Finding balance when you are stuck in a marsh: Navigating the complexities of Upper Newport Bay for effective invasive plant management

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What challenges does Upper Newport Bay face?

- History of disturbance
- Urban development
- Extremely sensitive habitat
- Complex land ownership, stakeholder, and partner relationships
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- History of disturbance
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- **Landowners**: often have some degree of involvement with land management

- **Resource agencies**: issue permits for restoration and land management activities

- **The public**: the City (council, committees), residents and homeowners, volunteers

- **Partners**: other nonprofits, educational and other independent institutions
  - Funders
Direct landowners

Adjacent landowners

Resource agencies

Upper Newport Bay

The Public

Funders

Partners

Caltrans

OC Public Works

OC parks

California Coastal Commission

Sea & Sage Audubon

Irvine Ranch Conservancy

CNPS Orange County Chapter

VCB State of California Wildlife Conservation Board

Coastal Conservancy

Ocean Protection Council

Irvine Ranch Water District

CALIPC

Orange County Coastkeeper

California Native Plant Society

Caltrans

US Army Corps of Engineers

CALFED

California Water Boards

California Dept of Fish & Wildlife

The Public
What is the Newport Bay Conservancy’s role in managing invasive plants in Upper Newport Bay?

• Big Canyon Restoration and Habitat Adaptation Project

• Monitoring and management of invasive Limonium

• Eradication of Volutaria tubuliflora
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Big Canyon Habitat Restoration and Adaptation Project

Major Site Issues
• Big Canyon Creek with altered hydrology and dry weather flows
• Invasive Brazilian peppertrees dominate

Goals
• Remove all invasive plants
• Restore hydrology
• Reestablish native communities

Challenges
• Multiple landowners
• Considered tidelands
• Homeowners immediately adjacent
Big Canyon Habitat Restoration and Adaptation Project

Approach

• Technical Advisory Committee
  • all stakeholders and interested partners

• Strong correspondence with permitting agencies

• Building relationships with City staff and committees

• Giving presentations and creating “fact sheet” for neighboring homeowners
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Invasive Limonium

Major Site Issues

• Invasive *Limonium* inhabits sensitive habitat throughout Upper Newport Bay
• *L. ramosissimum* and *L. duriusculum*

Goals

• Survey new areas
• Treat known populations
• Re-survey treated areas

Challenges

• Multiple landowners throughout bay and upstream
• Homeowners throughout Bay
• Limited person power
Invasive Limonium

Approach

• Weekly community-based restoration events with regular volunteers

• Hosting larger groups when available

• Hiring specialized interns and contractors to survey, map and help treat

• Work with other partners to divide and conquer surveying and treatment

• Educational signage
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EDRR of *Volutaria tubuliflora*

**Major Site Issues**
- Two large populations in Bay on different properties

**Goals**
- To eradicate from Upper Newport Bay
- Survey new locations
- Treating all infested areas

**Challenges**
- Conducting bay-wide surveys
- Coordination and data sharing
EDRR of Volutaria tubuliflora

**Approach**

- Strategic meetings with stakeholders
- Actionable project activities
- Establish method of information sharing and coordination
- Coordinating treatments with subcontractors and volunteers
Conclusion

• Important to understand the dynamics between stakeholders and partners

• Balancing and maintaining these relationships increases project success

• Know your audience to highlight their priorities and for effective communication
Questions?

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