Ballona Wetlands Restoration Project

The Ballona Wetlands Ecological Reserve is a 577-acre protected area on the ancestral lands of the Gabrielino-Tongva, now owned and managed by the State of California. The project will restore, enhance, and create coastal wetland habitat and re-establish natural processes and functions. It will improve habitat for native wildlife and create public access amenities for recreation and education.

Melendrez 2013

PROJECT TIMELINE

1984 Friends of Ballona Wetlands sues to stop development

2003 Highly degraded land purchased by the state with the intention of restoration

2004 Twelve years of stakeholder meetings began

2005 Ballona Wetlands designated an Ecological Reserve

2006 Scientific Advisory Committee Meetings begin

2009 Baseline data collection begins

2017 Draft EIR outlining long-term restoration plans (with four project alternatives) released

2019 Final EIR released

2020 CDFW certifies project "Alternative 1"

18-24 months after Certification: *US Army Corps will finalize the engineering plans*

PROJECTED START DATE: 2023-2025

Why Does Ballona Need Restoration?

Ballona's health is extremely poor; the wetlands were saved from development, but not restored.

more than 95% *of coastal wetlands have been lost in Los Angeles County*

Stein et al. 2014

The construction of Marina Del Rey ***destroyed nearly half of the Ballona Wetlands*** & dumped 3.1 million cubic yards of fill on the rest, piled 15-20 feet high in some places.

Restoration would remove the dumped fill from Marina del Rey's construction to create a more natural elevation gradient.

Most of Ballona is ***closed*** to the public, and only has less than 2 miles of bike path and 1 mile of pedestrian trail.

Restoration would create a system of pedestrian and bike trails for recreational and educational use open to the public from dawn to dusk.

A serious ***weed epidemic*** has degraded more than 70% of this protected area.

Restoration would remove invasive weeds that blanket the area and replace with native wetland and upland plants.

A majority of the wetlands are not wet because they are ***disconnected*** from Ballona Creek. Only the most western portion has limited connection via tide gates, and even these are threatened by sea level rise.

Restoration would remove cement levees along Ballona Creek and replace with earthen levees along the roads. This will reunite the creek with its historic floodplain and increase tidal flow while maintaining flood capacity.

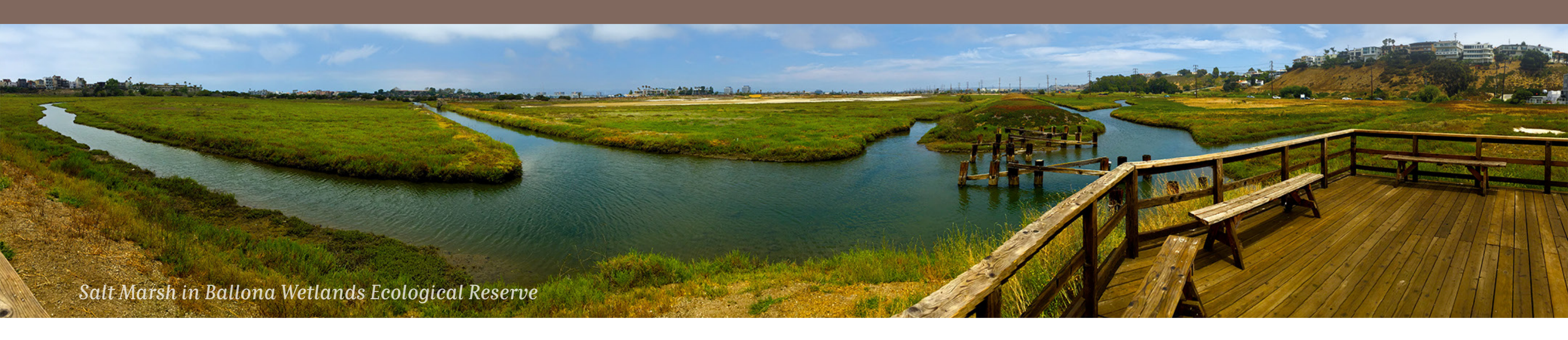
The Ballona Freshwater Marsh was created in 2003 to provide habitat, and stormwater control and treatment, but ***doesn't connect*** to the adjacent Reserve as originally designed.

Restoration will connect the freshwater marsh to the salt marsh to create brackish marsh habitat.

What will Restoration Do?

Restoration would undo over a century of damage to Los Angeles' largest coastal wetland.

The Gabrielino-Tongva are Ballona's first inhabitants. The Reserve has an educational display where students discover the history of Ballona and the people who lived here for thousands of years. **The new public access plan is critical to providing educational and recreational opportunities for ALL Angelenos, particularly for Indigenous people, communities of color, and those living in park-poor and low-income communities.** Photo credit: Lauren Man, Assistant Photo Editor at the Daily Bruin


Salt Marsh in Ballona Wetlands Ecological Reserve

What are the Benefits of Restoration?


Federally endangered El Segundo blue butterfly, brought back to Ballona by decades of FBW hand-restoration efforts with thousands of volunteers

1 Repair damaged habitats and improve biodiversity

Ballona has suffered from farming, ranching, oil drilling, filling, pollution, invasive plants, channelization, and other human impacts over the last 100+ years. The project will restore biodiversity by bringing back plants and animals that previously called Ballona home and by improving habitat for the endangered and special status species that are hanging on. A thriving Ballona Wetlands will also attract new species that have lost their habitat elsewhere in California.

This project would create or enhance 201 acres of wetland habitat
Ballona Wetlands EIR 2017

Los Angeles County has lost more than 95% of its estuarine vegetated and unvegetated wetland habitat
SCCWRP 2014

More than 1 in 3 threatened or endangered species live only in wetlands
EPA 2016

2 Reconnect the land and the sea

Ballona is an estuary, a rare place where the mouth of a river meets the ocean, but because Ballona Creek was straightened and cemented and the wetlands were buried under fill from constructing Marina del Rey, most of Ballona is disconnected from the creek and tides. Restoration will bring water back to the wetlands, improve water quality, and provide storm surge protection. Habitat for fish and other aquatic species will be enhanced, improving the base of the food chain for countless species and creating nurseries for fish.

This project would create or enhance 65 acres of intertidal and open water habitats
Ballona Wetlands EIR 2017

97% of Ballona is disconnected from the tides
Johnston et al. 2015

As of 2013, nearly 70% of the Ballona Wetlands Ecological Reserve was overwhelmed by **non-native invasive plants**, like *black mustard, iceplant*, and *crown daisy* (Johnston et al. 2015) Large blankets of weeds, called monocultures, have replaced native habitat that wildlife depend on for food, shelter, and breeding.

Water/Tidal Channel

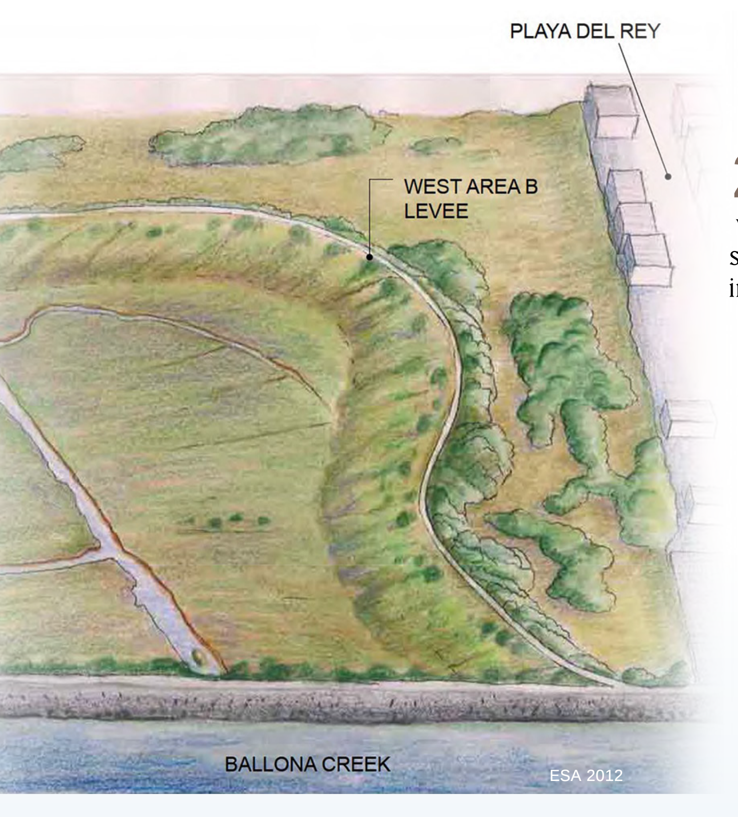
Non-native Cover (%)
- 0%
- < 2%
- 2-9%
- 10-39%
- 40-59%
- 60-100%
- Developed / Not Surveyed

These yellow flowers look pretty, but they out-compete native plants by spreading quickly and taking advantage of disturbed soils and hydrology. These plants die in early summer and become an unsightly fire hazard. They also alter soil chemistry to prevent native plants from growing back.

Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*) is one of the many endangered species that depend on California's salt marshes for survival year round. Increased tidal flow will improve and expand the pickleweed habitat this little bird depends on.

3 Make Ballona climate-resilient

One of the greatest threats to Ballona is climate change. Currently, limited tidal flow enters the western part of the Reserve through tide gates. Eventually, sea level rise will reach a point that these gates will be permanently shut to prevent the roads from flooding and the marsh habitat will become a stagnant pond. To prevent this from happening, the restoration project will replace cement levees with gently rising earthen levees that will allow marsh habitat to migrate to higher elevations over time, preserving this habitat for sensitive wildlife into the distant future.



ESA 2012

The National Audubon Society has identified more than 25 bird species vulnerable to losing their habitat to sea level rise in the Los Angeles area, including the **California Least Tern** which nests on Venice Beach and forages in the Ballona Wetlands.
Bateman et al. 2020

What happens if we do nothing?

Without restoration, the wetlands will be become stagnant, flooded ponds around 2050, ***eliminating the marsh habitat on which many rare and endangered species depend.***

Restoration will **allow marsh habitat to migrate to higher elevations as the ocean rises**, preserving habitat for Belding's Savannah Sparrow and other wetland dependent species into the distant future.

Management of the wetlands will **adapt over time** to utilize new technologies, strategies, and the best available science to protect habitats and wildlife in the face of climate change.

Properly functioning wetlands are the first line of defense against sea level rise; a restored Ballona Wetlands will ease the flood risk on neighboring communities and protect wetland habitat for wildlife.

The National Research Council's *Sea-Level Rise for the Coasts of California, Oregon, and Washington* report predicts sea level rises of

10-17 inches by 2050 & 31-69 inches by 2100
NRC 2012

4 Remove SoCalGas infrastructure from Ballona

SoCalGas will permanently abandon all 16 wells from within the boundaries of the Reserve. Accompanying service roads, concrete, and infrastructure will be removed and restored to native habitat, providing more space for local plants and wildlife to thrive. Up to six monitoring wells may be drilled on SoCalGas property to compensate for removed wells to maintain regulatory requirements.
Ballona Wetlands EIR 2017. Managed by the California Public Utilities Commission and California Geologic Energy Management Division

5 Make Ballona accessible to ALL Angelenos

Restoration will create exceptional wildlife viewing, and recreational and educational opportunities for communities that have very little access to the outdoors. Trails will also create access for differently-abled people, strollers, and the elderly. Trails will be primarily on the periphery of the Reserve and some areas are trail-free to protect wildlife.

Friends of Ballona Wetlands brings more than 9,000 students & visitors to the wetlands every year, just imagine how many people can visit after it is restored and all the trails are added!

FUN FACT: Ballona Wetlands is the 2nd largest open space in Los Angeles, after Griffith Park

This restoration project will add:

3.6 miles	5.5 miles	2,000 feet	2 bridges
of bike/pedestrian pathway	of pedestrian only pathway	of boardwalk for pedestrians	to increase safety and access

+ educational signage and parking facilities

Ballona Wetlands EIR 2017

All newly constructed features and trails will be fully accessible, removing current obstacles and allowing the wetlands to become a gathering place for the entire community.

This includes more than ***15,000 Disadvantaged Households within biking distance*** *(1.9 miles) and* ***500,000 within driving distance*** *(13 miles).*

Christensen 2000


Melendrez 2013

Learn more at www.BallonaFriends.org

Infographic compiled by Neysa Frechette and Harrison Detroy. Design by Grace Stees.