

# Russian River Estuary Management Project

Final Environmental Impact Report  
Certification &  
Project Approval

August 16, 2011



SONOMA  
C O U N T Y  
W A T E R



A G E N C Y



**Russian River Instream  
Flow and Restoration**

[www.sonomacountywater.org](http://www.sonomacountywater.org)

# Agenda

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- **Project Description Overview**
- **CEQA Process/EIR Analysis Overview**
- **Final EIR – Response to Comments**
- **Requested Board Action**
  - Consider FEIR
  - Resolution certifying FEIR and Project Approval
  - Findings and Statement of Overriding Consideration



# Estuary Management Overview

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- Estuary open to tides much of the year
- Barrier beach naturally forms and closes river mouth, forming lagoon conditions
- River inflow causes water levels in the lagoon to rise, creating flood hazard
- 1950s-1990s: Breaching by residents and County Public Works
- Water Agency breaches closed barrier beach when water surface is between +4.5 and 7 feet
  - Highly Variable: Average 6 times annually since 1990s

# National Marine Fisheries Service (NMFS)

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- Federal Agency with authority under the Endangered Species Act (ESA)
  - Responsible for the management, conservation and protection of marine resources
  - Policies to protect three ESA-listed species from extinction
    - Chinook salmon, Coho salmon, Steelhead trout
- Issued Russian River Biological Opinion to Corps and Water Agency in 2008
  - Establishes required actions to avoid extinction

# NMFS Russian River Biological Opinion

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- Includes the following conclusions regarding Estuary:
  - Tidal saline Estuary minimizes the available habitat for juvenile steelhead
  - California fresh or brackish water lagoons provide depths and water quality highly favorable to survival of rearing steelhead
  - Modify Estuary management to reduce tidal influence and promote freshwater conditions

# Estuary Management Project: Project Objectives

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- Enhance rearing habitat for juvenile salmonids, particularly steelhead
  - Reduce tidal influence  
May 15 - Oct 15



- Manage water levels to minimize flooding

# Estuary Management Project: Project Description

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- Continue artificial breaching
- Lagoon Management Period – May 15 to Oct 15
  - Create temporary outlet channel
  - Monitor lagoon conditions
  - Adaptive Management
- Conform with regulatory permits
  - Corps, State Parks, NCRWQCB, State Lands, Coastal Commission, CDFG, NMFS

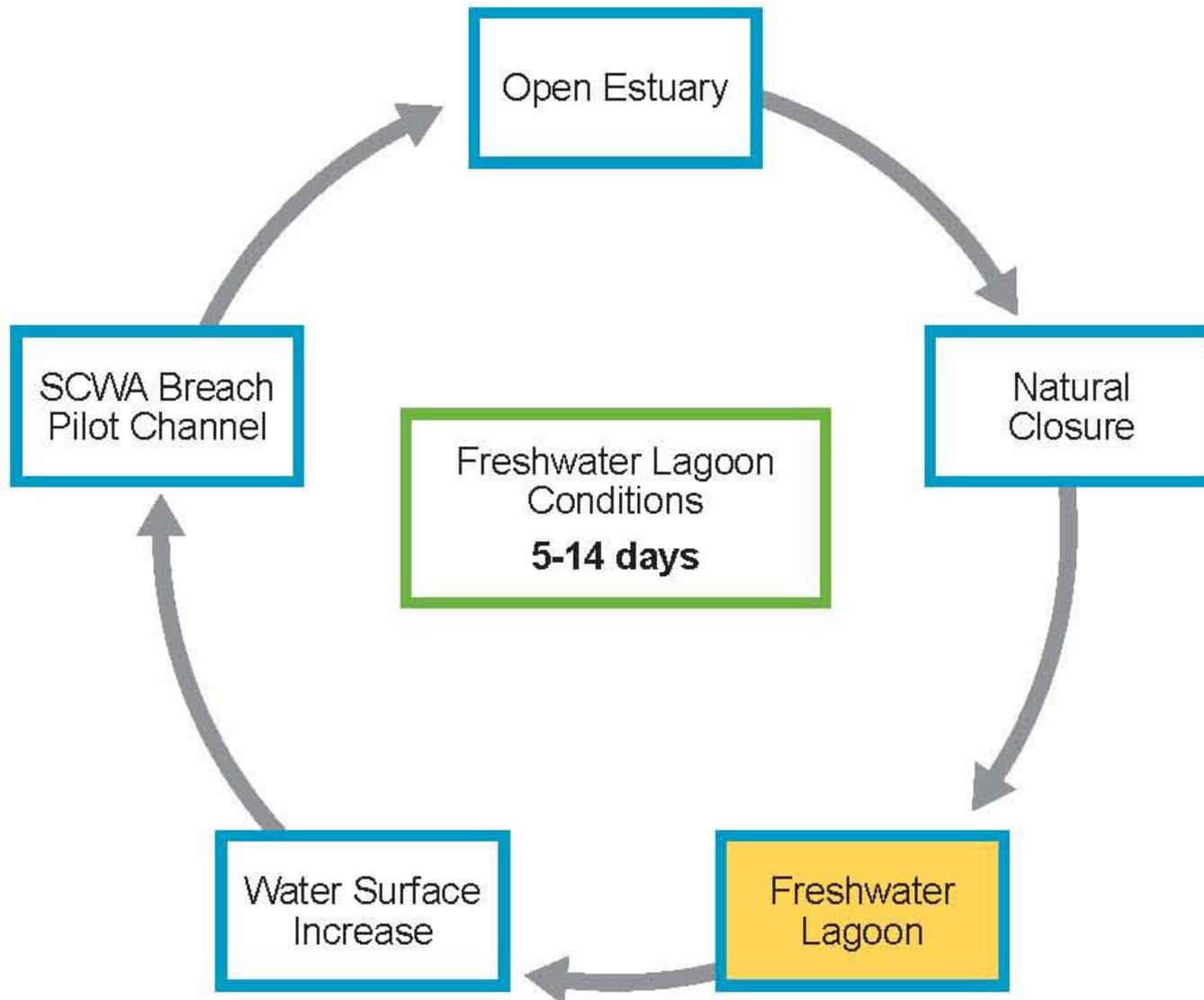
# Adaptive Management

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- Target Conditions:
  - Freshwater Lagoon in summer for juvenile steelhead
  - Target water level: 7'; maximum water level: 9'
- Adaptively manage outlet channel
- Monitor Estuary conditions
  - Water quality, biological resources, water surface elevations
- Adapt to Estuary conditions
  - Dynamic environment, wide range of conditions
  - Modify management in coordination with NMFS and CDFG

# Current Estuary Management

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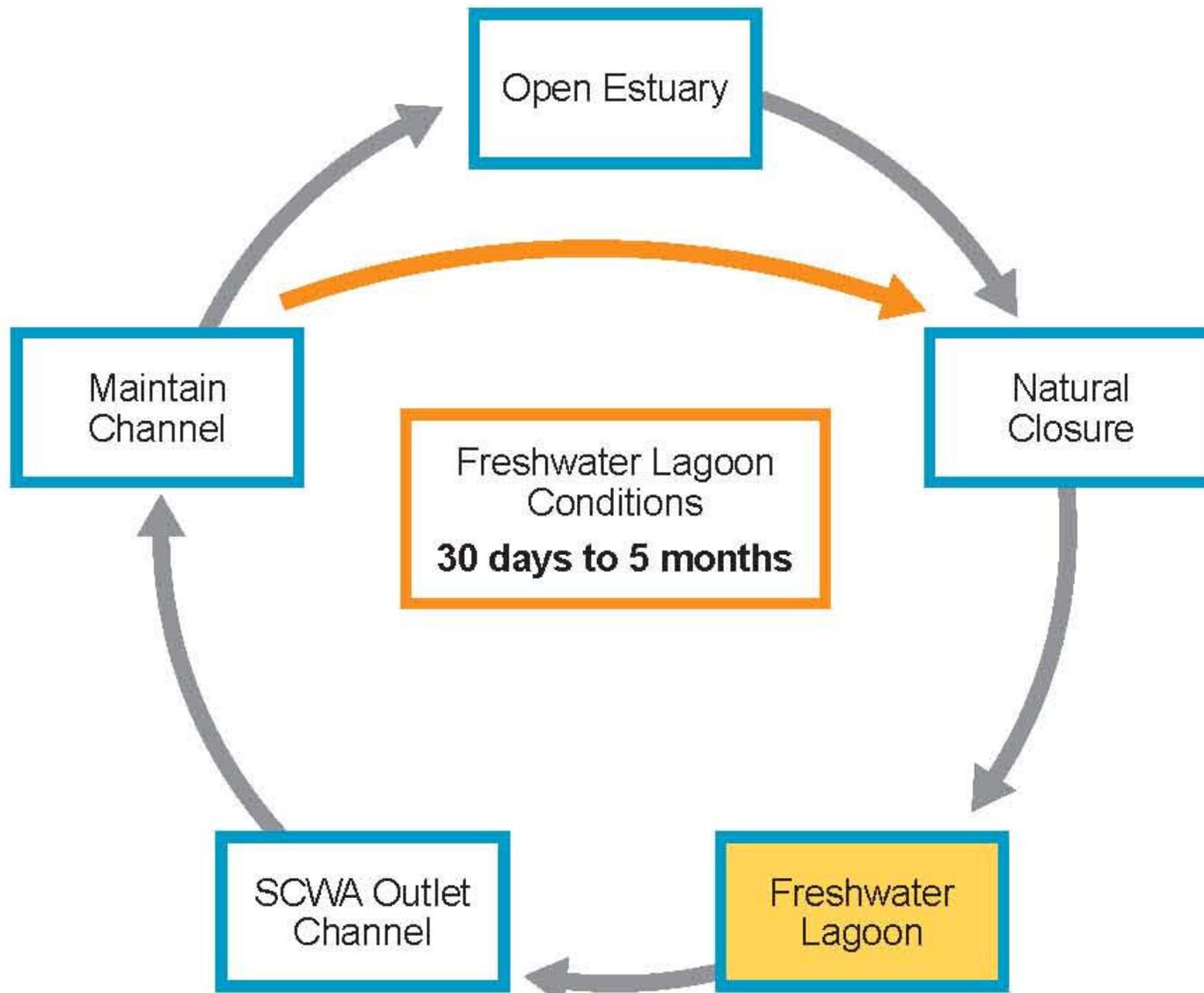


A photograph of a beach scene. In the foreground, a large, calm body of water reflects the sky and the beach. The beach is dark sand. A red excavator is positioned on the left side of the beach. A large, conical pile of sand is on the right. In the background, the ocean waves are breaking on the shore. The sky is a clear, bright blue. Overlaid on the bottom half of the image is white text.

**Lowers Water Surface  
Establishes Tidal Influence  
Saline Conditions**

# Proposed Estuary Management

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A wide-angle photograph of a coastal landscape. In the foreground, a grassy dune slopes down towards a dark sand beach. The beach is scattered with driftwood and rocks. A lagoon, filled with calm water, is situated between the dune and the ocean. The ocean extends to the horizon under a hazy, overcast sky. The text is overlaid on the upper portion of the image.

Increase Duration of Lagoon  
Conditions under range of historically  
observed flows: 70 cfs to 1,250 cfs

Open, tidal channel



Natural closure



# Lagoon Outlet Channel

July 8, 2010



# Outlet Channel



- Location and configuration will depend on natural closure conditions
- Establish Initial Channel
  - 1-2 day operation
  - Equipment consistent with current activities
- 18 maintenance events
- Designed to “fail to close”
  - preserve lagoon v. scour

# Change in Estuary Water Levels

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- Estuary regularly experiences water levels of 7' to 9' during barrier beach closures
- Project will increase the duration of those water levels during summer months
- Effects associated with longer duration of higher water levels during summer months
- EIR discloses impacts of managing lagoon water levels at 9' for entire 5 month period

# CEQA Public Participation Process

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- **Notice of Preparation**

- Circulated May 6, 2010
- Public scoping meetings held on May 19 & 20, 2010
- 45-day public comment period closed June 21, 2010
- Notices mailed to 1,662 parties
- Advertised in community and regional papers

- **Draft EIR Public Review**

- Circulated December 2010
- Public Hearing – January 2011
- 60-day public review period closed February 14, 2011
- Notice of Availability mailed to 1,352; advertised in community and regional papers

# EIR Impact Analysis

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- Geology and Soils
- Hydrology and Flooding
- Water Quality
- Biological Resources
- Fisheries
- Land Use and Agriculture
- Recreation
- Cultural Resources
- Noise
- Air Quality
- Traffic
- Hazards and Hazardous Materials
- Public Services and Utilities and Public Safety
- Aesthetics
- Cumulative

# Key Impact Areas

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- Fisheries: Beneficial
- Hydrology: Significant Unavoidable
  - Property and infrastructure inundation
  - Increased risk of flooding in an unlikely tsunami event
- Water Quality: Significant Unavoidable
  - Nutrients/bacteria
  - Groundwater
- Biological Resources: Significant Unavoidable
  - Interior river haul outs
- Recreation: Significant Unavoidable
  - Riverfront beach inundation
  - Surfing

# Cumulative Impacts

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- Cumulative effect of proposed project and other projects of similar nature
- Cumulatively Significant Effects identified for:
  - Water quality (nutrients/bacteria)
    - In some years, lower flows may increase occurrence of higher nutrient/bacteria concentrations
  - Groundwater impacts
  - Changes to in-river haulouts

# Range of Alternatives

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## 1. No Project Alternative

Continuation of Current Program, and No Further Artificial Breaching

## 2. Habitat Restoration Alternative

## 3. Temporary Standpipe Alternative

## 4. Reduced Project Alternative

## 5. Jetty Modification

## 6. Alternative Flood Management

Proposed Project best meets project objectives and regulatory requirements

# Response to Comments and Final EIR

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- 203 Commentors
  - 8 Agencies,
  - 13 Organizations,
  - 171 Individuals
  - 11 Public Hearing Commentors
- 9 Master Responses prepared to address common or similar issues



# Final EIR Master Response Topics

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- Relationship to Other Biological Opinion Projects
- Project Description, Impact Areas, Scope of Analysis
- Project Feasibility
- Water Quality
- Alternatives
- Recreational and Socioeconomic Impacts, Mitigation Feasibility
- CEQA Statutes and Adequacy of Analysis
- Public Participation Process
- Re-circulation

# Final EIR Master Comments

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- Relationship to Other Biological Opinion Projects
  - Independent utility in terms of objectives, timing requirements, regulatory approvals, location
  - Would accommodate observed range of hydrologic flow conditions; 70 cfs to 1,250 cfs
  - Includes cumulative analysis, including the Fish Flow Project
  - Stand Alone Project under CEQA

# Final EIR Master Comments

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- Water Quality

- Project would not alter water quality inputs
- Review of 2010 data report: Consistent with data provided in the Draft EIR
- Discussion regarding secondary water quality issues, such as algal blooms and ludwigia
- Clarification of 2010 nutrient/bacteria data reporting
- No changes in the EIR conclusions

# Final EIR Circulation

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- Final EIR responds to comments received as required under CEQA
  - Recirculation of Draft EIR not required
  - Discloses impacts of discretionary action
- Final EIR Circulation
  - Responses to comments circulated July 28, 2011
  - Notice of Board Meeting August 16, 2011

# Requested Board Action

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- Certify Final EIR and Approve the Project
- Adopt mitigation measures and Mitigation Monitoring and Reporting Program (MMRP)
- Adopt Findings Regarding Impacts and Mitigation
- Statement of Overriding Considerations
  - Compliance with Biological Opinion
  - Continued flood protection
  - Improved and enhance rearing habitat for T&E salmonid species through adaptive management
- File Notice of Determination

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# Questions and Board Consideration