Planning Aid Memoranda

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FISH AND WILDLIFE SERVICE

Ecological Services
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July 28, 1999

Memorandum

To: Regional Director, Bureau of Reclamation, Upper Colorado Regional Office, Salt Lake City, Utah

From: Field Supervisor, Fish and Wildlife Service, Ecological Services, Lakewood, Colorado

Subject: Planning Aid Memorandum for Animas-La Plata Project

This responds to Reclamation's request in February 1999, for a Planning Aid Memorandum for the Animas-La Plata Project. This PAM specifically addresses alternatives for the project, described in the Notice of Intent to prepare a Draft Supplemental Environmental Impact Statement to the 1996 Final Supplement to the Final Environmental Statement for the Animas-La Plata Project, published in the Federal Register, January 4, 1999. This PAM will provide the Bureau of Reclamation with an evaluation of impacts to terrestrial and aquatic wildlife, water quality, wetlands, and federally listed threatened and endangered species associated with the 10 alternatives under consideration. This memorandum has been prepared under the authority of, and in accordance with, the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401 as amended; 16 U.S.C. 661 et seq.).

BACKGROUND

The purpose of the project is the implementation of the Colorado Ute Indian Water Rights Settlement Act of 1988, to provide the Ute Tribes an assured long-term water supply and water acquisition fund in order to satisfy the Tribes' senior water rights claim, and to provide for identified municipal and industrial water needs in the project area.

The project area includes portions of La Plata and Montezuma Counties in Colorado, and San Juan County, New Mexico, including: from Vallecito Reservoir, west to McPhee Reservoir, south to the San Juan River, east to the Pine River Arm of Navajo Reservoir, and back north to Vallecito.

DESCRIPTION OF ALTERNATIVES

This PAM will evaluate the 10 alternatives proposed for ALP, including Alternatives 1-4, Administration Proposal with different sizes for a Ridges Basin Reservoir; Alternative 5, Animas-La Plata Reconciliation Plan; Alternative 6, Animas River Citizens Coalition Proposal; Alternative 7, 1996 FSFES (phase 1, stage A); Alternative 8, Administration Proposal with an alternative source of water for non-Ute water users; Alternative 9, Citizens Progressive Alliance Proposal; and Alternative 10, the No Action Alternative.

Alternatives 1-4

Alternatives 1-4 are variations of The Administration Proposal, which includes both structural and nonstructural components.

Structural Components: This includes an off-stream storage reservoir within Ridges Basin (capacities of approximately 90,000, 105,000, 120,000, or 135,000 acre-feet), with no inactive storage and only a limited amount of "dead" storage, a pumping facility (up to approximately 240 cubic feet per second of capacity), and a reservoir inlet conduit, all designed to deplete no more than an average of 57,100 acre-feet per year. This depletion limit is consistent with the Fish and Wildlife Services 1996 biological opinion. This limits further water depletion in the entire San Juan River Basin in order to avoid jeopardy to the two Colorado River endangered fish species, Colorado pikeminnow (Ptychocheilus lucius) and razorback sucker (Xyrauchen texanus).

Nonstructural Component: Under the allocation of depletion amounts described in the NOI, the Tribes are still approximately 13,000 acre-feet per year short of the total quantity of depletion recognized in the settlement agreement. The proposed action therefore, includes a nonstructural element which would establish and utilize a water acquisition fund which the Tribes could use to acquire water rights on a willing buyer/willing seller basis in an amount sufficient to allow the Tribes approximately 13,000 acre-feet per year of depletion in addition to the depletions available from the reservoir. Preliminary cost estimates indicate that a one-time fund of approximately $40 million would be required to purchase the additional rights. However, to provide flexibility in the use of the fund, authorization would allow some, or all of the funds to be redirected for on-farm development, water delivery infrastructure, and other economic development activities.

Non-Binding Scenarios: Associated with the administration proposal is the assumption that the Tribes will develop the water in some way. Water use scenarios have been preliminarily discussed to provide information about how the water could be used by the Tribes in the future. The Tribes are not bound by these scenarios and may choose not to adopt any of the scenarios and develop project water in other ways.

Alternative 5

The Animas-La Plata Reconciliation Plan would be similar to Alternatives 1-4, except that it would be approximately 260,000 acre-feet in size. The use and conveyance of project water would be the same as those described in the non-binding scenarios for Alternatives 1-4.

Alternative 6

The Citizen's Coalition Alternative has several components that could be used in any combination. Central to the alternative is the development of a legacy fund for land and water acquisition. At this time, it is difficult to evaluate environmental impacts associated with this alternative. Implementation of Alternative 6 could involve the conversion of habitats or the complete loss of habitats. At the time of acquisition of land or water rights associated with monies from this project, Reclamation may need to coordinate and possibly consult with the Service regarding impacts to fish and wildlife habitat and federally listed species that could be affected by a change in land or water use. This alternative also includes water available through existing projects.

Vallecito Reservoir and the Pine (Los Pinos) River Drainage: An estimate of 45,000 acre-feet is said to be available from water savings through conservation measures on the Pine River drainage. The proposal describes up-grading the irrigation systems currently used in the valley so that water would be conserved. At this time there is very little information available about wildlife habitats within the valley. It is certain that, should the conservation methods be employed, substantial losses of riparian-wetland habitats would be incurred. It is also possible that the method of conveying water saved by irrigation conversion could impact riparian wetland habitats. The extent of potential riparian-wetland impacts will be covered later in this PAM. Many wildlife species use these long narrow strips of habitat created by irrigation conveyances. These types of habitats occur infrequently throughout the West, and are vital components to many wildlife species. Extensive surveys would need to be conducted within the proposed area where conservation measures would be employed to determine species occurrence, as well as type of habitat use. Southwestern willow flycatchers, a federally listed species, may occur within this drainage and extensive survey work would be required to determine if this species occurs in the area. If this species does occur within this area, consultation with the Service would be required before any action affecting the flycatcher could be initiated. Reclamation may need to coordinate with the Service to determine the extent of impact to wildlife habitats related to this component.

Lemon Reservoir and the Florida River Drainage: This component involves safety upgrades to the current facility in conjunction with raising the elevation of the dam approximately 10 feet. This component also includes additional land acquisition. If this alternative is to be considered, the land subject to acquisition would have to be evaluated for its current land use and an impact assessment would be required. Raising the dam could potentially

impact riparian-wetlands and other wildlife habitat downstream of the existing dam, depending on whether the abutments of the existing dam would have to be widened. By increasing the storage capacity of the reservoir, riparian-wetlands occurring at the reservoir inlet would be inundated. Also, there could be downstream impacts to riparian-wetland, fish and wildlife habitats depending on how the dam would be re-operated. At this time, there is not enough information available that will allow for adequate impact assessment of the loss of riparian-wetlands and wildlife habitats. Extensive surveys would need to be conducted to determine species occurrence and habitat use. The Lemon Reservoir area also has the potential to harbor southwestern willow flycatchers and would need to be surveyed for occurrence of this federally listed species. Implementation of this component may inundate the road along the east shoreline. This road provides access to properties that may have to be abandoned in order to facilitate higher water in the reservoir. The disposition of those properties (i.e., whether current residents would retain ownership), may determine if the road would be relocated or abandoned. This issue has not been discussed at length, but relocation of the road would further impact wildlife habitats, because the road would be relocated to a previously undisturbed area.

Dolores Project/McPhee Reservoir: Implementation of this component would deliver water from McPhee Reservoir to the Ute Mountain Ute Indian Reservation. Assuming that water would be delivered using existing systems, it is currently unclear whether there would be any additional impacts to wildlife habitat resulting from implementation of this component. Currently, there do not appear to be additional impacts, and as such, would not require additional analysis or mitigation. If, in the future, there are additional impacts associated with this alternative, Reclamation may need to coordinate and possibly reinitiate consultation with the Service.

Alternative 7

This alternative is analogous to Phase 1, Stage A of the 1996 Final Supplement to the Final Environmental Statement. This alternative consists of a Ridges Basin Reservoir, of approximately 274,000 acre-feet capacity. Impact analysis is available in the 1996 FSFES. Analysis of the impacts of this alternative will need to be updated with current information, including potential impacts that would result from the use and conveyance of project water.

Alternative 8

This alternative includes the Administration Proposal along with the addition of other components to supply water to non-Ute water users. One of the components of this alternative could be Aztec Reservoir, which would require another pumping facility on the Animas River, and conveyance system to the basin. This alternative could also include components described in Alternative 6 above: Pine (Los Pinos) River drainage, Lemon Reservoir and the Florida River drainage, Dolores Project/McPhee Reservoir.

Alternative 9

The Citizens' Progressive Alliance Alternative incorporates a revenue stream derived from the principal water users un-diverted water supply, which would generate hydro-power downstream. The second component of this alternative describes water available from other federal projects as described in Alternative 6 above. Impacts would also be similar to those in Alternative 6.

If the water in the Animas River remains in the river, and revenue generated from that water is used to purchase land and or water rights, impacts of this scenario are similar to what has been described in the nonstructural component of Alternative 1.

Alternative 10

The No Action Alternative would not include any construction activities. Land and water use would remain the same.

EVALUATION OF ALTERNATIVES

The following is an evaluation of the alternatives for the Animas-La Plata Project, including impacts on wildlife, riparian-wetlands, aquatic resources, and federally listed threatened and endangered species. Table 1, summarizes the alternatives and a preliminary description of the impacts associated with each alternative.

Wildlife

Alternatives 1-5, and 7

These alternatives all include a reservoir located within Ridges Basin, southwest of Durango, Colorado. The alternatives have been lumped together due to similarity of impacts.

Pumping Facility on Animas River: Currently, there are three alternative locations for a pumping facility that will supply water to Ridges Basin Reservoir. The impacts of actual pumping of water will be evaluated in the aquatics section. Impacts will depend on the exact location of the pump site. There will also be impacts to upland habitats along the right-of-way of the delivery conduit to Ridges Basin. These impacts will need to be assessed when a decision is made on the location of the pumping facility and the position of the delivery conduit right-of-way. Impacts associated with constructing the pumping facility will be temporary in nature; however, the pumping facility itself will be a permanent feature upon completion. The construction of the delivery conduit will also present a temporary impact to the environment. There will likely be a conversion of habitat type along portions of the right-of-way that will have an effect on wildlife. Construction of the delivery conduit may impede movement along historic migration corridors for big game animals during spring and fall migration periods.

Ridges Basin Reservoir Site: These alternatives have been evaluated at length by the Service in the 1993 Coordination Act Report. At that time, reservoir capacity was approximately 274,000 acre feet. Essentially, the impacts to wildlife resources would be the same as previously analyzed.

New information is available that will allow for an up-to-date evaluation of impact to wildlife habitats. Other Ridges Basin alternatives, having smaller capacities, will have correspondingly reduced impact to wildlife habitats. We do not feel the need, at this time, to attempt to evaluate each of the Ridges Basin alternatives separately. We will rank the alternatives from least impacts to greatest impacts. The Service will coordinate wildlife habitat impacts evaluation with the States of Colorado and New Mexico as to their concerns about a Ridges Basin alternative.

Impacts associated with Ridges Basin alternatives are similar, but vary in magnitude, depending on reservoir size. There are many species of wildlife that use the available habitat within Ridges Basin (1979 Final Environmental Statement). In the 1979 Final Environmental Statement, habitat generalists (Rocky Mountain elk) were selected to represent impacts to habitats used by all terrestrial species. It is our intention to analyze the habitat types as a whole and the mosaic created by those habitats rather than using one indicator species to attempt to evaluate habitat impacts. The evaluation will identify the different habitat types and quantity of each type that will be impacted should a Ridges Basin alternative be selected.

Recreation: In addition to the administrative proposal, Alternatives 2, 4, 5, and 7 would include a recreation component which would include a campground and ancillary facilities. These components would further impact wildlife habitats. These impacts have been discussed in the 1993 Coordination Act Report and will be updated should one of these alternatives be selected as the preferred alternative.

Although Alternative 1 presents the least amount of impact to wildlife habitats, the Colorado Division of Wildlife expects the need to include a recreational fishery as part of the project. The Division has no position on reservoir size, as they feel that a recreational fishery can be established in any size reservoir (see attached letter).

Roads: County Road 211 passes through Ridges Basin and would be inundated for most of its length within the basin. The 1996 FSFES and the 1993 Coordination Act Report have addressed the impacts associated with relocation of the road. If the relocation is to remain along the ridge top, this impact will be reviewed to ensure impact analysis is complete. Disturbances to wildlife and wildlife collisions with vehicles may increase on this road due to projected increases in traffic flow. It is likely that during winter months commuters will prefer this route into Durango due to hazardous conditions on the Wildcat Canyon Road (State Highway 141).

Table 1. Evaluation of the ten alternatives for the Animas-La Plata Project.

Wildlife	Riparian-Wetlands	Aquatic Ecology	T&E Species
Alternatives 1-5, 8* (Administration Proposals), and 7 (1996 FSEIS)			
–total inundation & losses of terrestrial vegetation and wildlife habitat by Ridges Basin Reservoir:	–loss of 121 acres of riparian-wetland vegetation from inundation by Ridges Basin Res. at all reservoir sizes	–concentration/bioaccumulation of heavy metals, non-metallics, contaminants from Animas River into Ridges Basin Res.; and into Aztec Res. (Alt. 8).	–effects on bald eagles, western willow flycatchers to be addressed in Biological Assessment/Biological Opinion
1. 90,000 af– 1,271 & 1,225 ac 2. 120,000 af–1,468 & 1,433 ac 3. 105,000 af–1,390 & 1,341 ac 4. 135,000 af–1,597 & 1,538 ac 5. 260,000 af–2,153 & 2,061 ac 7. 274,000 af–2,265 & 2,167 ac	–possible loss of cottonwood recruitment from pumping of Animas River –possible loss of wetlands from conveyance pipelines and future uses of water rights	–loss of non-native fish habitat from pumping of Animas River –entrainment/impingement of fish in Animas River pumping plant –risk of warm-water predator fish being released into Ridges Basin	–effect of flow reduction on Colorado pikeminnow and razorback sucker considered in San Juan Flow Recommendations
*Alternative 8 would include impacts @90,000 (above) and could include additional impacts at the Aztec site and/or those for alternative 6			
Alternative 6 (Citizens Coalition)			
–minor loss of shoreline habitats from Lemon Res. enlargement –implementation of conservation measures in Pine Valley could have significant loss of wildlife dependent on wetlands and riparian habitats	–minor loss of riparian-wetland habitats from Lemon Res. enlargement –implementation of conservation measures in Pine Valley could have significant loss of wetlands and riparian habitats	–minor impacts from Lemon Res. enlargement –implementation of conservation measures in Pine Valley could reduce stream flow and nutrients into the Pine River	–effects on bald eagles, western willow flycatchers to be addressed in Biological Assessment/Biological Opinion –effect of flow reduction on Colorado pikeminnow and razorback sucker considered in San Juan Flow Recommendations
Alternative 9 (Citizens Progressive Alliance)			
–possible effects to wildlife if existing federal projects are modified	–possible effects to wetlands and riparian habitat if existing federal projects are modified	–possible effects to aquatic resources if existing federal projects are modified	–effects to T&E species to be addressed in Biological Assessment/Biological Opinion
Alternative 10 (No Action)			
No impacts expected	No impacts expected	No impacts expected	No impacts expected

Nonstructural Components: This component involves an acquisition fund to acquire land and water rights to fulfill the remaining 13,000 acre-feet per year depletion allowed under the Settlement Act. At this time we cannot determine effects to the environment resulting from implementation of this component. Currently there is no plan for acquisition of land or water rights. Once a plan is in place, and a specific piece of land or a water right has been identified, Reclamation may need to coordinate with the Service to determine impacts on fish and wildlife resources.

Non-Binding Scenarios:

Water Use Scenarios for Southern Ute and Ute Mountain Ute Indian Tribes: There are many potential end uses for water made available by this project. Currently, there is no plan to implement any of these scenarios. Therefore, it is difficult to assess what impacts these end uses may have on fish and wildlife resources. Once a plan for an end use of project water has been identified, an environmental assessment will need to be completed, including appropriate coordination with the Service to determine impacts on fish and wildlife resources.

Conveyance Routes: Impacts associated with conveyance routes from Ridges Basin Reservoir, for non-binding scenarios, are difficult to assess. There will be impacts to wetland, riparian and upland habitats as a result of any conveyance of water away from the reservoir. If there is to be an immediate construction of a water conveyance, impacts will be determined when a decision is made for that portion of the project. Habitats potentially impacted are pinyon/juniper upland, and as mentioned above, wetland and riparian habitats. The routes for the conveyance system have been mapped, however these routes may or may not be used. Impacts to habitats would be temporary in nature and would result in a conversion of habitat type.

Alternative 8

The Ridges Basin component of this alternative has been discussed above. Impacts of this alternative that includes other federal projects are discussed below in Alternative 6. Aztec Reservoir would inundate winter range and a migration corridor for mule deer (Bruce Mazuranich, New Mexico Game and Fish Department, pers. comm. June 1999). There is very little information concerning this site at this time, and will require surveys to fully assess species occurrence within this basin as well as habitat impacts. As of this date, there is no decision about reservoir storage capacity, size, or capacity of the pumping facility. It is assumed that the capacity would be large enough to accommodate the non-Ute water users downstream of this facility. Numerous oil and gas wells have been developed in the vicinity of the Aztec site. The basin itself contains at least one pipeline that may have to be relocated. There is also an active well site that could be inundated. This well site is either oil or natural gas, and would have to be capped in order to prohibit contamination of the water held in the basin.

Alternative 6

The Lemon Reservoir component will likely have only minor impact to wildlife. Inundation of the Florida River inflow may inundate and kill some willows and displace beavers further upstream. This is not expected to be significant. Reservoir enlargement will not substantially change the nature of the shoreline and should not adversely affect wildlife. Relocation of the road along the east side of the reservoir is likely to impact wildlife habitats. Impacts would be similar to those mentioned for the Ridges Basin alternatives and the relocation of County Road 211. Wildlife habitats would be lost due to road relocation and would likely fragment habitat used by larger, more mobile species.

Implementation of conservation measures in the Pine (Los Pinos) River Valley may have extensive impacts to wildlife. Abandonment of the canal systems currently used to convey water would result in loss of wetlands and riparian habitats that support a great diversity of wildlife, including upland game birds (pheasants, quail, doves), small mammals (rabbits, mink, weasels, beaver, muskrat, foxes), as well as resident and wintering big game animals (elk, deer, moose). It is difficult to quantify and evaluate the impact of this alternative on wildlife throughout the Pine Valley because of the widespread nature of the wetlands and riparian habitats that support wildlife species. An inventory of wildlife species would be needed to determine impacts. If this water conservation alternative were to be implemented, the magnitude of the impacts would exceed those of other alternatives presented herein.

Implementation of the Dolores Project/McPhee Reservoir component would not have any additional impacts to wildlife, if implementation only includes purchase and delivery of water from that project. Mitigation for this project has already been initiated and/or completed.

Alternative 9

The Citizens' Progressive Alliance Alternative would have approximately the same impacts to wildlife as described in Alternative 6 above.

Alternative 10

Under the No Action Alternative, existing water and land use would remain the same, and would not have any additional impact to wildlife resources.

Riparian-Wetlands

Alternatives 1-5, and 7

This section contains the preliminary assessment of both direct and indirect impacts to riparian-wetlands resources that could potentially occur as a result of the ten alternatives

presently being considered. The assessment is based on Reclamation's descriptions of the alternatives (dated May 20, 1999), as well as other supplemental information about the alternatives that were made available through reports, maps, memos, meetings, and telephone conversations.

It has been agreed upon that the quantity of impacts to riparian-wetland habitats within Ridges Basin would not differ from the 1996 FSFES. As described below, the quantity of wetlands impacted is 121 acres, regardless of the size of any reservoir that may be constructed in Ridges Basin. As such, we will not evaluate all of the Ridges Basin alternatives separately as the impacts are the same. Impacts associated with all other components of the Ridges Basin alternatives are also similar, and will not be described separately to reduce redundancy.

Pumping Facility on Animas River: The use of a 240 cfs pumping facility is expected to have minimal effects to the Animas River's flood regime and alluvial aquifer. Therefore, indirect impact to riparian-wetlands habitats, occurring within the river's zone-of-influence (i.e., that area along the river corridor that is influenced by both the surface water and groundwater hydrology of the river), is expected to be minimal. There could be minor impacts to cottonwood recruitment downstream of Flora Vista according to analyses that were completed by Reclamation for the 1996 FSFES (Reclamation 1995a). As mentioned before, there are 3 alternatives for the location of the pumping facility. Impacts to riparian-wetlands may be incurred, depending on the exact location of the pumping facility and the conveyance route to Ridges Basin.

Ridges Basin Reservoir Site: The footprint of Ridges Basin Reservoir would accommodate a storage capacity from approximately 90,000 acre-feet up to 274,000 acre-feet. No more than 121 acres of riparian-wetland habitats that were previously delineated by Reclamation would be directly impacted by the construction of the dam and resultant inundation. There may be up to 1 acre of temporary impacts to riparian-wetland habitats during the construction of the dam and appurtenant facilities according to Reclamation's description in the 1996 FSFES. It is unlikely that the majority of the reservoir shoreline would support any riparian-wetland habitats of significance due to wide fluctuations in water levels.

Non-Structural Components: Potential impacts that may result from nonstructural components, which would entail the establishment of a fund for the Tribes to acquire up to 13,000 acre-feet of existing water rights, cannot be specifically determined without knowing, in advance, which water rights would actually be acquired and how the Tribes would exercise the water rights after they were acquired. A likely scenario may entail the acquisition of a private ranch that uses open ditches and flood irrigation. If the ranch was either developed, converted to a dry-farm operation, or converted to pressurized sprinkler irrigation, it is likely that all existing riparian-wetland habitats that are directly or indirectly supported by water in irrigation ditches, seepage from ditches, or return flows from irrigation practices would be adversely impacted. A similar analysis of potential riparian-wetland impacts that could result from the abandonment

and/or conversion of irrigation practices was completed by Reclamation for the 1996 FSFES (Reclamation 1995a).

Non-Binding Scenarios:

Conveyance Routes: Potential impacts to riparian-wetlands resulting from conveyance and use of project water was assessed based on mapping of conveyance routes provided by Reclamation and on the non-binding water use descriptions provided by David M. Dornbusch & Company (May 3, 1999). The construction of buried pipelines to convey project water would temporarily impact riparian-wetlands at several stream and drainage crossings. It is assumed that other appurtenant facilities for Municipal and Industrial use would not be constructed in riparian-wetlands, thereby avoiding any impacts to riparian-wetlands. Return flows from Municipal and Industrial use by both Indian and non-Indian users would probably not result in any significant indirect impacts to riparian-wetlands assuming that the water quality of return flows meets State water quality standards. It is assumed that any actions for the conveyance and use of project water would require additional analysis and coordination with the Service.

Non-Ute Water Use: Alternatives 5 and 7 could result in increases in irrigation use by non-Ute water users. There is the potential for increased return flow and the augmentation of existing riparian-wetland habitats. Additional irrigation water could also allow for an increase in irrigable lands. Depending on irrigation practices, there could be an increase in the acreage of riparian-wetlands as a result of irrigating new lands and run off from those lands.

Alternative 8

Aztec Reservoir: The portion of Alternative 8 that includes Ridges Basin has been evaluated above. There are other potential components of this project as mentioned above. There do not appear to be any riparian-wetlands that would be directly impacted by the construction and flooding of Aztec Reservoir. It is assumed that the pumping facility and delivery conduit for this off-stream reservoir could be sited so as to avoid and/or minimize direct impacts to riparian-wetland habitats situated along the Animas River corridor. An analysis of potential impacts to riparian-wetlands located along the Animas River downstream of Aztec Reservoir pumping station would have to be completed in a manner similar to that conducted for the Ridges Basin facility.

Alternative 6

As mentioned in the alternative descriptions, there are several components to this alternative. The Lemon Reservoir component would result in only minor impact to riparian-wetlands as a result of its implementation. With the exception of the reservoir's inlet, there are virtually no riparian-wetlands occurring along the perimeter of the reservoir. The extent of dam

reconstruction, reservoir inundation, and resultant impacts to riparian-wetlands, has not been quantified at this time and would need to be evaluated prior to implementation. Also, an analysis of potential impacts to riparian-wetlands situated along the Florida River corridor, that would result from the re-operation of Lemon Reservoir, would have to be completed prior to implementation of this component.

Implementation of conservation measures in the Pine (Los Pinos) River Valley presents several impacts to riparian-wetlands. The conversion of the canal and open ditch systems to pressurized sprinkler irrigation would result in the loss of those "artificial" wetlands that are directly supported by water in open ditches, seepage from ditches, and excessive saturation caused by flood irrigation. In addition, "naturally" occurring wetlands associated with the flood plain of the Pine River may be adversely impacted by the loss of return flows from irrigation. Impacts to naturally occurring riparian-wetlands could be compounded if the Pine River is not used as a means to convey project water. It is extremely difficult to quantify the loss of riparian-wetlands that could result from the implementation of this component without a defined plan of action that identifies: 1) which lands would be converted to pressurized sprinkler irrigation; 2) how Vallecito Reservoir would be re-operated; and 3) conveyance methods and routes for project water. Prior to the implementation of this component, an inventory and analysis of those riparian-wetlands that would be either directly or indirectly impacted would have to be completed. Based on the available information, it appears that the conversion of irrigation practices in the Pine River drainage could result in significant impacts to riparian-wetland habitats.

Potential impacts that could result from the Dolores Project/McPhee Reservoir component are not known at this time due to a lack of detailed information about this component. However, it appears that impacts would be relatively minor, assuming that the operation of McPhee Reservoir would remain unchanged. At this time, it appears that riparian-wetland impacts would be limited to the construction of new conveyance routes. Prior to any new construction, a complete inventory and analysis of riparian-wetland impacts would have to be completed.

Alternative 9

The Citizens' Progressive Alliance Alternative, depending on what components would be implemented, could have the same affects as those in Alternative 6.

Alternative 10

Under the No Action Alternative, the project would not be constructed. Existing water and land use would remain the same and there would be no project-related impacts to riparian-wetland resources.

Aquatic Resources

This section contains the preliminary analysis of both direct and indirect impacts to aquatic resources that could potentially occur as a result of the ten alternatives presently being considered. Impacts to aquatic resources will not change substantially with differences in the reservoir size in Ridges Basin. As such, we will evaluate the Ridges Basin alternatives (1-5, and 7) together since anticipated impacts for different reservoir sizes are similar.

Alternatives 1-5, and 7

Pumping Facility on Animas River: The primary features of alternatives with a Ridges Basin component are a pumping facility on the Animas River and a reservoir in Ridges Basin. The pumping facility is expected to impinge young fish on debris screens as water is being drawn into the pumps, and entrain young fish in the pumping structure or transport conduit. Young larval native fishes, including flannelmouth suckers, bluehead suckers, and speckled dace will be particularly susceptible because of their small size and poor swimming ability. Rainbow, brown, and cutthroat trout may also be affected. Pumping of water from the Animas River will also reduce the river stage and is likely to reduce available nursery shoreline habitat for young native fishes, resulting in possible reduction in survival and recruitment. The New Mexico Department of Game and Fish has specific concerns relating to reduced flows in the Animas River and how the native fish populations will be affected by these alternatives. These specific concerns are included in the attached letter dated July 19, 1999.

Ridges Basin Reservoir Site: Ridges Basin Reservoir is likely to accumulate contaminants from the Animas River, including heavy metals (e.g., mercury, lead, zinc), non-metallics (e.g., selenium), and pesticides. None of these elements occur in concentrations that exceed toxic or lethal levels in the river, but these may bioaccumulate in plankton and fish in the reservoir, and subsequently in birds of prey, such as eagles, ospreys, and herons. Contaminants should be monitored in Ridges Basin Reservoir to determine concentration and bio-accumulation levels.

A recreational fishery plan has not been developed for Ridges Basin Reservoir at this time. Assuming a plan is developed, the fish species to be introduced should be restricted to hatchery-reared salmonids in order to avoid introducing potential predators or competitors of the native, endangered Colorado River fishes, Colorado pikeminnow and razorback sucker, into their critical habitat in the San Juan River. Fishes from Ridges Basin Reservoir could escape into the Animas, La Plata, or Mancos Rivers, and eventually into the San Juan River, through releases from the reservoir or other unspecified water delivery systems. A recognized risk of Ridges Basin Reservoir is unauthorized release of warm-water predators, such as northern pike, largemouth bass, smallmouth bass, into Ridges Basin Reservoir and subsequent escape into the San Juan River. The reservoir fishery will likely create additional habitat for fish eating birds such as bald eagles and ospreys.

Nonstructural Components: Potential impacts that may result from the nonstructural component, which would entail the establishment of a fund for the Tribes to acquire up to 13,000 acre-feet of existing water rights, cannot be specifically determined without knowing, in advance, which water rights would actually be acquired and how the Tribes would exercise the water rights after they were acquired. A change in point-of-diversion or method of use could affect stream flows and consequently affect fish populations.

Non-Binding Scenarios:

Conveyance Routes: Impacts to aquatic resources on the La Plata and Mancos Rivers, from the conveyance and use of project water, were assessed based on mapping of conveyance routes provided by Reclamation, and on the non-binding water use descriptions provided by David M. Dornbusch & Company (May 3, 1999). The construction of buried pipelines to convey project water would temporarily impact aquatic resources at and immediately below stream crossings by interfering with fish movements (e.g., flannelmouth suckers in the La Plata River), and by sedimentation of spawning and rearing areas.

Alternative 8

The component of Alternative 8 that includes Ridges Basin has been evaluated above. Components that include other federal projects have been evaluated below in Alternative 6. At this time there is little information available concerning Aztec Reservoir with regard to aquatic impacts. It can be assumed that many of the impacts involving a pumping facility would be similar to those for the Administration Proposal. An additional pumping facility, for Aztec Reservoir, will likely contribute to adverse impacts to downstream resources.

Alternative 6

There are several components to this alternative. The Lemon Reservoir component would have only minor impact to aquatic resources as a result of reservoir enlargement. A portion of the Florida River at the upper end of the reservoir would be inundated, possibly eliminating some spawning areas for fish. Reservoir enlargement would not substantially alter the shallow limnetic zone, although the inundation of vegetation and soils may result in a temporary increase in primary production.

Implementation of conservation measures in the Pine (Los Pinos) River Valley could impact aquatic resources of the Pine River by altering hydrology. Water conservation could reduce return flow from seepage from irrigation conveyances and reduce river flows. An evaluation and monitoring would need to be conducted to determine if this reduction would affect fish populations. Reduction of seepage back to the river would also reduce return of nutrients and possibly decrease primary production.

Implementation of the Dolores Project/McPhee Reservoir component is not likely to have additional impacts to aquatic resources or fisheries in McPhee Reservoir or the Dolores River.

Alternative 9

The Citizens' Progressive Alliance Alternative, depending on components implemented, would have similar effects on aquatic resources as Alternative 6. If water were to remain in the river, to be used to generate hydropower downstream, there is likely to be no change in the conditions of the Animas River.

Alternative 10

Under the No Action Alternative, the project would not be constructed. Existing water and land use would remain the same and there would be no project-related impacts to aquatic resources.

Federally Listed Threatened and Endangered Species

This project will deplete water from the San Juan River Basin. Depletions within the San Juan River drainage are likely to have adverse impacts to the two endangered fish (Colorado pikeminnow and razorback sucker).

Alternatives 1-5, and 7

The pumping facility on the Animas River may impact willow communities within the riparian zone. This impact could, in turn, adversely impact the southwestern willow flycatcher. NMDGF expressed additional concerns relating to concentrations of toxic chemicals in aquatic invertebrates and amphibians, which are important food sources for the flycatcher (see attached letter). In addition, there is the potential to impact bald eagles along the river. Reduction in flows could degrade water quality, reduce recruitment of cottonwood trees and over time, reduce nesting and roosting habitats available to eagles. In addition, Ridges Basin Reservoir will likely attract bald eagles. Bioaccumulation of heavy metals, non-metallics and pesticides, in the food chain, could negatively impact bald eagles. Relocation of County Road 211, and recreation facilities proposed for Alternatives 2, 4, 5, and 7, are not expected to adversely impact federally listed species.

Although the nonstructural components have the potential to impact federally listed species, there is currently no plan to implement this component. In the future, when land and/or water rights are acquired, or infrastructures are proposed, Reclamation may need to consult with the Service on any federally listed species that could occur within the project area.

Development of non-binding scenarios and the conveyance of project water to those developments could adversely impact listed species. At this time, there does not appear to be a

plan to develop project water. In the future, when some type of development of project water is to be considered, there will be a need for separate environmental assessment and possibly consultation with the Service.

Alternative 8

The Administration Proposal component of this alternative has been discussed above. At this time, it is uncertain whether or not there would be impacts to federally listed species as a result of the construction of Aztec Reservoir. Surveys would be required to determine occupancy of listed species within the basin. Potential impacts of a pumping facility, and delivery conduit would need to be evaluated for impacts to federally listed species.

Alternative 6

With the multitude of potential components associated with this alternative, there is the potential to impact southwestern willow flycatchers and bald eagles. Loss of cottonwood recruitment and willow habitats at Lemon Reservoir, the Florida River drainage, and the Pine River drainage could have significant impacts to these species.

Alternative 9

This alternative is expected to have similar impacts, to listed species, as those mentioned in Alternative 6.

Alternative 10

There will not be any impact to listed species as a result of this alternative.

CONCLUSIONS AND RECOMMENDATIONS

In this section, the Service will rank the alternatives and the resultant impact to the environment. The ranking will take into account the four resources that have been discussed in the PAM.

The Service ranks the alternatives, from least impact to greatest impact, as follows:

- Alternative 10 (would not have any additional impact to the environment).
- Alternative 1 (90,000 acre-foot reservoir with associated impacts).
- Alternative 3 (Administration Proposal plus 15,000 acre-feet of additional water to make up for bypass flows during spring peak runoff to meet flow recommendation in the San Juan River).

- Alternative 2 (Administration Proposal with the addition of a recreational fishery, represents greater impacts to fish and wildlife resources than Alternatives 1 and 3, due to the recreational fishery, camping and ancillary facilities proposed).

- Alternative 4 (Administration Proposal with the addition of a recreational fishery and 15,000 acre-feet for bypass flows).

- Alternative 5 (Reconciliation Plan, 260,000 acre-foot reservoir).

- Alternative 7 (1996 FSFES).

- Alternative 8 (if Aztec Reservoir is not included, this alternative may rank somewhat higher (reduced impacts) depending on which components were included. It would rank no higher than Alternative 5 due to additional impacts (additional water source for non-Ute water users) that would be incurred above those described for Ridges Basin Reservoir).

- Alternative 9 (Citizens Progressive Alliance Proposal. If conservation measures on the Pine River are included. Depending on how this alternative would be implemented, and which components would be implemented, this alternative could rank above Alternative 5 if it did not include conservation measures on the Pine River).

- Alternative 6 (Citizens Coalition Proposal (non-structural), with the inclusion of conservation measures implemented in the Pine River drainage).

The Division has concluded that the public will demand that a recreational fishery component be included in a Ridges Basin alternative. The Division has also stated that they have no position on how large the reservoir should be, and that any size reservoir could achieve a recreational fishery. The Service will discuss, with the Division, implementation of an alternative which would be the most cost effective means of maintaining a fishery in a Ridges Basin alterative.

The New Mexico Department of Game and Fish recommends adoption of the Administration Proposal, limited to a 90,000 acre-foot reservoir and the facilities necessary for this alternative. NMDGF would oppose a second reservoir facility at the Aztec Site due to "additional, needless impacts to New Mexico fish and wildlife" (see attached letter). NMDGF encourages further investigation of the non-structural alternatives presented in Alternatives 6 and 9, as there is the potential for some of the alternatives to limit impacts, as well as provide water conservation measures, irrespective of their relationship to the final plan for the project.

Alternatives 3 and 4 include the addition of 15,000 acre-feet of water that would be stored in Ridges Basin. The additional water would allow the cessation of pumping water for two weeks

during peak runoff to meet the flow recommendation in the San Juan River. The additional water would make up for the two-week period when the pump would not run. It is currently unclear whether additional water is necessary to make up for the non-pumping period. The Service has concerns about the need for additional storage, and the resultant impacts of storing additional water in Ridges Basin.

Construction of a larger Ridges Basin Reservoir (Alternatives 5 and 7) would create greater impacts than a smaller reservoir alternative. Construction of a larger reservoir could provide for future water development above proposed depletion amounts, however, this would not be consistent with the Services 1996 biological opinion and allowable depletions for this project. Further, there is no established need to construct a larger reservoir, nor the need to further negatively impact wildlife and their habitats.

We have concluded that the majority of nonstructural alternatives, individually, present lower magnitude impacts to the environment than Ridges Basin Reservoir. The exception to this is the plan for conservation measures in the Pine River Valley. It does not appear that all of the water demands can be met by any of the individual alternatives except Ridges Basin. This leads the Service to believe that several nonstructural components would have to be combined in order to meet all of the demands for project water. The combination of several components will likely need to include the conservation measures proposed in the Pine River drainage to meet total water demand. The cumulative impacts of combining enough of these other alternatives to satisfy water rights will likely exceed impacts of a Ridges Basin Reservoir alternative.

Building a separate reservoir (Aztec) to supply water for non-Ute water users would present additional impacts to the environment that could easily be avoided by storing water in Ridges Basin Reservoir.

Conservation measures employed within the Pine River drainage would have significant effects to fish and wildlife resources, and mitigation would be very difficult to achieve. The extent of impact to wetlands and wildlife habitats would be difficult to accurately assess. In comparison to Ridges Basin, impacts within the Pine River drainage would present impacts of far greater magnitude, due to differences in diversity of habitats of the two locations. The Pine River Valley possesses a far greater diversity of vegetation and therefore wildlife, than Ridges Basin.

Attachments

pc: FWS/ES, Grand Junction
FWS/ES, Albuquerque (Attn: Jennifer Fowler-Propst
FWS/RO, Lakewood (Attn: Joe Webster)
FWS/RO, Lakewood (Attn: Bob McCue)
BR, Durango
BR, Grand Junction
Bureau of Indian Affairs, Albuquerque Area Office, PO Box 26567, Albuquerque, New Mexico 87125-6567
CDOW, Grand Junction (Attn: Mike Grode)
CDOW, Montrose (Attn: Norwin Smith)
CDOW, Durango (Attn: Chris Kloster)
NMDGF, Villagra Building, PO Box 25112, Santa Fe, New Mexico 87504 (Attn: Nick Medlee)
Southern Ute Indian Tribe, PO Box 737, Ignacio, Colorado 81137
Ute Mountain Indian Tribe, General Delivery, Towaoc, Colorado 81334
The Navajo Nation, PO Box 9000, Window Rock, Arizona 86515
Jicarilla Apache Indian Tribe, PO Box 507, Dulce, New Mexico 87125-6567
Jessica Aberly, Aberly, Nordhaus, Haltom, Taylor, Taradash & Frye, 500 Marquette Avenue North West, Suite 1050, Albuquerque, New Mexico 87102
Dan Israel, 6403 East Willow Spring Lane, Cave Creek, Arizona 85331
Scott McElroy, Greene, Meyer & McElroy, 1007 Pearl Street, Suite 220, Boulder, Colorado 80302
Stan Pollack, Special Counsel for Water Rights, Navajo Nation Department of Justice, P.O. Box 2010, Window Rock, Arizona 86515

KBroderdorp:ALPPAM2.mem:072899

STATE OF COLORADO
Bill Owens, Governor
DEPARTMENT OF NATURAL RESOURCES
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AN EQUAL OPPORTUNITY EMPLOYER

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For Wildlife--
For People

July 16, 1999

Kurt Broderdorp, Ecological Services
U.S. Fish & Wildlife Services
764 Horizon Drive
South Annex A
Grand Junction, CO 81506-3946

RE: CDOW COMMENTS ON DRAFT PAM ANIMAS LaPLATA PROJECT

Dear Kurt:

CDOW biologists and Area staff have reviewed the Draft PAM and offer the following comments. The CDOW can concur with the various fish and wildlife related impacts that are addressed in the draft document. We agree that impacts to habitat types should be assessed using a diversity of wildlife species found in the project area rather than attempting to evaluate habitat impacts on the basis of one indicator species. The report is very comprehensive given the fact that there are many different alternatives and combinations of potential projects and impacts that required review. Once a final alternative is selected and specific project components and impacts can be outlined the CDOW will be able to provide more helpful comments to the Service.

One item that the CDOW can discuss at this time is the recreational fishery possibilities at Ridges Basin. It is our assessment that the public will demand that a recreational fishery component be included in any biological discussion for a Ridges Basin Reservoir. The CDOW has no position on how large the reservoir should be. A recreational fishery can be achieved for any size reservoir; and, a determination of stocking costs vs potential fishery benefits for each reservoir could be developed, if necessary. If one of the Reservoir Alternatives is selected, an assessment for a salmonid fishery with contingencies and specific warm-water fish control measures should be completed.

Thank you for giving the CDOW the opportunity to comment on this draft document. We look forward to working with the Service on this project in the coming months.

Sincerely,

Ron D. Velarde

Ron Velarde
Regional Manager - West Region

cc: Drayton Harrison; Mike Grode; Bob Towry; Steve Norris; Walt Graul

DEPARTMENT OF NATURAL RESOURCES, Greg Walcher, Executive Director
WILDLIFE COMMISSION, Chuck Lewis, Chair • Mark LeValley, Vice-Chair •Bernard L. Black, Secretary
Marianna Raftopoulos, Member • Philip James, Member •Robert Shoemaker, Member • Arnold Salazar, Member • Rick Enstrom, Member

Kurt SM
ACP
file

GOVERNOR
Gary E. Johnson

DIRECTOR AND SECRETARY
TO THE COMMISSION
Gerald A. Maracchini

STATE OF NEW MEXICO

DEPARTMENT OF GAME & FISH

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Farmington, NM
George A. Ortega
Santa Fe, NM

July 19, 1999

Susan Moyer, Assistant Colorado Field Supervisor
U. S. Fish and Wildlife Service
Western Colorado Field Office
746 Horizon Drive, South Annex A
Grand Junction, CO 81506.

Re: Selection of preferred alternative for the Animas La Plata Project and mitigation for impacts.

Dear Ms. Moyer,

The New Mexico Department of Game and Fish (Department) has reviewed the ten alternatives presently being considered in the continuing NEPA process for the Animas La Plata Project (ALP) for their potential impacts to fish and wildlife in New Mexico. We also reviewed the draft Planning Aid Memo (PAM) that your office is developing.

The Department understands that the USFWS Ecological Field Office in Grand Junction is coordinating Fish and Wildlife Coordination Act activities, and will develop a PAM, a Coordination Act Report and a Biological Opinion regarding the proposed project. The PAM will be submitted to the interdisciplinary NEPA team at the Bureau of Reclamation (BOR), who will use this analysis of wildlife impacts during their preparation of another Draft Supplemental Environmental Impact Statement to the 1996 Final Supplement to the Final Environmental Statement for the Animas La Plata Project (1996 FSEIS). They have suggested five criteria to assess impacts: water quality and hydrology, terrestrial vegetation, wildlife, state and federal threatened and endangered species and impacts to wetlands and riparian areas. The Department would like to submit the following comments.

The USFWS has asked the Department to address potential impacts to fish and wildlife as though the flow recommendations for Navajo Dam have been adopted by the BOR and that the (re)operation of Navajo Dam and the proposed actions associated with ALP on the Animas River are not "connected actions." The following analysis of the proposed alternatives is based on the assumption that these recommendations will be adopted. If they are not adopted, the Department will reconsider its present position and resubmit comments, as necessary.

The Department believes that the selected alternative should minimize the impacts to fish, wildlife and habitat in New Mexico. However, the Department recognizes that any proposed project should be consistent with the "general principles" outlined in the "Administration Proposal for Final Implementation of the Colorado Ute Settlement Act" proposed by Secretary of the Interior, Bruce Babbit on August 11, 1998, including the recommendations of the 1996 USFWS Biological Opinion to avoid jeopardy to the federally endangered Colorado River pikeminnow and the razorback sucker.

The Department recommends that the "Administration Proposal" (Alternative 1) be adopted as the preferred alternative. This alternative includes a 90,000 acre-feet, off-stream reservoir located at the Ridges Basin site with no inactive storage, only a limited amount of "dead" storage and a 240 cfs pumping plant. Consumptive use of water will be restricted to municipal and industrial uses. This alternative also includes a non-structural element, which would establish a water acquisition fund that the tribes can use to acquire the additional 13,000 acre-feet of water rights needed to meet the water allocations outlined in the settlement agreement. The Department recognizes that this alternative meets the purpose and need of the proposed project, is consistent with the "general principles" including the maximum allowable depletion stipulated in the 1996 Biological Opinion and is the structural alternative that best minimizes the impacts to fish and wildlife in New Mexico.

However, the Department concludes that the Administration Proposal will have unavoidable impacts. In particular, the Department believes that reduced flows in summer and winter from the additional depletions represent a significant threat to the continued survival of the native fishes in the New Mexico portion of the Animas River. The 1996 FSEIS states that base flow during this period is approximately 300 – 400 cfs. If the proposed 240 cfs of water is taken from the river during this time, flows in the Animas River will be reduced to the minimum bypass flows (identified in the 1996 FSEIS) of 225 cfs in summer and 125 cfs in winter and could potentially remain at that level for considerable time, especially in dry years. Subsequent

downstream depletions for irrigation will further increase the probability of low or no flow conditions in New Mexico. Lower flow conditions will likely have a significant effect on the native fish population in the lower Animas River. Reductions in wetted area will limit river productivity and invertebrate abundance and may cause subsequent reductions in fish populations. Reduced pool area, especially in winter, may increase fish densities leading to stress, higher incidence of disease and further reductions in fish populations as they adjust to limited habitat availability during critical periods in their life history. Further attenuation of spring and summer flood events will reduce near bed shear stresses in riffle areas, decreasing the competency of the river to move and flush sediment through the system, leading to increased sedimentation. Increased sedimentation will result in losses of critical spawning and rearing habitat. Flood peak attenuation will also lead to decreased temporal variability of flows. High temporal variability is important for some native fish populations to maintain a competitive advantage in the presence of non-natives. It is possible that decreased flood peaks will shift this balance, resulting in reductions in native fish populations with a concomitant increase in non-natives. The Department suggests that a more comprehensive analysis be conducted to better understand these issues and to identify (through an Instream Flow Incremental Methodology or Habitat Evaluation Procedure) the flows necessary for the protection and maintenance of native fishes and their habitat in New Mexico. This analysis is necessary for developing long term monitoring and mitigation and should be conducted even if it cannot be completed before implementation of the ALP.

Additionally, irrigation, municipal and industrial (M & I) water returns and urban runoff will constitute a larger proportion of the water in the Animas River leading to reductions in water quality and increasing the potential for eutrophication, excessive algal growth and the potential for fish kills. This impact may be considerable if the Southern Ute Indians decide to use their water for irrigation rather than for M & I uses suggested in the non-binding general principles of the Administration Proposal. The 1996 FSEIS (page III-38,39) acknowledges that many native suckers sampled in the lower Animas River are afflicted with external lesions from an opportunistic bacterial fish disease (furunculosis) and ectoparasites. These symptoms are often secondary infections related to environmental stress, and have been provisionally attributed to elevated levels of PAH's known to be present in the Animas, chronic low flow conditions and related habitat loss, together with elevated water temperatures and water quality degradation. The Department concludes that these problems will only worsen upon implementation of any alternative that will reduce flows in the lower Animas River.

The lower Animas River is considered potential southwestern willow flycatcher habitat (SWF). The Department agrees with the conclusion of the 1996 FSEIS and the draft PAM that impacts to the development and maintenance of wetland and riparian vegetation in the lower Animas will be minimal. However, decreased water quality can increase the concentrations of toxic chemicals in aquatic invertebrates and amphibians, an important food source for the SWF, other birds, fish and wildlife. Elevated body burdens of toxic chemicals and metals may cause a diverse array of physiological and behavioral problems that can affect survival and reproduction. Increased availability of potentially diseased and contaminated fish during winter low flow conditions may increase the risk of bioaccumulation of toxic chemicals in fish-eating wildlife, specifically in bald eagles known to over-winter in the area. These potential impacts and others need to be fully addressed, and we suggest that an ecological risk assessment be conducted to assess the potential for food web transport as a consequence of water quality degradation due to additional water depletions. Such a study can be used to better understand the impacts of the proposed project on fish and wildlife, will help to develop management strategies to limit these impacts and can suggest more appropriate mitigation for unavoidable impacts.

The Department also reviewed the other alternatives presented in the PAM. We believe that all other variations of the Administration Proposal (Alternatives 2,3,4,5,7 and 8) with structural components that further reduce flows in the Animas River will have more severe impacts to native fish and wildlife in New Mexico, and we do not support them.

The Department concludes that under most alternatives, the impacts to terrestrial vegetation in New Mexico will be minimal. However, this would not be the case if Alternative 8 is implemented. This alternative is a variation of the Administration Proposal, but proposes the construction of another 15,000 acre-feet, off-stream reservoir at Cedar Hills, New Mexico to supply water to the non-Ute entities identified in the settlement act with a possible reduction in the size of the proposed Ridges Basin reservoir. We believe that the proposed Aztec Reservoir should not be built and oppose this alternative. This would cause additional, needless impacts to New Mexico fish and wildlife from flooding two sites instead of one when water demands could easily be supplied by maintaining the 90,000 acre-feet storage capacity of the proposed Ridges Basin Dam outlined in the Administration Proposal.

The Department believes that non-structural alternatives (Alternatives 6 and 9) propose some interesting solutions for satisfying the water demands of ALP, but finds that not enough information is provided to adequately analyze whether they will meet the purpose and need of the

proposed project or assess the cumulative costs and benefits to fish and wildlife. We can only recommend that components of the alternatives that have non-structural elements be investigated further and those that have minimal impacts, perhaps be considered as good water conservation practices irrespective of their final relationship to ALP.

In summary, the Department concurs with the recommendations of the PAM and supports Alternative 1 (Administration Proposal) and Alternative 10 (No Action Alternative). The Department does not support any other structural variation of the Administration Proposal because they would cause additional impacts to fish and wildlife in New Mexico beyond the minimum needed to meet the water demands of ALP. However, the Department concludes that impacts associated with the Administration Proposal, individually and cumulatively represent a significant threat to the persistence and recovery of the native fishery and may impact other wildlife in the Animas and San Juan Rivers. Every effort must be made to limit these impacts and unavoidable impacts must be mitigated. The Department would like to offer some ideas that it believes may be appropriate mitigation.

1) Set up a trust account with sufficient funds to study, design and implement appropriate mitigation projects for direct and future impacts in New Mexico and Colorado resulting from implementation of the Animas La Plata project.

2) Design and implement a study to understand the factors limiting the (re)establishment of the roundtail chub in the lower Animas River. Although a reproducing population occurs in the Florida River, Colorado, no apparent recruitment occurs in the Animas River from downstream larval drift.

3) Design and implement a study to understand the factors that currently limit the use of the Animas River as potential spawning habitat for the Colorado River pikeminnow.

4) Design and implement appropriate studies to better understand the factors causing fish diseases in the lower Animas River.

5) Develop additional grow-out ponds for the razorback sucker and other endangered fishes for reintroduction into the San Juan River and its tributaries to aid in the recovery of the native fishes.

6) Further investigate approaches and implement projects to remove the barriers to movement and migration of native fish in the main-stem and tributaries of the San Juan River in New Mexico and Colorado, upstream of Farmington.

7) Develop a watershed plan and produce recommendations for best management practices that can be implemented to improve water quality in the Animas drainage. This plan should specifically focus on reducing heavy metals originating from historical mining districts in the upper watershed, fine sediment originating from the Animas valley between Bakers Bridge and Durango, Colorado and reducing the impacts from irrigation and M & I return flows.

8) The BOR has suggested the possibility of establishing maintenance flows in the La Plata River in New Mexico by diverting water from the Animas drainage to the La Plata drainage. Currently, this reach of river is dry for much of the irrigation season, preventing the establishment of a viable native fishery. The Department supports this idea in principle, but believes that many questions must be answered before being implemented. Currently some native species occur sympatrically with non-natives in some reaches of the river. How would constant maintenance flows affect the balance between natives and non-natives? Would maintenance flows create a bridge between the persisting natives in the upper drainage and the non-natives in the lower drainage, tipping the balance in favor of non-natives in these reaches? How could we manage for large flow variability to give the natives the edge? How would water quality and quantity be protected? The Department suggests that a study be commissioned to investigate the possibility of this mitigation and its potential costs and benefit.

The Department appreciates the opportunity to comment on the draft PAM and the ten alternatives currently being analyzed in the continuing NEPA process for the ALP project. If you have any further questions please contact Nic Medley, Aquatic Habitat Biologist of my staff at (505) 827-9907 or nmedley@state.nm.us.

Sincerely,

Tod W. Stevenson

Tod Stevenson, Chief
Conservation Services Division

TS/CNM

cc: Lieutenant Governor Walter Bradley
Jennifer Fowler-Propst (Supervisor, Ecological Field Office, USFWS)
Kirk Lashmett (Fish and Wildlife Biologist, BOR, Durango)
State Game Commission
Jerry Maracchini (Director, NMGF)
Scott Brown (Assistant Director, NMGF)
Glenn Case (Northwest Area Division Chief, NMGF)
Jack Kelly (Chief, Fisheries Division, NMGF)
Amy Fisher (Conservation Services Division Assistant Chief, NMGF)
David Propst (Endangered Fish Biologist, NMGF)
Marc Wethington (San Juan Fisheries Biologist, NMGF)

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
755 Parfet, Suite 361
Lakewood, Colorado 80215

FEB 22 '99

IN REPLY REFER TO:
ES/CO:BR-ALP
MS 65412 LK

February 19, 1999

Memorandum

To: Regional Director, Bureau of Reclamation, Upper Colorado Regional Office, Salt Lake City, Utah

From: Field Supervisor, Fish and Wildlife Service, Ecological Services, Lakewood, Colorado

Subject: Planning Aid Memorandum for Animas-La Plata Project

This responds to your request on February 1, 1999, for a Planning Aid Memorandum for the Animas-La Plata Project. This PAM specifically addresses pipeline route alternatives associated with the project, mentioned in the Notice of Intent to prepare a Draft Supplemental Environmental Impact Statement to the 1996 Final Supplement to the Final Environmental Impact Statement for the Animas-La Plata Project, published in the Federal Register, January 4, 1999. This memorandum has been prepared under the authority of and in accordance with, the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401 as amended; 16 U.S.C. 661 et seq.).

The project proposal is to construct a dam and reservoir within Ridges Basin, southwest of Durango, Colorado. This memorandum only addresses 2 pipelines that currently cross Ridges Basin. It addresses possible impacts to wildlife, specifically, the Carbon Mountain golden eagle nests, deer and elk winter range, migration routes, and calving/fawning areas. We also discuss water quality issues associated with pipelines that could be constructed under Ridges Basin Reservoir and cross the Animas River. One pipeline carries natural gas, the other carries natural gas by-products and both lines are under pressure.

Carbon Mountain Eagle Nests: We have addressed this issue on three prior occasions: first in the January 1993, Fish and Wildlife Coordination Act Report, a November 30, 1994, PAM, and again in the March 4, 1996, PAM.

Although there have been some recommendations regarding take and permits for the nests, be aware that only inactive golden eagle nests may be taken. (see attached 50CFR 22.25,b,1). The regulation also states that when determining if a permit should be issued, the Director of the Fish and Wildlife Service shall conduct an investigation and in making a determination, must consider whether the applicant can reasonably conduct the resource development operation in a manner that avoids taking any golden eagle nest.

Deer and Elk: Ridges Basin and the surrounding mountains provide a variety of habitats for deer and elk. Bodo State Wildlife area is to the north of the Basin and is used for winter range. These species use the timbered areas to the east and west of the basin as migration routes and use Basin Mountain and its long south facing slope as calving and fawning areas. The area to the west of the basin is becoming developed and in the future will not provide adequate habitat. This will make the area between Carbon Mountain and the Animas River very important as a migration corridor to these wide ranging species. Impacts would include trenches that block migration routes, and removal of hiding cover and forage. We are also concerned that any upland ROW could be used as trails for OHV use. This type of disturbance is unpredictable and has a major affect on wildlife during winter and calving/fawning seasons. Also of concern is nonnative plant invasion along a disturbed ROW. Nonnative invasive plants are a threat to native wildlife habitat.

Water Quality: The Fish and Wildlife Service is also concerned about water quality, with regard to the pipelines running beneath the reservoir, or along the shoreline. Petroleum products and by-products can have devastating affects to the environment. There is potential for the pipelines to release petroleum products into the aquatic environment and causing damage. We are also concerned about alternatives that include new crossings of the Animas River, as these have the potential to release petroleum products into the aquatic environment as well.

The Bureau of Reclamation suggested 17 alternatives for relocation of the pipelines. Many of the alternatives share route alignments and we are discussing those routes, rather than each alternative separately. The routes to be discussed are as follows: West Carbon Mountain, East Carbon Mountain, East Animas, High Abutment, Low Abutment, 6,800 Foot Elevation North and South, Lower Southern, Upper Southern, Indian Creek Short, Indian Creek Long, Powerline, Phoneline, North Reservoir, and Reservoir.

The West Carbon Mountain and the Reservoir High Abutment Route Alternatives pass within ¼ mile of 2 golden eagle nests. It is thought that both nests are used by a single pair of adults. A third golden eagle nest, located north of the other two, may be used by the same pair. This alternative may produce enough line-of-sight disturbance in proximity to the nests that the nests would be abandoned, resulting in nest failure and take under the Bald Eagle Protection Act. Therefore, this route should not be used.

The East Carbon Mountain Route Alternative traverses an area that is used by deer and elk herds for migration to and from Bodo State Wildlife Area. Although there would be a disturbance within the migration corridor, it would be of relatively short duration. If the construction could not be completed within one work season, construction would need to be postponed between December 1st and April 15th. This will allow migrating herds to use the area during the critical winter range use period. Any disturbance along this route would be temporary and long term affects to migrating herds would be minimal. Open trenches could present an obstacle to migrating deer and elk. This alternative would not affect golden eagle nests.

The East Animas Route Alternative follows the Animas River Corridor. This alternative crosses the Animas River at 2 locations. If selected, we recommend that the pipeline be bored underneath the river. This would limit disturbance to the Animas River, and fish habitat would be unaffected. This alternative would have no affect to the golden eagle nests, but may have an affect to migrating deer and elk herds while under construction. Long stretches of open trench would preclude migration of deer and elk through the area.

The Lower Southern, Upper Southern, Indian Creek Long and Short Route Alternatives are located south of Ridges Basin on Basin Mountain. This is a long, south facing slope which provides winter forage and spring calving and fawning areas for elk and deer. This area is relatively undisturbed year around. There is an unimproved road that follows the Indian Creek Drainage, but it is believed to cause very little disturbance through this area. The slope includes land that is privately owned and land owned by the Southern Ute Tribe. Access to Southern Ute land is controlled by locked gates. Construction of a pipeline through this area would result in a temporary disturbance which could disrupt calving/fawning seasons for elk and deer. We recommend that if one of these alternatives is selected, construction be postponed from June 1st through June 30th to limit disturbance during calving

and fawning seasons. These alternatives would have no impacts to the golden eagle nests on Carbon Mountain. The Indian Creek Long Route Alternative passes between 2 eagle nests near West Gap and would cause a line of sight disturbance during the construction period. If selected, the area within ¼ mile of the nests should be avoided during nesting/fledging periods.

The Phoneline Route Alternative roughly follows an unimproved road that runs along a ridge top to the north of Ridges Basin. This route has previously been considered for the relocation of County Road 211. This alternative provides a route that has already been disturbed and is in an upland location. This alternative would not have adverse affects to the golden eagle nests. There would be temporary impacts for deer and elk habitat.

The Powerline Route Alternative follows the ROW for a large powerline. There is some localized disturbance around each pole, but there is not a road or trail that follows this ROW. There are some small access roads that lead to each tower off of the road alignment to the north. Moving the pipeline to this route would result in a temporary disturbance to deer and elk habitat along the construction route.

The North Reservoir Route Alternative follows another powerline ROW. This option, as well as the 6,800 Foot Eleavation North and South Route Alternatives, would put a portion of the pipeline underwater, or at least near the shoreline, for part of the year. These alternatives would not have any long term affects to the wildlife resources of concern. Many of the disturbances associated with these alternatives would become nonexistent when the reservoir is filled.

The final alignment being considered is the Reservoir Route Alternative. This route would use the current alignment of both pipelines. This route would preclude any major upland disturbance to deer and elk migration routes, and would not impact the golden eagle nests on Carbon Mountain. Any modification of the Low Abutment Route Alternative north of the dam must be considered for possible take of the eagle nests. Relocation of the route further north would bring construction very close to the nests on Carbon Mountain.

Recommendations: The Service recommends that the West Carbon Mountain Route Alternative be removed from consideration due to it's proximity to golden eagle nests and the likely take of nests. There are alternatives to this route which will not have an impact to the nests.

The Lower Southern, Upper Southern, and both Indian Creek Route Alternatives would not affect golden eagle nests on Carbon Mountain, but are in an area that is relatively undisturbed. We do not recommend these alternatives because there are other alternatives that pass through areas that are already disturbed.

The East Animas Route Alternative passes through an area that is relatively flat. This type of terrain would make reclamation of the ROW much easier to accomplish. The route crosses the Animas River at two locations. We would recommend whatever safety mechanisms are available to ensure that if a spill from either of the lines occurred, there be shut off devices to limit the amount of spilled product. This recommendation also applies to the 6,800 Foot North and South, North Reservoir, and the Reservoir Route Alternatives. These routes will be under water and whatever safety precautions are available should be used to prevent exposure of the aquatic environment.

All of the upland alternatives would disturb habitat and forage for many species of wildlife. After the pipeline has been laid, the land should be reclaimed and a reclamation monitoring plan developed to ensure full attainment of the criteria for 2 consecutive growing seasons. Further, a weed management plan should be developed with control criteria to ensure full attainment of the criteria for 3 consecutive growing seasons. Native grass seed mixes should be used as well as plantings of woody species. There may be long distances (¼ mile or more) where there is no cover along the ROW. We recommend that until woody species can reestablish, brush piles be placed in the ROW, approximately 500 feet apart, to break up long line-of-sight areas, that may increase predation on some species. We also recommend a plan to mitigate loss of snags along the ROW. If snags cannot be retained within the ROW, a mitigation plan should be proposed to ensure that densities of snags are retained throughout the immediate area.

If the Service can be of any further assistance, please contact Kurt Broderdorp in the Grand Junction Field Office at (970)243-2778.

Attachments

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The Navaho Nation, PO Box 9000, Window Rock, AZ 86515
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PART 22—EAGLE PERMITS

Subpart A—Introduction

Sec.
22.1 Purpose of regulations.
22.2 Scope of regulations.
22.3 Definitions.

Subpart B—General Requirements

22.11 General permit requirements.
22.12 General restrictions.

Subpart C—Eagle Permits

22.21 Permits for scientific or exhibition purposes.
22.22 Permits for Indian religious purposes.
22.23 Permits to take depredating eagles.
22.24 Permits for falconry purposes.
22.25 Permits to take golden eagle nests.

Subpart D—Depredation Control Orders on Golden Eagles

22.31 Golden eagle depredations control order on request of Governor of a State.
22.32 Conditions and limitations on taking under depredation control order.

AUTHORITY: Sec. 2, Eagle Protection Act of June 8, 1940, Chapter 278, 54 Stat. 251; Pub. L. 87-884, 76 Stat. 1246; sec. 2, Pub. L. 92-535, 86 Stat. 1065; sec. 9, Pub. L. 95-616, 92 Stat. 3114 (16 U.S.C. 668a).

SOURCE: 39 FR 1183, Jan. 4, 1974, unless otherwise noted.

Subpart A—Introduction

§ 22.1 Purpose of regulations.

The regulations contained in this part govern the taking, possession, and transportation of bald and golden eagles for scientific, educational, and depredations control purposes and for the religious purposes of Indian tribes. The import, export, purchase, sale, or barter of bald or golden eagles, their parts, nests, or eggs is not permitted by any regulation of this subchapter B.

§ 22.2 Scope of regulations.

(a) Bald eagles, alive or dead, or their parts, nests, or eggs lawfully acquired prior to June 8, 1940, and golden eagles, alive or dead, or their parts, nests, or eggs lawfully acquired prior to October 24, 1962, may be possessed, or transported without a Federal permit, but may not be imported, exported, purchased, sold, traded, bartered, or offered for purchase, sale, trade or barter; and all shipments containing such birds, parts, nests, or eggs must be marked as provided by 18 U.S.C. 44 and §14.81 of this subchapter: *Provided*, That no exemption from any statute or regulation shall accrue to any offspring of such birds.

(b) The provisions in this part are in addition to, and are not in lieu of, other regulations of this subchapter B which may require a permit or prescribe additional restrictions or conditions for the importation, exportation, and interstate transportation of wildlife (see also part 13 of this subchapter).

§ 22.3 Definitions.

In addition to definitions contained in part 0 of this subchapter, and unless the context otherwise requires, in this part 22:

Area nesting population means the number of pairs of golden eagles known to have a resting attempt during the preceding 12 months within a 10-mile radius of a golden eagle nest.

Golden eagle nest means any readily identifiable structure built, maintained or occupied by golden eagles for propagation purposes.

Inactive nest means a golden eagle nest that is not currently used by golden eagles as determined by the absence of any adult, egg, or dependent young at the nest during the 10 days before the nest is taken.

Nesting attempt means any activity by golden eagles involving egg laying and incubation as determined by the presence of an egg attended by an adult, an adult in incubation posture, or other evidence indicating recent use of a golden eagle nest for incubation of eggs or rearing of young.

Person means an individual, corporation, partnership, trust, association, or

any other private entity, or any officer, employee, agent, department, or instrumentality of any State or political subdivision of a State.

Resource development or recovery includes, but is not limited to, mining, timbering, extracting oil, natural gas and geothermal energy, construction of roads, dams, reservoirs, power plants, power transmission lines, and pipelines, as well as facilities and access routes essential to these operations, and reclamation following any of these operations.

Take includes also pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb.

[39 FR 1183, Jan. 4, 1974, as amended at 48 FR 57300, Dec. 29, 1983]

Subpart B—General Requirements

§ 22.11 General permit requirements.

No person shall take, possess, or transport any bald eagle (*Haliaeetus leucocephalus*) or any golden eagle (*Aquilachrysaetos*), or the parts, nests, or eggs of such birds except as may be permitted under the terms of a valid permit issued pursuant to the provisions of this part and part 13 and under § 21.22 (banding or marking permits), or under a depredation order issued under subpart D of this part.

§ 22.12 General restrictions.

No person shall sell, purchase, barter, trade, or offer for sale, purchase, barter, or trade, export or import, at any time or in any manner, any bald eagle (*Haliaeetusleu cocephalus*), or any golden eagle (*Aquila chrysaetos*), or the parts, nests, or eggs of such birds, and no permit will be issued to authorize such acts.

Subpart C—Eagle Permits

§ 22.21 Permits for scientific or exhibition purposes.

The Director may, upon receipt of an application and in accordance with the issuance criteria of this section, issue a permit authorizing taking, possession, or transportation of bald eagles or golden eagles, or their parts, nests, or eggs for the scientific or exhibition purposes of public museums, public scientific societies, or public zoological parks.

(a) *Application procedure.* Applications for permits to take, possess, or transport bald or golden eagles, their parts, nests or eggs for scientific or exhibition purposes shall be submitted to the appropriate Special Agent in Charge (See: §13.11(b) of this subchapter). Each such application must contain the general information and certification required by §13.12(a) of this subchapter plus the following information:

(1) Species of eagle and number of such birds, nests, or eggs proposed to be taken, possessed, or transported;

(2) Specific locality in which taking is proposed, if any;

(3) Method taking proposed, if any;

(4) If not taken, the source of eagles and other circumstances surrounding the proposed acquisition or transportation;

(5) Name and address of the public museum, public scientific societies, or public zoological park for which they are intended;

(6) Complete explanation and justification of request, nature of project or study, number of specimens now at institution, reason these are inadequate, and other appropriate explanations.

(b) *Additional permit conditions.* In addition to the general conditions set forth in part 13 of this subchapter B, permits to take, possess, or transport bald or golden eagles for scientific or exhibition purposes, shall be subject to the following condition: In addition to any reporting requirement set forth in the permit, the permittee shall submit a report of activities conducted under the permit to the Special Agent in Charge within 30 days after expiration of the permit.

(c) *Issuance criteria.* The Director shall conduct an investigation and not issue a permit to take, possess, or transport bald or golden eagles for scientific or exhibition purposes unless he has determined that such taking, possession, or transportation is compatible with the preservation of the bald or golden eagle. In making such determination, the Director shall consider, among other criteria, the following:

(1) The direct or indirect effect which issuing such permit would be likely to have upon the wild populations of bald and golden eagles;

(2) Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application;

(3) Whether the justification of the purpose for which the permit is being requested is adequate to justify the removal of the eagle from the wild or otherwise change its status; and

(4) Whether the applicant has demonstrated that the permit is being requested for *bona fide* scientific or exhibition purposes of public museums, public scientific societies, or public zoological parks.

(d) *Tenure of permits.* The tenure of permits to take bald or golden eagles for scientific or exhibition purposes shall be that shown on the face of the permit.

§ 22.22 Permits for Indian religious purposes.

The Director may, upon receipt of an application and in accordance with the issuance criteria of this section, issue a permit authorizing the taking, possession, and transportation of bald or golden eagles, or their parts, nests, or eggs for the religious use of Indians.

(a) *Application procedure.* Applications for permits to take, possess, and transport bald or golden eagles, their parts, nests, or eggs for the religious use of Indians shall be submitted to the appropriate Special Agent in Charge (See: § 13.11(b) of this subchapter). Only applications from individual Indians will be accepted. Each such application must contain the general information and certification required by § 13.12(a) of this subchapter plus the following additional information:

(1) Species and number of eagles or feathers proposed to be taken, or acquired by gift or inheritance.

(2) State and local area where the taking is proposed to be done, or from whom acquired.

(3) Name of tribe with which applicant is associated.

(4) Name of tribal religious ceremony(ies) for which required.

(5) Applicant must attach a certification from the Bureau of Indian Affairs that the applicant is an Indian.

(6) Applicant must attach a certification from a duly authorized official of the religious group that the applicant is authorized to participate in such ceremonies.

(b) *Additional permit conditions.* In addition to the general conditions set forth in part 13 of this subchapter B, permits to take, possess, and transport bald or golden eagles, their parts, nests or eggs, for the religious use of Indians shall be subject to the following conditions:

(1) Bald or golden eagles or their parts possessed under permits issued pursuant to this section are not transferable, except such birds or their parts may be handed down from generation to generation or from one Indian to another in accordance with tribal or religious customs; and

(2) Permittees shall make such reports or submit inventories of eagle feathers or parts on hand as may be requested by the Special Agent in Charge.

(c) *Issuance criteria.* The Director shall conduct an investigation and not issue a permit to take, possess, and transport bald or golden eagles, their parts, nests or eggs, for the religious use of Indians unless he has determined that such taking, possession, and transportation is compatible with the preservation of the bald or golden eagle. In making such determination, the Director shall consider, among other criteria, the following:

(1) The direct or indirect effect which issuing such permit would be likely to have upon the wild populations of bald or golden eagles; and

(2) Whether the applicant is an Indian who is authorized to participate in *bona fide* tribal religious ceremonies.

(d) *Tenure of permits.* Any permit issued pursuant to this section under which the applicant is authorized to take eagles shall be valid during the period specified on the face thereof which shall in no case be longer than 1 year from date of issue. Any permit issued pursuant to this part which authorizes the permittee to transport and possess eagles or their parts shall be

valid for the life of the permittee unless sooner revoked.

§22.23 Permits to take depredating eagles.

The Director may, upon receipt of an application and in accordance with the issuance criteria of this section, issue a permit authorizing the taking of depredating bald or golden eagles.

(a) *Application procedure.* Applications for permits to take depredating bald or golden eagles shall be submitted to the appropriate Special Agent in Charge (See: §13.11(b) of this subchapter). Each such application must contain the general information and certification required by §13.12(a) of this subchapter plus the following additional information:

(1) Species and number of eagles proposed to be taken;

(2) Location and description of property where taking is proposed;

(3) Inclusive dates for which permit is requested;

(4) Method of taking proposed;

(5) Kind and number of livestock or domestic animals owned by applicant;

(6) Kind and amount of alleged damaged; and

(7) Name, address, age, and business relationship with applicant of any person the applicant proposes to act for him as his agent in the taking of such eagles.

(b) *Additional permit conditions.* In addition to the general conditions set forth in part 13 of this subchapter B. permits to take depredating bald or golden eagles shall be subject to the following conditions:

(1) Bald or golden eagles may be taken under permit by firearms, traps, or other suitable means except by poison or from aircraft;

(2) The taking of eagles under permit may be done only by the permittee or his agents named in the permit;

(3) Any eagle taken under authority of such permit will be promptly turned over to a Service agent or other game law enforcement officer designated in the permit; and

(4) In addition to any reporting requirement set forth in the permit, the permittee shall submit a report of activities conducted under the permit to the Special Agent in Charge within 10 days following completion of the taking operations or the expiration of the permit whichever occurs first.

(c) *Issuance criteria.* The Director shall conduct an investigation and not issue a permit to take depredating bald or golden eagles unless he has determined that such taking is compatible with the preservation of the bald or golden eagle. In making such determination the Director shall consider the following:

(1) The direct or indirect effect which issuing such permit would be likely to have upon the wild population of bald or golden eagles;

(2) Whether there is evidence to show that bald or golden eagles have in fact become seriously injurious to wildlife or to agriculture or other interests in the particular locality to be covered by the permit, and the injury complained of is substantial; and

(3) Whether the only way to abate the damage caused by the bald or golden eagle is to take some or all of the offending birds.

(d) *Tenure of permits.* The tenure of any permit to take bald or golden eagles for depredation control purposes shall be that shown on the face thereof, and shall in no case be longer than 90 days from date of issue.

§22.24 Permits for falconry purposes.

The Director may, upon receipt of an application and in accordance with the issuance criteria of this section, issue a permit authorizing the possession and transportation of golden eagles for falconry purposes.

(a) *Application procedure.* Applications for permits to possess and transport golden eagles for falconry purposes shall be submitted to the appropriate special agent in charge (see §13.11(b) of this subchapter). Each application must contain the general information and certification required by §13.12(a) of this subchapter plus the following additional information:

(1) A copy of the applicant's master (or equivalent) class permit issued in accordance with 50 CFR 21.28.

(2) A statement of the applicant's experience in handling large raptors, including the species, type of experience and duration of the activity in which the experience was acquired.

(3) At least two (2) letters of reference from individuals with recognized experience in handling and/or flying eagles. Each letter must contain a concise history of the author's experience with eagles. Eagle handling experience is defined as, but is not limited to, the handling of pre-Act birds, zoological specimens, rehabilitating eagles, or scientific studies involving eagles. Each letter must also assess the applicant's capability to properly care for the fly golden eagles in falconry, and recommend the issuance or denial of the permit.

(4) A description of the facilities in which golden eagles will be housed.

(5) If requesting an eagle(s) from the Service, applicants must specify the sex, age and condition of the eagle(s) they will accept.

(6) For eagles already legally possessed, a copy of the permit or other documentation authorizing possession of said birds, and the procedures to be used to minimize or eliminate hazards associated with the use of imprinted birds in falconry.

(7) Name, address, age and experience in handling raptors of any person the applicant proposes to act as an authorized agent in taking possession of golden eagles provided by the Service.

(8) To obtain additional or replacement golden eagles, a request in writing to the appropriate special agent in charge must be tendered, identifying the existing permit and, for replacement eagles, the reason for such replacement.

(b) *Permit conditions.* In addition to the general conditions set forth in part 13 of this subchapter B, permits to possess and transport golden eagles for falconry purposes are subject to the following conditions:

(1) Golden eagles possessed for falconry purposes are considered as raptors and must be maintained in accordance with Federal falconry standards described in §§21.28 and 21.29 of this subchapter.

(2) Only golden eagles legally obtained may be possessed and transported for falconry purposes.

(3) Captive breeding of golden eagles possessed for falconry purposes is prohibited.

(4) The applicant, or authorized agent, must agree to take possession of a requested golden eagle(s) within 72 hours of notification of availability. Expenses incurred by the applicant in taking possession of said eagle(s) will be the applicant's responsibility.

(5) The golden eagle(s) must be banded with a numbered eagle marker provided by the Service.

(6) All permits issued pursuant to this section shall state on their face that eagles possessed for falconry purposes under authority of this permit may not be transferred or otherwise intentionally disposed of by any means, including release to the wild, without written approval from the appropriate regional director.

(7) All permits issued pursuant to this section shall state on their face that the appropriate special agent in charge must be notified no later than ten (10) days after the death of a permit holder.

(c) *More restrictive State laws.* Nothing in this section shall be construed to prevent a State from making and/or enforcing more restrictive laws and regulations as regards the use of golden eagles in falconry.

(d) *Issuance criteria.* The Director shall conduct an investigation and shall not issue a permit to possess and transport golden eagles for falconry purposes unless he has determined: that such possession and transportation is compatible with the preservation of golden eagles; that the proposed possession and transportation of golden eagles for falconry is not otherwise prohibited by laws and regulations within the State where the activity is proposed; and that the applicant is qualified to possess and transport golden eagles for falconry purposes. In making the latter determination, the Director shall consider, but shall not necessarily be limited to, the following:

(1) The applicant's cumulative falconry experience.

(2) The applicant's demonstrated ability to handle and care for large raptors.

(3) Information contained in the applicant's letters of reference.

(e) *Tenure of permits.* Any permit to possess and transport golden eagles for

falconry purposes is valid for as long as the holder maintains a valid master (or equivalent) class falconry permit or until revoked in writing by the Service.

(f) *Permission to trap golden eagles for falconry purposes.* Applicants desiring to trap golden eagles from the wild for use in falconry must request and obtain permission from the Service prior to exercising this privilege. The following applies to requests:

(1) Only golden eagles from a specified depredation area may be trapped for falconry purposes.

(2) Permission to trap golden eagles must be requested in writing from the appropriate State Animal Damage Control (ADC) supervisor subsequent to issuance of the permit to possess and transport golden eagles for falconry purposes.

(3) Permission to trap will not be granted until the permittee suitably demonstrates to the State ADC supervisor or a designated project leader his/her qualifications and capabilities to trap golden eagles from the wild.

(4) All such trapping must be conducted under the direct supervision of the State ADC supervisor or designated project leader in the specified depredation area.

(5) Any permission to trap golden eagles from the wild pursuant to this section shall in no case extend more than 90 days from the date of issue.

(6) Upon issuance of permission to trap in accordance with the above conditions, the appropriate special agent in charge will be notified in writing by the State ADC supervisor of the individual's name, address, location of the specified depredation area and tenure of permission to trap golden eagles.

(The information collection requirements approved by the Office of Management and Budget under control number 1018-0022. The information is necessary to determine potential permittee's qualifications and is required to obtain a permit)

[49 FR 891, Jan. 6, 1984]

§22.25 Permits to take golden eagle nests.

The Director may, upon receipt of an application and in accordance with the issuance criteria of this section, issue a permit authorizing any person to take golden eagle nests during a resource development or recovery operation when the nests are inactive, if the taking is compatible with the preservation of the area nesting population of golden eagles. The information collection requirements contained within this section have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned clearance number 1018-0022. This information is being collected to provide information necessary to evaluate permit applications. This information will be used to review permit applications and make decisions, according to the criteria established in this section for the issuance or denial of such permits. The obligation to respond is required to obtain or retain a permit.

(a) *Application procedure.* Applications for permits to take golden eagle nests must be submitted to the appropriate Special Agent in Charge (see §13.11(b) of this chapter). Applications are only accepted from persons engaged in a resource development or recovery operation, including the planning and permitting stages of an operation. Each application must contain the general information and certification required by §13.12(a) of this chapter plus the following additional information:

(1) A description of the resource development or recovery operation in which the applicant is engaged;

(2) The number of golden eagle nests proposed to be taken;

(3) A description of the property on which the taking is proposed, with reference made to its exact geographic location. An appropriately scaled map or plat must be included which delineates the area of the resource development or recovery operation and identifies the exact location of each golden eagle nest proposed to be taken. The map or plat must contain enough detail so that each golden eagle nest proposed to be taken can be readily located by the Service.

(4) For each golden eagle nest proposed to be taken, the applicant must calculate the area nesting population of golden eagles and identify on an appropriately scaled map or plat the exact location of each golden eagle nest used to calculate the area nesting

population unless the Service has sufficient data to independently calculate the area nesting population. The map or plat must contain enough details so that each golden eagle nest used to calculate the area nesting population can be readily located by the Service.

(5) A description of each activity to be performed during the resource development or recovery operation which involves the taking of a golden eagle nest;

(6) A statement with any supporting documents from ornithologists experienced with golden eagles or other qualified persons who have made on site inspections and can verify the applicant's calculation of the area nesting population;

(7) The length of time for which the permit is requested, including the dates on which the proposed resource development or recovery operation is to begin and end;

(8) A statement indicating the intended disposition of each nest proposed to be taken. Applicants should state whether they are willing to collect any nest for scientific or educational purposes; and

(9) A statement indicating any proposed mitigation measures that are compatible with the resource development or recovery operation to encourage golden eagles to reoccupy the resource development or recovery site. Mitigation measures may include reclaiming disturbed land to enhance golden eagle nesting and foraging habitat, relocating in suitable habitat any inactive golden eagle nest taken, or establishing one or more nest sites. If the establishment of one or more nest sites is proposed, a description of the materials and methods to be used and the exact location of each artificial nest site must be included.

(b) *Additional permit conditions.* In addition to the general conditions set forth in part 13 of this chapter, permits to take golden eagle nests are subject to the following additional conditions:

(1) Only inactive golden eagle nests may be taken.

(2) The permittee shall submit a report of activities conducted under the permit to the Director within ten (10) days following the permit's expiration;

(3) The permittee shall notify the Director in writing at least 10 days but not more than 30 days before any golden eagle nest is taken;

(4) The permittee shall comply with any mitigation measures determined by the Director to be feasible and compatible with the resource development or recovery operation; and

(5) Any permit issued before the commencement of a resource development or recovery operation is invalid if the activity which required a permit is not performed.

(c) *Issuance criteria.* The Director shall conduct an investigation and not issue a permit to take any golden eagle nest unless such taking is compatible with the preservation of the area nesting population of golden eagles. In making such determination, the Director shall consider the following:

(1) Whether the applicant can reasonably conduct the resource development or recovery operation in a manner that avoids taking any golden eagle nest;

(2) The total number of golden eagle nests proposed to be taken;

(3) The size of the area nesting population of golden eagles;

(4) Whether suitable golden eagle nesting and foraging habitat unaffected by the resource development or recovery operation is available to the area nesting population of golden eagles to accommodate any golden eagles displaced by the resource development or recovery operation;

(5) Whether feasible mitigation measures compatible with the resource development or recovery operation are available to encourage golden eagles to reoccupy the resource development or recovery site. Mitigation measures may include reclaiming disturbed land to enhance golden eagle nesting and foraging habitat, relocating in suitable habitat any golden eagle nest taken, or establishing one or more nest sites; and

(6) Whether the area nesting population is widely dispersed or locally concentrated.

(d) *Tenure of permits.* The tenure of any permit to take golden eagle nests

is 2 years from the date of issuance, unless a shorter period of time is prescribed on the face of the permit. Permits may be renewed in accordance with part 13 of this chapter.

[48 FR 57300, Dec. 29, 1983]

Subpart D—Depredation Control Orders on Golden Eagles

§ 22.31 Golden eagle depredations control order on request of Governor of a State.

(a) Whenever the Governor of any State requests permission to take golden eagles to seasonally protect domesticated flocks and herds in such State, the Director shall make an investigation and if he determines that such taking is necessary to and will seasonally protect domesticated flocks and herds in such States he shall authorize such taking in whatever part or parts of the State and for such periods as he determines necessary to protect such interests.

(b) Requests from the Governor of a State to take golden eagles to seasonally protect domesticated flocks and herds must be submitted in writing to the Director listing the periods of time during which the taking of such birds is recommended, and including a map of the State indicating the boundaries of the proposed area of taking. Such requests should include a statement of the facts and the source of such facts that in the Governor's opinion justifies the request. After a decision by the Director, the Governor will be advised in writing concerning the request and a notice will be published in the FEDERAL REGISTER.

§ 22.32 Conditions and limitations on taking under depredation control order.

(a) Whenever the taking of golden eagles without a permit is authorized for the seasonal protection of livestock, such birds may be taken by firearms, traps, or other suitable means except by poison or from aircraft.

(b) Any person exercising any of the privileges granted by this subpart D must permit all reasonable times, including during actual operations, any Service agent, or other game law enforcement officer free and unrestricted access over the premises on which such operations have been or are being conducted; and shall furnish promptly to such officer whatever information he may require concerning such operations.

(c) The authority to take golden eagles under a depredations control order issued pursuant to this subpart D only authorizes the taking of golden eagles when necessary to seasonally protect domesticated flocks and herds, and all such birds taken must be reported and turned over to a local Bureau Agent.