

# CHAPTER 1.0

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## Introduction

The Sonoma County Water Agency (Water Agency), as Lead Agency, has prepared this Draft Environmental Impact Report (EIR) for the proposed Russian River Estuary Management Project (Estuary Management Project or proposed project), in accordance with the provisions of the California Environmental Quality Act (CEQA) of 1970, codified as California Public Resources Code Sections 21000 et. seq., the State CEQA Guidelines in the Code of Regulations, Title 14, Division 6, Chapter 3, and the Water Agency's Procedures for the Implementation of CEQA. The EIR is a public document for use by the Water Agency, other governmental agencies, and the public in identifying and analyzing the potential effects on the environment and mitigation measures to lessen or eliminate adverse impacts, and examining feasible alternatives to the proposed project.

### 1.1 Background and Overview of Proposed Project

The Water Agency was created in 1949 by the California Legislature as a special district to provide flood protection and water supply services. The Sonoma County Board of Supervisors acts as the Water Agency's Board of Directors. The Water Agency's powers and duties, as authorized by the California Legislature, include the production and supply of surface water and groundwater for beneficial uses, control of flood waters, generation of electricity, provision of recreational facilities (in connection with the Water Agency's facilities), and the treatment and disposal of wastewater.

The Russian River Estuary (Estuary) is open to the ocean tides for much of the year. At certain times, the natural formation of a barrier beach<sup>1</sup> across the mouth of the Russian River cuts off the tidal connection between the ocean and the Russian River and creates a lagoon.<sup>2</sup> The Estuary may close at any time of the year, although the closures occur most often during the spring, summer, and late fall. Closures result in increasing water levels in the Estuary behind the barrier beach and an increase in the risk of flooding low-lying properties (SCWA, 2009). Natural breaching of the barrier beach occurs when Estuary water levels exceed the capability of the barrier beach to impound this water, causing localized erosion of the barrier beach and creating a tidal channel that reconnects the Russian River to the Pacific Ocean. Historically, private citizens breached the barrier beach, enabling the river to flow into the ocean, in an effort to avoid flooding. In the 1960s, the Sonoma County Public Works Department began carrying out breaching, using heavy

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<sup>1</sup> For the purposes of this project, the term barrier beach is used to describe closed sandbar conditions, consistent with National Marine Fisheries Service (NMFS) terminology.

<sup>2</sup> A lagoon is formed when a barrier beach restricts tidal exchange in the Estuary.

equipment. After a county reorganization in the mid-1990s, the Water Agency began to perform activities related to breaching the barrier beach. Currently, the Water Agency artificially breaches the barrier beach when the water surface level in the Estuary is between 4.5 and 7.0 feet above mean sea level, as determined by the gage at the Jenner Visitor's Center, in accordance with the *Russian River Estuary Study 1992–1993* (Heckel, 1994). Artificial breaching occurred every year between 1996 and 2009, except 2006. A detailed description of artificial breaching activities is provided in **Chapter 2.0, Project Description**.

In September 2008, the National Marine Fisheries Service (NMFS) issued the *Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation District in the Russian River Watershed* (Russian River Biological Opinion).<sup>3</sup> The Russian River Biological Opinion is a culmination of more than a decade of consultation between the Water Agency, the U.S. Army Corps of Engineers (USACE), and NMFS regarding the impact of the Water Agency's and USACE's water supply and flood control activities on three fish species listed under the federal Endangered Species Act: Central California Coast steelhead, Central California Coast coho salmon, and California Coastal Chinook salmon. The California Department of Fish and Game (CDFG) issued a consistency determination on November 9, 2009, finding that the Russian River Biological Opinion was consistent with the requirements of the California Endangered Species Act (CESA) and adopted the measures identified in the Russian River Biological Opinion.

The Russian River Biological Opinion concluded that the continued operations of Coyote Valley Dam and Warm Springs Dam by the USACE and the Water Agency in a manner similar to recent historic practices, together with the Water Agency's stream channel maintenance activities and Estuary management, are likely to jeopardize and adversely modify critical habitat for endangered coho salmon and threatened steelhead. The Russian River Biological Opinion found that artificially elevated inflows to the Russian River Estuary during the low flow season (May through October) and historical artificial breaching practices have significant, adverse effects on the Russian River's estuarine rearing habitat for juvenile salmonids, particularly steelhead. The historic method of artificial breaching, which is done in response to rising water levels behind the barrier beach, creates a tidal marine environment with shallow depths and high salinity. The Russian River Biological Opinion concludes that the combination of high inflows and breaching practices impact rearing habitat because they interfere with natural processes that would otherwise cause a freshwater lagoon to form behind the barrier beach. According to NMFS, fresh or brackish water lagoons at the mouths of many streams in central and southern California often provide depths and water quality that are highly favorable to the survival of rearing salmon and steelhead.<sup>4</sup>

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<sup>3</sup> The Russian River Biological Opinion may be accessed online at [www.sonomacountywater.org](http://www.sonomacountywater.org) and may be reviewed at the Water Agency's office located at 404 Aviation Boulevard, Santa Rosa, CA.

<sup>4</sup> National Marine Fisheries Service. *Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation District in the Russian River Watershed*. p. 243. September 2008.

The Russian River Biological Opinion requires the Water Agency to collaborate with NMFS and the CDFG and to modify Estuary management in order to reduce marine influence (high salinity and tidal inflow) and promote a higher water level in the Estuary (formation of a fresh or brackish water lagoon) from May 15 to October 15 (referred to hereafter as the “lagoon management period”). Conditions in a fresh or brackish water lagoon are thought by NMFS to enhance the quality of rearing habitat for juvenile salmonids. The Russian River Biological Opinion prescribes a program of potential, incremental steps to accomplish these conditions, including adaptive management of a lagoon outlet channel on the barrier beach during the lagoon management period. The Water Agency would continue the historical practice of artificially breaching the barrier beach to minimize flooding outside of the lagoon management period.

## 1.2 Project Objectives, Purpose, and Need

This EIR has been developed to provide the public and responsible and trustee agencies reviewing the Estuary Management Project an analysis of the potential effects, both beneficial and adverse, on the local and regional environment associated with implementation and operation of the Estuary Management Project. In order to comply with the requirements of the Russian River Biological Opinion, the Water Agency will adaptively manage the Estuary with the primary objectives of enhancing rearing habitat for juvenile salmonids, particularly steelhead, and managing Estuary water levels to minimize flood hazard. Rearing habitat may be enhanced by reducing tidal influence on the Russian River Estuary during the lagoon management period to increase freshwater habitat available for rearing salmon and steelhead. Adaptive management requires: 1) monitoring of biological productivity, water quality, and physical processes in the Estuary in response to the changes in management actions that control water surface elevations in the estuary-lagoon system; and 2) refinement of management actions to achieve desired water levels to support biological productivity, while simultaneously providing flood management for properties adjacent to the Estuary. The Estuary Management Project proposes the elements discussed in **Chapter 2.0, Project Description**.

In addition to the primary objectives, the Estuary Management Project is intended to assist the Water Agency in its efforts to provide for the health and safety of visitors and employees of Goat Rock State Beach, and Water Agency staff, during management activities; and to implement, operate, and maintain management techniques in a technically and economically feasible manner.

## 1.3 Agency Use of this Document

Section 15124(d) of the CEQA Guidelines requires that an EIR contain a statement briefly describing the intended uses of the EIR. This Draft EIR has been prepared to analyze the potential environmental impacts of proposed management of the Russian River Estuary. This EIR will be used primarily by the Water Agency, as the lead agency, and other Responsible Agencies, to evaluate environmental impacts of the proposed project and make a decision of approval for the proposed project. Prior to a decision, the Water Agency will consider certification of the EIR. Upon completion and certification of this EIR, the Water Agency will use this document to make

written findings and decisions, adopt a Statement of Overriding Considerations, if necessary, and file a Notice of Determination (NOD).

## 1.4 CEQA Process

This document satisfies the requirements of the CEQA. The primary purpose of an EIR is to identify and publicly disclose environmental impacts that may result from implementation of a project and to identify feasible alternatives, mitigation measures, or revisions to the project that would reduce those impacts, to the degree feasible. CEQA requires a determination of impact significance for each impact discussed in an EIR based on the significance criteria. This document has been prepared as a project-level EIR, as provided for by CEQA Guidelines Section 15161.

### 1.4.1 Notice of Preparation and Public Scoping

In accordance with CEQA Guidelines Section 15082, the Water Agency circulated a Notice of Preparation (NOP) to local, state, and federal agencies, and to other interested parties on May 7, 2010. The NOP was mailed to the State Clearinghouse and was available online on the Water Agency website and local libraries. The NOP was circulated for a 45-day public review period, which ended on June 21, 2010,<sup>5</sup> to solicit both written and verbal comments on the EIR's scope and provide information on the public scoping meeting. Additionally, the NOP presented the background, purpose, description, and location of the proposed project, potential issues to be addressed in the EIR, and contact information for additional information regarding the project. The NOP was directly mailed to 400 parties, and a postcard notification of the NOP's availability was sent to 1,200 parties.<sup>6</sup>

During the NOP review period, the Water Agency held two scoping meetings, in May at the Jenner Community Center and the Sonoma County Permit and Resource Management Department in Santa Rosa, to discuss the project and to solicit public input as to the scope and content of this EIR.

Public legal notices and display advertisements were placed in five local newspapers informing the general public of the availability of the NOP and the times and locations of scheduled scoping meetings. The purpose of the scoping meetings was to present the proposed project to the public through use of display maps and handouts describing project components and potential environmental impacts. Attendees were provided an opportunity to voice comments or concerns regarding potential effects of the proposed project. **Appendix 1** of this Draft EIR contains a copy of the NOP and the

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<sup>5</sup> The public scoping period generally lasts for 30 days; the Water Agency determined 45 days was appropriate for this project.

<sup>6</sup> The distribution list was developed based on the Water Agency databases of regulatory agencies with jurisdiction, local organizations, business, and interest groups, and property owners based on parcel data. Hard copies of the NOP were mailed directly to federal, state, and local agencies with jurisdiction; members of organizations, business, and interest groups that requested a copy; and property owners with postal zip codes within Jenner, Duncans Mills, Monte Rio, Ville Grande, Rio Nido, Camp Meeker, Forestville, Occidental, and some in the Bodega Bay area. Postcards were mailed to parties that have previously expressed interest in the Russian River Instream Flow and Restoration Program, including other local agencies, other interest groups and organizations, and a subset of Sonoma County residents and property owners (outside of the locations listed above).

Scoping Report, which provides a summary of all verbal and written comments received, and copies of the written comments.

During an additional scoping meeting with regulatory agencies' staff, the Water Agency requested participation from regulatory agencies with jurisdiction over the project area or resources to solicit their comments and input on the scope of the EIR. Invitees included members from NMFS, USACE, CDFG, California Department of Parks and Recreation (State Parks), North Coast Regional Water Quality Control Board, California Coastal Commission, and California State Lands Commission. The meeting was not attended by representatives from the latter two agencies. Written comments received during the scoping meetings and circulation of the NOP are included in **Appendix 1**. A total of 33 comment submittals (letters, emails, comment cards) were received. Collectively, a total of 38 individual verbal comments were received and noted below. Written comments were received from federal agencies, including NMFS; state agencies, including CDFG, State Parks, and California Native American Heritage Commission; public organizations, including SealWatch, Russian Riverkeeper, Save the Waves Coalition, Sonoma Coast Surfrider Foundation, Russian River Watershed Protection Committee, Northern California River Watch, Trout Unlimited; and members of the public. The comments included questions regarding the project description and CEQA process, as well as CEQA technical issues, including potential effects on water quality, biological and fisheries resources, hydrology, cultural resources, climate change, and recreational resources.

## 1.4.2 Draft EIR

This document constitutes the Draft EIR. The report contains a description of the Estuary Management Project elements, description of the environmental setting and baseline conditions, identification of impacts, and mitigation measures, where feasible, for impacts found to be significant, as well as an analysis of alternatives. This document is intended to provide the Water Agency with the information required to carry out its activities with respect to the proposed project. The Draft EIR addresses environmental issues that could result in potentially significant environmental effects from project implementation. Significance criteria have been developed for each environmental issue analyzed in this Draft EIR and are defined at the beginning of each impact analysis section. Impacts are categorized as follows:

1. Significant and unavoidable;
2. Potentially significant, but can be mitigated to a less-than-significant level;
3. Less than significant (mitigation is not required under CEQA, but may be recommended);
4. No impact; or
5. Beneficial.

CEQA requires that a lead agency shall neither approve nor carry out a project as proposed unless the significant environmental effects have been reduced to an acceptable level, where possible (CEQA Guidelines Section 15091 and Section 15092). An acceptable level is defined as eliminating, avoiding, or substantially lessening the significant effects. If such a reduction is not possible, a lead agency must adopt mitigation measures and findings for potentially significant

impacts that can be reduced to a less than significant level. For those impacts that remain significant and unavoidable, a lead agency must adopt findings regarding alternatives and a Statement of Overriding Considerations. As defined in CEQA Guidelines Section 15093, a Statement of Overriding Considerations balances the benefits of a project against its unavoidable environmental consequences.

## Scope of this EIR

The Water Agency identified in the NOP the potential areas of analysis that could be addressed in the EIR. Based on the NOP scoping process, the Water Agency determined that this EIR would address the following technical issue areas, which are listed in the order in which they appear in **Chapter 4.0**:

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|-----------------------------|---|
| 1. Geology and Soils        | 8. Cultural Resources                               |
| 2. Hydrology and Flooding   | 9. Noise  |
| 3. Water Quality            | 10. Air Quality                                     |
| 4. Biological Resources     | 11. Transportation and Traffic                      |
| 5. Fisheries                | 12. Hazards and Hazardous Materials                 |
| 6. Land Use and Agriculture | 13. Public Services and Utilities and Public Safety |
| 7. Recreation               | 14. Aesthetics                                      |

## Organization of the Draft EIR

This Draft EIR has been organized into the following chapters:

- ES. Executive Summary.** This chapter summarizes the contents of the Draft EIR and provides a tabulation of the impacts and mitigation measures for the proposed project and alternatives.
- 1. Introduction and Project Background.** This chapter discusses the CEQA process, the purpose of the EIR, and the intended use of the document.
- 2. Project Description.** This chapter provides a detailed description of the proposed project.
- 3. Project Background and Environmental Setting.** This chapter discusses existing conditions and establishes the environmental baseline for several key issue areas.
- 4. Impacts and Mitigation Measures.** This chapter provides a comprehensive analysis and assessment of impacts and mitigation measures for the proposed project. This section is divided into main sections for each environmental issue area (e.g., Air Quality, Biological Resources, etc.) that contain the environmental settings, regulatory framework, significance thresholds, and impacts of the proposed project.
- 5. Cumulative Impacts.** This chapter describes the potential impacts of the proposed project when considered together with other related projects in the action area.
- 6. Alternatives Analysis.** This chapter presents an overview of the alternatives development process and describes the alternatives to the proposed project that were considered.
- 7. Other Topics Required by CEQA.** This chapter describes the potential for the proposed project to induce growth and discusses indirect secondary impacts associated with the

proposed project. This chapter also provides a discussion of significant environmental effects that cannot be avoided and irreversible environmental changes.

8. **Report Preparers.** This chapter identifies authors and consultants involved in preparing this Draft EIR, including persons and organizations consulted.
9. **Appendices.** The appendices contain supporting documents and technical data used in the preparation and documentation of the analysis included in the EIR.

## Public Review

This Draft EIR will be available to local, state, and federal agencies and to interested organizations and individuals who may want to review and comment on the report. Notice of this Draft EIR will also be sent directly to every agency, person, or organization that commented on the NOP. Publication of this Draft EIR marks the beginning of a 60-day public review period, during which written comments will be accepted via regular mail, fax, and e-mail at the contact information listed below. During the review period, the Water Agency will hold a public hearing on the Draft EIR. Details regarding the public hearing will be posted on the Water Agency's website, [www.sonomacountywater.org](http://www.sonomacountywater.org), in local newspapers, or by sending inquiries to:

**Sonoma County Water Agency**  
**Attention: Jessica Martini-Lamb**  
**404 Aviation Boulevard**  
**Santa Rosa, CA 95403**  
**email: [estuaryproject@esassoc.com](mailto:estuaryproject@esassoc.com)**

### 1.4.3 Final EIR

Written and oral comments received in response to the Draft EIR will be addressed in a Response to Comments document which, together with the Draft EIR, will constitute the Final EIR. As the CEQA Lead Agency, the Water Agency's Board of Directors will consider certification of the EIR as complete under CEQA (CEQA Guidelines Section 15090). Once the EIR has been certified, the Water Agency may proceed to consider project approval. Prior to approving the project, the Water Agency must make written findings with respect to each significant environmental effect identified in the EIR in accordance with Section 15091 of CEQA Guidelines. The Water Agency would be required to adopt Findings of Fact, and for impacts determined to be significant and unavoidable, adopt a Statement of Overriding Considerations.

## 1.5 References

Heckel, M., *Russian River Estuary Study, 1992-1993*, Prepared for Sonoma County Department of Planning and California State Coastal Conservancy, 1994.

National Marine Fisheries Service (NMFS), *Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation Improvement District in the Russian River Watershed*, September 24, 2008.

Philip Williams and Associates (PWA), *Final Russian River Estuary Outlet Channel Adaptive Management Plan 2010*, prepared for Sonoma County Water Agency, June 23, 2010.

Sonoma County Water Agency (SCWA), *Request for Marine Mammal Protection Act Incidental Harassment Authorization, Russian River Estuary Management Activities*, September 2009.