

# RIPARIAN ZONES

A riparian zone is an area of moisture-loving vegetation that surrounds bodies of water, such as along river banks. Riparian areas are important for maintaining the ecological health of rivers. Riparian vegetation reduces soil erosion, buffers water from polluted run-off, and regulates river water temperatures by providing shade. Riparian zones also support a variety of flora and fauna.

The Kern River flows from the Southern Sierra Nevada Mountains. Historically, the Kern River emptied into lakes and wetlands on the San Joaquin Valley floor. During years of heavy snowmelt, flows could reach the now dry Tulare Lake, or even travel all the way to the San Joaquin River. On the San Joaquin Valley floor, seasonal flooding cycles once created marshes, shallow lakes, and supported riparian woodlands. Most of this habitat has been lost due to the construction of the Isabella Dam and diversion of water for agricultural and municipal use.

Despite the disturbed state and altered hydrology of the lower Kern River, it still provides valuable habitat for plants and animals. Native riparian tree and shrub species provide cover for animals and contrast sharply with the surrounding arid southern San Joaquin Valley. Many native herbaceous plant species also grow along the lower Kern River. Invasive annual grasses, most originating from the Mediterranean region, are a ubiquitous component to the ecosystem.

## Trees



***Populus fremontii*, Fremont Cottonwood**  
Large deciduous trees with reddish yellow catkins and delta-shaped leaves.



***Salix goodingii*, Goodding's Black Willow**  
Medium sized tree with deciduous, lance-shaped leaves and deeply fissured bark.



***Salix laevigata*, Red Willow**  
Shrubby tree with soft deciduous leaves. Often grows in thickets but can also grows solitarily.



***Chilopsis linearis*, Desert Willow**  
Not a true willow, and not locally native, this tree was planted as a landscape specimen and appears to be spreading.

## Shrubs



***Peritoma arborea*, Bladderpod**  
Shrub with glover-shaped leaves and yellow flowers. Inflated fruit contains pungent-smelling seeds.



***Baccharis salicifolia*, Mule Fat**  
Evergreen shrub with distinct male and female flowers and sticky leaves.



***Atriplex polycarpa*, Allscale Saltbush**  
Large shrub often appears grey in color.

## Perennials



***Urtica dioica*, Stinging Nettle**  
Tall herbaceous plant with serrated leaves and stinging hairs.



***Cucurbita palmatum*, Coyote Melon**  
Herbaceous plant with trailing growth form and fruit that resemble small watermelon.



***Datura wrightii*, Jimson Weed**  
Herbaceous perennial with large funnel-shaped flowers and prickly fruits.



***Heliotropium curassavicum*, Alkali Heliotrope**  
Herbaceous plant with bluish, leathery leaves. Flowers are white, usually with a purple throat.

## Annuals



***Amsinckia menziesii*, Common Fiddleneck**  
Annual plant with prickly fuzz and yellow flowers



***Mimulus guttatus*, Common Monkeyflower**  
Annual with yellow flowers that occurs more abundantly in wet areas



***Lupinus* spp., Lupine**  
Annual plants with often succulent or fuzzy foliage. Distinctly compound leaves with variously colored or pink flowers.



***Calandrinia ciliata*, Red Maids**  
Annual with fleshy leaves and purple flowers

## Invasive Plants

The following are plants that originated from areas outside of California. They compete with native vegetation to cause ecological harm



***Nicotiana glauca*, Tree Tobacco**  
Small evergreen tree from South America.



***Tamarix ramosissima*, Saltcedar**  
Shrubby tree from Asia with wispy foliage and displays of pink to white flowers.



***Salsola tragus*, Tumbleweed**  
Annual shrub from Eurasia with wiry, purple-veined branches.



***Bromus* spp.**  
Genus contains several invasive annual grass species, most from the Mediterranean region.

# Common Plants of the Environmental Studies Area



Kern Audubon Society

[www.KernAudubonSociety.org](http://www.KernAudubonSociety.org)

Audubon California  
[www.AudubonCA.org](http://www.AudubonCA.org)

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