ENVIRONMENTAL ASSESSMENT
and
BIOLOGICAL ASSESSMENT

DEYO RESERVOIR

COOPERATIVE PROJECT BETWEEN IDAHO DEPARTMENT OF FISH AND GAME AND FRIENDS OF THE DEYO RESERVOIR

CLEARWATER COUNTY, IDAHO

Prepared for
US Fish and Wildlife Service

By
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INTRODUCTION

This Environmental Assessment and Biological Assessment has been modified numerous times to address comments and concerns provided by the USFWS, NOAA Fisheries, the Corp of Engineers and the EPA. Please disregard all versions of an older date.

This environmental assessment considers the effects of development of a public recreational fishing reservoir on Schmidt Creek, a tributary of Lolo Creek that flows into the Clearwater River east of Orofino, Idaho (Figure 1). Management plans for Deyo Reservoir include a "two-story" fishery that manages for both cold and warm water species. Anglers will be expected to catch bass, panfish, and seasonally stocked rainbow trout and cutthroat trout. A variety of sources have contributed funds for the construction of the reservoir and associated site improvement including: local businesses, the Clearwater County, State grants, the Idaho Department of Fish and Game, and the Sport Fish Restoration program (administered by the U.S. Fish and Wildlife Service). Sport Fish Restoration funding creates the Federal nexus, and as required by the National Environmental Policy Act (NEPA) of 1969 and subsequent implementing regulations promulgated by the Council on Environmental Quality, this assessment is prepared to determine whether the action proposed constitutes a "….major Federal action significantly affecting the quality of the human environment….." and whether an environmental impact statement is required.

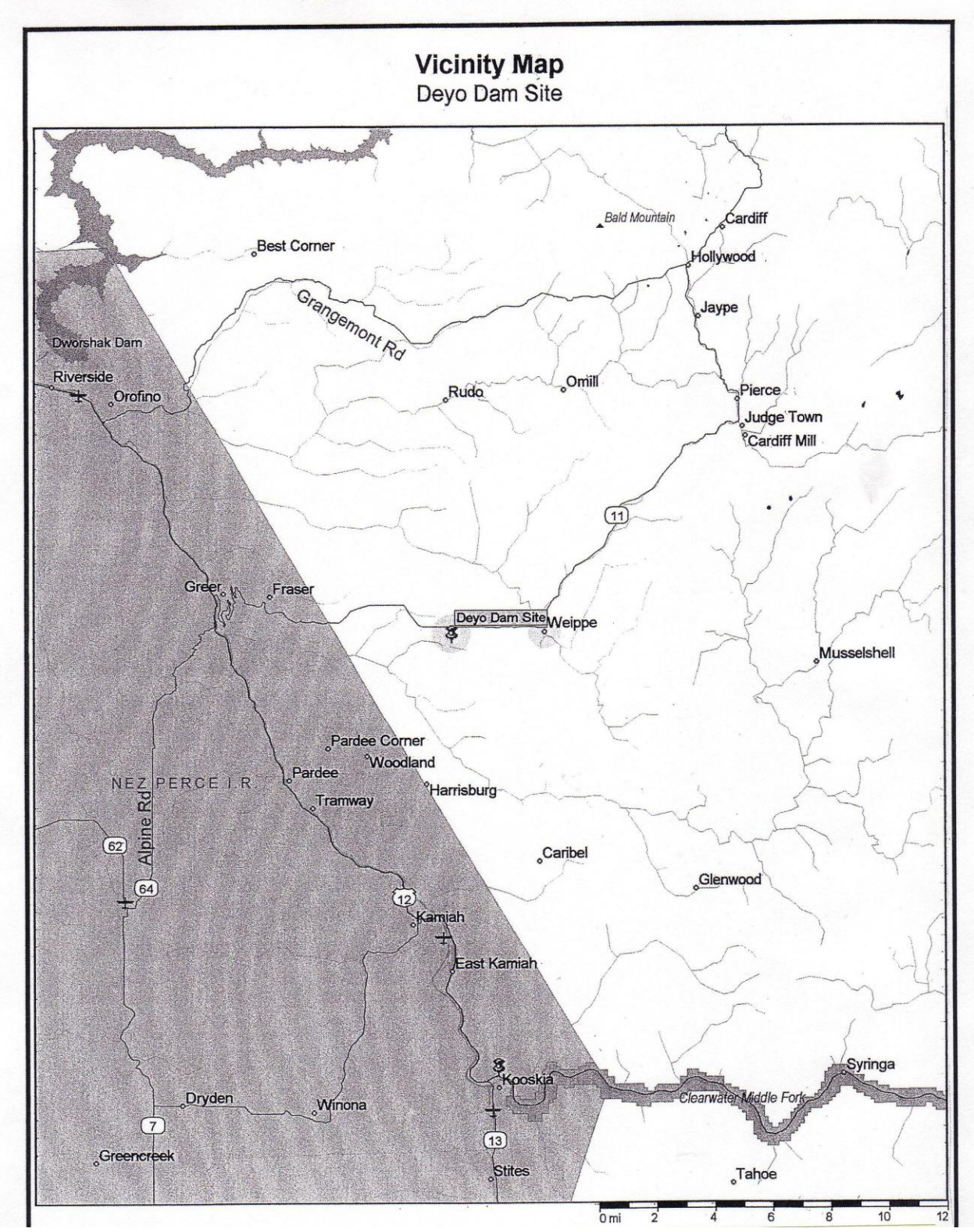

Figure 1. Site location for proposed Deyo Reservoir.

Section I: PURPOSE AND NEED FOR ACTION

A. Purpose for Taking Action:

The Idaho Department of Fish and Game (IDFG), supported by community efforts, is proposing to construct a 55 acre fishing reservoir near Weippe, Idaho. This reservoir, named Deyo Reservoir, will provide both an intensive public recreational fishery and an economic boost to the local economy with minimal negative biological impacts. The proposed reservoir is in concert with overall regional and statewide management direction (2007-2012 Fisheries Management Plan and the Departments 15 year strategic plan) to develop small fishing reservoirs throughout the state with emphasis on sites that will connect youth to the outdoors and fishing and enhance rural economics.

Management plans for Deyo Reservoir include a "two-story" fishery, managing for both cold and warm water species. Sport fishing would likely include stocking sterile, catchable size rainbow trout for a "put and take" fishery, stocking fingerling westslope cutthroat for a "put and grow" fishery, and developing a self sustaining warm-water fishery. These management practices would allow increased utilization of hatchery fish to support consumptive oriented fisheries while eliminating impacts of stocking hatchery fish on native fish in rivers and streams.

Mill closures in the vicinity of the proposed Deyo Reservoir site have depressed the local economy. It is anticipated that, if constructed, Deyo Reservoir would attract 20,000 to 40,000 hours of angling effort annually and potentially bring $300,000 to $800,000 to the local community.

B. Need for Taking Action:

Currently, there are limited opportunities near the proposed Deyo reservoir site for family fishing and boating opportunities. If completed, this reservoir will provide a great family setting with easy year round access, a consumptive oriented fishery, picnic and camping

sites, hiking trails, and a safe fishing and boating experience. There are no other water bodies within a 50 mile radius from the proposed Deyo Reservoir site that would provide these same types of opportunities. Developing this reservoir would help accomplish the Department's goals, as indicated in their 15 year strategic plan, to better connect youth to the outdoors and fishing.

Historic improvements in accessibility to Idaho's back country rivers and streams have subsequently lead to increases in angling demands and angling based impacts to native fish populations. The initial fisheries management response to this increased demand on these fisheries was met by stocking hatchery fish. Due to negative effects on native fish species and inefficient results, resident fish stocking in these rivers and streams have been phased out. In the last 25 years, these native fish populations have been managed by implementing progressively increasing restrictive sport angling regulations. These restrictive angling regulations have included: catch and release, reduced bag limits, reduced bag limits with minimum size, removal of bait, shortened season, and barbless hooks. These regulations have been effective in providing needed conservation on native westslope cutthroat trout populations. The entire North Fork Clearwater River (upstream of Dworshak Reservoir), Lochsa River and Selway river basins are currently managed under wild trout guidelines with some combination of restrictive regulations designed to preserve, protect and perpetuate the native fisheries. However, restrictive regulations aimed at conserving wild trout have displaced some anglers. The 2006 IDFG Angler Opinion survey indicated that about 50% of anglers would not fish waters where they could not harvest fish. Continued broad-based support for native fish conservation may well depend on development and management of alternative harvest oriented fishing opportunities.

The Idaho Department of Fish and Game has concurrently been developing small fishing reservoirs where consumptive based fisheries can be managed with low impact to native species. High levels of recreational fishing are supported at these sites using sterile, hatchery reared trout. Other small reservoirs within the Clearwater Region provide hundreds of thousands of hours of fishing opportunity throughout the year and provide

substantial economic stimulus annually to rural areas. It is anticipated that, if constructed, Deyo Reservoir would attract 20,000 to 40,000 hours of angling effort annually and potentially bring $300,000 to $800,000 to the local community annually. Rural communities in North Central Idaho have long depended on the timber industry to support their economy. However, the timber industry and rural timber based economies have been depressed for the past decades. Rural communities are relying more often on recreation for economic support. It is anticipated that the construction of Deyo Reservoir would provide a needed boost to the local economy.

Clearwater County is still trying to recover from the closure of the Potlatch Plywood Mill near Pierce, losing more than 250 jobs more than a decade ago. This County has had the highest or next to highest unemployment since 1980 according to Idaho Job Service reports. The loss of good paying jobs over a long period has forced families to relocate to find other employment. There has been some slow rebound with growth in manufacturing and education/health care sectors indicating that the economy is beginning to diversify. This project will focus on continuation of that diversification.

A study conducted in 2001 by the University of Idaho, Center for Business Development and Entrepreneurship, identified several action items that could be undertaken by the County to facilitate economic recovery and development. Measures identified are directly related to developing mechanisms to guide the community's future economic development efforts and providing adaptations to the recreational development within the County. The community, with assistance from and in partnership with several public and private entities, has taken steps to begin implementing items identified the action plan:

1. A County economic development plan has been established.
2. A community visitor center has been constructed in Weippe that is staffed year-round in conjunction with the Weippe Public Library and provides an education outreach and small business development center.
3. Weippe has established the Camas Festival, an annual historical festival now in its 10^{th} year, that attracts visitors and encourages their return.

A federal nexus occurs because partial funding for the project will be federal, therefore a NEPA evaluation and a biological assessment with the U.S. Fish and Wildlife Service and NOAA National Marine Fisheries Service is necessary.

The property around the proposed Deyo Reservoir site was Gift Deeded to the IDFG from private landowners for the purpose of creating a reservoir that will provide fishing and other outdoor recreation opportunities and support outdoor tourism and recreation in rural Clearwater County, Idaho. This deed will revert back to the families if construction of Deyo Reservoir does not begin by December 31, 2010. This obviously has brought a sense of urgency to construct this reservoir. The inability to begin construction of this reservoir by the deadline date will eliminate an opportunity to create a unique fishing experience in an area that would benefit greatly from it.

C. Issue Identification and Scoping

Scoping for this specific project has been an ongoing process for over fifteen years. Scoping the need for additional fishing waters to meet consumptive angling demand that has been displaced from wild trout waters by implementation of restrictive angling regulations has been ongoing for over twenty-five years. Idaho Fish and Dame Department personnel annually hold public meetings to solicit public comment on regulation changes and subsequent changes in angling opportunity. In addition, the Department also conducts angler opinion surveys to determine opinions and preferences. The Department recently underwent statewide scoping in the creation of a 2007-2012 Fisheries Management Plan (IDFG 2007). Within this plan, it states that in the Clearwater Region one of the objectives is to develop strategies to construct a new recreational fishing reservoir in the Clearwater drainage. The program to accomplish this goal specifically states, “Construct Deyo Reservoir near Weippe, Idaho during this planning period”.

The Department has been scoping the Deyo Reservoir project with the Deyo and Bird families, Friends of Deyo Reservoir, other private partnerships, Clearwater County Board of Commissioners and local angling groups for over a decade. We have held meetings with the Orofino and Pierce Chambers of Commerce. The proposed project has also been reported in numerous local newspapers. The Nez Perce tribal fishery staff was consulted on this project and their concerns were incorporated.

The 2006 Idaho Angler Opinion Survey identified wild trout protection as a controversial topic. In this survey anglers indicated that managing for native trout was very important to them (Willard et al. 2007). In an effort to protect native fish, stocking of hatchery fish has been phased out in many rivers and streams and restrictive fishing regulations have been implemented to prevent over-harvest of native fish. These practices have displaced many anglers as according to the 2006 angler opinion survey, 59% of resident anglers stated they would not fish waters if they could not keep fish (Willard et al. 2007). To help increase opportunities for harvest oriented anglers, the IDFG has placed a high priority on constructing new recreational fishing waters. These waters will not only provide harvest opportunities, but will also be aimed at providing a good family experience and connecting youths with the outdoors. Based on the 2007-2012 Fisheries Management Plan, providing opportunities for family fishing is one of the most preferred Department management programs (IDFG 2007).

Idaho anglers prefer to fish for coldwater species. Trout were fished for more often than any other species in Idaho. The majority of anglers preferred fishing from the bank or a motor boat, and the most used fishing gear was bait or artificial lures (Willard et al. 2007).

Based on the 2006 Angler Opinion Survey (Willard et al. 2007), angler input given on the 2007-2012 Fisheries Management Plan (IDFG 2007), and Department priorities, statewide strategies were developed. Four of the top programs the department intends to pursue during the 2007-2012 planning period include:

- Providing a diversity of angling opportunities

- Providing family fishing opportunities managed as consumptive fisheries with simple fishing rules.
- Protecting and enhancing native trout populations.
- Maintaining hatchery trout programs in streams, lakes, and reservoirs.
- Recruiting and retaining new anglers

Section II: ALTERNATIVES INCLUDING THE PROPOSED ACTIONS.

Proposed Action.

Construct a 35 foot high earth embankment approximately 345 feet in length with a crest width of 20 feet on Schmidt Creek near Weippe, Id (T35N R4E, north half of the northwest quarter of Section 19, Figure 1). The embankment is expected to have a crest elevation of 3,005 feet above mean sea level and a normal high water elevation of 3,000 feet. The dam would create a 55-acre reservoir with depths averaging 10-20 feet (Figure 2 and 3). The volume of the proposed reservoir is estimated at 650 acre-feet. Long term planning for Deyo Reservoir includes development of a paved parking area and boat ramp, a restroom and picnic shelter, RV and primitive camping areas, an interpretive path system, and wetland enhancement to promote waterfowl production and other wetland species (Figure 4). The Idaho Department of Fish and Game owns the land for the reservoir and surrounding area and has flood easements covering a 500 year flood event (Figure 3). The reservoir will be open to the public and will be managed by the Idaho Department of Fish and Game as a recreational fishery.

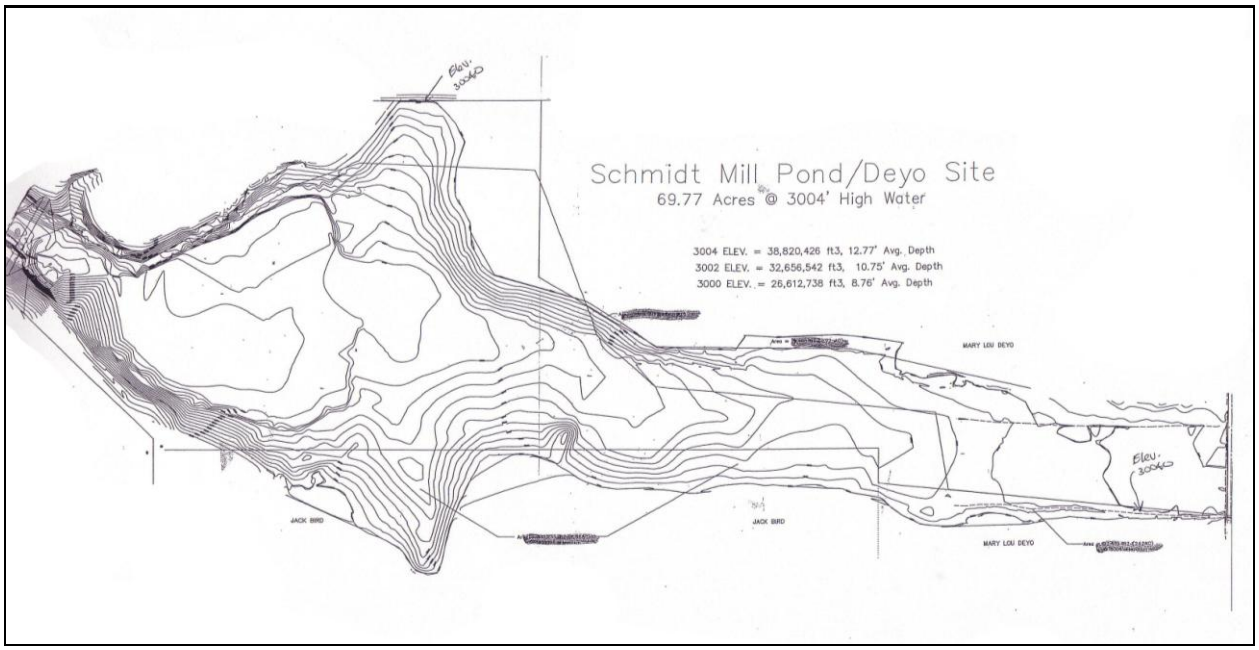

Figure 2. Proposed Deyo Reservoir survey map. Survey shows flood elevation of 3004 feet MSL corresponding to approximately 70 surface acres. Normal high water elevation (spillway crest) is proposed at 3000 feet MSL corresponding to approximately 55 surface acres.

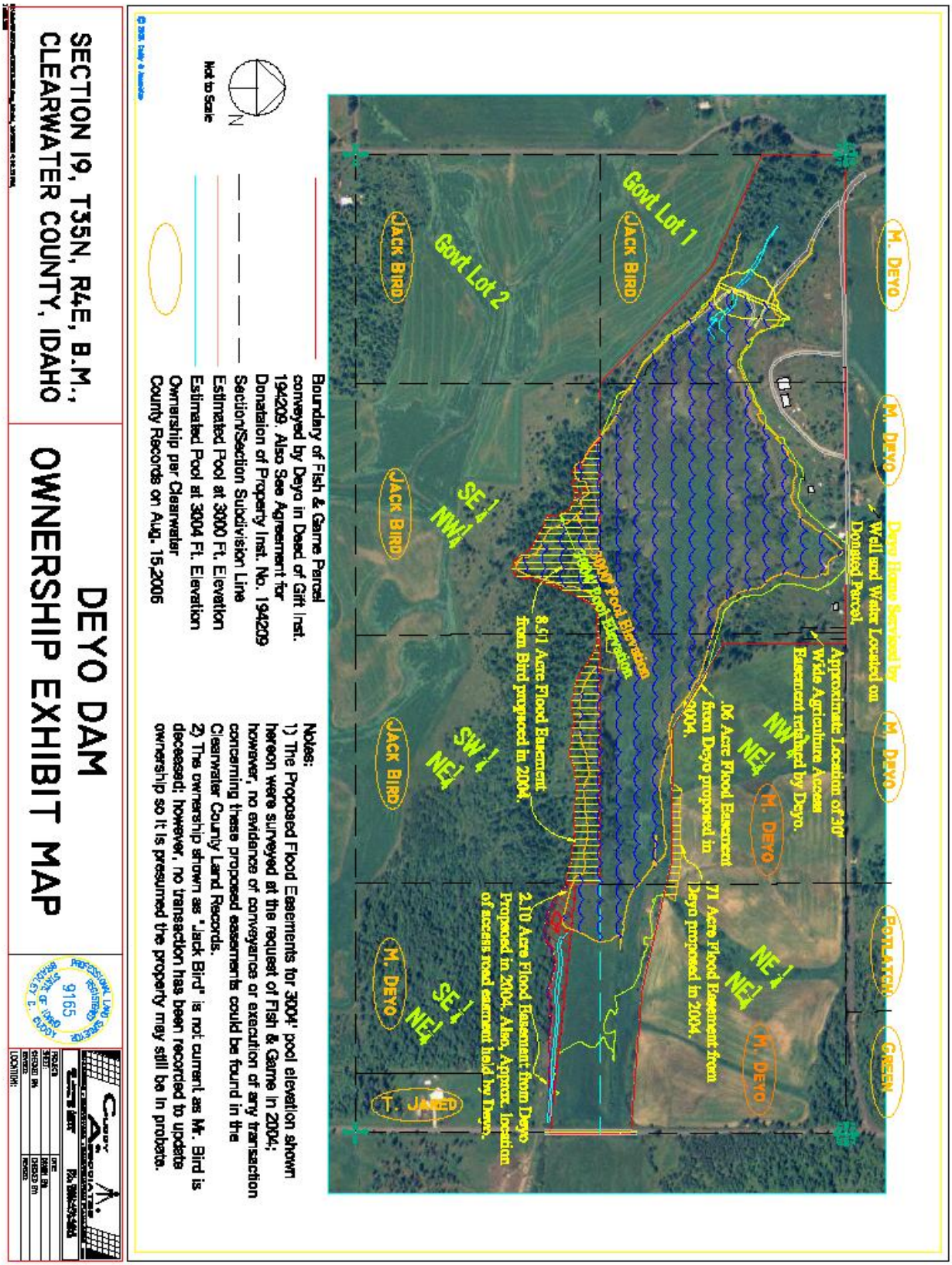

Figure 3. Map depicting ownership at the proposed Deyo Reservoir site.

Figure 4. A schematic of the Master Plan for the proposed Deyo Reservoir.

Alternative A. No Action.

Under a no action alternative, the Idaho Department of Fish and Game would not construct a recreational fishing reservoir. This alternative would not have any physical environmental impacts. However, the No Action alternative would not address the needs identified for additional consumptive oriented recreational fishing waters and the opportunity for increased economic returns to the local communities. The No Action alternative would not address the set of issues identified from the 2006-2012 Statewide Fisheries Management Plan (IDFG 2007), specifically:

- Providing a diversity of angling opportunities.
- Protecting and enhancing native trout populations.
- Providing family fishing opportunities managed as consumptive fisheries with simple fishing rules.
- Maintaining hatchery trout programs in streams, lakes, and reservoirs.
- Recruiting and retaining new anglers.

By not providing alternative consumptive fishing opportunity the No Action alternative may also jeopardize the current level of public acceptance for the existing restrictive angling regulations, or future angling restrictions that provide the necessary conservation of native, sensitive fish species.

The No Action alternative would result in forgone recreational opportunity and preclude any economic benefits to the local area that would be generated from that recreational activity. Finally, the No Action alternative would not allow development of a wetland area (long term planning) that would benefit waterfowl and other wetland oriented species.

Alternative B. Deyo Reservoir *(Proposed Action)*

Geotechnical and engineering services found that the proposed Deyo Reservoir site is suitable for a recreational fishing reservoir (STRATA 2003; STRATA 2006). The

preferred alternative is to construct a 35-foot high earthen embankment at this site that will flood an existing cultivated pastureland and hay fields. The resulting reservoir will encompass approximately 55 surface acres (Figure 2). The reservoir will be managed primarily as a recreational fishery, with attempts to maintain stable water levels and high shoreline riparian values. Additional biological resource value associated with the reservoir will include seasonal waterfowl use and other wildlife species associated with wetland and open water and wetland habitat.

The reservoir will likely provide 20,000 to 40,000 hours of angling on an annual basis. The fishery will be managed to provide a "two-story" fishery, including both cold and warm water species. Sport fishing would likely include stocking sterile, catchable size rainbow trout for a "put and take" fishery, stocking fingerling westslope cutthroat for a "put and grow" fishery, and developing a self sustaining warm-water fishery. Stocking brook trout would not occur. General fishing regulations would be used to manage this fishery. This management direction will address the needs identified and implement portions of the Program Direction stipulated in the 2007-20012 Fisheries Management Plan (IDFG 2007). Fishing recreation at the reservoir will likely generate up to $300,000 to $800,000 annually to the rural economy based on what has been observed in other reservoirs in the IDFG Clearwater Region (IDFG 2003).

Idaho Department of Fish and Game owns the land (Exhibit A) as a result of a Gift Deed of approximately 92 acres from the Deyo family (Figure 3). The Deyo's have been a pivotal partner in the proposed project from the beginning. To facilitate development, IDFG has also worked with the Bird family to secure a Quit Claim deed of approximately 9 acres needed for a flood and public access easement (Exhibit A).

Section III: AFFECTED ENVIRONMENT

A. No Action

This alternative would not have any physical environmental impacts.

B. Proposed Action (Deyo Reservoir)

This proposed action will transform approximately 60 acres of the old Schmidt Mill Pond site and upstream grazing pasture lands to approximately 55 acres of open water aquatic habitat and wetlands. Ancillary facilities such as a paved parking area and boat ramp, a restroom and picnic shelter, RV and primitive camping areas, an interpretive path system, and a secondary dike to promote waterfowl production are also in the planning after construction of the reservoir (Figure 4). The project will inundate approximately 1,700 meters of intermittent stream channel and associated riparian habitat and replace it with approximately 2,850 meters (67% increase) of reservoir shoreline. The development of the reservoir would result in a net decline in 8.1 acres of wetland; however, the resulting wetland would change from one that is only seasonally wet and dominated by Reeds Canary Grass, and exotic invasive with little wildlife benefit, to one that would experience year round surface water and provide vegetation that was more desirable to waterfowl, and other wetland animals. Most dam construction materials will originate from within or near the reservoir site. No new road construction will be required to access the site for construction. Silt fences will be utilized to control job site sediment.

1. Aesthetics/Visual Quality.

   The Deyo Reservoir site is located on Schmidt Creek near Weippe, Idaho (Figure 1). Road access to the site is from a gravel county road that access State Highway 11 approximately 1.5 miles from the site. State Highway 11 provides recreational access from U.S. Highway 12, Orofino, Pierce, and Weippe, Idaho to the North Fork Clearwater River and adjacent landscapes. The site is in a sparsely populated area of Clearwater County and located entirely within private lands. The land directly surrounding the

proposed reservoir site is covered by young to middle age timber patches intermingled with pastureland and hay fields. A portion of the proposed inundation zone of the reservoir is the remnant of a mill pond associated with a small private lumber mill that used to be operated at this site. The pond has water year round, although by late summer the pond is small (< 1 acre) and shallow and overgrown with lily pads and cattails.

2. Recreation.

   Deyo Reservoir site will provide for a diverse variety of potential recreational activities such as fishing, hunting, hiking, boating, picnicking, camping, horse riding and bird watching. Because of past private ownership and the lack of a unique or defining feature, the current public use of this area is minimal.

3. Fish.

   Schmidt Creek is a low elevation tributary of Lolo Creek, a direct tributary of the Clearwater River. Fish surveys of Schmidt Creek immediately below the proposed project indicate the only native species present is long-nosed dace. Fish species distributed lower in the Schmidt Creek drainage include rainbow trout or steelhead, dace and sculpin. The channel upstream of the reservoir site was dry when fish sampling occurred. Schmidt Creek is dominated by silt substrate and the riparian area is dominated by grasses. The original streambed and surrounding area was altered by past logging, construction of the logging millpond, road construction, and stream channelization to improve grazing.

   A shallow pond (~15 acres) does occur less than a mile upstream of the proposed project that has brown bullhead and pumpkinseed which are non-native game fish. These fish likely occur in the mill pond at the proposed reservoir site, although it has not been surveyed. The mill pond has water year round, although by late summer the pond is small (< 1 acre), shallow and overgrown with lily pads and cattails.

Fish species distributed lower in the Schmidt Creek drainage include rainbow trout or steelhead, dace and sculpin. More detailed information on bull trout and steelhead distribution is listed in section III.B.5 below.

4. Wildlife.

The proposed reservoir site and adjacent lands support many wildlife species. The site location encompasses grazed pastureland, intermittent stream and its associated riparian habitat and you to middle aged timber patches. These habitat types support a variety of wildlife species including upland and big game species, amphibians, songbirds, and waterfowl. The old mill pond also likely supports long-toed salamanders and spotted frogs, although none have been documented.

5. Endangered species.

There are four wildlife species and four fish species that are either endangered or are of special concern and may be found in the vicinity of the proposed site. These species are gray wolf, fisher, lynx, Coeur d'Alene salamander, steelhead and bull trout. The U S Fish and Wildlife Service status of each is as follows:

Gray wolf – Experimental nonessential population
Fisher – Species of special concern
Lynx – Threatened
Coeur d'Alene salamander – Species of special concern
Bull trout – Threatened
Steelhead trout – Threatened
Chinook salmon – Extirpated and reintroduced
Coho salmon – Extirpated and reintroduced

There have been recent, confirmed sightings of two gray wolves as close as about ten miles to the east of the proposed Deyo Reservoir site. These wolves do move around considerably but are not believed to utilize the agricultural land and young to middle age timber patches that surrounds the proposed Deyo Reservoir site. There have been multiple sightings of fisher about 10 miles to the east of the proposed Deyo Reservoir

site. Fisher tend to use older age timber stands, and consequently, are not believed to utilize the agricultural land or young to middle age timber patches that surrounds the proposed Deyo Reservoir site. There was a single sighting of a lynx in 1967 near the town of Hollywood approximately 15 miles northeast of Weippe. Coeur d'Alene salamanders tend to be found in spring and seeps, waterfall spray zones and stream edges. They usually are located in conifer forests and prefer areas with canopy cover, especially around streams. The open dry nature of the proposed Deyo Reservoir site makes it unlikely that Coeur d'Alene salamander occur there. The closest a Coeur d'Alene salamander has been documented in relation to the proposed Deyo Reservoir site was about 18 air miles.

Bull trout are listed as Threatened under the ESA, and have been documented in Lolo Creek (USFWS 2002). All sightings were of juvenile bull trout and occurred prior to 1996 – no bull trout have been observed since (USFWS 2002). These bull trout were located upstream of small falls (fish passage barriers) in the upper Lolo Creek watershed, about 23 miles upstream of Schmidt Creek (USFWS 2002). The closest suitable spawning and rearing habitat in Lolo Creek occurs over 33 stream miles from the proposed reservoir site in Schmidt Creek. Lower Lolo Creek in the proximity of Schmidt Creek is considered only as migratory habitat for bull trout.

Steelhead trout are listed as Threatened under the ESA, and are found in Lolo Creek. No steelhead trout abundance or distribution data exists for Schmidt Creek. However, the Idaho Department of Environmental Quality surveyed 30 m of Schmidt Creek in 2002, 30 m upstream from the mouth and did find rainbow trout. Based on this survey, steelhead trout are present in the lower reach of Schmidt Creek and they may be present in the steeper gradient stream reach in the timbered canyon section. However, it is likely that the steep stream grade and lack of flow would preclude adult steelhead from ever reaching the low gradient meadow reach where the proposed reservoir site is. The upper limit of critical habitat for steelhead in Schmidt Creek is about 1.7 miles downstream (lat/long coordinates are 46.3617, 116.0426) from the proposed dam site or 0.7 miles

upstream from the mouth. This distribution is very similar to other "bench and canyon" tributaries in the Lower Clearwater River where more data is available.

Spring Chinook salmon and Coho salmon were extirpated from the Clearwater River basin in the past and as a result neither were listed under the Endangered Species Act. However, Schmidt Creek is designated as "Essential Fish Habitat" for spring Chinook and Coho salmon. Recent efforts have been made to reintroduce both species throughout the Clearwater River basin including Lolo Creek. Adults of both species have been documented returning to Lolo Creek. Spring Chinook salmon and Coho salmon have not been documented in Schmidt Creek and are not believed to occur there. It is possible they could utilize lower Schmidt Creek; but as with Steelhead, the steep stream grade and lack of flow would preclude adults from ever reaching the low gradient meadow reach where the proposed reservoir site is.

The habitat at and upstream of the proposed Deyo Reservoir site is unsuitable for steelhead, bull trout, spring Chinook Salmon, or Coho salmon spawning or rearing. The original streambed and surrounding area was altered by past logging, construction of the logging millpond, road construction, and stream channelization to improve grazing. These activities have resulted in a straightened stream channel with substrate dominated by silt and a riparian area dominated by grass (Figure 5). The dominance of silt substrate would make this reach unsuitable for spawning. Stream flow dries up annually around July making it unsuitable for rearing.

Figure 5. Schmidt Creek at the proposed Deyo Reservoir site on March, 2009.

6. Cultural Resources.

   A survey of cultural resources was performed in August, 2006 (Vallier, 2006). Findings at the proposed site are consistent with circa mid-1930's construction of the mill site by the Schmidt brothers and resulting logging and milling operations. A final report of Determination of Significance and Effect concluded that the Deyo Reservoir project will have no effect on historic properties or cultural resources. The State of Idaho, Historical Preservation Office agreed with these findings (April 28, 2009 – Exhibit A). Due to concerns from the Nez Perce Tribe, additional subsurface investigations were conducted in November 2010 (Harder 2011), and it was concluded in a final report that no further archaeological investigations were recommended prior to or during execution of the project. The State of Idaho, Historical Preservation Office (Exhibit B) and Nez Perce Tribe (Exhibit C) agreed with these findings.

7. Water Quality.

   The Schmidt Creek drainage above the reservoir site encompasses approximately 2,100 acres, most of which is a mixture of agricultural land and young to middle aged timber land. Existing water quality in Schmidt Creek is representative of other small streams in the area. Currently, Lolo Creek, which Schmidt Creek drains into, is as a 303(d) listed stream with sediment and temperature listed as pollutants of concern. The Idaho Department of Fish and Game has water rights (Snake River Adjudication ID Numbers A84-04270, A84-04269 and A84-04266) for irrigation and storage.

Section IV: ENVIRONMENTAL CONSEQUENCES

A. No Action

This alternative would not have any physical environmental impacts.

B. Proposed Action (Deyo Reservoir)

1. Aesthetics/Visual Quality.

   The development of Deyo Reservoir on Schmidt Creek would be visible to anyone approaching the site either by vehicle or otherwise. Visitors to the area expecting a natural landscape would see an earthen dam and the resultant reservoir. Grazed pasture land, some highly managed timber land, a mill pond, and intermittent stream and its associated riparian area would be lost. In place would be a 55 acres reservoir with 1.8 miles of shoreline and associated wetlands as well as paved parking area and boat ramp, a restroom and picnic shelter, RV and primitive camping areas, an interpretive path system, and improvement of the wetland to promote waterfowl production and other wetland species. It is reasonable to believe that the resulting development will improve the aesthetics and visual quality of the site.

2. Recreation.

   Current recreational use of the area is minimal due to the long term private ownership. The establishment of a fishing reservoir on public land will increase recreational use in the area. Based on other similar bodies of water in the IDFG Clearwater Region, the development of this reservoir should result in 20,000 to 40,000 hours of angling effort annually and potentially bring $300,000 to $800,000 to the local community annually. This does not include those who would come to the area to just picnic, bird watch or go for a walk. To accommodate this increase in use, appropriate numbers of toilet facilities and garbage receptacles will be in place at the parking area. The current graveled road meeting County standards will be used to access the reservoir site. A graveled parking area and a concrete boat launching ramp will be developed on the north side of the reservoir. Other recreational facilities will be based upon community input identifying the level of development desired to stimulate economic returns to the local economy.

3. Fish.

   Construction of the reservoir will not adversely impact native longnose dace in the stream below the proposed dam site. Rainbow trout/steelhead trout occur in the extreme downstream reaches of Schmidt Creek and are found in Lolo Creek. When the reservoir

is filled, sterile hatchery reared, catchable rainbow trout and fingerling westslope cutthroat trout will be introduced to provide a trout fishery. Largemouth bass and bluegill will be introduced to provide a warmwater fishery. The vast majority of introduced trout and warmwater species will not emigrate from the reservoir. If they do, their existence in the stream below the reservoir and into Lolo Creek would be minimal and would not likely impact native fauna. Species such as largemouth bass and blue gill are adapted to live in warm, lentic habitat and cannot survive in cool or cold stream habitat such as occurs in Schmidt Creek and Lolo Creek. Recent studies by IDFG have found hatchery rainbow trout are not adapted to survive in stream environments and only survive in stream habitat on average about two weeks (High 2007). Use of sterile trout in the reservoir would eliminate genetic risk to native fish species in the watershed if some of the hatchery trout did manage to survive. As part of the effort to provide a high quality fishery at Deyo Reservoir, local ponds upstream of the proposed site will be surveyed for fish presence. Where undesirable species (bullhead catfish, pumpkinseed, green sunfish, goldfish, etc) are found, attempts will be made to remove them (rotenone) before construction of Deyo Reservoir.

4. Wildlife

Development of the reservoir will not likely have an adverse impact on wildlife populations found in the area. The current stream channel flows through a seasonal cattle pasture. Long term grazing and haying in this pasture has significantly reduced over-story along this stream channel and has resulted in a stream riparian area and associated wetland that now consists predominately of Reeds Canary Grass, exotic invasive. The 1,700 m of stream riparian habitat and associated wetland (29.7 acres) that would be lost to inundation is common, abundant and not thought to be a limiting factor for any wildlife species in the area (Figure 6). In addition, the wetland in its current state is believed to provide minimal functioning value to wildlife species. Development of the Deyo Reservoir would flood the current wetland and create 12.8 acres of wetland (waters < 3 ft on average). Although this would result in a net decline in 16.9 acres of wetland, the wetland would change from one that is only seasonally wet and dominated by Reeds

Canary Grass to one that would experience year round surface water and provide vegetation that was more desirable to waterfowl, and other wetland animals.

To mitigate for the loss of the existing wetlands, the Deyo Reservoir project will improve the functioning value of the wetlands in and around the hay fields (9.1 acres) on the upper end of the project area (Figure 7). This land is owned by IDFG and would be managed in the future in a manner to benefit wetland plant and animal species. The project plan includes redirecting the currently canalized stream channel back into its historic floodplain and through a series of three constructed ponds of various sizes (approximately 1 acre each) and with varying depths (for permanent and ephemeral water retention) that will fill during peak flows (Figure 8). Each pond will be irregularly contoured to maximize edge for wildlife breeding, foraging, and hiding cover. Logs and coarse woody debris will be added to the ponds for increased underwater structure. The shorelines and shallows of the ponds will be planted with wetland aquatic and emergent species, and with suitable shrubs and tree species for increased plant species diversity. Between the ponds and the primary reservoir will be an area designated for seasonal flooding which will be planted and maintained with emergent vegetation. Vegetative corridors among habitat types and buffers around ponds will be maintained and/or created for wildlife benefit. The wetlands will be designed to partially dry each year in order to provide the most beneficial habitat for native amphibians and migratory shorebirds, but still retain water in deeper pools year-round to benefit amphibians, invertebrates, and other avifauna. These mitigation actions would greatly improve these 9.1 acres of wetland, bringing the total area of high functioning wetland to 21.9 acres.

As a result of the reservoir development and associated wetland mitigation, water dependent wildlife would adapt and, we believe, increase substantially in numbers. The developed wetlands in association with the open water habitat would attract more and a wider diversity of water-oriented wildlife species including shoreline feeding birds, waterfowl, blue heron, spotted sandpipers, king fishers, osprey, and amphibians.

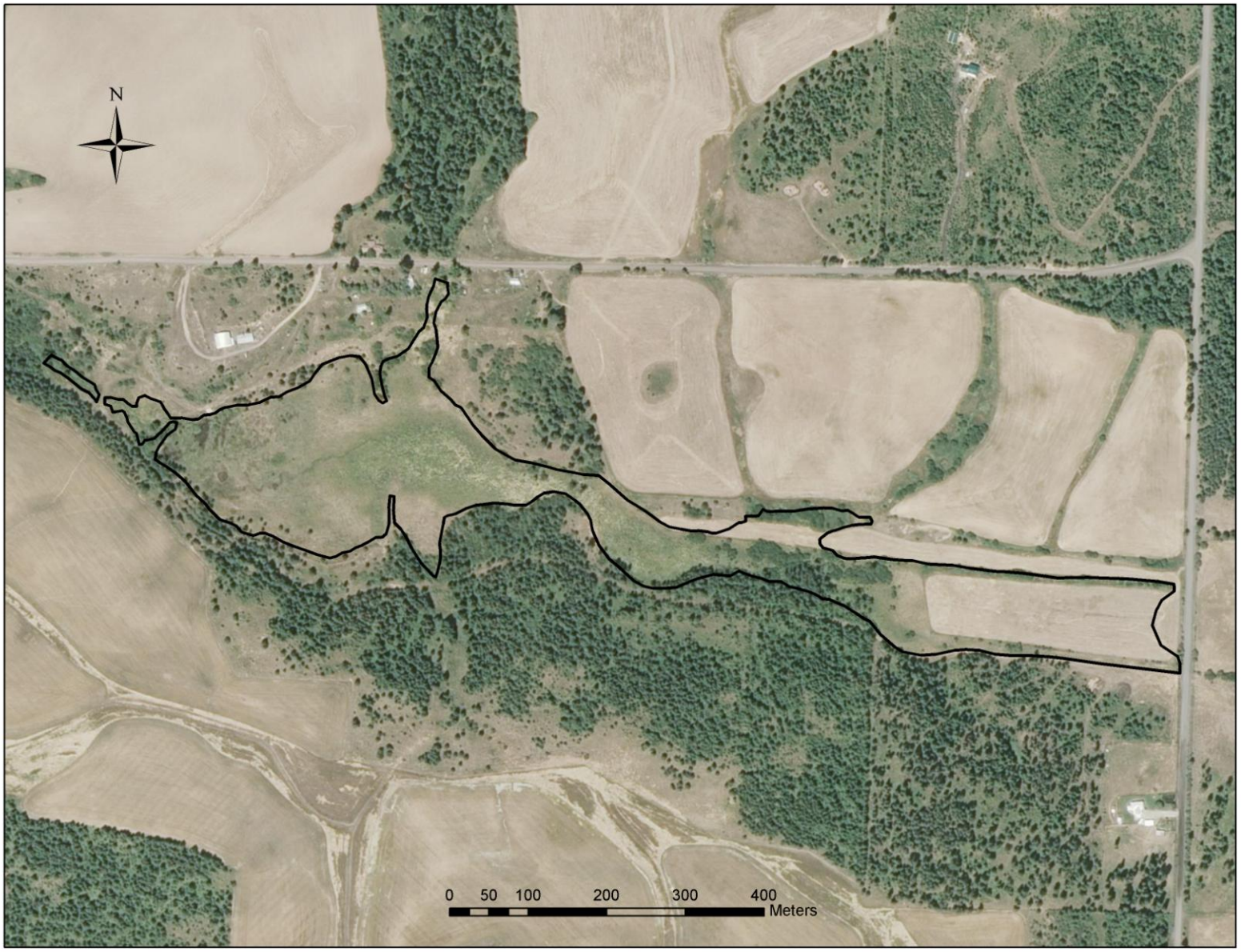

Figure 6. The wetland boudary deternined on January 11, 2010 within the Deyo Reservoir, Idaho, project area.

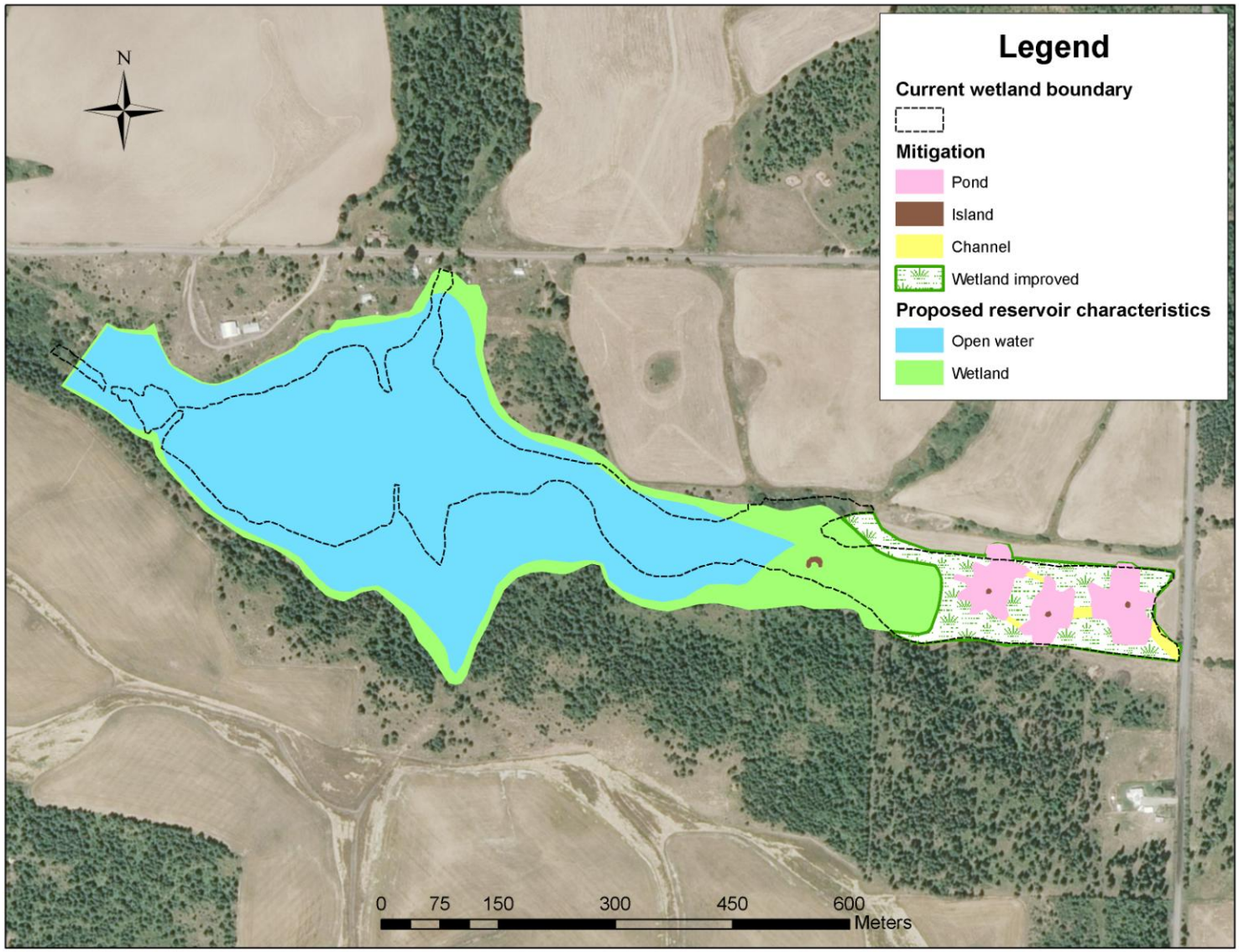

Figure 7. Proposed wetland areas within the Deyo Reservoir, Idaho, high water mark (open water > 3 ft deep; wetland < 3 ft deep) and habitat that will be added through mitigation in relation to the current wetland boundary.

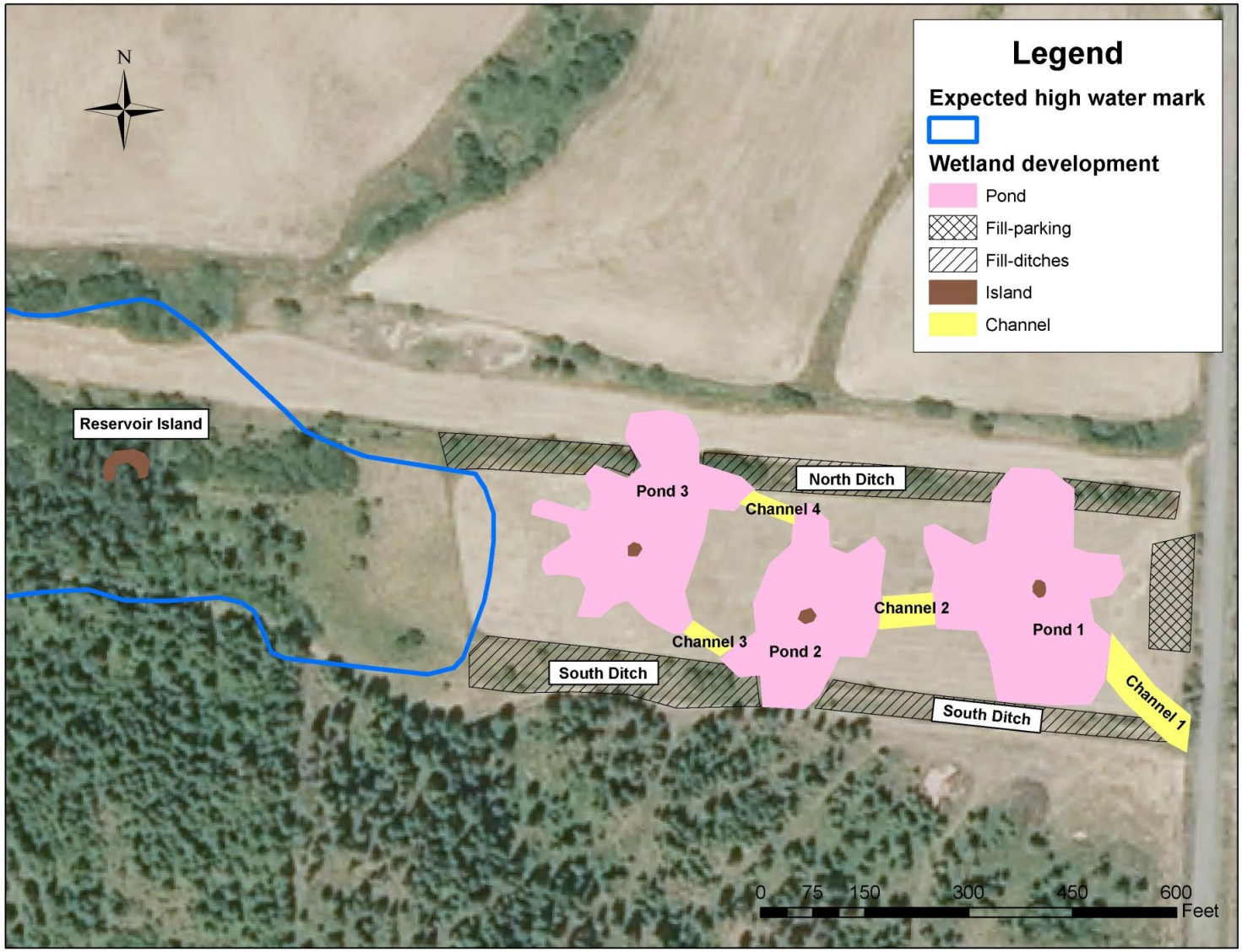

Figure 8. Proposed actions for wetland mitigation in the Deyo Reservoir, Idaho, project area.

5. Endangered Species.

   The development of Deyo reservoir will not significantly impact the species listed in section III.2.e. None of the species have been recently observed in the specific project area or are expected to occur there. The shoreline habitat created by the reservoir should more than compensate for the stream riparian area lost. Since the reservoir will be managed as a recreational fishery, the water level will be held as stable as possible (< 3 ft fluctuation) which will create a riparian area with high value. The reservoir will cause minor reductions in stream flows in Lower Schmidt Creek during winter (up to 0.27 cfs), and likely cause a slight increase in flows during summer (Table 1). In streams that that are naturally drought-prone, such as Schmidt Creek, fish habitat attributes during the low flow periods are driven primarily by local bed topography and the elevation of the water table. In the lower reaches where steelhead occur, the flow alterations caused by the proposed action would not change bed topography and they are unlikely to appreciably change the water table elevation. Consequently, the wetted area of the stream during winter and summer with the dam in place is likely to be similar to the wetted area without the dam, and the difference in water depth and velocity is unlikely to appreciably change by reducing flows by 0.27 cfs or less. Flow near the mouth of Schmidt Creek will be checked after the dam is in place to insure it is not causing much effect on low flows during December, January, and July.

6. Cultural Resources.

   Development of the reservoir and associated road and parking areas will have no impact on cultural resources. An information kiosk would be installed that would include the history of the "Old Schmidt Mill" which was in operation from 1922 to 1977 at the proposed reservoir site.

7. Water Quality.

   The proposed project would have no significant impacts to water quality. In fact, it is anticipated the proposed reservoir would reduce sediment input into Lolo Creek which is currently listed as a 303(d) stream with sediment as one of pollutants of concern. The watershed upstream of the proposed site is agricultural (pasture, cropland, and hayfields)

and highly managed timber land. These practices deliver a considerable amount of sediment to the stream network. Construction of Deyo Reservoir would intercept and help settle out this sediment. The amount of sediment expected to enter Schmidt Creek due to the construction of the dam and preparation of the reservoir would be minimal. Construction would take place from July 1 to October 31, with the stipulation that instream work would not begin until flows became intermittent. Construction is expected to take two working seasons. Temporary silt fences will be installed as needed along the contours at the margins of the construction activity; they will be regularly inspected and maintained until their removal approximately 1 year after construction activity has ended. Trapped sediment will be removed and placed where delivery to the stream network will not occur. The contractor will establish an erosion control and stormwater pollution prevention plan to meet governmental standards at the time of construction. The entire downstream face of the dam would be rip-rapped to minimize erosion and sediment deliver to Schmidt Creek. Disturbed areas will be roughened and hydro seeded with a grass/forb mixture using a seed application of rate of no less than 100 pounds (gross) of seed mix per acres.

Deyo Reservoir will be managed to maintain as stable a water level as possible. The reservoir will pass inflow less evaporative loss. Thus, construction will only have a minor influence on the hydrographic regime of Schmidt Creek. Evaporative water loss caused by the impoundment was estimated to be about 0.5 cfs during summer months. Currently, Schmidt Creek at the proposed Deyo Reservoir site tends to stop flowing around early to late July depending on snowpack. Construction of Deyo Reservoir could potentially shorten the period of surface flow past the project site by two weeks. Evaporative loss would be considerably less than 0.5 cfs from March through June when most of the runoff comes off (Table 1), and would have little effect on stream flow then. This project would not affect downstream flows or water temperature between about mid-July and the end of October as the stream channel is usually dry during this time. Seepage past the proposed dam site was calculated to be 0.0035 cfs. This could potentially result in a small net increase in flow during low flow periods downstream of the proposed dam site.

Table 1. Estimated average monthly stream flow that will be exceeded 80 percent of the time in Schmidt Creek just downstream of the proposed Deyo Reservoir site with and without the dam constructed.

Month	Estimated Flow (cfs)	
	No Dam	With Dam
January	0.28	<0.01
February	0.39	0.25
March	1.48	1.38
April	8.79	8.69
May	5.83	5.68
June	1.0	0.75
July	0.25	<0.01
August	0	<0.01
September	0	<0.01
October	0	<0.01
November	0.10	<0.01
December	0.21	<0.01

Surface water temperatures of the proposed reservoir during summer are likely to be higher than temperatures in Schmidt Creek. Deyo Reservoir will be deep enough to thermally stratify, providing a source of cold water. Outlet flows would be managed using surface and subsurface discharge flows to regulate temperature of discharge flows to mimic natural conditions.

Table 2. Summary of impacts by alternative.

Impact Topics	Alternative A. No Action	Alternative B. Proposed Action Deyo Reservoir
Physical Resources	Hydrology – No effect	Hydrology - Negative, Evaporation loss by reservoir will reduce out flow by about two weeks and will reduce average stream flow at outlet of reservoir. Seepage could potentially increase low flows.
	Sediment delivery - Foregone opportunity to reduce sediment delivery produced from agricultural and timber practices in the Schmidt Creek watershed into Lolo Creek.	Positive - Will intercept sediment delivered from agricultural and timber practices in the Schmidt Creek watershed. Sediment deliver during construction would be minor and short term.
	Water temperature – No effect	Neutral - Outlet flows will be managed using surface and subsurface discharge flows to regulate temperature of discharge flows to mimic natural conditions.
Biological Resources	Potential negative effect on native fish species if public acceptance of conservation based regulations erodes due to lack of consumptive angling opportunity.	Positive – Small negative effects to stream riparian oriented species in the inundation zone. Positive effects for open water and wetland oriented species following creation of reservoir and associated wetland mitigation.
Cultural Resources	No effect	No effect
Recreation	Foregone opportunity to create recreational fishery	Attract 20,000 to 40,000 hours of angling effort annually.
Social	Foregone opportunity to create recreational fishery, including associated picnicking and wildlife watching.	Provides geographically focused, low impact, family oriented, recreational opportunities. Important to local residents and tourists.
Economic	Foregone economic benefit of recreational fishery	Generate $300,000 to $800,000 annually to the local economy due to increase recreational use.

Section V. EFFECTS DETERMINATION

A. Terrestrial Species

This project will have no effect on gray wolves, lynx, fisher and Coeur d'Alene salamanders

Gray wolves, lynx, fisher and Coeur d'Alene salamanders do not utilize the habitat that would be modified from this project. In addition, the habitat surrounding this project (~10 mile radius) is not utilized by or considered desirable by these species.

B. Aquatic Species

1. Bull Trout

   This project will have no effect on bull trout or their critical habitat. This determination was made based on the following information:

   - Schmidt Creek upstream of the proposed reservoir site dries up annually between July and November making spawning and rearing impossible.
   - The closest bull trout have been documented to occur to the proposed site is over 25 miles away. These sighting occurred during between 1987 and 1994. Surveys in 1996 and 1998 did not document any bull trout in Lolo Creek. The closest suitable spawning and rearing habitat in Lolo Creek occurs over 33 stream miles from the proposed reservoir site in Schmidt Creek.

2. Steelhead, Chinook Salmon and Coho Salmon

   This project will not likely to adversely affect steelhead or their critical habitat, or essential fish habitat for spring Chinook salmon and Coho salmon. This determination was made based on the follow information:

- Schmidt Creek upstream of the proposed reservoir site is unsuitable to spawning and rearing steelhead, Chinook salmon, and Coho Salmon. The stream is dominated by silt, has been channelized, has little riparian vegetation other than grass, and it dries up annually by July and flows do not return until around November when fall rains occur.
- The steep stream grade and lack of flow in the canyon reach of Schmidt Creek would likely preclude adult steelhead, Chinook salmon, and Coho Salmon from ever reaching the low gradient meadow reach where the proposed reservoir site is.
- Steelhead, Chinook salmon and Coho salmon likely occur over 1.6 miles downstream of the proposed reservoir site. Impacts to habitat this distance downstream from the proposed reservoir site will be minimal. The only potential changes would be from flow alterations that are not large enough to appreciably alter habitat features where steelhead occur.
- Changes in downstream flow from this project would be minimal (< 0.25 cfs) and would only reduce flows between November and July. This project would not reduce summer low flows and most likely would result in a slight increase in summer low flows.

Section VI: COMPLIANCE, CONSULTATION AND COORDINATION WITH OTEHRS

A. Federal Statutes

The following paragraphs address the principal environmental review and consultation requirements applicable to this project.

1. Clean Air Act As Amended

   Pursuant to Section 176© and 309 of the Act, this environmental assessment will be provided to the Environmental Protection Agency.

2. Clean Water Act

This project will not result in the discharge of significant sediment into Schmidt Creek or degrade the quality of water in Schmidt Creek (Exhibit D).

3. Endangered Species Act of 1973, As Amended. See Section IV.e.
   Informal consultation regarding this project occurred with the Nation Marine Fisheries Service and they have determined that this project is "Not Likely to Adversely Affect" EAS-listed Snake River fall Chinook and Snake River Basin steelhead (Exhibit E).

4. Fish and Wildlife Coordination Act.
   Site selection, facility design, and biological concerns are being directly coordinated with the U.S. Fish and Wildlife Service and the Idaho Department of Fish and Game. A Coordination Act report is not required.

5. National Environmental Policy Act (NEPA).
   This environmental assessment has been prepared and is available to agencies and the public for review and comment pursuant to requirements of the Act. Full compliance with NEPA will be achieved when the Finding of No Significant Impact is signed.

6. Executive Order 11990, Protection of Wetlands, May 24, 1977.

B. Consultation and Coordination.

The basic criteria for the planning and design of the proposed impoundment are the result of coordination between the Idaho Department of Fish and Game and Friends of Deyo Reservoir. The Environmental Assessment is available to interested Federal and state agencies, tribes, groups and public for comment.

Idaho Department of Fish and Game consulted with the professional engineering firms; STRATA Geotechnical Engineering Services, Moscow Idaho, for site feasibility and construction design.

Idaho Department of Fish and Game consulted with USFS Clearwater National Forest archeologist for a cultural resource survey of the project area. The Department also consulted with Idaho State Historical Preservation Office and Nez Perce Tribe for agreement of cultural determination.

Idaho Department of Fish and Game consulted with Idaho Department of Water Resources concerning design and safety aspects of the project.

Idaho Department of Fish and Game consulted with the Nez Perce Tribe concerning potential impacts to fisheries, and surrounding wetlands.

LITERATURE CITED

Harder, D.A. 2011. Archaeological testing in the IDFG Deyo Reservoir Project Area, Clearwater County, Idaho. Plateau Archaeological Investigations, LLC. Pullman, Washington.

IDFG. 2003. 2003 Idaho Sport Fishing Economic Report. Idaho Department of Fish and Game, Boise.

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High, B. 2007. Wild Trout Competition Studies. 2006 Annual Performance Report, Grant # F-73-R-27, Subproject II. Idaho Department of Fish and Game. Boise, Idaho.

STRATA. 2003. Geotechnical engineering services Deyo embankment dam feasibility study, Clearwater County, Idaho. STRATA, Inc. Moscow, Idaho.

STRATA. 2006. Engineering design report, proposed Deyo embankment dam, Clearwater County, Idaho. STRATA, Inc. Moscow, Idaho.

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Vallier, M.T. 2006. Deyo Reservoir wetland project cultural resource inventory report. Report Number 2006-05-003. Clearwater National Forest, Orofino, Idaho.

Willard, C., T. McArthur, and S. Grunder. 2007. Opinions and preferences of Idaho anglers, a report on the 1994, 1999, and 2006 angler opinion surveys. Job Completion Report, 07-93. Idaho Department of Fish and Game, Boise.

Exhibit A

Determination of Eligibility and Effect

NEW DEYO RESERVOIR PROJECT **R2009010500019**

Project Title Report Number

A cultural resource investigation has been conducted for this project and no cultural properties have been identified within the area of potential effects. Based on information included within the attached report, the Forest Service has made the following eligibility and effect determinations. Monitoring requirements or other site specific comments are provided below.

National Register Eligibility (36 CFR 60.4):

Evaluation Class (per FSM 2361.1)	No. of Sites	USFS Site Numbers	Smithsonian Site Numbers
I - Eligible	0		
II - Potential	0		
III - Not Eligible	1	001050000099	

Effect (36 CFR 800 Subpart B):

[ ] Because of the type of project, and/or its location, the Forest Cultural Resource Specialist has determined that the above project has little likelihood to adversely affect cultural properties. As a result, a *No Inventory Decision* has been made and the project may proceed.

[ ] An appropriate inventory has been conducted for the above project and no cultural properties are located within the area of potential effects. As a result, the Forest Cultural Resource Specialist has made a *No Historic Properties Affected* determination and the project may proceed.

[X] An appropriate inventory has been conducted for the above project and cultural properties are known to be located within the area of potential effects. SHPO concurrence is thus required, however, the Forest Cultural Resource Specialist has made a preliminary determination that the project will have *no adverse effect* to these properties because:

[X] The cultural properties are not eligible for the National Register of Historic Places.
[ ] The project has been designed to avoid significant effects to components/features associated with Class I and II properties.
[ ] An attached report/plan provides certain information meant to resolve, minimize, reduce or mitigate adverse effects to Class I properties.
[ ] Other rationale exists and is explained below in the Comments and Coordination Requirements section.

Comments and Coordinating Requirements:

/S/ William Bruce Ellis	04-25-2009	N/A	
Forest Cultural Resource Specialist	Date	Line Officer Approval*	Date

*Required when non-routine action is recommended.

S.H.P.O. Comments - I have reviewed the documentation provided by the Forest Service
[X] I agree with the determination [ ] I disagree as explained below or in attached letter.

Mary Anne Davis	Associate State Archaeologist	April 28, 2009
Signature	Title	Date

Exhibit B

www.history.idaho.gov

Idaho • State Historical SOCIETY

C.L. "Butch" Otter
Governor of Idaho

Janet Gallimore
Executive Director

Administration
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office: (208) 334-2682
Fax: (208) 334-2774

Membership and Fund Development
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office: (208) 514-2310
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Historical Museum and Education Programs
610 North Julia Davis Drive
Boise, Idaho 83702-7695
Office: (208) 334-2120
Fax: (208) 334-4059

State Historic Preservation Office and Historic Sites Archeological Survey of Idaho
210 Main Street
Boise, Idaho 83702-7264
Office: (208) 334-3861
Fax: (208) 334-2775

Statewide Sites:
• Franklin Historic Site
• Pierce Courthouse
• Rock Creek Station and
• Stricker Homesite

Old Penitentiary
2445 Old Penitentiary Road
Boise, Idaho 83712-8254
Office: (208) 334-2844
Fax: (208) 334-3225

Idaho State Archives
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office: (208) 334-2620
Fax: (208) 334-2626

North Idaho Office
112 West 4th Street, Suite #7
Moscow, Idaho 83843
Office: (208) 882-1540
Fax: (208) 882-1763

Historical Society is an Equal Opportunity Employer.

Joe Dupont
Clearwater Region Fishery Manager
Idaho Department of Fish and Game
3316 16th Street
Lewiston, Idaho 83501

FEB 28 2011

February 24, 2011

Dear Mr. Dupont:

Idaho SHPO has reviewed the report completed by Plateau Archaeological Investigations for the Deyo Reservoir Project Area, Clearwater County, Idaho. The report adequately documents field investigations designed to address concerns raised by the Nez Perce Tribal Historic Preservation Office concerning possible subsurface cultural resources or historic properties anticipated in three bounded and specified areas.

Ground surface inspections at 46 locations and 231 subsurface probes placed within the three specified areas of concern failed to locate any cultural resources. Because previous investigations had determined that the Schmdit Mill site, located within the area of potential affect, was not eligible for inclusion in the National Register of Historic Places, and because the surface inspection and subsurface investigations turned up uniformly negative results, Idaho SHPO concurs with the recommendation that no further archaeological investigations are required prior to the completion of this project. Under Section 106 review, we believe the project will have no effect on historic properties.

Thank you for the opportunity to comment on this undertaking.

Sincerely,

Kenneth C. Reid, Ph.D.
State Archaeologist and Deputy SHPO
Idaho State Historic Preservation Office
210 Main Street
Boise, Idaho 83702
208/334-3861 x 110
Ken.reid@ishs.idaho.gov

Exhibit C

NEZ PERCE TRIBE TREATY OF 1855

Nez Perce

TRIBAL EXECUTIVE COMMITTEE
P.O. BOX 305 • LAPWAI, IDAHO 83540 • (208) 843-2253

April 12, 2011

Dave Cadwallader
Idaho Department of Fish and Game
Region 2
3316 16th Street
Lewiston, ID 83540

RE: Deyo Reservoir Project

Dear Dave,

I want to thank you for working with the Nez Perce Tribe on the proposed Deyo Reservoir project to provide an economic boost for the City of Weippe and surrounding area. It is my understanding the Idaho Department of Fish and Game (IDF&G) has applied for a 404 Permit through the US Army Corps of Engineers to proceed with the project implementation. As you know the Nez Perce Tribe is vigilant about the protection of its culture and natural resources. Initially, the Deyo Reservoir project posed several issues and concerns to the Tribe. These issues included an inadequate cultural resource site assessment for the old Schmitt Mill site and proposed area, no plan for re-vegetation of the camas in the proposed project/a net loss of wetland habitat, and potential water quality issues on Lolo Creek for anadromous fisheries. After our staff in the Department of Natural Resources, and the Department of Fisheries Resource Management worked with your staff over the fiscal year, it is our intent to support the project in principle.

Traditional Cultural Properties

The Tribe's archeologist, Pat Baird, indicated that there was a superficial analysis done for the old Schmitt Mill site being proposed for the project. The project area appeared to be very near the original campsite of our ancestors while they were gathering camas when they met the Lewis and Clark Expedition in 1805. Our experience in working on these types of projects is that it is not uncommon for traditional cultural properties to be found at such a well-known site. The IDF&G was able to provide a more detailed analysis, based upon our technical advice, with additional sampling which determined no findings. Based upon our review and recommendation, the archaeological fieldwork and reporting satisfy the needs of Section 106 cultural resource compliance for the Tribe. We also agree with the author's recommendations in the *"Archaeological Testing in the IDFG Deyo Reservoir Project Area"*,

Clearwater County, Idaho, by Plateau Archaeological Investigations, LLC that no further archaeological investigation is necessary.

Camas Restoration

The Tribe also had concerns about the impact and change to existing wetlands. Our concerns were that there appeared to be a net loss of the "wetland footprint" for the completed project. After our staff worked with you on your goal in the Wetland Mitigation Plan for Deyo Reservoir, we felt that the measures meet our expectations which is to "provide a wetland that is of equal or greater value after the reservoir is constructed to what currently exists". This is acceptable to the Nez Perce Tribe. We agree the work to upgrade and enhance the wetlands on the project will result in a more functional wetland. We appreciate your response to more thoroughly review and propose a plan of action to improve wetlands.

Based upon our staff recommendations, the Tribe fully supports the project. We appreciate the technical meetings among our respective staff to address these issues. If you have any questions or concerns, please feel free to contact Aaron Miles, at (208) 621-3845, or 2moon@nezperce.org.

Sincerely,

McCoy Oatman

McCoy Oatman
Chairman

cc: Duane Mitchell, ACE
Ken Reid, SHP

Exhibit D

Idaho Department of Environmental Quality
§401 Water Quality Certification

August 25, 2010

404 Permit Application Number: NWW-2010-53-W04

Applicant: Idaho Department of Fish and Game

Receiving Water Body/Assessment Unit (AU): Schmidt Creek; ID17060306CL026_02

Receiving Water Body Condition: In the Idaho Water Quality Standards, Schmidt Creek is included in water body unit 17060306C26, which is protected for the presumed beneficial uses of cold water aquatic life and secondary contact recreation. Schmidt Creek is currently listed in Section 2 of the Idaho 2008 Integrated Report as supporting all of its assessed beneficial uses. Schmidt Creek has a direct discharge to Lolo Creek (AU 17060305Cl026_04), which is protected for aquatic life beneficial uses and secondary contact recreation and listed in Section 2 of the Idaho 2008 Integrated Report as supporting all of its assessed beneficial uses. The project location on Schmidt Creek is in an area where Schmidt Creek is intermittent.

Project Location: Schmidt Creek, Section 19, Township 35N, Range 4E, Boise Meridian, near Weippe, Clearwater County, Idaho, USGS Quadrangle ID-WOODLAND.

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended, 33 USC Section 1341 (a)(1), and Idaho Code §§ 39-101 et.seq., and 39-3601 et.seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue a water quality certification decision.

Based upon DEQ review of the permit application and associated information for the above-referenced activity, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, including the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02) and other appropriate water quality requirements of State law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations or permits.

Project Description
The project consists of discharging 25,000 cubic yards of clay into Schmidt Creek and adjacent wetlands for the construction of a dam, which would impound approximately 55.8 acres of water to provide public recreation, including fishing and waterfowl habitat. The project includes the construction of an island and pond complex in the upper reservoir to create additional wetland acres for mitigation and waterfowl

habitat. Heavy equipment would be used to construct the embankment dam, which would include a spillway and drain outlet. Approximately 650 acre-feet of water would be impounded.

Antidegradation

Idaho's antidegradation policy (IDAPA 58.01.02.051) requires that existing uses of all waters in the state be maintained. In addition, where the quality of water is better than that required to maintain beneficial uses, then DEQ must assure that no degradation will be allowed unless it is deemed to be necessary and appropriate for important economic or social development. In allowing degradation, DEQ must also assure that the highest statutory and regulatory requirements for all new and existing point sources and cost-effective and reasonable best management practices for nonpoint source control will be achieved.

The primary parameters of concern for this activity are sediment and turbidity during the construction phase and temperature, dissolved oxygen, and flow during the dam operation phase. Because Schmidt Creek is fully supporting its coldwater aquatic life and recreation beneficial uses, Schmidt Creek is considered high quality water for purposes of antidegradation review.

Construction of Deyo Reservoir has the potential to lower water quality in Schmidt Creek. Because of this potential, the applicant provided the *Draft Environmental Assessment and Biological Assessment: Deyo Reservoir* (DuPont, 2010) and additional information to demonstrate that alternatives were considered; the project was socially and economically justified; and the highest statutory and regulatory requirements for new and existing point sources and cost-effective and reasonable best management practices (BMPs) for nonpoint sources (NPS) are or will be achieved.

Based on the information provided and in consideration of the conditions placed in this §401 water quality certification, DEQ has concluded that the construction of the Deyo Reservoir is necessary and important for social and economic development in the area. Additionally, DEQ has concluded that all cost-effective and reasonable BMPs that are required of NPS activities are being implemented. Furthermore, the conditions in this certification are developed to ensure the State's numeric and narrative criteria will be met. The numeric and narrative criteria are set at levels which protect and maintain applicable designated and existing uses. Therefore, in accordance with IDAPA 58.01.02.051.02, DEQ authorizes the potential lowering of water quality and concludes that as long as the activity is conducted in a manner that complies with the conditions of this certification and with the Corps of Engineers permit, then there should be protection and maintenance of the existing uses in Schmidt Creek.

Conditions That Are Necessary To Assure Compliance With Water Quality Standards Or Other Appropriate Water Quality Requirements Of State Law

1. The certification holder shall notify the DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person.
2. The new owner/operator shall request, in writing, transfer of this water quality certification to his/her name.
3. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines the project activities are having an adverse impact on State water quality or beneficial uses (e.g. violations of water quality standards, downstream erosion, etc.).
4. This certification shall be invalid and no longer effective if construction of the proposed project is not begun within three years of the date of this certification.
5. The proposed construction project shall be conducted in a manner which will not violate or cause a violation of Idaho's Water Quality Standards as set forth in IDAPA 58.01.02.
6. DEQ's main concern is in creating a water body that is not capable of meeting state standards for the aquatic life beneficial use. Therefore, this certification is issued on the condition that the reservoir will be operated and maintained in such a manner that Water Quality Standards will not be violated.

If the reservoir has difficulties meeting presumed cold water aquatic life beneficial use, then IDFG will assist DEQ in designating an appropriate aquatic life beneficial use for the reservoir.

7. The hydrological modification shall provide for the attainment and maintenance of the designated beneficial uses of waters below the dam.
8. The proposed project shall be constructed in accordance with the plans submitted to the Army Corps of Engineers and included in the May 6, 2010 Public Notice for Application for Permit. Final construction plans for the proposed Deyo Dam shall not differ significantly from the preliminary plans dated 9/12/2006 and 3/2010.
9. The proposed project shall be constructed in accordance with the Idaho Department of Water Resources minimum standards for dam construction.
10. All fill and construction materials not used in the project shall be removed and disposed of in a manner which will prevent their entry into waters of the State.
11. Best Management Practices (BMPs) for construction and erosion control shall be implemented to prevent and control the discharge of sediment to Schmidt Creek during dam and island complex construction. Specialized or approved BMPs include the Idaho Department of Water Resources "Stream Channel Alteration Rules", etc. (IDAPA 58.01.02.350.03). The BMPs shall be maintained and monitored for effectiveness to ensure that turbidity in Schmidt Creek downstream of the project site does not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days (IDAPA 58.01.02.250.02.e). BMPs shall be replaced or augmented if they are not effective.
12. Equipment should not be fueled nor fluids changed adjacent to waters of the state. Any equipment operated adjacent to waters of the state shall be maintained in a good state of repair and shall have no damaged hoses, fittings, lines, tanks, etc…that release or may release pollutants into waters of the state. Waste oil and waste fluids shall not be stored at the site.
13. Recovery materials such as absorbent pads, booms, etc. shall be kept on site in order to remove waste oil, waste fluids or fuels, to the maximum extent practicable, in the event of a petroleum spill or release. If an above ground spill or overfill of petroleum results in a release that exceeds 25 gallons or causes a sheen on nearby surface water, the responsible person must make an effort to contain the spill and notify the DEQ Lewiston Regional Office within 24 hours. If the spill cannot be contained call the Emergency Response System at 1-800-632-8000.
14. As this project is larger than 1 acre in size and there is potential for discharge of storm water to waters of the U.S., the applicant must obtain coverage under the Construction Storm Water General Permit which is administered by the U.S. Environmental Protection Agency. More information can be found at: http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/Region+10+CGP+resources.
15. No uncured concrete shall enter flowing water.
16. Any exposed slopes and stream banks must be stabilized immediately upon completion of construction. If construction is to occur in phases, then the banks must be stabilized upon completion of each phase. This may require erosion control materials such as fiber blankets.
17. Riprap will be clean, angular, dense rock that is free of fines and resistant to aquatic decomposition.
18. The applicant must prepare a water quality monitoring plan for Schmidt Creek below the dam and submit the plan to DEQ for review and approval. The applicant must also prepare an annual report summarizing the temperature, dissolved oxygen, and flow data that was collected pre- and post-dam construction. The applicant must summarize whether changes in the operations of the dam are necessary to ensure compliance with WQS and minimize impacts to downstream water quality.
19. The applicant must provide DEQ with an operation and maintenance plan for the Deyo Reservoir. This plan should summarize how downstream water quality data will be used to evaluate whether changes in dam operations are needed. The applicant must inform DEQ of any dam operation changes that are necessary to minimize impacts to downstream water quality.
20. Dissolved oxygen standards for waters discharged from new dams and reservoirs are subject to the provisions of IDAPA 58.01.02 subsection 276.02 unless the State has documented the existence of significant fish spawning areas below the facility. If such areas exist, then waters below those

facilities shall contain the dissolved oxygen concentrations shown in subsection 276.03 during the modified time periods indicated for each species found in the designated area.

21. Human and solid waste receptacles will be provided at the reservoir recreation site.

RIGHT TO APPEAL FINAL CERTIFICATION

The final §401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5), and the Rules of Administrative Procedure Before the Board of Environmental Quality, IDAPA 58.01.23, within 35 days of the date of the final certification.

Questions regarding the actions taken in this certification should be directed to Cindy Barrett, DEQ Lewiston Regional Office, (208) 799-4370, Cynthia.Barrett@deq.idaho.gov.

Clayton Steele, Regional Administrator
DEQ, Lewiston Regional Office

c: Joe DuPont, IDFG, Lewiston
Duane Mitchell, ACOE, Walla Walla

Exhibit E

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

NMFS Tracking No: 2010/03517 (FWS)
2010/03701 (COE)

August 6, 2010

J. Frederick Caslick
U.S. Fish and Wildlife Service
911 N.E. 11th Avenue
Portland, Oregon 97232-4181

Lt. Col. Michael J. Farrell
U.S. Army Corps of Engineers
Walla Walla District Office
201 N. Third Avenue
Walla Walla, Washington 99362

RE: Endangered Species Act Section 7 Informal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the Deyo Reservoir Project (One project) HUC # 170603060305

Dear Mr. Caslick and Lt. Col. Michael J. Farrell:

This responds to the U.S. Fish and Wildlife Service (FWS) July 15, 2010, letter requesting Endangered Species Act (ESA) consultation and Magnuson-Stevens Fishery Conservation and Management Act (MSA) consultation on the subject action. The contents of the biological assessment (BA) accompanying that letter fully explain the potential impacts on Snake River fall Chinook salmon, Snake River Basin steelhead, their designated critical habitat, and essential fish habitat (EFH) under National Marine Fisheries Service (NMFS) review. In the BA, the FWS made a "Not Likely to Adversely Affect" determination for the ESA-listed species. The project has been reviewed by NMFS, as provided under section 7(a)(2) of the ESA and its implementing regulations, 50 CFR Part 402, and section 305(b)(2) of the MSA and its implementing regulations, 50 CFR Part 600.

Endangered Species Act

Snake River fall Chinook salmon and Snake River Basin steelhead are likely to occur within the action area. The action is within designated critical habitat for ESA-listed fall Chinook salmon and Snake River Basin steelhead (Table 1). Pursuant to NMFS' ESA responsibilities and authorities, NMFS evaluated the effect of the project on ESA-listed species and designated critical habitat.

The FWS, through the Wildlife and Sport Fish Restoration Program, is requesting consultation for a Federal grant to fund the Idaho Department of Fish and Game (IDFG) to create a reservoir in Clearwater County near Weippe, Idaho. A Clean Water Act section 404 permit will likely be needed to construct this project. The issuance of that permit by the Corps of Engineers is also covered under this consultation. The IDFG will construct a 55-acre, two-story fishery reservoir on Schmidt Creek, a small tributary of Lolo Creek. The State of Idaho, Clearwater County, IDFG, and local businesses have also contributed toward the construction of the reservoir with the anticipation that the reservoir will contribute nearby fishing in an area lacking such opportunity and help the local economy. The reservoir will be stocked with smallmouth bass, largemouth bass, panfish, and seasonally stocked with sterile hatchery-reared rainbow and cutthroat trout. The reservoir will be open to the public and will be managed by the IDFG as a recreational fishery.

Table 1. Federal Register notices for final rules that list threatened and endangered species, designated critical habitat, or apply protective regulations to listed species considered in this consultation.

Species	Listing Status	Critical Habitat	Protective Regulations
Chinook salmon (*Oncorhynchus tshawytscha*)			
Snake River fall-run	T 6/28/05; 70 FR 37160	12/28/93; 58 FR 68543	6/28/05; 70 FR 37160
Steelhead (*O. mykiss*)			
Snake River Basin	T 1/05/06; 71 FR 834	9/02/05; 70 FR 52630	6/28/05; 70 FR 37160

Listing status: 'T' means listed as threatened under the ESA

The IDFG will construct a 35-foot high earthen embankment across Schmidt Creek to form a reservoir that will average 10 feet to 20 feet deep. It will convert the old Schmidt Millpond site and upstream grazing pasture lands to approximately 55 acres of open water habitat and wetlands. The total volume of the reservoir has been estimated at 650 acre-feet. Additional facilities will include a paved parking area and boat ramp, restroom and picnic shelter, motorized and primitive camping areas, an interpretive path system, and a secondary dike to promote waterfowl production. The project will inundate approximately 5,500 feet of intermittent stream channel. Most dam construction materials will originate from within or near the reservoir site. No new road construction will be required to access the site for construction.

The action area starts 300 feet above the old Schmidt Millpond and then downstream on Schmidt Creek approximately 3 miles where it enters Lolo Creek. The original streambed and surrounding area was altered by past logging, the logging millpond, road construction, and stream channelization to improve grazing. The existing millpond has water year-round, although by late summer the pond is less than 1 acre, shallow and overgrown with lily pads and cattails. Fish species now present at the construction site include bullheads, dace, and pumpkinseeds. Fish found lower in Schmidt Creek include rainbow trout or steelhead, dace and sculpin. The steep stream gradient and low flow in the canyon reach of Schmidt Creek precludes steelhead from reaching the reservoir site. The Schmidt Creek drainage above the reservoir site encompasses approximately 2,100 acres, most of which is a mixture of agricultural land and young to middle-aged timberland.

Currently, Lolo Creek is listed as a 303(d) listed stream with sediment and temperature listed as pollutants of concern. The reservoir would attract more open water and shoreline feeding birds, such as waterfowl, blue heron, spotted sandpiper, kingfisher, and osprey.

The FWS, through the IDFG, will implement the following minimization/avoidance measures to reduce the potential of adversely affecting anadromous fish and/or their habitat:

- Comply with all Federal, state, and local laws and regulations, and comply with all permits and safety provisions, including dam stability inspections.
- Construct the dam and reservoir during seasonal low flows when Schmidt Creek at the site is typically dry.
- Utilize silt fences and other sediment control devices.
- Conduct operations in ways that prevent any unnecessary damage.
- Fill the pond gradually in spring and late fall when runoff water is available, with less potential downstream impacts.
- Manage Deyo Reservoir to maintain a stable water level; after the initial filling of the reservoir, the IDFG will pass the upstream flow less evaporative loss.
- Check equipment daily for leaks and repair any leaks prior to work activities near water and sensitive areas. Equipment staging and refueling areas will be located at least 100 feet away from aquatic habitat and sensitive areas.
- Plant any disturbed areas with native vegetation.

Species Determination

Adult Snake River fall Chinook salmon and Snake River Basin steelhead are found in the vicinity of the action area in Lolo Creek and Schmidt Creek near the confluence with Lolo Creek. The potential pathways for adverse effects to salmonids from the proposed action are through decreased stream flow and predation. Adverse effects to ESA-listed salmon and steelhead from the proposed action will be insignificant or discountable for the following reasons:

1. Salmon and steelhead are not found at the project site in Schmidt Creek. The steep stream gradient and low flow in the canyon reach of Schmidt Creek preclude them from reaching the reservoir site.
2. The stocked trout and warmwater fish species will not likely emigrate from the reservoir. If they do, their numbers in the stream below the reservoir and into Lolo Creek would be

minimal and would not likely impact native fish. Smallmouth bass are already found within the Clearwater River system. Use of stocked sterile trout in the reservoir would eliminate genetic risk to native fish species in the watershed. The potential for the introduced fish to affect salmon or steelhead is insignificant.

3. The IDFG will fill the reservoir gradually in spring and late fall when runoff water is more available, with less potential downstream impacts. The reservoir will be managed to maintain a stable water level, meaning that the IDFG will pass the upstream flow minus the amount lost to evaporation. Schmidt Creek, however, is normally dry above the millpond during the summer and early fall. Therefore, effects on water quantity and water velocity to the downstream portions of Schmidt Creek and Lolo Creek should be insignificant.

Based on the best available information and successful implementation of the conservation measures described in the BA, NMFS concurs with the FWS' finding that the subject action is "Not Likely to Adversely Affect" ESA-listed Snake River fall Chinook salmon and Snake River Basin steelhead.

Critical Habitat Determination

NMFS reviews the status of designated critical habitat affected by the proposed action by examining the condition and trends of primary constituent elements (PCEs) throughout the designated area. The PCEs consist of the physical and biological features identified as essential to the conservation of the ESA-listed species (Table 2).

The PCEs required for Snake River fall Chinook salmon and Snake River Basin steelhead include sites essential to support one or more life stages of the ESA-listed species (sites for spawning, rearing, and migration) and contain physical or biological features essential to salmon and steelhead conservation. The PCEs that could be affected by the proposed action include water quality, water quantity, water velocity, substrate, and safe passage.

Table 2. Types of sites and essential physical and biological features designated as PCEs, and the species life stage each PCE supports.

Site	Essential Physical and Biological Features	ESA-listed Species Life Stage
Snake River Basin Steelhead[a]		
Freshwater spawning	Water quality, water quantity, and substrate	Spawning, incubation, and larval development
Freshwater rearing	Water quantity & floodplain connectivity to form and maintain physical habitat conditions	Juvenile growth and mobility
	Water quality and forage[b]	Juvenile development
	Natural cover[c]	Juvenile mobility and survival
Freshwater migration	Free of artificial obstructions, water quality and quantity, and natural cover[c]	Juvenile and adult mobility and survival
Snake River Fall Chinook Salmon		
Spawning and Juvenile Rearing	Spawning gravel, water quality and quantity, cover/shelter, food, riparian vegetation, and space	Juvenile and adult.
Migration	Substrate, water quality and quantity, water temperature, water velocity, cover/shelter, food[d], riparian vegetation, space, safe passage	Juvenile and adult.

a. Additional PCEs pertaining to estuarine, nearshore, and offshore marine areas have also been described for Snake River Basin steelhead. These PCEs will not be affected by the proposed action and have therefore not been described in this letter of concurrence.
b. Forage includes aquatic invertebrate and fish species that support growth and maturation.
c. Natural cover includes shade, large wood, log jams, beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.
d. Food applies to juvenile migration only.

The FWS action has the potential to negatively affect fish habitat within the action area by increasing sediment, decreasing water quality and water quantity, and increasing water temperature, and spilling toxic fuels. However, adverse effects to ESA-listed salmon and steelhead habitat from the proposed action will be insignificant or discountable for the following reasons:

1. Construction-related erosion and sediment release will be kept to insignificant levels because the IDFG will construct the dam and reservoir during seasonal low flows when Schmidt Creek is typically dry. They will also use silt fences and other erosion control devices and replant disturbed areas with native vegetation. The reservoir may actually reduce sediment input into Schmidt Creek. The watershed upstream of the proposed site is agricultural (pasture, cropland, and hayfields) and highly managed timberland. Such land practices deliver a considerable amount of sediment to the stream network. Construction of

Deyo Reservoir would intercept and help settle out this sediment. Therefore, the proposed project should have no significant impacts to water quality.

2. The IDFG will fill the reservoir gradually in spring and late fall when runoff water is more available, with less potential downstream impacts. The reservoir will be managed to maintain a stable water level, meaning that the IDFG will pass the upstream flow minus the amount lost to evaporation. Schmidt Creek, however, is normally dry above the millpond during the summer and early fall. Therefore, effects on water quantity and water velocity to the downstream portions of Schmidt Creek and Lolo Creek should be insignificant.

3. Surface water temperatures of the proposed reservoir during summer are likely to be higher than downstream temperatures in Schmidt Creek. However, since the reservoir is located approximately 3 miles upstream of Lolo Creek, any warmer water released from the reservoir would have sufficient distance to equilibrate to natural water temperatures. Therefore, any water temperature effects are expected to be insignificant.

Based on the best available information and successful implementation of conservation measures described in the BA, NMFS concurs with the FWS finding that the proposed project is "Not Likely to Adversely Affect" designated critical habitat for Snake River fall Chinook salmon and Snake River Basin steelhead.

Magnuson-Stevens Fishery Conservation and Management Act

Federal agencies are required, under 305(b)(2) of the MSA and its implementing regulations (50 CFR 600 Subpart K), to consult with NMFS regarding actions that are authorized, funded, or undertaken by that agency that may adversely affect EFH. The MSA defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." If an action would adversely affect EFH, NMFS is required to provide the Federal action agency with EFH conservation recommendations (MSA 305(b)(4)(A)). This consultation is based, in part, on information provided by the Federal action agency and descriptions of EFH for Pacific salmon contained in Appendix A to Amendment 14 to the Pacific Coast Salmon Plan (August 1999) developed by the Pacific Fishery Management Council and approved by the Secretary of Commerce (September 27, 2000).

The proposed action and action area are described in the BA and this letter. The action area includes habitat which has been designated as EFH for various life stages of Chinook salmon and coho salmon. Because the habitat requirements (i.e., EFH) for Chinook and coho salmon in the action area are similar to those of the ESA-listed species and because the conservation measures included as part of the proposed action are adequate to address ESA concerns, they are also adequate to avoid, minimize, or otherwise offset potential adverse effects to designated EFH. Therefore, conservation recommendations pursuant to MSA (305(b)(4)(A)) are not necessary.

This concludes informal ESA consultation on this action in accordance with 50 CFR 402.14 (b)(1), and MSA consultation in accordance with 50 CFR 600.920 (e)(3). The FWS must reinitiate consultation on this action if new information becomes available, or if circumstances occur that may affect listed species, designated critical habitat, or EFH in a manner, or to an extent, not previously considered. This letter of concurrence meets the applicable Information Quality Act standards for utility, integrity, and objectivity.

Mr. Bob Ries at (208) 882-6148 and Mr. Dale Brege at (208) 983-4060 are the NMFS contacts for this consultation.

Sincerely,

David Mabe
for

William W. Stelle, Jr.
Regional Administrator

cc: D. Mitchell – COE
M. Lopez – Nez Perce Tribe
R. Holder – USFWS, Boise
R. Hennekey – IDFG