## Public Scoping Report

City of Aurora Proposed Excess Capacity Contracts Fryingpan-Arkansas Project



Bureau of Reclamation Eastern Colorado Area Office Loveland, Colorado March 2004

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#### 1. Introduction

Public involvement is a vital component of the National Environmental Policy Act (NEPA) and an important step in the development of the Environmental Assessment (EA) for the proposed storage, exchange, and conveyance contract(s) (hereafter, excess capacity contracts) between the City of Aurora, Colorado (Aurora) and the Bureau of Reclamation (Reclamation). The first phase of the public involvement process, also called "scoping," is designed to help identify the potentially significant issues related to a proposed action. Scoping also helps Reclamation identify those issues that the public, government agencies, and other interested parties believe are most important to address in the EA.

The proposed action requires a decision by Reclamation on whether to enter into a long-term (40-year) contract with Aurora to use excess capacity in the Fryingpan-Arkansas Project for storage and conveyance of Aurora's nonproject water and/or exchange of Aurora's water with project water. Reclamation's decision on the excess capacity contracts is a federal action subject to compliance with NEPA and other Federal laws. Reclamation intends to prepare an EA to determine the environmental and socioeconomic effects, both positive and negative, of the proposed action. The EA will also describe what would happen if no action is taken by Reclamation to enter into excess capacity contracts with Aurora. To assist in the preparation of the EA, Reclamation initiated the public scoping process described in this document and will use the information gathered in the process to prepare the EA. Reclamation will use the results of the EA to determine whether to prepare a Finding of No Significant Impact (FONSI). If significant impacts are identified and cannot be mitigated, Reclamation will prepare an Environmental Impact Statement (EIS).

This report documents the results of the public scoping process, conducted between October 2003 and February 2004. The main sections of this report include:

- Scoping activities
- Scoping results
- Issues to be considered in the EA
- Future actions

#### **Purpose and Need**

The purpose of the proposed excess capacity contracts is to establish a long-term arrangement that allows Aurora to more efficiently manage and use its decreed Arkansas River water rights and leased water. Aurora's Arkansas Valley water rights and leased water constitute about 25 percent to 35 percent of its water supplies and are needed to meet Aurora's existing and projected municipal and industrial water demands. Use of excess capacity in the Fryingpan-Arkansas Project eliminates the need for construction and physical disturbances to accommodate storage, conveyance, and exchange of this water.

#### **Background**

Reclamation is considering a request from the City of Aurora, Colorado acting by and through its Utility Enterprise for long-term municipal and industrial excess capacity contracts. The proposed excess capacity contracts would allow Aurora to use up to 10,000 acre-feet of available excess storage space in Pueblo Reservoir and would allow for the exchange of up to 10,000 acre-feet of Aurora's water with Fryingpan-Arkansas Project water in Twin Lakes Reservoir or Turquoise Lake. The proposed excess capacity contracts would use existing facilities to move Aurora's water from the Arkansas River Basin to the Platte River Basin via the existing Otero pump station and allow Aurora to more efficiently manage and use its Arkansas River water rights and leased water.

The Fryingpan-Arkansas Project is a Reclamation project that delivers water from the western slope of Colorado to the upper Arkansas River Basin near Leadville. Turquoise Lake and Twin Lakes Reservoir are Reclamation facilities in the upper Arkansas River Basin that store Fryingpan-Arkansas Project water before it is delivered to downstream users. From Turquoise Lake and Twin Lakes Reservoir, Fryingpan-Arkansas Project waters are delivered via the Arkansas River to Pueblo Reservoir where project water is further distributed to Fryingpan-Arkansas Project users.

Reclamation would require that the excess capacity contracts, if approved, do not adversely affect Fryingpan-Arkansas Project purposes and operations. In addition, Fryingpan-Arkansas Project operations and Reclamation's participation in the Arkansas River Voluntary Flow Program would be protected by conditions in the proposed excess capacity contracts. If water spills from Pueblo Reservoir, Aurora's water would be the first to spill. The proposed contracts would require Aurora's compliance with Colorado water law in the use of excess capacity in the Fryingpan-Arkansas Project

In 1986 and 1987, Aurora purchased shares in the mutual water companies operating the Colorado Canal, Lake Henry, and Lake Meredith (Colorado Canal System). In 1987, Aurora also purchased approximately 58 percent of the shares of the Rocky Ford Ditch Company. Aurora is currently in the process of purchasing an additional 36 percent of the Rocky Ford Ditch. Water right applications providing for these 1986, 1987, and 2004 transfers and exchanges were decreed by Colorado Court Division 2 (Case Nos. 84CW62, 84CW63, 84CW64, 83CW18, 87CW63, 99CW169). The exchange decree for the second purchase of Rocky Ford Ditch shares is pending (99CW170). Aurora's water rights from the Rocky Ford Ditch and Colorado Canal System, as well as water leased from the High Line Canal or other sources would be used in the proposed excess capacity contracts. The transfer and lease of water rights are regulated by Colorado water law and are not within the jurisdiction of Reclamation or within the scope of the EA. Water exchanges are also regulated under state law, but a contract with Reclamation is required for use of excess storage capacity in Pueblo Reservoir to accommodate exchanges.

The excess capacity contracts would allow storage and exchange of Rocky Ford I, Rocky Ford II, Colorado Canal decreed water, and Highline Canal or other lease water for municipal, commercial, industrial, and other beneficial uses as provided by Aurora's water rights and temporary substitute supply plan.

No additional facilities will be constructed to store or deliver Aurora's water. Once native Arkansas River water is stored in Pueblo Reservoir it may be exchanged upstream by one of three methods 1) either against native inflows to Twin Lakes Reservoir or Turquoise Lake, 2) a contract exchange may be made that exchanges Aurora's non-project water stored in Pueblo Reservoir for stored water in upstream reservoirs including Twin Lake Reservoir or Turquoise Lake or 3) water may be directly exchanged to the Otero Pipeline. Once water is exchanged upstream and delivered to the Otero Pipeline, it would be pumped to the South Platte basin for use by Aurora.

A contract exchange is a trade of stored waters. An entity with water stored in Pueblo Reservoir, may request to exchange water with an entity whose water is stored in an upstream Reservoir. A mutual benefit to the parties occurs by an instantaneous exchange of stored water. The entity with water stored upstream, has moved water to a downstream account without incurring transit losses, and the entity with water in the downstream account has the ability to position its water for delivery upstream. With a contract exchange the impact to flow is not immediate. Exchanged water would no longer flow down the river for delivery, from the upper reservoir to the lower reservoir; therefore flows may be affected during the time that delivery would have occurred without a contract exchange.

A physical exchange is a trade of flowing water. In the state of Colorado, physical exchanges are approved by either the State Engineers Office or Colorado's water court to ensure that no senior water rights, in the intervening reach of the stream, are harmed as a result of the exchange. An entity with water in one part of the basin can exchange that water for flows in another part of the basin. During a physical exchange, streamflow in the reach between the exchanging reservoirs is decreased by the amount of the exchange. In this case, it would be the reach between Twin Lakes Reservoir and Pueblo Reservoir. Water that is exchanged is replaced at the outflow of Pueblo Reservoir to ensure that injury to senior water right holders downstream does not occur.

#### 2. Scoping Activities

The intent of the scoping process is to gather comments, concerns, and ideas from those who have an interest in or that may be affected by the proposed action. During the scoping phase of the project, Reclamation sought input from the public, interested organizations, and agencies to help identify issues for evaluation in the EA.

Several methods were used to inform the public and solicit comments. These methods included publication of a scoping announcement, news releases, legal notices, agency scoping meetings, a public meeting, and a meeting with the Lower Arkansas Water Conservancy District. Each of these activities is described below.

#### Scoping Announcement, Press Release, and Legal Notice

Reclamation initiated the scoping process with release of a scoping announcement and other materials in October 2003. The scoping announcement (see Appendix A), which described the proposed project and compliance requirements, was mailed to approximately 300 federal, state, and local governments, as well as water districts, environmental groups and other organizations that Reclamation determined may have an interest in the proposed project. At the same time, legal notices describing the project

were placed in newspapers in Pueblo, Salida, Buena Vista, Leadville, Denver, Colorado Springs, Rocky Ford, and Cañon City. In addition, Reclamation sent a news release in October to print, radio, and television media in Denver, Pueblo, La Junta, Leadville, Salida, Buena Vista, Lamar, Colorado Springs, and Pueblo West. The scoping announcement was also placed on Reclamation's web site (<a href="www.usbr.gov/gp/ecao/aurorascoping.pdf">www.usbr.gov/gp/ecao/aurorascoping.pdf</a>). The initial comment period deadline of November 24, 2003 was later extended to February 2, 2004 and then to February 12, 2004 to allow sufficient time for public comment.

#### **Agency Consultation**

Reclamation held two agency scoping meetings to provide federal, state, and local government representatives with more information about the proposed project, and the opportunity to ask questions and provide comments (Table 1). These meetings were held at Colorado State Park facilities at Lake Pueblo on January 13, 2004, from 1 to 3 p.m. and at the City of Aurora's Municipal Building on January 15, 2004, from 9:00 a.m. to 12:00 p.m.

**Table 1. Agency Scoping Meetings.** 

Location	Date	Facility	Time	Attendance
Pueblo	January 13, 2004	Colorado State Parks Visitor Center Auditorium 640 Pueblo Reservoir Road	1:00 pm to 3:00 pm	49
Aurora	January 15, 2004	City of Aurora Municipal Building 15151 E. Alameda Parkway	9:00 am to 12:00 pm	6

The agency scoping meeting in Pueblo was attended by agencies or organizations representing the Colorado Division of Wildlife, U.S. Forest Service, Bureau of Land Management, Colorado State Parks, State of Kansas, Chaffee County, Pueblo County, Canon City, Town of Olney Springs, Town of Ordway, Town of Poncha Springs, and Pueblo Board of Water Works, the Southeastern Colorado Water Conservancy District, Lower Arkansas Valley Water Conservancy District, Arkansas Headwaters Recreation Association, and Colorado Mountain Club, among others. Following announcement of the meeting by the Pueblo Chieftain newspaper, members of the public also attended the meeting. In all, 49 people attended the Pueblo agency scoping meeting.

The scoping meeting held in Aurora on January 15, 2004, provided an additional opportunity for agencies to provide comments. Six people attended this meeting, including representatives from the Bureau of Land Management, U.S. Forest Service, Colorado Division of Wildlife, and the Colorado Department of Public Health and Environment-Water Quality Control Division.

#### **Public Scoping Meeting**

Reclamation held a public scoping meeting on January 29, 2004, to provide the public with more information about the proposed project and an opportunity to ask questions and provide comments. A public scoping meeting was held from 6:30 p.m. to 10 p.m. at the Colorado State University Pueblo Campus. This scoping meeting included an open house for members of the public to discuss the proposed project with Reclamation staff, a presentation by Reclamation and the Colorado State Engineer's Office, and a period for

the public to ask questions and make comments. The meeting was well attended by about 250 people. While Reclamation staff and the environmental consultant did take informal notes on oral comments, the meeting was not a recorded event and the public was encouraged to submit written comments to Reclamation by February 12, 2004 to assure an accurate record of their comments.

#### **Other Meetings**

Reclamation met with members of the Lower Arkansas Valley Water Conservancy District (LAVWCD) on February 11, 2004 in Rocky Ford, Colorado. The purpose of this meeting was to answer questions on the NEPA process and the proposed project. Approximately 30 people attended this meeting in addition to LAVWCD board members.

#### 3. Scoping Results

#### **Methods for Comment Collection and Analysis**

Comments in the form of written submissions sent via U.S. mail, email, and facsimile were collected by Reclamation. Approximately 2,150 comments on the proposed project were received. Each submission was read and comments were consolidated into one of the following topic areas:

- Purpose and Need
- Alternatives
- Hydrology
- Water Rights
- Water Quality
- Wildlife Resources
- Aquatic Resources
- Vegetation

- Recreation
- Land Use
- Visual Quality
- Socioeconomics
- Environmental Justice
- Cumulative Effects
- NEPA or Regulatory Issues

Appendix B includes a summary of all comments received, organized by topic area. Comments received after the February 12, 2004 submission deadline will be reviewed to determine if any additional issues are identified, but these comments are not included in this Scoping Report.

Of the approximate 2,150 written comments received to date, about 2,100 were from individuals, 16 were from governments or public agencies, and 19 were from organizations. Approximately 90 percent of the comments from individuals were form letters that expressed the same comments. Appendix C includes a list of agencies and organizations that provided written comments. A complete list of individuals that submitted comments is available upon request from Reclamation.

It should be noted that public scoping is not a "voting process." For this project, duplicate or similar comments were consolidated. In addition, written statements favoring or opposing the project without raising a specific issue were noted, but were not considered an issue.

#### **Summary of Scoping Comments**

The following section provides a brief summary description of the issues, concerns, and recommendations received for each topic area. Many of these issues were mentioned more than once during the scoping process. This section does not describe every issue raised during the scoping process, nor does it list every individual comment that was received. A more detailed list of the comments received is provided in Appendix B.

#### **Purpose and Need**

Issues about the purpose and need for the proposed project questioned whether there is a need or justification for the proposed project and whether Aurora has other water resources available for use.

#### Alternatives

Several alternatives in addition to the No Action and the Proposed Action alternatives were included in the comments. Many focused on other sources of water supply to meet Aurora's demand including additional conservation, reuse or recycling of water supplies, ground water, and implementation of a sustainable water management program. Some respondents recommended diverting the water from the headgates of the Rocky Ford Ditch and Colorado Canal and then constructing a pipeline for delivering the water to Aurora. Exchanges with Colorado Springs and use of the proposed Southern Delivery Water Supply project to deliver water to Aurora were recommended. Other alternatives suggested controlling population growth in Aurora to reduce water demand, constructing a new reservoir, and enlarging Pueblo Reservoir. There were recommendations for limiting the storage contract to a period shorter than 40 years.

#### Hydrology

A number of comments related to potential changes in streamflow in the Arkansas River and changes in reservoir operations and water levels in Pueblo Reservoir, Turquoise Lake, Twin Lakes Reservoir, Lake Meredith and Lake Henry. Comments included concerns that the operation and water yields from the Fryingpan-Arkansas Project are not altered as a result of this project. Protection of historic streamflow on the Lower Arkansas River was an issue for downstream water users. Multiple comments centered on maintaining the provisions of the Voluntary Flow Program, ensuring the minimum streamflow recommendations in the Program are not compromised, that contracts with Aurora should include conditions that require adherence to the Voluntary Flow Program, and that the proposed contracts do not adversely affect Reclamation's participation in the program. Respondents also requested that Reclamation clarify the amount of water being transferred, where it is transferred, and place limits on the amount of water stored, exchanged, and conveyed. Other comments requested a determination on whether there would be reduced exchange potential by other communities because of the project, and an evaluation of impacts on existing diversions, including the potential for an increase in transmountain diversions.

An evaluation of the potential effect to Arkansas River alluvium, aquifer recharge, subirrigation of alluvial lands and riparian areas was requested. Comments included a request for ongoing monitoring to develop mitigation measures. There was a request for information on the hydrology model so that independent analysis can be conducted. There is concern that the imports to the South Platte River are consistent with the South Platte Basin Streamflow Management Plan.

#### Water Rights

Respondents requested that Reclamation identify whether the proposed long-term contracts with Aurora would preclude or limit the opportunity for long-term storage contracts with other entities. Additional water rights issues included a request that Reclamation require declaratory judgment from the U.S. District Court as to whether a long-term storage contract with a municipality outside of the Arkansas Basin is legal. There was a request that Reclamation define all of the water rights, including transmountain diversions and that existing water rights are protected. Another concern was that the long-term excess capacity contracts would avoid the water court process.

#### Water Quality

Comments included a number of concerns about the potential impacts to water quality in the Arkansas River and existing reservoirs in the project area. The removal of high quality water from the Upper Arkansas River basin was listed as a concern because of the potential for increased salinity in the Lower Arkansas River with removal of dilution flows. Other water quality parameters mentioned as a concern included temperature, selenium, nutrients, sediment, mercury, lead, arsenic, and other metals. The State of Kansas requested an evaluation of their ability to meet water quality standards for sulfate, boron, and selenium on the Lower Arkansas, and that adverse water quality effects should be mitigated. The potential for increased algal mats in the Arkansas River from reduced flows was mentioned as an issue of concern. Other issues included the potential for reduced dilution of wastewater treatment plant discharges, historical mining inputs, and other point and non-point pollutant sources in the Upper Arkansas. The potential for an improvement in the water quality in the Lower Arkansas River because of a reduction in irrigated lands that contribute to the salinity and selenium load in the river was mentioned.

Potential impacts to water quality in affected reservoirs were also mentioned including changes in temperature stratification, dissolved oxygen, suspended sediment, inorganic or organic compounds, metals, and water retention time.

Respondents requested that Reclamation condition the transfer of water to prevent degradation of water quality at the Kansas state line. Additional respondent concerns centered on impacts to drinking water quality in the Lower Arkansas and the additional water treatment that may be necessary.

#### Wildlife Resources

Respondents expressed concern about impacts to wildlife in the Arkansas River and affected reservoirs, including all threatened and endangered species. Wildlife of concern included shorebirds, raptors, waterfowl, and amphibians and reptiles. Respondents also expressed concern about impacts to island habitat in the Arkansas River for roosting and nesting birds.

Wildlife resource issues included evaluating the effects of increased salinity and decreased water quality on wildlife. It was recommended that the Arkansas River Water Needs Assessment be used as a guide for identifying potential impacts and the timing, location, and amounts of flow rates that are particularly critical to natural resource values. Also mentioned was the need to mitigate ecological effects in the Upper Arkansas River Valley.

#### **Aquatic Resources**

Issues related to aquatic resources centered on impacts to fish species in the Arkansas River and affected reservoirs from changes in flow, water quality, and reservoir operation. General issues of concern for the stream fishery included potential impacts to the Voluntary Flow Management Program, and changes in riverine habitat that may affect the reproduction, feeding, growth, movement of trout and native fish species. Sensitive species of concern include the Arkansas darter, suckermouth minnow, and plains minnow in the Arkansas River between Canon City and the Rocky Ford Ditch. Comments requested identification of changes in water quality that would affect the biology, reproduction, and survival of native fish, including threatened and endangered species.

Issues at Turquoise Lake and Twin Lakes included potential impacts to aquatic life production, lake trout reproduction, egg incubation, fry survival, and growth of juvenile and adults. In Pueblo Reservoir, issues included potential impacts to fish reproduction, growth and survival, spawning needs, food production, fish predator/prey relationships, emigration of fish through the Pueblo Dam outlet, the fishery downstream of the dam, and the volume of water and/or changes in the quality of water delivered to the Colorado Division of Wildlife Pueblo hatchery. Respondents expressed concerns about potential increases in mosquito breeding habitat and frequency of the West Nile Virus in the Pueblo area.

Fish reproduction, growth, and survival at Lake Meredith and Lake Henry were mentioned as an issue, including potential changes in water quality and habitat from changes in flow to these reservoirs.

Impacts to fish and other aquatic resources in the South Platte River between Spinney Mountain Reservoir and Strontia Springs Reservoir were mentioned as an issue. Potential impacts to fish and aquatic resources in Spinney Mountain, Elevenmile Reservoir, and Cheesman Reservoir were also identified as an issue.

#### Vegetation

Respondents expressed concerns about potential impacts to riparian vegetation from reduced flows and changes in water quality. Other issues included concern over the spread of noxious weeds and whether there would be any monitoring of dried up lands fed by the High Line Canal.

#### Recreation

Most recreation issues and concerns were related to a potential reduction in flows in the Arkansas River or changes in water quality. Recreation issues included potential impacts to water-based recreation such as boating and fishing along the Arkansas River and at Pueblo Reservoir, Lake Meredith, and Lake Henry. Potential impacts to recreation activities at Forest Service recreation areas at Twin Lakes and Turquoise Lake were also mentioned. Respondents requested that Reclamation mitigate any recreation impacts on the Upper Arkansas River.

Specifically, some respondents highlighted concerns about recreation impacts at Pueblo Reservoir and reduced flows through the City of Pueblo that could potentially impact recreational opportunities such as Pueblo's proposed kayaking and rafting course and the Section 206/Legacy Project below Pueblo Dam.

#### Land Use

Respondents indicated that reduced flows on the Arkansas River could impact agriculture in the Lower Arkansas and Chaffee County. Some recommended that water should be used for agriculture in the Lower Arkansas and not the growth of northern Colorado cities. Other comments mentioned concerns about resulting land use impacts in Aurora, and that Aurora is promoting growth at the expense of communities situated along the Arkansas River.

#### Visual Quality

Respondents recommended mitigation of visual resource impacts on the Upper Arkansas River.

#### Socioeconomics

Respondents mentioned a wide array of socioeconomic issues including economic impacts to agriculture in the Lower Arkansas and overall reduced economic activity, increased costs associated with treating water, reduced property values near Rocky Ford, and decreased ability to provide drought relief in the Lower Arkansas. Comments mentioned the potential impacts to the rafting industry, fisheries, wildlife, tourism and recreation, agriculture and construction activities from removal of water, which could affect the future growth of the economy in Chaffee County.

Some suggested that payments by the City of Aurora for Rocky Ford water rights have a beneficial impact on the economy and quality of life in the Arkansas Valley. Others mentioned that water leases are not as devastating to the Lower Arkansas Valley as permanent transfers out of the area. Additional recommendations mentioned that Aurora

should pay its share of the cost and construction of the Fryingpan-Arkansas Project and that Aurora should be taxed for removing and selling water as a means of partially mitigating lost local tax revenues. Another respondent mentioned that money paid to the Southeastern Colorado Water Conservancy District would help lessen the burden to taxpayers in the District. Mitigating socioeconomic effects was recommended.

Some respondents were concerned that Lower Arkansas residents would have to request additional ground water well permits from the state due to decreased ground water well production. Other concerns included the potential for the project to exacerbate the continued loss of younger residents from the Lower Arkansas Valley and that towns on the Lower Arkansas would have to obtain expensive water rights because Fryingpan-Arkansas water would no longer fully supplement local water needs.

#### **Environmental Justice**

Issues surrounding environmental justice included ensuring that minority and low-income residents do not bear a disproportionate share of any negative environmental consequences resulting from the decision on the proposed contract. It was also recommended that minority and low-income residents of the Lower Arkansas Valley should be meaningfully involved in the NEPA process to ensure their fair treatment.

#### Cumulative Effects

Cumulative impact issues include any direct or indirect effects from a proposed action that adds to or detracts from the possible effects of other past, present, or reasonably foreseeable actions. Multiple respondents requested that Reclamation discuss the cumulative impacts of water exports from the Arkansas River. Suggested reasonably foreseeable actions that should be included in the cumulative effects analysis included the Southern Delivery System, Preferred Storage Option Plan, Arkansas Valley Conduit, Eagle River diversions from the Colorado River basin and other West Slope diversions, and the Fountain Creek watershed plan. Additional recommendations related to cumulative effects included the consideration of Aurora's use of all of its Arkansas River native direct flow rights; quantifying the amount of water exchanged by Colorado Springs, Pueblo, and Aurora; leased and permanent water supplies; and all exchanges over the past 40 years. Comments included the need to address the cumulative effect of other "if and when" contracts that may be considered. Another issue was the relationship of reasonably foreseeable actions throughout the Front Range on the Fryingpan-Arkansas River Basin. Other respondents mentioned concern about cumulative effects of this project in addition to the Fort Lyon Canal project.

Comments recommended the consideration of cumulative effects on the Lower Arkansas Valley Water Conservancy District, including Pueblo, Otero, Crowley, Bent, and Prowers Counties.

#### **NEPA or Regulatory Issues**

A broad range of NEPA and regulatory issues were raised including the need for an EIS instead of an EA, the need for an independent evaluation of the project purpose and need and alternatives, and an explanation of the basis for determination of available excess

capacity. Some respondents recommended that Reclamation revisit previous decisions regarding use of Fryingpan-Arkansas facilities for Aurora and describe the justification and legal authority for entering into excess capacity contracts. Comments included the need to evaluate what precedents would be established for additional uses of the Fryingpan-Arkansas Project by Aurora and others, and how the proposed excess capacity contracts would be considered in the context of future requests from Aurora for more diversions from the Arkansas River. There was a request that Reclamation consider the agreements contained in the Inter-governmental Agreement with the Southeastern Water Conservancy District as it considers the assumptions related to the proposed action.

Many respondents felt that the proposed schedule did not provide enough time for completing the EA and gathering sufficient public input and information and that additional time will be needed to review the Draft EA. Another respondent recommended that Reclamation consider a programmatic EIS that includes Southern Delivery System, Preferred Storage Option Plan, Arkansas Valley Conduit, and increased Eagle River diversion from the Colorado River. Other respondents recommended expanding the project area to include portions of the Lower Arkansas River to the Colorado/Kansas state line or to Garden City, Kansas.

#### 4. Issues to be Considered in the EA Process

Reclamation will consider comments received during the public scoping process in the preparation of the EA. This includes an evaluation of potential resource impacts that were identified during scoping. The following broad range of resource topics will be evaluated in the EA. Substantive issues and concerns identified during scoping for each of these topics will be addressed.

- Hydrology, water rights, and water quality
- Aquatic resources
- Recreation
- Vegetation and wetlands
- Threatened, endangered, and candidate species

- Wildlife resources
- Socioeconomics and environmental justice
- Land use
- Cumulative impacts
- NEPA and regulatory issues

#### 5. Summary of Future Actions

Information collected during the scoping process will assist Reclamation in the analysis of potential impacts from the proposed action. Reclamation anticipates release of a draft EA in June 2004 and will make electronic copies of the document available on one or more websites:

www.usbr.gov/gp/pubinv1.cfm or www.eroresources.com/aurora\_exchange/aurora.html

Hard copies will be available upon request. Reclamation will take comments on the Draft EA during a 45-day review period. Reclamation also will hold a public open house about 2 –3 weeks after release of the Draft EA to present results of the EA and take comments. Following receipt of comments on the Draft EA, Reclamation will prepare a Final EA and response to comments. Reclamation will then determine whether to

prepare a Finding of No Significant Impact (FONSI), which would allow the proposed excess capacity contracts to move forward or, if significant impacts are identified and cannot be mitigated, Reclamation will prepare an EIS.

Reclamation will continue to provide interested agencies and the public with opportunities for input. Although the formal scoping period has passed, there will be an additional opportunity for public involvement when the Draft EA is released. Table 2 reflects the estimated schedule for the EA process.

**Table 2. Anticipated EA Schedule for City of Aurora Proposed Excess Capacity Contracts.** 

Planning Stage	Timeframe	Public Information or Involvement
1. Initiate EA Process	Completed October 2003	Scoping Announcement, Press Release, and Legal Notice
2. Hold Agency Scoping Meetings	Completed January 13 and 15, 2004	Agency scoping meetings in Pueblo and Aurora
3. Public Scoping Meeting - Pueblo	Completed January 29, 2004	Public meeting in Pueblo
4. Scoping Comment Period	October 2003 to February 2004	Public comments taken
5. Release Public Scoping Report	Completed March 2004	Available to public
6. Release Draft EA	June 2004	Public review
7. Public Comment Period	June-July- 2004	45-day public comment period
8. Public Meeting	July 2004	Open house and public comments
9. Release of Final EA and Response to Comments	August 2004	Available to public
10. Issue Finding of No Significant Impact or Decision to Prepare an EIS	August 2004	Available to public

A copy of this report may be found at <a href="http://www.usbr.gov/gp/pubinv1.cfm">http://www.usbr.gov/gp/pubinv1.cfm</a> or <a href="http://www.usbr.gov/gp/pubinv1.cfm">www.eroresources.com/aurora\_exchange/aurora.html</a>. Additional comments, questions or concerns, at any time during the planning process, can be directed to:

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# APPENDIX A SCOPING ANNOUNCEMENT



To: Interested Agencies and Members of the Public

Subject: Proposed Contract Between the Bureau of Reclamation and City of Aurora, Colorado, acting by and

through its Utility Enterprise, for the Use of Excess Capacity in the Fryingpan-Arkansas Project

The U.S. Bureau of Reclamation (Reclamation) is considering a request from the City of Aurora, Colorado acting by and through its Utility Enterprise (Aurora) for a long-term municipal and industrial water storage, exchange, and conveyance service contract or contracts hereinafter referred to as "excess capacity contract(s)". The proposed excess capacity contract(s) would allow Aurora to use up to 10,000 acre-feet of available excess storage space in Pueblo Reservoir, and to allow for the exchange of up to 10,000 acre-feet of Aurora's water with Fryingpan-Arkansas Project water in Twin Lakes Reservoir or Turquoise Reservoir (see attached map). The proposed excess capacity contract(s) would use existing facilities to move Aurora's water from the Arkansas River Basin to the Platte River Basin and allow Aurora to more efficiently manage and use its Arkansas River water rights and leased water.

The Fryingpan-Arkansas Project is a Reclamation project that delivers water from the western slope of Colorado to the upper Arkansas River Basin near Leadville. Turquoise and Twin Lakes Reservoirs are Reclamation facilities in the upper Arkansas River Basin that store Fryingpan-Arkansas Project water before it is delivered to downstream users. From Turquoise and Twin Lakes Reservoirs, Fryingpan-Arkansas Project waters are delivered via the Arkansas River to Pueblo Reservoir where project water is further distributed to Fryingpan-Arkansas Project users. Reclamation will require that the excess capacity contract(s), if approved, not adversely affect Fryingpan-Arkansas Project purposes and operations.

Reclamation intends to prepare an environmental assessment (EA) to determine the environmental and socioeconomic effects, both positive and negative, of this proposed action. To assist in the preparation of the EA, Reclamation is conducting scoping and will use the information gathered in the process to prepare the EA. The National Environmental Policy Act (NEPA) defines scoping as an early and open process designed to determine the scope of issues to be addressed in the EA and to identify potentially significant issues related to a proposed action. As part of the scoping process, Reclamation invites comments on the proposed action from Federal, State, and local agencies, Indian tribes and other interested parties.

#### **Purpose and Need**

The purpose of the proposed excess capacity contract(s) is to establish a long-term arrangement which allows Aurora to more efficiently manage and use its decreed Arkansas River water rights and leased water. Aurora's Arkansas Valley water rights and lease water constitute about 25% of its water supplies and are needed to meet Aurora's projected municipal and industrial water demands. Use of excess capacity in the Fryingpan-Arkansas Project eliminates the need for construction and physical disturbances to accommodate storage, conveyance, and exchange of this water.

#### **Background**

In the 1980's, Aurora purchased shares in the mutual companies operating the Colorado Canal, Lake Henry and Lake Meredith (Colorado Canal System). In 1986, Aurora purchased approximately 58% of the shares of the Rocky Ford Ditch Company. Aurora is currently in the process of purchasing an additional 36% of the Rocky Ford Ditch. Water right applications providing for these transfers and exchanges have been decreed (Colorado

Court Division 2 Case Nos. 84CW62, 84CW63, 84CW64, 83CW18, 87CW63) or are awaiting adjudication (99CW169 and 99CW170.) Aurora is currently negotiating a short-term lease agreement with shareholders of the High Line Canal Company. In the future, Aurora may negotiate short-term leases with other Arkansas Valley ditches in the reach of the Arkansas River reach between the Rocky Ford Ditch and Pueblo Reservoir.

Assumptions Related to the Proposed Action: Aurora's storage and exchange decree's will be administered in accordance with the water rights decrees. Downstream senior water users are protected through the Colorado water rights system. Reclamation will not permit or allow any operation of the exchanges that would adversely affect Reclamation's operation of the Fryingpan-Arkansas Project. Also, Fryingpan-Arkansas Project operations and Reclamation's participation in the Arkansas River Voluntary Flow Program will be protected by conditions in the proposed excess capacity contract(s). Finally, if water spills from Pueblo Reservoir, Aurora's water will be the first to spill.

**Rocky Ford Ditch Operations:** The Rocky Ford Ditch headgate is located near Rocky Ford, Colorado, approximately 70 miles downstream from the Pueblo Reservoir outlet works. Under Aurora's water rights decree Rocky Ford Ditch water may be diverted at several alternate points of diversion including Pueblo Reservoir. (See map below.) Water diverted and stored at Pueblo Reservoir under the proposed excess capacity contract(s) and Aurora's Rocky Ford Ditch rights would be exchanged to upstream storage and diversion locations including Twin Lakes Reservoir, Turquoise Reservoir and the Otero Pump Station.

Colorado Canal System Operations: The Colorado Canal System includes a 52-mile diversion canal, which diverts water from the Arkansas River approximately 20 miles downstream of Pueblo Reservoir near Boone, Colorado, and two storage reservoirs, Lake Henry and Lake Meredith, located near Ordway, Colorado. Under Aurora's water right decree and the proposed excess capacity contract(s), Aurora's Colorado Canal water would be stored at Pueblo Reservoir, and exchanged to upstream storage and diversion locations including Twin Lakes Reservoir, Turquoise Reservoir and the Otero Pump Station.

**Leased Water**: Aurora is currently negotiating a short-term lease with shareholders of the High Line Canal Company for water that could be stored at Pueblo Reservoir under the proposed excess capacity contract(s). Aurora proposes to use contract exchanges to move High Line Canal water stored in Pueblo Reservoir to upstream sites. In the future, Aurora may negotiate short-term leases with other Arkansas Valley ditches in the reach between the Rocky Ford Ditch and Pueblo Reservoir. Aurora does not intend to lease water from any one ditch for more than 3 out of every 10 years, or lease more than 10,000 acre-feet per year.

**Exchange Operations**: Aurora proposes to exchange Aurora water in storage at Pueblo Reservoir for Fryingpan-Arkansas Project water in storage in either Turquoise or Twin Lakes Reservoirs. The water would then be diverted through the Otero Pipeline and pumping plant (see map). Under Aurora's water rights decrees, exchanges from Pueblo Reservoir are not allowed during the Winter Water Storage Program (November 15 through March 14).

**Pueblo Reservoir Storage**: Aurora has requested up to 10,000 acre-feet of contract storage at Pueblo Reservoir. Contract storage space would be used for storage of native Arkansas River water physically and legally available to Aurora. Storage of Aurora's water in Pueblo Reservoir will typically begin on March 15 of each year, gradually accumulate in early spring during low flow conditions, and reach its peak during June and July, at which time Aurora will begin exchanges to upstream sites. When the run-off ends, storage in the contracted space will begin to decline as Aurora continues exchanges to upstream sites. Typically Aurora's excess capacity storage space at Pueblo Reservoir will be evacuated by November 15 of each year. However, Aurora has proposed to retain some water in storage for exchange and use in the following year, if it cannot exchange it due to current year river conditions.

#### **Alternatives**

Preliminary alternatives that have been developed for initial consideration and comment include:

- 1. *No Action Alternative*: Reclamation would not execute a long-term excess capacity contract(s) with Aurora.
- 2. Long-Term Contract(s) Alternative: Reclamation would execute a long-term excess capacity contract(s) with Aurora for up to 10,000 acre-feet of water exchange, conveyance and storage involving the use of the Fryingpan-Arkansas Project's Pueblo Reservoir, Turquoise Reservoir and Twin Lakes Reservoir.

Additional alternatives that meet the Purpose and Need may be added during the NEPA process and considered in the EA.

#### **Environmental Effects**

Reclamation has tentatively identified the following issues or potential resource impacts that could result from the proposed action.

- 1. Impacts on Arkansas River flow between Turquoise Lake and Timpas Creek.
- 2. Effects on Fryingpan-Arkansas Project operations.
- 3. Effects on threatened and endangered species.
- 4. Cumulative impacts, including water quality, of this project along with other reasonably foreseeable water-related activities in the Arkansas River Basin.
- 5. Impacts on recreation activities at Turquoise Reservoir, Twin Lakes Reservoir and the Upper Arkansas River, especially fishing and commercial rafting.

#### **Additional Information and Submitting Comments**

Again, the purpose of this document is to solicit public and agency comments on potentially significant issues related to the proposed action that should be considered by Reclamation before a decision is made on whether to enter into a excess capacity contract(s) with Aurora. Identified issues will be analyzed in a NEPA document. If upon review of this information, you have any questions or would like a copy of the Scoping Document please contact Kara Lamb at:

**Phone**: 970-962-4326 **E-mail**: klamb@gp.usbr.gov

Written comments on the scope of the EA for the proposed contract(s) may be submitted by mail, email or fax and should be submitted on or before November 24, 2003 to:

Mail: Bureau of Reclamation

Eastern Colorado Area Office

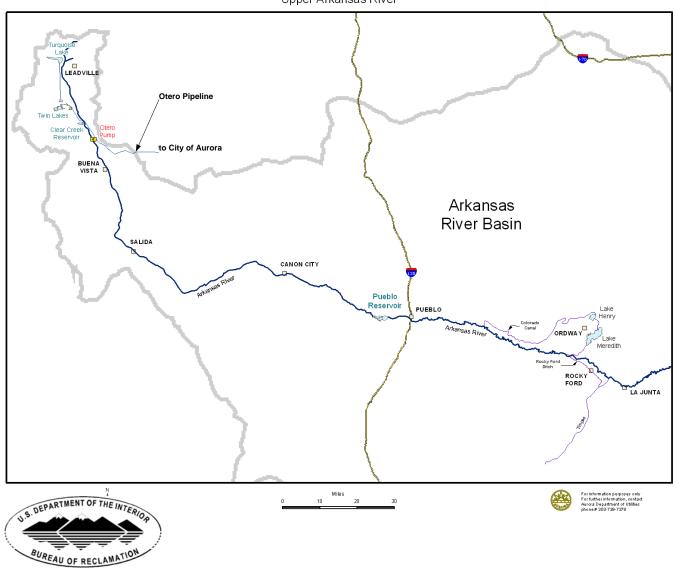
Attn: William Tully

11056 West County Road 18E Loveland, CO 80537-9711

**E-mail:** wtully@gp.usbr.gov

**Fax:** 970-663-3212 **Phone:** 970-962-4368

Upper Arkansas River



# APPENDIX B — SUMMARY LIST OF COMMENTS

## PROPOSED EXCHANGE AGREEMENT AND STORAGE CONTRACT SUMMARY OF SCOPING COMMENTS

#### **Purpose and Need**

- Has Reclamation conducted any analysis of the actual need or justification for the proposed contract?
- Does Aurora have other water resources that it can use?

#### **Alternatives**

- Consider trading 10,000 acre-feet of Homestake Project water conveyed to Colorado Springs in exchange for 10,000 acre-feet of Rocky Ford Ditch and Colorado Canal water via the Southern Delivery System.
- Consider building a pipeline from the Arkansas River to Aurora.
- Consider building a pipeline from reservoirs in the lower portion of the river and treat the water in a plant paid for by Aurora.
- Rely on Aurora's purchase of Thornton water rights to meet needs.
- Consider use of ground water in the Denver basin.
- Reuse or recycle existing water supplies.
- Investigate alternative reservoir sites.
- Evaluate whether Aurora can recapture effluent on the South Platte River and pipe water to its reservoirs for indirect potable reuse.
- Investigate water conservation measures to meet water demand.
- Consider leasing water to Aurora.
- Reclamation should carefully review Aurora's reuse of imported water and condition contracts on implementation of a reuse program.
- Reclamation should reject any proposal that is not clear to the public.
- Reclamation should approve a "short term" contract with Aurora and use data gathered from this project for development of a future "long term" contract.
- Storage contracts should not exceed three years.
- Can Aurora charge new housing more money for water in an effort to manage population growth?
- Consider an alternative that includes a short- or intermediate-term contract for storage in the Fryingpan-Arkansas reservoirs.
- Aurora should divert water at the head gate of the Ricky Ford Ditch and Colorado Canal.
- Consider flow augmentation on the Arkansas River.
- Aurora should be allowed to store water in Pueblo Reservoir.
- Has Reclamation looked into any alternatives to the proposed contract other than "no action?"
- Consider managing population growth in Aurora.
- Enlarge Pueblo Reservoir.
- Is it possible to divert water from the West Slope such as from the Colorado River?
- Consider the concepts of "sustainable water management" as they apply to the proposed project and related Fryingpan-Arkansas projects.

#### **Hydrology**

- Will the EA determine the amounts, timing, and location of excess capacity within the Fryingpan-Arkansas Project to store, exchange, and convey Aurora's water supplies or has it already been determined that excess capacity exists?
- Concern that streamflow returns are protected to their historical point of return in the Arkansas River so that no significant effects occur to downstream water users.
- Consumptive use in the Arkansas River should not be increased.
- Concern that Aurora intends to annually divert 10,000 acre-feet of Arkansas River water, not just in 3 out of every 10 years as previously understood. Increased diversions above leased water are a concern.
- Clarify the amount of water that is being transferred or exchanged.
- Conduct a comprehensive and objective evaluation of outbasin transfers and impacts.
- Voluntary Flow Program conditions should be reviewed and included in the exchange contract.
- Investigate the management of storage space to ensure that space dedicated to the Flow Program is not compromised.
- Protect the Voluntary Flow Program including the flow regime outside of dates in Department of Natural Resources flow recommendation letter.
- All exchanges would negatively affect the water available from Twin Lakes and Turquoise Lake that is necessary to fully implement the Flow Program.
- Contract exchanges should not be used to subvert the recommendations of the Flow Program.
- Reclamation should identify plans and the legal basis for imposing terms and conditions on the Aurora contract to ensure that operation of the contract does not impact the annual Flow Management Program.
- An excess capacity contract with Reclamation will substantially increase Aurora's ability to take water out of the basin.
- Concern over Aurora's potential ability to enhance its entire portfolio of water rights with additional storage.
- How would Aurora replace temporary water supplies when the Fryingpan-Arkansas facilities have no excess capacity or when Aurora's water must be spilled?
- Concern that Reclamation could not enforce the proposed contract terms that Aurora's water is subordinate to the Fryingpan-Arkansas Project without assurance that substitute permanent supplies would be available to Aurora.
- Evaluate changes in Fryingpan-Arkansas Project operations from a baseline prior to any temporary or annual "if and when" accounts by Aurora.
- Concern that minimum streamflows are maintained in the Lower Arkansas.
- The amount of water diverted each year must be clearly evident to the public.
- Reclamation should look at reduced exchange potential by other communities if this project is implemented.
- Concern that the contract would impair drought protection.
- Mitigation measures for impacts of exchanges should be developed.
- Reclamation should evaluate changes in the Upper Arkansas River flow regime including impacts in the Colorado River basin and South Platte basin.
- Reclamation should evaluate impacts on existing and transmountain diversions.
- Actions have significant potential to increase transmountain diversions beyond what was contemplated by the original Fryingpan-Arkansas Project environmental studies and authorizing legislation.
- Proposed exchanges would reduce streamflow in Chaffee County.

- Reclamation should evaluate impacts to the Arkansas River alluvium and surrounding aquifers from reduced flow in the Arkansas.
- Consider impacts to Arkansas River alluvium, aquifer recharge, and surrounding aquifer recharge in Chaffee County, including impacts to water quality, quantity, and sub-irrigation of alluvial lands and riparian areas.
- Concern about the impacts of moving water out of the water basin from which it originates.
- Would like assurances that the Fryingpan-Arkansas Project be managed in conformity with the operating principles set forth in the 1<sup>st</sup> Session of the 87<sup>th</sup> Congress House Document No. 130, as adopted by the State of Colorado on April 30, 1959.
- For Henry and Meredith Reservoirs Address changes (from historical) that will occur to reservoir drawdown timing and elevation. Also, assess the timing and amount of reservoir inflow and outflow, retention time, habitat alterations to shoreline, average depth, and draining
- Important river processes from natural flooding needs consideration for future water storage issues, and plans for mitigation should be developed.
- Evaluate any changes in reservoir operations and water levels for releases from Turquoise Lake, Twin Lakes, and Pueblo Reservoir.
- Address the effect of the proposed diversion on the Arkansas River flows through Chaffee County in light of Aurora's testimony that the exchange would eliminate the 10% "losses" it incurs if the water flowed through Chaffee County.
- Describe in detail where water exchanges will be coming from and going to.
- Reclamation should analyze how it can manage its storage so that the volume necessary to make the flow target is not increased on an average basis.
- The hydrologic analysis should incorporate a wide range of hydrologic conditions from historical gage data.
- The hydrologic analysis should include exchanges necessary to implement the proposed 10,000-acre foot storage contract with Colorado Springs Utilities.
- Concern that the proposed contract exchanges will result in moving water out of Lake Meredith and Lake Henry more quickly and with greater regularity.
- Delay Aurora's request until the necessary data is collected for a minimum of 3 to 5 years, preferably long enough to straddle years of drought and above average flows.
- Concern about chronic low water levels at Turquoise Lake and Twin Lakes.
- Discuss any impacts to ongoing restoration work to return the Arkansas River to its normal flow.
- Discuss a monitoring program or protocols that will be used to monitor impacts and any proposed mitigation to affected waterways.
- Compare water quantity impacts with and without the excess capacity contract.
- Work closely with the Forest Service to maintain consistency with the South Platte Basin Streamflow Management Plan, which identifies maximum flows out of Spinney Mountain, Eleven Mile, and Cheesman Reservoirs.
- Specify quantitative limits being proposed for water storage, exchange, and conveyance.
- Concern about return flows for municipal well augmentation.
- Will the project result in a decrease in rainfall?
- Provide Chaffee County with the preliminary hydrological model and assumptions mentioned at the January 13<sup>th</sup> meeting.
- The Arkansas River public deserves time for a local peer review of the hydrologic model.

#### **Water Rights**

- Concern that the long-term exchange agreement and storage contract avoid the water court process.
- Define all of the water rights including transmountain diversions. Historical operation of those rights must be fully documented and proposed operations and impacts fully disclosed.
- Reclamation should request a declaratory judgment from the US. District Court as to whether a long-term storage contract with a municipality outside of the Arkansas Basin is legal.
- The Arkansas River should not be appropriated.
- Identify whether the proposed long-term contracts with Aurora and Colorado Springs will preclude or limit the opportunity for long-term contracts with other entities.
- Protect existing water rights.

#### **Water Quality**

- Evaluate water quality degradation in the Lower Arkansas River, including increased salinity, chemical
  concentration, sedimentation, etc.
- There is sufficient information regarding the effects of the exchange agreement and storage contract on water quality. See Simulated Effects of Water Exchanges on Streamflow and Specific Conductance in the Arkansas River Upstream from Avondale, Colorado, USGS Water Res. Investig. Report 98-4140. and Simulated Effects of Irrigation on Salinity in the Arkansas River Valley in Colorado, Karin Goff et al., Ground water v. 36, No. 1 Jan-Feb 1998.
- Petition the Water Court to grant an injunction to stay all transfers and further proceedings until there is enough time to study water quality and for misrepresentation by water dealers and the City of Aurora that water would be used for future growth not current needs.
- Removal of lands from irrigation in the Lower Arkansas will result in a slight improvement in Arkansas River
  water quality with the reduction in non-point source loading of dissolved solids that contribute to increased
  salinity.
- Reclamation should consider the effect of the excess capacity contract on NPDES permit holders in the Lower Arkansas.
- Conditions should be placed on the transfer of water to prevent degradation of water quality at the Kansas state line
- Removing higher quality water from the Upper Arkansas River will increase the concentration of salts and other constituents.
- The historical flow in Rocky Ford Ditch will no longer be present in the Arkansas River to assist the dilution factor, which is critical to the agricultural community.
- Water quality in the Upper Arkansas could be reduced because of the removal of high quality water. The withdrawal of 35,900 acre-feet of water by Aurora should be considered, not just the amounts included in this contract.
- Reclamation should consider impacts from reduced dilution for wastewater treatment plant discharges, historical mining, and other point and non-point sources in Upper Arkansas.
- Arkansas River classified water uses could be affected by increased contaminant levels from the exchange agreement and storage contract.
- The City or Reclamation should mitigate adverse water quality effects.
- Concern about water quality impacts at Pueblo Reservoir.
- Increased contaminant concentrations would make water uses downstream less viable and more expensive.
- Address changes in water chemistry (temperature strata, thermocline development, dissolved oxygen, suspended sediments, retention time, inorganic or organic compounds, and metals) in affected reservoirs.

- Concern about increased concentrations of metals (i.e., mercury, lead, arsenic) due to diverting water on the Upper Arkansas.
- Will lower flows result in a greater amount of fine sediment falling out of suspension?
- Will poorer water quality in the Arkansas River mainstem affect the dilution of water entering the river from Fountain Creek?
- Concern about increased selenium in the mainstem Arkansas River below Pueblo Reservoir.
- Will there become a greater abundance of "algal mats" attached to the stream substrate due to the lack of "scouring flows"?
- Concern about nutrient loading to the Arkansas River.
- Concern about water temperature change in the Arkansas River.
- Concern about impacts to drinking water quality in the Lower Arkansas.
- Use studies by Dr. Tim Gates of Colorado State University and the USGS when trying to determine longrange water quality degradation.
- Continue water quality studies following implementation of the project.
- Concern about water quality in the Lower Arkansas following removal of water from the Rocky Ford Canal and leased water from the High Line Canal.
- Concern about having to install a reverse osmosis water treatment plant for Lower Arkansas residents.
- Concern that withdrawal of 10,000 af at the Otero Pump Station may result in higher heavy metal concentrations in the remaining river flow.
- Compare water quality impacts with and without the excess capacity contract.
- Evaluate impact of the excess capacity contract on Kansas' ability to meet water quality standards for sulfate, boron, and selenium.

#### Wildlife Resources

- Evaluate impacts to wildlife.
- Evaluate how increased salinity and water quality degradation may impact Lower Arkansas fauna.
- Mitigate ecological effects in the Upper Arkansas River Valley.
- Use the Arkansas River Water Needs Assessment as a guide for identifying potential impacts and the timing, location, and amounts of flow rates that are particularly critical to natural resource values.
- Evaluate impacts to the environment and ecology, including reduced flows in Chaffee County.
- Concern about impacts to raptors.
- Concern about impacts to shorebirds.
- Concern about impacts to waterfowl on the Arkansas River, Pueblo Reservoir, Lake Henry and Lake Meredith. Waterfowl should be given due consideration in any proposed change to water management.
- Concern about impacts to amphibians and reptiles.
- General concern about impacts to threatened and endangered species.
- Concern about impacts to island habitat needed for roosting and nesting birds.
- Concern about impacts to wildlife at Twin Lakes, Turquoise Lake, Pueblo Reservoir, Lake Meredith, and Lake Henry.
- Concern about effects to nesting habitat for birds from vegetation changes along the river.

#### **Aquatic Resources**

- Evaluate impacts to fish.
- Concern about increased potential for spread of West Nile Virus, particularly around the City of Pueblo.
- Concern about potential increases in mosquito-breeding habitat caused by varying flow intervals?
- Concern about possible impacts to flow management for brown trout spawning, egg incubation, hatching, fry
  emergence, and adult success.
- Concern that diminished flows in the Upper Arkansas would affect Flow Program releases and the fishery, which could have potentially catastrophic environmental consequences.
- At Pueblo Reservoir address spawning needs of smallmouth and largemouth bass, bluegill, crappie, walleye, gizzard shad, and channel/blue catfish; and the production of food for survival of young fish.
- At Pueblo Reservoir evaluate any impacts to primary and secondary production, and associated food/prey sources such as macroinvertebrates, crustacea, and other forage fish.
- At Pueblo Reservoir address reservoir drawdown and the associated affects on fishery predator/prey relationships.
- At Pueblo Reservoir address changes in reservoir water chemistry (temperature strata, thermocline development, dissolved oxygen, suspended sediments, retention time, and metals).
- Address impacts to the emigration of fish through the Pueblo Dam outlet, and the fishery downstream of the dam.
- Address volume of water, or changes of water quality, delivered to the DOW Pueblo hatchery.
- Address impacts to the primary and secondary production (phytoplankton, algae, aquatic plants, zooplankton, invertebrates) necessary to sustain the fisheries in Turquoise Lake, Twin Lakes, and Mount Elbert forebay.
- Address lake trout reproduction, egg incubation, fry survival and growth of juvenile and adults in Turquoise Lake, Twin Lakes, and Mount Elbert forebay.
- Address emigration of lake trout or rainbow trout through the outlet of the upper reservoir dams.
- Address changes in vulnerability of mysis shrimp and/or fish to entrainment by the Mt. Elbert powerplant operations.
- Identify habitat or biological alterations that would affect the survival of naturally reproduced fish species or stocked trout in Turquoise Lake, Twin Lakes, and Mount Elbert forebay.
- For Meredith and Henry Reservoirs address effects on fish reproduction, growth and survival.
- Identify changes in riverine habitat (riffles, pools, backwaters) for native fish assemblages due to alterations in water hydrology below Pueblo Reservoir to the Rocky Ford Ditch.
- Address impacts to the native fish assemblages, including Arkansas darters (state-listed threatened species and federal candidate species), suckermouth minnow (state-listed endangered species), plains minnow (state-listed endangered species) within the river between Canon City and the Rocky Ford Ditch.
- Determine effect of flow changes on the reproduction, feeding, growth, movement of trout and native fish species in the Arkansas River and associated tributary habitats.
- Address impacts to plains reservoir fisheries, water quality and habitat as a result of changes of water deliveries to those reservoirs, i.e., Lake Henry and Lake Meredith in relation to operation of the Colorado Canal and the Rocky Ford Ditch rights (exchange).
- Address impacts of operational hydrology (timing, duration, and amounts of water delivered through the
  system from below Spinney Reservoir down to conveyance to Rampart Reservoir) on trout population
  dynamics. In particular, life stage habitats, reproduction, feeding, fish movements, and benthic invertebrate
  production.

- Identify expected operational changes to river and reservoir hydrology (timing, amount, duration) on the South Platte River below Spinney as well as on Elevenmile and Cheesman Reservoirs.
- At Spinney Reservoir Identify effects on reservoir storage levels on the biotic components of the fishery and on attributes of the recreational fishery (as described above for the other reservoirs) and particularly on angler access and boating.
- At Spinney Reservoir Identify potential effects of altered operations on reproduction and recruitment of northern pike.
- Identify any changes of water quality that would affect the biology, reproduction and survival of native fish species, including threatened and endangered species.

#### **Vegetative Resources**

- At Pueblo Reservoir address shoreline and littoral vegetative regeneration and production.
- Concern about impacts to vegetation from reduced flows and decreased water quality.
- Noxious weed controls need to be addressed as this project may facilitate the spread and increase the cost of the existing weed problems.
- Ban the use of Kentucky bluegrass.
- Monitor dry up of lands fed by High Line Canal.
- Evaluate impacts to riparian corridor from reduced Arkansas River flows.

#### Recreation

- Concern that reduced flows in Chaffee County would impact recreation including hunting, fishing, and rafting.
- Mitigate effects to recreation in Upper Arkansas.
- Recreation in the Upper Arkansas will be affected by reduced water quality.
- Reduced flows through Pueblo would have impacts on recreational opportunities including Pueblo's proposed kayaking and rafting course and the Section 206/Legacy Project below Pueblo Dam.
- Identify and evaluate impacts to recreation at Pueblo Reservoir.
- Analyze effect to Forest Service recreation areas at Twin Lakes and Turquoise Lake.
- Address alterations to operations that would impact the recreational fishery (use, catch/harvest rates, catch composition, angler satisfaction) at Meredith and Henry Reservoirs.
- Concern about adverse impacts to recreation at Lake Meredith and Lake Henry.
- At Pueblo Reservoir address alterations of the fishery or habitat that would affect the sport fish recreation (use, catch/harvest rates, catch composition, angler satisfaction).
- Address alterations of the fishery or habitat that would affect the sport fish recreation (use, catch/harvest rates, catch composition, angler satisfaction) in upper reservoirs.

#### **Land Use**

- Reduced flows in the Arkansas could affect agriculture in Chaffee County.
- Evaluate how increased salinity and reduced water quality could impact agriculture in the Lower Arkansas.
- For lands leased from the High Line Canal, Reclamation should monitor the dry-up of agricultural lands. Future leases from the Arkansas River that use Fryingpan-Arkansas Project facilities should be similarly conditioned.
- Concern that Aurora is promoting growth at the expense of communities situated along the Arkansas River.
- Concern about land use impacts to where the water is destined.
- Water should be used for agriculture in the Lower Arkansas not growth of northern cities.

- Concern that the Lower Arkansas will become another Owens Valley.
- Concern about impacts to the power plant located at Twin Lakes.

#### **Visual Quality**

• Mitigate aesthetic effects in Upper Arkansas.

#### **Socioeconomics**

- Reclamation should consider socioeconomic effects in Lower Arkansas.
- Water leases are not as devastating to the Lower Arkansas Valley as permanent transfers out of the area.
- Aurora needs to pay its share of the cost and construction of the Fryingpan-Arkansas Project.
- Payments by the City of Aurora for Rocky Ford water rights will have a beneficial impact on the economy and quality of life in the Arkansas Valley.
- Concern that the proposal goes against the Fryingpan-Arkansas Project goal to support agriculture and provide drought relief to Lower Arkansas.
- Reclamation should evaluate indirect effects to land use, population, and growth in Aurora, including growth patterns, air, and water quality and other natural systems. Indirect effects in the lower Arkansas Valley include out-migration, cultural changes, and reduced economic activity.
- Diminished Arkansas River flows for recreation and fishing could have potential catastrophic economic consequences.
- Consider impacts to Chaffee County economy, including rafting industry, fisheries, wildlife, tourism and recreation, agriculture and construction from removal of 35,900 acre-feet of water, not just the 10,000 acrefeet included in proposed contract.
- Reclamation should consider direct impact to future growth of Chaffee County economy.
- Mitigate socioeconomic effects.
- Money paid to the Southeastern Colorado Water Conservancy District will help lessen the burden to taxpayers in the district.
- Concern that communities on the Lower Arkansas will have to request additional ground water well permits from the state due to decreased ground water well production.
- Concern about impacts to property values in the Rocky Ford area.
- Concern about an increase in illegal Mexican immigrants being drawn to the lower Arkansas Valley.
- Concern that towns on the Lower Arkansas would have to obtain expensive water rights because Fryingpan-Arkansas water would no longer fully supplement our needs.
- Aurora should be taxed for removing and selling water as a means of partially mitigating local tax revenues that will be lost.
- Let Aurora pay for the loss of tax revenues, and agricultural, residential, and commercial water treatment plant upgrades.
- Sending the water to metropolitan areas will lead to high population concentrations.
- Concern that we will need to import more food as a result of such projects.
- Concern that the project will exacerbate the continued loss of younger residents from the Lower Arkansas Valley.
- Concern about the costs of upgrading water treatment plants.
- Reduced water quality could affect Lower Arkansas small communities' ability to financially provide potable water to residents.

#### **Environmental Justice**

- Meaningfully involve minority and low-income residents of the Lower Arkansas Valley in the process to ensure their fair treatment in its decision making process.
- Ensure that minority and low-income residents do not bear a disproportionate share of the negative environmental consequences resulting from its decision on the proposed contract.

#### **Cumulative Effects**

- Reclamation should consider the cumulative effect of the Southern Delivery System, Preferred Storage Option Plan, Arkansas Valley Conduit, Eagle River basin diversions from the Colorado River basin, and Fountain Creek watershed plan.
- Reclamation should evaluate how Aurora and Southern Delivery System improve the ability to increase transmountain diversions.
- Reclamation should make sure the EA addresses big picture issues in consideration of storage requests from SECWCD, Colorado Springs, and Aurora.
- Reclamation should consider Aurora's use of all of its Arkansas River native direct flow rights—i.e., 35,900 af/yr rather than 10,000 af/yr.
- The impacts to recreation at Pueblo Reservoir should be evaluated in combination with the Southern Delivery System.
- Impacts from all the projects with cumulative effects should develop and implement joint mitigation measures.
- Reclamation should quantify the amount of water exchanged by Colorado Springs, Pueblo, and Aurora.
- All of the prospective environmental studies in the EA should be examined to define cumulative impacts to Fryingpan-Arkansas operations.
- Discuss the cumulative impacts of water exports on the Arkansas River and significant changes in the operation pattern.
- Consider any other pending contracts or agreements that would more formally establish changes to the operations of the Fryingpan-Arkansas Project, for instance "if and when" accounts.
- Assess cumulative effects to leased and permanent water supplies.
- Consider the effects of all exchanges over the past 40 years.
- General concern about cumulative socioeconomic impacts.
- Concern about the cumulative environmental effects of this project in addition to the Fort Lyon Canal project.
- West Slope diversions resulting from past Reclamation contracts for non-project use of the Project storage space have exacerbated the negative effects of water shortages and drought, and should be included in the analysis of cumulative impacts.
- Consider cumulative effects on the Lower Valley District, including Pueblo, Otero, Crowley, Bent, and Prowers Counties.
- Should cumulative impacts be significant, a comprehensive NEPA evaluation of planned projects may be warranted, such as a programmatic analysis of the Fryingpan-Arkansas Project that includes reasonably foreseeable projects in the Basin.
- Consider the relationship of reasonably foreseeable actions throughout the Front Range on the Fryingpan-Arkansas River Basin.

#### **NEPA** or **Regulatory Issues**

- Reclamation should independently evaluate the project purpose and need and alternatives.
- There is no legal basis for Reclamation to execute contracts for a re-operations storage program. Reclamation
  does not have the authority to enter into a contract with Aurora because the proposed action is contrary to the
  authorized purpose of the Fryingpan-Arkansas Project.

- Reclamation should decline from entering into long-term use of excess Fryingpan-Arkansas Project capacity unless authorized by Congress. Reclamation should take a broad view and consider the precedent set by this exchange.
- Reclamation should provide a description of its legal authority to enter into a contract for excess storage capacity.
- Review the original intent of the Fryingpan-Arkansas Project in the EIS.
- Fully evaluate the impacts of the alternative actions on existing, permitted, and future transmountain diversions.
- Explain the basis for determination of available excess capacity.
- Withhold approval of all contract exchanges with Aurora until settlement terms on the 99CW170 water case are agreed upon.
- Reclamation should consider the IGA with the Southeast Colorado Water Conservancy District as it considers "assumptions related to the proposed action."
- Revisit previous decisions regarding use of Fryingpan-Arkansas facilities for Aurora and describe justification and authority for this project.
- Prepare an EIS rather than an EA.
- Consider conducting a system-wide EIS for Aurora's service area including plans for other future contracts.
- Consider a programmatic EIS that includes Southern Delivery System, Preferred Storage Option Plan, Arkansas Valley Conduit, and increased Eagle River diversion from the Colorado River. This is the only way a systematic approach to mitigation can treat all applicants fairly.
- Consider these excess capacity contracts in the context of future requests from Aurora for more diversions from the Arkansas River.
- Consider what precedents would be established for additional uses of the Fryingpan-Arkansas Project by Aurora and others.
- Clarify if and why the transaction with Aurora would be treated differently from the SECWCD practice applied to diverting import water through the Fountain Valley Conduit to be used and reused by the recipient to extinction.
- Reclamation must analyze the complete range of environmental impacts posed by irreversible and irretrievable commitment of water resources.
- Reconsider the short timetable that has been set for developing the EA. More time is needed for public input.
- Issuance of contracts to Aurora would also likely predetermine and dictate Reclamation's approval of the enlargement of Pueblo Reservoir and other Fryingpan-Arkansas facilities for Aurora's use.
- What are the guidelines for completing an EA or EIS and what are the kinds of things this study looks at?
- Reclamation should be removed from the EA process and hire a neutral, private contractor to perform an EIS.
- Reclamation needs to take a thorough in-depth look at both the immediate and cumulative environmental impacts and resist a quick, superficial study to meet an unrealistic schedule.
- Speed up the NEPA process and do not complete a full EIS.
- This study is not warranted because it will cost taxpayers money and time.
- Who will be accountable for future unforeseen damage to the Arkansas River Basin?
- Provide any preliminary information/drafts concerning the proposal to Chaffee County as soon as possible so it can perform their own independent analysis.
- Expand the project area to Garden City, Kansas.
- Consider a minimum of two public hearings in each of the major cities along the Arkansas; one for presenting information and one for gathering comments.

- Determine ways to mitigate impacts of current and future withdrawals from the Arkansas River Basin.
- One month is not sufficient time to review the Draft EA.
- Impacts should be evaluated beyond Timpas Creek and all the way to the Kansas/Colorado state line.

# APPENDIX C — LIST OF COMMENTERS FROM AGENCIES AND ORGANIZATIONS

## LIST OF COMMENTERS FROM AGENCIES AND ORGANIZATIONS

#### **Agencies**

- Bill Mulholland, Recreation/Lands/Wilderness Staff, U.S. Forest Service, Leadville Ranger District
- Robert J. Leaverton, Forest Supervisor, USDA Forest Service, Pike and San Isabel National Forests
- Roy E. Smith, Water Rights and Instream Flow Coordinator, USDI Bureau of Land Management, Colorado State Office
- Larry Svoboda, Director, NEPA Program, U.S. Environmental Protection Agency, Region 8
- Bruce McCloskey, Acting Director, Colorado Division of Wildlife, Arkansas and Rio Grande Basins
- Lyle Laverty, Director, Colorado State Parks
- Lola Spradley, Speaker of the House, Colorado House of Representatives
- David L. Pope, Chief Engineer, State of Kansas, Department of Agriculture, Division of Water Resources
- Jennifer A. Davis, Chaffee County Attorney, for the Board of County Commissioners of Chaffee County
- Joseph H. De Luca, Chairman; Jim Thompson, Commissioner; Tim Glenn, Commissioner, The Board of County Commissioners of Chaffee County
- Matthew Heimerich, District 1; Dwight L. Gardner, District 2; T.E. Allumbaugh, District 3, Board of County Commissioners, Crowley County
- Dennis J. Jones, Fremont County Commissioner 1985-1989
- Donald J. Rizzuto, Mayor, City of La Junta
- Richard G. Klein, City Manager; Joe A. Kelley, Director of Water/Wastewater, City of La Junta
- Mark F. Thonhoff, Mayor, Town of Poncha Springs
- Christine Nevin-Woods, Director, Pueblo City-County Health Department
- Lawrence Sena, Chair, Bent County Board of Commissioners
- Loretta Kennedy, Chair, Pueblo Board of County Commissioners

#### **Organizations**

- Greg Felt, Arkansas River Outfitters Association
- Michael Harvey, President, Board of Directors, Arkansas River Trust
- John W. Canaday, President; Roy Fritch, Vice President; Martin Andrews, Treasurer; Randy Igou, Secretary; et al., Bents Fort Water Company
- Randy E. Kuhn, General Manager, Colorado River Water Conservation District
- David C. Hallford, Balcomb & Green, P.C. for Colorado River Water Conservation District
- John W. Canaday, General Manager, Dean Specialty Foods Group
- Donald L. Steerman, Shinn, Steerman & Shinn for District 67 Irrigation Canals Association
- Board of Directors, Fort Lyon Canal Company
- Tom Verquer, President, Las Animas County Farm Bureau
- Scott Monarco; Mark Grasmick; Dave Hill; Jim Wallace; Jerre Church, La Junta Development, Inc.
- Peter D. Nichols, Trout, Witwer & Freeman, P.C. for the Lower Arkansas Valley Water Conservancy District
- William and Mary Skuderna, Lower Arkansas Valley Water Conservancy District
- Board of Directors, Lower Arkansas Valley Water Conservancy District
- Dan Henrichs, Superintendent, Rocky Ford High Line Canal Co.
- Ronald M. Aschermann, Secretary Treasurer, The Sellers Group of the Rocky Ford Ditch Company
- Anne Cain, Treasurer, Sierra Club, Sangre de Cristo Group
- Lee E. Miller, Burns, Figa & Will, P.C., for the Southeastern Colorado Water Conservancy District
- George M. Hostetler, Spring Valley Ranch
- Melinda Kassen, Director, Trout Unlimited Colorado Water Project

#### **Individuals**

Approximately 2,150 additional comments were received from individual members of the public. A complete list of individuals submitting comments on the proposed project is available on request from Reclamation:

Will Tully Bureau of Reclamation Eastern Colorado Area Office 11056 W. County Road 18E Loveland, CO 80537

Phone: (970) 962-4326

Fax: (970) 663-3212 or (970) 962-4216

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