Working In Nature

San Diego County Water Authority

Building Water Reliability through the Emergency Storage Project

The Emergency Storage Project is a system of reservoirs, interconnected pipelines and pumping stations designed to make water available to all communities in the San Diego region in the event of an interruption in imported water deliveries.

The Water Authority is a public agency serving the San Diego region as a wholesale supplier of water. The Water Authority works through its 23 member agencies to provide a safe, reliable water supply to support the region's $126 billion economy and quality of life of nearly 3 million residents.

San Diego County Water Authority
Capital Improvement Program

For more than 50 years, San Diego County has relied on imported water to support local homes and businesses. Currently, 75 to 95 percent of the county's water supply is imported from hundreds of miles away and the pipelines that carry water to San Diego cross several major fault lines. An earthquake, drought or other disaster could interrupt San Diego County's imported water supply for up to six months. The Emergency Storage Project will increase the amount of water available during emergencies.

Protecting the Region's Biological Resources

The Emergency Storage Project is an important investment for the future reliability of San Diego County's water supply. The Water Authority is also committed to avoiding impacts to the environment from construction activities of this project whenever possible. If an impact cannot be avoided, every effort is taken to minimize impacts to environmental resources. The Water Authority conducted detailed studies to identify sensitive plants, wildlife and habitat that could be affected.

Sensitive Plants and Wildlife

The environmental studies conducted at each of the Emergency Storage Project construction sites identified sensitive plant and wildlife species that may be impacted by the work activities. These species are protected either under the federal or state Endangered Species Act.

Encinitas baccharis

Plants

The *Encinitas baccharis* is native to San Diego County and is found in upland communities. It has green leaves with purple flowers that bloom from August to January.

The *San Diego thornmint* is a plant species found in the coastal sage scrub, grassland and chaparral communities. It is an aromatic herb of the mint family with white flower petals with rose markings on the lower lip.

California gnatcatcher

Wildlife

The *California gnatcatcher* is a small gray and black songbird. Coastal sage scrub, found in upland communities, is critical habitat for the California gnatcatcher which uses sage scrub for foraging, nesting, rearing of young, roosting and shelter.

Quino checkerspot butterfly

The *Quino checkerspot butterfly* is found in coastal sage scrub habitat. Its wings are a patchwork of brown, red and yellow spots.

Encinitas baccharis

Mitigation Monitoring Program

The Water Authority implemented an environmental mitigation monitoring program to ensure environmental protection during construction. The Water Authority's mitigation monitoring program includes **avoiding and minimizing impacts** to sensitive biological resources, **preserving offsite mitigation lands** and compensating for impacts by **restoring habitat**.

Avoiding and Minimizing Impacts

When avoidance of environmental impacts is not possible, the Water Authority strives to minimize impacts to resources. Mitigation monitoring programs are implemented to identify all mitigation measures and ensure proper execution. To avoid and minimize impacts at construction sites, environmentally sensitive areas are marked with fencing and flagging to preserve identified resources. Construction is scheduled to avoid breeding seasons of sensitive bird species and a biological monitor visits construction sites at least weekly to ensure sensitive resource protection. Examples of these efforts include scheduling construction around the California gnatcatcher's breeding season, fencing coastal sage scrub habitat and revegetating with native plants when construction is complete.

Fencing protects sensitive plant species from potential impacts at a construction site.

Upland and Wetland Habitats

Uplands and wetlands play a crucial role in habitat that is home to many sensitive plant and wildlife species. Wetlands are found along streams and creeks and support a diverse range of sensitive species. Uplands occur in the drier areas above creeks and include important habitats such as coastal sage scrub, which has been declining due to urban growth.

Habitat Community	Description	Sample Habitat
Uplands	Dry for most of the year; Support plants that do not require much water	Coastal sage scrub, oak woodland, chaparral and grassland
Wetlands	Consistently wet soil; Home to plants that require a large amount of water to survive	Southern willow scrub, freshwater marsh and cottonwood-willow riparian forest

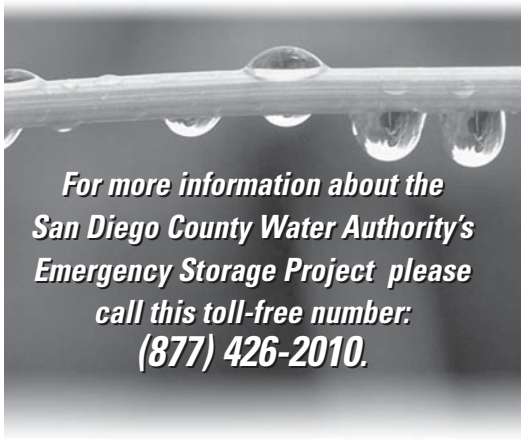
Preserving Offsite Mitigation Lands

The Water Authority is obligated to acquire and preserve habitat as compensation for the temporary and permanent impacts associated with the Emergency Storage Project. The Water Authority has exceeded its mitigation requirements and obtained core upland areas that would greater benefit regional conservation planning efforts. Working closely with wildlife resources agencies and jurisdictions impacted by project construction, including the city and county of San Diego, the city of Poway and the San Diego Association of Governments, enabled the Water Authority to identify a land mitigation package beneficial to all parties. To date, 650 acres of upland habitat and 45.4 acres of wetland habitat will be created or restored. These lands will be preserved for future generations.

The Emergency Storage Project wetland mitigation program includes both wetland enhancement at Escondido Creek and wetland creation at the Manchester site in Encinitas. Wetlands located along Escondido Creek will be enhanced by removing invasive plants such as eucalyptus trees, which will allow native species to flourish. The Manchester Wetland Creation Site is characterized as disturbed, undeveloped land on either side of Lux Canyon Creek. The Water Authority will grade the site to within approximately one foot of the groundwater table to create a wetland condition, remove invasive plants and revegetate with native wetland species. This will create valuable habitat for sensitive wildlife species.

Habitat Restoration

Another element of the Water Authority's mitigation efforts for the Emergency Storage Project includes habitat restoration and management for land temporarily impacted by construction. Restoration efforts include recontouring the site to match original contours and revegetation including seeding and container planting. After the restoration work is complete, it is monitored for five years to ensure success.



For more information about the San Diego County Water Authority's Emergency Storage Project please call this toll-free number: (877) 426-2010.