



United States
Department of
Agriculture

Forest
Service

February 2003



Environmental Assessment

Long Lake Recreation

Improvements

**Mogollon Rim Ranger District,
Coconino National Forest**

Coconino County, Arizona

For Information Contact: Patricia Callaghan
HC 31 Box 300, Happy Jack, Arizona 86024
(928) 477-2255

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CHAPTER 1 – PURPOSE AND NEED

Document Structure

This environmental assessment (EA) is being prepared to analyze the effects of constructing recreation improvements under the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. This Environmental Assessment discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives. An interdisciplinary analysis on the proposed action is documented in a project record. An index for the project record is presented in Appendix A. Source documents from the project record are referenced throughout this EA by showing the document number in Brackets [#]. This EA summarizes the project record to make the analysis results as clear as possible.

National Forest planning takes place at several levels: national, regional, forest, and project levels. The Long Lake Recreation Improvements Environmental Assessment is a project-level analysis; its scope is confined to addressing the significant issues and possible decisions made at higher levels. It does not, however, implement direction provided at those higher levels.

The Coconino National Forest Plan (USDA 1987) [#1] embodies the provisions of the National Forest Management Act (1976), its implementing regulations, and other guiding documents. The Forest Plan sets forth in detail the direction for managing the land and resources of the Coconino National Forest. The Long Lake Recreation Improvements is consistent with and tiers to the Coconino Forest Plan FEIS (USDA 1987), 40 CFR 1502.20. The Coconino National Forest Plan proposed enhanced boater access and boat launch ramp construction in the Long Lake area.

This chapter outlines the project scope, background, purpose and need for action, proposed action, decision to be made, public involvement, issues, applicable laws and Executive Orders, and project record availability.

Purpose & Need for Action

Long Lake is a popular recreation area with residents from Winslow as well as the residents in the local summer home subdivisions of Blue Ridge. It provides many opportunities for picnicking and camping, in user-created sites, along the west shore of the Long Lake. Long Lake supports a variety of warm and cool water fisheries, some state record northern pike and very large channel catfish.

Currently no permanent sanitation facilities exist. There are port-a-potties on site and they are pumped on an “as needed” basis under contract. These port-a-potties were meant to be temporary solutions, and are on site only from Memorial Day through Labor Day. They do not meet universal guides for accessibility as stated in the Americans With Disabilities Act (ADA), or the Regional standard for “Sweet Smelling” toilets (SST). Before Memorial Day, and after Labor Day, visitors use the “bushes” for sanitation

facilities. Some visitors even use their self-contained motor home toilet holding tanks while they camp and then dump their waste along Forest Road 82 as they return home.

The existing (north) concrete boat ramp, constructed in the 1990's, is not long enough and is often either "high and dry" or completely covered by water.

Parking and access from Forest Road 82 to the lakeshore is over rough, boulder strewn clay soils. To launch boats, picnic or camp, campers must maneuver around old fire rings and dispersed camps. During times of inclement weather, the clay soils make it very difficult to access the lake without getting stuck.

Vegetation along the shoreline is degraded, providing poor cover and forage for upland and wetland-dependant wildlife, especially migratory waterfowl and bald eagles. Wetland transition vegetation, such as sedges, rushes and bulrushes, no longer exist in Long Lake, resulting in poor water quality, increased sediment loads, and decreased habitat quality for fish, amphibians, macro invertebrates, and wetland bird species. Hunting, fishing, and wildlife viewing opportunities are limited by habitat conditions in the area.

There is a need to provide sanitation facilities, boater access, parking, protect water quality and water dependent wildlife.

There is a need to provide toilets that meet Sweet Smelling Toilets (SST) standards and Americans with Disabilities Act (ADA) guidelines. Permanent toilets with large vault capacity would need less frequent pumping, and would provide sanitary facilities on a year-round basis.

There is a need to have boat ramps that would provide maximum launching capacity during the high use season, and during times of water fluctuations in the lake. Adequate parking and access to the boat ramps is needed to reduce sedimentation into the lake and to manage boat launching activities within defined areas.

There is a need to reestablish transition vegetation along the shoreline and in the lake, helping to create desirable habitat for fish, amphibians, macro-invertebrates, and wetland bird species.

Proposed Action

The Mogollon Rim Ranger District of the Coconino National Forest proposes to install recreation facilities at two locations along the west edge of Long Lake and improve fisheries habitat as described below.

EACH of the boat launch sites, approximately 3/4 mile apart, would have the same three basic elements:

- Two permanent compartment vault toilets with 1000-gallon capacity.
- Two 15' wide by 200' long boat launch ramps. The existing launches would be extended to accommodate the high/low water fluctuation.
- Graveled access roads to the boat ramps from Forest Road 82 and parking lot suitable for turning around and parking approximately 30 vehicles with trailers.

Each of the two sites (North Long Lake Boating Site and South Long Lake Boating Site) would be designed to accommodate traffic load similar to the current level. The toilet at each site would be located and designed to meet Arizona Department of Environmental Quality (ADEQ) sanitation standards. The developed Boating Site (or group of facilities) would be located to meet the needs of day use boating and fishing visitors and be convenient for overnight dispersed campers. No developed camping sites are proposed with this action.

- Upland and wetland transition vegetation such as native bulrushes, sedges, and rushes would be planted in small plots, (both transplanted and/or native seed species) along the shoreline and in the lake. Temporary fencing would be constructed to protect the newly planted vegetation from browsing animals. Fishery enhancement structures for catfish would be constructed and installed in Long Lake. Large individual juniper trees would be removed during construction of the boat ramps, parking areas and toilets and used as fish enhancement in Tremaine Lake.

Project Location

Long Lake is located on the Coconino National Forest's Mogollon Rim Ranger District, at an elevation of about 6700 feet. Vehicle access is via State Route 87 to Forest Road 211 near Blue Ridge Ranger Station, north 3 miles to Forest Road 82, continue north for 15 miles to the south end of Long Lake. Vehicle access to the shoreline is by several side access roads from Forest Road 82. Please refer to the following maps.

Figure 1. Project Area Map.

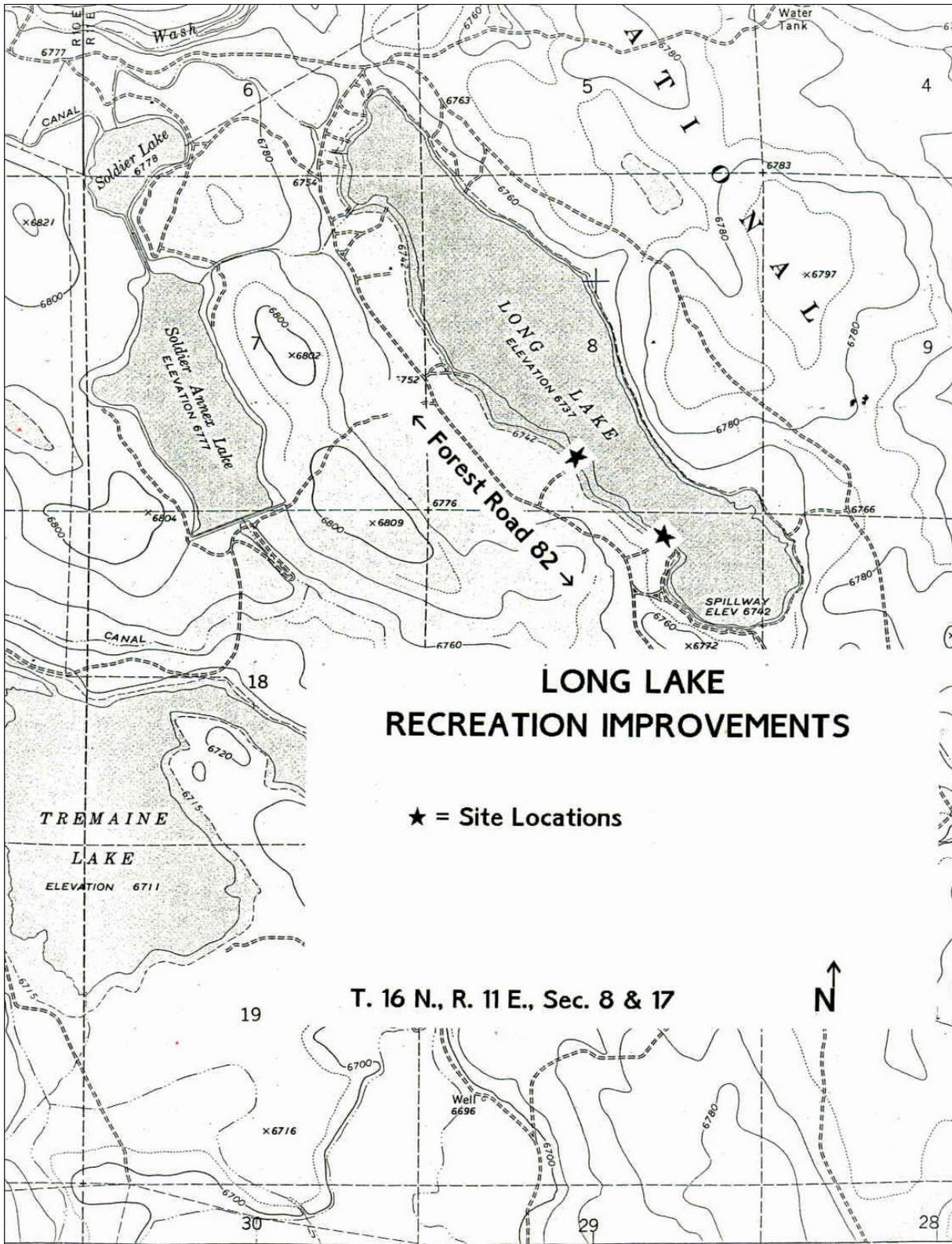
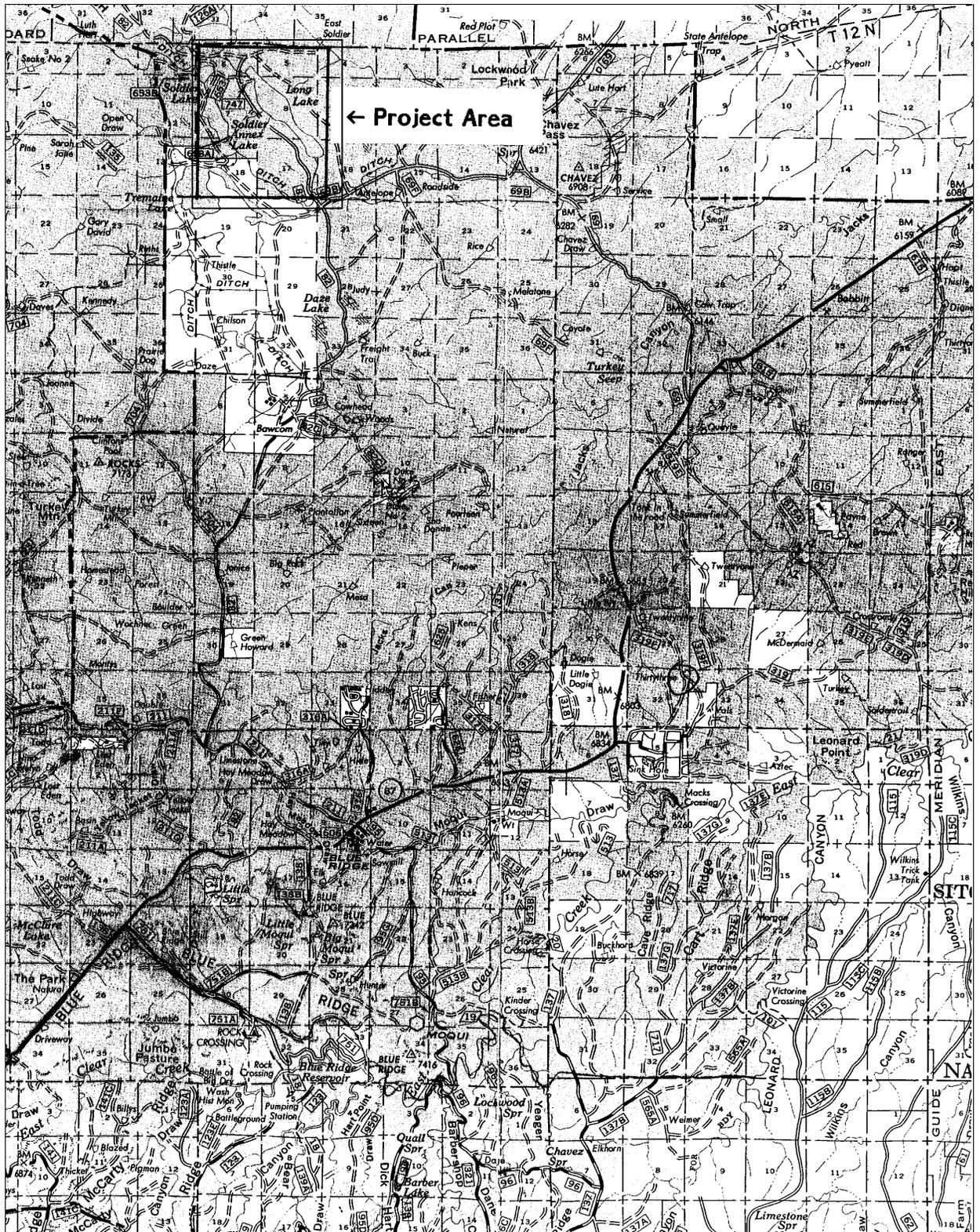


Figure 2. Vicinity Map.



Decision Framework

The Mogollon Rim District Ranger is the responsible official to decide whether or not to authorize construction of the proposed recreation improvements. The responsible official may decide to select the “no action” alternative, accept the proposed action, or a modification of the proposed action and approve appropriate mitigation measures. If approved, project implementation would begin in spring of 2003.

Public Involvement

On February 15, 2001, scoping letters, defining the proposed action were mailed to interested and affected parties [#7]. The project has been listed as an upcoming project since 1999 in the Coconino National Forest “Schedule of Proposed Actions” (SOPA) which outlines project proposals for the entire National Forest. As part of the consultation agreement with 13 individual Native American tribes in Arizona and New Mexico, this project was identified along with others on the Coconino National Forest. No follow-up comments were received from any tribes about this project.

Specific letters were sent to seven parties, and 4 letters and 2 phone calls regarding concerns were received.

Comment:

From the Sun City Conservation and Sportsman Club.

“we hope you get the funds to proceed. These facilities are needed by the public”.

Response:

This statement of support was encouraging, and followed up by phone calls and visits to the Ranger Station in the intervening time since the initial scoping period was over. The group still seems to be in favor of the project. These comments do not generate either an issue, or additional alternatives.

Comment:

From the Bar-T-Bar Ranch (permittees on the livestock grazing allotment surrounding the project area).

“existing road condition will not accommodate more or current traffic to lake. Road should be upgraded and maintained from both directions (via 82 and 69 roads) towards lake. Sediment coming into the lake is from roads surrounding lake and those from Soldier Annex Lake. Erosion is being caused by very close growing junipers around the lake, one of the issues is really lake sediment”.

Response:

Road closures and large-scale juniper removal are not within the scope of this project. Road maintenance in this area is done on a routine basis within the Forest Road Maintenance process. Some Junipers would be removed as facilities are installed. Although disagreement was expressed, these comments do not generate either an issue or additional alternatives.

Comment:

From Diablo Trust.

“Recreation projects are a good idea as long as a road management plan is created for Road 82. Completed recreation projects will bring more use ...we think that once a road maintenance/resurfacing plan is included, the proposed action will be a good one”.

Response:

There is a plan for routine road maintenance. The scope of this project will not address improvement of road conditions beyond the boat ramp/parking lot access within the recreation site. Suggested action regarding addition of a Roads Management Plan is outside of the scope of the site-specific proposal. A Forest-wide Roads Maintenance Plan is in effect which does address the roads of concern. Although disagreement was expressed, these comments do not generate either an issue or additional alternatives. Additional alternative would not be created based on these concerns.

Comment:

From the Arizona Department of Game and Fish.

“The Department’s Heritage Data Management System has been accessed, and current records do not indicate the presence of any special status species as occurring in the project vicinity.”

Response:

No disagreement has been expressed, and these comments do not generate either an issue or additional alternatives.

Issues

Scoping is an early and open process used to determine the scope of issues and significant issues related to the effects of the proposed action. Many potential issues raised by the public are resolved by management plan direction, mitigation measures, design criteria, or laws and regulations, or by being outside the scope of the analysis. Significant issues therefore, are unresolved issues that are: 1) within the scope of the analysis, 2) not decided by law, regulation or previous decision, 3) related to the decision, 4) amenable to scientific analysis rather than conjecture, and 5) not limited in extent, duration, or intensity. The measures shown are used to differentiate the effects of the alternatives on the particular issue.

No significant issues were raised during scoping. In this case, where no significant issues were raised, “no action” and the proposed action provide a reasonable range of alternatives to analyze in the Environmental Assessment.

The scoping report addresses the concerns provided in response to the Proposed Action, and tracks the manner in which they were addressed in this analysis [#9].

CHAPTER 2 - ALTERNATIVES

This chapter describes and compares the alternatives considered for the Long Lake Recreation Improvements. It includes, Alternatives Considered but Eliminated From Detailed Analysis, Alternatives Considered in Detail, Mitigation, and Monitoring. This section also presents the alternatives in comparative form, defining the differences between each alternative and providing a clear basis for choice among options by the decision maker and the public.

Alternatives Considered but Eliminated from Detailed Analysis

Based on the scope of the concerns received from the public during the early phases of this process, no alternatives were considered beyond the Proposed Action and the No Action Alternatives as outlined below.

Alternatives Considered In Detail

Alternative 1

Proposed Action

- Two permanent compartment vault toilets with 1000 gallon capacity.
- Two 15' wide by 200' long boat launch ramps. The existing launches would be extended to accommodate the high/low water fluctuation.
- Graveled access roads to the boat ramps from Forest Road 82 and parking lot suitable for turning around and parking approximately 30 vehicles with trailers.

Each of the two sites (North Long Lake Boating Site and South Long Lake Boating Site) would be designed to accommodate traffic load similar to the current level. The toilet at each site would be located and designed to meet Arizona Department of Environmental Quality (ADEQ) sanitation standards. The developed Boating Site (or group of facilities) would be located to meet the needs of day use boating and fishing visitors and be convenient for overnight dispersed campers. No developed camping sites are proposed with this action.

- Upland and wetland transition vegetation such as native bullrushes, sedges, and rushes would be planted in small plots, (both transplanted and/or native seed species) along the shoreline and in the lake. Temporary fencing would be constructed to protect the newly planted vegetation from browsing animals. Fishery enhancement structures for catfish

would be constructed and installed in Long Lake. Large juniper trees removed during construction of the boat ramps, parking areas and toilets would be used as fish enhancement in Tremaine Lake.

Alternative 2

No Action

This alternative is required by Council on Environmental Quality (CEQ) regulations, and forms the baseline for comparison between the alternatives. No Action is a continuation of the current management. Even though no action would be taken, there are still effects from no action.

- No permanent compartment vault toilets would be constructed. Port-a-potties would continue to be used and pumped as needed. Recreationists would continue to use the “bushes” for sanitation facilities.
- No new boat launch ramps would be constructed. The existing launches would continue to either be high and dry or be under water.
- Since there would be no new boat launch ramps constructed, no graveled access roads would be needed.
- No upland and wetland transition vegetation such as native bullrushes, sedges, and rushes would be planted along the shoreline and in the lake. Fishery enhancement structures for catfish would not be constructed and installed in Long Lake.

Mitigation Measures

To minimize resource impacts, mitigation measures are an integral part of the proposed action. The environmental effects described in Chapter 3 are estimated with the assumption that these measures would be implemented. Some mitigation measures included in Alternative 1 are based on best management practices found in Southwestern Region’s Soil and Water Conservation Practices Handbook (FSH 2509.22) [#19] and the Coconino Forest Plan [#1]

In Table 1, the Effectiveness Rating (ER) column is included to give the reader an idea of how well these mitigation measures work from past experiences and/or research. The numbers correspond to the following results:

1. Almost always reduces impacts significantly. Almost always done in this situation.
2. Usually reduces significant impacts. Often done in this situation.
3. Effectiveness monitoring will be conducted during project implementation & other appropriate times.

Table 1. Mitigation Measures Required for Proposed Action

#	Mitigation	Rationale	ER
Soil and Water			
SW1	Seed or revegetate disturbed areas.	To minimize soil erosion through the stabilizing influence of vegetation ground cover.	1
SW2	Equipment shall not be operated when ground conditions are such that unacceptable soil compaction or displacement results.	To minimize soil compaction, soil detachment & sediment transport. To maintain long-term soil productivity.	2
Facilities and Access			
FA1	Direct and drain water off the parking lot surface into nearby vegetation.	To prevent standing water within parking lot.	2
Wildlife			
W1	Heavy hauling and construction activities shall not occur between November 15 th and April 15 th .	To avoid impacts to wintering bald eagles.	1
Human Environment			
H1	If any heritage resource sites are discovered during construction and clearing, stop all operations immediately and contact the Contracting Officer's Representative (COR).	To protect & preserve heritage resources in the project area.	1
H2	During construction, post traffic caution signs at critical locations along FR 82.	To protect and caution the traveling public of heavy equipment in the area.	1
Noxious Weeds			
NW1	During construction, clean off-road equipment of visible mud, dirt and plant parts before	To remove a seed source that could be picked up by passing vehicles and to limit seed transport into a relatively weed-free area at moderate or	1

	moving onto the project site.	high ecological risk
NW2	Gravel and fill to be placed must come from weed-free sources. Inspect gravel pits and fill sources to identify weed-free sources.	To minimize weed spread caused by moving infested gravel and fill material to relatively weed-free locations.

Monitoring

Some monitoring is required by the Coconino Forest Land Management Plan, as amended; by requirements established through lawsuits and court orders; by conditions of permitting and by reasonable and prudent measures.

All projects require periodic monitoring of resources or activities on a representative sample basis in order to establish long-term trends, assess the impacts of land management activities, determine how well objectives have been met, and check compliance with established standards.

Most of the monitoring activities will be ongoing as the project progresses through its various stages. The mitigation measures described above include some monitoring activities. Federal acquisition regulations contain environmental clauses that are included within the construction contract to ensure environmental protection and to assure that contractual obligations are met.

Project Contracting Officer’s Representative (COR) will monitor all ground-disturbing activities on the site during construction. Recreation staff would periodically visit the site following construction to monitor ongoing use of the site and the constructed facilities, and to maintain the site.

CHAPTER 3 – AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the affected environment and the consequences of implementing both the proposed action alternative and the no action alternative. Some environmental effects are confined to the proposed project area. Others are cumulative with environmental effects from past, present or reasonably foreseeable future actions in or near the project area.

Past and Present Actions

Very little management of Long Lake as a developed recreation site has occurred beyond establishing the existing (North) boat ramp and garbage collection. Camping has been and would remain dispersed at visitor created sites, and fishing and hunting would continue to be regulated by the Arizona Game and Fish Department in cooperation with the Forest Service.

The area around Long Lake is unfenced and open to livestock grazing. Livestock have been grazing in the Long Lake area prior to the formation of the National Forest System. The project lies within the Lakes Pasture of the Bar T Bar Allotment.

Reasonably Foreseeable Future Actions

Livestock grazing will continue in the area and be managed by the Bar T Bar Ranch under the existing Bar T Bar Allotment Management Plan.

Recreation

General Recreational Use

Affected Environment

Recreation Sites and Uses. The main developed facility in the area is the boat ramp currently located at the “north” site. This concrete ramp was constructed in the 1990’s. The Long Lake area is popular with local residents from Winslow and the residents in the summer homes and subdivisions of Blue Ridge, and provides many opportunities for picnicking and camping, in user-created sites, mostly on the west shore of the lake. Long Lake supports a variety of warm and cool water fisheries, and some state record northern pike and very large channel catfish have been taken out of there. [#16]

None of the campsites have developments other than those put there by visitors, and occupancy takes place largely on weekends during the summer and fall.

Other recreational activities include: Bird watching and wildlife viewing, picnicking, Off Highway Vehicles (OHV) use, and antler hunting and gathering.

Local hunting seasons may attract some occasional use to the Long Lake area, however; this is fairly minimal. The winter and early spring months bring inclement weather and generally limits access to the area.

Environmental Consequences

Alternative 1 (Proposed Action)

On-site signs would direct visitors to the new facilities. As time goes on, more visitors will hear of the improved facilities, and may plan to stay longer or visit more frequently, however, there are no appropriate predictive models, nor is there a direct correlative between building “new” facilities and increased use. The clientele has changed little over the years, and the lake itself is only so large. The predominant factor in a camping area out in the Pinyon/Juniper environment, during the summer months when the Juniper gnats are out in force is *shade*. Activities in and around the camping area (ATV use, and other uses not related to the lake) may increase.

Developed boat launching facilities will help keep boats launching in defined areas, especially if there is adequate parking for trucks with trailers nearby. This will help relieve, over time, soil sedimentation into the lake from all points around the lake.

Larger capacity vault toilets permanently on site, in a convenient location, would relieve the need for costly weekly pumping. Built to meet the “Sweet Smelling Toilet” design for proper venting and airflow; these toilets would also be universally accessible, and would complement the parking and boat launch areas to permit access to users with a wide variety of abilities. Besides complying with the Americans with Disabilities Act (1984), this would ensure added convenience to all users at the site. Better sanitation facilities on site would encourage visitors to use the toilets more, and address sanitation issues.

Planting transition vegetation along the shoreline will be most successful if it can be fenced until it becomes well established, and if the initial planting is on the side of the lake where recreation activity is minimal. Some minor and temporary inconvenience to the visitors may occur with the fencing, but no long term effects to the recreationists is expected. Increasing catfish habitat in this lake will have a direct, and long term positive effect on fishermen at Long Lake, and should add to their enjoyment of the area.

Alternative 2 (No Action)

Dispersed boat launching would still occur when the existing boat ramp is not useable (high water or low water events) continuing to contribute to sedimentation into the lake. Parking would occur on rough terrain at numerous locations across the area. Day-use parking would not be discernable from overnight camping areas. Sanitation would continue to be provided via porta-potties only from Memorial Day through Labor Day. These currently do not meet “sweet smelling toilet” or universal accessibility standards. The long term needs for sanitary camping/day-use would not be met. With no change to current management direction, the trend of gradual increase based on population

influences would most likely continue. With this alternative, no new facilities would be built at this time. Management would continue as current, budget permitting. If the transition vegetation is not planted the area around the lake will continue to have a denuded appearance. If the Catfish houses are not installed, there will be no increased habitat for this popular game fish, and no change to the current catfishing activity level.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have minimal cumulative effects on general recreational use.

Recreation Special Uses

Affected Environment

Hunting guides occasionally apply for permits for the general area. Currently there are no fishing guides operating.

Environmental Consequences

Alternative 1 (Proposed Action)

There would be no positive or negative cumulative effects if Alternative 1 were implemented. No change is expected with implementation of this alternative.

Alternative 2 (No Action)

There would be no positive or negative cumulative effects if Alternative 2 were implemented. No change is expected with implementation of this alternative.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have minimal cumulative effects on recreation special uses.

Special Designated Areas

Affected Environment

No specially designated areas such as Wilderness Areas occur in the vicinity of Long Lake. The general area of Long Lake contains no outstandingly remarkable values (ORV's) that would suggest its potential for eligibility in a Wild and Scenic River recreational classification.

Environmental Consequences

Alternative 1 (Proposed Action)

There would be no positive or negative cumulative effects if Alternative 1 were implemented. No change is expected with implementation of this alternative.

Alternative 2 (No Action)

There would be no positive or negative cumulative effects if Alternative 2 were implemented. No change is expected with implementation of this alternative.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have no cumulative effects on special designated areas.

Inventoried Roadless Areas**Affected Environment**

Inventoried Roadless Areas (IRA) have been delineated for the Coconino National Forest. These areas were first delineated under the RARE II roadless area review process in the early 1980's. The original designation as roadless areas has been included in the proposed Roadless Area policy that was formulated under the Clinton administration. The project area contains no Inventoried Roadless Areas.

Environmental Consequences**Alternative 1 (Proposed Action)**

There would be no positive or negative cumulative effects if Alternative 1 were implemented. No change is expected with implementation of this alternative.

Alternative 2 (No Action)

There would be no positive or negative cumulative effects if Alternative 2 were implemented. No change is expected with implementation of this alternative.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have no cumulative effects on Inventoried Roadless Areas.

Recreation Opportunity Spectrum - ROS**Affected Environment**

Semi-primitive Motorized: In this setting, the area is characterized by a predominantly natural or natural-appearing environment. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted on the lake and around the general area. Off-highway vehicle use is a common and popular activity. There is a moderate probability of experiencing independence, isolation from the sights and sounds of humans, and self-reliance in an environment that offers risk and challenge. The roads in the area are primitive, and many visitors and local residents with off highway vehicles enjoy exploring the area [#3].

Environmental Consequences

Alternative 1 (Proposed Action)

The design of the facilities would maintain the Semi-primitive Motorized objectives of the Recreation Opportunity Spectrum. Long Lake is a place where most successful fishermen use boats to access their catch. It is a long way from anywhere else, and other forms of recreation include use of off road vehicles for sightseeing and hunting. Pavement would not be added; rather, surface material at the parking area would be similar in coloration to native stone, (if crushed in place, it would even be the native rocks). The boat ramp itself would be (mostly) underwater, but made of concrete to last as the water in the impoundment fluctuates. Noise levels from motorized traffic and boats are not expected to change with this alternative.

Transition vegetation would be most successful if it is temporarily fenced until it becomes established, and if it is planted in locations away from the main traffic and camping use. This would not have a long lasting negative effect to the ROS objectives, and the establishment of additional vegetation would add to the attractiveness of the area in a positive manner.

Alternative 2 (No Action)

No change is anticipated to the existing Recreational Opportunity Spectrum. Visitors would continue to be able to have a Semi-primitive Motorized experience. Noise levels from motorized traffic and boats are not expected to change with this alternative.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have no cumulative effects on the Recreation Opportunity Spectrum.

Visual Quality Objectives - VQO's

Affected Environment

There are many objectives for managing the differing visual aspects of the area. These are based on programmatic guidelines contained in the Coconino National Forest Plan for each management area [#1], and on Scenery Management Guidelines contained in Landscape Aesthetics: a Handbook for Scenery Management [#2].

Partial retention. "In general, management activities may be evident but must remain subordinate to the characteristic landscape". The Chavez pass area (background level) and most of the managed forests and grasslands in this part of the Forest meet the objective of partial retention. Fences and treated timber areas are the most apparent management activities to the casual visitor.

Modification. "Management activities may dominate the characteristic landscape, but must, at the same time, use naturally established form, line, color and texture". Activities should appear as a natural occurrence when viewed as background. The majority of the lands included in the project area are in this category, and they meet the guidelines. The

area appears managed from the middleground viewing distance in the pine and pinyon/juniper vegetation types.

Environmental Consequences

Alternative 1 (Proposed Action)

The facilities, vaulted toilets, boat ramps and access roads and parking, would be designed to blend with the Visual Quality Objective of partial retention/foreground modification. They would blend with the landscape, yet be noticeable so that it would receive use. Split faced block type construction on the toilet buildings would use materials reflective of the colors of native stone in the area. Visual Quality Objectives would continue to be met. Transition vegetation would be most successful if it is temporarily fenced until it becomes established, and if it is planted in locations away from the main traffic and camping use. This would not have a long lasting negative effect to the VQO's, and the establishment of additional vegetation would add to the attractiveness of the area in a positive manner.

Alternative 2 (No Action)

Visual Quality Objectives would continue to be met. There would be no new development to integrate into the landscape, which is already meeting the objectives.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have no cumulative effects on Visual Quality Objectives

Heritage Resources

Affected Environment

Nearby Chavez Pass is a National Registry site for its historic and prehistoric significance to the area. The area has been used as a recreation site since it was constructed specifically to provide water-based recreation in the 1940's. Because of this continuous use, artifacts of heritage resources are virtually non-existent. An archeological survey was conducted in 1999 covering 100% of the proposed area. No sites were found [#6]. Tribal consultation was conducted and no issues or concerns were mentioned. A former Recreation Residence cabin, built in the 1950's is located on the north end of the lake; this historic structure reverted to Forest Service management in the 1970's, and is partially underwater during extreme high water years. This structure has not been evaluated for inclusion in the National Register of Historic Places.

Environmental Consequences

Alternative 1 (Proposed Action)

No sites were initially located, and mitigation measures are in place to protect any heritage resources discovered during construction activities. No effects are expected from implementation of this alternative.

Alternative 2 (No Action)

No sites were initially located, continued activity in this area may not ensure protection of newly discovered sites. Continued dispersed use of this area may result in negative effects to any yet to be discovered sites in the area.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have no cumulative effects on Heritage Resources.

Wildlife, Fish, And Rare Plants

Many species of wildlife and fish rely on the Long Lake/Tremaine Lake/Soldier Lake/Soldier Annex Lake complex for a variety of habitat needs. The diversity in vegetation types and structural stages, combined with the availability of water provide for a diverse species mix. Elk, mule deer, white-tailed deer, turkey, pronghorn antelope, coyote, bobcat, and many other species of birds, reptiles, amphibians, and mammals are common throughout the area.

Threatened and Endangered Species

Section 2 of the Endangered Species Act of 1973, as amended 1978, 1979, 1982, and 1988 (16 U.S.C. 1531 et seq.) declares that "...all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act." Section 7 directs Federal agencies to ensure that actions authorized, funded, or carried out by them are not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of their critical habitats (16 U.S.C. 1536 et seq.). Federal agencies also must consult with the Secretary of the Interior (U.S. Fish and Wildlife Service) whenever an action authorized by the agency is likely to affect a species listed as threatened or endangered or to affect its critical habitat. The Act mandates conference with the Secretary of the Interior whenever an action is likely to jeopardize the continued existence of any species proposed for listing as threatened or endangered, or whenever an action might result in destruction or adverse modification of critical habitat proposed for listing (16 U.S.C. 1536(a) 4).

Two federally threatened species and one federally endangered species either occur in the area, or have potential to occur there.

Affected Environment

Chiricahua Leopard Frog - The Chiricahua leopard frog was listed as a federally threatened species in June 2002. Surveys conducted at Long Lake have found no frogs, but potential habitat exists in wetlands, lakes, and stock ponds adjacent to the project area.

Bald Eagles - Bald eagles are federally listed as a threatened species. Eagles are generally winter visitors to the Coconino National Forest occupying all habitat types and

elevations. Small groups of eagles roost at night in clumps of large trees, typically in protected locations such as drainages or hillsides. These roosts are the key habitat component for bald eagles. Human-made roosts have been constructed at Long Lake, and a natural roost-site is known from Tremaine Lake. Long Lake is an important foraging area for bald eagles, as well. Annual mid-winter bald eagle surveys show variable numbers of eagles using the area for foraging and roosting habitat. No nesting habitat occurs at Long Lake.

Black-footed Ferrets - Black-footed ferrets are a federally listed endangered species. No records of this species exist for the Long Lake area, but prairie dog towns are present in the grasslands and open pinyon-juniper adjacent to Long Lake. Prairie dog colonies are key to ferret survival. Ferrets occupy the burrows made by prairie dogs and utilize prairie dogs as their main food source. Existing prairie dog towns in the area are small and would not support black-footed ferrets, but prairie dog colonies in adjacent areas are considered of suitable size and extent to support ferrets.

Environmental Consequences

Alternative 1 (Proposed Action)

Chiricahua Leopard Frogs –This species does not occur in the project area. Potential habitat occurs in the area and proposed vegetation planting of emergent vegetation in the lake, and terrestrial species along the shoreline of Long Lake would be beneficial to frogs over the long term by providing a limited amount of suitable habitat where plantings are successful. Providing graveled access roads into the boat ramp areas and parking areas is expected to improve vegetation conditions in some areas. This may increase the potential for habitat for this species to develop over time.

Bald eagles - Construction of boat ramps, access improvement, and availability of designated parking and toilets may serve as a “magnet” for people using the lake, thus reducing the potential for disturbance to eagles from recreationists at other parts of the Lake. Over the long term, installation of fishery enhancement structures is expected to improve foraging and food availability for eagles, as is planting vegetation along the shoreline and in the lake. There may be some short-term disturbance to foraging eagles such as flushing individual eagles from resting sites or hunting perches due to noise disturbance from construction activities. This is considered to be a minimal impact. Eagle roost sites are located on the opposite side of the Lake from proposed boat ramps, parking lot, toilet, and road maintenance activities. Mitigation measures are in place to reduce effects on bald eagles.

Black-footed Ferrets

No impacts on black-footed ferrets would occur if Alternative 1 were implemented.

Alternative 2 (No Action)

Chiricahua Leopard Frog - No impacts on Chiricahua leopard frogs would occur if this alternative were implemented.

Bald Eagles - Implementation of this alternative is not expected to directly impact bald eagles. Foraging opportunities would remain the same. Mitigation measures are in place

that would result in no disturbance to wintering eagles during construction activities. Potential for disturbance from recreational activities would continue to be high due to the likelihood that recreationists would continue to be widely dispersed in all areas surrounding Long Lake.

Black-footed Ferrets - No impacts on black-footed ferrets would occur with implementation of this alternative.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have no cumulative effects on black-footed ferrets or the bald eagle. Alternative 1 may increase the potential for habitat for the Chiricahua Leopard Frog.

Sensitive Species

Sensitive species are defined as "those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by: a) significant current or predicted downward trends in population numbers or density, or b) significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution (FSM 2670.5(19))". It is the policy of the Forest Service regarding Sensitive Species to 1) assist States in achieving their goals for conservation of endemic species, 2) as part of the National Environmental Policy Act process, review programs and activities, through a biological evaluation, to determine their potential effect on sensitive species, 3) avoid or minimize impacts to species whose viability has been identified as a concern, 4) if impacts cannot be avoided, analyze the significance of potential adverse effects on the population or its habitat within the area of concern and on the species as a whole (the Line Officer, with project approval authority, makes the decision to allow or disallow impacts, but the decision must not result in loss of species viability or create significant trends toward Federal listing), and 5) establish management objectives in cooperation with the State when projects on National Forest system lands may have a significant effect on sensitive species population numbers or distributions. Establish objectives for Federal candidate species, in cooperation with the U.S. Fish and Wildlife Service and the State (FSM 2670.32).

Affected Environment

A review of the Regional Forester's Sensitive Species List dated July 21, 1999 was completed. Habitat for three sensitive species occurs in the project area.

Northern Leopard Frogs - The northern leopard frog is a Forest Service sensitive species. Surveys conducted at Long Lake have found no frogs, but potential habitat exists in wetlands, lakes, and stock ponds adjacent to the project area.

Tusayan Rabbitbrush - Tusayan rabbitbrush is a Forest Service sensitive species found on slopes and flat areas at elevations ranging from 6,000 to 7,000 feet. It is associated with pinyon-juniper woodland and grasslands, such as those found around Long Lake.

Surveys of potential habitat for this species have been completed and no plants were found. .

Navajo Mountain Mexican Voles - This species is designated as Forest Service sensitive. They are only known from not expected to occur in the project area and no records of occur in the project area. Voles typically occupy dry grassy or dry grass-forb vegetation in association with ponderosa pine or other coniferous forests, and may be found in low, dense, shrubby thickets in other parts of their range. Ferrets occupy the burrows made by prairie dogs and utilize prairie dogs as a main food source; they formerly ranged from the Great Plains of Canada to the intermontane region of the interior Rocky Mountains and the southwest.

Environmental Consequences

Alternative 1 (Proposed Action)

Northern Leopard Frog –This species does not occur in the project area. Potential habitat occurs in the area and proposed vegetation planting of emergent vegetation in the lake, and terrestrial species along the shoreline of Long Lake would be beneficial to frogs over the long term by providing a limited amount of suitable habitat where plantings are successful. Providing graveled access roads into the boat ramp areas and parking areas is expected to improve vegetation conditions in some areas. This may increase the potential for habitat for this species to develop over time.

Tusayan Rabbitbrush - No impacts on this species would occur if Alternative 1 were implemented.

Navajo Mountain Mexican Voles - No impacts on this species would occur if this alternative were implemented.

Alternative 2 (No Action)

Implementation is not expected to directly impact Northern Leopard frogs, Tusayan rabbitbrush, or Navajo Mountain Mexican voles.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have no cumulative effects on the Northern Leopard Frog, Tusayan Rabbitbrush or the Navajo Mountain Mexican Voles. There may be a positive cumulative effect for the Northern Leopard Frog in that it may increase the potential for habitat.

Management Indicator Species

The Forest Planning Regulations require that certain species, whose population changes are believed to indicate the effects of management activities, be selected and evaluated in forest planning alternatives (CFR 219.19). Additionally, the Planning Regulations require that the population trends of management indicator species be monitored and relationships to habitat changes determined (CFR 219.19). Specific management

direction for MIS is also found in Forest Service Manual (FSM) 2600. Policy and direction that tiers to CFR 219.19 is provided for MIS for application at the Forest Plan and project levels relative to species selection, habitat analysis, monitoring and evaluation, and other habitat and planning evaluation considerations, in FSM 2620. FSM 2630 provides guidance on improving MIS habitat, and conducting habitat examinations, and project level evaluations for MIS within the project area.

A forest-wide assessment entitled "*Management Indicator Species Status Report for the Coconino National Forest*" dated 7/1/02 summarizes current knowledge of population and habitat trends for species identified as management indicator species (MIS) for the Coconino National Forest. Population trends need to be monitored as the Forest Plan is implemented, and relationships to habitat changes over time determined (36 CFR 219.19). The following is a description of each of the management indicator species identified for management areas (MA's) within the analysis area, and a discussion of the relationship of the effects of each project alternative on forest-wide population and habitat trends for each of these species. Table 2 summarizes acres of habitat for management indicator species within the analysis area.

Table 2. Summary of Management Indicator Species Habitat in the Project Area by Management Area (Coconino FLMP 1986).

MANAGEMENT AREA (MA)	MANAGEMENT INDICATOR SPECIES	TYPE OF HABITAT SPECIES IS AN INDICATOR FOR	STATUS ON THE COCONINO NATIONAL FOREST
MA 7 (Pinyon-juniper Woodland with <40% Slopes)	Plain (juniper) titmouse	Late seral and snag component of pinyon-juniper	Stable to declining Declining
	Mule deer	Early seral aspen and pinyon-juniper	Increasing during the early to mid-1990's, declining in the mid to late 1990's
	Elk	Early seral ponderosa pine, mixed conifer, and spruce-fir	
MA 10 (Grassland and Sparse Pinyon-juniper)	Pronghorn Antelope	Early and late seral grasslands	Declining
MA 12 (Riparian and Open Water)	Cinnamon Teal	Wetlands/aquatic	Inconclusive, some habitat indicators are stable, but well below potential
	Lincoln's sparrow	Late seral, high elevation riparian (>7,000 ft.)	Inconclusive, but limited data suggests stable to increasing wintering populations
	Yellow-breasted chat	Late seral, low elevation riparian (<7000 ft.)	Inconclusive, but limited information may indicate a slightly declining population trend, while habitat trend is improved
	Lucy's warbler	Late seral, low elevation riparian (<7000 ft.)	Inconclusive, but limited information may indicate a slightly declining population trend, while habitat trend is improved
	Macroinvertebrates	Late seral, high and low elevation riparian	Stable to improved

Affected Environment

For MA 7 – Pinyon-Juniper woodlands on less than 40% slopes

Plain (Juniper) Titmouse is stable to decreasing in Arizona and stable in the project area; they are cavity nesters in oak or pinyon-juniper woodlands.

Mule Deer are relatively abundant in the project area due to the availability of a wide variety of habitat and cover types. They are found in a variety of habitats from deserts to mountains and tend to occupy scrub oak, mountain mahogany, skunk bush, buckthorn, and manzanita habitat. Habitat needs include water within one mile, cover, and foods high in protein. Rugged topography provides cover in more open areas.

Elk do not tend to be as sensitive to human presence as other species, such as pronghorn. The area provides both summer and winter range for elk. Elk consume grasses, sedges, aster, goosefoot, bear grass, erigonums, lupines, serviceberry, mountain mahogany, sagebrush, rabbitbrush, cliffrose, manzanita, aspen, acorns, conifer leaves, oak leaves, snowberry, and willows. In winter they consume juniper and in summer/autumn they consume silktassel. The summer diet tends to focus on grass and forbs, while the winter diet focuses on browse. They tend to move to higher country following the spring green-up of blue grass, squirrel-tail, and orchard grass.

For MA 10 – Grassland and Sparse Pinyon-Juniper above the Rim

Pronghorn antelope populations in this area have fluctuated greatly since surveys began in the early part of the 20th Century. The area classified as antelope habitat receives heavy use by antler gatherers during the spring, hunters during the fall and winter, and other recreational users during the summer. Fuelwood gathering, both for personal and commercial use, is popular in this area from mid-April through mid-December, as is year-round off-road vehicle (ORV) use.

For MA 12 - Riparian and Open water

Cinnamon Teal live in shallow, tule-bordered lakes, freshwater ponds, sluggish creeks, reservoirs, and irrigation ditches. They migrate early in the fall. This species nests on the ground, concealed in tall grass or weeds, often on high ground 100 feet or more from water.

Other species, such as **Lincoln's Sparrow, Yellow Breasted chat, Lucy's Warbler**, do not have habitat in the project area. The status of various **macroinvertebrates** is unknown in the project area. There is no habitat for this species in the analysis area. Composition of **macroinvertebrate** populations is associated with plant succession. They move into deeper pools, wetland sediments within the water table, and other nearby wetlands when water levels drop or change within a specific wetland. Flooding affects wetland insect occurrence, growth, survival, and reproduction. Macroinvertebrate populations can be altered by water pH, stream flow, and dissolved oxygen and silt levels. The amount of silt can be altered by livestock use and road disturbance. Oxygen and pH levels can be affected by runoff. Flowing streams can provide oxygen and food. Macroinvertebrates feed on algae and leaf and animal matter. Indicator species for poor water conditions include midge and black fly larvae.

Environmental Consequences

Alternative 1 (Proposed Action):

No direct or indirect effects are expected to **Plain juniper titmouse**.

No direct effects on **mule deer, pronghorn antelope** or **elk** are expected. Indirect effects may include short term displacement of mule deer or elk during construction activities.

The project is expected to have little direct impact on **cinnamon teal**. Indirect positive effects to cinnamon teal could occur with this project. Potential for disturbance to nesting or foraging birds would be reduced if off-road travel was reduced or “funneled” into specific areas. Emergent vegetation plantings would provide improved foraging areas for teal.

Alternative 2 (No Action):

No direct effects are expected on **Plain juniper titmouse, Mule Deer, Elk, Pronghorn Antelope, or Cinnamon Teal**.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have no indirect effects on **Plain juniper titmouse, Mule Deer, Elk or Pronghorn Antelope**. Indirect effects on **cinnamon teal** would include further loss of cover values for ground nesting birds and high potential for disturbance from continued uncontrolled off-road vehicle use adjacent to the lake. Availability of foraging habitat would continue to be poor.

Migratory Birds

President Clinton signed Executive Order 13186 on January 10, 2001, placing emphasis on conservation of migratory birds. This order requires that an analysis be made of the effects of Forest Service actions on Species of Concern listed by Partners in Flight, the effects on Important Bird Areas (IBA's) identified by Partners in Flight (Latta, et al. 1999), and the effects to important overwintering areas. There are no IBA's within the analysis area.

Affected Environment

Pinyon-juniper Habitat Types – Pinyon-juniper habitat types are the most common in the project area. Five species have been identified as priority species of concern: **Juniper titmouse, gray flycatchers, pinyon jays, gray vireos, and black-throated warblers**. Juniper titmouse was discussed in the *Management Indicator Species* section.

Gray flycatchers in Arizona are most common in larger and taller stands of pinyon pine and/or juniper with open understory sometimes interspersed with sagebrush, cliffrose, and barberry. These areas are generally limited to drainages and transition areas between ponderosa pine and pinyon-juniper vegetation types adjacent to the project area. This species is common. During the 1960's and early 1970's, large-scale chaining and juniper pushes were done in much of the pinyon-juniper vegetation types in the project area. At that time, large acreages were affected with few trees being left regardless of size, age, or value from a wildlife perspective. Subsequent treatments in these areas took into account the age of the trees, their value to wildlife, and even went so far as to begin the process of

leaving corridors identified as future wildlife cover corridors and pathways for wildlife movement. These early treatments greatly reduced the availability of mature stands of pinyon and juniper trees in all but the most rocky, inaccessible sites. **Pinyon jays** require extensive stands of pinyon with emphasis on cone-producing trees in mature pinyon-juniper woodlands or pure pinyon pine woodlands. Pure pinyon pine woodlands are limited to very few stands, but mixed stands of pinyon-juniper occur over large areas. In general, trees greater than 75 years old are preferred, but only occur in large numbers in drainages and canyons where early chaining and pushes did not occur. **Gray vireos** prefer open mature pinyon-juniper woodlands on canyon and mesa slopes. They are generally absent from woodland stands greater than 280 trees per hectare (2.5 acres). Rare open stands of mature pinyon-juniper are interspersed with areas of young trees where chaining and pushes were done in the 1960's and 1970's. In general, mature stands of pinyon-juniper have much higher tree densities than the preferred 280 trees per hectare, thus limiting the availability of habitat for this species. **Black-throated gray warblers** are generally associated with pinyon pine and juniper woodlands and mixed oak-pine woodlands.

High Elevation Grassland Habitat Types – High elevation grassland habitat types are interspersed throughout the project area. Four species have been identified as species of concern for high elevation grasslands. **Ferruginous hawks, Swainson's hawks, burrowing owls,** and **grasshopper sparrow** is considered to be stable to slightly decreasing.

Ferruginous hawks occupy open scrublands and woodlands, grasslands, and semi desert grasslands adjacent to the rimrock canyons that feed the Little Colorado River. They are known to occur in the open grassland habitats adjacent to the project area. **Swainson's hawks** prefer open grassland or open agricultural fields with a scattering of tall trees or trees along riparian corridors for roosting, nesting, and perching. Scrub/brush areas are not preferred. This species occupies grassland habitats adjacent to the project area, although habitat is limited to short grass prairie habitats in the north of the project area. **Burrowing owls** are primarily associated with prairie dog towns and round-tailed ground squirrel populations in Arizona. In the project area, habitat is limited to the Hay Lake Area. **Grasshopper sparrows** prefer pure grassland habitat without trees or emergent shrubs. As with the other grassland species discussed above, habitat is limited.

High Elevation Riparian Habitat Types – Five species have been identified as species of concern for high elevation riparian habitat types. These include the common black-hawk, elegant trogon, southwestern willow flycatcher, and the Macgillivray's warbler. Habitat for these species does not exist in or adjacent to the project area.

Environmental Consequences

Alternative 1 (Proposed Action)

No direct effects to **gray flycatchers, Pinyon Jays, Gray vireos, Black-throated, gray warblers, Ferruginous hawk, Swainson's hawk, Burrowing owls, or Grasshopper sparrows**, would occur. Indirect effects may include disturbance to individual birds during foraging or roosting from noise and activity associated with construction activities. No long term effects are expected.

Alternative 2 (No Action)

No direct or indirect effects to **gray flycatchers, Pinyon Jays, Gray vireos, Black-throated, gray warblers, Ferruginous hawk, Swainson's hawk, Burrowing owls, or Grasshopper sparrows**, would occur. No habitat loss or alteration would occur. No construction activities would occur, so noise disturbance would not occur. Canopy cover would remain the same.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have short-term effects during construction phase only. No long-term effects are expected.

General Wildlife and Fisheries**Affected Environment**

Wild **turkey** occur throughout the project area. Human disturbance to turkeys is high throughout much of the area, with high road densities and heavy dispersed recreation use during the summer and fall.

In the project area **white-tailed deer** are uncommon. They prefer to stay in brushy side-slopes of canyons and drainages, but may use the lakes as water sources.

The wetlands adjacent to the project area include several semi-permanent and seasonal natural lakes, as well as the Long Lake/Soldier/Soldier Annex/Tremaine Lake Complex. Wintering **waterfowl** also use stock ponds in the area. This area, in combination with the rest of Anderson Mesa is considered to be important migratory habitat for waterfowl.

Long Lake is one of the most popular **fisheries** on the Mogollon Rim Ranger District. Both warm water and cold water species are found in the lake, and trophy size catfish and northern pike are known to occur there. Underwater structures have been placed in Long Lake to enhance habitat for the fish species that occur here. Water level fluctuations and heavy sediment loads have reduced the aquatic vegetation to a few remnant areas [#10].

Environmental Consequences**Alternative 1 (Proposed Action)**

No direct effects on **turkeys** are expected. Indirect effects may include short term displacement of turkeys during construction activities. Other sources of water, forage, and cover are available adjacent to the project site.

Direct effects of implementation of this alternative would include benefits to **waterfowl** from experimental planting of shoreline and emergent vegetation. If successful, these would provide cover and foraging areas for waterfowl and other wetland species. Construction of boat ramps, parking areas, and toilets is not expected to directly affect waterfowl. Waterfowl would also indirectly benefit from improvements in existing groundcover resulting from "funneling" vehicles into parking areas and surfaced roads.

These structures are expected to reduce off-road driving adjacent to the lake. Indirect effects from construction of boat ramps, parking areas, and toilets could include disturbance to individual birds during foraging, nesting, or resting. It is unlikely that waterfowl nest in the proposed construction area due to low cover values. Any disturbance would be short term, with no long term impacts expected.

Direct effects to **fisheries** would include benefits to small to medium-sized catfish and other fish species once catfish houses were installed in Long Lake and juniper “skeletons” were placed in Tremaine Lake. These structures would provide shelter for smaller fish. Indirect effects may include reduced sedimentation and improved water quality in Long Lake resulting from road improvements, development of parking areas, installation of boat ramps, and construction of toilets. Emergent vegetation plantings would provide improved cover and increased insect availability.

Alternative 2 (No Action)

No direct or indirect effects on **turkeys** since no habitat alteration would occur. No direct effects to **waterfowl** would occur. Indirect effects would include further loss of cover values for ground nesting birds and high potential for disturbance from continued uncontrolled off-road vehicle use adjacent to the lake. Availability of foraging habitat would continue to be poor. No direct effects on **fisheries** would occur. No indirect effects on fisheries would occur. Excess sedimentation and poor water quality would continue to be the status quo.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have short-term effects during construction phase only. No long-term effects are expected.

Range Management

Affected Environment

The Long Lake Recreation Improvements are located in the Lakes Pasture of the Hay Lake Management Unit of the Bar T Bar Allotment. The Hay Lake Management Unit is located north and east of the remaining private ranch lands, and is made up of the Lakes, West Melatone, East Melatone, West Service, East Service, and West Soldier pastures.

The Lakes pasture includes grasslands, pinyon juniper, treated pinyon juniper, and browse vegetation types. Large portions have previously been treated for juniper control and seeded to grasses. Problems identified are low vigor in the forage plants, plant pedestalling, active erosion, and conflicts with recreationists near the Lakes (Long Lake, Soldier, and Soldier Annex Lakes).

Environmental Consequences

Alternative 1 (Proposed Action)

Range management activities would continue as planned under the BarTBar allotment Management plan. No fences would be constructed with this proposal. Construction and use of the boat ramps, parking areas, and toilets would not affect range management on the Bar T Bar Allotment. Proposed planting of vegetation to promote fisheries habitat and reduce sedimentation may be affected by livestock activities, such as grazing and soil disturbance. The plantings will serve as an attraction to livestock (and wildlife such as elk) unless the plantings are fenced, or access to them is restricted in some way.

Alternative 2 (No Action)

Range management activities would continue as planned under the BarTBar allotment Management plan. No fences would be constructed with this proposal. No transitional vegetation would be planted, and thus would not serve as an attractant to either livestock or wildlife. This alternative has no effects to range management activities in the Long Lake area.

Cumulative Effects

Implementation of Alternative 1, along with past, present and reasonably foreseeable future actions, would have no cumulative impacts to range and the Bar T Bar Allotment.

Environmental Justice

Executive Order 12898 (February 11, 1994) directs federal agencies to focus attention on the human health and environmental condition in minority communities and low-income communities. The purpose of the Executive Order is to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. The principle behind Environmental Justice is simple: people should not suffer disproportionately because of their ethnicity or income level. The Southwestern United States has many and varied ethnic and socio-economical groups; there has been no evidence that either alternative to this proposal would disproportionately affect any of these groups. There is nothing that would indicate that either alternative to this proposal would have a disparate impact on any low-income populations or tribe.

CHAPTER 4 - CONSULTATION AND COORDINATION

The Forest Service consulted the following individuals, Federal, state and local agencies, tribes and non-Forest Service persons during the development of this environmental assessment:

ID TEAM MEMBERS:

Carol Holland, Planning Staff Mogollon Rim Ranger District
Henry Brill, Recreation/Lands Forester, Mogollon Rim Ranger District
Elizabeth Humphrey, Staff Wildlife Biologist, Mogollon Rim Ranger District
Jim Beard, Coconino National Forest Landscape Architect
Ramona Chapman, Engineering Staff, Mogollon Rim Ranger District (retired)
Dick Fleishman, Hydrologist, Mogollon Rim Ranger District
Park Gilbertson, Para-Archeologist, Mogollon Rim Ranger District
Trish Callaghan, Public Services Staff, Mogollon Rim Ranger District

FEDERAL, STATE, AND LOCAL AGENCIES:

Arizona Department of Game and Fish
Arizona State Historic Preservation Officer (SHPO)

TRIBES:

Pueblo of Zuni, Pueblo of Acoma, San Carlos Apache, Hualapai Tribe, Havasupai, Yavapai-Apache Nation, Ft. McDowell Yavapai Nation, Yavapai-Prescott Tribe, The Hopi Tribe, The White Mountain Apache Tribe, The San Juan Southern Paiute Tribe, The Navaho Nation, and The Tonto Apache Tribe were all part of the February 19, 2002 tribal consultation, and no responses were received.

OTHERS:

Diablo Trust; Bob and Judy Prosser, Bar T Bar Ranch; Donald Cox, Sun Country Conservation and Sportsmen Club.