

**Conservation Strategy
for
the Southwestern Willow Flycatcher**



**on
City of Los Angeles
Department of Water and Power Lands
in the Owens Management Unit**



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A. Background

Federal Status: On October 12, 2004, the U.S. Fish and Wildlife Service (Service) published a proposed rule to designate critical habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) in the Federal Register (69 FR 60706). The proposed critical habitat designation includes 376,095 acres [including approximately 1,556 stream miles (2,508 stream kilometers)] in southern California, southern Nevada, southwestern Utah, south-central Colorado, Arizona, and New Mexico. The proposed critical habitat includes riparian habitat along a 69-mile long reach of the Owens River and a 0.9 mile long reach of Rock Creek in Inyo and Mono Counties, California. The Owens River segment is bounded on the upstream end by a point that is located 0.5 mile east of the Long Valley Dam, and is bounded on the downstream end by a point that is 4 miles north of Tinemaha Reservoir. The Rock Creek segment consists of the downstream-most portion of the creek in Birchim Canyon before it intersects the Owens River. These lands along the Owens River and Rock Creek are owned and managed by the Los Angeles Department of Water and Power (LADWP). For the purposes of this document, this 69-mile long Owens River segment and the 0.9 mile long Rock Creek segment will be referred to as the “Owens Management Unit”.

Critical Habitat: Section 4(b)(2) of the Act allows the Secretary to exclude from the designation of critical habitat any lands or property if the Secretary determines that the benefit of excluding such lands or property from the designation outweighs the benefit of including such property in the designation, provided that the Secretary does not determine that excluding such lands would lead to the extinction of the species for which critical habitat is being designated. The Secretary is expected to weigh the benefits of including the Owens Management Unit within the designation for the southwestern willow flycatcher (but without the benefit of these conservation measures) against the benefits of excluding the Owens Management Unit from the designation (but having the benefit of this conservation strategy being implemented on the Property) and to make a decision as to whether to exclude the unit from the final critical habitat designation under Section 4(b)(2) of the Act.

Life History of the Southwestern Willow Flycatcher: The southwestern willow flycatcher is one of four subspecies of willow flycatcher. The species is migratory, and individuals winter south of the southern United States border. Southwestern willow flycatchers typically arrive at their breeding grounds between early May and early June. In south-central Arizona, a few southwestern willow flycatchers arrive on territories as early as the third week in April. Data on the southward departure of southwestern willow flycatchers from their breeding grounds are few, but the available documentation suggests these birds leave their breeding areas in mid- to late August.

The habitat preferences of the southwestern willow flycatcher are described in the final recovery plan that addresses the species. In summary, this document states that “The southwestern willow flycatchers breed in substantially different types of riparian habitat across a large elevational and geographical area. Breeding patch size, configuration, and plant species composition can vary dramatically across the subspecies’ range. However,

certain patterns emerge and are present at most sites. Regardless of the plant species composition or height, occupied sites always have dense vegetation in the patch interior. In most cases this dense vegetation occurs within the first 3 - 4 m (10-13 ft) above ground. Canopy cover is usually very high - typically 80% or greater. These dense patches are often interspersed with small openings, open water, or shorter/sparser vegetation, creating a mosaic that is not uniformly dense. Nesting habitat patches will tend not to be very narrow, as single rows of trees bordering a small stream. In almost all cases, slow-moving or still surface water and/or saturated soil will be present at or near breeding sites during wet or normal precipitation years. Southwestern willow flycatchers do nest in some riparian habitats containing and even dominated by saltcedar. In terms of southwestern willow flycatcher productivity, the suitability of saltcedar dominated habitats is not known.

The southwestern willow flycatcher is a diurnal insectivore, catching its prey on the wing usually in the middle story of riparian woodland.

Males maintain and advertise a territory by singing to attract females. Territorial defense begins immediately after spring arrival. Females occasionally sing, apparently when stimulated by territorial disputes. Male southwestern willow flycatchers sing most persistently early in the breeding season, but song rate declines as the season progresses, particularly once the male finds a mate and nesting efforts begin. Mapped breeding territory sizes are 0.15 to 0.5 acres on the Colorado River, 0.5 to 1.25 acres along the Verde River, Arizona, and 0.35 to 5.7 acres along the Kern River, California. In historic egg collections from southern California, 86 percent of nests were in willows (*Salix* spp.), 4 percent in stinging nettles (*Urtica dioica*), and 10 percent in other plants. Evidence gathered during multi-year studies of color-banded populations show that although most southwestern willow flycatchers return to former breeding areas, they regularly move among sites within and between years. From 1997 to 2000, 66 percent to 78 percent of southwestern willow flycatchers returned to the same breeding site. Within drainage movements are more common than between drainage movements.

In some cases, willow flycatchers are faced with situations that force movement, such as when catastrophic habitat loss occurs from fire or flood. Several such cases have been documented, with some of the resident willow flycatchers moving to remaining habitat within the breeding site, some moving to other sites 1.2 to 16.8 miles away, and others disappearing without being seen again.

Activities That May Adversely Affect the Southwestern Willow Flycatcher: The decline in the abundance of the southwestern willow flycatcher may be attributed to four broad categories that include: 1) the loss and modification of habitat that is related to the construction and operation of dams and reservoirs, water diversions and ground water pumping, channelization and bank stabilization, phreatophyte control, livestock grazing, recreation, fire, agricultural development, and urbanization; 2) changes in the abundance of other species, including exotic species, and brood parasitism from cowbirds; 3) vulnerability of small populations, which may induce demographic effects or genetic effects; and 4) migration and winter range stresses.

While many potential threats are noted above, livestock grazing, recreation and fire have the greatest potential for causing adverse effects on LADWP land. This conservation strategy is focused on reducing the adverse effects related to these three threats. These threats are discussed in greater detail below, so the benefits that are derived from the implementation of the conservation strategy can be more clearly identified. The text that describes these three threats is derived from the final recovery plan that pertains to the southwestern willow flycatcher (Service 2002).

Livestock Grazing: If not properly managed, livestock grazing can significantly alter plant community structure, species composition, relative abundance of species, and alter stream channel morphology. The primary mechanism of effect is by livestock feeding in and on riparian habitats. Over-utilization of riparian vegetation by livestock also can reduce the overall density of vegetation, which is a primary attribute of southwestern willow flycatcher breeding habitat. Palatable broadleaf plants like willows and cottonwood saplings may also be preferred by livestock, as are grasses and forbs comprising the understory, depending on season and the availability of upland forage. Livestock may also physically contact and destroy nests. Livestock also physically degrade nesting habitat by trampling and seeking shade and by creating trails that nest predators and people (see Recreation subsection below) may use. Furthermore, improper livestock grazing in watershed uplands above riparian systems can cause bank destabilization, increased runoff, increased sedimentation, increased erosion, and reduced capacity of soils to hold water.

Recreation: In the warm, arid Southwest, recreation is often concentrated in riparian areas because of the shade, water, aesthetic values, and opportunities for fishing, boating, swimming, and other activities. Adverse effects that may arise as a result of recreational activities include reduction in vegetation through trampling, clearing, woodcutting and prevention of seedling germination due to soil compaction; bank erosion; increased incidence of fire; promoting invasion by exotic plant species; promoting increases in predators and scavengers due to food scraps and garbage (ravens, jays, grackles, skunks, squirrels, domestic cats, etc.); promoting increases in broodparasitic cowbirds; and noise disturbance. Recreational development also tends to promote an increased need for foot and vehicle access, roads, pavement, trails, boating, and structures which fragment habitat (i.e., verandas, picnic areas, etc.).

Fire: Fire is an imminent threat to occupied and potential southwestern willow flycatcher breeding habitat. Fires in riparian habitats are typically catastrophic, causing immediate and drastic changes in riparian plant density and species composition. Tamarisk, a nonnative species, recovers more rapidly from fire than does cottonwood and willow, and the recolonization of burned areas by tamarisk tends to reduce the abundance of native cottonwood and willow that have historically constituted the primarily plants that southwestern willow flycatchers rely upon.

Status of the Southwestern Willow Flycatcher in the Owens Management Unit: The southwestern willow flycatcher breeds at least as far north as Pleasant Valley, Inyo

County and the area within the Owens Management Unit that is proposed critical habitat is at the northernmost range of *E. t. extimus* in California. Based on a small sample of museum specimens, Unitt (1987) concluded that the northern limit of occurrence of *E. t. extimus* was Independence, Inyo County. Specimens from northern Inyo and Mono counties all proved to be of the Great Basin subspecies (*E. t. adastus*) (Unitt 1987 from Laymon and Williams 2000). Genetic sampling conducted in 1999 on willow flycatchers breeding in Pleasant Valley 7 miles northwest of the city of Bishop concluded that the willow flycatchers at this site should be affiliated with *E. t. extimus* (Paxton 2000), therefore extending the boundary of breeding for this subspecies to at least northern Inyo County.

The willow flycatcher is a neotropical migrant that is present in Owens Valley from late-April to September. A large breeding population of southwestern willow flycatchers exists in northern Inyo County, from Pleasant Valley south to just south of Line Street in the city of Bishop. This population was first discovered in 1993 during general avian surveys by Steve Laymon and Pamela Williams (Laymon and Williams 2000). During those surveys, which did not cover all available habitat, 10 singing male willow flycatchers were detected (Laymon and Williams 2000). Focused willow flycatcher surveys conducted in 1999 detected 11 pairs plus an additional 14 males on one survey conducted from Long Valley Dam to approximately 2.5 km south of Line Street in Bishop (Laymon and Williams 2000). Only very small sections of the Owens River gorge (from Long Valley Dam to Pleasant Valley Dam) were visited during this survey, which only included one visit. In addition, single visit observations of territorial willow flycatchers and pairs were noted in 1999 and include two pairs along the Owens River near Lone Pine and two pairs at Sanger Slough, just north of Tinemaha Reservoir. The most recent surveys for willow flycatchers along Owens River were conducted in 2001. The Owens River was surveyed from Pleasant Valley, to south of Poleta Road, east of Bishop. A total of 24 territories were detected during this single visit in 2001 (Whitfield 2001). Willow flycatchers were only detected from Pleasant Valley to just south of Line Street in 2001. In addition, general avian surveys conducted in 1996 (Ecosystem Sciences 1997) and 2001 (LADWP unpublished data) in selected sections of the Owens River Gorge detected one willow flycatcher in the lower gorge in mid-August. It is suspected that that bird was a migrant.

The final recovery plan for the southwestern willow flycatcher notes that at the time the Service finalized the plan in 2002, there were 28 known southwestern willow flycatcher territories in the Owens Management Unit. The recovery plan estimates that at least 525 southwestern willow flycatcher territories will need to become established across the species' entire geographic range before it is possible to consider reclassifying the bird as a threatened taxon, and that 50 of these territories should occur in the Owens Management Unit.

B. Project Location

The project location consists of the Owens Management Unit described above.

C. Project Description

The Los Angeles Aqueduct conveys drinking water to the City of Los Angeles from the Owens River and thus it is part of a drinking water supply as defined and regulated by the Clean Drinking Water Act (See 42 USC § 300f *et seq.*). The United States Congress has mandated that the safety of drinking water be given the highest priority in its legislative enactments:

The Congress finds that safe drinking water is essential to the protection of public health (Congressional findings on amendment of 42 USC § 300f on Aug. 6, 1996).

Congress included drinking water supplies, as defined in the Safe Drinking Water Act, as deserving of protection in the Comprehensive Environmental Response Compensation and Liability Act ((CERCLA) 42 USC § 9601 subd. (7)) and further mandated in 42 USC § 9620 that:

Each department, agency, and instrumentality of the United States (including the executive, legislative and judicial branches of government) shall be subject to and comply with, this Act in the same manner and to the same extent, both procedurally and substantively, as any nongovernmental entity, including liability under section 107 of this Act [42 USC § 9607].

In sum, no agency of the federal government should require that the safe/proper operation of a municipal drinking water system be compromised as a condition of a federal permit, order, designation, etc. The City of Los Angeles Department of Water and Power will continue to operate its aqueduct system as required to supply water to its citizens.

With regard to the southwestern willow flycatcher, the LADWP proposes to manage livestock grazing, recreation, and fire management activities in the Owens Management Unit in a manner that is compatible with the conservation of the southwestern willow flycatcher. Management of the proposed critical habitat will involve the following measures:

Livestock Grazing: Cattle currently graze all riparian areas along the Owens River, including all the area within the proposed critical habitat. Current management is at the discretion of each individual livestock operator, and LADWP has previously provided little input regarding appropriate use on these leases. In some areas, livestock use within the riparian zone exceeds levels that are desirable for the protection of riparian habitats critical to the southwestern willow flycatcher. Seven grazing leases currently exist within the Owens Management Unit.

To promote the establishment and maintenance of native riparian habitat that is preferred by the southwestern willow flycatcher, the LADWP will implement the following measures within the proposed critical habitat:

1. New riparian pasture and riparian utilization rates will be implemented within the area proposed as critical habitat. These utilization rates of not to exceed 40% use of the herbaceous forage should facilitate the development of dense vegetation within 10-13 feet of the ground, which is the preferred nesting habitat of the southwestern willow flycatcher.
2. Timing restrictions for when cattle will be allowed to graze in riparian habitats will be implemented. The specified period of use for riverine riparian pastures will be during the winter months (October through April). These timing restrictions will ensure that there are no livestock within the riparian areas during either the critical period for riparian plant establishment and growth, or the nesting season for southwestern willow flycatchers.
3. Livestock will be removed from the riparian areas within the proposed critical habitat area when either the utilization rate, or the period of use criteria has been met, whichever occurs first. These measures should protect the habitat of the southwestern willow flycatcher and reduce the potential that birds will be disturbed by cattle operations when they are present.
4. The condition of riparian habitat within each grazing lease will be monitored on an annual basis using LADWP range condition and trend protocols (USDA Rangeland Analysis and Planning Guide, 1997) , and these data will be used to determine if grazing prescriptions allow for the development of suitable southwestern willow flycatcher habitat.
5. An adaptive management approach will be implemented, and livestock management practices will be revised (i.e., changes in timing, duration, utilization rates, distribution within the pastures) so the preferred habitat of the southwestern willow flycatcher can become established and persist.

These 5 measures will be implemented throughout the proposed critical habitat unit within the Owens Management Unit. Additional measures may be implemented as necessary within an individual cattle lease to enhance habitat of the southwestern willow flycatcher. These measures may include but are not limited to: additional fencing, off-river stockwater supplies, and supplemental feeding.

Because there are seven grazing leases within the Owens Management Unit, and these leases occur over a relatively large area (i.e., a 69-mile long reach of the river), it is not feasible to implement all of the above-mentioned measures within a relatively short period of time. Therefore, the LADWP will begin to implement these five measures in 2007, and have all of the measures fully implemented by July 2010.

Recreation: LADWP owns the majority of land in the Owens Valley, including the entire Owens River corridor. Presently, this land is largely unrestricted for public use. LADWP's policy is to retain approximately 75% of Department lands in the Owens

Valley open for public recreational use. The other 25% of Department lands in the Owens Valley are posted "No Trespassing."

To promote the establishment and maintenance of native riparian habitat that is preferred by the southwestern willow flycatcher, the LADWP will implement the following recreation management measures:

1. No overnight camping will be permitted on any LADWP lands within the proposed critical habitat area.
2. No firewood cutting or wood gathering will be permitted within the proposed critical habitat area.
3. Vehicular access will be limited along the river to designated parking areas by installing fencing, blocking roads, and creating off-river parking areas. Walkthrough access will be provided.

The prohibitions against camping and firewood cutting are already in effect. However, because of the relatively large area (i.e., a 69-mile long reach of the river), it is not feasible to implement all access control measures within a relatively short period of time. Therefore, the LADWP will begin to implement these measures in 2007, and have a majority of the measures fully implemented by 2010.

Fire Management: The Recovery plan states that the primary cause of the flycatcher's decline is loss and modification of habitat. The plan identifies fire as a threat to the flycatchers through modification of riparian ecosystems. LADWP lands are covered under the Interagency Fire Response Plan. The responsibility for fire suppression on LADWP property, including the proposed critical habitat area, lies with the California Department of Forestry (CDF). The CDF has classified this area as a Designated Protection Area (DPA) which means that they will respond to fires first in this area. The plan states that, if no CDF Fire Resources are in the area or if additional crews and equipment are needed, Interagency Fire crews from the Bureau of Land Management and U.S. Forest Service will staff the fire until CDF arrives at the scene or assumes control of the fire. If the fire is larger than a spot fire, the Local Government Resources or fire districts are requested to respond and aide in fire suppression.

To promote the establishment and maintenance of native riparian habitat that is preferred by the southwestern willow flycatcher, the LADWP currently implements the following management measures designed to minimize the adverse effects of fire within the proposed critical habitat area:

1. LADWP provides personnel and heavy equipment support to assist the above agencies in fire suppression.
2. LADWP and CDF have an agreement that states that a LADWP Resource Representative is consulted during suppression activities on LADWP land and is part

of the Joint Unified Command for the fire. This LADWP Resource Representative helps direct suppression activities in sensitive areas including the Owens Management Unit. While safety is the highest priority, actions are taken to minimize impacts to riparian habitats and have been very successful in the past.

3. No burning will be allowed on LADWP lands without the written approval of LADWP. Lessees will not burn any part of their lease without receiving LADWP approval. All managed burning for the purpose of improving rangeland, wildlife habitat, and/or watershed condition, will be conducted under the direction of LADWP. Controlled burning within the proposed critical habitat area will not normally include habitats that are preferred by the southwestern willow flycatcher.
4. Unintentional fires in riparian woodland areas will be given high priority fire suppression.
5. After a significant fire within the proposed critical habitat area, LADWP resource staff will pursue management actions to facilitate quick recovery of the riparian habitats. These actions include flow, grazing, and recreation management adjustments to promote the recovery of riparian habitat that is preferred by the southwestern willow flycatcher.

Other activities that protect the critical habitat:

1. LADWP currently documents, identifies, treats, and monitors exotic weed infestations on LADWP lands and provides information to the Eastern Sierra Weed Management Association (ESWMA) database. LADWP arranges for the control of infestations on LADWP administered lands through the pesticide permitting process of the Inyo/Mono Counties Agricultural Commissioner's Office and through discussions with the ESWMA working group.
2. LADWP currently prohibits dumping on its lands and cleans up illegal dump sites as soon they are identified.
3. LADWP policy does not promote urban or agricultural development on its lands within the proposed critical habitat of the southwestern willow flycatcher.

LADWP shall implement the aforementioned measures and activities with the goal of promoting the establishment of 50 southwestern willow flycatcher territories in the Owens Management Unit.

D. Reporting Requirements

The LADWP will send the Service a status report at the end of each year after the Memorandum of Understanding is signed. The report will include information pertaining to the implementation of the measures contained in this Conservation Strategy (e.g., level

of difficulty LADWP had with the Conservation Strategy implementation) and any suggestions or recommendations to aid in the implementation of the Conservation Strategy.

E. Purpose/Objective

USFWS considers a conservation plan to provide adequate management or protection if it meets three criteria: (1) The plan is complete and provides a conservation benefit to the species (i.e., the plan must maintain or provide for an increase in the species' population, or the enhancement or restoration of its habitat within the area covered by the plan); (2) the plan provides assurances that the conservation management strategies and actions will be implemented (i.e., those responsible for implementing the plan are capable of accomplishing the objectives, and have an implementation schedule or adequate funding for implementing the management plan); and (3) the plan provides assurances that the conservation strategies and measures will be effective (i.e., it identifies biological goals, has provisions for reporting progress, and is of a duration sufficient to implement the plan and achieve the plan's goals and objectives). The land the LADWP proposes to be covered by this agreement is comprised of 49,000 acres located along the Owens River between the Long Valley Dam and a point 4 miles north of Tinemaha Reservoir, and the portion of lower Rock Creek located in Birchim Canyon; these areas are located in Inyo and Mono Counties, California. This proposed conservation strategy meets the criteria in the following ways:

(1) The plan is complete and provides a conservation benefit to the species:

The riparian grazing prescription will enhance the survival of riparian shrubs and trees during their first years of growth and achieve LADWP's riparian objectives. Grazing management methods will minimize impacts to the young age classes of riparian willow and cottonwood trees. This will allow the riparian community to develop dense thickets of trees and shrubs. Adaptive Management will allow for necessary grazing adjustments.

Recreation plan implementation will act to protect and/or restore riparian areas to minimize erosion, improve bank stability, and enhance plant biodiversity as well as provide for the protection of wildlife and sensitive plant species in riparian areas, meadows, and other locations of importance.

Unintentional fires in riparian woodland areas will be given high priority fire suppression. If fires affect significant portions of the Owens River, LADWP resource staff will pursue management actions to facilitate quick recovery of the riparian habitats. Flow, grazing, and recreation management adjustments provide the opportunity to speed the recovery process.

(2) The plan provides assurances that the conservation management strategies and actions will be implemented:

As the sole landowner within the proposed critical habitat in the Owens Management Unit, LADWP's overall goal of managing the water resources is to avoid certain described decreases and changes in vegetation and to cause no significant effect on the environment which cannot be acceptably mitigated while providing a reliable supply of water for export to Los Angeles and for use in Inyo County (Agreement 1989).

This conservation strategy will be a long-term effort, and will require a commitment on the part of the recipient and Service staff to ensure that all measures to continue with the management or protection efforts as described are followed accordingly. By signing the attached signature sheet, the LADWP is committing the resources necessary to implementing this conservation strategy and the management strategy described above. Service personnel may ensure that the above measures are continually implemented. The LADWP will provide annual reports to the Service as specified above, and authorize Service personnel routine visits with advanced notice.

(3) The plan provides assurances that the conservation strategies and measures will be effective:

The Conservation Strategy is applicable for a period not to exceed 10 years to those areas of land on the Owens Management Unit proposed as critical habitat for the southwestern willow flycatcher owned by the Los Angeles Department of Water and Power as set forth in the Service's October 12, 2004 proposed rule (69 FR 60706). At the end of the 10-year period, the Service and LADWP will conduct a joint evaluation to determine if there is a need to renew the conservation strategy for an additional 10-year period. If this Conservation Strategy does not prove to be compatible with southwestern willow flycatcher conservation, LADWP and Service personnel will review the strategy and management activities to determine what mutually agreeable protective measures could be further implemented/added to the existing conservation strategy. If such additional protective measures are needed, they shall be identified in an annual report and implemented as soon as possible. If needed, the Service will aid the LADWP in seeking additional funding sources to implement additional protective measures.

F. Literature Cited

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