FINAL ENVIRONMENTAL ASSESSMENT:

RECONSTRUCTION OF THE WHITEROCKS STATE FISH HATCHERY

April 2004

Utah Division of Wildlife Resources

Utah Reclamation Mitigation and Conservation Commission

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CHAPTER 1 - PURPOSE, NEED, AND ISSUES

1.1 BACKGROUND

As part of the Colorado River Storage Project (Project), several major reservoirs were constructed in Utah. The associated reservoir fisheries provide significant sport fishing opportunity, are immensely popular with anglers, and are heavily dependent on supplemental stocking of sport fish. Through reservoir construction and related water development, the Project has also affected native fish populations in several streams and rivers. Stocking of streams and rivers can facilitate native fish recovery and conservation efforts.

In 1992 the Congress established the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission) to coordinate implementation of mitigation and conservation measures associated with the Central Utah Project and other federal reclamation water development projects in Utah. Section 313(c) of the Central Utah Project Completion Act (CUPCA; Public Law 120:575, the legislation that created the Mitigation Commission) required the development of a *Fish Hatchery Production Plan* (*Plan*) to outline fish hatchery improvement and construction priorities as a means of addressing the mitigation and conservation purposes identified in CUPCA. Implementing the *Plan* would increase production of warmwater and coldwater fish for Project-affected waters in Utah

As *Plan* development progressed, it became apparent that funding authorized for increased hatchery production under CUPCA could only provide for approximately 50% of the estimated cold-water fish needs. Site-specific feasibility studies of existing and proposed hatchery sites were conducted to determine which site improvements and combination of sites would best utilize available funding. In an effort to increase the total funding available for hatchery construction, the Utah Division of Wildlife Resources (Division) and the Mitigation Commission also entered into a cooperative funding arrangement by which the Mitigation Commission would provide 75% and the State would contribute 25% of the costs associated with construction activities described in the *Plan* for Division cold-water facilities. The *Plan* subsequently identified the reconstruction of the Kamas and Fountain Green State Fish Hatcheries, and a partial reconstruction of the Whiterocks State Fish Hatchery as among the actions which best serve to address cold-water production needs at the level of federal funding presently authorized. An environmental assessment was conducted, and a Decision Notice and Finding of No Significant Impact for implementation of the *Plan* was issued in 1998 (U.S. Fish and Wildlife Service and Mitigation Commission 1998).

The necessary site-specific environmental assessments for reconstruction of both the Kamas and Fountain Green Hatcheries were completed, and both these facilities have been rebuilt. Reconstruction measures proposed for the Whiterocks Hatchery under the *Plan*, the subject of this document, include rehabilitation of the existing water supply and internal water delivery systems, installation of an oxygen injection system, and construction of a new hatchery/lab/office building. These measures, described collectively in the *Plan* and supporting feasibility studies as "Priority 1" reconstruction (hereafter referred to as partial reconstruction), would have increased total production at the facility to 87,700 ponds, an increase of 52,200 pounds above current capacity at an estimated cost of approximately $2.4 million (FishPro, Inc.

1996). It is anticipated that partial reconstruction would fully commit the remainder of Mitigation Commission funding dedicated for improvements at state-operated, cold-water hatcheries.

1.2 PURPOSE AND NEED

The underlying purpose of this proposal is to increase coldwater fish production associated with the Whiterocks Hatchery (Figure 1). The need is to satisfy long-term demands for fish for Project waters, as determined by the *Plan*, which are not currently possible because of inadequate production capability at existing facilities. The Whiterocks Hatchery has been in operation since 1923. Although some features have been replaced since original construction, the hatchery overall has deteriorated badly and cannot meet the rearing objectives developed for it by the Division without refurbishment (Figure 2).

Design objectives for the partial reconstruction of the Whiterocks Hatchery (Division 1996) would result in approximately 87,700 pounds of coldwater fish production annually, a 52,200-pound (147%) increase over the present production capacity. This capacity would supply approximately 6% of the increase in annual coldwater sport fish production necessary to fulfill total fish needs, as identified in the *Plan*.

The design objectives also reflect Mitigation Commission priorities for funding improvement at fish hatcheries as described in the revised 1998 *Plan*, pages 1-3. In addition to meeting fish production needs, the each hatchery improvement project developed under the auspices of the *Plan* should:

- be cost-effective [both capital and operations and maintenance (O&M)] and/or provide the versatility to respond to future management objectives and species and/or size of the hatchery product,
- optimize capital costs and minimize long-term O&M costs,
- perpetuate or increase existing hatchery production capabilities where possible in meeting increased production demands,
- complement other Federal, State or Tribal programs, such as species conservation strategies,
- implement projects with substantial matching fund contributions,
- provide educational opportunities, and
- where feasible, provide environmental enhancement at hatchery sites.

Similar to the improvements at the Kamas and Fountain Green Hatcheries, the Utah Division of Facilities Construction and Management would provide project oversight at all levels and develop, award, and supervise all design and construction contracts associated with the Proposed Action. The Proposed Action will comply with all the applicable criteria noted above.

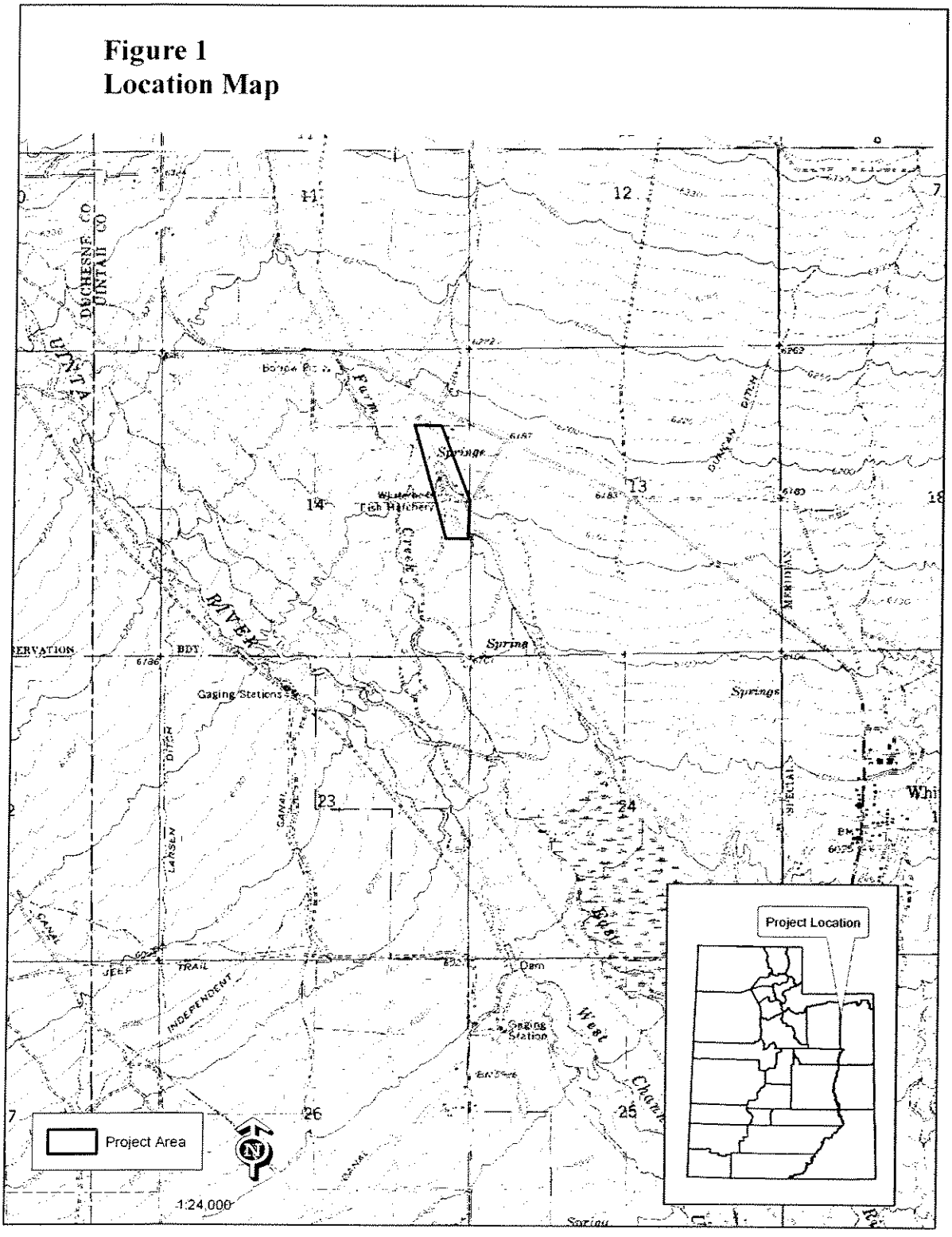

Figure 1. Whiterocks Hatchery - Location Map

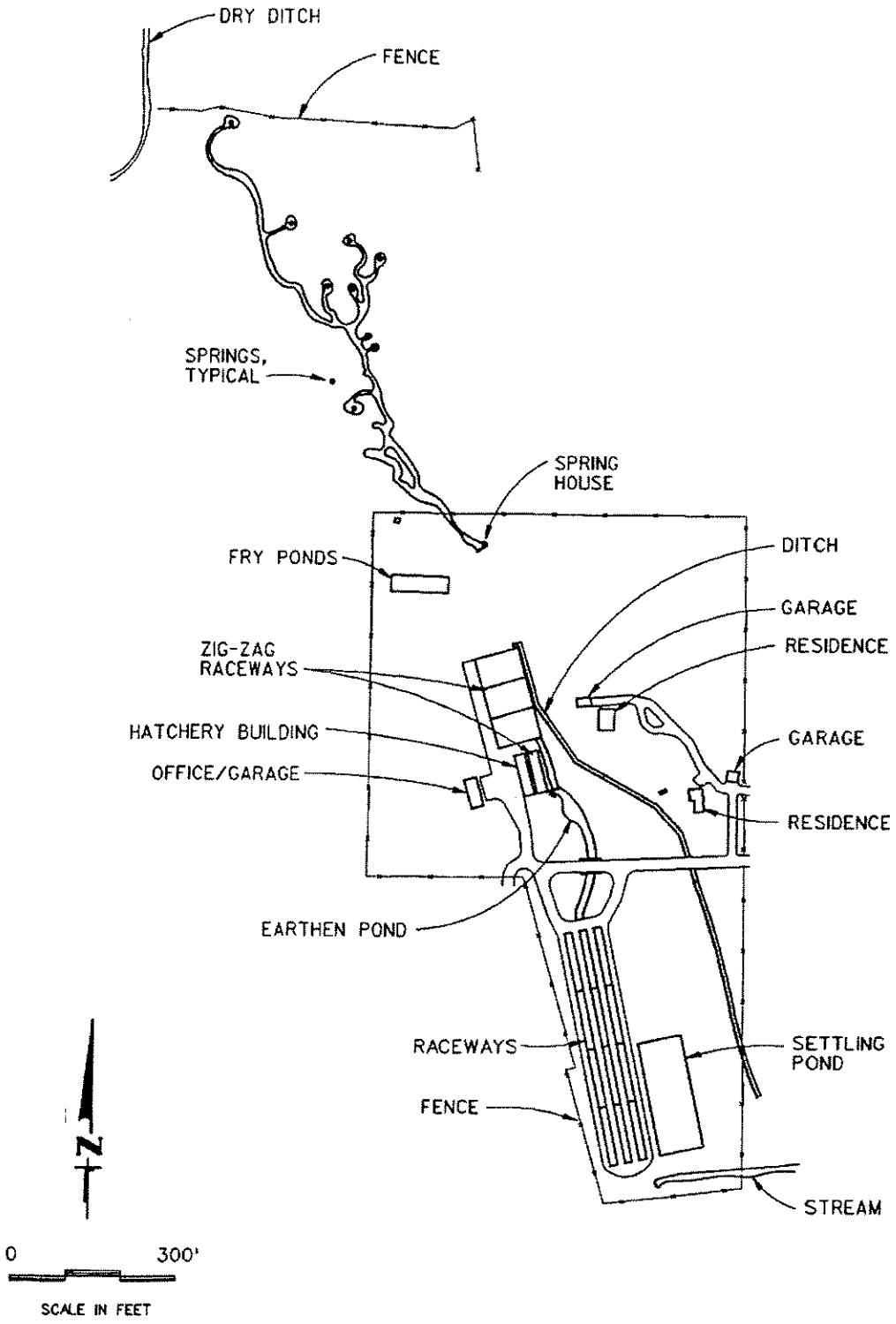

Figure 2. Whiterocks Hatchery - Existing Site Plan (From FishPro, 1996).

Implementation of the Proposed Action would require approval by the Mitigation Commission to apply funds available for cold-water fish production associated with state hatcheries for the partial reconstruction of the Whiterocks State Fish Hatchery.

1.3 ISSUES

During the spring of 2002, 140 individuals, agencies, or organizations were sent a brief scoping notice, which outlined the nature of the Proposed Action (reconstruction of the Whiterocks Hatchery) and the method for providing comments. A total of seven responses were received. Of those, five contained comments in direct response to the Proposed Action. In addition to issues raised during scoping, Mitigation Commission and Division staffs have identified potential issues during ongoing and routine project coordination.

1.3.1 Issues Considered Relevant to the Proposed Action

The following issues were raised by one or more respondents and cooperating agencies and were considered relevant to the Proposed Action.

- *Water Quality*

A general concern was expressed for potential impacts to stream water quality downstream of the hatchery discharge point. The issue is whether the reconstructed hatchery would be in compliance with the pertinent discharge permit.

- *Wetlands*

A respondent recommended that adverse impacts to springs or wetland complexes should be minimized. Agencies also recognized the need to comply with requirements associated with any necessary U.S. Army Corps of Engineers (Corps) permit for modification of wetlands.

- *Noxious Weeds*

A respondent requested that a survey for noxious weeds be conducted to anticipate the scope of potential infestations of areas disturbed during construction. It was further requested that measures to avoid or control these species be described.

- *Raptor Protection*

A respondent recommended that appropriate mitigation measures that would minimize adverse impacts to roosting raptors be incorporated when installing power lines.

1.3.2 Issues Considered but Eliminated from Detailed Analysis

- *Information and Education Topics*

A respondent recommended that the emphasized topics of any developed information and education components include the value of native species and aquatic ecosystems. The *Plan* stipulates that public education measures which provide information on the use of hatcheries as a management tool and the importance of habitat to sustain both wild and stocked fish populations be incorporated in hatcheries built or reconstructed through the use of CUPCA funds. Additional informational messages may also be presented, particularly if they serve an identified mitigative requirement. The topics suggested by the respondent are certainly worthy of consideration, however, the specific content of any message beyond the generalities mentioned above is beyond the scope of this analysis.

- *Facility Use*

A respondent asked if the new facility would be primarily used for the propagation and/or restoration of Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus*). At present, Colorado River cutthroat trout present in the hatchery system originate from eggs taken from brood stock in Sheep Creek Lake and are hatched and reared at the Fisheries Experiment Station in Logan, Utah. Once reconstructed, the Whiterocks Hatchery will be capable of rearing all species of salmonids associated with the Division's sport fish programs. Specific production targets for species and size are dictated by overall program needs; the past performance and current functionality of each facility; and water quality and supply characteristics. As with most existing state hatcheries, the Whiterocks Hatchery production goals could change in response to shifts in program needs. The Whiterocks Hatchery currently rears primarily rainbow trout (*O. mykiss*), kokanee (*O. nerka*), brown trout (*Salmo trutta*), and brook trout (*Salvelinus fontinalis*). As of this writing, we do not anticipate that the identified mix of species will change in the foreseeable future.

- *Interagency Program Coordination*

A respondent questioned how the Northern Ute Tribe's Big Spring Hatchery and the Tribe's stocking plans relate to the state's culture facilities and stocking program. The intention of the comment was to ascertain the potential for various agencies with culture facilities to work together for the benefit of the fishery resource in northeastern Utah.

All culture facilities that were identified in the *Plan* and associated Decision Notice were evaluated as individual projects which, when considered as a whole, were judged to best address the overall mitigation objective of the *Plan*. Individual facilities, including the proposed construction of the Big Springs facility and reconstruction of the Whiterocks Hatchery, still retain their own production goals that, collectively, contribute to overall *Plan* objectives, and there is no requirement that any one facility necessarily justifies or negates the need for any or all the others.

As with the two state hatcheries previously built or reconstructed under the *Plan*, the Whiterocks Hatchery reconstruction is considered a stand-alone project for the sake of this analysis. The need to reconstruct this facility under the *Plan* remains whether or not coordinated management programs exist. Mutually beneficial and supportive programs among management entities are always a laudable goal, however, consideration of such an action is beyond the scope of this document.

- *Facility Design Considerations*

Another respondent suggested that the new facility incorporate exclosures to reduce fish loss due to avian predators. The same respondent also suggested that the new hatchery be designed to include as many energy-saving measures as possible. Both of these suggestions are certainly worthy of eventual consideration, and the project will incorporate measures that will, as noted under Purpose and Need above, optimize capital costs and minimize long-term O&M costs. It is not the purpose of this document however to serve as a vehicle for specific design decisions. Regardless of specific design features that may or may not be incorporated to address the issue, any necessary predator control will be implemented in accordance with appurtenant policies, regulations, and laws.

- *Loss of Existing Production Capacity Due to Construction*

A respondent questioned how the Division would accommodate the loss of the 35,500 pounds of hatchery production that will occur during the period that the hatchery is out of service, and what effect that reduction would have on the Division's sport fish program. Any reduction in statewide cold-water production resulting from the reconstruction of the Whiterocks Hatchery will be temporary. It is also expected that the hatchery could continue to hold some fish on station during the construction period depending on the work schedule and the specific culture requirements of the fish at that time. In addition, even if it is assumed that all production at Whiterocks Hatchery is lost for the entire construction period, minor operational modifications will allow other hatcheries in the system to absorb most, if not all, of any temporary production loss. Overall, programmatic impacts of that short-term reduction are expected to be insignificant.

CHAPTER 2 - ALTERNATIVES

This chapter describes the Proposed Action, alternatives to the Proposed Action, and alternatives considered but eliminated from detailed analysis.

2.1 PROPOSED ACTION – Partial Reconstruction of the Whiterocks Hatchery

The Proposed Action is to reconstruct, operate, and maintain the Whiterocks Hatchery so that it can satisfy the long-term fish demands (87,700 pounds of fish per year) at the partial reconstruction level as identified in the *Plan*. See Figure 3, partial reconstruction items are marked with an asterisk.

Final design will be completed for a full reconstruction of the Whiterocks Hatchery. The Proposed Action will consist of implementation of only the priority 1 items: rehabilitation of the existing water supply and internal water delivery systems, installation of an oxygen injection system, construction of a new hatchery/lab/office building, construction of a truck disinfection station and associated site paving. The total cost of is estimated to be $2.4 million. This would be funded at the 75% level by the Mitigation Commission with a 25% Division match.

Under the Proposed Action, annual production of the facility would increase by approximately 52,200 pounds, for a total of 87,700 pounds, at a total cost of an estimated $2.43 million. The 87,700 lb production target for the Whiterocks Hatchery represents the priority 1 utilization of the water supply and site conditions (i.e., land available and latest technology) and reflects the desired species composition, size, and production history. Facility design would begin in 2004, after fulfillment of the National Environmental Policy Act (NEPA) compliance. Construction is scheduled to begin in the 2004 and be completed in 2005.

The remainder of the reconstruction items identified on Figure 3 will be implemented by the Division as funds become available. The impacts of these actions are evaluated in the Cumulative Impacts Section of Chapter 4.

2.1.1 General Physical Components

The Whiterocks Hatchery is situated in the central portion of the E1/2 of the E1/2, Section 14, T1N, R1W, Uinta Special Meridian, Uintah County, Utah, approximately 4 miles northeast of the town of Whiterocks (Figure 1).

Some of the existing raceways and other structures would be demolished to accommodate the new facilities. The construction debris would be removed from the site and transported to landfills. The existing concrete fry ponds and upper zigzag raceways would be removed, the surface elevation returned to the approximate local contour, and the site vegetated.

The improved facility will continue to use the Division's existing 11.7 cfs water right. The water collection system for this supply is located on a 20-acre parcel of trust land administered by the

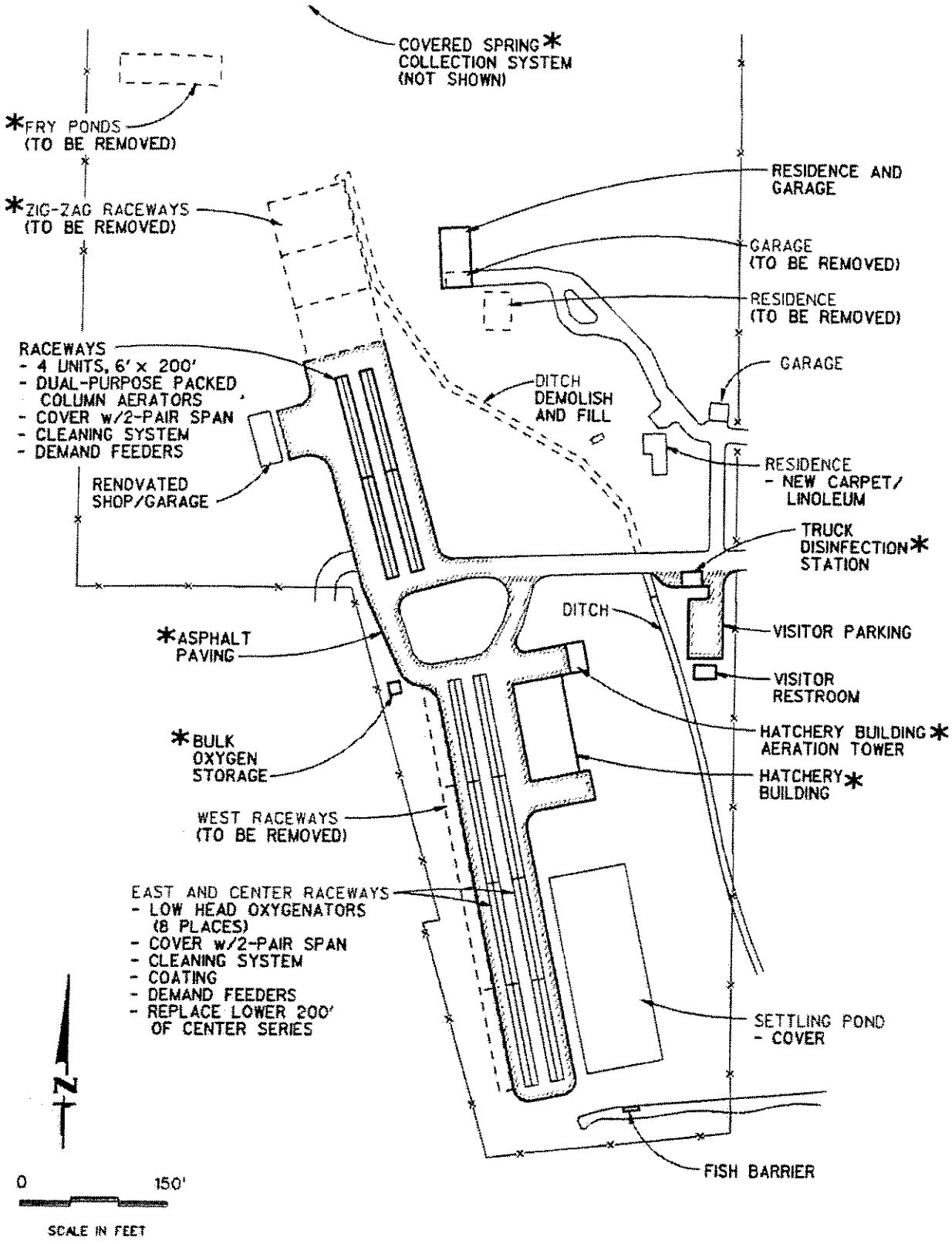

Figure 3. Whiterocks Hatchery - Proposed Conceptual Site Design (From FishPro 1996). Proposed action encompasses those items marked with an *.

Bureau of Indian Affairs (Bureau) on behalf of the Ute Indian Tribe and under lease to the Division (leased Bureau parcel.) The leased Bureau parcel is located immediately north of and adjacent to the state-owned hatchery site. The current lease agreement, negotiated in 2000, is in effect for a period of 25 years with an option to renew for an additional 25 years. The agreement requires that the Division maintain the leased Bureau parcel in an agricultural status and allows the Division to capture, preserve and enhance the springs for the sole continued purpose of fish culture. These lease provisions allow the Division to protect the spring source from land-use activities that might otherwise compromise water quality.

The existing water collection system encompasses an area of approximately 3.5 acres and consists of a series of buried perforated pipes and terminal collection boxes located on the leased Bureau parcel and underlying the spring complex, locally known as Provo Dick Spring. Although general maps of the system exist, there are no known "as built" diagrams or other engineering records that provide a precise location of the existing subsurface components of the of the original collection system. Barring unforeseen circumstances, it is assumed that replacement of the existing pipe and collection box system with an upgraded system along the existing alignment will be adequate to satisfy the existing water rights. A subsurface infiltration gallery, located entirely on the state-owned parcel immediately downstream of the spring complex, will also be installed to augment the pipe collection system. Regardless of the final design of the water collection system, any quantity of water in excess of the facility's existing water right would be bypassed and continue downstream. All flows diverted for fish production would be returned to the natural spring channel immediately below the facility.

Water diverted to the facility would be passed through de-gassing columns to reduce the concentration of dissolved nitrogen, naturally present in the available spring water and harmful to fish in high concentrations. The water would then be routed through the raceways and hatchery building, as necessary. Supplemental oxygen would be introduced to the water supply at several places during water passage through the facility. This oxygen injection process allows water to be reused several times and increases the production capacity of the facility.

A new hatchery building, where eggs are hatched and fry are grown to fingerling size (a few inches long) before they are moved into outdoor raceways, would be constructed at a new site adjacent to the south raceways. Relocation on this site allows for better use of gravity flow of the water supply to the building. The new hatchery building will also incorporate office and laboratory space.

The hatchery is designed to use gravity-flow production water, with backup pumps, standby electrical power generators, and alarm systems where pumping is necessary. This combination of features would reduce the O&M requirements and reduce the likelihood that power failure or equipment malfunction would result in the loss of fish stocks.

2.1.2 Water Quality and Quantity

Effluent will be treated to comply with the Utah Pollution Discharge Elimination System (UPDES) permit, administered by the Utah Division of Water Quality (UDWQ). At present, the water quality parameters currently regulated at the Whiterocks Hatchery are total suspended solids (TSS), total dissolved solids (TDS), and pH. The current discharge permit (Permit Number UTG130000) requires TSS concentration to be maintained below 25 mg/l. As part of the UPDES permit and monitoring requirements, the concentration of TDS measured at the point of discharge can be no more than 100 mg/l higher than that measured at the water source. Allowable pH ranges from 6.5 to 9.0. Implementation of the Proposed Action and the resultant increase in total capacity at the facility will not necessitate any modification of the existing UPDES permit. Permit requirements and monitoring standards for the reconstructed hatchery will be identical to the present facility.

Use of reduced phosphorus feed formulations will likely reduce TSS, achieve moderate reductions in phosphorus discharge, and slight reductions in organic nitrogen and ammonia. These latter three parameters are not regulated under current state and federal law but are of importance to culturists. All collected water used for fish production will be treated to remove suspended solids prior to discharge. It is anticipated the reconstructed facility will easily comply with permit requirements.

The facility will continue to use the Division's existing 11.7 cfs water right. No additional water rights will be necessary. There are no consumptive uses of diverted water for fish culture, and the total flow diverted to the facility will be released undiminished to the natural stream channel.

2.1.3 Wetlands

Impacts to the leased Bureau parcel would stem from necessary excavation and replacement of the existing water collection system. The replacement collection system would consist of a series of perforated pipes with terminal collection boxes buried in infiltration trenches along the general alignment of the existing system. The spring complex overlying the existing collection system encompasses approximately 3.5 acres of jurisdictional wetland (Figure 4a). No significant expansion of the existing system footprint is anticipated. Direct construction-related impacts would occur on somewhat less than 3.5 acres.

On the 14-acre parcel in state ownership, some of the existing open-water ditches and ponds would be eliminated where possible. This action is necessary to eliminate bottom sediments and minimize the potential for infestation of the aquatic worm, *Tubifex tubifex*, the primary host for the metazoan parasite that causes whirling disease in trout. Small wetlands associated with existing pipelines, raceways, and other features will also likely be eliminated. It is anticipated that the Proposed Action will affect an estimated 0.3 acres of wetlands (Figure 4b).

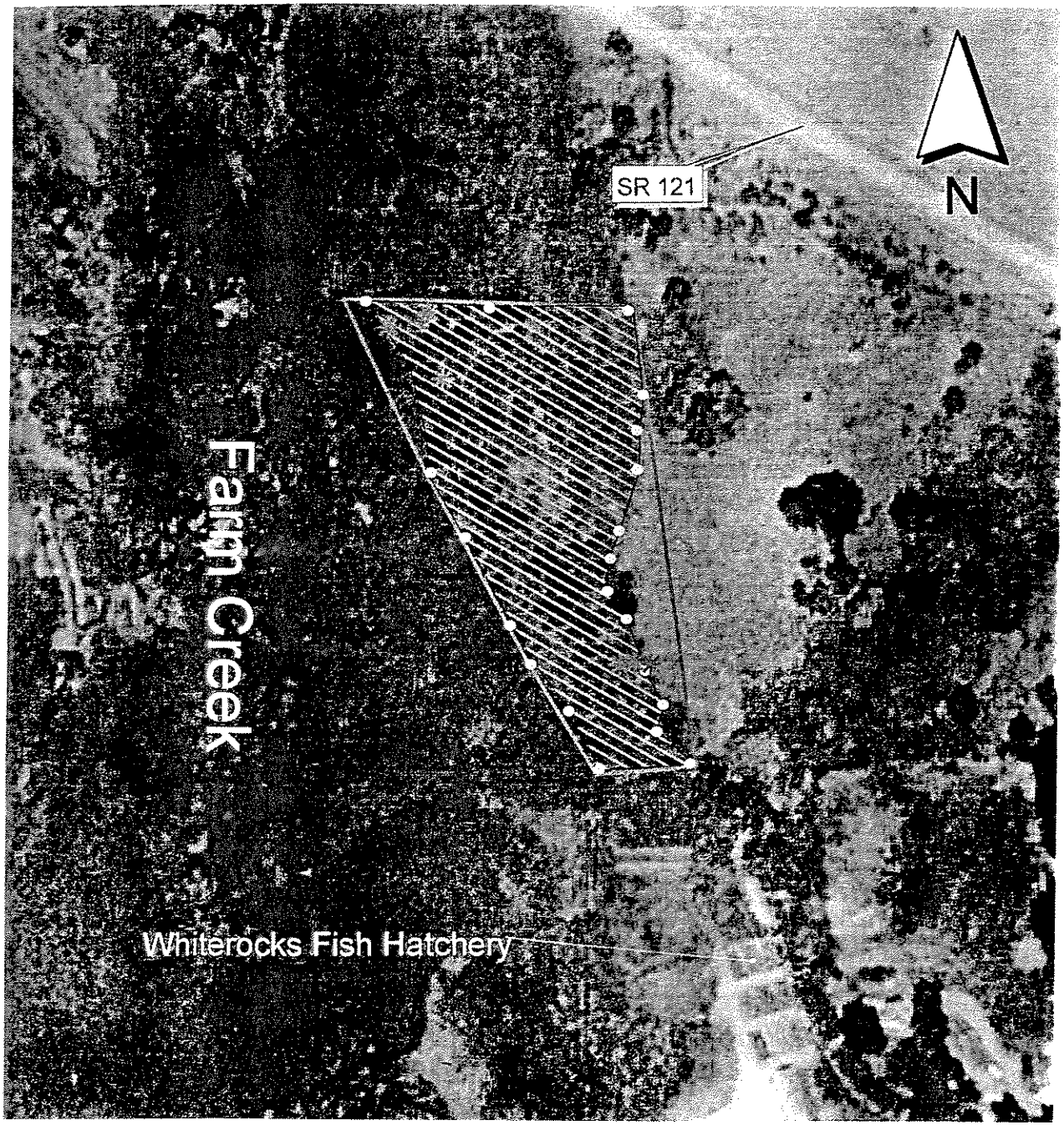

Figure 4a. Delineated wetlands associated with the Whiterocks Hatchery site spring source (leased Bureau parcel). Scale: 1"=200'. Data points = . Wetland flag = . Site acres = 4.4 (□); wetland acres = 3.5 (⊘). Delineators: Leslie Gecy and Mindy Wheeler; completed August 15, 2002.

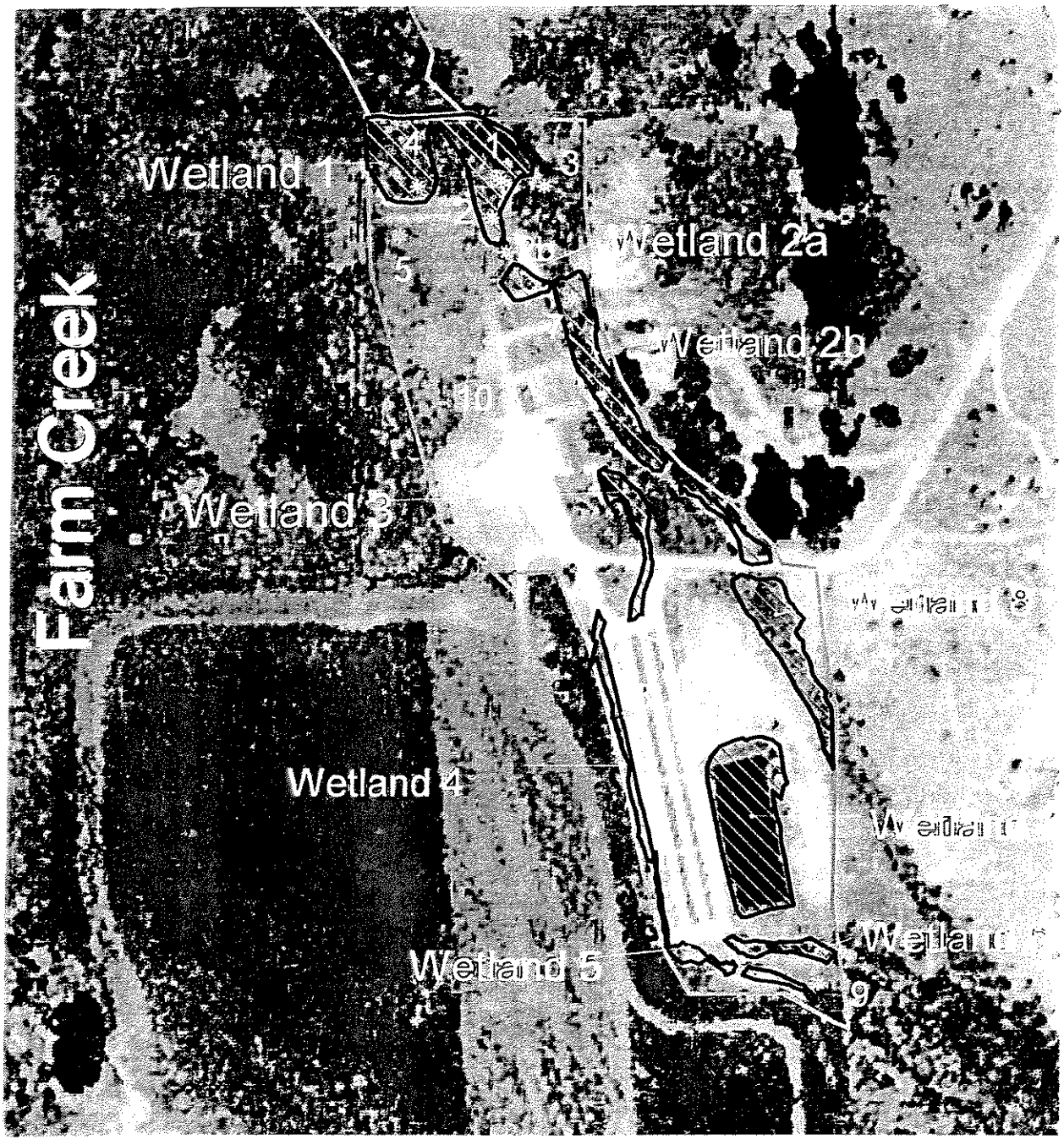

Figure 4b. Delineated wetlands associated with the Whiterocks Hatchery site. Scale: 1"=200'. Data points = . Site acres = 9.0 (□); wetland acres = 1.975 (⊘). Delineators: Leslie Gecy and Mindy Wheeler; completed May 3, 2003.

On-site mitigation measures on the leased Bureau parcel could include actions such as control of invasive/noxious plants species, rejuvenation of decadent willow stands, planting of desirable wetland species, opportunistic conversion of existing open-water ditches and ponds to meadow wetlands, monitoring to determine impacts of increase efficiency in subsurface water collection, and implementation of Best Management Practices during construction. Any mitigation or enhancement activities that might be proposed for the leased Bureau parcel north of the hatchery site will require the concurrence of the Bureau's Superintendent of the Uintah and Ouray Agency (Superintendent). Opportunities to mitigate for wetland losses on the state parcel will likely be limited due to the anticipated lack of available space and whirling disease considerations.

An appropriate Section 404 (Clean Water Act) permit that will address specific mitigation requirements will be required prior to construction. Consultation with the U.S. Army Corps of Engineers (Colorado/Gunnison Basin Regulatory Office) was initiated early in project development, and is continuing. As part of the permitting process, wetlands at the site were delineated and the associated reports were submitted to the Corps for review and approval. After field review, the Corps accepted the wetlands delineation report and associated conclusions in correspondence dated August 23, 2003.

Preliminary permitting discussions have also been held with the Corps at the site. Permit stipulations and any necessary mitigation measures have yet to be finalized, however, it is the Corps' initial preference that all such mitigation actions be "on-site and in-kind" to the degree possible. Wetland mapping data derived from the delineation report will assist design engineers to avoid sensitive areas and minimize wetland impacts where possible.

2.1.4 Noxious Weeds

Surveys for noxious plant species were conducted in conjunction with wetlands delineations, cultural surveys, and other onsite investigations. In addition to those species specifically documented during those surveys, there exist other species that are known to occur in the region that could potentially become established in areas disturbed during construction. Most disturbed areas on the 14-acre hatchery site owned by the state will be paved, landscaped or otherwise revegetated as part of the Proposed Action, thereby minimizing opportunities for noxious weeds to become established. Surface disturbances on the 20-acre leased Bureau parcel will be restricted to that area associated with the water collection system rehabilitation and possibly a small area of uplands that may be used as a temporary staging area for materials used in reconstruction.

Commonly accepted mitigative practices would be implemented to minimize disturbance of soils during the reconstruction of the water collection system. These techniques include stockpiling and replacement of soil layers, a prohibition of imported soil for backfilling, the use of mats to

minimize soil disturbance, etc. Further, post-construction monitoring of any areas of likely infestation will be incorporated as part of the hatchery's routine maintenance program. Infestations of noxious weed discovered will be controlled using accepted methods. Weed control activities proposed for the leased Bureau parcel north of the hatchery site require the concurrence of the Superintendent.

2.1.5 Raptor Protection

Any temporary or permanent structures or components for power transmission that are required for reconstruction will conform to recommended design configurations as presented in the Avian Power Lines Interaction Committee's most recent publications to minimize risk of raptor electrocutions. Appropriate measures designed to avoid adverse impacts to raptors will be implemented (U.S. Fish and Wildlife Service 2002).

2.1.6 Traffic-related Disturbance

Facility design will commence in 2004, immediately after NEPA compliance and issuance of a Record of Decision. Construction will begin in 2004 and be completed by 2005. In the interest of safety, the Whiterocks Hatchery will be closed to visitors during the construction period. Construction access will be along the existing right-of-way via paved road connecting the hatchery site to the county road. Construction would be generally conducted during daylight, water would be sprayed on access roads to control dust, and litter would be collected regularly. The contractor or other responsible party will notify adjacent landowners as to the construction schedule to minimize traffic-related disturbances. In addition, the Tribe? Uintah County Road Department will be solicited regarding appropriate cautionary signs for placement along the county road in the vicinity of the hatchery during the construction period.

2.1.7 Operation and Maintenance

In addition to traditional state support, pursuant to Section 313(c) of CUPCA, the U.S. Department of the Interior (Department) intends to participate with the State of Utah by providing O&M funding to support the increased fish production at the Whiterocks Hatchery. This funding obligation has been defined in a separate transfer funding agreement between the Division and the Department, entitled "Draft Cooperative Agreement between the Secretary of the Interior and the Utah Division of Wildlife Resources to Provide for Operation and Maintenance of the Whiterocks State Fish Hatchery." The Draft Cooperative Agreement is under negotiation and will not be finalized until NEPA compliance is completed. This agreement would reimburse the Division for the anticipated increase in O&M costs attributable to the projected increase in Whiterocks Hatchery production devoted to fulfillment of the fish needs goals as described in the *Plan*.

2.2 NO ACTION - No Reconstruction

This alternative would involve continued operation of existing facilities at the Whiterocks Hatchery without reconstruction and without financial support of hatchery operations and maintenance by the Department.

2.2.1 General Physical Components

The kinds of capital and technological improvement identified for the Proposed Action are possible only through construction of new production facilities. This alternative would not provide those improved facilities or extend the useful life of current facilities. Hatchery production would likely decline as facilities become more dilapidated. The production goals for the Whiterocks Hatchery as identified in the *Plan* would not be met.

2.2.2 Water Quality and Quantity

The existing UPDES permit requirements would continue to be met. The current monitoring stipulations would continue to be implemented. All water diverted for fish culture would continue to be released undiminished to the natural stream channel.

2.2.3 Wetlands

No construction or demolition would occur under the No Action alternative. Wetland expanse and condition would remain as they presently exist. The existing lease agreement between the Division and the Bureau would remain in effect.

2.2.4 Noxious Weeds

Noxious weed control would continue opportunistically as part of routine facility maintenance.

2.2.5 Raptor Protection

The present level of threat associated with existing power poles, transmission lines, and related equipment would remain unchanged.

2.2.6 Traffic-related Disturbance

Without construction, there would be no increase in construction traffic and therefore no need to manage such traffic. Increased visitation would likely occur, although no improved visitor facilities would be provided.

2.2.7 Operation and Maintenance

Because there would be no increased production, there would be no financial support provided by the Department for increases in hatchery operation and maintenance costs.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED

The following alternatives were considered then eliminated from further analysis on the basis that they would not have provided reasonable means of fulfilling the need. The specific reasons for eliminating them are discussed.

2.3.1 Building a Completely New Installation at Another Site:

This alternative would consist of finding a new, suitable site with sufficient water supplies, acquiring the land and water rights from presumably willing sellers, and constructing a new state fish hatchery comparable to the proposed facility. The Plan NEPA determined which sites would be best for construction. This alternative is similar to building a new cold-water hatchery for stocking CRSP-affected waters only as discussed in the Plan. This alternative was eliminated because such facilities would meet the need, but not be most cost effective. Land and water rights purchases could add significant costs. This alternative would also not meet the purpose of perpetuating or increasing existing hatchery production capabilities, or likely have substantial matching funds. It is likely that a new installation would also have greater environmental impacts.

2.3.2 Shifting Production to Other State Hatcheries:

This alternative would consist of shifting all of the Whiterocks Hatchery's production demand to other hatcheries within the state system. Such an option would be feasible only if other hatcheries had appreciable unused production capacity. At present, no such long-term capacity exists. As such, this alternative is infeasible and would not fulfill the need.

CHAPTER 3 - AFFECTED ENVIRONMENT

This chapter provides a description of the existing environment area that could be affected by the alternatives. The description should facilitate an interpretation of environmental impacts and their potential significance as discussed in Chapter 4.

3.1 TOPOGRAPHY

The Whiterocks Hatchery is located in a shallow swale immediately downstream of a small complex of springs. Slopes trend to the south and are gentle to moderate throughout the site. A steeper slope separates a higher terrace, located on the northeastern side of the properties, from the remainder of the parcels. Elevations site-wide range from roughly 6,120 to 6,180 feet. Two residences, which house facility personnel, are located at an elevation of approximately 6,160 feet. The principal fish culture facilities are situated at approximately 6,150 feet.

3.2 SOILS

Most of the production facilities are located on an alluvial deposit, classified by the Natural Resource and Conservation Service (2002) as Moynier Loam, a poorly drained floodplain soil, which extends downslope from at least the spring complex to the north through the southern terminus of the project area. These sandy and clay loam soils are associated with gentle slopes and are slightly alkaline. The higher elevation terrace areas are composed of Surfaz Loam. These soils are relatively coarse-textured sandy loams interspersed with larger diameter gravels and cobble. They are described as excessively drained and neutral-to-slightly alkaline. A third soil type, the Yarts-Paradox complex, is found on a relatively small portion of the leased Bureau parcel. These soils are alkaline, moderately-drained sandy loams which border the west side of the spring complex.

3.3 VEGETATION

Vegetation located on the site is described by Western Wetland Systems (2002). The more xeric upland sites are dominated by Basin sagebrush (*Artemesia tridentata*) and goldeneye *(Viguiere multiflora*). Upland pastures contained orchard grass (*Dactylis glomerata*), timothy *(Phleum pratense*), and Kentucky bluegrass (*Poa pratensis*). Lowland vegetation, particularly in the northern spring complex, is comprised of various grasses, rushes (*Juncus* spp.), sedges (*Carex* spp.), willows (*Salix* spp.), various herbs, trees and shrubs. A more comprehensive description of wetland vegetation can be found in Section 3.6 below. Areas proximate to the developed facilities, such as raceways, support structures, and residences are landscaped with various ornamental trees and shrubs and planted in lawn grasses.

Two species of weeds, Canada thistle (*Cirsium arvense*), classified as noxious by the State of Utah, and Russian olive (*Eleagnus augustifolia*), classified as noxious by both Uintah and Duchesne Counties, were present in small patches on both the state and leased Bureau parcels.

3.4 WATER SUPPLY

Culinary water is provided to residences and hatchery buildings via an underground well located on the state parcel. Production water at the Whiterocks Hatchery originates from Provo Dick Spring, a spring complex located on the leased Bureau parcel. As previously described, the lease agreement allows the Division to protect the springs from land uses that might otherwise compromise water quality. The existing water collection system consists of a series of buried perforated pipes and terminal collection boxes located on the leased Bureau parcel and underlying the spring complex. The buried pipes, which, according to existing diagrams, consist of one main line and several laterals, collect surface and subsurface water and convey that supply to a main collection box located on the north end of the state-owned parcel. From that point, water is then piped into the facility for fish culture.

Any water in excess of immediate production needs enters a bypass ditch that conveys those flows to the southern property boundary, where they are discharged into the natural stream channel and continue downstream. Flows diverted at the upstream collection box into the hatchery for culture purposes are similarly discharged into the natural channel after culture use and required treatment. There is no consumptive use assigned to water used for fish production at this facility. Thus, all water captured by the collection system is either bypassed or returned to the natural channel after use and available to downstream users.

The reconstructed facility will continue to use the Division's existing 11.7 cubic feet/second (cfs) water right. According to available records, collected flows (which likely does not represent total yield from the spring) have generally fluctuated between approximately 4.5 and 8.3 cfs, depending on the season and local moisture conditions. The temperature of the production water varies between 47° F in January to 51° F in mid-summer. Dissolved oxygen levels generally range between 7.7 and 9.9 mg/l. The water pH is neutral to slightly alkaline (7.0 - 7.5).

3.5 WETLANDS

A total of 5.5 acres of wetlands were delineated on the two properties associated with the operation of the Whiterocks Hatchery (Figures 4a and 4b.). The Bureau leased parcel, which supports the spring complex and water collection system, contains 3.5 acres of jurisdictional wetlands. The wetland vegetative community on this site consists of intermixed emergent marsh and scrub shrub. A variety of forb species were observed. Graminoids, however, provide most of the ground cover and include three species of sedges (*Carex* spp.), four rushes (*Juncus* spp.), and eight grasses. The shrub community consisted of ten species, however yellow and coyote willows (*Salix lutea* and *S. exigua*) predominated.

Wetlands on the state-owned parcel encompass a total of approximately 2.0 acres and are generally associated with constructed open-water ditches and ponds or found in areas where subsurface construction (associated primarily with the raceways) has intercepted subsurface flow and directed water to the surface. There are three wetland vegetative communities on this site: wet meadow, emergent marsh, and scrub shrub. The dominant species were similar to those

noted on the previously described leased Bureau parcel, however, the species composition of the associated vegetative communities were generally not as diverse.

3.6 DOWNSTREAM AREAS

Immediately below the hatchery outflow, the natural channel of Provo Dick Springs crosses from state-owned lands to trust lands administered by the Bureau. After flowing generally southeast for approximately 1 mile, the stream enters a shrub-dominated wetland approximately 170 acres in size. Surface flows appear to diffuse throughout this wetland complex, and the channel becomes relatively undefined. It is assumed that these unconsolidated and possibly subsurface flows eventually reach the highly braided East Channel of the Uinta River, where they are available to downstream appropriators.

The only fish observed in the natural spring channel immediately below the Whiterocks Hatchery have been trout species (R. Morrill, Utah Division of Wildlife Resources, personal communication). These fish are assumed to have originated from the hatchery.

3.7 THREATENED, ENDANGERED, CANDIDATE AND STATE SENSITIVE SPECIES

The Utah Field Office of the U.S. Fish and Wildlife Service (Service) provided a list of 18 Threatened, Endangered and Candidate species that may occur in the project area by letter dated November 12, 2002 (Table 1). [Subsequent to the receipt of that letter, the listing package for the mountain plover (*Charadrium montanus*) was formally withdrawn.] The potential occurrence for these species has been evaluated and is listed. Potential project impacts on those that are likely to occur or have habitat in the project area are discussed in Chapter 4.8.

The Utah Natural Heritage Program database shows a single record of occurrence near the Whiterocks Hatchery for a species listed as State-Sensitive, the smooth greensnake (*Opheodrys vernalis*). The sighting occurred approximately 1.5 miles from the hatchery.

Table 1. Threatened, Endangered and Candidate Species That May Occur in the Whiterocks Hatchery Project Area.

Species	Occurrence Potential
Endangered	
Shrubby Reed-mustard *Schoenocrambe suffrutescens*	None. The shrubby reed-mustard grows along semi-barren, white-shale layers of the Green River Formation. It grows in mixed desert shrub and pinyon-juniper communities in southern Duchesne County, outside the project area [Utah Natural Heritage Program website, April, 2003 (Division 2002)].
Bonytail *Gila elegans*	None. These four species occur in the Colorado River drainage, downstream of the project area influence on the Uinta River. They did not historically occur in the project area. (Division 2002). Fish culture is considered a nonconsumptive use of water supplies and will not affect flows in the Colorado River system.
Colorado pikeminnow *Ptychocheilus lucius*	
Razorback sucker *Xyrauchen texanus*	
Humpback chub *Gila cypha*	
Black-footed ferret *Mustela nigripes*	None. No populations of black-footed ferret or prairie dog colonies occur in the project area.
Southwestern Willow Flycatcher *Empidonax trailii extimus*	None, while there is potential willow flycatcher habitat in the project area, the subspecies that may occur in this portion of the state is *E.t. adastus*.
Threatened	
Clay Reed-mustard *Schoenocrambe argillacea*	None. The Clay reed-mustard grows on the Green River soil formation on substrates of bedrock, scree and fine textured soils in southwestern Uinta County. It does not occur within the project area. (Division 2002).
Uinta Basin Hookless cactus *Sclerocactus glaucus*	None. This species is found in salt desert scrub community and pinyon-juniper woodlands on clays soils that are often covered with cobbles and pebbles. The distribution of the plant is limited to four counties in Colorado and Duchesne and Uinta Counties in Utah. It is located in southeastern Duchesne County, outside the project area. (Division 2002).
Ute Ladies'-tresses *Spiranthes diluvialis*	The orchid has been found on the hatchery grounds in 1992 and 2003.
Bald eagle *Haliaeetus leucocephalus*	Possible wintering bald eagle habitat along the Uinta River.
Mexican spotted owl *Strix occidentalis lucida*	None. The Whiterocks hatchery area does not contain any Mexican Spotted Owl habitat.
Canada lynx *Lynx canadensis*	None. Canada lynx is typically found at elevations above 7,000 -8,000 ft. The area also includes no snowshoe hare, which are associated with Canada lynx. (B. Blackwell, Division, personal communication).
Candidate	
Graham Beardtongue *Penstemon grahamii*	None. In Utah, the Graham beardtongue occurs only in the Uinta Basin in Carbon, Duchesne, and Uintah Counties. It grows on semi-barren knolls, ridges, and steep slopes in a mix of fragmented white shale and silty clay soils of the Green River Formation in southeastern Duchesne County. It is located outside the project area. (Division 2002).
Horseshoe milkvetch *Astragalus equisolensis*	None. The horseshoe milkvetch is found on river terrace sands and gravels overlying the Duchsesne River Formation. It is located in central Uinta County and is not found in the project area. (Division 2002).
White River beardtongue *Penstamon scariosus* var. *albifluvis*	None. White River beardtongue is found on semi-barren areas of xeric shallow fine textured soils and does not occur on the project site. (Division 2002).
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	Unlikely. Yellow-billed cuckoos are usually found in large tracts of cottonwood/willow habitats with dense sub-canopies.

CHAPTER 4 - ENVIRONMENTAL CONSEQUENCES

This chapter describes the environmental effects that are likely to result from the identified alternatives. A summary of those effects can be found at the end of the chapter (Table 3).

4.1 WATER QUALITY AND QUANTITY

Proposed Action:

Total suspended solids (TSS), total dissolved solids (TDS), and pH are the water quality parameters regulated and periodically monitored at the Whiterocks Hatchery under the current UPDES permit. Under current UPDES regulations, an increase in production under the Proposed Action will not necessitate a change in the parameters regulated, discharge limitations, or monitoring requirements. Currently, the discharge from the Whiterocks Hatchery falls well within prescribed limitations for all regulated parameters.

Suspended solids, those materials entrained during routine raceway cleaning that can be removed from the discharge water through filtering, will be managed through the use of low phosphorus feed formulations and solids filtration and disposal features incorporated as part of the reconstructed facility. Some of the total phosphorus and small amounts of total organic nitrogen and ammonia produced by hatchery operations are contained within the solids and can be removed with them. These parameters are not regulated under current state and federal law but are nonetheless of some importance to culturists. Removal of suspended solids will also reduce phosphorus discharge somewhat and slightly reduce organic nitrogen and ammonia discharge over what would be observed without solids removal.

The proposed project production capacity (~88,000 pounds) of the reconstructed Whiterocks Hatchery is about 60% of that currently produced at the Loa Fish Hatchery (~145,000 pounds). The Loa facility is also within the Colorado River drainage and, thus, subject to the same monitoring requirements as the Whiterocks Hatchery. Most recent data supplied to the Division of Water Quality from monitoring at Loa shows TSS levels of <4.0 mg/l, TDS in the 2-34 mg/l range (with most measurements at 2 mg/l), and pH in the 7.4-8.1 range. All regulated and routinely monitored water quality parameters at the Loa station are well within acceptable limits. In summary, it is anticipated that the reconstructed Whiterocks Hatchery will easily comply with permit requirements.

Water quantity will also not significantly differ from that currently observed. Because water is not consumed in the culture process, stream flows downstream of the facility will not change significantly from the current condition. In other words, the yield of the spring source will not change as a result of reconstruction of the hatchery, and all flows collected will return to the spring channel undiminished. For these reasons, no significant adverse impacts to downstream aquatic biota, aquatic habitats, or stream channel morphology are anticipated.

No Action:

This alternative does not provide facilities for improved solids removal, although permitting requirements have been met to date. Use of reduced phosphorus feed formulations, which would also be implemented as part of the Proposed Action, may be incorporated and would likely achieve moderate reductions in phosphorus discharge, slight reductions in organic nitrogen discharge, and slight reductions in suspended solids discharge. The effects of improved feeds on water quality differ from the Proposed Action only because fish production would not increase under the No Action alternative. The facility would continue to meet all UPDES permit requirements.

4.2 WETLANDS

Proposed Action:

The Proposed Action would have temporary wetland impacts to an estimated area of 4.6 acres (Table 2). Impacts would stem from required excavation and construction of new pipelines, and related features.

Approximately 3.5 acres of that total consists of wetlands that overlay the existing water collection system on the leased Bureau parcel. The best available information indicates that, because the spring complex is not completely underlain by pipes and other associated features, direct construction-related impacts would occur on an acreage somewhat less than 3.5 acres.

Wetland areas affected by rehabilitation of the water collection system will be restored to an approximate prior condition and in accordance with permit conditions. Specific conditions designed to minimize construction impacts and maintain post-construction wetland values will ultimately be determined in consultation with the Corps, but could include measures such as:

1. Installation of construction mats to minimize soil disturbance;
2. Installation of subsurface pipes in such a manner as to preclude active drainage along the newly constructed trenches;
3. Restriction of the construction footprint to the minimum necessary to accomplish the work;
4. Removal, storage, and replacement of disturbed soil in layers;
5. Incorporation of appropriate topsoil management techniques to minimize weed colonization;
6. Implementation of a post-construction weed monitoring and treatment program; and
7. Implementation of post-construction monitoring to assess changes in wetland expanse that may result from increases in water collection efficiency.

On-site mitigation measures on the leased Bureau parcel could also include rejuvenation of decadent willow stands not immediately associated with the subsurface water collection system and planting of desirable wetland species, particularly shrubs. Willow treatments could include such measures as pruning, applied fire, or planting of shoots. It is clearly understood that any mitigation activities that proposed for the leased Bureau parcel will require additional consultations and the concurrence of the Superintendent.

Table 2. Summary of Jurisdictional Wetlands at the Whiterocks Hatchery[a].

Wetland Type	Figure, Wetland Number	Habitat Type	Dominant Species	Total Acres	Estimated Affected Acres	
					Temporary	Permanent
Springs Seeps	4a, N/A	Emergent marsh Scrub shrub	*Carex* and *Juncus spp.* *Salix lutea* and *S. exigua*	3.5	<3.5	Unknown, but assumed to be <3.5, possible indirect impacts due to enhanced water collection efficiency
Seep	4b, 1	Wet meadow	*Carex nebrascensis* *Juncus articus*	0.530	<0.530	0.0
Spring	4b, 2a	Wet meadow Emergent marsh	*C. nebrascensis* *J. articus* *Nasturtium officinale*	0.048	0.0	0.048
Hillslope seep	4b, 2b	Wet meadow	*C. nebrascensis* *J. articus* *Equisetum hymenale*	0.305	<0.305	0.15 50% loss assumed
Inter-raceway ditch	4b, 3	Open water Wet meadow fringe	*N. officinale* *Phlaris arundinacea*	0.106	0.0	0.106 (loss primarily associated with open water)
Hillslope seep	4b, 4	Wet meadow	*J. articus* *E. hymenale* *Calmagrostis canadensis*	0.137	0.0	0.0
Ditch	4b, 5	Open water	N/A	0.026	0.0	0.0
Ditch	4b, 6	Open water	N/A	0.062	0.0	0.0
Excavated pond	4b, 7	Open water Scrub shrub margin	*Salix lutea* *S. exigua*	0.510	0.0	0.0
Hillside seep/ Ditch	4b, 8	Open water Wet meadow Emergent marsh	*Phragmites australis* *Typha latifolia* *E. hymenale*	0.250	0.250	0.0
Total				**5.5**	**<4.6**	**0.3** + due to increased water collection efficiency

[a] Modified from Western Wetlands System (2002, 2003)

On the state-owned parcel (Figure 4b), some of the smaller wetlands, primarily associated with existing pipelines would be eliminated due to reconstruction. It is anticipated that construction will have 1.1 temporary wetland impacts and 0.3 permanent wetland impacts on the state-owned parcel (Figure 4b).

All mitigation measures mentioned above are examples of the generally accepted techniques to minimize construction impacts in wetlands or be of potential benefit to wetland systems. It is likely that many of those techniques will be incorporated either as Best Management Practices in the construction phase or as post-construction mitigation and enhancement. Final determination of impacts and mitigation and/or compensation measures associated with the requisite permit will be made as consultation with the Corps continues and as the project design evolves and impacts can be better determined. Any restoration measures that may be applied to the parcel leased from the BIA will require review and approval of the Superintendent.

No Action:

This alternative would not affect jurisdictional wetlands. It would also not provide for any measures for wetland enhancement or restoration.

4.3 NOXIOUS WEEDS/INVASIVE SPECIES

Proposed Action:

Noxious weeds may occupy sites disturbed by construction activities. Most disturbed areas on the 14-acre hatchery site owned by the state will be paved, landscaped or otherwise revegetated as part of the reconstruction process, thereby minimizing opportunities for establishment of these species. Post-construction monitoring of any disturbed areas will be periodically scheduled and continue until appropriate ground cover has become established as part of routine facility maintenance. Infestations of noxious weeds found will be controlled using accepted methods.

Commonly accepted mitigative practices would be implemented to minimize disturbance of soils during the reconstruction of the water collection system. These techniques could include such measures as stockpiling and replacement of soil layers, a prohibition of imported soil for backfilling, the use of mats to minimize soil disturbance, etc. Similar to the state-owned parcel, post-construction monitoring of any areas of potential infestation will be periodically scheduled and continue until appropriate ground cover has become established. Weed control activities proposed on the leased Bureau parcel north of the hatchery site will require the concurrence of the Superintendent.

No Action:

Noxious weed control would continue opportunistically as part of routine facility maintenance.

4.4 RAPTOR PROTECTION

Proposed Action:

Any new power poles, transformers, or power line configurations, whether permanent or temporarily installed to facilitate construction, which might adversely affect roosting raptors or other bird species will be designed and constructed to conform to specifications recommended by the Avian Power Lines Interaction Committee (1994, 1996) to minimize the potential of bird electrocutions. Appropriate measures designed to avoid adverse impacts to raptors will be implemented (Service 2002). No significant changes or impacts to raptor populations are anticipated.

No Action:

The present level of threat associated with existing power poles, transmission lines, and related equipment would remain unchanged.

4.5 TRAFFIC-RELATED DISTURBANCES

Proposed Action:

Facility design would begin in 2004. Construction would begin in 2004 and be completed in 2005. Traffic from construction vehicles and construction workers would likely have some influence on local traffic-related congestion, noise, and dust. Heavy equipment use, such as of cement and dump trucks, would be limited to daylight hours.

Visitation at the hatchery is largely incidental, occurring as an opportunistic encounter by people already traveling in the area, rather than as a primary attraction drawing increased numbers of people to the general area. In the interest of safety, the Whiterocks Hatchery will be closed to visitors during construction.

Through common construction management practices, it is likely that these temporary impacts and inconveniences can be managed at an acceptable, minimal level. Construction access will be along the existing right-of-way via paved road connecting the hatchery site to the county road. Construction would be generally conducted during daylight hours, water would be sprayed on access roads to control dust, and litter would be collected regularly. Adjacent landowners will be informed of the construction schedule to minimize traffic-related disturbances. Appropriate cautionary signage will also be installed along the county road in the vicinity of the hatchery during the construction period.

Anticipated increases in total fish production will likely result in increases in vehicular traffic to and from the facility due to increases in deliveries of fish food and other supplies associated with production and distribution of fish for stocking. Visitation to the facility by the public will also likely increase. Increased post-construction traffic to the facility is expected to be only marginally higher than the present condition.

No Action:

Under the No Action alternative, no major construction is planned. Current levels of visitation would be expected to persist, and there will be no need to manage traffic or close the facility to visitors.

4.6 OPERATION AND MAINTENANCE

Proposed Action:

This alternative results in an annual projected increase in production of approximately 52,200 lbs of fish. The increase in total production will used to meet the goals as defined for Project-affected waters in the *Plan*. Federal participation assists the Division in operating the Whiterocks Hatchery to meet the total production objective of 87,700 lbs annually. The Department and the Division would share the O&M costs at the Whiterocks Hatchery under an agreement.

No Action:

Because there would be no increased production dedicated to the fulfillment of the fish need objectives described in the *Plan*, there would be no financial support provided by the Department for increases in hatchery operation and maintenance costs.

4.7 CULTURAL RESOURCES

Proposed Action:

Consultations with the State Historic Preservation Office (SHPO) regarding potential historic cultural resources that will be affected by the reconstruction of the Whiterocks Hatchery were initiated in 2001. The Division's archeologist, with the assistance of other Division staff, has compiled necessary supportive documentation of the hatchery infrastructure and has submitted this draft report to SHPO for review. Initial archeological surveys have not found cultural resources, and because of the already disturbed condition of the site, and previous ground excavation that occurred during initial construction of the water supply system, hatchery building and associated structures, the potential for discovery of significant archeological resources is low.

Nonetheless, an archeologist will be assigned to oversee any reconstruction associated with the water supply system on the leased Bureau parcel so that appropriate procedures are followed should any cultural resources be discovered in the area of the springs.

Some of buildings and structures associated with the Whiterocks Hatchery are considered to be eligible for the National Register of Historic Places. As part of the reconstruction process, a documentation package detailing the site history and infrastructure inventory has been prepared and submitted to SHPO for review.

Consultation with SHPO and compliance with Section 106 of the National Historic Preservation Act of 1966, which would include a Memorandum of Understanding with the National Historic Preservation Council, will be completed before groundbreaking is initiated. Consultation with affected Tribal entities has been initiated and will continue.

No Action:

Under the No Action alternative, no cultural or historic resources would be impacted and no consultations will be required.

4.8 THREATENED, ENDANGERED, CANDIDATE AND STATE SENSITIVE SPECIES

Proposed Action:

A "may affect" determination is made if certain conditions may potentially occur as a result of the Proposed Action. The analysis is based on the potential of the Proposed Action to:

- take a threatened, endangered or candidate species,
- cause a loss of habitat of a threatened, endangered or candidate species and/or
- disturb a species migration, dispersal, breeding, or pollination that would affect the viability of the population of a threatened, endangered or candidate species.

General life history information is described only for those species with a potential to occur in the project area: bald eagle, Western yellow bellied cuckoo, Ute ladies' tresses and smooth greensnake. Sightings and availability of habitat in the area of influence are included in the descriptions.

4.8.1 Bald eagle

4.8.1.1 Life History

Bald eagles typically nest in large ponderosa pine, Douglas-fir, and cottonwood trees. Fish and waterfowl are the primary prey, with rabbits and carrion utilized to a lesser extent. Foraging habitat consists of large, unobstructed open areas such as openings in river corridors or lakes.

Eagles also concentrate around big-game winter range and consistent sources of carrion associated with road kills (Division 2002). Perching and roost sites (on large trees with open branches) and access to prey are important habitat characteristics for bald eagles during the winter. Bald eagles have yearly fidelity to the same tree for roosting and nesting. They are intolerant of human disturbance, especially during the breeding season (Service 1986). Consequently, they normally locate perches and nest sites away from human disturbances or move them if they are disturbed (Division 2002).

Bald eagle wintering roost sites would typically be in use during the period of November through April.

4.8.1.2 Occurrence in the Assessment Area

Breeding bald eagles are only known to occur in Carbon County, Salt Lake County and Grand County. Any area below the forested slopes of the Uinta Mountains could be used by bald eagles for foraging during the winter, depending on ice conditions and perch availability (Central Utah Water Conservancy District 1996).

Wintering bald eagles are not known to occur in the Uinta River drainage (K. Paulin, U.S. Forest Service, personal communication). While they are occasionally seen in the Uinta River basin, they tend to congregate near areas of open water, such as near the White and Green Rivers. While there are tall cottonwood trees near the hatchery residences, bald eagles have not used them for wintering roost sites.

Impacts are not anticipated to the wintering bald eagle at the Whiterocks hatchery site as the construction season is expected to be during the period of May through October. Should construction activities occur in November or later, the Commission will consult with the Service at that time.

4.8.2 Western Yellow-billed Cuckoo

4.8.2.1 Life History

The yellow-billed cuckoo is thought to be a rare breeder in lowland riparian habitats. It is usually found in large tracts of cottonwood/willow habitats with dense sub-canopies less than 33 ft in height (Division 2002).

The current distribution of yellow-billed cuckoos in Utah appears to indicate that they are an extremely rare breeder in lowland riparian habitats statewide. Yellow-billed cuckoos are one of the latest migrants to arrive and breed in Utah. They arrive in late May or early June and breed in late June through July. Cuckoos typically start their southerly migration by late August or early September.

Nesting habitat is classified as dense lowland riparian characterized by a dense sub-canopy or shrub layer (regenerating canopy trees, willows, or other riparian shrubs) within 100 m (333 ft) of water. Over story in these habitats may be either large, gallery-forming trees (33-90 ft) or developing trees (10-27 ft), usually cottonwoods. Nesting habitats are found at low to mid-elevations (2500-6000 ft) in Utah. Cuckoos may require large tracts (100-200 ac) of contiguous riparian nesting habitat; however, cuckoos are not strongly territorial and home ranges may overlap during the breeding season. Nests are usually 4-8 ft above the ground on the horizontal limb of a deciduous tree or shrub, but nest heights may range from 1-6 m (3-20 ft) and higher (Division 2002)

4.8.2.2 Occurrence in the Assessment Area

Western yellow billed cuckoo have been observed in the Uinta Basin along riparian areas of up to an elevation of 6,000 feet (F. Howe, Utah Division of Wildlife Resources, personal communication). No surveys have been conducted above this elevation.

Based on a wetland delineation of the hatchery site, the Whiterocks hatchery does not include the preferred cuckoo nesting habitat made up of cottonwoods with a dense understory of willows or other woody riparian species (Western Wetland Systems 2002). No project impacts to the western yellow-billed cuckoo are anticipated at this site.

4.8.3 Ute Ladies'-tresses

4.8.3.1 Life History

The Ute ladies'-tresses orchid occurs in wetland and riparian areas in three distinct geographic areas: the eastern great basin of Utah and Nevada, the Colorado River drainage of eastern Utah, and the eastern front of the Rocky Mountains from southern Wyoming to south of Denver (Stone 1993). All known populations of Ute ladies'-tresses in Utah inhabit wetland sites (Division 2002). Plants have most often been found in old stream channels and on recently deposited material in the floodplain of adjacent rivers (Division 2002).

The species is somewhat tolerant of disturbance of the type that helps perpetuate its apparent preference for open areas that lack dense stands of overtopping vegetation. Where vegetation, such as willows, becomes more dense, the orchid may be found in small openings and along wildlife and recreation trails.

Habitat for the Ute ladies'-tresses consists of open riparian meadows, including active floodplains and old channel locations, and spring-fed wetlands between 4,300 and 7,000 ft in elevation. The Ute ladies'-tresses has been documented along the Uinta River from its terminus at the Duchesne River up to an elevation of 6,800 ft. Suitable habitat occurs for the Ute ladies'-tresses at the Whiterocks Hatchery site.

4.8.3.2 Occurrence in Assessment Area

One flowering orchid was observed on the Whiterocks Hatchery, west of the raceways at the southern end of the site, in 1992 by Division staff (B. Franklin, Utah Division of Wildlife Resources, personal communication). Surveys for the orchid and potential habitat were conducted on the hatchery grounds on July 24 and August 13, 2003. During the August 2003 survey, three flowering plants were observed in the same area as in 1992. This area is identified as wetland 4 in the wetland delineation report addenda (Western Wetland Systems, 2003). It is a hillslope seep and is an area that will not be disturbed under the Proposed Action. Orchids were not observed in any other area on the hatchery grounds.

Potential habitat was also identified in a portion of wetland 1, located at the north end of the existing hatchery area. A small area of this wetland may be temporarily impacted when the water supply pipe is replaced. A survey to locate any orchids will take place before excavation. Any found will be avoided by small changes in the pipeline alignment, or will be transplanted in coordination with the Service.

4.8.4 Smooth Greensnake

4.8.4.1 Life History

The smooth greensnake prefers moist areas, especially moist grassy areas and meadows where the snake is camouflaged due to its solid green dorsal coloration. They occur in the Uinta Mountain range (Division 2003) and are generally found at elevations ranging from 6,000 to 9,000 ft (B. Bosworth, Utah Division of Wildlife Resources, personal communication).

4.8.4.2 Occurrence in Assessment Area

Potential habitat occurs on the Whiterocks hatchery area, within wetlands described by L. Gecy (Western Wetland Systems 2002 and 2003). The bulk of the wet meadows will not be disturbed under the Proposed Action, with the exception of the area to be excavated at the north end of the existing hatchery area. The impacts to this area will be temporary. Replacement of the water supply collection system in the area to the north of the developed hatchery grounds will change the woody scrub-shrub wetland type to more of a wet meadow wetland and should provide additional potential habitat for the smooth greensnake.

4.8.5 Conservation Measures

To avoid any potential impacts to federally-listed threatened, endangered or candidate species, especially the Ute ladies'-tresses and bald eagle, the following measures will be taken:

- an additional Ute ladies'-tresses survey will be made prior to initiation of construction,
- adjustments in the water supply pipe alignment will be made to eliminate impacts if the orchid is observed in the potential habitat located at the north end of the property,
- if pipeline alignment adjustments are not possible, any orchids found will be

transplanted in coordination with the Service,

- to preclude adverse impacts during construction, existing plants will be fenced off or otherwise protected, and .
- the project construction period will be from May through October. If construction is to occur later in the fall or winter, the Commission will consult with the Service.

4.8.6 Determination of Effects

The Mitigation Commission concludes that the Proposed Action will not affect the shrubby reed-mustard, bonytail, Colorado pikeminnow, razorback sucker, humpback chub, black-footed ferret, southwestern willow flycatcher, Clay reed-mustard, Uinta Basin hookless cactus, Mexican spotted owl, mountain plover, Canada lynx, Graham beardtongue, horseshoe milkvetch, White River beardtongue or the western yellow-billed cuckoo.

The Mitigation Commission concludes that the Proposed Action with the conservation measures described above may affect, but is not likely to adversely affect, the bald eagle or the Ute ladies'-tresses orchid.

The Service has concurred with the above determination of effect for all species except Canada lynx, in a letter dated March 29, 2004. The Service has been directed from issuing concurrence on no effect determinations on Canada lynx by a court decision. The Mitigation Commission as a federal agency however, may proceed on a no effect determination. Based on the analysis presented, the Mitigation Commission concludes that the Proposed Action will have no effect on Canada lynx.

No Action:

No construction would occur, and there would be no effects to the above named species.

4.9 ENVIRONMENTAL JUSTICE AND INDIAN TRUST ASSETS

Proposed Action:

Executive Order 12989, *Environmental Justice*, requires Federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations and communities.

The Proposed Action would be implemented entirely within lands that have been devoted to the operation of the Whiterocks Hatchery for many years. Public access to the site during the construction period would be restricted and measures to minimize construction-related impacts will be implemented. Consequently, adverse impacts on the human environment are not anticipated. Therefore, the Proposed Action would not have any health or environmental effects on minority and low-income populations and communities as defined in the Environmental Protection Agency's Environmental Justice Guidance of 1988.

Indian Trust Assets are legal interests in property held in trust by the United States for federally recognized Indian Tribes or individual Indians. U.S. Department of the Interior Order 3175 requires agencies to consult with Indian tribes when trust property may be affected, and environmental and planning documents should clearly state that the rationale for the recommended decision will be consistent with the Department's trust responsibilities.

As previously referenced, the Proposed Action includes the reconstruction of the existing water collection system situated on a 20-acre parcel of trust land, immediately north of and adjacent to the hatchery site, administered by the Bureau on the behalf of the Ute Indian Tribe and leased to the Division. The current lease agreement, issued by the Bureau in 2000, will remain in effect for a period of 25 years with an option to renew for an additional 25 years. The agreement requires that the Division maintain the parcel in an agricultural status and allows the Division to capture, preserve and enhance the springs on the leased Bureau parcel for the sole continued purpose of fish culture. These lease provisions allow the Division to protect the spring source from land-use activities that might otherwise compromise water quality.

A representative of the Bureau's Uintah and Ouray Agency (Agency) has visited the hatchery site and was briefed about the project. The Agency has also requested that a copy of this Environmental Assessment be sent to their office for review. Reconstruction of the collection system will likely not extend beyond the existing alignment, and the Proposed Action is not expected to conflict with the stipulations of the existing lease agreement. In addition, the Mitigation Commission and Division will coordinate with the Agency during the design and construction process and offer opportunities for input. Consequently, it is anticipated that implementation of the Proposed Action would not adversely affect known Indian Trust Assets and therefore would be consistent with Department trust responsibilities. Prior to issuance of the Final Environmental Assessment and Decision Record, the Bureau will be requested to provide a letter of concurrence to the Mitigation Commission to that effect.

No Action:

There would be no construction, and consultation under the subject Executive Orders would not be required.

4.10 FLOODPLAINS AND WILD AND SCENIC RIVERS

Proposed Action:

The existing hatchery site has been mapped in consultation with the Federal Emergency Management Agency. It has been determined that that the state-owned site is not within the 100-year floodplain of Farm Creek. Although floodplains on federal lands, including the leased Bureau parcel, have not been mapped, it is highly unlikely that the leased Bureau parcel could be construed to lie within the 100-year floodplain of Farm Creek. The parcel is in the same subdrainage as the mapped hatchery site and located at a higher elevation than the mapped site. No floodplain-related impacts or effects are anticipated.

There are no river reaches in the immediate vicinity that currently exist or have been proposed for inclusion under the Wild and Scenic Rivers System.

No Action:

Similar to the Proposed Action.

4.11 CUMULATIVE IMPACTS

Cumulative impacts are the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. The existing facility has been in existence, in one form or another, since the early 1920's. The Proposed Action (partial reconstruction of the facility) represents a modernization of a portion of the existing hatchery (Figure 3, items highlighted with an asterisk). The Division intends to use state funds to complete the remainder of reconstruction when and if State funds become available.

This action would use essentially the existing hatchery footprint, but would complete those items identified in the 1996 Feasibility Study (FishPro), but not included in the partial rebuild. These are as listed below:

Disease Prevention Measures
Arched raceway Covers
Settling Pond Cover
Fish Barrier

Water Treatment
Dual purpose paced column aerators

Production Units
Exiting raceway coating
Existing raceway replacement (200')
New Raceways

Support Facilities
Renovate existing Office/Garage to be used as both garage and storage area
Automated feed system with feeders

Site work
Utilities, potable water system replacement
Roads and parking
Residences and Garage
Visitor parking and information center

The full reconstruction of the Whiterocks Hatchery (Division 1996) would result in approximately 131,400 pounds of coldwater fish production annually, a 95,900-pound (270%) increase over the present production capacity. This capacity would supply approximately 11% of the increase in annual coldwater sport fish production necessary to fulfill total fish needs, as identified in the *Plan* at an estimated additional cost of $2.7 million, the cost which will be borne by the State, and contribute an additional 43,700 pounds of production.

4.11.1 WATER QUALITY AND QUANTITY

Increased solids and nutrient loading is anticipated with the full reconstruction of the Whiterocks hatchery. Removal of solids from the effluent will be improved by use of baffled, self-cleaning raceways, a settling basin and/or microscreen filters, temporary storage of solids, and subsequent disposal off-site. At the 131,400 lb capacity, Whiterocks Hatchery will approximate the capacity of the Loa Hatchery as discussed in Section 4.1. Discharge permit effluent limit and monitoring requirements are expected to be the same. The hatchery is expected to meet these requirements. Minor or no additional impacts on water quality and quantity due to the full reconstruction are expected.

4.11.2 WETLANDS

Wetland impacts likely occurred when the initial construction of the hatchery in the 1920s, although the extent of these impacts are not known. The majority of the anticipated wetland impacts with the Proposed Action are due to the spring water collection system (see Table 2, P. 28). A maximum of an additional 0.6 acres of permanent wetland impacts are expected with the full reconstruction of the Whiterocks Hatchery. These include wetland areas 5 through 7, as depicted on Figure 4b. As with the Proposed Action, wetland mitigation will be completed as part of the Clean Water Act Section 404 permit requirements in consultation with the Army Corps of Engineers. Two onsite review meetings have been conducted to discuss mitigation requirements for impacts of the complete reconstruction. Mitigation will be completed to replace wetlands in place and in kind, where possible on the site.

4.11.3 NOXIOUS WEEDS/INVASIVE SPECIES

Noxious weeds may occupy sites disturbed by construction. Disturbed areas associated with the full reconstruction will be paved or landscaped. Management practices to prevent the establishment of noxious weeds during these activities will be implemented. As with the Proposed Action, post-construction monitoring of any areas of potential infestation will be periodically scheduled and continue until appropriate ground cover has become established.

4.11.4 RAPTOR PROTECTION

Any new power lines will be installed during the Proposed Action. No additional power lines are included in the full reconstruction. No additional impacts are anticipated.

4.11.5 TRAFFIC-RELATED DISTURBANCES

Additional construction traffic is anticipated with the full reconstruction. With construction management practices, it is likely that these temporary impacts and inconveniences will be managed at an acceptable, minimal level. Construction access will be along the existing right-of-way via paved road connecting the hatchery site to the county road. Construction would be generally conducted during daylight hours, water would be sprayed on access roads to control dust, and litter would be collected regularly. Adjacent landowners will be informed of the construction schedule to minimize traffic-related disturbances. Appropriate cautionary signage will also be installed along the county road in the vicinity of the hatchery during the construction period.

4.11. 6 OPERATION AND MAINTENANCE

Any O&M costs for additional production associated with full reconstruction will be determined by an agreement with the Department.

4.11.7 CULTURAL RESOURCES

The structures to be replaced under the full reconstruction are not considered to be eligible for listing on the National Register of Historic Places, as they were built within the last 50 years. No additional impacts to historic resources are anticipated.

The archeological site survey discussed in Section 4.7 was completed on the entire hatchery site. Impacts to significant archeological resources are not anticipated. An archeologist will be assigned to oversee any reconstruction associated ground disturbance. If any artifacts are discovered, appropriate contact procedures will be followed.

4.11.8 THREATENED, ENDANGERED, CANDIDATE AND STATE SENSITIVE SPECIES

No additional impacts to threatened, endangered, candidate or state-sensitive species are anticipated with the full reconstruction. The area containing the Ute ladies' tresses will be clearly marked and avoided. Consultation with the Service will be completed on any construction activities scheduled later than November.

4.11.9 ENVIRONMENTAL JUSTICE AND INDIAN TRUST ASSETS

There are no known impacts associated with the full reconstruction that would affect Indian Trust Assets, or disproportionately affect minorities. As with the Proposed Action, in accordance with Executive Order 12898, there are no minority or low income populations disproportionately negatively affected by the full reconstruction of the Whiterocks Hatchery.

4.11.10 FLOODPLAINS AND WILD AND SCENIC RIVERS

As described in Section 4.10, no designated floodplains exist at the Whiterocks hatchery site. No wild and scenic rivers are located in the full reconstruction area.

4.11.11 OTHER PLANNED ACTIVITIES

The area surrounding the hatchery grounds is Tribal Trust property administered by the Bureau on behalf of the Ute Tribe and is generally used for livestock grazing and forage production. There are no known planned projects in the area that may be affected by implementation of the Proposed Action.

No Action:

Reconstruction would not take place. There would be no cumulative impacts under that scenario.

Table 3. Summary of Issue-related Effects.

ISSUE	Issue-related Effects	
	Partial Reconstruction (Proposed Action)	**No Action**
Water Quality	All regulated parameters (total suspended solids, total dissolved solids, and pH) will remain within limits regulated under the UPDES permit. Improved feed composition and enhanced ability to remove total suspended solids will somewhat reduce total phosphorus, nitrogen and ammonia (unregulated parameters)	Improved feed composition and enhanced ability to remove total suspended solids will somewhat reduce total phosphorus, nitrogen and ammonia (unregulated parameters). UPDES compliance will continue.
Wetlands	Estimated <4.6 acres of jurisdictional wetlands affected to varying degree, permanent impacts to a maximum 0.3 acres located on the state-owned parcel and unquantified impacts to wetlands associated with the spring complex. Section 404 compliance required.	No impacts to wetlands. No wetland mitigation.
Noxious Weeds	Periodic monitoring and treatment of infestations, as necessary.	Infestations treated through normal facility maintenance.
Raptor Protection	Raptor protection measures will be incorporated when designing new power lines and associated components.	Level of hazard remains unchanged.
Traffic-related Disturbances	Short-term disturbances temporary and minimized through construction management. Marginal increase in post-construction visitation and traffic associated with production	No effect.
Operation and Maintenance	Department funds O&M costs for the increase in production at the Whiterocks Hatchery.	No Department funding for O&M.
Cultural Resources	Consultation with the Utah State Historic Preservation Office and Tribal entities has been initiated; impacts to cultural resources will be mitigated via a memo of understanding with the SHPO. Archeologist will present during reconstruction associated with the spring complex.	No impact
T&E, Candidate, State Sensitive Species	Will not affect most T&E species. May affect but will likely not adversely affect bald eagle and Ute ladies'-tresses with implementation of proposed conservation measures. Smooth greensnake habitat will increase.	No impact
Environmental Justice / Indian Trust Assets	No impact or effect	No impact
Floodplains / Wild and Scenic Rivers	No impact or effect	No impact
Cumulative Impacts	Increased solids loading and nutrients are expected. These will be offset by efficient solids collection and removal system and low nutrient feeding system. Additional 0.6 acres of wetland areas affected, mitigation will be implemented on site, where possible, under a 404 permit. Increased construction traffic expected and will be managed. Noxious weeds will be avoided as with the Proposed Action. Other resources same as Proposed Action.	Same as Proposed Action

CHAPTER 5 - LIST OF PREPARERS

The following individuals prepared this environmental assessment for the Division and the Mitigation Commission:

Eric Larson – Central Utah Project Coordinator, Utah Division of Wildlife Resources
Maureen Wilson - Project Coordinator, Utah Reclamation Mitigation and Conservation Commission.
Joe Valentine - Aquatic Culture Supervisor, Utah Division of Wildlife Resources.
Kathie Davies – Archeologist, Utah Division of Wildlife Resources.
Leslie Gecy – Owner, Western Wetland Systems, Inc.

CHAPTER 6 – CONSULTATION AND COORDINATION

In June 2002 a scoping notice was distributed to local government, Tribal entities, State and Federal agencies, and the interested publics informing them of the upcoming preparation of an Environmental Assessment (EA) for reconstruction of the Whiterocks State Fish Hatchery. Comments and concerns pertinent to the Proposed Action were solicited from those recipients.

Hard copies of this Draft EA will be sent to all agencies and individuals who provided written comments in response to the original scoping notice. Selected entities who may have specific interest in this project, but who did not provide scoping comments, may also receive a hard copy of the draft. All recipients of the initial scoping solicitation will receive notification that a downloadable electronic version of this document can be found on the Mitigation Commission's website.

The following agencies, entities or individuals provided input and/or will receive either copies of the EA or notices of availability for the electronic version.

FEDERAL GOVERNMENT

U.S. Senator Robert Bennett
U.S. Senator Orrin G Hatch
Congressman Chris Cannon
Utah Reclamation Mitigation & Conservation Commission
U.S. Bureau of Indian Affairs - Uintah and Ouray Agency
U.S. Fish & Wildlife Service - Denver Federal Center
U.S. Fish & Wildlife Service - Salt Lake City Field Office
U.S. Fish & Wildlife Service - Fort Duchesne
U.S. Fish & Wildlife Service - Jones Hole National Fish Hatchery
U.S. Fish & Wildlife Service - Ouray National Fish Hatchery
U.S. Bureau of Reclamation - Utah Projects Office
U.S. Bureau of Reclamation - Upper Colorado River Basin Office
U.S. Army Corps of Engineers - Regulatory Branch, Western Colorado Office
U.S. Army Corps of Engineers - Intermountain Section
Department of Interior - CUP Completion Act Office
U.S. Forest Service - Intermountain Region
U.S. Forest Service - Duchesne Ranger District
U.S. Bureau of Land Management

STATE GOVERNMENT

Utah Department of Natural Resources
Utah Division of Water Rights
Utah Department of Agriculture & Food
Utah Division of State History
Utah Association of Conservation Districts

Utah Division of Water Quality
Utah Division of Facilities Construction & Management
Utah Division of Water Resources
Utah Division of Wildlife Resources
Governor's Office of Planning And Budget
Central Utah Water Conservancy District
Selected State Representatives
Selected State Senators

LOCAL GOVERNMENT

Uintah County Commission
Duchesne County Commission
Vernal City
Roosevelt City Corporation

UTE TRIBAL GOVERNMENT

Ute Tribe Business Committee
Ute Tribe Fish & Wildlife Department
Ute Tribe Natural Resources
Ute Tribe Cultural Rights And Protection Program

OTHER

Private Individuals
Uinta Basin Standard
Vernal Express
Salt Lake Tribune
Deseret News
Utah State University
Brigham Young University
Northwestern University
Moon Lake Electric Company
Utah Cattlemens Association
Utah Trout Foundation
Utah Farm Bureau Federation
Angler's Inn
Sportsman's Warehouse
Utah Aquaculture Association
Trout Of Paradise
League Of Women Voters Of Utah
Trout Unlimited
Utah Wildlife Federation
Uinta Mountain Club

Bonneville Chapter - American Fisheries Society
Salt Lake County Fish & Game Assn
Utah Chapter of The Wildlife Society
Utah Valley Flyrodders
High Uintas Preservation Council
Utah Wildlife Federation
Utah Bass Federation
Rocky Mountain Anglers
The Nature Conservancy
High Country Fly Fishers
Native Utah Cutthroat Association
Sportsmen For Fish And Wildlife
Utah Rivers Council
Great Salt Lake Audubon
Sierra Club Utah Chapter
Southern Utah Wilderness Alliance
Weber Basin Anglers
Cache Anglers
Utah Waters
The Wilderness Society

CHAPTER 7 – RESPONSES TO COMMENTS ON THE DRAFT EA

Comment letters were received on the Draft EA for the Whiterocks Hatchery Construction. The letters were received from:

1. Utah Department of Agriculture and Food

2. U. S. Fish and Wildlife Service, Utah Field Office

3. U.S. Department of the Interior, CUP Completion Act Office

4. Ute Tribe; 2 letters

A copy of these letters is included at the end of this chapter. Comments requiring a specific response are presented here in a comment and response format. Some comments are paraphrased. Recommended editorial comments have been made in the EA text where appropriate.

Utah Department of Agriculture and Food

Comment: The EA did not include an alternative using the commercial sector, which might safely rear the target species at a lower cost.

Response: Similar to the hatcheries previously constructed using CUPCA (Section 313(c)) funds, the most important consideration has not necessarily been cost, but rather how well the project addresses the need for increased fish production to support State fish management goals and objectives and the Fish Production Plan. The issue of using the private sector for fish production to meet these needs has been evaluated on a programmatic level in the 1998 Fish Production Plan EA and is beyond the scope of this specific project.

U.S. Department of the Interior, CUP Completion Act Office

Comment: The proposed action as described in the document is confusing and should be clarified for the public. Suggested wording is provided.

Response: The comment makes reference to "dual proposed action." There is only one Proposed Action, partial reconstruction of the Whiterocks Hatchery. The related Division action to complete the full reconstruction is considered a future action and impacts have been evaluated under the cumulative impacts sections of the document. Language has been added to final EA to further clarify that relationship.

Comment: Wetland impacts appear to be the main environmental impact of the proposed action. The wetland impact analysis should be improved with discussion of restoration measures to be used after rehabilitation of the spring collection system is completed. A worst case scenario should be assumed and conclusions developed with the Corps of Engineers.

Response: The intent of Table 2 is to provide the reader with some idea of the relative scope of possible wetland impacts. It is not meant to be the final word on the degree of wetland impact associated with the reconstruction of the facility. It is difficult to precisely assess the extent of construction related impacts without some level of advanced design. The estimates of affected acreage in Table 2 were best estimates of reasonable impact based on the existing wetland delineation, where construction will likely occur, and the likelihood of permanent disruption of groundwater sources. A worst case scenario was assumed in the analysis. Additional language has been added to the text and table to further clarify the hypothetical nature of this data.

Much of the opinion expressed in the comment pertaining to the relative value of the wetlands and what may be important may be correct. It is also possible that some level of monitoring will be necessary to more fully quantify post-construction impacts associated with the reconstruction of the collection system. Consequently, any list of possible restoration measures beyond those provided in the draft and prior to quantification of impact would tend to be speculative at best. It is understood that final determination of impacts and mitigation and/or compensation measures associated with the requisite permit will be made as consultation with the U.S. Army Corps of Engineers continues and as the project design evolves and impacts can be better determined. Any restoration measures that may be applied to the parcel leased from the BIA will require review and approval of the Superintendent of the Ouray Agency.

Comment: The resolution of wetland impacts/restoration/mitigation issues should not be deferred to the Corps permit process.

Response: We are required to follow the process as defined by the U.S. Army Corps of Engineers, the agency with primary regulatory authority concerning these issues. We have had a Corps of Engineers staff person to the site on two occasions to discuss wetland delineation, potential impacts and possible mitigation alternatives. The analysis in the EA is based on these discussions. An individual permit, which undergoes further public and agency review, will be required for this project. A full, complete, and accurate determination of impacts will be determined when project design has advanced to the point where decisions can be made about specific placement of hatchery facilities. A Record of Decision is required before the project can move ahead with that level of design.

Comment: Note in the Interagency Program Coordination section that a partnership with the Whiterocks Hatchery has been considered by the Ute Tribe as a substitute for the Big Springs Hatchery.

Response: We agree with the Ute Tribe's conclusion that the Big Springs Hatchery and the Whiterocks Hatchery are distinct and independent of each other and this has been added to the text.

Comment: Include a discussion of the potential for rejuvenation of decadent willow stands and how such measures might be accomplished.

Response: We have added language to this section that expands on the willow discussion.

Comment: Service concurrence on the Proposed Action affect finding on Ute ladies'- tresses should be requested

Response: Concurrence has been received from the Service. Language to that effect has been included in the Final EA.

Comment: Provide evidence as to why the Proposed Action is not within the 100-year floodplain of Farm Creek.

Response: This evaluation was provided as part of the wetland delineation study done for the EA. Language further clarifying the floodplain issue has been incorporated in the Final EA.

Ute Tribe

Comment: Qualified Tribal contractors must be provided the opportunity for employment in the construction process. Qualified tribal members must be provided the opportunity for employment by contractors hired and qualified tribal members must be provided the opportunity for employment at the hatchery facility.

Because the Whiterocks Fish Hatchery is located on land that remains "Indian Country" and part of the Uintah and Ouray Reservation, the federal government's Indian preference standards should be applied to any hiring at the hatchery. That preference typically requires that any qualified Indian or Indian contractor be given preference in the hiring process.

Response: Qualified Tribal contractors will be provided the opportunity for employment in the construction of the Whiterocks State Fish Hatchery, and are encouraged to do so. Qualified tribal members will be provided the opportunity for employment by contractors hired and qualified tribal members will be provided the opportunity for employment at the hatchery facility and will be encouraged to do so through the State of Utah contracting and hiring process.

The 14.19 acres on which the Whiterocks State Fish Hatchery is located is not part of the Uinta and Ouray Reservation. According to the Division's records, 10 acres were deeded to the State of Utah, Fish and Game Department, from Sumner Provo and Jennie Tavoots, his wife (warranty deed November 15, 1923). This 10-acre parcel had been patented to Sumner Provo, a Ute Indian on October 23, 1923 (Patent No. 921655) from the United States of America. On February 19, 1946, a decree of condemnation for 4.19 acres was made on Hiawatha Provo, a minor Indian, to the State of Utah, Fish and Game Commission, for $419. As the land is not part of the Uintah and Ouray Reservations, the Federal government's Indian preference standards would not apply.

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MC07	

STATE OF UTAH

CARY G. PETERSON
COMMISSIONER

KYLE R. STEPHENS
DEPUTY COMMISSIONER

MICHAEL O. LEAVITT
GOVERNOR

MICHAEL R. MARSHALL DVM
STATE VETERINARIAN
DIRECTOR, ANIMAL INDUSTRY

January 7, 2004

Ms. Maureen Wilson
Utah Reclamation Mitigation & Conservation Comm.
102 W 500 S #315
SLC, UT 84101

Dear Ms. Wilson:

Thank you for the opportunity to review the draft environmental assessment re Reconstruction of the Whiterocks State Fish Hatchery.

I take issue with chapter 2.3, page 18 of the EA ("Alternatives considered but eliminated"). One alternative not considered in this section is the commercial sector, which might be in a position to safely rear the target species at a much lower cost to the taxpayer.

Sincerely,

A. Kent Hauck
Fish Pathologist
Fish Health Program Manager

cc: Michael R. Marshall DVM, State Veterinarian, Director, Division of Animal Industry
Kevin Conway, Director, Division of Wildlife Resources
Robb Judd, Pres. Utah Aquaculture Assn.

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United States Department of the Interior
FISH AND WILDLIFE SERVICE
UTAH FIELD OFFICE
2369 WEST ORTON CIRCLE, SUITE 50
WEST VALLEY CITY, UTAH 84119

In Reply Refer To
FWS/R6
ES/UT
04-0249

January 9, 2004

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JAN 12 2004

CODE	INITIALS
MC01	MCW
MC07	MW

Michael C. Weland, Director
Utah Reclamation Mitigation and Conservation Commission
102 West 500 South #315
Salt Lake City, Utah 84101-3148

Dear Mr. Weland:

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Assessment (EA) dated November 23, 2003 for the Proposed Reconstruction of the Whiterocks State Fish Hatchery. The purpose of the project is to increase the hatchery's coldwater fish production by 95,500 pounds annually. The project will reconstruct almost all of the existing facilities such as raceways, spring boxes, and piping networks.

Consistent with NEPA regulation 40 CFR 1503.1(a)(1) that the action agency shall obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved, we are responding to your request for concerns and comments on this EA. Service comments were provided October 2, 2003 on a previous version of this draft EA. These comments were adequately addressed in the latest version, and no additional comments are offered at this time.

We appreciate the opportunity to provide these comments. If further assistance is needed or you have any questions, please contact Paul Abate, Ecologist, at (801) 975-3330 extension 130.

Sincerely,

Henry R. Maddux
Utah Field Supervisor

cc: Rick Larson, UDWR - SLC
FWS/R6 - Denver, (Attn.: Connie Young-Dubovsky)

United States Department of the Interior

OFFICE OF THE SECRETARY
Program Director
CUP Completion Act Office
302 East 1860 South
Provo, Utah 84606-7317

IN REPLY REFER TO:

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Mr. Michael C. Weland
Executive Director
Utah Reclamation Mitigation
and Conservation Commission
102 West 500 South, Suite 315
Salt Lake City, UT 84101

Subject: Draft Environmental Assessment, Reconstruction of Whiterocks State Fish Hatchery

Dear Mr. Weland:

In response to your letter of November 24, 2003, we have reviewed the subject document and offer the following comments.

General Comments

The Proposed Action is somewhat confusing as described in this document and should be clarified so the public can easily understand what is proposed. As we understand, the Federal action proposed by the Mitigation Commission is limited to an upgrade of the existing water system and replacing the hatchery building. As a related (interdependent) action, the Division of Wildlife Resources proposes a full reconstruction of the remaining hatchery facility, pending the availability of state funds. We concur that the EA should evaluate the impacts of the proposed Federal action plus the interdependent actions proposed by the state. However, the document needs a clear explanation of this dual proposed action in Section 2.1, although the background basis could be laid in Chapter 1 as well for clarity. We suggest a paragraph such as the following:

> The Mitigation Commission proposes to rehabilitate the existing water supply and internal water delivery systems, install oxygen injection equipment, and construct a new hatchery/lab/office to increase fish production by about 52,500 pounds, to a total production target of 87,700 pounds annually. These facilities will cost an estimated $2.4 million. As a related action, the State of Utah, Division of Wildlife Resources, proposes, at some future time, to complete the full reconstruction of the remaining

hatchery facility to boost total fish production to 131,400 pounds annually. These additional improvements are estimated to cost an additional $2.7 million and would only be undertaken pending the availability of state funding.

Wetlands appear to be the main environmental impact issue in this project. The 3.5 acres of wetlands impacted on the Bureau leased parcel are the most significant because they are natural wetlands. Table 2 suggests these impacts are temporary. However, there is no discussion to establish this conclusion. This may become important as the Corps of Engineers reviews the wetlands impacts. The wetland impact analysis would be improved with some discussion of proposed wetland restoration measures, if any, to be employed after rehabilitation of the spring collection system is complete.

This issue is also important because the EA is only able to make an assumption as to the extent of construction needed to rework the water collection system and the resulting wetland impacts. A worst-case scenario should be assumed and conclusions developed with the Corps of Engineers.

The 1.6 acres of man-made wetlands (ditches, ponds) on the state parcel are not of the same concern, in our view, and could be filled without significant environmental impacts. However, the Corps will determine its own wetland impact mitigation or replacement requirements in the Clean Water Act permit, which may differ from that presented in this document.

The resolution of wetland impacts/restoration/mitigation issues should not be deferred to the Corps permit process which tends to occur out of public view. The permit deliberations with the Corps should be completed expeditiously and the results reported in the final EA so the public can see the final determination of wetland impacts and mitigation commitments.

Specific Comments

Section 1.3.2 – Interagency Program Coordination

It is important to note in this section that a partnership (or business relationship) with the Whiterocks Hatchery was considered by the Ute Tribe as a substitute for the Big Springs Hatchery. However, the Tribe concluded the purpose and need for the Big Springs facility is to provide fish for stocking of waters within the Ute Tribal Reservation. The tribal hatchery is also, in part, to make the Tribe self-sufficient in fish production for its reservation, to contribute to restoration of native Colorado River cutthroat trout, and to offer tribal employment and training opportunities in fish management. None of these objectives are fulfilled simply by buying fish from Whiterocks State Fish Hatchery.

4.2 – Wetlands

The rejuvenation of decadent willow stands is presented in the manner of a potential wetland mitigation measure. The document should include a brief discussion of the potential for such actions, and how such measures might be accomplished as part of this project.

4.8.3.2 – Ute Ladies'-tresses

The U.S. Fish and Wildlife Service should be requested to affirmatively concur in the determination that Ute Ladies'-tresses will not be affected by the proposed action. If possible, this determination should be included in the final EA.

4.10 - Floodplains

The document needs to present some evidence as to why the project is not within in the 100-year floodplain of Farm Creek, and why it will not otherwise impact that floodplain. Is there some means to assess this matter in absence of a map? This issue needs support in order that readers can accept the conclusions and to respond to the requirements of Executive Order 11988 on floodplains in a FONSI.

Sincerely,

Ronald Johnston
Program Director

WHITEING & SMITH

ATTORNEYS AT LAW
1136 PEARL STREET, SUITE 203
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EMAIL tod@whiteingsmith.com

January 21, 2004

Maureen Wilson
Utah Reclamation, Mitigation and
Conservation Commission
102 West 500 South, # 315
Salt Lake City, Utah 84101-2328

MITIGATION COMMISSION
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CLASSIFICATION
PROJECT

JAN 26 2004

CODE	INITIALS
MC07	MW

Re: Draft Environmental Assessment - Whiterocks Fish Hatchery

Dear Ms. Wilson:

Enclosed please find the original version of the Ute Indian Tribe's comments on the Draft Environmental Assessment for the Whiterocks Fish Hatchery, which was submitted to the Commission by facsimile on January 9, 2004. I apologize for taking so long to get you the original. In response to your question, because, the Whiterocks Fish Hatchery is located on land that remains "Indian country" and part of the Uintah and Ouray Reservation, the federal government's Indian preference standards should be applied to any hiring at the Hatchery. That preference is typically requires that any qualified Indian or Indian contractor be given preference in the hiring process.

Please feel free to give me a call if you have any additional questions or concerns.

Sincerely,

Tod J. Smith

cc: w/o attach
Members, Tribal Business Committee
Mike Montoya

WHITEING & SMITH

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January 9, 2004

SENT BY FACSIMILE

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Utah Reclamation, Mitigation and
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c/o Maureen Wilson
102 West 500 South, # 315
Salt Lake City, Utah 84101-2328

Re: Draft Environmental Assessment - Whiterocks State Fish Hatchery

Commission Members:

On behalf of the Tribal Business Committee of the Ute Indian Tribe of the Uintah and Ouray Reservation, the following comment is submitted:

> The proposed reconstruction of the Whiterocks Fish Hatchery will occur on lands located within the Reservation and, in the case of the water supply on lands held in trust. Tribal lands surround the hatchery location and will incur the impacts or the reconstruction project and of hatchery operation. Qualified tribal contractors must be provided the opportunity for employment in the construction process. Qualified tribal members must be provided the opportunity for employment by contractors hired to do the reconstruction. And, qualified tribal members must be provided the opportunity for employment at the hatchery facility.

Respectfully submitted,

Tod J. Smith
Special Water Counsel

cc: Members, Tribal Business Committee
Mike Montoya

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