Wild & Scenic Rivers Act: Section 7

May 1997 Council Contact: Jackie Diedrich U.S. Forest Service Portland, Oregon

Technical Report of the Interagency Wild and Scenic Rivers Coordinating Council

Wild & Scenic Rivers Act: Section 7

Table of Contents

FOREWORD	1
INTRODUCTION	1
STATUTORY BACKGROUND	2
DEFINITIONS	2
STANDARDS AND EVALUATION PROCEDURES	4 4
B. Water Resources Projects Outside the River Corridor	6
B. Water Resources Projects Outside the Authorized Study River IV. Agency-Identified, 5(d)(1), Study Rivers: Section 7	
SECTION 7, NEPA, AND COORDINATION WITH PROPONENT/REGULATING AGENCY	7
SECTION 7 AND THE FERC LICENSING PROCESS	9
SECTION 7 AND THE ACOE PERMITTING PROCESS	9
APPENDIX A: Section 7 Examples	11
APPENDIX B: Section 7 Case Studies	14
APPENDIX C: Evaluation Procedure Under "Direct and Adverse"	21
APPENDIX D: Evaluation Procedure Under "Invade the Area or Unreasonably Diminish"	24
APPENDIX E: Evaluation Procedure Under "Invade the Area or Diminish"	26

Wild & Scenic Rivers Act: Section 7

FOREWORD

Section 7 is one of the most important and powerful parts of the Wild and Scenic Rivers Act (Act). This key provision directs federal agencies to protect the free-flowing condition and other values of designated rivers and congressionally authorized study rivers. However, limited understanding by agency personnel, and growing public awareness of the protection afforded by Section 7, requires development of rigorous and consistent interagency evaluation procedures to protect river resources. This paper provides a basis for consistent interpretation of the standards and presents procedures to evaluate the effects of proposed water resources projects under Section 7.

INTRODUCTION

Congress passed the Act to preserve selected rivers from the dams and developments associated with many of the nation's waterways. While the Act provides a number of important measures to protect and enhance the values for which rivers are added to the National Wild and Scenic Rivers System (National System), none is more significant than the restrictions to water resources projects provided in Section 7. Through the language of this section, Congress expressed the clear intent to protect river values from the harmful effects of water resources projects.

More specifically, the Act prohibits the Federal Energy Regulatory Commission (FERC) from licensing the construction of hydroelectric facilities on rivers that have been designated as components of the National System, or which have been authorized by Congress for study as potential additions. Further, the Act prohibits other federal agencies from assisting in the construction of any water resources project that would have a direct and adverse effect on a designated river or congressionally authorized study river. The Act also includes a standard that governs water resources projects below or above a designated river or congressionally authorized study river. Determinations under Section 7(a) or 7(b) are made by the river-administering agency.

STATUTORY BACKGROUND

Section 7(a) states in part:

The Federal Power Commission [FERC] shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is designated in section 3 of this Act as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation of a river as a component of the national wild and scenic rivers system.

Section 7(b) of the Act provides the same protection to congressionally authorized, 5(a), study rivers except that the qualifying word "unreasonably" does not appear before "diminish." The effect is to provide greater protection for study rivers during the shorter term study process.

The first sentence of Section 7(a) and (b) applies a more stringent standard to projects licensed by the FERC than for other federally assisted projects proposed on a designated river or congressionally authorized study river (i.e., a prohibition to the FERC). Importantly, both standards in this sentence apply to projects proposed within the river corridor. The second sentence of Sections 7(a) and (b), which applies to the FERC and other federal agencies, defines a standard for projects proposed outside (i.e., below/above or on a tributary stream) the designated river or congressionally authorized study river. It specifically identifies scenic, recreational, and fish and wildlife as the four values to be evaluated.

DEFINITIONS

The Act does not define the terms expressed in Section 7; however, the U.S. Forest Service (USFS) has codified regulations for Section 7 at 36 CFR 297 which includes definitions. These definitions are based on Departments of Agriculture and Interior interpretations of Section 7 as developed in response to specific situations.

Construction: Any action carried on with federal assistance affecting the free-flowing characteristics or the scenic or natural values of a wild and scenic river (WSR) or congressionally authorized study river.

Federal Assistance: Any assistance by an authorizing agency before, during, or after construction. Such assistance may include, but is not limited to: a license, permit, preliminary permit, or other authorization granted by the FERC; a license, permit or other authorization granted by the Army Corps of Engineers, (ACOE), Department of the Army, pursuant to the Rivers and Harbors Act and Section 404 of the Clean Water Act. Assistance also includes federal funding of projects such as state highway proposals.

Free-flowing: Defined in the Act at Section 16(b) as "existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway."

Invade: Encroach or intrude upon.

River Corridor: Means a river and the adjacent area within the boundaries of a designated river, or a river and the adjacent area within one-quarter mile of the banks of a congressionally authorized study river (one-half mile for designated/study rivers authorized under the Alaska National Interest Lands Conservation Act).

River-administering Agency: One of the four federal agencies that may be charged with administration of a component of the National System. These agencies are the Bureau of Land Management (BLM), National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), and USFS.

Section 7 Standards: This paper offers an evaluation process to provide context for measuring a proposed project against the specific standard rather than a more precise definition.

Water Resources Projects: Any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (FPA), or other construction of developments which would affect the free-flowing characteristics of a wild and scenic or congressionally authorized study river. In addition to projects licensed by the FERC, water resources projects may also include: dams; water diversion projects; fisheries habitat and watershed restoration/enhancement projects; bridges and other roadway construction/reconstruction projects; bank stabilization projects; channelization projects; levee construction; recreation facilities such as boat ramps and fishing piers; and, activities that require a 404 permit from the ACOE. Refer to Appendix A for a further discussion of how Section 7 may apply to particular types of projects.

STANDARDS AND EVALUATION PROCEDURES

The remainder of this text provides an interpretation of the standards in Section 7 and presents methods to evaluate the effects of proposed water resources projects for: 1) congressionally designated rivers; 2) secretarial-designated, 2(a)(ii), rivers; 3) congressionally authorized, 5(a), study rivers; and, 4) agency-identified, 5(d)(1), study rivers. It is presented in the form of a key, based on the type of project and location. Refer to Appendix B for Section 7 case studies.

I. Congressionally Designated Rivers: Section 7(a)

A. Water Resources Projects Within the River Corridor

1. Proposed Hydroelectric Facilities (Licensed by the FERC)

The FERC is prohibited from issuing a license (or exemption) for construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the FPA if the project is "on or directly affecting" a designated river.

The FERC routes applications for preliminary permits and licenses for proposed hydroelectric facilities to river-administering agencies for determinations of whether the project is "on or directly affecting" a designated river. The river-administering agencies apply the statute to prohibit any project work licensed under the FPA within the river corridor.

2. Existing Hydroelectric Facilities (Licensed by the FERC)

In the rare instances where an existing hydroelectric facility is included in a designated river corridor, modifying or relicensing of the facility is not prohibited by the Act. The riveradministering agency should evaluate the proposed modification or relicense application to ensure that proposed operations protect or enhance river-related values under the "direct and adverse" effects standard. The baseline for evaluation of existing hydroelectric facilities is the project's configuration and operation at the time of the river's designation as subsequently modified through FERC processes. The baseline also includes the values as assessed at the date the river was added to the National System and the current resource conditions and trends. In certain situations, the change of operations (per modification or relicense) may be of positive benefit to river-related values. Opportunities identified in the river management plan (or other plans) may be used to recommend enhancements. However, such recommendations are not part of the Section 7 determination nor binding on the FERC. (Application of Section 7 does not, however, restrict an agency's authority to provide terms and conditions or other article requirements under the FPA.) Refer to Appendix C for the evaluation procedure.

3. Other Proposed Federally Assisted Water Resources Projects (Agency Other than the FERC)

Unlike proposed FERC-licensed projects, which are prohibited if they are "on or directly affecting" a WSR, other proposed federally assisted water resources projects are prohibited only if they would have a "direct and adverse effect" on the values for which a river was added to the National System. Examples of projects that would likely be subject to this standard include, but are not limited to: dams; water diversion projects; fisheries habitat and watershed restoration/enhancement projects; bridge and other roadway construction/reconstruction projects; bank stabilization projects; channelization projects; levee construction; recreation facilities such as boat ramps and fishing piers; and, activities that require a Section 404 permit from the ACOE. Refer to Appendix C for the evaluation procedure.

B. Water Resources Projects Outside the River Corridor

1. Proposed or Modification/Relicense of Hydroelectric Facilities (Licensed by the FERC)

The FERC is subject to the river-administering Secretary's finding relating to developments (i.e., FERC-licensed projects) located below/above or on a stream tributary to the designated river. The downstream/upstream project may be constructed (proposed project) -- or reconfigured or operations modified (modification/relicense) -- as long as the designated river is not invaded by the project, or the scenic, recreational, and fish and wildlife values present at the date of designation are not unreasonably diminished. Opportunities identified in the river management plan (or other plans) may be used to recommend enhancements. However, such recommendations are not part of the Section 7 determination, nor binding on the FERC. (Application of Section 7 does not, however, restrict an agency's authority to provide terms and conditions or other article requirements under the FPA.) Refer to Appendix D for the evaluation procedure.

2. Other Proposed Federally Assisted Water Resources Projects (Agency Other than the FERC)

The river-administering agency evaluates non-hydroelectric project proposals under the "invade the area or unreasonably diminish" standard. Examples of projects that may be subject to this standard include, but are not limited to non-hydroelectric dams and other projects that affect the free-flowing characteristics of the designated river. Refer to Appendix D for the evaluation procedure.

II. Secretarial-Designated, 2(a)(ii), Rivers: Section 7(a)

Standards and evaluation procedures for the determination of effects of water resources projects are the same as discussed in the preceding section (I.A.1-3 and I.B.1-2). If there is an adjacent

federal land manager, that agency is responsible for conducting the Section 7(a) determination. On rivers without adjacent federal ownership, the NPS is responsible for the Section 7(a) determination.

III. Congressionally Authorized, 5(a), Study Rivers: Section 7(b)

A. Water Resources Projects Within the Congressionally Authorized Study River

1. Proposed Hydroelectric Facilities (Licensed by the FERC)

Section 7(b) of the Act prohibits the FERC from issuing a license or exemption for a hydropower project if the proposed project is on or directly affecting a study river designated under Section 5(a) of the Act. This moratorium is in effect during the study and for three years after the President sends the report and his recommendations to Congress. If Congress designates the river during this three year period, the protection becomes permanent. The study agency is responsible for the determination as to whether a proposed project is on or directly affecting the study river. Refer to the section "proposed hydroelectric facilities" under water resources projects within the designated river corridor (Section I.A.1.).

2. Existing Hydroelectric Facilities (Licensed by the FERC)

Refer to the section on "existing hydroelectric facilities" under water resources projects within the designated river corridor (Section I.A.2.).

3. Other Proposed Federally Assisted Water Resources Projects (Agency Other than the FERC)

Refer to the section on "other proposed federally assisted water resources projects" under water resources projects within the designated river corridor (Section I.A.3.).

B. Water Resources Projects Outside the Congressionally Authorized Study River

For 1 and 2 below, i.e., water resources projects outside the congressionally authorized study river, the downstream/upstream project will be evaluated as to whether the study river is invaded or the scenic, recreational, and fish and wildlife values present on the date of designation of the river for study are diminished.

1. Proposed or Modification/Relicense of Hydroelectric Facilities (Licensed by the FERC)

Refer to the section on "proposed or modification/relicense of hydroelectric facilities" under water resources projects outside the designated river corridor (Section I.B.1.). Refer to Appendix E for the evaluation procedure.

2. Other Proposed Federally Assisted Water Resources Projects (Agency Other than the FERC)

Refer to the section on "other federally assisted water resources projects" under water resources projects outside the designated river corridor (Section I.B.2.). Refer to Appendix E for the evaluation procedure.

IV. Agency-Identified, 5(d)(1), Study Rivers: Section 7

Rivers found eligible or suitable for the National System through agency planning processes are not protected by the Act from proposed hydroelectric facilities or other federally assisted water resources projects that have the potential to affect the river's free-flowing characteristics and other identified values. However, the managing agency should, within its authorities, protect the values which make the river eligible or suitable. If a river is listed in the Nationwide Rivers Inventory (NRI), the federal agency involved with the action must consult with the land managing agency, or the NPS, if the river is on private lands, in an attempt to avoid or mitigate adverse effects. This consultation is required pursuant to a 1980 directive from the Council on Environmental Quality.

SECTION 7, NATIONAL ENVIRONMENTAL POLICY ACT (NEPA), AND COORDINATION WITH PROPONENT/REGULATING AGENCY

A separate environmental document is not required for a Section 7 determination. Rather, the federal official proposing or permitting the project typically includes analysis of what, if any, impact the proposal would have on a designated or potential WSR in their respective environmental and/or permitting processes. The river-administering agency is responsible for conducting the Section 7 analysis and making a determination under the statute. This responsibility does not preclude utilizing staff expertise of the proposing/permitting agency in the evaluation process. The Section 7 determination is signed and transmitted to the proposing/permitting agency via respective river-administering agency processes.

1. Hydropower Proposals (Licensed by the FERC)

For hydropower proposals, a preliminary Section 7 determination should be completed at the final application stage. This approach is based on the assumption that sufficient detail of the project proposal is not available until the final application. This preliminary determination will precede the environmental assessment (EA) or environmental impact statement (EIS) conducted prior to the licensing decision. Completing the preliminary determination with the final application provides the river-administering agency an opportunity to recommend measures to reduce adverse effects to within acceptable levels, if the proposal is found inconsistent with the appropriate Section 7 standard.

During the environmental analysis process, the FERC will develop alternatives and may assess the project under different configurations than proposed in the license application. Importantly, the river-administering agency will reserve the right to reevaluate a Section 7 determination completed for the final application in the event the alternatives considered in the environmental analysis modify the project, or otherwise create impacts not previously addressed. The river-administering agency will evaluate and make its Section 7 determination responsive to the FERC's draft and final environmental documents.

Note: The FERC is considering new procedures that would allow the NEPA process to take place earlier in the licensing process and formalizing cooperating agency status under NEPA. The river-administering agency would complete the preliminary Section 7 determination coincident with the environmental document (including the draft) or final application, whichever is issued first.

2. Other Federally Assisted Water Resources Projects (Agency Other than the FERC)

For proposed water resources projects "assisted" by other federal agencies, the Section 7 determination would be conducted responsive to draft and final environmental documents, respectively (i.e., when sufficient alternative detail and discussion of environmental consequences is available in a NEPA document). The river-administering agency should identify WSR concerns early in the scoping process and should cooperate with the proposing agency to the greatest extent possible.

Section 7 creates a requirement for consultation between the river-administering agency and the federal agency assisting the construction of the project. Project proponents, if not federal agencies, are not required to consult directly with the federal river-administering agency, and no new permits are required under Section 7. However, project proponents should be encouraged to consult informally with the river-administering agency early in the siting and project design process, in order to avoid delays and costs associated with projects that cannot be approved under Section 7.

The river-administering agency should, as appropriate, coordinate its evaluation process with other agencies that are required to review and comment on the project. Depending on the type of proposed project, this may include: USFWS (Fish and Wildlife Coordination Act, Endangered Species Act, and other statutes); National Marine Fisheries Service (Endangered Species Act); Environmental Protection Agency (Clean Water Act, Clean Air Act); and state fish, wildlife, water quality, and other agencies. Coordination with these other agencies should begin as early as possible in the process, preferably in the first stages of project planning.

For a water resources project proposed by a river-administering agency, the Section 7 determination should be documented in, or appended to, the environmental analysis. Similarly, for 5(d)(1) study rivers, an analysis of the potential effects of a proposed water resources project on free-flow, water quality, and the outstandingly remarkable values (ORVs) should be incorporated, appended, or available in the analysis file.

SECTION 7 AND THE FERC LICENSING PROCESS

A key step to facilitate Section 7 determinations for hydropower proposals is the early identification in the consultation process of precisely what information the proponent must collect or analyze to address issues necessary for the determination. This information appears in Exhibit E of the proponent's application for license or relicense and serves as the basis of the determination. Careful identification of information and analysis needs, at appropriate steps in the consultation process, will greatly simplify the work associated with completing a Section 7 determination responsive to the final application and draft/final environmental analysis documents.

It is also important to note that the Section 7 determination does not provide the river-administering agency an avenue to require mitigation and enhancement needs (relative to the licensing process). If a determination is made that a project would result in a direct and adverse effect, or, for projects below/above the designated river, to invade the area or unreasonably diminish (or diminish for a study river) the scenic, recreational, and fish and wildlife values present at the date of designation, the responsible official may recommend measures to eliminate adverse effects.

SECTION 7 AND THE ACOE PERMITTING PROCESS

The ACOE's regulations are found at 33 CFR 320-330. Section 404 of the Clean Water Act requires the ACOE to regulate, through permits, the discharge of dredged or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of

1899 requires the ACOE to regulate, through permits, structures and work in navigable waters of the United States. The scope of the ACOE jurisdiction pursuant to these regulatory authorities is defined at 33 CFR 328-329. ACOE permit applications for activities in WSRs subject to the provisions of Section 7 of the Act.

Federal assistance, as defined by the river-administering agencies, includes ACOE permits. A permit from the ACOE will require a Section 7 determination by the river-administering agency when the proposal occurs in a designated river or congressionally authorized study river and is a water resources project, i.e., affects the river's free-flowing condition. The ACOE process requires a written determination from the river-administering agency for such projects. It is very important for WSR administrators to develop a close working relationship with Regional and District ACOE staff to participate in the review and evaluation process.

Appendix A: Section 7 Examples

The following examples represent typical project proposals that may affect WSRs. For some of these examples, whether or not and/or how to apply Section 7 is apparent, for others it may not be as obvious. The answers are based on recommendations by river management experts; however, for these, or more complex situations such as mining activities, threatened and endangered species, and hydroelectric development projects, consultation with agency experts and/or legal counsel may be appropriate.

River-administering agency proposes to place fish habitat improvement structures in a WSR to meet habitat restoration goals.

Section 7 should be applied if the proposed project has the potential to affect the free-flowing condition of the river. Consideration of such structures should be based on the need for fish habitat restoration as identified in the River Management Plan (RMP). For example, the RMP may identify a need to recruit large woody debris in a stream where there is a limited natural source.

A federal agency proposes to construct a dam on an upstream tributary of a WSR. The tributary is not a part of the designated river.

Section 7 should be applied if the proposed project has the potential to affect the free-flowing condition of the designated river. The appropriate standard under Section 7(a) is whether the project would invade the designated river or unreasonably diminish the scenic, recreational, fish and wildlife values present at the date of designation. Because the project is upstream of the designated river, the project will not invade it. The river manager should consider, and document, how the project might affect the four values specified for a project outside the river corridor: scenic, recreational, and fish and wildlife.

River-administering agency proposes to construct a new boat launch facility within a WSR.

Boat launch facilities of traditional designs typically have the potential to affect the free-flowing condition of a river and should be evaluated under Section 7. Such projects should be supported by direction in the RMP.

River-administering agency proposes a vegetative manipulation on public lands in a WSR.

Typically, a vegetative manipulation project within a river corridor does not have the potential to affect the free-flowing condition of the river and is not considered a water resources project.

Importantly, however, the effects of the project should be evaluated to assure that the values for which the river was included in the National System are protected.

An existing hydroelectric facility is being relicensed upstream of a WSR. The licensee proposes changes in project configuration and operation.

Section 7 applies specifically to hydroelectric projects licensed by the FERC. For projects, outside the river corridor, the river-administering agency would evaluate the effects of the proposal on scenic, recreational, and fish and wildlife values present in the designated river at the date of designation. The standard of evaluation is whether the proposal would "unreasonably diminish" these stated values.

River administering agency proposes to replace a culvert on a road that crosses a river found eligible for wild and scenic river designation though the agency's planning process (Section 5(d)(1)).

An agency identified study river is not protected under the Act. Generally, agency policy requires some type of analysis to determine the effects of the project on free-flow and the ORVs. The resulting design, if implemented, would protect the potential river's values as a WSR.

A small community proposes to withdraw water from a WSR for domestic purposes.

Section 7 would be applied if the project has a structure associated with it that has the potential to affect the free-flowing condition of the river.

A landowner proposes to block a major tributary of a WSR for irrigation purposes. The project is located above the designated river.

It would be appropriate to apply Section 7 if there was federal assistance involved and the construction had the potential to affect the free-flow of the designated river. Such assistance may include the need to acquire a license, permit or other authorization by a department or agency of the federal government before, during, or after construction of the project. It also includes technical assistance from a federal agency and/or federal funding.

A bridge crossing a WSR washes out and the proposal by the river-administering agency is to replace it similar to its original condition.

An analysis of the bridge replacement should be conducted relative to Section 7. In the analysis process, opportunities for improved design or a better location for the bridge may lessen its impacts on river resources and allow better connection of the river with its floodplain. This

would be true if the bridge replacement was proposed by another federal agency or state/county utilizing federal assistance (federal funding, ACOE Section 404 permit, etc.).

Private landowners with homes on the bank of a WSR propose to replace a section of existing riprap that is failing and to construct a new section of riprap on a portion of land that is not presently armored.

A proposal to place riprap on private lands typically requires federal assistance in the form of a Section 404 permit by the ACOE. The RMP should address this issue and provide guidance. For example, the RMP might provide guidance that it is permissible to replace existing riprap but, in such replacement, consideration is to be given to improving the existing situation and/or using methods that mimic natural processes. The river-administering agency might offer assistance in the design of the project under authorities given in Section 11(b)(1). New riprap is not typically permitted on a designated river, but careful consideration must be given to the existing development and the river's flow regime.

Appendix B: Section 7 Case Studies

Salmon River Side-Channel Restoration, Oregon

Background: The BLM, through the WSR planning process, identified an important side-channel of the Salmon River for stream habitat restoration. The side-channel had been closed 25 years previously by flood control channelization work conducted by the ACOE. During following years, a dike was constructed along the river in order to protect a recreation site and facilities from flooding. Dike construction blocked all flow of Salmon River water to the secondary channel. Restoring flow to the side-channel would provide critical off-channel spawning and rearing habitat for anadromous fish. The anadromous fishery of the river was found to be one of the river's ORVs.

Application of Section 7: An interdisciplinary BLM team used the accompanying Section 7 process in preparing an environmental analysis of the proposed project. The Section 7 review analyzed the effects of reopening the secondary channel by breaching the old dike, constructing a diversion structure and diverting flow from the mainstem of the Salmon River into the secondary channel for about one-third of a mile before returning to the mainstem. The step-wise Section 7 analysis resulted in a careful multi-disciplinary review and design process. The final project satisfied the intent of the Act while meeting stream habitat restoration and flood control goals. Construction of a small headgate was required to maintain the flood control integrity of the dike while allowing control of flows that would mimic natural variations occurring on the mainstem. A section 404 permit (of the Federal Water Pollution Control Act administered by the ACOE) was required for construction. The Section 7 analysis satisfied the ACOE, Oregon Department of Fish and Wildlife, and Oregon Department of Water Resources review processes, and the project was approved.

Results: An average of about five to fifteen cubic feet per second (cfs) of water now flows from the mainstem of the river through the side channel and adjacent pools, returning to the mainstem just one-third mile downstream. The Section 7 analysis provided an alternative that minimized disturbance of the bed and bank at the head of the old channel and reduced sedimentation in the side channel. A surface flow diversion structure with headgate was constructed and screened with natural or natural-appearing materials. Regulation of flow was necessary in order to mimic natural flows, maintain flood protection for the recreation site, and ensure that there will be no adverse impacts to the mainstem habitat during extreme low flow conditions. Even at lowest recorded flow conditions (approximately 70 cfs at this location), side channel flows would not exceed 10% of the main channel flows, resulting in negligible effect to the mainstem habitat. The project was successful in restoring approximately 2,700 square meters of prime spawning and rearing (particularly over-wintering) habitat for coho salmon, winter steelhead, and cutthroat trout. First year inventories of coho salmon and winter steelhead populations showed that production vastly exceeded expectations. The channel has been highly acclaimed for its habitat restoration, environmental education, research and aesthetic values.

Lower St. Croix River Marina, Minnesota/Wisconsin

Background: Most of the St. Croix Wild and Scenic River in Minnesota and Wisconsin is administered by the NPS, but the lower 25 miles were designated by the Secretary of the Interior and this segment is administered by the States. The Minnesota and Wisconsin Departments of Natural Resources have entered into an agreement with the NPS to form a Lower St. Croix Management Commission (Management Commission) so that these three form a management triumvirate.

In 1980, the Control Data Employees Recreational Foundation (Control Data) made application to the ACOE for a permit to construct a marina for its employees in the state-administered segment on the Minnesota side of the river. There already was concern that the Lower St. Croix was being overused for recreational boating, and that the proposed facility would worsen the situation. The state of Minnesota supported construction, but Wisconsin and the NPS opposed it. The Secretary of the Interior wrote to the ACOE requesting that the ACOE withhold a decision pending completion of a river use pattern study being performed under contract for the NPS. The purpose of the study was to determine the appropriate level of river use and development.

Application of Section 7: The project would involve dredge and fill in the bed and on the banks of a navigable waterway included in the National System. It clearly was a water resource development project requiring a Section 10 (of the Rivers and Harbors Act of 1899) permit and a Section 404 (of the Federal Water Pollution Control Act) permit from the ACOE. The NPS felt that it was responsible for reviewing the proposal for possible "direct and adverse effects" under Section 7(a). Control Data claimed the Secretary of the Interior (NPS) did not have this authority for a state-administered river and brought suit. The U.S. District Court for the District of Columbia ruled that the Secretary did have this authority.

Results: A key finding of the study aside from confirming crowded conditions during peak use which caused safety concerns, was that institutional, industrial and commercial users (which would include Control Data) did not contribute significantly to the volume of traffic (less than 2%) during peak use periods. Therefore, the Secretary lifted his moratorium, and the ACOE issued the permit, but for a smaller marina than had been proposed. The Secretary also ordered that a new policy for future boating facilities be developed with several provisos established. These include: no more large marinas because they contributed significantly to peak use, with the Management Commission to define the distinction between "large" and "small" for Lower St. Croix purposes; establishment of thresholds of safety; and the issuing of permits to individual riparian owners since they also did not contribute significantly to congestion of the water surface or in beach areas.

North Umpqua River Highway Project, Oregon

Background: The Oregon Department of Transportation (ODOT), funded by the federal Public Lands Highway Program, proposed to reconstruct Highway 138, including a segment that parallels part of the North Umpqua Wild and Scenic River. The intent of the proposal was to correct existing pavement and safety deficiencies along the route and to enhance access to the multiple resource activities on adjacent federal lands (managed by the BLM, NPS and USFS). The North Umpqua was added to the National System in recognition of its fishery; water quality and quantity; and recreational, scenic and cultural values. The lower portion of the designated river is administered by the BLM and the upper portion (where a 13.5-mile segment of highway reconstruction was proposed) administered by the USFS.

Application of Section 7: Staff of the Umpqua National Forest utilized the management direction in the recently completed North Umpqua Wild and Scenic River Management Plan to provide input into the state's planning process and as a basis for the resulting Section 7 determination. In addition to identification of the desired future condition for the outstandingly remarkable and other important river values, the North Umpqua Wild and Scenic River Management Plan included guidance for the North Umpqua Highway which is a part of the National Scenic Byway System. Components of the proposed highway project that were evaluated as water resources projects under the "direct and adverse effects" standard included redesign of an access site, widening of a bridge spanning the river, and proposed gabion walls to accommodate roadway width and guardrail.

Results: Early consultation with the ODOT, and the application of the Section 7 procedure by a USFS interdisciplinary team, resulted in significant redesign of the project to protect the river's connection with its floodplain and ORVs. Specifically, the access site redesign eliminated encroachment on bank full channel and lower river terraces in the two- to five-year floodplain. The bridge was widened without modifications or additions to the existing footing and columns (protecting an important anadromous spawning area at the site and immediately downstream), and the gabion wall proposal was eliminated and the site redesigned without additional excavation or embankment construction.

Little Miami River Dock and Concrete Pad Project, Ohio

Background: The Little Miami River was designated in stages (1973 and 1980) by the Secretary of Interior at the request of the Governor of Ohio (via Section 2(a)(ii) of the Act). In December 1986, the NPS received a Public Notice from the ACOE announcing that a landowner was requesting "after-the-fact" Sections 10 (of the Rivers and Harbor Act) and 404 (of the Federal Water Pollution Control Act) permits for construction of a boat landing and scenic

overlook on a designated segment of the river. The river possessed outstanding scenic, recreational, fish and wildlife, geologic and historic values.

Application of Section 7: On state-administered national WSRs, without adjacent federal ownership, the Secretary of the Interior, through the NPS, is responsible for making Section 7 determinations. (Consultation with the state-administering agencies occurs as needed.) The NPS Midwest Region evaluated this water resources project for "direct and adverse" effects on WSR values.

Results: After consultation with the Ohio Department of Natural Resources, the NPS determined that the project did have a "direct and adverse effect" on the values for which the Little Miami had been designated. Essentially, the owner's entire riverbank had been converted from a natural condition by covering it with concrete. A letter was sent to the ACOE requesting that the permit not be issued and that the owner be ordered to remove the construction and restore the riverbank. The ACOE denied the permit and ordered that the compliance measures requested by the NPS be implemented. The landowner refused and in due time the ACOE had the U.S. Justice Department bring suit against the landowner to comply. Eventually, a Consent Order and Judgment was handed down in which the landowner agreed to comply with the terms of the ACOE requirement.

North Fork John Day Dredge Pile Restoration, Oregon

Background: Past dredge mining has severely altered the free-flowing characteristics of the North Fork John Day (North Fork) Wild and Scenic River. The dredge tailings, located over an approximate 11-mile portion of the designated river, have acted to direct the flow of the river against the streambanks, causing streambank erosion and aggravating a serious bank stability problem. Past dredging also excavated streambed material down to bedrock, completely rearranging the distribution of the natural sediments of the stream. Little recovery has occurred in the 50 years since the site was dredged because of the large amount of tailings and non-erosive characteristics of the dredge piles.

The North Fork is one of the few remaining rivers in the Columbia River Basin that supports wild runs of anadromous chinook salmon and steelhead. The river also supports populations of bull trout. The purpose of the restoration project is to improve salmonid rearing habitat, water quality, streambank stability, and floodplain function. The project was based on proven restoration techniques and phased in, beginning with a pilot effort in 1993 that focused on alternative placement of tailings material. Phase 2 expanded the treatment area and extended the time frame to a five-year period.

Application of Section 7: Umatilla National Forest staff applied the accompanying Section 7 process to evaluate the potential for "direct and adverse" effects. The project proposal was coordinated with the Oregon Division of State Lands and the ACOE regarding state/federal permits for fill and removal. In addition, USFS staff consulted with the Oregon Department of Fish and Wildlife, Oregon Parks and Recreation Department (the river is also a State Scenic Waterway), and affected county and tribal governments; the USFS conducted an extensive public outreach as part of the environmental analysis process. The project was designed to remove the artificial impediment to the river's free-flowing characteristics with as little effect to streambank and riparian vegetation as possible, thereby, allowing the river to reconnect with its floodplain over time.

Results: The results of extensive (and ongoing) monitoring of the first phase of the project indicate that floodplain function has been restored. The river has access to its floodplain and is emulating the natural system as typified in the upstream wilderness segment. The channel morphology is evidencing little change except for widening of the river adjacent to where tailings had been piled. Photo point monitoring shows that most of the pre-project vegetation is still on the site and also that vegetative recovery is occurring on the newly established floodplain. Importantly, the restoration was planned and implemented in a manner to allow the river to reconnect with its floodplain by removing the dredge tailings rather than engineering a solution.

Maurice River Boat Dock and Onshore Mining Development, New Jersey

Background: During the study phase for the Maurice Wild and Scenic River in New Jersey, the Genstar Stone Products Company applied to the ACOE for a permit to build a dock and berthing facility on a section of the river under study. This facility was to service barges for a proposed sand and gravel operation landward of the dock. Construction of the dock and berthing space would require removal of 12,000 cubic yards of sand from the river bottom and banks and construction of 400 feet of bulkhead. In order to move the extracted material from the mine site to the barges, a conveyer system was to be built which would be 60 feet above water level. A 40-foot-high section would extend 85 feet over the river. Ancillary facilities would include roads, a sand processing plant, truck scales, offices, parking and refueling areas. Up to four barge loads would have been moved per day.

Application of Section 7: Because the proposal involved dredge and fill in the river, it was clearly a water resources project and because it would occur in a navigable waterway, an ACOE Section 10 permit was required. The NPS, as the study agency for this river, reviewed the application pursuant to Section 7(b) of the Act.

Results: The effects of the project on the river's free-flowing condition was considered. Some of the ORVs identified by the study were several rare or imperiled plants (specifically the

sensitive joint vetch, Parker's pipewort, the sedge *Carex barrattii*, and the boneset *Eupatorium reinosum*); essential bald eagle habitat; and the occurrence of other rare and imperiled birds such as Cooper's hawk, northern harrier and osprey. It was determined that construction activities would occur in some of the same locale as that of the rare and imperiled plants, and that noise from the mining activities and barge traffic would adversely affect the raptor population along the river. There would also be adverse effects on scenic values in the vicinity of the plant, though these values were not judged to be outstandingly remarkable.

Based on this impact assessment, the NPS, through the USFWS, recommended to the ACOE that the permit be denied on the basis of "direct and adverse effects." The New Jersey Department of Environmental Protection found the proposal to be inconsistent with the New Jersey Coastal Zone Management Program. On the basis of these determinations, the ACOE denied the permit.

Sudbury River Aqueduct, Massachusetts

Background: Boston's regional water supply utility, the Massachusetts Water Resources Authority (MWRA), is in the process of constructing a major new aqueduct in the form of a bedrock tunnel that will cross under the Sudbury River in Framingham, Massachusetts. A major tunnel access shaft, "Shaft L," will be excavated a few hundred feet from the river. During the construction period, pumps at Shaft L will remove the large volume of groundwater that will seep into the tunnel, and the MWRA proposes to discharge this water, after treatment, to the Sudbury River. The water treatment facility will remove oil and grease, suspended solids, etc., from the water, which should be fairly high in water quality. A riprap stilling basin will be constructed on the banks of the river to reduce the velocity of the discharge, which will have a maximum rate of 3200 gallons per minute (or 7.15 cfs). This is the equivalent of almost one-third of the river's natural flow during extreme low flow periods (ten-year drought).

In addition to its free-flowing character, the resources of interest along this portion of the Sudbury include aquatic wildlife habitat (Great Meadows National Wildlife Refuge is one-quarter mile downstream), scenery, recreation, archaeology, and literary (cultural) values (the adjacent oxbow was one of H.D. Thoreau's favorite haunts and features of his writings).

Application of Section 7: The segment of the Sudbury River that will be affected by the discharge is currently a congressionally authorized, 5(a), study river and thus is subject to the protections afforded by Section 7(b) of the Act. Based on favorable eligibility and suitability findings, along with eight Town Meeting votes in favor of designation, the Study Committee and NPS are recommending that the river be added to the National System, and legislation to designate the river will be filed soon.

The MWRA is seeking two permits under the federal Clean Water Act: a National Pollutant Discharge Elimination System (NPDES) permit from the Environmental Protection Agency, and a Section 404 permit from the ACOE. The NPS, in partnership with the Wild and Scenic River Study Committee, has been involved in close consultation with both permitting agencies.

Results: As a result of this process, the following provisions have been added to the NPDES and Section 404 permits to ensure that the project will have no direct and adverse effect on the river's values:

- The MWRA will not be permitted to retain the discharge structure permanently, as originally requested, because of unacceptable direct and adverse impacts on the river's free-flowing character and scenic values.
- The proposed stilling basin has been moved from a sensitive archaeologic site to a previously disturbed area of riverbank. Riparian wetlands at this site will be restored when the basin is removed, enhancing both scenery and riparian habitat.
- Discharge velocities have been reduced and decentralized to avoid scouring, thereby
 protecting water quality and aquatic biota. In addition, the MWRA will be required to
 monitor temperature, turbidity, and total suspended solids continuously up and downstream of the discharge point, and to undertake a study of the discharge's effects on
 benthic macroinvertebrates.
- A 70-foot high "mountain" of unvegetated crushed rock that was originally proposed to be created at the site, within view of the river, has been eliminated. Instead, rock removed from the tunnel will be processed as gravel and sold off-site. (While this portion of the project was not subject to Section 7 since it did not require any federal permits or funding, the MWRA chose to mitigate the rock pile's impacts voluntarily.)

Appendix C: Evaluation Procedure Under "Direct and Adverse"

Evaluation procedure under the direct and adverse effects standard for existing projects licensed by the FERC, or other federally assisted projects inside the designated river (Section 7(a)), or congressionally authorized study river (Section 7(b)).

The following questions should be considered in a typical analysis under this standard. The scope of the evaluation should be consistent with the magnitude and complexity of the proposed activity. The resulting analysis may be documented in a few pages or a much lengthier product, as required.

- 1. **Define the Proposed Activity.** Describe the proposed activity in terms of the:
 - a. Project proponent(s);
 - b. Purpose/need for the project;
 - c. Geographic location of the project (include a map);
 - d. Duration of the proposed activities;
 - e. Magnitude/extent of the proposed activities; and,
 - f. Relationship to past and future management activities.
- 2. Describe How the Proposed Activity Will Directly Alter Within-Channel Conditions. Address the magnitude and spatial extent of the effects the proposed activity will have on within-channel attributes. Give special attention to changes in features that would affect the ORVs. Describe:
 - a. The position of the proposed activity relative to the streambed and streambanks.
 - b. Any likely resulting changes in:
 - (1) Active channel location;
 - (2) Channel geometry (cross-sectional shape, width/depth characteristics);
 - (3) Channel slope (rate or nature of vertical drop);
 - (4) Channel form (straight, meandering, or braided);
 - (5) Relevant water quality parameters (turbidity, temperature, nutrient availability); and,
 - (6) Navigation of the river.
- 3. Describe How the Proposed Activity Will Directly Alter Riparian and/or Floodplain Conditions. Address the magnitude and spatial extent of the effects the proposed activity will have on riparian/floodplain attributes. Give special attention to changes in features that would affect the ORVs. Describe:

- a. The position of the proposed activity relative to the riparian area and floodplain.
- b. Any likely resulting changes in:
 - (1) Vegetation composition, age structure, quantity, or vigor;
 - (2) Relevant soil properties such as compaction or percent bare ground; and,
 - (3) Relevant floodplain properties such as width, roughness, bank stability, or susceptibility to erosion.

4. Describe How the Proposed Activity Will Directly Alter Upland Conditions.

Address the magnitude and spatial extent of the effects the proposed activity will have on upland attributes. Give special attention to changes in features that would affect the ORVs. Describe:

- a. The position of the proposed activity relative to the uplands.
- b. Any likely resulting changes in:
 - (1) Vegetation composition, age structure, quantity, or vigor;
 - (2) Relevant soil properties such as compaction or percent bare ground; and,
 - (3) Relevant hydrologic properties such as drainage patterns or the character of surface and subsurface flows.
- c. Potential changes in upland conditions that would influence archaeological, cultural, or other identified significant resource values.

5. Evaluate and Describe How Changes in On-Site Conditions Can/Will Alter Existing Hydrologic or Biologic Processes. Evaluate potential changes in hydrologic and biologic processes by quantifying, qualifying, and/or modeling the likely effects of the proposed activity on:

- a. The ability of the channel to change course, re-occupy former segments, or inundate its floodplain.
- b. Streambank erosion potential, sediment routing and deposition, or debris loading.
- c. The amount or timing of flow in the channel.
- d. Existing flow patterns.
- e. Surface and subsurface flow characteristics.
- f. Flood storage (detention storage).
- g. Aggradation/degradation of the channel.
- h. Biological processes such as:
 - (1) Reproduction, vigor, growth and/or succession of streamside vegetation;
 - (2) Nutrient cycling;
 - (3) Fish spawning and/or rearing success;
 - (4) Riparian dependent avian species needs;
 - (5) Amphibian/mollusk needs; and,
 - (6) Species composition (diversity).

- **6.** Estimate the Magnitude and Spatial Extent of Potential Off-Site Changes. Address potential off-site, or indirect effects of the proposed activity, acknowledging any uncertainties.
 - a. Consider and document:
 - (1) Changes that influence other parts of the river system;
 - (2) The range of circumstances under which off-site changes might occur (for example, as may be related to flow frequency); and,
 - (3) The likelihood that predicted changes will be realized.
 - b. Specify processes involved, such as water and sediment, and the movement of nutrients.
- 7. **Define the Time Scale Over Which Steps 3-6 are Likely to Occur.** Review steps 3-6, looking independently at the element of time. Define and document the time scale over which the effects will occur.
- **8.** Compare Project Analyses to Management Goals. Based on the analysis of steps 3-7, identify and document project effects on achievement, or timing of achievement, of management goals and objectives relative to free-flow, water quality, riparian area and floodplain conditions, and the ORVs and river classification.
- **9.** Make the Section 7 Determination. Based on the analysis of steps 3-8, document:
 - a. The effects of the proposed activity on conditions of free-flow, including identification of any proposed measures to minimize those effects.
 - b. Any direct and adverse effects on the ORVs for which the river was designated.

Appendix D: Evaluation Procedure Under "Invade the Area or Unreasonably Diminish"

Evaluation procedure under the invade or unreasonably diminish standard for projects licensed by the FERC, or other federally assisted projects outside the designated river corridor (Section 7(a)).

The evaluation procedure for this standard does not lend itself to a common series of questions as developed for the direct and adverse effects standard (Appendix C). Rather, the evaluation should be focused on describing the potential of the proposed project to either invade the designated river, or diminish the scenic, recreational, and fish and wildlife values. The following text provides an outline for documenting the determination and, importantly, identifies the questions to consider in evaluating the magnitude of the effects.

Suggested Outline for Determination

Introduction: Briefly describe the project and attributes of the designated river (clearly identify the ORVs).

Section 7(a) Requirement: Describe the standard. Include the following text.

Section 7(a) of the Act provides a specific standard for review of developments below or above or on a stream tributary to a designated river. Such developments may occur as long as the project "will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area as of the date of designation . . ." This standard applies to projects outside the river corridor but on the same river or a tributary.

(Relate the project location to the designated river.)

The initial question to be addressed is whether or not the proposed project invades the designated river. The term invade is defined as encroachment or intrusion upon. If the project is determined to invade the designated river, the proponent would be advised to develop measures to eliminate this unacceptable effect.

If the proposed project does not invade the designated river, the next question to be answered, relative to the standard in Section 7(a), is whether or not the proposed project will "unreasonably diminish" any of the specified values. Given that the standard implies that some diminution of values may be determined reasonable, there are two questions to consider:

- 1. Does the proposed project cause diminution of the scenic, recreational, and fish and wildlife values of the designated river as present at the date of designation?
- 2. If there is diminution, is it unreasonable? This would suggest an evaluation of the magnitude of the loss. Factors to be considered include:
 - (1) Whether the value contributed to the designation of the river (i.e., outstandingly remarkable); and,
 - (2) The current condition and trends of the resource. (If diminution is determined unreasonable, measures may be recommended to reduce adverse effects to within acceptable levels.)

Rationale for Determination: Identify the document that provides the basis for the evaluation. For hydroelectric proposals, the application, including Exhibit E, is the basis for the preliminary Section 7 determination, reserving the right for further evaluation based on the results of subsequent environmental analysis. For a non-hydroelectric project, this document is the proposing agency or river-administering agency's environmental document. Also include, if appropriate, that staff specialists utilized available additional data as described in an accompanying Section 7(a) report.

Determination: Describe the findings as to whether the proposed project will invade the area or unreasonably diminish the four identified values: scenic, recreational, fish, wildlife. If the finding is that the proposal will invade the area or unreasonably diminish any of the four specified values, identify recommendations to reduce adverse effects to within acceptable levels, as possible.

Signature: Of the responsible official.

Section 7(a) Report: Include, as appropriate, a report that provides the detailed discussion of the potential effects that lead to the conclusions summarized in the determination.

Note: The completed Section 7 determination (determination and, if appropriate, an accompanying report) should then be included in, or appended to, the project's environmental document. Refer to preceding discussion "Section 7, NEPA, and Coordination with Proponent/Regulating Agency."

Appendix E: Evaluation Procedure Under "Invade the Area or Diminish"

Evaluation procedure under the invade or diminish standard for projects licensed by the FERC, or other federally assisted projects outside the congressionally authorized, 5(a), study river corridor (Section 7(b)).

The evaluation procedure for this standard does not lend itself to a common series of questions as developed for the direct and adverse effects standard (Appendix C). Rather, the evaluation should be focused on describing the potential of the proposed project to either invade the designated river or diminish the scenic, recreational, and fish and wildlife values. The following text provides an outline for documenting the determination and, importantly, identifies the questions to consider in making the determination.

Suggested Outline for Determination

Introduction: Briefly describe the project and attributes of the designated river (clearly identify the ORVs).

Section 7(b) Requirement: Describe the standard. Include the following text.

Section 7(b) of the Act provides a specific standard for review of developments below or above or on a stream tributary to a designated river. Such developments may occur as long as the project "will not invade the area or diminish the scenic, recreational, and fish and wildlife values present in the area as of the date of designation . . ." This standard applies to projects outside the river corridor but on the same river or a tributary.

(Relate the project location to the designated river.)

The initial question to be addressed is whether or not the proposed project invades the congressionally authorized study river. The term invade is defined as encroachment or intrusion upon. If the project is determined to invade the designated river, the proponent would be advised to develop measures to eliminate this unacceptable effect.

If the proposed project does not invade the designated river, the next question to be answered, relative to the standard in Section 7(b), is whether or not the proposed project will "diminish" any of the specified values. Specifically, does the proposed project cause diminution of the scenic, recreational, and fish and wildlife values of the study river (as present at the date of designation of the river

for study)? A project with long-term, positive benefits which greatly outweigh very short term diminishment of stated values may be determined acceptable. However, the river's eligibility; i.e., its identified ORVs, free-flow and water quality, as well as its inventoried (tentative) classification, must be maintained in the short- and long-term.

Rationale for Determination: Identify the document that provides the basis for the evaluation. For hydroelectric proposals, the application, including Exhibit E, is the basis for the preliminary Section 7 determination, reserving the right for further evaluation based on the results of subsequent environmental analysis. For a non-hydroelectric project, this document is the proposing agency or river-administering agency's environmental document. Also include, if appropriate, that staff specialists utilized available additional data as described in an accompanying Section 7(b) report.

Determination: Describe the findings as to whether the proposed project will invade the area or diminish the four identified values: scenic, recreational, fish, wildlife. If the finding is that the proposal will invade the area or diminish any of the four specified values, identify recommendations to reduce adverse effects to within acceptable levels, as possible.

Signature: Of the responsible official.

Section 7(b) Report: Include, as appropriate, a report that provides the detailed discussion of the potential effects that lead to the conclusions summarized in the determination.