

# Russian River Estuary Management Project



Public Scoping Meetings  
May 19 and 20



*Michael Tovani*

Jim O'Toole, ESA





# Agenda

- Purpose: Provide Opportunity for Public to Comment on Scope of EIR Analysis
- Background
  - Estuary Management
  - Russian River BO
  - RRIFR Program
- Project Description
- Analysis Areas
- Next CEQA Steps
- Open House





# CEQA – California Environmental Quality Act

- Disclose Environmental Impacts
- Reduce/Minimize Environmental Impacts
- Disclose Agency Decision Making
- Foster Inter-Agency Coordination
- Include Public Participation



# Estuary Management Activities



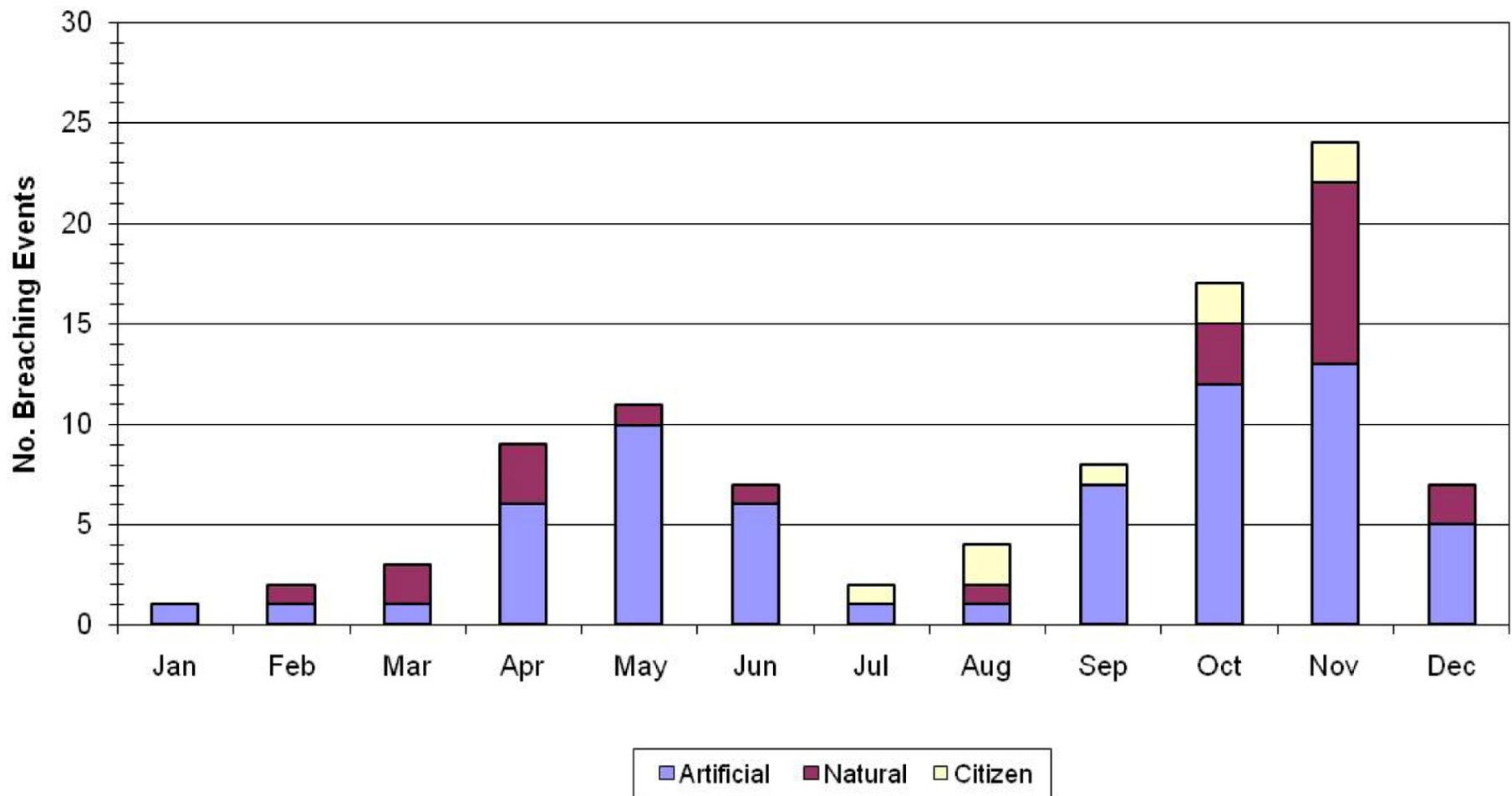




# Estuary Management Overview

- Estuary open to tides much of the year
- Barrier Beach naturally forms and closes river mouth, forming lagoon conditions
- Water levels in the lagoon rise due to inflow
- Breaching of the barrier beach historically practiced by residents and Sonoma County Public Works since 1950's
- SCWA breaches closed barrier beach when water surface is between +4.5 and 7 feet
  - 5 to 10 times annually since 1990s

### Number of Sandbar Breaching Events at the Russian River Estuary: 1996-2008







SONOMA



SONOMA



- 
- A photograph of a beach scene. In the foreground, a large, smooth, grey rock sits on the sand. To the left of the rock, a red excavator is parked on the beach. A few people are standing near the excavator. The ocean is in the background, with waves breaking on the shore. The sky is clear and blue. The water in the foreground is calm and reflects the sky and the rock.
- **Lowers Water Surface**  
**Establishes Tidal Influence**  
**Saline Conditions**



# Russian River Biological Opinion and RRIFR Program



# NMFS Russian River BO

- Issued September 2008 to Corps/SCWA
  - Dam Operations, Stream Channel Maintenance and Estuary Management are likely to jeopardize and adversely modify habitat for coho salmon and steelhead
- Established Reasonable and Prudent Measures for Implementation by SCWA and Corps



# NMFS Russian River BO – Estuary Management Conclusions

- Current practice of maintaining tidal saline estuary minimizes the available habitat for juvenile salmonids
- Fresh or brackish water lagoons in California provide depths and water quality highly favorable to the survival of rearing salmonids
- Modify Estuary Management to reduce marine influence and promote freshwater conditions



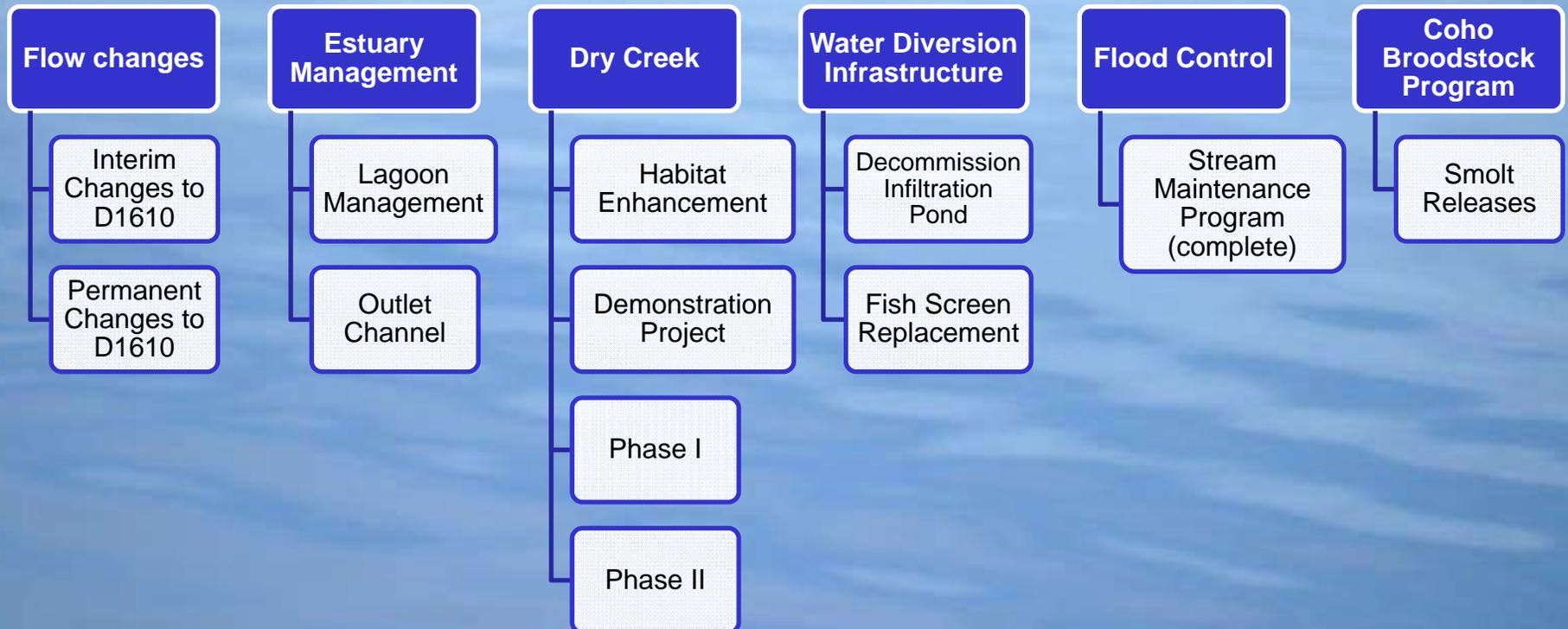
# RRIFR Program

- To meet the requirements of the NMFS BO, SCWA implementing a series of actions, collectively referred to as the RRIFR Program:
  - Changes to Minimum In-stream Flow Requirements Under D1610
  - Enhancements to Dry Creek
  - Stream Maintenance
  - Estuary Management
  - Other Measures



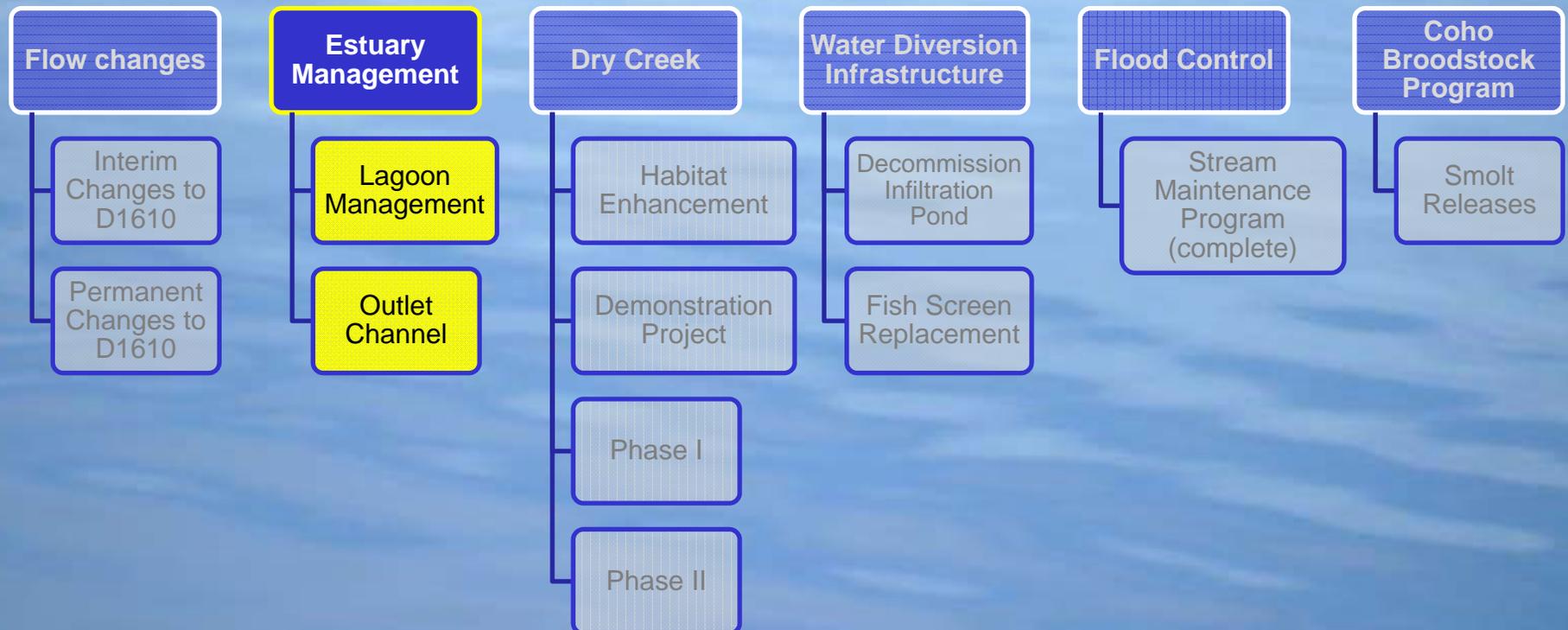


# RRIFR Program Elements





# RRIFR Program Elements





# Project Relationship to RRIFR

- Agency provides ongoing Estuary Management, will need to respond to this year's closure conditions
- NMFS Russian River BO requires Agency to modify Estuary Management
  - Project is required irrespective of other RRIFR Program Elements
- SCWA will renew permits for Estuary Management at end of 2010



# Estuary Management Plan CEQA Project Description



# Project Objectives

- Dual Objectives:
  - Enhancing Rearing Habitat for Juvenile Salmonids, particularly steelhead
    - Reducing tidal influence May 15-Oct 15
  - Managing water levels to minimize flood risk



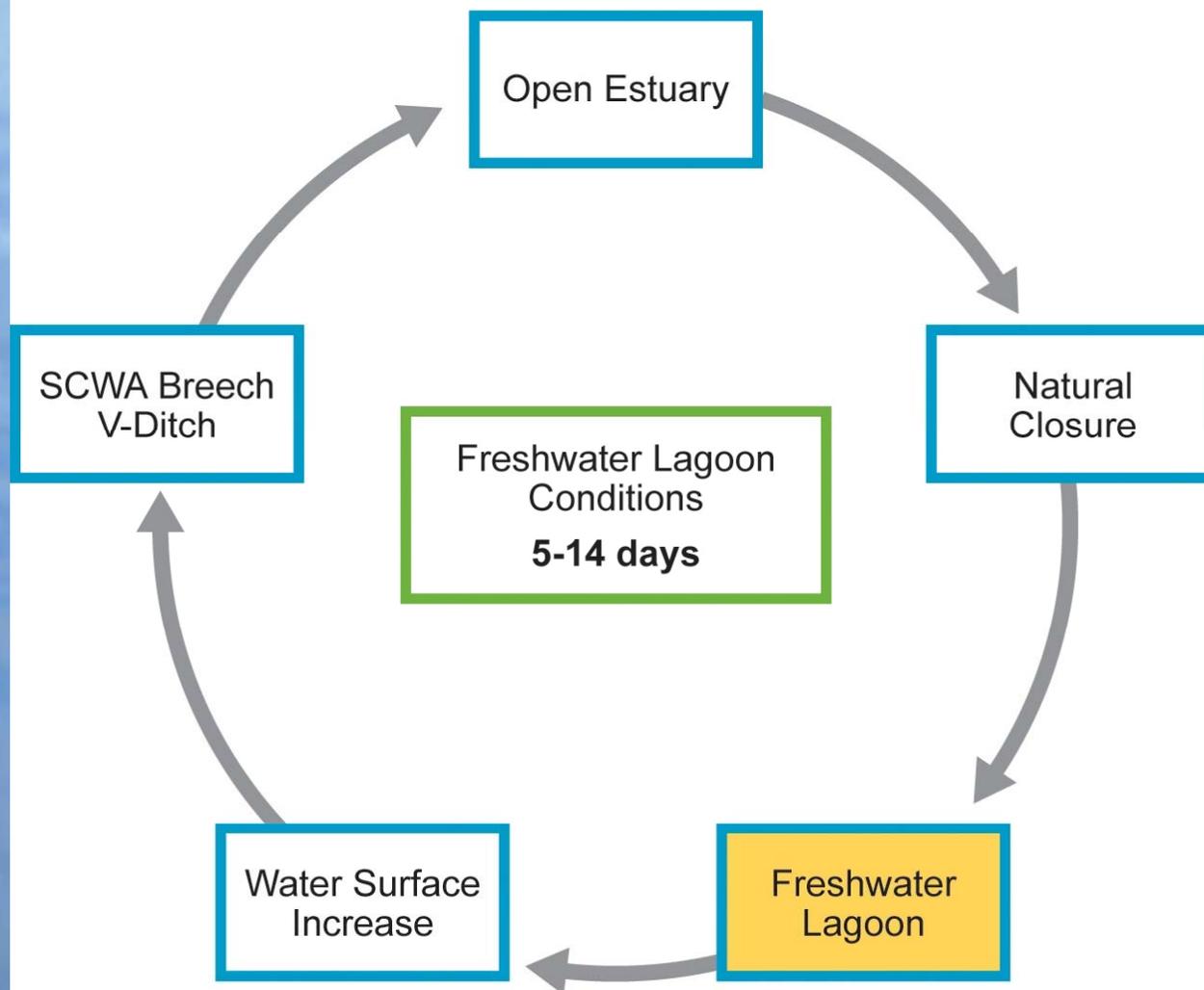
# Project Description

- Continued Artificial Breaching
- Lagoon Management Period – May 15 to Oct 15
  - Create Temporary Outlet Channel
  - Monitoring of Lagoon Conditions
  - Adaptive Management of Outlet Channel
- Conformance with Regulatory Permits
  - Corps, State Parks, NCRWQCB, State Lands, Coastal Commission, CDFG, NMFS



# Current Estuary Management

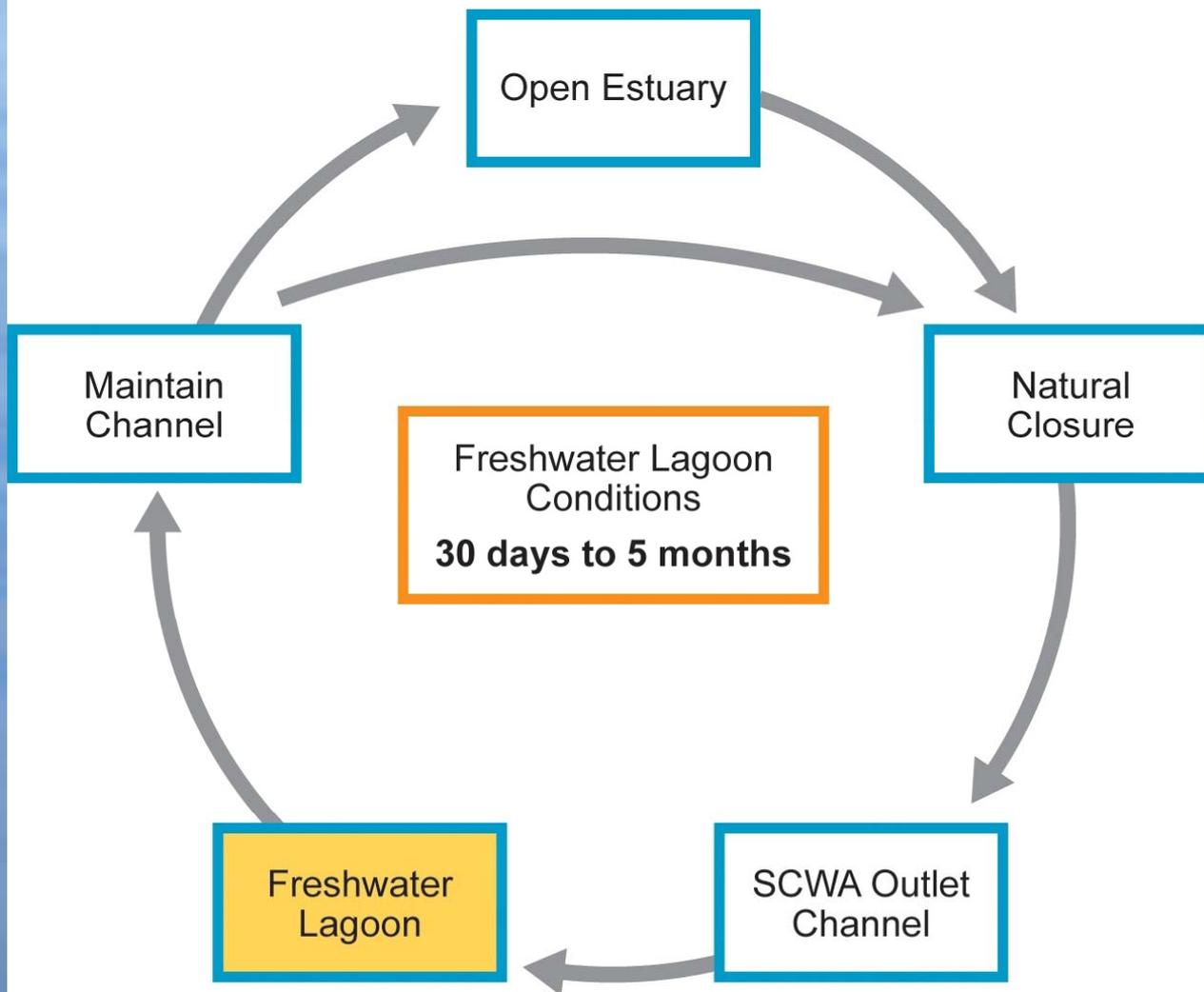
## CURRENT PRACTICE





# Proposed Estuary Management

PROPOSED PRACTICE  
Lagoon Management Period May 15-Oct 15



# Increase Duration of Lagoon Conditions





# Channel Location



- Channel Location and Configuration will Depend On Natural Closure Conditions
- Within historical area of occurrence



# Channel Creation

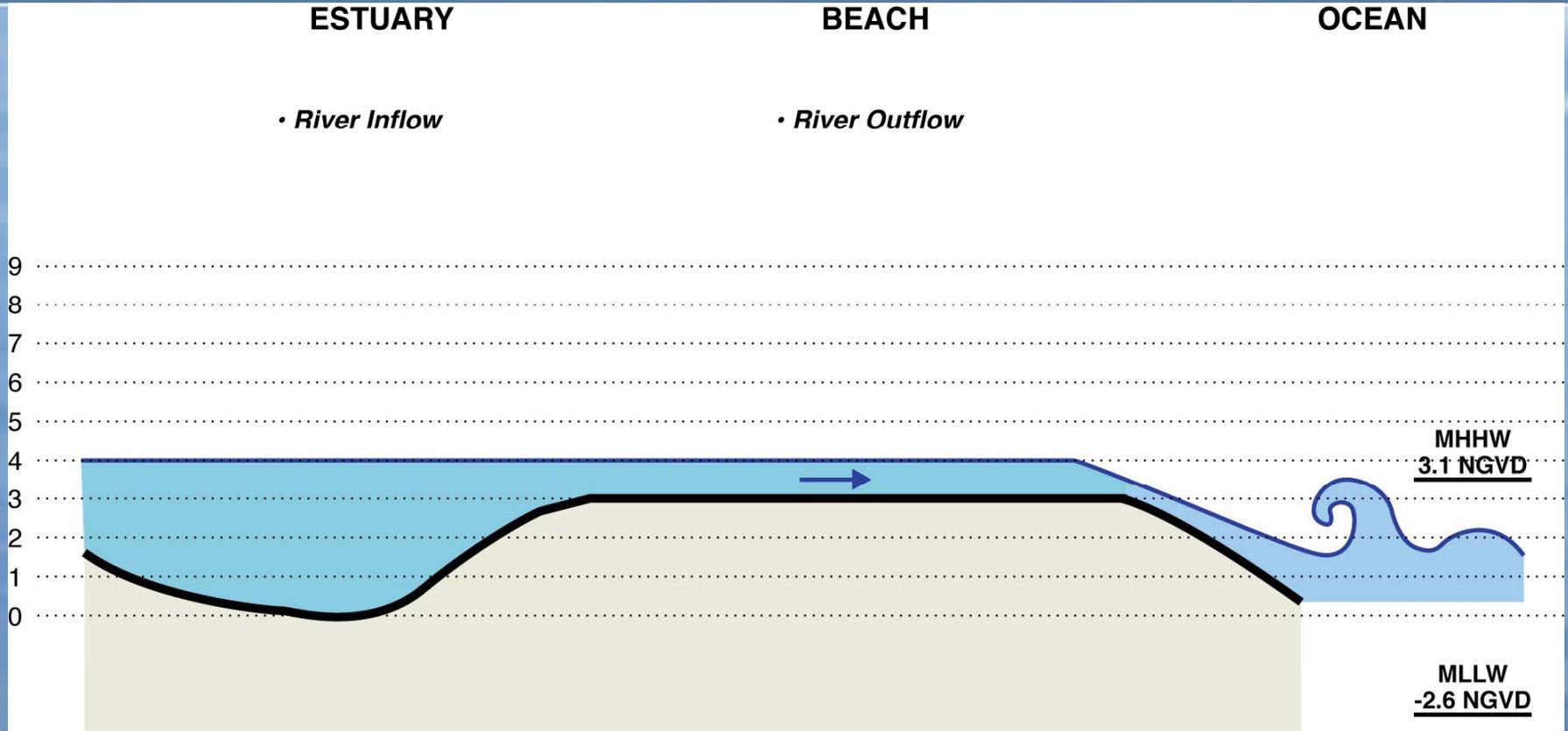
- Equipment
  - One or two pieces of equipment, consistent with current practices
- Frequency
  - Daily or weekly for initial management period
    - Consistent with MMPA, which limit number of consecutive days during pupping season
  - Less frequent for remaining management period
- Volume
  - Depends on resulting topography
  - Smoothed into adjacent beach



# Channel Sequence – Conceptual Profile View



# Current Practice





# Current Practice

**ESTUARY**

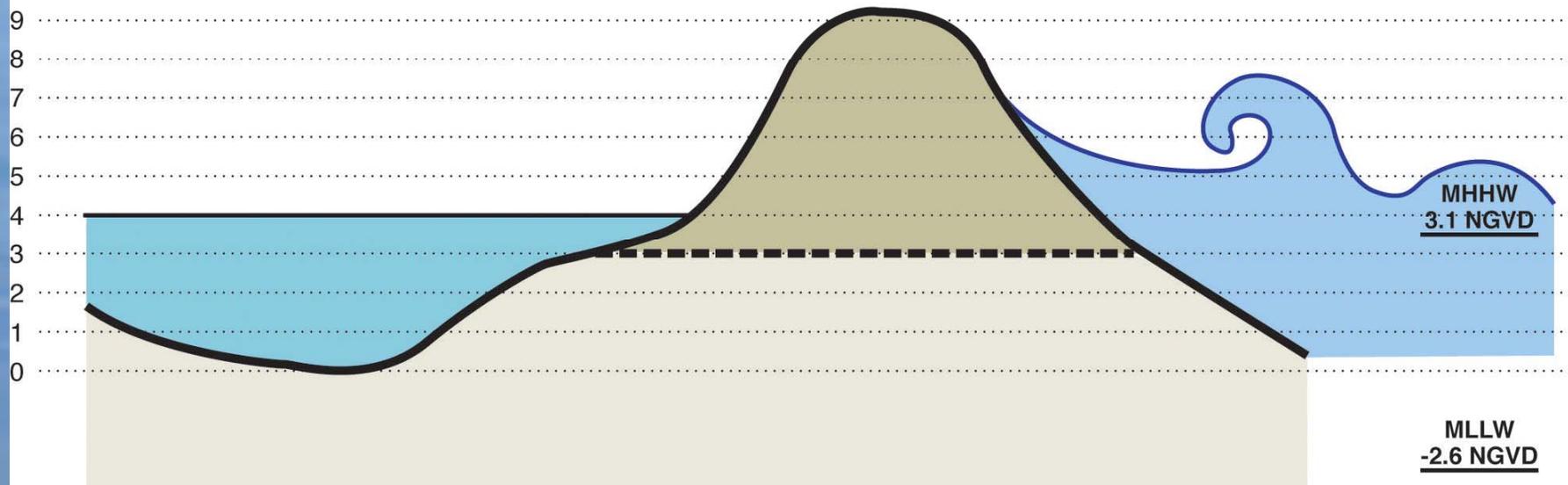
**BEACH**

**OCEAN**

• *Increased Water Surface*

• *Barrier Beach Creation*

• *Wave Event*





# Current Practice

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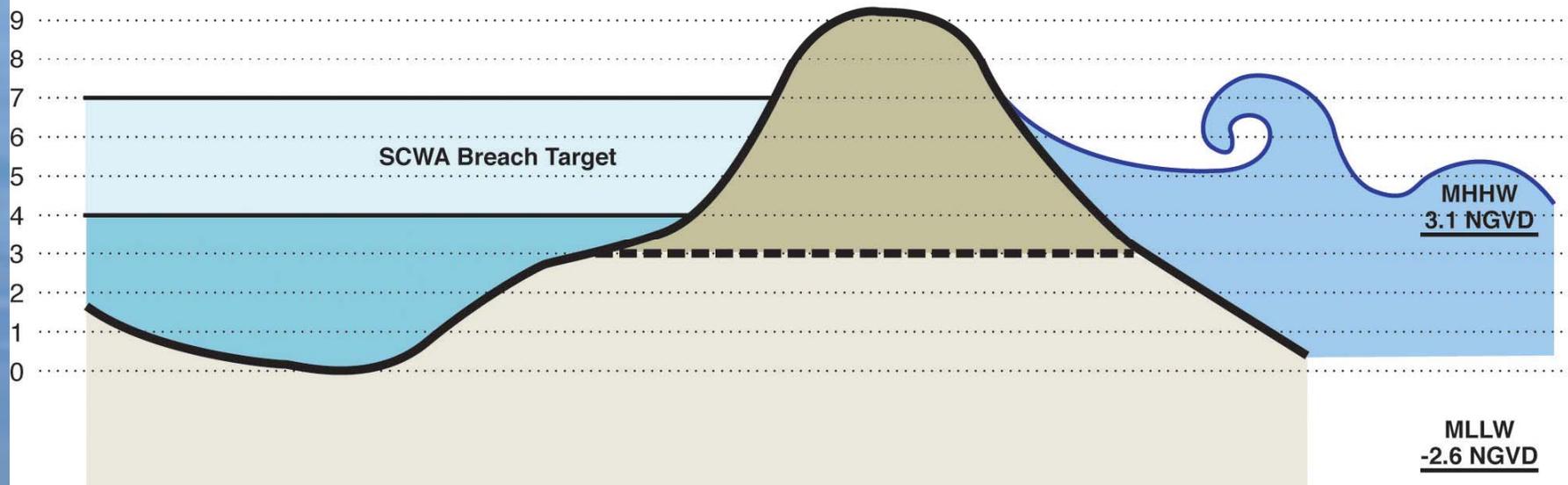
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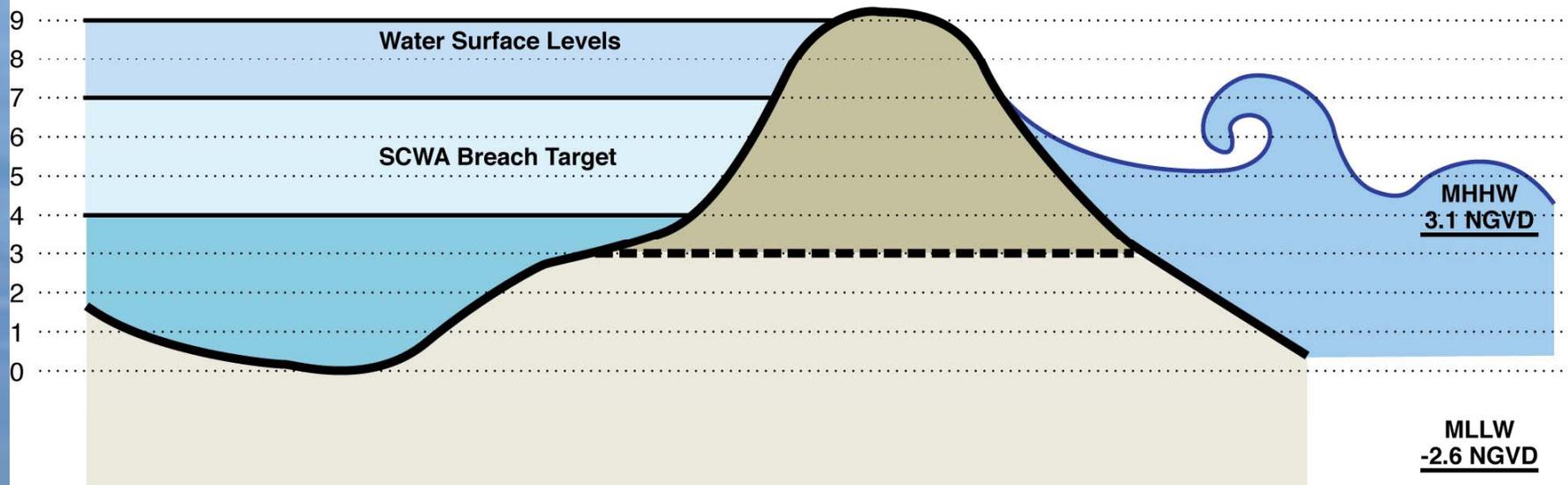
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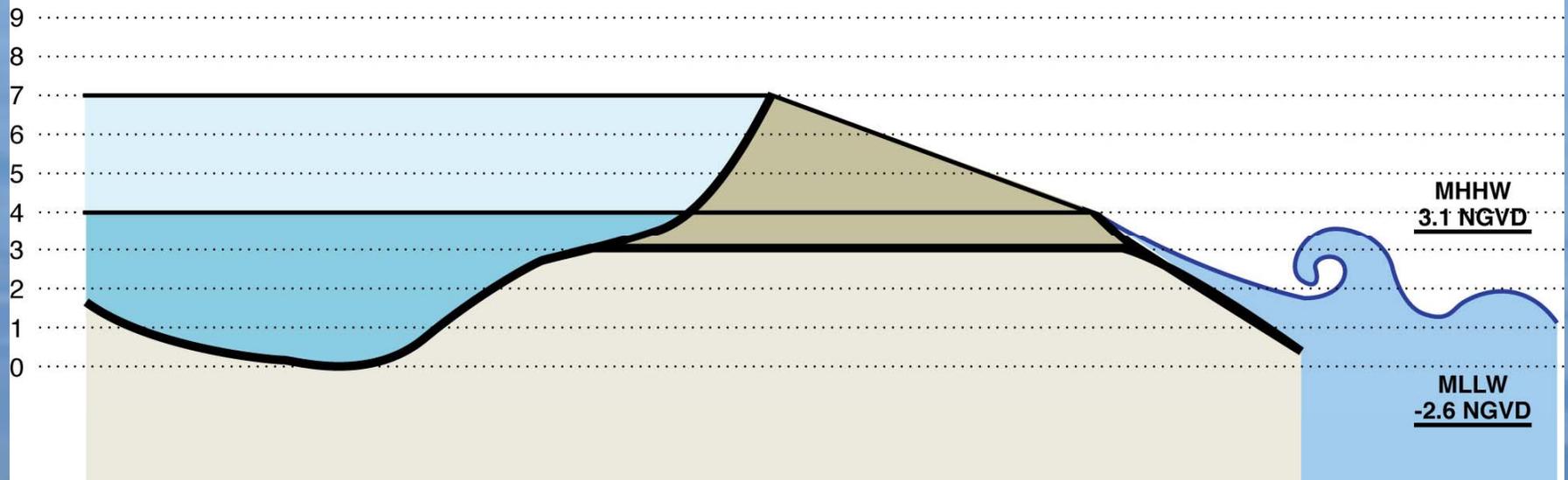
# Current Practice

ESTUARY

BEACH

OCEAN

• SCWA Breach at +7 Feet





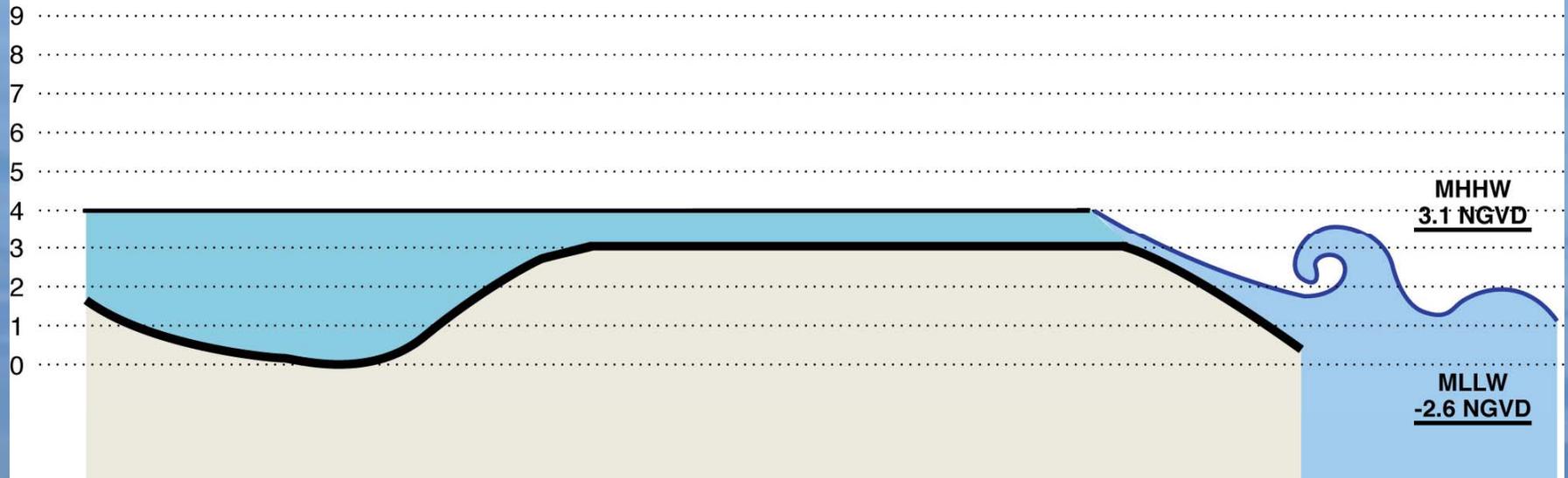
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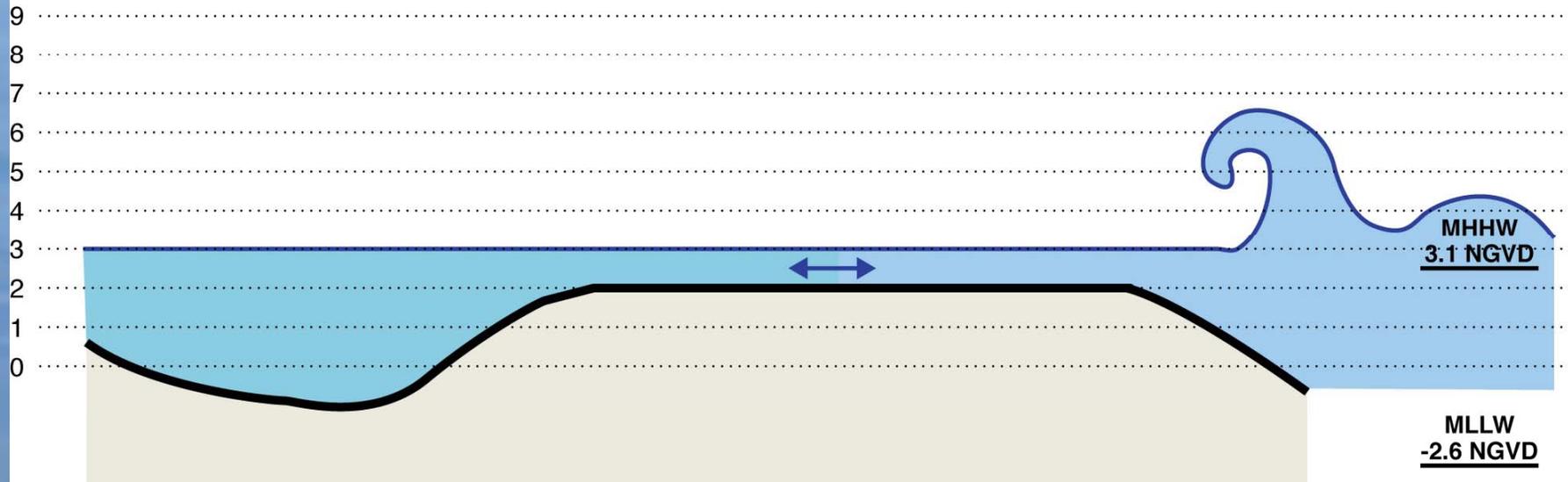
**ESTUARY**

**BEACH**

**OCEAN**

• *Saline Conditions*

• *Ocean Influence*





# Proposed Practice

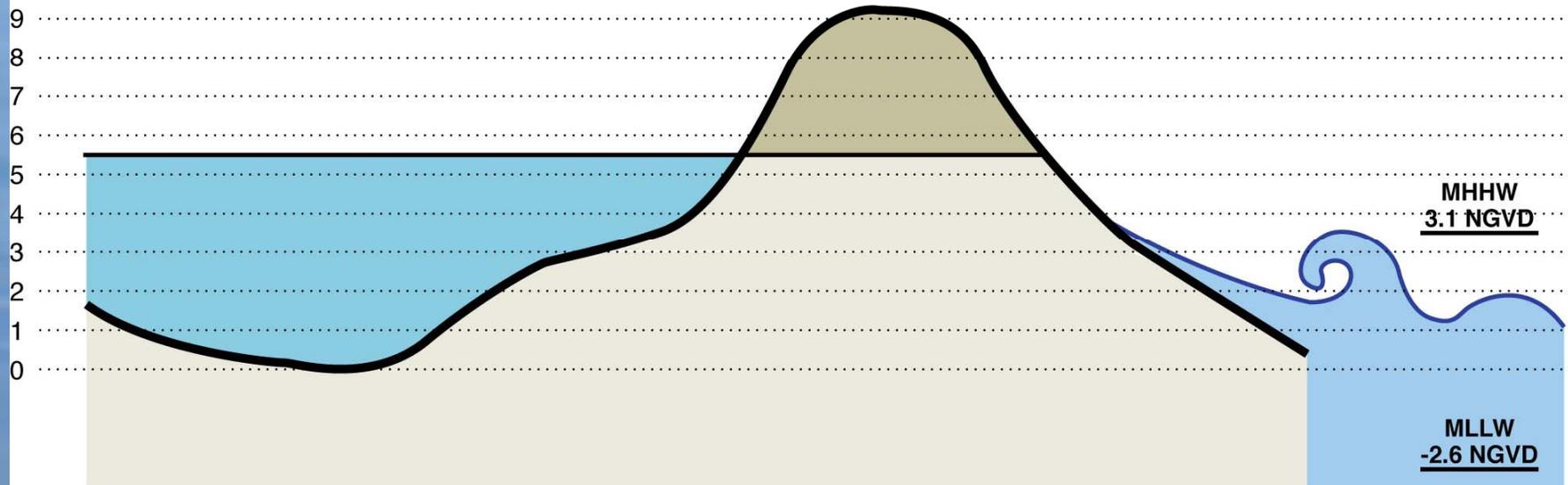
## ESTUARY

- *Freshwater Lagoon Condition*
- *Longer Duration*

## BEACH

- *SCWA Establish Channel*  
*Prior to Increase Water Surface*
- *Maintain Outflow*

## OCEAN



**MHHW**  
**3.1 NGVD**

**MLLW**  
**-2.6 NGVD**



# Proposed Practice

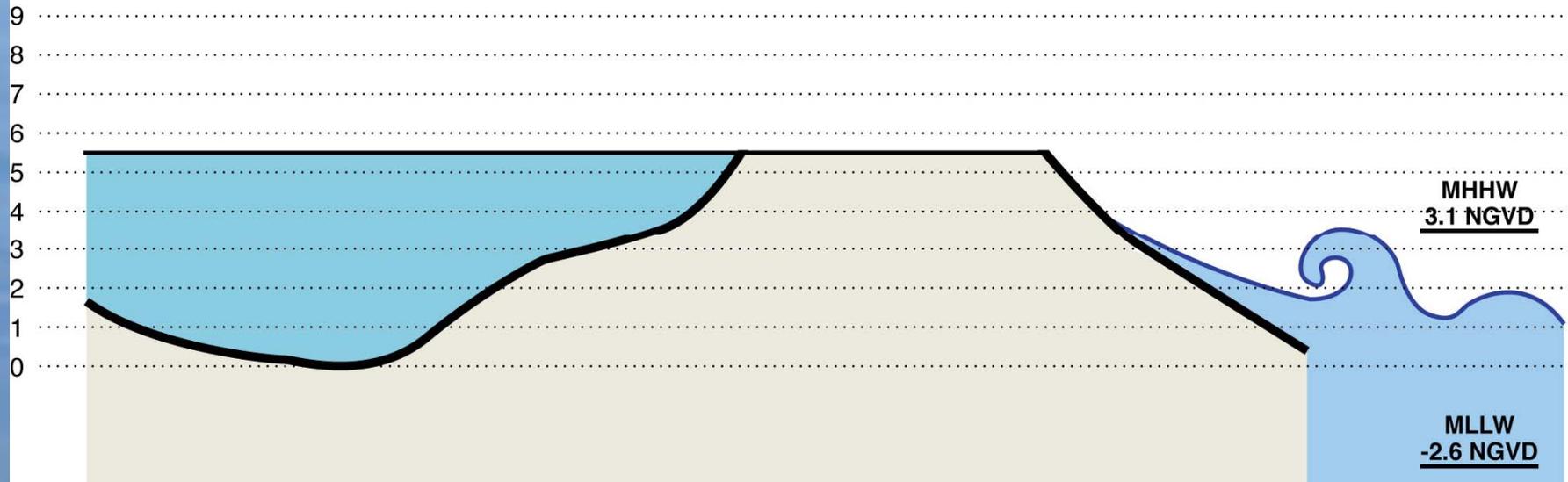
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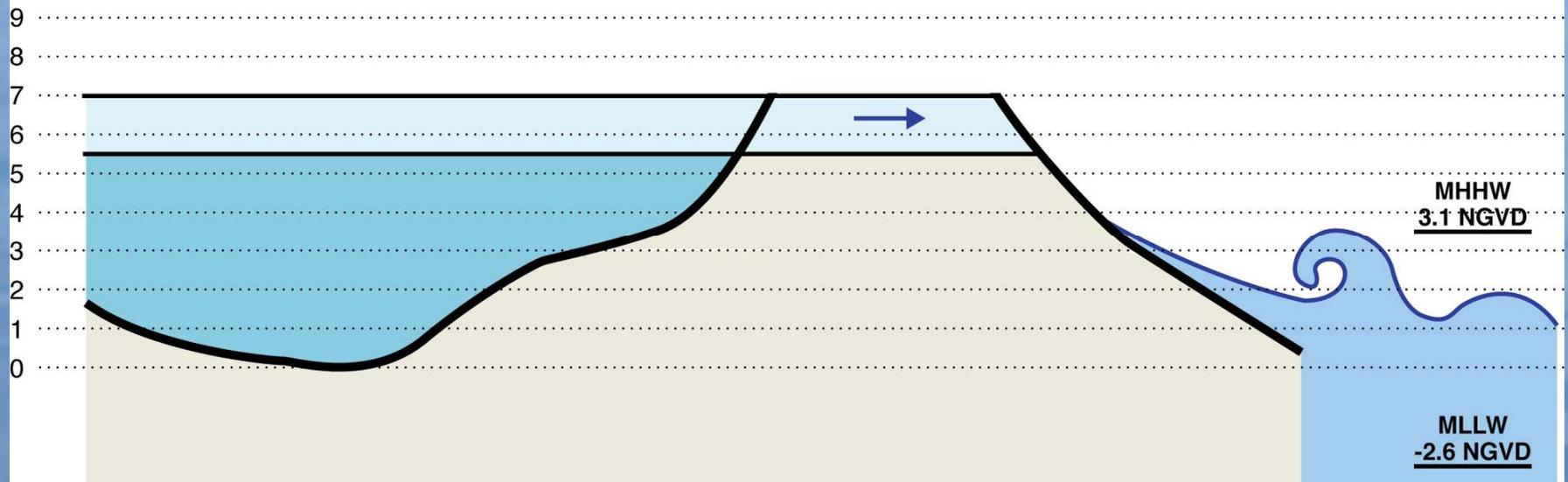
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## OCEAN



# Channel Breach Conditions



# Temporary Outlet Channel – Conceptual Layout





# EIR Analysis Sections

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems
- EIR Analysis: Establish Performance Standards and Mitigation Framework



# Effects to Properties

## **EIR Will Review:**

- Review of historical water surface elevations and resulting conditions
- Identification of water surface elevations related to proposed estuary management
- Review of potential effects to properties



# Water Quality

## **EIR Will Review:**

- Short-term effects of channel creation
- Management period changes in water quality associated with lagoon conditions
  - Localized and estuary scale trends
  - Salinity, DO, Temperature
- Other Issues: Nutrients, BOD, Bacteria



# Biological Resources

## EIR will Review:

- Species within Estuary and potential for:
  - Direct effects related to channel creation
  - Indirect effects related to increased frequency and duration of freshwater lagoon conditions during management period



# Biological Resources

## Key Species and Issues:

- Coho, Steelhead and Chinook rearing habitat
- Other fish species:
  - Over 40 freshwater, anadromous, marine, estuarine species
- Harbor Seal haulout, pupping, foraging access
- Invertebrate and macro-invertebrates
- Vegetative assemblage and distribution
- Invasive species



# Cultural Resources

- Phase I Cultural Resources Report underway
  - Database, Native American consultation, field reconnaissance

## **EIR will review:**

- Potential direct effects to known cultural resources
- Indirect effects of increased frequency and duration of freshwater lagoon conditions
- Mitigation Measures will be identified as appropriate



# Channel Creation

## **EIR will review:**

- Short-Term Impacts
  - Noise, Emissions, Recreational Access, Visual Resources
  - EIR will identify Best Management Practices (BMPs) as mitigation measures
- Minimize short-term impacts



# Recreation

## **EIR will review:**

- Effects to Goat Rock State Beach
- Beach access during channel creation
- Beach access during management period
- Other effects to recreational opportunities
  - Fishing, kayaking, surfing



# Other CEQA Sections

- Cumulative Impacts:
  - Cumulative effects when considered with other projects
  - Analysis will include other RRIFR and Non-RRIFR Projects
- Growth Inducement
- Energy and Depletable Resources
- Irreversible Commitment of Resources



# Alternatives

- Range of Alternatives: “Rule of Reason”
- No Project Alternative
  - Continuation of Current Practices
- Jetty Modification
- Other Flood Management Options
- Review alternative relative to proposed project



# Public Participation Opportunities

- EIR Notice of Preparation
  - Public Scoping Meetings
  - 45 day Public Comment Period Closes June 21
- Draft EIR 45-Day Public Review Period
  - Anticipated Summer 2010
  - Draft EIR Public Hearings
- Final EIR/Response to Comment
  - Anticipated Fall 2010



# How to Comment on the NOP

## **NOP Comment Period**

- Attend Scoping Meeting
- Comment Cards Available
- Submit electronic comments via email before June 21<sup>st</sup> to [estuaryproject@esassoc.com](mailto:estuaryproject@esassoc.com)
- Mail Written Comments Directly to:  
Sonoma County Water Agency  
Attn: Jessica Martini Lamb  
404 Aviation Boulevard  
Santa Rosa, CA 95403



# Open Workshop