

# from Big Pine to Lone Pine

The project features four major habitats where restoration will create significant positive impacts:

- Lower Owens River Riverine-Riparian system
- Off-River Lakes and Ponds
- Blackrock Waterfowl Habitat Area
- Owens River Delta Habitat
  Area

These are all important components of the LORP ecosystem.

## **Lower Owens River Riverine-Riparian System**

**Goal:** Create and sustain healthy and diverse riparian aquatic habitats, and a warm water recreational fishery with healthy habitat for native fish species. Diverse natural habitats will be created and maintained through flow and land management, to the extent feasible, consistent with the needs of the habitat indicator species for the riverine-riparian system.

The project is focused on improving habitats with the expectation that wildlife and fish species will naturally colonize enhanced areas.

After 80 years of diversion, the Lower Owens River will flow year-round once again. Annual baseflow will be about 40 cubic feet per second. Studies of river ecology show that this volume will sustain habitat for the native and non-native species of fish, birds, and mammals that indicate a healthy river environment.

### Rivers naturally rise with snowmelt from the surrounding Eastern Sierra

Higher seasonal flows are essential for developing healthy riparian sytems. They maintain important channel features such as pools and gravel bars, recharge groundwater along the stream banks, minimize tules and cattails, promote seed germination, and enhance the fishery. The LORP includes releases of up to 200 cubic feet per second in spring – five times the baseflow.



### Wildlife and fish species that should benefit from riverine habitat improvement/restoration:

**Fish (non-native game fish):** Largemouth bass; smallmouth bass; bluegill, channel catfish

**Native fish:** Owens sucker, Owens pupfish\*, Owens chub\*, and Owens speckled dace

**Birds and mammals:** Yellow warbler, willow flycatcher\*, yellow-breasted chat, blue grosbeak, yellow-billed cuckoo\*, warbling vireo, tree swallow, belted kingfisher, Nuttall's woodpecker, long-eared owl, Swainson's hawk, red-shouldered hawk, northern harrier, rails, least bittern, marsh wren, wood duck, great blue heron, Owens Valley vole.

\*Endangered or threatened species

#### **Multiple Uses of the LORP Ecosystem**

The LORP gives the river system a chance to repair itself, given a steady flow of water, compatible land management practices, and time.

- Riparian woodlands, virtually missing along the dry reach of river above Mazourka Canyon Road, are expected to regenerate
- Game fish are expected to flourish in the Lower Owens River
- The LORP seasonal flows will ensure healthy fish habitat and a rich riparian system with tremendous values for wildlife in a dry Great Basin environment

### Off-River Lakes and Ponds

**Goal:** Maintain and/or establish off-river lakes and ponds to sustain diverse habitat for fisheries, waterfowl, shorebirds and other animals ... through flow and land management, to the extent feasible, consistent with the needs of the "habitat indicator species" for the off-river lakes and ponds.

The off-river lakes and ponds included in the LORP are Twin Lakes (Upper and Lower), Goose Lake, Billy Lake, and Thibaut Ponds. Since the mid 1980s, a permanent water supply has been provided to them as part of the Lower Owens River Rewatering Enhancement Mitigation Project.

These lakes have been and should continue to be popular spots for bass fishing. The LADWP will maintain water supplies and water levels in each of the lakes to continue to support these good fishing conditions.



#### Fish and bird species that should benefit from offriver lakes and ponds improvement/restoration:

**Non-native game fish:** Largemouth bass, smallmouth bass, blue gill, channel catfish

Native fish: Owens pupfish\*, Owens tui chub\*

**Native birds:** Northern harrier, least bittern, rails, marsh wren, osprey, resident and migratory waterfowl, and wading birds

\*Endangered or threatened species