



# PUBLIC SCOPING WELCOME

## Regional Watershed SUPPLY PROJECT



US Army Corps  
of Engineers  
Omaha District

### Public Scoping Meetings:

April 14  
6:30pm to 9pm  
Green River High School  
1615 Hitching Post Dr.  
Green River, WY


April 15  
6:30pm to 9pm  
Uintah High School  
1880 West 500 North  
Vernal, UT

April 16  
6:30pm to 9pm  
Laramie High School  
1257 N. 11th St.  
Laramie, WY

April 20  
6:30pm to 9pm  
Fossil Ridge High School  
5400 Ziegler Rd.  
Fort Collins, CO

April 21  
6:30pm to 9pm  
West High School  
951 Elati St.  
Denver, CO

April 22  
6:30pm to 9pm  
Risley Middle School  
625 N. Monument Ave.  
Pueblo, CO



# PROJECT PARTICIPANTS

## Regional Watershed SUPPLY PROJECT



US Army Corps  
of Engineers  
Omaha District

### Lead Agency

#### U.S. Army Corps of Engineers, Omaha District (Corps)

The Corps is the lead federal agency overseeing the preparation of the Environmental Impact Statement (EIS) of the Regional Watershed Supply Project (RWSP) based on issuance of a 404 Permit.

### Project Contact:

#### Rena J. Brand, Project Manager

U.S. Army Corps of Engineers,  
Omaha District  
Denver Regulatory Office  
9307 S. Wadsworth Blvd.  
Littleton, CO 80128-6901  
303.979.4120  
MCRG.EIS@usace.army.mil



### Cooperating Agencies

#### U.S. Bureau of Reclamation (Bureau)

Bureau is a cooperating agency because of its role as the primary water management agency for the Flaming Gorge Reservoir.



#### U.S. Bureau of Land Management (BLM)

BLM is a cooperating agency because of its legal jurisdiction over lands that would be crossed by the proposed pipeline.



#### U.S. Forest Service, Ashley National Forest (USFS)

USFS is a cooperating agency on this project because of its legal jurisdiction over lands within the Flaming Gorge National Recreation Area.



#### U.S. Environmental Protection Agency (EPA)

EPA is a cooperating agency on this project because of its expertise with respect to air and water issues, and the 404 permitting process.

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### Consultant

#### AECOM Environment

AECOM Environment is preparing the Environmental Impact Statement for the RWSP under the Corp's direction.

# NEPA PROCESS

## Regional Watershed

SUPPLY PROJECT



### Purpose of Scoping Meetings

- Introduce and describe the proposed project
- Identify reasonable and practicable alternatives for the proposed project
- Receive public input on the purpose and need, project description, alternatives, impacts, cumulative impacts, and potential mitigation measures
- Identify and gain an understanding of the issues and concerns expressed by all interested parties
- Ensure we have reached the key stakeholders and obtained their perspectives
- Describe the project schedule, the key milestones, and opportunities for public involvement

### What is the National Environmental Policy Act (NEPA)?

The National Environmental Policy Act of 1969 is designed to encourage environmental protection and informed decision-making. It provides the means to carry out these goals by:

- Mandating every Federal agency prepare a detailed statement of the effects of “major Federal actions significantly affecting the quality of the human environment”
- Establishing the need for agencies to consider alternatives to those actions
- Requiring each agency to consult with and obtain comments from any Federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved
- Requiring detailed statements, comments, and views of the appropriate Federal, State, Tribal, and local agencies be made available to the public

# NEPA PROCESS

## Regional Watershed SUPPLY PROJECT



### The EIS Process and Estimated Time Frame

#### Prepare a Notice of Intent (NOI)

- Publish an NOI to prepare an EIS in the Federal Register
- Make local announcements of the NOI

#### Conduct scoping to:

- Solicit public comments
- Identify alternatives to the project proponent's proposed action
- Identify issues requiring analysis
- Communicate information
- Consult with agencies and organizations

#### Develop/analyze scoping results and share with public

- Prepare Scoping Report
- Post final scoping report on Corps' website for public review

#### Prepare Draft EIS

- Consider scoping comments
- Conduct alternatives evaluation to determine reasonable and practicable alternatives
- Assess impacts and develop mitigation
- Identify the least environmentally damaging practicable alternative (see *Section 404(b)(1)* information)
- Seek public comments on the Draft EIS
- Publish a Notice of Availability in the Federal Register to begin the 90-day public comment period
- Conduct public meetings

#### Prepare Final EIS

- Consider and analyze comments on Draft EIS
- Prepare Final EIS
- Publish a Notice of Availability in the Federal Register

#### Record of Decision

- Describe commitments for mitigating project impacts
- Announce Record of Decision no sooner than 30 days after the Notice of Availability of the Final EIS is published

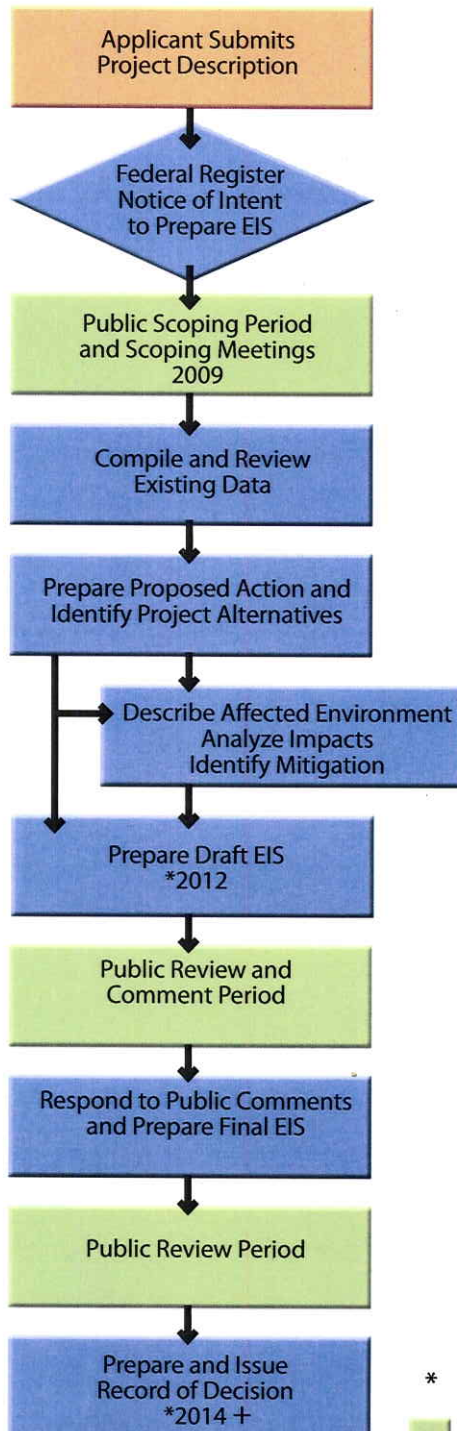
# NEPA PROCESS

## Regional Watershed

SUPPLY PROJECT



### EIS Process and Estimated Time Frame



### How Can I Participate?

- Attend scoping meetings
  - Visit the various information stations
  - Provide information on issues
  - Fill out a comment sheet
- Review Draft EIS
- Attend public meetings
- Visit website: <https://www.nwo.usace.army.mil/html/od-tl/eis-info.htm>

# SECTION 404 (b)(1) PROCESS

## Regional Watershed SUPPLY PROJECT



### **Section 404(b)(1) Process Requires:**

- An extensive alternatives evaluation to select alternatives to be analyzed in the EIS
- That the approved alternative is practicable and has the least environmental impact to the aquatic ecosystem
- Practicable alternatives include those available and capable of being implemented after taking into consideration cost, logistics, and technology

### **Close integration and coordination of the NEPA process with the Section 404 (b)(1) alternatives evaluation early in the process will help ensure that the range of alternatives:**

- Can meet the applicant's basic purpose and need
- Are practicable and reasonable
- Are least damaging to the aquatic ecosystem

# PROPOSED PROJECT

## Regional Watershed

SUPPLY PROJECT



### **Project Proponent's Draft Purpose and Need Statement:**

#### **Project Purpose**

As part of allocations to the States of Wyoming and Colorado under the Colorado River and Upper Colorado River compacts, approximately 250,000 acre-feet (AF) per year of new annual firm yield would be withdrawn from Flaming Gorge Reservoir and the Green River and transported to help meet the projected water supply needs of southeastern Wyoming and the Front Range of Colorado.

#### **Project Need**

The Project would meet projected shortages in water supplies for agriculture, municipalities and industrial use on a perpetual basis through 2030 and beyond in the following basins: Platte River in Wyoming; and South Platte River and Arkansas River in the Front Range of Colorado.

# PROPOSED PROJECT

## Regional Watershed

SUPPLY PROJECT



### Project Water Users

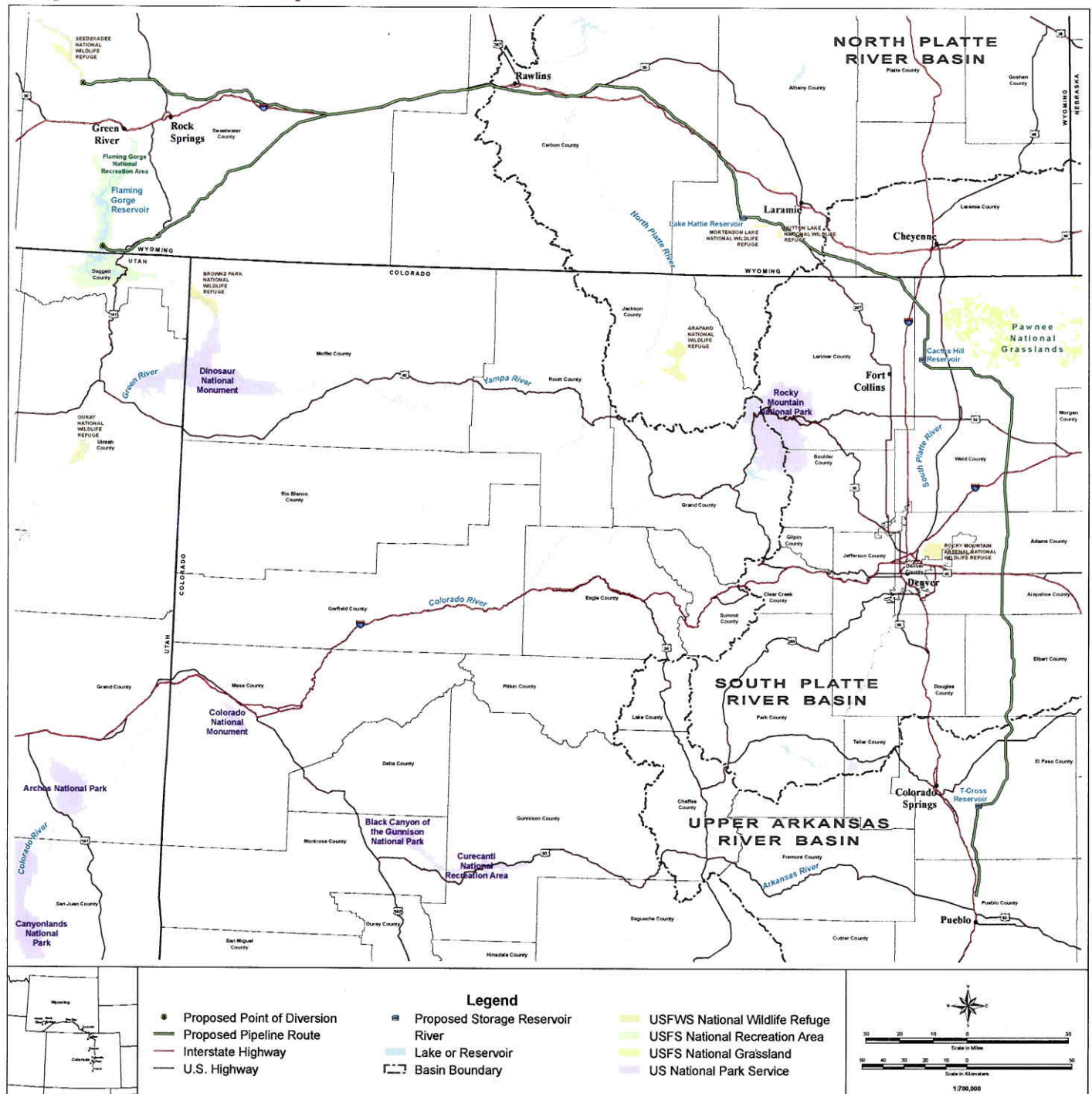
- Potential water users would include agriculture, municipalities, and industries focused in the vicinity of three proposed water storage reservoirs (Lake Hattie in Wyoming; proposed Cactus Hill Reservoir near Fort Collins, Colorado; and the proposed T-Cross reservoir near Pueblo, Colorado)
- In Wyoming, approximately 25,000 acre-feet of water would be delivered annually to users in the Platte River Basin
- Approximately 225,000 acre-feet of water would be delivered annually to users in the South Platte and Arkansas River basins in Colorado
- Specific water users in each of the three basins would be determined through letters of intent. These letters would serve as documentation of specific project water users and help define the "water-user portion" of the project study area
- After specific water users are defined, water delivery systems will be determined as part of the proposed project facilities

# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### Project Overview Map



# PROPOSED PROJECT

## Regional Watershed

SUPPLY PROJECT



### Alternatives Defined by Project Proponent

#### Alternative A

Withdrawal of 250,000 acre-feet (AF) of annual firm yield from the Green River near Seedskaadee National Wildlife Refuge and the east bank of Flaming Gorge Reservoir. Estimated volumes from the Green River would range from approximately 85,000 AF in a dry year to 195,000 AF in a wet year. These withdrawal rates are estimates based upon historical streamflow conditions during the 1971 to 2007 period of record; therefore, the future effects of increased depletions in Wyoming upstream of the withdrawal facilities have not been considered at this time.

#### Alternative B

Withdrawal of 250,000 AF of annual firm yield from the Green River near the City of Green River.

#### Alternative C

Withdrawal of 250,000 AF of annual firm yield from the Green River near the Seedskaadee National Wildlife Refuge.

#### Alternative D

Withdrawal of 250,000 AF of annual firm yield from the east bank of Flaming Gorge Reservoir.

#### Alternative E

Withdrawal of 250,000 AF of annual firm yield from the west bank of Flaming Gorge Reservoir.

### No Action Alternative

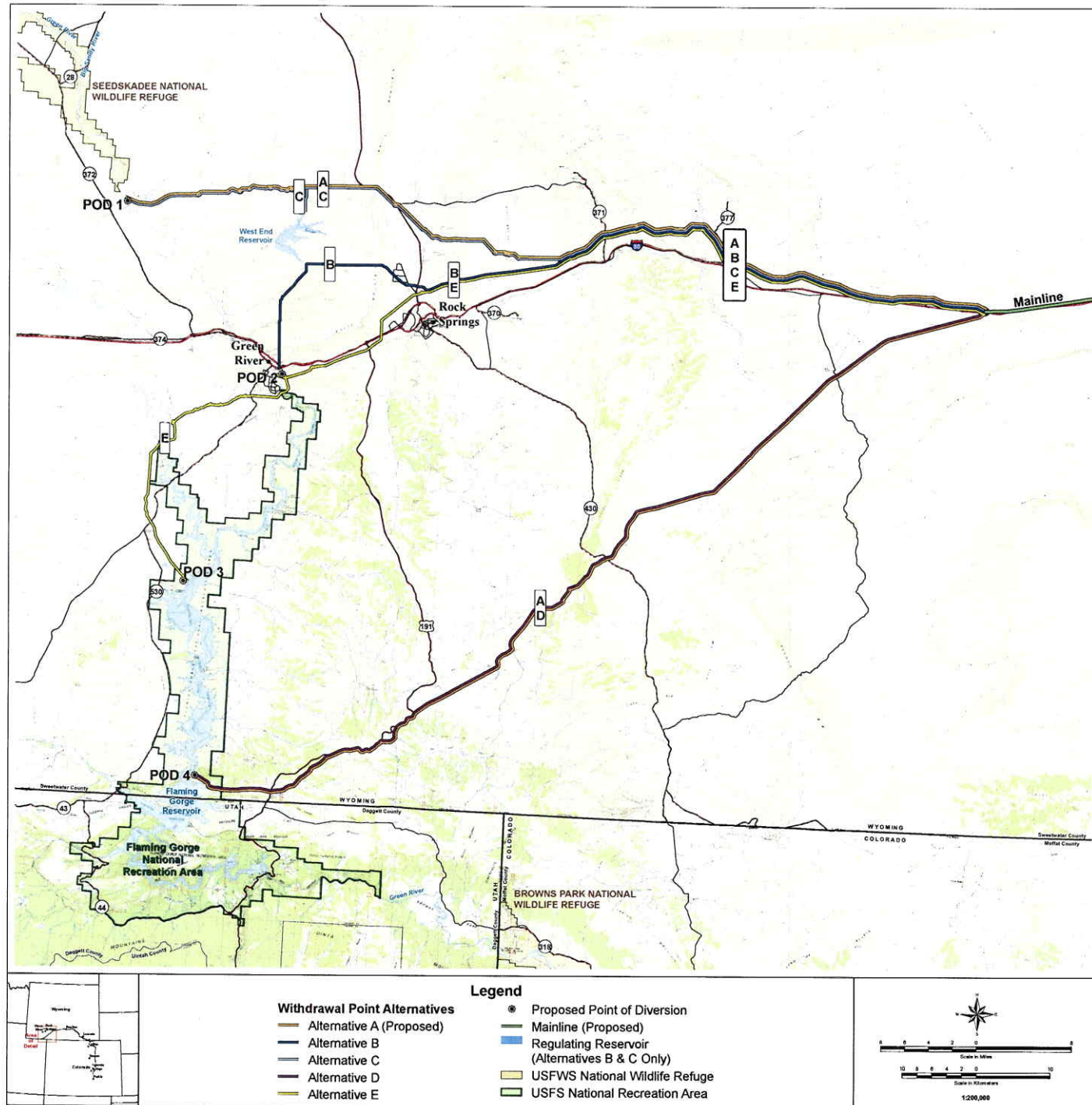
No withdrawal of water from the Green River or Flaming Gorge Reservoir to meet water needs in southeastern Wyoming and the Front Range of Colorado.

# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### Route Alternatives Map

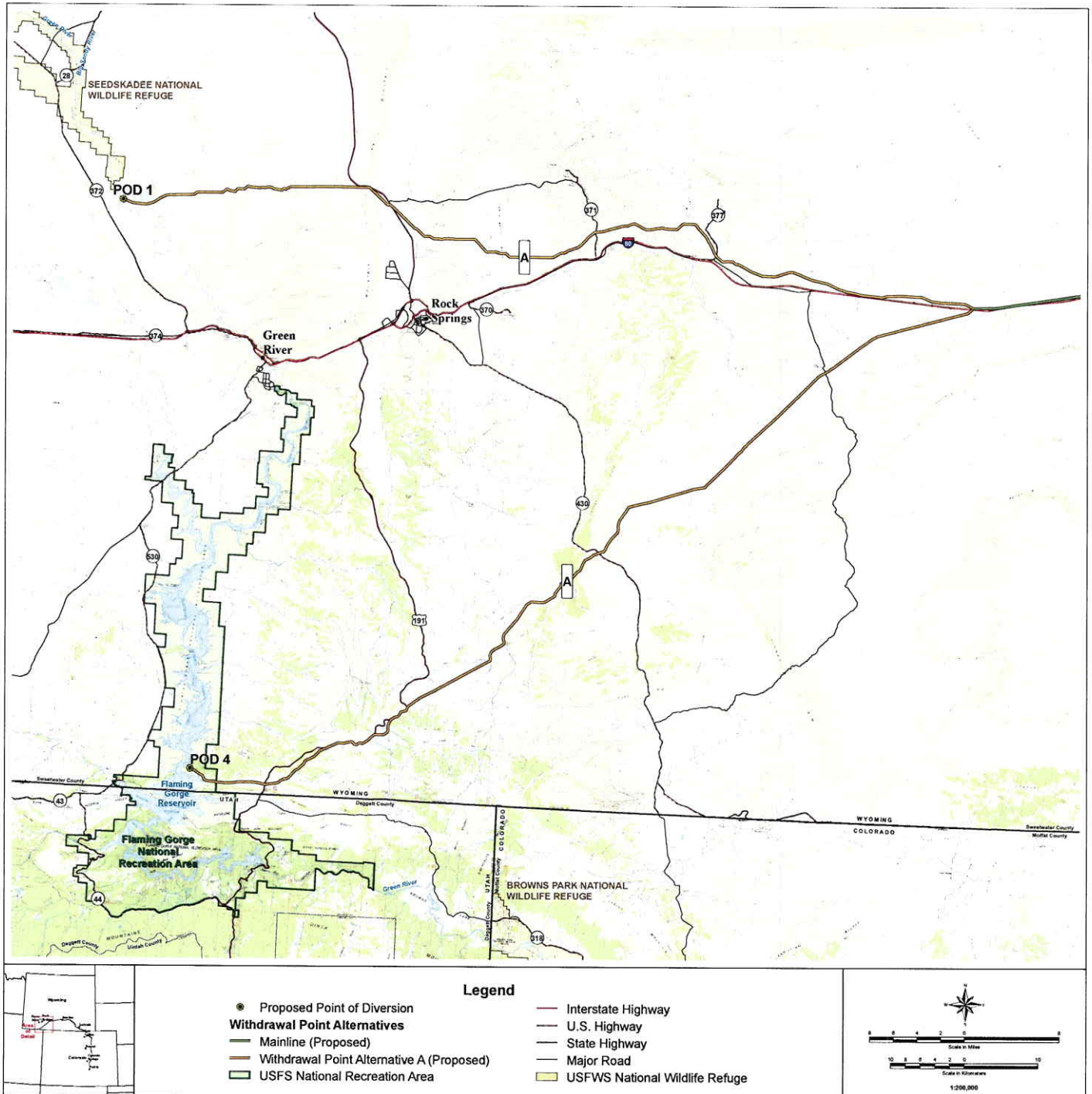


# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### Route A: Proponent's Preferred Alternative

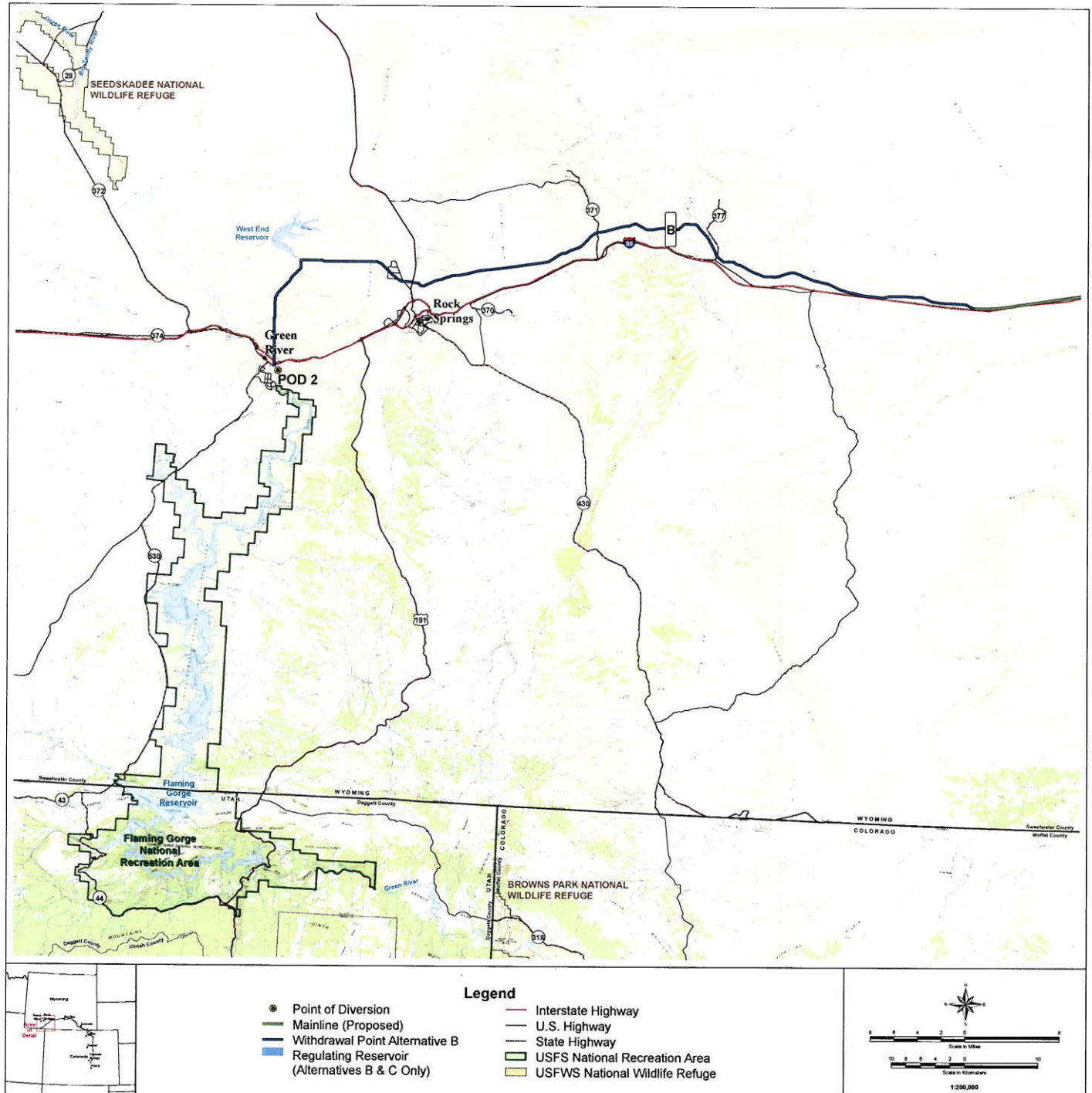


# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### Alternative Route B

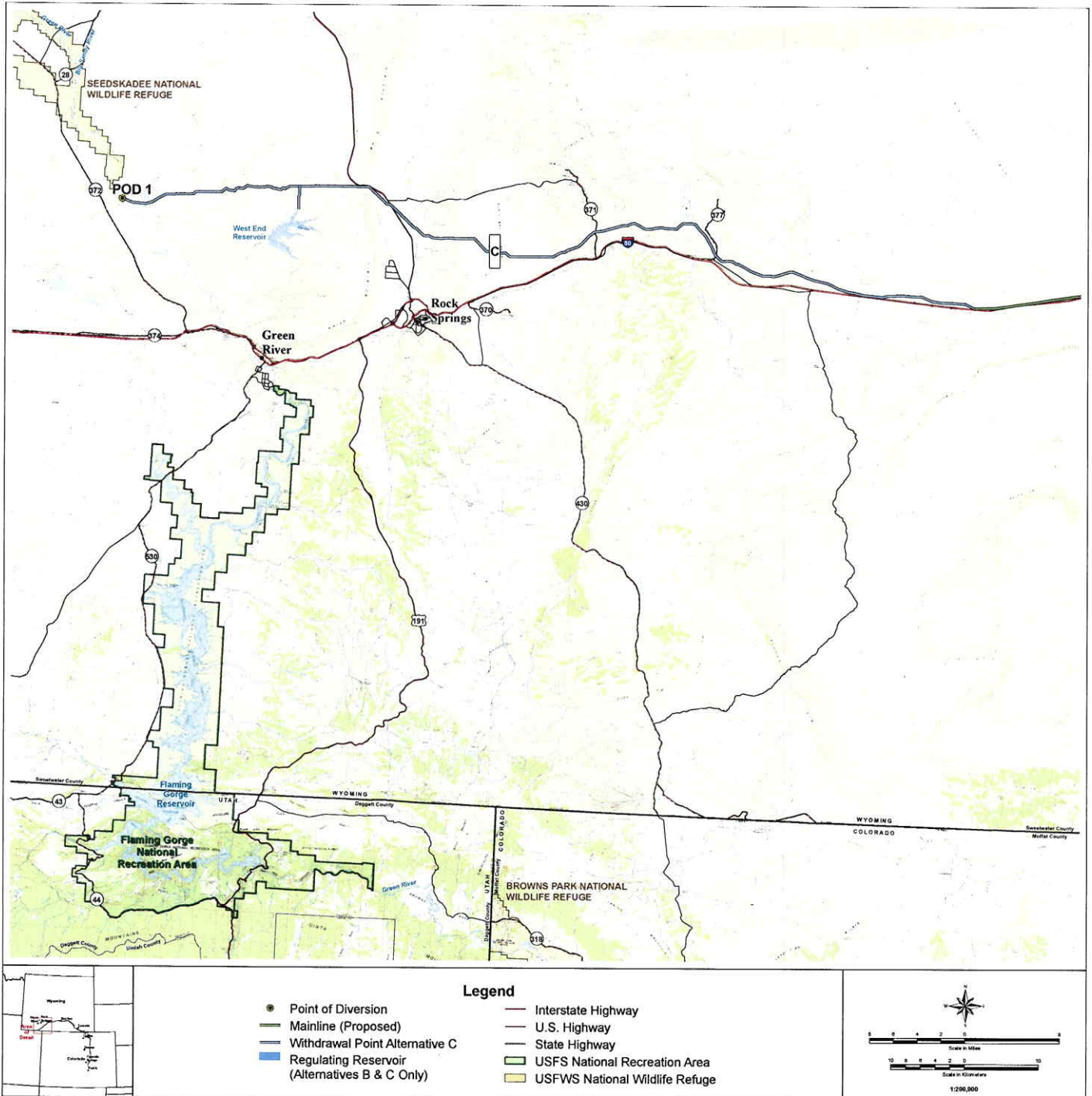


# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### Alternative Route C

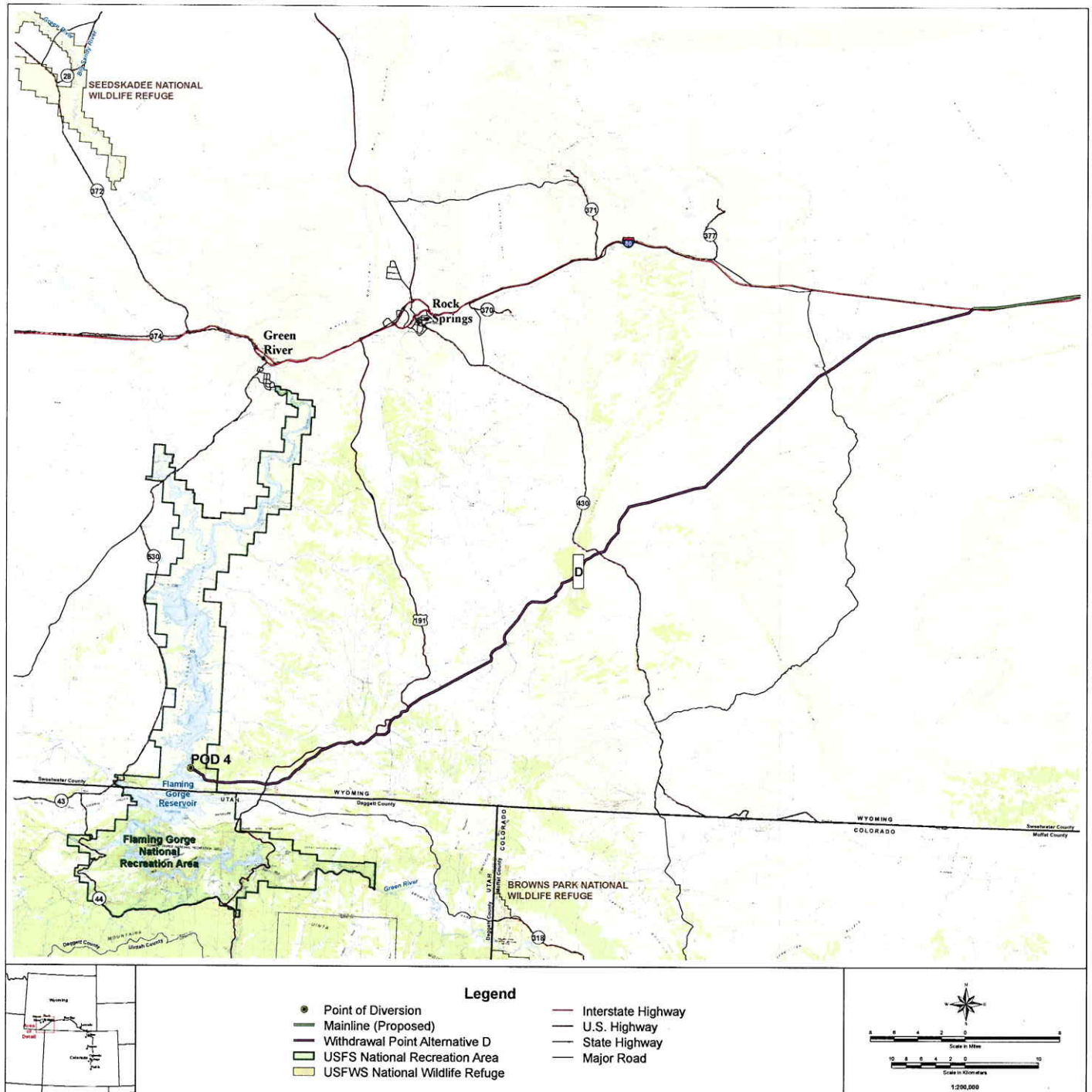


# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### Alternative Route D

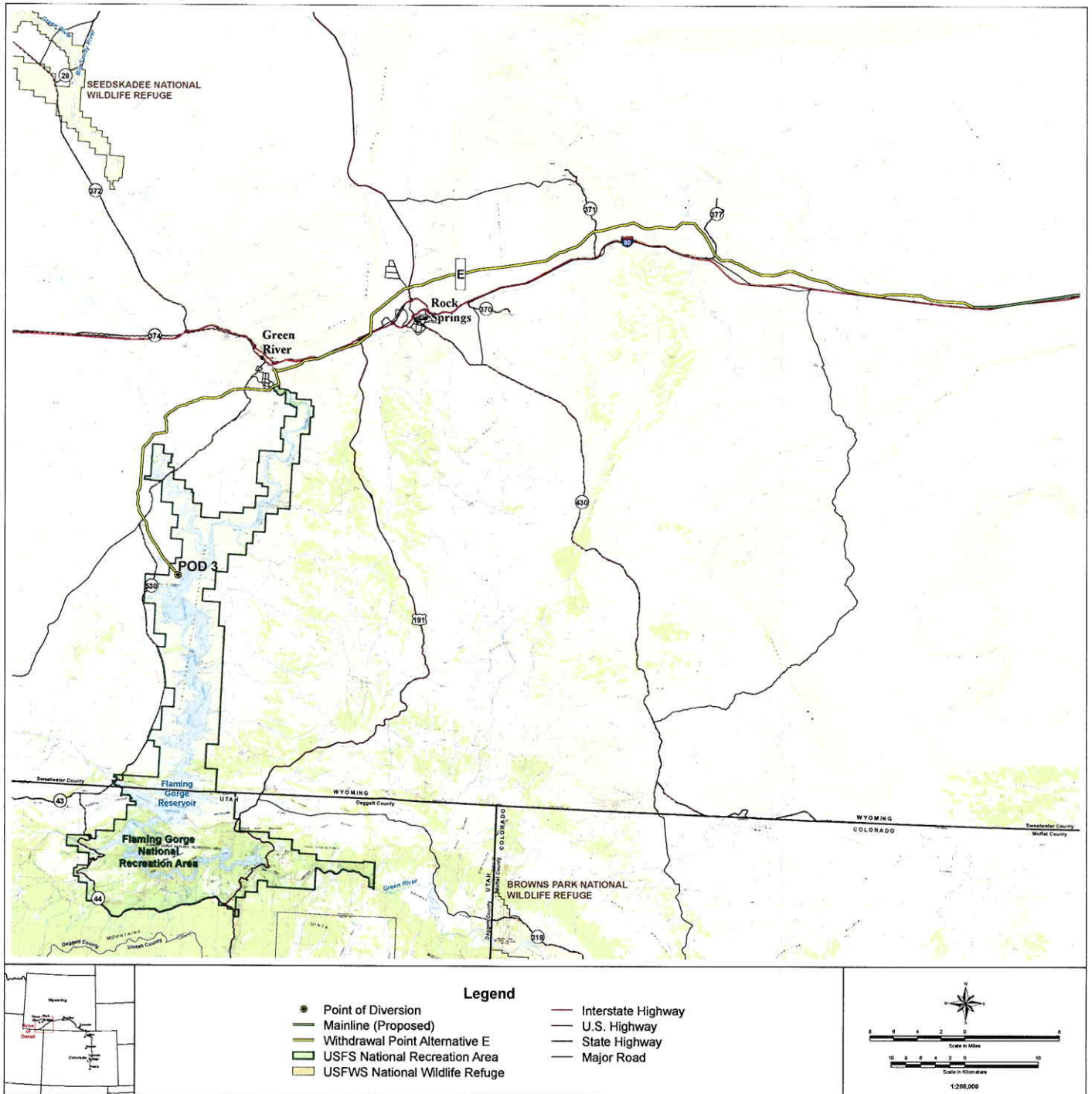


# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### Alternative Route E



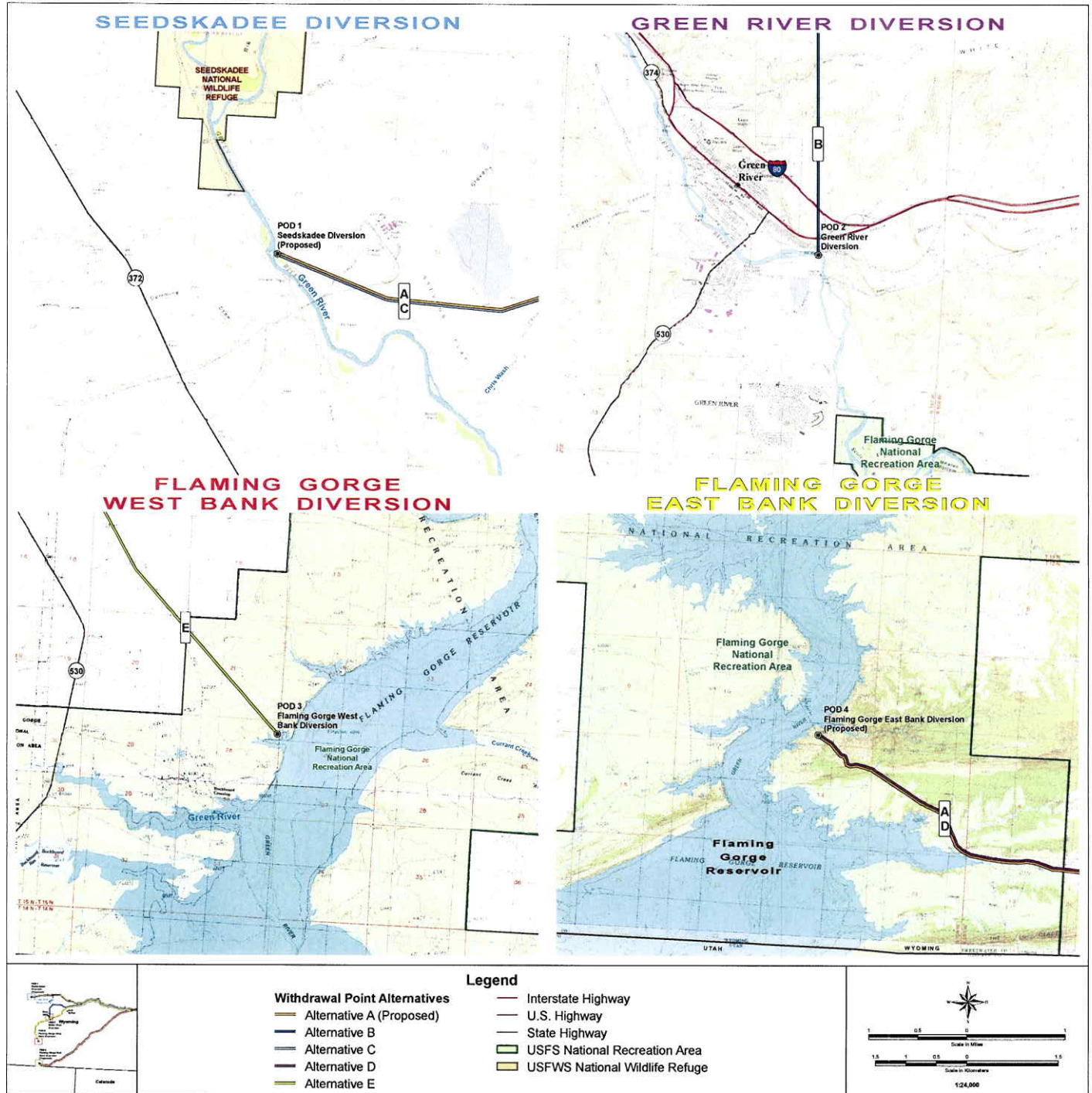
# PROPOSED PROJECT

## Regional Watershed

SUPPLY PROJECT



### Water Withdrawal Diversion Points



# PROPOSED PROJECT

## Regional Watershed

SUPPLY PROJECT

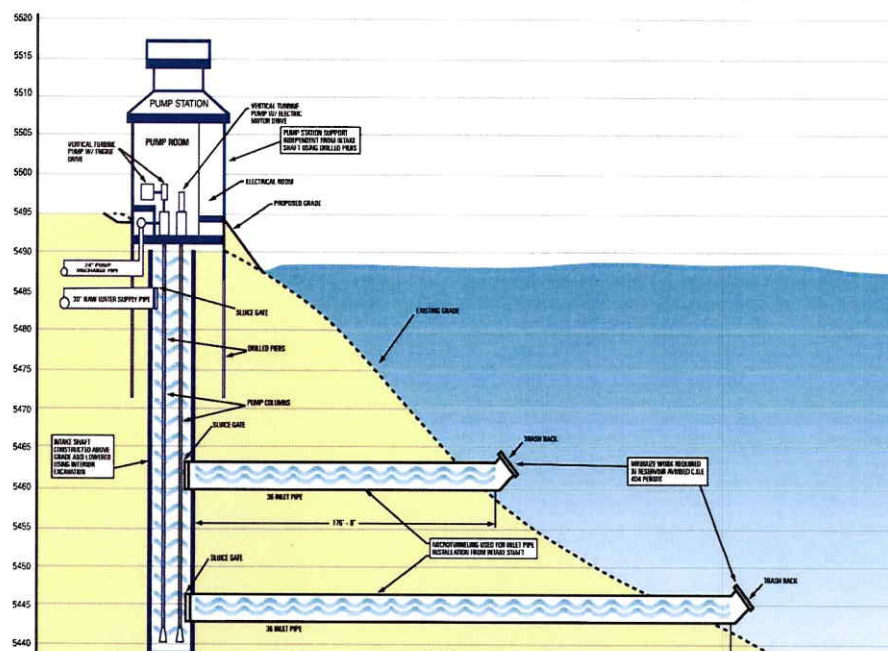


### Photograph of Representative Pump Station Building for the Flaming Gorge Reservoir Intake System



Pump station would be designed to withdraw 250 million gallons of water per day using eight pumps and eight natural-gas driven engines. Note: building dimensions would be approximately 140 feet x 170 feet with a height of 40 feet.

### Schematic Representative Pump Station Building for the Flaming Gorge Reservoir Intake System



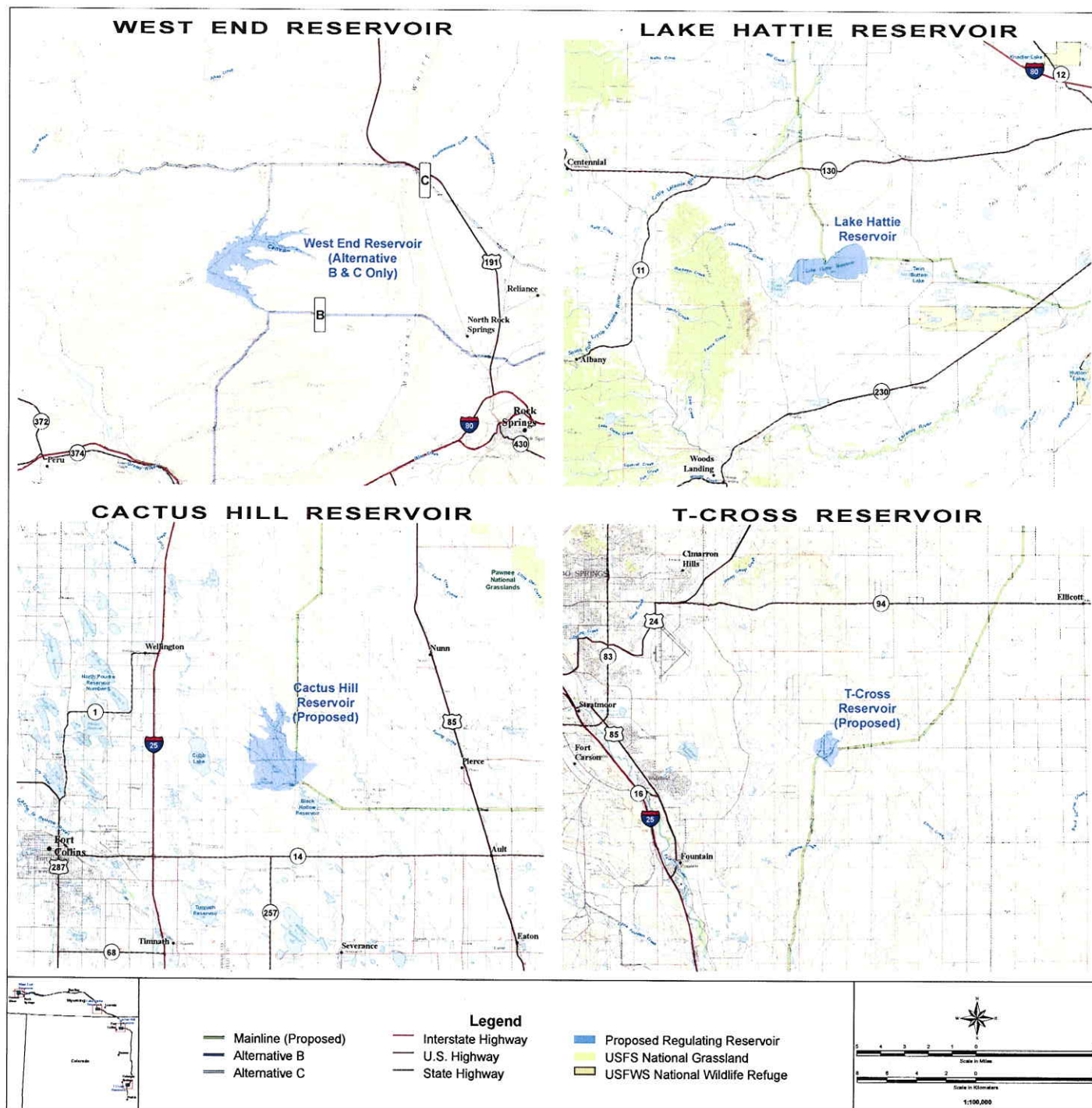
# PROPOSED PROJECT

## Regional Watershed

SUPPLY PROJECT



### Proposed Regulating and Storage Reservoirs

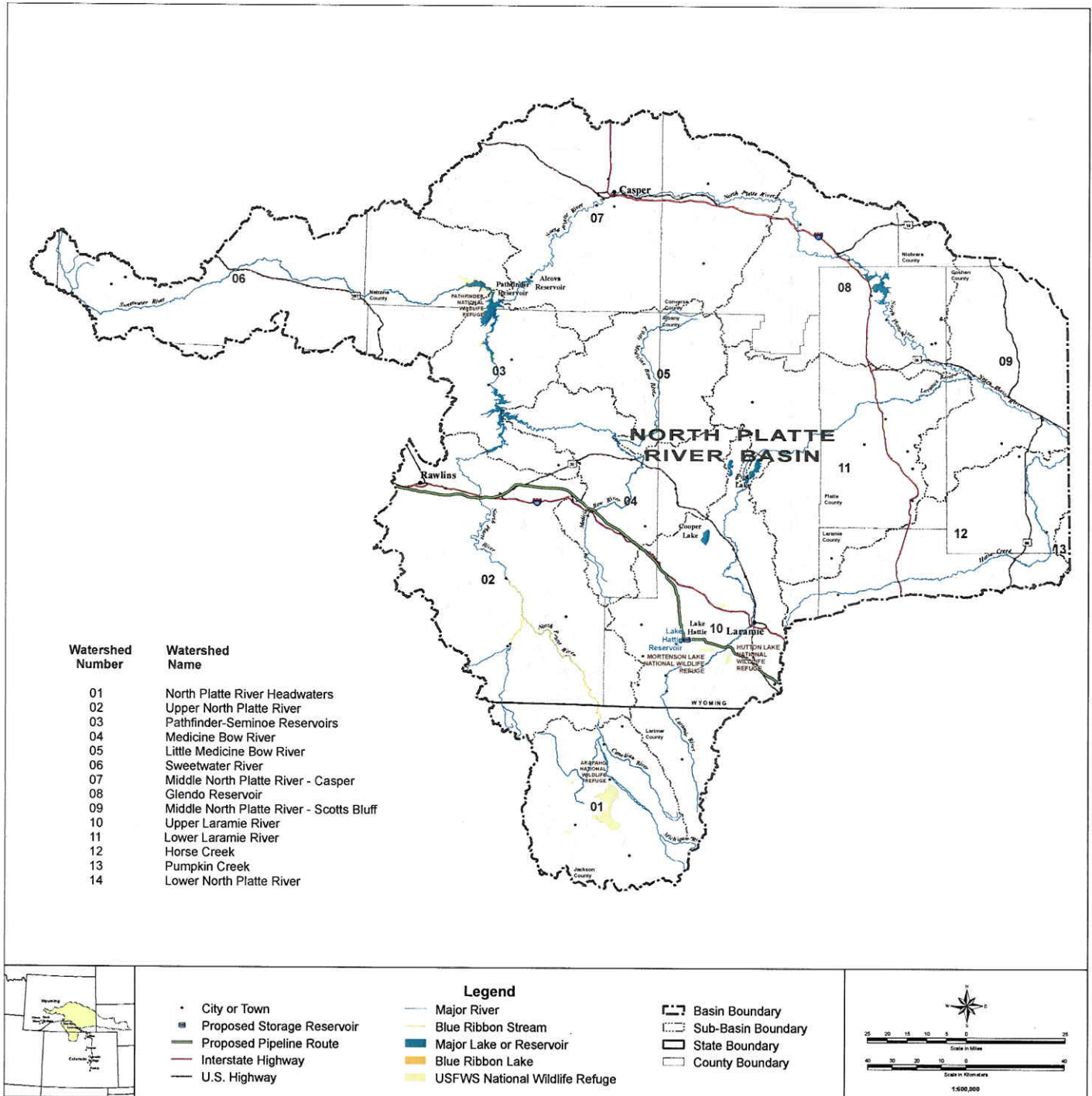


# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### North Platte River Basin

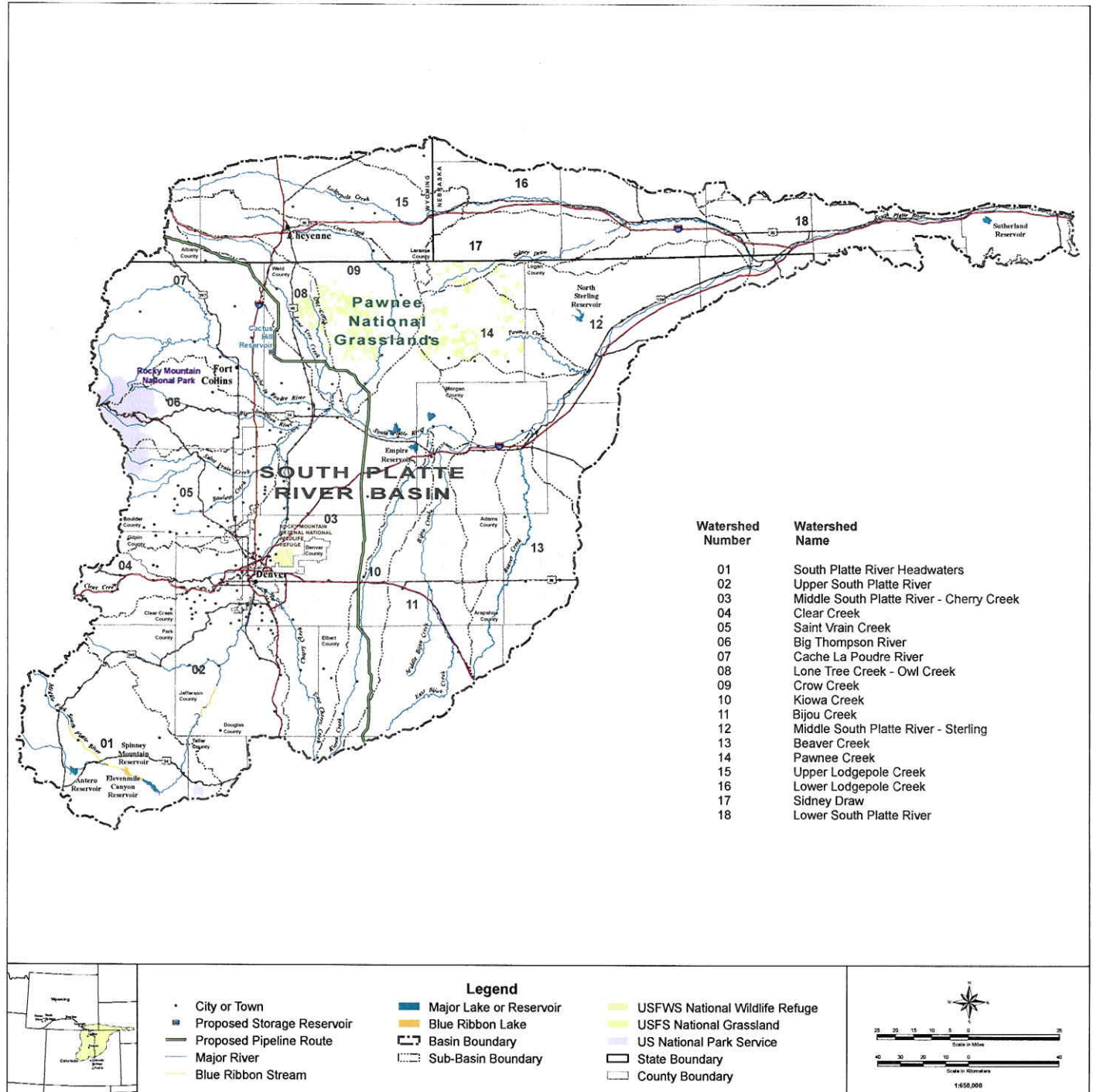


# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### South Platte River Basin

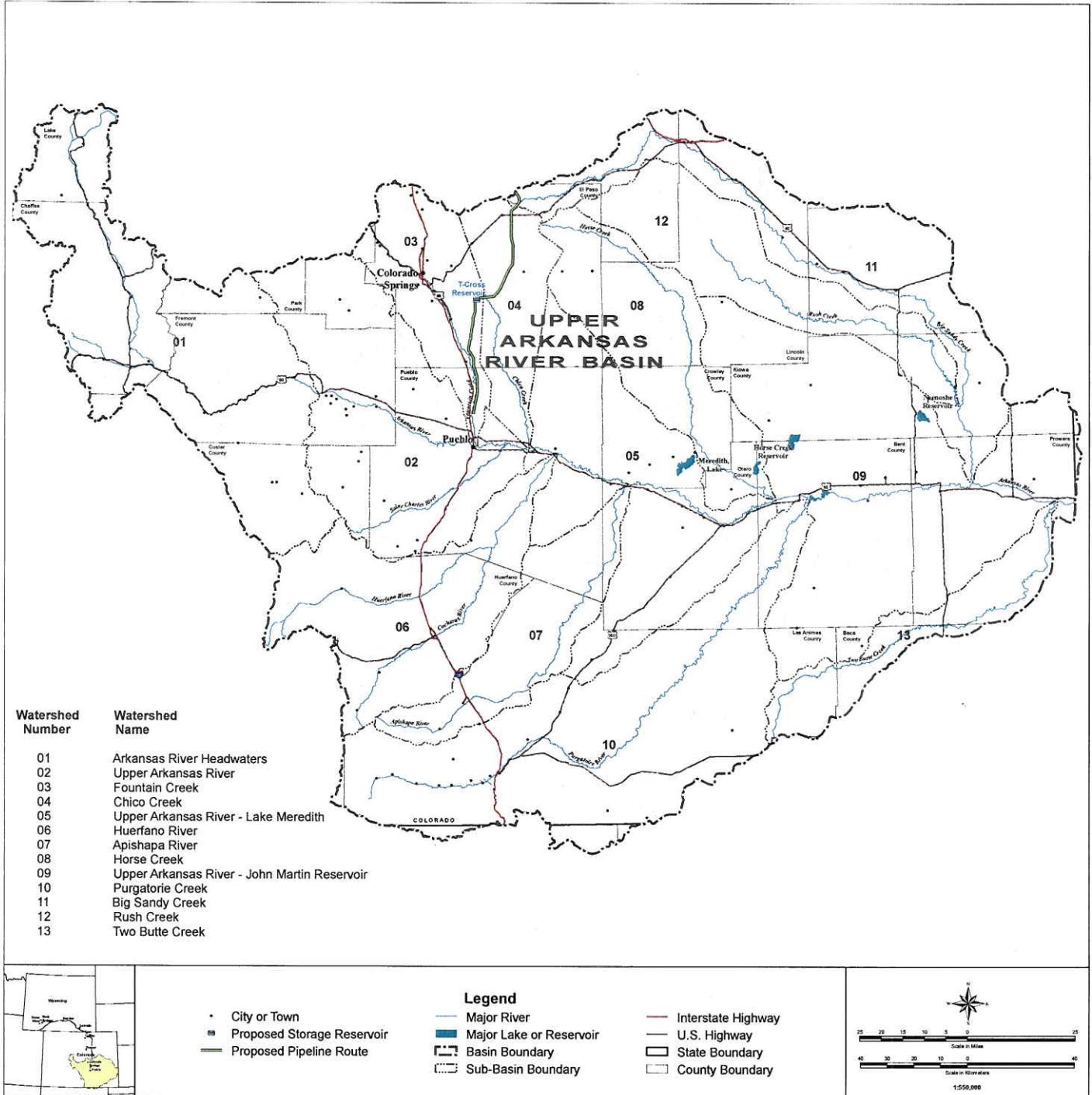


# PROPOSED PROJECT

## Regional Watershed SUPPLY PROJECT



### Upper Arkansas River Basin



# WATER RIGHTS & USE

## Regional Watershed

SUPPLY PROJECT



### Colorado River Compact

**November 24, 1922**

Signatory States: Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming

#### Major Purposes:

- Equitable division of the waters of the Colorado River (Art. I)
- Establish relative importance of different uses (Art. II)
- Promote interstate cooperation (Art. I)
- Remove causes of present and future controversies (Art. I)
- Secure expeditious agricultural and industrial development of the basin (Art. I)

#### Important Provisions:

- Divides the Colorado River Basin into the Lower Basin (California, Arizona, Nevada) and the Upper Basin (Colorado, Utah, New Mexico, Wyoming) at Lee Ferry, Arizona (Art. I and II)
- Allocates 7,500,000 acre-feet of consumptive use to each basin per annum (Art. III)
- Allows the Lower Basin to increase its consumptive use by 1,000,000 acre-feet per year (Art. III)
- Provides for Mexico allocation from surplus waters above the 15,000,000 acre-feet per year; obligation split equally between the basins (Art. III)
- Provides that the Upper Basin will deliver 75,000,000 acre-feet in each consecutive 10-year period to the Lower Basin (Art. III)
- Subordinates navigation use to domestic, agriculture, and power purposes (Art. IV)
- Subordinates power use to domestic and agricultural purposes (Art. IV)
- Termination of compact by unanimous agreement of all signatory states (Art. X)

# WATER RIGHTS & USE

## Regional Watershed

SUPPLY PROJECT



### Upper Colorado River Compact

October 11, 1948

Signatory States: Arizona, Colorado, New Mexico, Utah, and Wyoming

#### Major Purposes:

- Provide for equitable division of the waters of the Upper Basin (Art. I)
- Establish obligations of each state of the Upper Basin with respect to required deliveries at Lee Ferry (Art. I)
- Promote interstate comity (Art. I)
- Remove causes of present and future controversies (Art. I)
- Secure the expeditious agricultural and industrial development of the Upper Basin (Art. I)

#### Important Provisions:

- Of the total beneficial consumptive use allocated to the Upper Basin, less the 50,000 acre-feet per year apportioned to Arizona, the apportionment is (Art. III):
  - Colorado – 51.75%
  - New Mexico – 11.25%
  - Utah – 23.00%
  - Wyoming – 14.00%
- The apportionment is based upon the allocation of man-made depletions, and beneficial use is based on the right to use (Art. III)
- No state will exceed its apportioned use in any water year when the effect is to deprive another signatory state of its apportioned use (Art. III)
- If a call is placed at Lee Ferry by the Lower Basin, the extent of curtailment by each state of the Upper Basin is determined as follows:
  1. The extent and times of curtailment will satisfy full compliance with Article III of the Colorado River Compact (Art. III)
  2. Any state exceeding its allocation in the preceding 10 years will make up that overdraft before demand is placed on any other state (Art. IV)
  3. Excluding rights that predate November 24, 1922, curtailment will be proportioned in the same ratio among the states, as beneficial use of waters in the preceding year (Art. IV)
- The Compact recognizes the provisions of the La Plata River Compact, and consumptive use of water under it will be charged to the respective states under Article III (Art. X)
- Apportions the waters of the Little Snake River between Colorado and Wyoming differentially between rights before and after the Compact was signed (Art. XI)
- Apportions the waters of Henry's Fork, a tributary of the Green River, between Utah and Wyoming (Art. XII)
- Apportions the waters of the Yampa River between Colorado and Utah such that Colorado must ensure that the flow of the Yampa at Maybell does not fall below 5,000,000 acre-feet for any consecutive 10-year period (Art. XIII)
- Apportions the waters of the San Juan River system between Colorado and New Mexico in such a way that Colorado delivers enough water in the San Juan and its tributaries to meet New Mexico's entitlement under Article III considering the water which originates within New Mexico proper (Art. XIV)

# WATER RIGHTS & USE

## Regional Watershed SUPPLY PROJECT



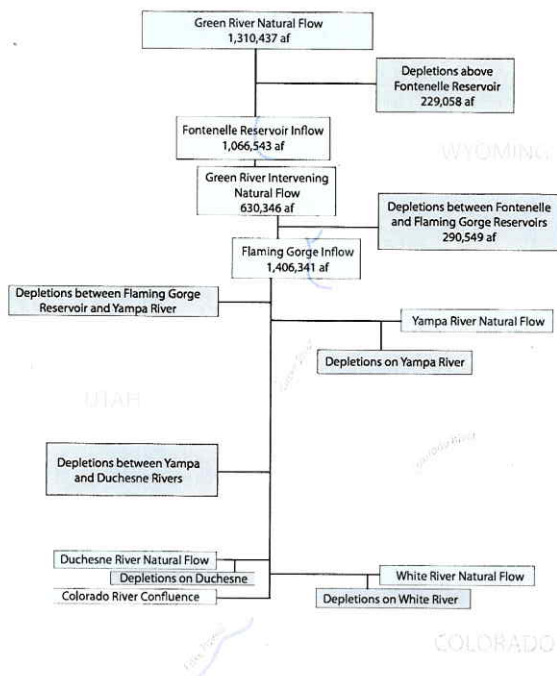
### Water Withdrawal Modeling

#### Purpose of Modeling

- Evaluate hydrologic availability of the proposed withdrawal volumes from the Green River
- Evaluate in-stream flow impacts of withdrawals:
  - Above Flaming Gorge Reservoir
  - Below Flaming Gorge Reservoir
- Evaluate the availability of withdrawal volume from the Flaming Gorge Reservoir
- Evaluate impacts to Flaming Gorge operations that have been cited in the Bureau of Reclamation's Flaming Gorge EIS/ ROD (2006)
- Evaluate climatic changes on water availability

#### Model Basis

- The Flaming Gorge EIS and ROD conducted by the Bureau of Reclamation (2006)
  - The Flaming Gorge model concentrates on impacts to threatened and endangered (T&E) fish downstream of the Flaming Gorge Dam
  - The study accounts for current and projected depletions and uses of water from the Green River and its tributaries
  - The EIS/ ROD concludes the Flaming Gorge could operate to meet the flow and temperature recommendations for T&E fish downstream of the Flaming Gorge Dam based on future depletions
- The modeling would utilize a RiverWare Simulation Model
- The study will examine the Green River from the Fontenelle Reservoir to the Colorado River Confluence



# KEY RESOURCE ISSUES

Regional Watershed  
SUPPLY PROJECT



## Evaluation of Project Effects on Environmental Resources

- Environmental resources to be addressed in the EIS include surface water, water rights, groundwater, floodplains, wetlands, riparian areas, geology, vegetation, noxious weeds, wildlife, aquatic biology, special status species, land use, recreation, aesthetics and visual resources, transportation, cultural resources, socioeconomics, noise, air quality, and public health and safety
- Project study areas will be defined based on the location of project facilities and the areas of potential effects for each resource
- Baseline (affected environment) information will be described based on existing published and unpublished literature, personal communications with agency resource specialists, and GIS mapping
- Existing baseline information on biological (vegetation, noxious weeds, wetlands, wildlife, and sensitive species) and cultural resources will be supplemented with field surveys within potential effects areas
- Resource issues will be identified based on feedback from public scoping, agency contacts, other NEPA analyses, and experience of resource specialists on similar types of projects
- Impacts will be analyzed using indicators or assessment parameters that focus on resource issues
- Mitigation will be identified for those impacts that are considered to be at levels of concern after implementing project-committed protection measures and best management practices

# KEY RESOURCE ISSUES

## Regional Watershed

SUPPLY PROJECT



### Preliminary General Issues

Preliminary general issues associated with the RWSP EIS were identified by the agencies and the consultant team. The list of issues will be reviewed and expanded following scoping. At a minimum, the following general resource areas will be examined in the EIS:

- Biological resources (including wildlife, vegetation, aquatic and noxious weeds)
- Federally listed and special status species
- Recreational uses
- Floodplains and wetlands
- Cultural and historical resources and Native American values
- Physical resources (including air quality, soil, and geology)
- Water resources (including surface water and groundwater quality and quantity)
- Land use, including agricultural operations
- Visual and aesthetic resources
- Socioeconomic resources (including environmental justice)
- Cumulative impacts associated with other projects in the area or region

# KEY RESOURCE ISSUES

Regional Watershed  
SUPPLY PROJECT



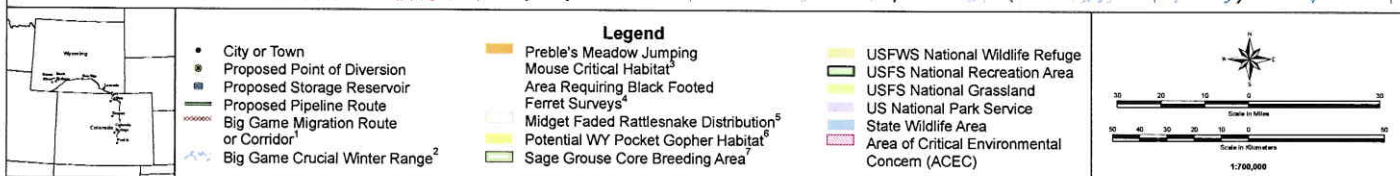
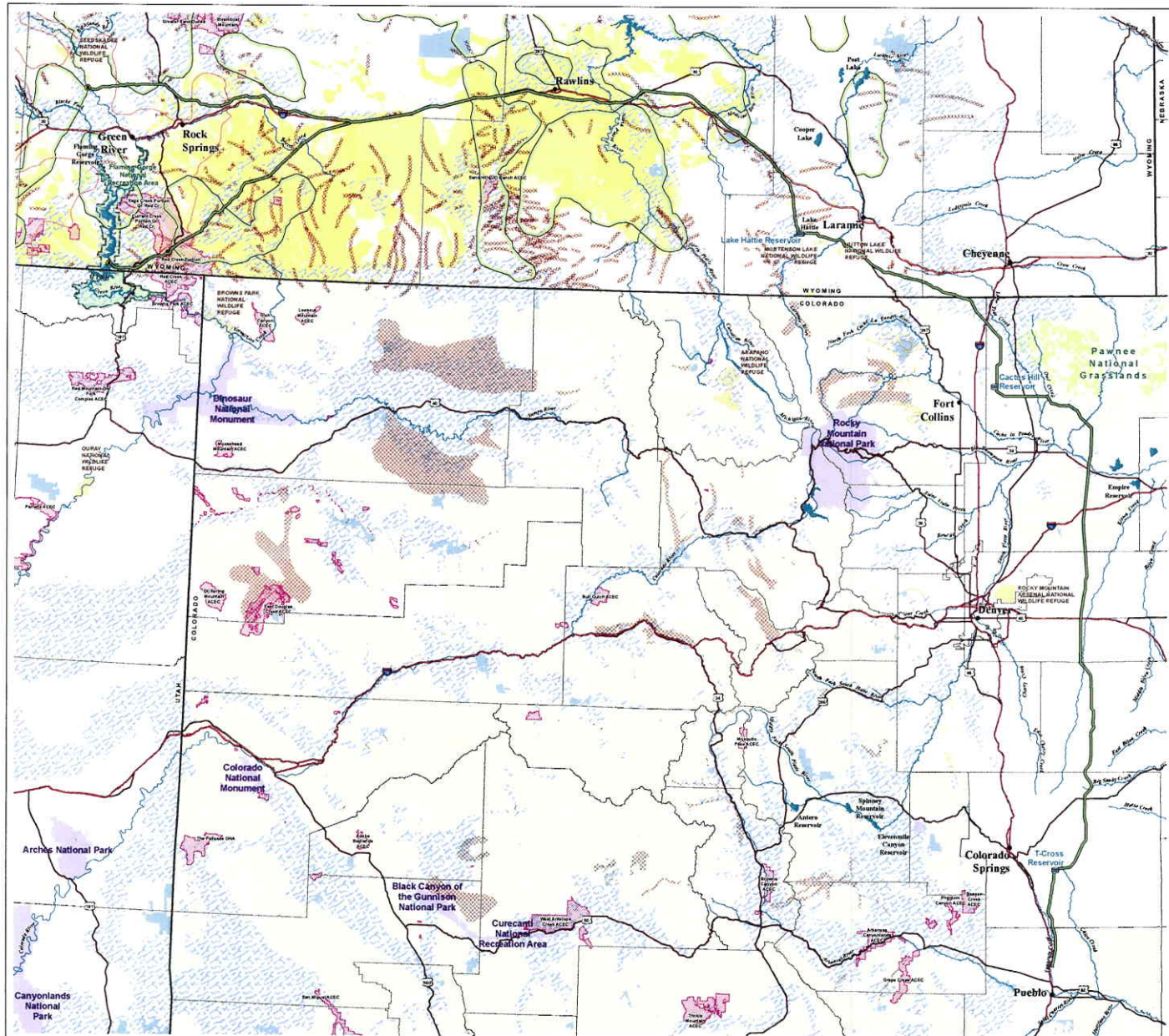
## Preliminary Specific Issues

A comprehensive list of specific issues to be analyzed in the EIS will be determined at the close of all scoping activities and will be revised continuously throughout the NEPA process. At a minimum, we anticipate the following specific issues:

- Effect of proposed diversions from the Green River on water supply needs for municipal water demands and operation of Flaming Gorge Reservoir
- Effect of the proposed diversion on the communities whose economies are somewhat or entirely dependent on water-related recreation
- Effect on water quality in the Green River
- Effect of depletions on riparian and aquatic habitats, including the possibility for aquatic vegetation to trend toward upland vegetation
- Effects of depletions, pipeline construction, and/or storage construction on protected, threatened, endangered, or sensitive species of animals or plants, or their critical habitats
- Effect of additional firm yield through water deliveries on growth and development along the Front Range of Colorado
- Effect of trans-basin diversions on water quality treatment requirements in storage reservoirs and delivery points in Wyoming and the Front Range of Colorado
- Effects of depletions on water-related recreation such as fishing and boating and fisheries in the Green River
- Potential transfer of nuisance organisms between drainages

# BIOLOGICAL RESOURCES

## Regional Watershed SUPPLY PROJECT



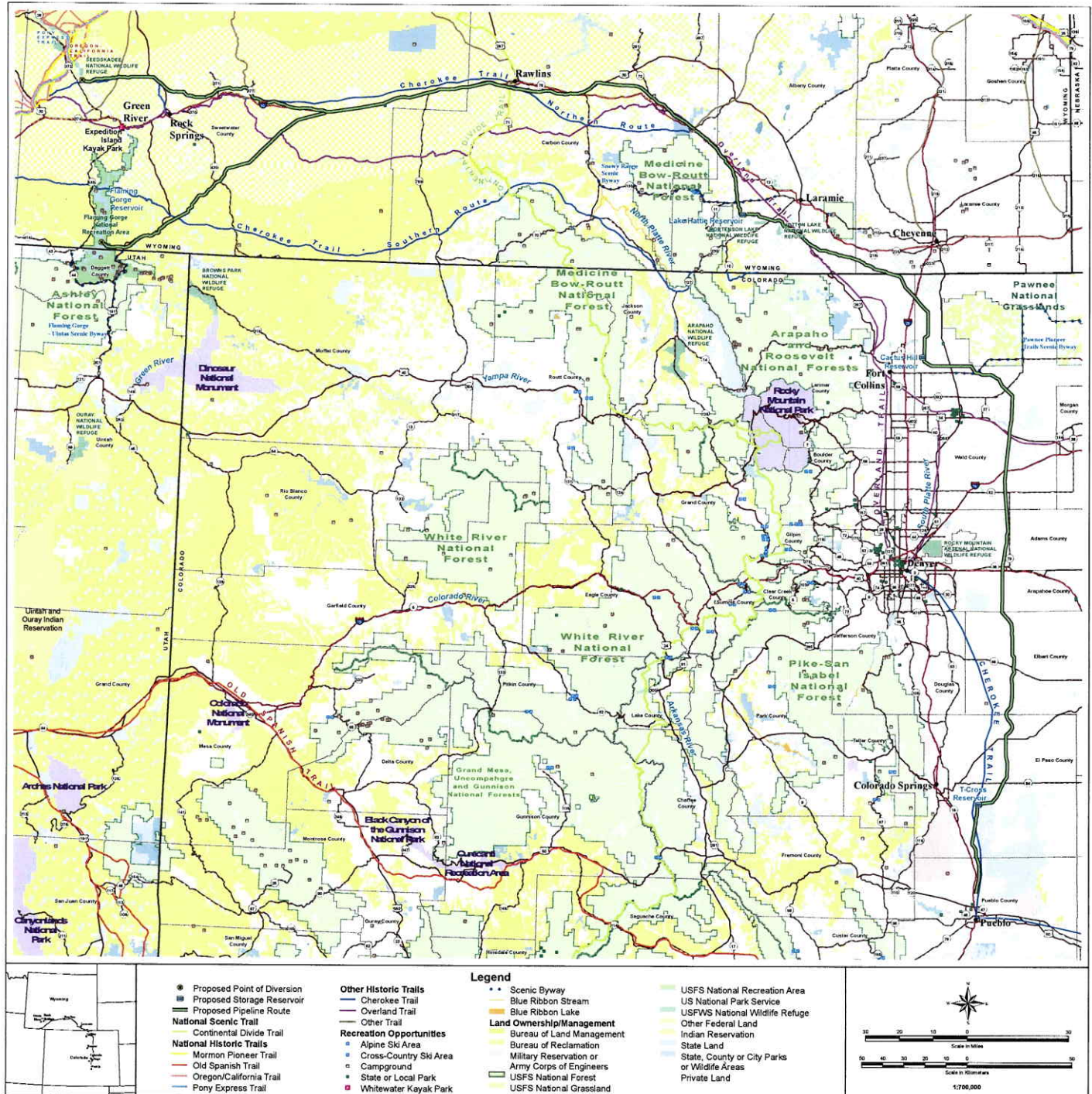
Feature	Resource / Species	Source Agency	Citation
1	Big Game Migration Route or Corridor Antelope, Dugong Sheep, Elk, Moose, Mountain Goat, Mule Deer, White-tailed Deer	Wyoming Game and Fish Department Colorado Division of Wildlife	Wyoming Game and Fish Department Wyoming Big Game Migration Routes. Apr. 2002. <a href="http://biggame.wyo.gov/education/management/management.htm">http://biggame.wyo.gov/education/management/management.htm</a> Colorado Division of Wildlife Colorado Species Distribution: Migration Corridors. Oct. 2006. <a href="http://wildlife.state.co.us/education/management/management.htm">http://wildlife.state.co.us/education/management/management.htm</a>
2	Big Game Crucial Winter Range Antelope, Dugong Sheep, Elk, Moose, Mountain Goat, Mule Deer, White-tailed Deer	Wyoming Game and Fish Department Colorado Division of Wildlife Utah Division of Wildlife Resources	Wyoming Game and Fish Department Wyoming Big Game Migration Routes. Apr. 2002. <a href="http://biggame.wyo.gov/education/management/management.htm">http://biggame.wyo.gov/education/management/management.htm</a> Colorado Division of Wildlife Colorado Species Distribution: Migration Corridors. Oct. 2006. <a href="http://wildlife.state.co.us/education/management/management.htm">http://wildlife.state.co.us/education/management/management.htm</a> Utah Division of Wildlife Resources Utah Big Game Migration Routes. July 2000. <a href="http://wildlife.state.ut.us/education/management/management.htm">http://wildlife.state.ut.us/education/management/management.htm</a>
3	Preble's Meadow Jumping Mouse Critical Habitat	US Fish and Wildlife Service	U.S. Fish and Wildlife Service Wyoming Preble's Meadow Jumping Mouse Critical Habitat. June 2003. <a href="http://www.fws.gov/yw/">http://www.fws.gov/yw/</a>
4	Area Requiring Black Footed Ferret Surveys	US Fish and Wildlife Service	U.S. Fish and Wildlife Service Colorado Preble's Meadow Jumping Mouse Critical Habitat. June 2003. <a href="http://www.fws.gov/yw/">http://www.fws.gov/yw/</a>
5	Midget Faded Rattlesnake Distribution	Wyoming Game and Fish Department	Wyoming Game and Fish Department Midget Faded Rattlesnake. 2004. <a href="http://biggame.wyo.gov/education/management/management.htm">http://biggame.wyo.gov/education/management/management.htm</a>
6	Potential WY Pocket Gopher Habitat	University of Wyoming - Wyoming Natural Diversity Database	University of Wyoming - Wyoming Natural Diversity Database Wyoming and Idaho pocket gopher Data Distribution. Dec. 2008. <a href="http://wyo.naturaldiversitydatabase.org/pocket_gopher/">http://wyo.naturaldiversitydatabase.org/pocket_gopher/</a>
7	Sage Grouse Core Breeding Area	Wyoming Game and Fish Department	Wyoming Game and Fish Department Sage Grouse Core Breeding Areas. Version 2. Aug. 2005. <a href="http://biggame.wyo.gov/education/management/management.htm">http://biggame.wyo.gov/education/management/management.htm</a>

# KEY RESOURCE ISSUES

## Regional Watershed SUPPLY PROJECT



### Land Ownership and Recreational Opportunities



# Key Resource Issues

## Regional Watershed

SUPPLY PROJECT



### Help us define the issues

This list of issues is not all inclusive.

We invite you to suggest specific issues and concerns within these general categories or to suggest other issues that should be evaluated in the EIS.

We need your comments by May 19, 2009.

Submit your comments at this meeting  
or mail/email comments to:

Rena Brand, Project Manager  
U.S. Army Corps of Engineers, Omaha District  
Denver Regulatory Office  
9307 S. Wadsworth Blvd.  
Littleton, CO 80128-6901  
Phone: 303.979.4120  
Email: [mcrgeis@usace.army.mil](mailto:mcrgeis@usace.army.mil)