CHAPTER 1

1.0 PURPOSE AND NEED FOR ACTION

1.1 HISTORY AND BACKGROUND

The High Uintas Wilderness (HUW), established by the Utah Wilderness Act of 1984 (99 Stat.1657), contains nineteen reservoirs used for mid to late season irrigation for lands in the Uinta Basin of northeastern Utah. Fox and Crescent Reservoirs are two of the nineteen, and are in need of repair if they are to continue to be used to store water for use by the owners of the water rights. The reservoirs are permitted by Forest Service special use authorizations to the Dry Gulch Irrigation Company (DGIC). Provisions of the special use authorizations require that the reservoirs be properly maintained to insure their safe and proper functioning as draw down reservoirs.

The history of the Forest Service authorizations is as follows:

Fox and Crescent Dams and Reservoirs –
The original Forest Service authorizations were dated September 30, 1922, and were issued….“for the purpose of “constructing, maintaining, impounding, dams, and storing water for irrigation purposes”. Construction was started in 1923 and completed in 1927.

New authorizations were issued March 20, 1963, “for the purpose of constructing, using, and maintaining a dam and reservoir for storage of 750 acre feet of irrigation water.”

The latest authorizations were issued February 15, 1996, with the types of use shown as “dams and reservoirs”. The authorizations were authorized under the Organic Administration Act of June 4, 1897. Both Forest Service authorizations have an expiration date of December 31, 2005.

Dry Gulch Irrigation Company currently holds two irrigation water rights in Fox Reservoir (#43-3176 and #43-3824) and one irrigation water right in Crescent Reservoir (#43-3175). The Crescent Reservoir water right and the #43-3176 water right in Fox Reservoir have 1919 priority dates and are for storage of water from November 1 to April 1, with use from April 1 to November 1. In Fox Reservoir, 750 acre-feet of storage is allowed with the 1919 water right. An additional 400 acre-feet of storage is authorized in Fox Reservoir by water right #43-3824, which has a priority date of 1964, a storage period of October 15 to July 15, and a use period of April 1 to November 1. Crescent Reservoir water right #43-3175 allows storage of 216 acre-feet year round.

Both dams and reservoirs have served the stockholders in the DGIC for many years. The reservoirs are in tandem – Crescent Reservoir water drains into Fox Reservoir and all stored water is then released through the Fox Reservoir outlet works into a small tributary and eventually flows into the main Uinta River for diversion and use downstream on private property. The reservoirs, now over seventy years old, are in need of repair and upkeep to insure their safety and continued use. Recent safety inspections of the dams by the Utah State Department of Natural Resources, Division of Water Rights and the Forest Service indicate that there are serious defects with the outlet works on both reservoirs, and on Fox Reservoir there are additional problems with the dikes, the interior pipes, the existing wet well, and the spillway.

The Utah State Department of Natural Resources, Division of Water Rights, Utah State Engineer’s Office, and the Forest Service have agreed on the repair work that must be undertaken if the reservoirs are to continue to be used as in the past *(Bastian 2000 and 2001, Kulesza 2001, Marchant Field Notes 2000, Marchant 2000 Note to Rick Hall, Assistant State Engineer, Marchant 2001, Morgan August 10, 2000. Morgan September 19, 2000, Morgan October 25, 2000, Morgan November 29, 2000, Nelson 2000, Self – note to Don Marchant).* The Utah State Engineer’s Office and the Forest Service have classified both dams as “Moderate Hazard” structures *(Utah Government Web Site – DamView Dam Safety Database, Intermountain Region Wilderness Dam Database 2003, Ashley NF Rating Sheets for Fox and Crescent Reservoirs).* Failure to repair the

reservoirs to the accepted standard could eventually result in storage restrictions being put into place on each reservoir. Storage restrictions would be placed to protect soil and vegetation resources below the reservoirs in the Uinta Canyon drainage and to minimize danger to Forest users and damage to property on National Forest System lands (U-Bar Ranch Resort, campgrounds, bridges, trails, water diversions) and on Uintah and Ouray Indian Reservation Tribal Lands (Big Springs Recreation Area, water diversions).

The owners of the irrigation reservoirs are dependent on the water stored for producing their crops and place a high value on them. Without alternative storage, or other water delivery system to the farms and ranches, the value of the water in late summer would be lost.

The only irrigation water available to Dry Gulch Irrigation Company stockholders on the Uinta River in 2002 was the winter water storage in the high mountain lakes and reservoirs. In the summer of 2002, the Uinta River produced natural flow water for water rights on Indian lands and produced no irrigation water for secondary water users. *(Crozier 2002)*

The wilderness classification poses several obvious constraints and prohibitions to completing necessary repairs or reconstruction of the reservoirs. Foremost among these are the wilderness restrictions on the use of motorized tools and equipment and mechanical access.

While the 1964 Wilderness Act (16 U.S.C. 1131) has the general prohibition against motorized tools and equipment and mechanical access, it does provide for exceptions if necessary for "…the minimum requirements for the administration of the area for the purposes of this Act…" (1964 Wilderness Act, Section 4c). The reservoirs are legally authorized, are in the wilderness, and must be properly administered to protect wilderness values, downstream resources, and insure public safety. While presently permitted by Forest Service authorizations, the DGIC has applied for easements under the provisions of the Colorado Ditch Bill (FLPMA, Sec. 501 – 43 U.S.C. 1761). Easements under this law are considered valid existing rights under the Wilderness Acts and must be treated as such. The reservoirs qualify for easements under the law, and such easements will eventually be issued.

Allowing motorized tools and equipment and mechanical access under this provision of the 1964 Wilderness Act, requires a determination of the minimum requirements necessary to properly administer the use, and compliance with the National Environmental Policy Act (83 Stat.852). This Environmental Impact Statement will meet both requirements.

Photo 1.a – Fox Reservoir

Related Project – the 203(a) Uinta Basin Replacement Project:

Another project is underway that has bearing upon the proposal to repair Fox and Crescent Reservoirs as proposed by DGIC. It is important to discuss this project because it sets some context for the request to repair these two reservoirs.

It has long been recognized that the 19 high mountain reservoirs in the HUW would someday need to be stabilized or require heavy maintenance. For many years, since the Colorado River Storage Act (70 Stat. 105) was passed in the

mid 1950's, and through the various formulations of the Central Utah Project, these wilderness reservoirs were to be stabilized and the storage rights transferred to new facilities to be built at lower elevations and more easily accessible sites. Under these Acts, provision was made to stabilize the reservoirs after the storage rights have been transferred to new reservoirs. The Forest Service has always been strongly in favor of high lakes stabilization. Stabilization would allow these old reservoirs to be retired and the sites rehabilitated, enhancing the wilderness values by returning the natural hydrologic function to the drainages. New facilities would allow the water users to better manage their water by having new reservoirs, easily accessible by motor vehicles. Water users have been reluctant to invest heavily in the maintenance of the high mountain reservoirs due to the pending status of being stabilized in the near future.

Because it has long been planned to stabilize these reservoirs at natural lake levels once new facilities were built under the Central Utah Project, some maintenance work on many of the reservoirs has been postponed for many years, increasing the need, and the cost of repair work. The reservoirs were built using draft horses and Fresno scrapers and with other methods, tools, and equipment quite different than those in use today. Design standards have changed since the construction of the dams and when repairs or reconstruction is authorized, the facilities must meet the most recent federal and state standards.

The Reclamation Projects Authorization and The Adjustment Act of 1992 (P.L. 102-575), often called the Central Utah Project Completion Act, (CUPCA) contained provisions to again look at completion of units of the project that would allow new reservoirs to be built at lower elevations and allow the high lakes in the HUW to be stabilized. CUPCA authorized the Uinta Basin Replacement Projects (UBRP) in section 203(a). Title II of the act authorized the Central Utah Water Conservancy District (CUWCD) to take the lead in planning for this effort and gave the CUWCD quasi - federal status so they could assume the federal responsibility to prepare the required Environmental Impact Statements (EIS). The UBRP authorized the CUWCD to look at reformulating two specific projects – the Uinta Unit and the Upalco Unit.

The CUWCD worked very hard through the early 1990's to work with affected parties, formulate alternative ways to meet the intent of the Act, and produced draft EIS's for the Upalco and Uinta units in December of 1996 and February of 1997, respectively. Both draft EIS's contained provisions to stabilize some of the wilderness reservoirs. The Upalco Unit would stabilize ten reservoirs after storage rights were transferred to the proposed new Crystal Ranch Reservoir in Yellowstone Canyon and the Uinta Unit would stabilize five reservoirs after the storage rights were transferred to the proposed new Lower Uinta Canyon reservoir (located on tribal trust lands). The reservoirs to be stabilized under the Upalco Unit are those owned and operated by the Moon Lake Water Users Association (MLWUA), and those to be stabilized under the Uinta unit are owned and operated by the Dry Gulch Irrigation Company (DGIC) and include Fox and Crescent Reservoirs.

For various reasons, primarily dealing with “Northern Ute Indian” water rights, and who would control the operation of the new reservoirs, the parties could not come to agreement, and the Uinta and Upalco Units will not be pursued further.

A new proposal has emerged that, if implemented, would stabilize thirteen of the nineteen reservoirs in the HUW. A reformulation of the 203(a) authorization, it proposes to enlarge Big Sand Wash Reservoir, a private reservoir owned by the MLWUA, re-regulate the flows in Moon Lake, and add some additional pipelines and diversions – all on private property. The thirteen reservoirs to be stabilized under this program do <u>not</u> include the HUW reservoirs in Uinta Canyon that were included under the old Uinta Unit – including Fox and Crescent Reservoirs. At this time, there are no alternative water storage sites identified that will allow the stabilization of the Uinta Canyon reservoirs. The decision on the 203(a) project was made in October 2001, and the selected alternative will stabilize the 13 reservoirs mentioned above.

Since Fox and Crescent reservoirs are not scheduled to be stabilized through the 203(a) project, and no other alternative storage opportunities have been identified, the DGIC submitted the proposal to invest in, and repair these reservoirs.

It is important to note that while it may be possible in the future to find alternative solutions to the storage of the water in these reservoirs and that it may be possible to eventually stabilize these reservoirs, it is beyond the scope of this analysis to address stabilization. A site restoration plan would be needed if this proposal goes forward. This EIS analyzes the proposal to repair Fox and Crescent Reservoirs to allow continued use as water storage for mid- to late season irrigation use.

1.2 PURPOSE AND NEED FOR ACTION

Dry Gulch Irrigation Company (DGIC) has applied for a permanent easement for Fox and Crescent Reservoirs located in the High Uintas Wilderness, Ashley National Forest. DGIC has also applied for authorization to repair the existing dams and impoundment structures to bring them up to current engineering and dam safety standards.

The maintenance work at the two reservoirs is required if the dams are to continue to serve as storage facilities to provide for mid- to late-summer irrigation in the lower valleys of the Uinta Basin of Utah.

The Division of Water Rights of the Utah State Department of Natural Resources, the State of Utah Engineer's Office, and the Forest Service require that dams be maintained to standard to insure their safe operation, protect adjacent and downstream resources, private and public property, and other values (*Utah Government Web Site – Rule R655-10, Dam Safety Classifications, Approval Procedures and Independent Reviews, Utah Code Section 73-5a-101, USDA Forest Service 1983, State of Utah Dam Safety Guide to Routine Maintenance – 1990, State of Utah Dam Safety Guide to Emergency Action Plan – 1990 & 1994, State of Utah Dam Safety Guide to Standard Operating Procedures – 1991 State of Utah Statutes and Administrative Rules for Dam Safety - July 1996*). *(Inspection Reports on file at Ashley National Forest Supervisor's Office).*

The Forest Service has determined that Dry Gulch is qualified for permanent easement under the Colorado Ditch Bill, 43 U.S.C. §1761(c). *(The requirements for issuance of a Ditch Bill are listed in the following paragraph.)* Under the Ditch Bill, the Forest Service is required to issue permanent easements for qualifying water diversion and impoundment facilities. Therefore, the purpose of this decision is to establish the terms and conditions of the easement that must be issued under the Ditch Bill. Those terms and conditions will include standards for repair and upgrade of the facilities necessary to meet current safety and engineering requirements.

DGIC meets the following requirements under Section 501of Public Law 99-545 (also known as the Colorado Ditch Bill):

a. The traversed National Forest lands are in a State where the appropriation doctrine governs the ownership of water rights;
b. At the time of submission of the application the water system is used solely for agricultural irrigation or livestock watering purposes;
c. The use served by the water system is not located solely on Federal lands;
d. The originally constructed facilities comprising such system have been in substantially continuous operation without abandonment;
e. The applicant has a valid existing right, established under applicable State law, for water to be conveyed by the water system;
f. A recordable survey and other information concerning the location and characteristics of the system as necessary for proper system as necessary for proper management of National Forest lands is provided to the Secretary of Agriculture by the applicant for the easement; and
g. The applicant submits such application on or before December 31, 1996.

The Ashley National Forest received Dry Gulch Irrigation Company's applications for Fox and Crescent Lakes on August 5, 1996. The applications were reviewed and considered adequate for meeting these requirements.

1.3 PROPOSED ACTION

The Forest Service proposes to develop the terms and conditions for operation, maintenance, and repair of the water impoundment facilities under easements that will be issued under the Ditch Bill. The repair work that would be authorized is as follows:

Refer to Project Location Map, pages 9, and Fox and Crescent Reservoirs Maintenance Project Site Map, page 10.

FOX RESERVOIR

- The outlet pipe will be repaired. The inlet structure will be formed and a new concrete structure will be poured. The outlet structure may also need to be replaced, or if not replaced, then some grout work will be necessary.

- Existing head gate controls will be removed and a new head gate and frame assembly will be installed on the inlet end of the outlet pipe.

- The southwest levee will be raised in elevation to match the elevation of the dam. Native material from existing borrow pits are proposed to be used to complete this portion of the project.

- There may also be some work required on the main dike.

- The leak at the toe of the southwest levee will be repaired.

- Any leaks on the upstream apron of the spillway will be repaired.

- All woody vegetation will be removed from the existing dam, levees, and dike (this action could take place annually or as needed for long term maintenance.)

Photo 1.b – Dam at Fox Reservoir

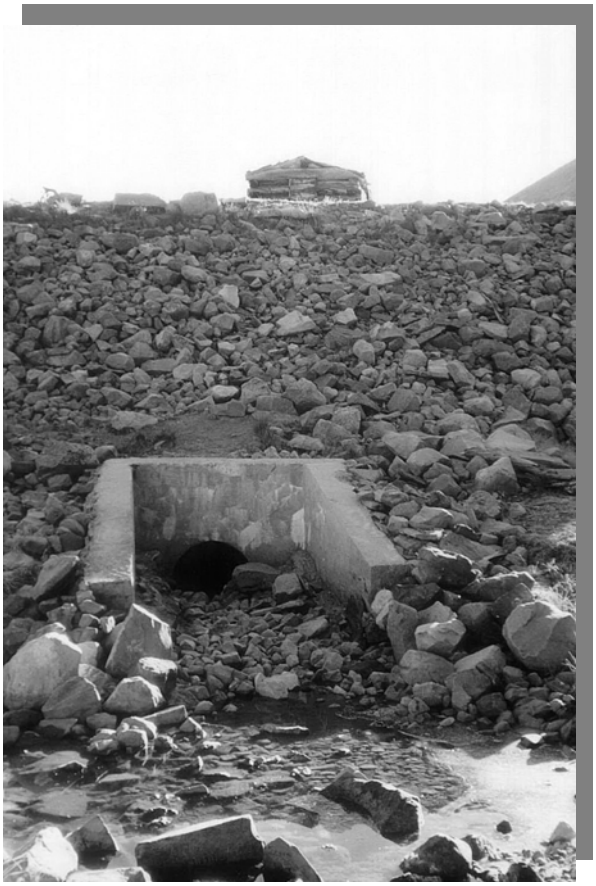


Photo 1.c – Outlet at Fox Reservoir

CRESCENT RESERVOIR

- A new head gate frame assembly will be installed and any repairs required to the head gate or outlet pipe will be performed to ensure proper operation.

- The cracks in the masonry dam will be repaired.

Photo 1.d – Crescent Reservoir

Photo 1.e – Existing head gate – Crescent Reservoir

Refer to Chapter 3, Table 3.b – Hydrologic Reservoir Data for Fox and Crescent Reservoirs, and Table 3.c – Dam Structure Information for Fox and Crescent Reservoirs for information on size, storage capacity, and other related reservoir data.

Dry Gulch Irrigation Company would transport equipment and supplies by helicopter and packhorses to complete the above proposed operation and maintenance activities. Work crews varying from six to fourteen personnel would be involved during the operation and maintenance activities, and would camp onsite during various times during the activities. Staging areas for both helicopter and pack horse activities would be located outside of the wilderness at Reader Creek Meadows, with helicopter flight routes over North Pole Pass or Fox/Queant Pass and pack horse trips over North Pole Pass.

OPERATION AND MAINTENANCE PLAN

As part of the Proposed Action, the Forest Service will require DGIC to update their current "Annual Routine Operation and Maintenance Plan", and to prepare a "Long-term Operation and Maintenance Plan with specific terms and conditions for operating and maintaining the Fox and Crescent reservoirs and dams in the High Uintas Wilderness. Significant changes in annual routine actions and all long-term operation and maintenance actions may require analysis and documentation in a separate environmental impact statement or environmental assessment.

As part of the permanent easement to DGIC and the annual routine and long-term operation and maintenance plan, the Forest Service, Ashley National Forest will continue to coordinate with the State of Utah Engineer's Office on safety inspections of the dams. The State Engineer's Office will continue with their responsibilities to ensure safety of the dams, and the State Division of Water Rights will manage the water rights associated with the water storage capacity and seasonal releases at Fox and Crescent Reservoirs.

ANALYSIS AND DOCUMENTATION

The proposed operation and maintenance activities and the development of an annual and long-term operation and maintenance plan will require an analysis and documentation of environmental consequences, including proposals to use motorized and mechanical tools and equipment within the boundaries of the High Uintas Wilderness.

A project location map displaying the general location of Fox and Crescent reservoirs is found on page 9.

1.4 RELEVANT AND/OR REFERENCED LAWS, REGULATIONS AND EXECUTIVE ORDERS

1.4.1 Relevant Laws:

1964 Wilderness Act (16 U.S.C. 1131) Established the National Wilderness Preservation System (NWPS) and sets basic direction for management of wilderness areas.

1984 Utah Wilderness Act (99 Stat.1657): Established the HUW, and other wildernesses in Utah. Gives specific direction on managing different wilderness areas.

Colorado Ditch Bill (FLPMA, Sec. 501 – 43 U.S.C. 1761): Provides for issuing permanent easements for water related facilities that meet the criteria in the law.

Colorado River Storage Project Act of April 11, 1956 (70 Stat. 105): Originally authorized features of the Central Utah Project.

Reclamation Projects Authorization and Adjustment Act of 1992 (P.L. 102-575) often called the Central Utah Project Completion Act, (CUPCA): Authorizes the UBRP – and provides the opportunity to stabilize certain reservoirs within the HUW.

National Environmental Policy Act (83 Stat. 852): Establishes overall policy for environmental analysis for projects and requires the preparation of EIS's or other form of documenting environmental analyses.

Organic Act of 1897 (16 USC 473-475, 477-482, 551): The Forest Service's Organic Act which sets Forest Service authority to regulate the occupancy and use of National Forest System Lands.

Endangered Species Act (87 Stat. 884, as amended; 16 USC 1531-1536, 1538-1540): Sets national policy for the protection of endangered and threatened species, and set consultation requirements for federal agencies to work with the US Fish and Wildlife Service when projects are proposed.

Clean Water Act (33 USC 1151) and the Federal Water Pollution Control Act Amendments of 1972 (86 Stat. 816; 33 USC 1251): The act states the objective to restore and maintain the chemical, physical, and biological integrity of the nations waters. Section 404 of this act establishes the need for permits, issued by the Corps of Engineers, for projects where dredge and fill in navigable waters is proposed to take place.

Wild and Scenic Rivers Act (82 Stat. 906; as amended 16 USC 1271-1288): Declares it a national policy that certain rivers of the nation, which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic cultural or other similar values shall be preserved in free-flowing condition, and sets guidelines for conducting eligibility and suitability for rivers to be included as a component in the Wild and Scenic Rivers system.

National Historic Preservation Act of 1966, as amended (80 Stat. 915): Established, in Section 106, the requirement to consult with State Historic Preservation Office's (SHPO's) and get clearance before project work can begin that may effect sites eligible for inclusion in the National Register of Historic Sites.

1.4.2 Relevant Regulations:

36 CFR Part 215: Notice, Comment, and Appeal Procedures for National Forest System Projects and Activities: Implements procedures to appeal agency decisions relating to NEPA documents and NEPA decision documents.

36 CFR Part 251 Subpart B: Special Uses: implements procedures covering the issuance of special use authorizations to regulate the occupancy and use of National Forest System lands.

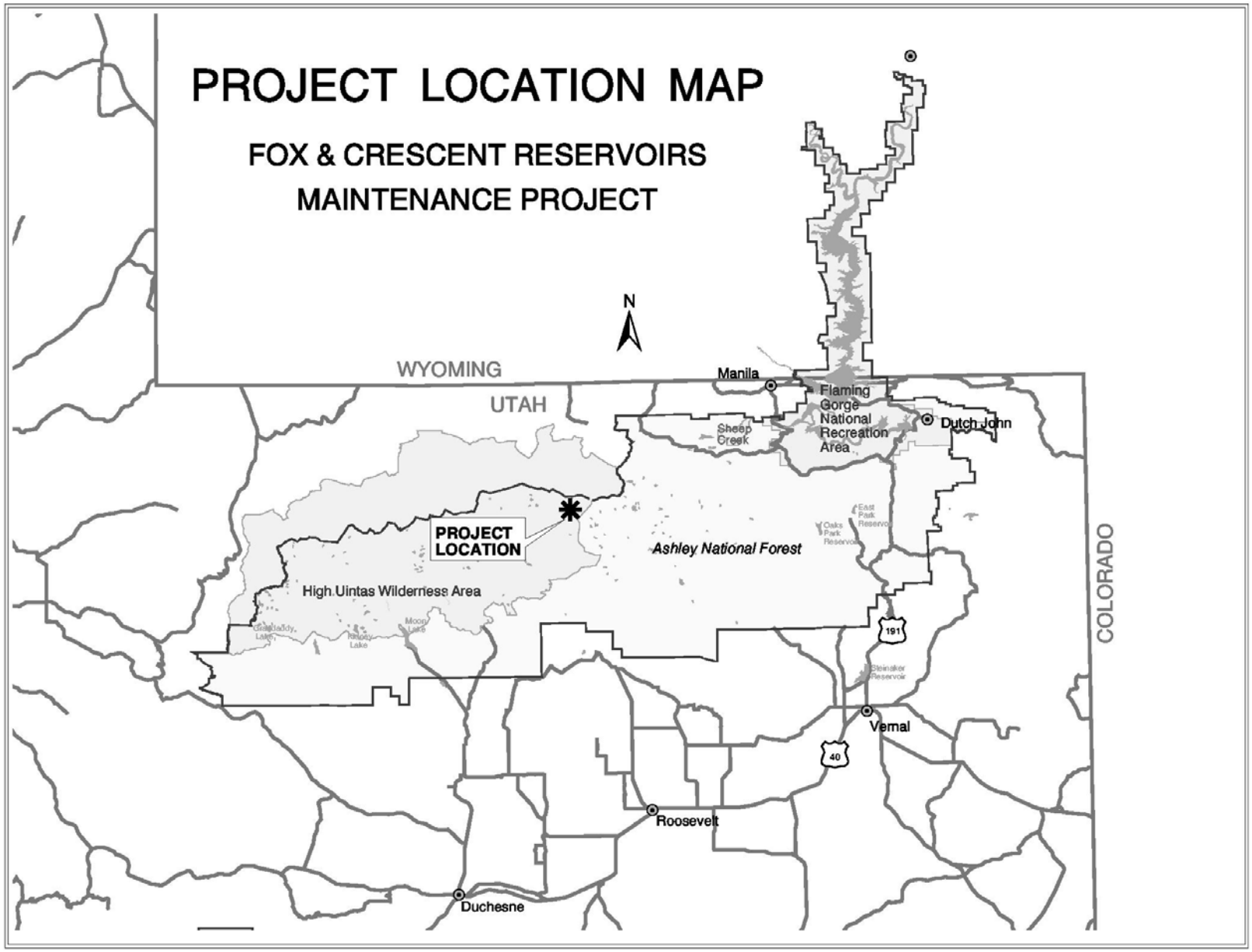
36 CFR Part 293: Wilderness and Primitive Areas: Implements procedures for managing units of the NWPS.

36 CFR Part 296: Protection of Archeological Resources: Uniform Regulations: Implements procedures for complying with the provisions in the National Historic Preservation Act.

36 CFR Part 297: Wild and Scenic Rivers: Implements procedures to protect characteristics of wild and free-flowing rivers in accordance with the act.

1.4.3 Executive Orders:

Floodplains and Wetlands (EO 11990): This EO requires each federal agency shall provide leadership and take action to a) minimize adverse impacts associated with the occupancy and modification of flood plains and reduce the risk of flood loss; b) minimize impact of floods on human safety, health, and welfare, and c) restore and preserve the natural and beneficial values served by floodplains. This EO also requires each agency to take action to minimize destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.


PROJECT LOCATION MAP
FOX & CRESCENT RESERVOIRS
MAINTENANCE PROJECT
N
WYOMING
UTAH
COLORADO
Manila
Flaming Gorge National Recreation Area
Dutch John
Sheep Creek
PROJECT LOCATION
Ashley National Forest
High Uintas Wilderness Area
191
Vernal
40
Roosevelt
Duchesne

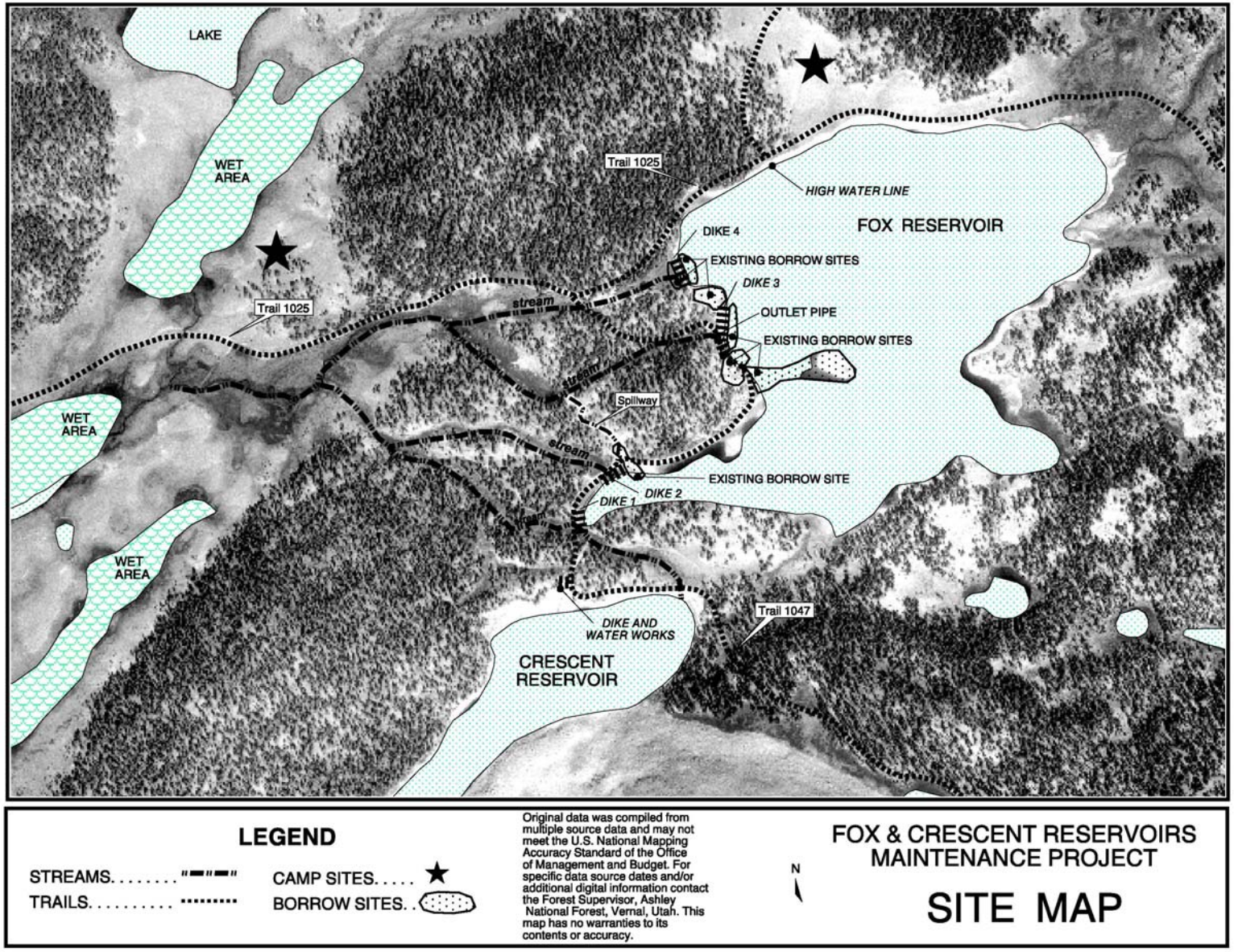

LAKE
WET AREA
WET AREA
WET AREA
Trail 1025
Trail 1025
Trail 1047
HIGH WATER LINE
FOX RESERVOIR
DIKE 4
EXISTING BORROW SITES
DIKE 3
OUTLET PIPE
EXISTING BORROW SITES
stream
stream
stream
stream
Spillway
EXISTING BORROW SITE
DIKE 2
DIKE 1
DIKE AND WATER WORKS
CRESCENT RESERVOIR
LEGEND
STREAMS
TRAILS
CAMP SITES
BORROW SITES
Original data was compiled from multiple source data and may not meet the U.S. National Mapping Accuracy Standard of the Office of Management and Budget. For specific data source dates and/or additional digital information contact the Forest Supervisor, Ashley National Forest, Vernal, Utah. This map has no warranties to its contents or accuracy.
N
FOX & CRESCENT RESERVOIRS MAINTENANCE PROJECT
SITE MAP

Photo 1.f – Fox/Crescent Pass above Fox Reservoir

- **The general direction for management Area 'g' is to provide undeveloped dispersed recreation in an unroaded environment.** ***(majority of the project area outside of the High Uintas Wilderness)***
  Criteria and assumptions for area 'g' preclude scheduled timber harvesting and road construction. Other uses such as ORV use, prescribed fire, and vegetative manipulation are permitted as long as they meet Plan standards and guidelines and do not clearly conflict with the overall objective of the management prescription. Facilities may be constructed for public safety, convenience and protection of the site.

1.5 FOREST PLAN DIRECTION FOR MANAGEMENT AREAS, GENERAL REQUIREMENTS, AND OBJECTIVES, STANDARDS AND GUIDELINES

1.5.1 Management Areas

The Forest Plan provides general direction for the management areas associated with the project area. This direction is found in Chapter IV, pages IV-5 through IV-13 of the Plan. Management Areas ‘d’, ‘g’, ‘i’ and ‘n’ occur within the areas to be analyzed. General management guidelines and emphasis for these areas are summarized below.

- **Management Area 'd' has a high forage production and livestock utilization emphasis. (*several small areas south of Chepeta Lake)***
  While all traditional uses are allowed within this management area, recreation may be limited or discouraged to reduce conflicts with livestock use. Any wildlife improvements must be coordinated closely with range interests and may not be detrimental to livestock.

- **The general direction for management Area 'i' is to follow the direction contained in the Utah Wilderness Act of 1984. *(project area within the High Uintas Wilderness, including Fox and Crescent Reservoirs)***
  Criteria and assumptions for area 'i' are based on maintaining wilderness values as stipulated in the Wilderness Act of 1964 (PL88-577).

- **Management Area 'n' has the objective of allowing a range of resource uses and outputs with commodity production (livestock grazing, timber sales) modified for amenity production (recreation uses, visuals). *(several small areas outside of the High Uintas Wilderness)***
  While no traditional use is precluded by this prescription, one of its basic assumptions is that commodity production will be modified for amenity production. The framework of prescription 'n' allows the decision maker a multitude of management options dependent upon the resource constraints (identified throughout this analysis) and the standards and guidelines contained within the Forest Plan. Maintenance of facilities is done as required, and construction of new facilities must meet management objectives.

The three management areas outside of the High Uintas Wilderness call for maintenance and protection of riparian areas.

1.5.2 General Requirements

The project must meet all safety standards. All state and federal dam safety standards would be met in the selected alternative.

The existing Forest Service authorization requires an operation and maintenance plan with specific terms and conditions. The authorization specifies that Dry Gulch Irrigation Company, (DGIC) is required to monitor the operation, maintenance and safety of the reservoirs on an annual basis, and to correct deficiencies as noted. The company is also required to respond to and correct operation, maintenance and safety items that are identified during formal safety inspections by Forest Service and State of Utah agency personnel *(Ashley NF – High Mountain Lakes and Reservoirs, Marchant 1997 and 1999, Pyron 1999, Overbay 1990, Self 1989 and 1990). (Inspection Reports are on file at the Ashley National Forest Supervisor's Office.)* The Forest Service and the Utah Department of Natural Resources, Division of Water Rights will continue their monitoring and safety inspection program for the dams and reservoirs. The existing operation and maintenance plan would be rewritten to address the new permanent easement and selected alternative, and associated requirements and measures.

Long-term monitoring of the dam and effects of the proposal must be accomplished. A long-term monitoring plan would be a part of the selected alternative. Safety inspections of the dams and reservoirs, including monitoring of operation and maintenance work would be subject to the following process:

As directed and guided by the Forest Service and State of Utah personnel, Dry Gulch Irrigation Company would adhere to the following process and procedure for initiating and completing all operation and maintenance work.

- DGIC would inspect the reservoirs annually, and report findings to the Forest Service.
- The Forest Service would provide direction to DGIC on what work should be done and the time frames for completion.
- DGIC would report back to the Forest Service and describe accomplishments.

The project would have a cultural resource clearance through the State Historic Preservation Office (SHPO) before any ground disturbing activities are allowed.

A hazardous materials (HAZMAT) plan would be required as part of the operating plan for the project.

1.5.3 Objectives and accompanying Standards and Guidelines

Refer to Ashley National Forest Land and Resources Management Plan, pages IV-14 through IV-55; Amendment No. 12 (High Uintas Wilderness Management Plan and Forest Plan Amendment); and the Uinta Recreation Management Plan, dated January 12, 1998.

The following Resource Standards and Guidelines in the Ashley National Forest Land and Resource Management Plan would be followed and become part of the Fox and Crescent Reservoirs Operation and Maintenance Plan.

1.5.3.1 Wilderness

The provisions in the High Uintas Wilderness (HUW) portion of the plan (Amendment 12) would be a part of all operational requirements for activities in the wilderness.

This Environmental Impact Statement will meet the requirements for the Minimum Tool Analysis as stated in the Forest Plan Wilderness Standard and Guideline – MA-01-070 (G)

The Ashley National Forest Land and Resource Management Plan was amended in 1997 (Amendment #12) to incorporate new management direction for the HUW.

The Forest Plan wilderness standards (S) and guidelines (G) that are specifically pertinent to this project are as follows:

- MA-01-007 (S) The area is designated a Class III in which no more than 50% of all use areas have erosion class 1 characteristics, no more than 25% have erosion class 2 characteristics, and 0% erosion class 3.
- MA-01-070 (G) Use Minimum Tool analyses to determine most appropriate methods for implementation of projects and proposals. Minimum tool may include mechanized or motorized means.
- MA-01-008 (S) Resource activities are not allowed where damage cannot be mitigated to meet Federal, State, and local water quality standards.
- MA-01-013 (G) Maintain natural vegetative composition and diversity.
- MA-01-035 (S) Campsite Density: Class 1 – campsites should be one mile apart; class II – campsites should be ¼ mile apart; class III – campsites are 200 feet apart.
- MA-01-037 (G) Terrain permitting, campsites must be at least 200 feet from water.
- MA-01-038 (S) Group Size – all classes – 14 people/15 head of stock.
- MA-01-039 (S) length of stay at campsites: class I – 1 to 2 nights recommended overnight stay; class II and III – 14 nights at an individual site.
- MA-01-040 (G) All classes: Stock may be tethered to a tree for two hours or less if damage is occurring to tree or vegetation at base of tree.
- MA-01-041 (G) All classes: Stock cannot be tethered within 200 feet of water sources more than two hours.
- MA-01-043 (G) Litter or waste will be disposed of in an appropriate manner.
- MA-01-068 (G) Protect cultural resources from human activities and public vandalism.

1.5.3.2 Recreation

(Refer to pages IV-14, 17, and 18 of the Forest Plan)

Objective 1 – Allow public access and manage all travel to protect other resources, provide for public safety, and minimize conflicts with other users.

Standards and Guidelines –
Retain travel route and include it on the Forest transportation system if a road or trail is required for access to private or State land, mining claims, and special use permits.

Road or trail use may be restricted:

a. seasonally to protect road bed or to protect wildlife species and habitat, or
b. permanently with use authorized by a special use permit.

Objective 5 – Manage dispersed recreation use to avoid resource deterioration, improve economic efficiency and provide for public safety.

Standards and Guidelines –
Promote and emphasize “Pack-in Pack-out”, “Leave No Trace”, and “Tread Lightly” Programs Forest-wide.

Objective 6 – Provide areas and opportunities for all types of recreation user experience.

Standards and Guidelines –
Implement “Tread Lightly” Program.

1.5.3.3 Vegetation

(Refer to pages IV-26 and 27 of the Forest Plan.)

Objective 3 – Manage wildlife, fish, range and watershed resources in conformance with the Wilderness Act.

Standards and Guidelines –

- Manage livestock use within present capacity of allotment.
- Maintain or restore range conditions to good or better.
- Maintain natural vegetative composition and diversity.
- Regulate recreation livestock to prevent deterioration of the forage resource and popular campsites and fishing areas.

From the Uinta Recreation Management Plan, dated January 12, 1998 –

Standard and Guideline –
II-C – Promote better livestock utilization throughout the allotment by designating alternative camping and grazing sites.

1.5.3.4 Hydrology and Soils and Landform

(Refer to pages IV-38 through IV-41 of the Forest Plan)

Objective #2 – Maintain and improve soil stability, site productivity, and repair or stabilize damaged watersheds

Standards and Guidelines –

- Provide soil and water guidance to other resource activities.
- Obtain at least 80% of original ground cover within five years after project completion.
- Design activities to minimize project-caused sediment rates.
- Rehabilitate disturbed areas based on these priority considerations:
  -Aquatic ecosystems
  -Riparian ecosystems
  -Riparian areas outside of aquatic and riparian ecosystems

Objective #2 for Riparian Areas – Maintain or improve riparian areas and riparian dependent resource values including wildlife, fish, vegetation, watershed, and recreation in a stable or upward trend. Manage for species diversity.

Standards and Guidelines –

- Maintain natural complexity and high relative productivity of riparian areas.
- Maintain capability of riparian areas to act as an effective sediment-buffering zone in relation to upslope activities.
- Riparian area dependent resources will be given preferential consideration in cases of unrecoverable conflicts.
- Restrict facilities and ground disturbing activities to areas outside riparian areas unless alternative routes have been reviewed and rejected as being more environmentally damaging.

1.5.3.5 Cultural Resources

(Refer to pages IV-20 of the Forest Plan.)

Objective 11 – Comply with National Legislation pertaining to cultural resource management.

Standards and Guidelines –

- Evaluate and identify sites for nomination to the National Register.
- Develop and implement a plan for the interpretation, protection, maintenance and /or mitigation of known significant cultural resources sites.
- Conduct cultural resources surveys prior to an agency undertaking, which could affect significant cultural values until inventories are complete.
- Coordinate management of cultural resources with the State Historic Preservation Office and others as needed.
- Prevent damage to any significant cultural site.

1.6 DECISION FRAMEWORK

The Regional Forester, of the United States Department of Agriculture Intermountain Region of the US Forest Service- will make the following decisions:

✓ Should the DGIC be allowed to complete the repairs, as proposed, on Fox and Crescent dam structures to allow further use of the reservoirs as storage for mid- to late season irrigation water as authorized under the Colorado Ditch Bill, 43 U.S.C., 1761(c)?

If yes, then:

✓ Will motorized access be permitted in the High Uintas Wilderness to complete the extensive repair work, and if so, what conditions will be needed to minimize effects on wilderness resources?

- ✓ Will mechanized tools be permitted in the High Uintas Wilderness to complete extensive repair work, and if so, what conditions will be needed to minimize effects on wilderness resources?

- ✓ What terms and conditions will be placed in the annual and long-term operation and maintenance plan for the Fox and Crescent reservoirs and dam structures and eventually in the permanent easement, in order to prevent safety problems while minimizing effects to wilderness and other resources?

If not, then:

- ✓ What terms and conditions will be placed in the Fox and Crescent Dam and Reservoir Restoration Plan in order to prevent safety problems while minimizing effects to wilderness and other resources?

1.7 PUBLIC INVOLVEMENT

Scoping began for this project with the mailing of the initial scoping letter on March 19, 2001, and the publishing of the Notice of Intent in the Federal Register. The initial scoping letter went out to 83 parties, representing private individuals, government agencies at the federal, state, and local level, Indian tribes, environmental organizations, congressional offices, and other interested parties. A second scoping letter was sent on February 4, 2002, to the same parties. This letter addressed the status of the Environmental Impact Statement, and the intent of the Forest Service to include EIS sections on the "framework and content of an annual and long-term operation and maintenance plan (O&M Plan)". The letter requested comments on the proposed O&M plan.

The Notice of Intent to prepare an EIS was published in the Federal Register on May 9, 2001 with a close of comment period on May 29, 2001.

The DGIC modified their proposal in May 2001, and on June 1, 2001, a revised scoping letter was sent to all parties on the initial list as well as all those who had commented on the original scoping effort. This second scoping effort ended on June 20, 2001.

These scoping letters resulted in 92 comments being received and evaluated.

1.7.1 Public Comment:

Many commenters were concerned about protecting the wilderness character of the area during and after the project. Some questioned the legal authority to do this kind of project in a designated wilderness and referred to and quoted from the various wilderness acts. Many expressed concern about the impact of the reservoirs on natural processes, leaving the "imprint of man", the impact on solitude, and the long-term propensity for further mechanical and motorized incursions that would continue to undermine the integrity of the wilderness character.

Several respondents expressed support for the "No Action" alternative, feeling that the reservoirs should be stabilized and the authorizations terminated, because the reservoirs contrasted with the wilderness designation. The need for motorized equipment and mechanical access would further contrast with the wilderness environment and the expectations of wilderness users.

The DGIC, supporters, and other water users expressed the need to protect existing water rights, and other valid existing rights associated with these reservoirs. Many feel that the need to continue to use the water resources for their legal and authorized purposes should take precedence over any constraints imposed by the wilderness acts.

Several commenters suggested the need for a good cumulative effects analysis that considers the long-term maintenance needs of the reservoirs, the associated need for the helicopter staging area and other impacts outside the wilderness, and the potential for future needs of this kind to maintain other reservoirs in the HUW. Some suggested the need for a long-term monitoring plan for the reservoirs that consider future needs of this and other reservoirs.

The Environmental Protection Agency (EPA) suggested the Forest Service consider the alternative of not allowing the repairs and restoring the site to natural conditions as well as identifying some specific issues to be analyzed and the need for a good cumulative effects analysis.

Others commented on the need to consider the long-range implications of repairs to the reservoirs in a wilderness setting as part of an annual and long-term operation and maintenance plan. It was also recommended that access, equipment and supplies be clearing listed and defined and in the O&M Plan for annual, long-term and emergency situations.

Several comments requested that water rights be fully explained in the EIS, including ownership and disposition.

1.8 RELEVANT ISSUES SUMMARY

Based on the responses received and the work of the interdisciplinary team, the following issues will be addressed in this EIS. An issue is an effect (or a perceived effect, risk, or hazard) on a physical, biological, social, or economic resource.

Issues that will be tracked throughout the EIS and have impacts that may vary by alternative:

1.8.1. Impacts of the project on wilderness values

1.8.1.1 Use of motorized equipment and mechanical transportation conflicts with the basic tenets of the 1964 Wilderness Act.

Measure – amount and duration of intrusion.

1.8.1.2 Sustained and perpetual maintenance will involve motorized equipment and mechanized transportation for the life of the reservoir.

Measure – number of intrusions per decade.

1.8.1.3 Impact to wilderness visitors, including noise, dust, and opportunities for solitude.

Measure – number of days of project duration.

1.8.1.4 Impacts to the physical resources of the wilderness, including trails.

Measure – number of pack trips

1.8.1.5 Impacts to the established campsites.

Measure – degree of change in the Site Impact Index.

1.8.1.6 Impacts to the forage resource due to stock grazing.

Measure – number of forage acres impacted.

1.8.1.7 Benefits of an Annual and Long-range Operation and Maintenance Plan, and Dam and Reservoir Restoration Plan

Measure – framework and content of an O&M Plan, and Dam and Reservoir Restoration Plan. Approval process for access, materials, tools and equipment.

1.8.1.8 Long-term maintenance needs on the reservoirs a result of the proposal.

Measure – number of intrusions per decade.

1.8.2 Effect of the project on recreation experiences inside and outside the wilderness at associated sites and trails and use of the helicopter staging area and its impacts on recreation use and the physical resources.

Measure – number of vehicles at trailheads, number of helicopter overflights, and use of access trails.

Measure – number of helicopter flights observed or heard from West Fork Trailhead and Trail.

1.8.3 Effects on wildlife resources, including TES species, and both terrestrial and aquatic life.

Measure – number of species adversely affected and effect on listed species.

1.8.4 Effects on Water Quality and Stream Condition.

1.8.4.1 Effects of water storage on the hydrologic function of the drainages and its resulting effects on microorganisms, macroinvertebrates, and riparian condition of the stream.

Measure – change in stream condition.

1.8.4.2 Increase sedimentation from project activities and their effects on biological resources such as fish, amphibians, etc.

Measure – sedimentation change during project activities.

1.8.4.3 Effects of sediment trapping by the dam on the stream environment below the structure.

Measure – change in sediment below dam structure.

1.8.4.4 Changes in stream and reservoir water temperatures from project activities.

Measure – temperature change of reservoir water and stream water below Fox Reservoir.

1.8.4.5 Effects of the project on the safe passage of high flows without physical degradation of the stream system.

Measure – riparian and stream channel conditions.

1.8.4.6 Use of the helicopter staging area and trails, and the impacts on riparian areas, streams, and soils.

Measure – change in water quality and soil stability.

1.8.5 The ability of DGIC to use their existing water storage rights, and the effects to water rights and holders of water rights, with and without the reservoirs and the proposed repairs.

Measure – list of water rights, applicability to Fox and Crescent Reservoirs, and legal ramifications of non-use or loss of the rights.

Measure– acre-feet of authorized storage.

1.8.6 Use of existing borrow areas, and the associated impact from re-disturbing the recovering sites.

Measure – number of borrow sites impacted.

1.8.7 Effects of the project on historic and cultural sites.

Measure – number of sites where proper mitigation was accomplished.

1.8.8 Effects to the Inventoried Roadless Area, including use of the helicopter staging area and trails along with other uses, and impacts on the adjacent inventoried roadless area.

Measure – changes to inventoried roadless area attributes.

Issues that are beyond the scope of the analyses:

1.8.9 What is being proposed is not routine maintenance, but a major overhaul and reconstruction of the dams. Essentially a new reservoir is being constructed.

The proposed activity is restoration maintenance of existing dams. The dams have not failed, as supported by the State of Utah and the Forest Service, are not being enlarged to store additional water, nor increasing in capacity in any way *(Bastian 2000 and 2001, Kulesza 2001, Marchant Field Notes 2000, Marchant 2000 Note to Rick Hall, Assistant State Engineer, Marchant 2001, Morgan August 10, 2000. Morgan September 19, 2000, Morgan October 25, 2000, Morgan November 29, 2000, Nelson 2000, Self – note to Don Marchant).* The activity proposed will allow the existing dams to continue to meet their original purpose with no reconstruction, enhancements, or enlargements.

1.8.10 Develop a formula for dividing the costs of the project because of added expenses due to wilderness designation and Forest Service rules.

There are no provisions under appropriation law to allow Forest Service funds to be used to repair private reservoirs.

1.8.11 Legal Rights granted by the Utah Wilderness Act of 1984.

Comments received in response to scoping raise several questions about whether or not these facilities are prohibited by the Wilderness Act, or expressly provided for in the 1984 Utah Wilderness Act. Since the Forest Service has determined that it is required to issue permanent easements for these facilities under the Colorado Ditch Bill, this EIS need not address the various theories proffered by commenters as to why these facilities may or may not be authorized in the Wilderness. The sole purpose of this EIS is to determine the terms and conditions of the easements that will be issued under the Ditch Bill.

1.8.12 The special use authorizations are temporary and can be revoked. They do not provide a valid existing right as discussed in the Wilderness Acts.

It is true that the special use authorizations for the HUW reservoirs do not grant a valid existing right. Under the current authorization the terms and conditions provide some measure of assurance of use of the facilities. The process of revocation is an option under limited circumstances, and the Forest Service would need to build a case that the DGIC has not met the conditions of the authorizations when instructed to do so or that the land is needed for a higher and better use. Neither of these items applies to the existing authorizations or conditions.

However, as has been pointed out, DGIC has applied for easements under the Colorado Ditch Bill (Sec. 501, Federal Land Policy and Management Act, 43 U.S.C. 1761c). These easements do grant a valid existing right under the law. While this EIS is addressing conditions for the Special Use Authorization, these conditions should also apply to easements for these facilities.

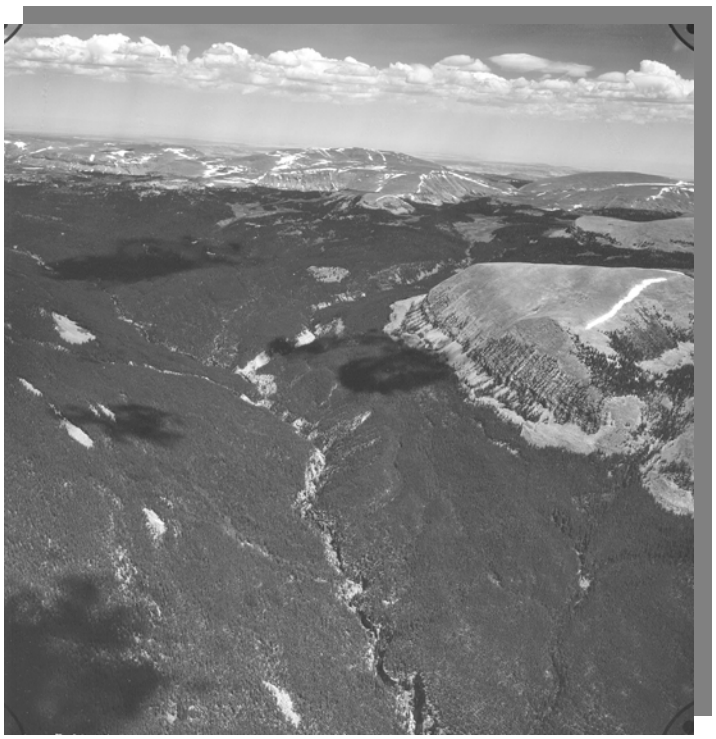


Photo 1.g – Upper Uinta River Watershed – Fox and Crescent Reservoirs in NW corner of oblique photo