient basis for what people perceive as a reasonable social and civic life and how this social and civic life works in light of the physical, administrative, and economic infrastructural architecture of the city is what we will turn to next.

If the history of Valdez can be typified in the late 20th century as one of boom and bust and if the economic realities of Valdez have been to a great extent formed through periods of boom and bust, so too does the theme of boom and bust underlie much of the feelings residents have towards Valdez. As one respondent observed: "People here live from boom to bust and boom again; from the earthquake to the pipeline to the spill and then to the next boom."

Valdez, as we have noted, exists today as it is because of oil. Most people, with the exception of the those who resided in Valdez before the pipeline, have come to Valdez for a good job and the economic rewards that it may bring them. Be it the reality of a good job or the hope of obtaining one, economic prosperity or the sense of prosperity, or *the failure to meet one's hopes for economic well-being, the job and its reward or lack of*

reward forms the foundation upon which people in Valdez evaluate and understand their experiences.

Because oil is the literal and metaphorical stuff that fuels Valdez's prosperity, it forms the central factor around which attitudes and sensibilities are structured directly and indirectly. For many, the spill and its aftermath have brought into bold relief both the strengths of Valdez as a community and its weaknesses, as well as what is good and bad about residing there.

It is to the attitudes, beliefs, and understandings that people have about their lives in Valdez and the effects of the spill and the social formations that underlie them that we now turn. What follows is a series of discussions based on observations and interviews gathered while in Valdez. The discussions and analyses are based on observations, impressions, suggestions, and positions developed over the course of my short research in Valdez during February and March of 1991. In no way are they meant to be conclusive but are offered as a prologue for the understanding of Valdez and its people. To them in general and to the many individuals who kindly gave of their hospitality, their time, and their important insights, I am extremely grateful.

III. THE SOCIOLOGY OF THE SPILL AND ITS EFFECTS

III.A. Social Relations, Social Tensions, and the Spill

Almost everyone in Valdez who was interviewed felt there was tension and conflict during the *spill-cleanup period* but that the tension and conflict, while poisoning the atmosphere in Valdez, was never particularly virulent, as apparently it was in other places on the Sound like Cordova. The social divisions and conflicts that people felt were manifest in Valdez during the aftermath of the spill replicate for the most part the more general and constant social and economic relations that existed in Valdez prior to the spill and still exist today.

Valdez is beset by a number of constant if low-level divisions and tensions that are more latent than obviously manifest. People are aware of the divisions and express sentiments that reflect social divisions in the community. However, these divisions rarely, if ever, find expression as open political or social conflicts.

III.B. Jobs, Oil, Economic Institutions, and Social Divisions

While the observations about everyday social life make no direct reference to the structural relationships that underlie everyday social interaction in Valdez, they allude most clearly to one critical attribute of Valdez life. Social relations as a structural and informal reality in Valdez are a function of the reasons that people come to Valdez to live.

Valdez now, if not prior to the building of the oil terminal, is a social entity defined primarily by its economic reason for being. If we look at our interview sample and ask ourselves why these people are in Valdez, we find that in the majority of cases there is one answer: the jobs they hold. Persons who were unemployed or underemployed at the time of their interviews remained in Valdez for only two reasons: (1) because of hopes of finding better and more stable employment or (2) because they are employed as fishermen or construction workers through the summer and are willing to cobble together a few jobs in winter, like snow removal, so as to provide enough income to support them through the year. Whatever positive features interviewees saw in Valdez, such as its beautiful setting or its location, one lives in Valdez to hold a job.

The overwhelming importance of the job in Valdez and earning a living, hopefully with real economic rewards but often only providing enough to get by, is made most clear by the fact that in our sample over 85 percent of those married or living with another person had either spouses or companions who also worked. What is of note is that the respondent's income could not be used as a predictor for whether others in his/her household worked because individuals earning over \$60,000 were as likely to have a spouse or companion working as those who made under \$30,000.

If people are in Valdez because of the work it provides, the types of work, the skills the various jobs require, and the incomes that these jobs provide vary significantly. Embedded within the social fabric are economic and social divisions that divide the community between the "haves" and the "have-nots" and between those who work for the major institutions in town, i.e., Alyeska and government, and those who do not.

On the one hand were those interviewed who held jobs like janitors, cooks, construction workers, bartenders, automechanics, medical assistants, and such and earned

typically under \$30,000 a year. On the other hand were those who were employed as oil workers, government officials, teachers, and professionals such as accountants and earned typically over \$60,000 a year. Household income was similarly divided, with about 40 percent of the households earning over \$60,000 a year and 40 percent earning roughly \$40,000 a year. A surprising number, 26 percent, earned less than \$30,000 a year in a community where the per capita income is \$20,000 a year. What these figures suggest is a relatively wide division between the various households in Valdez when income is taken into account--a division that is paralleled socially.

In Valdez, people can be divided into those who are "doing well" and those who are "making do." The 40 percent or so of our sample who had household incomes of over \$60,000--and over 75 percent of those had incomes considerably higher than \$60,000 a year³⁵--clearly had incomes that provided the basis for a reasonably affluent lifestyle. This is especially evident when one realizes that top-of-the-market housing was not substantially higher than low-end housing, although high enough to put it beyond the reach of those earning under \$40,000 a year.³⁶ While a household income of \$40,000 is high by U.S. standards, costs in Valdez diminish the real economic value of such an income. If rent and utilities on a small one-bedroom trailer run on average about \$1,000 a month, then \$40,000 will buy one the good life it can in other parts of the United States. But little disposable income is retained if one tries to live in anything but the most basic form of accommodation in Valdez with such an income. A household income of between \$20,000 and \$30,000--about 26 percent of our sample--represents relative impoverishment in Valdez.

No one, or at least no one of whom I knew, was starving in Valdez. Being poor by Valdez standards compared with other places in the U.S. is not poor at all; an income of \$25,000 in many locations in the lower 48 is adequate. However, one's sense of

³⁵Income categories on the interview schedule were divided 0-10,000, 10,001-20,000, 20,001-30,000, 30,001-40,000, 40,001-60,000, and 60,001 or more. Figures on the higher incomes are based on respondent communications.

³⁶Assuming some upscale Valdez house prices between \$130,000 and \$150,000, mortgage payments are between \$1,500 and \$2,000 a month.

economic status and one's real economic opportunities are not defined absolutely. In Valdez, a relatively affluent and expensive community, what appear to be high incomes by the national standard are low incomes by Valdez standards. Incomes that give one real economic choices and some economic status in many lower 48 communities provide little real disposable income in Valdez.

On the other side of the coin, incomes are not so skewed that there is anyone in Valdez who can be called the richest man in town. Neither are there people who have that much more social power as a result of their income and economic position alone. Many people make high incomes in Valdez, but no one, so far as I know, makes so much *significantly more than the rest of the community or controls so much more economically* that by virtue of their economic position they can be seen as part of a privileged and ruling group. Status and social position in Valdez are defined by criteria other than wealth and income. The economic divisions in Valdez are paralleled by a series of social divisions as well.

Historically, Valdez, especially since the building of the pipeline, has been divided socially between those who resided in Valdez before the earthquake and those who came after. The division normally is not alluded to by respondents but does come up in two ways: (1) Old-time residents often are seen as snobs with a superior sense of their own moral self-worth because they did not come to Valdez just because of the good life offered by the oil economy and (2) more important, the town's newer residents often complain that the old-timers maintain a too-tight control over business in Valdez, making it difficult if not impossible for them to establish their own businesses. Whether the claim is true or not, several respondents argued that feelings that separate the old-time residents from the more recent residents helps to erode whatever sense of commitment newer residents of Valdez have toward the community. Moreover, a number of respondents argue that old-timers tend to resist almost all changes suggested for the town, seeing themselves as the only lifetime residents of Valdez and, whether accurately or not, the only residents likely to retire in Valdez or remain when the oil-economy operations close down.

The divisions based on longevity are both broad and subtle. On the one hand, there are those who lived in Valdez before the earthquake of 1964. On the other hand, there are those who did not. The latter are themselves divided among those who came to Valdez after the earthquake but before the announcement of the pipeline, those who came for the construction of pipeline and stayed, those who came after the pipeline was completed, and those who came for the spill cleanup or after.

Among some of the pre-earthquake residents of Valdez, there is a feeling that the social reality of Valdez began to change with the building of the new town. As one old-timer observed:

In the old town, we had a building called the "Museum" where we held all the group activities--especially in winter when we would push the exhibits out of the way until summer, when we would put them back for tourists.

When the new town was established, people built bigger houses so they could stay home more and entertain at home more. It diminished the social life because instead of big gatherings for the whole town people became more insular and cliquish and more used to entertaining at home.

The feeling one gets when talking to residents is that each new influx of residents transformed, if only slightly, the basis of social interaction in Valdez. For example, with the pipeline, the community became a bit more raucous and lively, as the figures for bar receipts in Table 1, Section I, reveal. Respondents recall a far more active social life, with more parties and get-togethers as well as more tension and everyday conflict resulting from the preponderance of single men in town working pipeline construction.

With the normalization of Valdez after the pipeline was completed, a number of respondents observed, there was a shift in the makeup of population with more families and professional and technical workers who created a quieter, less socially interactive lifestyle for the town. With the spill and all the inconveniences it created for residents, the insularity of family life was increased.

While social relations prior to the coming of the pipeline were a function of location, weather, and the smallness and relative remoteness of Valdez, today, social

relations are a function first and foremost of the economy and its national and even international character. Valdez is no longer relatively poor, nor is it remote. While it still is small, the relative wealth of the town provides Valdez with an infrastructure usually associated with much larger places and a demographic breakdown in relation to such characteristics as education, income, and cosmopolitanism that is not typical of a community of 3,000 to 4,000 people. The oil economy, the wealth it attracts, the skills and educational levels it requires, the experiences of those who work with that industry, and the infrastructure they demand (e.g., schools, hospitals, utilities)--along with all the other economic activities in Valdez--produces a wide range of social roles and social types. Among Valdez's residents are college teachers, bankers, engineers, and other highly educated persons. There also are stevedores, construction workers, and boat crewmen, all of whom may or may not be highly educated, but who, within the social construction of our society, are viewed as a social group distinct from that of professionals. All of this apparent variety and heterogeneity is made possible ironically by a single economic fact: oil.

Oil is responsible for the occupational structure of the community and the predominance of two major institutions, Alyeska and government. There is a division between those who work for those institutions--who are also generally the highest paid *members of the community--and others in the community. This division expresses itself* not only economically but also in how one positions oneself in the community and the roles and attitudes one holds about life there. For example, most Alyeska employees are in Valdez because Alyeska has brought them there. Their lifestyles are very much conditioned by the nature of the work they do and its organization: a week on and a week off. Their loyalties and energies are, for the most part, defined by their institutional affiliation. This is not to say that many individuals who work for Alyeska are not involved in town life; they are. But they form a central and special group affiliated with the most critical economic institution in the town.

This became clear for me when most if not all Alyeska employees drawn for our sample refused to be interviewed.³⁷ While some non-Alyeska employees refused as well, Alyeska employees and spouses were the only individuals who refused an interview on the basis of their occupational affiliation. In Mineral Creek, an upscale subdivision of stick-built single-family homes, a number of individuals with Alyeska affiliations, identifiable by the trucks and other vehicles parked outside their homes, refused interviews, saying such things as: "My wife and I work for the oil company, please leave us alone," or "I have worked for the oil company for 13 years," or they just slammed the door.

While such actions do not constitute any proof of a sense of separateness on the part of Alyeska employees, it is emblematic of what many in Valdez who did not work for Alyeska--and indeed a number who did--saw as conduct that was snobbish and somewhat distant socially by those who worked for the company, particularly those in supervisory and professional roles.

This distance may be explained by a sense of self-importance, but it may just as well be a function of the different educational, technical, and intellectual interests and backgrounds of those who work for Alyeska. It also may be a function either of the individual backgrounds of those who are in the oil industry and those who are not or of the schedules that oil people work. These schedules facilitate trips to Anchorage on the oil employees' week off. This in turn appears to divide them from the rest of Valdez, disposing them to different lifestyles as it does. Whatever the case, and there is as yet no evidence to claim that one reason or another is the basis for the division, many in Valdez recognize this division as a fact of life.

It is important to remind oneself that the division and the feelings it produces may be critically related to the central role that oil plays in town and Valdez's dependence on oil. This gives Alyeska employees a special place whether they want it or not, or

³⁷While Alyeska allowed its employees to be interviewed as individuals, I and my assistant, Mike Howard, were not permitted in the terminal, nor were we given any interviews with company officials. Their attorney called and said that "while he had heard that our interview was fair and balanced and not anti-oil, he had advised Alyeska officials to refuse interviews because of the suits pending in both Federal and State courts."

whether or not they choose to be special. They are representatives of the institution that defines at least for now the very reality of Valdez. As such, they carry its baggage as well as the economic largesse associated with oil. As we shall see, this baggage became important during the spill-cleanup period and has carried over into postspill Valdez. But the baggage that employees of Alyeska carry is mitigated or transformed to some extent by the problems they and other residents of Valdez face, including problems with Alyeska.

The divisions between Alyeska workers and the rest of the community apparently have been aggravated by the policy of Alyeska, which, for the most part, has relied on outsiders to fill Alyeska jobs. While at first justifiable by the lack of skilled oil workers in Valdez, the continuation of the policy has created a series of ironies. For one thing, it has moved some employees of Alyeska closer to those who do not work for Alyeska. Both groups see new jobs that are filled not by their children, many of whom have grown up in Valdez, but by people brought from outside the community. As a result, oil workers previously separated by their "outsideness" and their employment at Alyeska are, when it comes to life-chances for their children, more like other Valdez residents in relation to Alyeska's hiring practices. This policy of Alyeska, according to some respondents, has come under review; and the company has begun to help young people in Valdez ready themselves for future employment in the oil industry.

While the social relations and divisions defined directly by the oil economy loom like a benign spectre over the community, there are other important and in some ways equally critical social relationships and divisions that mitigate and refocus the social realities defined by oil.

Distance and division in Valdez are not only defined by one's work but by the backgrounds that people bring there. The many (over 60%)³⁸ who have college degrees come with professional and technical skills and interests and, as a result, hold high-paying jobs. Like communities elsewhere (Robbins 1975), such people seek each other

³⁸CF. Donald et al., *The Stress Related Impact of the Valdez Oil Spill on the Residents of Cordova and Valdez*, Valdez Counseling Center, June 1990.

out on the basis of their interests and backgrounds. When a group is so specialized or the institution to which that group may be associated is considered relatively neutral such that it forms no threat to others in the community, e.g., teachers, then the exclusivity of the group is noted but not considered to be of any social importance to respondents as a group. It is when such divisions are associated not only with economic advantage (teachers are well paid) but with status wrought by the importance of the source of that status, i.e., the institution one is associated with, that the division is noted. So just as with Alyeska, there is a sense that those who are associated with government--especially the city government and particularly technical and professional occupations--see themselves as special and stand a bit aloof from the rest of the community.

Social interests are often defined by one's occupation or economic pursuits rather than income alone. Commercial fishermen and tour boat operators see a community that both supports and is in some ways a threat to their lifestyles. While many express support for the oil companies and the oil industry, these same respondents often express a sense of loss in relation to that industry. As one respondent stated quite bluntly after talking about the fact that the oil industry is probably a necessary part of Valdez's economic health, "Since the spill I have come to hate the oil companies."

Other respondents also voiced similar if not as directly stated feelings about their relationship to the oil industry and about what the coming of the oil industry to Valdez has meant to their own sense of gain and loss.

For many people the oil economy has been a boon. Investments in the commercial life of the town prior to the building of the pipeline have grown in value. New infrastructure has improved the capacity to do business and earn a living, and the growth of Valdez has made it a more comfortable place to live. But these gains have been accompanied by losses.

What many respondents feel they have lost is the power to control their own lives and the power to define Valdez in ways that will guarantee the longevity and security of their economic pursuits. For example, among members of this group one finds a higher percentage of individuals who are actively engaged in city politics or in the various committees that have arisen as a result of the spill. It is unclear whether this is because

many of these same individuals are long-term, pre-earthquake residents who feel a greater sense of involvement in town life or because their economic interests and their perceived loss of power over these interests to oil have resulted in a greater need to actively participate in the formal institutions of community life. Perhaps the two are intertwined, with the long-time residents generally feeling a greater loss of autonomy and a greater sense of responsibility as part and parcel of the changes in their social position in the community wrought by the coming of the oil economy.

Business people, who form a small but important group in Valdez, express similar feelings. While the oil economy adds to the potential to do business, it also disempowers business people by operating in a fashion that ignores the needs of business. For example, the shift schedule at Alyeska of 1 week on and 1 week off allows employees to shop in Anchorage, much to the detriment of local business. While not unimportant to the community, I get the impression that the relative social position of business people is not as important in Valdez as in other towns of its size. Rather, their social place and power are reminiscent of towns that are more openly and clearly company towns and see themselves as such.

Power and authority lie in corporate and institutional places in Valdez. The directors of Alyeska exercise the greatest real power in the community given the central role of oil transport as the linchpin of both the economic and social wheel that moves Valdez. Another locus of authority is comprised by city government--with its various agencies that are funded primarily through oil. How politically the oil industry, city government, and the other elements of the community actually divide power is unclear to me, unable as I was to see it in operation while I was resident in Valdez. But I would suggest that the key institutional players in the community also are key to understanding social relations, social authority, and status.

The divisions suggested here were for the most part not observed but pointed out by respondents. It is important to note that while Valdez is divided by the social characteristics and honorifics associated with occupation, income, education, individual background, and interests, among others, the social divisions that seem to have the most importance and actual power are twofold. First, there are those divisions associated with

income and occupation and the different interests this generates between the haves and the have-nots, a typical and common social division in most communities. Second is the more complex division based on institutional and occupational loyalties and interests people see that sometimes replicate institutional divisions. At other times, they appear to resist them. These divisions also play a critical role in the way people understand Valdez and what happened as a result of the spill.

While we have mentioned some of the tensions wrought by the economic divisions in Valdez especially in relation to Alyeska, the deep feelings these divisions bring evidence themselves more as a function of income and opportunity than institutional alignment. It is clear, in speaking to people, that the power and authority of Alyeska in many ways divides its employees from the rest of the community. The social implications of shift work also separate Alyeska employees from the rest of the community in many ways. The most hostility one sees and hears in town is that aimed directly by the have-nots at the haves and less directly by the haves at the have-nots.

The have-nots complain bitterly about the injustices they feel they experience in Valdez because they have no money. As evidence of their low status and position in town, they point to the underwriting of a new subdivision for upscale housing, the lack of social supports in town, what they feel is the rotten condition of their housing, and the lack of real opportunity for local residents when compared with outsiders brought in to fill high-paying jobs. For example, many feel that they have the skills and energy to fill jobs like those created by SERVS and do not understand why they have been given to people from Louisiana.

At times, the haves refer to problems they believe to be caused by people who do not hold good jobs, e.g., the problems of rowdiness, crime, and transiency. It is interesting that many people with high-paying jobs tend to feel that those with low-paying jobs are transient, yet my interviews reveal that many low-earners have been in town for as long as many persons with high-paying jobs, and some even longer.

The division reveals itself in social patterns, with those who have higher incomes gathering at venues not frequented, for the most part, by those with lower incomes. This division is not absolute, mitigated as it is in any small town by the number of available

public-gathering places. But that the division exists became clear to me when interviewing have-nots in the lounge of the Westmark Hotel--a gathering place for teachers, city employees, oil workers, and other haves. They would come for the interview, albeit often feeling unease at both the interview and the venue, and would leave immediately afterward. At no time did I see any of the have-nots I interviewed in the hotel lounge. The exceptions to this were hotel employees, who could be seen in the bar during the day, usually when it was not busy, and the members of various clubs that met at the hotel, e.g., the cribbage club had a number of low-income members.

In Valdez, the distinction between haves and have-nots is often expressed, even if not accurately, as the division between insiders and outsiders or between those who are permanent residents and those who are transient. Often almost all those who are have-nots are viewed as transient and added to a class of persons who are seen to be necessary but problematic by most who reside in the town--ironically even many have-nots.

In summer, Valdez swells from as few as 3,000 to 4,000 people to as many as 4,000 to 5,000 with the peaking of the construction, tourist, boating, and fish-processing industries. All these industries rely on workers who come for the months of their peak operations. While there is a distinct economic benefit of varying degrees that accrues to the town, residents are divided about its overall value. For many, the transient workers add unacceptable pressures on the town's infrastructure and add negatively to the community's social life, crowding restaurants and other public places as they do.

Even for those who see real benefits to economic growth from such persons and economic activities, the transient workers form separate and distinct social groups and a kind of necessary but distasteful underclass that resides in Valdez over the summer. While not a critical social division nor one that creates great conflict, according to respondents it does increase tensions in the community and at times has played a significant role in defining the social reality of Valdez, e.g., during the pipeline-construction days and, subsequently, during the spill-cleanup period.

The economy and its institutional nature, while creating the most critical social divisions, also has helped to produce a number of important political cleavages within

the community. The cleavages are for the most part latent, but they hold within them the potential for serious internal conflicts within the community. In complex ways, they undercut and transcend the structural and institutional social divisions that define the central social reality of Valdez.

III.C. Development, the Environment, and Social Conflict in Valdez

While almost everyone is resident in Valdez for some economic gain, e.g., a job or the hope of a job that pays well, the town is divided between those who are progrowth and those who are not. Over the last few years, conflicts have arisen over the expansion of the boat harbor, the underwriting and development of new housing subdivisions, the potential expansion of Alyeska, and the development of ANWR. The most potentially explosive issue is that of the environment and its relation to the development of new gas and oil fields and the potential growth of Valdez.

It is important to note that everyone with whom I spoke in Valdez is in favor of maintaining a clean, balanced, bountiful, and healthy environment. All the respondents felt we should maintain the environment to the best of our abilities and with the best for the environment in mind. Oil people and environmentalists agreed in general on this point. The differences surfaced when one specifically spoke about what a good and healthy environment should be, what may or may not harm the environment, and what can be done to assure its continued well-being. Thus, the disagreements that surface about development need to be understood within this context.

The disagreements over economic development, while often heated, are limited in their reach. During my study of Valdez, no one ever voiced the opinion that the construction of the pipeline should never have occurred. Nor was anyone of the opinion that the pipeline was anything but, on measure, a good and positive development for Valdez. To a person, respondents believed that Valdez would not and could not be what it is today without the oil economy. Even those respondents who were residents of Valdez prior to the construction of the pipeline who, in the words of one such resident, "hated the oil companies for what they have done to Prince William Sound," admitted that the oil economy did much that was good for Valdez. Respondents who were not

resident in Valdez before the pipeline were cognizant that their residence there was due to the creation of the oil-pipeline terminus in Valdez.

This said, there is still division about the necessity and the desirability of further growth of the oil industry. On the negative side, while there were no respondents who could be typified as, in the local parlance, "tree-huggers," there is vocal and active opposition to greater development of the oil economy. The opposition to further growth cites the potential for another disaster like the spill of the Exxon Valdez as one reason for thinking hard about the further growth of the oil industry. While the potential for such a disaster increases with development, the more cogent and more commonly expressed opposition to further growth is based on the argument that there is constant and low level, but nonetheless environmentally hazardous, pollution caused by the oil industry. Respondents cited such problems as benzene in the air, the frequent small spills,³⁹ and the ships that enter the harbor covered with and emitting pollutants that color the snow grey and brown. There is a deep suspicion among those who oppose more development that, given past experience, one cannot trust the oil companies to be forthcoming about the hazards associated with the pipeline and with the shipment of oil. Even with the creation of the RCAC (Regional Citizens Advisory Committee) and other regional watchdog committees, people remain suspicious.

Another source of opposition to the growth of the oil industry is indirect and, ironically, often comes from individuals who work for Alyeska. This opposition probably would find their inclusion as opponents to growth an inappropriate classification; nevertheless, they do oppose many of the initiatives that accompany growth. For example, the opposition to the development of the new subdivision and especially Alyeska's and the city's guarantees for the project was led by individuals who already owned income-producing property and were wary of the effects of such a new housing development on both their property values and incomes.

³⁹While I was in Valdez, there was a rumor about a spill of 10,000, 1,000, or 100 gallons of oil into the harbor, depending on to whom one spoke. The only dispute was over the amount, not that the spill happened.

While not consciously antidevelopment, such forms of opposition raise questions about how any development might be thought of when issues that are ancillary but critical to such development are raised. Another example is the conflict over the siting of a new harbor--Alyeska needs new facilities and wants them sited on one of the most attractive hills on the harbor, but the tourist industry and many others in town are opposed to such a siting. As an offshoot of the above divisions, there are those who would like to see Valdez develop in ways that make it less dependent on oil for its economic wealth and well-being. These people become suspicious of increasing such dependence. Conflicts over development projects underwritten by the city also involve both suspicions of growth and suspicions about the city's capacity, especially given earlier projects like the granary and port facility, to properly undertake any development projects.

While these conflicts are not ostensibly over development of the oil industry, they impinge on decisions that need to be made about such development and create cross-cutting interest groups. At certain levels of analysis and social reality, these groups put to lie the more obvious and more straightforward divisions within the community that derive from the presence of the oil industry. While a previous mayor was voted out of office because he was felt to have too adamantly criticized Exxon after the spill,⁴⁰ and while many voice opposition to the workings of the RCAC and some of its members, these disagreements in regard to development are tempered by suspicions that the oil industry may be risky to health⁴¹ and also by fears people have about too much development.

What one sees in Valdez is that beneath a seemingly simple and obvious social structure based on the critical economic institutions in the community, there is a more subtle and complex set of social relations, divisions, and attitudes. Crosscutting divisions based on employment status or company loyalty are alliances, no matter how organizationally weak, based on fears about pollution or shared views about the

⁴⁰The former mayor still believes the oil economy is a necessary and positive part of the community.

⁴¹Respondents cite what they believe to be high levels of cancer among people who work at the oil terminal.

development of the town. Thus, people often find themselves expressing contradictory interests in the same interview.

However, with all its complexity, Valdez is nonetheless a place where people come to get a job, to prosper, and to raise their standard of living. It is not a place where most people come to retire, nor is it a place where people come just for its location or ambience, even though it has a magnificent natural setting. As such, its social relationships, its social and political divisions, and the attitudes and perceptions of residents about where they belong in the community and what their interests are revolve around the realities and perceptions that influence each individual's economic position and pursuits. It is that which defines both the simplicity and complexity of social division and conflict⁴² and would come to define the underlying nature of the tensions, splits, and conflicts that came to typify the spill.

III.D. The Spill: Divisions and Conflicts

Tensions, divisions, and at times some open conflict during the spill and its aftermath were present in Valdez but, according to almost all our informants, they were never of the virulent and even violent nature of conflicts attributed to communities elsewhere on the PWS. For example, Valdez respondents characterized Cordova as a place seething with virulent and vitriolic disputes. Residents of Valdez were often quick to point out that Valdez did not suffer particularly bitter infighting or violent contestations. They offered a number of reasons, reasons that are fundamental to the difference between Valdez and most other towns on the PWS affected by the spill.

The most important reason is that Valdez is not a community that is primarily dependent on the PWS, except as a transportation lane, for its economic well-being. Commercial fishing, while present in Valdez and a small and in some ways important industry, is not critical to the lives of most residents. Tourism, which includes the boat trips to the PWS and is dependent on the well-being of the PWS, also makes up only a small part of the economic activities in Valdez. A generous estimate of those economic

⁴²Recall that even the division between old and new residents is at best a division that is felt to be important only to the degree that it appears to affect economic activity.

pursuits dependent on an ecologically clean Sound makes up about 10 percent of the economic activities in Valdez. An oil slick that might be disheartening and disturbing to the community for a number of reasons was nonetheless never a real threat to the well-being of 90 percent of the citizens of Valdez.

Equally as important in abating anger over the spill, again according to most respondents, was that almost every adult resident in Valdez who wanted to work the spill cleanup and earn significant extra income during the summer of 1989 was able to do so.⁴³ A few people were able to earn so much extra income that they were able to start new businesses. In other cases, they were able to leave Valdez and start new lives elsewhere. Apparently unlike other communities on the PWS, the feeling in Valdez is that if what people received from the spill cleanup wasn't exactly equal and not always entirely fair, on measure it was equitable enough for those who actively pursued work during the cleanup. This is not to say that there were not disappointments and feelings among some residents that they were unfairly treated. However, it is clear in Valdez that people recognized that there was money to be made and available to almost all of those who chose to make it.

Moreover, it is important to recall when thinking about the effects of the spill on Valdez that the town itself was never even threatened by the spill. We think of Valdez when discussing the spill because of the name of the ship, the Exxon Valdez, and because cleanup operations in the summer of 1989 were centered there. For the people of Valdez, the actual spill was in some ways, especially if they did not participate in the cleanup, as abstract a reality as it was for those who watched the spill in the lower 48. As one respondent told me: "I did not hear of the spill until my wife called, worried that oil was seeping into our backyard after hearing about the spill in Seattle where she was visiting relatives."

⁴³Boats belonging to some owners either were too small or too poorly maintained to work the spill. Persons who weren't contracted to work the spill remain bitter about their exclusion to this day. Other respondents who knew of this situation argued that those contracting boats were correct in their assessment of the working capacity of those boats although they might, as some suggested, have given the owners a small payment to assuage any feeling of losing out on the cleanup activities.

The town of Valdez and the word "Valdez" served as emblems for the spill, but the spill was never near the town itself. Even the hatchery was never threatened by the spill, and fishing never stopped entirely during the cleanup. In a sense, Valdez, as one respondent, even if a bit hyperbolically, noted: "Could have avoided the spill entirely and its effects if it weren't for the fact that the cleanup operations were centered here."

Centering the spill-cleanup operations in Valdez generated a number of problems and tensions that led to divisions within the community and even open conflict, however short-lived.

For one, the insider-outsider division, always a part of the social reality of Valdez, was exacerbated by the intrusion of so many outsiders into the community. Most of the outsiders who came to work on the spill cleanup were socially positioned as most outsiders coming to Valdez previously, i.e., as transients with little social position and no authority or say about the workings of the community. However, there were outsiders who came to work on the spill-cleanup operations, most specifically the executives of Exxon and VECO, who came with great resources, authority to run the cleanup endeavor, and a social status. Although these persons were located outside the everyday social hierarchy of Valdez, their social position was above that of local residents, at least in their own minds, according to Valdez residents.

Residents felt alienated and angered by the incursion of outsiders from Exxon and VECO who took over the spill cleanup as soon as they arrived. "Bossy," "incompetent," "corrupt," and "inefficient" are just some of the terms applied to the executives from both Exxon and VECO.

One respondent, close to the cleanup effort, told me, "People felt abused, angered, and pushed around by Exxon and VECO. As a result, there were threats of violence against Exxon and VECO employees and their places of residence although I don't remember any violence." Another respondent put it this way:

We in Alaska always have the feeling we know how to deal with the environment so we were angry at the arrogance of the Exxon people and felt that they should work more closely with local people to protect the Sound, for example, people who worked the hatcheries. Even though VECO is from Alaska they too were arrogant and ignored local residents.

The anger precipitated some incidents. Several respondents spoke of situations where vehicles belonging to Exxon or VECO were run off the road and situations where harsh words were spoken. And of course there were enough threats to alarm the Exxon executives sufficiently that they put guards around their places of residence--an act that for many further exemplified the distance of these executives from the rest of Valdez. As one Valdez resident observed: "During the spill, Exxon people put guards around themselves and their places of residence. We had to work with people like that who were all from Texas. It was very distasteful."

A number of respondents noted that the tensions and anger that residents of Valdez felt about Exxon and VECO were carryovers from the anger they felt toward Alyeska. But these residents were for the most part in the minority. Although there are memories of a number of incidents where people hurled petty verbal assaults at Alyeska employees, the latent anger people felt about the spill was rarely directed at Alyeska employees. Most respondents were of the opinion that people who worked for Alyeska were members of the Valdez community, and they too were as adversely affected as those who did not work for Alyeska. Moreover, a number of respondents added that many Alyeska employees were as angered by the spill as those who did not work for the company. This is borne out in interviews with a number of Alyeska employees who felt as "put-off" by the oil companies as everyone else in Valdez.

More material tensions and conflict arose over the allocation of contracts and jobs by Exxon and VECO. While for the most part everyone who wanted to participate in the cleanup effort could do so, there was some feeling that there was favoritism toward buddies on the part VECO employees. This was coupled with the perception that outsiders were favored and that the benefits from the cleanup were tilted away from many Valdez residents. People spoke of contracts going to individuals who didn't even

have boats but had to buy them in order to work the spill. Others spoke of differential payments for the same job--a fact that no one denies and one that has been dealt with in a new plan between the oil companies and Valdez in the eventuality of another spill disaster. Whether the differential payments were the result of corruption or the ability of an individual in the hectic circumstances surrounding the cleanup to negotiate the best deal possible is open to question. But whatever the case may have been, the memory has left many in Valdez bitter and distrustful of outsiders.

If there were tensions toward oil company people, there also were feelings of anger and distrust toward other outsiders, particularly the media, and those environmentalists who in the words of so many in the community "invaded Valdez." Even those who were aghast at the spill and angered by oil company incompetence felt the media and the environmental groups who came to Valdez did so with their own agendas and manipulated the situation to their own advantage. Several people told of a town meeting where a woman from Greenpeace pretended to be attacked by a local policeman for the benefit of the media.

While in most instances the spill did not lead to open hostility, even towards outsiders--and residents who were present during the pipeline days saw the spill-cleanup period as less dynamic and disruptive than the construction period--there are divisions of *opinion in the community about the spill's effects on the community*. For one, there are still bitter memories about those who benefited most from the spill and fears about how these benefits might distort elements of the economy, e.g., commercial fishing. For another, there are open conflicts with the city government about what many saw as a capitulation by city authorities to Exxon, allowing them to build at will without any permits or city oversight. At the same time, the city government forced those residents trying to build during the spill-cleanup period to go through the permitting process. For many, the influx of outsiders has changed the way they see Valdez. It has permanently transformed social life for others less likely to participate in public life, political or social, because of the angers and the disappointments and confusions wrought by the spill.

Some residents recall fights while others do not; and while no one remembers any serious violence or open hostility, there are many poignant tales of losses of friendships as a result of the spill. Several people spoke of loss of close friends because of disagreements over the spill's effects and the role of the oil companies. For many, it became hard to maintain friendships with those who worked for Alyeska; and those who worked for Alyeska often found it hard to maintain friendships with those who didn't.⁴⁴

As one respondent sadly recounted: "I saw a well develop between me and my friends at Alyeska because of the spill. We are friends again but it is not the same, the old hurt can't heal."

Others saw old working relationships destroyed by new economic competitions produced by the spill-cleanup effort. A number of respondents told of losing friends over competitions for contracts or the breakdown of longstanding relationships because one or the other wanted to work the spill in ways that destroyed previous economic or social relations. For example, several respondents spoke of losing people who had worked for them for years and had become good friends. While they understood why these people would look to the spill for new sources of income, the change in relationship broke down old trusts and awaited a new way of relating that had not as yet been found. The pressures on many individual relationships clearly has transformed some of the earlier basis for social interaction and trust in Valdez but now awaits both the time for these relationships to develop and a study of what they once were and now have become.

Whether these memories of manipulation by outsiders and bitter memories about issues internal to Valdez and its residents refer to real events or not, they do point to a critical internal stress and conflict among the residents of Valdez. While people in Valdez clearly wanted to help the cleanup effort and worked hard to accomplish a cleanup, the fact that the cleanup effort was centered in Valdez altered their lives during

⁴⁴It would be extremely edifying to return to Valdez and do a reasonably exhaustive study of present social networks and friendship patterns. The discussion of individual relations above is based on respondent testimony and not on a study of actual patterns of interaction, except insofar as they were observed in my daily round through the community.

that period. Effectively powerless in managing any part of the cleanup effort but wanting to see a successful cleanup, residents were left with internally ambiguous and conflictive feelings that remain to this day. Open hostility would not stand in the way of a cleanup, but by not expressing their angers and alienation, many people in Valdez have been left with ambivalent memories and feelings about the spill and what it has meant to their lives. It is, at least in my mind, too soon to know how the spill will affect the town and those who experienced it. Only now are the internal stresses beginning to reveal themselves within individuals. How this translates into the social order will take even longer, I suggest, to manifest itself.

III.E. The Problems of Stress

To understand the problems of stress that accompanied the spill in Valdez and to put the stresses and strains of the spill into perspective, we need to be reminded of the changes the community has undergone since the early 1970's. Although the new town was born out of the earthquake of 1964, which had traumatic effects on the community, the present population is for the most part made up of people who either arrived at the same time as the construction of the pipeline or have come to Valdez since. The period between 1974 and when the spill occurred in 1989 was a rocky one with a number of important and even dramatic changes affecting Valdez. These changes transformed the town's infrastructure, superstructure, and population. The coming of the pipeline and the economic and demographic boom that followed transformed Valdez from a sleepy little town of about 1,000 people into an active, wealthy, and vibrant community of upwards of 10,000 people. While superficially the period of the spill would transform Valdez in many of the same ways that the pipeline construction did--upwards of 10,000 people came during the cleanup, and the town experienced another economic boom--people in Valdez have distinctly different memories about how those periods affected their lives.

The pipeline days are remembered as a chaotic but socially active time of partying and relative social goodwill. On the one hand, it is clear from police statistics (see Sec. III.F) that many of the problems associated with the pipeline days, e.g., crime, drunken driving, drunkenness in general, fighting, and overcrowding, were similar to those of the

spill-cleanup days but were even worse in some ways. For example, prostitution and drugs were present during the building of the pipeline but never manifested themselves during the spill cleanup. On the other hand, people who had lived in Valdez during the period of pipeline construction remember that time as a period unlike the period of the spill cleanup. They remember the latter as a basically difficult period but the former as a happy time of prosperity, active social interaction and the problems notwithstanding, a basically positive period in Valdez's history.

Whether such memories are a nostalgic distortion of reality or an accurate recollection of the feelings and perceptions abroad at the time of pipeline construction,⁴⁵ there are some important differences between the pipeline-construction days and the spill-cleanup days that critically distinguish those two periods and the effects they had on people. These differences, I would argue, are strong enough to clearly overshadow the similarities that the two periods share.

While the spill in its way brought new economic prosperity to both individuals and the town after an economic decline, as did the building of the pipeline, there is nonetheless a critical difference between the two events. The pipeline, unlike the spill, was both desired and courted by the townspeople; it was something they wanted, for which they had planned and for which they were basically ready. The spill had no such attributes, unexpected and sudden as it was. Because the pipeline was planned, infrastructure, although not entirely adequate, was put in place to receive the thousands of construction workers who came to work on the pipeline. Moreover, as a planned development, workers were contracted outside Valdez and came in organized groups who for the most part were brought in by contractors who had provided for them.

As a planned activity, even though it was a major imposition on the social and physical fabric of Valdez, the demographic changes wrought by the pipeline did not occasion the devastating effects that were caused by the spill. During the spill cleanup, the population changed in less than a month, and people came as individuals prompted

⁴⁵It is of note that similar fond memories are shared by people as different as old timers who lived in pre-earthquake Valdez and own businesses in town and individuals who worked on the pipeline or were bartenders during the pipeline-construction period.

by several reasons. Some came to help the environment, and some came to make an economic killing. Many persons came without work or a sense of what they would actually be doing, and with no particular place to lodge. Unlike the reasonably controlled transformations of the pipeline-construction days, the transformations resulting from spill cleanup--a sudden, unexpected, and massive invasion into community life--were uncontrolled. As a result, they became a threat to the infrastructure of the town and an annoyance, even a threat, to the everyday well-being of residents rather than the welcome change brought by pipeline construction. For the townspeople, the rapid invasion of so many people all at once created excessive demands on the town's services and infrastructure. At times, according to city authorities, the water supply was threatened with infection from an inability to deal with the population overload, which led to people often relieving themselves on the streets and living in vacant lots without any facilities.

While we might want to ascribe the different memories of the pipeline-construction days and the spill-cleanup days to a degree of distance and the nostalgia that distance brings, the pipeline days did create problems for the town. The response one senses to *the spill, though, is not merely a lack of nostalgia. The suddenness of the change and the lack of control residents had over events produced a sense of alienation and powerlessness. In the words of a study done by the Valdez Counseling Center (Donald et al. 1990:23): "The tremendous convergence that totally disrupted the community and robbed residents of the ability to predict events in their lives with any degree of accuracy produced extraordinary stress in their lives."*

The speed with which events changed during the spill cleanup; the fact that the spill happened without any warning or, indeed, any expectation that such a disaster would ever occur;⁴⁶ and the unwelcome nature of the spill and the changes it brought all made the spill a very different experience from the pipeline.

⁴⁶We need to recall that no spill in U.S. waters previous to that of the Exxon Valdez had been so big and extensive.

The effects of the spill cleanup on Valdez also were made more traumatic for the community than the effects of pipeline construction because of a major change in the cultural ethos and understandings of Valdez society. Valdez, which had, as one respondent put it: "A sense of a frontier and of a rapidly changing world during the pipeline days had remade itself into a normal, family oriented, and quiet community."

Rather than desiring change as they did in the pipeline days, residents for the most part had redefined Valdez as a community where, as another respondent observed: "People had settled down into a life where they could feel that things today would be like things were yesterday and would be like things tomorrow."

The spill abruptly and even violently destroyed, at least for the spring and summer of 1989, that feeling and the psychological and cultural security it provided. As a result and overall: "The spill and its aftermath constituted an extreme stressor for most area residents."⁴⁷ These stresses could and did: "Cause emotional problems for most people in one way or another" (Donald et al. 1990:17).

The problems associated with stress were not germinated out of thin air, according to those at the Valdez Counseling Center who have looked at the relation of stress to the spill, but were rooted in the social and personality profile of both Valdez as a place and the individuals who made up the community. For one thing, as many respondents were wont to point out and one succinctly put it: "Remember, Alaska is seen as a land of opportunity, an escape from earlier failures, so it attracts a lot of people who already have social ills and individual problems when they come here. They are people who often don't fit in elsewhere."

Because so many of the people employed in Valdez came as result of the oil economy and had jobs with various oil companies before they arrived, Valdez might not be exemplary of the typical Alaskan community. Nonetheless, for many who do live there, according to the testimony of respondents, Valdez is a last chance, a place that has provided new and better opportunities. It is a place in which one could put one's trust that the psychological, social, and economic props of one's life would not be undercut.

⁴⁷Donald et. al. (1990:17), speaking of Valdez and Cordova.

The spill, while shoring up and even cementing those props in some instances, ate away--if not entirely at least somewhat--the props in other instances.

Economically, as has been noted previously, the spill energized a stagnant economy. Many, if not most, individuals gained monetarily (often significantly) as a result of the activities associated with the spill cleanup. However, economic gains were undercut to some extent by the effects and implications of other aspects of the spill. As one respondent so aptly put it: "The spill left many people with a sense of betrayal by the oil companies because they (residents of Valdez) had been told nothing like the spill would ever happen. But it did. And when it did, the company couldn't handle it, so we just lost our trust in Alyeska because promises weren't kept."

This in itself was not so much the problem. A loss of trust is not in itself damaging. What made the loss of trust so problematic in Valdez and even personally destructive in some instances, the respondent went on to say, was that: "We live in an oil town and there was nothing little people could do about this. So the anger and disappointment was turned inward and added to the tensions in town and the problems one gets from stress."

The inwardness that the respondent speaks of was aggravated by the winter of 1990 when 46 feet or so of snow fell, intensifying feelings of entrapment and reducing chances for social interaction and community life.

The spill did not directly cause depression in and of itself. Incidents of family violence as a measure of depression actually increased after the spill cleanup was over, as police statistics reveal (see Sec. III.F). According to Heasley (1991:15), the Advocates for Victims of Violence have noted an increase in victims of domestic violence since the spill. During the spill cleanup, as one respondent noted: "We were too busy to know we had problems; we were too tired to think about them."

What the spill instilled in people, which has only come to the surface in the period after its occurrence--and in my view will continue to surface--was a sense of instability, of powerlessness, and of a loss of control over their lives. Many respondents spoke of a new cynicism toward the town, toward the oil companies, and toward the institutions of society like government. They all failed during the spill and thus are no longer to be

trusted. While not everyone felt this way and a significant number of respondents felt that the institutions of society like the oil companies and the government did as well as could be expected, almost all felt that another disaster such as the spill is probable and that the future has been sullied by the spill.

This is not to say that pessimism dominates the mood in Valdez. Quite the contrary. To an outsider, Valdez appears to be a friendly, lively, and healthy place to live.

The problems caused by or related to--depending on one's viewpoint about causation--the spill are not crippling, nor do they appear overwhelming, but they are there. For example, the Counseling Center saw more people in 1990 than in any previous year. Reports of domestic violence were up, even though twice as many people were resident in Valdez during the spill-cleanup period; and more people than ever, according to a number of respondents, spoke of: "Being depressed although they have good jobs," as one respondent put it. Moreover, people spoke of lost friendships and the realization that people in Valdez are greedy and opportunistic--concepts used by a majority of respondents at one point or another in our discussions--a realization that came out of watching people's actions during the spill cleanup.

While the feelings that people revealed themselves to be less than saintly during the spill cleanup are pervasive, they are countered by feelings that there were people who acted rather selflessly as well. But on measure, one definitely gets the feeling, in speaking to people both formally and informally, that the spill created a sense of distrust, of doubt about people's motives and of betrayal by friends and enemies alike, and that it: "Will be an undercurrent in Valdez for years to come," as one respondent averred.

Whatever people feel about the spill now and whatever problems it has caused and will cause, the net effect of the spill and its consequences on the individual psychological and social psychological health of Valdez is still an unknown. It had been over a year since the spill when I was in Valdez, and the feelings that were prompted by the spill were just surfacing. Whether people were staying home because they had less money or because of patterns they learned during the spill, when going out was an unrewarding experience, is not known. Whether housing problems caused by new employment

resulting from the spill are temporary or will change the fabric of social life and relations in Valdez is still to be known. Moreover, the answer to the question as to whether the economic boom that for some is just a memory but for others has brought continued economic advantage and still others economic problems will create new social ills and psychological stresses still is not known.

However one feels about the spill, it is at least safe to say that, in the words of a long-time resident of Valdez: "If not everyone was burned out by the spill everyone in town was singed by it."⁴⁸

III.F. Crime

Along with the problems of daily life during the spill-cleanup period, the larger population put the police force under extreme stress during this time. A force designed to deal with the exigencies of no more than 5,000 people was asked to deal with the problems of a community of 10,000--a community that had a large number of unemployed transients looking for work and large representations of people not normally resident in Valdez. Included in the latter were environmentalists, the media, government representatives, oil company officials, and the like. While dealing with such a large population clearly was a strain on an undermanned police force, police statistics reveal that although their workload increased significantly, the rise in crime was less than might have been expected. Moreover, although the spill brought a great rise in a number of people all coming in a short time and for a short and intense period of work, the Valdez police were not entirely unfamiliar with such changes. Every summer there is an influx of persons to work in construction, fish processing, and the tourist industry. The problem of the spill for the police was not so much one of a qualitative shift but of a significant quantitative shift in their workload.

Normally, while Valdez experiences problems with crime and social disturbances, they are not problems that overwhelm the community. In 1990, for example, the police

⁴⁸Burnout itself was not a major problem for most. Even those who were extremely overworked, as for example in city government, were for the most part able to handle the strains of the spill. In city government they instituted a policy of watching each other so as to avoid burnout. Some respondents told me they quit high-paying but high-stress jobs during the spill cleanup to avoid burnout.

department responded to a total of 5,195 calls.⁴⁹ That is an average of 14 responses a day. If we estimated the population of Valdez to be 4,000,⁵⁰ then the number of responses equals 3.5 responses per day per 1,000 people. Responses include everything from injuries and complaints about neighbors to more serious crimes like assault, theft, and domestic violence.

Although Valdez is not overwhelmed by crime, it is not a crime-free community. In 1990, there were 396 arrests, or about 1 for every 100 people, assuming an average population of 4,000. More serious crimes are problematic. For example, while there were only 27 recorded assaults in Valdez in 1990, there were 237 thefts during that same period. This represents a rate of 5 percent for the population.⁵¹

According to the police, crime increases significantly during the summer as transients, often without any resources of their own, come to Valdez for work. Although the summer influx increases the population incrementally, crime increases at a greater rate than the increase in population. Moreover, maintaining order is made more difficult for the police because many transients choose to live in tents rather than in the bunkhouses in order to save money. This puts a strain on the community's infrastructural resources and creates a greater potential for disturbances.

According to police, two policies to control problems in Valdez have been instituted with some success. One is a town curfew for anyone under 18 that begins at 11 p.m. on weekdays and midnight on weekends. The other is a program to decrease the number of drunk drivers. Bartenders give intoxicated patrons cards to use for free taxi rides to their homes and then back to pick up their cars the next morning. Privately funded, the free rides have significantly reduced the number of accidents that usually occur from drunk driving.

⁴⁹All statistics relating to crime are from the year-end report by Chief-of-Police Bert Cottle to the City Manager and were kindly supplied by Mr. Cottle.

⁵⁰The estimate is a rough averaging of peak and nonpeak populations for the year.

⁵¹Ironically, my assistant, Michael Howard, had money stolen from his wallet while working out at a health club. When the police were called, they said this was not an entirely uncommon occurrence.

One problem Valdez suffers, according to police, is that there is no sitting District Attorney (D.A.). Rather s/he visits once a month. This has created problems for the police in getting warrants when needed; in allowing those arrested to make deals when the D.A. comes because of the overload; or even, during the pipeline days, to the dismissal of charges because the D.A. had no time to prosecute all the cases at hand. Given Alaskan law and the reduced number of active court calendar dates, police feel the lack of a sitting D.A. makes law enforcement that much more difficult in Valdez, especially at peak times like the summer and during the spill-cleanup period.

During this period, problems were exaggerated but not entirely out of the ordinary experience the town has each year with the shift from winter to summer populations. This is not to say that the spill summer was not extremely exhausting and difficult for police. However, it is important to note that in some ways the police have had experience in dealing with a large immigration in summer, but it is an immigration that is slower, more orderly, and much lower in the numbers of people involved than those who arrived after the spill. Although the police force was strained, the police did have some experience in dealing with such shifts in population.

Police problems and crime normally rise during periods of population escalation at a rate at least equal to the rise in population. For example, the total number of responses rose from 4,111 in 1988 to 6,734 in 1989, falling again in 1990 to 5,195. However, arrests during these years went up from 301 to 673 and back down to 396, suggesting that problems within the community grew proportionally more during the year following the spill than during the time of the spill cleanup itself. Why this is the case is not yet understood.

Crime was not the major problem for the police during the spill-cleanup period. Rather, the biggest problem was maintaining order among the large numbers of people who camped out, especially at the beginning of the cleanup with the large influx of people. At the time, snow was still on the ground, campgrounds were not yet open, and the cleanup effort still was in organizational disarray, forcing many of those came to work the cleanup to sleep on city streets. According to police, up to 500 people were put in the courthouse to sleep.

Problems created by the spill included public disorder and crime but on a smaller scale than the comparative problems faced during the time of pipeline construction. In 1976, for example, there were 96 assaults compared with only 58 during 1989. In 1976 there were 205 bar disturbances; in 1989 there were only 130. The only category in which the spill year exceeded comparative problems during the pipeline-construction period was general disturbances, which went up from 54 in 1976 to 308 in 1989.⁵² The problems of the spill were immense, but they were more restricted to the infrastructure and services than they were the result of criminal or delinquent activities on the part of visitors, residents, or long-term residents.

In many ways, crime was lower than one might expect. As many respondents argued, everyone was so busy and making so much money that theft and other crimes became less attractive. Crimes were lower in 1989 in some areas than they were 1990. Most significantly, domestic violence went up from 75 calls in 1989 to 89 calls in 1990. Theft too went up from 223 instances in 1989 to 237 in 1990. This compares with only 71 calls about domestic violence in 1988 and 160 thefts that same year. The rate per 100 persons for domestic violence and theft dramatically illustrates the rise in both in 1990, assuming an average population of 4,000 in 1988 and 1990 and 8,000 in 1989. Domestic violence, which had a rate of 1.7 incidents for each 100 persons in 1988, fell to .9 per 100 in 1989 and rose to 2.2 per 100 in 1990. Thefts rose even more dramatically in 1988, 4 per 100. They fell to 2.7 per 100 in 1989 but again rose dramatically, to 5.9 per 100, in 1991.

The explanation for these numbers is not obvious. Whether it is a result of stress, of people remaining in Valdez who came to work on the spill cleanup and found themselves without jobs after it was over, or other reasons is not known. It can be reasonably argued that the drop in domestic violence is a function of the lowered percentage of married couples in Valdez because presumably most of those who came to Valdez to work the spill cleanup were single.

⁵²There were more man days in jail in 1989, 2,660, and police responses to calls, 6,743, than in 1976 when the figures were 520 and 4,762, respectively. However, these differences may tell us more about the changes in town policy and people's attitudes toward the police than they do about police problems.

What is clear is that Valdez, while suffering major impositions on its technical and human infrastructure, was able to come through the spill and its aftermath intact, with most people who worked for the city still employed by it, with some but no major rises in crime or other problems of social disorder, and with a community still in place. On the surface, things look fine. But as we have noted, problems still may exist beneath the surface, particularly stress, social disillusionment, and depression. If and when these problems may surface cannot be predicted, but my observations and intuitions suggest they will arise. The increase in domestic violence and theft from 1988 to 1989 is one indicator of stress.

The complexity of feelings and perceptions that people have about the spill and its effects reveals some of the ambivalence people still feel about the spill and the hopes as well as the fears that it has provoked.

III.G. The Spill: Perceptions and Understandings⁵³

When respondents spoke of both the positive and negative effects of the spill on the community, they usually dealt with three important areas: (1) the attitudes of people in Valdez toward the oil companies, (2) the social life of the community, and (3) the economy of Valdez and the ecology of the PWS.

For many, one positive and important aspect of the spill was the way it changed how the residents of Valdez perceive oil transport, Alyeska, and the oil companies that compose Alyeska. Respondents recalled how before the spill the attitude of people toward oil transport was one of complete trust in the ability of the oil companies to transport oil safely and well. At worst, there was a benign sense that nothing would go wrong.

Since the spill, attitudes have changed. At the extremes are two diametrically opposed views. On one side, there are those, mostly employees of Alyeska, who have maintained complete trust in the consortium's will and capacity to maintain a safe and environmentally appropriate oil-transport industry. On the other side, there are those

⁵³This section deals with many of the same issues dealt with above in Section III.E on stress and the spill, but from the vantage point of attitudes about the spill in general. Some points are repeated, therefore, and some points made in the section on stress are reemphasized, but from a different vantage point.

who feel that the spill revealed the consortium to be an institution to be distrusted--one that has neither the will nor perhaps the capacity to maintain a safe, environmentally sound oil industry. While those who have come to completely distrust Alyeska are a smaller group than those who have complete trust in the company, they are a part of the community that had no real voice nor any real basis for support before the spill occurred.

Subsequent to the spill, most people in Valdez fall between the two extreme positions but in such a way as to give some credence to those who argue that one should remain vigilant when confronted by the realities of the oil economy. The majority feel the spill has alerted them to the dangers of oil transport and that they and other institutions like government can no longer be entirely passive when dealing with the oil companies. However, most, if not all, respondents--even those who are most distrustful of the oil companies--still would reject any proposition that the risks of oil transport outweigh the economic gains to the community.

New attitudes toward the oil companies have created a new awareness both official and unofficial. The creation of the RCAC and the increased vigilance of residents has led many people to believe that one gain from the spill is the greater ability on the part of Alyeska and the community to deal with another disaster if one should occur. Moreover, many respondents felt that the new awareness has increased Alyeska's attention to safety and will ensure that the likelihood of another disaster like the spill will decrease significantly. The institution of SERV'S and other spill-prevention activities and personnel designated to avert future spills are cited as examples of new safety precautions. The recent testing for the effects of benzene and the increased awareness of the possible health hazards associated with oil transport also have come under discussion, according to respondents.

However, even though safety precautions have demonstrably increased and there is discussion of the potential for hazards to health, a number of respondents argue that such changes of attitude on the part of the residents of Valdez and of Alyeska are not enough. For one, they argue, there is some doubt as to how long Alyeska will keep its safety net in place. They cite recent cutbacks of workers responsible for the

maintenance and safety of oil transfers at the terminal. They also argue that while the RCAC, funded by Exxon, is a useful watchdog, it often deals with smaller, local issues and has not had the time nor the resources to look at the issues of the safety of oil transport in general. Furthermore, they suggest, the spill has produced a dangerous kind of fatalism among residents of places like Valdez, dependent as they are on oil and thus unable to do much to curb the oil companies' lack of attention to safety and proper environmental controls.

Along with a shift in attitudes, a number of respondents noted a change in the social fabric of Valdez, almost all of which has been negative. As noted above, a number of respondents felt that the spill, in the words of one respondent: "Splintered the town between those who work for oil and those who don't and those who gained from the spill and those who didn't."

For many, the spill revealed a greed in neighbors that was disheartening. One man spoke of being evicted from his apartment so that it could be rented to Exxon at a higher rate, even though his wife was late in her pregnancy at the time. The perception of greed, the continuing lawsuits between residents and Exxon, and the differential rewards the spill brought have led not so much to open hostility that one might see in public but to expressions of bitterness and distrust on the part of a large number of respondents. On the one hand, they will aver that the spill did not really change things in town. But then they go on to speak of the avarice of so many in the community, of lost opportunities or unfair advantage given others during the spill, and other such complaints that have, in the words of another respondent: "Led to a loss of cooperation and communication in the community."

Differences about the role and responsibility of the oil companies also divided the town. There were and are a number of people who believe that the attacks on the oil companies may have endangered their personal livelihood. John Devens, mayor at the time of the spill, as was noted previously, was voted out of office because of what was felt by many to be an overly antagonistic stance toward Alyeska and Exxon. Devens, it might be noted, always has supported the need for the oil industry in Valdez but has argued that it needs oversight if it is to work safely and appropriately.

Moreover, the spill, as we also noted earlier, changed people's attitudes about social life because of its associated overcrowding and generally unpleasant conditions. Along with tensions left over from the time of the spill, disagreements about the role of oil in town and a loss of trust on the part of many in the good moral intentions of their fellow residents has resulted in more and more people becoming homebodies. They have become more insular and less community oriented, according to a number of respondents. As one observed: "During the spill we learned to stay home because it was so crowded everywhere. Now with all the tension and such, people still stay home. It's not the money but the feeling about the town" (which makes them stay home). Whether people in fact stay home more now than before the spill is open to question; certainly when visiting the town things seem reasonably active if not crowded. But accurate or not, the feelings of change that so many respondents expressed and the sense of the moral culpability of so many of their neighbors, has allowed for most, at the very least, only a benign feeling toward the effects of the spill. At worst, there is a bitterness that threatens to undermine the character of Valdez as a community.

The social fabric has been affected in more direct ways, not only attitudinally. The addition of SERVS and other new jobs related to safety have been welcomed for their positive economic and environmental effects but also have created greater strains in what was already a strained housing market. Competition for adequate and affordable housing has become more intense and has increased social tensions in town. Especially affected are the splits between the haves and the have-nots and also between those in town who see the need for planned development and those--many who work for Alyeska but who oppose Alyeska's entry into the housing-development sector of the town--who see planning as inimical to their investments in housing. The increased competition for housing also has increased the perceptions of injustice and inequality that always were just beneath the surface. This, added to feelings that there were injustices in the allocation of contracts during the spill, has aggravated an already developed sense of inequity felt by many in Valdez. While this is not manifest, it is constantly just beneath the surface of what appears to be relative social harmony.

Moreover, according to a number of city officials, there has been a turnover in population since the spill, although the exact number is not known. A number of residents left Valdez after the spill was cleaned up because the wealth they earned enabled them to return home or to open up businesses elsewhere. At the same time, a number of people who came to Valdez to work on the spill cleanup have remained. At least four of the people interviewed had come to Valdez during the spill cleanup and remained because of the opportunities they hoped it might offer them. In addition, the 200 or so jobs that have come about as a result of the spill have added a significant number of people to the community, even though a number of people who had resided in Valdez before the spill were able to get some of the new jobs the spill made available. However, some of the new SERVS employees are from Louisiana and live on the boats they brought to work as SERVS vessels. These people do not live in Valdez permanently but return to their homes in Louisiana on a regular shift basis. Their presence in the community has added to tensions and problems in town primarily through the addition of a number of socially uninvolved single males to the community.

What is of note is that the changes in the social fabric remarked on by respondents are all negative. No one spoke of new social energies or new potentials resulting from the spill even though there have been a number of new businesses, like a health food store and a new restaurant, that new residents have opened since the spill. What people feel, objectively based or not, is that the social changes wrought by the spill have reshaped Valdez in ways that have not been for the good.

The same cannot be said for the spill's effects on the economy. In this area, respondents felt that the effects were for the most part positive for the community as a whole, even in those instances where they did not personally gain from the spill.

Almost everyone I spoke with noted the generally positive effects of the spill on the economy of Valdez. Not only has it brought 200 new jobs to the community, but a number of businesses were rescued by the income generated by the spill, and a large number of individuals were able to earn a significantly larger income the year of the spill.

The picture of economic benefit, though, is more complex than it might appear at first glance. Benefits from the spill were uneven both sectorally and individually. While respondents were willing to argue that overall Valdez benefited economically from the spill, only 48 percent claimed that they had higher household incomes as a result of spill activities. Of the respondents, 32 percent said their incomes remained the same during the spill year, and 20 percent actually saw their incomes go down.

Individual choice, economic strategy, and one's location in the economy were critical variables defining whether one raised their income during the spill-cleanup period and to what extent it was raised. Boat owners, especially those with large boats, were able to earn extremely large sums, depending on the contract they negotiated for themselves. The few who chose not to work the spill cleanup probably lost money because of the shortened fishing season that summer. For some, settlements have helped to allay losses, but others have not been able to get what they feel are adequate settlements. Some commercial fishermen, because they owned a number of boats or bought more during the cleanup, were able to both work on the spill cleanup and to fish the abbreviated but record-breaking fishing season and also to obtain settlements for lost time fishing. These persons who optimized all elements of economic opportunity were able, in the words of one: "to make a killing." But others not so well located or who were not able to negotiate the best contracts, although earning extra income during the summer of the spill, did not do so well.

Some took their spill-related profits and were able to buy new and more technically advanced boats, putting them in a more advantageous position than others in commercial fishing or boating. Still too, some who never had owned boats were able to buy them based on contracts negotiated with Exxon and thus were able to enter new economic endeavors that previously were unavailable. All these economic changes have added inestimably to the economic complexity of Valdez. Their effects are as yet unknown, but they may not be all that positive--both for the community in general and for many of the individuals involved.

The spill also added, at least temporarily, to the incomes of many in Valdez who held low-paying jobs. Of the 48 percent of the respondents who reported a higher

income during the spill year, 70 percent had held low-paying jobs such as bartenders, crewmen in boats, or seasonal construction workers. They then worked the spill cleanup and earned significantly more than they might have had they remained in their pre-cleanup job. Some were able to make such a large income that they left Valdez. Others profited, but only for that summer, returning to low-paying jobs when the spill cleanup was completed.

Some decided not to work on the spill cleanup. At least one such respondent figured that if he waited, one of the more permanent jobs that were vacated by those working the spill cleanup might come his way. In this way he went from a gas-station attendant to a hospital worker, which he feels brought him short-term losses but long-term gains.

Those who lost income earned their income from areas that were either directly or indirectly hurt by the spill. A number of fishermen who either couldn't or wouldn't work on the spill cleanup lost income. So too did those who repaired or upholstered tour boats, those who made or sold tourist crafts, and other such summertime pursuits. While in a minority, they feel the spill-cleanup period to have been a time of real loss, both materially and morally, because the town changed so much for them during this period and revealed their powerlessness in the light of the oil-driven economy. Others lost income because they quit jobs that paid well for spill-related activities but were too stressful. They felt the stress was too much to suffer for the economic gain--although some are bitter now at the loss.

Many neither gained nor lost income. Those who worked for the city or Alyeska on salary did not gain particularly from the spill, although it was a hard time for them.

While people speak of the real material gains the community received from the spill, they also feel that there is a downside to the economic effects of the spill. The effects of the increased number of boats on commercial fishing still are unclear. Moreover, many who invested spill profits in boats and such may still lose out because of taxes for which they forgot to calculate and which will soon come due. Some businesses and individual respondents note that they were only temporarily saved from economic

collapse by the spill because the spill saved them from bad economic practices that they have continued to use.

In a sense, some of the issues that have confronted individuals in regard to the overall benefits of the spill also have confronted the town as a whole. The spill rescued Valdez from economic stagnation. It also may have put off thinking about the future and what reliance on oil means. If so, the economic gain from the spill may, some respondents point out, eventually be seen to have had more of a negative than a positive effect.

When one adds to that what many people saw as the deleterious effects of the spill on the environment and the threats some of these effects may pose to such as the tourist industry, then overall the spill is viewed at best as a mixed blessing. Few felt the environment was unaffected by the spill, although to what degree it has permanently despoiled the PWS still is hotly debated in Valdez and certainly open to question. But as one respondent so aptly put it: "The spill left us with a kind of loss of virginity when it comes to the environment and a different sense of where we live."

For some, the spill's effects on the environment will prove to be small and unimportant. Others see the PWS if not permanently ruined, certainly transformed and no longer pristine.

Like feelings about the effects of the spill in general, disagreements about the effects of the spill on the environment emanate to a great extent from three factors: (1) one's experience with the spill, (2) one's economic and social position in the community--most oil workers while certainly in favor of a clean environment tend to see the spill's effects as minor--and (3) one's own sense of gain and loss from the spill.

How people saw the spill's effects was a function of previous attitudes, the economic location in which one found oneself (which defined what opportunities for gain or loss were available) the experiences of the spill itself and the strategies one used to deal with the spill and the activities associated with it. While there is a great amount of agreement about much of the spill and its effects on Valdez, the complexities that underlie what is generally agreed on make the agreements less than meet the eye and more open to the variety of interpretations that underlie the generality.

III.H. Community Involvement with the Oil Industry

The complexity of views that underlie what appear to be general agreements about oil and the spill become apparent when dealing with the relationship of the community with the oil industry. As has been noted a number of times, almost everyone spoken to in Valdez agreed that the oil industry was on measure a positive good for the community. But while people agreed that oil was a good thing, how it should be managed and in what way the community might oversee the oil industry was a matter of often intense disagreement.

Critical to this disagreement was the extent to which people felt the oil companies were able to deal with the spill, especially Exxon; the extent to which either the State or Federal Governments were able to do as well or better than the oil industry; and the degree to which any of these institutions were forthcoming about the spill and its effects. The impression the responses give is that it is in these areas where people are the most divided. While more people felt that Exxon handled the spill better than either State or Federal agencies, most felt that the jobs done by all probably were as good as they could be but not good enough. Moreover, there was a distinct division between those who felt that Exxon was forthcoming about the spill and those who did not. The issues of competence and trust play heavily in peoples' attitudes toward community involvement but often in complex ways. When thinking about the issue, trust and competence played off against each other in framing the way people felt about it.

A minority of respondents argued, but often quite vigorously, that it was entirely inappropriate for the community to involve itself in the operations of Alyeska. One group of those who opposed such involvement did so on the basis of a principled belief that private industry, like all things private, should remain outside the control of any kind of governmental interference. For them, less government was always better, and less community oversight of Alyeska meant less government. A less ideologically driven reason for no or as little as possible community involvement in running the oil-transport industry given by a number of respondents concerned the technical and professional expertise that one needed to understand the industry. A number of people, usually

Alyeska employees, argued that the community did not have enough expertise to really oversee the industry, "to really help the situation," as one Alyeska employee put it.

Ironically, a number of respondents who were in principle in favor of significant community involvement in overseeing the oil industry and who also were deeply suspicious of Alyeska's good intentions and ability to safeguard Valdez agreed with those who argued that the community needed more sophisticated input if it was to really oversee Alyeska. They noted that without environmental and technical expertise in the town government, it was probably self-defeating to monitor Alyeska's activities. As one respondent argued:

I think the community has to have a say, but the city government is spread too thin. If it doesn't have the resources to oversee oil then it shouldn't because it will be crippled (in its attempts at oversight). The city needs a real environmental expert to work with the community and even there it would be difficult for one person to do it.

This problem notwithstanding, most residents with whom I spoke would opt for some form of community involvement with Alyeska and input into their activities for a number of reasons. From a planning and town management perspective, Valdez often needs to know more than it does if it is to adequately plan for the future. The questions as to whether oil will run and when it will, and whether exploration will go forward or not, need to be answered if the community is to plan rationally for its future. And if the community is to use the necessary information, there must be a way for that information to be used. When the pipeline was conceived and the TAPS agreement made, respondents point out, the State of Alaska and the oil companies made contractual agreements about issues such as the rate of depreciation of oil that profoundly influenced Valdez's well-being with no input from or consultation with the community. Today, Valdez must live with those agreements. It also lives in ignorance about what new agreements, e.g., about ANWR, might affect the livelihood and future of the community.

Less overarching and possibly less critical to the long-term future of Valdez--but nonetheless critical to a rationally functioning town, respondents point out--is the need

for the community to have information about and input into Alyeska's everyday activities. For example, housing is a sector of the community that, if it is to function adequately for residents, needs to be thought out and designed on the basis of Alyeska's activities and plans for the future. Recently there has been more cooperation between Alyeska and the city in this regard, although with opposition from some landlords in town.

Other areas of town planning also need to be based on shared information and input, respondents point out. Alyeska has wanted to build a new emergency response center but decided on a location without involving the community. There has been resistance because the site chosen was one of the more special, from an aesthetic and environmental point of view, places in the town. It also would be located on a spot that would interfere with plans for the expansion of the boat harbor. As a result, the Harbor Expansion Committee has turned down Alyeska's request for the site, but how the City Council will deal with it still was an open question when I left Valdez. For respondents, the emergency center was another case of Alyeska acting without consultation and creating more problems and tensions than necessary, both for themselves and for the community. Greater cooperation as well as community involvement and input into Alyeska's activities would, these respondents note, create more efficient, more evenhanded, and less conflictive relations with Alyeska.

Equal if not more important concerns to many who want more community involvement with Alyeska revolve around environmental issues. There is a deep suspicion among a majority of respondents that without community involvement in this area Alyeska will not be forthcoming with accurate and truthful information about the environment and the community will not be able to trust in adequate environmental oversight. Even though most of these same respondents are "pro-oil," they feel--especially since the spill--that Alyeska needs to know, as one respondent put it: "That they don't hold all the cards."

Monitoring, many respondents feel, is essential to prevent another major disaster like the spill and also to oversee the less dramatic but equally important long-term effects of minor ecological problems like the constantly occurring small spills; the

leakage of gases into the air, which stains the snow a brackish brown; and other such problems.

Before the spill, most respondents agree, there was little or no possibility of community oversight of Alyeska. Even during the spill there was, in the words of one government official: "Little consultation. Exxon did not consult but worked around the community when making its decisions."

This official had attempted before the spill to generate more oversight of the oil companies by forming the Ad-Hoc Committee on Oil, but with little success according to other respondents. Since the spill, however, such committees have been more active; and Exxon and Alyeska have been to a degree more willing to allow for community oversight.

The cooperation between the city government and Alyeska in developing the new housing subdivision is one such example for respondents. Another more critical example is the creation of the RCAC, started by Alyeska in 15 communities affected by the spill to increase community involvement with the company.

The local RCAC has developed a response plan for fishermen in case of another spill; is looking into the health risks of oil transfers, attempting to ensure that the gases are properly inerted at the terminal; overlooking the operation of the oil-treatment plant; and conducting a range of other such activities.

Opinion about this new involvement is divided. There are those who see it as a positive development that will increase the town's ability to work with Alyeska cooperatively. Others see it as a thorn in the side of the oil industry, a possible hindrance to the proper working of Alyeska and a possible threat to the long-term stability of the industry. There are still others who see such committees as sops being thrown the town--sops that are mired in meetings and other organizational and bureaucratic impedances to real community oversight and continued community militancy in relation to oil. Moreover, they argue that the community still is dependent on Alyeska, State, and Federal experts for advice, so they still suffer from a lack of really independent information on which to judge what is going on.

The irony is that the issue runs both hot and cold. The community is divided about oversight and its uses and effects. Even among those who favor oversight, there are those who see the need for real militancy or at least independent oversight. Others feel that oversight would be useful if it were truly independent but are cynical about such a possibility. In the final analysis, feelings about involvement come down to (1) feelings about just how much control over one's life the oil companies have; (2) whether such control is benign or potentially problematic; and (3) even if it is threatening and problematic, what real individual control one can hope to have given the nature and the size of Alyeska and the dependence of the community on the oil-transport economy.

This division and what it suggests about Valdez as a place to live very much influences what people feel about their commitment to the civic and economic life of the town itself.

III.I. Commitment and Investment in Valdez

While Valdez is an attractive community because of the economic opportunities it makes available to many of its residents, it does not appear to be a community to which people are for the most part committed either emotionally or materially. Most people come to Valdez to work and to save, and they hope to leave better off than they were when they arrived. Although over 50 percent of those with whom I spoke have lived in Valdez for more than 5 years,⁵⁴ when talking with people one gets the sense that no matter how long they have lived in Valdez, for most it is not home. Rather, as one pre-earthquake resident put it: "Most people come into town with a 10-, 15-, or 20-year plan to make money and to return home. But it isn't a town where they plan to retire."

But there are retirees in Valdez; I spoke with at least three. There also are individuals who plan to retire in Valdez. I spoke with at least two such individuals. However, with the exception of one individual who planned to retire in Valdez, all of these individuals were resident in Valdez prior to the construction of the pipeline. Indeed, they were resident in Valdez prior to the earthquake of 1964. For them, Valdez

⁵⁴There are no figures available that I know of that provide an accurate picture of length of residence in Valdez. From my own informal questioning, I would suggest that over half the population if not more has been there for periods of over 5 years or even 8 years.

was home. They said that although the winters were difficult, the Senior Center--founded subsequent to the pipeline days with the idea of keeping people in Valdez after they retired, although with little success, according to one respondent who was involved with its founding--provided significant support. But even if the center were not available, there was no place else these individuals could see themselves retiring.

Like most things in Valdez, respondents are divided about the extent to which the people in the community are committed to the community. However, they are nearly unanimous about one thing: commitment is not a function of viewing Valdez as a permanent place to live and retire. For most, the Senior Center and its supports notwithstanding, retirement in Valdez is not something they feel is worth looking forward to. As one resident who has lived in Valdez since before the earthquake put it: "Why would anyone want to retire here? I'd certainly keep my investments here but I don't want to be shoveling snow when I am 80."

Commitment for residents of Valdez is measured by the quality and quantity of the investment people make in the community. On this issue, there also is division. Some argue that there is little commitment to Valdez. Others argue the opposite and believe that there is commitment and that it is growing.

Those who argue that there is little commitment on the part of most of the residents of Valdez argue that because most people live in Valdez for limited periods, be it 10 years or 20, there is a feeling of impermanence to Valdez. They argue further that this feeling militates against any desire to invest in the community. As one respondent observed: "There is a limited optimism here because of the feeling of transience."

The limited optimism of which he speaks and the sense that life in Valdez is transient is magnified by the experience of boom and bust and the knowledge that the community's continued well-being is predicated on a healthy and vibrant oil economy. But, as another respondent averred: "The place (Valdez) is unpredictable in its economy so you don't know how long you will get to stay. Because you don't know how long you will stay or be here, you won't invest in the place."

What respondents refer to over and over, given my impression of what they mean, is a sense of powerlessness and a lack of any real command over the destiny of Valdez

because the community has become so dependent on the oil-transport economy, an economy over which Valdez has absolutely no control. People often point out that to invest in any way in Valdez, be it emotionally or materially, is a mistake. As one respondent put it: "People feel that the oil industry is not permanent so they feel the town will be different when the last barrel of oil comes through the terminal." However, this same person added: "There is probably over a hundred years left in oil."

The fact that the stated official life left in the pipeline is limited to early in the next century adds to the sense that the good life in Valdez may be coming to an end. Although most in authority believe that the terminal will be in operation for a long time to come, even the city calculates revenues on the assumption that the assessed value of oil property will continue to go down to nil in about 25 years. Although such stated limits probably are a significant underestimate of the real longevity of an active oil-transport economy, they fuel the uncertainty that drives many in the community to the position that to invest in Valdez is at best unpredictable and that committing one's resources and life chances to its continued growth and prosperity probably is unwise. As a result: "Many people in Valdez are already investing in homes, businesses, and retirement outside Valdez," as one respondent noted.

People invest outside Valdez because, as another respondent argued: "You have to understand the history of the town, the boom and the bust, to sense why I think it is not so wise to invest here. If, for example, the price of oil goes down we would be in real trouble here."

Along with the uncertainty goes a sense that throughout its history Valdez has been a relatively unstable place and offers few real incentives to invest.

Whether the belief in Valdez's instability and the uncertainty that accompanies it is true or not, most people in Valdez came there either looking for a job or because they already had one. It is not a community made up of people looking for investments or a place to stay. Rather, it is a place made up of people who have come for work. As one person put it quite bluntly: "You come for work and when your work is done you leave."

Even if people want to invest in the town, many posit, there is little in which to invest and a social and economic climate that discourages investment. Many newcomers

feel that there is resistance to them from people who have lived in Valdez since before the earthquake and before the pipeline. This resistance adds to the feeling that Valdez is at best a lucrative way station on the road to a more permanent and welcoming place outside. A number of respondents said, at times bitterly, that the "old money" in town (the pre-earthquake residents) owns most of the businesses and prevents any new investment. As one business person put it: "Businesses here resist other businesses coming in."

Whether real or not, the perception of exclusion and resistance that people claim to feel either encourages or supplies a rationalization for what clearly is a disinclination to invest either energy or resources in Valdez on the part of so many with whom I spoke.

Another reason given for the lack of local investment in the community runs counter to that given above. Some argue that the local investment diminished when Valdez was left with only a bank from Anchorage rather than a local bank. As one business person claimed: "The availability of loans for local things has become dependent on what is happening in Anchorage where given the recession monies have dried up."

Moreover, what there is to invest in either is too expensive, e.g. to build a house, or is nonexistent, e.g., a house in which to invest.

All the reasons people give for not investing in the town materially may be best explained not so much by the town itself but by reference to the kinds of people who settle in Valdez. It is a town made up of technicians, professional people, skilled workers, and the service workers who provide the necessary supports. As one town official argued: "I've run five trade visits to Asia but I couldn't get their money because people here are not hungry enough. People who were looking to use our foreign-trade zone couldn't cut deals. We are not a community of entrepreneurs but people who make good livings and play at being businessmen."

Some argue there are and have been plenty of opportunities for investment. The problem of investment is not contingent on conditions in Valdez but a refusal to commit to Valdez. For example, everyone agrees that the Senior Center provides extremely good support, yet people say they won't retire in Valdez.

So too with investment in housing. The new subdivision being underwritten by Alyeska and the city give evidence, city authorities argue, of a commitment on the part of both institutions to the town and will provide the upscale housing many complain is unavailable. Whether it succeeds or not will be a test of whether a disposition exists among residents to invest in Valdez, those who favor such investment argue. As one respondent put it: "People in Alyeska claim there is no place to invest in the city. So we will build the new subdivision to see if people want to invest."

Possibly, some argue, the support given the new subdivision project by Alyeska and the local government and the effort by Alyeska to remove its temporary housing left over from the pipeline-construction days will provide a greater sense of stability and permanence to Valdez. With this, the guarded optimism with which people treat Valdez, as a number of respondents suggested, might turn into a solid optimism and a new desire to a commitment of resources to the community.

Other respondents suggest the subdivision project will succeed because they believe people want to invest in their community but need things that are worthy of investment. Other respondents add--although they were in the minority--that there is a strong inclination for people to invest in Valdez even if they do not see themselves as permanently resident there. Because so many do stay for upwards of 20 years, there is a willingness to invest in a community where they will spend so long a period of their lives.

Those who believe that there is a commitment of resources to Valdez by its residents point to the many locally owned businesses and argue as one respondent did that: "We are beginning to see some investment in town. People are investing in housing, they are building, they are investing in new businesses and expanding the businesses they have." These respondents also observe that while people often talk of leaving and appear dispirited by the spill and the winter of 1990, when roughly 46 feet of snow fell, and feel depressed every winter by the weather and the lack of light, as things stabilize and as winter turns into spring, people rethink their sense of belonging. As summer returns, people feel less alienated and more alive to the opportunities Valdez presents. With this, Valdez will see renewed commitment and energy.

It is hard to say who is right regarding commitment. Looking at the community superficially will not provide any real clues to the issue. What creates the tension about commitment in Valdez, I would suggest, is not apparent in the comings and goings of daily life. Rather the problem is rooted in the particular history of Valdez with its booms and busts and more critically its present heavy dependency on oil.

For many, there is a real conflict between the community and Alyeska and an internal conflict about where their individual loyalties lie. The institutional reality of Valdez, the fact that it is a company town while also being independent of the company, creates complexities and problems that make commitment to the community a politically and socially loaded act. The division about commitment that one hears from respondents, often with contradictory messages from the same respondent, is a function of each individual's perceptions and experiences as each tries to define a place for themselves in Valdez. The debate about commitment and the ambivalence it appears to produce in the town in general and in so many individuals suggests that Valdez still is a community seeking to define itself. It is still seeking to discover what it wants to be in light of its social and economic history and the economic structure of today.

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EFFECTS OF THE 1989 EXXON VALDEZ OIL SPILL ON CORDOVA, ALASKA

Stephanie Reynolds

Effects of the 1989 Exxon Valdez Oil Spill on Cordova

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EFFECTS OF THE 1989 EXXON VALDEZ OIL SPILL ON CORDOVA

I. INTRODUCTION

This report provides an ethnographic portrait of Cordova, Alaska, through the lens of Cordova's response to the Exxon Valdez oil spill of March 24, 1989. The goal of this research was to furnish a vehicle through which Cordovans could chronicle impacts which they experienced as a result of the oil spill. Local news coverage and interviews with residents comprise the principal data base. Evaluations of background sources are embedded in the text. This introduction prefaces the ethnographic report with a brief overview of Cordova and its history.

This paper is an interim report which Principal Investigator (PI) Joseph G. Jorgensen will use in analyzing data for a large comparative study, described below. In its present format, the paper includes extensive interview and press citations, intended to maximize the PI's ethnographic understanding.

The Study

Qualitative ethnographic data were collected between February 11 and March 13, 1991, as part of an extension of the Alaska Outer Continental Shelf Social Indicators Study (AOSIS). The study applies multi-method, multi-data sets to develop a system of social indicators which will measure social change and distinguish between external and internal causes of change. In particular, the AOSIS seeks to discriminate between social change caused by Outer Continental Shelf (OCS) activities and other social changes.

Beginning in 1987, the Social Indicators Project sampled 31 western Alaskan communities, from Kodiak Island in the south to the coast of the Beaufort Sea in the north. Cordova, on Prince William Sound, was not included in the original sample because Minerals Management Service (MMS) leasing in that region was not anticipated (Jorgensen 1990, oral comm.). With the cataclysmic Exxon Valdez oil spill, a contract modification in the summer of 1989 allowed post-spill AOSIS research in Cordova and nine other spill-affected communities.

Analyses of data collected in questionnaires and protocol interviews as part of the AOSIS in Cordova are not available at the time of this writing. Data from prior studies,

cited in this introduction, may be compared with 1991 AOSIS results. Most information in this qualitative instrument was collected by the author, for the 1991 Key Informant Summary for Cordova. Research Assistant and Questionnaire Interviewer (QI) Mike Howard, in Cordova for the last week of field research, produced seven institutional interviews. The author, as Key Informant (KI) Interviewer and field supervisor, conducted 37 institutional interviews. Cordova resident Art Miller and Mary Lynch also served as QI's; Rose Arvidson and Kate Beam, both local residents, consulted briefly on the sample.

The Sample

Cordova's sample was drawn by random selection from a list of residential properties. This created some unique problems. Due to high residence seasonality in Cordova, many properties were not occupied. Also, some entries were multiple unit dwellings (such as the State of Alaska Housing Authority) and some were single family residences.

Twenty-four Key Informant interviews, given to a randomly selected sample of winter residents, comprise a partial basis for this report. Two were carried out by Mike Howard and the author, and 22 were conducted by the author. In addition, 44 institutional interviews represent the following entities:¹

- City Government (includes spill offices) (8)
- Animal Rescue (1)
- Electrical Cooperative (1)
- Fish Hatcheries (3)
- Fishermen's United (1)
- Fishermen's Claims Office (1)
- Fish Processors (1)
- Eyak Non-Profit Corporation (3)
- Eyak Profit Corporation (1)
- Chugach Profit Corporation (1)
- Tatitlek Profit Corporation (1)
- Law Enforcement (1)

¹These figures address the representativeness rather than the size of the sample. Six of the 44 institutional interviews were with KI's. On the other hand, five KI's gave partial institutional interviews which are not listed here, as did countless other residents questioned informally. Two individuals gave two institutional interviews each. Commercial fishermen, although representative of the fishing industry, are not counted with "institutional" informants.

Education (3)
Social Services (1)
Alaska Department of Fish and Game (1)
Churches (3)
Financial Institutions (2)
Other Private Businesses (9)
Childcare (1)
Harbor Operations (1)

Also, two individuals widely acknowledged as "experts" in Eyak culture were interviewed by the author.

The method employed in selecting institutional respondents was to request local persons to direct me to individuals who were knowledgeable about the oil spill, or who in their estimation had been "helped or hurt" a great deal by the spill and its aftermath.

I.A. Cordova

Cordova is a commercial fishing village located in southeastern Prince William Sound between Orca Bay and the Gulf of Alaska. The city lies at the foot of Mount Eyak and is bounded by Orca Inlet to the west, Mt. Eccles to the south, and Lake Eyak to the east. Much of the land surrounding Cordova is in the Chugach National Forest. Cordova is isolated both by land and water, and residents in general do not anticipate major expansion.

Cordova borders the contrasting ecological regions of Prince William Sound to the west, and the Copper River Delta to the east. Prince William Sound forms a complex system of bays, lagoons, fjords, glaciers, and barrier islands, while the Copper River Delta is a tidal marshland spotted by forests and traversed by channels of the Copper River draining into the Gulf of Alaska. Cordova's unique and breathtaking beauty is highly prized by residents, who demonstrate exceptional sensitivity to their environment.

Historical Overview: Prior to European contact, the Cordova area was inhabited by Chugach Eskimos in the Prince William Sound region, and Eyak and Tlingit Indians in the Copper River region (Johnson 1988). Relatively little is known about early Eyak settlers (Johnson 1988; Hanable and Workman 1974; Krauss 1980; Birket-Smith and de

Laguna, 1938, cited in Payne 1983). Key ethnographic accounts on the Chugach, Eyak, and Tlingit include Birket-Smith and de Laguna (1938), de Laguna (1956, 1972), and Birket-Smith (1953). Seminal linguistic research on the Eyak has been carried out by Krauss (1980, 1982).

Eyak: The Eyaks are members of the Na Dene language family, and the Eyak language is thought to have evolved from proto-Athabaskan more than 3,000 years ago (Krauss 1982). Eyaks were probably an inland people who migrated down the Copper River to Prince William Sound at some point in the distant past (Johnson 1988). There they co-existed with the maritime Tlingit, often joining them in battling the Chugach (Johnson 1988). Eyaks were partially assimilated by the Tlingits, learning both languages. Both cultures were organized into the clan systems of Eagle and Raven, and Eyaks and Tlingits jointly occupied villages from Cordova to Yakutat (Johnson 1988). The present Eyak village, in Old Town, Cordova, was founded in 1893 by survivors of smallpox and scarlet fever epidemics who fled from the Eyak village of Alaganik (USDOI, BLM, Alaska OCS Office 1979).

European contact with the Eyaks occurred through Russian fur traders, who established a post at Nuchek in 1793 on Hinchinbrook Island (Stratton 1989). Development of a non-Native salmon industry and canneries on the Copper River in the late 1800's, as well as the coming of copper mining and the railroad at the turn of the century, was detrimental to the Eyak population. Eyaks were not employed at the canneries, and diseases imported by white and Chinese workers decimated the population (USDOI, BLM, Alaska OCS Office 1979). Eyaks were excluded from railroad construction jobs as well, and by 1910 an Eyak population numbering 100 to 200 (between 1818 and 1890) was reduced to approximately 50 persons (USDOI, BLM, Alaska OCS Office 1979).

Early monographs describe Eyaks as subsisting primarily on clams, mussels, salmon, goat, and bear (Stratton 1989).² Eyaks also fished for halibut, trout, whitefish,

²Stratton's study provides an excellent summary of past and present subsistence practices of Natives and non-Natives.

and eulachon. They gathered seaweed and preserved several kinds of berries. Seals were harvested on land, ice, and water. Eyaks trapped fox, lynx, mink, marten, muskrat, and weasel. Ducks, grouse, ptarmigan, and spruce grouse were hunted (Stratton 1989).

Chugach Eskimo: The Chugach Eskimo probably migrated over the Alaska Peninsula to the Prince William Sound area about 1300 AD. They were a more maritime culture than the Eyak. Sea mammals were an important food, including seal, sea lion, sea otter, and whale. Whale hunting entailed considerable ceremony (Stratton 1989).

The Chugach fished for all types of salmon, grinding and fermenting chum salmon eggs and drying, smoking, and compacting silver salmon eggs (Stratton 1989). The Chugach also fished for herring, halibut, red snapper, and cod. They hunted mountain goat, bear, weasel, mink, and land otter. Shellfish were most important in winter and early spring, as supplies of dried salmon were depleted. The Chugach hunted gulls, cormorants, and eagles. They gathered many types of berries as well as seaweed, Kamchatka lily, roots, and greens. They dried and preserved plant foods using a variety of methods (Birket-Smith 1938; and de Laguna 1956, cited in Stratton 1989).

The Chugach became involved in the Russian fur trade after battling Russian efforts to infiltrate the area (USDOI, BLM, Alaska OCS Office 1979). Soon after, the Russian trading post at Nuchek became a center for the dispensation of Russian Orthodoxy. Elderly Cordovan Natives still recount resentment over their assignment of Russian names. Some remember the exodus from Nuchek to Cordova in 1925-1930, in fear of an epidemic.³

With increasing participation in the fur trade, the Chugach began to lose access to their means of production. Russian traders established themselves in Prince William Sound as sea otter populations in the Aleutian Islands and the Kodiak area declined (Stratton 1989). They shifted their strategy of dominance over time from violence to inducing Native indebtedness and dependency on the trading company (Hassen 1978,

³The considerable intermarriage in Native groups in the Cordova area is discussed in Section II. Many respondents recounted both Aleut and Eyak lore.

cited in Stratton 1989). As the Chugach spent more time hunting otter to pay off debts and procure supplies, they had less and less time available for subsistence harvesting. The Chugach were dependent on the credit system for their daily needs by the time Russian domination gave way to a rivalry between the Alaska Commercial Company and the Eastern Fur and Trade Company (USDOI, BLM, Alaska OCS Office 1979).

This credit system continued with the institution of the cannery system (USDOI, BLM, Alaska OCS Office 1979) and with mining employment after the decline of the fur trade at the turn of the 19th century (Hassen 1978, cited in Stratton 1989). With the close of mining around 1930, commercial fishing became the primary economic support (Hassen 1978, cited in Stratton 1989).⁴

Non-Native Economy: Cordova's economy developed in conjunction with various forms of resource development. As these phases of development waxed and waned, the town persisted. Cordova was founded in conjunction with local copper mining, which crashed within three decades of its beginning in the early 1900's. Cordova's economy shifted to fishing at that time. Despite the unpredictable nature of nonrenewable resource development in the area, and the predictably erratic nature of the fishing industry, Cordova's year-round resident population has remained fairly stable since the town's inception.

Oil was discovered in 1894 in Katalla, 50 miles southeast of Cordova (Stratton 1989:27). Coal was discovered in 1896, 60 miles east of Cordova. Copper was discovered in Prince William Sound in 1887, between Valdez and Cordova, and the Ellamar mine was opened in 1902 3 miles northwest of Tatitlek (Stratton 1989:28). The mining of coal attracted the railroad industry, which planned to haul copper. The 1898 Alaska gold rush brought prospectors to Valdez and Cordova, en route to the interior.

⁴It is interesting to see in Cordova the degree to which commercial fishing is viewed by Natives and non-Natives as a means of production which enables them to retain substantial control over their lives. Commercial fishing overlaps subsistence fishing, and many Cordovans enjoy a blending of a subsistence lifestyle with participation in a cash economy. In the wake of the 1989 oil spill, fears for the loss of this mode of life, more than economic losses, agitate Native and non-Native Cordovans.

Cordova was founded in 1906, in conjunction with plans for construction of the Copper River Railway, connecting Cordova's port with rich copper fields to the northeast (see Janson 1975, as cited in USDO, BLM, Alaska OCS Office 1979:30). The railroad was completed in 1910, and shipped more than \$175 million of copper ore to Cordova for shipment south for smelting until the Kennecott mines closed in 1938 (Janson 1975, as cited in USDO, BLM, Alaska OCS Office 1979). The Ellamar coal mine had already closed in the late 1920's, with the onset of the depression. After the Kennecott mines shut down, the railroad closed a year later, in 1939. The collapse of these industries had a limited effect on Cordova because at the time salmon production was at record levels (Janson 1975, cited in Payne 1983). From this period on, Cordova relied on its commercial salmon industry (USDO, BLM, Alaska OCS Office 1979:28). An excellent history of Cordova's fishing industry appears in Payne (1983).

Development of the Fishing Industry: Intensive development of Cordova's salmon industry occurred with a high demand for canned salmon during World War I (Payne 1983:42). This effort depleted the salmon stocks, especially those on the Copper River. Payne (1983) cites the following description of this enterprise:

From 1914 there was an increase in the delta district of about 450% in the amount of gear used, while the increase in the catch of salmon was only about 120%. At the up-river fields the catch in 1917 was 600% greater than in 1914, while there was an increase of 1,000% in gear for the same season (Bower 1919:32-33).

Natives who relied on salmon for subsistence purposes complained bitterly over the depletion of stocks, but were not listened to at first (Payne 1983:42-43). During 1915, 1916, and 1917, Native residents objected to commercial fishing on the Copper River, claiming that they were being deprived of their subsistence (Bower and Allen 1917a:19-20 and 1917b:26-27, cited in Payne 1983). The Bureau of Fisheries believed that there was no clear evidence of deprivation, stating that, ". . . at present, caribou, moose, and mountain sheep are plentiful in localities and a supply of food secured from these animals may be substituted in part" (Bower and Allen 1917a:20, cited in Payne 1983).

The 1915 grievances led to an on-site investigation, however, in which few salmon were found to reach the upper Copper River spawning grounds (Bower 1917b:27, cited in Payne 1983). The Bureau of Fisheries noted continuing Native complaints in 1917, but doubted the veracity of Natives' reports that they were destitute (Bower and Allen 1917a:23, cited in Payne 1983).

A 1917 Bureau of Fisheries report, however, expressed concern about depletion of Copper River stocks. The Bureau initiated meetings with salmon packers and Government representatives which resulted in comprehensive Government regulation of Copper River salmon fishing. Regulation began in 1919, and the salmon run for that year improved dramatically (Payne 1983:43-44).

Fishing profits have fluctuated widely over past decades, but have stabilized somewhat since the establishment of local hatcheries (discussed with fishing). Harvest levels plunged sharply during the 1950's, associated with adverse weather conditions, and the fishery closed in 1954, 1955, and 1959 (Payne 1983:160). In the 1960's, the State of Alaska took over management of fish conservation from the Federal Government (Payne 1983). The 1964 earthquake had a detrimental effect on Cordova's fishery, reinforcing management and research to increase stocks. Catches in the 1960's, even with the effects of the 1964 earthquake, were nevertheless higher than those of the 1950's (Payne 1983:160-165).

The early 1970's again saw adverse weather conditions, forcing closures of some fisheries in 1972 and 1974 (Payne 1983). These closures, following the closures in the 1950's, the earthquake in 1964, and new threats perceived from the pipeline terminal in Valdez, led to the development of hatcheries. The hatcheries provided a stabilizing effect, although damages from the 1989 oil spill have threatened the fishing industry once again.

Rapid energy development was anticipated in 1974-1977 in association with OCS development (USDOI, BLM, Alaska OCS Office 1979:84). Such development was controversial at that time and created substantial social tension, but it did not materialize

in Cordova, and the city focused economic efforts toward the development of the commercial fish industry.

Activism and Formal Organizations: Cordovan fishermen have attempted to exercise control over their means of production, through organized efforts over time. During the initial stage of the industry, individual fishermen were brought to Cordova by the canneries (Payne 1983:77). At that time, the canneries set prices, which were as low as 8 to 10 cents per salmon. Some of these fishermen settled in Cordova and formed a union as salmon prices dropped after World War I (Payne 1983:78). The union lasted until the Depression, when a decline in prices spurred formation of a new union in 1933 (Payne 1983). Cannery workers joined this union in 1934. Strikes in 1933, 1934, and 1935 sparked strike breaking, picketing, company unionism, violence, and arrests (Casaday 1937, cited in Payne 1983).

This union eventually split into unions of fishermen, cannery workers, and clam diggers (Payne 1983). The fishermen's union became the Cordova District Fishermen's Union (CDFU), an organization that featured prominently in this report. The CDFU carried out price negotiations from the 1930's to the 1950's, as well as political activities that included legislative bids and efforts towards marine resource control (Payne 1983:78).

The Federal Trade Commission halted CDFU's price bargaining activities through application of the Sherman Anti-Trust Act in 1955 (Payne 1983:78-79). The rationale for the Federal action was that fish pass interstate lines and so fall under the statute. Fishermen had been excluded from the Sherman Anti-Trust Act by the Fishermen's Collective Marketing Act of 1934, which recognized need for cooperative efforts among fishermen. But a 1955 updating of the Sherman Anti-Trust Act declared that fishermen were independent businessmen, and so could not strike against processors (Payne 1983:206).⁵ Processors in turn are not allowed to set or discuss prices with each other.

⁵This appears to ignore the interests of boat crews, who also suffered disproportionately in Exxon's claims' settlement policies, as shown in this report.

In response to the Federal cease and desist order, the fishermen formed a marketing cooperative, the Cordova Aquatic Marketing Association (CAMA) (Payne 1983:79). The CAMA could not initiate strikes, but members could apply social pressure on fishermen who fished during price disputes (Payne 1983.)

The CAMA split in the 1980's due to disagreements during price negotiations and was replaced by separate organizations for gear types: the Prince William Sound Seiners Association and the Prince William Sound Alliance, for gillnetters (Payne 1991:12).

Activities of the CDFU declined with the creation of CAMA (Payne 1983:79), but the organization was revitalized through its political initiative in opposing the oil pipeline terminal at Valdez in 1971 (discussed with fishing). Now called the Cordova District Fishermen United (CDFU), the organization has brought suit along with the Wilderness Society and the Friends of the Earth to stop the pipeline. In recent years, CDFU has continued its political activism, as described in the discussion of the 1989 oil spill.

Fishing as a Way of Life: Fishermen (and other Cordovans) in 1991 described fishing as a "way of life" more than an economic enterprise. Competitiveness was acknowledged, but respondents articulated regret that circumstances dictated this. Informants deplored recent increases in competitiveness brought about by increasing capitalization of the industry in general, and by the oil spill in particular. Commitment to each other's welfare was expressed as a key value.

A 1980 survey showed that fishermen view fishing as a treasured way of life, characterized by conflicting forces of intense competition and cooperation (Payne 1983:82-85). Competition between fishermen includes the upgrading of boats and gear, and may include illegal activities such as creek robbing and setting nets to intercept fish headed toward other fishermen. In seining, aggressive captains may try to out-manuever other boats, risking being rammed (called "seagulling"). Fishermen reportedly often dissemble as to their successes in fishing to prevent being followed or "seagulled" the next year. Payne quotes one informant as saying: "You only have the summer to make your living, but you have all winter to get your friends back" (Payne 1983).

Cooperation and mutual commitment, however, are the other side of this coin. In 1980, 84 percent of a sample of fishermen reported that they had received assistance from other fishermen, and 92 percent stated that they had provided assistance (Payne 1983). Fishermen organize in informal work groups, teach each other skills, and loan equipment without question, despite their competition during fishing season (Payne 1983).

Eighty-two percent of the fishermen in Payne's 1980 survey consider fishing a "way of life" (Payne 1983:86-87). Over 77 percent said that they would not want to leave fishing for a land based job. Valued attributes of this way of life include independence and good income. Negative factors include bad weather, government interference, and competition and greed in the industry (Payne 1983). Respondents in 1991 commonly voiced these complaints in relation to the 1989 oil spill.

When the 1980 sample of fishermen was asked if they would like their children to become fishermen, 78 percent said yes (Payne 1983). Demographics for fishermen reporting in 1980 include that 89.4 percent are male. The mean age is 37.9 years for drift gillnet permit holders, and 42.1 years for purse seine permit holders. Of fishermen with some college education, approximately 52 percent have begun or completed an advanced degree. The majority are married (65.6%), 24.1 percent are single, and the remainder are separated, divorced, widowed, or living together (Payne 1983:63-65).

By ethnic groups, most fishermen are reportedly Americans of Scandinavian, Greek, or Finnish descent (Payne 1983). A sub-group of individuals of Russian extraction maintain many cultural customs such as Russian as a first language. These persons are respected as exceptional fishermen. Of commercial fishermen, 92.7 percent identified themselves as non-Native in 1980. The majority of cannery workers are Anglo or Filipino (Payne 1983).

Population and Demography: Studies describe Cordova's year-round population as remarkably stable since the town's inception (see USDOJ, BLM, Alaska OCS Office 1979:43; Payne 1983:46; Stratton 1989:36). The following figures show some fluctuations,

but Payne, for instance, points out that there was a population difference of only 13 people in Cordova between 1910 and 1950 (Payne 1983:48) (see Table 1).

Table 1
CORDOVA POPULATION, 1910 TO 1990

Year	Population	Percent Change
1910	1,152	
1920	955	-17.00
1929	980	+2.60
1930	938	-4.30
1950	1,165	+24.20
1960	1,128	-3.20
1970	1,164	+3.32
1980	2,241	+92.40
1985	2,307	+2.90
1990	2,612	+13.20

Sources: Stratton 1989:29; Alaska Department of Fish and Game (ADF&G) 1985; Alaska Department of Labor 1987; Birket-Smith and de Laguna 1938; de Laguna 1956; Hassen 1978; City of Cordova 1990b:8.

The apparent increase in population between 1970 and 1980 has been attributed to the stabilization of the fishing industry due to diversification and the construction of the hatcheries, and to population increases in Alaska due to Trans Alaska Pipeline (TAPS) construction (see Stratton 1989:30) but Cordovan officials in 1991 cited winter residency at approximately 1,200 people, due to the seasonal residency of many fishermen, with summer population between 5,000 and 6,000. (This huge influx of people strains the city's saturated housing resources, discussed in the Cordova economy portion of this report). Because a Cordovan address has economic advantages in holding local permits, increases in legal residency may not reflect year-round residence: Payne reported in

1980 that 18 percent of those claiming Cordovan residency were actually in Cordova less than the 6-month criteria (Payne 1983:228).⁶

Real fluctuations in population parallel major economic developments, but decreases appear milder than increases, especially in recent years. According to city officials, population increases, however, are limited due to housing shortages.

With the establishment of Cordova in 1906 in relation to energy developments, population in Cordova and contiguous areas increased from 395 in 1900 to 1,293 in 1910 (Payne 1991:9). There was a 17 percent population decrease during the World War I era, during which a heavy demand for canned salmon depleted stocks. The Ellamar coal mine closed and the depression hit in the late 1920's. The Kennecott mines shut down in 1938, and the railroad closed in 1939, yet Cordova's population dropped by only 4.3 percent between 1929 and 1939. Catches varied from the 1920's through 1940's (Payne 1983:5), as population increased 24 percent between 1939 and 1950. Catches dropped dramatically in the 1950's (Payne 1983), but population dropped by only 3.3 percent. The 1964 Good Friday earthquake had devastating effects on the fishing industry (Payne 1983), but population between 1960 and 1970 rose 3.3 percent (this may reflect an influx of people from Chenega, which was hard-hit by the quake). As noted, recent large population increases after the hatcheries were established may not reflect actual year-round residence.

Elementary school enrollment also suggests that the doubling of residency between 1970 and 1980 might not precisely measure winter occupation. Elementary school figures show a decline for that period, although this might also reflect a decrease in numbers of children per household as well as winter absences (see Table 2).

⁶There are substantial population fluctuations over time, when measured by percentages. Perhaps the emphasis by ethnographers on the stability in Cordova's population reflects the impression of tenacity which is apparent in the attitudes of many residents. To the ethnographer, the spirit of the place and the love of inhabitants for it are striking: Cordova appears to hang precariously at the edge of the sea, but to hang tough.

Table 2

CITY OF CORDOVA ELEMENTARY SCHOOL ENROLLMENT

Year (Begin)	Enrollment
1974	518
1975	558
1976	529
1977	494
1978	484
1979	463
1980	431
1981	407
1982	440
1983	401
1984	374

Source: Mundy, Jarvis, and Associates 1985:13, 18.

The above figures show a 28-percent decline for the decade, but this trend appears to have reversed in recent years. According to the Cordova School District, elementary school enrollment figures for 1988-1990 were as follows: October 1988: 440, May 1989: 436; October 1989: 441, May 1990: 456; October 1990: 428.

Stability in year-round total population corresponds with a core citizenry that is strongly attached to the town, its lifestyle, and its wilderness environment. A significant proportion of Cordovans are native residents or long-term residents: approximately 18 percent are Alaska Natives, 25 percent are native Cordovans, and 60 percent are heads of households who have lived in Cordova for more than 10 years (Stratton 1989:36).⁷

⁷Survey and census information is somewhat contradictory; data from the KI and QI surveys may be substituted here.

Residents are also well-educated; in the early 1980's, 55 percent of adults reported some college education, with only 15 percent not completing high school (Payne 1983:50). Prince William Sound Community College is located in Cordova, with ties to the University of Alaska; if respondents' bookshelves are indicative, Cordovans are well read.⁸

The median age of Cordovans in 1989 was reported at 31 years, older than the 1984 State median of 27.5 years (Stratton 1989:33). Males comprised 52.6 percent of the population. Of 547 people surveyed in 1989, 18 percent were Alaska Native. These included combinations of Eyak and Chugach Eskimo (self-identified as Aleut), and other Natives who had moved into the area (Stratton 1989).

In length of residency, a 1989 sample showed a mean residency of 13.5 years, a median of 8 years, and a range of 1 month to 69 years (Stratton 1989:36). More than 14 percent of heads of households surveyed had lived in Cordova all of their lives, and over half of these were Alaskan Natives. Over 46 percent of heads of household surveyed had lived in Cordova for 10 or more years. Twenty-three percent of the sample were resident in Cordova for 4 years or less (Stratton 1989). Approximately 25 percent of the sample were born in Cordova, 30.7 percent were born in Prince William Sound (including Cordova), and 7 percent were born elsewhere in Alaska. Over half (58%) of the sample population was born in the United States outside of Alaska (Stratton 1989).

Social Organization: In a 1989 survey, average household size was 2.7 persons (Stratton 1989:33). Ninety-eight percent of households were nuclear family groups or single persons; 76.3 percent had 2 or more people. Larger households included extended families or multiple roommates (Stratton 1989).

Housing is a combination of single family houses, trailers, and apartment units. Land shortages within the city limit the construction of new houses. City officials, in attempting to accommodate increases in numbers of seasonal workers, have focused on expanding campgrounds and bunkhouses. In a 1975 study, there were 585 housing units

⁸Cable television is a recent offering in Cordova.

in Cordova (excluding Eyak Village), with 51 percent single family homes, 29 percent multiple family residences, and 21 percent mobile homes (Alaska Consultants 1976, cited in USDOl, BLM, Alaska OCS Office 1979:44).

Clubs and service organizations in Cordova include the Elks and Moose (with women's auxiliary organizations), the Pioneers of Alaska, the Weavers and Spinners, and the Historical Society.

Cordovans often say that the city has "an equal number of churches and bars." More churches were counted, representing the following denominations: Assembly of God, Baptist, Catholic, Church of Jesus Christ of Latter-Day Saints, Church of God of Prophecy, Eastern Orthodox, Episcopal, Jehovah's Witness, Church of the Nazarene, Lutheran, and the non-denominational Little Chapel.

Cordova has a wide range of services for its small population. City services include a hospital, public library, museum, community swimming pool, harbor, public works, water and sewer, police and fire departments, and refuse, which was taken over by the city in November 1989 (City of Cordova 1990a). Other government services include a mental health clinic and alcohol and social services. Cordova has an elementary school, a high school, and a community college.

Subsistence: Subsistence harvesting is important in Cordova's local economy both in material and social terms (Stratton 1989). Sharing and bartering are extensive and part of a community intimacy which is highly valued by Cordovans. One respondent noted that "Cordova would be a good place to be if you were broke--you'd never starve." Cordovans are ensconced in a cash economy, but underlying this is a social framework where people take care of each other. They share and trade food, services, and other materials, as needed. Benefits are given when residents fall ill; friends take sick neighbors into their homes to nurse them. If equipment breaks down, help promptly materializes:

The local people adapt to take care of each other. The old ones, the sick ones. Sharing money, help, food. Whatever is needed. We know who is in need. For instance, women with no one to

hunt or fish. We give it to them every year, without expecting anything in return . . .

The commercial fishermen take part of their catch home, and give it to those that need it, so everybody gets enough fish.

The importance of sharing in Cordova is evident in the greater proportion of households using resources than harvesting them: over 75 percent of households gave away resources in 1985, while 92.7 percent of households received harvested resources (Stratton 1989:ii).

Cordova has a high cost of living, and subsistence harvesting contributes substantially to family food supplies. (Natives emphasize subsistence more than non-Natives, who nevertheless rely on harvested foods to supplement store-bought goods). According to a 1986 survey, food cost 25.6 percent more in Cordova than in Anchorage (Stratton 1989:52).

Retail prices for the following items, averaged for two Cordova markets, were recorded for the AOSIS in 1989 and are shown in Table 3. Cordova labor rates are shown in Table 4.

In 1985 Cordovans harvested a mean of 151.7 pounds per capita of wild resources (Stratton 1989:iii). Salmon accounted for the largest proportion of this: 39 percent of the harvest weight was salmon, 27.3% was game, and 22.6 percent was fish other than salmon (Stratton 1989). The majority of salmon consumed (62.7%) was from commercial harvests (Stratton 1989).

The sharing of salmon by commercial fishermen is culturally important. Many respondents complained in 1991 that recent trends toward intensive capitalization of fishing have made it increasingly difficult for fishermen to share salmon. Respondents described this as culturally and socially abrasive, as the sharing of salmon is an ethical imperative and a source of pride for commercial fishermen.

Cordovans understand their economic vulnerability as a "one-produce town," but they desire the persistence of their lifestyle, which they believe has been threatened by the oil spill. Residents rely in part on subsistence harvesting, but they are enmeshed in a

Table 3**CORDOVA RETAIL PRICES**

Commodity	Price
10 lb flour	\$6.64
12 oz evaporated milk	.92
1 lb onions	.92
48 oz oil	2.60
6-pack cola	3.64
19 lb sugar	3.85
18 oz corn flour	2.63
18 oz bread	2.89
1 lb bacon	6.59
3 lb coffee	12.47
1 lb butter	2.89
12 qt powdered milk	14.25
22 oz punch	4.00
12-pack diapers	6.80
Coleman lantern (small)	35.00
2-D batteries	2.99
1 gal Blazo	8.99
Ax handle	16.99
1 gal gas	1.96
1 qt motor oil (10-40 wt.)	2.95
35 hp outboard	3,500.00
16-ft skiff (aluminum)	3,000.00

Source: Field notes 1989.

Table 4
CORDOVA LABOR RATES

Labor Category (Hourly Rate)	Price
Net hanging	\$50.00
Rough carpentry (construction)	20.00
Electrical repair	50.00
Engine repair	48.00
Welding	50.00
Plumbing	48.00

Source: Field notes 1989.

cash economy which they believe is essential to the town's survival. That economy relies on fishing, which residents consider vital to their town's identity.

Cordova's Economy: Cordovans believe that their town would vanish without its fishing industry. City officials and residents also appreciate that their economic development is largely subject to factors beyond their control in the form of external economic, political, and environmental forces. Economic diversification, however, remains controversial. Cordovans value their present way of life; they like their town the way it is. Recent community efforts have been aimed at protecting and stabilizing the fishing industry, rather than diversifying the economy.

Prior to the oil spill of 1989, Cordova's economy was considered by economists to be relatively stable (see City of Cordova 1990b; and USDOJ, BLM, Alaska OCS Office 1979:127). The employment trend shows expansion over the last 25 years, with the greatest increases in the State and local government sector, but with Federal Government employment decreasing (Stratton 1989:39). The economy grew modestly from 1980 to 1988.

The Exxon Valdez oil spill of March 1989, however, has "caused severe economic disruption and dislocation" (City of Cordova 1990b:8). The \$500,000 shrimp and \$200,000 sablefish seasons in Prince William Sound were closed for 1989; in early April, the \$12 million Prince William Sound Herring fishery was closed; in May the Eshamy District, Main Bay, and parts of the Montague District were closed to salmon fishing.

These closures impacted local businesses in an inconsistent manner. Many businesses suffered financial losses while other businesses realized financial gains as a result of economic activities associated with the spill cleanup. Other businesses made approximately the same profits but on different merchandise, so that normal business practices and business-client relations were disrupted.

The three largest sectors of Cordova's economy, in terms of numbers of jobs and payroll, are, respectively, the fishing industry (harvesting and processing); the government sector (Federal, State, and local); and the retail and service sector. The fishing industry renders substantial economic support to the latter two sectors. Over half of the government jobs and payroll are local, and the local government relies on fishing revenues in the form of sales tax and intergovernmental transfers (primarily, the raw fish tax). The retail and service sector provides support industries for the fishing sector.

Fishing revenues are subject to world market forces. The Japanese, who own large fish processing plants and who comprise a major market for local harvests, exercise the predominant influence. Seattle based fishing interests are interwoven with Cordova's fishing industry: each fishing season brings an influx of fishermen from Seattle, and the cannery workers' union is based in Seattle. Urban centers such as Los Angeles comprise large markets, particularly for the high quality frozen fish produced by local processing cooperatives.

State and Federal legislation and regulation have strongly influenced fish revenues and the character of fish harvesting in recent years (notably through the transfer of some fisheries to limited entry and through the 1974 Non-profit Hatcheries Act).

Federal laws governing oil development also are significant, and these, in turn, are influenced by interrelated public and private proponents of oil development and by world

economic and political forces. Alaska oil revenues, in the form of intergovernmental transfers, provide a significant (though perhaps not critical) portion of city government revenues. On the other hand, environmental disasters such as the Exxon Valdez oil spill threaten the existence of Cordova's fishing industry and the city itself. Residents currently recount with bitterness the 1971 suit by Cordova fishermen to prevent the pipeline terminal at Valdez: "We won the Supreme Court case, but we lost in Congress." Cordovans are aware that they cannot control oil development, and many believe that they have more to lose than to gain from it. Their position of relative powerlessness has not stopped their activism, however (discussed with oil spill impacts to the business and fishing communities).

Fishing: Cordova is the center of fishing and fish processing for a 38,000 mi² area (City of Cordova 1990b). Located on Orca Inlet in eastern Prince William Sound, Cordova is nearer the commercial fishing grounds, especially those of the Copper River and Bering River, than other Prince William Sound communities (City of Cordova 1988:18). In 1986, 50 percent of Prince William Sound drift gill net permits and 44 percent of purse seine permits fished were owned by Cordova residents (City of Cordova 1990b:11). That year, 399 Cordovan permit holders harvested over 39 million pounds of seafood, worth \$23 million (City of Cordova 1990b:12).⁹ This was the fourth largest community harvest in Alaska (City of Cordova 1990b:11). Cordova was the eleventh leading fishing port in the U.S. in dollar value of the catch in 1988 (City of Cordova 1990b).

While salmon forms the backbone of Cordova's fishing industry, other fisheries generated nearly \$10 million in gross earnings for Cordovans in 1986 (see Table 5).

Fishing dominates Cordova's economy, and most Cordovans believe that their town would cease to exist without its fishing industry. Fish harvesting provides more jobs than any other source, and commercial fishing and fish processing together provide nearly half of the jobs in Cordova (See Table 6).

⁹Of 1,357 total fishery permits held for Prince William Sound in 1985, 609 were held by people with Cordova addresses (Stratton 1989:44-45). Not all permits are fished each year.

Table 5
CATCH AND GROSS EARNINGS OF CORDOVA
RESIDENTS BY FISHERY IN 1986^a

Type of Fishery	Permits Fished	Total Harvest (millions/lbs)	Earnings (\$ millions)
PWS Drift Gillnet	265	7.4	8.9
PWS Purse Seine	108	15.9	4.2
Herring Pound	51	0.1	0.7
Bristol Bay Drift Gillnet	10	0.5	0.6
Herring Purse Seine ^b	12	2.5	0.6
Halibut Longline ^c	44	0.7	1.0
Tanner Crab	7	0.3	0.5
Dungeness Crab	5	0.5	0.5
Blackcod Longline	9	0.2	0.2
Misc. Other Fisheries	158	11.1	5.8
TOTALS	669	39.2	23.0

Source: Commercial Fisheries Entry Commission, cited in City of Cordova 1990b:12.

^a Totals for 399 Cordova-based permit holders.

^b Bristol Bay fishery only.

^c From vessels 5 tons and over.

Table 6
CORDOVA EMPLOYMENT AND PAYROLL IN 1988

Employment Category	Annual Average Employment	Total Payroll (\$ millions)	Average Annual Salary
CIVILIAN EMPLOYMENT			
<u>Private Sector</u>			
Manufacturing ^a	224	5.9	\$26,339
Retail Trade	138	2.1	15,369
Services	112	1.1	10,181
TCU ^b	83	2.4	28,835
FIRE ^c	24	0.5	21,463
Construction	19	*	*
<u>Government</u>			
Federal	38	1.1	29,941
State	90	3.5	39,078
Local	174	4.8	27,344
Total Government	302	9.4	32,121
OTHER EMPLOYMENT			
Seafood Harvesting	355	17.5	49,296
U.S. Coast Guard ^d	61	1.7	27,505
GRAND TOTAL	1,360	41.6	30,588

Source: Data cited in City of Cordova 1990b:10-11. From Alaska Department of Labor (ADOL), The McDowell Group, and Alaska Seafood Industry Study: A Technical Report.

^a Manufacturing employment is primarily seafood processing. The ADOL includes all employment by Cordova-based processors, even if the employment occurs elsewhere in Alaska.

^b Transportation, communications, and utilities.

^c Finance, insurance, and real estate.

^d In addition to basic pay, Coast Guard personnel receive allowances for housing and cost of living which varies according to number of dependents and other factors.

Moreover, support industries rely heavily on the presence of a fishing population (City of Cordova 1990b:8; Payne 1983:52; Stratton 1989:39). Fishing is Cordova's principal basic industry, and there is a very high ratio of basic to secondary employment in Cordova. In 1978, the ratio of basic to secondary employment was close to 1.0 to 0.5, compared to a national norm of 1.0 to 1.5 (Payne 1983:50).¹⁰ The basic sector of Cordova's economy apart from fishing (such as the Eyak logging operation) is not large enough to support a community (Payne 1983:52).

While government employment is substantial, these operations rely on community infrastructure created by the fishing industry (Payne 1983:52). Local government, the leading public sector employer, is dependent upon revenue generated by the fishing industry; for instance, raw fish tax accounts for approximately 25 percent of the community budget (City of Cordova 1990b:8).¹¹

In addition to being Cordova's largest employer, commercial fishing yields the largest average annual salaries (\$49,296). This is followed, but not closely, by State government employment (\$39,078); Federal Government employment (\$29,941); and transportation, communication, and utilities employment (\$29,835). Private sector employment is generally less lucrative, although average figures cited in the table above do not reflect the very large salaries of a few successful entrepreneurs.

Cordovans view their economic dependency on fish as critical to a way of life which they wish to preserve. In the recent past, residents have been opposed to nonfisheries-related growth (USDOI, BLM, Alaska OCS Office 1979:109). Twelve years ago, they expressed fear of domination of fish harvesting by nonresidents (USDOI, BLM, Alaska OCS Office 1979). They continue to express these fears. Cordovans believe that

¹⁰ A "basic" industry here is one which produces exports and is therefore influenced by forces external to the local economy; "secondary" industries support basic industries and are directly subject to local economic dynamics.

¹¹ This figure fluctuates from year to year, with large variations in quantities and prices of fish harvested. For instance, according to the City of Cordova Approved 1990-91 Budget, in 1987-1988, the raw fish tax as intergovernmental revenue provided \$570,574 of \$5,920,767 in total revenues (p.2; p.7). In fiscal year 1988-89, the raw fish tax provided \$1,294,703 of \$8,409,837 in total city revenues (City of Cordova 1990a).

increasingly more fishing permit holders reside outside of the state during the off season, maintaining an official Cordova or Alaska residence in order to avoid higher permit fees (Stratton 1989:45; respondent communications). While the majority of Alaska rural local residence fishing permits are held by Cordovans, there was a 14-percent drop in the number of rural local permit holders between 1975 and 1985 (Stratton 1989:46).¹²

Cordovans report a rise in competition and in capital investment in high technology equipment in recent years. The transition of salmon and herring fisheries to limited entry and the sale of limited entry permits for increasingly higher prices have aggravated this trend (Stratton 1989). Often fishermen must fish each season in order to meet loan payments on their permits; thus, adding to the competition (Stratton 1989). Respondents report concerns that this increasing competition and capitalization of fishing will alter their way of life. The oil spill has reportedly accelerated this process, as some fishermen used spill cleanup money to upgrade their equipment.¹³

Fishing dictates the highly seasonal nature of Cordova's economy. Cordova's local population fluctuates each year in tandem with the cyclical nature of the fishing industry. For revenue sharing purposes, the city estimates its year-round population at 2,612 residents; during fishing season, the resident population is "conservatively estimated to be around 5,000" (City of Cordova 1990b:8). While some Cordovan fishermen maintain residency only for economic purposes, others commonly leave for extended periods during the winter, to "escape boredom and the weather." *Accurate census on winter residency and peak summer population are not available, but city officials have estimated the winter population at approximately 1,200.*

Most of the seasonal workers fill jobs directly related to the fishing industry; others fill jobs in support service industries such as restaurants, hotels, and retail stores.

¹²Alaska rural local permits are held by residents of small communities such as Cordova, Tatitlek, Whittier, and Chenega; residents of larger communities such as Valdez and Seward hold local urban residence permits (Stratton 1989).

¹³The effects of the oil spills made here on fishing are discussed elsewhere. The point that Cordova's economic dependency on fishing, while making the community vulnerable to such disruptions as the 1989 oil spill, is nevertheless inherent to a valued way of life.

Government agencies, such as the ADF&G, the U.S. Fish and Wildlife Service (FWS), and U.S. Forest Service (USFS), also employ seasonal workers (City of Cordova 1990b:8).

There were about 1,300 jobs in Cordova during 1988, but peak employment during fishing season was over 2,000 (City of Cordova 1990b:9). Fish harvesting is Cordova's largest employer, accounting for 355 jobs annually; during the commercial fishing season, two to three times that number of Cordovans hold such jobs (City of Cordova 1990b). Commercial fishing accounted for more net earnings than any other industry in 1988, at \$17.5 million. Seafood processing is Cordova's second leading industry, employing an annual average of 224 workers (600 during fishing season) and providing \$5.9 million in payroll (City of Cordova 1990b).

Overlaying these regular seasonal cycles are irregular fluctuations in fishing revenues over time. While Cordova's fishing economy has been relatively stable over the past decade, the fishing industry is routinely erratic (City of Cordova 1990b:12). Incomes of skippers and crew members vary dramatically, as catch rates and prices vary *from year to year; price fluctuations within the last 10 years have reached 146 percent for the gill net fishery and 264 percent for the seine fishery* (City of Cordova 1990b). These fluctuations reverberate throughout the local economy.

In recent years, fish revenues have generally increased due to the transition of the salmon and herring fisheries to limited entry and the creation of a local hatchery--the Prince William Sound Aquaculture Corporation (PWSAC) (Stratton 1989:46).¹⁴ Limited entry and resource management have resulted in larger runs of fish in recent years, with correspondingly higher fish quotas (Stratton 1989). Since the passage of the Non-profit Hatcheries Act and the establishment of PWSAC in 1974, salmon hatcheries have appreciably increased fish harvests (Stratton 1989).¹⁵

¹⁴The development of PWSAC is discussed with impacts of the oil spill to the fishing community.

¹⁵There are hatcheries at Cannery Creek, Main Bay, Port San Juan, Esther Island, Solomon Gulch, and Paxson.

While increases in the catch are thought to drive prices down, the trend in recent years has been a steady rise in overall fish revenues (Stratton 1989:47). Comparing 24-year average dollar values of salmon harvests (from 1960-1986) with 10-year average values (from 1976-1986), the 10-year average is typically double the 24-year average (Stratton 1989:48).

Nevertheless, dramatic yearly fluctuations are predictable features of the fishing industry. For instance, the pink salmon harvest value in Prince William Sound went from \$44,000 in 1972 to \$3,009,000 in 1973. In 1981, the ex-vessel value was \$38,198,000; in 1982 it was \$15,600,000 (Stratton 1989:49).

Residents recognize such fluctuations as beyond local control. They commonly describe fish profits as less predictable than the weather (on which they depend, in part). Harvest sizes are subject to the weather, enhancement efforts, State and Federal resource management, environmental disasters such as the 1964 earthquake and the 1989 oil spill, and so on. Fish prices are subject to world market forces; competition from other regions; domination of the industry and price controls by transnational conglomerates; public perceptions of the product; and so on. Cordovans in 1991 often referred to a botulism scare in the early 1980's (which drove prices down) as an analogue to the 1989 oil spill.

Many forces beyond local control constrain expansion of the fishing industry, including environmental degradation, fish prices, competition from farmed fish, and illegal high seas fishing (City of Cordova 1990b:18).

Fishing is expected to continue to be the mainstay of Cordova's economy, and is expected to grow due to the activities of PWSAC (City of Cordova 1990b:16). The PWSAC plans to increase the number of fish released and also will take over two State hatcheries in 1990-1991 (City of Cordova 1990b). The PWSAC and the ADF&G are evaluating possible new remote release sites in eastern Prince William Sound. Officials believe that the Cordova small boat harbor could be expanded, and the city has waterfront industrial and commercial land available for new processors and support

industries. The city currently plans to upgrade its marine facilities, but such upgrades are dependent on funding sources (City of Cordova 1990b).

The Seafood Processing Industry: The seafood processing industry is the third largest employer in Cordova (City of Cordova 1990b:12). Four major processors and one small processor are located there. Employment in the city's seafood processing industry over the 10 years prior to the oil spill ranged from a high annual average of 325 jobs in 1979 to a low of 133 jobs in 1984 (City of Cordova 1990b:13). This fluctuation has lessened somewhat in recent years as processors have diversified, and the hatcheries have become a stabilizing factor. But salmon is expected to continue to dominate the industry, so that a seasonal and yearly fluctuation is expected to remain characteristic of employment in this sector (City of Cordova 1990b).

Some business leaders fear that Cordova is losing its status as the center of the Prince William Sound fish processing industry. A number of processors have in recent years located outside of Cordova, at times in Valdez (Cordova Times, March 7, 1991). Some entrepreneurs believe that local government leaders have not offered enough incentives (such as lower utility rates) to encourage processors to locate in Cordova. Some fishermen maintain that Cordova is falling behind other communities in its ability to provide support services and housing needed for the fish processing industry (City of Cordova 1990b:17; respondent communications). Sources in 1986 reported that Cordova's high cost of living was motivating more fishermen and their families to become seasonal residents, while the high cost of utilities was causing some processors to relocate to other Prince William Sound communities in order to operate more economically (Stratton 1989:30). Respondents in 1991 expressed similar views.

Relations between fishermen and the fish processing industry are focussed in part through the PWSAC. For instance, in anticipation of low fish prices in 1991 (with pink salmon prices dropping to 15-20 cents a pound from 30-35 cents a pound in 1990), the PWSAC attempted to recruit foreign offshore floating processors into Prince William

Sound (Cordova Times, March 7, 1991).¹⁶ Such efforts are regulated by Federal and State laws, which in turn are interrelated with national and international economic interests. The PWSAC also is seeking additional fish markets in the Soviet Union and China, but economic difficulties in both countries could restrict sales (Cordova Times, March 7, 1991).

A limiting factor in attempts to raise fish prices by introducing new competition lies *in post-spill economic woes experienced by the old competition. The bankruptcy of the Copper River Fishermen's Cooperative, and the rumored bankruptcy of Chugach Fisheries, Inc. and their suit against Exxon are described elsewhere. Some other processors are reportedly facing financial difficulties, and some fishermen are experiencing difficulties in finding advance buyers for the 1991 season (Cordova Times, March 7, 1991). While North Pacific Processor, Inc. and St. Elias Ocean Products, as well as Peter Pan Seafoods, Inc. in Valdez declared plans for full operations during the 1991 season, other buyers were pulling out as of March, including one processor with offices in Cordova, a processor in Anchorage, and two Valdez processors (Cordova Times, March 7, 1991). The additional competition for fish which foreign offshore processors represent could cause reductions in the operation of onshore processors (Cordova Times, March 7, 1991).*

Local government interests clash with PWSAC's plans to attract foreign floating processors. If onshore operations are cut, the number of workers will be reduced; a reduction in seasonal labor population would reduce sales tax revenues. Also, city officials worry that they could lose raw fish tax revenues if fish are not processed in Cordova (Cordova Times, March 7, 1991).

¹⁶The PWSAC reportedly needs 54 cents a pound to cover costs, and wanted to open at 72 cents a pound; when PWSAC put out their hatchery fish, none of the five major canneries in the area would bid on them. The Japanese wanted to pay 15 cents a pound for pink salmon, so PWSAC management wrote to the Governor and requested permission to bring foreign processors into the area. While leftover stock from last year could keep prices down, the Japanese also market roe, which is a high priced delicacy in Japan. Local fishermen think the Japanese processors are taking advantage of the oil spill, and conspiring to bring prices down.

Japanese control within the processing industry causes concern among many Cordovans. Residents are disposed toward local activism and formation of cooperatives, and some view the Japanese as a remote entity, extensively networked with worldwide markets and not dependent on the survival of Cordova. Residents believe that the Japanese corporations would maximize profits by setting low prices, regardless of the effect on Cordovans. Many respondents in 1991 expressed resentment over the "secret settlements" between Exxon and the large canneries, which they believe were enmeshed in a broader context of political and economic issues beyond the scope of local interests and knowledge. Respondents hypothesized that Exxon may have offset generous payments to the big processors by more niggardly claims settlements for local residents.

Some respondents fear increasing control by a more homogeneous Japanese interest over time, which would result in less competition and lower fish prices. The validity of this notion is beyond the scope of this paper, but it is possible that a traditional pattern of interownership of processors has moved toward a more singular controlling interest by Marubeni Corporation of Tokyo. In 1978, the three major canneries operating in Cordova were thought to be partially Japanese owned (USDOJ, BLM, Alaska OCS Office 1979:52). Nichiro Gyogyo Kaisha, Ltd. and Mitsubishi Shojiku formed a consortium with New England Fish Company and created Orca Pacific Packing Company in Cordova in 1966 (USDOJ, BLM, Alaska OCS Office 1979:52). In 1979, Morpac, Inc. was controlled by a joint venture of Nippon Suisan Kaisha, Ltd., and Mitsui and Company, Ltd.; Marubeni Corp. and Marubeni America Corporation owned partial interest in North Pacific Processors and St. Elias Ocean Products (USDOJ, BLM, Alaska OCS Office 1979:53). Currently, Cordova's two externally owned processors, St. Elias Ocean Products and North Pacific Processors, are reportedly owned by Marubeni Corporation and both have the same address. Two more canneries have reportedly been approved by the City Council, both licensed in Tokyo.

The Japanese interest has brought increased diversity within the fish industry, a benefit to Cordovans. Herring and salmon roe (previously a waste product), and roe on kelp are considered delicacies in Japan.

Chugach Natives, Inc., acquired the Orca Cannery in 1979. Cordova also has a processing cooperative run by local fishermen, the Copper River Fishermen's Cooperative (CRFC), and a small Eyak packing plant.

Government: While Cordova is widely described as exclusively "a fishing town," government jobs comprise a significant aspect of the local economy, and also provide seasonal and long-range economic stability. Few residents describe government as nearing the economic importance of fishing, and this may be because Cordovans believe that the town would fold altogether without the fishing industry. Nevertheless, government jobs account for a large segment of the economy, with local government being the largest public sector employer. In 1988, local, State, and Federal government jobs accounted for 302 jobs and \$9.4 million in payroll (City of Cordova 1990b:10). Local government accounted for approximately half of the government employment, with an annual average of 174 jobs and a payroll of \$4.8 million; State government provided 90 jobs and \$3.5 million in salaries; and Federal civilian positions accounted for 38 jobs and a payroll of \$1.1 million (City of Cordova 1990b:10). In addition, 61 U.S. Coast Guard (USCG) jobs provided \$1.7 million in payroll (City of Cordova 1990b:10).

City officials intend to encourage State and Federal governments to do business in Cordova, but constraining factors include the high cost of living, a housing shortage, and the lack of highway access (City of Cordova 1990b:17). Due to the housing shortage, the trend is for State and Federal agencies to construct their own housing, which means lost revenues for the city and local landlords (City of Cordova 1990b:18). As with other major sectors of Cordova's economy, external forces determine the presence of the public sector: budgets in Juneau and Washington are currently decreasing, and city officials expect a decrease in government employment in the near future (City of Cordova 1990b:17).

Municipal government is the largest employer in the public sector, as noted, with jobs in administration, education, library science, and public works. State government is the second largest public employer; the ADF&G has significant numbers of employees in Cordova (City of Cordova 1990b:17). Other State presences in Cordova include the

Department of Transportation and Public Facilities, Alaska Court System, University of Alaska, Department of Environmental Conservation, Marine Highway System, Division of Youth and Family Services, and Department of Public Safety. Main Federal Government employment is with the USFS and the Federal Aviation Administration (FAA); also present are jobs in the USCG, FWS, Postal Service, and projected employment (summer of 1991) with the National Oceanic and Atmospheric Administration (NOAA) (City of Cordova 1990b:13).

While the city relies on intergovernmental transfers for revenues, some State support is dispersed on a regional basis. City officials often complain that they receive less than their share of such funds and that proportionately more remains in Valdez. Similar local sentiments toward State government were reported in 1979:

One former State official aptly captured this feeling when he stated that Cordova has long felt like the "orphan" of State government - dependent upon state transportation, harbor and fish and game regulation for its livelihood and continuance, yet hampered in its ability to bargain by a climate and economy that are energy demanding and time consuming. An old time resident put it somewhat differently when he stated that "most post-statehood votes (in Cordova) have been protest votes. Our weighted vote doesn't count for much" (USDOJ, BLM, Alaska OCS Office 1979:59).

Retail Trade and Service Sector: Other important sectors in the Cordova economy include retail trade (138 jobs providing \$2.1 million in payroll), service sector businesses (112 jobs and \$1.1 million in payroll), and transportation, communications, and utilities (83 jobs and \$2.4 million in payroll). Minor industries include construction, finance, insurance and real estate, and the timber industry.

Cordova has two grocery stores, a convenience store, two clothing stores, one gas station, three liquor stores, a furniture store, a drug store, a bakery, five to ten restaurants (reflecting seasonal variation), and six bars (City of Cordova 1990b:13). Business organizations, such as the Cordova Chamber of Commerce, are discussed elsewhere.

Employers in the service sector include the Cordova Community Hospital, social service personnel, and two major hotels. A significant number of businesses service the fishing industry, including fishing supply stores, net sales and mending shops, hardware stores, and boat and engine repair shops (City of Cordova 1990b:14).

Transportation, Communications, and Utilities: Alaska Airlines employs personnel, as does Wilbur's Airlines, a commuter service providing three flights a day. There are also several charter services, and taxi and limousine companies. Both the telephone and the electrical service are cooperatives. Cordova Telephone Cooperative employs most of the communications workers; the Cordova Electric Cooperative employs most utility workers (City of Cordova 1990b:14).

Finance, Insurance, and Real Estate: Cordova has two banks and one insurance agency. There is no local real estate office. Most insurance and all real estate transactions are carried out in other cities, such as Anchorage and Seattle (City of Cordova 1990b:14).

Construction: Eight or nine general contractors live and do business in Cordova. Several of these employ a number of workers (City of Cordova 1990b:14).

Tourism: Studies frequently cite tourism as potentially of economic significance, especially if the Copper River Highway is constructed (see for instance, Payne 1991; City of Cordova 1990b; Stratton 1989; City of Cordova 1988; and Alaska Consultants 1976). Cordova sits in a spectacular physical setting, located between two major ecological systems (Prince William Sound and the Copper River Delta). Recreational opportunities include hiking, camping, hunting, fishing, kayaking, boating, skiing, and wildlife viewing. Historic attractions from the early mining era of the 1900's (such as the "Million Dollar Bridge") exist as well. There currently is a small visitor traffic for fishing, hunting, bird watching, and the Ice Worm Festival (City of Cordova 1990b:14).

While Cordova is recognized as having tremendous undeveloped potential as a tourist area, its inaccessible location is cited as a constraining factor (City of Cordova 1988:35). City planners believe that a seasonal influx of recreational tourists would be

problematic at this time (City of Cordova 1990b:15). The seasonality of tourism could amplify the already seasonal nature of Cordova's fishing economy. City leaders worry that the addition of large numbers of summer jobs in the tourist industry could create increased off-season unemployment (City of Cordova 1988:36). The alternative of transient labor would strain Cordova's already saturated housing facilities; there is already a lack of housing and accommodations for the yearly influx of fishing industry workers, and tourism would exacerbate this problem. Such seasonal accommodations as exist are not only scarce but expensive in a town known for its high cost of living.

Also, the community lacks a consensus on whether tourism is desirable (City of Cordova 1988:18). A substantial number of residents oppose completion of the Copper River Highway, in large part because they appreciate Cordova's remote setting and do not want floods of visitors.

Existing tourism employment is not reported, although Cordova draws a significant number of visitors. Cordova ranked as the 20th most visited community in Alaska, according to a McDowell Group tourism industry study, drawing 11,600 visitors in 1985 (City of Cordova 1990b:14). Cordova's visitor industry stems primarily from business travel, often related to the seafood industry or government activities (City of Cordova 1990b).

Forestry: Timber harvesting is expected to remain an insignificant sector of Cordova's economy although the industry generates divisive political currents. Current harvesting by the Eyak Corporation is met with vociferous disapproval by non-Native residents, who object to clearcutting. Eyak respondents are indignant at this attitude, given the non-Native record on environmental protection.¹⁷

After the Alaska Native Claims Settlement Act (ANCSA), the Native communities of Eyak, Tatitlek, Chenega, Afognak, Ouzinkie, and Port Lions selected lands from within the Chugach National Forest; Kodiak Village Corporation, Port William, Litnik, and Afognak were also eligible for land selections as of 1988 (City of Cordova 1988:34).

¹⁷Sec Sec. II Alaska Natives in Cordova.

Eyak Corporation began timber harvesting in the Sheridan Glacier area in 1988 on a reserve of about 360 million board feet and is harvesting at a rate of 15 to 18 million board feet a year (City of Cordova 1990b:15). They plan to continue cutting at that rate for the next 10 years. The timber operation employs about 20 workers, but only a few are Cordova residents. The timber harvesting has little effect on Cordova's local economy (City of Cordova 1990b).

The long-range economic potential for timber harvesting appears minor, due to the type of timber, a small sustained yield capacity, and a slow reforestation rate. The Chugach National Forest, established by Congress in 1907, takes in the coastal areas around Prince William Sound, areas of the eastern Kenai Peninsula, and Afognak Island (City of Cordova 1988:33). In the Cordova area are overmature mixed stands of western hemlock and Sitka spruce, with hemlock the predominant species rather than the more valuable Sitka spruce (City of Cordova 1988). The USFS estimates a sustained yield capacity of operable timber stands in the entire Chugach National Forest of 72,800,000 board feet annually, less than the annual production of major sawmills in Southeast Alaska (City of Cordova 1988). Reforestation rates have been estimated at 100 years (Stratton 1989:50).

The ANCSA greatly reduced the amount of timber under the control of the USFS, who must manage this resource on a sustained yield basis. In 1988 the USFS planned to harvest 6.3 million board feet annually for 5 years and then 10.6 million board feet annually for the following 5 years (City of Cordova 1988:34). This is a more modest effort than current Native logging.

While Eyak Corporation owns considerable commercial forest lands around Cordova, it is difficult to transport logs to ships, and currently logs are rafted to an in-water transfer site (City of Cordova 1988:20). The rafts are reported to be hazards to small boats traveling between Tatitlek and Cordova; one death occurred in March 1991 when a skiff overturned after striking a raft.

Logging, like fishing, is subject to external controls such as the international timber market, State and Federal legislation, and competition from elsewhere. Cordova

residents oppose expansion of the timber industry onto State or USFS lands (City of Cordova 1988:20; respondent communications).

Oil, Gas, and Coal Development: Economic studies have recommended local coal and oil development as an option for diversifying Cordova's economy (see Mundy, Jarvis, and Associates 1985:ii). Nevertheless, Cordovans do not anticipate major involvements in local energy developments. In 1976, the Federal Government held a lease sale for outer continental oil and gas in the northern Gulf of Alaska; Cordova felt little impact (City of Cordova 1988:30). Studies conducted in 1974 to 1976 concerning potential outer continental shelf oil and gas development cite land shortages as a major obstacle to development of Cordova-Eyak as a service base for offshore oil (USDOI, BLM, Alaska OCS Office 1979:85). Many Cordovans opposed the prospect of rapid energy development and population increases, and representatives of the city and CDFU joined state efforts to delay OCS leases (Cordova Times, March 11, 1976, cited in USDOI, BLM, Alaska OCS Office 1979:85).

In 1986, the Alaskan Crude Corporation proposed to drill ten wells in the Katalla oil fields, planning to ship the oil through Cordova (City of Cordova 1988:30). Low oil prices and the lack of a road linking Cordova to the oil fields brought Katalla development to a standstill (City of Cordova 1988). The Katalla field is small, and city planners do not predict direct employment benefits from development (City of Cordova 1988). City officials perceive possible potential indirect employment from oil storage, as well as lower local fuel costs (City of Cordova 1988:32) although these benefits might not materialize.

In 1981, Chugach Natives, Inc. entered into a partnership with KADCO, a Korean firm, to explore the Bering River coal fields. Exploratory drilling on Chugach Natives, Inc. lands identified 62 million tons of anthracite coal (City of Cordova 1988). Development would require a road linking the Copper River Highway to the mine area and this has not occurred. City planners anticipate few local benefits (City of Cordova 1988).

Science and Education: City officials and many residents would like to see Cordova emerge as a science and education center (City of Cordova 1990b:18). Seed money has been provided for the Copper River Delta Institute and Prince William Sound Science Center, which would carry out research projects and draw an influx of faculty and research staff, and possibly some spin-off businesses (Cordova Times, February 14, 1991). These developments are limited due to housing shortages and the high costs of living and doing business in Cordova. Also, outside economic forces such as the availability of research dollars will be definitive (City of Cordova 1990b:19).

Deep Water Port: A recent feasibility study appears to indicate that construction of a deep water port is technically feasible but unlikely for economic reasons(City of Cordova 1990b:20). Future construction of a deep water port (especially in combination with a highway) could alter the economic face of Cordova considerably. The port is currently controversial because the immediate major beneficiary would be the unpopular timber industry. In this respect, the three participants in the feasibility study, (Cordova, Eyak Corporation, and Chugach Alaska Corporation), might have conflicting goals for the development of a port (City of Cordova 1990b).

Copper River Highway: Construction of the Copper River Highway would connect Cordova to the Alaska road system. Residents are deeply divided on this issue, and a city survey was being conducted at the time of this research. The presence of the highway could provide residents with convenient access to the outside, increase tourism, reduce shipping costs, and lower the cost of living. The project is subject to State and Federal politics and funding, and local officials have recently found economic prospects for the highway in the near future unfavorable (City of Cordova 1990b:21).

Bering River Road: Construction of a Bering River Road would provide access to extensive coal fields, an oil field, and timber stands. The USFS recently solicited proposals for drafting an Environmental Impact Statement for construction of this road. However, the coal, oil, and timber in this region are in remote areas, and shipment to market is problematic. Whether Cordova were to be selected as the port from which to ship these raw materials would be a corporate decision, and whether these

resources are exploited is largely contingent on market forces. Economic feasibility of exploitation of these resources appears unlikely (City of Cordova 1990b).

Future Economic Trends: Economic studies have predicted no new employment opportunities in Cordova (Mundy, Jarvis, and Associates 1985:19). Employers are expected to continue to follow cyclical hiring policies in consort with the seasonal nature of the fishing industry. The probability of a new basic industry selecting Cordova as a base is considered low due to the high costs of living and doing business there, notably high energy costs (Mundy, Jarvis, and Associates 1985:i). Compared with other communities, for instance, weekly grocery costs for a family of four and energy costs were reported in 1985 as shown in Table 7.

Table 7

WEEKLY GROCERY AND ENERGY COSTS FOR A FAMILY OF FOUR

Community	Grocery Costs	Energy Costs (per KWH)
Yakutat	\$92.67	\$.250 ^a
Cordova	85.40	.190
Skagway	74.34	.175
Valdez	62.99	.220
Anchorage	55.17	.060
Seattle	49.12	

Source: Mundy, Jarvis, and Associates 1985.

^a Plus \$18 per month.

Lack of highway access is related to higher costs, as shown by the higher costs in Yakutat and Cordova, which are accessible only by air or sea.

The loss of retail sales (through purchasing outside of Cordova) has been noted as significant (estimated at \$4.3 million for local households) (Mundy, Jarvis, and Associates 1985:iii). Nonresidents in Cordova (such as seasonal fishermen and cannery workers) purchase approximately \$935,000 in goods annually (Mundy, Jarvis, and Associates 1985).

A negative economic trend which worries some Cordovans is a reported loss of dominance in the fish processing industry, as noted. In 1985, 50 percent of Prince William Sound processors were scheduled to operate in Cordova (Mundy, Jarvis, and Associates 1985). However, Cordova's high cost of living and the economic incentives offered by other communities (such as free utilities and land for nominal fees) are drawing processors to communities such as Valdez, Seward, and Whittier (Mundy, Jarvis, and Associates 1985:25).

In developments since this research period, Governor Hickel has begun construction on a road which would connect Cordova to Alaska's highway system. Such a road could have substantial effects on Cordova's character and residents remain strongly divided on this issue. The future of the enterprise is still in doubt. The following article from the Los Angeles Times emphasizes how Cordovans, despite geographical isolation and local activism, could still see their town "turn into something else:"

. . . there are those who favor a road, and none favor it more than Alaska's combative governor, Walter J. Hickel. A former U.S. secretary of the Interior and a longtime real estate developer elected as an independent last year, Hickel has made building a road to Cordova one of his top priorities.

Last summer, with no notice and with Hickel's blessing, state highway crews began carving out a gravel road along an 82-mile, long-abandoned railroad bed between Cordova and the nearest settlement, Chitina. In the rush to get the work done, debris was dumped into the salmon-rich Copper River and its tributaries . . .

The federal government is threatening to take the state to court for failing to stop the road work and for allegedly violating the Clean Water Act. The Ahtna Indians sued, claiming bulldozers were plowing near ancient burial grounds. Recently, a special

prosecutor was appointed to investigate whether criminal charges should be filed against highway workers for damaging fish habitat. Legislators are up in arms because Hickel never got their approval

...

One argument against the road is that it would further hurt fishing, partly by luring tourists here and creating a big new sport salmon fishery, cutting into the commercial fishermen's take.

Another argument is that Cordova should remain a quiet part of the world . . . "A lot of people, including me, came here because of the way Cordova is. They don't want it to turn into something else," said [one resident] . . . Still, many people in Cordova see the road as progress . . . (Los Angeles Times, December 2, 1991:A5).

II. ALASKA NATIVES IN CORDOVA

A relatively comprehensive description of Alaskan Natives in Cordova appears in Northern Gulf of Alaska Petroleum Development Scenarios Sociocultural Impacts (USDOJ, BLM, Alaska OCS Office 1979). The following is drawn primarily from that source, combined with updates from 1991 fieldwork.

Eyak "identity loss" has been a factor in attempts to deny them Native recognition and rights by Federal agencies under ANCSA and by Exxon after the 1989 oil spill. This report argues that Eyak respondents retain a philosophy and way of life which is distinctly Native, and that prior analyses of identity loss have overemphasized historical data and neglected contemporary comparative data on ideology, social and kin networks, and subsistence practices.

According to Eyak leaders, Exxon claimed that Eyak Village was not "impacted" by the 1989 oil spill. Results here show that Cordova Natives suffered the same negative consequences experienced by non-Natives. These include social disruptions, higher prices, shortages of rental space, and business impacts such as the economic difficulties of fish processors based in Cordova. Stressed more by respondents are cultural impacts particular to Natives, such as the looting of burial and historical sites. The most intense concerns relate to subsistence foods and practices.

Natives were and still are unable to obtain many subsistence foods. They were and still are afraid to eat subsistence foods that they do obtain. They worry about future adverse health effects from subsistence foods that they have eaten since the 1989 oil spill. They worry about continuing damage to their environment and way of life, and they discount Exxon's assurances that their food supply is safe.

Subsistence practices, including sharing, are integral to a way of life which connects Natives with their past and with each other, both in a spiritual sense and in terms of extending kin ties. These practices entail a spiritual philosophy as well as social and kin relations. Respondents describe their cultural identity as inclusive of the earth, wildlife, cultural practices, and people. All of these are viewed as interdependent. When oil threatens wildlife it threatens Native "life."

Eyaks expressed diverse views on whether resource development is moral. However, respondents agreed that humans cannot "manage" natural resources--which only God can manage. Due to this conviction, statements endorsing resource development appear somewhat fatalistic. Those opposed to development of resources agreed that only God can manage them, but expressed fears that human attempts to manage could obliterate the Native environment and way of life. Because of an expressed belief that all aspects of Nature are critically interdependent, these respondents described the entire world as jeopardized by development of resources such as oil.

On describing the effects of the oil spill, respondents were divided: some said that they were afraid to talk about it; others expressed gratitude and relief that, finally, someone had come to hear their views. Some Eyaks said that they were troubled because their people were afraid even to discuss such things with each other.

Most local Natives interviewed in 1991 virtually refused to discuss corporate matters (Chugach, Eyak, and Tatitlek). Reluctance was explained as necessary secrecy because of litigation with Exxon. However, it was my impression that Cordovan Alaskan Natives are resentful and fearful of negative Anglo attitudes toward their corporate activities. Some appeared speechless with indignation over criticisms of their

development policies, noting that their pursuit of profits is mandated by non-Native law and that the non-Native record on environmental protection is abominable.

A hesitancy to speak out on issues appeared to be generalized, so that reluctance to talk about the oil spill was intermingled with fear of discussing other corporate issues. Many Eyaks appeared to be troubled by the policies of non-Native corporate management.

Eyak political relations with the City of Cordova have traditionally been strained. Eyak Village was annexed by the city over strong Eyak protests while Eyaks were fighting for Federal recognition under ANCSA. Natives lack any substantial voice in city government, while Cordova City Council members have reportedly sat on Eyak and Chugach corporate boards. Native funds have benefitted the city economically, with little recognition by non-Native residents.

Despite historical and contemporary intergroup tensions between Natives and non-Natives, individuals are unified through a shared lifestyle, extensive intermarriage, and occupancy of a small settlement surrounded by a vast wilderness. Many friendship and kin networks exist between the two cultural groups, and ignorance and suspicion of one another is markedly less apparent than in many rural areas near Indian reservations in "the lower 48." However, Eyaks readily point out past discrimination and contemporary prejudice.

II.A. Population

Cordova has a heterogeneous Native population which presently includes Eyaks, Aleuts, Eskimos, Hawaiians, and other American Indians. Eyaks are recognized as the predominant indigenous group. Cordova's Eyak population, in contrast to the non-Native population, grew between 1960 and 1970: the Eyak population was 41 in 1950 and 48 in 1960, but increased to 349 by 1970 (USDOJ, BLM, Alaska OCS Office 1979:44). According to village leaders, Eyak population in 1985 was 397. This number decreased after the oil spill, as some individuals who made money on the oil cleanup temporarily relocated. These people have reportedly begun to return. Eyak government

representatives cited the population in 1991 as 265 Eyak residents (210 adults and 55 children).

It is not known if the population increase between 1960 and 1970 relates to an influx of residents from Chenega after the 1964 earthquake. However, many Chenegans have returned home, while Eyak population in Cordova has remained relatively stable.

The increase in population after 1960 may (or may not) reflect a different self-reporting by persons with mixed ancestry. In 1991, some respondents who were less than half Eyak considered themselves Eyak, whether or not they held corporate stock. While a substantial number of Eyaks have non-Native ancestry, many identify more with their Eyak descent. Some expressed an ethical imperative to take pride in a Native heritage:

It's important to know that you're a Native and be proud of it, no matter how much Native blood you have. My father was full-blooded [Western European], but when I look in the mirror I see my mother. I see a Native.

According to Village leaders, the Eyak Corporation requires a one fourth blood quotient, but the Eyak Village service area has no such requirements. The government is currently compiling enrollment figures for the Bureau of Indian Affairs (BIA). In any case, there are reportedly only two full-blooded Eyak residents left in Cordova, both elderly.

Eyaks comprise approximately 25 percent of winter residents, reportedly being more likely than non-Natives to remain in Cordova after fishing season. Eyaks tend not to belong to the major groups who absent themselves during the off season (such as non-resident fishermen who maintain a Cordova address for economic reasons and wealthy fishermen who spend winters in warmer climates).

Some migration of Natives occurs, however. Natives migrate seasonally or permanently to Anchorage for visiting, shopping, or jobs. Natives more often migrate to Anchorage, while non-Natives tend to visit or reside in the Seattle area (USDOJ, BLM, Alaska OCS Office 1979:111-112; respondent communications).

II.B. Cultural Identity

Eyak "identity loss" has been widely reported, relating in part to unanswered questions about their past (see Sec. I.A.1 Historical Overview; see also USDOI, BLM, Alaska OCS Office 1979; and Johnson 1988):

Dr. Krause at the University of Alaska has classified Eyak language, but it's a language of its own. No one knows where we come from. We're not Athapaskans or Tlingits. "Eyak" is not an Eyak word. It means "mouth of the river" in Aleut. That's where the villages were.

Eyaks expressed concern over the question of their historical roots; elders do not remember any Eyak dances, for instance, although they remember games and sports. Some leaders consider renewal of cultural heritage a solution for social ills:

The young people here don't know who they are, and that's why there are drug and alcohol problems. We're going to start cultural heritage classes for them next month.

Leaders expressed faith and determination that Eyak identity would persist:

We wouldn't lose our identity. We're a strong people. We deal with mental health, alcoholism, and suicide. A lot of Native kids don't know their identity. So we have gatherings and teach the culture so they'll know who they are. There are a lot of Natives with White coloring; it's hard for them to understand who they are.

I have heard similar statements by Natives in Tonga, Fiji, Cook Islands, New Zealand, Mexico, Utah, Arizona, New Mexico, Colorado, and California. Feelings of cultural loss and beliefs in the significance of traditional culture to individual well-being are not measures of cultural identity loss. Natives the world over appreciate that they have been overwhelmed by a super-ordinate culture, yet retain faith in their distinct identity and worldview.

Post-contact epidemics and natural disasters severely decreased the population. The effects of Anglo contacts on identity loss is described in a Federal field study entitled Alaska Natives and the Land:

Because the territory of the Eyaks was the center of much activity, including salmon canneries, mineral exploration, railroad construction, and trading enterprises commencing as early as the 1880's, the Eyak traditional way of life was seriously disrupted. Judging from their decline in numbers, their adjustment to changing conditions imposed by non-Natives was far from being successful, although a willingness to marry outside of their tribe may have been an important element in the fairly rapid loss of their identity (Federal Field Committee, 1978, as cited in USDOl, BLM, Alaska OCS Office 1979:90).

On the other hand, Eyak "identity loss" may be overstated. A comparative examination of ideology demonstrates that Eyak respondents have a coherent cultural philosophy that differs markedly from that of non-Natives but which coincides with that of other Native groups. Also, social and kin networks with Natives in other villages, often carried out in subsistence practices, demonstrate a cultural unity with those groups and outweighs similarities with non-Native Cordovans.

While many Eyak respondents expressed regret and unquenched curiosity stemming from gaps in knowledge about their past, Native identity was expressly acknowledged. The following statement refers to the effects of the oil spill. Eyaks shared with other Native groups the experience of suffering and loss because they share a common environment, way of life and spiritual philosophy. In particular, respondents described craving for subsistence foods as a racial characteristic (inbred, or in the blood), similar to Navajo descriptions of "mutton hunger":¹⁸

It's been inbred in us from childhood: the spirituality and kinship we feel one to another. A oneness we feel among each other. What affected the other villages we could feel. We felt their loss. It's not Christianity: t's a oneness, a spiritual feeling among ourselves.

We have White blood, but the Native blood comes out and we have to satisfy that part of us. Salmon eggs - it's inbred. The Native blood: he part within must be satisfied.

¹⁸See Shoepfle et al. 1979. This phenomenon is discussed again in Section II.H Effects of the 1989 Oil Spill.

This is a way of life for us, not just subsistence. It's part of us.¹⁹
We are part of the earth. We respect it.

The last statement shows how Eyaks consider cultural identity as equivalent to a way of life which is comprised of subsistence harvesting and values pertaining to this. To be Native is to hold these values: Natives leave seeds for regrowth; the White man leaves nothing and will lose everything. A shared identity is delineated, with the earth, that yields subsistence, the way of life that subsistence harvesting comprises, and the people who live this way of life:

SUBSISTENCE COMES FROM THE EARTH.

SUBSISTENCE (HARVESTING AND FOODS) IS A WAY OF LIFE.

THIS WAY OF LIFE IS PART OF THE PEOPLE.

THE PEOPLE ARE PART OF THE EARTH;

THEREFORE:

SUBSISTENCE IS PART OF THE PEOPLE AND THE EARTH.

THIS WAY OF LIFE IS PART OF THE PEOPLE AND THE EARTH.

Cordovan Natives uniformly emphasized subsistence foods as well as practices in describing Native identity:

Subsistence harvesting is still part of the identity here. It's our way of life, so it's part of our identity . . . Once a month we have a luncheon of Native foods. Mostly for the elderly who can't get things themselves. We use fins; they make us feel good inside. They go in fish soup. Nutritionists have finally decided there's nutrition for elderly people in fish soup. It has a calming effect on unruly kids.

Subsistence harvesting, described as "our way of life" and "our identity," actively connects Eyaks to their heritage, according to respondents. That is, this way of life is shared by past and present Eyaks, and is intrinsic to being Eyak. Eyak identity is not regarded as a function of blood quantum, but of a perceived unity with other Eyaks and

¹⁹Underlines reflect vocal emphasis.

other Natives. Subsistence harvesting also comprises a connection between the people and the earth; it is a form of respect for the earth. This respect for the earth (including the life which it supports) entails a value system where the earth and its resources are not equatable to money values. Likewise, one's heritage and identity are not exchangeable with money values:

I think a unified spirit connects all American Natives. I feel it whenever I meet American Indian people. We all feel the same way about things.

The subsistence foods are related to our heritage. They connect us to our heritage.

How could you put a money value on things: food, the things that we have? Because it's free. If you're a subsistence user you can't put an economy value on these things.

My father trapped and fished, but my mother and I lived off the land. We went duck hunting in a pond behind our house. I trapped with my father and ate bear meat. Once a year we took strawberries and rhubarb to town and sold them and bought rice. We canned from our garden.

When we trapped we ate the muskrat and beaver and porcupine and lynx. That's better than chicken. Jam, fruit. That shows how we treated the land. When fiddlehair ferns came up in summer we'd eat them in bacon grease. Salmon berry sprouts, full of vitamin C.

That's our connection with the earth and we respected it. We feel differently about subsistence than non-Natives.

The wanton waste at the city dump shows the difference between Whites and Natives. They take the breast meat off the duck. We used it all. We eat stomachs and hearts of king salmon. We smoke it, freeze it, can it, dry it, until there's nothing left.

Here we weren't allowed allotments because we were part of the National Forests. Even after eating all the fish (except some of the intestines) we feed the bones to the sea gulls. Even the bones are used. We even eat the fish eyes. They're tasty.

Regardless of the degree of Native blood, it's different for us. Real subsistence users would never throw parts of the game away.

We've gone out and gotten heart, liver, etc. that others have thrown away. Bake the seal flippers, braid the seal gut, eat the liver, dry the skin and make slippers (mukluks). Make buttons out of moose horns. Moose and sealskin garments, purses, hats. Bear gut parkas: they're water proof.

Now, with modern stuff, you just buy it. But that doesn't affect me.

It means more than food. It's our way of life. It's inbred. Such a part of us.

Traditional subsistence practices also were emphasized in addressing questions about respondents' "memories" about special places. This question in the KI protocol was intended to refer to personal memories, but Eyaks often referred to past cultural practices, particularly subsistence harvesting. Such statements demonstrate a sense of continuity between past and present subsistence practices. For instance, hunters used to need skill with bows and arrows because this was their livelihood; now, they need skill with a rifle, for the same reason:

They used to go out to sea in kayaks. Now they call them bidarkis. Our name was kayak; kayak was a seal. Which a kayak was made out of. So the name is for the seal.

They used to go out for days to hunt sea otters. Sometimes they got caught in a storm out there. The sea was 'way high, and the island down below. They'd look at Kayak Island; from there it looked like a kayak. They thought it was another boat. The current took them over to Kayak Island. They used to paddle all over to visit relatives, then paddle home.

Bigger boats they made out of sea lion skins. Great big boats. To haul freight with. I forget what they used to call them. They paddled them too. It held whole families. Kayaks held one, two or three [persons].

Old man _____ had a boat: six feet high, and thick: four inches thick. I couldn't even haul it. He said you had to be strong, to haul the boat and to pull a speedy bow.

He had 102 little knife marks in the bow. He said, "That's how many sea otters I killed with that bow and arrow. " That's all we used to hunt with. You had to be good with it, because that's your livelihood.

Now I've got to be good with a rifle because I have only so many shells. We needed more money for more shells. So you had to be good with a rifle too.

You used to see a sea otter traveling and the boats would go around in a ring around the sea otter. And we'd all shoot at it. The first arrow doesn't kill it. But the first arrow to go into the otter meant that it was your sea otter. Every body else helped kill it, but it's yours because you had the first arrow in.

Contemporary cultural training of Native youngsters is likened here to traditional practices:²⁰

Kids are taken out [at spirit camp] and shown how to camp and hunt, and [people] teach them. In my days, my people used to do that with us. Take us out and teach us how to hunt, fish, and so on. They were Spirit Camps.

Someone who knew would teach us how to do things, how to live. I used to go hunting with a deaf and dumb guy, _____. He'd know exactly how to do things: make a camp, work. I got so I could understand him.

He was a good hunter! We'd sleep out on the beach, build a fire. Dig a whole in the sand. Our length head to toe. About two feet deep. Cut spruce ratches and lay then in the hole for a mattress. We only had one blanket. But under the ground, you sleep real

²⁰"Spirit camps," referred to here, have been set up by the Alaska Native Resource Development Company of Anchorage, to teach Native youths traditional technologies such as smoking fish, tanning hides, and so on. Presently The North Pacific Rim Corporation (TNPR) has a proposal for a cultural renovation program which would set up spirit camps in villages, and is seeking grants to implement this. The TNPR planning committee is also contemplating a return to more traditional village organizations, with chiefs and councils of elders (Cordova Times, February 14, 1991:9).

warm under the ground, and the cold air went right over.
Branches over and under keep you warm.

We learned to dry fish. Dried salmon; had to be held in the mouth, too hard to chew. It'd break your teeth. Don't drink much water when traveling; just wet your mouth. And a piece of dried salmon in your mouth will last all day long. You don't starve.

When you go traveling, always look back, to see your way home. Make a mark whenever you go. Because in fog and snow you can get lost 15 minutes from your house.

Watch for creeks because they run one way. Down to the beach. After you get to the beach you have to know where your camp is. So have marks everywhere on the beach.

One time I was hunting deer out there. Following a fresh deer track. So I rushed and forget to look where I was going.

I stopped and looked and my tracks were covered already. It was just snowing! After awhile I ran into a strip of timber and followed a creek. It took me to a big bluff. I couldn't get down. I hadn't been to that place before so I didn't know where I was, and I couldn't see anywhere. But I stood up and faced the cliff down. I thought: Cordova is to my left. I went left and found my partner in 1/2 hour. Otherwise I'd have had to stay out in the snow all night.

Animals show you a lot of things if you can read their signs. Where water is. Certain places animals will take you to. But if you follow a deer here, he'll take you to hell!

They can really travel! I followed a deer once and he out-smarted me. He was following me, ten feet behind me, the whole time. I turned around and saw him, just looking at me, and then I said, "You don't want me to shoot you. You were just playing with me!"

And I couldn't shoot him. I just let him go. He was laughing at me. Just playing a trick on me. Animals will play with you.

While memories emphasize subsistence, other cultural features were referenced:

We had two or three religions here: Chenegan, Yakutat, Tlingit. They'd have an Olympics and invite other religions over to play Aleut games. Rock throwing, arm wrestling, ear pulling, and so on. For weeks and weeks. Furs would be won, kayaks, bows and arrows. Some people would get cleaned out. And next year the other religion would have it.

During winter time, everybody had a good time. Everything was free: the food, and so on. But the games were for prizes. And they fought hard for them. The wrestling, and so on, until the other guy couldn't move. It was a lot of fun. Tree hauling, all kinds of games. If you won a lot of stuff, they'd plot against you, or your village, for next year. It was between the villages.

They made it all work. But some were evil and mean. They fought wars all the time. Over practically nothing. If there was *nothing to do they'd start a war with some other village.*

I lived on Makarka Point. I was born in Duchet, but they had that flu that killed everybody. I didn't have a mother so _____ raised me. My dad took me out and that saved me from the sickness. Everybody but a couple people died.

When the Russians came in there was nothing but Aleuts. They called you anything they wanted to. It could be an animal. So you had an Aleut name. But the Russians baptized everybody and gave them Russian names for last names. The Russian couldn't say the Aleut names, So our last names were given to us by the Russians. I have no Russian blood, even though I have a Russian name.

In addition to continuity in subsistence practices and Native blood, respondents often described some congruity between precontact and Christian religions:

We talk to our Elders, and it's hard to comprehend how they lived in underground houses with their whole families. How could they have lived? Kids would be fighting. Two little smoke holes: one to praise and thank the spirit for good hunting.

I was so pleased to hear that, because I always thought that they acknowledged something there. We call it God.

The following statement by another respondent echoes this recognition:

I think a lot of things happened in the early days. They had their own way of living. They didn't know about God even. But they still had a feeling that somebody did things to this world.

They saw the mountains and animals. So they figured out there was a ruler somewhere. Must be from up above. Can't be from below. They knew there was two things: a god and a good. They weren't religious. They just lived on what they knew themselves. Then they figured out there was a ruler. They asked: who made that moon? That sun?

They lived in smoke houses and smoked fish. A hole where the smoke went out, you could see the sky through. And sit by a low table. And old man would look through that glory hole and tell the Man above that, "We're gonna' eat now." They believed in something above, and that was Nature. And then the Russians come and brought religion.

We knew that religion before the Russians came. But we didn't have a name for it. They used to say, "On your left side is a bad spirit. But the one on the right is the one you should listen to." They knew good and bad.

Years ago the old people said there was a bad spirit on earth here. Not a Devil or God. They never saw a Devil. The bad was in you and me. Or the Good.

When people were against one another the people themselves had a bad spirit. The people used to fight, but not a war. Just for tools, or a woman. Killed each other for what they had.

But they knew that in later times they would have big wars: a power we know nothing about, that we can't control. So we have to know which side to belong to.

Some people start a war over nothing: greedy, wanting power. It's happening right now and will keep on happening until the end of the world.

Those old people used to tell us that. They knew that, and it's happening now. Those old people never had no schooling, but they knew things.

Respect for Eyak forbears and their way of life was uniformly expressed. Respondents often described their forbears as prescient, having knowledge and forecasting ability not shared by contemporary humans. These elders advised the young to maintain their cultural knowledge and ethics; the statement below demonstrates how some have attempted to do this:

They told us our language would be taken away from us. They said not to forget our language, even when the schools tried to take it away, and tell us we didn't know anything.

They said keep up our knowledge: how to live, what plants to use for medicine. "You'll need that."

The doctors here, they ask and I show them roots and plants to cure a certain sickness. When I was a little kid, I wasn't interested, but when I got older I thought: Why didn't I pay more attention?

I know some things. The medicines from plants around here is lots better than the stuff you get from the doctor. The plants had Aleut names, but I can't remember . . .

They used to use seines and get all wet when you put them in the water. One guy came out of the water and got sick and couldn't move. Couldn't walk from rheumatism, from being in the water.

Somebody (a Native from Yakutat) came up to see him. He came back with some roots and leaves and made some tea. He wouldn't take money for it. But the tea cured the rheumatism, and it never came back. Even when he was old.

Me and my wife used to go pick leaves and made tea. Just something to drink so we wouldn't get sick. Wild currents. They grow all over.

I was going trapping one time, and there was an old Native lady here. She was married to a White man. She had two boys. We went out trapping and she said, "We have to get our medicines now. Don't buy any cold medicines. Get medicine for your cuts, but leave the cold medicine to me."

She told us about these wild currents. They grew all over. It was fall, where the currents fell off the stems. She said to cut the

stems and take them and scrape the brown skin off. Under is a green sap. Shave off the green sap in strips and collect a pile of it and boil it up. She said, "You'll need one gallon, the color of light tea. To use it, listen close and write it down: in the morning before breakfast, each one take 1/2 cup. Then eat breakfast before drinking it. After breakfast drink the 1/2 cup juice. It's bitter. If you drink it before you eat you'll get sick.

But 1/2 cup after breakfast each, and none of us got sick. Even though it was icy, wet, rain, and sleet, and none of us got sick even though we was out all winter long.

Some plants cure pneumonia. Devil's Club. It cures pneumonia. The Aleuts had lots of stuff that worked, but lots of stuff that didn't work. They lost a lot of relations, too. Old man _____. I grew up with him. He raised me. He used to come around town with all this stuff.

He used to read the clouds and the stars to see what would happen. I asked him, "What do you do when you go outside? What are you reading?"

He says, "You're interested, but you can't do it. I go out and read the clouds and read the stars. You have to understand to do it. You won't learn it. I won't even tell you, but I watch the stars and clouds and read what the weather will be like." They would read the different layers of clouds, and how the stars twinkled.

II.C. Organizational Complexity

While Eyaks retain a strong sense of Native identity, the loss of some aspects of traditional culture and the presence of different Native groups in the area may hinder integration of the structural complexity dictated by ANCSA. Newly created organizations include two Native for-profit corporations, the Eyak non-profit Bidarki Corporation, the Eyak Youth Center, and the Indian Reorganization Act (IRA) Tribal Council. Respondents in 1979 felt that these group affiliations had a splintering effect socially (USDOI, BLM, Alaska OCS Office 1979:92). In 1991, respondents complained of social fragmentation where individuals were afraid to meet communally and discuss their political and economic concerns; some expressed feelings of futility. More

homogeneity in the Native community might mitigate the social stresses produced by the ANCSA reorganization (USDOI, BLM, Alaska OCS Office 1979:93). Religious heterogeneity exists as well (see "Ideology"), although the Russian Orthodox Church is a central focus of social organization for many Natives.

Cordova houses headquarters for two Native profit corporations and one non-profit corporation formed under ANCSA: Eyak Corporation and its non-profit affiliate the Bidarki Corporation, and Tatitlek Corporation. Roughly 150 members of Tatitlek Corporation lived in Cordova in 1979 (USDOI, BLM, Alaska OCS Office 1979:61). Counting all members of Chugach Region, Inc., there were at least 500 Alaskan Natives residing in Cordova in 1979 (USDOI, BLM, Alaska OCS Office 1979:61)²¹

Eyak Village formed a new IRA Council under provisions of the Indian Self-Determination Act of 1975. Eyak leaders had rejected the IRA political framework earlier, correctly deducing that it imparted increased power to the Secretary of the Interior:

We never accepted an IRA government. At the time, I studied it and came to the conclusion that the IRA government gave the Secretary of Interior more power over us. So we voted it down.

The IRA Council consists of a president and five elected members. Activities include ownership and management of office headquarters for Eyak Corporation, Bidarki Corporation, and a community health aide who is part of North Pacific Rim's Health Department program. A community service worker administers food stamps and energy assistance. Eyak government leaders are working on enrollment figures for the BIA. The Eyak government also seeks and administers block grants and government aid programs; currently plans for cultural classes sponsored by the non-profit corporation are underway.

The Bidarki Corporation administers programs at the Eyak Youth Center. Other non-profit activities include helping the Salvation Army food bank locate persons in need, and joint missions for clothes collections and referrals.

²¹Current figures were not available because the recent census combined Cordova with other areas.

Economic activities of the profit corporations (regional and village) are discussed in Sec. II.D Economic Development Policies. The Eyak Corporation has an elected nine member board; the village holds elections every 2 years. Corporation enterprises include timber, a marina, commercial buildings, and a trailer court (which government leaders described as not lucrative).

Tatitlek has maintained close relations with Eyak over the years and houses their profit corporation headquarters there. Their IRA village council is headquartered in Tatitlek. Residents of both villages maintain close ties through family visiting, a common fishing tradition, exchange of harvested foods, and joint church meetings. Many from Tatitlek and Chenega still maintain close ties to the Russian Orthodox Church in Eyak, relocated from Nuchek in about 1925 (USDOJ, BLM, Alaska OCS Office 1979:65).

Organizational complexity mandated by ANCSA is not the only way in which Federal relations with Eyak complicate respondents' lives. The topic runs throughout this report, but a common complaint concerns administration of Indian Health Service funds. These run out in Cordova after the first few days of each month. Natives needing medical care often wait until the first day of the following month, and then join a long line at the hospital clinic. Some fly to Anchorage at their own expense.²²

II.D. Economic Development Policies

Views on Resource Development: While the provisions of ANCSA mandate that the Eyak Corporation produce profits, members are ensconced in a subsistence fishing lifestyle. Members of Eyak Corporation were split on development in 1979 (USDOJ, BLM, Alaska OCS Office 1979:62). Some favored development, some were for maintenance of a traditional fishing village economy, and others espoused a "back to the land" philosophy which would preclude economic development and relations with the non-Native community.

²²One respondent claimed that hospital overhead is taken out of Alaskan Native funds disproportionately, leaving little for walk-in patient care. This is unconfirmed information but warrants further research.

Eyaks in 1991 are still split on resource development. Interestingly, they are in accord on whether humans can "manage" resources. Most said that, ultimately, only God manages resources, or that Nature manages itself.

The following statements by two Eyak political leaders show acceptance of some resource development, since the people "have to have an economy of some kind." A fundamental Native conviction is applied to oil development: you should share resources widely, and they will come back to you; the farther the resource goes, the more powerful the force of return on the investment.²³ Respondents here describe resource development as "living off the land," and they express moral concerns about the earth. Economic profits are not emphasized per se, but the importance of an economy which supports everyday living is recognized: "Existence is a big part of our lives."

The view that only God can manage resources is used here to rationalize the morality of resource extraction: humans are not at Nature's helm. No one can predict the effects of development; God will control the earth which renews itself. Humans cannot fully understand God's intentions; they are occupied in a struggle to survive. These beliefs give the following endorsement of resource development a fatalistic quality which strongly contrasts with Anglo entrepreneurial enthusiasm:

Question:

How do you feel about oil development?

First Respondent:

We still have to have oil.

Second Respondent:

Let's have seal oil.

First Respondent:

Timber and oil are part of our lives. We have to have an economy of some kind. We can't go back to our aboriginal life, our early days.

²³This belief is also discussed in Sec. II.H. Effects of the 1989 Oil Spill.

Second Respondent:

We're living off the land. They're cutting down our trees and paying us for it.

First Respondent:

I was never against the pipeline. Our oil is going all over. The whole world needs it. We identify with everybody. Why are we fighting for Kuwait? Our synthetics, tires, shoes, and so on: it all comes from oil. Cotton comes from the earth too.

Question:

Do you think there's a difference between renewable and non-renewable resources?

First Respondent:

I never thought much about that effect on Nature. Existence is a big part of our lives.

The earth is constantly changing. How can we say anything is non-renewable? God who made everything may say it's renewable. There may be a way earth will renew everything.

God had to make everything: the earth and its beauty. Inside each person there is a spirit, and that spirit believes in God. There's so many mysteries God has given us, so we can't say what will happen. We can't predict a 110 mile per hour wind. It could take the trees and roofs. We had one once, and it was scary. You couldn't do anything until it stopped. Then it was beautiful.

We cannot predict a non-renewable resource. How can we say that anything won't go back to the earth? That's where it came from. We started as dirt, and we finish as dirt. I'm not an evolutionist. I came from an egg and sperm, not a piece of slime.

All things--plastic--it came from the earth; it will go back.

Question:

Do you think that people can manage resources?

First Respondent:

No. We can't manage, we can't predict. Whether the oil is going to be there, or anything.

Second Respondent:

The synthetics may turn back into oil.

First Respondent:

There's too many people managing. And some [management] isn't right. Native people don't want to be managers. We have too much to do in our daily life.

The following respondent is opposed to oil development, and the inquiry elicited a story containing a number of implicit messages. The account that follows shows a continuity between traditional subsistence practices and contemporary ones; different weapons are used, but the dangers and skills required are the same. While it is difficult to live by hunting, Native people are able to do so. Before interference by State and Federal regulation, Natives used subsistence practices which were satisfactory and satisfying; the respondent is angered over non-Native intrusions which have curtailed and threatened this way of life.

Like the two Eyak respondents quoted above, the following respondent does not believe that humans can manage resources. Contemporary attempts to do so are associated with fears of culture and resource loss. This respondent also resembles the previous two respondents in not embracing capitalistic values. He believes that animals, for instance, cannot be "owned" in an economic sense. One makes use of them to survive. A sense of "belonging" involves an interrelatedness of animals and humans in subsistence which comprises "my life" and "my way of living." Animals and humans were created together when the world was made.

The statement that follows expresses intense concern over the effects of oil development on animals. Eyaks hold strong positive sentiments toward the animals in their environment, and questions which referenced extinction of animals appeared to shock informants to the point of causing physical as well as mental discomfort. Moreover, since all aspects of Nature are crucially interrelated, if one aspect is destroyed, the whole can be lost.

Question:

Is oil development good?

Answer:

No. I don't think so. The people here before, they had an awful time getting by. They had no guns. They had to eat, and they had to use spears.

Not too long ago I had a guy living with me here. He said we should go out and look for bear. Black bear. They're easy to get in summer at the creeks eating fish, but in the winter they're hibernating. They used to get bear in their dens with bow and arrows, knives, spears. I said I wouldn't go in a den, even if the bears were sleeping.

We went up the road and saw a black bear. He went into his den. We watched it for 2-3 days. That fall, pretty late, this guy said, "Let's go get that bear in his den," so I went with him and we found his den. He had it covered up with branches in the front. He had a flashlight and we both had rifles. He went in and found the bear. I told him, "We don't need meat that bad," but he said, "I like bear." I said, "What if he wakes up?" He said, "He'll be dead by that time." I said, "Bear season's closed."

But I couldn't talk him out of it. He took off his coat and said, "If he comes running out, you shoot him." I said, "I thought you were going to shoot him." He said, "Well, if he gets away, you shoot him."

After awhile I heard a "boom" and then _____'s feet come out through the hole. Then I dragged him out and we dragged the bear out of the hole. He said it was sound asleep. He touched it, looked at it. People used to do that, but it was tricky. Some people got killed when the bear woke up.

The bears in Tatitlek and Chenega will walk right through the village. Some of the old people in Chenega were smart hunters. They took me goat hunting.

We came to a village and there were 50 goats playing. We watched them for a half hour. They had some kind of game. They'd dig a hole and then stick their horns in the hole. They'd run to the hole and put their horns in: "Click."

A goat will outrun you on a climb, but on a level you can outrun a goat. So we went down and chased the goats. But you have to

watch out for their horns. So five of us went down and chased them. They said, "Don't shoot them, just chase them." We got five goats, one each, and headed them off and blocked their way from climbing the mountain.

We used to trap here. They used to use deadfalls but then they outlawed them. I trapped foxes, mink, every winter. We each had different trapping sites. Two men worked together on a particular place.

Each family would choose a place on the creek, and put salmon up there in summer and then trap there in winter. All over the Sound you could go and everyone knew where they were.

The Forestry Service burned every one of those Native camps down. And put up cabins. But the Native camps, the village camps: everybody knew where they were when those were there. There was lots of room for everyone. But they were all taken away from us.

They outlawed the deadfalls. They were good. You had to use steel traps. I don't know why, but they outlawed all that Aleut stuff. And those deadfalls worked good and didn't cost you a cent.

Question:

What do you think would happen if some of the animals became extinct?

Answer:

I don't know how much the oil did to those animals. A lot of ducks were killed. Seals. I know there's a lot of Natives are afraid to eat that stuff because they know what happened to it. They inspect it, but they're still afraid. You don't know what's going to happen to the people who eat it.

That oil just killed billions of "grayboots" on the rocks. Killed everything off, even land animals. They go down to eat kelp because they need salt. A lot of them ate crude oil on the kelp. Clams with oil. Of course there's hardly any butter clams or razor clams left. I used to go get grayboots every year. Now I don't. You used to go get all the razor clams, butter clams, cockles you want. Now there's none. In fact, I hardly eat seal now. Just once in a while the boys get one.

The people in Chenega are afraid to eat the things they get. I don't blame them.

Question:

What would happen if there were no game?

Answer:

It affects all the others and people too. You have to watch all of them. It ruins the whole thing. No matter what kind of animal it is.

And you never know: the second oil spill could happen any time. Ships spilling ballast water out all the time. Right in Valdez Harbor. The more oil they want to find, the more will leak out.

Question:

Do you think that people can manage resources?

Answer:

I imagine they could. I don't know how. How could they do it?

The Aleut people are quite afraid they can never do what they used to do. So I don't know how they can manage [resources]. The Eskimos: there's lots they don't have. They have to fight for everything they want.

Question:

Who do the resources belong to? Does anyone own them?

Answer:

I don't know if animals belong to anyone. But everyone makes use of them. I wouldn't say that an animal belongs to me unless I kill one. Then it's because it's my life and my way of living that I have to eat that animal.

But still I wouldn't say they belonged to us. We make use of them to live. Their skins, and so on. But no one owns the animals before they get them [when they're alive].

Even now I don't get enough Aleut food. I get to needing it and get some once in a while. But now we're leery to eat it.

Question:

What if there were no animals?

Answer:

Geeze! Had to be the end of it, I guess. What would the world be good for? To kill all the animals! When the world was created, the animals were created too, just like human beings. If the animals were taken away, that would be the end of it.

What would we do without animals? I like animals. I love animals, even if I don't eat them. Of course, you've got to learn to keep away from some: wild bear, and so on.

Eyak Corporation: Logging by Chugach and Eyak Corporations in 1991 is described in Sec. I.A.6 Cordova's Economy. Logging is currently the major economic enterprise of the Eyak Corporation, but the move toward timber development met internal opposition (USDOJ, BLM, Alaska OCS Office 1979:57). It appears an unlikely source of long-term economic benefit, as noted, and has become a source of controversy locally among Natives and between Natives and non-Natives.

Logging yields bigger dividends than other economic enterprises. For instance, one shareholder with a thousand shares receives a regular dividend of \$200 to \$300 every 3 months ("It's enough for a carton of cigarettes and a case of beer.") Last December he received \$1,800 from timber alone. These timber dividends are reportedly increasing with each payment. He receives relatively little income from the Chugach Regional Corporation. His last shareholder's check came 2 years ago in 1989.

Income from corporations varies according to how much stock a person holds. Respondents said that each person started with 100 shares automatically. Stock holdings increase through inheritance; persons born after the 1970's receive stock only through inheritance. Respondent estimates of income from Eyak Corporation approximated \$100 a month, with irregular timber dividends currently ranging from \$1,500 to \$1,800.

By comparison, non-Native financial officers of the Eyak Corporation reportedly make about \$90,000 a year and up.

Chugach Region: Chugach Region, Inc. has equivocated somewhat on rapid energy development. It has pursued energy development at times but has also shown interest in fishery related development. Some economic diversification has occurred but on a small scale. Chugach Region appears to recognize negative local sentiments against rapid energy development, while also acknowledging its mandate as a for-profit corporation. Leadership of Chugach Region, Inc. changed in the mid-1970's, as it became clear that OCS development, favored by prior leaders, would not occur (USDOI, BLM, Alaska OCS Office 1979:18).

From 1976 to 1977 Chugach Region, Inc. pursued feasibility studies and joint ventures in the expectation of development of offshore drilling in the Northern Gulf of Alaska (USDOI, BLM, Alaska OCS Office 1979:66). Icy Bay was proposed as a potential OCS service base (USDOI, BLM, Alaska OCS Office 1979:66). During this period Chugach Natives, Inc. pursued a boundary dispute with Sealaska, Inc., establishing the 141st Meridian as the southern boundary of Chugach Natives, Inc. (USDOI, BLM, Alaska OCS Office 1979:38). Once the boundary was established, Chugach Region moved to develop Icy Bay. They made contracts with Phillips Petroleum for oil exploration, using Bomhoff Associates of Anchorage for development planning and Anchorage Helicopters for support services for offshore drilling rigs. Chugach Region also showed interest in potential OCS lands in the Yakatat area (Chugach Natives, Inc. 1975, as cited in USDOI, BLM; Alaska OCS Office 1979:38).²⁴

Cordovan Natives were willing to take oil jobs during the construction of the pipeline. In the late 1970's, Eyak and Chugach Natives got lucrative pipeline jobs as a result of efforts by their regional corporation, the Alaska Federation of Natives, and Alyeska Native hiring provisions (Chugach Natives, Inc. 1975, as cited in USDOI, BLM, Alaska OCS Office 1979:40).

Chugach Region has also showed continuing interest in fisheries development, acquiring Orca Cannery in Cordova. The regional corporation has maintained an interest

²⁴Chugach Natives, Inc. is the profit corporation representing Chugach Region (USDOI, BLM, Alaska OCS Office 1979:42).

in developing a bottomfishing industry, as well (Chugach Natives, Inc. 1975, as cited in USDOJ, BLM, Alaska OCS Office 1979:66).

Chugach Fisheries, Inc. is reportedly on the brink of bankruptcy. Chugach corporate spokesmen refused to discuss this and the regional corporation is currently engaged in litigation against Exxon. Chugach Region like the Eyak Corporation has non-resident management: Larry Cambronera of Seattle is vice president of operations.

Other economic diversification has been fairly minimal. The corporation employed nine staff in 1978 (Chugach Natives, Inc. 1975 as cited in USDOJ, BLM, Alaska OCS Office 1979:66). They acquired expanded office housing in Anchorage for Chugach Natives, Inc., North Pacific Rim, Chugach Development Corporation (a wholly owned subsidiary of Chugach Natives), and Chenega Corporation. Chugach Region through Chugach Development Corporation bought majority stock in the Sunshine Plaza Mall, a shopping mall in downtown Anchorage.

Chugach Alaska Corporation of Chugach Region ranked as the 13th highest in revenues of Alaskan owned and based businesses in 1989 (The Cordova Times, October 18, 1990:8). Chugach also took advantage of spill cleanup opportunities, setting up a joint venture with NANA/Marriott to provide catering and housekeeping services for oil-spill cleanup camps. While Chugach-NANA/Marriott was a temporary venture, it ranked 33rd among Alaskan businesses in revenues in 1989, declaring \$29 million in revenues (Cordova Times, October 18, 1990:8).

Fishing: Natives have concerns over the increased capitalization of fishing (following increased fish harvests from Limited Entry and PWSAC), particularly the permit system and the high cost of permits. Traditionally, fishing was passed on as a lifeway from father to son, and the permit system threatens this tradition. If a fisherman is forced to sell his permit during a bad year, reentry for children is difficult to finance (USDOJ, BLM, Alaska OCS Office 1979:84).

II.E. Struggles Over Land Conveyances

Both Eyak Village and Chugach Region engaged in a series of litigations related to land conveyances stipulated in ANCSA. Cordova Native leaders were involved during

the early 1970's in Alaska Native efforts to claim aboriginal lands (USDOI, BLM, Alaska OCS Office 1979:35). They initially organized with the nearby Tlingit, and later with the Alaska Federation of Natives. In 1966, a group of Cordova Natives incorporated the original Chugach Native Association and sent a member to represent Chugach Region in the emerging organization of Alaska Native Groups (USDOI, BLM, Alaska OCS Office 1979:35).

Chugach Natives, Inc. represents a small population and relatively few villages in the region, and the association fought for years to establish the legitimacy of some villages for entitlement under ANCSA (USDOI, BLM, Alaska OCS Office 1979:36). Chenega, for instance, had been completely destroyed by the Good Friday Earthquake of 1964, yet residents who moved temporarily to Cordova, Anchorage, and Tatitlek maintained a commitment to return. Chenega was granted village status under ANCSA in 1974.

Eyak Village appealed for village status for 2 years. Their decision to reject an IRA government, based on what was considered to be sound reasoning at the time, hindered their pursuit of Native village status under ANSCA. Eyak Village finally won recognition and the right to have land conveyed in 1974 (USDOI, BLM, Alaska OCS Office 1979:37).

For Eyaks this was a gain, since they had previously been disenfranchised and enveloped in a non-Native area as its poorer class:

We used to be segregated: Eyak Village and Cordova. The Native Village of Eyak was recognized by the Department of the Interior. Land claims [under ANCSA] forgot about Eyak Village, so they had to meet with them and get recognition. We had to have Whites and Natives testify. We had to fight hard for it.

It was a problem. We had no IRA government. You have to jump through the hoops of the Federal Government to be an IRA government.

The last statement demonstrates that some local Anglos, whatever their motives, supported Eyak's fight for Native status.

The Eyak struggle for recognition, however, occurred conjointly with a battle against annexation by the City of Cordova. Shortly after the 1971 passage of ANCSA, Cordova attempted to annex the Eyak area, then known as "Old Town." Eyaks objected strenuously, and their incorporation was carried out after a long dispute which was finally settled by the Alaska State Legislature in 1972 (USDOI, BLM, Alaska OCS Office 1979:37). Eyak respondents are still bitter over their appropriation by the City of Cordova:

They took our land. Not much from Eyak. We're in Chugach National Forest. So it was all Federal land anyway. But the city took us through annexation. We just own our two buildings. Now our two cemeteries are city-owned. Fortunately, the Russian Church owns their church's land . . .

We were incorporated by Cordova against our wishes. Eighty-five percent voted "no" on that. So our only sovereign lands are where our Council Buildings are. And there are corporation lands.

During this time Eyak fought both the city and the USFS in a series of litigations. The USFS aligned with the Cordova Chamber of Commerce on many issues. The USFS fought Eyak's recognition under ANCSA, maintaining that Eyak did not qualify for lands under the Act's provisions (USDOI, BLM, Alaska OCS Office 1979:37). In original hearings and an appeal over annexation in 1974, testimony in support of Eyak's status focused on Native commitment to their community and a history of segregation and prejudice which they had endured at the hands of those who now wanted to appropriate them. Eyaks felt that their recognition as a separate village had been hampered by this segregation and prejudice (USDOI, BLM, Alaska OCS Office 1979:37).

For instance, Eyaks cited a history of discrimination against Native workers by the canneries. *Testimony before the Native Claims Appeal Board over Eyak's village designation* claimed that the village's decline was related to hiring practices which favored Chinese over local Eyak laborers (U.S. Forest Service vs. Village of Eyak, Recommended Decision and related summary of testimony, AN CAB # VE 4-89, p.12, as cited in USDOI, BLM, Alaska OCS Office 1979:55).

In addition to favoring Chinese over Native workers, the canneries also discriminated against Natives by not promoting them (USDOI, BLM, Alaska OCS Office 1979:55). This system of discrimination in the canneries was still in place in 1979, when hiring practices and training programs appeared minimal (USDOI, BLM, Alaska OCS Office 1979:55). Currently, the canneries employ many Filipino workers; some Natives work in the canneries, but salaries are low compared to earnings from fishing.

While the canneries may have favored non-Eyak workers in hiring, leading to a village decline, Eyak employment in non-Native enterprises such as canneries and copper mines may have contributed to personal declines in health for some. Many older Eyak respondents recounted work in canneries and mines from early childhood, under less than ideal conditions:

I started working in the cannery when I was eight and a half years old, until I was 63. Then there was an ammonia leak in the big freezer where they packed crabs and fish, and it got into my lungs and I got asthma. Our tears were just coming out in the bone picking room. They put up canvas, but it came in just the same.

They didn't pay me. I never even thought of suing. Never heard of suing people before. The doctor made me quit working. It's easier now; before, it's mostly hard work.

Eyak Corporation sued the USFS in 1976 for removing gravel from their lands without prior consultation. The suit was settled in U.S. Circuit Court, with Eyak Corporation's written consent established as required prior to gravel sales during the freeze on Eyak selections (USDOI, BLM, Alaska OCS Office 1979:37).

Chugach Region also carried out lengthy negotiations over their land conveyances. They contended that 60 percent of their original land entitlement, if within the Chugach National Forest boundary, would have been in "deficiency lands" (glacial ice and snow, inconsistent with a coastal people's aboriginal land claim) because of prior State selections (USDOI, BLM, Alaska OCS Office 1979:38). In 1975 Chugach Natives, Inc. filed litigation against the Secretary of the Interior, settling out of court in 1977.

Land freezes related to stalled conveyances to Chugach Region and to the Eyak, Tatitlek, and Chenega corporations caused frustrations and dissension between Native and non-Native residents (USDOI, BLM, Alaska OCS Office 1979:77).

The Cordova Chamber of Commerce support for USFS opposition to the Chugach effort to exchange land in Chugach National Forest generated controversy (USDOI, BLM, Alaska OCS Office 1979:60). The splitting into local factions over this issue echoes dissensions over 1989 negotiations with Exxon. The Cordova Chamber of Commerce, unlike many, is small and was often attended more by local government and media workers than by business owners in 1979 (USDOI, BLM, Alaska OCS Office 1979:59). Some respondents in 1991 described the Chamber as a "small tea party," consisting of the president and her supporters, rather than being a group representing local business interests. So, Native-White relations here could be represented as more multi-faceted than a simple dual division between traditional Natives and Anglo Cordovan entrepreneurs.

Ongoing interference by State and Federal regulators in the status of Eyak lands still evokes anger:

Environmentalists want to make Prince William Sound a wilderness area. That would deny subsistence use. It would deplete hunting and fishing. They're trying to make Native owned land into wilderness. That's encroachment.

II.F. Eyak-Anglo Social Relations

Relations between the Eyak and non-Native communities are characterized by pressure cooker stresses (with some lack of cohesiveness in the Native community). Extensive intermarriage and a more similar lifestyle in recent times have mitigated interpersonal differences between Natives and non-Natives while inter-group tensions remain.

The ANCSA caused new stresses between Eyaks and non-Natives. Rapid organizational changes mandated by the Act were paired with torpid land conveyance, and no lands were conveyed from 1971 to 1978 (USDOI, BLM, Alaska OCS Office 1979:93). Disputes over land entitlements include concern over hunting and fishing

rights, annexation of Eyak lands within the City of Cordova, illegal gravel extraction on Eyak lands in 1976-1977, and disagreements over land management plans. These have been addressed in the courts but have resulted in social tension and an absence of land conveyance.

The USFS opposition to Eyak's village designation and to Chugach Region's land exchange proposal (to compensate the Region for an excessive amount of glacial designated lands) increased social tension between the Eyak Corporation and groups that supported the USFS, most notably the Chamber of Commerce (USDOI, BLM, Alaska OCS Office 1979:94).

Major Native-Anglo tensions in 1991 include: (1) Native fears that oil development will result in destruction of their environment (and therefore their subsistence practices; (2) negotiations with Exxon over spill compensation; (3) fear and uneasiness over enforced incorporation and the policies of a non-Native corporate management; (4) conflicts over clearcutting timber; (5) resentment of Federal and State interference with traditional subsistence practices; (6) continuing bitterness and suspicion toward the USFS; (7) anger from city jurisdiction over Natives (stemming from Cordova's annexation of Eyak village); and, (8) resentment that Natives do not have an equal voice in city government.

Discrimination and Segregation: Prior to the 1950's, racial distinctions were made on the basis of different fishing styles, different church affiliations, different residence patterns, and income differences. The relative poverty of Natives reinforced social segregation (USDOI, BLM, Alaska OCS Office 1979:79).

From about 1940 to 1955, segregation in the community included discrimination in the canneries and in the schools. This has been reduced somewhat in recent times with an end to formalized segregation, the ANCSA settlement, and a more year-round fishery with a local cannery work force (USDOI, BLM, Alaska OCS Office 1979).

The first school for Native children in the Cordova area was established in 1925 and located in Eyak. It operated until the 1950's when it was closed in order to begin integrated programs. Still, residents in 1979 complained that recent tracking programs

had produced de facto segregation with under-representation of Natives in gifted programs (USDOJ, BLM, Alaska OCS Office 1979:93).

A grant for cultural heritage programs in the schools was a provision of ANCSA, but these programs are not conspicuous in Cordova. As noted, Eyak leadership is pursuing grants for cultural heritage classes to be sponsored by their non-profit corporation. In a 1991 interview, the new community college dean, a Native American, expressed his appreciation of cultural differences and their importance to education.

The passage of ANCSA, and the political activism which it spurred, may have caused Native resentments over past discrimination to surface:

While the conveyance of lands opens the door to new hope and potential prosperity to come, it also opens a flood gate of old resentments and anxieties locked behind the appearance of docility and accommodation for generations (USDOJ, BLM, Alaska OCS Office 1979:62).

Respondents in 1991 recounted their anger over past prejudice and segregation such as restaurant signs saying, "No Natives or dogs allowed." Eyaks resent stereotypic attitudes about Native abilities and potential:

In the public schools they were punished for speaking Eyak. After the spill a reporter called and asked how much Native I was. I said half. She asked where I learned English. I said school and college. She was amazed I was fluent.

There's stereotyping again. When Russia sold Alaska to the U.S. we were classified as "uncivilized savages. . ."

The book The Eyak Legends is integrated with Aleut. We speak Aleut. I can understand Yupik from the Yukon River. The legends: that was discovered in Copenhagen. I never heard those stories when I was growing up.

We knew about how we came here and about life at Nuchek. And how Eyaks married with Aleuts . . .

. . . In the 1940's or so they closed the BIA schools and assimilated us into the public schools. It was the early 1940's. My father was white so I had to go to White schools. It was good because I learned to fight.

It was discrimination, boy. Those of us with White fathers had to go to public schools. At that time the restaurants had signs: "No Natives or dogs allowed." You had to sit in the balconies at movies. There was segregation until; I don't know when they quit.

There's really no date because to this day there's underlying prejudice. There's one state trooper who doesn't like Natives. He made that statement once. He's not a "local," but there's a lot of discrimination by the locals too.

Social stratification has decreased somewhat in recent times. For instance, in Cordova as a whole, a powerful fishery-cannery group has two stratifications: (1) successful fishermen and cannery superintendents; and (2) less prosperous fishermen and cannery workers. Natives are found in both groups (USDOI, BLM, Alaska OCS Office 1979:69).

There are strong unifying factors acting on the two cultures. An early Eyak willingness to intermarry has continued, and presently only two full-blooded Eyak speakers are still alive. Extensive kin and friend relations with non-Natives mitigate social stresses considerably. The current lifestyle has grown more homogeneous, as a fishing economy supplemented by subsistence harvesting is embraced by both Natives and non-Natives. As one resident explained:

The lifestyle 30 or 40 years ago was considerably different primarily due to economics . . . I expect today we're sort of pretty well amalgamated . . . I'm not sure whether. . . which direction the assimilation has flown (testimony, U.S. Forest Service vs. Eyak Village, July 16, 1974, cited in USDOI, BLM, Alaska OCS Office 1979:79).

The above statement, that assimilation may have been in the direction of a Native way of life, is noteworthy.

While inter-group resentments are still expressed, along with Eyak internal divisiveness, confusion, and some sense of futility, Cordovans, in general, feel a strong unity and interdependency with each other. The propensity for intermarriage has established intercultural kin relations, and substantial solidarity is based on a common lifestyle and isolation within a wilderness area. Some Anglo statements reflect their cultural biases, such as references to Native backwardness, equating Native culture to the past and so forth. On the other hand, many non-Native Cordovans appear to hold purely positive sentiments and respect for Native residents. Comparing Cordova to many towns in America's rural West, ignorance and prejudice are less pronounced.²⁵

II.G. Political and Economic Relations: Cordova-Eyak

After suffering a long history of disenfranchisement, prejudice, and discrimination, Eyaks had to battle the USFS and the City of Cordova over their village status and entitlement for land conveyances under ANCSA. Loss of population and cultural identity brought about by their early relations with non-Natives were cited by non-Natives as reasons to deny their claims to Native village status and land.

As noted, Eyaks are extremely bitter over their annexation by the city. This is seen as a single step in a long history of White confiscations:

I was born in Eyak Village by the lake. The name Eyak [for the lake] came from the Eyak Indians. It's Aleut for "the mouth of the river."

When the railroad went in, they took the Eyak Indians from up near Abercrombie Canyon and moved them to Alganick and then to the shore, where McLoughlin Trailer Court is. So this area became "Old Town." We've been here since the late 1800's when the smallpox and other epidemics hit Nuchek. People came here and went to Tatitlek, and so on.

In 1971 the City of Cordova annexed us against the protests of 85 percent of the people in "Old Town."

²⁵If the observations in this section appear equivocal, it is because we found the dynamics of Eyak-Anglo social relations to be so.

In economic and political terms, Eyak relations with the City of Cordova are characterized by a lack of Native political voice in city government, while Native funds contribute to the economic health of the area. This economic contribution was never referred to by non-Native informants in 1991, although past city leaders have shown an eagerness to take advantage of it. While Natives do not serve on the Cordova City Council, non-Native council members have served on the Eyak and Chugach boards of directors (USDOI, BLM, Alaska OCS Office 1979:70; respondent communications 1991).

State funds targeted for the Native population have benefitted the City of Cordova. One Eyak traditional leader who was instrumental in forming the Eyak corporations described how Cordova's city manager sought his help in bringing a State housing facility to the city:

When they first started the corporation, we went to Anchorage and went to a lawyer. I had to make up a speech saying why we wanted this, but there were so many people we could only talk for 12 minutes. They kept the IRA government.

. . . . The city manager called me and said, "We want to start something here. We want [State] Housing here. For the old people. We want jobs, money for the people. So we're sending some people to Juneau.

So I want you to go with them and make a speech, why we need this. Answer questions. He said, "There's lots of old people among the Native population and we can't get jobs here. We're some of the last ones left, and we can't get enough help." He said to explain the Native side.

I said anything that's good . . . We got Sunset View started [Eyak Manor, or Sunset View Apartments, State of Alaska Housing Authority]. We got some jobs for old people, working for the city. They tried to hire me first.

Native funds helped establish the PWSAC (USDOI, BLM, Alaska OCS Office 1979:56). PWSAC was founded in 1974, aided by the City of Cordova, the City of Valdez, local Native corporations, and seed money from a loan from Chugach Region, Inc. Members of the CDFU contributed \$.02 per fish, with matching funds contributed

by local processors. The PWSAC's first 5 years of operation were based primarily on local funding.

In 1991 Eyaks appeared politically segregated, almost as if they had not been annexed by the city. This is despite a substantial presence of the Eyak population, especially during the off season. Because Natives tend to stay in Cordova during much of the winter, winter residence was estimated as about 25 percent of the population in 1979 (USDOJ, BLM, Alaska OCS Office 1979:63); informants cited similar estimates in 1991.

Former apathy of Eyak residents is thought to have given way to more activism regarding Native issues after ANCSA (see USDOJ, BLM, Alaska OCS Office 1979), but this activism did not appear to spread into non-Native city government. However, one Native representative was appointed to the Oil Spill Response Committee in 1989, some time after it had begun operating, showing some belated city recognition of Native concerns as a minority voice. Joint participation in other areas (such as feasibility studies for development) are described in Sec. I.A.6 Cordova's Economy.

II.H. Effects of the 1989 Oil Spill

Both Eyak and Chugach corporations have claims pending against Exxon. Chugach Alaska Corporation filed suit against Exxon in U.S. District Court on April 19, 1989. Plaintiffs included Eyak Corporation, Tatitlek Corporation, Chenega, and Port Graham Development (Cordova Times, August 31, 1989:7). The North Pacific Rim, Inc. filed suit against Exxon in U.S. District Court on April 19, 1989, on behalf of Eyak Native Village and others in the region (Cordova Times, August 31, 1989:7).

While Eyak spokespersons declined to detail the economic effects of the 1989 oil spill due to pending litigation, leaders did direct me to individuals who could explain cultural and social concerns.

Eyak government leaders complained that after the 1989 oil spill Exxon simply refused to recognize their Native group. The oil company took the position that Cordova Natives were not adversely affected by the oil spill, and, consequently, refused to provide food and services which were provided for Natives elsewhere:

During the "Oiled Mayors" study, Exxon declared that we were not "impacted." (It's a new word: impacted.) So they didn't provide to us the same services that they did to others, like fuel or food. I heard that in Valdez they brought groceries and no one used them, so they had to throw them in the trash. There are people here that could have used that food.

We're filing a claim with Exxon. All that is secret because of the litigation.

Exxon omitted Eyak Village when the company held presentations during July of 1989, to inform Native Alaskans that the oil spill had not "negatively impacted their health and food supply" (News release from Exxon Company, U.S.A., July 31, 1989, published in Cordova Fact Sheet, August 2, 1989:1). Exxon delivered shipments of fish during the summer of 1989, to Tatitlek and Port Graham, but not Eyak Village (Oil Spill Chronicle, ADEC and Alaska Governor's Office, September 19, 1989, as cited in Cordova Fact Sheet, September 26, 1989:3).

Eyak leaders, accustomed to being overlooked through experience with Federal agencies who had denied them Native status under ANCSA, agitated for recognition. One prominent leader voiced Eyak concerns to the media and to Federal representatives. She cited adverse effects (discussed in more detail below) such as social disruptions, economic impacts, corporate and government disruptions due to lost office space, loss of Native foods, and fears for the future. This person, like other Eyaks, views the intentions and abilities of public representatives to understand Native concerns with considerable cynicism:

After the spill I was chosen as a spokesperson to see Dan Quayle. I told him I was quite insulted that he only gave us 20 minutes, when he gave the press an hour.

I said, "We've been here for hundreds of years. Our lineages go back here that far. We are all related to each other here. We have been here for centuries, and you only gave us 20 minutes. It's insulting."

The Federal Government doesn't recognize our claim, but the State does.

There was terrific social impact. We had our offices taken away from us. Our prices went up. We felt invaded. People who rely on Native foods from other areas don't get them as much, and are worried about what they eat

I went on [a nationally broadcast television talk show] as a spokesperson after the spill.

Natives (like non-Natives), were particularly indignant that a corporate entity, in the form of Exxon's agent VECO, could overwhelm them within their own home territory, evicting them from their offices:

When the spill just started, everyone was taken over by the oil spill, when that big money came to town. They took all the offices away from people. They thought they'd need more people on the staff for mental health. We were told to move out, that they needed our office. Now Eyak village is building a new office.

The Eyak government could not regain their office space, due to increased rental prices after the oil spill. The Eyaks were forced to find funding to construct a new building, which they now must maintain. As a result, Eyak government files were placed in storage and unavailable for 2 years; some were destroyed when water leaked into the bottom of the filing cabinets.

After the spill we couldn't get office space for less than \$800-1,200 a month. They took over our small office that was \$300 a month. So we had to build this new office. We got grants, and now we have to maintain the building.

Our files were in storage for 2 years. So we're going through it all now. It's bringing back so much history.

The health representative and family service representative will move in here this month. As soon as we get a sewer.

Eyak officials and Native persons in spill-related positions were much more likely than non-Natives to cite health effects due to the oil spill or cleanup work. This may be because non-Native Cordova fishermen are extremely anxious that the public view fish from Prince William Sound as uncontaminated. Eyak leaders received complaints of

mental and physical health effects on spill workers; some were suspicious because persons injured in cleanup work were not treated locally:

First Respondent:

The mental part too: we had three in the hospital, mental cases. Some of the spill workers showed me the sores on their necks and the fumes from working the spill. Three were affected.

Second Respondent:

Funny, here: very few who were hurt on the cleanup were brought here. They were taken to Anchorage.

First Respondent:

The three mental cases were from the trauma of seeing the animals dying. The morning after the spill I got calls from the elderly saying, "I feel like someone has died, like a part inside me is gone."

Intense cultural concerns were generated by the trespass of cleanup crews on Native historical sites, as the president of Chugach Alaska Corporation describes:

Chugach's tangible cultural resources are also being damaged. Many such resources are fouled with the residue of the Exxon Valdez. Others are inadvertently trampled or disturbed by Exxon's hordes of beach crews. We are only beginning to wrestle with how these sites, important to our shareholders, can be restored (Testimony before a Fisheries Subcommittee, House Merchant Marine and Fisheries Committee, at a meeting held in Cordova on August 10, 1989; as cited in Cordova Fact Sheet, August 12, 1989:3-4).

The Eyak Corporation published an August 13, 1989 resolution condemning the looting of burial and historical sites by cleanup crews, demanding cancellation of a planned display by the Exxon Valdez Cultural Resource Program of stolen artifacts, and *demanding immediate return of all artifacts. The resolution notes the "complete lack of respect" inherent in such pilfering, which constitutes criminal theft:*

WHEREAS, the Eyak Corporation board of Directors has been apprised of the planned display of archaeological material and artifacts collected by the so-called Exxon Valdez cultural resource program in the Prince William Sound; and

WHEREAS, the Eyak Corporation shareholders working on the oil disaster cleanup effort have observed and reported to the Board numerous acts of oil disaster workers being in possession of artifacts, desecration by the same of our historical burial sites and looting by the same of old sites of native habitation; and. . .

WHEREAS, there is a general lack of knowledge by the public about the Alaska Native Claims Settlement Act and that land so conveyed is in fact private land and that removal of any objects or artifacts is in fact criminal theft; and

WHEREAS, these acts are further evidence of the complete lack of respect and consideration for the Native peoples of the Prince William Sound and other Alaska Native coastal communities;

NOW THEREFORE BE IT RESOLVED, that the Eyak Corporation DEMAND that Exxon immediately: return all artifacts found in the Prince William Sound and other Alaskan Native coastal communities, CANCEL the display of archaeological material collected by the Exxon Valdez Cultural Resource Program scheduled for Monday, August 14, 1989, in Valdez, Alaska, and IMMEDIATELY institute and strictly enforce a program for protecting our lands from pilferage and looting by the oil spill disaster workers (Cordova Fact Sheet, August 15, 1989:2).

Cordova Natives generally scoffed at Exxon's assurances that their subsistence foods were safe. Respondent statements from 1991 show continued alarm concerning the quantity and quality of the Native food supply. Exxon press statements appear to dissemble somewhat on this point:

Exxon has completed an information program to reassure Native Alaskans that the oil spill in Prince William Sound has not negatively impacted their health and food supply.

The program, which was presented during July in response to concerns raised in native villages, reached some 600 residents who live in eight remote villages and depend on fishing as their primary food source. Villagers helped coordinate the meetings, which were well attended and well received by local residents . . .

During the meetings, Exxon officials urged residents to continue their subsistence food gathering, since more than 300 tests conducted by the Alaska Department of Environmental Conservation, the Alaska Department of Fish and Game, and the U.S. Food and Drug Administration showed no evidence of toxicity in fish. Toxicological and industrial hygiene concerns were also addressed during the information sessions . . .

The presentations were reviewed and endorsed by a number of organizations, including the State of Alaska Public Health Service, the Alaska Oil Spill Commission, Kodiak Area Native Association, the Alaska Native Medical Center Public Health Service, and North Pacific Rim (News release from Exxon Company, U.S.A., July 31, 1989, published in Cordova Fact Sheet, August 2, 1989:1).

Possibly, if audience members did not shout death threats at Exxon officials, as did non-Native Cordovan fishermen who attended similar meetings, the above presentations appeared "well received." But Native press statements contrast sharply with Exxon's rosy depiction. The Chairman of Chugach Alaska Corporation complained of many Exxon failings (noted by Cordovan business owners elsewhere in this report.

We were optimistic this spring that we could establish a reasonable working relationship with Exxon and its contractors. Unfortunately, Exxon has proven to be obdurate, intractable, and exceedingly difficult to work with. Many of its early promises have proven to be hollow rhetoric. Its reactions and responses to proposals are painfully slow . . . Further, there is no consistency to its ultimate responses. Assurances given at one level are frequently contradicted at another. The result is ever increasing frustration and bitterness. (Testimony before a Fisheries Subcommittee, House Merchant Marine and Fisheries Committee, at a meeting held in Cordova on August 10, 1989; as cited in Cordova Fact Sheet, August 12, 1989:3-4).

An Eyak leader echoed this frustration and bitterness in a resolution adopted unanimously by approximately 3,000 Natives at an Alaska Native Youth Convention and Elders' Conference held in Anchorage in October 1990 (The Cordova Times, November 1, 1990:4). The resolution stated that "our darkest nightmare came as none before [when the Exxon Valdez spilled its] black tide of oil, gushing onto our beaches, fouling the

clean waters, and threatening our land, animals, and birds" (The Cordova Times, November 1, 1990:4). The resolution called for Alaskan Natives of Prince William Sound to "support . . . the Alaska Federation of Natives . . . to ensure just compensation for the damage from the Exxon Valdez oil spill" (The Cordova Times, November 1, 1990:4). It stated, "Exxon promised to make us whole again . . . We want to be whole again" (The Cordova Times, November 1, 1990:4). The president of Eyak Corporation stated for the press:

I'm trying to send a message to the oil company. They need to come in and clean up their mess. We worked well with them in the past, and we can work with them again in the future. We don't have time to spend in litigation day in and day out. It's time to get on with our lives (The Cordova Times, November 1, 1990:4).

Exxon's urgings in July 1989, for Natives to "continue their subsistence food gathering" appear to be at odds with Federal and State data available at the time.²⁶

For instance, the U.S. Food and Drug Administration (FDA) reported in August 1989 that foods that looked or smelled oily were toxic (Cordova Fact Sheet, September 1, 1989:1-2). The study was based on thirteen samples of subsistence resources harvested in May 1989 near Tatitlek, Chenega Bay, English Bay, and Port Graham. The FDA cautioned that additional monitoring was needed (Cordova Fact Sheet, September 1, 1989:1-2). The Federal report happily conformed with an earlier (May 5, 1989) Alaska Department of Health and Social Services Bulletin urging that "if the resources smell or taste of petroleum, they should not be eaten. If they appear clean by these methods, they are almost certainly safe to eat" (Cordova Fact Sheet, September 1, 1989:1-2).

During this same time period, the State of Alaska Epidemiology Bulletin (September 22, 1989) declined to endorse the safety of the food supply absolutely although it projected a very low risk. The State here appears to hold the presumption,

²⁶Federal and State studies were more optimistic than some other scientific studies (see Sec. III Effects of the 1989 Oil Spill on the Fishing Community). A major flaw in such studies, according to some analysts, is that very few harmful agents are tested for. The Federal study cited here tested for polycyclic aromatic hydrocarbons and aliphatic hydrocarbons; crude oil, let alone the agents used in the cleanup, contains thousands of chemicals.

consonant with Western scientific and legal ideology, that food is safe until it can be proved unsafe beyond a reasonable doubt:

Based on all information provided by experts and agencies to date, at this time we know of no constituents of the oil that are known or suspected to accumulate in fish that might result in human illness or disease from eating the fish.

We are unable to provide absolute assurances at this time and are working to have better information as our highest priority. As more information becomes available, we will provide additional reports.

Toxicity to humans from exposure to crude oil, especially weathered crude oil is very low . . . There are many components, comprised of thousands of different chemicals, in crude oil. Human health concerns have focused most intensely on one chemical family, aromatic hydrocarbons, because some of the chemicals in this family are known to cause cancer after long term exposure to high levels, and the levels of aromatic hydrocarbons can be measured accurately at very low levels (part per billion). Testing for aromatic hydrocarbons is a reliable way to detect evidence of oil contamination in seafood and other subsistence foods.

. . . Risk from exposure to aromatic hydrocarbons due to the oil spill in food cannot be said to be zero, but the contribution to levels of aromatic hydrocarbons in food not obviously contaminated with oil as a result of the oil spill are so low as to constitute no basis for public health concern (Cordova Fact Sheet, September 30, 1989:1-2).

Despite State determinations of no public health concern, Natives were and continue to be afraid to eat subsistence foods.

A circle of sharing of Native foods between villages is a major factor which Exxon officials ignored in assessing spill impacts, according to Eyak leaders. Because other areas of the Sound were oiled, Cordova Natives were not able to get the subsistence foods which they needed:

There's a system of sharing of foods between the villages: Chenega, Tatitlek, and Cordova. So we're impacted there. In Chenega they have to go out 60 miles now to get seal, and even then the livers seem contaminated. So they aren't getting as many. . .

There was real concern. They say we weren't impacted, but because of sharing we were impacted.

Everyone was afraid of the food. For example no herring spawn in Tatitlek, where we get it.

Deer were dying on Hawkins Island, because they were eating the seaweed. Quite a few deer died. And that affected the meat for that winter. The mussels and clams are still questionable, where the oil hit. The livers contain all the toxin. They're not safe.

Respondents described their need for Native foods, unavailable after the spill, in terms similar to Navajo descriptions of "mutton hunger." That is, people experience a strong physical need for particular subsistence foods which cannot be satisfied by other foods:

I really missed my Native foods after the spill. Lots of things I would get before from relatives elsewhere. We'd get clams, octopus, crab, shrimp, and herring. And we haven't gotten that for the last two years. The last time I got herring was two years ago, on March 1st. And the spill was March 24th.

I got some herring and brought it home and called some of the elders and asked if they wanted some, and they said, "Would I ever!" Kelp too because the elderly can't just go to the store and get those things. They have to wait until somebody goes and gets it for them.

Roe-on-kelp doesn't taste the same now. We don't eat the food. We wonder: is it safe? The things that we're used to eating. I always wonder.

. . . When you're used to eating those foods and you go without them, then your body just craves them. Like the seal. For seal you go to Chenega, way down on the Sound. My friends there said, "I can't even remember the last time I ate seal. Before I used

to send you seal from Chenega, now you have to send me seal from Cordova."

I think the spill killed them all. Before the spill, whenever anyone would come on the plane they'd bring pieces of meat for people. But that's not the same now.

One of the newspapers said one of the ladies said they were tired of eating chicken. Your body gets tired of the food you can eat in the stores.

Another person, an elder, describes how a lack of subsistence foods would result in physical illness:

I think people would get sick without [Native foods]. I would. I get so hungry for them. I keep looking for some clams to satisfy the old stomach. I told my cousin I was starving for clams.

To share Native foods widely is an ethical imperative, based on a "spiritual unity" among Natives in different villages as described in Section II.B. Cultural Identity. Below an Eyak elder explains how this ethic assures survival in that what is shared will "come back to us double." As often occurs in interviews with Eyak elders, the explanation is couched in a longer story. Implicit in the account is a perceived continuity and unity in sharing of practices for subsistence food production; sharing as a mode of social relations; and cultural ethical imperatives related to sharing. The oil spill, according to this elder, disrupted all of the above by destroying wildlife and so preventing Natives from harvesting and sharing foods:

I never saw razor clams and butter clams since that time. I've been talking to people. The people won't gather and talk about it.

And crabs too. They don't come around here anymore. We used to go and fish for them. People are too scared of the oil now. We eat lots of seal meat. And it doesn't taste the same. Ducks and stuff: I never see ducks or geese going over anymore. And sea gulls are getting scarce.

If there were no Native foods: I'm lost without it, but you're scared to eat them now. I can tell by the looks of the clams, but I don't get any. I don't think people are hunting. The rabbits like to eat stuff that grows on the beach.

It's important for the people, for the animals to be well. Store food is not the same as Nature's foods. The people like Native foods. Even White people do . . .

Now nobody brings me anything because they're not eating them. Like hooligans: nobody's bringing them and they should have been here this month . . .

Even now I can tell the Eyak smoker how long to smoke [fish] before putting it in the jars. You have to pick the wood: green alder has tar in it. You have to get the alders a year early and use them the next year. If the bark is starting to come off, it's an old tree, and that's the kind to cut. No green alders: that'll make you sick. You see White people's smoke houses: they're all black from the tar. You have to know your alders. If you don't know them, cut them in the fall.

You need heat. Just smoke the fish so the bugs will stay off it, then you need heat.

Aldrich is good too. Purple pine cones and pine needles. But you hardly see those trees anymore. I've got one out here, but it's dying.

And you don't burn it too fast. It gets too dry. Smoke fir one and a half days, then a little heat. Put a tin between the fish and the heat. If it's sunny take the fish out in the sun. It dries the fish.

Game is just as important to us now [as to past generations]. We like it. I put up fish to give it away to my kids or to those that like it.

My friend got me a whole deer and I cut it all up and packaged it for them. Before, when they catch king salmon they ask me which one I want to salt and put up.

My friends look after us, the older people. The fishermen think we're good luck. Fishermen always try to beat each other to give me fish first. (That's White people's idea. It's cute.)

Our idea is that if we give anything it will come back to us double. It will always come back to you on your table.

Sharing is an essential aspect of Native social relations, and could not proceed without subsistence harvesting:

We always treat each other with something to eat. Because everybody cares for each other. _____'s parents never forget me if they've got cod fish that they know I like. And I share it with others . . .

We take care of each other. People check up on me. They know I'm alive.

It would be harder to take care of each other if people wouldn't hunt or fish anymore.

If people could not carry out their social relations through sharing, personal identities could be adversely affected; for instance, generosity could be replaced with greed:

Question:

What would happen if there were no game and no sharing?

Answer:

It would be like a big war: what would be life?

Here we can live off the land--or we could before the spill. People who are so generous now, who want to share widely, they wouldn't be so generous then. Like I just got a call: someone wanted to share halibut because someone had given it to them and wanted to share it widely . . .

Just like the salmon: what would happen? Maybe everybody would become greedy and wouldn't share. Just save it for myself.

. . . I've always thought: I'll get more. So I'll put this up for someone else and share it.

I was brought up to share. My mother had ten kids. And when she died, a lot of people cried with us.

Sharing of subsistence foods is recognized as integral to cultural traditions and values, a fundamental part of life:

There's no seal in Tatitlek. Before the spill I'd get seal from Tatitlek and take it to my daughter-in-law in Anchorage, and she would send it to Port Graham to her mother. So see how far that seal traveled? But I can't get any seal this year.

When you can't get those foods, your body craves it.

It's tied up with our traditions and values. That's part of our life. It's just tradition. When the herring hasn't come in: we just expect it, this time of year, we're going to eat herring. It's part of our life.

The traditional value of sharing Native foods widely also has spiritual connotations, as "something deeper." Sharing widely creates and sustains social bonds which are equivalent to kin bonds and as a respondent explains below, her mother directed, "It's just like you're doing it for me." Life energies which are properly expended in subsistence practices could become destructive in the void which would result if these practices were denied to the people:

Some of the old-timers have said: "In my lifetime I'll never see this again. I'll never be able to eat clams again from here."

I'm glad my uncle died the year of the spill. He was too old to realize what had happened. He was 89 years old. And the food Exxon gave to Tatitlek and Chenega was a waste. My 89 year old uncle was given bags and bags and bags of beans. And what good was that going to do? He had 24 boxes of cereal. He was sick, and they brought all this food and left it in the middle of his floor. He was overwhelmed. Relatives came and took away the food.

The people got so tired of chicken. Our bodies crave our own food. That left a big part of their life gone, that summer.

And so many worked on the spill that they didn't prepare for winter. Nobody put up food for winter, like we'd done all our lives.

That year a part of the people was gone, inside, because they couldn't go out and get their fish. Part of their life was gone.

There was one lady (it was in the paper) who usually fills two freezers, one for winter, and that year that freezer was empty.

So it was better Uncle was so sick he didn't realize what was going on. Because he used to walk around the village a lot. And he'd notice when the herring came in, and the ducks. They used to walk around the point and get clams. But not anymore.

Question:

Is sharing a spiritual thing?

Answer:

I think so. It's something deeper. And we love to share. Whenever I get something we share. When we get something it's never just for me. If I get a piece of deer, I cut some up for an elderly woman in Anchorage. She thanks me. She's in her 70's. And I do it because I know how it is to crave for something. I recently sent her an ice chest full of meat and fish, jam, bread. I never go to Anchorage empty handed.

My mother taught me: no matter how tired you are, never say "No" when someone brings you something. Always take care of it and share it. Then your table will never be empty. If you always feed other people, you'll never have to worry about food. So whatever I get I share with lots of others. And then I get some more.

People who brought me a seal were so surprised [to hear where I'd taken it]: "That seal went that far?" I always take things to shut-ins. Both our parents are dead, so I try to reach out to someone else. Mom said, "It's just like you're doing it for me."

Question:

What would happen if there were no game?

Answer:

A part of our lives would be missing. We'd be craving something we can't get. It would bring a void. There'd be more violence. Because people wouldn't be able to release their energies, that

they use on hunting. Where would that energy go? It would be turned into violence.

A day like today: they'd always go looking for seal.

Subsistence practices, engaging spiritual and kin values, are considered an integral part of personal identity. Without these, one's identity would be fundamentally altered. According to one Eyak elder, deprivation of subsistence foods and practices could jeopardize the existence of the people:

I think as long as there's oil around the beaches and grass, that the animals will get sick. Deer like to go on the beach and eat seaweed.

It could hurt everything. Nature as a whole.

Question:

What would happen if there were no animals?

Answer:

I don't know what we'd do. We gotta have our own food.

Question:

Is it important to the culture?

Answer:

It's important to the people. Just like California: they're running out of water. Same with us, with clams and other things.

Question:

Do the game animals have a spiritual value?

Answer:

Yes, they have a spiritual value.

Question:

What would happen if they all died?

Answer:

I don't know if the people could continue. I'm 79 years old and I still want my own food.

We used to live out of town and get ducks, bears in their dens in March. Get any kind of fish. Now they hardly get any kind of fish. Porcupine: people just throw them away. [Or use them] just for earrings. That's not nice, because that's our food, too.

Question:

Is it important to the identity of the people?

Answer:

I would change if I didn't have my Native foods. I got seal meat from Chenega and I'm afraid to eat it because it's oily.

I'm glad you came because I want to talk to somebody about this spill. I can't go to meetings because I'm 80 percent blind.

The changes which could take place in personal identity without subsistence foods and practices stem in part from personal qualities which are engaged, as noted above (generosity and altruism could become self-centered greed). The most frequent reason cited for personal identity loss resulting from a deprivation of subsistence practices was that these are equivalent to personal identity because they are integral to culture:

The subsistence foods are a big part of the culture. We know when we should be getting those things. The kids love those spawns . . .

In some ways it's better this year, but we don't know how it'll be. Or how it'll be five and ten years from now. Will we even have anything ten years from now? How far will we have to go to get it? Will we be able to get it? It's hard, and you can easily get very depressed. You have to take one day at a time. I could dwell on that, but I can't do that. "Will we be able to get that? How will we be?"

Without those things, a part of us will be missing. Because we were raised that way.

Eagles in Chenega were grounded. One allowed itself to be picked up by the legs and head. There's something wrong with those eagles.

Particular concern was expressed for wildlife. Eyak respondents feel a special kinship with animals, who are integral to their world, culture, and identity:

Question:

Is there a kinship between the people and the animals?

Answer:

Yes. It's part of themselves. So a part of our life is gone if we don't do those things.

Most Eyak respondents view animals as having spirits, with people responsible for their welfare. This is in part because people, wildlife, and the earth are all critically interrelated:

Question:

Do the animals have spirits?

Answer:

The animals have spirits. I think so. I wish they would learn not to eat the bad stuff now, that's full of oil. I think they will go on being hurt as long as they're full of oil. That's yet to be seen. They're still finding dead deer around the Sound.

There's oil spilled all over now. Last week a pipe burst in Kenai. Everything is against us here now . . .

Question:

Does it hurt the people if the land is oiled?

Answer:

Oh yes. It's hurting animals. It's got to hurt people. People are all responsible to care for the land. We watch the things like rats. They have to be careful if they poison them, not to poison the dogs, or the bears or nothing.

People will succeed in taking care of Nature and the animals. People that eat seal are so used to it. Now they even can the seal meat and blubber. We dry meat and smoke it. We didn't used to have freezers. My mom used to put up seal meat, goat, sea gull eggs. Everything is in seal oil . . .

Question:

What would happen if the animals died?

Answer:

If more spills come the animals will die off. They won't make it to the mountain or hills. Like a brown bear will eat the deer meat and that will hurt them and they'll die too. Mountains are not affected, if no animals come back up.

Because of this critical interrelationship between humans and all aspects of nature, many Eyaks believe that loss of one aspect of nature would entail loss of the whole: If you lose one aspect you'll have a chain reaction.

Eyaks expressed acute fears over the long-range consequences of oil toxicity, which addressed both material health and cultural survival. Fears of culture loss are made more poignant by the general Native view that one must experience nature in order to understand it. If aspects of culture are lost, descendants will never be able to know them:

Question:

Are all aspects of nature interrelated?

Answer:

It was already proven by the oil spill. People were even scared to eat deer. And maybe we did wrong to eat deer. Maybe we'll all get cancer. What will be left in 10-20 years, of our game? No one knows.

Or maybe the oil companies do know. But I don't know. Will my grandchildren be able to eat any of the things I eat? Or just read about it in books?

Question:

How does a person come to understand nature?

Answer:

You have to experience it. You can read about it, but it won't mean anything unless you see it, taste it, hunt the deer, cut it up, wash it, wrap it.

What good is a picture? There may be a lot that my grandson won't be able to see.

Summary: In summarizing cultural impacts of the 1989 oil spill, Eyaks assess very high risks in environmental costs, past, present and future. Respondents describe all facets of their world as a critically interconnected whole: if one aspect is destroyed, the whole is jeopardized.

Because subsistence (used by Eyaks to refer to both specified foods and practices) comprises a way of life for past as well as present generations, it also "connects" the people to their heritage. That is, the identity of past Eyaks is merged with that of present Eyaks, since that identity comprises a single way of life which is inbred in both. The resulting unity is conceptually merged with the earth, which cannot be distinguished from its many aspects, which comprise subsistence, the Eyak way of life, and the Eyak people (in terms of personal and communal identity). The reasoning is circular, in that everything is part of everything else.

Sharing, an aspect of a subsistence way of life, is another facet of this interrelated whole. Sharing connects Native people with each other, both in a spiritual sense and in terms of extending kin ties. Sharing creates and sustains bonds which respondents equate to kin bonds; those who share participate in a subsistence way of life which is inborn in all of them and part of their identity; these persons are joined through a spiritual unity; this subsistence way of life which they share entails spiritual values. As it connects past and present Eyaks, sharing "connects" people in such a way that their identity is merged through a common spiritual way of life which is innate in their "Native blood."

Wildlife too is included in this interconnected system. Respondents perceive a special kinship between humans and wildlife. When asked if there is a kinship between people and animals, an Eyak elder explains, "Yes. It's part of themselves. So a part of our life is gone if we don't do those things." This statement demonstrates a common feature of Eyak interviews: respondents more frequently refer to subsistence (foods and practices) as "our life" than "our way of life." Animals, like subsistence practices, are part a "life" which comprises the peoples' experience, understanding, spirituality, community,

and identity. So, when oil toxicity threatens wildlife, it also threatens the "life" of these people.

III. EFFECTS OF THE 1989 OIL SPILL ON THE FISHING COMMUNITY

A key grievance concerning the aftermath of the 1989 Exxon Valdez oil spill was, "Exxon was calling all the shots." The oil company "ran roughshod" over Federal, State and local government agencies, as well as local residents, according to respondents. Exxon's mitigation of their losses was carried out completely at its own discretion, to serve its own ends: respondents described a process in which Exxon continually had its cake and ate it too. A paramount objection, for instance, was that Exxon substituted spill cleanup costs for spill damage payments. Another source of outrage was that, in calculating settlements for fishermen, Exxon combined low harvest figures (based on past catches) with low fish prices (based on the spill year which had a high harvest and weak market). Fish prices respond to a complex dynamic, but, in general, fishermen expect low harvests to generate higher prices and large harvests to produce lower prices. For this reason, fishermen were furious that Exxon had it both ways by producing low harvests and low prices.

Cordova has depended on fishing for its existence since the collapse of the copper mines and railroad in 1938-1939 (see Sec. I.A.1 Historical Overview). At present, most respondents support continued fisheries-related growth. During the 1970's, Cordova-Eyak anticipated oil development associated with OCS exploration that did not occur, due to a redirection of lease-sale tracts further south (USDOI, BLM, Alaska OCS Office 1979:77). A polarization of attitudes developed where fishing and environmental concerns conflicted with prodevelopment aspirations. Resulting social tensions were exacerbated by stresses arising from land freezes associated with stalled land conveyances to Native corporations under ANCSA (USDOI, BLM, Alaska OCS Office 1979:77). Cordova was forced to plan for a potential 100-percent population increase, while fishermen and others expended energy to fight the proposed changes (USDOI, BLM, Alaska OCS Office 1979:78). In the period 1976 to 1978, all municipal offices associated with planning for major industrial development changed hands, and the community

became fragmented around land and development issues (USDOJ, BLM, Alaska OCS Office 1979:102).

Frustrations were high when projected oil development failed to materialize, as both proponents and opponents lamented wasted expenditures of time and energy (USDOJ, BLM, Alaska OCS Office 1979:77). Cordovan attitudes during this period appear to have shifted away from non-fisheries-related growth. In a 1975 survey, 56 percent of the Cordovan area population stated that oil and gas development near Cordova would be good for the community; by the 1977-1978 period, only 24 percent said that such development should be strongly encouraged and 44 percent stated that it should be discouraged (USDOJ, BLM, Alaska OCS Office 1979:86-87).

Cordovans have long believed that their risks from oil development are disproportionate to their benefits. Their environment, economy, and way of life are put at risk by the pipeline terminal at Valdez with the main economic beneficiary being the oil industry. As one city official and generally prodevelopment entrepreneur explains:

Oil development is not good for Cordova. It's good for Alyeska, but Cordova gets little benefit from it. As long as the pipeline is flowing and they're drilling ANWR, we're at risk all the time. We get all the risk and no benefit.

We found out that they can spill 11 million gallons on you and no one comes to your aid. There was no set up mechanism. We had to fight for every bit of response and funding, from everyone.

Then Exxon came in and it was like we were occupied. They took over the government. You couldn't fish, so it changed the whole lifestyle.

They refused to pay for any social problems (mental health, for instance). They said, "That's not our department."

After the oil spill, Cordovans assumed major risks entailed by Exxon's spill cleanup: equipment risks, health risks, and legal liabilities associated with the status of independent contractor.

Respondents believe that they have been portrayed in media coverage of the spill aftermath as a "bunch of complainers." Respondents are bitterly resentful of their treatment by Exxon, and they consider their complaints justified. Many believe that the Federal Government serves primarily the oil industry, to the detriment of Cordova. Cordovans view State government in a more positive light, but believe that it cannot control big oil interests.

Cordovans predicted a disaster such as the Good Friday oil spill when they sued the Department of the Interior to stop the pipeline terminal in Valdez, and respondents in 1991 were quick to point this out. In 1971 the Cordova District Fisheries Union (now the Cordova District Fisheries United) (CDFU) supported other suits in contesting permits and right of way provisions needed to construct the TAPS (USDOI, BLM, Alaska OCS Office 1979:33). The CDFU, with the Wilderness Society and other environmental groups, appealed a U.S. District Court order favoring the Department of the Interior, Secretary of Agriculture, State of Alaska, and Alyeska Pipeline Service Company (USDOI, BLM, Alaska OCS Office 1979:34). The CDFU challenged the right of these groups to grant permits in violation of Congressional requirements for pipeline corridors, questioned the Department of Agriculture's right to allow special land use permits within a National Forest, and contested the adequacy of a Federal Environmental Impact Statement which, they argued, should have supported an alternative route through Canada (USDOI, BLM, Alaska OCS Office 1979:34).

The Cordovan fishermen pursued their legal action to the Supreme Court and won. In response, Congress adjusted pipeline legislation in 1973, which President Nixon signed (Payne 1991:7). The CDFU continued to seek power over their fishing environment, put at risk by the oil pipeline, through exercising some control in permit granting decisions: CDFU officials participated in subsequent decisions by the Alaska Coastal Zone Management and the chairman of CDFU occupied the only Alaska seat on the national Coastal Zone Management Advisory Committee (USDOI, BLM, Alaska OCS Office 1979:34). One lesson learned from the Federal suit, according to informants in 1991 was

that, permit powers notwithstanding, the Federal Government supported the oil industry, which was virtually unstoppable.

The fear that Cordova would be destroyed as a result of the 1989 oil spill was prevalent in 1991. Many expressed anger that they were not listened to 20 years before when, in testifying before Congress when it overturned CDFU's Supreme Court victory, Cordova fisherman Ross Mullins said, "Cordova stands a chance of becoming a ghost town" in the event of an oil spill (Cordova Times, April 5-6, 1989:A3). During the 1970's, Alyeska representatives assured that a major oil spill would not occur, and that if it did the oil companies would prevent serious environmental impacts. These empty guarantees have reinforced contemporary misgivings about oil development. A CDFU official explained:

I'm not in favor of oil development, the pipeline, and so forth, but I'm realistic enough to know it won't go away.

CDFU fought the pipeline and won in court. So Congress voted it in, with Spiro Agnew casting the tie vote. CDFU wanted the pipeline through British Columbia. The suit was going on in 1971 and 1972, probably in the U.S. District Court in Anchorage.

There was testimony before a Congressional hearing, where a fishermen used the example of a 250,000 barrel oil spill at Bligh Reef. There was a 240,000 barrel spill at Bligh Reef . . .

The suit was against the Department of Interior and Department of Agriculture. We won in court and lost in Congress.

On oil development, like ANWR, CDFU has no formal position. But I think people (and myself) are feeling uneasy about it because of their claims that there'd be no spills and no environmental damage, and there was.

They said they could clean it up and they didn't. We're too quick to look for more oil and too slow to explore our energy policy.

Respondents generally expressed more positive views toward the cleanup efforts of State agencies than Federal agencies or Exxon, as described below. In efforts to stop the oil terminal at Valdez, however, Cordovans viewed State government as an adversary:

Many people here knew this would happen someday. And we fought and fought against that. They kept saying they'd take care of it if something happened, but they weren't prepared . . .

Years ago, when we were fighting the pipeline, and we were worried about the Sound, we fought them. But we couldn't. You're talking about big money against a handful of fishermen.

A group of fishermen went to Juneau to express their concerns. But they were told not to step on too many toes, because you're dependent on the state, as a city, for a lot of things.

After the spill we had a meeting at the high school, and one of the Coast Guard said, "I think our record is great. A spill only happened once in 12 years."

I couldn't believe he said that. It shouldn't have happened at all. But we're all at fault because nobody made sure we were prepared.

Valdez said they had the necessary equipment for a spill; where was it? Was there ever any equipment?

. . . They promised to clean the beaches and they didn't. I've got that on tape. They did everything they knew, which wasn't much. They'd never really thought about a spill. And then they tried to put the blame on one man: the captain. It's not all his fault.

Local newspapers printed a letter from a Colorado resident in the weeks after the 1989 oil spill, which is quoted here in part because it summarizes the views of many Cordovan respondents in 1991:

EXXON LOOKING AT BOTTOM LINE

To the Editor:

I am writing to the good citizens of Valdez as one who has experience dealing with Exxon. There are a couple of things you need to keep in mind while dealing with Exxon. From my experience in Rifle, Colorado, I believe that they will do whatever is best for their bottom line. They will tell you that they are concerned for people and the environment and they will have smooth-tongued P.R. persons saying it, but don't you believe it!

The federal government will be of very little help since Exxon is such a big multi-national company. They command more federal respect than most nations. Your best bet is to get your local government officials who grant any permits to oil companies for the pipeline to hold those permits hostage until Exxon cleans up their mistake to your satisfaction and be mindful of the human and social costs to your community. You may have to pressure all oil companies to get to Exxon, as they often hide behind each other.

The old axiom that I found most true in dealing with Exxon is that if their lips are moving, they are lying (combined issue, Valdez Vanguard, April 5, 1989 and Cordova Times, April 6, 1989:B2).

Cordovans had already tried and failed to exercise permit powers in their suit. That Cordovans had already acquired some savvy in negotiating with the oil industry is often reflected in submissions to their publication, The Cordova Fact Sheet. I cite this publication frequently below because it reflects local perceptions of the unfolding of events during the aftermath of the oil spill. This daily fact sheet was published by the City of Cordova (which held complete editorial control) under direction of the Oil Spill Disaster Response Committee and the Oil Spill Disaster Response Office. The publication was a service initially provided by the city to VECO, Inc., at a cost not to exceed \$650 per day. The city subcontracted with Connie Taylor of Fathom Graphics, Cordova to reproduce and distribute the fact sheet, with the editor of The Cordova Times editing (Cordova Fact Sheet, June 9, 1989:2).²⁷

Citations from 1991 interviews echo concerns expressed in the Cordova Fact Sheet, and show how conflicts arising from the oil spill and cleanup have remained consequential over the past 2 years.

²⁷Connie Taylor, widely described as an Exxon supporter, announced at an August 1989 meeting of the Oil Spill Response Committee that Fathom Graphics would stop printing the Cordova Fact Sheet because it was putting out press releases and "stories" which she felt belonged in the local newspaper. She also recommended that the committee stop faxing the publication to various offices outside of Cordova. Another city official responded that the Fact Sheet "has been an effective tool to get Cordova's story out to our elected representatives and various agency people..." (Cordova Times, August 31, 1989:A4). The city continued daily publication of the Fact Sheet through September 1989 and resumed publication from February to October 1990 on a less frequent basis.

The emotional impact of the environmental destruction caused by the oil spill probably cannot be fully grasped by outsiders. Some Cordovans viewed the spill as potentially bringing about "the end of the world as we know it" (Cordova Times, March 29-30, 1989:A3). Certainly, many Cordovans did not appear to be beguiled by Exxon's "smooth-tongued PR persons." For instance, according to one respondent:

People here weren't mean to the Exxon and VECO employees.
They were just people doing their jobs.

Question:

Weren't there death threats shouted at Exxon representatives?

Answer:

Oh yeah. At the first town meeting, some people did jeer at Exxon and shout death threats. But later, no one blamed the employees.

The trauma appeared fresh in Cordovan's minds in 1991:

Color our world black. I was nursing my son at the time, and my milk stopped. It blew our faith in how things work.

It was so hard to see grown men crying their eyes out. The men who went out to see it, tough fishermen, came back with gray faces, tears streaming down. That was the hardest thing for me to see.

There's no counting the emotional cost, it's still costing. We don't trust the capacity of the Sound to support our lives anymore. You can't count on anything anymore . . .

Many respondents hold a spiritual view of Prince William Sound which makes the environmental destruction all the more devastating.

Question:

Do wilderness and nature's resources have a spiritual value for you?

Answer:

Yeah. I seriously believe that. I was born and raised in Cordova. And spent all my life in the outdoors. I live here because I can step out my door and be in the wilderness. I grew up turning over

rocks to see sea critters. And after the spill: to go out and turn over rocks and see oil oozing out--it really affects me. It's real spiritual . . .

And there's still a lot of oil on the beaches and rocks in places where Exxon drove by and called it clean. But the oil is right beneath the surface. And there are sheens across the water. Exxon is just interested in PR and public image. They say it's gone and are deliberately misleading the public.

III.A. First Response

Exxon and Alyeska's first response to the catastrophic oil spill was no response, according to Cordovans. The oil consortium effectively blocked the initial responses of Cordovan fishermen, who were organized and ready to protect Prince William Sound. Especially galling for respondents was Alyeska's rationale for refusing to let Cordovan fishermen prevent the early spread of oil: the oil companies reportedly did not want to incur the "liability" of using "amateurs." (Exxon later treated these amateurs as independent contractors for the spill cleanup, forcing them to undertake accompanying legal liabilities.) A CDFU official recalls:

CDFU was the central focus for the fishermen's response. The first response was to begin accumulating a list of boats to fight the spill. But we were rejected by Alyeska.

I started to call them at 7 a.m. Their emergency number was busy. I finally got a command center number at 9 p.m. They said they'd call and didn't. Finally, I got someone and they said they couldn't afford the liability of using amateurs.

We were also calling ADEC [Alaska Department of Environmental Conservation]. Finally, I got a call from DEC. By Saturday evening, March 25, DEC called and said they'd heard we had boats. Could we dispatch four boats? I had 100 boats on call. So they said to send four boats to Valdez.

The four boats that went (Sunday was Easter) got caught in the storm. They just holed up in Valdez. DEC finally put them boom tending around the tanker. They came back and said they weren't effective. The booms were not keeping the oil in at all.

But we got a toe in the door. Alyeska and Exxon were still ignoring us.

Then DEC called and said the San Juan Hatchery was in jeopardy. Could we send 15 boats? They called at 7 a.m., and we got them out in a couple of hours. Out in the boats. Nobody cared if they'd get paid.

By then Exxon and Alyeska wanted to use us, a few boats.

While the State agency (ADEC) was reportedly more responsive than Exxon and Alyeska, many Cordovans complained that the Federal Government acted as a lackey of the oil consortium. Informants believe that the USCG backed up Exxon's refusal to incur the insurance liability for an immediate local response:

We learned some hard lessons. The Coast Guard doesn't work for us. They work for oil and Bush and major powers that run the United States. I used to think the Coast Guard worked for us, on our tax moneys, to protect our lives. But they don't.

. . . Exxon blew the cleanup in the first three good-weather days after the spill. They could have put a bounty on oil. There were fishermen who would have gone out and sucked it up. They could have burned it off right away. Alyeska could have been prepared. They never intended to clean up an oil spill.

Exxon wouldn't let the fishermen in with their suckers on the boats because of insurance liability. So the Coast Guard kept them out. Those fishermen would have put their lives on the line to save the Sound . . .

. . . Bush had a "wait and see" attitude about who would run the operation. There was no chain of command, and there was a delay. The governor didn't have the power we thought he did. The oil company wanted to run everything, and nobody trusted them. And when they were in charge they didn't know what to do.

It would be silly to be confident. We used to be naive. Now we don't trust.

Another respondent concurs with this characterization of the Federal Government as Exxon's flunky:

I have problems with the Coast Guard. They weren't rigorous or harsh enough on Exxon. They didn't make enough demands on Alyeska or Exxon. With Alyeska the feds were just looking the other way.

Alyeska: they were supposed to be the initial response. I was out working there and their response was minimal. They did nothing for two days and that's another beef with the Coast Guard. They should have made Alyeska act. But they were apathetic. So the federal government is just as much to blame for the damage as Exxon. The federal government should have regulated to prevent the spill.

The state's hands were tied by the Coast Guard, who wanted to be in charge. The State tried, under the circumstances.

Exxon tried to buy off complaints. They had no environmental concerns, just economic concerns. They tried to pump money in to quiet complainants. They could have gotten cleanup equipment in within hours of the spill or days, but they didn't. The cleanup was a media show. The point was to hire all the people to buy them off.

Exxon did decide finally to use CDFU to organize their spill operations in contracting boats for the spill cleanup. By mid-April the oil company had donated \$250,000 to CDFU, which was applied to overhead. However, this donation did not deter CDFU officials from expressing their outrage at Exxon's dereliction in not responding immediately to the spill:

Cordova District Fisherman United has sent letters to the editors of local newspapers, the Anchorage Daily News, the Juneau Empire and other press discussing the receipt of funds from Exxon by CDFU. From the onset of the spill, CDFU aided the deployment of fishing vessels volunteering to defend PWSAC's hatcheries. Exxon subsequently offered these and other fishing vessels paying contracts for their work. CDFU continued in the dispatching of all vessels from Cordova, contracted and non-contracted.

The receipt of the Exxon funds, \$250,000, goes to support CDFU office management expenses only. It has not softened CDFU's resolve to bring attention to the delay in the oil cleanup that Exxon and the Federal Government have demonstrated, and to

press for immediate corrective action (Cordova Fact Sheet, April 21, 1989:2).²⁸

An eloquent description of the delay in spill response appears in Congressional testimony by a CDFU official. After initially ignoring the organized bid of Cordovan fishermen to contain the spill, Exxon allowed a few of them to boom off its tanker but supplied them with boom that leaked. Meanwhile, Exxon officials reportedly began to lie to the press, describing its tanker as boomed off when it was not. According to one respondent:

March 24th at 6:20 a.m. my husband and I were awakened by a phone call from a fellow fisherman in Seattle, Washington, telling us of the oil spill. We immediately called the state troopers and Jack Lamb, acting president of Cordova District Fisherman United (CDFU), and suggested we coordinate with the fishermen of Valdez, Whittier, Seward, Homer and the native villages of Tatitlek and Chenega to help Alyeska boom off the tanker or assist in any way possible with our boats, equipment, and professional local knowledge of the currents, tides and weather patterns of Prince William Sound.

Jack Lamb called the Coast Guard, Alyeska, and other agencies in Valdez to let them know we were available immediately with 20 boats to deploy boom. No response. By midafternoon on the day of the spill over 50 boats from Cordova and Tatitlek were ready to go. We still never received a phone call back despite many more attempts to contact Alyeska. Many of the fishermen flew the spill from 7 a.m. on throughout the rest of the day. With each flight report CDFU became more appalled as no efforts were being made to boom off the tanker. We assumed Alyeska had a large stockpile of boom material on hand ready to be deployed, when in fact they had only 7,000 feet of low quality boom, fit only for calm water use. Yet, they could not even issue a command to have that deployed.

²⁸This CDFU press release may implicitly address the ethical issue of accepting Exxon funds. For instance, some respondents described Exxon's \$20,000 grant to the Chamber of Commerce as a bribe; many Cordovans refused to work for Exxon on the spill cleanup because they refused to take "blood money." Here CDFU emphasizes that, while they accepted money from Exxon in order to further cleanup efforts, this did not buy their endorsement of the oil company's methods.

At one of the early Exxon press conferences, it was announced that boom was in place around the tanker, when in fact it was not. This same scenario was played many times with different versions of the theme. Ralph Lohse and his three brothers-in-law, all from Cordova, were working their boats in a volunteer effort at Exxon's request, to hold boom together around the tanker.

Even after the low quality boom was put around the tanker it continually broke, fractured, and pulled apart as oil gushed under it in the unusually calm weather. Ralph made repeated attempts to contact Exxon and inform them of the situation and the need for real boom capable of containing at least some of the spill. They were ignored totally. They finally gave up, returning to Cordova when the original boom material was so broken it could no longer contain oil, and no new boom material was forthcoming. On their way back to Cordova, they again heard Exxon say at a press conference that the tanker was boomed off, when in reality the boom's only function was for show and tell . . .

. . . Alyeska Pipeline Company has reaped over 12 billion dollars in profits from Alaskan crude oil at something near 2.5 million dollars a day. It has had 16 years to prepare for an oil spill in Prince William Sound. It seems as though the oil industry should have spent some of those profits on researching the latest technological advances and equipment, with field testing in all kinds of weather, and compiling that information with the location of materials around the world on a central computer system that would be available for the entire world's input and use.

The oil industry's lack of proper equipment, absence of efficient oil spill response teams, and failure to clean up its mess is deplorable and inexcusable. Fishermen should not have to do Alyeska's job and locate boom materials for them, arrange for transportation of oil clean up materials, design supersucker setups to remove oil from their unreliable skimmers, and in essence be their oil spill response team. It is time for the government to take responsibility and force the oil industry to account for its actions and correct them. It is time that this planet is not just used and abused, but protected and loved.

1989 is the 100th anniversary of commercial fishing in Prince William Sound. The first cannery was built in Cordova in 1889. Although the natives had been harvesting salmon for many years it

was the commercial beginning of 99 years of bounty provided by the beautiful, rich and renewable resources of the Sound. What a sad, destructive, and pathetic situation fishermen and all members of the Sound face in this historic 100th year (Testimony before the Senate Committee on the Environment and Public Works in Washington, DC, cited in Cordova Fact Sheet, April 29, 1989:4).

Exxon officials were still dissembling in July 1989, according to respondents, in reporting to the National Transportation Safety Board that their initial spill response was immediate and appropriate:

1. The grounding of the Exxon Valdez and the subsequent discharge of 258,000 barrels of crude oil in the Prince William Sound was caused by the delay in bringing the vessel back into the traffic lanes following maneuvers to avoid ice.
2. The manning level of the Exxon Valdez and the physical condition of the vessel's crew were not contributing causes to the casualty.
3. The role of alcohol in the grounding cannot be established. Exxon Shipping Company's drug and alcohol policy and its implementation cannot be considered as a contributing cause to the accident.
4. . . . Exxon Shipping Company's initial response to the spill was immediate and appropriate. . . .

The Oil Spill Contingency Plan and Initial Response... with respect to Exxon Shipping Company's activities during the first 24 hours following the spill, the initial response and actions of Exxon Shipping Company were swift and appropriate.

The record indicates, from both testimony and chronology submitted to the Board, that within hours of the spill, Exxon Shipping Company had mobilized appropriate personnel including environmental experts, and had ordered and put in transit to the site oil spill response equipment from the lower 48 states and abroad. Exxon Shipping Company made an immediate response with a full, unqualified commitment to mitigate the consequences of the spill (Cordova Fact Sheet, July 21, 1989:2-3).

This report, denying any delay in appropriate spill response, was submitted to the National Transportation Safety Board on July 17, 1989. Statements by the Exxon Corporation Chairman in the Wall Street Journal on June 30, 1989, refer to an early delay in the use of dispersants on the spill, but appear to blame the USCG for this:

In an interview with the Wall Street Journal Exxon Corporation Chairman Lawrence Rawl said last week he wishes he had visited Valdez sooner after the disastrous grounding March 24 of the tanker Exxon Valdez. Persuaded by others in the company that he might get in the way of "people who were already up to their necks in alligators," Rawl said he now "sometimes wishes he had gotten in the way . . . Mr. Rawl wonders: If he had gone to Alaska right away, could he have gotten the Coast Guard to decide more quickly to allow spray dispersant rather than waiting through more than two days of tests? Exxon argues that delay caused it to miss its only opportunity to fight the spill with dispersants; federal and state authorities argue tests showed dispersants wouldn't have worked during the period in dispute anyway" (Cordova Fact Sheet, July 7, 1989:3).²⁹

Cordovans, as noted, expressed anger at the USCG for allowing Exxon to get in their way, blocking their immediate cleanup response for what they consider trivial reasons. A perceived general endorsement of Exxon by the USCG was a source of resentment, and the following statement by the Coast Guard commander of the Pacific Area exemplifies an attitude which evoked the ire of Cordovans. He maintains that Exxon was not to blame for problems with the cleanup, and finds some culpability in the response of Alaska State agencies:

The state of technology and the system for handling emergencies, not Exxon Corp., are to blame for problems in cleaning up last year's oil spill off the coast of Alaska, a top Coast Guard official said. "We can blame it on Exxon but the truth is the system failed here," said Vice Admiral Clyde Robbins . . . He said Exxon has spent millions and will spend more this summer cleaning up the mess left when the Exxon Valdez ran into a reef in Prince William Sound last March, spilling 11 million gallons of oil . . . "They were

²⁹This is, of course, an admission by the Exxon Corporation Chairman, that if he "had gotten in the way" by going to Alaska immediately after the spill, he might well have determined the actions of the USCG.

trying to do what was right," Robbins said. "Generally speaking, they did everything possible to clean it up. They wanted the oil gone. The problem was that the equipment that was needed and necessary to do that just doesn't exist."

. . . Robbins also said state officials in Alaska tended to operate on a "business as usual" basis and did not seem mentally prepared to deal with the scope of the disaster (Cordova Fact Sheet, June 7, 1990:4).

While Exxon attempted to direct blame toward the USCG, which in turn found fault with State agencies, Cordovans in general desired more local control over oil companies operating in their environment. Most expect more oil spills:

There should be more local control. The local fishermen's organization in town originally fought the pipeline because an accident might happen.

And there will be more accidents. They just had one in Valdez. They say the pipeline is corroded. The possibility is always there. *Whether from running onto a rock, or forgetting to turn off a valve.*

The local community should have control over oil shipping and extracting. The oil companies are still running roughshod over the Coast Guard and the public. This morning in the news there was something about shipping toxic wastes and unloading tank washings. They just have too much money that they contributed to the U.S., so nobody can control them . . .

There's no way they could process the ballast water as fast as they're bringing in tankers there. Hopefully they'll figure something out before the environment is totally destroyed over there.

III.B. Conflicts Generated by the Spill Cleanup

Fishermen Become Oil Cleanup Contractors: After initially refusing to allow Cordovan fishermen to boom off the leaking Exxon Valdez, reportedly to avoid legal liabilities, Exxon created a hiring policy which defined these fishermen as independent contractors:

Exxon will be utilizing a number of contractors to fulfill the additional manpower requirements as they arise. Exxon will not be hiring directly. All hiring will originate from the contractors as various services are required by Exxon (policy statement by Exxon office, Cordova, cited in Cordova Fact Sheet, April 21, 1989:3).

The designation of contractor entailed a substantial transfer of legal liabilities to the fishermen who became Exxon's spill response team. Oil spill cleanup contracting was a new profession for these individuals, and many complained in 1991 of ensuing confusion, as well as resentment, over tax and other liabilities. For instance, contracting boats were responsible for withholding taxes:

Agents for the IRS contacted the Valdez Emergency Operations Center with concerns about tax liabilities for boats contracting with VECO. Crews working on the boats are employees of the contracted boat which places the responsibility of withholding taxes upon the contracted boats (Lower Cook Inlet Oil Spill Protection Update, cited in Cordova Fact Sheet, May 9, 1989:1).

Contractors for the cleanup were also liable for worker's compensation coverage and unemployment taxes. Employers who furnished transportation to incoming workers were responsible in most cases to furnish return transportation (Cordova Fact Sheet, June 6, 1989:2). New types of medical insurance were sometimes required. The health risks of cleanup work were (and still are) largely undocumented, and future liabilities for health impacts remain an open question. The Alaska Department of Labor attempted to clarify some of these issues, well into the cleanup operation:

The Alaska Department of Labor is investigating reports of health problems (primarily nausea, dizziness, headaches, and vomiting) among workers on the oil spill cleanup. An industrial hygienist from the Division of Occupational Safety and Health (OSHA) has interviewed beach crews from the USS Juneau, and will be conducting air monitoring and taking material samples to ascertain if exposure to oil is causing the reported illnesses . . .

Worker's Compensation--It is the opinion of the Department of labor that virtually all employment related to the oil spill is subject to Alaska Workers' Compensation coverage. There may be instances when some employers will need, in addition to Alaska

Workers' compensation, coverage for "seamen" under the Jones Act or for "longshoremen" under the Longshore and Harbor Workers Act. Owners and crewmen on vessels which are normally engaged in commercial fishing operations should be aware that the Fishermen's Fund will not cover medical expenses incurred as a result of non-fishing operations, and that the crew insurance carried by most vessel owners does not satisfy the requirements of the Alaska Workers' Compensation Act. Employers from outside the state cannot cover their workers' compensation liability in Alaska through extraterritorial coverage provisions of any kind; coverage must be obtained from an insurer licensed to do business in the state . . .

Unemployment taxes--Businesses, individuals and boat owners involved in oil spill operations should also be advised that if they hire individuals to work for them they are liable to payment of unemployment taxes under the Alaska Employment Security Act. Crews of vessels normally involved in fishing operations are not exempt from the Act while engaged in spill cleanup activities. Exxon has been provided with the forms required to establish its contractors as employers (Cordova Fact Sheet, May 12, 1989:3).

Some respondents were irked that, while Cordovan fishermen were defined as oil cleanup contractors, and money earned working on the spill cleanup was taxed, their volunteer services on the cleanup were not tax deductible (Cordova Fact Sheet, May 26, 1989:3). Exxon's cleanup expenses, of course, were deductible, although legislative attempts to require Exxon to meet Federal anti-pollution standards before deducting oil spill expenses were initiated (Cordova Fact Sheet, June 17, 1989:2).

Conflicts Over Cleanup Money: A great deal of animosity was generated by the moral stigma attached to working for Exxon. Cleanup workers and contractors were called "Exxon whores," who accepted "blood money" and became "spillionaires." Most respondents expressed resentment towards the oil company, whether or not they gained financially from cleanup work. Differences among 1991 respondents could be gauged by whether that resentment was strong enough to cause subjects to refuse to participate in

Exxon's spill cleanup. No respondents in the fishing community expressed positive sentiments toward the oil spill and an ensuing windfall.³⁰

Some people wouldn't go on the spill: called others Exxon whores. And here's all these people around them making all this money.

It caused conflicts within families. There were quite a few divorces. Kids left home. There were all kinds of changes here. People who'd never had money before had money. Some people thought it was the best thing that ever happened to them . . .

And Exxon bought up all the supplies, and the shopkeepers gave Exxon priority. So you'd go to the store and there was no bread and no milk. It was little things like that, that were aggravating. At the store they'd say, "Exxon has priority." Where you live here, and you've been buying from them all your life.

It felt like being in a concentration camp. You felt you were invaded and taken over.

It was very hard on those who wouldn't work on the spill. They thought it was wrong to help Exxon, after what had happened. But then they were left with no money.

But those who did go were afraid they'd need the money because they might not get anything again. Or compensation for what had happened.

The social disruptions caused by the different economic impacts of the oil spill were painful to all respondents in this close knit community:

The biggest conflicts among fishermen, because they were able to get money, were over money. After the spill, you couldn't walk down the street and ask people, "How're you doing?" some people were cleaning up, and others had no jobs and no prospects (if they couldn't fish and wouldn't work for Exxon) . . .

We are the walking wounded here. Everybody keeps to himself because the person next to him will fall down if he leans on him.

³⁰ Respondents claimed that many who garnered large cleanup earnings from contracting their boats left Cordova during the winter to spend their money in places like Hawaii and California. It is unknown whether some big earners would have expressed different views had they been in town when this research was conducted.

While social conflicts arose over money, respondents overwhelmingly agreed that money could not compensate them for the loss of their way of life, put at risk by this catastrophic oil spill:

Money can't substitute for loss of a life style. Money can be measured, and life style can't. It's tough to measure the human factor. No one paid any attention to the human factor. People are not a resource. State and Federal governments settle resources. People don't crank into that formula.

Conflicts Over Contracts: Animosity among persons who were willing to contract their boats for the spill cleanup focussed on how contracts were obtained and who obtained them. These animosities exacerbated other tensions associated with the oil spill, and destroyed the communal spirit created by the fishermen's initial volunteer response; according to many respondents:

[The initial volunteer response effort, which was frustrated] did create a community closeness, but that went away as soon as Exxon hired some people and not others. For instance, \$1,000 a day, or \$7,000 a day to charter boats.

A CDFU official recalls:

Some people got contracts. People were grouped according to:

- (1) those who wanted and got contracts
- (2) those who wanted and didn't get contracts
- (3) those who wouldn't work for Exxon.

There was much animosity among the groups. Some people went outside the system and approached Exxon in Anchorage. Some people who'd been friends all their lives weren't speaking to each other . . .

The homes had tension in them: not knowing what their finances would be. People who'd lived here all their lives, this was their way of life, and now it was uncertain if that would continue . . .

Our criteria for contracts were:

- (1) you had the right boat
- (2) by what fishery you lost

For example, the herring fishermen had lost their whole season and went first.

I saw no favoritism, but of course some people thought that. Sometimes it was because we couldn't reach them on the phone.

The CDFU even published objective criteria for selecting boats for cleanup contracts:

Boats are continuing to be dispatched from the Cordova District Fishermen United office in Cordova (approximately 118 boats). Criteria for deployment are as follows:

- (1) Involvement in lost fisheries (any herring, shrimp, black cod fisherman).
 - (2) Attendance at a boom and safety seminar.
 - (3) Boat must be capable of handling the job (be fueled and ready to go).
 - (4) Residency status
 - (a) Local residents with Area E permits.
 - (b) Alaska Area E permittees.
 - (c) Other Area E permittees.
- (Cordova Fact Sheet, April 16, 1989:3).

However, in the chaotic spill aftermath, these objective criteria could not always be implemented. Respondents described how their anxiety was too extreme to wait at home; some fishermen were reportedly pacing on the sidewalk in front of the CDFU office, smoking and waiting to hear spill news, so that other boat owners got their contracts because CDFU workers could not reach them on the telephone. While some respondents described the contracting process as unfair, none charged favoritism; most cited the turbulent nature of the spill aftermath:

Women came to work at CDFU. They were never at home because they couldn't stand being at home. They were needed. There were 30 more workers at CDFU after the spill. Women manning phones. Calls came from all over the world--the press, lawyers, fishermen, people concerned to help.

While respondents believe that CDFU intended to administer contracts fairly, Exxon's motivations in constructing the contracts are perceived in a different light. A CDFU official recounts how

Exxon was not honest at any level. They were not open. They were not forthcoming. They'd be playing us off against each other. Lots of different types of contracts were floating around. Sometimes you had to sign that oil cleanup money counted against any claim you'd make in the future. Other contracts didn't have that stipulation. Valdez got different contracts than Cordova, and so on. They wanted to set people fighting amongst themselves.

The belief that Exxon issued diverse contracts because it wanted to set Cordovans against each other was reiterated in descriptions of Exxon strategies in many dimensions of oil spill impacts. These include business claims settlements, relations with business organizations, fishermen's claims settlements, and relations with city government. One inconsistency, according to a key official at the Fishermen's Claims Office, was that those who leased boats got higher fishing claims approved than those who did not:

Exxon made a lot of promises that they didn't keep. People are treated differently, and this causes dissensions. People who leased boats for the spill got good claims too, for bigger dollar amounts: 20-40 percent higher than others.

Many believe that Exxon used large cleanup contracts as a form of bribe, to quiet discontent among the more vocal fishermen: "Exxon just poured a lot of money on the oil spill." Then, according to respondents, the oil company subtracted this money from claims payments; the perception is, then, that Exxon was bribing fishermen with their own money:

I couldn't work the spill because my businesses were in a shambles. Exxon hired the malcontents, then took their wages off their claims. That solved those problems.

Another dividing factor in determining who was to become a "spillionaire" was the extremely long work hours demanded by cleanup work. Fishing "openers," by contrast may last 24 or 48 hours, or even less. Fishermen who held down other jobs were unable to participate in the cleanup:

Normally with fishing there are openers where they go out and fish and come back. Twenty-four and 48 hour openers. But on the spill cleanup, they went out for weeks and didn't come back. Only those in businesses that could take advantage of the spill could keep afloat.

A number of respondents who could not work the spill because they held other jobs loaned or leased their boats to friends who obtained contracts, only to have their boats damaged on the cleanup. Exxon, consistent with treating fishermen as independent spill contractors, reportedly took no responsibility for boats that broke down in cleanup operations, even though cleanup operations were much more stressful than normal fishing. This was especially galling to some who had their cleanup earnings subtracted from their fishing claims payments. A subject who could not leave his regular job for cleanup work describes how:

The guy who leased my boat to work the spill blew the engine. But Exxon wouldn't pay for my broken down boat. It cost \$900 to clean the oil out.

Another respondent recalls:

Before the spill, we expected a record year, and put big money into our preparations. And we lost big instead. We leased our boat out, and it got trashed. So we lost it.

Another problem with Exxon cleanup contracts was slow payment (also experienced by Cordovan business owners who made sales to VECO). A mother of a small child remembers:

My husband signed a contract that said we'd be paid in two weeks, and we weren't paid. We didn't have food money. I had to put a stop on our tax payment. We were trying to get into this house, and our carpenters quit to work the spill, so we didn't have any place to live, because they couldn't turn down Exxon's money. We're going through TAPAA [Trans-Alaska Pipeline Authorization Act] which will take years to settle.

Conflicts Over Changes in Fishing: Some individuals did make substantial sums by leasing their boats, and many used this money to upgrade their equipment. This in itself

has created lasting conflicts in this fishing community. Some perceive that those who compromised their moral principles by working for Exxon now have a lasting advantage in fisheries that have become permanently more competitive due to these technical upgrades. They see a steady shift toward more capital intensive fishing and limited entry had already evoked disapproval and fears that a local fishing lifestyle could be replaced by competitive fishing carried out by affluent non-residents (see Sec. I.A.6 Cordova's Economy). This trend was reportedly exacerbated by spill cleanup money, and many fishermen fear that a normal process where upgrades occur gradually, based on the ability of the fishermen, was upset. Spill-related upgrades were not determined by fishing skill, so that some less skilled fishermen have reportedly bought much more expensive equipment. Respondents fear that this has made fishing more dangerous. A CDFU official explains:

The Exxon contract money . . . on a long term basis some people made a lot of money and invested it in new boats. They have a competitive edge over the ones that didn't, now.

Some people got out of fishing, but I can't say why. Fishing is more competitive now, and that adds to divisiveness that was created at the time of the cleanup. There's only so many fish, so that hurts you.

According to a fisherman's wife:

The spillionaires . . . made a quarter of a million dollars by renting their boats out, and they upgraded. So they can outfish others who didn't who now can't keep up. It also got more dangerous when they compressed guys into a small area. So we had to buy a new boat, because it was too dangerous.

According to one fisherman and lifelong Cordova resident:

There's some big changes in the fishing fleets. They're more high tech due to the cleanup and settlement money. We'll be faced with that forever, so our fishing time will be reduced due to the new equipment. It's too efficient.

It's too efficient because, say we're on the flats 12 hours. And we can only take so many fish. So if we're too efficient we take too much. So the solution is reduced fishing time . . .

Then the navigational aids, and they can move around in nastier weather. With the oil money some boats will do 20 knots where they could go 10 knots before.

My feeling (I'm a scratch fisherman) so the more time I put in the less my catch will be. So it jeopardizes my abilities.

If seine fishermen have six hours in an enclosed area, in a ram and jam situation, they have to compete in that highly competitive situation.

But the hours are lessened whether you have the high tech equipment or not. You can't influence management: Fish and Game regulates the openers and closings of the fisheries.

. . . I would say close to half the fishermen upgraded in one way or another: new boats, gear, nets. Seine boats can cost \$20,000. So it's a substantial investment. The cleanup money was the larger amount of people's earnings. Some settlements earlier were better than later ones. Some people got good settlements and some didn't.

Health Hazards: Unlike Cordovan Natives, non-Native Cordovans expressed less anxiety toward adverse health effects from working on the spill cleanup (see Sec. II Alaska Natives in Cordova). Respondents repeatedly explained that fishermen were more than willing to "put their lives on the line" to protect and clean up the Sound. However, physical dangers entailed by the cleanup were nevertheless cause for concern. The State Division of Public Health issued a bulletin on May 5, 1989 which claimed that risks to appropriately trained spill workers were low:

The bulletin states that the risks to human health depend on the type of exposure and says risks "are greatest to workers heavily exposed to oil during some cleanup activities, but the risks to these workers is considered to be low. With appropriate training and personal protective equipment, as required by hazardous waste regulations, cleanup activities can continue and workers can be

confident that their health will not be compromised" (Cordova Fact Sheet, May 11, 1989:3).

This statement was quickly contested by Dr. Robert W. Rigg, regional flight surgeon for the FAA and a former Alaska medical director for Standard Alaska (BP). His written statement was read at a May 13, 1989 meeting of CDFU, and excerpts were printed in the Cordova Fact Sheet, which compared them to the State bulletin cited above:

It is a known fact that neurologic changes (brain damage), skin disorders (including cancer), liver and kidney damage, cancer of other organ systems, and other medical complications--secondary to exposure to--working unprotected in (or inadequately protected) can and will occur to workers exposed to crude oil and other petrochemical by-products. While short-term complaints, i.e., skin irritation, nausea, dizziness, pulmonary symptoms, etc., may be the initial signs of exposure and toxicity, the more serious long-term effects must be prevented . . .

Adequate chemical protective (clothing) and employee instructions in the hazards and risks is of paramount importance. Adequate ventilation and protection of skin and body parts is a must. Compliance with health requirements is essential, but likely to be overlooked in the rush to clean the environment. Regrettably, long term (as well as short term) physical impairments are most certainly going to surface among the cleanup workers.

My personal recommendation is to pull the cleanup crews off the beaches--out of Prince William Sound, and avoid further tragedy in the form of human suffering, illness and disease (Cordova Fact Sheet, May 16, 1989:3).

Workers did complain in 1991 of having experienced short-term health effects (such as nausea and dizziness), and many objected to the excessively short and cursory training sessions conducted by Exxon. In May 1989, Exxon expanded its 2-hour Health and Safety Training session to 4 hours; by that time, 942 Cordovans had already completed the course (Cordova Fact Sheet, May 20, 1989:3). Respondents claimed that this training was inadequate.

Deficits in health and safety training continued to trouble Cordovans in 1991. Fishermen were angered when Alyeska Pipeline Service Co. decided not to provide safety training for its oil spill response program. According to an Alyeska spokesman, the omission of safety training was mandated by company lawyers. He said, "Alyeska is pulling back on training commitments because of possible liability for any damage done to a site by a response team" (Cordova Times, February 21, 1991:A5). Cordovans viewed this as another example of the oil industry looking after itself rather than showing concern for people or the environment.

Accidents occurred, and a Fishermen's Claims Office official describes a seemingly inadequate medical response structure:

It was a hazardous job. There were a lot of accidents. I had quite a few come in. A young lady spraying hot water had steam and oil sprayed on her face and her mouth had second degree burns. She was just left on the Beach in Valdez, to find her way home. She was in really bad shape.

There were a lot of eye injuries. And falls. The women lasted longer than the men.

The Cleanup Does More Harm than Good: Not the least of the frustrations associated with the spill cleanup, described by Cordovans in 1991, was that Exxon's spill cleanup may have done more harm than good to their environment. Respondents are bitter that the oil companies promised to prevent environmental damages but were not really prepared to do so. Cordovans had put their lives and equipment at risk in cleanup methods that had not been well thought out or tested.

This was especially galling in that Exxon used its cleanup expenses to double as mitigation for economic losses caused by the spill. Exxon announced that cleanup moneys would compensate local businesses for losses caused by cancellations of fisheries, and it subtracted these moneys in the form of net profits from business claims (see Sec. IV. Private Sector Economic Impacts of the Oil Spill [Non-fishing]). The oil company also refused claims advances to cleanup workers, described below.

Exxon's reimbursements for losses proceeded only for a limited period of time after the spill; many who delayed in putting in claims did not receive compensation. So, Exxon put Cordovans (city government and business owners in particular) in the position of pursuing cleanup work that might be causing secondary damage to their environment, in order to mitigate economic losses caused by the primary damage of spilled oil. This conflict was compounded by the blackout of scientific information which was occurring due to pending litigation.

General awareness of the harm caused by the cleanup was evident by August 1989:

Many beaches remained blackened, but most scientists agree the crude oil spilled by the Exxon Valdez is less damaging at this point than the cleanup itself.

However, the task of assessing the effects of the March 24 Prince William Sound oil spill is becoming increasingly complicated by the near universal preoccupation with lawsuits . . .

Exxon is racing to treat the oily beaches that yet remain with barge based, high pressure, hot-water washing units. The state has pressed Exxon to continue this treatment on as much shoreline as possible despite increasing evidence that the application of 110-140 degree water is more harmful to intertidal species than the presence of the weathered oil.

In a recent study by NOAA, more micro-organisms were found alive in untreated oily beaches than in those subjected to Exxon's harsh hot-water wash. According to scientists with the National Marine Fisheries office, organisms residing in intertidal areas below rocks blasted with hot water end up smothered by the hydrocarbon plume generated by the treatment . . .

According to Cordova fisherman Riki Ott . . . Hydrocarbon components remaining in the weathered oil present a long-term threat to the environment. Studies have shown long-term damage to the reproductivity and growth of crab populations living in areas near past spills, Ott said. However, she agreed the hot water treatment was probably too harsh.

Legal issues are also complicating the search for hard answers to the spill's true effects. Friday, this fishing village was scheduled to

host a long-awaited, interdisciplinary meeting of scientists studying aspects of the spill. The meeting was cancelled. "It was cancelled principally because the agencies all had lawyers telling them they couldn't come: said John Harville, director of Cordova's new Science Center (Cordova Times, August 31, 1989:A1).

III.C. Fish Claims

1989: A Record Year: Preseason forecasts predicted a record commercial harvest of over 40 million salmon for Prince William Sound (Cordova Fact Sheet, May 7, 1989:3). Moreover, prices were "at an all time high" in 1988. The actual harvest of salmon in 1989 was substantially less than predicted, and prices for many species dropped radically (especially for pink salmon, coho salmon, and chum salmon). The following two tables (Tables 8 and 9) demonstrate this dynamic.

Residents of Cordova hold the greatest number of Prince William Sound fisheries permits (see Sec. I.A.6 Cordova's Economy). According to Alaska's Commercial Fisheries Entry Commission, in 1989 the following number of permits were assigned: Cordova, 634; Anchorage, 174; Valdez, 85; Homer, 83; Seward, 50 (Cordova Fact Sheet, May 23, 1989:2). Large sums of money hinge on each year's harvests as seen in Table 10.

Due to the above forecasts, fishermen as well as business owners had geared up for a record year in 1989 for Cordova's commercial fishery. They were "all inventoried up, all dressed up for the party that didn't come." As one respondent said:

The prediction was for 81 million fish for the 1989 season, half to be caught in Prince William Sound. Very low catches for the last 2 years, so prices were up. We all thought we've got it made! We can't lose. So that was the feeling in town.

Everyone was gearing up our boats, expecting to get rich that season. Then whammo! Right in the gutter.

Exxon's Voluntary Settlement Policy: After the March 24, 1989 oil spill, the herring, shrimp, and sablefish seasons were closed. In addition, periodic closures of salmon fisheries occurred. Class action suits against Exxon were initiated on behalf of a number of fishermen's organizations (see below). Exxon developed a "voluntary

Table 8

**AVERAGE PRICE IN DOLLARS PAID TO FISHERMEN FOR SALMON,
PRINCE WILLIAM SOUND, 1979-1989**

Species	1979^a	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
King Salmon	1.62	1.40	1.65	1.40	1.05	1.30	1.65	1.45	1.75	2.23	2.25
Sockeye Salmon	1.40	0.85	1.40	1.01	0.95	1.15	1.50				
Copper River				0.80	0.95	1.00	1.55	1.65	1.90	3.20	2.30
Bering River				0.80	0.85	0.95	1.10	1.65	1.90	3.00	2.30
Coghill/Unakwik Districts						0.90	1.20	1.37	1.75	2.68	2.00
Eshamy						0.85	1.10	1.34	1.60	2.77	
General Purse											
Seine								1.35	1.45	2.68	2.00
Coho Salmon											
Copper/Bering Rivers	1.10	0.95	0.95	0.86	0.75	1.10	0.85	0.94	0.93	2.35	0.60
PWS	0.39	0.39	0.39	0.40	0.30	1.10	0.40	0.46	0.55	1.86	0.70
Pink Salmon	0.38	0.42	0.44	0.23	0.24	0.26	0.22	0.23	0.40	0.79	0.35
Chum Salmon	0.53	0.50	0.50	0.38	0.24	0.26	0.29	0.33	0.39	0.73	0.35

Source: ADF&G, Annual Management Report 1990, in progress.

- ^a Based on processor reports, fish tickets and other sources. Prices are monitored throughout the season and a weighted average is generally used. Prices generally do not reflect post-season adjustments. Prices are an estimate only.

Table 9**COMMERCIAL SALMON HARVEST BY SPECIES FROM
ALL GEAR TYPES, PRINCE WILLIAM SOUND, 1971-1990^a**

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1971	20,142	741,945	327,697	7,312,730	579,552	8,982,066
1972	23,003	976,115	124,670	57,090	46,088	1,226,966
1973	22,638	473,044	199,019	2,065,844	740,017	3,500,562
1974	20,602	741,340	76,041	458,619	89,210	1,385,812
1975	22,325	546,636	84,109	4,453,041	101,286	5,297,395
1976	32,751	1,008,912	160,496	3,022,426	370,657	4,595,240
1977	22,864	943,943	179,417	4,536,459	573,166	6,255,849
1978	30,435	505,509	312,930	2,917,499	489,771	4,256,144
1979	20,078	369,583	315,774	15,615,810	349,615	16,670,860
1980	8,643	208,724	337,123	14,161,023	482,214	15,197,727
1981	20,782	786,469	396,163	20,558,304	1,888,822	23,648,540
1982	47,871	2,362,328	623,877	20,403,423	1,336,878	24,774,377
1983	53,879	908,469	365,469	13,977,116	1,048,737	16,353,670
1984	39,774	1,303,515	609,484	22,119,309	1,229,185	25,301,267
1985	43,735	1,464,563	1,025,046	25,252,924	1,321,538	29,107,806
1986	41,128	1,288,712	626,240	11,410,302	1,700,906	14,868,288
1987	41,909	1,737,989	175,214	29,230,303	1,919,415	33,104,830
1988 ^b	31,797	767,674	477,816	11,820,121	1,843,317	14,940,725
1989 ^b	32,006	1,175,238	424,980	21,886,466	1,001,809	24,520,499
1990 ^b	22,163	911,607	524,274	44,165,077	967,384	46,590,505
10-Year Avg. (1980-1989)	36,252	1,200,168	486,151	19,081,929	1,377,282	22,181,773

Source: ADF&G, Annual Management Report 1990, in progress.

^a Includes catches by all gear types and hatchery sales from the Eastern, Northern, Coghill, Unakwik, Northwestern, Eshamy, Southwestern, Montague, Southeastern, Cooper River and Bering River Districts.

^b Includes confiscated and educational special use permits. Also includes hatchery sales harvests and carcass sales.

Table 10

**EX-VESSEL ESTIMATED VALUES IN DOLLARS OF GROSS EARNINGS
IN THE LIMITED PRINCE WILLIAM SOUND FISHERIES, 1987-1988***

Fishery	1987	1988
Salmon seine	44,960,323	33,922,443
Salmon drift net	27,054,624	36,848,153
Salmon set net	335,038	1,560,315
Herring roe seine	4,930,463	5,937,353
Herring roe gillnet	509,803	456,278
Herring roe pound	1,836,180	3,831,969

Source: ADF&G, Annual Management Report 1990, in progress.

* Data are derived from fish ticket files and surveys of processors.

settlement policy" over the next few months. On April 13, 1989, Don Cornett, Alaska Coordinator for Exxon, made the following announcement:

A three step payment procedure has been placed into operation--advances, partial payments, and final settlements--to expedite the flow of cash.

In order to provide payments for those in need of immediate cash, a cash advance system is in place. With minimum documentation to establish the validity of a claim and the need for immediate cash, advances are being made with a receipt requested and the granting of the right to offset against subsequent settlements. The individuals receiving the advance give up none of their rights but receive partial payment toward the ultimate amount.

Partial settlements can be effected to settle claims for events that have already occurred such as the closing of the herring season. Under this procedure a final settlement is negotiated, the full amount is paid and a release is obtained only for the event being settled. Individuals give up none of their to claim damages from any other events.

Final settlements will be negotiated as soon as all the factors are known and documentation can be finalized.

Special financing arrangements are being developed to assist in solving the cash flow problems of businesses such as canneries. The arrangements will be made through Alaska banks to the maximum extent possible.

Other steps such as maximizing the use of local procurement, local hiring, and expedited payment processing for invoicing have also been implemented.

All of the efforts have been put in place to mitigate, to the extent possible, the economic impact on those individuals and companies directly affected by the oil spill.

We are hopeful that most can be handled to the satisfaction of the claimants, through this process. However, for some few cases where agreement cannot be reached, we support voluntary arbitration by a panel to be selected by Exxon and the claimant. It is important that the arbitration alternative be agreed by both parties and that both are assured of a fair hearing by an impartial group of arbitrators. We understand legislation along these lines was introduced this morning.

Anyone having a claim is encouraged to contact the nearest Exxon claims office and we promise to give expeditious consideration to their claim (Cordova Fact Sheet, April 17, 1989:2).

Despite Exxon's declaration that expeditious cash advances and financing would be available, many fishermen and business owners hit dire financial straits before receiving any cash (see Sec. IV. Private Sector Economic Impact of the Oil Spill [Non-Fishing]). Some respondents complained that Exxon took advantage of their financial desperation to force them to sign releases rather than receipts. An official of the Fishermen's Claims Office recounts:

On early claims, net hangers had to sign partial releases. And on herring business claims, tenders signed partial releases. On salmon claims, we got it done on a receipt bases. People were desperate for money, so they signed releases.

Attorneys representing fishermen (permit holders and crew members) in class action suits against Exxon, concerned that some fishermen were signing releases, sent the following notice to CDFU on June 5, 1989:

Through negotiations with top Exxon and Alyeska officials, and with support from various government officials in Washington and Juneau, agreement has been reached on a method by which you can submit to Exxon's claims representatives in your local community proof of your losses so far. Exxon has agreed to make immediate payment as an advance against your eventual full claims.

Exxon has also agreed that you will not be required to sign any release in order to be paid. All you will need to sign is the "Funds Receipt and Claims Credit" form, acknowledging the amount paid. Acceptance of this interim payment, and signing this form, will not preclude you in any way from submitting further claims for the herring fishery or for subsequent losses.

Exxon has agreed to honor this procedure for all claimants, whether or not you have a lawyer. You need not retain a lawyer or pay any fees to anyone in order to submit your claim and receive immediate payments. If you want or need help in putting together your claim, or in negotiating the amount with Exxon's claims representatives, you may consult with representatives from law firms that have filed class action lawsuits (on behalf of CDFU, the Prince William Sound Seiners Association and the PWS Setnetters Association, among others) . . . Exxon has agreed to pay a processing fee for legal services provided to you in connection with your claim. Each of the firms working at the claims offices . . . has agreed that these legal fees will be placed in an escrow fund. These firms have agreed to provide claims services to you as part of their responsibilities as class action counsel, and will apply for payment from the escrow fund only as the judge specifically approves (Cordova Fact Sheet, June 7, 1989:3).

Exxon announced their "voluntary settlement of claims" for salmon permit holders, modeled after their herring permit holder's claims policy, in June 1989:

Exxon announced June 22 terms for the voluntary settlement of claims by salmon permit holders in Prince William Sound, Kodiak and Lower Cook Inlet.

The guidelines are based on extensive discussions with Cook Inlet Seiners Association, Cordova District Fishermen United, Kodiak Beach Seiners' Association, Prince William Sound Setnetters' Association, United Fishermen's Marketing Association, Inc., and other groups.

Dick Harvin, Exxon's Claims Manager, said, "Our program is designed to ensure equitable and prompt compensation if there are spill-related shortfalls."

Harvin added, "Assistance payments will also be available under the program's guidelines. In addition, permit holders will not have to waive their rights or release any claim they might have by accepting such assistance. Funds received will be an offset against existing and/or future claims."

Individual salmon permit holders will be compensated for their share of the pre-season Alaska Department of Fish and Game projected salmon harvest based on their two year historical average share and their actual catch.

"The salmon settlement terms are largely modeled after our highly successful herring settlement program, under which more than 60 percent of the pound fishing permit holders' claims have been paid," said Harvin. "We hope it will be as well received as the herring settlement program" (Cordova Fact Sheet, June 23, 1989:1).

Hopes that Exxon's herring or salmon settlement policies would be well received were dashed as fishermen objected to a number of problematic features. These include the low price paid for fish, the estimation of catch based on a prior 2-year average, and the necessity to fish in order to file a claim.

Low Fish Prices: Low fish prices were a leading outrage, and fishermen confronted CDFU officials, who had negotiated with Exxon on its settlement policy with their protests. Officials of CDFU responded that there had really been no negotiations, since Exxon simply did whatever it wanted to:

Angry fishermen demanded explanations from CDFU president Gerry McCune in a meeting last Friday. The meeting was called to explain the recent guidelines released by Exxon for the 1989 salmon season claims.

According to a June Daily News article, the guidelines were "a plan worked out with fishing groups from Cordova, Kodiak and Homer." Local fishermen questioned how the plan was arranged and what was negotiated.

"These are Exxon's guidelines, not ours," McCune told the group of 200 fishermen. "We put out proposals in and argued like hell to change three of four things. They said they were going to put it out anyway and we said, 'Okay, we'll go with this.'"

The Elks' lodge dining room was filled to capacity during Friday afternoon's meeting as fishermen attempted to understand what the guidelines will mean to their season.

"Sounds like we're going ahead with this program," one fisherman said. "We're getting dictated to. I don't like it." "There's no use arguing with me; these are Exxon's guidelines," McCune said

For the past two weeks CDFU was working with Exxon on adequate claims settlements. [McCune] told fishermen CDFU tried to change as many things as they could but talks came to a standstill. "We're happy with the things we got," he said.

In an interview, McCune said CDFU did not negotiate with Exxon on the guidelines. "You don't get to negotiate much when someone lays something on the table and says this is it."

Besides the issue of processing claims, fishermen questioned low salmon prices. "Prices should be high; this is where most of them will be caught," one fisherman said.

"It falls on us to prove the oil spill affected prices," McCune said.

Another fisherman said that low prices were a "conspiracy among Exxon and the processors to keep prices down. We can't accept *the burden of proof.*"

The guidelines do not list a price value for fish in the claims. "The bad thing is they are using this year's prices. Processors will pay what they want to pay. People have been screaming at me for a week about prices," McCune said (Cordova Times, July 6, 1989:A1-5).

Cordovans did not get the support they would have liked from the State Commercial Fisheries Entry Commission (CFEC). In a memo to the governor dated April 13, 1989, CFEC Commissioner Phil Smith stated that the agency would not estimate or anticipate 1989 harvest levels and prices:

To do so would be pure speculation on our part; fishermen/businessmen and processors are in the best position to estimate prices, while ADF&G pre-season harvest forecasts may be the best estimate of total anticipated harvest (Cordova Fact Sheet, April 20, 1989:2).

Fishermen had gone into the 1989 season expecting about 80 cents a pound for pink salmon (see Table 8 above). Respondents in 1991 are still wondering whether low prices offered by the large foreign-owned fish processors (who received secret settlements from Exxon) were part of a conspiracy to offset processor and Exxon losses at the expense of fishermen. Cordovans are angry that Exxon shifted the burden of proof to them and that the oil spill caused fish prices to drop. Fish prices respond to an intricate dynamic of human and natural forces, and cause and effect relations are difficult if not impossible to prove. However, applying rationales described below, Cordovans have little doubt that the oil spill hurt fish prices.

In July 1989, processors were paying 35 cents a pound for pink salmon, 45 to 50 cents for bright chum salmon, and 20 to 25 cents for dark chum salmon (Cordova Times, July 6, 1989:A1). This was a big disappointment for fishermen, and CDFU announced that it was investigating the cause for the low prices (Cordova Times, July 6, 1989:A1).

One reason cited for low prices was that major buyers might fear that the oil spill would taint public perceptions of the fish. For instance, immediately after the spill, Japanese buyers stated that if any roe on kelp held perceptible traces of oil, they would

not buy it (Cordova Times, March 29-30 1989:A3). Respondents likened this to a botulism scare in the early 1980's, which caused a radical drop in prices.

Other reasons cited for low fish prices refer to the lack of dynamics present in a normal fishing season, that would ordinarily drive prices up. For instance, competition was reportedly dampened because: (1) there was a lack of floating processors on the Sound due to spilled oil and closures; (2) many people worked the spill and fewer fished; and, (3) Exxon promised to make up the price difference at the end of the season, lessening pressure to bargain. One respondent, recognized locally as an expert on fish prices, explains:

Pink salmon is our main fish here. That was the biggest effect . . .

Fish go through a 20-year cycle. In 1988 dollars, the prices went down in 1964 [the year of the earthquake], peaked in 1974, went down in the early 1980's [with the botulism scare], and were on their way to a peak in 1988.

In 1972-1974 the price was about 88 cents a pound for pink salmon. This went down to about 25 cents in 1982-1986 because of botulism. A guy died from a can of pink salmon in Belgium. People thought fish were poison. You couldn't sell it.

The fishermen used to have a union to negotiate with the processors, to advance 90 percent of the price. There was fair inventory too, so the price stayed at about 25 cents from 1982 to 1986. So that's in people's memories.

Then in 1987 there was a low volume year and the price came up to about 40 cents, where it was before botulism. Then in 1988, when all the prices were going crazy because of the yen, there was low volume again, and the price was up to 80 cents. It had been there before and above, from 1964 to 1981. But the price was going up, and volume was low, with inventories running out.

In 1988 there were only 10 million salmon, with prices at 80 cents a pound. In 1989 they expected 40 million fish, at a price of 80 cents a pound or more. So, the expectations were high. What could go wrong? People were gearing up, expanding in anticipation of a record year. People went crazy.

With the spill of 1989 . . . pink salmon, there was no inventory, and people expected at least 60 cents a pound. The season opened at 35 cents a pound. Not too strange. For instance in 1987, the price opened at 23 cents a pound. Through the season the floating processors compete, so the price ends up at 45 cents a pound. In 1988 prices ranged from 30 cents to 80 cents a pound.

After the spill in 1989, the price opened at 35 cents and closed at 35 cents. There were no floating processors, and no dynamics of a regular season which would force prices up. There were worries about oil tainting the fish--like the botulism scare. One can ruined the market for 5 years. How do you inspect 40 million fish? So there was no dynamics, and no competition for fish, so no rise in prices.

Also, lots of people worked the spill, so they weren't fishing; so no dynamics.

And, Exxon said they'd make up the price at the end, so there was no pressure to bargain the price up.

So, the drop from 80 cents a pound to 35 cents a pound was the same as the drop from botulism. So the price of fish was whacked down.

A big study for \$200,000 for the class action attorneys was carried out. If you drop the price a penny, at 40 million fish, that's \$1.4 million. Each fish weighs about 3.5 lb., with pink salmon.

Botulism is fresh in everyone's mind. The price is out of control and here it goes again. The fishermen are approaching Exxon about prices now.

The price drop is a complex dynamic: no one knows for sure why it's down . . .

In 1989 we had 30 cents a pound. In 1990, we had 35 cents a pound. This year, they're talking 20 to 25 cents a pound. That's below botulism prices.

I've compiled all the barroom bull shit. Fishermen fish, and then come to the bars and talk about fishing. . . . The figures I've given you are the talk on the street. The feeling is "The fish price has been affected."

Low Fish Quality: Market effects of harvesting older fish (of darker, poorer quality) were described with the bankruptcy of the local fish processing cooperative (see Sec. IV. Private Sector Economic Impacts of the Oil Spill [Non-Fishing]). The issue of public perceptions of fish being safe to eat was examined by the Alaska Seafood Marketing Institute:

While DEC and ADF&G are concerned about the "technical" quality of fish, the Alaska Seafood Marketing Institute is focusing on the consumer's and trade market's perceptions about the quality. "This is all about perception, not about reality," said Merry Tuten, ASMI's executive director. The institute has conducted polls since the spill among both trade industry personnel and the consumer. The trade people are concerned about the spill's effect on fish prices, she said, and the consumer has only recently begun to express concerns about Alaskan seafood quality (Cordova Fact Sheet, April 21, 1989:2).

The Alaska Seafood Marketing Institute received \$800,000 from Exxon to pay for research projects in June 1989 (Cordova Fact Sheet, June 30, 1989:4). The organization published results from market surveys in September. While the report appears to conclude that consumers were not affected by the oil spill, the data seem to indicate that they were. For instance, three out of ten consumers in the United States and Britain said that they did not believe that Alaska seafood was safe to eat:

Results from market surveys commissioned by the Alaska Seafood Marketing Institute indicate that awareness of the Exxon Valdez oil spill among consumers has not affected purchases of seafood from Alaska.

Hundreds of seafood consumers, retailers, and wholesalers of Alaska seafood were interviewed in the U.S., France, and Britain. Similar market research is underway in Japan.

In France and the United States, one household in five reported reducing or eliminating seafood likely to have come from Alaska, and it was not due to an association with the spill. Most respondents mentioned price.³¹ In Britain only one household in ten reported reducing seafood purchases.

In the United States and Britain three consumers in ten said they do not believe Alaska seafood is safe to eat. In France, only two consumers in ten said that.

For the trade and consumers, the principal reasons for believing that Alaska seafood is safe is that it is inspected by federal and state governments before it reaches them.

"We are encouraged by the results of the surveys, and see this as one indicator of the success of our inspection and communication programs," said Merry Tuten, ASMI's executive director.

The Alaska Seafood Marketing Institute was established in 1981 and is headquartered in Juneau, Alaska. ASMI oversees worldwide marketing programs for Alaska's \$3 billion wholesale seafood industry (from the "Oil Spill Chronicle," ADEC, Governor's Oil Spill Coordination Office, as cited in Cordova Fact Sheet, September 29, 1989:3-4).

Fishermen were intensely concerned about fish quality, and their anxiety was maintained at a high pitch as State inspectors declared short openers based on the movement of oil throughout the Sound. Many did not have complete confidence in the ability of State agencies to keep up with oil sightings, and some felt that the fisheries should simply be shut down rather than risk marketing contaminated fish. (Many cited the botulism scare as an example of how public safety concerns could dampen a market for years.)

Respondents were frustrated that Exxon's claims policy forced them to fish in waters they were unsure of, in order to file a claim; the company would only pay the difference between projected earnings from past years and what a fisherman earned in

³¹Although, prices paid to fishermen were down in 1989.

1989 if (s)he fished. Fishermen felt that only Exxon benefitted economically from fish harvesting under these risky conditions. This caused conflict between Cordovan fishermen and State agencies who controlled the openers:

Fishermen told the Alaska Department of Fish and Game Wednesday they want the Prince William Sound fishery shut down. Resounding applause followed the statement by one fisherman that it would be better to "shut the whole thing down and give us some direction," than to wait for short openers with the potential for further contaminated fish to be harvested.

ADF&G management biologist James Brady told the crowd that he heard "a lot of support" for that proposal but said he had also heard from people needing to pay bills. "We owe it to the industry to not burn any bridges," Brady said.

Ken Florey, Regional Supervisor for ADF&G, said the commissioner has determined it to be in the state's best interests to continue the Sound fishery. "If we can determine an area is clean, and if we can have an orderly fishery, then we will fish," Florey said.

At the two-hour public meeting, the fishermen saved the brunt of their frustrations and anger for the Department of Environmental Conservation. Complaints ranged from being unable to contact DEC officials when oil sightings occur to not having qualified inspectors and not having inspectors on the fishing grounds.

Earlier in the meeting, Brady and Florey described the events leading to the decision last week to open fishing in the Esther Subdistrict and Cannery Creek hatchery area. Florey said the departments had probably not communicated as well as they should have and, consequently, a decision made 2-3 weeks ago to not open fishing in any areas with any oil sheens was not relayed to Cordova.

Brady announced the July 26 opening of the Esther and Cannery Creek areas to seiners and gillnetters on July 21. On Monday, July 24, a DEC overflight of the areas indicated there was an oil sheen in the fishing area but Brady said he reviewed the reports and determined that "there was no appreciable risk of adulteration" of the salmon harvest. He surveyed parts of the areas before the

Wednesday morning opener and saw no evidence of oil sheens on Tuesday or Wednesday.

The first report of problems from fishermen did not reach Brady until 8 p.m. Friday night. He announced the emergency closure about 11 a.m. Saturday after making contact with two of the vessels which had encountered oil. "I accept responsibility for the decision to open the fishery" Brady stated.

The department will proceed in "a very conservative manner from here on," he noted. He later said there will be a very strict interpretation of what constitutes an oil sheen. The advance notice on fishing openings was extended Wednesday from 24 to 48 hours and regular updates will be announced Mondays, Wednesdays, and Fridays.

Prior to any opening, good areal survey conditions will be required and future openings will be shortened in length to avoid larger problems should oil sheens move into an open fishing area.

E.J. Cheshier said he and other fishermen were most concerned about their market and the impacts on it from closures due to oil. He compared the risks of opening fishing now to those associated with the pipeline's construction to Prince William Sound. "You took a chance on maybe wrecking our market" Cheshier said. "I'm appalled that you took that chance." Prolonged applause from the audience followed his statement.

Manny Soares, the director of the DEC Seafood Quality Division, said his office had only received one report of oil in previously opened fishing areas. He said ADF&G must have verification on any reports before deciding to close an area.

When asked what better provisions for reporting oil sightings will be made, Soares said reports should be directed to DEC officials, in Cordova or elsewhere.

The meeting ended with some fishermen attempting to organize another meeting for fishermen only to draft letters or take other action complaining about their treatment (Cordova Fact Sheet, August 3, 1989:2-3).

According to respondents, Exxon's blatant unconcern over market impacts of poor or unsafe fish quality continued to shape its claims policy in 1990. Exxon officials announced that the company would not honor claims from fishermen who lost their catch due to the State's "zero-tolerance" oil contamination policy, adopted in 1989 to protect the reputation of Alaska seafood after the Exxon Valdez oil spill (Cordova Fact Sheet, April 9, 1990:5). Exxon Claims Manager Dick Harvin stated that 1990 Exxon surveys showed that conditions had "improved quite markedly" since suspension of the oil cleanup in September 1989. Harvin said that, "Therefore, there shouldn't be any closures and therefore we don't have a claims policy on closures" (Cordova Fact Sheet, April 9, 1990:5). Exxon General Manager Otto R. Harrison opposed fishery closures before the Senate Oil and Gas Committee, maintaining that monitoring the quality of fish caught was preferred (Cordova Fact Sheet, April 9, 1990:5). Cordovan fishermen disputed the ability of state agencies to inspect tens of millions of fish, as mentioned. Respondents in 1990 and 1991 also disputed Exxon's characterizations of their environment as "clean" or "cleaned" (see below).

In seeming contradiction to Exxon's contention that environmental conditions were so improved that no closures of fisheries should be necessary, Claims Manager Harvin announced that Exxon would cover claims in 1990 regarding oil-fouled nets and gear, where the evidence was obvious (Cordova Fact Sheet, April 9, 1990:5). Harvin added, "But in terms of an expensive claims program like last summer--there won't be one" (Cordova Fact Sheet, April 9, 1990:5). Respondents in 1991 cited gear contaminated by oil in 1990 as evidence that fish quality continued to be jeopardized by Exxon's fouling of Prince William Sound.

Fish Quantities: While low fish prices was a major source of complaint regarding Exxon claims payments (as well as a chief negative impact cited for the oil spill), Exxon's determination of the quantity of the catch based on past 2-year averages was a further irritant. With a record forecast for 1989 of over 40 million fish, respondents wondered how Exxon could possibly justify a projection based on past averages. Salmon harvests in Prince William Sound for 1987 and 1988 were

approximately 33 million and 15 million fish, respectively (see Table 9). Most respondents concluded that the oil company did not have to justify their claims policy, because "Exxon was calling all the shots."

Cordovans are extremely bitter that the exceptionally large forecasted harvest for 1989, rather than benefitting fishermen economically, benefitted Exxon. More fish were caught than could have been caught under the same circumstances in previous years, reducing net losses; and Exxon used the size of the harvest to argue for exceptionally low fish prices in claims awards.

That Exxon continues to cite large fish returns for 1990 and 1991 to discount spill impacts aggravates Cordovans immensely. For instance, an Exxon news release points out:

Under Exxon's policy, fishermen are reimbursed for the difference between their normal projected catch, based on historical data, versus their actual catch. While salmon seasons have been cancelled or delayed in some areas affected by the spill, this year's statewide salmon catch has been the second largest in history (Cordova Fact Sheet, September 12, 1989:2).

Cordovans believe that the catches from 1989 on would have been even bigger without the oil spill and with a better market. They further believe that the oil spill represents one of a series of catastrophic blows to their fishing environment; the damage to Prince William Sound may not be measurable only in terms of this one incident according to this view. The denial by State and Federal agencies of making biological data public due to pending litigation exacerbates the uncertainty. Also, many respondents do not believe that settlements paid to the Federal or State governments will be used to compensate their losses. One fisherman explains:

The oil spill is one of a series of stresses on the Sound: the over fishing, followed in 1964 by the earthquake. This tilted the southern Sound and raised the northern Sound, decimating stocks . . .

The spill didn't touch the flats directly, but indirectly it entered the migration route of the fry. So it killed small fish and plankton which they feed on.

It definitely damaged salmon stocks, but it's hard to prove. The research data are still locked up by the Federal and State governments and by Exxon, because of the suits. So nobody knows what the researchers found.

In 1989 the environmental impact was quite severe, because nobody knew what the long term consequences would be. Everybody had doubts that we could go on with a normal life as fishermen. This question of damage is still one that hangs in the air.

[The 1989 season] was severely impacted. We did catch some fish in clean areas, but we caught them late because they had to test for oil, so the catch was way down. Fishing was severely disrupted all the way into the market place.

The quality of the fish was down because they were ready to spawn by the time they were caught.

The fry that came out of the hatcheries swam through the contaminated water. We will never know what the impact was. If they weren't killed outright, they might have damage to homing instincts, growth patterns, and so on.

We had an excellent spring with lots of plankton, so the hatchery fish were supported by a new plankton bloom, after the oil killed the plankton that was already there.

Pink salmon spend 1 year in the ocean and come back; the other types take longer.

In 1990 we had a record year for survival. There was 9- percent survival, vs. a 5.5-percent survival on the average. This was because of the high plankton, but it could have been 12 percent or higher without the oil . . . the fish were small. Nobody knows why.

Ninety percent of salmon mortality occurs in fresh water. Ten percent occurs in the ocean. The hatchery returns are over 10 fold what Mother Nature can put out . . .

Prince William Sound is a fragile environment. The trees take 100 years to grow. The fish are dependent on the trees, to hold moisture in, keep temperatures the same, streams to flow, and so on.

So, the 1964 earthquake was a stress on the fish, with the uplift. Logging is another stress. The oil development here is a problem: the plants at Valdez.

So how much can the environment stand? If you heap one stress after another, the Sound could be jeopardized.

Exxon hasn't done anything for restoration. The restoration problem has only been talked about.

Everybody is suing everybody. The Federal Government doesn't even know what to charge. How much for an oiled moose? What's the cost of a sea otter? And what do you do with the money? Buy tanks?

So the individual claims and damages too often aren't settled: just an initial payment for damages.

So, Hickle wants \$1.4 billion over time, and so on. But will the government use the money to mitigate damages? Who knows?

Exxon wants to settle out the claim and get out of the liability. They have little to say about how those moneys are spent for restoration.

You can't restore; things are dead. Things are impacted. How do you restore an ecosystem? Paying a bunch of money doesn't restore the tube worms.

We still have single-hulled tankers. Who knows? You're always going to be subject to those perils. We predicted this. Once every 10-20 years. It's statistically likely . . .

My income decreased, because of the disrupted fishing season that year and afterward. The season was closed most of the year. Exxon made a voluntary payment for that loss, but the disagreement is over the final settlement.

I'm having to estimate my consequences for the TAPS fund. And the data is locked up so I have no way to estimate the consequences, for instance, for the degradation that will take 10 years to restore.

No one knows what the actual damage will be, over the years. People will finally settle, but without the best information available. And, no one can really nail down what would have been.

If I tell Exxon \$150,000, they'll pay it. But if there's really been genetic damage to some stocks, what am I going to do with that? So everyone is fighting over this.

Exxon Claims Advances: A great many fishermen are still pursuing settlements which were partially paid when Exxon began a system of claims "advances." These cash advances were provided at the urgings of CDFU and fishermen and litigation organizations, who were concerned that some fishermen were being forced to sign releases because they had no money.

Some respondents reported in 1991 that Exxon paid these advances, and then refused to continue processing claims, pending litigation. These individuals were referred to the TAPAA fund, which they perceive as inadequate to cover all losses. Respondents also believe that TAPAA claims may take years to settle.³² In general, subjects described their claims "advances" as constituting their "settlements" from Exxon.

The first of two Exxon claims advances in 1989 involved a set cash payment for all gillnet permit holders and seiners. Those working on the oil spill could not apply for these advances:

As a result of the efforts of the Cordova District Fishermen United, Prince William Sound Seiners Association and the Plaintiff's Class Action Committee, the Exxon Claims office will start an "advance" payment program for Prince William Sound fishermen later this week.

³²TAPAA claims are discussed in succeeding sections.

There are two "advance" programs, one for gillnet permit holders and one for seine permit holders. Gillnet permit holders will be eligible for a \$10,000 advance and seiners will be eligible to receive \$30,000.

To obtain this advance from Exxon, the permit holder will need to provide:

1. A copy of their permit card.
2. A copy of their ADF&G vessel license card, or if they lease their boat, a copy of the lease or a statement from the boat owner about the terms of the lease agreement.
3. Identification of their crew members, spotter pilots and boat payments; Exxon will deduct these shares and pay them directly to those individuals.
4. A copy of the second page (the summary sheet) of your Commercial Fisheries Entry Commission (CFEC) computer readout.
5. For gillnetters who usually do not have a crew, a statement that you have no crew.
6. To be eligible for the Advance program, you will NOT have to show hardship, but anyone who is working on the oil spill will NOT be eligible for an Exxon advance.

All forms needed for the "Advance" claim are available through the Cordova Fishermen's Claims Office. In addition, the Fishermen's Claims Office has available a Notary for the sworn statements that need to be filled out (Cordova Fact Sheet, August 15, 1989:1).

A second advance payment covered 85 percent of individuals' total claims, as calculated by Exxon and contested by fishermen. As noted, many recounted that this 85 percent of their total claim was all that they received. Exxon reportedly refused to process claims any further after this second payment. Again, only those who fished could file for this claims advance:

The Exxon Claims office began accepting applications from fishermen last Monday for the 85 percent Advance No. 2. The office was swamped with applications early in the week but Claims Supervisor Walter Moore said Thursday that the work is going more smoothly.

Packets of the forms necessary to apply for this second advance payment are available at the Exxon Claims office on Breakwater Avenue. Those fishermen who submitted applications for the first advance payment do not need to resubmit their fishing records from the Commercial Fisheries Entry Commission but they are required to fill out additional forms to receive the second advance and must submit copies of their fish tickets for the 1989 season (copies can be made at the Exxon office).

A few additional clarifications on the 85 percent Advance No. 2 program:

- * All permit holders in PWS who participated in the 1989 fishery are eligible for this program.

- * Those who received advances in the Advance No. 1 program will have those advances deducted from their 85 percent advance payment.

- * Also, deductions will be made for 1) their total 1989 catch; 2) crew members and spotter pilots; 3) boat lease payments due (for those skippers leasing a boat); and 4) 4%, deduction for hatchery and variable expenses.

- * There are two main reasons for this second advance payment program: 1) Many fishermen's records for past seasons, provided by the Commercial Fisheries Entry Commission, are incomplete and require fishermen to submit additional fish tickets from past season to CFEC for correction. Therefore, final settlements for fishermen cannot be made until the CFEC has time to enter corrections received from fishermen.

2) Exxon is currently reviewing information related to the grounds price on which the 85 percent advance is being made. There may be a price adjustment at a future date.

- * Fishermen do not have to participate in either the Advance No, 1 or No. 2. They may choose to wait for a final settlement after price adjustments and CFEC records have been finalized.

- * Permit holders with no prior catch history will receive "average" amounts, equal to \$28,926 for gillnetters . . . For seiners, the average catch is equal to \$171,915. Under the Advance No. 2

program, fishermen are eligible to receive 85 percent of these amounts with deductions as noted above (Cordova Fact Sheet, September 1, 1989:1).

Under pressure from fishermen's claims attorneys, Exxon announced that it would grant certain exceptions to its standard claims formula. These announcements are cited below, although fishermen and claims officials recounted in 1991 that exceptions were administered in an uneven fashion.

Exxon's first announcement of exceptions to their claims formula was in response to a letter of complaint by Cordova's Oil Spill Disaster Response Office Director. The oil company's letter defends Exxon's standard claims formula, without addressing the key issues of the projected increase in the size of the 1989 catch and the radical drop of fish prices after the oil spill. It states that Exxon's program "utilizes" the ADF&G preseason projected harvest, but (in seeming contradiction) that permit holders would be paid on the basis of a 2-year historical average.

This statement exemplifies a general reported tendency of Exxon officials, particularly irksome to respondents, to obfuscate issues. In discussing the effects of averaging a 2-year catch history, Exxon's Claims Manager argues that the company had wanted to use a 3-year average catch, which would have "smoothed out" irregularities; this was changed at the request of fishermen's organizations. Clearly, the size of salmon catches has increased steadily over time (see Table 9). In this case, the inclusion of the 1986 catch (a total of approximately 15 million salmon for PWS) would have simply diluted this increase (the 1987 catch being approximately 33 million, the 1988 catch approximately 15 million, and the 1989 catch projected at over 40 million). This would have exacerbated the difference between Exxon's projected 1989 catch and fishermen's expectations for that harvest.

Exxon's letter notes that fishing is a "high risk business," and refers to impacts of the Exxon Valdez oil spill as a "new" risk. This equation (of spill damages with risks) appears to subsume damages caused by Exxon's oil spill under the general category of normal risks:

Dear Mr. Treadwell:

We recently received your August 30, 1989 letter concerning "exceptions" to the guidelines being used to administer claims from salmon fishermen. We are in the process of developing procedures to handle exceptions and will provide additional compensation to those individuals who have extraordinary circumstances. However, we also believe that fishermen's claims attorney's Graham Bell's assertion that the program is unfair to 50% of the fishermen is an overstatement.

As you are aware, fishing is a high risk business. The program we have put in place this year in Prince William Sound was designed to address the "new" risks this year to the fishing season which occurred as a result of the M/V Exxon Valdez oil spill. The program utilizes the Alaska Department of Fish and Game pre-season projected harvest with each individual permit holder being compensated on the basis of an average of their two year historical share of the catch. Thus, it is true that a permit holder who had a 30% increase in his catch in 1988 versus 1987 will have his 1989 compensation based on a 15% reduction versus his 1988 catch. However, on the reserve side, the same program will provide a 15% increase in compensation in 1989 to a permit holder whose catch in 1988 dropped 30% versus 1987. The original proposal which Exxon presented to the fishermen's groups representatives on June 20, 1989 would have used three years' history as the basis for 1989 compensation. This would have further "smoothed out" large changes between 1987 and 1988 performance. The program was changed to two years at the request of the fishing groups in the meeting.

The procedures for exceptions we are developing will address permit holders who have extraordinary reasons for having extremely low catches in one year. It will also address issues involving "new" permit holders who can prove that they have a fishing history in the area above the average performance.

Your letter also stated that the calculation which was done to arrive at the participation factor to use for a new drift gill permit holder included 100 gill netters who fish only the Copper and Bering River districts. *This statement is not correct and the calculation excluded gill netters who only fished the flats.* It was solely based on 1987 and 1988 harvest values and drift gill permit

holder participation from areas in Prince William Sound other than the Copper and Bering River districts.

In conclusion, we realize that there are legitimate exceptions to the guidelines and intend to address those cases this year. Our primary focus to this point in time has been to concentrate on the overall program to insure that the majority of the people receive compensation in a timely fashion. The guidelines do cover five different fishing areas with approximately 2000 permit holders in the program. As we complete this primary focus, we will move into addressing exceptions on a case by case basis.

We appreciate the chance to discuss this issue with you and please contact us if you have any questions.

Sincerely, Richard T. Harvin, Exxon Claims Manager (Cordova Fact Sheet, September 21, 1989:2).

Exxon recognized two factors for consideration in determining exceptions to their standard claims policy. One factor was significant capital expenditures for upgrades. This principle was reportedly applied unevenly, and the majority who upgraded were not compensated. A official at the Fishermen's Claims Office reports:

Exxon hasn't been even-handed in paying off. As time went along they got better. At first they were arbitrary. A major inequity was that a fisherman who usually made \$8,000 got \$10,000. He went to Exxon and said he'd upgraded his equipment, and he got another \$18,000. I tried that on 30 other identical requests with the same conditions and Exxon said they'd pay off, but they didn't. They just refused to act on them.

The second exceptional factor involved the adjustment of the average catch figure. Here Exxon referred only to past years, ignoring the projected harvest increase for 1989:

As you are aware, our voluntary salmon compensation program was developed to fairly compensate fishermen who were directly impacted by the M/V Exxon Valdez oil spill. Our guidelines and methods of calculation provide a fair and reasonable basis for determining the impact of the spill. However, as with all programs that apply to a large population, there may be a small number of permit holders with extenuating circumstances who deserve additional consideration.

We have isolated two groups that may need additional evaluation to determine if their claim should be considered in a different manner. If you identify such cases, the files should be sent to Rich Eichner, Jim House or Dave Henry for review and a final decision. The key to determining if the file should be forwarded is a pattern of catch history which indicates that the use of an 'average', or one of the actual years in the calculation, is clearly at a significant variance with the pattern for other years.

1. Fishermen who have had to use an "average" year, due to missing a year being used in the calculation, or being a new permit holder, may deserve additional consideration if he/she was consistently above average in other years. Documentation of this will be required.
2. There may be fishermen who have an abnormally low year due to an extraordinary circumstance such as medical problem, major boat repair, or a similarly rare and unforeseeable event. The claimant's circumstance must significantly affect at least one-third of the season and be well documented.

In addition, catch exception guidelines due to significant capital expenditures for boat and gear upgrades are being considered. However, until those considerations are complete, we should continue to deny exceptions on that basis (From a September 19 Exxon memo sent to all Exxon Claims Offices, as cited in Cordova Fact Sheet, September 27, 1989:1).

In general, respondents described a claims process which diverged from Exxon's publicly announced policies. The application in practice of the Exxon volunteer claims policy differed widely. One complication was that the CFEC could not provide earnings records for crewmen, since their data are based on delivery records (fish tickets) only; at best, the CFEC could verify that an individual held a crewman's license in a given year (Cordova Fact Sheet, April 20, 1989:2). Some fishermen reportedly worked on the spill cleanup and also got good fishing claims settlements, while others who worked on the cleanup could not fish and so did not receive claims. Some were compensated for equipment upgrades while others were not. Some fishermen signed releases in order to receive money while others only signed receipts. Some claims settlements were

reportedly much more generous than others. Despite Exxon's announcement of specific policy guidelines, individual case settlements appeared to vary.

A Case Example: The following case example, then, is not "representative;" rather, it illustrates a situation where there were no exceptional circumstances (such as loss of a boat due to oil damage, loss of all fish earnings without any compensation by someone who refused to fish an oiled Sound, complete loss of income by someone who refused to fish and refused to work for Exxon, etc.).

This person does share one very common experience of Cordovans during the post-spill period, however. Many fishermen, private and public sector employees, and business owners reported that, while their income for 1989 approximated that of other years, they worked much harder for the same money. Here a fisherman who traditionally would have fished during short openers worked on the spill cleanup for hourly wages which were far less lucrative.

The following person is a lifelong Cordovan resident who fishes each year in several fisheries, with relatives. His father owns a salmon permit. He believes that Exxon's claims settlement left him with losses relative to previous years, to say nothing of his expectations for an exceptionally good year in 1989:

The water was polluted, the beaches were polluted, sea life and water fowl were destroyed. People's ability to make money and to survive wasn't there anymore. People were sickened by what happened. Sickened by the stupidity of it. It shouldn't have happened . . .

My income the year of the spill decreased. I wasn't allowed to fish. The year of the spill I made \$250 fishing. The other income was compensation and spill work.

Their compensation wasn't fair because they figured it on your average for the past 3 years. They only paid me \$13,000, but that [amount] would have been the worst year we ever had. They didn't pay enough.

The prediction was it would have been a fine year. I seine salmon, mostly red salmon, down in the Aleutians. Here I fish pinks. [Also, roe on kelp.] I expected close to \$30,000 for the season.

The last three years I'd made . . . every year it was over \$20,000. Between \$20,000 and \$30,000 each year.

We didn't sign a release. It's still pending.

We were . . . our lawyers were trying to get them to increase it. At one point we got a check for \$11,000. We got them to increase our prediction, and they gave us another \$2,800. We were going for a class action suit, but now they have this Trans Alaska Pipeline Fund. They sent us a paper and I sent it in.

[Exxon's] figure was based on their prediction. I don't know how they justified it. They may have taken cleanup wages out of the claim. I don't know.

Some people made a lot of money because of the spill and some didn't make any. My friend bought a boat and made \$100,000 on the spill. I had been going to buy that boat and didn't. It helped some people and made it horrible for others.

I made about \$8,000 working the spill, but that [cleanup income] was, again, to please people with money. But people weren't happy, because they wanted to clean the oil up and go fishing. And they weren't cleaning it up.

The above claim appears to conform roughly to Exxon's policy as described by respondents. This fisherman averaged between \$20,000 to \$30,000 per year, expecting \$30,000 for 1989. If his historical average is \$25,000, 85 percent of this amount is \$21,250. He received \$13,800 from Exxon (with the intercession of his lawyer). He made \$250 fishing, bringing this to \$14,050. If, as he suggests, his cleanup wages of \$8,000 were added to this amount, the total would be \$23,050, close to 85 percent of his historical average.

On the other hand, this settlement may have been based on this fisherman's projected catch, at the artificially low 1989 prices. Seen in season totals, the 1989 forecast was 40 million salmon at an expected 80 cents per pound; Exxon's claims projection averaged the catches for 1987 and 1988 (totalling approximately 48 million salmon), arriving at an average of 24 million salmon, at 35 cents a pound. Roughly

calculated, if this fisherman averaged \$25,000 per year, at an averaged price of 60 cents per pound (fishermen were paid an average of 40 cents a pound for pink salmon in 1987 and 79 cents a pound in 1988), that would indicate a catch of 41,667 pounds. At Exxon's 35 cents per pound, this would yield \$14,584.45 in projected fish earnings. This fisherman made \$250 and was awarded a first claim of \$11,000, which his lawyer argued up to \$13,800; the totaled fish earnings and award is \$14,050.

It is impossible to determine how this person's claims award was actually calculated. However, one can easily understand why respondents believe that their awards were too low. It can also be argued that Exxon calculated that a person who was used to earning \$25,000 per year, who expected \$30,000 for 1989, and who received a total of \$22,050 in 1989 (from cleanup wages, compensation, and fish earnings combined), might not be strongly motivated to pursue legal action for the difference. Cordovans, however, do not believe that cleanup earnings should offset losses in fish earnings, as mentioned. They complain that those who refused to work for Exxon for ethical reasons suffered disproportionately.

The TAPAA Fund: During the winter of 1991, many Cordovans were absorbed in filing TAPAA claims. On December 14, 1990 a ruling from U.S. District Court Judge Russell Holland in Anchorage denied class action certification for lawsuits against Exxon Corporation over the 1989 Exxon Valdez oil spill.

The Trans-Alaska Pipeline Authorization Act (TAPAA) was created in 1973, based on a five cents per barrel levy for tankers shipping crude oil (Cordova Times, January 3, 1991:1). The fund as of winter 1991 contained approximately \$300 million; the maximum liability is \$100 million, with \$86 million coming from the fund and \$14 million from the spiller (Cordova Times, January 3, 1991:1). Liability over that amount would be paid by the spiller, and the TAPAA could sue Exxon for reimbursement for its pro rata share of claims payments (Cordova Times, January 3, 1991:1).

Cordovan respondents were generally unhappy about being referred to TAPAA. Complaints included that the fund would not contain enough money for all damages, processing of claims (including possible appeals over class action) might take years,

subjects could not determine true damages by the March 24, 1991 deadline, claims would be difficult to alter later, and individuals felt overwhelmed at the prospect of carrying out necessary litigation on their own.

While many of the law firms representing fishermen proposed that a class action suit did not best serve individual and community claimants, Exxon had opposed class action certification (Cordova Times, January 3, 1991:1).³³ The latter factor was also cited as a reason for fishermen's endorsement of class action.

The inherent gambles in a 2-year statute of limitation on claims stemming from a catastrophic oil spill were a source of concern for many. A representative of the Fisherman's Claims and Litigation Support Office, set up to represent CDFU members in Cordova, explains:

We have a March 24 deadline due to the statute of limitations. But they can alter the amount on the TAPAA form. It can be amended, but it's hard . . . you were crazy, for instance.

We don't know what Exxon is going to do. We're gambling that the fish will come back.

We were organized for class action suits. Now we're the Federal TAPAA. We were formed after the spill. Exxon paid our law offices for each claim. If you got a check from Exxon, we got one. But they aren't keeping up their payments . . . The lawyers also fund this office. They got a cut from each claim. There are a lot of problems. Each claim is different.

In general, respondents expressed their lack of confidence in the adequacy of the TAPAA fund to mitigate present and future damages:

Uncertainty is still a big problem. People are being conservative. I saw in the news where oil has done long-term damage to birds and fish. Then we'll have long-term financial problems.

³³Cordova law firms representing fishermen include Bixby, Cowan and Gerry and that of George Harrington.

Litigation is crazy; a Federal judge rules one way, a State judge rules another way. TAPAA funds are insufficient and there's still no real mechanisms to prevent another major disaster. Just a few more escort boats . . .

There's 10,000 fishermen involved in the spill, and an \$86 million TAPAA fund. Fishing season in Prince William Sound is worth \$50 million. I sure hope they change the TAPAA fund before they punch any more holes in ANWR [Arctic National Wildlife Refuge] . . .

A widely expressed source of indignation and dismay is the withholding by government agencies of biological study results needed by individual claimants, pending litigation. As one respondent points out, this pits the interests of citizens against those of their public servants:

[Alaska] Fish and Game have a cap on [biological studies]. The average guy on the street needs their data for his claim, but the State has their claim, so you lose your public servants. So everybody is speculating.

We got slimed, and we're going to get screwed.

III.D. The Hatcheries: Prince William Sound Aquaculture

General Background: The PWSAC is a private nonprofit corporation which operates three salmon hatcheries in Prince William Sound (the Armin F. Koernig Hatchery, the Esther Island Hatchery, and the Cannery Creek Hatchery). The corporation has a budget of over \$10 million--a budget larger than the Cordova city budget.

The corporation was begun in the early 1970's by Cordovan commercial fishermen, who were concerned that their livelihood was endangered by low wild salmon returns and the creation of the oil pipeline. One founder explains:

The stocks in Prince William Sound fluctuate widely because of normal conditions. The State and Federal governments took over to protect them from overfishing . . .

[Here we] have 800 or so spawning populations. Streams are small and steep. So they are easily affected, for instance by hard freezes and droughts. The streams move a lot.

So environmental factors here wipe out spawning more easily. So there are large fluctuations, of highs and lows.

In 1972 and 1974 there were small returns of salmon. Also, the pipeline was built then. So the fishermen said, "Why don't we quit fishing and go to work for the oil companies? We can't make a living fishing."

But we wanted to turn this around. So Alaska created FRED [Fishing Rehabilitation and Enhancement Division] to protect fishing, in about 1972.

Hatcheries were first set up in the 1930's, but technologies weren't suitable. For instance, small fry were dropped directly into salt water when they needed a year in fresh water first. This changed when the FRED came into being. The Federal Government wanted to give the private sector a chance to help out.

In 1974 a Private Non-profit Aquifer Act was put up by the legislature. In 1974 we had the chance either to give up fishing or get into the act, using that legislation.

So we formed the Prince William Sound Aquaculture Corporation. I was head from 19__ to 19__. We decided the state should do half the job, and we should do half the job.

Currently PWSAC is the State regional association for Area E in Prince William Sound and the Copper River. As such, it has public responsibilities beyond the interests of the commercial fishermen who are members. For instance, the State of Alaska has requested that PWSAC take over operations of the Main Bay Hatchery and provide funding for the Gulkana Hatchery, transferring these State hatcheries to the regional aquaculture association (PWSAC 1990:20). Corporate spokesmen do not anticipate that this will be profitable, but PWSAC has agreed in principle to the request. A company representative describes these broader responsibilities:

[We are] a private, non-profit corporation, not publicly held. It's Area E: Prince William Sound and the Copper River. So it's a regional aquaculture corporation. The areas were created in 1974 by the State to improve the fishing areas. We're answerable to the fishermen and the State.

We are the regional association for Area E. We have a 45 member board, 60 percent are commercial fishermen elected by the permit-holding private fishermen. Those 27 people are divided equally between gill and seine netters, with one set netter. The other 40 percent (18 people) are representatives of Native corporations, fish processors, municipalities, and sports users. They are appointed by their constituents. For instance, Cordova chose its mayor.

The board elects an executive committee of seven in June of each year. They conduct daily business. Most fisheries are under a limited entry system, because most fisheries were depleted by overfishing.

There's a set number of permits available: for instance, 263 seining permits, no more. Each is worth about \$300,000. They're worth a lot because there are a set amount and no more. Gill net permits are about \$150,000. The permit holders are the constituency. As a regional association we're responsible to *provide fish for all the users: subsistence, commercial, sports, and so on . . .*

We don't anticipate any lost recovery at the Copper River hatcheries. Our other hatcheries are on the tidewalls. But the Copper River fish have to go up river 200 to 250 miles before reaching the hatcheries. So they'll be too old for a good price. And they won't be distinguished from the wild stock, so we can't take a percentage. In our other hatcheries, no wild stock comes into those area, so we can take a proportion of them.

We have to go in to the Copper River. The State asked us to, and it's our statutory responsibility because we have this regional responsibility. The State doesn't want to operate those fisheries anymore.

We started with one hatchery in 1975, built another, were given another, and a fourth will be given us by the State in a short while.

The Oil Spill: The 1989 Exxon Valdez oil spill caused considerable turmoil and disorganization for PWSAC, creating financial complexities, operational reorganization, and extra employee responsibilities (PWSAC 1990:4,9). The corporation incurred substantial costs to protect its hatcheries from the oil, and normal business operations were disrupted (PWSAC 1990:19). The majority of extra costs were reimbursed by Exxon (PWSAC 1990:19). However, a weak salmon market with radical drops in prices, bankruptcies of small processors, and the reluctance of other processors to buy the corporation's harvests, all continue to trouble the corporation.

While the immediate organized response of CDFU fishermen did little to stem the early oil leakage from the Exxon Valdez, due to interference from the oil industry, efforts to protect the PWSAC hatcheries fared better. Before oil could spread to the hatcheries, the ADEC asked CDFU to send 15 boats to protect them; they were dispatched without delay. By mid-April 1989, 8,000 feet of ocean boom was in place in front of the Armin F. Keornig Hatchery; 1,600 feet of boom had arrived from Norway, with an additional 2,000 feet arriving from the Persian Gulf (Cordova Fact Sheet, April 16, 1989:4). Gunnar Gangsaas, working for the supplier of the boom, Norpol Marine Services, arrived from Norway on April 15 to assist in deployment of the boom (Cordova Fact Sheet, April 16, 1989:4).

Representatives of PWSAC were also relatively successful in persuading Exxon to foot the bill for their protection efforts, once they had convinced the oil company that delays would entail astronomical damages. For instance, the timing of the oil spill made it particularly perilous for salmon runs because the fry were just about to be released into the ocean. The PWSAC fared better than many Cordova businesses in negotiating with Exxon for mitigation of losses, but PWSAC spokespeople describe a process in which the oil company was completely unprepared to handle the oil spill emergency, and had no idea of the social, cultural, environmental, or commercial setting through which it was *pumping oil*:

The spill impacted us, but we were reimbursed \$8 million by Exxon. So only a few hundred thousand dollars weren't reimbursed. We're suing Exxon over that now.³⁴

They paid for the protection of the hatcheries. We had five layers of boom at each of the hatcheries. At Sawmill Bay we had around the clock mopping of oil that slipped around the boom. We hired Spill Tech, a corporation that deals with spills . . .

I flew around giving press conferences all the time. It took enormous time away from ordinary operations. We had to hire extra employees. It was a struggle, but we were able to. We were forced to pay them quite adequately.

For the most part we hired boats that were paid for by Exxon to protect the hatcheries. At the beginning boats went out as volunteers, but then they became on payroll. Our effort, Exxon's efforts, and the Coast Guard efforts were all coordinated.

We incurred the expenses for our boats, then Exxon sent in an auditor who checked everything for authenticity, then they would pay.

We had special harvest expenses which were not paid; about \$600,000. We had special harvests where we had to catch more fish than usual because the fishermen weren't catching them. We have "cost recovery," where we hire boats who come and catch a proportion of our fish which we sell at about the rate the fishermen get.

Ordinarily we catch 30 percent of our own fish who return to the hatchery. But in 1989 we had to catch all the fish, because the fishermen weren't catching at all. So we incurred extra costs. In 1988 the price for salmon was 85 cents per pound. In 1989 it was 35 cents per pound . . .

³⁴It is interesting to compare Exxon's treatment of PWSAC with, for instance, the Cooper River Fishermen's Cooperative (CRFC) (discussed elsewhere). The small processor was unable to argue an Exxon offer of \$700,000 up to meet their \$1.7 million claim, which could have kept the cooperative out of bankruptcy, according to the CRFC management.

Abnormalities in herring were documented, but those were in natural areas, not hatcheries. We kept the oil out of our hatcheries, thank God. Otherwise we'd have lost them all.

The fish had just started emerging the week of the spill: 120 million fry at the San Juan Hatchery in the third week of April, which had to be released into the sea.

We release our fry when we deem the zoa plankton to be optimal. So we release the fry into the plankton bloom. So we've achieved very high survival rates. They are fed in the pens and have food when they're let out. They mix with the wild stock when released, and come back with wild stock to spawn. But the wild stock goes back to their own streams, and our fish come back to the hatchery areas . . .

The wild pink stock was above average in 1990. The hatcheries' success was related to a huge and long plankton bloom in 1989. It was warm, with weeks of bloom where usually the bloom is a few days. So that probably explains the high survival rate of the pink salmon.

Exxon was forthright and even-handed, once they realized we existed. We made efforts to impress them. They had absolutely no concept of anything in the Sound: the Natives, the hatcheries, the fishermen.

They thought of us as Natives in a jungle with grass skirts. As far as the culture of the area, they were bringing their tankers through, they had absolutely no idea of it. They started from ground zero.

[My husband and I] have a seine boat. My husband was out on the Sound. I was working 18 hours a day here. He went to Valdez to work. He called and said, "They just figured out they need boats to get out on the Sound."

They had no knowledge, no logistics, no manpower, no nothing to deal with anything of this magnitude. They still don't. The only thing they've done that is meaningful is their escort vessels. They could move a loaded tanker around and keep it from hitting anything.

But that's the only thing they've got going. The response plans are in a shambles. The local response is not organized. So, spill prevention has progressed, but spill response has not progressed.

No one is trained to operate equipment that is placed around the Sound. It's all being done halfway, 2 years afterward. There's not much existing.

The cleanup endangered our areas. We had to ask them to refrain from cleaning in certain areas at certain times. They complied, with total ignorance.

For instance, when our President, Bruce Suzumoto, went to Valdez, _____ was in charge in Valdez. Bruce went to see him to express the dangers for the hatcheries, the need for booms, what was at stake. Frank had a good attitude. He said, "Speak to this guy and he'll give you what you need: \$100,000-200,000." Bruce said, "We're thinking about \$2 million to start." So Frank gave him a business card with \$1 million written on the back: his guarantee for a million dollars in the bank account by tomorrow morning. They spent over \$8 million by the time we were done.

The only contribution Exxon made was money. Logistically, they were incompetent. The Coast Guard helped set the boom. We flew boom in from . . . Norway, England, and so on. Norway makes a lot of spill equipment, and Shetland Islands, and the Gulf. They have more on the ball regarding oil spills.

To meet its annual expenses of approximately \$10 million, PWSAC must harvest about 24 percent of the fish returning to its hatcheries (PWSAC 1991:2). This figure fluctuates according to the size of returns and fish prices. In 1989 PWSAC was able to harvest and sell its quota of salmon, but it took them all from the Armin F. Koernig (AFK) Hatchery, rather than from all three of its hatcheries. This was because the AFK hatchery was hardest hit by the Exxon Valdez oil spill, so that the district was closed and no commercial fishery could intercept the approximately 6 million pink salmon returning there (Cordova Fact Sheet, July 14, 1989:1).

The corporation presold 30 percent of their 1989 salmon harvest (2 million pink salmon) to Chugach Alaska Fisheries of Cordova, who agreed to pay 152 percent of the

average price being paid to commercial fishermen by the 6 major local processors at that time (Cordova Fact Sheet, July 14, 1989:1). The remainder of the harvests were offered to processors who gave the highest bids. Although concrete figures are not available, some respondents in 1991 believe that Chugach Alaska Fisheries (rumored to be on the verge of bankruptcy with a substantial suit against Exxon) was hurt by having paid too high a price in 1989 for salmon.

Price projections by PWSAC before the oil spill had been 60 cents a pound for pink salmon; at this price, an estimated 5.4 million pink salmon available at AFK would have yielded a sales harvest of about \$11.3 million, which would have come close to meeting the corporation's 1989 sales harvest goal of \$11.6 million (Cordova Fact Sheet, May 18, 1989:3). Expenses for PWSAC's 1990 budget totaled a little over \$12 million, to be supplied by fish sales revenues and a 2-percent enhancement tax revenue of approximately \$1.6 million (Cordova Fact Sheet, May 18, 1989:3).

The corporation's fish sales revenues for the following years ending June 30 were: \$4,756,617 in 1989; \$14,857,267 in 1990; \$9,066,020 in 1991; and a projected goal of \$9,066,020 for 1992 (PWSAC 1990:14). Since PWSAC fish sales during 1989 took place in August after the spill, the oil spill does not appear to have had a crushing economic impact during that year. However, the aquaculture corporation has run into serious difficulties in subsequent years which relate to low fish prices and a reluctance of processors to buy their harvests. (The relation of low fish prices to the oil spill remains an open question, as discussed above, but Cordovans believe that there is a relationship.)

Low fish prices, problematic for Cordovan fishermen in 1989, continued to plague the industry in 1990. Processors in Prince William Sound paid from 30 to 35 cents per pound for pink salmon (Cordova Times, August 16, 1990:A5). While salmon returns were strong in 1990, there was a problem with quality in that large numbers of the fish were smaller than average. Many of the pink salmon were under 2 pounds (head and entrails removed), compared to a normal weight in Prince William Sound of between 2.4 and 3.5 pounds (Cordova Times, August 16, 1990:A5). There is less of a market for the smaller fish: European and Far Eastern buyers often reject them, and larger fish

traditionally command higher prices worldwide (Cordova Times, August 16, 1990:A5). Cordovan fishermen wondered in 1991 whether the oil spill had affected the size of the fish.

Prices for 1991 were still low, and PWSAC began to have trouble finding buyers for its fish. In mid-December 1991, PWSAC President Bruce Suzumoto reported to the PWSAC Board of Directors that the five major processors in the Sound had showed reluctance to buy the hatchery-caught, cost-recovery harvests (PWSAC 1991:2). To meet its annual expenses of approximately \$10 million, the corporation projected a 23-percent recovery of returning fish, or about 7 million pink salmon at a price of 28 cents a pound (PWSAC 1991:2-3).

Processors in the winter of 1991 offered between 15 cents and 20 cents a pound for pink salmon (Cordova Times, February 14, 1991:A12). At an average price of 17 cents a pound, the aquaculture corporation would have to harvest 55 percent of its run to meet expenses (Cordova Times, February 14, 1991:A12). Since PWSAC was already having a hard time finding buyers, increasing its harvest size was not a pleasing option.

President Suzumoto of PWSAC announced that if prices were as low as predicted, the corporation would have to use part of its \$5 million contingency fund to meet expenses (Cordova Times, March 7, 1991:A9). Exacerbating these problems was a carry-over of canned salmon, which processors reportedly did not want to unload at low prices. Suzumoto expressed PWSAC's fears that huge stockpiles of 1990 fish in Seattle could drive prices down in 1992 (Cordova Times, March 7, 1991:A9).

Fearing that local processors might refuse to buy as much as a third of the PWSAC cost recovery harvest, the aquaculture corporation asked Alaska Governor Walter Hickel to allow foreign floating processors into the Sound to provide additional buyers and perhaps drive prices up (Cordova Times, January 17, 1991:A4). The top capacity of the State's canneries is reportedly about 85 million fish, with an estimated 110 to 135 million fish expected in 1991 (Cordova Times, January 17, 1991:A4). In 1990 some of the season's catch was sent to other areas for processing, but in 1991 all areas were expected to be inundated (Cordova Times, January 17, 1991:A4).

Another response by PWSAC was to announce a general shift from its production orientation to engage in marketing (PWSAC 1990:2). In 1991 PWSAC was investigating markets in China and the Soviet Union, but they were not sanguine due to economic problems in those countries (Cordova Times, January 17, 1991:A4).

While record salmon returns in 1989 to 1991 have undoubtedly caused price drops and strains on processor capacities, Cordovans believe that their market has also been affected by the oil spill. A general view of PWSAC President Suzumoto is that the State legislature should protect the fishing industry more and oil interests less:

The commercial fishing industry within Alaska is not receiving the attention and support it needs from the State Legislature to allow it to grow and thrive in the 90's. Fishing is the second largest industry in the state, yet it has not attained as much recognition as have the oil, tourism, or mining interests. The state's lack of commitment to the fisheries enhancement program is a symptom of the problem. The industry must take aggressive steps to educate Anchorage and interior Alaska legislators about commercial fishing's importance to the state's economy, present and future (PWSAC 1990:2).

III.E. Cleaned Beaches³⁵

Cordovans complained in 1991 that Exxon did not clean up after its spill, but simply "poured money on top of the oil," as part of a media show and to douse damage claims. Respondents point out that true "restoration" is an impossible task:

You can't restore. Things are dead. Things are impacted. How do you restore an ecosystem? Paying a bunch of money doesn't restore the tube worms.

Another person expressed it this way:

As far as valuing the eagle or otter which were damaged out there, the money is artificial if you can't make an eagle out of it. You can't exchange money for natural things that can't be made back. Those things are priceless. The system breaks down when you try to put a [dollar] value on it . . .

³⁵For Native views of the post-spill environment, see Section II. Alaska Natives in Cordova.

I think [the spill] had a real terrible effect on the environment, and it'll never be the same. The oil may go away and species may come back. But there was a large deflection in the natural order of things.

Things have been deflected and are not on their natural course. If I go through a trauma it passes, but it stays with you too. I cut my thumb when I was eight, and I still have the scar.

That's just one organism: me. But in Prince William Sound, there were untold organisms impacted by this. Birds were killed, so some small fish didn't get eaten. So who knows what they overall result will be?

In 1991 residents overwhelmingly reported being angry over Exxon claims that beaches were clean after the cleanup when Cordovans could see for themselves that they were not. Respondents overwhelmingly reported that beaches were still oiled even after the 1990 cleanup often under the surface. Most residents also expressed the view that the technology to remove the oil without environmental damage does not exist. Cordovans generally did not embrace the view of a top USCG official, that this technological shortfall let the oil company off the hook: "[Exxon was] trying to do what was right. Generally speaking, they did everything possible to clean it up. They wanted the oil gone. The problem was that the equipment that was needed and necessary to do that just doesn't exist" (Cordova Fact Sheet, June 6, 1990:4). Many respondents declared that given the absence of technological means to undo a major oil spill, Alyeska's promises of 20 years ago to prevent environmental damages in the event of oil spills were lies.

Another key complaint regarding the oil cleanup was that, "Exxon had their own timetable." An official on the Oil Spill Response Committee described inspecting "treated" beaches which appeared clean for some distance and then black; cleanup crews had reportedly pulled up stakes halfway through because the company had allotted certain time allowances for particular sites rather than applying a standard of cleanness.

Respondents described a process where Exxon was not controlled by State or Federal agencies in its cleanup efforts. For instance, in July 1989 Exxon officials

rejected State requests to modify its mid-September deadline for ending 1989 cleanup operations and to maintain a work force through the winter to monitor and respond to oil which could be released by winter storms (Cordova Fact Sheet, July 26, 1989:1).

Also, there appeared to be no consensus within and between Federal and State agencies, as to what constituted a "cleaned" beach. For instance, in the summer of 1990 there was disagreement over State proposed numeric standards for determining amounts of oil which would indicate whether beaches had been "cleaned" (Anchorage Daily News, July 30, 1990, cited in Cordova Fact Sheet, August 10, 1990:1). State Commissioner of Environmental Conservation Dennis Kelso called for weight ratio standards and was supported by Chief William Reilly of the Federal Environmental Protection Agency (EPA). The USCG Commandant William Kime did not reject numeric standards but did not endorse the State's proposed standard. The USCG Rear Admiral David Ciancaglini, Federal Cleanup Coordinator, flatly rejected the State's numeric standards as lacking in scientific or historic foundation (Cordova Fact Sheet, August 10, 1990:1).

Exxon, after treating beaches in 1989 according to what Cordovans described as an arbitrary timeline, described these sites as "environmentally stable." Exxon Operations Manager Otto Harrison sent the following letter to Ciancaglini of the USCG:

It continues to be our objective to leave all shorelines in Prince William Sound and the Gulf of Alaska "environmentally stable" so that no threat remains to wildlife, fish or persons subsisting from these resources. You will find that the status reviews shows that all significantly impacted areas are planned to be treated and/or signed off before the safety considerations related to severe weather causes as operations change (Cordova Fact Sheet, August 22, 1989:1).

Cordovans, as noted, do not believe that oily beaches represent no threat to wildlife. But an Exxon news release a week after the letter cited above declared the cleanup operation "95% complete:"

With more than 1,000 miles treated, shoreline cleanup operations in Prince William Sound and Gulf of Alaska areas are 95% complete, Exxon's Valdez Operations Manager Otto Harrison said today (Cordova Fact Sheet, August 31, 1989).

An Exxon news release two weeks later quoted Exxon's corporate chairman as declaring the beaches to be "what most people would consider clean:"

Exxon has conducted cleanup work on nearly 1,100 miles of shoreline impacted by the Exxon Valdez spill, Exxon Corporation Chairman Larry Rawl said today. Rawl said he had flown over many cleanup areas earlier this week and walked on some of the shorelines in order to have first-hand knowledge of the "impressive" cleanup results before reviewing detailed winter plans.

"Hundreds of miles of Prince William Sound and Gulf of Alaska shorelines are certainly what most people would consider clean," Rawl said. "A very small percent of the shorelines which were most heavily impacted have been cleaned several times but still have some oil residue. These areas are environmentally stable, however, and pose no risk to fish or wildlife . . ."

Rawl said that in terms of miles worked and personnel and equipment employed, the cleanup effort exceeded the goals set in Exxon's April and May plans which were approved by the U.S. Coast Guard (Cordova Fact Sheet, September 15, 1989).

During this time period (the end of the 1989 cleanup), Cordovans did not consider most cleaned beaches to be clean. On the heels of the above press release (Labor Day 1989), eight Cordovans toured Prince William Sound beaches on an inspection coordinated by Cordova's Oil Spill Disaster Response Office with air transport provided by the ADEC (Cordova Times, September 14, 1989:A1-5). Sites inspected included examples of the three cleanup methods: mechanical, bioremediation, and COREXIT. The Cordova Times printed the following impressions of participants:

Mike Anderson, city council: "I really wanted to be on the beaches more, because we really didn't get to walk on heavily oiled beaches. It wasn't that I didn't get my boots oily, though . . ."

On Sleepy Bay, we walked on the beach and saw high tide lines. There was also boot impact, where the beach had been trampled and oil trailed . . . black footprints on the driftwood. Sleepy Bay didn't seem clean to me, but it was clean of life. It was devoid of barnacles and moss . . .

The Coast Guard was real frank with us (at the briefing) and said it was only possible to get 20% of the spill up . . . There are still areas that are heavily oiled and won't be cleaned at all. My impression is that it will be more useful to go back in two or three years. That's the impact. How long will it take to stabilize without being a detriment to the environment?"

Jeannine Buller, manager of the Valdez office of Cordova District Fishermen United: "For some of the beaches that have been cleaned up, they're still awfully oily. The surfaces may look clean, but if you dig down there's oil.

Sleepy Bay at Latouche was really oily and there were lots of bags of garbage . . . It had been mechanically treated and crews had removed the sides of the salmon stream and replaced the rocks. But the oil is deep and it keeps re-oiling."

Brena Guest, deputy director Cordova Oil Spill Disaster Response Office: . . . "The most significant was Pt. Helen. There were a half dozen out there with hoses, spraying down the beaches, pushing oil in the water toward booms. There was this huge sheen of oil in the water, and the areas they were spraying had clouds of brownish stuff, like oil, around them. It looked pretty sad. Like the beach was under assault . . . If Exxon thinks 95% is cleaned, they're on a 130% scale."

Marilyn Leland, executive director CDFU, Oil Spill Disaster Response Committee: "The beaches that were mechanically cleaned, like Sleepy Cove, look the worst. Near the shoreline, it looked clean, but it was like a bathtub ring . . .

On all the beaches, if you dug, you'd find oil. Also, on the mechanically cleaned, there was a heavy oil odor. We couldn't walk on the area that had been treated with bioremediation, but it looked good on the surface.

We flew over Pt. Helen three times, real low. It looks like a war zone. It was overwhelming! They looked like little ants with toy boats. In a lot of places, it looked like the cleanup was causing more harm than good . . ."

Max McCarty, filling in for Heather McCarty of Prince William Sound Aquaculture: "It's f----! The beaches are all the same, and there's oil three feet down. I don't expect Exxon to do a decent job. The beaches are beyond treatment. Maybe winter will help, but not as much as 20 winters. There's more oil than I ever imagined."

Connie Taylor, Oil Spill Disaster Response Committee:³⁶ What I expected to see was everything still oiled, from high tide to low tide. I was really pleased because I didn't find that. You could dig down in some places and not find oil; you could walk on beaches and not get oily. Overall, it was nowhere near as bad as I expected. You can see it's going to recover.

The beaches were pretty much the same. There were spots on each beach that were good and spots that were bad . . . There was some oil everywhere we went, hard dry oil in places, but no oil in the tide pools . . . there was an obvious shortage of sea birds, but I didn't see any dead stuff. Superficially, things look good and winter should break down the stuff.

It was definitely ugly. I don't want to be accused of painting too bright a picture . . . but it will heal itself."

Steve Ujoka, [Native representative on the] Oil Spill Response Committee: "First of all, it was my first trip out there, but I can definitely say if that's any indication, "treated" doesn't mean "clean." I was disappointed because I expected treated beaches to be clean . . . (Cordova Times, September 14, 1989:A1-5).

Also, during the above time period, Cordovans sent packages of "treated" rocks to all members of the U.S. Congress:

Congressional aides in Washington, D.C., opened their bosses' mailboxes Wednesday morning to find specially delivered packages from Alaska. The contents: "treated" rocks from Prince William Sound's Smith Island.

³⁶For a discussion of this person's role in disputes with Exxon, see the sections on political and economic impacts of the oil spill. Her concern not to paint "too bright a picture" of the beaches is interesting in that she is perceived as a singular Exxon supporter.

Every member of Congress--650 in all--were treated to the special stones, care of the National Wildlife Federation. The stones, varying in size from pebbles to rocks, were collected Friday and packaged by a small contingent of "workers" aboard Cordova's flotilla that had rendezvoused in Jack Bay for Saturday's protest regatta in Valdez . . .

Cordova pilot Jim Brown tied his float plane to one of the fishing boats and emerged with a dozen small plastic packets of the still-oily stones. In assembly-line fashion, workers wearing latex gloves then transplanted the greasy stones into individual ziploc sandwich bags and placed them in larger trash bags for transport . . .

Brown and a companion [had] dropped down near Smith Island and scooped up several hundred stones. The whole rock-gathering process took about 10 minutes. Walking along the treated but oily beach, there was no scarcity of material, he said (Cordova Times, September 14, 1989:A1).

In August 1989, Exxon representatives began challenging whether oil causing fish closures in Prince William Sound stemmed from Exxon's spill. As with drops in fish prices, the burden of proof appeared not to be with Exxon:

Attorneys for the Fishermen's Claims Office are seeking statements from fishermen who either encountered or saw evidence of oil in the fishing area during last week's opening. Attorney Lewis Gordon said Wednesday that Exxon is not acknowledging responsibility for the fishing closure because, at least, one initial water sample indicated diesel contamination. "Unless and until it is acknowledged that Exxon Valdez oil is responsible for the fishery's closure, we need two things from fishermen," Gordon said. "One, we need written statements . . . and two, any fouled gear that can be tested must be" (Cordova Fact Sheet, August 3, 1989:2).

Exxon continued the policy of contesting whether oil belonged to the oil spill and took over the testing procedure. The following Exxon news release appeared June 12, 1990:

The scenario could start in a number of ways. Someone spots an oily sheen in Prince William Sound. A fisherman finds oil on his nets. A village monitor sees tarballs on a beach. Most people assume the oil is from the Exxon Valdez, even though it could be

diesel oil from a fishing boat, crude from Cook Inlet production, or naturally occurring hydrocarbons from plants and animals.

The job of investigating the mysterious oil and determining if it is from the Exxon Valdez belongs to Mike Parsons of Exxon Research and Engineering in Clinton, N.J., and Leo Babin of Exxon's Research and Development Laboratory in Baton Rouge, LA., working in Exxon's Anchorage laboratory.

"Each type of oil has a particular chemical composition or fingerprint," Parsons explains. "These distinctive characteristics enable scientists to distinguish between them . . . A combination of several tests provides an identifiable 'fingerprint' of the oil, distinguishing it from any other oil" (Cordova Fact Sheet, June 22, 1990:3-4).

Florescence tests and gas chromatography-mass spectroscopy were used, finding in spring 1990 that 79 percent of oil samples tested were not from the Exxon Valdez.

Cordovan respondents believe that the oil presently threatening their environment is from the 1989 Exxon Valdez spill. Most expressed concerns over other oil spills stemming from the pipeline terminal at Valdez, but these concerns were cited in the context of objections to the terminal and to generally irresponsible behavior by Alyeska (including Exxon). Respondents did note that if a foreign tanker had been responsible for the spill, the economic impact might have been much worse. For this and other reasons, Cordovans believe that the Federal Government, in general, is not regulating the pipeline terminal safely:

"The entire oil industry should dedicate funds to research. We need better tankers--bow thrusters, double hulls, thicker hull plating, shorter lengths, and, most importantly, containerized cargo . . ."

"Terminals are another problem. More oil enters the ocean each year from a variety of sources than from major spills. The Alyeska marine terminal is a classic example. Despite making over \$12 billion in profits, Alyeska is not up to date in waste water treatment and pollution control. The entire facility must be reviewed and upgraded as originally promised by the oil industry."

"Our Congressmen are creating a Superfund to clean up oil spills and compensate affected parties. However, one billion dollars is not enough for catastrophic spills . . . We ask that the Superfund be increased to \$10 billion . . ."

"Financial liability of tanker owners is another issue. Alaska is the only state in the nation that allows foreign flag supertankers to carry oil from one of its ports. Israeli-owned Liberian-flagged, Italian-crewed ultra-large crude carriers transport 50% more oil than the Exxon Valdez. These tankers' owners must have the financial capability to respond to a major spill from their vessels. One of the Alyeska owners has posted a billion dollar bond to cover oil spills from its chartered foreign flag supertankers. Who would pay right now if one of the many third party charter tankers had a major spill without a billion dollar bond?" (Excerpts from the Regatta Protest Statement, in a news release from CDFU, in Cordova Fact Sheet, September 12, 1989:1).

Cordovans remain suspicious of the USCG as an effective agency to monitor Exxon's cleanup. For instance, Cordova's Oil Spill Disaster Response Office printed Admiral Ciancaglini's responses to questions posed by the town of Whittier regarding the 1990 cleanup. Cordova generally shares Whittier's concerns. Residents asked that meetings of the Technical Advisory Group (TAG) (including representatives from Exxon, the USCG and the ADEC) be publicly held. Ciancaglini explained that this did not have to be so:

Question:

Why are TAG meetings closed to the public? Are not the government agency representatives covered by the Open Meeting Act or Federal Advisory Committee Act?

Answer:

I addressed this issue early in the year to all organizations, the general public and the press. Simply put, the Government in the Sunshine Act requires open meetings, but applies only to Federal Agencies "headed by a collegial body of two or more members . . ." These agencies include the major regulatory commissions, such as the ICC, SEC, FTC, FCC, etc., but do not include the Coast Guard.

With regard to the Federal Advisory Committee Act, the TAG meetings are operational in nature and consequently, they may properly be closed to the public. It is important that the TAG meeting be kept closed so that the experts can provide me their very best recommendation about how various subdivisions should be treated, etc. I do not want their input to me tempered in any way. I believe that if the meetings were opened, an honest and full dialogue would not be conducted by TAG, some posturing may occur and the meetings may be disrupted by others than TAG (Cordova Fact Sheet, September 7, 1989:1).

Having declared Prince William Sound beaches to be "what most people could consider clean" in 1989, Exxon produced independent contract research in 1990 (by organizations engaged by Exxon immediately after the oil spill) which showed that the spilled oil would not have any adverse effects on plants and animals living below the surface of the ocean:

It is extremely unlikely that hydrocarbon concentrations resulting from the spilled oil have had or will in the future have any adverse effects on plants and animals living below the surface of the water column of Prince William Sound, including commercial fishery species (From "Water Quality in Prince William Sound," by Dr. Jerry Neff, presented to representatives of Federal and State agencies in Anchorage, cited in Cordova Fact Sheet, April 18, 1990:1-3).

Cordovans are unsure of the spill's long-term effect on their ocean environment, as seen from the many interviews above. However, they fear that oiled beaches are not safe and will continue to affect sea and river waters. Respondents complained in 1991 of the frustration of not having access to State and Federal biological studies, due to pending litigation, that might challenge Exxon's definition of their oiled beaches as safe.

According to ADEC figures in 1990, 38 percent of 759 miles of beach still had visible oil (Cordova Fact Sheet, June 7, 1990:6). A Shoreline Assessment crew surveying beaches in Prince William Sound in May 1990 found that five of nine locations surveyed had visible oil (DEC Weekly Report, May 12, 1990, cited in Cordova Fact Sheet, June 1, 1990:4). On May 12, a beach transect at the Bay of Isles revealed oil in the upper intertidal zone with an average surface coverage of 50 percent and an average

penetration to 10 centimeters (DEC Weekly Report, May 12, 1990, cited in Cordova Fact Sheet, June 1, 1990:4).

The question of what constitutes "clean" or "cleaned" remains a key issue for Cordovans in 1991. Cordovan residents (particularly Natives) hold stricter standards than Exxon and Federal and State agencies as to what constitute an uncontaminated area:

As the end of the second year of cleanup work on the Exxon Valdez oil spill draws near, and beach survey crews begin their final inspections of the year, the problem (of how clean is clean) is becoming a serious one.

Scientists and oil industry executives want the beaches clean enough to sustain life, charter boat operators want them clean enough so oil can't be seen, and Alaska Natives, who hunt, gather and cook here, want them clean enough to eat off of.

Perhaps because they want so much more, residents of Sound communities see more oil than anyone else. And they expect more work from Exxon in cleaning up the leavings of its spill.

A group of them, being paid by the state, in July conducted a tour of 105 oiled beaches. Of those beaches cleanup officials had said did not need more treatment, the community group decided 45% still have oil that could be recovered without harm to the environment.

Residents of the Alaska Native village of Chenega did the same. After checking 37 beaches on Chenega Village Corporation land where state, federal and Exxon teams said no work was needed, they said nine out of 10 need more work.

Exxon's operations manager, Scott Nauman, said their findings are wrong. "I can't imagine that is going to be borne out by an objective survey," he said. But objectivity is in short supply.

Even on this beach, near the north tip of Knight Island, where a couple of dozen community members, a few journalists and Nauman congregated Tuesday for the announcement of the community group's findings, the oily gravel refused to define itself . . .

Gail Evanoff, who is running [Cheneg Village's] beach monitoring program, wants the beaches clean enough to eat off of--as they used to do on beaches all over this part of the Sound. "We would cut our seals on this beach," she said. "We would build a fire and eat. It strengthens our bond of who we are as Aleut people. The teaching, the spirit of who we are is so important. And Knight Island has particular importance to Chenagan people."³⁷

Although the National Oceanic and Atmospheric Administration has said the oily beaches are safe for subsistence hunting and gathering, the villagers aren't using them and are picnicing in their back yards instead, said Village Council President Pete Selanoff (Anchorage Daily News, August 1, 1990, cited in Cordova Fact Sheet, August 17, 1990:1-2).

Cordovans are particularly angry that Exxon has used their success in protecting the hatchery fish in 1989 to argue that the oil spill caused no environmental damage. Respondents encounter oil on their beaches and find this situation unacceptable. Exxon officials argue that large salmon returns are "living proof of the 'recovery' of Prince William Sound" (Los Angeles Times, August 29, 1991:A5). In Exxon's view, oiled beaches virtually are clean enough to eat off of, since oil is harmless:

"Because the short-term impacts of an oil spill are so great, we assume the long-term impacts must be there--and that's not necessarily the case," Exxon wildlife biologist Mike Barker says. ". . . There aren't any real long-term bogeymen in oil. Our children play on oil when they play on the playground. We expose ourselves to it every day; we clothe ourselves in it; we literally eat off of it . . . We don't suffer as a result and the organisms of Prince William Sound don't, either" (Los Angeles Times August 29, 1991:A5).

III.F. Alyeska Contingency Plans for Future Spills

Cordovan fishermen and representatives of PWSAC were and still are disgusted at a reported lack of commitment by Alyeska to develop an adequate spill response program. However, many respondents believe that future responses will show some

³⁷See Section II Alaska Natives in Cordova for Native views of the oil spill and ties between Cordovan Natives and Chenegans.

improvement over the 1989 spill response as "some lessons were learned." Still, Cordovans are concerned that an adequate technology does not exist to clean up a major oil spill, and most do not believe that enough is being done to prevent one.

Many informants cited the new tanker escort vessels as the "only thing Alyeska has done to improve the situation." This aspect of an Alyeska contingency plan requires all loaded tankers to be accompanied by two vessels from the Valdez terminal to the Hinchinbrook Entrance (Cordova Fact Sheet, July 1, 1989:1). One vessel must be an emergency response vessel (carrying boom materials and capable of towing a tanker). Cordovans complained in 1991 that this did not constitute a preventive measure, and they called for double hulled tankers or smaller containers (such as barrels) for oil.

Another aspect of Alyeska's contingency plan aims at improving the organization and command structure of a spill response. Based on the Incident Command System used by fire departments, this plan would use local residents and their resources, such as boats and knowledge of local waters (Cordova Fact Sheet, July 1, 1989:1). Consonant with this plan, Alyeska signed a contract in May 1990 with CDFU to provide services for local boat call-outs and negotiate fishermen's contracts (Cordova Fact Sheet, June 1, 1990:1). Alyeska also planned to hold regular, paid training sessions for local skippers (Cordova Fact Sheet, July 1, 1989:1), and reportedly promised to maintain equipment in local storage containers, ready to use in the event of a spill (Cordova Times, February 21, 1991:A5).

Cordovans complained in 1991 that Alyeska had backed down on many of these latter commitments:

There were some widened eyes and down-turned lips in Cordova last week when it was learned Alyeska Pipeline Service Co. was not providing safety training for its oil spill response program this spring . . .

Also angered was Floyd Hutchins, past president of Prince William Sound Seiners Association. "Alyeska promised fishermen could be involved in the program," he said. "We were to be independent contractors." But he said Alyeska is proposing to pay only \$11 to

\$22 per foot for vessels. "We want real pay," he said, which is \$44 per foot. "The system won't work with volunteers," he added . . .

Copeland [fisherman and representative of the Oil Spill Prevention and Response Committee, a part of the Regional Citizens Advisory Committee, or RCAC] and Hutchins also expressed frustration that there is "no safety or personal safety equipment in Cordova to outfit a response group in the event of a spill. We need to be fitted with gear," said Copeland, "But there's no one willing to provide classes or fitting." The gear is available only aboard boats deployed in Alyeska's Ship Escort Response Vessel System, he said.

Spokesmen for the Prince William Sound Aquaculture Corporation were also upset because Alyeska seemed to be withdrawing from its commitment to provide training of hatchery staff and protection to hatcheries in the event of a spill.

"We expected a plan to be in place," said Hutchins. "That's why we came to Cordova for this meeting." Hutchins winters in Idaho, and Copeland in Washington state.

The men said Alyeska is supposed to have equipment in storage containers here, but an inspection last Friday found them empty, and no keys were available to crews . . .

The Alaska Department of Environmental Conservation must approve the Alyeska contingency plan by June 1, said Copeland. "It seems the deadline won't be met," he added. RCAC opposes approval before details such as training and equipment are finalized, he said (Cordova Times, February 21, 1991:A5.).

After the oil spill, the Regional Citizens Advisory Committee (RCAC) was created to monitor and advise Alyeska on shipping practices, which included representatives from PWSAC, CDFU and the city of Cordova. Alyeska agreed to fund the voluntary advisory committee in the amount of \$2 million, if Congress did not pass appropriate legislation for the committee, and to provide "reasonable access to the terminal and its records that aren't confidential" (Cordova Times, November 2, 1989:A1). While the committee may request access to Alyeska memos, studies, and internal documents, and the oil

consortium must respond within a given period, Alyeska is not bound by the committee's advice.

III.G. Competition With Valdez

Cordovans frequently cite contrasts between their city, based on a fishing and subsistence lifestyle, and Valdez, which they describe as "a company town" (the company being Alyeska). The two towns have competed for development and resources since their initial settlement during the Kennecott mining era (USDOJ, BLM, Alaska OCS Office 1979:40). After the unsuccessful effort of Cordovan fishermen to stop the oil pipeline terminal at Valdez, Valdez experienced a construction boom in 1974-1975. Valdez now has a favorable tax base, enabling key leaders to travel extensively and advocate on the city's behalf (USDOJ, BLM, Alaska OCS Office 1979:113). Respondents in 1991 complained that Valdez regularly receives inequitable proportions of State funds slated for the region.

The polarization of the two towns appears to have been exacerbated by the oil spill. Cordovans described Valdez as representing an urban industrial lifestyle and worldview with expanding population and development. They fear that this development threatens their environment and, consequently, their town's existence. Residents depict Cordova as a small fishing village, subsisting within a wilderness with a stable population committed to each other through sharing and caring.

Cordovans believe that Exxon used Valdez as a media showcase for its spill cleanup, attempting to divert public attention from the severe problems which the oil spill created for their fishing village. Respondents feel that Valdez in general has benefitted economically from the oil pipeline terminal, while not assuming any of the major risks associated with oil development. In the case of the spill, respondents view Exxon as pouring proportionately more cleanup money into Valdez, which was not critically harmed by the spill. This angered Cordovans. City officials spent time and money on frequent trips to Valdez, attempting to gain media coverage of their predicament, and CDFU set up offices in Valdez.

A report in the Santa Clara Press Democrat, reprinted in the Cordova Fact Sheet, compared reactions to the spill in Cordova and Valdez. The following contrasts stand out:

Before the spill...

Valdez is a town of 3,270 with an economy that depends largely on the oil terminal, somewhat on tourism and very little on fishing . . . It resembled a Texas oil boom town from 1974 to 1977 when the pipeline was being constructed and has not changed much since then.

Cordova's 2,580 residents rely almost exclusively on fishing and seafood processing. Few tourists visit the town other than the big game hunters and adventurous kayak aficionados. The Cordova District Fishermen United . . . filed suit in the mid-1970's to block the pipeline because it feared damage to fishing areas of Prince William Sound.

After the Exxon Valdez ran aground...

The main business of Valdez switched from oil shipping to oil cleanup. The town tripled in population as it was inundated with Exxon officials, news media crews, Alaskans in search of cleanup jobs and environmentalists studying the effects of the spill. All available hotel rooms were reserved by Exxon and restaurants were crowded at all hours.

Fearing oil would invade their fish hatcheries and angered that Exxon was not placing oil containment booms, Cordova fishermen put up their own. The harbor is nearly empty as most boats and crews are leased to Exxon for the cleanup. The town seems deserted as many residents are out on the boats for weeks at a stretch.

When the inevitable T-shirts went on sale...

Those in Valdez were akin to a rock concert tour or big party. One depicted the tanker and said: "On the Rocks." Another said "Clean Up Crew" with oil blotted hand prints all over. Others read: "Exxon Valdez Oil Spill '89 . . . One Slick Operation" . . .

The t-shirts in Cordova shops took a pointedly political stance. One showed an oil-soaked otter and read: "An ounce of prevention is worth 11 million gallons of cure." The most popular was . . . a

tanker with its bow ripped open in the shape of giant jaws and read: "Tanker from Hell."

And when they bend an elbow at the bar...

The taverns of Valdez compete for the most potent drink dubbed Exxon on the Rocks or Valdez on the Rocks. One bartender confides the secret concoction consists of a splash of scotch across Kahlua and vodka . . .

The tanker crash isn't a drinking joke in Cordova. . .

When it comes time for reflection....

While other Alaskan communities observed a Prince William Sound Day on April 23. . . Valdez residents took little note. . .

In Cordova practically the entire community packed the school gymnasium. . . to begin a celebration called Sound Love. Poems were read, speeches delivered and people joined in song in an event broadcast over the Alaskan Public Radio Network...(Cordova Fact Sheet, June 3, 1989:2).

A year-long study conducted by the Valdez Counseling Center in 1989-1990 found differences in spill-related stress symptoms and causes (Cordova Times, July 26, 1990:A1, A11). A telling result was that in Cordova the people who made the most money from the spill cleanup (over \$50,000) experienced the most stress; in Valdez, people making between \$500 to \$5,000 reported the most severe symptoms (Cordova Times, July 26, 1990:A1, A11). Cordovan respondents in 1991 who profited from the cleanup reported moral conflicts and distress over the plight of those who suffered greater financial hardship.

Another finding was that Cordovan respondents were most concerned about negative impacts of the spill on the environment, and social disruption caused by greed or jealousy related to spill cleanup income (Cordova Times, July 26, 1990:A1, A11). These key concerns were expressed in 1991. Cordovans care intensely about each other and about the natural environment in which they live and subsist. Interpersonal relationships among this close-knit community emphasize a commitment to take care of one another. If a resident becomes seriously ill, a benefit will probably be held for that

person, and others will nurse the patient in their homes for extended periods. Sharing of food and other resources is extensive. When vehicles break down on the road, swarms of people descend with offers of help. The inequities of Exxon's cleanup and settlement policies bothered the winners as well as the losers in Cordova.

In Valdez, the most frequently reported concern was the influx of new people (Cordova Times, July 26, 1990:A1, A11). Consonant with this, Valdezans experienced the most stress early in the study, and their stress decreased over the year. In contrast, the stress-related problems of Cordovans increased over time. Interviews in 1991 showed that conflicts and fears stemming from the spill and cleanup are still widespread and intense. Overall, the study showed "a higher incidence, intensity and duration of stress as a result of the spill than was experienced in Valdez" (Cordova Times, July 26, 1990:A1, A11).

III.H. Environmental Ethics³⁸

Many non-Native Cordovan fishermen hold philosophies of Nature which are similar to those of American Native peoples in general. These often include the following principles:

Nature is inspirited.

Spirit(s) in Nature can be sensed directly.

Nature, in its own state, is omnipresent.

Nature cannot be owned by man.

³⁸A comparative study of wilderness ideology, using quantitative and qualitative methods, is underway. Here I examine excerpts from an interview with a prominent Cordovan fisherman. This person's views express common threads found in the philosophies of many commercial fishermen and others who gain their livelihood in Nature.

"Wilderness" in this study is defined as "Nature as in its own state," such as surrounds Cordova on land and sea. The concept is inclusive of man, as well as all natural resources, in its usage by respondents. Cordovans tend to personify nature, as "Mother Nature," or "she." Hence I capitalize the term Nature.

Preliminary results of the comparative study indicate that there may be a continuum of sample subsets, in terms of spiritual vs. commodity values of Nature. These groups may be ordered as holding values of Nature which are increasingly commodity-oriented: (1) Natives (non-Russian Orthodox); (2) Russian Orthodox Natives and non-Native fishermen; (3) other non-Natives.

Life is transmutable, through subsistence practices. This transmutation occurs on a spiritual level, involving fusions of life, spirit, and destiny.

All parts of Nature are critically interrelated.

Nature comprises interwoven cycles of life(lives) and destiny(densities), maintained in an harmonious balance.

Man is morally responsible to help maintain the balance of Nature's parts.

Man must fit himself to the aspects of Nature which surround him in order for the whole and all of its parts to continue.

Man will be successful in subsistence practices according to whether he is morally deserving (for instance, by only taking what he needs).

If one aspect of Nature is destroyed, all aspects could be lost.

Man is subject to Nature's laws, not the reverse. Man "manages" Nature in preventing other men from destroying her aspects (for instance, by over-fishing).

Commodity values of Nature are exploitive and wrong.

Older generations were more in tune with Nature.

Understandings of Nature are passed down over many generations.

Understandings of Nature are inborn.

These key philosophical principles are exemplified in the following excerpts, of an interview with a non-Native Cordovan fisherman:³⁹

The older generation is more tuned into Mother nature. They have a different sense of responsibility and values. The younger generation don't know that milk comes from a cow, and they are more exploitive.

³⁹As in other quotations in this report, paragraphs are provided for the reader's convenience, and do not represent breaks unless indicated by "..."

Here, the lifestyle was more satisfying with less before the 1960's. They lived here with what they had and were satisfied.

Once we were introduced to commodities (TV, phones, and so on), like in New York, we wanted these things, and then commodity values and exploitation came in.

You kill 40 sea otters to take a 2-week Hawaiian vacation. Fifty years ago they saw sea otters as fur coats for the wife and kids.

Older generations' values were geared toward living on this country's values. Younger generations are more exploitive. Expectations have grown dramatically.

Demands have grown as commodities have grown. A lot of furs was a goal, and now a new car is a goal. It's become more exaggerated.

Question:

Is Nature spiritual?

Answer:

Yes. There's a place in the north of the Sound named Unakwik. Fishermen go in June and early July and leave, and it's empty until the next year.

Natives tell stories that there's a spirit of Unakwik that lives there. When you go there you're really on your own. You know that to find fish there, you have to deserve them. So you have to leave some . . .

Nobody knows if the fish are there. You put down a net and wait. It's a ritual experience. It's so impressive. The splendor of the Nature is there. The old-timers say, "You say hello to the spirit of Unakwik. You say a prayer and promise not to plunder this sacred place: 'I hope you will share the bounty. And I will take some and leave some.'"

You don't go in like a Nimrod. You don't kill wantonly, and Nature pays you back. The bears and sea otters don't run away. You talk to the bears. Nothing is afraid of you because you don't behave like an enemy. And then Mother Nature will share with you, and it will still be there next year.

Natives have more of that feeling than commercial fishermen. But residents here still have that feeling. You're a part of Mother Nature, and you have to be to survive.

Question:

Who creates Nature?

Answer:

The Almighty God creates and makes the laws of Mother Nature. They are basic and undisputable, though mysterious.

If you try to fool Mother Nature she gets angry. It's a natural creation that follows its own predestined ways and laws built in.

Fish and Game, and Federal agencies, and Exxon don't create that. They're subject to those same laws of Mother Nature. They're exploiting a resource; the basic principle is the same. They shouldn't destroy other parts of Mother Nature, but fit to the other parts of the system around them.

There's been vast abuses in the past, which result in destruction of Mother Nature's balancing and restoration. We have to recognize what Mother Nature needs to survive in its balance.

Man has the ability to destroy his own foundation. It's the same for a large and small scale. We all need to be conservationists. Man is not the dominant species or else he will destroy the basis for his existence.

Question:

What kind of person is sensitive to spiritual meanings in Nature?

Answer:

Someone who is sensitive to taking impressions at the ice wall of a glacier, to see Unakwik with open eyes. If you are susceptible, you may sense the spirit of Unakwik without being told about it. The spirit can be sensed.

Most of the folklore has its source in the perceptions of people who try to explain in works and give it meaning. And then it was carried on over the generations.

Once you destroy that environment, the stories go on, because it was something of great beauty. When you read stories you still are moved by that vision, and the remembering . . .

People were put on this earth to make use of Mother Nature for man's advantage, according to the Bible, but within God's laws, which are Mother Nature's laws.

So you use, but not destructively. Mother Nature combines every living thing, so there's a relation here we have to pay attention to.

Question:

Who does Nature, or its aspects, belong to?

Answer:

Cynically, it's who has title. But it's like the Indians say: you don't own the land, because if you live here awhile the land owns you.

Mother Nature doesn't recognize title. It is not ownable.

You only live a short time. One generation doesn't have a right to spoil it for the other ones. All of us live here only as long as Mother Nature has that delicate balance.

Earth as a planet is owned by the Eternal Force that is the beginning and end of everything.

So "ownership" is very limited. We lay claims and have rationales, but when you expand it over 10 generations and further, we find our systems are poorly laid out unless they serve the continuance, until the final end.

Every generation uses Earth for life. Temporary ownership doesn't give the right to destroy it.

Question:

What type of person appreciates wilderness?

Answer:

Someone whose values are not egomaniacal. Each religion teaches that. Feelings and attitudes are born in. Anyone with any brains and feelings tries to explain his relationship to his surroundings. To relate your existence to the bigger picture.

Those not susceptible to Nature would be primitive, self-centered, not intelligent. They don't relate their activities to the whole of things. Even Einstein related things to the "Big Picture." Relating our own being to the Natural Laws.

Corporate America is not exempt. They are short-sighted, goal-oriented, and specific purpose-oriented. They are entities who disregard their context for their own benefit. They deny how things fit together and they ignore a philosophy of continuance.

There is a responsibility to the children to keep the world so that they will be able to live in it.

Question:

How long will wilderness last?

Answer:

Some wilderness will last forever. Even with high tech. Some other will yield. I've seen a lot disappear in my lifetime . . .

There's a little wilderness in every field that farmers plow. The world couldn't be as sterile as presented in futuristic movies. Because wilderness is Mother Nature: as it is, wild, and things as they are. So there's a little there, everywhere that we look . . .

Question:

In subsistence practices, is life transmutable?

Answer:

Fishermen don't make a lot of money. Not millions. But you're on your own: the freedom, Nature, and enough money to live an independent life. And work four or five months and then play the rest of the year.

The sea . . .the adventure of fishing is a challenge. No fisherman just does it for the money. The personal challenge is to survive at sea. Be self-motivated and self-reliant.

. . . This country is vicious, and it's a killer. You have to protect yourself and read the signs.

You have to take pride in surviving a storm. To turn into an emotional Alaskan it takes several years. Everything you do is subject to the water and the land and the wind. This is the ultimate rule . . .

On a small skiff with 20 feet waves, where you realize you're totally helpless, fighting for survival like any animal, Nature is more powerful than you are, and if you don't do the right thing, you will die.

We used to have three to four deaths every year. Now we have better equipment, radios, a helicopter, and so on. Now people are still dying, but it's better than in the '60's. But if the weather got bad again, like in the '60's, with 120 mile per hour winds, people would die again. That risk is always there. You have to be prudent and be a good judge . . .

The fish navigate currents to get upstream to spawn. You have to read their road maps and learn how they behave. You have to understand the salmon. Each species and type behave differently and have different personalities. The fish have instincts, and are conscious. They have celestial observations, observe sunlight, the earth's magnetism, and so on. They smell the water.

Subsistence people are dependent on those animals for their life. They need to fish every year. If one year the fish didn't show up, they'll die. So they realize that they must not take them all: just take their share.

But when the White man comes with their cannery, they take them all: just fence them in and take them all.

It's the same with animals. You can't just decimate the herds. You have to leave the young, the mothers and so forth.

The seal is the source of all life for the people. The bear is the source of all life for the people. So if the bear isn't there, the people will die. If the people weren't there, the bear would die. Because sometimes the man got the bear, but sometimes the bear got him . . .

Question:

Is life transmutable?

Answer:

You don't have to be a Native to realize a spiritual connection between you, using a life for sustenance.

Calories: you don't know what that is. Calories don't really exist, on an atomic level. An animal has spirit, maybe a soul, a life cycle and destiny. And your interdependent destiny touches theirs. That life-sustaining sustenance comes from a living animal.

As a member of modern society we lose that knowledge. That spiritual connection to your world. Then people go and kill wantonly, disregarding the respect man has when he realizes he's part of these interconnecting life cycles. You don't have to destroy the basis on which you live, to stay alive, although you have to take some animal's life.

It's the very basis of man, that he lives of. So you don't destroy the basis of your life. Water, and so on, is the basis too. So we mustn't pollute it, but take care of it.

IV. PRIVATE SECTOR ECONOMIC IMPACTS OF THE OIL SPILL (NON-FISHING)

IV.A. Introduction

This section of the report provides a qualitative analysis of the effects of the 1989 Exxon Valdez oil spill on Cordova's business community. In-depth institutional interviews and local press coverage of the spill are analyzed to supplement statistical data collected in QI and KI interviews. Respondents were selected by asking Cordovan residents to direct the interviewers to business people who had either experienced profits or losses due to the oil spill.

The majority of Cordovan business owners interviewed in 1991 described the oil spill as negatively impacting their businesses. Only one entrepreneur (of 20 businesses contacted) reported an economic windfall. This observation, while not statistical, agrees with data collected in April 20-21 of 1989 by labor economists with the Alaska Department of Labor (Alaska Economic Trends 1989). A random telephone survey of 23 businesses showed that no respondents foresaw any long term positive impacts on their businesses, and only one entrepreneur reported increased business.

However, it is quite possible that entrepreneurs who were severely injured by the spill were more eager to discuss their experiences in 1991 than those who profited. Strong negative sentiments toward Exxon are pervasive in Cordova, and some residents described profiting from the spill as a form of prostitution. Residents also described the period during the spill cleanup as "like living in an occupied war zone," with profiting on the cleanup equated to collaborating with the enemy. Probably more telling is that Cordova is a small community in which residents are strongly interdependent; sharing and responsibility toward each other in times of need are emphasized. Many respondents who profited during the spill cleanup expressed unhappiness on behalf of those who were hurt (at times these were family members or close friends). It may be that those who profited were less anxious to broadcast this than those who experienced losses.

Economic repercussions attributed to the spill were not limited to the 1989 fishing season; some of the worst economic effects are still unfolding, such as the bankruptcy of the CRFC (a fish processor), described below. Major economic impacts in the private sector discussed here include bankruptcies, foreclosures, lost credit lines, economic losses due to disruptions of normal business patterns (such as losses due to unsold inventory), business closures, and lost business and property values.

A major success of business owners' negotiations with Exxon was that Cordova businesses were recognized as directly impacted by the oil spill, due to the city's remoteness and its sole reliance on the fishing industry. On the other hand, Cordova businessmen were unable to elicit any long-term commitment from Exxon to mitigate their losses. Exxon stated that, "The real purpose in paying the claims is to bring everyone back to the same position they would have been in had the spill not occurred" (Cordova Fact Sheet, May 11, 1981:1). In seeming contradiction, the company refused to recognize a fishery growth factor. This was especially hard on entrepreneurs who had carried out expansions due to a forecast of record salmon harvests and strong prices.

Exxon did not comply with requests for wage subsidies, low interest loans to cover cash flow problems, or consideration of lost bank loans, business values, or property

values. The company refused to specify required documentation for business claims. It appears from written statements cited here that Exxon's primary plan for mitigating Cordova's economic impacts lay in lavish spending on the spill cleanup, which presumably would spread in a fair and equitable fashion throughout the Cordova economy.

Exxon in many cases negotiated settlements, with final offers covering a proportion of documented losses. The resulting shortfalls resulted in such impacts as bankruptcies, business closures, and lost credit lines because Cordova's small businesses had little capacity to weather such losses. The city has no road access and no deep port, so merchandise generally takes several weeks to arrive. Credit lines tend to be small, and stretched to the limit as spring approaches, since merchants regularly extend credit to fishermen through the off-season. If, for instance, a business owner has a credit line of \$50,000, due in 60 days, and merchandise must be ordered 25 days in advance, there is little flexibility to withstand radical disruptions in business patterns. Sales volumes are low in such a small town, so merchants must pay higher prices for inventory. Also, business is seasonal.

All of these factors made Cordova's businesses especially vulnerable to the economic disruptions caused by the cancellation of fisheries. Entrepreneurs complained that Exxon's emphasis on compensation for net profit losses, rather than loans to prevent losses, caused structural damages to their businesses which continue to cripple them today. (For instance, a loss of net profits is considered less injurious than loss of a credit line.) Cash flow problems needed to be addressed quickly to avert losses, and business owners complained that immediate loans to prevent losses were not even available from the Federal Small Business Administration. Cordova's small business owners were eligible for working capital loans to offset economic losses, and between April and September of 1989 the SBA's Anchorage office issued over 400 applications for disaster loans. But by early September only 29 applications had been submitted (Cordova Fact Sheet, September 7, 1989:1).

Widespread criticism centered on a chaotic and continually modified claims process. Business owners complained bitterly that this process was carried out at Exxon's discretion, with no objective agency overseeing the process. Many respondents claimed that Exxon representatives lied to them. A generally held belief is that Exxon settled claims more readily in the early post-spill period than later, while corporate representatives stated that there was no immediate deadline to file claims. Some entrepreneurs delayed filing their claims because seemingly ambiguous statements by Exxon over whether partial releases were final made them fearful to file until they knew the full extent of their losses. Some delayed because they lost bookkeepers, or were too busy due to lost employees and spill-related efforts. These respondents believe they were treated unfairly.

Cordova's small business owners expressed resentment that they were forced to sign releases while fishermen were allowed to sign receipts. They complained that fishermen and Native organizations could more readily attract lawyers and file class action suits than they could.

Respondents stated that public attention generated by oil spills centers too much on environmental issues and not enough on economic repercussions to small communities affected. Many stated that government efforts address spill prevention (which respondents believe is impossible) without sufficient emphasis on corporate accountability for economic impacts to local communities.

The oil spill created a climate of uncertainty in Cordova; respondents expressed fears that the town would not survive if the fishing industry were damaged. The disruption of regular business patterns in Cordova's "fishbowl economy" appears to have amplified these apprehensions. Residents who wish to sell businesses reportedly have been unable to do so, even at a loss:

My parents own the laundromat and the video shop. My father retired last year so they were trying to sell it. They had a buyer lined up before the oil spill, but after the spill the sale fell through, and they haven't been able to sell it yet, because everyone is afraid to invest in the economy, because the fishing industry may be devastated and everyone will have to move away, and so on.

My parents are trying to sell their business for \$250,000, and it's worth \$350,000. But no one will invest now, because of the uncertainty.

Respondents expressed the belief that Exxon deliberately fostered strife in their community to hamper their efforts to force the oil company to redress their losses. Conflicts within the business community arose in the process of negotiating with Exxon, creating hostilities and distrust (which persist in 1991) between business owners in this close-knit community. While Exxon carried on a cordial dialogue with the Chamber of Commerce, many business owners believed that their interests were not being represented; these persons felt excluded from the negotiation process. Feelings of powerlessness and frustration were expressed by merchants who concluded that they had no means of enforcing their claims for damages; no outside agency mediated the process of claims settlement, which was carried out at Exxon's discretion. The affected business owners formed the Cordova Business Owners Association (CBOA), and attempted to negotiate with Exxon outside of the auspices of the Chamber of Commerce. This conflict continues to the present; it has political as well as economic dimensions, as the president of the Chamber of Commerce is suing the City Council (membership of which includes some organizers of the CBOA). The suit has already consumed approximately a half million dollars of the city budget.

Other conflicts described here include those between individual business persons, business owners and VECO, entrepreneurs and Exxon, business owners and their customers, regular employees and transient employees, and business shareholders and their management.

These and other impacts are detailed in individual case studies discussed below. Factors which affected most if not all of the business community include shortages and higher costs of labor, housing, office space, fuel, and other supplies, as boats and planes ordinarily servicing the community became involved in the spill cleanup.

IV.B. Labor Shortages

Labor shortages in Cordova were extreme; nevertheless, some Cordovans refused to work for Exxon (to become "Exxon whores") on principle. Many residents were eager to earn the \$16.69 hourly spill wages, and controversies even arose over who was being hired. VECO announced a local hiring policy which gave first preference to Cordova residents, second preference to part-time Cordova residents, and third preference to other Alaska residents (Cordova Fact Sheet, April 19, 1989:3). Non-Native Cordovans expressed concerns that VECO was favoring shareholders of Chugach Alaska Corporation, but the company denied this (Cordova Fact Sheet, April 19, 1989:3). By late April of 1989, some 75 Cordova vessels with 191 crew members were working for VECO, with an additional 143 individuals working on the Navy ship USS Juneau in Valdez (Cordova Fact Sheet, April 19, 1989:3). The Alaska Department of Labor opened a job service office in Cordova, but respondents in 1991 reported little success in securing employees through this agency.

Cordova's Oil Spill Recovery Office commissioned a study in May of 1989 which showed that the city had lost almost one-fifth of its labor force to the Exxon Valdez cleanup effort, with employers forced to raise wages, pay large amounts of overtime, and go without needed employees (Cordova Fact Sheet, May 20, 1989:1). The 64 Cordova employers participating in the survey lost 199 employees to spill cleanup operations, representing 19 percent of the 1,145 people normally employed by these businesses during the spring season (Cordova Fact Sheet, May 20, 1989:1). Fish processors lost one-third of their 226 member employee pool, while retail service and transportation industries lost from 26 to 29 percent of their workers (Cordova Fact Sheet, May 20, 1989:1). VECO attempted to alleviate the shortage by allowing individuals on their waiting list for positions to take jobs at local processing plants (Cordova Fact Sheet, May 24, 1989:4), but the city's survey reported "help wanted" signs for 239 employees, and employers reported that they would need 309 new employees for the 1989 summer season (Cordova Fact Sheet, May 20, 1989:1). Nineteen of the 64 businesses responding reported that they had increased wages in an effort to keep employees (Cordova Fact

Sheet, May 20, 1989:1). These labor shortages are described in detail in the following interviews analyzed in this section of the paper.

IV.C. Housing Shortages

Cordova has a regular transient worker housing shortage during fishing season, which was exacerbated after the oil spill. The city entered the 1989 summer season with most of its transient housing capacity (for 610 people) occupied due to an influx of prospective spill cleanup workers (Cordova Fact Sheet, May 18, 1989:4). A city housing study found that this would leave a housing shortage for 200 to 250 people, according to *polled agencies*. *The study noted that this figure did not include "normal seasonal fishing people or others not directly related to the polled agencies and businesses included in the study"* (Cordova Fact Sheet, May 18, 1989:14).

This housing shortage posed a problem for employers because, as regular workers left on spill cleanup jobs, there was no housing for people arriving in Cordova looking for spill work. In general, establishments which normally provided housing did not profit, because these were already full to capacity (the one exception interviewed was the owner of a relatively expensive hotel who raised rates for Exxon and VECO representatives housed there). For other businesses, the inflow of transient people was balanced by an exodus of local residents who left on spill work:

Unlike Valdez, Cordova hasn't been inundated by people since Good Friday 1989. If anything, this town of 2,000 has lost population. The few who came to Cordova to deal with the spill haven't replaced the many who left earlier for nearby spill related work (from excerpts of an article in the July issue of Alaska Economic Trends, by Neal Fried and Holly Stinson, printed in the Cordova Fact Sheet, July 15, 1989:2).

While many residents were absent from Cordova for extended periods during the spill cleanup, in general they retained their housing, so new arrivals encountered a housing shortage. One fish processor who normally housed 100 temporary employees needed housing for 50 extra workers, because his business could not hire the usual 50 local seasonal employees, who had their own housing (Cordova Fact Sheet, May 20, 1989:2). Employee housing shortages are recounted in the interviews that follow; for

instance, one entrepreneur described in 1991 how she housed workers in her own home, creating stress for her family. City housing programs are discussed elsewhere.

IV.D. Gasoline

A common complaint in 1991 was that "gas prices went up after the spill, and they never went down." Gasoline prices in Cordova increased 69 percent in 1 week because of a lack of barges available to transport it (Cordova Fact Sheet, June 3, 1989:1). The barge which regularly transported fuel to Cordova became involved in the spill cleanup, so that gasoline had to be brought to the city via air. Prices at the pump increased from \$1.47 per gallon to \$2.49 per gallon to cover the extra freight costs. Cordova residents are close observers of price increases and their causes. Orca Oil Co., the city's one wholesale fuel supplier, published a price breakdown on the cost increase in the Cordova Fact Sheet:

- Delivery charge Anchorage:	.0625 cents
--Delivery charge Northern Air Cargo:	.77823 cents
--Delivery charge Cordova:	.10 cents
--Additional cost of fuel:	.033 cents

(Cordova Fact Sheet, June 3, 1989:1)

Orca Oil Co. stated that it intended to file a claim for the additional costs with Exxon, and, "When paid, Orca Oil will reimburse our customers for these additional costs" (Cordova Fact Sheet, June 3, 1989:1).

Intermittent fuel shortages also were a problem, as barge transportation halted due to the oil cleanup. In early June 1989, three to four plane loads of gasoline arrived daily via Northern Air Cargo, carrying 4,000 gallons per load (Cordova Fact Sheet, June 3, 1989:1). The city estimated its fuel needs at 100,000 gallons of diesel and 50,000 gallons of gasoline per week (Cordova Fact Sheet, June 3, 1989:1). Fishermen were given priority in obtaining fuel, leaving some drivers without gas at times (Cordova Fact Sheet, June 3, 1989:1).

Exxon responded to this crisis by underwriting \$30,000 in barge transportation costs and offloading fuel from one of their own barges. Residents interviewed in 1991 remain bitter over price increases.

IV.E. Conflicts Within the Business Community

The Cordova business community was virtually split in two in the aftermath of the oil spill. The Cordova Chamber of Commerce cooperated closely with Exxon officials, maintaining cordial relations with them; other business owners and city leaders, dissatisfied with Exxon's efforts to compensate their losses, took a more adversarial posture. These businesses created the Cordova Business Owners Association and attempted to negotiate with Exxon independently from the Chamber of Commerce. The following is a summary of the emergence and development of this conflict in the business community as it relates to Exxon's unfolding business claims settlement policy. The delineation of this policy provides context for the discussion of individual cases offered below.

This controversy has continuing economic repercussions for the city 2 years after the spill. Business leaders are often political leaders in Cordova, and this split in the business community is being played out in political confrontations in which the president of the Cordova Chamber of Commerce is suing the City Council (costing the city \$500,000 in legal fees to date). The Chamber president has been recalled from her seat on the City Council in a special election. The political dimensions of this conflict will be discussed in Section V. *City Government Impacts*. *Conflicts within the Cordova business community and between business owners and Exxon will be discussed here.*

The position of many city leaders and business owners is, briefly, that the Chamber of Commerce leadership was too sympathetic with Exxon's interests and actually hindered the efforts of some business owners to pursue claims:

A major conflict was between business owners and the Chamber of Commerce. The Chamber of Commerce was doing well economically with Exxon, and they were handling the small business claims. Exxon donated \$20,000 to the Chamber.

Exxon listened to the Chamber and to the people who benefitted economically from the spill, while those who suffered weren't listened to.

Connie [Taylor] was President of the Chamber of Commerce then. She's admitted showing Exxon city documents, while she benefitted economically from them . . .

Connie Taylor and the Associated Press, the Anchorage Daily News, and top business leaders met after the spill and went to Juneau for assistance. Businesses were not just those belonging to the Chamber of Commerce. It's a tea party in Cordova, mostly Connie's friends and supporters, a small group that doesn't do anything. Seventy percent of the businesses in town are not active members, and have \$10 million in business.

So, a tele-conference with government officials, the Attorney General, President of the Senate, a governor's candidate, and so on (a cross-party group, very powerful), were to meet.

Connie blew the meeting by not bringing Exxon executives to the conference. It was her decision.⁴⁰

The position of the President of the Chamber of Commerce is that the oil spill was an unavoidable accident which benefitted the town economically, due to the economic boom created by spill cleanup activities. Exxon responded promptly and appropriately, according to this person, and the company was, if anything, too generous and forthcoming in paying for possible damages during the early post-spill period. This created a "window of opportunity" for Cordova leaders to work constructively with Exxon representatives and educate them as to how to address the city's problems. The Chamber president contests the utility of adopting antagonistic postures toward the oil company. Later in the post-spill period, Exxon purportedly did try to minimize spill expenses, as good business practice would dictate, and company representatives "closed their purse strings and went home." Overall, this person contends, the spill benefitted

⁴⁰Since this paper cites local news coverage of events, key public figures are identified. Partial anonymity of respondents interviewed in 1991 is maintained in that either respondents or persons referred to by respondents are not identified.

the community economically. This person contends that social impacts are not measurable but are only value judgments. This person discounts social impacts, while arguing that those impacts were properly addressed by Exxon. Error lay in the responses of residents and city administrators, not in the policies and responses of Exxon:

It was a boom. Financially, it was the best thing that's ever happened in Cordova. Nobody made more money in their lives. It was a gold mine.

Cordova lost opportunities, in a corporate sense, to take advantage of it. For instance, Exxon was willing to fund living spaces: tent sites and camper parks. It gave Cordova a \$35,000 advance to start that. Exxon would have come up with more if the city had spent it all on that, but the city delayed in starting the project.

There were misunderstandings between Exxon and city residents. The residents were unusually suspicious of Exxon who didn't recognize this. If Exxon had realized this they would have provided more information originally. There was lag between the information coming in and getting out. Some information was probably erroneous, but through mishap rather than by deliberation . . .

Cordova has an unusually high amount at stake because it's created a situation where it's in trouble. It's dependent on fishing. Valdez has three industries: fishing, tourism, and oil.

Cordova is the only community that had business claims paid by Exxon, in recognition that we were unequally at risk.

The Chamber of Commerce wanted to work with Exxon and explain our problems to them. They didn't have a clue as to what our problems were. So we took their personnel to the various businesses. We took one of their treasurers to the laundromat. No one was using it because there was no herring fishing season. So then their representative had an understanding of what the problem was.

They did respond appropriately. Exxon responded to the city that they needed to know why the city needed money. The city didn't do that.

Exxon's representatives were jeered at, insulted, and there were some [vocal] threats on their lives.

Exxon usually erred toward over-compensation. For instance the _____ Restaurant got a \$55,000 settlement where the owner's claim in Money Magazine was that his business was worth \$30,000. It's true that Exxon paid more at first, for the earlier claims. The later claims were probably more reasonable . . .

I'm not really sure whether Exxon was the divisive factor. We all wanted the greatest benefit from Exxon for the community. Some thought the way was through threat and aggression and press releases. I thought Exxon wanted to spend money, and we should educate them. So the difference was the method rather than the goal . . .

I think that the spill was an accident. When you have that many ships, one is going to hit a rock.

What matters is, do I rectify the error as fast as possible? Exxon didn't single out that ship to hit the rocks. They did what they could as fast as they could, afterward.

Initially, Exxon did not try to minimize their expenses in paying for the spill. Later they did. Who wouldn't try to minimize their expenses? That's good business practice.

People that had legitimate claims were fairly compensated. You weren't supposed to be made better off because of the spill . . .

Economically, the spill benefitted the town. Socially, the story isn't told, and I'm not the judge. And what can you say, good or bad? It depends on how people spent their money--to pay a mortgage or for alcohol. Social effects are a value judgment . . .

Exxon announced an economic settlement policy on April 13, 1989, which was described in the Cordova Fact Sheet.⁴¹ This policy statement does not address business impacts, but addresses lost net income from inability to use natural resources:

Loss of income claims will be processed for individuals and businesses that lose net income because of their reduced ability to use natural resources of Prince William Sound as a direct result of the discharge of oil. These will include fishermen, hatcheries, canneries and others who have been directly impacted by the spilled oil (Cordova Fact Sheet, April 13, 1989: 2).

While secondary effects of the spill, experienced by most Cordova businesses, are not included, a general intent to compensate for damages due to the oil spill is expressed:

We intend to provide fair, reasonable and prompt settlements to those who were damaged by the spilled oil (Cordova Fact Sheet, April 13, 1989).

Exxon's policy statement describes a three step payment procedure involving: (1) cash advances with minimum documentation to satisfy immediate cash flow needs, entailing a receipt requested and the granting of rights to offset against subsequent settlements; (2) partial settlements for completed events such as the closing of herring season, with a release obtained for the settlement of the event in question; and, (3) final settlements negotiated when all factors are known and documentation is complete (Cordova Fact Sheet, April 13, 1989).

The board of directors of the Cordova Chamber of Commerce and other city leaders immediately and successfully pursued efforts to have Cordova recognized by Exxon as a "unique community where every business is directly affected by the oil spill" (Cordova Fact Sheet, April 21, 1989:1). Because of the local economy's dependence on one product--fish--Exxon Senior Vice President Ulyese LeGrange assured city businesses that "all reasonable claims" would be honored (Cordova Fact Sheet, April 29, 1989:1). A verbatim transcript of the following statement made by LeGrange at a panel discussion

⁴¹The April 17, 1989, Cordova Fact Sheet printed excerpts from a presentation by D. E. Cornett, Alaska Coordinator for Exxon Company, U.S.A., before the Senate Special Committee on Oil and Gas, Juneau, Alaska, Thursday, April 13, 1989.

held at Cordova High School on April 27, 1989 appears in the Cordova Fact Sheet, April 29, 1989:⁴²

I have a statement. It's not typed, but I'll type it and send it to you . . . I've had some of my financial people addressing the situation in Cordova. We were responding to the feedback from the Chamber of Commerce, Don Moore and some of the other business people. And you presented us with a case that Cordova is really a unique situation with its total dependence on the fishing industry. I think it was obvious though from the feedback we got from all of you that we have two problems.

The first was that it was clear we had some misunderstanding about how we would treat certain claimants. Since some of the questions that were raised were about the electric cooperative, about some of the cannery workers and suppliers to the cannery and that sort of thing. We were already intending to cover those under our guidelines. We were going to treat those as directly affected by the oil spill.

But it's also clear that we'd have to address the additional question that you raised, and that is would we recognize the unique situation here in Cordova. We've been wrestling with that problem the past couple of days, assessing the situation and we wanted to be prepared if we could to deal with that issue this evening.

After discussion with you (addressing Connie Taylor, Cordova Chamber of Commerce President), your office, representatives of a number of businesses here in Cordova, some of your town officials, we've concluded that Cordova does represent a unique situation. It is, essentially, a one-product economy. Local businesses are dependent on the fishing industry in that economy.

The problem that we see arising from the cancellation of the herring season is already on us. It is pervasive throughout your economy and we recognize that. You are aware, I think, that we have claims guidelines in place to deal with those directly impacted from the closing of the herring season and we're trying to process those claims as rapidly as we can. We've made, as I say, about 100 payments already to people here in Cordova. Now, we've clarified

⁴²The Fact Sheet often offered tapes of public meetings, for a nominal price. This illustrates the alacrity of residents who sought to hold Exxon to their verbally stated policies.

with several of you those businesses that we were already prepared to deal with and we'll be moving ahead. We've already had conversations with the electric coop and we'll be moving ahead with them. What I'm adding tonight is an interpretation of those guidelines for Cordova . . .

. . . we're going to be treating your businesses in Cordova as directly impacted under our guidelines for the closings that have already happened. And we'll be prepared to accept claims for damages incurred and we want to process those claims and get your advance payments or partial settlements or whatever you'd like to discuss with us as quickly as possible. So, we're trying to respond to your plea for a special situation. We've evaluated it and we agree with you. You have a unique situation here.

The Chamber of Commerce announced Exxon's policy guidelines for treating business claims at a special City Council meeting on May 3, 1989. These guidelines were described as the results of dialogue between Exxon senior management and the Chamber, in a Cordova Chamber of Commerce statement printed in the Cordova Fact Sheet, on May 4, 1989:1:

. . . Chamber President Connie Taylor outlined the results of a lengthy and continuing dialogue with Exxon which first resulted in the announcement last Thursday, by Exxon Senior Vice-President Ulyese LeGrange, that Cordova businesses would be considered directly affected by the oil spill. The subsequent guidelines, presented to the Council, were developed to define the announced policy.

"Through the ongoing dialogue the Chamber established with senior management in Exxon," Taylor said, "we were successful in helping them refine these guidelines for release today."

At the invitation of the Cordova Chamber, Curtis M. Fitzgerald, Treasurer, Exxon Company, U.S.A., visited one-on-one with Cordova business persons last week. Taylor arranged visits with a wide range of businesses representing all facets of the community . . .

Cordova's economy is 100% dependent upon the fishing industry and the oil spill in Prince William Sound had an immediate and dramatic effect on the residents of the community. Cordova's fishing fleet was among the first to respond to the oil spill.

Continued contacts between Fitzgerald and the Chamber resulted in the development of the guidelines. Fitzgerald in his letter of transmittal to the Chamber said, "My meetings in Cordova were extremely informative and useful. I think you'll agree they produced results."

The guidelines cover concerns that have been raised by local businesses. It will now be possible for them to file claims for the first two month period following the spill. Businesses with cash flow problems may receive an immediate 25% of the estimated potential claim. Businesses may choose 1988 or an average of 1986-88 as a basis for determining their net income loss for the claim period.

Fitzgerald spoke to the future in his transmittal letter to the Chamber, "You also expressed concerns about the possible longer-term effects on Cordova." He said, "At this point, no one can know with any certainty what they may be, but we will be working to study and assess any such longer term economic effects on Cordova . . . once we have sufficient information to reach some conclusions, we will deal with those assessments. In the meanwhile, we are committed to doing the best possible job of addressing the immediate economic impacts.

The Cordova Chamber has several projects underway to help identify and define problem areas within the business community, the results of which will be shared with Exxon to aid them in their decision making process.

"Throughout this situation that is so disturbing to all of us," Taylor said, "we have learned that when we talk to each other, we can fix it. It is the intent of the Chamber to continue this invaluable personal dialogue."

While the Cordova Chamber of Commerce took a leading role in arranging and monitoring early post-spill negotiations with Exxon, some business owners held less than friendly sentiments toward the oil company. Many found Exxon's proposed

compensation unsatisfactory, and were distrustful of Exxon's stated intent to fully compensate them for their losses. This more guarded posture is expressed in statements made at a May 9, 1989 meeting of business leaders with Exxon's claims representative:

Exxon representative Dick Harvin listened to the concerns and questions of about 35 business owners at a meeting organized by the Cordova Chamber of Commerce on Tuesday evening. Several local business owners expressed fear that Exxon would not accept claims for losses in future years and, generally, stated their mistrust of company statements to date.

"The previous track record of oil companies in settling claims is deplorable," said Bob Van Broeklin, owner of a bar and hotel. "We've been told we 'would be made whole.' We were told 'yes' you're eligible to file claims, maybe, no and now it's okay again. Why should we believe you?"

Harvin, who is the oil spill manager for treasury and claims, repeatedly stated that Exxon will recognize all claims that are losses as a result of businesses being directly affected by the oil spill. "The real purpose in paying the claims is to bring everyone back to the same position they would have been in had the spill not occurred," Harvin said. ". . . the guidelines (in the claims procedure) are no more than guidelines. Each business will have a unique situation. . . we want to be fair and equitable to everyone. We need dialogue and need to talk about individual situations."

Norm Roberts, owner of a hardware store, suggested Exxon should publish a document stating "What you've said tonight" and have it signed by a high Exxon authority. "I believe the document should be addressed to the people of Cordova," Roberts added. "Not to the city, not to the Chamber of Commerce or the businessman's association, but to the people."

Harvin said he would attempt to write such a document. He also said he would be willing to return to Cordova as many times as necessary to meet with individual businesses (Cordova Fact Sheet, May 11, 1989:1).

In interviews conducted with Cordova business owners in 1991, it is apparent that concerns expressed in 1989 were warranted: Exxon did not "bring everyone back to the same position they would have been in had the spill not occurred." Many economic

impacts described here in 1991 interviews have not been redressed. Ironically, Exxon cited their promise of "fair and equitable" treatment of all businesses as a rationale to deny recognition of a fishery growth factor, as described below.

At the May 9 meeting between Exxon representatives and Cordovans, a resolution signed by the owners of 50 Cordova businesses was presented to Exxon treasurer Harvin. The resolution outlines six issues which signers believed Exxon should recognize in their claims procedure:

1. Recognition that the closure or partial closure of any fishery will result in a loss of income.
2. Recognition that purchasing patterns have been disrupted.
3. Recognition of losses based on sales records for the past three years.
4. Recognition of losses based on increased labor costs related to the extraordinary wages being paid to oil cleanup crews.
5. Recognition that future growth potential, based on the fishing economy of Cordova, is a measurable quantum and failure to achieve that growth should be compensated.
6. Recognition that low interest loans by Exxon to refinance existing business debts and current cash flow problems is a viable solution for impacted businesses (Cordova Fact Sheet, May 19, 1989:4).

Exxon's response to these requests is contained in Harvin's reply (July 10) to a Chamber letter (May 22) which contained questions about the future. Lengthy excerpts are included below because: (1) this statement of intent was key in defining Exxon's business claims policy for Cordova business people at the time; (2) such publications in the Fact Sheet demonstrate how cognizant Cordovans in general were of salient issues; and, (3) the use of quotations around verbatim Exxon statements reflects a desire which residents often recounted in 1991, to "pin Exxon down" and "hold them to their promises."

In brief, Exxon refused to recognize a fishery growth factor, rationalizing that since fishery growth would not affect local businesses uniformly, application of a fishery growth factor would violate the principle of "fair and equitable" treatment of Cordova businesses. The company agreed to recognize individual growth factors. Exxon refused to subsidize wages, arguing that this would eliminate employer incentives to control costs. Using questionable logic, Exxon refused to provide low interest, long-term loans because no long-term impacts of the oil spill had been established. The company declined to consider lost bank loans, uncompleted projects, or lost property or business values, but left the door open to business claims stemming from direct oil spill impacts beyond those generated by closed fisheries.

Exxon stated that economic damages to the Cordova business community should be mitigated through local purchasing for the spill cleanup. To this end, Exxon analysts "supported the Chamber in preparing a products and services guide for Cordova businesses to assure that all local purchasing opportunities were identified." Exxon also approved a 25-percent advance against claims for lost net income, prompt settlement of claims for lost net income, and programs for labor and housing assistance:

- Q. Will Exxon recognize a fishery growth factor for Cordova business claims?
- A. "A fishery growth factor applied to Cordova businesses does not appear to be appropriate. From discussions with Cordova business owners, and you as we., it appears that the size of fish catches do not affect local businesses uniformly--some businesses may do better and some may not do as well when there is a very successful fishing season and the fleet is out on the grounds most of the time. The effects on individual businesses would be difficult, if not impossible, to determine. Applying such a fisheries growth factor would be inconsistent with the principles previously discussed with the Chamber of attempting to treat business claimants fairly and equitable. Therefore, Exxon does not intend to recognize a fisheries growth factor in settling business claims."
- Q. Will Exxon recognize an individual growth factor for Cordova businesses?

A. "Exxon recognizes that patterns for growth of businesses may vary from year to year based on business owners efforts in such areas as expanding store space or seating areas, offering a wider variety of merchandise or increasing advertising efforts. Our claims office has recognized appropriate growth for specific claimants where good documentation existed."

Q. Will Exxon subsidize wages for Cordova employers?

A. "Exxon cannot agree to subsidize wages. Such action would only eliminate incentives for employers to control costs. It also could have the effect of inappropriately fixing wages at artificial levels. Exxon has responded to the labor shortages in Cordova by working with the Chamber to implement an employee search program through the Job Service. In addition, we have provided financial assistance for the construction of temporary worker housing. Exxon will continue to monitor the labor problems that Cordova is facing and will work with the Chamber to monitor the results of these programs."

Q. Will Exxon provide low interest, long-term loans?

A. "Our claims procedures do not include low interest, long-term loans because no long-term impacts on the community have yet been identified. In addition, the Small Business Administration offers loan programs for qualified borrowers. And as you know, for businesses that may be suffering cash flow problems, Exxon is offering the option of a 25% advance on claims. We hope you will agree that our claims settlements have been handled in a very expeditious manner which should eliminate short-term cash flow problems for businesses."

Q. What efforts will Exxon make to mitigate economic damages to the Cordova business community?

A. "It has been, and continues to be, Exxon's policy to mitigate economic impacts on Cordova area businesses as a result of the Exxon Valdez oil spill through local purchasing, our 25% advance against claims, the prompt settlement of claims and programs such as labor and housing assistance. The assignment of analysts from Exxon's Treasurers group to

assist local businesses was to aid in the expeditious handling of claims. Exxon also supported the Chamber in preparing a products and services guide for Cordova businesses to assure that all local purchasing opportunities were identified."

Q. Will Exxon claims policy recognize lost bank loans, uncompleted projects or lost property or business values?

A. "At this time our claims policies do not consider lost bank loans, uncompleted projects or lost property or business values. However, as I have indicated in the past, we are willing to listen to and evaluate well documented, specific situations believed to be caused solely by the oil spill. The claims office's evaluation of these claims may require additional investigation including contacting other involved parties such as banks or prospective property or business purchasers."

Q. Will Exxon recognize claims of Cordova businesses beyond those generated by closed fisheries?

A. "Cordova businesses were recognized as primary claimants by Exxon because of the city's remote location and almost total dependence upon Prince William Sound fisheries for its livelihood. Exxon considers Cordova businesses as directly impacted by the closed commercial fisheries. Exxon will also evaluate claims for businesses that, while not affected by the closed commercial fisheries, also may have been directly impacted by the oil spill. The Chamber should direct any business that may have a claim as a direct result of the spill to donate the claims office. We will evaluate and process valid claims as long as there are losses that are a direct result of the oil spill."

"We believe the dialogue and working relationship between the Cordova Chamber and Exxon have been most productive," Harvin wrote. "We look forward to continuing constructive and productive communications in the future."

... "Exxon has shown that they are willing to work with our business community," Chamber president Connie Taylor said. "And the Chamber continues to work with Exxon to enhance

their claims and other business-related programs for Cordova" (Cordova Fact Sheet, July 13, 1989:1-2).

This publication of Exxon's policy statement in the Cordova Fact Sheet, demonstrates community awareness of a constructive working relationship between the Cordova Chamber of Commerce and Exxon.⁴³ Exxon had made some concessions to mitigate business losses (such as recognition that Cordova businesses were "directly impacted by the spill), but had refused to accommodate many demands (such as to subsidize wages, or recognize a fishery growth factor, lost bank loans, or lost property or business values).

Exxon's cordial relationship with the Cordova Chamber of Commerce was manifest during this period by a \$20,000 check from Exxon, U.S.A. to the Chamber, representing "the sincere appreciation of Exxon for the efforts of the Chamber to assist the community through the disruptive times associated with the Exxon Valdez cleanup activity" (Cordova Fact Sheet, June 9, 1989:1).

Some business leaders were not content with the outcome of negotiations between Exxon and the Chamber. Interviews conducted in 1991 demonstrate a continuing bitterness over the perceived exclusivity of the Chamber's orchestration of the claims negotiation process. Some exercise of control by the Chamber is illustrated in the following announcement, describing how business owners would be selected by the Chamber to meet with Exxon representatives:

Tom Chrichlow and Dave Shoup from the Anchorage Exxon Claims office will be in Cordova on Thursday, July 20 to listen to the concerns and suggestions of local businesses. Chrichlow is the claims manager when Dick Harvin, the on site claims manager, is on rotation . . .

The Chamber is also arranging a series of private meetings during the afternoon with individual business owners and managers. Those interested in meeting with Crichlow should contact Chamber

⁴³Most constructive, perhaps, for the Chamber and for Exxon. Public sentiments toward this relationship are discussed more thoroughly with governmental impacts. Most respondents viewed the large donation by Exxon to the Chamber as a "bribe."

President Connie Taylor who is responsible for scheduling the meetings. Because of the time restrictions only a limited number of individual meetings can be scheduled. Participants will be selected to be representative of problems continuing to face the business community . . . (Cordova Fact Sheet, July 18, 1989:1).

A substantial segment of the Cordova business community banded together and formed a new organization, the CBOA to negotiate with Exxon outside of the auspices of the Chamber of Commerce in an "uncompromised fashion:"

A new association for business owners in Cordova is being formed by about a dozen founding members. The immediate objectives of the Cordova Business Owners Association are to initiate an open dialogue with Exxon on business claims and to work cooperatively with Exxon officials on alleviating long-range economic problems related to the oil spill.

The original claims policy was based on the closure of the herring fishery with an extension to May and June. At this point, however, there has been no commitment from Exxon to continue honoring and paying business claims until the impact from the spill is over and business patterns return to normal. Although business owners have been allowed to submit claims to Exxon on an individual basis, they have not been involved in the negotiations process to secure a long-term commitment from Exxon to make the Cordova business community "whole" again.

Presently, the Chamber of Commerce has been the only entity acknowledged by Exxon to represent the entire business community of Cordova. The Cordova Business Owners Association wants "to offer business owners a cohesive, positive and uncompromised alternative to the Chamber of Commerce and an opportunity to be actively involved in working toward a reasonable, equitable claims policy with Exxon" (Cordova Fact Sheet, July 21, 1989:1).

The fears and frustrations of many business owners are reflected in this statement of purpose of the CBOA: members felt powerless because they had not been involved in negotiations to secure a long-term commitment from Exxon to mitigate their damages. . . . Founding members of the new association include owners of the Killer Whale Cafe, Club Enterprises, Orca Oil, Hoover's Movers, Area E Fisheries and the Powder House,

Heaney Mobile Home Park, Odiak Child Development Center, Davis Super Foods, Chitina Air Service, Cordova Drug, Cordova Commercial Company, and Laura's Liquors (Cordova Fact Sheet, July 21, 1989:1). One month later the membership had expanded to include Flinn's Too Clothing for Women and Children, Flinn's Clothing and Sporting Goods, Ambrosia Restaurant, Steen's Home Furnishings and Gifts, Windsinger Cafe, Chitina Air Service, and Cordova Air Service, Inc. (Cordova Fact Sheet, August 23, 1989:2).

The CBOA immediately pressed Exxon for a long-term commitment for claims settlement and for recognition of a fishery growth factor. They met with little success in pressing these and other concerns, according to reports from members in 1991. The following exchange of letters between the association and Richard T. Harvin, Exxon Claims Manager, demonstrate this, as well as a diminished cordiality as compared with the dialogue quoted here, between Exxon and the Chamber of Commerce:⁴⁴

August 9, 1989

Dear Mr. Harvin:

As you well know many Cordova business owners have joined the Cordova Business Owners Association. This organization is made up of prominent members of the business community who represent a majority of the retail and service merchants.

The intent of this letter is to establish negotiations between Exxon management and the Cordova Business Owners Association . . .

At this time, we feel it important for us to begin by discussion of the following issues:

1. That a strong commitment from Exxon to extend the business claims policies through this winter is essential in order to eliminate the concern for the future that many Cordova business owners have expressed.

⁴⁴Compare, for instance, the opening sentences of Harvin's letters to the CBOA and Chamber, cited immediately below.

2. That a growth factor based on the fishing economy of Cordova, is a measurable quantum and failure to achieve that growth should be compensated.

In closing we would like to say that our frustration and anxiety about our future is very real to us. Our lives and our businesses have been exposed to this disaster since March 24th and our intentions are to be here for many more March 24ths . . .

Sincerely, Cordova Business Owners Association.

August 21, 1989

Dear Jeff (Jeff Bailey):

This is in response to the unsigned letter from the Cordova Business Owners Association handed to me by you last Thursday in Cordova. Our response to the two points outlined in the letter are as follows:

1. The Cordova Business Owners Association should send any businesses that may have a claim as a direct result of the M/V Exxon Valdez oil spill to our local claims office. Exxon will evaluate and process valid claims as long as there are losses that are a direct result of the M/V Exxon Valdez oil spill.
2. A fishery growth factor applied to Cordova businesses does not appear to be appropriate. From discussions with Cordova business owners, it appears that the size of fish catches does not affect local business uniformly--some businesses may do better and some may not do as well when there is a very successful fishing season and the fleet is out on the grounds most of the time. The effects on individual businesses would be difficult, if not impossible, to determine. Applying such fisheries growth factor would be inconsistent with the principles previously discussed with the Cordova business community of attempting to treat business claimants fairly and equitably. Therefore, Exxon does not intend to recognize a fisheries growth factor in settling business claims. If you continue to feel we are overlooking key factors in arriving at that position, we would appreciate receiving from

you the documentation supporting such a fishery growth factor . . .

Sincerely, Richard T. Harvin, Claims
Manager
(Cordova Fact Sheet, August 23, 1989:2)

While Exxon's relations with the Cordova Chamber of Commerce remained relatively cordial, key Chamber requests were not granted. A major complaint in 1991 was that business owners remained confused throughout the claims process, as to what documentation Exxon would require. Many respondents recounted how Exxon changed their standards of proof, as well as their settlement policy, over time. Exxon field representatives changed as well; respondents stated that they would be told by one auditor that they had a substantial claim only to have another auditor tell them a month later that they had no claim.

A major problem for many was Exxon's demand for monthly financial statements. Small businesses who did not keep monthly records found it difficult or impossible to provide them, especially as bookkeepers were lost to spill cleanup work or shifted to other duties to replace employees who had left.

The following letter from the Exxon Claims Manager to the Chamber of Commerce illustrates how Exxon refused to be pinned to a specific level of documentation for all business claims, stating, ". . . our claims office representative may request further information needed to quantify or verify the claim. While I agree that it is desirable to specify the needed documents when review of a given claim is begun, this is not always possible."

Chamber President Connie Taylor received the following letter in response to a Chamber request for a listing of the documentation required for business claims.

Dear Connie

Thank you for your August 31, 1989 letter concerning general business claims.

Unfortunately, it is exceedingly difficult to provide an all encompassing list of general-business claimant documentation

requirements. Requirements differ depending on the size and nature of the specific business being considered. However, all claimants will normally be expected to provide the following in addition to other materials appropriate for the individual claim:

- 1986 through 1988 Federal income tax returns
- Monthly income statements for 1988 and 1989 consisting of
 - Sales records by month
 - Expense/cash disbursement records by month
 - 1988 and 1989 bank statements by month
 - Sales receipts/documents
 - Expense invoices/bills

Each claimant should provide any additional information which they believe supports and quantifies the net income loss suffered as a direct result of the March 1989 Exxon Valdez oil spill. In turn, our claims office representative may request further information needed to quantify or verify the claim. While I agree that it is desirable to specify the needed documents when review of a given claim has begun, this is not always possible. However, I assure you that it is not our policy or practice to ask for additional documents as a means of delaying compensation . . .

Connie, I very much appreciate the Chamber's continuing interest in the Exxon claims program, and its help in communicating information about our program to the Cordova business community.

Sincerely, Dick Harvin, Exxon Claims Manager (Cordova Fact Sheet, September 21, 1989:4)

The disquiet which Cordova business owners expressed over lack of definition in Exxon's business claims policy was also evident in late July 1989, when confusion arose over whether business owners had signed off future claims when they signed partial releases for the months of March through July. This issue was discussed when Tom Crichlow and Dave Shoup from Exxon's Anchorage claims office met in Cordova with

business owners, including the Cordova Chamber of Commerce Board of Directors and CBOA (Cordova Times, July 27, 1989:A1).⁴⁵

Business owners understood that the partial releases they had signed allowed them to file later claims. As a founder of the CBOA expressed:

What I was told, was the (partial release) left it open. There would be future claims. I'm confused with the process and don't want to compromise future claims. I'd rather receive a receipt [for the money]. I don't want to hear now that those papers I signed was signing off on future claims (Cordova Times, July 27, 1989:A1-9).

Crichlow's stated understanding was that there would be no future settlements for the months in which partial releases had been signed (Cordova Times, July 27, 1989:1). The president of the Chamber of Commerce pointed out that four lines on the partial releases for businesses were left blank, but Crichlow "appeared confident that the releases were final" (Cordova Times, July 27, 1989:1).⁴⁶

The above exemplifies the common complaint of 1991 respondents that "Exxon said one thing at one point in time and another thing at another point in time." That is, some entrepreneurs claim that they were told the partial releases were not final, while they are told here that the partial releases may well be final. This common observation by respondents, that "Exxon was not being straight with us," is manifest in another issue discussed at the meeting cited above.

Respondents in 1991 overwhelmingly agreed that Exxon was more willing to meet claims submitted in the first months after the spill than in later months. Yet, in the following statement, business owners are assured by Exxon representatives that they could submit their claims at any time:

⁴⁵Crichlow, with Shoup assisting, filled in for claims manager Harvin when he was off duty, 10 days out of 40 days (Cordova Times July 27, 1989:A1-9).

⁴⁶One resident asked whether business owners would have received receipts if they had hired attorneys as the fishermen had and received no answer (Cordova Times July 27, 1989:1). While trivial in import, the remark and its appearance in local press coverage demonstrate local cynicism toward Exxon's motives and a commonly expressed belief that Exxon would not willingly reimburse residents fully for their losses.

Business owners do not have a deadline to submit their claims. "There's no time horizon for a business or an individual's right to make a claim," Crichlow said. "They have a right to make a claim at any time. We've extended the Cordova guidelines for July and August addressing net income losses." He added that Cordova is the only community with the "unique program" (The Cordova Times, July 27, 1989:A-9).

Some Cordovans waited to file claims, inferring that Exxon would use the same guidelines regardless of when a claim was filed. Respondents expressed their regret for this decision in 1991 interviews. Reasons cited in 1991 for delays in filing claims included lack of a bookkeeper, a desire to determine the total loss before filing (fear of signing a partial release), extended absences of business owners on trips to Valdez and Anchorage to lobby for spill relief, and general confusion over the claims process.

IV.F. Conflicts Between VECO and Local Business Owners

Virtually all respondents expressed resentments in 1991 over the way VECO "stole our employees." Another common complaint was that the company was slow in paying for goods and services, exacerbating cash flow problems already created by the cancellation of fisheries. At a meeting with the Cordova Chamber of Commerce in May of 1989, a VECO vice-president for finance and a treasurer addressed complaints over delays in payment to many Cordova business owners (Cordova Fact Sheet, May 17, 1989:1). He explained that the company had been unable to meet its goal of issuing checks within 2 weeks of receiving invoices because there had been confusion about procedures; some invoices were mistakenly sent to Exxon instead of VECO and vice versa. New procedures, such as the assignment of a purchase order number each week for individual businesses, were being instituted (Cordova Fact Sheet, May 17, 1989:1).

Respondents in 1991 described delays in receiving payment from VECO, often for 2 months, as a continuing financial burden. Some found it especially galling to "front the money for the spill cleanup" on top of other financial burdens associated with the spill.

Another conflict involves suspicions held by some that VECO encouraged its boats to buy provisions in Valdez instead of Cordova where prices are higher. The VECO spokesperson at the meeting cited above assured business owners present that Exxon's

directive was to purchase locally and to emphasize logistical rather than financial factors (Cordova Fact Sheet, May 17, 1989:1). He added that Exxon monitored VECO's purchases more closely after the first few weeks of the post-spill period.

The next section of the paper presents economic impacts in individual cases in various sectors of Cordova's economy.

IV.G. Fish Processors⁴⁷

Bankruptcy of the Copper River Fishermen's Cooperative: Bankruptcy proceedings of the CRFC are now in progress, an outcome of the March 1989 Exxon Valdez oil spill according to the Co-op's management.⁴⁸ In February 1991, the Spokane Bank of Cooperatives foreclosed on the Co-op's indebtedness; the Co-op management tried and failed to get financial assistance from the National Marine Fisheries Service's capital construction fund in Washington, DC. Presently, the Co-op is seeking to file for reorganization in Anchorage, in hopes that the U.S. Bankruptcy Court will approve a *Chapter 11 plan that will allow their freezer plant, owned by local fishermen, to continue functioning during the 1991 season.* The alternative is reportedly a ruling which would dissolve the company and force a closure.

Background: The CRFC was started in 1981 by a group of gillnet fishermen. Members cite two main impetuses behind the Co-op's formation: (1) to "break the strangle-hold on prices" of the few large processors in the area, and, (2) to provide a dependable market for gillnet fish.

Gillnet fishermen catch salmon using a net which traps the gills of the fish; the fishermen pull the fish out one by one. These fish are in good condition, suitable for

⁴⁷Chugach Fisheries, Inc. is widely rumored to be on the verge of bankruptcy, and there was a radio announcement that they had filed Chapter 11. Chugach representatives refused interviews on the subject, due to pending litigation. Larry Cambronera of Seattle, vice president of operations for the fishery, declined to make a statement to the Cordova Times during press coverage of the bankruptcy of the CRFC (Cordova Times March 7, 1991:A-9).

⁴⁸Bankruptcy proceedings are currently unfolding, and information here will not remain up to date. Cooperative spokespeople announced in the first week of March that the Co-op was scheduled to file for Chapter 11 the following week in Anchorage; within 20 to 40 days of filing, creditors would have the chance to meet with bankruptcy trustees (Cordova Times March 7, 1991:A-1).

freezing. In purse seining, millions of pounds of fish are harvested in nets which are emptied onto the boats; these fish are "squashed and good only for canning."

Prior to 1981, a few processors controlled prices and gillnet fishermen periodically went on strike for higher prices. But once the major processors received large volumes of seine pink salmon, the gillnetters were often left high and dry (Cordova Times, March 7, 1991:A-1). A group of gillnet fishermen organized this processing cooperative specializing in frozen fish to provide alternative pricing and a dependable market for their gillnet harvest. The Co-op offers fishermen an initial price at the dock, but gives a price adjustment later in the season if the selling price goes up.

The CRFC is the smallest land-based processor in Cordova, but it ships out more frozen salmon than any other local company. Major markets include Japanese buyers and upscale restaurants in urban centers in the United States. The Co-op has six permanent employees and 50 seasonal employees, most of whom are local residents.

The Oil Spill and the Coop's Bankruptcy: Although the bankruptcy of the CRFC is occurring 2 years after the Exxon Valdez oil spill, interviews with the Co-op's management describe a sequence of events leading up to the current financial crisis in which the oil spill and cleanup are conspicuous.

During 1989 there were closures on Prince William Sound due to the presence of oil on the water; in addition, some fishermen worked on the oil spill cleanup. Consequently, during the 1989 season the Co-op bought fewer fish than anticipated and had lower profits. Some fishermen did fish (in fact, they were required to fish in order to put in claims against Exxon for mitigation of losses). Due to the closures, fish caught were older and darker than usual, and not of a bright, fresh-looking quality necessary for freezing and sale to the Co-op's markets. As a result, the Co-op reportedly lost some markets and damaged their reputation for high quality frozen fish. They also ended up with extra frozen inventory.

Because the Co-op had sustained losses during 1989, they started 1990 already into their seasonal credit line. While these losses were direct effects of the oil spill, the Co-op was unable to obtain adequate compensation from Exxon and was finally forced to

accept a settlement which was less than their documented losses and sign a release under duress in order to get operating capital:

We fought with Exxon all winter. In the next spring we had to accept the claim they offered under duress, signing a release, or go out of business . . .

The original claim against Exxon was \$1.7 million. And it wasn't a trumped up claim. Their first offer was \$700,000, and we settled for \$1.3 million. This fell short of our documented losses . . .

The \$1.3 million was all contribution to overhead. In 1990 we went into the season already into our seasonal credit line. In mid-June we were \$1.5 million into our \$1.7 million open credit line for the season . . .

Exxon gave us a hard time because we're little potatoes and they don't have to deal with us. They had us over a barrel. We tried to avoid signing the release. We had four or five proposals for them, but they insisted that we sign a release. We put it in the minutes that we signed under duress, but they don't care. We can duress all we want. We're nothing to them . . .

We have a suit against Exxon, but it means nothing. Processors were declared "secondary" effects in court. The suit will be dropped now anyway, due to the expense.

In 1990 there were additional financial pressures for the Co-op: a record 11 buyers were operating in Area E which forced prices up. The CRFC, a small cooperative already in financial difficulties, could not compete in the season's "price war:"

There were 11 buyers in the Sound in 1990, driving prices up. Big buyers can even their losses, but we couldn't. We couldn't meet the prices. Every processor took a loss last year. But we'd had our pegs knocked out from under us in 1989 and couldn't survive . . .

We couldn't compete for those early fish with the 11 buyers, who had floating tenders and less overhead. They were paying top dollar.

When the tenders left, the image was that the fish were worth 90c/lb., and we only could pay 80c/lb. Even though the tenders weren't there anymore, people still wanted 90c/lb . . .

Coops can't compete well in price wars. We can't ride out losses. And, selling less volume, we can't take lower profit margins, like big processors can. We lost fish again in the early 1990 season.

The Co-op, now short on operating funds, needed the early season salmon because these yield a high price. They reportedly paid more than they could afford and still have not paid some of the fishermen for their fish. The Co-op did not get as many fish as they would have liked, and they had problems with their markets because they had sold older, darker fish the previous year. As a result, they started the 1991 season heavily in debt and their bank foreclosed:

We lost our market for pink salmon in '89. In '90 we just didn't get the volumes we needed. For '91 we're into our seasonal credit line with the Spokane Bank. We're more than \$1.7 million in debt to them. So they won't extend any more credit so we can operate, and they started foreclosure proceedings. So we went into Chapter 11 . . .

The bank said in April of '90 that we were out of the covenants of our loan; they wanted us to have \$200,000 in working capital, and we were in the hole because of the spill . . .

When the bank decided to foreclose a month ago, we scrambled for help from the state, or anywhere. One board member got hold of the Marine Fisheries Service: it takes 4-6 months to do the paperwork for long term loans. But we had 3-4 days until foreclosure . . .

They wanted to help us put a loan through in 54 days. So we spent four days putting a 60 page application together, with the Exxon claims and so on, and submitted it . . .

The Marine Fisheries Service told us to raise a million dollars from our members, then they'd loan us a million dollars. We couldn't do it, so we're sunk . . .

We were outraged. The Spokane Bank only wanted \$500,000 for us to keep operating! We only have 80 members. To come up with a million dollars in April? They probably couldn't come up with \$500 each right now.⁴⁹

The frustration of Co-op management is exacerbated by their perception that Exxon could probably have prevented the bankruptcy by meeting the Co-op's documented losses for 1989. They feel that the \$400,000 difference between their claim and settlement is small relative to other settlements paid by Exxon:

The Chapter 11 probably wouldn't have happened without the spill. We'd still have lost money this year, but we could have hung on. The bank doesn't want that much. \$500,000 would keep the bank backing us . . .

It's rumored that the seven major fish processors [in the area] settled with Exxon for \$54 million. Why didn't they give us at least one more million?

Continuing conflicts are described by Co-op members that include: resentment between members who worked on the oil cleanup and those who fished and supported the company; irritation when the Co-op could not keep up fish prices in 1990; exasperation when fishermen were not paid fully for their fish in 1990; and beliefs on the part of some fishermen that the Co-op's financial troubles are due to bad management. Some Co-op members report that they were asked for contributions of \$8,000 each to keep the Co-op out of bankruptcy; they refused, irritated that this amount approximated what they were still owed by the Co-op for their 1990 harvest.

IV.H. Fishing Gear Suppliers

Retail suppliers of fishing gear were often able to offset 1989 losses by selling cleanup gear to VECO. However, business owners explain that the disruptions of their normal business patterns have caused financial hardships which continue 2 years after

⁴⁹Most fishermen live on their seasonal income from fishing all year, so that many are out of money and in debt to local businesses just prior to the start of each fishing season.

the spill. Problems include unsold inventory (which Exxon would not credit as a loss, since stores still owned the merchandise), over-extended credit, and lower sales.

One such business owner had begun expansions shortly before the spill, and now fears bankruptcy and plans to close up shop and enter a new venture:

After the spill, there was mass confusion and chaos. We sold lots of small items for the oil spill: rain gear, and so on. So we had normal net sales in 1989, but it was on small, turn-around items like rain gear and boots. Not on our normal sales items . . .

In 1989 we were expecting a huge run of fish. So people ordered new nets but didn't fish. Many didn't pick up their web in 1989 or 1990, so it's still here in the store. So we can't afford to order new inventory. We have no flexibility there . . .

I lost \$190,000 [in 1990], plus I'm carrying lots of credit on my books. Lots of people moved out in the winter after the spill, so there was less business . . .

I sell nets, which are what really took the drubbing. It'll be another year or two before people will start ordering new nets. Last summer they thought they'd work on the oil cleanup. This summer they bought equipment at the auction of spill equipment in Anchorage . . .

There's no way our business will survive unless [a new venture] takes off. There's no way of taking those kinds of losses and surviving.

Overextended credit is described as a financial burden, and as disrupting the established patterns in which residents of Cordova were used to doing business with each other. Residents often say that Cordova has a "fishbowl economy;" we see here how financial impacts in different sectors immediately spread throughout the economy. Cordova merchants regularly extend credit to fishermen through winter and spring until the opening of fishing seasons, but in 1989, normally solvent customers such as canneries did not pay bills promptly. Moreover, many business owners complained that VECO delayed paying bills for 2 months, so that Cordova businesses were forced to capitalize the spill cleanup. A serious social consequence of this credit crunch was that the

business owner quoted below was forced to sue old and valued customers, to whom she normally would have extended credit:

And, the \$190,000 loss and unsold inventory doesn't count what people have charged and not paid for.

Even the canneries haven't paid me. I used to think of cannery credits as being as good as cash. But they aren't paying me. One fish buyer went into Chapter 11. [Another processor] still owes us money . . .

A lot of the local communities fronted the money for the cleanup. At one point I had \$300,000 riding on the books with VECO. It took 2-3 months to get my first check from VECO . . .

A lot of people here fronted that spill cleanup and credit limits were stretched to the limit. This year the company I borrow from is carrying me.

A lot of people in town now are operating on a cash basis only. We're very careful now about extending credit.

And I've had to file in small claims court against old customers. A lot of them have moved out of town. A lot of them mismanaged their spill money and can't pay their debts now.

Like all business people interviewed, this person lost employees to the spill cleanup crews. Like many respondents, she describes the consequent "burnout" as straining family relations:

I had 13 employees in 1989 hanging gear for me, and after VECO came in I had two. I'm stuck trying to get untrained people to hang gear, which I'm committed to have ready, when it's a skilled labor. It was a nightmare. As soon as I'd train someone, VECO would steal them . . .

Any problems in your personal life were exacerbated. I went through a divorce. Lots of people got divorces. Families suffered. There were lots of social impacts . . .

There was total burnout. We're the "walking dead." There was no let up from March 1989 until now. It never stopped . . .

When I finally got employees at [another business I own] through the State Employment, I had to house them. I had to put employees in my home. Then I had no privacy. It was insane.

Like other business owners, this person describes Exxon's claims process as unfair. Exxon did not credit unsold inventory as a loss, their payment policy changed after 1989, and Exxon spokespeople lied:

The Exxon claims process was insane. At one point last February, they told us that they owed us \$80,000, and we got nothing. We weren't able to subtract the inventory outlays from the net profits . . .

The fish net I had left in inventory didn't constitute a loss, according to Exxon, because I still had it, but that affected my business . . .

We've received nothing from Exxon except their promise: "No one will suffer. We will make you whole again." That's a laugh.

I didn't put a claim in for 1989 because I grossed the same amount as in previous years. That was a mistake. I put in a claim for 1990 because of the low orders. I could see that I'd be hurt that year . . .

Exxon required different verification from different people. And they made promises they didn't keep. They came and audited our books last May. One of them said we'd lost \$90,000 in one month, but he was transferred, and the next guy said we had no claim . . .

They had a disastrous impact on us, and they only want to deal with the fishermen. Last summer we only had two sales from Exxon/VECO, so they didn't even keep trying to funnel money into the community in 1990.

And I didn't even raise my prices for them, like people in Valdez did. I just tried to do normal business with them . . .

They caused me a loss in this retail store through their screwing up the Sound, so they owe me for that, but the Federal court says, "The buck stops at the water line" . . .

Exxon wasn't honest. They said they didn't want us to go under. They kept us going through the claims process, jumping through their hoops, only to say, "You have no claim."

This person and her husband entered into business expansions prior to the spill, as did other Cordova fishermen and business people, due to the high expectations for the 1989 fishing season. This respondent points out that furthest from her expectations prior to the oil spill was a business failure. Now, rather than their planned expansion, she and her husband are facing the closure of their business. Moreover, like other respondents trying to sell businesses, they are not having great luck finding buyers:

We were committed to expanding our business in 1989, and it was a total disaster. Net sales are the main part of [our] fishing supply . . .

Gill nets take six months to get here from Japan, and there was a big fishing season forecast for the summer of 1989. So we forecast big profits. We ordered huge amounts of net to hang gear on. All of it was special ordered, with deposits.

Because we're still sitting on that, we have had no capital to work with. And we'd just expanded into a new building, and oil prices went up. We had already started expanding, and our equity was all in inventory . . .

Our equity is still tied up in that inventory outlay which has been sitting upstairs for 2 years. We were committed to the expansion, and now we may lose this company altogether, because we lost \$190,000 last year . . .

For instance, trying to buy insurance on this building when you're working on a _____ shoestring is impossible! I mean, the money for operating costs isn't even there . . .

We have a new seine boat, in a contract we entered before the spill, and we haven't been able to sell our old boat. Boats aren't moving now. We need to sell the old one to get the new one paid for, and we have to keep insurance on both. Had we known the situation, we wouldn't have gotten another boat. It's not economical now.

Ours was an upgrade, but we'd planned it before the spill, planning for the increased fish runs, to increase our productivity. A lot of people upgraded, planning on the hatchery runs. But nothing's moving right now . . .

We're actively trying to sell this place now, but with everything so low now, it's not moving . . .

We'd just expanded, and it wasn't because we were planning to sell. So the sale is spill-related and our leaving is spill-related . . .

Why should I be sitting on \$50,000 in payment receivables, when I'm juggling funds from one place to another, just to stay in business? I had to borrow from [family members] this year and last year to pay the bills. I've got all that inventory I'm sitting on, and all that credit on the books, and I can't even pay the bills. And I have to spend money pursuing that claim? Why should I go through that when I'm working so hard?

IV.I. Hotels and Motels

Divergent accounts of personal economic impacts are offered by hotel and motel owners. Cordova was deluged with incoming people after the spill, including representatives of Exxon and VECO and individuals eager to work on spill cleanup crews, but many spill workers boarded on boats rather than in the lower priced motels that are normally frequented by the non-resident fishing fleet. Some of these latter establishments report losses. Exxon and VECO representatives reportedly stayed at higher priced hotels, that benefitted economically. Nevertheless, entrepreneurs who benefitted economically overwhelmingly express compassion for those hurt by the spill.

A positive spin on economic effects of the spill is offered by the owner of a quality hotel in Cordova where many Exxon and VECO representatives stayed. This respondent views the spill as an economic boon; simultaneously, he describes the spill in catastrophic terms, likening it to the 1964 earthquake:

The spill was the greatest thing that ever happened to me. The place was plum full, but it was sad to see the cause.

As for the businesses, in the short term it was great. What remains to be seen is if there's any long term adverse effects on

the fishing. We depend on fishing here, so if something adverse happens, it could be bad for us.

In terms of my personal feelings about the spill, it's like "My psyche and world are gone," but it would be more severe if you lost a member of your family.

While this person expresses fears of future impacts on Cordova's critical fishing industry, he expresses an optimism regarding recovery from such disasters, shared by many in the business sector:

The earthquake wiped out the whole harbor. It wiped out our fishery, and we recovered. So, because of seeing that I'm more balanced.

People were killed in the earthquake. There were acres of sea mammals, clams, and so on, that were just gone. This [spill] didn't kill anybody. Still, it's important, but not heart-rending.

The ever-present problem of lost employees did not daunt this entrepreneur, who recouped losses for meeting cleanup wages by nearly doubling his room rates:

You had to meet the cleanup wages. Exxon-VECO offered \$17 an hour plus room and board, so you had to meet that. I offered all my employees \$500 a week bonuses to keep them on. All those people were fodder for the mill. VECO would come in one day and take 'em the next.

I made more than enough to counter that expense. Exxon-VECO stole my help, so I raised their room rates. I about doubled them.

Someone I was paying \$7 an hour had to earn \$15 an hour now. And there was no notice. It was hire on the spot.

While this respondent benefitted economically from the spill in 1989, he expresses considerable compassion for others who did not:

There was a scarcity of labor for some, but then you work longer and harder yourself. It only lasts for awhile, but you've got to do it. Some people put signs on their business doors: "Thanks Exxon, I don't have any help!"

The early parts of the spill, for the younger people who had never had anything but sunshine and roses, it caused some stress there. It caused some stress in families where you had two boys and one went on the boat and one worked for Exxon. One made \$15,000 and one made \$4,000. And it was working 7 days a week, 24 hours a day. That caused stress for some households . . .

Fishermen got paid for leasing their boats, and they went on parties, got new boats, and so on. Then they couldn't pay their taxes. This hit them unexpectedly.

A very different scenario is depicted by the following owner of a motel and nearby bar, restaurant, laundromat, and liquor store. This person explains that he did not raise his room rates in 1989 because he did not want to hurt (and possibly lose) his regular seasonal clientele. He reports substantial losses which were not reimbursed through the Exxon claims process. More damaging, however, is the loss of his credit line, due to unsold inventory which he could not pay for; this calamity continues to adversely affect his business:

[The fishing season of] 1989 was projected to be the opportunity of a lifetime: big volume, big prices. Then the oil spill hit . . . no herring season, no fishing season. Everybody left to work the oil spill; your employees left to work the spill. Then the people who made big money working the spill left the following winter after the spill. So, businesses were all inventoried up, all dressed up for the party which didn't come . . .

There was a limited claims program for businesses but it didn't take care of everything. I got compensated for March and April. Most of our business is in May to September.

I was loaded up in March with inventory, and the business didn't happen because all the people went out to work the spill. I lost my credit rating with some of my suppliers because I couldn't pay for my inventory until 2 months later. That effect has hurt my business for the last year and a half.

Exxon paid only on a net profit basis. For example, in March I did \$30,000 worth of business where I normally would gross \$60,000. But I would have taken inventory and overhead costs out of that \$60,000. So I would have gotten an [additional] net profit of

\$10,000, and \$20,000 would have paid for the inventory, expenses, overhead, and so on.

Exxon only paid me \$5,000 for lost net; nothing for my inventory. So I missed the "gross" factor. I couldn't pay for the inventory and I have lost my credit and suffered ever since from a shortage of inventory. . .

With a small business here, supplies can take 25 days to get here. Credit lines are \$50,000 for 60 days. So without that credit line I have a major crimp in my business due to insufficient inventory. With less inventory, I can't sell as much. After stocking up in March, I sat for 6 weeks developing a claim, which didn't get processed right away. So I didn't meet my 60 days and I lost my credit line . . .

They didn't pay for my inventory, because I still had it. But I couldn't sell it and couldn't pay for it. I lost my line of credit and now I can't order in advance in time to get merchandise when I need it, because it takes so long to ship goods in.

Since June, I'm off \$100,000 in business. I've had this business since 1974, and that's never happened before . . .

For my motel, I kept my prices the same. I don't do business that way. So after the spill, I still have my clientele. Because I'd have to have raised prices on the locals too. And I didn't want to inflate my prices for them. Those who inflated prices say we who are now bitchin' about claims are rabble rousers.

The last statement echoes resentments widely expressed, over the uneven economic effects of the spill. These asymmetrical effects also ensued from the inequitable nature of Exxon's claims process, according to Cordova residents.⁵⁰ Respondents believe that Exxon paid varying amounts on claims and insisted on signatures of either receipts or releases, based on the financial desperation of the injured parties:

So Exxon set up their "net profit claims program." You needed 3 years of monthly financial statements, which most small businesses didn't have. And even though this was to be the biggest year ever,

⁵⁰This is also discussed in the sections on fishermen and fish processors.

you got paid on your history. When they paid me my claim, they came with two checks. The first one I refused. They pulled out the second one, and I took it . . .

We were in such disarray because our employees took off. I was in Juneau lobbying for a claims process. Exxon wanted businessmen to sign a release for March and April. Fishermen only had to sign a receipt.⁵¹ I was in no position to refuse to sign a release, so I had to sign. So that blew a large part of my claim.

So all people weren't treated the same. The average guy on the street got screwed. Natives and fishermen had attorneys jumping out of the woodwork on them, but not for businesses. It's all smaller claims with lots of paper work . . .

People who were ethical in their prices and looked out for all the people got screwed. I only did about \$1,000 worth of business with Exxon. If you were an advocate, Exxon and VECO wouldn't deal with you. Exxon avoided me like the plague.

This uneven treatment by Exxon exacerbated what respondents describe as the chaotic nature of the claims settlement process, due to the absence of bureaucratic or legal mechanisms to administer it. Respondents complain that attention has centered on spill prevention (which cannot be assured), rather than legal remedies for economic losses which will recur with future oil spills:

The TAPAA fund has a limit of \$86 million, which won't pay the bill. So we're sitting in the middle of a bureaucracy and nothing has been fixed in case it ever happens again. But we've learned not to trust the Federal and State governments . . .

Also, the legal process is uncertain. Judges reverse each other. You never know if you'll be compensated. They're about to drill again and you never know when the next spill will be. People get really edgy . . . there's still no real mechanisms to prevent another major disaster. Just a few more escort boats. And no one looks at the human damage. We were effected as much as the fish and birds . . .

⁵¹Some fishermen report that they were forced to sign releases; others report that they only signed receipts. As described above, the CRFC was forced to sign a release in order to receive their claim from Exxon.

Exxon didn't provide trustworthy information. No one did. The State didn't either. We really had no source of information unless you went out and looked at the spill. We were caught in between major public relation battles.

The Federal Small Business Association put out low interest loans, but that would put us farther in the hole . . . If there'd been financing available [immediately], through SBA, everyone could have weathered it. Exxon wouldn't make us loans, [but with the] SBA: (1) you have to prove losses, and (2) borrow money on losses. At least with Exxon they paid your net loss. What we needed was financing, not hand outs. But immediately, so we could make the necessary adjustments to avoid the losses. Change stocking methods, refinance buildings, and so on . . .

The only economic help was that the city put a moratorium on the sales tax, extending the payment date for 2 months . . .

Another problem was that we never knew whether a given month would be paid. We'd get May in June, and so on, so there was instability and defensive business practices.

I showed some net profit by September, but I did no repairs and was in bad shape the next year, in addition to having bad credit.

For a small business that really hurts. You have to plan in advance based on established patterns, without much cushion for uncertainty.

The above observation, that Cordova's small businesses have little ability to weather economic hardships, recurs in most business interviews. Cordova has no road to the outside and no deep port, so merchandise must be requested weeks in advance. This leaves little flexibility for radical disruptions such as cancellations of fishing seasons. Business is seasonal, with merchants often stretching their own credit limits to extend credit to local customers each year prior to fishing season. Sales volumes are low, so merchants pay high prices for inventory:

A case of Teacher's Scotch, for instance, is \$180. For five cases it's \$140 per case. I have to buy a half case. Here there is a big fluctuation in business and no big volume, but your expenses stay the same.

This businessman reports the usual problems with employees: loss of key employees, employee burnout, larger overhead due to overtime wages, business closures due to lack of employees, hiring of untrustworthy people, paying of trainees who left before becoming productive, and so on. Especially inconvenient, for this respondent and others was the loss of his bookkeeper, whose aid was needed for filing a claim with Exxon. This entrepreneur was afraid to meet VECO's wages, because of the uncertainty of the claims process:

There were horrible employee problems, and the few who stayed were completely burned out, including me.

We couldn't match Exxon's wage, or come up with bonuses, since we were losing business, and we've had employment problems since because people now expect more money.

Here [in the bar] I have 12-20 employees. I own the bar, liquor store, laundromat, hotel, and restaurant. During the cleanup we were five employees short. Everyone was paid overtime and worked six and seven days a week . . .

Employees have been a nightmare. You lost your crews, and then after the spill they went on vacation. I had people working for me that normally I wouldn't have let in my bar! You'd take anybody off the street. Then you spent all your time watching them . . .

Maintenance men: the first was an alcoholic and in trouble with the cops. I paid for his alcoholic counseling. The next one was also in trouble with the cops, and he belonged in a mental institution. The other employees insisted I fire him because they were scared of him . . .

My bookkeeper quit. She couldn't take the stress. I've never been able to replace her.

You saw gobs of "HELP WANTED" signs up and down the street. We asked Exxon for wage subsidies; they told us to raise wages and raise your net loss, and they'd pay for that, but we couldn't raise the wages because you never knew what Exxon was going to do. They did March and April. In June they'd do May. But you never knew what their program would be.

It changed over time, and it wasn't binding on them. You could go broke. Technically a claim is mitigating your damages; we didn't know if they'd pay for raises.

To even file a claim, you need a bookkeeper, and mine left because of the strain. Everyone ran out at one point, so we kept the bar open and closed the liquor store.

You'd train people for a week, and then they'd quit. You had to pay them even though they were never productive, and they were irresponsible. You never knew if they'd show up. It was a nightmare, and it's just starting to straighten out . . .

I've only had two employees stay throughout, in two businesses. In the bar I went through 10 employees; in the liquor store I went through 15 employees; in the motel I went through three employees. You spent all your time training new employees and had not time to manage your business.

Like many in Cordova, this respondent likens the oil spill to the 1964 earthquake, but he notes that the effects of the spill continue on, with uncertain social and economic repercussions:

It was like the earthquake [of 1964]. Nothing fell down, but the effects kept on going. When you have a fire or an earthquake, it stops. With the spill, we still don't know. Are the fish damaged? And the cleanup caused more damage than the spill.

But we've seen no damage information by the State or Federal governments, because of litigation with Exxon. Exxon gives glowing reports. State and Federal judges are opposing each other. Federal judges say you can't sue Exxon for dumping oil . . .

Some employees wondered if they should sell their houses and leave. If Cordova would survive the spill. There were no guarantees that things could be made right . . .

The town was in a turmoil. It ceased to function. Everyone was in shock, wondering if their income and life style would be totally destroyed . . .

My group of customers seems to have been disenfranchised. They all moved away. People have come in, researchers, government people. The houses are full, but it's not the same town.

For instance, you're a researcher; I bet you don't drink like a fisherman. You don't spend money the same way. People are here, but the other people who made up the town have moved away.

IV.J. Grocery Stores and Food Suppliers

Grocery stores and suppliers of prepared foods (such as bakeries) do not report economic losses, because they were able to sell their regular food inventories to the cleanup crews. However, these businesses do not report financial windfalls; rather, the economic season was slightly better than average, but entailed much more work. Shortages of employees and employee burnout are predominant complaints.

The owner of one grocery store, for instance, describes sales to VECO as merely compensating for sales lost due to fishing cancellations, but she also expresses concern over possible future economic losses should Cordova's fishing industry be damaged:

The spill didn't hurt us a bit because what we lost from the fishermen's business we made up for from VECO coming in and buying food.

We may be hurt in the future, if the fishing business is hurt from the spill; if there's damage to the fish, but we won't know that until later.

The manager of this same grocery store adopts a more negative posture: he was engaged in the stressful process of maintaining operations despite a shortage of personnel. This establishment could not significantly increase wages although they provided bonuses for employees who stayed on. Problems include loss of employees, burnout in overworked employees who stayed, lost work hours due to a lack of day care, and daily uncertainty as to whether enough employees would appear to keep the business running:

It was a tremendous strain. We went through four times the people as usual. We couldn't get employees to hire because of VECO, so those that worked had to work 6 days a week, 10 hours a day. People got burned out working the peak season from March to September . . .

We raised our starting wage by \$1/hour, making it only \$10/hour less than VECO's starting wage. It might be someone with retirement investment who stayed, who didn't want to lose that, but we went through a lot of people . . .

We maintained about 18-20 employees. It was hard; we went through 60-70 employment W2 forms for 1989 . . .

We were open from 8 AM to 8 PM, 6 days a week. We're open from 10 AM to 4 PM on Sunday, plus emergency openers in the middle of the night.

Most people got 20-30 hours overtime a week. Sometimes 1 day off every 2 weeks. It was hard to schedule time off because you didn't know when the boats would come in . . .

It made it difficult. You never knew if anyone would be there when you went to work each morning. We gave generous bonuses to employees that stayed. Everyone was aware that there were *tremendous problems* . . .

There wasn't any day care. People couldn't work because there was no one to take care of their kids. That was a tremendous fiasco. The store thought of opening its own day care, but we couldn't find employees to run it . . .

We lost 4-5 days a week because of no day care. There weren't many easy days. They were all hard days. You still had people trying to fish around the oil.

We were sure selling things, but it was a strain. It would usually wind down in August, but that year it wound down in September . . .

We were fortunate. Some businesses really got hammered. For instance, restaurants and bars, who needed people in there every day . . .

The sales [here] increased substantially, before the bonuses. We got some advantages on freight. And we were short staffed, so even with overtime there was less expense in terms of employee benefits, and so on.

The business did better, the employees earned more, but they earned it. It was hard work, and very stressful. To an extent it helped the store, but if it wasn't so unplanned we could have done even better. *Most of it breezed right through our hands and went to the government.*

The bottom line was, the money was about the same.

This person notes that while employees who chose to stay (such as those who would have sacrificed pension benefits by leaving) earned extra wages by working 20 to 30 hours of overtime per week, some of these people accrued financial losses relative to previous years, because they did not fish:

I stayed full-time manager here, so I couldn't fish. I lost lots of money that way.

In addition to the strain in operations caused by loss of employees, this store manager observed disruptions in regular business patterns when VECO workers would buy out inventory, so that regular customers could not get groceries. This is a widely reported impact, which Cordova residents describe as "like being in an occupied war zone:" grocery store shelves were empty and people were evicted from their offices to make room for VECO operations:

Our regular customers couldn't get groceries sometimes when VECO bought us out. They would come in and take out a huge order and clean us out without warning. Then your average little old lady would have to wait 3-4 days for her cantaloupe.

This respondent describes the chaotic nature of the cleanup operation from the perspective of grocery stocking. For instance, some boat operators refused to buy feminine hygiene products or cigarettes for workers boarding on their boats, while other boat operators gave away condoms and beer:

VECO hired people that weren't doing the job they were supposed to do. They wouldn't buy a prime rib but would buy rib steaks at \$.50/pound more. They wouldn't let the workers get cigarettes, or feminine hygiene products, deodorant, or toothpaste. But some boat operators were giving everything away: condoms, beer. But on other boats you couldn't even get necessities.

This respondent, like others, describes continuing emotional impacts of the spill, due to uncertainties over future effects of the 1989 oil spill, and the certainty that future spills will occur:

No one knew what would happen. People were worried about their future. People were tense because they didn't know if they could pay for their boats or houses . . .

Now we've been trying to forget all that stuff. It still lingers; there's enough people frustrated with the lack of results . . .

Biologically, it's hard to tell the effects. Under the surface there's still raw crude everywhere. How many years before we get two headed fish? No one knows. You need 30-40 year studies. Rock fish live for 70 years, and you need an intergenerational study. So I don't know.

Every year you have to question whether you want to keep your fishing operation or get out while it's still good. I've been here 11 years . . .

We were lucky it was Exxon, because their revenues are so great. Foreign tankers owned by X, Y, or Z, 20 times removed, with \$100,000 liability. They would just say, "We're bankrupt."

It's not a question of if it'll happen again, but when.

Interestingly, while this respondent expresses fears of future economic and biological damages stemming from the 1989 oil spill, he is not fearful of the present local food supply. This attitude is widespread among non-Native respondents; Native respondents (as this person notes) express extreme anxieties over their current food supply:

The Native people are tremendously affected, emotionally. That's their pantry; is this seal going to kill me, or are these clams going to hurt my kids?

I don't feel uncertainty about food because I only get food from areas that weren't impacted by the oil. If we get a fish that doesn't look right, we throw it out right away.

Producers of prepared foods relate similar accounts. For instance, the owner of a bakery states that although her earnings matched those of previous years, she worked "three times as hard" in 1989. She couldn't keep employees and had to work 6 days a week rather than her usual 5 days. Moreover, her life was made miserable by other spill impacts, such as hostilities among her friends over spill jobs, reduced community services, and fears of eating locally harvested foods.

IV.K. Childcare Providers

Respondents in 1991 are still bitter over the lack of adequate childcare during the 1989 crisis. There was an increased demand for childcare in Cordova after the oil spill, as unemployed mothers began to work on cleanup crews. But what might otherwise have constituted a short-lived "boom" for childcare providers became an economic disaster, due to labor shortages. Childcare facilities (which are required by law to maintain a fixed ratio of caretakers to children) suffered the same losses of employees to the oil cleanup effort that were experienced by other businesses; the normally low pay scales for childcare work may have even exacerbated the problem in this employment sector, so, not only were prospective cleanup workers unable to place their children, some parents who maintained their regular employment lost their childcare placement and missed work. Moreover, the labor shortage did not abate with spill cleanup efforts, but lingered for months afterward. Respondents explained this as resulting from a general unwillingness to work for low wages after earning higher wages on spill cleanup crews; also, many who worked the spill used their money to leave town afterward. (As discussed earlier, summer residency and winter absence is a regular demographic pattern in Cordova, which was reportedly amplified during 1989-1990.)

A scarcity of childcare was experienced within the context of incessant parental anxieties over the emotional impacts suffered by their children, due to the oil spill. Key burdens for children described in 1991 by parents include: children's fears and confusion over the massive death toll to animals and birds; children's worries about the environment in general and the Sound in particular; fear for the future which might be transmitted to children by parents who were fearful for their way of life; absences from the home of parents working on the cleanup for weeks at a time; increased family tensions (in some cases divorces) experienced by many Cordovans.

Cordova has two childcare facilities: Odiak Child Development Center is a non-profit day care center which normally accommodates 50 to 60 children per day; Play and Learn Child Care is licensed for about 19 children. Both centers lost employees during the spill cleanup. Odiak lost five employees to oil spill-related higher-paying jobs and lost several other employees as well; Play and Learn lost three employees after the oil spill (Cordova Times, June 22, 1989:5). The current director of one of the centers described in 1991 how, in addition to losing business due to a lack of employees, extra debt was incurred because the bookkeeper was shifted to regular childcare tasks for a year after the spill, and the center was unable to muster the manpower to bill clients. The following statement also reflects concern over the mental and emotional health of the children, frequently voiced by childcare workers:

The center was immensely impacted. When Exxon gave the \$16.69 an hour wage, the work force took off, but there were more children needing day care. We tried to negotiate with Exxon to provide our staff with an extra \$10 per hour so we could meet their wage. What an ordeal!

We got no support from the Oil Spill Response Office, so we went to the City Council. They told [a city official] to look for a grant. Then, before he found one, Exxon gave \$18,000 for both child care centers in town. It wasn't enough.

Both our bookkeeper and director had to do child care activities, so the administration fell apart. We had no bookkeeper for a year! We've just now finally catching up with our records and billing . . .

We incurred an incredible debt load because we didn't have time to bill. So no money was coming in. We've been hurting financially ever since. For the first time last month, we showed a profit.

The children were upset and didn't understand what was going on: missing parents [working the spill on boats], fear, anger. What was oil?

We had some psychologists and mental health workers come down from Anchorage to listen to the children and answer their questions. We had people come in from the community and the children got to question them. "Why does the oil kill the birds?"

The children were able then to get some understanding. We also brought in some children from Tatitlek and Chenega to participate.

We finally embarrassed Exxon into making a small contribution to the workshop, which was sponsored by the Susitna Girl Scouts . . .

Still, today, when the children spill milk, they shout, "Oil spill!" That's the lasting effect.

And there'll be tar on the beach, probably forever. We tried to make it a teachable moment, about responsibility and faith. They can't take away our life. Many of us have learned a lot of lessons. Money can't be equated to those things.

That a childcare labor shortage endured while the spill cleanup tapered off is demonstrated by the September 13 closure of Odiak Child Development Center, with less than 24 hours notice (Cordova Fact Sheet, September 15, 1989:3). The reason cited for the closure was a staff shortage stemming from the high wages paid for oil cleanup work (Cordova Fact Sheet, September 15, 1989:3). *Many workers apparently did not return to lower paying jobs. As the center's director explained, "Who's going to work for \$6.25 an hour when they made \$16.69 an hour all summer? . . . Those who return from spill work already have plenty of money and don't need to work now"* (Cordova Times,

September 14, 1989:1).⁵² This director worked for a month through the Job Service to hire teachers, but no one applied for the job (Cordova Times, September 14, 1989:1)

The Odiak Center reopened on September 14, 1989, but, still experiencing a labor shortage, accepted only a limited number of children (Cordova Fact Sheet, September 15, 1989:3). The City of Cordova as well as the Exxon employer assistance program joined with Odiak in searching for employees to bring the center back to full capacity (Cordova Fact Sheet, September 15, 1989:3). The Cordova City Council authorized a grant request for approximately \$17,000 for wage subsidies, to be filed with the Department of Community and Regional Affairs (Cordova Fact Sheet, September 15, 1989:3).

Cordova, through the City Council and various committees, mounted multiple efforts to alleviate the childcare shortage during the spill's aftermath. In April 1989 the Cordova Child Care Task Force recommended funding through the State's Division of Emergency Services for programs such as training for child care providers, direct grants to centers, respite care for parents, and so on (Cordova Fact Sheet, April 22, 1989:3). In May of 1989 the Cordova Children's Task Force, an ad hoc group formed shortly after the March 24 oil spill, planned training sessions for childcare workers. The task force received \$5,000 from the Division of Emergency Services to carry out the training program (Cordova Fact Sheet, May 13, 1989:2).

Also in May of 1989, the Children's Task Force began working with Chenega and Tatitlek to solve childcare problems, and presented a signed statement to Exxon requesting that the oil company "supplement staff wages in Child Care Centers to create incentive for staff to stay in their present jobs" (Cordova Fact Sheet, May 27 1989:2). The Oil Spill Response Committee at this time passed a motion to support wage supplements for all businesses (Cordova Fact Sheet, May 27, 1989:2).

⁵²This article in the Cordova Times also describes the closure of the Killer Whale Cafe 3 months earlier than usual because the owner could not find anyone to work. This business person had even imported family members from another state in an attempt to stay open.

Other monies obtained for childcare from the Division of Emergency Services included: \$8,000 for respite care; \$5,000 for a youth employment program (a joint venture between the North Pacific Rim and the USFS); \$2,000 for a summer camp scholarship fund at Cordova's Bidarki Recreation Center; and \$25,000 to be divided between Cordova's two licensed day care centers. The Children's Task Force also received a \$300 donation from a Presbyterian Church in Juneau, targeted for child care needs of parents working on the oil cleanup (Cordova Fact Sheet, May 27, 1989:2). In June, 1989, the Children's Task Force made respite vouchers available to parents through the Cordova Oil Spill Response Office, for \$50 per family; the Oil Spill Response Office also offered telephone numbers of teenagers who had completed the caregiver training program (Cordova Fact Sheet, June 20, 1989:1, and June 29, 1989:1).

Cordova volunteer organizations also addressed the emotional impacts of the spill on children. The Children's Task Force sponsored a "Listen to Me" workshop, organized by the Susitna Girl Scouts Council, in which 97 children from Cordova, Chenega Bay, and Tatitlek participated in a question-and-answer session about the oil spill, questioning representatives from the State's Oil Spill Response Office, Exxon, the CDFU, the USFS, PWSAC, the ADF&G, the Cordova Oil Spill Response Office, and a fourth grade teacher (Cordova Fact Sheet, July 28, 1989:2). The children directed most of their questions to Exxon and the USFS, with their main concerns being: (1) that Exxon would clean up the spill, and, (2) the fate of the animals and birds (Cordova Fact Sheet, July 28, 1989:2). Questions included: "What is the effect of the oil on the wildlife?" "How many animals were affected?" and "Why are the dead wildlife being kept in freezers?" (Cordova Fact Sheet, July 28, 1989:2).

Despite the abundance of volunteerism, impressive community organization, and active pursuit of monetary relief, the scale of the childcare shortage overwhelmed such relief efforts.

Conflicts Within the Childcare Community: Exxon provided an \$18,000 grant in June of 1989 to mitigate the childcare shortage created by the spill cleanup. This grant

became the center of a community conflict, due to a perceived ambiguity in Exxon's stipulations for its disbursement.

This grant was an outcome of negotiations begun during the second week after the oil spill, between the Odiak management and Exxon. Odiak submitted a \$24,000 claim which requested wage subsidies for childcare workers. Exxon turned down Odiak's claim, but allowed them to submit a grant proposal for \$18,000, which was approved. Exxon then sent an \$18,000 check to the city government, suggesting that the total grant be given to Odiak, as the sole non-profit day care facility in Cordova. However, in a subsequent letter to the city, Exxon stated that the city could disperse the money as it saw fit, as the intent was not to benefit any individual agency but to address a community problem.

This ambiguity in Exxon's guidelines for dispersal of the grant resulted in a controversy over whether and how to split the funds, which drew in the Cordova City Council, the Children's Task Force, the Oil Spill Response Committee, Cordova's two childcare providers, and the community in general.

The position of the Odiak management was that the grant was conferred in response to their proposal, containing specific allocations of funds according to their needs; dividing the grant would leave Odiak with unmet needs and would prevent other childcare providers from pursuing their own grants. Odiak's spokesperson hypothesized that Exxon deliberately equivocated in their letter of intent in order to avoid setting a precedent for wage subsidies.⁵³ Respondents in 1991 described Exxon's administration of this grant as demonstrative of a general policy to foment strife among Cordovans (with the principal example of such conflict being the suit of the City Council, discussed elsewhere). Eventually the grant was divided, with \$13,000 going to Odiak and the remainder to Play and Learn (Cordova Times, September 14, 1989:A1).

⁵³Exxon's refusal to subsidize wages is discussed elsewhere. Factors which might suggest this concern here include: Exxon's refusal of a claim but endowment of a grant; Exxon's initial specification that the grant be for a non-profit facility; and the later specification that the grant address a community problem while not benefitting any individual or agency.

Below is an excerpt from press coverage of this controversy, offered because it illustrates the high level of community involvement with and awareness of such conflicts concerning Exxon's strategies and motives and shows how emotional impacts of conflicts between Exxon and individual agencies quickly spread in such a close-knit community.

EXXON GRANT CREATES STRIFE

A tug-of-war is developing in the community over an \$18,000 grant Exxon gave to the city for child care in Cordova. The topic was a focus of hot debate during two meetings of the oil spill response committee last week, the June 14 city council meetings and last Friday's Children's Task Force meeting. In a letter to the oil spill committee, chairman Connie Taylor wrote: "This grant money has created an injury to community members in the effort to disburse the funds."

Though the committee and city council have taken the position they will not become involved between Exxon and private enterprise, Exxon dropped the ball in their court. "This is a very uncomfortable position to be in," said committee member Heather McCarty. "Here we are smack between two (businesses)," replied Marilyn Leland during Wednesday's oil spill committee meetings. Chairman Connie Taylor felt differently, viewing the money as necessary to meet the community's child care needs.

During Wednesday's oil spill committee meeting Jacqueline Fowler, director of Odiak Child Development Center, presented her case. Since the second week of the spill she has been preparing a claim for Exxon to subsidize Odiak's child care workers' salaries. She said Exxon originally turned down her claim for \$24,000 but agreed to give Odiak \$18,000. Fowler felt any agreement between Odiak and Exxon would open the door for Play and Learn to negotiate with Exxon to meet their needs. Play and Learn has not submitted a claim to Exxon.

"I was the only one to submit a proposal," Fowler said in an interview. "I pursued Exxon with our specific needs. The response committee, the task force, the city or Play and Learn did not negotiate for child care."

". . . I feel real concerned we're going to close the door on Play and Learn. We need to keep the door open so (Debra Collins) can negotiate with Exxon. This is pitting Debbie and I against

each other. When we start fighting each other . . . the door shuts" . . .

In a June 6 letter, Exxon General Manager Otto Harrison wrote, "D. J. Moon and Milt Alverstadt . . . Have been keeping us abreast of the day care situation in your city. They recommended and we agree, that Exxon make an \$18,000 financial grant to the City of Cordova to alleviate these difficulties. They further asked that at the time of conveying this grant to you that we suggest you consider providing this total grant to the Odiak Child Development Center as it is the sole non-profit day care facility in Cordova. We are enclosing our check for \$18,000 to assist the non-profit day care center in your community."

Eight days later, a letter from D.J. Moon clarified what some considered a confusing situation. "The City may disburse the money as it sees fit. Our intent is not to benefit any particular individual, agency or business but, rather, to help solve a community problem."

According to Fowler, Exxon gave the grant to the city to avoid setting a precedent for wage subsidies. . . In a letter to the City Council, Fowler states that "Exxon is extremely concerned about setting a precedent for wage subsidy." . . . Originally a letter was sent to Exxon by the committee as well as the Children's Task Force recommending Exxon supply wage subsidies so local employers can keep their workers from leaving to work on the oil spill (Cordova Times, June 22, 1989:A-5).

V. CITY GOVERNMENT IMPACTS⁵⁴

Cordova is a home rule city with an elected city council and mayor who serve without remuneration. The mayor and council oversee activities of a paid city manager. Elected political positions change hands frequently; these officials are not professional politicians, and they have to carry out political duties in addition to their individual

⁵⁴The city, like the Native corporations, refused to disclose financial figures on spill impacts, due to pending litigation with Exxon. Direct oil-related expenses in 1989 have been estimated at \$951,000 (Final Report, Oiled Mayors Subcommittee 1990:103). Similar to business owners, city officials are only now compiling information concerning economic impacts, having been hampered by such factors as staff shortages and turnovers, as well as ongoing computer breakdowns. Consequently, economic impacts to the city reported here are not exhaustive.

economic activities. The character of Cordovan politics, as a highly collective enterprise, is described in an Alaska Socioeconomic Studies Report:

People who have lived in Cordova-Eyak all mention the love of "politics" and the active involvement of local residents in the political process. Local residents joke about February as the month to "roast officials" and speculate as to which official will "get it" this year . . .⁵⁵

From another vantage point, the gossiping and criticism process often expressed in Cordova-Eyak is a means by which the community maintains a collective political decision process. As one informant suggested, a "tight rein" on officials and an attitude of mild to open skepticism of "professional advice" keeps the dominant and practical concerns of Cordova-Eyak in the forefront and prevents overly ambitious leadership from transforming the community into something the majority would dislike. By regulating the role of City Manager and other key positions which in more urban places usually involve considerable authority, to one in which the community's concerns are served first and foremost, the Council and (through it) the community majority maintains maximum control over the decision making process (USDOI, BLM, Alaska OCS Office 1979:68-71).

Compared to the general population, elected officials are reportedly more prodevelopment. For instance, city government leaders tend to favor such projects as construction of a deep water port and a highway connecting Cordova to the rest of Alaska. However, these officials are notably reluctant to force such preferences on the local populace. For instance, in March 1991 a survey was conducted to determine whether a majority of Cordovans supported construction of the Copper River Highway.⁵⁶ Interviews indicated that the desires of residents rather than city officials would prevail.

⁵⁵This pattern emerged in 1991.

⁵⁶The results of this survey were not available at the termination of this research. Respondents were divided on the issue which generated deep feelings.

In describing the role of city government in Cordova's spill response, Cordovans often said they felt as if they were living in a "war zone" or "concentration camp," under "martial law." Buttressed by the USCG, Exxon was a superior, parasitic, often hostile power in this view. The oil company had fouled Cordova's environment, threatening the present and future livelihood of residents and the existence of the city itself. Upheld by the USCG, Exxon prevented residents from protecting their environment in the first days after the oil spill. During the cleanup, Exxon and its agent VECO took over offices and "occupied" their town, according to Cordovans. VECO determined the content and availability of goods in Cordovan stores (discussed in Sec. IV. Private Sector Economic Impacts of the Oil Spill [Non-Fishing]). City officials stated that the oil company was not even-handed in dealing with communities affected by the spill; they believe that their lobbying efforts prompted an increasingly adversarial posture in Exxon:

The city was in good shape before the spill. We had the money to spend. We can weather a few storms . . . There was a surplus in our Permanent Fund of \$2 million. There was a \$1 million pledge for school construction, which would have been reimbursed at 80 percent by the State. The budget was about \$3 million, with about \$800,000 for emergencies that came up. So we had money to lobby, and so on.

So we weren't as much under Exxon's control as other city governments. So we didn't end up on Exxon's good guy list.

The Kenai Borough got \$2 million up front. In Cordova, they said: "Submit your bills and we'll pay if we feel like it." . . . Exxon just paid you to shut you up. Those paid off didn't support the ones still hurting. It was like martial law.

The view that Cordova was powerless in its dealings with Exxon due to Federal policy is discussed at length with spill impacts to the fishing community. Political leaders echoed this concern, again focussing on the USCG as a Federal agency which failed to exert power over Exxon. A letter sent by the Chairman of the Oiled Mayors Subcommittee to Alaska Senator Ted Stevens on August 9, 1989 voices this complaint:

Dear Senator Stevens:

. . . At a meeting of the Subcommittee on August 3, 1989, Capt. Richard J. Asaro, Marine Safety Officer of the United States Coast Guard, stationed in Anchorage, attended the meeting to discuss with the Mayors Conference a number of matters. . . As the minutes of the meeting reflect:

"Capt. Asaro stated that Exxon had already expended far in excess of the ship owner's limit of liability. Attorney Jamin spoke in opposition to the perception voiced by Capt. Asaro, stating that pursuant to CERCLA and the Clean Water Act, Exxon was responsible for returning the environment to pre-spill conditions, regardless of the cost. Attorney Harris asked Capt. Asaro whether his statement represented his personal opinion or the opinion of the Coast Guard; if indeed Capt. Asaro was voicing the opinion of the Coast Guard, the misconception would greatly impact the agency's dealings with Exxon."

Subsequent to this meeting, Capt. Asaro telephoned Mr. Harris in response to Mr. Harris' questions as to whether the statement represented the opinion of the Coast Guard. Asaro advised that after conference with Juneau, he has been informed by the Coast Guard that Exxon does have a limit of liability, a limit established by the TAPS liability fund of \$100 million (43 U.S.C.A. 1653). Of course, as you are aware, that legislation relates to the establishment of a specific fund for strict liability, and is not an absolute limitation as to any liability of Exxon.

The attitude of Exxon in dealing with our Subcommittee has been that their reimbursement of expenses to municipalities are voluntary acts of generosity. While we recognize that there may be litigation as to the exact extent of Exxon's liability, we are deeply concerned that the candid and forthright statements by Capt. Asaro reflect an attitude on the part of the Coast Guard which strongly suggests that they, too, believe Exxon's expenditures over \$100 million are acts of voluntary generosity. . . (Cordova Fact Sheet, August 29, 1989:1-2).

Exxon was able to superimpose the dynamics of a market economy on municipal governments which were unable to enforce rules of democratic government on Exxon. The oil company dealt with small communities affected by its spill as if they were

independent contractors, while local leaders objected that this would mean their municipalities would be compelled to act in Exxon's best interests. Exxon's reported uneven treatment of communities during the spill aftermath was perceived as an attempt to "divide and conquer" the local populace. Each city alone (or all combined for that matter) lacked the power to control an entity of Exxon's magnitude. Being forced to become, in essence, employees of Exxon, small communities feared that they had lost control of their own fates:

Anchorage, AK--A plan for standardized reimbursement presented by the mayors and Chiefs of more than 15 coastal communities affected by the Exxon Valdez oil spill has been rejected by Exxon officials. According to Bob Brodie, chairman of the Oiled Mayors Subcommittee of the Alaska Conference of Mayors and City of Kodiak mayor, Exxon representatives Dutch Holland and Wiley Bragg indicated that Exxon would not sign an agreement to reimburse local governments for expenses incurred directly as result of assisting in the clean up efforts. Prior to the 12:00 noon meeting with Exxon officials, representatives from Cordova, Valdez, Seward, Whittier, the Kenai Peninsula Borough, the City of Kenai, Larson Bay, Seldovia, Chenega Bay, Port Graham, English Bay, Lake and Peninsula Borough, Aleutians East Borough, the City of Kodiak and the Kodiak Island Borough assembled in Anchorage to review a counter-agreement submitted late yesterday by Exxon.

The Mayors and Chiefs unanimously voted to resubmit its agreement to Exxon and not accept Exxon's counter-proposal. "We feel we submitted a fair and equitable agreement," said John Devens, mayor of Valdez. "We want uniformity and Exxon appears to want discord and division. We are not now, nor will we be satisfied until Exxon recognizes our needs as mutual and worthy of real consideration."

According to Devens, "The purpose of our agreement is to provide a simple, yet uniform system for reimbursement by Exxon of the actual costs incurred in helping Exxon and others mitigate what is clearly the biggest disaster in Alaska in recent history." Exxon officials indicated at that meeting they were not authorized to sign any agreement unless it was "mutually agreed upon." In comparing the two agreements, Devens indicated that the two agreements are so unlike, "that it is not even possible to do a direct comparison of

the two let alone come to a mutual agreement." The concept of the mayors' agreement was to provide a mechanism for reimbursement of expenses the governments were incurring in the course of providing municipal services necessitated by the various responses to the Exxon Valdez oil spill," said Devens. "The Exxon counter-proposal is, in fact, an agreement to employ each municipality as an independent contractor of Exxon to provide services to Exxon. This contractor relationship, in which the cities would actually go to work on behalf of Exxon, means the cities agree not take actions that could result in conflict with Exxon's best interests."

The Mayors felt strongly that the language of the Exxon agreement represented Exxon's attempt to "divide and conquer" leaving the cities and villages with little or no control over their own financial destinies (Cordova Fact Sheet, May 27, 1989:1).

V.A. Cordova as Spill Cleanup Contractor

The position of Cordova, vis-a-vis Exxon in the spill response, resembled that of an involuntary, non-profit, independent contractor. The city was constrained to provide services and facilities for Exxon's spill cleanup; Cordova's economic structure was threatened by the spill and supplanted by the cleanup. Moreover, citizens felt bullied by Exxon and VECO, and powerless to prevent these entities from overwhelming them (see discussions of fishing and other economic impacts). The city's expenses for this spill response were sometimes reimbursed, at Exxon's discretion, but profits were not structured into the arrangement. Unpaid city leaders were not reimbursed for their time, and paid city officials did not receive remuneration for the extra workload entailed by the spill response. Elected city officials experienced the spill as a double hardship; they were required to work extra hours and travel extensively on behalf of the city, often neglecting the impact of the spill emergency on their own businesses:

Since I [was elected] in October of 1989, I didn't have a travel card [for personal use], because I didn't go anywhere. I'm approaching 80,000 miles of travel, just for the city. It's always a meeting about the spill. I'm a non-paid [official], so when I leave, my businesses suffer. . .

Most people here are individual business persons who don't work for others. They're all leaders, not followers. So, there's too many chefs: fishermen, business owners. So it's difficult representing the people in Cordova. It's a hard job, and takes a lot of effort. I don't want to run for [election] again because my businesses couldn't stand my being gone for 2 years.

In making the transition to the new role of spill cleanup contractor, normal government operations broke down. As one city official recalls:

The main impact for the city was we lost a year of our normal activities: our normal mode of government broke down. There was the media, funding, spill operations, studies, compensation, and so on, all to deal with.

And now we're paying for it. We have a broken computer system, for instance. Ordinary operations broke down because we lost a lot of our resources . . .

Exxon didn't provide trustworthy information. No one did. The State didn't either. We really had no source of information unless you went out and looked at the spill. We were caught in between major public relation battles.

At first no one paid any attention to Cordova, because we were 60 miles from the spill. We explained to them that our whole economy was based right in the middle of the spill!

So we went over to Valdez and talked to the media about this, but we weren't the center of attraction by any means.

The city had to mount an immediate spill response, with no assurance of financial reimbursement. Exxon provided voluntary, partial remuneration for spill impacts, at its own discretion and on its own timetable. In general, Exxon appears to have helped fund city infrastructure and superstructure operative in the spill cleanup (such as bunkhousing for cleanup workers and an oil spill response committee). Exxon appears to have been disinclined to reimburse other economic impacts to the city (such as lost bond opportunities and fish taxes, expenses of elected and appointed officials, or litigation).

Expenses of Cordova's spill response included supplying boom to protect the PWSAC hatcheries, travel by public officials, lobbying, mitigation of labor and housing shortages caused by Exxon's cleanup activities, the formation of special spill response committees, the publication of a daily fact sheet, and litigation. City officials were particularly distressed that Exxon declined to address litigation expenses, which became substantial for Cordova, as discussed later:

Mead Treadwell, Director, Cordova Oil Spill Response Office:
"The Cordova 1988-89 city budget was \$4.7 million and the city has already spent \$800,000 responding to the spill, and is likely to have another \$700,000-800,000 in oil-spill related expenses . . . The expenses, to date, have included boom materials, work to mitigate the labor and housing shortages for the response office staff, publication of the Fact Sheet, and legal fees unrelated to litigation . . . The city's entire budget for legal fees this year of \$50,000 only covered the first month of expenses after the spill."

Treadwell focused on the limited sources of funds for cities for response-related expenses, particularly for economic assessments and legal fees which Exxon has stated it will not accept (Cordova Fact Sheet, July 3, 1989:3).

Complaints about the voluntary nature of Exxon's reimbursements of the city's spill expenses appear in a letter which Cordova Mayor Erling Johansen sent to President George Bush in August 1989:

One of the uppermost concerns in the minds of Cordovans who had their last remaining Prince William Sound seining district indefinitely closed last week due to oil in the water is why are we talking about packing up the cleanup, leaving the Sound, when there is still oil on the water and oil on the beaches leaching back into the water?

. . . A second question we are grappling with as individuals is what price do we have to pay for using energy in the United States? We suggest one very important price is protection of communities. We have discovered, the hard way, we are unprotected.

The City of Cordova has a \$4 million general fund budget and has had close to \$800,000 in expenses since the spill. Our spill has included providing extra housing, protecting our salmon hatcheries

when others would not, responding to the loss of 20% of the labor force to cleanup efforts, and distribution of information. We created the Cordova Oil Spill Disaster Response Committee to bring the varied concerns and productive ideas of key representatives of the community, and have staffed an office dedicated to responding to the short and long term needs of Cordova's citizens caused by the Exxon oil spill.

Where, you might ask, does the money come from? The answer is Exxon - in some ways willingly, in some ways begrudgingly, in some ways not at all. The point is their funding of the City's response has been voluntary. Until the law is changed - either at the state or federal level to allow local governments access to spill contingency funds -reimbursement of our response costs will continue to be voluntary . . .

The spill has been, in many respects, a war scene. Thousands of tons of material, hundreds of men were to be moved through Prince William Sound - and may be needed again - in short order . . .

This disaster, like the Challenger, like Three Mile Island, cost the nation billions and endangered lives for what was, ultimately, some small and human reason (Cordova Fact Sheet, August 8, 1989:2-3).

The city formed the Cordova Oil Spill Disaster Response Committee on April 17, 1989, to make recommendations to the council for city actions related to the oil spill and to oversee resulting city operations (Cordova Fact Sheet, April 19, 1989:1). This committee was funded by a variety of sources, including the ADEC, Exxon, the Alaska Department of Community and Regional Affairs, and the City of Cordova (City of Cordova 1990). The five member committee included representatives from the city, the Chamber of Commerce, CDFU, the fish processors, and PWSAC. Connie Taylor, from the Chamber of Commerce, was elected chairman (Cordova Fact Sheet, May 6, 1989:3).⁵⁷

⁵⁷After the resignation of Taylor on July 13, 1989, two new members were appointed, representing: (1) the community at large, and, (2) the Native community (Cordova Fact Sheet July 18, 1989:1).

Under the direction of the Oil Spill Disaster Response Committee, the city published the Cordova Fact Sheet, which was distributed to all Cordova post office box holders beginning April 13, 1989. The City of Cordova retained editorial control, becoming an independent contractor of VECO in providing this publication:

The City of Cordova and Veco, Inc. have signed a letter of agreement which reads in part, "The City of Cordova will please provide the following service: A daily fact sheet on the oil spill and recovery activities in the area covering all relevant aspects of local interest to be distributed in the Cordova area by bulk mail to all households and through a distribution to key locations within the community, on a daily basis through June 18. The cost is not to exceed \$650.00 per day. (Cordova Fact Sheet, June 9, 1989:2).

Another vital service which the city had to provide for Exxon's spill cleanup was housing for the incoming flood of potential cleanup workers. Exxon cooperated with the city in this enterprise, agreeing to reimburse the city for \$2,000 for the cost of a housing needs survey (Cordova Fact Sheet, May 6, 1989:3). The city learned that it would be required to house an additional 350 employees to fill job vacancies resulting from spill operations by June 25, 1989 (Cordova Fact Sheet, June 2, 1989:1). Interim City Manager William Weinstein proposed to Exxon that the city establish: (1) a "tent city" of 100 tent platforms with water bibs and toilets; (2) a campground/trailer facility with 50 sites with water, toilet, and shower facilities; and, (3) the use of the Bidarki Recreation Center as a bunkhouse accommodating 50 employees (Cordova Fact Sheet, June 2, 1989:1). The city requested that Exxon contract directly with Bidarki Corporation (the Native non-profit corporation) for needed renovations, and contract with the City of Cordova to pay approximately \$188,000 for provision of the other two facilities (Cordova Fact Sheet, June 7, 1989:2).

Exxon signed a contract with the city for \$145,000 for improvements to the Bidarki Recreation Center and management of a temporary 70-person bunkhouse at the center through October 1, 1989 (Cordova Fact Sheet, June 21, 1989:1). Other contract negotiations continued, but Exxon informed the city that it had signed a contract with a private supplier, North Pacific Processors to provide bunkhousing. The Bidarki

bunkhouse opened in mid-July with 52 beds available (Cordova Fact Sheet, July 29, 1989:1). After the bunkhouse was disassembled in late September, lasting benefits from the renovations included new shower and locker room facilities, a small kitchen/concessionaire area, and improved fire sprinkler and fire alarm systems (Cordova Fact Sheet, July 29, 1989:2). Respondents recount that a severe housing shortage remained throughout the spill aftermath, but the housing of workers was a need to which Exxon responded. It did so, however, at its own discretion and on its own terms, negotiating with public entities as if they were private entities.

Reimbursement from Exxon for spill expenses proceeded largely after expenditures were made. This meant that the community, like individual business owners, had to capitalize Exxon's spill cleanup:

The Cordova City Council received and accepted a check from Exxon Co. USA for reimbursement of expenses related to the March 24 oil spill. The check, totalling \$36,074.55, was received the last week of June and covers expenses the city invoiced Exxon for through May.

In a letter accompanying the check, Exxon community liaison Monte Taylor noted that Exxon found "many of the items in this invoice to be inappropriate for Exxon funding under the guidelines established even during the early negotiations with the Alaska Conference of Mayors." However, "primarily because we had not issued specific guidelines on reimbursable vs. non-reimbursable expenses or how the \$100,000 advance issued on May 1 could be spent," Taylor said Exxon chose to reimburse all items except for two which should be collected from other sources and two other items which should be submitted as claims to Exxon . . . (Cordova Fact Sheet, July 12, 1989:1).

V.B. Other Costs

Economic impacts of the spill which were not related to Exxon's cleanup operations went largely unredressed. For instance, lost bond opportunities were simply the city's tough luck; one official recalls a bond issue that was not passed:

They were going to do a bond issue for a new school and decided not to put the bond up because of the uncertainty [caused by the oil spill]. It wouldn't have passed [if it had been put up]. At that

time there was a State program that would have reimbursed 80 percent of the cost (\$7-8 million) for a new elementary school. That program has since been repealed.

The current elementary school leaks badly, has lots of asbestos, is not handicapped-accessible. It's 30 years old and not well built. There is no playground space.⁵⁸

After the spill, the school had hired extra teachers to handle the students and then people left and enrollment was down. The school was left with the new teacher for the year.

The special election for a bond to rebuild portions of Mt. Eccles Elementary School was reportedly cancelled because the city council was uncertain that the city could meet the economic demands of the oil spill. The council was aware that delaying the bond put the project in jeopardy, since State funding might be repealed. The 80-percent state reimbursement of a \$7-8 million bond would represent a \$6 million loss to Cordova, due to the oil spill:

Tuesday's special election for financing the rebuilding of portions of Mt. Eccles Elementary School has been indefinitely canceled . . . The effect on the city's bonding capacity if the election were held would be "playing with fire," said Mead Treadwell, director of Cordova's Oil Spill Recovery Office. "We don't want to put a cloud on this city's capabilities."

Councilman Mike Anderson voted against the motion, citing increasing construction costs and decreasing reimbursement funds from the state. "The state budget is going down and facilities construction is going up. If we're canceling, it has to be noted it's because of the Exxon Valdez oil spill," Anderson said (Cordova Times, June 15, 1989:A1).

Currently city officials are trying to estimate this loss as part of its litigation against Exxon.

Lost fish tax was a principal grievance. Raw fish tax, an intergovernmental revenue from the State, provides an estimated 20 to 25 percent of the city's operating income

⁵⁸Visits to the school confirmed this account.

according to city officials. The fish tax is collected based on the calculated value of fish processed locally, with the State normally retaining 50 percent of revenues. Decreases in the fish tax in Fiscal Year 1990 have been reported (Oiled Mayors Subcommittee 1990:97), while record revenues had been forecast for 1989 and 1990 (see Sec. III Effects of the 1989 Oil Spill on the Fishing Community). Exxon reportedly refused compensation for lost fish tax, and blocked city efforts to gain State compensation. One official recalls:

There was a bill up in Juneau that the State would compensate us for lost fish tax. The State would be compensated by Exxon. Exxon officials testified that there was no need for this bill because Exxon would handle the compensation with the cities directly. So far, we've received no money for fish tax compensation.

They thought it would be easier to deal with the cities separately, than through the State. So far none of the cities has been compensated for fish tax.

Across the board they made promises they didn't keep. We have never signed a release for Exxon.

Despite reported assurances by Exxon that it would compensate communities for lost fish tax, Cordova found Exxon less than forthcoming in doing so:

The following letter was sent to Mayor Ban Brocklin from David E. Shoup, Exxon Claims Office.

Thank you for your letter of May 3, 1990 concerning claims for lost processor fish tax revenues.

I share your view that last week's Juneau hearing was beneficial: it cleared the way to begin dialogue. As I told the Senate Finance Committee, *Exxon is prepared to meet and discuss the merit of these claims.* Additionally, I understood Attorney General Bailey to say that his office would be willing to participate in such discussions, and it will not be necessary to resolve the fish tax issue only in conjunction with resolution of the State's law suit. Furthermore, it was obvious from Steven Kettel's comments that the Department of Revenue does an effective job of collecting the relevant data, and it appeared that the Department would be willing to assist in the process once it has received the full data

needed to deal with the 1989 fisheries. Finally, as your May 3 letter indicates, Cordova and presumably the other municipalities in the areas directly impacted by the spill are anxious to address the matter.

I suspect you are correct in your observation that there will be some issues on which the various participants will, at least initially, have differing views. Furthermore, I am sure that, by frankly discussing them among the group, we can all gain a better understanding of the perspectives of the others.

For example, you appear to have the misconception that under Exxon's voluntary claim settlement program all Prince William Sound claims are being settled on the basis of ADF&G's pre-season 1989 salmon forecast. In fact, seafood processor claims are being settled and releases obtained on the basis of ADF&G's post season salmon run assessment, and it would appear that this is also the correct basis for discussing the processor fish tax. There will probably be other issues where further discussion is necessary.⁵⁹

You indicated it would be helpful to Cordova if Exxon would commit, within the next two weeks, that an amount of no less than \$400,000 to \$500,000 would be paid to Cordova before mid-August. While we are willing to address the lost fish tax issue in an open manner, we are not in a position to conclude that upcoming discussions among all the involved parties, including your sister municipalities, will necessarily result in a payment to Cordova of the magnitude you requested. Thus, we feel your request is premature . . .

The following letter was sent by Mayor Van Brocklin to Mr. David E. Shoup, Exxon Claims Office.

. . . we know very little about ADF&G's post season salmon run assessment for Prince William Sound. If you have that data, could you send it to us so we can do the homework necessary for the next step: We are somewhat concerned to learn that processor and fishermen's claims may each be processed on different bases. We are further concerned about our missing tax revenues being dependent on what could be long continuing and confidential

⁵⁹This issue is discussed with impacts to the fishing community.

negotiations between Exxon and processors . . . (Cordova Fact Sheet, May 21, 1991:2).

Lobbying and litigation were large expenses for Cordova, which were not addressed by Exxon.⁶⁰ For instance, city officials attempted to make the point legislatively, that they did not want Cordovans to foot the bill for infrastructure and superstructure which supported Exxon's disaster response:

The city spent a lot of money on the spill. We have the "Flagstaff Amendment." Cordova lobbied in Washington, DC to change the Flagstaff Amendment, retroactive to Feb. 1, 1989. Saying the party causing a natural disaster will be liable for any costs incurred, even though the city operates anyway. We paid \$80,000 in work based on that. Just lobbying on that bill.

In Flagstaff a chemical fire was cleaned up by the city, but was called "normal operations." We authorized \$187,000 for the spill cleanup. Our [general fund] budget's only about \$3 million. The first day of the spill we authorized \$200,000 for the Aquaculture to buy boom to protect our hatcheries. Eventually we were paid back by the State, who may have been reimbursed by Exxon. Later Exxon dealt with PSWAC.

But we exerted power 'way outside our boundaries to protect the hatcheries, which produce 70 percent of our gross income in the last 3 years before the spill, so we were quite panicky at that time.

You can't compile data with the existing staff. You have to have delegations in the State and Federal offices until you get results.

Now we're trying to pass legislation in Juneau for if this ever happens again. Get some State funds available. We spent all our time looking for funding, rather than doing something about the problem . . .

Here the oil cleanup cash register ran over our town and didn't drop any change. And we may have long-term economic damage. We're the only city that screamed before and after the spill. Our fishermen sued ALYESKA and even stopped the pipeline, back in

⁶⁰Litigation is discussed at length below, in relation to a suit filed against the city.

the 1960's. We thought we were well prepared for this nightmare, but we weren't even close.

We knew we'd be unprotected if oil was running through the Sound. Now, no one in Cordova will ever think that there's enough protection for major oil spills.

By June 1989, the Oiled Mayors Subcommittee of the Alaska Conference of Mayors concluded that Exxon would not provide funds necessary to maintain affected community governments in the wake of the spill emergency (Cordova Fact Sheet, June 28, 1989:1). The committee found that Exxon insisted on negotiating with communities on an individual basis, and refused to reimburse vital costs related to the welfare of local citizens. These include costs of legal research, representation, and social and economic impact studies. In particular, small communities such as Cordova lacked the resources to even assess economic impacts, let alone force Exxon to provide compensation. The Oiled Mayors Subcommittee, finding Exxon nonresponsive on these social impacts, requested aid from the State:

The "Oiled" Mayors have not reached an agreement with Exxon on reimbursements for municipalities affected by the spill. Exxon has indicated it prefers to negotiate settlements with each community involved on an individual basis . . .

RESOLUTION

Whereas, the oil spill of T/V Exxon Valdez occurring March 24, 1989 presented an economic emergency to many Alaskan community governments,

And whereas, Exxon Corporation has stated it will reimburse community governments impacted by the Spill for certain costs incurred, but has stated its principle not to pay other costs community governments must necessarily incur to protect the financial welfare of its citizens, including costs of legal research, representation, and economic and social impact studies,

And whereas, assessment of the damage of the Exxon Valdez oil spill on affected communities remains part of a necessary emergency first response, and is an important part of ensuring that

the citizens of Alaska are not left with long term costs arising from the oil spill disaster,

And whereas, while local governments lack the financial means to undertake proper assessment of these costs, they wish to cooperate with each other and with the State of Alaska which does have the means to help communities meet the need for assessment,

Now therefore be it resolved that we, the leaders of community governments affected by the Exxon Valdez call upon the State of Alaska to *immediately make funds available as required to* community governments for economic assessment and legal representation from emergency and other funds appropriated to deal with the Exxon Valdez oil spill . . . (Cordova Fact Sheet, June 28, 1989:1).

The Alaska Department of Community and Regional Affairs (DCRA) responded to the need for emergency funding for communities impacted by Exxon's oil spill, stating that its effects "have and will continue to stress the already extended abilities of communities to provide even the basic essential services" (Cordova Fact Sheet, August 2, 1989:3). The department noted that reimbursements from Exxon did not fully address the needs of impacted communities (Cordova Fact Sheet, August 2, 1989:3). The State provided a grant program with \$1 million, for projects such as planning, multi-community coordination to address spill effects, and operation of public facilities and services (Cordova Fact Sheet, August 2, 1989:1-2). The grant program disallowed projects related to litigation (Cordova Fact Sheet, August 2, 1989:1-2).

Cordova applied for a DCRA grant, receiving \$45,750 for a mental health clinician and programs addressing human impacts of the spill (such as stress and marital conflicts). The city also received a grant for \$16,936 to assist Cordova's two licensed child care facilities (Cordova Fact Sheet, September 29, 1989:1). This grant was inadequate to meet the crisis which child care operators were facing, having lost employees to the spill

cleanup (see Sec. IV Private Economic Impacts of the Oil Spill [Non-Fishing]).⁶¹ In general, Cordovan officials described State grants as helpful, but insufficient to address spill impacts on their city's economy.

Work overloads and burnout of public employees were not "costs" addressed by Exxon. For instance, personnel in the police department suffered because staff shrunk due to loss of employees to the cleanup, while workload increased due to stresses associated with the oil spill and cleanup. An administrator describes how personnel had to maintain 12 hour shifts, from April 1989 to March 1990:

Lots of information isn't available because of the computer problem.

A main impact was labor, and that's one reason we haven't been able to do a formal study of how it impacted Law Enforcement. We haven't had the manpower. We lost dispatchers to oil spill work almost immediately. Our clerical dispatch staff was really hurt. It was September of 1990 until we got our full staff back. So we're still digging that out.

There wasn't a great increase in numbers of arrests, but a great increase in severity of arrests. More felonies, more volatile situations: anger was high. So we had more prisoners in jail for that reason. We couldn't release them on their own recognizance, and we're a short-term facility here . . .

This year will be the first year in 2 to 3 years that we'll be able to even do an annual report. We are just beginning to even stabilize the staff.

The correlation of severity of crimes with the spill is the enormity of the influx of a lot of people into the area, from all over the country looking for work.

We haven't seen the full impact of the spill yet because there's been enough employment to keep people going, so far. If the

⁶¹Exxon also provided a small grant to the city, to address the childcare shortage created by the spill cleanup (discussed with economic impacts). Again, the oil company responded to a need related to its cleanup (cleanup workers needed childcare), but left the major cost to public entities. The overall result was insufficient funding.

fishing is off one season, then people will react. They'll feel threatened and stresses will come out at that time.

It's hard to say what hurts and what doesn't hurt people. If you threaten people and take their livelihood away, you hurt people. The fishermen have been threatened. Their livelihood has been threatened, but because all that money was thrown on, they were still able to feed their families.

In future years, this impact may come down on them if the fish are hurt. Then we'll see a reaction. It'll take years and years and years to realize the full impact.

There are still oiled beaches out there. What effect will that have on the environment or the fish? Other things: several eagles were seen around the lake around December and January. They aren't usually there now. So people notice those changes and wonder.

If the fishing industry goes belly-up, we'll all be hurt--the city administration included. There's no other industry to pick up the slack.

The new Annual Report, for April 1990-1991, won't take in the oil spill period. It's due in April, for the City Council.

We suffered burnout something fierce. From April 1989 to March 1990 we all had 12 hour shifts. It was rough.

The assessment of economic impacts was hindered in all city departments, due to loss of staff. But in Cordova a breakdown of the computer system exacerbated these difficulties, which in turn hampered city personnel from addressing the computer problems:

Glenn Hargin has been in town since February 2 trying to fix the computer down at Cordova City Hall. He's a good choice for doing the job, since he created the system-36 program of ledgers and bookkeeping back in 1985-86.

. . . officials have complained for months that they can get no information from the system, and have no idea how much money they have in the bank. "The first year it was installed, we had excellent audit," [Hargin] said. "but at some time the controls were

compromised." That means that someone put something into the computer the wrong way, and "normal controls were not maintained, thus making it hard to call up files and recover information. It got progressively worse," he said. . . He said it will take him until early summer to get it all straight again. . .

His first task--now completed--was to restore the payroll system. That is now "in balance," he said. His next problem is unravelling the ledger system, which has not been updated for five years. And the third phase will be to restore the capital projects program (Cordova Times, February 14, 1989:A9).

This problem hampers current attempts to compile a TAPS liability claim by the March 24, 1991 deadline.

Another frustration in assessing economic impacts of the spill to the city, according to officials, is that some increases in city revenues may be results of economically disruptive or inflationary factors. The spill and cleanup generated multiple expenses and reimbursements which city officials are still attempting to sort out. Disruptions in Cordova's "fishbowl economy" are discussed with economic impacts of the spill. Increases in sales tax revenues in cases of inflation (such as higher oil prices) are not perceived as portents of present or future economic health:

Sales tax was up this year. Why? Because our oil prices doubled. So it's not a sign of a healthy economy. It's been a cold winter. Oil prices were up, and lots of sales taxes were generated, but the gas stations could go up 20 percent while the bars would be down 50 percent, and still the overall figure is the same.

The city can't release breakdowns of sales tax, as that's confidential for each business.

The above account is born out by statements from social service workers, who reported that Cordovans have suffered greater economic hardships after the spill:

People are coming in earlier this year for food stamps. At the Salvation Army, they're amazed at the people coming in. Before the oil spill people came at the end of March and April. But after the spill, lots are coming earlier, and there are more people . . .

In January there were 18 applicants for Energy Assistance. This included long term residents who never would have applied before. The price of oil was raised, of course.

V.C. Political Controversies: The Suit Against the City

In characterizing Exxon's strategy in approaching communities affected by the spill, the Oiled Mayors Subcommittee's Final Report states that the company had no standard formula, attempting to appease local government leaders by establishing personal relationships between them and Exxon representatives (1990:90). These representatives would meet all requests of their local contacts, "with the understanding that such action was highly unusual and must not be seen as a precedent for other communities without compromising the granting of future requests" (Oiled Mayors Subcommittee Final Report 1990:90). The report quotes a local resident:

I tell you what the most difficult thing to deal with was, and that was Exxon would send people into the community . . . someone characterized it once as sort of a virus that was entered into the community . . . and they would go search out key leadership and try to convert them to Exxon's side, and mechanisms that were used I think included trying to get some Exxon money in their hands, and there was probably other things. They would identify what would get somebody's attention or what was important to somebody and then they would try to feed them so they would get them on their side (Oiled Mayors Subcommittee Final Report 1990:90).

This assessment of Exxon's strategy matches respondent accounts of relations between Exxon representatives and a key Cordovan city official, who eventually brought suit against other city officials. The city underwrote their legal expenses and became a co-defendant. The suit had cost the city approximately \$500,000 in legal fees by the time of this research.⁶²

The contention, that Exxon's tactic was to establish personal relations with city officials in order to circumvent duly constituted community agencies, is supported by an

⁶²Discussion of the ramifications of this conflict in Cordova's business community appear in Private Sector Economic Impacts of the Oil Spill. As in that discussion, the name of the plaintiff appears here, as a matter of public record. Press citations identify sources, but respondent communications from 1991 remain anonymous.

affidavit filed by a former acting city manager, in relation to the lawsuit. Here it appears that Constance Taylor, who sued the city, played some role in such a strategy:

A former acting city manager of Cordova was asked to meet privately with Exxon Corp. officials shortly after the 1989 oil spill.

Malcolm D. MacMaster, presently the sewer and water superintendent of the city, made the declaration last week in an affidavit filed in the Alaska Superior Court, Third Judicial District, in Cordova. It was an addendum to his earlier sworn testimony in pre-trial depositions being taken in the Taylor vs. Van Brocklin et al. lawsuit . . .

MacMaster said he was appointed acting city manager in July 1989, replacing outgoing city manager William Weinstein.

"Within hours after I became acting city manager, Constance Taylor, while she was chairman of the Oil Spill Disaster Response Committee, came to my residence, met with me privately, and asked me if I would meet privately with Exxon representatives, with respect to the city's relationship with Exxon in dealing with the oil spill," he stated in the affidavit.

He also said Taylor "told me that the city of Cordova should not collect information to sue Exxon, but should simply have faith in Exxon and deal with Exxon in good faith. She told me that Exxon wanted to meet with me and deal with me rather than the Oil Spill Response Office."

Copies of MacMaster's affidavit were released to the press by city officials at the request of the city council . . .

Defendants in the case have avowed that Taylor's case is a screen, and that she is being used as a ploy of Exxon to gather information about the city's proposed litigation strategy in the city's attempt to recover estimated economic losses caused by the spill.

Recently the court denied a subpoena request by Van Brocklin to order Exxon to surrender documents that would show Taylor's dealings with Exxon since the spill. Such documents, the judge ruled, would be irrelevant to the case.

MacMaster said in his affidavit that it was his "clear understanding from the council" in 1989 "that I was to deal with the day to day management affairs of the city, and that matters directly relating to the oil spill, oil spill recovery, and dealings with Exxon were to be handled on behalf of the city by the city's Oil Spill Response Office."

Taylor, he said, had been appointed head of the Oil Spill Disaster Response Committee, which was created by ordinance to be an advisory body to the council to deal with the oil spill emergency.

MacMaster said Taylor "set up a meeting with Exxon representatives D. J. Moon, Milt Alberstadt, and myself. Connie Taylor also attended. These Exxon representatives told me they wanted to deal with me as acting city manager and not with the Oil Spill Response Office."

He added, "I advised them that they should deal with the city's Oil Spill Response Office, as per the city council's instruction, unless they had problems in dealing with that office, in which case they could contact me" (Cordova Times, December 13, 1990:A1,7).

On May 23, 1990, Constance Taylor (President of the Cordova Chamber of Commerce, first president of Cordova's Oil Spill Disaster Response Committee, and Cordova City Council member), sued Mayor Bob Van Brocklin and council members R.J. Kopchak and Jeff Hawley for alleged violations of the Alaska Open Meetings Act (Cordova Times, June 28, 1990:A1). The suit claimed that these city officials had met privately to discuss issues outside of regular council meetings. On June 23, 1990, the Cordova City Council voted to spend \$75,000 on the individual legal defenses of these officials (Cordova Times, June 28, 1990:A1). The city's insurance carrier declined coverage for the defendants (Cordova Times, June 28, 1990:A1). The city council had previously voted \$25,000 for the lawsuit, but this had proved insufficient to begin a legal defense. Individual defendants experienced the suit as a form of harassment and expressed concerns that they could not afford their own legal costs:

According to Van Brocklin, who said he had done some "attorney checking" after that meeting, the \$25,000 originally voted on by the council was not enough to retain attorneys for the defendants in

the lawsuit. "Twenty-five thousand dollars isn't going to start this thing at all," the mayor said. He said a substantial amount of the \$25,000 would be spent to transcribe previous council minutes which Taylor and her attorney had requested in her lawsuit . . .

[Council member Doug] Lape said, if the city was not going to back a council member in any lawsuit, "he wasn't going to be sitting" on the council much longer. [Council member R. J.] Kopchak said he believed that anyone who served in public office must be indemnified . . . He said he has never violated the OMA and thought it was an "absolute shame that personality and political differences . . . have given rise to what I feel is the harassment of some public officials in a very unspecific way" . . . Kopchak said it was unfair to expect a volunteer public official to pay for a lawsuit filed against them in their official capacity. "This is insane you guys. This is really foolish. I'm heartbroken about it all . . . but you can bet, I'm not going to pay a dime out of my money. I just can't," Kopchak said . . .

[Taylor] maintained that the city is not named as a defendant in the lawsuit and said the city has nothing to gain by intervening since she is "only asking" for an order requiring public business to be held in public and that council members live up to the oath they took when they were sworn in, to uphold the laws of the state of Alaska. Taylor reminded the council that the city would be liable for the defendants' attorney costs and could be liable for her attorney costs (Cordova Times, June 29, 1990:A1-2).

Respondents in 1991 overwhelmingly supported the city's assumption of legal defense costs; most pointed out that no one would serve in city government if the city did not indemnify its officials.

City officials denounced the suit, claiming that it was a waste of money and that Taylor was collecting information regarding the city's potential claims against Exxon. *Some pointed out that the suit was adding an additional burden to city employees already besieged by the oil spill emergency:*

A lawsuit pending against the mayor and two councilmen is a "terrible waste of money and time," Mayor Bob Van Brocklin told the city council September 4. The city has already "spent over \$125,000, and it could go to a quarter of a million," he said . . .

The mayor said questions asked by Taylor and her attorney during testimonies by witnesses dealt "with the (EXXON VALDEZ) oil spill and how much money the city could expect to get from Exxon." Van Brocklin said when the city develops its claim for lost revenues from the state raw fish tax, "we have to be careful. It could hurt the fishermen, the canneries and the city."

. . . Councilman John Wheeler said, "I'd like to ask Connie to reconsider and drop her lawsuit. It's going to cost the taxpayers a lot of money. It's a no-win situation." He said, "City Hall is in a turmoil" over the case, and employees "don't have time to do their daily business" because of being diverted to other matters related to the case (Cordova Times, September 20, 1990:A5).

The city entered the suit as a defendant on August 23, 1990 on the advice of City Attorney Everett Harris. Taylor amended her suit on September 7, charging "city officials" with violating the city charter by spending money without public notice or council approval (Cordova Times, November 15, 1990:A8). Harris proposed to Taylor's attorney David Shoup that both parties drop the matter and not try to collect attorney's fees from each other; the defendants agreed to concede that the complaint was filed in good faith (Cordova Times, November 15, 1990:A8). Harris also suggested to Shoup that after 5 months of discovery there had been no evidence of wrongdoing. Shoup replied, in part, that evidence existed that the oil spill response office had spent money without council approval (Cordova Times, November 15, 1990:A8).

At roughly this point, the city manager inquired of the city attorney as to the consequences if the city decided not to fund any further legal fees for the defendants (the city had just appropriated \$189,000 in legal fees in addition to \$200,000 already spent (Cordova Times, November 15, 1990:A1). In reply

Harris said if the city failed to defend council members, it would leave them "to defend at their own expense," and thus "might discourage . . . citizens . . . from serving on the city council in the future." He also said, "If the defendants should decide not to defend themselves . . . further," then Taylor would win the case by default, and the defendants would likely have to pay her legal fees. Harris said he believed "it is important to resist interference by any

court in the day-to-day affairs of the city" (Cordova Times, November 15, 1990:8).

Taylor was conspicuously pro-Exxon during the spill aftermath, by all accounts (see Sec. IV Private Sector Economic Impacts of the Oil Spill [Non-Fishing]). Respondents in 1991 expressed a widely held belief that her suit was a device to aid Exxon, by creating conflicts within the community which would consume time, energy, and money, diverting the attention of residents and officials away from their battles with the oil company. Many residents complained of joint activities by Taylor's attorney and Exxon's attorneys. Some proposed that Taylor's lawyer was turning over city documents to Exxon in order to sabotage city litigation against the oil company. A particular sore point was that "her attorneys are Exxon's attorneys:" David Shoup represented the Exxon Claims Office in negotiations with the city (discussed above, see Cordova Times, May 21, 1990:2). Some respondents described Taylor as an "Exxon spy," whose receipt of a \$20,000 Exxon donation to the Cordova Chamber of Commerce constituted a "bribe." Respondents overwhelmingly expressed resentment and disgust over the cost of the suit to the city. Taylor was recalled from her position on the city council in February 1991.

Taylor maintained in a 1991 interview that her suit was not related to the oil spill, but to openness in government. She pointed out that she is not requesting a monetary award from the city and did not foresee that the city would assume the individual defendant's court costs. She has had to bear her own court costs. She contended that had she wanted to provide city documents to Exxon, she could have done so more easily, as a council member, before the suit.⁶³ She feels compelled to pursue the case in court, in part because she would like to be declared a "public interest litigant," and so have her court costs reimbursed:

My side of the suit is that people in the country have a right to know what their government is doing. People in Cordova have been excluded from knowing what their government is doing.

⁶³Taylor emphasized repeatedly that city documents were public information, so that it was not wrong to turn them over to Exxon; her position appears to be that cooperation with Exxon would produce the largest settlements.

That's my interest. The bottom line is, still, that you can't force people to know. But the suit should require the government to make the information available.

I don't feel the lawsuit is related to the spill. Some of the issues that were discussed behind the scenes were spill-related, some were not. The divisiveness out of the spill would have come up in any case.

I ran for the council after the spill. I got involved with the Oil Spill Response Committee, and this renewed my interest in local politics, and then I ran for city council. (I came here shortly after the earthquake, but not because of the earthquake.)

The major divisiveness in the city government predates the spill. The suit should result in a more careful following of the law by city government.

The State law states that elected officials conduct business in public. I'm not asking for monetary damages, so there's no contingency fee for the lawyers. I had to bankroll this myself. When the time comes, people have to stand up for their freedom in this country. It's the right of self-government in America.

I'm just asking for a court order to force them to meet in public. Nothing in the law provides for any economic damages. If I'm viewed as a public interest litigant I could get my fees refunded. That isn't dependent on my winning.

I didn't perceive that the city would spend a half million dollars on the defense. I don't approve of the city spending the money on the suit. I'm in no position to stop them. If I withdrew the suit, then they could counter-sue for "frivolous suit," "damage to reputation," and so on.

I think it's hilarious that they think Exxon is benefitting from the suit. Before I was suing, I was on the city council and had access to all the documents. The suit just put me under the spotlight and impeded my access to those documents. If I was an Exxon spy, I was in a better position before the suit.

And we only have documents that are public information. We've never asked for any confidential information. The company had

plenty of accountants who could have gotten that public information better than I could have.

The fact remains that I had access to all the information the city has, before the lawsuit. Why not gather the information secretly and sell it? Why file a lawsuit? It's a ludicrous idea.

I don't see any other solution than going to trial. Without a public presentation of the evidence, no one can know what's been going on. That would leave things unresolved and leave an open wound.

Depositions will be taken almost every day in March [1991]. And 10 days in trial, it's estimated . . .

If Cordova had handled Exxon better, they'd be in better shape now. But the window of opportunity has closed. Exxon's closed its purse strings and gone home.

One code violated was that any expenditure over \$300,000 requires a council vote. And huge sums were spent without council votes. There's a whole raft of city codes involved. Today we filed an amended complaint detailing 6 to 12 code violations. It was given to the court in the last hour. The court house, above [the] grocery, will have a copy next week. It will be public information. Ask the clerk to see the file . . .

The issue is that people have a right to know what the government is doing. Other issues are pulled in to detract from the real issue.

The money is one issue, and part of spending so much is a strategy to make me look like the villain: it's my fault that they spent the money.

Withdrawal was never a real option, and the settlement offers always said some form of, "You're a rat fink for ruining our lives." They recognized my good faith, but didn't admit guilt. The result would be just to drop the suit and walk away.

The public interest litigant issue would become a non-issue if I dropped the suit. If I win, the court will order them to pay my legal fees. I'm asking for that. That's substantial for me. Not a half million dollars, but substantial.

I've had a lot of support from people in town. Some of it is personal, and some for the issue. One person I don't know has called me two or three times to lend support.

A defendant in the case argued that Taylor deliberately sabotaged the effort of other city leaders to press their claims against Exxon. He pointed out that Cordova is a small town run by a volunteer council. Leadership rotates under normal circumstances, and all major city positions changed hands during the spill aftermath. This defendant noted that, in responding to a sudden disaster of the scope of the 1989 oil spill, it would not be surprising if the amateur politicians comprising the city council made some minor procedural errors. He believes that Taylor is using the discovery process to channel crucial information about the city's spill claims to Exxon:

The suit against Connie is costing \$500,000. There's no counter suit yet. The "open meetings" lawsuit against the mayor and two other council members: those guys and myself were not in the same social circles and did not meet secretly. The meetings [of city leaders in private] did not happen.

Now she's auditing every transaction of the council during the oil spill. The city formed the Oil Spill Response Committee, representing a cross-section of town. Connie Taylor became president. A bunch of us business guys went to Juneau and learned that she was opposing everything we did. So we set up a tele-conference with some state officials. Exxon was in town, invited by Connie, and she made sure they didn't go to the tele-conference. So that split us up and created bad feelings. Marilyn Leland and others had requested the conference, and Connie took it upon herself to block it.

She has blocked all actions which would aid us in making claims on Exxon. And she has admitted giving city information to Exxon.

The City of Cordova hasn't compiled information for a claim against Exxon. They're coming down to a deadline for TAPAA funds. March 24 is the deadline. So a week ago we hired counsel to assist us in putting information together.

Connie always focuses on procedure over substance to slow down city council business. She also circumvents the council . . .

My attorneys got \$30,000 a month. We tried to subpoena Exxon for all the information Connie Taylor gave to Exxon. The judge didn't allow it.

But Connie has gotten information about the city by discovery which goes to Exxon. Exxon tried to settle the suit between myself and Connie. We wouldn't take it because we didn't want to admit something we hadn't done.

She now has a discovery that's totally spill-oriented. "Unnamed officials did improper actions." She's subpoenaed every city action related to the spill from day one. The Oiled Mayors' Report is being subpoenaed by Exxon, as the raw data . . .

Exxon paid \$20 to 30 million in fishermen's claims and Connie told Exxon that fishermen might be oiling their nets.⁶⁴

In a little city like this, we have seven volunteers for city leaders. They have no training. The city says, "Let's let this bunch do it for a while." We went through three city managers in nine months. Of course we didn't always dot i's and cross t's. And she's opposed to a jury trial.

The charge, that the discovery process focusses on oil spill impacts, was echoed by city leaders not named in the suit. The waste of much needed city funds is a prime source of aggravation:

The mayor and another council member are being sued by a council member. The documents she wants for her suit, by discovery, are all focussed on the spill and documents dealing with Exxon.

She claims Exxon was an underdog. Cordova is picking on Exxon. The \$500,000 [the city's legal costs] is about 10 percent of the annual general fund budget.

The community at large will suffer: Council Street is falling apart. We need a retaining wall on Davis Street. Browning Street is falling in. We need to put in a bulkhead. Those are three things right off the top of my head.

⁶⁴Taylor explained this action to me as merely telling Exxon what she had heard to be true.

The furnace in this building is dangerous. It's on the second floor and the floor is oil-soaked. We need to get it off the second floor.⁶⁵ This building leaks water and heat. We want to put parks in town, landscaping vacant areas. It's a long list.

We're anticipating that the suit will come to trial on June 10. We hope that will bring it to end--that there will be no appeals.

We're afraid that, and she's acknowledged that, some city documents have been turned over to Exxon. We have a claim pending against Exxon for damages stemming from the suit. March 24 is our deadline. We're filing against the TAPAA fund. We're under that decision. We won't be able to increase the claim later.

The financial burden of the suit was reportedly exacerbated by economic impacts of the oil spill. Lower fish prices would result in lower raw fish taxes for the city; attempts by PWSAC to invite foreign processors into Prince William Sound, in order to stimulate higher fish prices, could have the same effect.⁶⁶

Cordova faces drastic cuts in revenues in 1991, if salmon prices plunge as anticipated. And it could mean loss of jobs at City Hall, as well as a delay in patching a leaking roof and replacing a faulty furnace . . .

City Manager Nancy Gross said in an interview last week that the city might face as much as a 50 percent drop in revenues for its operating budget.

And there are fears that some fishermen with huge mortgages on their boats could face financial disaster.

⁶⁵The example of the furnace demonstrates how dire financial emergencies can be for small cities which operate on meager budgets. The floor under the furnace at City Hall is indeed soaked with oil; upon encountering it, this respondent rushed into a nearby office to report this threat to public safety and was informed that everyone was already aware of it.

⁶⁶City officials were in the process of compiling figures on spill impacts at the time of this research. Actual city budget figures are inflated for the post-spill years, due to spill expenses and compensations; they do not necessarily reflect economic health or whether funds available for city infrastructure and superstructure have shrunk.

Gross said a fish price drop, plus drains on the city coffers by the Taylor vs. Van Brocklin et al. lawsuit, may mean cutting back personnel and public services this year . . .

PWSAC President Bruce Suzumoto, in a letter Dec. 18 to Gov. Walter J. Hickel, said local onshore canneries were glutted and could not process some 44 million pinks caught last season . . .

Objecting to the PWSAC proposal, Gross, on instructions from the city council, fired another letter to Hickel pointing out that foreign offshore processing vessels will take revenues out of the state and mean loss of raw fish taxes to the city. She said such taxes make up about 20 to 25 percent of the city's operating income, or between \$750,000 and \$1 million per year. She told this newspaper that amount could go as low as \$100,000 this year, if on-shore canneries only process Copper River red salmon this year. *The processors have said they won't handle the pinks because of the stockpile, she noted . . .*

With less canning and less fishing, Gross said the city also expects a drop in its sales tax, which represents about 35 percent of the operating budget. The population normally doubles to around 5,000 or 6,000 people in full swing, but she said these workers may not show up this year . . .

With only \$1.5 million left in undesignated monies, and about \$1 million left in its permanent fund, the city cannot face a drain like the lawsuit without cutting back she said.

The lawsuit money--about \$450,000--could have fixed the leaking roof at City Hall, where buckets are placed in some offices to catch the drips; or it could replace a faulty furnace which now poses a fire hazard, said Gross.

Possible cuts would include eliminating about four new job positions created last year, not hiring replacements when someone quits or retires, not replacing vehicles that wear out, and either cutting or delaying other services . . .

The city may have to increase fees for things like subdivision maps, building permits, and building inspections. It may have to impose a tax in motor vehicles, increase property taxes, and place a tax on personal property (Cordova Times, January 10, 1991:A1, 9-10).

The belief that Exxon had a hand in the lawsuit was widespread among city officials. Defendant Mayor Van Brocklin, through his attorney, attempted to subpoena information from Exxon, concerning its relations with Connie Taylor. Reportedly in response, Exxon lawyers submitted a settlement proposal to the Cordova City Council, which was rejected:

The Cordova City Council--apparently rejecting a proposal for an out-of-court settlement--has instructed City Atty. Everett Harris to "vigorously defend the lawsuit" brought against the mayor and two councilmen by Councilwoman Connie Taylor.

The proposal for a settlement came from an Exxon Corp. law firm.

The tersely worded instructions, proposed in a motion by outgoing councilwoman Marilyn Leland, came after a closed-door special session of the council at noon last Thursday. The motion was unanimously adopted . . .

The special session, closed to the public and the press, was also off-limits for Taylor, who sat outside until the council opened the doors again for its public motion. The council has ruled she would have a conflict of interest if she sat in on an en camera session called to discuss the lawsuit.

The executive meeting was called because of a proposal by Don Bauermeister, an attorney in the offices of Bogle and Gates, Anchorage. The law firm represents Exxon Corp. Bauermeister suggested the city and Taylor agree to settle the matter out of court, Taylor's attorney, David Shoup, said.

. . . there has been speculation during recent pretrial depositions for discovery--during which witnesses give testimony under oath--that Exxon may somehow color the case. The speculation has been based on deposition questions by attorneys for the plaintiff, asking about possible future oil spill recovery from Exxon. . .

Taylor's attorney, David Shoup of Anchorage, said Bauermeister "was trying to see if the case could be resolved before all parties, including Exxon, are forced to sit through numerous Exxon depositions which were requested by Bob Breeze." Breeze is Van Brocklin's attorney (Cordova Times, October 18, 1990:A1, 10).

The court denied Van Brocklin's subpoena of Exxon documents concerning its relations with Connie Taylor, ruling that they would be irrelevant to the case:

A subpoena from Cordova Mayor Bob Van Brocklin demanding papers from Exxon Corp. was rejected Dec. 6 by Superior court Judge Peter Michalski in Anchorage, according to a report in the Anchorage Times.

Robert Breeze, Van Brocklin's attorney, sought all the company's records which would reveal "any form of communication" between Councilwoman Connie Taylor and Exxon following the Exxon Valdez oil spill on March 24, 1989. . .

Exxon attorneys said the information sought by Van Brocklin is irrelevant to Taylor's case. To search out such papers would mean going through more than 9 million documents related to the oil spill, said Exxon attorney Don Bauermeister, and would impose an undue burden on the company.

Judge Michalski agreed and refused to order Exxon to turn over the documents. Breeze and City Attorney Everett Harris argued that Taylor is using her lawsuit to help Exxon gather information which would relate to pending civil litigation over the spill. In papers filed with the court, Breeze said, "The question is whether she is serving as a conduit for Exxon to obtain information that Exxon cannot otherwise obtain" (Cordova Times, December 13, 1990:A7).

Fear and frustration over escalating expenses and uncertain future liabilities stemming from the lawsuit were expressed by city officials as costs mounted. The council threatened a mass resignation in January 1991. This demonstrated the disruptive and intimidating power of the suit, which respondents attributed to Exxon:

Voices quavering with emotion, eyes red with feeling, the Cordova City Council almost came unglued at its first regular session of 1991 on Jan 2.

With his nose almost touching Councilwoman Connie Taylor's, Councilman Jeff Hawley yelled, "I'll quit if you will!"

. . . Other council members at the meeting also talked of resigning. The whole question exploded unexpectedly when Taylor introduced

a motion--not on the regular council agenda--to place an initiative petition on a public ballot Feb. 18. That is the date the council has set for a public special election on a recall petition to unseat Taylor. . .

Taylor circulated her own petition--which would limit spending on the lawsuit--and collected enough signatures to file it in the city clerk's office Dec. 21. But a letter from City Attorney Everett Harris, dated Jan. 2, informed the council that Taylor's petition was not legal and could not be put on the ballot.

Taylor, in introducing her motion to by-pass the attorney's ruling, said placing the added initiative petition on the ballot would give the public a chance to express its opinion about city spending. . .

Councilman John Wheeler said to add Taylor's petition to the ballot, if it is illegal, could make the whole election null and void . . .

[Councilman Bob Anderson] moved the council resign en masse and open all seats to a new race on Feb. 18 . . . Anderson said to Taylor, "People in public ask me why it's going in. I can only point to you, Connie. You have an axe over my head."

. . . Van Brocklin accused Taylor of "political terrorism." He declared, "By everyone resigning, it means you're intimidated. I won't tolerate it."

[Anderson] asked Taylor if she would drop the suit if they all resigned. But Taylor persisted in stating that the only way to resolve it is in the public forum of an open court. Councilman Doug Lape and others asked her, "Why not the open forum of the council?"

Under repeated questioning and pressure from fellow council members, Taylor said she could not disclose all the proofs of her case until the trial, which is expected after April 1. Van Brocklin, Hawley and other councilmen repeatedly asked for specific times, places, and issues that may have been discussed privately in violation of the OMA [Open Meetings Act], as she has alleged. However, she refused to answer.

Lape said it is virtually impossible to conduct city business without minor infractions of the OMA, which pertains to municipal bodies but not the state legislature. But he said it is not right to sue someone for making mistakes . . .

Councilwoman Nancy Bird compared Taylor's tactics to "McCarthyism" and by-passing "regular court procedures" by conducting a series of depositions in which witnesses are cross-examined by attorneys, and conducting discovery investigations into City Hall archives . . .

The council narrowly defeated the motion to resign en masse, 4-3, again with Van Brocklin breaking the tie (Cordova Times, January 10, 1990:A1, 11).

An unprecedented special election was held on February 18, 1991, in which voters recalled Councilwoman Taylor. The recall petition, sponsored by "a group of downtown retail merchants, seeks to remove Taylor because she disclosed information from a closed-door council meeting to her attorney" (Cordova Times, December 6, 1990:A2).⁶⁷ Taylor claimed that the information in question, while confidential under city policy, was shared under attorney-client privilege. The choice of this basis for Taylor's recall is consonant with strong feelings of some Cordovans that Taylor was turning city secrets over to Exxon through her attorney.

The special recall election was put in motion despite the threat of further legal entanglements and costs for the city, voiced by Taylor's attorney:

Faced with the threat of "yet another legal entanglement" the Cordova City Council last week set Feb. 18 as the date for a public vote on a petition to recall Councilwoman Connie Taylor . . . It accuses Taylor of "misconduct and/or incompetence" because she disclosed to her attorney information from a City Council executive (closed door) meeting.

Taylor has maintained the information was relevant to her lawsuit against the city and three councilmen, and that it was protected under client/attorney privilege.

⁶⁷Conflicts between Taylor and others in Cordova's business community are discussed elsewhere. As noted, business leaders are often also political leaders in Cordova.

"I believe you should reconsider your conclusion and inform the council that moving forward with an election based upon this petition could land the city in yet another legal entanglement, which likely would cost the city considerable funds in legal fees and which the city likely would lose," said her attorney, David Shoup, in a letter dated Dec. 5.

The letter was addressed to City Attorney Everett Harris, who answered, "the council members have no choice about going forward with the recall election . . .

Shoup questioned the sufficiency [of the petition], saying, " . . . The position taken by the petition sponsors is patently ridiculous." He said the City Council would be "acting unreasonably" if it "decides to go forward with this recall attempt." Under the rationale of the petition, he said, "no one could confer with an attorney regarding anything said or done in executive session even if these things were the subject of a lawsuit. And conferring with an attorney as Taylor did does "not rise to the level of incompetence or misconduct" he added.

Harris said City Clerk Lynda Plant, upon Harris' advice, had found the document sufficient. In disregarding Shoup's letter, Councilman Jeff Hawley--one of the defendants in the lawsuit--said he preferred an election date near the time when fishermen would be in town for the Board of Fish meeting around Feb. 14. He suggested "the last possible date," or Feb 18. The council unanimously agreed . . .

Asked later if she planned to take legal action, Taylor said she would have to "look at it first" before deciding. she added: "To say it's misconduct to talk to your attorney is ridiculous" (Cordova Times, December 13, 1990:A1, 4).

A general lack of interest in the ostensible issues of the suit was apparent in 1991 interviews, and may be illustrated by the small attendance at meetings Taylor held to explain her suit, just prior to her recall. Questioning at one of these meetings did reveal a connection between the lawsuit and the city's response to the oil spill, however:

Only a handful of citizens showed up last Friday at Home Port to hear Cordova Councilwoman Connie Taylor explain what she knows about the February 18 recall vote and the lawsuit she filed last May alleging violations of the state Open Meetings Act . . .

The main questions fired at Taylor Friday came from former Councilwoman Marilyn Leland. Leland--like several council members in open session January 2--asked for specific instances (what-when-where) of private meetings held in violation of the OMA.

"Where are your proofs?" asked Leland. Taylor replied, "I don't intend to reveal my trial strategy." . . . Leland said she had read several depositions that have been taken in pre-trial discovery, but has not seen "any evidence so far." . . . When Leland asked about alleged city code violations, which Taylor brought into the suit in an amendment last fall, Taylor said some of them "may have been made in secret meetings."

In a list of 13 points sent to City Council, January 25, Taylor said the city had entered into a contractual agreement without council approval "to participate in the regional Citizens Advisory Committee (RCAC)." Leland argued that the city's participation in the RCAC was at the invitation of the Alyeska Pipeline Service Co. in Valdez, and that it did not involve a contract . . .

Referring to Taylor's 13-point list, radio reporter Ellen Lockyer told Taylor, "It seems more like nitpicking than proof of anything."

. . . "You're wrong to do this," said Leland. "The people are backing away. They're calling it craziness." Leland added, "there are seven people here (at this meeting). That's how tired they are of it." "I'm tired too," said Taylor (Cordova Times, February 14, 1991:A5).

The recall vote of Councilwoman Taylor demonstrates that despite the overwhelming disgust expressed by respondents over the expense and triviality of her suit Taylor enjoyed some support. After counting 60 absentee ballots, the vote was 310 for removal of Taylor and 187 opposed (Cordova Times, February 28, 1991:A1). Many respondents explained the result (that Taylor was not recalled by a larger margin of

votes) as a reflection of personal sympathies for Taylor rather than a measure of support for her suit.

While Taylor had pledged not to contest the election results, she did pose some procedural objections (Cordova Times, February 28, 1991:A5). Responses by the council demonstrate the vulnerability of volunteer city officials to slight procedural errors, as well as the confusion which can arise over liability:

The Cordova City Council encountered two surprises when it met last week to certify the results of the Feb. 18 recall election. First, certification was stalled by a clerical error at a special meeting held an hour before the council's regular session . . . And then, Councilwoman Connie Taylor, ousted by the vote, warned the council to mind its "p's and q's" in counting 60 absentee ballots, saying there had been some irregularities.

Taylor had indicated the week before that she did not intend to contest the election results, but her letter saying the city code had not been properly followed during the process caught some council members off guard. . .

Delay in the first special session was caused by an error in working on the agenda cover sheet for the special meeting. The error was first spotted by Taylor, who asked the meaning of the working, which said the council was meeting as the canvass board to "certify the election board." City Clerk Lynda Plant admitted the word "board" should not have been included, and apologizes to the council.

. . . Taylor questioned whether three election judges had been appointed for the election, as required by the code. She also questioned whether the results of the election were reported "no later than 8 pm"--also as specified in the code.

Further, Taylor, who several weeks ago said she had no plans to contest the recall petition, said the grounds for that petition were not only incorrect but also outside the bounds of the code. She said the petition accused her of incompetence on the basis of sharing secret city information with her attorney. But pointing out that what she tells her attorney is protected under special privilege; she said such confidence does not "constitute either misconduct or incompetence."

She concluded: "It is important for the City Council to consider seriously the implications of the actions it is contemplating."

Asked by various council members if their actions were in jeopardy of being found illegal, or if the election might have to be held again, Plant said there were no problems in the procedure . . .

(Councilman) Anderson said he is concerned that as a member of the council he has been told by the city attorney that he can't consult his personal attorney concerning anything the council does. He suggested the council seek an opinion on the matter from a judge or from the attorney general (Cordova Times, February 28, 1991:A11).

VI. SUMMARY

For Cordovans in 1991, the 1989 oil spill was still an unfolding disaster. Spill-related problems, fears, and conflicts were widespread. Respondents who profited from the cleanup reported moral conflicts and anguish over the plight of those who suffered financially. Cordovans hold spiritual as well as commodity values of nature, and many refused to equate money to spill damages.

Spill cleanup and damage claims processes were dominated by adversarial relations with Exxon, which proved traumatic. Respondents felt without recourse, as "Exxon was calling all the shot.: Many Cordovans believe that the Federal Government primarily serves the oil industry--to the detriment of Cordovans. Cordovans view State agencies in a more positive light, but believe that they cannot control big oil interest. Also, respondents doubt whether Exxon settlements paid to the State and Federal governments will be used to compensate their losses.

Cordovans predicted a disaster such as the Exxon Valdez oil spill when they sued the Department of the Interior to stop the pipeline terminal in Valdez in the early 1970's; respondents are angry that their fears were ignored. After the 1989 oil spill, Cordovans assumed major risks entailed by Exxon's spill cleanup: equipment risks, health risks, and legal liabilities associated with the status of independent contractor.

VI.A. City Government Impacts

Residents described life during the spill cleanup as "living in a war zone" or "concentration camp," under "martial law." Federal and State agencies reportedly did not exert control over Exxon during the cleanup process, and the oil company displaced principles of democratic government with market dynamics. Exxon and its agent VECO took over offices and "occupied" their town, according to Cordovans. The city experienced lost bond opportunities, employee losses and burnout, breakdowns in normal government operations, housing shortages, lost raw fish taxes, and extraordinary litigation expenses. One pro-Exxon city council member brought suit against other council members and the city, reportedly as an outgrowth of spill-related political conflicts. This suit had cost Cordova \$500,000 by the time of this research.

Cordova as Spill Cleanup Contractor: Cordova served in the spill response as an involuntary, non-profit, independent contractor for Exxon. The city was constrained to provide services and facilities for Exxon's spill cleanup. City officials had to make expenditures and await reimbursements, thereby capitalizing the cleanup. Unpaid city leaders were not reimbursed for their time, and paid city officials did not receive remuneration for the extra workload entailed by the spill response.

VI.B. Private Sector Economic Impacts of the Oil Spill (Non-Fishing)

The spill affected Cordovan businesses unevenly, as Exxon reportedly substituted spill cleanup costs for spill damage payments. Businesses not involved in the cleanup were hurt disproportionately. Economic impacts of the oil spill in the private sector include bankruptcies, foreclosures, lost credit lines, economic losses due to disruptions of normal business patterns, business closures, and lost business and property values. The cleanup resulted in shortages of labor, childcare, housing, and commodities. Exxon did not comply with requests for wage subsidies, low interest loans to cover cash flow problems, or consideration of lost bank loans, business values, or property values. Widespread criticism centered on a chaotic and continually modified claims process. Business owners complained that this process was carried out at Exxon's discretion, with no objective agency overseeing the process. Many claimed that Exxon representatives

lied to them. Assurances made at one level of management were often violated at another; there was frequent turnover of Exxon field representatives who often violated prior verbal agreements.

Conflicts within the business community arose during negotiations with Exxon, creating hostilities that persisted in 1991. While Exxon carried on cordial relations with the Cordova Chamber of Commerce (donating \$20,000 to its operation), some business owners believed that their interests were not being represented. These business owners formed the Cordova Business Owners Association (CBOA) and attempted unsuccessfully to negotiate with Exxon on their own. This conflict had political ramifications, precipitating a suit by one city council member against the other council members.

Conflicts Between VECO and Local Businesses: Virtually all business owners complained that VECO "stole our employees." Exxon's cleanup contractor reportedly delayed payments for goods and services, exacerbating cash flow problems already created by the cancellation of fisheries.

VI.C. Impacts to the Fishing Community

Fishing forms the bulwark of Cordova's economy, and Cordovans fear that the spill's long-term effects could cause the collapse of their fishing industry. Residents believe that their town will cease to exist if this happens.

The Oil Spill Cleanup: Exxon and Alyeska reportedly blocked the immediate response efforts of Cordovans organized through the Cordova District Fishermen United (CDFU). Especially galling for respondents was the rationale for refusing to let Cordovan fishermen prevent the early spread of oil: the oil companies reportedly did not want to incur the liability of using "amateurs."

Fishermen Become Oil Cleanup Contractors: After initially refusing to allow Cordovan fishermen to boom off the leaking Exxon Valdez, Exxon created a hiring policy that defined these fishermen as independent contractors. This designation entailed a substantial transfer of legal liabilities to the fishermen who became Exxon's spill response team. Many complained of ensuing confusion and resentment over tax and other liabilities. Exxon, consistent with treating fishermen as independent spill

contractors, reportedly took no responsibility for boats that broke down during cleanup operations, even though these operations were more stressful on equipment than normal fishing.

Conflicts Over Cleanup Money: Great animosity was generated by the moral stigma attached to working for Exxon. Cleanup workers were called "Exxon whores," who accepted "blood money" and became "spillionaires." Some refused to work for Exxon on moral grounds.

Conflicts Over Contracts: Animosity among persons who were willing to contract their boats for the spill cleanup focussed on the form of contracts and how contracts were obtained. The CDFU published objective criteria for selecting boats for cleanup contracts, but in the chaotic spill aftermath these criteria could not always be implemented. Exxon reportedly made no effort to apply a uniform contract policy. Many believe that Exxon used large cleanup contracts as a form of bribery to quiet discontent among the more vocal fishermen. Exxon reportedly subtracted this money from subsequent claims payments. In this perception, Exxon was bribing fishermen with their own money.

Health Hazards: Spill cleanup workers experienced adverse health effects, and many objected to Exxon's short and cursory training sessions. Deficits in health and safety training continued to trouble Cordovans in 1991, as Alyeska Pipeline Service Co. declined to provide safety training for its oil spill response program in 1991. According to an Alyeska spokesman, the omission of safety training was mandated by company lawyers in order to avoid liability for any damage done to sites by response team.

The Cleanup Does More Harm Than Good: Not the least of Cordovan's frustrations over the spill cleanup was that it may have done their environment more harm than good. Cordovans had to pursue cleanup activities that might be damaging their environment to mitigate economic losses caused by the spilled oil.

Conflicts Over Fish Claims: Based on preseason forecasts predicting a record commercial salmon harvest in 1989, fishermen and business owners had geared up for a record year in Cordova's commercial fishery. After the oil spill, the herring, shrimp, and

sablefish seasons were closed. Periodic closures of salmon fisheries occurred. Exxon announced their "voluntary settlement of claims" for salmon permit holders in June 1989. Fishermen objected to problematic features of the claims settlement process. In calculating settlements for fishermen, Exxon combined low harvest figures (based on past catches) with low fish prices (based on the spill year which had a high harvest and weak market). The necessity to fish in order to file a claim was a major concern, due to fears of contamination and market damage. Market effects of harvesting older fish, due to frequent closures, reportedly contributed to the bankruptcy of the Copper River Fishermen's Cooperative (CRFC), a fish processing cooperative formed by Cordovan fishermen.

Respondents described a claims process that diverged from Exxon's publicized policies. Some fishermen reportedly worked on the spill cleanup and also got good fishing claims settlements, while others who worked on the cleanup could not fish and so did not receive claims. Some were compensated for equipment upgrades while others were not. Some fishermen signed releases in order to receive money while others only signed receipts. Some claims settlements were reportedly much more generous than others.

Many fishermen are still pursuing settlements that Exxon partially paid through claims "advances." Cleanup workers could not apply for advances, and only those who fished in 1989 could file. Many recounted that Exxon refused to process claims any further once these "advances" were paid. Respondents were then referred to the Trans-Alaska Pipeline Authorization Act (TAPAA).

In winter 1991, many Cordovans were agonizing over filing their TAPAA claims, due on March 24, 1991. Complaints included that the fund would not contain enough money for all damages, processing of claims might take years, individuals could not determine true damages by the deadline, claims would be difficult to alter later, and individuals felt overwhelmed at the prospect of carrying out necessary litigation on their own. A reported blackout of scientific information due to pending litigation was a further irritant.

The Hatcheries: Prince William Sound Aquaculture Corporation: Prince William Sound Aquaculture Corporation (PWSAC) is a private nonprofit corporation established by Cordovan fishermen, which operates salmon hatcheries in Prince William Sound. The 1989 Exxon Valdez spill caused considerable turmoil and disorganization for PWSAC by creating unforeseen financial complexities, forcing operation reorganization, and adding extra employee responsibilities. The corporation incurred substantial costs to protect its hatcheries from the oil, and normal business operations were disrupted. Exxon reimbursed most extra costs. However, a weak salmon market, with radical drops in prices, bankruptcies of small processors, and a reluctance of other processors to buy the corporations' harvests, all continue to trouble the corporation.

Cleaned Beaches: *Cordovans complained in 1991 that Exxon did not clean up its spilled oil, and that State and Federal agencies did not control Exxon's cleanup effort. There appeared to be no consensus within and between Federal and State agencies as to what constituted a "cleaned" beach. Cordovans, particularly Natives, hold stricter standards than Exxon and Federal and State agencies as to what constitutes an uncontaminated area.*

VI.D. Spill Impacts on Alaskan Natives in Cordova

Exxon reportedly claimed that Eyak Village was not "impacted" by the 1989 oil spill and refused to provide food and services that it provided for Natives elsewhere. Eyak leaders complained to the media and to legislators. Impacts include social disruptions, higher prices, shortages of rental space, economic difficulties for the Chugach fish processor based in Cordova, and disruption of government operations. Chugach Alaska Corporation, Eyak Corporation, and Eyak Village sued Exxon.

Cultural impacts particular to Natives, such as looting of burial and historical sites, were emphasized. The most intense concerns related to subsistence foods and practices. Natives were and still are unable to obtain many subsistence foods. They were and still are afraid to eat subsistence foods that they do obtain. They worry about future adverse health effects from subsistence foods that they have eaten since the 1989 oil spill. They worry about continuing damage to their environment and way of life.

Exxon reportedly ignored the circle of sharing relationship, where Native foods are shared between villages, in assessing spill impacts. Because other areas of the Sound were oiled, Cordova Natives were not able to get the subsistence foods that they needed. Subsistence practices, including sharing, are integral to a way of life that connects Natives with their past and with each other, both in a spiritual sense and in terms of extending kin ties. Respondents describe their cultural identity as inclusive of the earth, wildlife, cultural practices, and people. The oil spill reportedly continues to threaten Native "life."

Both Natives and non-Natives experience devastating social, economic, and political effects of the oil spill that are still ongoing. Both Native and Non-Native groups report that their continued existence in Cordova has been threatened. Bases for this fear vary between the two cultures in that an Eyak spiritual philosophy of nature stipulates pragmatic concerns regarding persistence.

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Tatitlek

Eric Morrison

Preface by Steven McNabb

TATITLEK

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TATITLEK

I. PREFACE

This chapter describes Tatitlek in the context of the Exxon Valdez oil spill. By this we mean that the oil spill is the central organizing concept for the report. The summary contains some historical and other background material, but its primary purpose is to describe basic social and institutional features of life in Tatitlek that must be grasped in order to understand how the oil spill was experienced. This is not an ethnographic sketch nor socioeconomic profile about Tatitlek. Indeed, our study team was unable to conduct as much research as we planned in Tatitlek, so the information base we draw on here is extremely fragmentary.

Eric Morrison, the researcher for Tatitlek, was invited by community leaders to conduct his assigned research in Tatitlek during 1989, and he did so without hindrance. However, he had been in Tatitlek for less than a day during his 1991 field excursion when he was asked to leave by village officials who were responding to the instructions of attorneys representing Tatitlek and other communities in pending litigation for damages related to the oil spill. Since anticipated litigation would focus on evidence of oil spill impacts, research data that were not possessed and controlled by the litigants were considered potentially dangerous. As such, much social research in spill communities came to a virtual halt after 1990. This event curtailed our field research in Tatitlek and eliminated the community from some phases of the analysis that required 1991 data. This situation is ironic inasmuch as Morrison, a Tlingit from southeast Alaska, was well known in Tatitlek and had conducted work there before.

By Morrison's estimation, Tatitlek's population had been stable over the latter part of the 1980's, but between 1980 and 1990 the population grew enormously (from 68 in 1980 to 119 in 1990--75%). The proportion of Alaska Natives (mainly Alutiiq of Pacific Yupik heritage) also grew over this interval, from 78 percent of the population in 1980 to 87 percent in 1990 (Alaska Department of Labor 1991; U.S. Department of Commerce 1982). Despite its proximity to Cordova and Valdez, its economic infrastructure is limited. For instance, there is no community store for groceries and dry goods, and

residents must shop outside the town or order goods for delivery. Subsistence food harvests are vitally important to residents inasmuch as they provide important sources of protein, calories, minerals and vitamins, and sustain in great part traditional ideologies of reciprocity and sharing and relationships between individuals, their kin groups, and the larger environment. Morrison's report describes how the Exxon Valdez oil spill affected the community through its impacts on these and other features of the social system: the fragile infrastructure, diet and food preferences, and relationships between persons, institutions, and the environment.

II. Background

Tatitlek is a predominantly Alutiiq community considered by residents to be the oldest continuously inhabited community in Prince William Sound. The population has been stable at around 100 in recent years. The population count done during a recent research site visit by the Alaska Department of Fish and Game was 101 in 1989 (Fall 1990:5). The 1990 census indicates a population of 119 (Alaska Department of Labor 1991). The most significant factor in recent history that has impacted the community is the 1964 Good Friday earthquake which destroyed nearby Chenega, causing some residents to move to Tatitlek. Some Tatitlek Natives are married to Alaska Natives from other regions, some of whom met while in boarding schools. There has been no significant immigration by non-Natives.

The community economy is based largely on subsistence hunting and fishing, although many of the men are commercial fishermen who fish seasonally for salmon and some shrimp. The boats and gear are not as new and sophisticated as those found in surrounding non-Native communities. Wood boats are often used rather than aluminum craft; cash is used largely to pay for conveniences introduced in the past two decades; and the community infrastructure is modest, evident in low income housing, and minimal electrical, sewer, and water utilities. Hunting and food gathering patterns are largely traditional, being done in groups, usually family and extended family members. Food is still provided for elders and those unable to hunt, fish, or gather. Elders in this community are identified as those over 50 years of age. Elders over 60 are few. In the

past, subsistence excursions often meant extended overnight trips to camps. Presently very few subsistence trips require overnight passage. This is probably due to improved equipment and changes in resource patterns: outboards and guns with scopes are used, and expansion of the Sitka deer introduced to the area in the 1930's provide more nearby resources. The community has retained its Russian Orthodox tradition although in the past 2 years the Assembly of God made some inroads.

III. Effects of the Exxon Valdez Oil Spill Through 1991

III.A. The Economy

The economy for the community is like many other Alaska Native villages. There is one village health aide, an assistant health aide, school aids, and janitorial and kitchen help at the school. Garbage collection is carried out by workers who also are responsible for maintenance of village equipment (trucks and electrical generators). The men are generally commercial fisherman whose season runs from July through August and the rest of the year is spent in subsistence. Some of the women go to nearby communities (Valdez, Whittier, Cordova) during the tourist season to earn cash through jobs such as kitchen helper, waitress, or hotel maintenance and cleaning.

The village economy was significantly impacted by the oil spill. While incomes were drastically inflated during the cleanup effort, the income derived from the spill has been significantly or totally diminished. During the employment boom, households bought luxury items, large televisions, VCR machines, satellite dishes, and stereos. Residents also spent money on travel out of the village. Little or no savings were realized from the earnings of the oil spill work. The loss of income has caused some families to sell their appliances to make ends meet and has caused friction within families. Some temporary marital separations may have resulted.

About half of the adults worked on the spill 6 weeks or more. Most appeared to be boat owners and their immediate families. About half of the remaining adults worked a week or less, and a small number did not work at all. (Those essential for the maintenance of the community and the elderly and children apparently worked the least, if at all.) Despite the apparent disparity in income, there was a widely shared belief that

the village could be healed through mutual support. People in the community sensed that economic conflict did exist; however, that conflict was not common.

III.B. Perceptions of Fault for the Oil Spill

The consensus was that the responsibility for the spill did not rest solely on the shoulders of the captain of the Exxon Valdez and that, furthermore, assertions that he was solely responsible were deceptive. The efforts by Exxon, the Federal Government through its various agencies, and the tribal non-profit North Pacific Rim were perceived as inadequate or non-existent; the State of Alaska, the regional for-profit ANCSA corporation, Chugach Alaska, and Tatitlek Corporation (the village ANCSA corporation) were perceived to have been very visible in assisting the community and to have had the *concerns of the community at heart in their efforts to mitigate the spill.*

The spill was seen as an unusual event but an event that will occur again in the future (estimated range from within a decade to within the next 100 years). However, this spill was perceived as a lesson for everyone concerned (Federal, State, oil companies, the community) and that the reaction to another spill will be more rapid and efficient. Older Tatitlek residents have noted environmental damage done by other events such as World War II construction, pre-1960's canneries and salteries, and of course the Good Friday earthquake, since these events also taught lessons.

In 1991 the village showed concern over the State of Alaska Department of Fish and Game releasing information about subsistence patterns and contamination of fish and game to the public. This release of information is perceived as being harmful to the legal course of action by the village against Exxon.

III.C. Human Intervention

The greatest degree of anger and frustration was expressed over the "human" spill into the community. The community expanded enormously during the spill cleanup. First seen, were the reporters who came to Tatitlek not only from across the country but from around the world. It did not matter where the news people came from or their particular field of media, they all were insensitive to the community, arrogant, frightening to the children, and abusive to the elders. Reportedly they chased children and elders

into homes, attempted to take pictures through resident's windows, and laughed at people who were caught off guard.

The second "human" spill came from the investigators and researchers who came to Tatitlek to do social, cultural, economic, psychological, and biological research. Again, the community felt that the researchers were unconcerned about the community and were there only to procure information to fulfill their requirements and/or personal interests.

The third "human" spill represented the oil spill workers or persons who camped out in or near the community looking for work who drained the community of its resources and patience. This group did not draw the frustration and anger that the first two did, however.

Agitation was consistently expressed over a lack of organization. Many individuals perceived more organization should have been in place to alleviate many of the circumstances and assist in many of the problems that arose as a result of the spill. The organization mentioned frequently as the one that should have shouldered this responsibility was the North Pacific Rim.

The personal and family conflict and the pressure associated with the spill has not been dealt with through responsive counseling services by any agency. An additional factor that brought stress on the community was the designation or apparent designation of the Valdez oil terminal as a possible terrorist strike location during Operation Desert Storm. Three of the four students who attended Mt. Edgecumbe Boarding High School located in Sitka, Alaska during the Desert Storm crisis returned home and finished their academic year through correspondence due to a concern that they be near their families during a crisis posed by terrorist threats close to home (Tatitlek does not have a high school).

III.D. Subsistence

The region was severely impacted by the 1964 Good Friday earthquake. The quake caused uplifting that led to a severe decline in halibut, sea mammals, sea birds, salmon (except pink), and nearly the complete extinction of some indigenous shellfish.

The community felt the beginning of recovery when the spill struck. Consistently, the community believed that bottom fish and shellfish were severely impacted by the spill. In that same vein, local residents were afraid to harvest local foods even after being told by experts that the subsistence food was safe to harvest. Exceptions to this pattern were a few young men who expressed the feeling that being part of the land they would harvest and suffer the consequences, saying in effect that if the ecology was destroyed they would see no reason to live. The community health aide received donated fish and other subsistence food from Chugach Alaska and the villages of Angoon and Tyonek. The residents were particularly grateful for this gesture and appreciated visits by executive officers of Chugach Alaska. Exxon also donated some of the food supply left at the end of the spill cleanup seasons.

The Alaska Department of Fish and Game subsistence survey in 1987-1988 indicated an average harvest of wild foods of 353 pounds per person. In 1988-1989 the subsistence harvest survey of wild foods yielded an average figure of 652 pounds per person (Fall 1990). I believe the 1988-1989 survey best reflects the true intake of wild foods at Tatitlek; hence, there may not have been an increase in harvests and consumption between 1988 and 1989. The 1987-1988 survey was not trusted by some residents--the community perceived Fish and Game as only an enforcement agency. This perception may have biased results and limited participation in the survey. The 1989 report indicated the distributions of harvests by food products as follows: salmon (35%), other fish (22%), game (12%), marine mammals (20%), marine invertebrates (7%), birds (2%), and wild plants (3%).

Of all the rural communities near the spill, Tatitlek has shown the largest subsistence intake decline in the year following the spill, from 652 pounds in 1988-1989 to 207 pounds in 1989-1990, a difference of 445 pounds or a 68.3-percent decline. *Eighty-two percent of the households reported that their traditional food supply was the foremost concern.* During my short visit in 1991, it was noted that the harvest (deer, fish, etc.) that was available was taken with restraint because of the belief that the renewability of the species was fragile. The seafood harvest season that had not yet

arrived (salmon, halibut, shellfish) was anticipated with anxiety concerning the size of the return and the health of the species. The health concerns varied from genetic mutations to species carrying toxic chemicals that could impact the health of the community. Fall's (1990) Alaska Department of Fish and Game report states that a few Tatitlek residents traveled to other areas in Prince William Sound well outside the regions impacted by the oil spill. This decline in subsistence, reliance on store bought groceries, and other economic hardships related to the oil spill increased personal and family friction and stress. (Although some household incomes increased as a consequence of spill clean-up employment, reduced subsistence harvests that resulted in higher grocery bills probably offset higher incomes.)

III.E. Leadership

The village of Tatitlek is an Indian Reorganization Act village consisting of a council and a chief. There is no municipal government in Tatitlek. The council does receive support from the village ANCSA corporation, but most of the daily operations of village government are being done by the elected chief through direction by the council.

In respect to the oil spill, the chief has been the sole contact and negotiator between the community and outside influences and agencies. The North Pacific Rim had employees to screen news, researchers, government agents, and other representatives but it was highly evident to this researcher that the chief was shouldering a great deal of the burden of spill work, public relations, and negotiations. This was evidenced further by the lack of knowledge of political and economic activities and relationships between the village and other organizations and agencies. In a sense, virtually everyone seemed to be working in a vacuum, and outside agencies, such as North Pacific Rim, provided insufficient assistance to beleaguered, lone village officials.

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