



ALYS ARENAS, MS  
RESTORATION MANAGER  
NEWPORT BAY CONSERVANCY  
2023 CAL-IPC SYMPOSIUM



# OVERVIEW

---

Introduction to Newport Bay Conservancy

---

History of Upper Newport Bay Preserve

---

Big Canyon Restoration Project Overview

---

Big Canyon Phase 3: Goals, Design, Permits

---

CDFW Cutting the Green Tape: CEQA Exemption & RMP

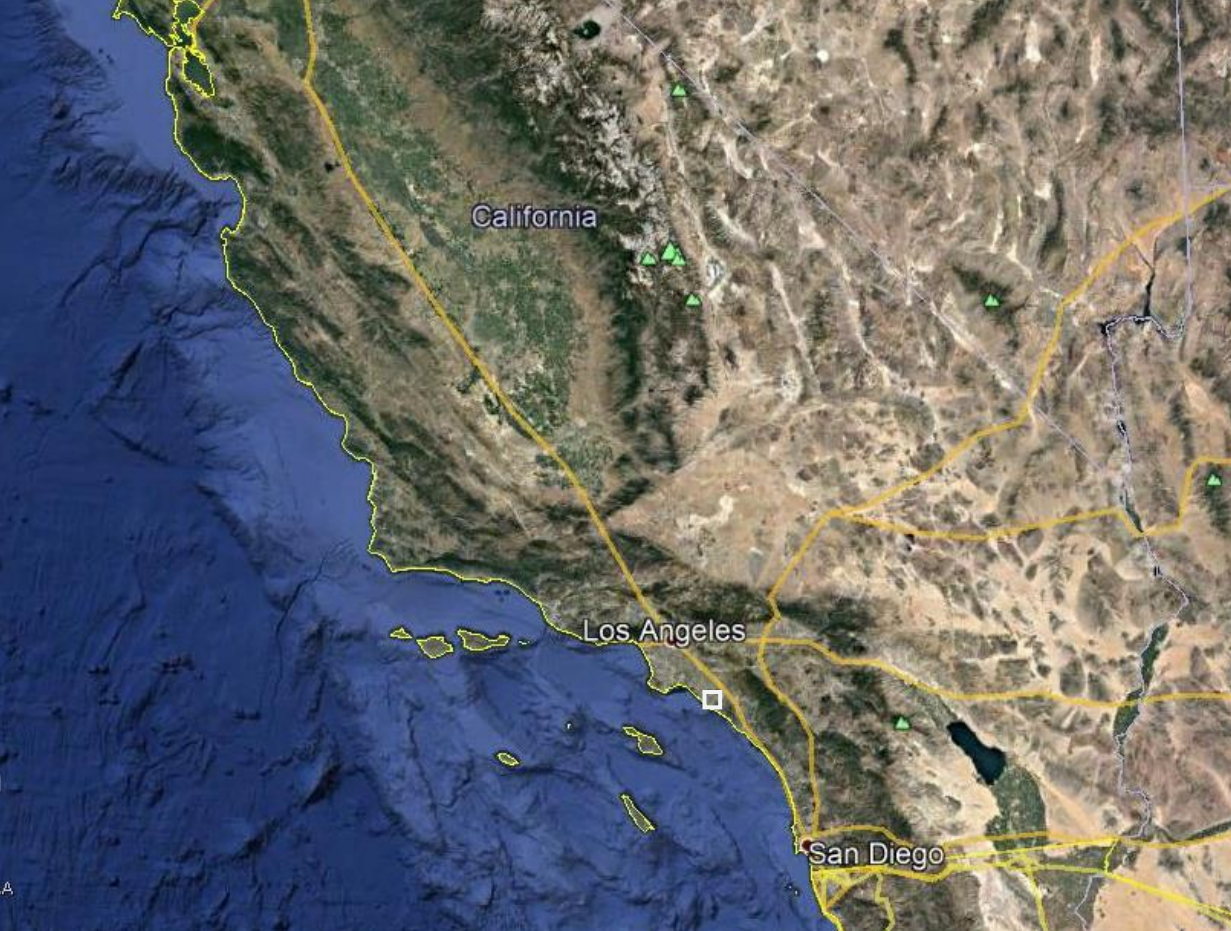
---



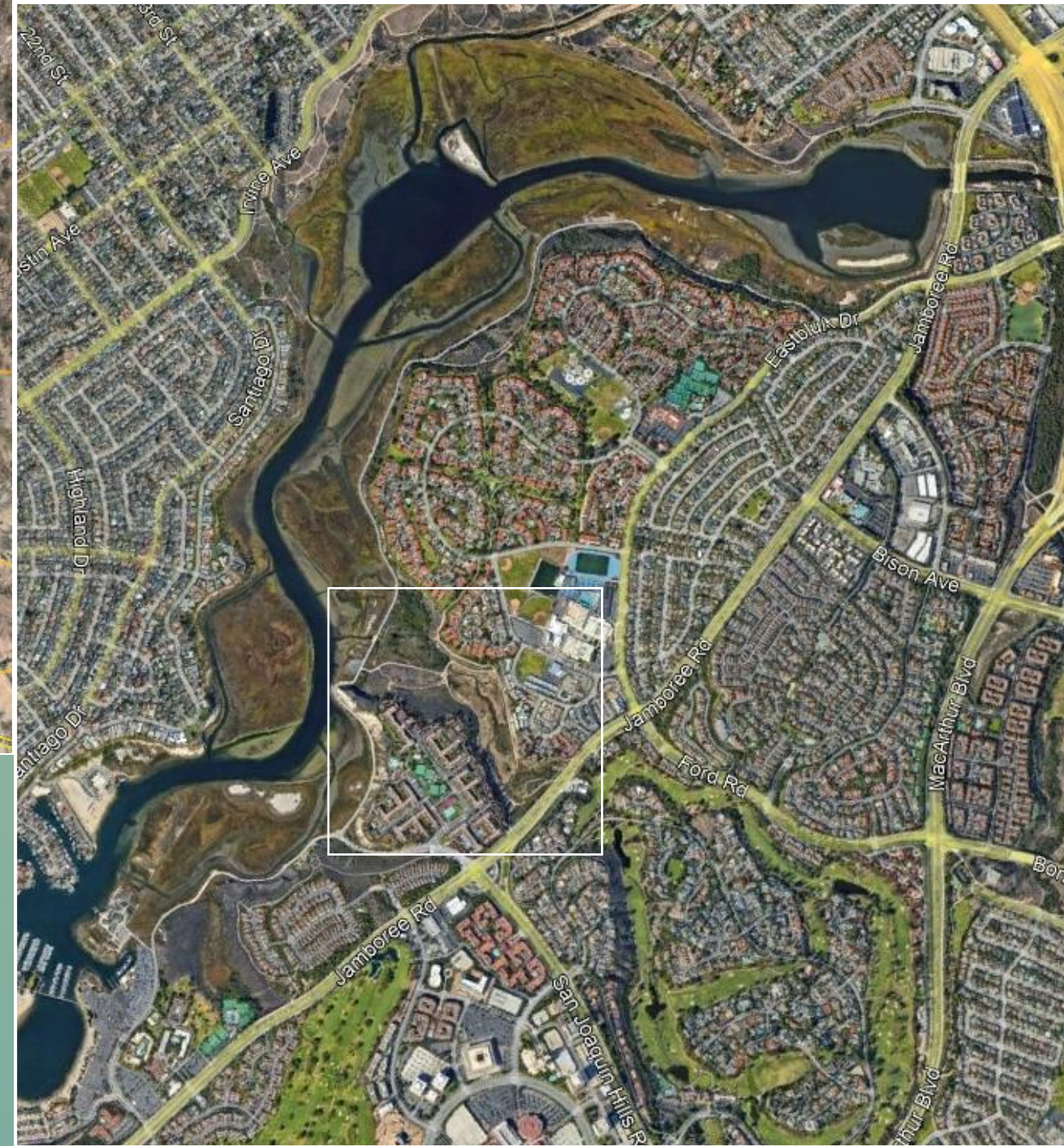
# NEWPORT BAY CONSERVANCY

We acknowledge that our work takes place on the ancestral lands of native peoples, original inhabitants and stewards of this territory. We respect their continuing connection to these lands and waters.





# UPPER NEWPORT BAY





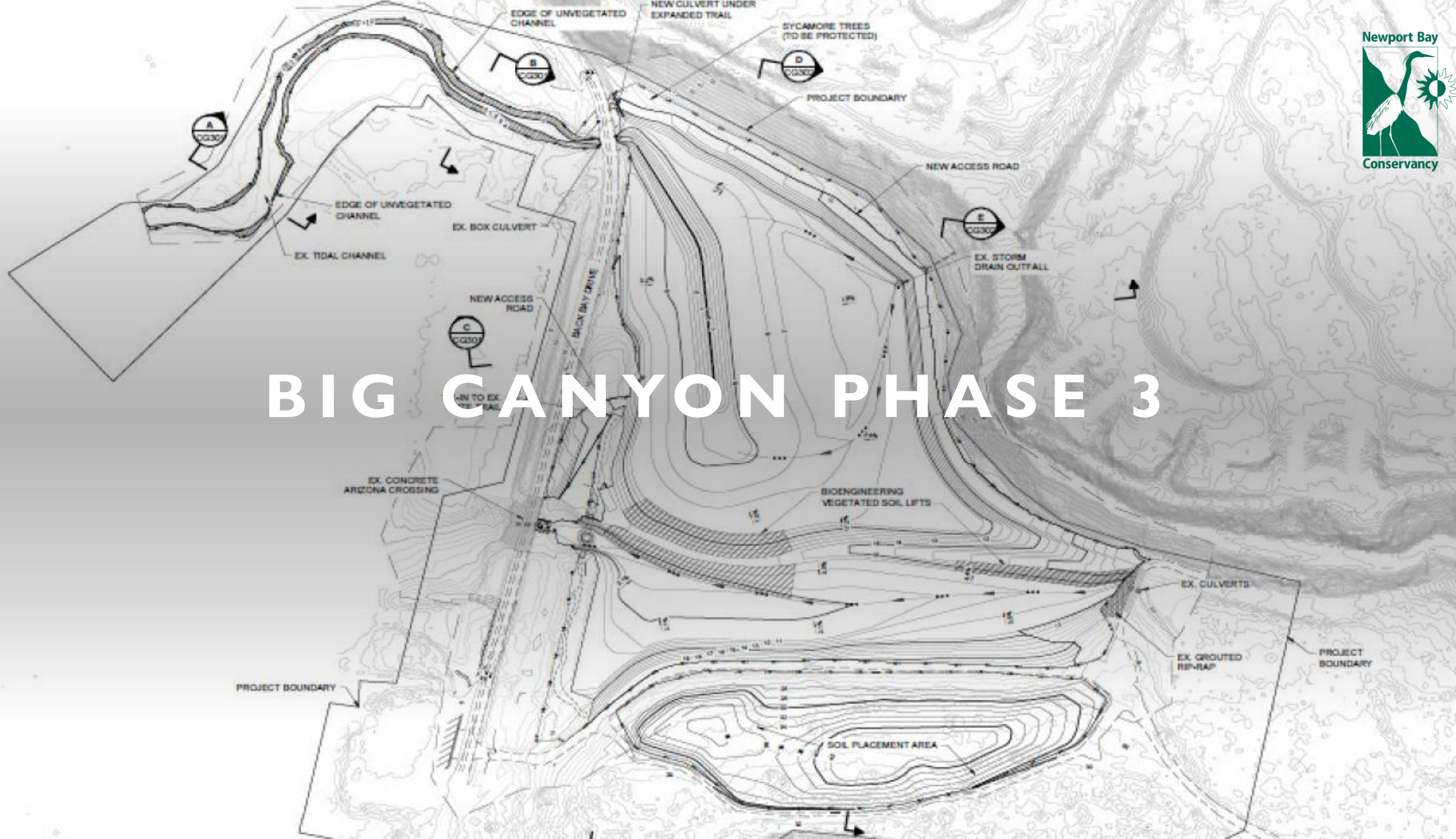
# BIG CANYON COASTAL HABITAT RESTORATION AND RESILIENCY PROJECT

- Major Site Issues
  - History of disturbance
  - Creek with altered hydrology and Selenium dry weather flows
  - Mosquito breeding habitat
  - Invasive weeds





# BIG CANYON PHASE 3





# EXISTING CONDITIONS

## Legend

Project Boundary

### Vegetation Communities

#### Wetland/Riparian

- Alkali Meadow (0.95 acre)
- California Bulrush Marsh (0.13 acre)
- California Cordgrass Marsh (0.13 acre)
- Freshwater Marsh (4.26 acres)
- Intertidal Mudflat (0.40 acre)
- Mixed Arroyo Willow/Peppertree Grove (6.96 acres)
- Mulefat/Coyote Brush (0.16 acre)
- Open Water (2.11 acres)
- Pickleweed Mat (2.04 acres)
- Willow Riparian (0.37 acre)

#### Transition/Upland

- Alkali Heath/Menzies' Goldenbush Scrub (0.48 acre)
- California Brittlebush/California Sagebrush (1.89 acres)
- California Sagebrush (0.69 acre)
- Coyote Brush/California Sagebrush (0.93 acres)
- Disturbed California Sagebrush/Fourwing Saltbush (0.20 acre)
- Disturbed Menzies' Goldenbush Scrub (2.61 acres)
- Swamp & Fourwing Saltbush (2.37 acres)

#### Other

- Disturbed/Developed (2.62 acres)



1 inch = 200 feet  
0 100 200 Feet



**Figure 7**  
Vegetation Map  
Big Canyon Coastal Habitat Restoration  
and Adaptation Project - Phase 3  
Orange County, California



# BIG CANYON PHASE 3

## GOALS

- Remove weeds (peppertrees) & restore historical salt marsh
- Restore riparian corridor integrated with upstream restoration (Phase 1 & 2)
- Address mosquito breeding habitat & selenium dry weather flows
- Create wetland transitional zone for long-term SLR adaptation
- Use existing trails & long-term maintenance roads to provide recreational & educational benefits to the community





# WEEDS IN BIG CANYON

- Brazilian peppertree (*Schinus terebinthifolius*)
- Desert knapweed (*Volutaria tubuliflora*)
- Seashore paspalum (*Paspalum vaginatum*)
- Stinknet (*Oncosiphon pilulifer*)
- Perennial pepperweed (*Lepidium latifolium*)
- European sea lavender (*Limonium duriusculum*)
- Algerian sea lavender (*Limonium ramosissimum*)





# BRAZILIAN PEPPERTREE

*Schinus terebinthifolius*

- Weedy evergreen tree or shrub species
- Red/pink fruit clusters easily dispersed by birds
- Often found by creeks or areas where water is available year round
- Produces many root sprouts when roots are injured, or tree is removed
- Cal-IPC rating: Moderate - Alert
- Mechanical & chemical treatment





# DESERT KNAPWEED

## *Volutaria tubuliflora*

- Annual herbaceous species native to north Africa
- Priority 1 species or NCC
- “A” rating from CDFA
- Red alert species by OC CNPS
- Cal-IPC rating: high
- Volutaria Task Force – NBC, OC Parks, CDFW
  - Seasonally will survey, treat and meet bi-weekly
  - Utilizing Calflora
- Mechanical removal of entire plant

### WEED ALERT!

Desert knapweed (*Volutaria tubuliflora*)



See other side for description

### WEED ALERT!

- Annual herb (Winter - Spring) with white to pink flowers and lobed hairy leaves
- Confused with mustards and tocalote
- Found on the sides of roads and trails
- Favors grasslands, dunes, scrub, and chaparral habitat
- Seeds are dispersed via human traffic, machinery, water, and wind
- Invaded the desert ranges and south coast ranges of California

For more information email us at [info@newportbay.org](mailto:info@newportbay.org)



Think you spotted  
Volutaria? Upload your  
photos to **iNaturalist!**





# SEASHORE PASPALUM

## *Paspalum vaginatum*

- Perennial grass native to southeast North America, parts of tropical Central and South America, and Africa
- Favors dunes, bogs and marsh habitats
- Blooms Aug-Dec (now)
- Reproduces vegetatively rhizomes (seeds thought to be rarely viable)
- Cal-IPC Rating: Watch
- Chemical treatment





# STINKNET

## *Oncosiphon pilulifer*

- Annual herb with strong scent with distinct round yellow flowers & finely dissected leaves
- Blooms Spring - summer
- Native to South Africa; favors dunes & scrub habitats
- Cal-IPC rating: high
- CDFW Rating: Q
- Mechanical & chemical treatment





# PERENNIAL PEPPERWEED

## *Lepidium latifolium*

- Perennial herb native to southern Europe and western Asia
- Seen in wetland-riparian and disturbed areas
- Small 4-petaled white flowers, in large clusters
- Leaves alternate; small rounded or flat fruits
- Blooms May-Jul (observed flowering in Sep)
- Cal-IPC Rating: High
- Recognized by CDFA, but not rated
- Chemical & selective mechanical treatment





# INVASIVE LIMONIUM

## European sea lavender (*Limonium duriusculum*)

- Perennial herb with tiny purple flowers and oval-shaped leaves
- Native to Mediterranean; favors marshes, CSS, riparian habitat
- Cal-IPC rating: moderate; CDFA rating: B
- Mechanical treatment



## Algerian sea lavender (*Limonium ramosissimum*)

- Perennial plant native to Mediterranean; favors coastal marshes and seeds can disperse by floating in salt water and relocating to new area
- Cal-IPC rating: limited; CDFA rating: B
- Mechanical treatment





# PERMITS

- RWQCB 401 Certification
- ACOE 404 Individual Permit
  - Section 7 Consultation
  - SHPO Consultation
- CDFW LSA Agreement x2
- Coastal Development Permit
  - CEQA
- CDFW & City Access Permits and Landowner Agreements





# **CUTTING THE GREEN TAPE: CEQA STATUTORY EXEMPTION FOR RESTORATION PROJECTS (SERP)**

- Consultation in January 2022
- Provided a draft application in Feb/Mar
- Follow up calls, emails and site visit
- Submitted final application in March
- Awarded CEQA exemption in May 2022

More information: <https://wildlife.ca.gov/Conservation/Cutting-Green-Tape/SERP#569973293-serp-process>





## CUTTING THE GREEN TAPE: RESTORATION MANAGEMENT PERMIT (RMP)

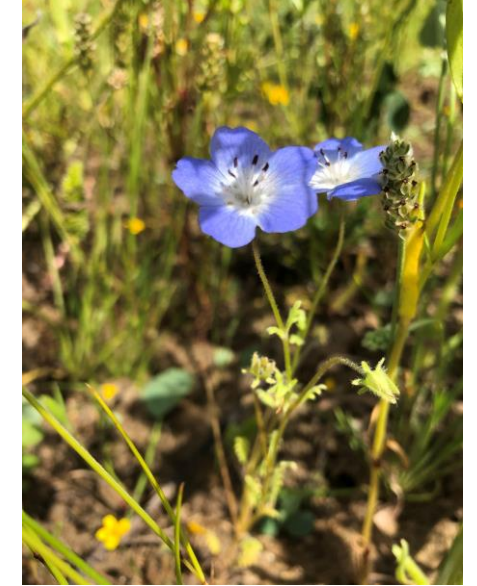
- Consultation in Dec 2022
- Few emails for follow up info
- Received RMP in Jul 2023
- RMP for CHMAMA and Light-footed Ridgeway's rail

More information <https://wildlife.ca.gov/Conservation/Cutting-Green-Tape/RMP>



# JOIN THE FUN!

- Weekly volunteer events: Thursday; 9am-12pm
- Bird surveys: 3rd Thursday of each month; 7am-9am
- Sign up on Eventbrite or email Alys





# QUESTIONS?

Alys Arenas, MS (She, Her, Ella)  
[alys.arenas@newportbay.org](mailto:alys.arenas@newportbay.org)