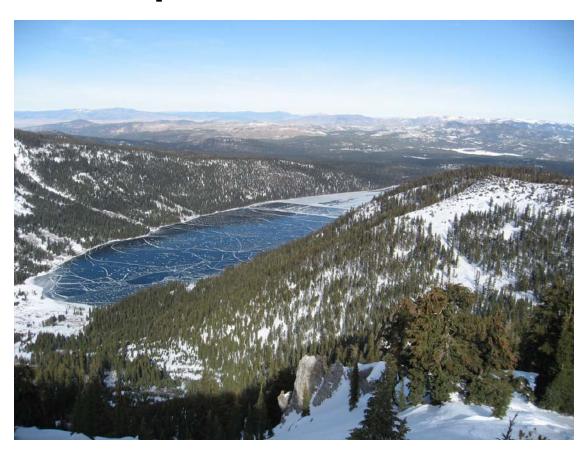
## RECLAMATION

Managing Water in the West

## **Environmental Assessment**

# Independence Lake Land Acquisition





U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region

May 2009

#### **Background**

The Bureau of Reclamation (Reclamation) has been directed by the Congress of the United States through Public Law 110-161, Title II, 208(a)(2) to provide funds to partially fund the acquisition of approximately 2,325 acres of land that surround Independence Lake (Figure 1):

"the Secretary of the Interior--

- (2) shall allocate \$9,000,000 to a nonprofit conservation organization, acting in consultation with the Truckee Meadows Water Authority, for--
  - (A) the acquisition of land surrounding Independence Lake; and
  - (B) protection of the native fishery and water quality of Independence Lake as determined by the nonprofit conservation organization;"

The land is currently owned by NV Energy (formerly Sierra Pacific Power Company). Independence Lake is a municipal water storage facility with storage facilities and related water rights to remain in ownership by the Truckee Meadows Water Authority (TMWA). The nonprofit conservation organization acquiring the land is The Nature Conservancy (TNC). TNC entered into a Purchase and Sale agreement for the land acquisition with NV Energy on January 17, 2008.

The relative remoteness of the area, its land use history and adjacency to National Forest System lands, combined with its unique assemblages of biological resources make the acquisition of the surrounding lands a valuable asset for long-term protection and conservation by TNC.

#### **Purpose and Need for Action**

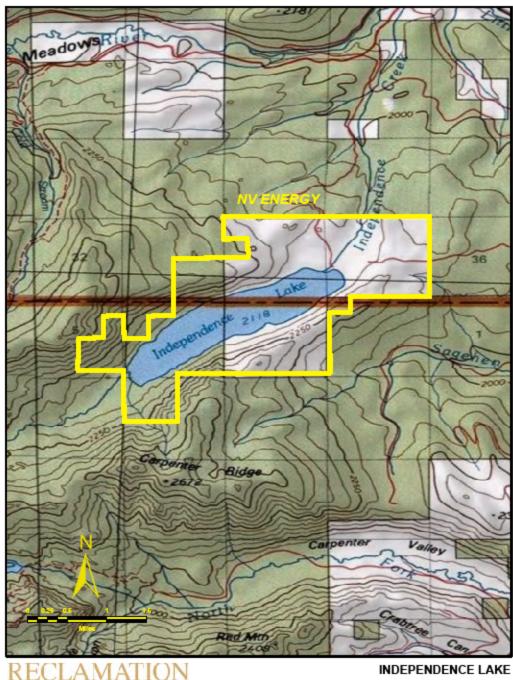
The purpose of Reclamation's funding of the TNC Independence Lake land acquisition is to permanently protect the unique resource values of the area including the lake's native fishery. The fishery includes Lahontan cutthroat trout (LCT), federally listed as threatened. Funding of the acquisition by Reclamation is needed to comply with section 208(a)(2), Public Law 110-161.

#### **Proposed Action and Alternatives**

Two alternatives were analyzed in the EA, the proposed provision of funding by Reclamation and a No Action Alternative as required by the National Environmental Policy Act. The No Action alternative is no change from current management and provides a baseline comparison.

#### **No Action Alternative:**

Reclamation would not provide \$9,000,000 in funding for the acquisition, research, monitoring and management of the 2,325 acres of lands surrounding Independence Lake. The future of the land surrounding Independence Lake would be unknown. TNC would be required to obtain the additional \$9,000,000 from other private and/or public sources in addition to the acquisition funding they are already seeking from other organizations. If alternative funding could not be secured, the Independence Lake land would not be acquired by TNC. The land could be subject



Managing Water in the West

LAND ACQUISITION

Lahontan Basin Area Office 705 N. Plaza Street, Carson City, NV 89701

Figure 1

to possible sale in whole or in part to another entity and could be used for uses that may not be compatible with conservation of the lake, native fisheries, and surrounding area.

#### **Proposed Action – Providing Funding Alternative:**

The Proposed Action is for Reclamation to provide funding to TNC for a portion of their acquisition costs of 2,325 acres of land around Independence Lake, California. The primary purpose of the acquisition is to protect and conserve Independence Lake and surrounding area, including an important population of native LCT, a federally listed threatened species. In addition to acquisition costs, funding would also be provided for fishery research and monitoring and for administrative management including personnel, supplies and services.

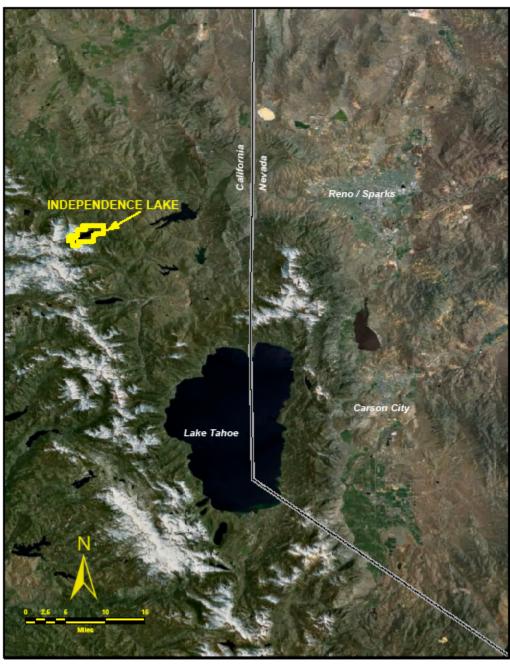
TNC intends to continue existing fisheries research and monitoring and to continue allowing public recreation. Research funding is primarily for researcher salaries and supplies. TNC is studying, and at some future date would develop management plans for the area; no decisions have been made by TNC on any stewardship or land management plans. The Independence Lake public law language states that protection of the area is to be determined by the nonprofit organization. Reclamation has no statutory authority over potential future management of the land by TNC and is not funding on-the-ground management activities.

Under the land acquisition there would be no changes to the rights and interests of TMWA's operational requirements of Independence Lake, water rights or easements pursuant to existing conveyance documents.

#### **Description of the Land Acquisition Area**

The proposed acquisition area is located on 2,325 acres of land surrounding Independence Lake, in Sierra and Nevada counties, California. The lake is approximately 10 air miles northwest of Truckee, California and 5 miles west of State Route 89 (Figure 2). Independence Lake is on the Independence Lake USGS quadrangle topographic map. The land to be purchased is located in portions of sections 2, 3, 4, 5, and 9, T. 18 N., R. 15 E. and sections 33, 34, and 35, T. 19 N., R. 15 E., Mount Diablo Meridian. The latitude and longitude coordinates for this reservoir are latitude 39°27'07" and longitude 120°17'23" referenced to North American Datum.

The approximately 2 and a half mile long basin in which Independence Lake lies is a valley formed from a former glacier on the east slopes of Mount Lola. The headwaters of Independence Creek flow into Independence Lake. Independence Creek flows out of the lake and downstream into the Little Truckee River. Independence Lake is approximately 2 miles long and 0.5 mile wide, with a surface area of 625 acres. The shoreline perimeter is approximately 5.8 miles in length and the maximum depth of the lake is about 145 feet. The elevation of the lake is 6,952 feet.



RECLAMATION

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INDEPENDENCE LAKE

LAND ACQUISITION

Lahontan Basin Area Office 705 N. Plaza Street, Carson City, NV 89701

Figure 2

#### **Affected Environment and Environmental Consequences**

#### **Land Use**

#### **Affected Environment**

The majority of the Independence Lake watershed, including the entire perimeter of the lake, is the land proposed for acquisition by TNC from NV Energy. NV Energy has owned the land since around 1937. The other major landowner in the watershed is the U.S. Forest Service (Tahoe National Forest). There are a few private parcels within the watershed which are currently being purchased and transferred to the Forest Service by the Truckee Donner Land Trust. NV Energy has employed a caretaker on the Independence Lake property for many years, with the most recent caretaker tenure being approximately ten years in addition to several years assisting the previous caretaker.

Current land uses of the area include recreation by the public and NV Energy employees, TMWA dam operation for storage of their water rights, and fishery research and monitoring activities by United States Geological Services (USGS) and United States Fish and Wildlife (FWS).

Over recent decades there have been several attempts to develop large resorts and private estates, including a mid-1970s resort development plan by the Walt Disney Corporation. None of those proposed developments occurred and Independence Lake remains as one of the last privately-owned pristine alpine lakes remaining in the Sierra Nevada.

NV Energy has allowed general public and employee use of the area and access to Independence Lake since approximately 1938. The site supports two small campgrounds with 20 sites at the current public campground and 10 sites at the private one. Both campgrounds have gravel boat launches. Other developed facilities in the area include dirt roads and building structures including four cabins and some storage buildings. One cabin has been used as the caretaker's cabin and the largest cabin dates back to the 1880s.

Recreation users have historically used the area for camping, picnicking, hiking, and fishing. Fishing occurs on the lake using either small motorboats or non-motorized boats and there is no paved boat ramp. Speedboats, jet skis and water skiing have never been allowed on the lake. Nevada and Sierra counties have ordinances restricting water craft speed to ten miles per hour.

Recreational use of Independence Lake is considered low to moderate (approximately 125 visitors during peak summer weekends). There is a long, rough access road generally suitable only for high clearance vehicles. Use of the lake is seasonal, usually around four months a year, mostly due to high elevation snow levels preventing driving access. Currently the end of the official camping season is Labor Day weekend, but the campgrounds stay open until the end of September.

Independence Lake is both a natural lake and a reservoir. The surface water of the lake is owned by TMWA and is regulated by a 31-foot high earth-filled dam with gates and related

infrastructure that control the upper 28 feet of the Lake, providing for usable storage of 17,500 acre feet. TMWA is the largest supplier of municipal and industrial water for northern Nevada. TMWA has easements over NV Energy lands for access, water and infrastructure management, and watershed management practices as they affect water quality. Reservoir operations, including timing, amount and duration of water releases are according to the 2008 Truckee River Operating Agreement (TROA).

Fisheries research and monitoring has been ongoing since the early 1990s at Independence Lake, supported by the FWS. USGS is the lead agency for development of LCT restoration strategies and is currently conducting a long term research project on the population ecology of LCT at the lake. The USGS research results will be used in developing TNC's fish monitoring and research management plan. Goals of that plan would likely include working to restore the annual adult spawning population of LCT and developing an understanding of population ecology of LCT in relation to kokanee salmon.

#### **Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative Reclamation would not provide funding to TNC to acquire the 2,325 acres around Independence Lake. If TNC wasn't able to raise funds from other sources for the acquisition, the land could be subject to possible sale in whole or in part by NV Energy and could have development occur in the area. Impacts to public recreation could either be increased recreation if a recreation-based development occurred or recreation could be eliminated if a new landowner denied public access and recreation use of the area.

There would be no impacts to TMWA's operation under this alternative because acquisition of the land by any entity is subject to TMWA's operational requirements of the reservoir and the terms of existing TMWA conveyance documents. The status of TMWA's easements, water rights and reservoir operations are not affected by changes in ownership of the surrounding land.

If a new landowner didn't allow the fisheries research and monitoring to continue this would be an adverse impact to the LCT research.

#### **Proposed Action – Providing Funding Alternative**

TNC intends to address the recreational use of the area without compromising its biological objectives for the lake and surrounding lands. TNC believes that recreation can be compatible with the Lake's conservation targets. TNC will be developing a recreation management plan at some future date; this plan may change existing recreation conditions, but impacts to recreation are expected to be minimal because TNC anticipates leaving the area open to public recreation.

There would be no impacts to TMWA's operation under this alternative because acquisition of the land by TNC or any entity is subject to TMWA's operational requirements of the reservoir and the terms of existing TMWA conveyance documents. The status of TMWA's water rights,

easements and reservoir operations are not affected by changes in ownership of the surrounding lands.

There would be no impacts to the fisheries research and monitoring land use because TNC intends to allow those activities to continue.

#### **Vegetation Communities**

#### **Affected Environment**

Independence Lake is surrounded by upland forests, upper montane mixed chaparral, aspen, and riparian vegetation complexes. The majority of the land area is upland forest, but the lowland riparian area includes important wet montane meadows, riparian aspen, willow, mountain alder and cottonwood trees as well as springs and seeps. The overall assemblage of alpine lake, montane coniferous forests, mixed chaparral, aspen stands, and diverse riparian vegetation constitutes a rare ecosystem in relatively pristine condition.

Upland forest stands are primarily mixed conifer consisting mostly of white fir and Jeffrey pine, with upper elevation stands having higher red fir composition. Lodgepole pine stands exist around the lake outlet and campground areas, including some dense thickets of small diameter trees. Aspen stands of varying sizes are found throughout the area.

Scattered large diameter Jeffrey pine trees occur in areas in the overstory and larger diameter pine stumps from past timber harvesting are present on portions of the land to be transferred. These larger pine trees and stumps may indicate that Jeffrey pine was a predominant species in the upland forest stands prior to fire suppression and historic logging. The overstory pine trees provide an important seed source and forest structure component.

Upland mixed conifer forest stands display evidence of white fir mortality caused by the fir engraver beetle (Scolytus ventralis). The white fir stands in many areas are in moderate to poor condition. Past fir engraver beetle activity has left many trees with dead spiked tops and low live crown ratios. The white fir mortality has also resulted in concentrated pockets of dead trees on the ground creating areas of heavy fuel loading which contributes to wildfire risk. Some recent mountain pine bark beetle (*Dendroctonus spp.*) activity can be found in the dense lodgepole stands around the campgrounds and lake outlet.

Some forest stands in the area are densely stocked. Drought conditions can increase risk of disease and insect mortality in crowded stands of decadent white fir and in lodgepole thickets. In some areas dense white fir-dominated conifer stands have little or no healthy pine reproduction because the understory pines are not able to effectively compete for site resources (light, nutrients, and water) with white fir. The dense stocking also increases the risk of stand replacing wildfire because of excessive ladder and crown fuels, putting forest stands at risk including important forest overstory pine trees.

Aspen stands in the area have moderate to severe conifer encroachment which is a threat to aspen survival. Aspen is shade intolerant and requires ample sunlight to thrive. Approximately 100

years of fire suppression has allowed conifers such as white fir and pine to encroach into areas historically occupied by aspen. Aspen is being overtopped and shaded out affecting future viability of the species. Aspen is an important ecological forest type that is disappearing from the western landscape. Active forest management to remove conifers within and around aspen stands can help existing stands to increase in size and thrive.

#### Federally Listed and Candidate Species – Plants:

Webber's ivesia (*lvesia webberi*) is listed as a candidate species under the Endangered Species Act and potential habitat may exist in the project area. Webber's ivesia is a low, spreading, perennial herb and is restricted to shallow, clayey soils derived from andesitic rock on midelevation flats, benches or terraces above moderately large valleys (Witham 2000). The plant has been found on open summits and ridge-tops and in meadow areas on drier, raised hummocks (ibid). Its habitat is comprised of sparse to moderately dense vegetation usually dominated or co-dominated by Webber's ivesia and low sagebrush or squirrel-tail grass in association with a wide variety of dwarfed or cushion-like perennial herbs (ibid).

Webber's ivesia is known from 15 occurrences clustered in seven general locations in Lassen, Plumas, and Sierra Counties, California, and in Douglas and Washoe Counties, Nevada. All known occurrences of Webber's ivesia are a considerable distance from Independence Lake in primarily different vegetation types with the closest being the Sierra Valley occurrence on a private in-holding of the Tahoe National Forest. Although the Independence Lake project area may contain potential habitat attributes for Webber's ivesia, no occurrences of this species have been documented.

#### **Environmental Consequences**

#### No Action Alternative

Under the No Action Alternative Reclamation would not provide funding to TNC to acquire the 2,325 acres around Independence Lake. If TNC wasn't able to raise funds from other sources for the acquisition then the land could be subject to possible sale in whole or in part. This could lead to development or other disturbance that has the potential to impact the vegetation communities of the area. Types of possible impacts could include clearing of vegetation for development and increased wildfire hazard from equipment caused fires and increased human use of the area.

#### Federally Listed and Candidate Species - Plants

Webber's ivesia is not known to exist in the project area, so no impacts to the plant or its habitat are expected under this alternative.

#### **Proposed Action – Providing Funding Alternative**

TNC's management of the area would involve actions to protect and conserve the lake and surrounding areas and no adverse impacts to vegetation communities are expected. While no management plans are in place, type of management that is being considered to meet the goals of

protection of the area would be those that maintain or improve the health of the various vegetation communities. Site specific studies of the area would be required to develop detailed vegetation management plans. Given the existing conditions of the vegetation communities, management of some areas for reduction of wildfire risk could help meet the conservation and protection goals of the area. Any forest management would be required to meet the appropriate forest practice environmental regulations and requirements of the California Department of Forestry for private landowners, including involvement in management plans by a Registered Professional Forester.

#### Federally Listed and Candidate Species - Plants

Webber's ivesia is not known to exist in the project area, so no adverse impacts to the plant are expected under this alternative. The proposed acquisition by TNC is expected to conserve and protect the land and no actions are expected that constitute any risk factors to potential Webber's ivesia or its habitat. Reclamation has therefore determined that the proposed acquisition would have No Effect on this candidate species.

#### Fish and Wildlife

#### **Affected Environment – Aquatic Species**

Native fish in Independence Lake and its tributaries include LCT, Tahoe sucker, Paiute sculpin, speckled dace, Lahontan redside shiner, Lahontan lake tui chub, and mountain whitefish. Independence Lake is the only location in the Truckee River watershed to support self-sustaining populations of all native fishes that historically occurred in lakes of the upper Truckee River drainage. The dam has been in place for decades and acts as a barrier to upstream migration of invasive fish that might pose a threat to the lake's native fish.

Independence Lake usually fills from April through June and releases are generally equal to inflow until August (U.S. Bureau of Reclamation 2008). The 2008 Truckee River Operating Agreement (TROA) provides protection for the native fish by permitting the California Department of Fish and Game, in conjunction with the other signatories, to take actions to protect the fish if water levels fall below specified levels.

Non-native species have the capacity to drive native fishes to extinction and dramatically alter the lake ecosystem. Currently, Independence Lake does contain some non-native species. The goal for conservation of the area and protection of its resource values is to control or eliminate existing non-natives and minimize or prevent introduction of additional non-native species.

#### Federally Listed and Candidate Species - Aquatic

#### Lahontan cutthroat trout

Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*) is federally listed as threatened under the Endangered Species Act. The only remaining indigenous population of LCT resides in the alpine Independence Lake and the main inlet tributary Independence Creek (Peacock et al.

1999). Independence Lake has the only self-sustaining lake LCT population in the Truckee River basin. This population is genetically unique (Cowan 1988; Bartley and Gall 1993) and is vulnerable to extinction (U.S. Fish and Wildlife Service 1995).

The lake supports a small LCT catch-and-release fishery and historically supported spawning runs of 2,000 to 3,000 fish (Welch 1929). By 1960 the population had declined to less than 100 spawners per year (Gerstung 1988) despite many attempts to supplement this population with hatchery-reared native Independence Lake LCT stock. The population decline is thought to be the result of competition with non-native kokanee salmon in the lake and brook trout in the stream. Additionally, a sand/silt delta has formed where Independence Creek enters the lake, which blocks LCT spawning runs into the creek when lake storage is less than 7,500 acre-feet (U.S. Fish and Wildlife Service 1995).

Like most cutthroat trout species, LCT is an obligatory stream spawner. LCT predominantly use tributary streams as spawning sites. Spawning typically occurs from April through July throughout the range of LCT, depending on stream elevation, stream discharge, and water temperature (U.S. Fish and Wildlife Service 1995). LCT may exhibit three different life-history strategies, depending upon conditions: outmigration as fry, outmigration as juveniles, or remaining in the river as residents (Neville-Arsenault 2003; Ray et al. 2000).

TROA requires the United States and California to exchange water with TMWA to maintain Independence Lake at an elevation that would allow LCT to move to upstream spawning habitat. TROA provides that the California Department of Fish and Game can direct TMWA to provide and maintain a fish channel through the Independence Creek delta should Independence Lake storage drop below 7,500 acre-feet. The additional opportunities to provide spawning access for the Independence Lake LCT population is considered a significant beneficial effect under TROA.

Existing LCT research and monitoring is being conducted by the USGS in cooperation with the FWS. The research is seeking to determine LCT spawning patterns and population dynamics; the timing and number of LCT adults, eggs, and out-migrating fry; stream residency time of fry; LCT survival in lake; the time and location of kokanee spawning; and distribution of brook trout.

#### Mountain yellow-legged frog

Mountain yellow-legged frog (*Rana muscosa*) is a candidate species proposed for federal listing under the Endangered Species Act. Although no mountain yellow-legged frog (MYLF) have been surveyed and found on the lands proposed for acquisition around Independence Lake, the area may contain habitat considered suitable for MYLF. MYLF occur in the Sierra Nevada from 4,500 feet to over 12,000 feet elevation (Jennings and Hayes 1994).

MYLF are seldom far from water. MYLF typically prefer well illuminated, sloping banks of meadow streams, riverbanks, isolated pools, and lake borders with vegetation that is continuous to the water's edge (Martin 1992, Zeiner et al. 1988). Adults primarily feed on aquatic and terrestrial invertebrates. Tadpoles and adults of this species overwinter in deep pools with undercut banks that provide cover. Since the adults and tadpoles overwinter underwater, in high

elevations they are restricted to relatively deep lakes (over 5 feet deep) that do not freeze solid in winter (Knapp 1994).

Suitable breeding habitat for MYLFs is considered to be low gradient (up to 4%) perennial streams and lakes. Breeding occurs between May and August in high elevations as soon as the meadows and lakes are free of snow and ice. Due to the adults' overwintering underwater and the tadpoles' long metamorphosis, this species is very vulnerable to introduced fish (Knapp 1994).

The MYLF has been eliminated from 50% of its historic range in the Sierra Nevada (Jennings 1993). Museum specimens indicate that MYLF were historically well distributed on the Tahoe National Forest that surrounds the private lands around Independence Lake. The decline of MYLF in the Sierra Nevada has largely been attributed to the introduction of salmonid fishes during the last century (Bradford et al. 1993, Knapp 1994). As MYLF populations are lost, remaining populations become more isolated which can indirectly result in extinctions of additional populations and reduce opportunities for recolonization of these sites (Bradford et al. 1993).

#### <u>Affected Environment – Terrestrial Species</u>

The assemblage of terrestrial species expected in the area surrounding Independence Lake is typical of Sierra Nevada mid to upper montane habitats. The combination of alpine lake, upland conifer forest, upper montane chaparral, and a variety of riparian habitats in close proximity and in a relatively undisturbed condition makes the project area particularly rich in species diversity. Aspen, alder, cottonwood and willow riparian habitat occurs in the area as a mosaic along stream courses, wet meadow edges, springs, and areas with high water tables.

The riparian habitat groups are important for wildlife because of the distribution and quantity of thermal and escape cover as well as providing a source of high quality forage. Aspen stands are a valuable habitat for wildlife in the west, especially where aspen is the only hardwood species interspersed with coniferous forests. Aspen communities are rich and diverse in wildlife species. Locally important species that depend upon aspen include raptors (Cooper's hawk, sharp-shinned hawk, red-tailed hawk, etc.), blue grouse, mountain quail, owls, and songbirds such as warbling vireo, willow flycatchers, woodpeckers, sapsuckers and others) (U.S. Forest Service 2007).

Additional terrestrial species of interest that may have potential habitat in or near the project area include fisher, bald eagle, California spotted owl, American marten, Sierra red fox, great gray owl, northern goshawk, wolverine, pallid bat, Townsend's big eared bat, and western red bat. Other common wildlife species in this area of the Sierra include mule deer, black bear, Douglas squirrel, northern flying squirrels, chipmunks and a variety of migratory songbirds.

#### Federally Listed and Candidate Species - Terrestrial

#### Fisher

The fisher (*Martes pennanti*) (West Coast Distinct Population Segment) is a candidate species proposed for federal listing under the Endangered Species Act. Historically, fishers were distributed across forested regions of California in the Sierra Nevada, Klamath Mountains and North Coast Ranges. The species have experienced a substantial reduction in geographic range and currently occurs as two populations; one occupying the Klamath Mountains and Coast Ranges of Humboldt and Del Norte counties and one occupying Yosemite National Park south into Kern County (Lamberson et al. 2000). The extirpation of fishers throughout much of their historic range in the Pacific states is attributed to over trapping and habitat alteration (Zielinski et al. 1995, Lewis and Stinson 1998, Aubry and Lewis 2003).

Although it is unlikely fisher inhabit the area proposed for acquisition by the TNC, potential habitat may exist in the area. Fishers generally occur at elevations somewhat lower than Independence Lake. Krohn et al. (1997) suggest that fisher are limited by deep snow and consequently occupy lower elevations. Preferred fisher habitat is often in close proximity to dense riparian corridors and saddles between major drainages or other landscape linkage patterns used as adult and juvenile dispersal corridors. Abundant evidence exists for selective fisher movement patterns along drainages (Buck et al. 1983).

#### **Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative Reclamation would not provide funding to TNC to acquire the 2,325 acres around Independence Lake. If TNC wasn't able to raise funds from other sources for the acquisition, the land could be subject to possible sale in whole or in part by NV Energy. This could lead to development or other disturbance that has the potential to impact fish and wildlife and their habitat. Types of possible impacts could include clearing of vegetation for development and increased human disturbance in this currently pristine area. Increased wildfire hazard could occur from equipment caused fires and increased human use of the area.

#### Federally Listed and Candidate Species – Aquatic and Terrestrial

Risk factors to LCT, MYLFs or fisher or their existing or potential habitat could occur under this alternative. However the future ownership of the land and what land management might occur is unknown. Therefore, Reclamation has determined that the No Action alternative would have No Effect on these three species.

#### **Proposed Action – Providing Funding Alternative**

TNC's management of the area would involve actions to protect and conserve the lake and surrounding areas and no adverse impacts to fish or wildlife or their habitat is expected. While no management plans are in place, type of management that is being considered to meet the

goals of protection of the area would be those that maintain or improve the health of the various vegetation communities and protection of the lake's water quality which would improve both fish and wildlife habitat.

#### Federally Listed and Candidate Species- Aquatic and Terrestrial

The proposed acquisition by TNC is expected to result in conservation and protection of the acquired land and the lake. No actions are expected that constitute any risk factors to LCT, MYLFs or fisher or their existing or potential habitat. Reclamation has therefore made a determination that the proposed acquisition would have No Effect on these three species.

The purpose of the LCT research and monitoring is to ensure the long-term viability of the fishery. This research that benefits the species would continue under this alternative and provide a better understanding of the population ecology of LCT in relation to non-native fish.

At the time of listing of LCT, the FWS issued an ESA section 4d rule that deferred management to the states. Therefore, permits for scientific research and monitoring for the species are issued by the states. Section 7 (a)(2) consultation with the FWS for scientific research or monitoring is not necessary. The USGS researchers have the appropriate state permits for the research.

#### **Cultural Resources**

#### **Affected Environment**

Cultural resources is a term used to describe both 'archaeological sites' depicting evidence of past human use of the landscape and the 'built environment' which is represented in structures such as dams, roadways, and buildings. Cultural resources may also be Traditional Cultural Properties or sites of religious and cultural significance which are important to Native American individuals and communities.

The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation which outlines the Federal Government's responsibility to cultural resources. Other applicable cultural resources laws and regulations that could apply include, but are not limited to, the Native American Graves Protection and Repatriation Act, and the Archaeological Resources Protection Act. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (National Register) and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties. Historic properties may include prehistoric and historic districts, sites, buildings, structures, or objects.

The Section 106 process is outlined in the Federal regulations at 36 CFR Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking will have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action that has the potential to

affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Officer to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

Reclamation conducted a records search of the proposed acquisition area through the Northeast Information Center and the North Central Information Center of the California Historical Resources Information System. The results of this records search indicated that there have been no cultural resource inventories within the Area of Potential Effect (APE), although a number of timber sale inventories have been conducted on adjacent land. The records search identified two historic logging sites, a historic aspen carving site, and a sparse lithic scatter, all located near the border of the APE and adjacent United States Forest Service lands. All four cultural resources extend at least partially into the APE. While the APE has not been subject to previous inventory coverage, surveys conducted adjacent to the APE identified cultural resources, including the four mentioned above, that are located within or extend into the APE. This suggests that there may be additional cultural resources located within the APE, potentially including prehistoric Native American sites and sites reflecting historic-era uses such as grazing and logging. It is also possible that some of these cultural resources could be found eligible for inclusion in the National Register of Historic Places (National Register) if evaluated.

TNC has not developed management plans for the area, though they may implement land management in the future to reduce fire/fuels hazards in some areas. They intend to allow public recreation, but details of recreation management are also undetermined at this time. Reclamation's role in the project is limited to providing funds for the land acquisition, research and administrative management, and the agency does not have approval authority nor is it providing funding for any future land management that may be implemented by TNC. For the purposes of this undertaking only, Reclamation assumes that all cultural resources located within the APE are historic properties eligible for inclusion in the National Register.

#### **Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative, Reclamation would not provide funding to TNC to acquire the 2,325 acres around Independence Lake or for research and administrative actions. The future of the land surrounding Independence Lake would be unknown. TNC may be able to raise funds from other sources for the acquisition for the purpose of protecting the native fisheries and unique resource values of the area. If TNC did not purchase the property it would be subject to possible sale in whole or in part to be used for other uses that may not be compatible with conservation of the lake and fisheries. Development or other actions that could occur on the property by future landowners have the potential to impact cultural resources. Under the No Action Alternative, Reclamation would not have an undertaking as defined by Section 301w(7)

of the NHPA (16 U.S.C 470), and would not be required to consider possible effects to historic properties from the actions of current or future landowners.

#### **Proposed Action – Providing Funding Alternative**

Reclamation's Proposed Action is limited to providing funds for the acquisition of land around Independence Lake, fishery research and monitoring, and project management including personnel, supplies and services. Reclamation does not have statutory authority over future management of the land and is not proposing to provide funding for any future land management activities that may be implemented by TNC. Reclamation has considered the degree of Federal involvement and the nature and extent of potential effects on historic properties in assessing the appropriate level of historic property identification efforts, as directed at 36 CFR Part 800.4(b)(1). Reclamation conducted cursory historic property identification efforts within the APE, contacted the Washoe Indian Tribe, and consulted with the State Historic Preservation Officer as required by 36 CFR Part 800. Reclamation, in consultation with the State Historic Preservation Officer, has found that the use of Federal funds to assist with the acquisition of approximately 2,325 acres around Independence Lake will not adversely affect historic properties pursuant to 36 CFR Part 800.5(b), thus concluding Reclamation's Section 106 compliance process.

#### **Indian Trust Assets**

#### **Affected Environment**

Indian trust assets are legal interests in property or natural resources held in trust by the United States for Indian Tribes or individuals. The Secretary of the Department of Interior is the trustee for the United States on behalf of Indian Tribes. All Interior bureaus share the Secretary's duty to act responsibly to protect and maintain Indian trust assets reserved by or granted to Indian Tribes or Indian individuals by treaties, statutes, and Executive orders. Examples of trust assets include lands, minerals, hunting and fishing rights, and water rights. The Department of Interior carries out its activities in a manner that protects trust assets and avoids adverse impacts when possible. When adverse impacts cannot be avoided, appropriate mitigation or compensation is to be provided in consultation with the affected Tribes and/or individuals.

There is one Tribe potentially affected by the proposed project, the Washoe Tribe of Nevada and California (Washoe Tribe). The Washoe Tribe is a federally recognized Indian tribe organized pursuant to the Indian Reorganization Act of June 18, 1934, as amended. The Tribal office is located in Gardnerville, Nevada. The Washoe Tribe has four communities, three in Nevada (Stewart, Carson, and Dresslerville), and one in California (Woodfords). There is also a Washoe community located within the Reno-Sparks Indian Colony. The Washoe Tribe has jurisdiction over trust allotments in both Nevada and California, with additional Tribal Trust parcels located in Alpine, Placer, Sierra, Douglas, Carson, and Washoe Counties. Tribal history extends an estimated 9,000 years in the Lake Tahoe basin and adjacent east and west slopes and valleys of the Sierra Nevada. The present day Washoe Tribe has deep roots in the past, radiating from Lake Tahoe, a spiritual and cultural center, and encompassing an area that stretches from Honey Lake to Mono Lake.

Indian trust assets and concerns include, but are not necessarily limited to, land, water quality, fisheries, native plants, wildlife resources, and cultural sites. These resources are important for both cultural and traditional practices.

#### **Environmental Consequences**

#### **No Action Alternative**

Under the No Action Alternative Reclamation would not provide funding to TNC to acquire the 2,325 acres around Independence Lake. If TNC wasn't able to raise funds from other sources for the acquisition, the land could be subject to possible sale in whole or in part by NV Energy. Future development or other disturbance that could occur has the potential to impact values of the Washoe Tribe including impacts to water quality, native plants, fish and wildlife, and any potential cultural sites in the vicinity of the lake. Types of possible impacts could include be clearing of vegetation for development, increased human disturbance of the generally pristine area, and increased wildfire hazard from equipment caused fires and higher human use of the area.

#### **Proposed Action – Providing Funding Alternative**

TNC's management of the area would involve actions to protect and conserve the lake and surrounding areas and no adverse impacts are expected to water quality, native plants, fish and wildlife and any potential cultural sites in the vicinity of the lake. TNC intends to protect and enhance these resource values in the area. No adverse impacts to Indian Trust Assets of the Washoe Tribe would occur under this alternative.

#### **Environmental Justice**

Executive Order 12898 (1994), "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," provides that each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

No minority or low-income populations occur in or near the project area. Land uses under the acquisition proposal are expected to be similar to existing conditions, therefore there would be no adverse human health or environmental effects to minority or low-income populations. As identified in the Indian Trust Assets section, no Indian Trust Assets of the Washoe Tribe of California and Nevada would be adversely impacted by the proposed acquisition.

#### **Cumulative Effects**

The Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) define cumulative impacts as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and

reasonably foreseeable future actions regardless of which agency (Federal or non-Federal) or person undertakes such actions (40 Code of Federal Regulations [CFR] section 1508.7)." Projects with a connection or potential cumulative effects on affected resources of the Independence Lake area proposed for acquisition would likely be potential Forest Service management on adjacent lands within the watershed.

Forest Service management of the forest land on the Truckee and Sierraville Districts of the Tahoe National Forest in recent years and expected for the future in the watershed has primarily been forest management for forest health and fire/fuels reduction. Forest management has included forest thinnings, salvage of dead trees, and small group selections as well as associated slash and fuel loading reduction. These two Districts also manage for public recreation and have implemented wildlife habitat improvement and watershed restoration projects.

The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations. This mission and Forest Service management is complimentary with the conservation goals of TNC for the lands surrounding Independence Lake and protection of the environment. No cumulative impacts on the environment are expected from the proposed acquisition and management of the lands by TNC when added to other past, present, and reasonably foreseeable future actions of other land management in the watershed.

#### **Consultation and Coordination with Others**

A public scoping letter on the acquisition project was sent to a list of potentially interested parties on January 16, 2009 requesting comments to assist with development of the EA. News releases were sent to Reclamation's Public Affairs newspaper list including the Sierra Sun in Truckee and the Reno Gazette Journal.

A government to government tribal consultation letter on the acquisition project was sent to the Washoe Tribe of Nevada and California dated January 16, 2009. Reclamation's Regional Archaeologist also sent a consultation letter dated November 26, 2008 to the Tribal Chairman and Tribal Historic Preservation Office.

Comments were received during scoping from four parties, TMWA, FWS, Robert Haug (long-term caretaker of the property) and a one-time visitor of the area. The letters provided clarifications of TMWA and FWS jurisdiction, information on the area, and questions and comments on TNC's future management.

The EA was circulated for a 30-day comment period to the interested parties mailing list and noticed via news releases. Comments were received from four parties, FWS, California Department of Fish and Game, Robert Haug, and long-term recreational user of the area, Tom Young. Comments included support for the acquisition, requests for clarification of potential TNC management funding, questions on LCT research and monitoring, corrections to existing conditions at the lake, support of potential fire/fuels management by TNC, complaint of government entities interference causing adverse effects on LCT, and a request to keep the area

open to the public and as natural as possible. Comments were evaluated and corrections and edits were made to the EA as determined to be appropriate. None of the comments resulted in changes to the environmental consequences of any resource.

### **List of Preparers**

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