SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors **AGENDA NO. V-D**

FROM: Steve Mack, General Manager

Meeting Date : September 1, 2016

SUBJECT: SONOMA COUNTY WATER AGENCY OPEN HOUSE REGARDING DECISION 1610

RECOMMENDED ACTION: Receive a presentation from General Manager Steve Mack regarding the meeting held August 24, 2016 at the Monte Rio Community Center on the Sonoma County EIR on its proposal to change Water Rights Decision 1610 with changes proposed by the Fish Flow Project and provide direction.

FISCAL IMPACT: none

DISCUSSION:

On August 24, 2016, I attended an open house meeting presented by the Sonoma County Water Agency on what they call the Fish Flow Project. It is their long-awaited document on the changes they propose to Water Rights Decision 1610 which governs how releases from the dams that regulate the Russian River are made. From my understanding of the proposed changes from earlier documents, a look at the handouts at the meeting, and a brief look at portions of the EIR, SCWA wants to achieve two major actions from the proposed changes to Decision 1610:

- Make permanent the flow changes ordered by the Biological Opinion for endangered salmonid species in the Russian River (BO), and

- Change the Decision 1610 hydrologic index so that 1) it is based on Lake Mendocino instead of Lake Pillsbury, has more (from 3 currently to 5) conditions on which to base releases, 3) takes account of the reduced inflows from the Eel River, and 4) has more flexibility seasonally, going from seasonal decisions to monthly decisions.

From a District perspective, our concern should be how does this affect our water supply. SCWA is proposing these changes in part to make their water supply more reliable and we should also be looking at this the same way.

The major flow change is making permanent the recent flows imposed by the BO which reduce flows at Hacienda Bridge from 125 cfs to 70 cfs in normal or wetter year. I believe the dry year flows remain largely the same - need to look at Decision 1610 to be certain of this. This reduction in flow does not affect District water supply, I believe,

and may make it more reliable because the Russian River System cannot support Decision 1610 flows well now because of reduced diversions from the Eel River.

Changing the Hydrologic Index to Lake Mendocino makes sense to me. The reduced influence of Eel River inflows makes the Pillsbury Lake based index obsolete and it needs to be changed. I am hoping the EIR gives enough information so that we can understand the new index - I'm not there yet.

One major objection to the process - The Fish Flow Project EIR was released last week, I believe. We got notice and a thumb drive with the EIR on Monday, August 22. The public hearing on the EIR is September 13 at the Board of Supervisors and comments are due by October 17. This EIR has been in preparation for many years - it was supposed to be released in the Autumn of 2013, as I recall. October 17 is a relatively quick turnaround for comments but we can revisit this at the October meeting.

I'll be reviewing the EIR between the date of writing of this agenda report and the September 1 Board meeting. I hope to have more comments prepared for the meeting. I'll be looking most closely at the hydrology and the hydrologic index. If you have other specific areas for review or questions about the EIR- please contact me.

CHAPTER 1 Executive Summary

1.1 Introduction

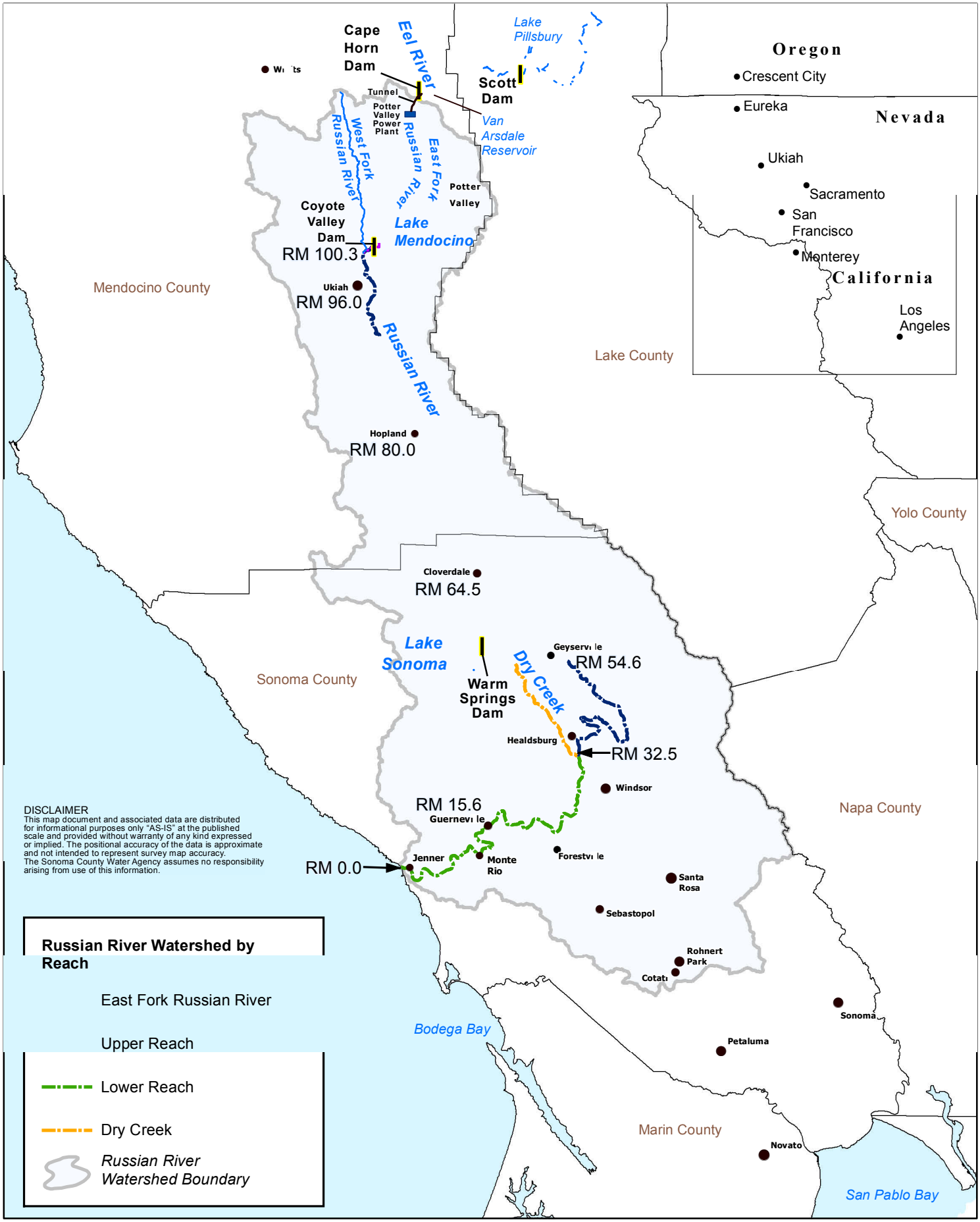
The Sonoma County Water Agency (Water Agency) has prepared this Draft Environmental Impact Report (Draft EIR) for the Fish Habitat Flows and Water Rights Project (Fish Flow Project). This Draft Environmental Impact Report will be referred to throughout this document as the Draft EIR. The Draft EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000-21177), the State CEQA Guidelines (CCR, Title 24, Division 6, Chapter 3, Sections 15000-15387), and the Water Agency's Procedures for the Implementation of the California Environmental Quality Act. The Water Agency is the lead agency for consideration of this EIR and potential project approval. CCR Section 15367 defines the Lead Agency as the agency with principal responsibility for carrying out or approving a project.

CEQA requires preparation of an EIR when a proposed project may have a significant impact on the environment (CCR Section 15064). "An EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental impacts of the proposed project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project" (CCR Section 15121). The basic informational requirements for an EIR include discussions of the purpose and need for the project, identification and analysis of project alternatives, environmental setting, environmental impacts, and proposed mitigation measures. This Draft EIR evaluates and discloses the environmental impacts of the proposed project and its alternatives. Where possible, mitigation measures are proposed to avoid or reduce project impacts. This document is a project-level EIR. A project-level EIR is defined as "the most common type of EIR that examines the environmental impacts of a specific development project" (CCR Section 15161).

1.2 Project Background

The Water Agency was created in 1949 by the California Legislature as a special district to provide flood protection and water supply services. The members of the Sonoma County Board of Supervisors are the Water Agency's Board of Directors. The Water Agency's powers and duties 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 Water Agency provides potable water for approximately 600,000 people in Sonoma County and northern Marin County. The Water Agency is the local sponsor for the two federal water supply and flood control reservoirs in the Russian River watershed. Coyote Valley Dam at Lake Mendocino is located on the East Fork of the Russian River near the City of Ukiah in Mendocino County (Figure 1-1). Warm Springs Dam at Lake Sonoma on Dry Creek is located near the City of Healdsburg in Sonoma County. The Water Agency, as local sponsor, partially financed the



SONOMA COUNTY WATER AGENCY

Fish Habitat Flows and Water Rights Project

Figure 1-1

construction of Coyote Valley and Warm Springs dams under agreements with the U.S. Army Corps of Engineers (USACE). The Water Agency manages water supply storage within Lake Mendocino and Lake Sonoma to optimize the water supply yields of the reservoirs, and the Water Agency controls releases from the water supply pools[1] of both reservoirs to maintain required minimum instream flows in the Russian River and Dry Creek and to meet the diversion demands of the Water Agency and other Russian River water users. The USACE manages flood control operations at Lake Mendocino and Lake Sonoma.

The Water Agency manages water supply releases from Coyote Valley Dam and Warm Springs Dam under water right permits originally issued by the State Water Resources Control Board (SWRCB). Water right Permit 12947A authorizes the Water Agency to store up to 122,500 AFY of water in Lake Mendocino and Permit 16596 authorizes the Water Agency to store up to 245,000 AFY of water in Lake Sonoma. The combined amount of direct diversion and re-diversion authorized under the Water Agency's four permits (12947A, 16596, 12949, and 12950) is limited to no more than 180 cfs (116.3 million gallons per day [mgd]) and 75,000 acre-feet per water year. The authorized points of diversion in these permits include the Water Agency's Wohler/Mirabel diversion facilities and facilities of its Russian River Customers.

1.3 Project Location

The Fish Flow Project would change the Water Agency's water right permits, which concern flows in and diversions from the Russian River and Dry Creek, which are located in Mendocino County and Sonoma County, California. A regional location map is included as Figure 1-1. The Russian River watershed drains an area of 1,485 square miles that includes substantial portions of Sonoma and Mendocino counties. The headwaters of the West Fork Russian River are located in central Mendocino County, approximately 15 miles north of Ukiah. The Russian River is approximately 110 miles long and flows generally southward to Forestville, where it then flows westward to the Pacific Ocean near Jenner, approximately 20 miles west of Santa Rosa. Potential environmental impacts of the Fish Flow Project could occur at Lake Mendocino and Lake Sonoma, in and along the Russian River downstream of Coyote Valley Dam to the Pacific Ocean, in and along Dry Creek downstream of Warm Springs Dam, and in the Water Agency's or its contractors'contractors service areas in Sonoma and Marin counties.

1.4 Project Purpose, Objectives, and Need

The objectives of the Fish Flow Project are to manage Lake Mendocino and Lake Sonoma water supply releases to provide instream flows that will improve habitat for threatened and endangered fish species, and to update the Water Agency's existing water rights to reflect current conditions.. The new minimum instream flow requirements proposed by the Fish Flow Project were developed to meet the requirements of the Biological Opinion to improve habitat for threatened and endangered salmonid species.

[1] The water supply pools in Lake Mendocino and Lake Sonoma are sometimes referred to a "water conservation pools."

The Water Agency holds water right permits,[2] issued by the State Water Resources Control Board (SWRCB), that authorize the Water Agency to divert Russian River and Dry Creek flows and to re-divert water released from Lake Mendocino and Lake Sonoma storage. The Water Agency releases water from storage in these reservoirs for re-diversion and subsequent delivery to retail water suppliers, where the water is used primarily for residential, governmental, commercial, and industrial purposes. The primary points of diversion and re-diversion are the Water Agency's facilities at Wohler and Forestville. The Water Agency also releases water to satisfy the needs of other water users who directly divert streamflow and to replace streamflow lost to the underlying aquifer and to contribute to the maintenance of minimum instream flow requirements in the Russian River and Dry Creek established in 1986 by the SWRCB's Decision 1610. The SWRCB's Decision 1610 approved a hydrologic index and minimum instream flow requirements for the Russian River watershed in 1986. The Decision 1610 hydrologic index, defines the hydrologic condition for the Russian River watershed based on cumulative inflow into Lake Pillsbury in the Eel River watershed. The Decision 1610 hydrologic index and minimum instream flow requirements are included in terms of the Water Agency's water right permits.

The Russian River and Dry Creek minimum instream flow requirements established by Decision 1610 and the hydrologic index that is based on Eel River flows to Lake Pillsbury are no longer appropriate. Decision 1610 was adopted before the listings of three salmonid species in the Russian River watershed under the federal Endangered Species Act (ESA),[3] was based on much higher PVP flows to Lake Mendocino than occur today, and did not specifically address the importance of fall storage in Lake Mendocino to the Chinook salmon migration. Also Decision 1610 assumed that higher instream flows were better for fishery resources, and information developed since Decision 1610 was adopted indicates this may not be true for salmonid species in the Russian River and Dry Creek. Decision 1610 expressly recognized that later fishery studies might identify a need to change the minimum instream flow requirements. Decision 1610 also expressly contemplated that changes might be needed if the amounts of water diverted into the East Fork Russian River by PG&E's PVP changed, as it has.

The National Marine Fisheries Service (NMFS) issued its *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* (Russian River Biological Opinion) on September 24, 2008. NMFS concluded in the Russian River Biological Opinion 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 are likely to jeopardize and adversely modify the critical habitats of endangered Central California Coast coho salmon and threatened Central California Coast steelhead. Specifically, NMFS concluded that the artificially elevated summertime minimum flows in the Russian River and Dry Creek that are currently required by the Decision 1610 minimum flow requirements result in high water

[2] Waterwater-right Permits 12947A, 12949, 12950 and 16596.

3 Central California coast coho salmon are also listed as endangered under the California Endangered Species Act.

velocities that reduce the quality and quantity of rearing habitat for coho salmon and steelhead. Additionally, NMFS concluded that maintaining these flows disrupts lagoon formation and retention in the Russian River estuary and that allowing a lagoon to develop and remain during the summer would likely enhance juvenile steelhead and salmon habitat.

NMFS's Russian River Biological Opinion concludes that reducing the Decision 1610 minimum instream flow requirements will enable alternative flow management scenarios that will increase available salmonid rearing habitat in Dry Creek and the upper Russian River, and provide lower, closer-to-natural inflows into the estuary between late spring and early fall, thereby enhancing the potential for maintaining a seasonal freshwater lagoon that would likely support increased production of juvenile steelhead and salmon.[4]

Until the SWRCB changes the Decision 1610 minimum instream flow requirements, these requiremens and the resulting adverse impacts to listed salmonids will remain in effect, except during times when temporary changes to these requirements are made by the SWRCB. The Russian River Biological Opinion requires that the Water Agency annually petition the SWRCB for certain temporary changes to the Decision 1610 minimum instream flow requirements during the summer months until the SWRCB issues an order permanently changing these requirements. The Russian River Biological Opinion requires annual Water Agency petitions for temporary changes to minimum instream flow requirements for the mainstem Russian River, but not to the requirements for Dry Creek. The Water Agency petitioned the SWRCB for the Biological Opinion-specified temporary changes for the first time in 2010, which the SWRCB approved.[5] The Water Agency filed temporary urgency change petitions to comply with the Russian River Biological Opinion in 2011, 2012, and 2016, and the SWRCB approved these petitions.[6] The temporary changes approved by the SWRCB reduced the minimum instream flow requirement to 70 cubic feet per second (cfs) for the Lower Russian River between approximately May 1 and October 15. Additionally, to enhance steelhead rearing habitat in the Russian River between the East Fork and Hopland, the temporary changes reduced the minimum instream flow requirement to 125 cfs for the Upper Russian River between May 1 and October 15.[7]

The Russian River Biological Opinion concluded that, in addition to providing fishery benefits, the lower instream flow requirements "should promote water conservation and limit effects on in-

[4] 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 Improvement District in the Russian River Watershed. p. 243. September 2008.

[5] The SWRCB approved the 2010 petition for temporary urgency change in its Order WR 2010-0018-DWR.

[6] The SWRCB approved the 2011 petition for temporary urgency change in its Order dated June 1, 2011. The 2012 petition was approved in the SWRCB's Order dated May 2, 2012. The 2016 petition for temporary urgency change was approved by the SWRCB in its Order dated May 4, 2016.

[7] 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 Improvement District in the Russian River Watershed. p 247. September 2008.

stream river recreation."[8] The Russian River Biological Opinion concluded that the following permanent changes to the Decision 1610 minimum instream flow requirements may achieve these goals:

During Normal Years:

1. Reduce the minimum flow requirement for the Russian River from the East Fork to Dry Creek from 185 cfs to 125 cfs between June 1 and August 31; and from 150 cfs to 125 cfs between September 1 and October 31.

2. Reduce the minimum flow requirement for the Russian River between the mouth of Dry Creek and the mouth of the Russian River from 125 cfs to 70 cfs.

3. Reduce the minimum flow requirement for Dry Creek from Warm Springs Dam to the Russian River from 80 cfs to 40 cfs from May 1 to October 31.

During Dry Years:

1. Reduce the minimum flow requirement for the Russian River between the mouth of Dry Creek and the mouth of the Russian River from 85 cfs to 70 cfs.

During the periods when the temporary changes have been in effect, the Water Agency has monitored water quality and fish, and collected and reported monitoring information as required by the Biological Opinion. This information has been used to develop the proposed Fish Flow Project and analyze its potential environmental impacts.

In 2002, 2004, 2007, and 2009, water storage levels in Lake Mendocino declined to low levels. In 2002, the Decision 1610 hydrologic index designated the water year as a "dry" year, and thus authorized reductions in the minimum instream flow requirements, but this was not the case in 2004, 2007 or 2009. In those years, the Water Agency petitioned for and the SWRCB approved temporary urgency changes to Water Agency water right permits to temporarily reduce the minimum instream flow requirements, to preserve Lake Mendocino water storage and to maintain a reliable water supply.[9] Low water storage levels in Lake Mendocino during these years were due to lack of rainfall and, in 2007 and 2009, were also due to lower inflows into the East Fork Russian River from PG&E's PVP, resulting from the 2004 changes in the FERC license for the PVP.

Because of the recent changes in operation of PG&E's PVP and consequent reductions in PG&E's PVP imports from the Eel River into the Russian River, the relationship between Eel River hydrologic conditions and Russian River hydrologic conditions has changed and it is no

8 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 Improvement District in the Russian River Watershed. p. 244. September 2008.

9 The SWRCB approved the 2004 petition for temporary urgency change in its Order WRO 2004-0035. The 2007 temporary urgency change petition was approved in Order WRO 2007-0022. The 2009 temporary urgency change petition was approved in Order WRO 2009-0034-EXEC.

longer reasonable to use cumulative Lake Pillsbury inflows to determine the water-year type (normal, dry, or critical) that governs Russian River and Dry Creek minimum instream flow requirements. It would better reflect local hydrologic conditions if the water-year type for Russian River minimum instream flow requirements were based on conditions in the Russian River watershed rather than on conditions in the Eel River watershed.

The Fish Flow Project is proposed and is necessary to change the Water Agency's management of water supply releases from Lake Mendocino and Lake Sonoma to provide minimum instream flows that will improve rearing habitat for threatened and endangered salmon, as required by the NMFS's Russian River Biological Opinion and CDFW's Consistency Determination, and to update the Water Agency's existing water rights to reflect current conditions.

1.5 Description of the Proposed Project

Under the Proposed Project, the Water Agency would manage water supply releases from Lake Mendocino and Lake Sonoma to provide minimum instream flows in the Russian River and Dry Creek that would improve habitat for listed salmonids and meet the requirements of the Russian River Biological Opinion. To implement the Fish Flow Project, changes to the Water Agency's existing water right permits from the SWRCB are required, as described below.

Water right Permit 12947A authorizes the Water Agency to store up to 122,500 AFY of water in Lake Mendocino and Permit 16596 authorizes the Water Agency to store up to 245,000 AFY of water in Lake Sonoma. The combined amount of direct diversion and re-diversion authorized under Permits 12947A, 12949, 12950, and 16596 is limited to a maximum instantaneous rate of 180 cfs and to a maximum annual rate of 75,000 acre-feet per water year. The Proposed Project does not include any changes to either of these limits.

The Proposed Project includes the following five components:

- amendments of the Water Agency's water right permits to replace the existing hydrologic index (which is based primarily on Lake Pillsbury inflows) with the new Russian River Hydrologic Index;
- changes to the minimum instream flow requirements in these permits to improve rearing habitat conditions for juvenile steelhead and coho salmon;
- changes to these minimum instream flow requirements to improve conditions for fall-run Chinook salmon migration;
- extending the deadlines for completing full beneficial use in these permits to December 31, 2040, and
- adding the Occidental Community Services District and Town of Windsor points of diversion and re-diversion to the authorized points of diversion in these permits.

The Proposed Project does not propose to increase or otherwise change the quantities of water that it diverts from the Russian River and Dry Creek and re-diverts from Lake Mendocino and

Lake Sonoma under its water right permits, obtain any new authorizations for new rights, or construct new facilities.

1.5.1 Russian River Hydrologic Index

The Water Agency filed a petition to the SWRCB in August 2016 to change the hydrologic index in the Water Agency's water right permits that is used to establish the water-year classifications that determine minimum instream flow requirements for the Russian River and Dry Creek to an index that more accurately reflects actual hydrologic conditions within the Russian River watershed. The Decision 1610 Hydrologic Index as defined in the Water Agency's water right permits is a metric that establishes the water supply condition, which then is used to determine the applicable minimum instream flow schedule for the Upper Russian River, Lower Russian River, and Dry Creek. The Decision 1610 Hydrologic Index is comprised of schedules designated as *Normal*, *Dry*, and *Critical*. The Decision 1610 Hydrologic Index is based on cumulative inflow into Lake Pillsbury in the Eel River watershed beginning on October 1, with hydrologic conditions for the Russian River system evaluated on the first of the month from January 1 to June 1.

Under the Proposed Project, the Decision 1610 Hydrologic Index would be replaced with the Russian River Hydrologic Index, which is comprised of five schedules of minimum instream flow requirements. The use of five new schedules rather than the current three schedules would allow for more responsive management of reservoir water supply storage, particularly for Lake Mendocino during the summer and fall months when preserving cold water in Lake Mendocino for later releases to benefit rearing steelhead and the fall-run Chinook salmon migration and other beneficial uses in the Upper Russian River is most crucial. The proposed five schedules would also allow for additional, smaller, incremental reductions in minimum instream flows, particularly in the Upper Russian River, if reservoir storage amounts are lower due to lower inflows. This allows the Russian River Hydrologic Index to better match minimum instream flow requirements to available water supply and to prevent large changes in minimum instream flows, which could impact habitat and other beneficial uses.

Minimum Instream Flow Schedules

The proposed Russian River Hydrologic Index is comprised of five minimum instream flow schedules (Flow Schedules): Schedule 1, Schedule 2, Schedule 3, Schedule 4, and Schedule 5. Flow Schedule 1 being the wettest hydrology and Schedule 5 being the driest hydrology. Flow Schedules are proposed for the East Fork Russian River from Coyote Valley Dam to the confluence with the Russian River, the Upper Russian River between the East Fork Russian River and Dry Creek, the Lower Russian River from the Russian River confluence with Dry Creek to the Pacific Ocean, and Dry Creek from Warm Springs Dam to its confluence with the Russian River as shown in Table 1-1.

Table 1-1. Russian River Hydrologic Index with Upper Russian River, Lower Russian River, and Dry Creek Minimum Instream Flow Schedules [cubic feet per second (cfs)], Lake Mendocino Cumulative Inflow Condition [cumulative inflows into Lake Mendocino (acre-feet)], and Lake Mendocino Storage Condition [storage condition thresholds (acre-feet)]. Upper Russian River, Lower Russian River, and Dry Creek Flow Schedules determined by Lake Mendocino Cumulative Inflow Condition beginning January 1 and continuing to October 1. Beginning June 1 to December 1, the Upper Russian River Flow Schedule determined by both Lake Mendocino Cumulative Inflow Condition and the Lake Mendocino Storage Condition.

Minimum Instream Flow Schedules

East Fork Russian River (from Coyote Valley Dam to its confluence with the Russian River)

The minimum instream flow shall be 25 cfs at all times.

Upper Russian River (between the East Fork Russian River and confluence with Dry Creek) Minimum Instream Flow Schedules 1 through 5 (cfs)

Flow Schedule	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct 1-15	Oct 16-31	Nov	Dec
1 (Wettest)	105	105	105	105	105	105	105	105	105	105	105	105	105
2	105	105	105	105	85	85	85	85	85	85	105	105	105
3	100	100	100	100	65	65	65	65	65	65	100	100	100
4	70	70	70	70	45	45	45	45	45	45	45	70	70
5 (Driest)	25	25	25	25	25	25	25	25	25	25	25	25	25

Lower Russian River (from the Russian River confluence with Dry Creek to the Pacific Ocean) Minimum Instream Flow Schedules 1 through 5 (cfs)

Flow Schedule	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct 1-15	Oct 16-31	Nov	Dec
1 (Wettest)	135	135	135	135	70	70	70	70	70	70	135	135	135
2	135	135	135	135	70	70	70	70	70	70	135	135	135
3	135	135	135	135	70	70	70	70	70	70	135	135	135
4	85	85	85	85	50	50	50	50	50	50	85	85	85
5 (Driest)	35	35	35	35	35	35	35	35	35	35	35	35	35

Dry Creek (from Warm Springs Dam to its confluence with the Russian River) Minimum Instream Flow Schedules 1 through 5 (cfs)

Flow Schedule	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct 1-15	Oct 16-31	Nov	Dec
1 (Wettest)	75	75	75	75	50	50	50	50	50	50	105	105	105
2	75	75	75	75	50	50	50	50	50	50	105	105	105
3	75	75	75	50	50	50	50	50	50	50	75	75	75
4	75	75	75	50	50	50	50	50	50	50	75	75	75
5 (Driest)	75	75	75	50	50	50	50	50	50	50	75	75	75

The Flow Schedules would be determined based on Lake Mendocino Cumulative Inflow Condition beginning January 1 and continuing to October 1. Beginning June 1, the Flow Schedule for the Upper Russian River would be determined by both the Lake Mendocino Cumulative Inflow Condition and the Lake Mendocino Storage Condition as described in the Chapter 3, “Background and Project Description.”

Lake Mendocino Cumulative Inflow Condition

On the first day of each month starting January 1, cumulative inflow into Lake Mendocino would be evaluated monthly through October 1 for a total of ten condition evaluation dates each year determining the Flow Schedule for each reach. The Lake Mendocino Inflow Condition (Inflow Condition) determined at each evaluation date sets the Flow Schedule for the Upper Russian River, Lower Russian River, and Dry Creek. The Inflow Condition is evaluated based on cumulative inflow thresholds.

Lake Mendocino Storage Condition

Beginning June 1, the Upper Russian River Flow Schedule would be determined by both the Inflow Condition and the Lake Mendocino Storage Condition (Storage Condition). On the first day of each month from June 1 through December 1, the Storage Condition would be determined by evaluating storage in Lake Mendocino against storage condition thresholds. The storage condition thresholds would be used to set the Upper Russian River Flow Schedule if the flow schedule determined by the Storage Condition alone is greater (is drier) than the schedule determined by Inflow Condition. For the evaluation dates from June 1 through September 1, the Storage Condition can adjust the Upper Russian River Flow Schedule only one schedule higher (drier) than the value of the Inflow Condition. The evaluation of Lake Mendocino storage from June 1 to October 1 would allow for changes in Upper Russian River Flow Schedules to respond to variability in downstream demands. The evaluation of storage from November 1 to December 1 would allow for changes in Upper Russian River Flow Schedules to respond to years with low fall/early winter rainfall.

The Russian River Biological Opinion determined that reducing minimum instream flows in the Upper Russian River during *Normal* years would enhance the quantity and quality of rearing habitat for steelhead in the Russian River between the confluence of the East Fork Russian River and Cloverdale, the reach that typically supports suitable summer water temperatures for rearing juvenile steelhead. The Russian River Biological Opinion also concluded that conservation of the cold water pool in Lake Mendocino would increase the likelihood that water released from the reservoir would remain suitably cool for rearing steelhead through the summer and help ensure that sufficient flow could be released to facilitate upstream migration of fall run Chinook salmon. The Russian River Biological Opinion also determined that artificially high inflows into the Russian River estuary interfere with the normal processes that discharge river flow through or over the barrier beach to the ocean and that changing minimum instream flow requirements would enhance the prospects of enhancing salmonid estuarine rearing habitat.

These objectives were incorporated in the evaluation of a range of minimum instream flow alternatives and development of the proposed hydrologic index. Meeting these objectives

requires balancing reservoir operations and water supply releases (operational feasibility) that meet demands downstream while meeting objectives for rearing habitat in the summer months, spawning habitat, particularly for Chinook salmon, in the fall, and reservoir and flow reliability.

1.5.2 Other Requested Changes to Water Rights Permits

Petitions for Extensions of Time to Complete Full Beneficial Use of Water

The Water Agency's existing water right Permits 12947A, 16596, 12949, and 12950 specify a deadline of December 1, 1999, for the full application of water to beneficial use. In 1999, the Water Agency filed a petition to extend this deadline to December 1, 2020. The highest diversion and use prior to 1999 was 65,110 AFY for Water Year 1997, and the overall highest diversion and use historically occurred in Water Year 2004 and totaled 68,994 AFY. The Water Agency's significantly lower Russian River diversions during recent years is because of the Water Agency's and its contractors' successful water conservation, recycled water use, and groundwater conjunctive use programs and the downturn in the economy.

The Water Agency anticipates that total diversions under its water right permits will increase over time, even with water conservation, recycled water use, and groundwater conjunctive use, because of population and economic growth in Water Agency's service area. The Water Agency therefore has filed a petition to extend the current the beneficial use deadline to 2040.

The Water Agency's wholesaler 2015 Urban Water Management Plan (Brown and Caldwell 2016) concluded that, with the savings expected from water conservation, recycled water and groundwater conjunctive use, and based on the water demand projections described in the 2015 UWMP, the annual diversion and re-diversion limit of 75,000 AFY in the Water Agency's water right permits may be exceeded in 2035 (Brown and Caldwell 2016). The Water Agency estimates that this limit will be exceed by about 117 AFY in 2035 and by almost 1,000 AFY in 2040. The UWMP states that the near-term demand projections are conservative estimates and the growth rate of water demand may be lower. The potential need to increase the 75,000 AFY diversion and re-diversion limit in the Water Agency's water right permits and the need for future projects will be reevaluated in the Water Agency's 2020 UWMP and in each subsequent UWMP as necessary.

Petition to Add Additional Authorized Points of Diversion

The Water Agency has agreements with specific entities that authorize them to divert water from the Russian River under the Water Agency's water right permits using their own facilities. These entities are the City of Healdsburg, Town of Windsor/Windsor Water District, Camp Meeker Recreation and Park District, and Occidental Community Services District (Occidental CSD). The Water Agency's agreements with these customers require them to use any water right they have before using the Water Agency's water rights. The agreements with Town of Windsor and Occidental CSD require the Water Agency to file petitions with the SWRCB for changes to the Water Agency's water right permit that will allow these Russian River customers to divert water from the Russian River at specific points of diversion under the Water Agency's permits. The

Water Agency petitioned the SWRCB to authorize the addition of the Occidental CSD and Town of Windsor points of diversion in October 2002 and May 2004, respectively. Both petitions are still pending before the SWRCB. The Water Agency's agreement with the Occidental CSD will become effective when the SWRCB approves the petition to add the Occidental CSD point of diversion.

The addition of the Occidental CSD's point of diversion would add one new point of diversion and re-diversion to the Water Agency's water right permits. Occidental CSD is currently provided water through an agreement with Camp Meeker Recreation and Park District. The SWRCB authorization of the petition would result in the Water Agency's agreement with Occidental CSD becoming effective and would allow Occidental CSD to take and the Water Agency to provide water to the Occidental CSD under the Water Agency's Permits 16596, 12947A, 12949, and 12950.

The addition of the Town of Windsor points of diversion would add two existing points of diversion and re-diversion at Town of Windsor Well No. 10 and Well No. 11 to the authorized points of diversion in the Water Agency's water right permits. The two points of diversion and re-diversion are located adjacent to the Town of Windsor's well field near Eastside Road in Sonoma County. Approval of this petition would allow the Town of Windsor to take, and the Water Agency to provide, water under the Water Agency's Permits 16596, 12947A, 12949, and 12950.

1.6 Summary of Environmental Impacts

Impact Assessment Methodology

This EIR includes Chapter 4, "Environmental Setting, Impacts, and Mitigation Measures," is divided into resource sections, which discuss the following resource categories that are listed in order in which they appear in Chapter 4.0.

1. Hydrology
2. Water Quality
3. Fisheries Resources
4. Vegetation and Wildlife
5. Recreation
6. Energy
7. Greenhouse Gas Emissions and Climate Change
8. Cultural Resources
9. Aesthetics
10. Public Services and Utilities

The resource sections evaluate the potential environmental impacts resulting from the Fish Flow Project. Each section provides the existing environmental setting, regulatory framework, impact analysis methodology, significance criteria, and the analysis of potential impacts. Impacts are numbered sequentially; any required mitigation measures are described and numbered to correspond with the impact number. Impacts are categorized as either no impact, less than significant impact, less than significant with mitigation, significant and unavoidable or beneficial. References are included at the end of each resource section.

The methodology used to assess the impacts of the project varies with the type of resource or impact being addressed. In some cases, the impacts have been determined by applying quantitative methods or reasoning; in other cases, a more qualitative approach was found to be most appropriate. The professional judgment of the Water Agency's staff and consultants has been applied in conducting this environmental assessment and developing feasible mitigation measures.

1.6.1 Effects Determined Not to be Significant and Not Discussed Further

CEQA and the CEQA Guidelines allow a lead agency to dismiss environmental effects that are not significant or potentially significant from detailed discussion in an EIR (PRC Section 21100, CCR Sections 15126.2[a] and 15128). For effects dismissed as clearly less than significant and not discussed further, the CEQA Guidelines require a brief explanation of the reasons supporting that determination.

Based on a review of the project description and research and analysis of potential environmental effects during preparation of this Draft EIR, it has been determined that the following resource categories would not result in significant environmental impacts from the project. Accordingly, these resources are not addressed further in this Draft EIR. Further discussion is provided in Chapter 4," Environmental Setting, Impacts, and Mitigation Measures," regarding the reasons why significant impacts to each resource would not occur.

- Air Quality
- Agricultural Resources
- Geology, Soils, and Mineral Resources
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise
- Population and Housing
- Traffic and Transportation

1.6.2 Findings

An overview of environmental impacts by resource area is provided below based on the detailed findings for the Proposed Project provided in Chapter 4.0, "Environmental Setting, Impacts, and Mitigation Measures." Table 1-2, provided at the end of this chapter, summarizes the environmental impacts associated with the Fish Flow Project. The table is organized to present impacts by environmental resource categories, available mitigation measures, and the significance of each impact after mitigation. The listing of environmental impacts, mitigation measures, and alternatives included in this chapter constitutes the required identification of issues to be resolved and areas of controversy in accordance with the State CEQA Guidelines Section 15123(b).

Less than Significant

For the Fish Flow Project, based on technical review and evaluation against the environmental and regulatory setting, the impacts to the following environmental resources were determined to be less than significant.

1. Hydrology
2. Water Quality
3. Fisheries Resources
4. Vegetation and Wildlife
5. Recreation
6. Energy
7. Greenhouse Gas Emissions and Climate Change
8. Aesthetics

Beneficial

As summarized in Table 1-2, environmental impacts would beneficial in the following areas:

1. Changes in minimum instream flow could benefit the quantity of rearing habitat for steelhead fry in the Upper Russian River (Impact 4.3-1).
2. Changes in minimum instream flow could benefit the quantity of habitat for rearing Chinook salmon fry in the Upper Russian River (Impact 4.3-3).
3. Changes in minimum instream flow could benefit the quantity of habitat in the Upper Russian River rearing juvenile Chinook salmon (Impact 4.3-4).
4. Changes in minimum instream flow could benefit the movement of salmonids in the Upper Russian River (Impact 4.3-6).
5. Changes in minimum instream flow could benefit the movement of salmonids in Dry Creek. (Impact 4.3-8).
6. Changes in minimum instream flow could benefit the quantity of spawning habitat for salmonids in the Russian River (Impact 4.3-9).
7. Changes in minimum instream flow could benefit the rearing habitat for juvenile steelhead through elevated water temperatures in the months April through November in the Russian River (above Cloverdale) and in Dry Creek. (Impact 4.3-21)
8. Changes in minimum instream flow could benefit the habitat for spawning sunfish through increased reservoir releases at Lake Mendocino (Impact 4.3-27).
9. Changes in minimum instream flow could benefit the habitat for spawning sunfish through increased reservoir releases at Lake Sonoma. (Impact 4.3-28).

Significant and Unavoidable

As summarized in Table 1-2, environmental impacts would be significant and unavoidable, even with implementation of feasible mitigation measures, in the following areas:

1. The Fish Flow Project could contribute to inundation by seiche, tsunami, or mudflow (Impact 4.1-5). The Project would potentially increase water elevations in the Russian River Estuary during lagoon conditions when the river mouth is closed or an outlet channel is in place. In the very unlikely event of a tsunami of sufficient

magnitude, the Proposed Project may result in increased risk to people and structures from flooding.

2. Changes in minimum instream flow requirements could result in a violation of water quality standards or waste discharge requirements or otherwise degrade water quality relating to biostimulatory substances in the Russian River (Impact 4.2-4). Elevated nitrogen and phosphorus concentrations that exceed United States Environmental Protection Agency (USEPA) criteria, along with depressed and supersaturated dissolved oxygen concentrations observed under Baseline Conditions would likely continue under the Proposed Project.
3. Changes in minimum instream flow requirements could adversely affect when water right permit holders may divert water from the Russian River while complying with the minimum bypass flow terms in their water-right permits (Impact 4.10.1). Water right permits along the Russian River may have terms that restrict diversions, including a minimum bypass flow rate below which diversions are not authorized. The Proposed Project would result in lower instream flows that could adversely affect when holders of these permits could divert water.

Chapter 4, “Environmental Setting, Impacts, and Mitigation Measures,” and its sub-chapters, did not identify any significant, but mitigable, environmental impacts.

1.7 Summary of Alternatives Evaluation

This EIR describes and evaluates a reasonable range of alternatives in accordance with CEQA Guidelines Section 15126(a). Because the range of alternatives considered must meet most of the basic objectives of the project, alternatives evaluated were limited to management of water supply releases from Lake Mendocino and Lake Sonoma to meet minimum instream flow requirements in the Russian River and Dry Creek. Selecting another location for project alternatives would not be feasible.

Alternatives evaluated using the screening process included those identified in the Russian River Biological Opinion, by Water Agency staff and in comments provided by regulatory agencies, public agencies and members of the public in response to the Notice of Preparation (NOP) of Environmental Impact Report (EIR) issued for the Fish Flow Project in 2010. The Water Agency screened 21 minimum instream flow alternatives and 7 combined hydrologic index and minimum instream flow requirement alternatives. The detailed results of the alternatives screening process are included in Chapter 7, “Alternatives,” of the EIR. Provided below are summary descriptions of the alternatives which meet the basic project objectives, avoid, minimize or lessen environmental effects, and were carried forward for further analysis.

1.7.1 No Project 1 Alternative

CEQA Guidelines Section 15125.6(e)(1) requires that a no project alternative be described and analyzed. Evaluation of a no project alternative allows decision-makers to compare the impacts of approving the project with the impacts of not approving the project. Under the No Project 1 Alternative, the Water Agency would continue to make releases from Coyote Valley Dam and Warm Springs Dam to maintain the minimum instream flow requirements specified in its water

right permits. Implementation of the Proposed Project would not proceed under the No Project 1 Alternative and the Water Agency's water supply operations would not be in compliance with the Russian River Biological Opinion.

The No Project 1 Alternative would result in the continuation of existing conditions within the Russian River and Dry Creek. The Water Agency would continue to make releases from Coyote Valley Dam and Warm Springs Dam to maintain the minimum instream flow requirements specified in its water right permits. These water supply operations have been found to be detrimental to threatened and endangered fish species and could result in the Water Agency being out of compliance with the Russian River Biological Opinion. Implementation of the No Project 1 Alternative would not meet project objectives related to the improvement of habitat for threatened and endangered fish species. The Proposed Project's benefits identified in Section 7.3.1 above would not be achieved under the No Project 1 Alternative. Implementation of the No Project 1 Alternative would not avoid significant and unavoidable impacts associated with risk of flooding from tsunami, which is an existing condition in the Russian River Estuary, or potential for violations of water quality standards or degradation of water quality relating to biostimulatory substances in the Russian River as these conditions occur under Baseline Conditions. The No Project 1 Alternative would avoid the Proposed Project's significant and unavoidable impact related to changes in minimum instream flow requirements that could adversely affect the ability of some water right permit holders to divert from the Russian River.

1.7.3 No Project 2 Alternative

Under the No Project 2 Alternative, the Water Agency would continue to make releases from Coyote Valley Dam and Warm Springs Dam to maintain the minimum instream flow requirements specified in its water right permits, but would include the temporary instream flows changes in compliance with the Russian River Biological Opinion. The Russian River Biological Opinion requires annual Water Agency petitions for temporary changes to minimum instream flow requirements for the mainstem Russian River, but not to the requirements for Dry Creek. These minimum instream flow changes are as follows: under *Normal* conditions from May 1 to October 15: 125 cfs in the Upper Russian River and 70 cfs in the Lower Russian River. The Russian River Biological Opinion did not provide recommended temporary changes to minimum instream flows for *Dry* or *Critical* conditions, so these are the same as the minimum instream flow requirements included in the Water Agency's water right permits and approved by the SWRCB's Decision 1610. As described in Chapter 3, "Background and Project Description," the Water Agency has filed temporary urgency change petitions as required by the Russian River Biological Opinion and received temporary urgency change orders issued by the SWRCB, in several years since the Biological Opinion was provided by NMFS. Under the No Project 2 Alternative, the Water Agency's water supply operations would comply with the Russian River Biological Opinion's recommendations for temporary changes in minimum instream flows; however, no changes in reservoir operations through implementation of the Russian River Hydrologic Index would occur. Reservoir operations would continue to follow the Decision 1610 Hydrologic Index.

The No Project 2 Alternative would result in the continuation of existing conditions within the Russian River and Dry Creek, except during the rearing season when minimum instream flow requirements would be reduced on a temporary basis. Outside the rearing season, the Water Agency would continue to make releases from Coyote Valley Dam and Warm Springs Dam to maintain the minimum instream flow requirements specified in its water right permits. Implementation of the No Project 2 Alternative would meet some of the project objectives related to the improvement of habitat for threatened and endangered fish species. The Proposed Project's benefits identified in Section 7.3.1 above would be achieved for steelhead fry rearing habitat, Chinook salmon fry rearing habitat, Chinook salmon juvenile rearing habitat, adult passage flows in the Upper Russian River, adult passage flows into Dry Creek, improve the quantity of spawning habitat for salmon in the Russian River, and habitat for spawning sunfish in Lake Mendocino.

Water temperatures for juvenile steelhead rearing habitat would not be affected by the No Project 2 Alternative in the Upper Russian River above Cloverdale or in Dry Creek, and the Proposed Project beneficial impact on temperatures would not be achieved. Water surface elevation changes in Lake Sonoma would be nearly identical between the No Project 2 Alternative and Baseline Conditions, and the Proposed Project beneficial impact on habitat for spawning sunfish would not be achieved.

Implementation of the No Project 2 Alternative would not avoid significant and unavoidable impacts associated with risk of flooding from tsunami, which is an existing condition in the Russian River Estuary, or potential for violations of water quality standards or degradation of water quality relating to biostimulatory substances in the Russian River as these conditions occur under Baseline Conditions. The No Project 2 Alternative would not avoid the Proposed Project's significant and unavoidable impact related to changes in minimum instream flow requirements that could adversely affect the ability of some water right permit holders to divert from the Russian River as the minimum instream flow requirements under this alternative would be below the minimum bypass flow terms included in many of these permits.

1.7.4 Russian River Biological Opinion Alternative

Under the Russian River Biological Opinion Alternative, the Water Agency would continue to make releases from Coyote Valley Dam and Warm Springs Dam to maintain minimum instream flow requirements, but minimum instream flow requirements would be as follows: in *Normal* hydrologic conditions: Upper Russian River (125 cfs), Lower Russian River (70 cfs), and Dry Creek (40 cfs) as recommended in the Biological Opinion. In *Dry* hydrologic conditions, the alternative included a 70 cfs minimum instream flow requirement in the Lower Russian River. The Russian River Biological Opinion did not provide recommended permanent changes to minimum instream flows for *Dry* conditions in the Upper Russian River and Lower Russian River, or *Critical* conditions for all three reaches, so the minimum instream flow requirements are the same as those included in the Water Agency's water right permits and approved by the SWRCB's Decision 1610. However, no changes in reservoir operations through implementation of the Russian River Hydrologic Index would occur. Reservoir operations would continue to follow the Decision 1610 Hydrologic Index.

The minimum instream flows under the Russian River Biological Opinion Alternative would be higher than the Proposed Project, which could result in reductions water supply stored in Lake Mendocino earlier in a year, reducing the availability of cold water stored in the reservoir for releases into the end of the rearing season and the beginning of the fall-run Chinook salmon migration and spawning season.

Implementation of the Russian River Biological Opinion Alternative would not avoid significant and unavoidable impacts associated with risk of flooding from tsunami, which is an existing condition in the Russian River Estuary, or potential for violations of water quality standards or degradation of water quality relating to biostimulatory substances in the Russian River as these conditions occur under Baseline Conditions. The Russian River Biological Opinion Alternative would minimize the Proposed Project's significant and unavoidable impact related to changes in minimum instream flow requirements that could adversely affect the ability of some water right permit holders to divert from the Russian River as the minimum instream flow requirements under this alternative are higher than under the Proposed Project.

1.7.5 Environmentally Superior Alternative

With regard to the other alternatives considered, the Proposed Project is the environmentally superior alternative. Both the No Project 2 and Russian River Biological Opinion alternatives would meet most of the basic objectives of the Fish Flow Project and would achieve some of the improvements to habitat for threatened and endangered fish species. Implementation of the No Project 2 and Russian River Biological Opinion alternatives would not avoid significant and unavoidable impacts associated with risk of flooding from tsunami, which is an existing condition in the Russian River Estuary, or potential for violations of water quality standards or degradation of water quality relating to biostimulatory substances in the Russian River as these conditions occur under Baseline Conditions. The No Project 2 Alternative would not avoid the Proposed Project's significant and unavoidable impact related to changes in minimum instream flow requirements that could adversely affect the ability of some water right permit holders to divert from the Russian River, while the Russian River Biological Opinion Alternative would minimize this impact. The Proposed Project would achieve the project objectives to manage Lake Mendocino and Lake Sonoma water supply releases to provide instream flows that will improve habitat for threatened and endangered fish species by achieving the most beneficial habitat impacts.

1.8 Impact Summary Table

Table 1-2, provided at the end of this chapter, summarizes the environmental impacts associated with the Fish Flow Project. The table is organized to present impacts by environmental resource categories, available mitigation measures, and the significance of each impact after mitigation. The listing of environmental impacts, mitigation measures, and alternatives included in this chapter constitutes the required identification of issues to be resolved and areas of controversy in accordance with the State CEQA Guidelines Section 15123(b).

Table 1-1. Summary of Impacts, Levels of Significance, and Proposed Mitigation Measures for the Fish Flow Project.

Impact	Proposed Mitigation	Impact Significance
Hydrology		
4.1-1. The Fish Flow Project could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.	No Mitigation Required	Less than Significant
4.1-2. The Fish Flow Project could substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on- or off-site.	No Mitigation Required	Less than Significant
4.1-3. The Fish Flow Project could substantially alter the area of exposed shoreline within Lake Mendocino and Lake Sonoma in a manner which would result in substantial erosion or sedimentation on- or off-site.	No Mitigation Required	Less than Significant
4.1-4. The Fish Flow Project could expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.	No Mitigation Required	No Impact
4.1-5. The Fish Flow Project could contribute to inundation by seiche, tsunami, or mudflow.	No mitigation available	Significant and Unavoidable
Water Quality		
4.2-1. Implementation of the Fish Flow Project could result in a violation of water quality standards or waste discharge requirements or otherwise substantially degrade water quality relating to mercury accumulation in fish tissue in Lake Mendocino and Lake Sonoma.	No Mitigation Required	Less than Significant
Impact 4.2-2. Implementation of the Fish Flow Project could result in a violation of water quality standards or waste discharge requirements or otherwise substantially degrade water quality as it relates to aluminum and specific conductance in the Russian River.	No Mitigation Required	Less than Significant

Impact	Proposed Mitigation	Impact Significance
Impact 4.2-3. Implementation of the Fish Flow Project could result in a violation of water quality standards or waste discharge requirements or otherwise substantially degrade water quality relating to temperature and dissolved oxygen in the Russian River and Dry Creek.	No Mitigation Required	No Impact
Impact 4.2-4. Changes to minimum instream flows could result in a violation of water quality standards or waste discharge requirements or otherwise degrade water quality relating to biostimulatory substances in the Russian River.	No mitigation is available.	Significant and Unavoidable
Fisheries Resources		
4.3-1. Changes in minimum instream flow could substantially affect the quantity of rearing habitat for steelhead fry in the Upper Russian River.	No Mitigation Required	Beneficial
4.3-2. Changes in minimum instream flow could substantially affect the quantity of habitat for rearing juvenile steelhead in the Upper Russian River.	No Mitigation Required	No Impact
4.3-3. Changes in minimum instream flow could substantially affect the quantity of habitat for rearing Chinook salmon fry in the Upper Russian River.	No Mitigation Required	Beneficial
4.3-4. Changes in minimum instream flow could substantially affect the quantity of habitat in the Upper Russian River rearing juvenile Chinook salmon.	No Mitigation Required	Beneficial
4.3-5. Changes in minimum instream flow could substantially affect the quantity of habitat for rearing steelhead, Coho, and Chinook salmon in Dry Creek.	No Mitigation Required	No Impact
4.3-6. Changes in minimum instream flow could substantially interfere with the movement salmonids in the Upper Russian River.	No Mitigation Required	Beneficial
4.3-7. Changes in minimum instream flow could substantially interfere with the movement of salmonids in the Lower Russian River.	No Mitigation Required	No Impact

Impact	Proposed Mitigation	Impact Significance
4.3-8. Changes in minimum instream flow could substantially interference with the movement salmonids in Dry Creek.	No Mitigation Required	Beneficial
4.3-9. Changes in minimum instream flow could substantially affect the quantity of spawning habitat for salmonids in the Russian River.	No Mitigation Required	Beneficial
4.3-10. Changes in minimum instream flow could substantially affect the quantity of spawning habitat for salmonids in Dry Creek.	No Mitigation Required	No Impact
4.3-11. Changes in minimum instream flow could substantially affect the upstream migration of Chinook salmon through elevated water temperatures in the months October through December in the Russian River and in Dry Creek.	No Mitigation Required	No Impact
4.3-12. Changes in minimum instream flow could substantially affect the quality of spawning habitat and egg incubation for Chinook salmon through elevated water temperatures from November 15 through March in the Russian River and in Dry Creek.	No Mitigation Required	No Impact
4.3-13. Changes in minimum instream flow could substantially affect the quality of habitat for rearing Chinook juveniles by elevated water temperatures from April through June in the Russian River and in Dry Creek.	No Mitigation Required	Less than Significant
4.3-14. Changes in minimum instream flow could substantially affect the quality of habitat for Chinook salmon smolts by elevated water temperatures from April through July 15 in the Russian River and in Dry Creek.	No Mitigation Required	No Impact
4.3-15. Changes in minimum instream flow could substantially affect the upstream migration of coho salmon through elevated water temperatures in the months November through February in the Lower Russian River and in Dry Creek.	No Mitigation Required	No Impact
4.3-16. Changes in minimum instream flow could substantially affect the spawning and egg incubation of coho salmon through elevated water	No Mitigation Required	No Impact

Impact	Proposed Mitigation	Impact Significance
temperatures in the months December through May in Dry Creek.		
4.3-17. Changes in minimum instream flow could substantially affect the quality of habitat for rearing coho salmon juveniles by elevated water temperatures from April through November in Dry Creek.	No Mitigation Required	No Impact
4.3-18. Changes in minimum instream flow could substantially affect emigrating coho salmon through elevated water temperatures in the months March through May in the Russian River and in Dry Creek.	No Mitigation Required	Less than Significant
4.3-19. Changes in minimum instream flow could substantially affect the upstream migration of steelhead through elevated water temperatures in the months December through March in the Russian River and in Dry Creek.	No Mitigation Required	No Impact
4.3-20. Changes in minimum instream flow could substantially affect the spawning and egg incubation of steelhead through elevated water temperatures in the months December through May in the Russian River (above Cloverdale) and in Dry Creek.	No Mitigation Required	Less than Significant
4.3-21. Changes in minimum instream flow could substantially affect the rearing habitat for juvenile steelhead through elevated water temperatures in the months April through November in the Russian River (above Cloverdale) and in Dry Creek.	No Mitigation Required	Beneficial
4.3-22. Changes in minimum instream flow could substantially affect the emigrating steelhead smolts through elevated water temperatures in the months March through May in the Russian River and in Dry Creek.	No Mitigation Required	No Impact
4.3-23. Changes in minimum instream flow could substantially affect the upstream migration of Chinook salmon through reduced dissolved oxygen	No Mitigation Required	No Impact

Impact	Proposed Mitigation	Impact Significance
levels in the months October through December in the Russian River and in Dry Creek.		
4.3-24. Changes in minimum instream flow could substantially affect the habitat for rearing juvenile steelhead through reduced dissolved oxygen levels in the months April through November in the Russian River and in Dry Creek.	No Mitigation Required	No Impact
4.3-25. Changes in minimum instream flow could substantially affect the habitat for native warmwater species through reduced dissolved oxygen levels in the months April through November in the Russian River and in Dry Creek.	No Mitigation Required	No Impact
4.3-26. Changes in minimum instream flow could substantially affect quantity and quality of habitat for resident, rare or endangered species in the Upper Russian River under 1977 Drought Conditions.	No Mitigation Required	No Impact
4.3-27. Changes in minimum instream flow could substantially affect the habitat for spawning sunfish through increased reservoir releases at Lake Mendocino.	No Mitigation Required	Beneficial
4.3-28. Changes in minimum instream flow could substantially affect the habitat for spawning sunfish through increased reservoir releases at Lake Sonoma.	No Mitigation Required	Beneficial
4.3-29. Changes in minimum instream flow could substantially affect the quality of habitat for spawning steelhead by elevated water temperatures from January through mid-April at the Coyote Valley Egg Taking Station.	No Mitigation Required	No Impact
4.3-30. Changes in minimum instream flow could substantially affect the quality of habitat for steelhead smolts by elevated water temperatures from March through April at the Coyote Valley Egg Taking Station.	No Mitigation Required	No Impact
4.3-31. Changes in minimum instream flow could substantially affect the quality of habitat for spawning steelhead and egg incubation by	No Mitigation Required	No Impact

Impact	Proposed Mitigation	Impact Significance
elevated water temperatures from January through mid-April at the Don Clauson Fish Hatchery.		
4.3-32. Changes in minimum instream flow could substantially affect the quality of habitat for juvenile steelhead rearing at the Don Clauson Fish Hatchery by elevated water temperatures from April through November.	No Mitigation Required	No Impact
4.3-33. Changes in minimum instream flow could substantially affect the quality of habitat for steelhead smolts by elevated water temperatures from March through April at the Don Clauson Fish Hatchery.	No Mitigation Required	No Impact
4.3-34. Changes in minimum instream flow could substantially affect the quality of habitat for spawning coho salmon and egg incubation by elevated water temperatures from April through November at the Don Clauson Fish Hatchery.	No Mitigation Required	No Impact
4.3-35. Changes in minimum instream flow could substantially affect the quality of habitat for spawning coho salmon and egg incubation by elevated water temperatures from April through November at the Don Clauson Fish Hatchery.	No Mitigation Required	No Impact
4.3-36. Changes in minimum instream flow could substantially affect the quality of habitat for coho salmon smolts by elevated water temperatures from April through November at the Don Clauson Fish Hatchery.	No Mitigation Required	No Impact
4.3-37. Changes in minimum instream flow could substantially affect the habitat for native warmwater species in the Russian River.	No Mitigation Required	No Impact
4.3-38. Changes in minimum instream flow could substantially affect the habitat for spawning American shad in the Russian River.	No Mitigation Required	Less than Significant
4.3-39. Changes in minimum instream flow could substantially affect the habitat for smallmouth bass in the Russian River.	No Mitigation Required	No Impact
4.3-40. Changes in minimum instream flow could affect the frequency Estuary closures which could	No Mitigation Required	No Impact

Impact	Proposed Mitigation	Impact Significance
substantially interfere with the movement of adult salmonid.		
4.3-41. Changes in minimum instream flow could affect the frequency Estuary closures which could substantially interfere with the movement of salmonid smolts.	No Mitigation Required	No Impact
4.3-42. Changes in minimum instream flow could affect the frequency of Estuary closures which could substantially affect the quantity and quality of juvenile steelhead habitat and steelhead could become more susceptible to avian predation.	No Mitigation Required	No Impact
Vegetation and Wildlife		
4.4-1. Changes in water surface elevations and flows could adversely affect sensitive natural communities.	No Mitigation Required	Less than Significant
4.4-2.Changes in minimum instream flows could adversely affect federal and state jurisdictional waters.	No Mitigation Required	No Impact
4.4-3. Changes in water surface elevations could interfere with wildlife movement or impede the use of nursery sites.	No Mitigation Required	Less than Significant
4.4-4. Changes to minimum instream flows and water levels could adversely affect special-status plant and wildlife species.	No Mitigation Required	Less than Significant
Recreation		
4.5-1. Changes in releases from Lake Mendocino could result in low water surface elevations and substantially impact access to Lake Mendocino at the South Boat Ramp.	No Mitigation Required	No Impact
4.5-2. Changes in releases from Lake Mendocino could result in higher water surface elevations and substantially impact the operation of the South Boat Ramp, including closure of the South Boat Ramp parking lot, during the recreational season.	No Mitigation Required	No Impact

Impact	Proposed Mitigation	Impact Significance
4.5-3. Changes in releases from Lake Mendocino could result in low water surface elevations and substantially impact access to Lake Mendocino at the North Boat Ramp.	No Mitigation Required	No Impact
4.5-4. Changes in releases from Lake Mendocino could result in higher water surface elevations and substantially impact access to Lake Mendocino at the North Boat Ramp, including closure of the North Boat Ramp parking lot.	No Mitigation Required	No Impact
4.5-5. Changes in releases from Lake Mendocino could result in higher water surface elevations that could flood Inlet Road and substantially alter or inhibit access to Bushay Campground during the recreational season.	No Mitigation Required	Less than Significant
4.5-6. Changes in releases from Lake Mendocino could result in higher water surface elevations that could substantially alter or inhibit access to Kyen Campground during the recreational season.	No Mitigation Required	Less than Significant
4.5-7. Changes in releases from Lake Sonoma could result in low water surface elevations that could cause additional closures of the Yorty Creek Boat Ramp and could substantially alter or inhibit access to Lake Sonoma during the recreational season.	No Mitigation Required	No Impact
4.5-8. Changes in releases from Lake Sonoma could result in low water surface elevations that could substantially alter or inhibit access to the Lake Sonoma Marina during the recreational season.	No Mitigation Required	No Impact
4.5-9. Changes in releases from Lake Sonoma could result in low water surface elevations that could substantially alter or inhibit access to Lake Sonoma at the public boat ramp.	No Mitigation Required	No Impact
4.5-10. Changes in releases from Lake Sonoma could result in low water surface elevations that could substantially alter or inhibit access to Lake Sonoma's boat in campgrounds.	No Mitigation Required	No Impact

Impact	Proposed Mitigation	Impact Significance
4.5-11. Changes in releases from Lake Sonoma could result in high water surface elevations that could substantially alter or inhibit access to Lake Sonoma's boat in campgrounds.	No Mitigation Required	No Impact
4.5-12. Changes in minimum instream flows could result in impacts that substantially alter or inhibit access to recreational activities such as swimming and sunbathing in the Russian River.	No Mitigation Required	Less than Significant
4.5-13. Changes in minimum instream flows could result in impacts that substantially alter or inhibit access to recreational activities in the Russian River Estuary.	No Mitigation Required	No Impact
4.5-14. Changes in minimum instream flows could result in impacts that substantially alter or inhibit access to boating in the Russian River from Rio Lindo Academy to the confluence of Dry Creek.	No Mitigation Required	Less than Significant
4.5-15. Changes in minimum instream flows could result in impacts that substantially alter or inhibit access to boating in the Russian River from the mouth of Dry Creek to Wohler.	No Mitigation Required	No Impact
4.5-16. Changes in minimum instream flows could result in impacts that substantially alter or inhibit access to recreational facilities or activities such as boating in the Russian River from Wohler to the Pacific Ocean.	No Mitigation Required	Less than Significant
4.5-17. Changes in minimum instream flows related to the Proposed Project and the No Project 2 Alternatives could result in impacts that substantially alter or inhibit access for fishing in the Russian River.	No Mitigation Required	No Impact
4.5-18. Changes in minimum instream flows related to the No Project 1 Alternative could result in impacts that substantially alter or inhibit access to recreational facilities or activities such as fishing in the Russian River.	No Mitigation Required	Less than Significant

Impact	Proposed Mitigation	Impact Significance
4.5-19. Changes in minimum instream flow releases from Lake Sonoma could substantially alter or inhibit access to recreational facilities or activities in Dry Creek.	No Mitigation Required	No Impact
Energy		
4.6-1. The Fish Habitat Flows and Water Rights Project could substantially increase reliance on fossil fuels.	No Mitigation Required	Less than Significant
4.6-2. The Fish Habitat Flows and Water Rights Project could conflict with existing energy policies and standards intended to protect the environment.	No Mitigation Required	Less than Significant
4.6-3. The Fish Habitat Flows and Water Rights Project could conflict with or impede the Water Agency's ability to provide carbon-free water.	No Mitigation Required	No Impact
Cultural Resources		
4.7-1. Implementation of the Proposed Project could disturb any human remains or cause a substantial adverse change in the significance of a unique archaeological resource or a historical resource.	No Mitigation Required	No Impact
4.7-2. Implementation of the Proposed Project could impact the distribution of natural vegetation communities along the Russian River or Dry Creek, such that availability of culturally significant plants is reduced.	No Mitigation Required	No Impact
Greenhouse Gas Emissions and Climate Change		
4.8-1. The Fish Habitat Flows and Water Rights Project could result in a substantial increase in reservoir-generated GHG emissions.	No Mitigation Required	Less than Significant
4.8-2. The Fish Habitat Flows and Water Rights Project could substantially affect the City of Ukiah's ability to meet RPS requirements.	No Mitigation Required	Less than Significant
4.8-3. Climate change could alter Fish Habitat Flows and Water Rights Project operations, potentially resulting in indirect environmental effects.	No Mitigation Required	No Impact
Aesthetics		

Impact	Proposed Mitigation	Impact Significance
4.9-1. Implementation of the Proposed Project could have a substantial adverse effect on a scenic vista or degrade the visual character or quality of Lakes Mendocino and Sonoma and their surroundings.	No Mitigation Required	No Impact
4.9-2. Implementation of the Proposed Project could have a substantial adverse effect on a scenic vista or degrade the visual character or quality of the Upper Russian River and its surroundings.	No Mitigation Required	Less than Significant
4.9-3. Implementation of the No Project 1 Alternative could have a substantial adverse effect on a scenic vista or degrade the visual character or quality of the Upper Russian River and its surroundings.	No Mitigation Required	No Impact
4.9-4. Implementation of the Proposed Project could have a substantial adverse effect on a scenic vista or degrade the visual character or quality of the Lower Russian River and its surroundings.	No Mitigation Required	Less than Significant
4.9-5. Implementation of the Proposed Project could have substantial adverse effects on a scenic vista or degrade the visual character or quality of Dry Creek and its surroundings.	No Mitigation Required	No Impact
4.9-6. Implementation of the Proposed Project could substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	No Mitigation Required	No Impact
Public Services and Utilities		
4.10-1. Changes in minimum instream flow requirements could adversely affect the ability of water right permit holders to divert from the Russian River.	No Mitigation Available	Significant and Unavoidable

Impact	Proposed Mitigation	Impact Significance
4.10-2. Changes in instream flows could result in violations of wastewater discharge requirements.	No Mitigation Required	No Impact
Cumulative		
Impact 5.7.1-1. Implementation of the Fish Habitat Flows and Water Rights Project could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level in the Upper Russian River in combination with Cumulative 1 through 4 Scenarios	No Mitigation Available	Cumulatively Significant and Unavoidable
Impact 5.7.1-2. Implementation of the Fish Habitat Flows and Water Rights Project could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level in Dry Creekin combination with Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively not Considerable
Impact 5.7.1-3. Implementation of the Fish Habitat Flows and Water Rights Project could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level in the Lower Russian River in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively Less than Significant)
Impact 5.7.1-4. Implementation of the Fish Habitat Flows and Water Rights Project could substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on- or off-site in the Upper Russian River in combination with the Cumulative 1 Scenario and the Cumulative 4 Scenario.	No Mitigation Available	Cumulatively Significant and Unavoidable

Impact	Proposed Mitigation	Impact Significance
Impact 5.7.1-5. Implementation of the Fish Habitat Flows and Water Rights Project could substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on- or off-site in the Upper Russian River in combination with Cumulative 2 Scenario and Cumulative 3 Scenario.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.1-6. Implementation of the Fish Habitat Flows and Water Rights Project could substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on- or off-site in Dry Creek in combination with Cumulative 1 Scenario and the Cumulative 4 Scenario.	No Mitigation Available	Cumulatively Significant and Unavoidable
Impact 5.7.1-7. Implementation of the Fish Habitat Flows and Water Rights Project could substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on- or off-site in Dry Creekin combination with Cumulative 2 Scenario and the Cumulative 3 Scenario.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.1-8. Implementation of the Fish Habitat Flows and Water Rights Project could substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on- or off-site in the Lower Russian River. in combination with the Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.1-9. Implementation of the Fish Habitat Flows and Water Rights Project could substantially alter the area of exposed shoreline within Lake	No Mitigation Required	Cumulatively Less than Significant

Impact	Proposed Mitigation	Impact Significance
Sonoma in a manner which would result in substantial erosion or sedimentation on-or off-site in combination with Cumulative 1 through 4 Scenarios.		
Impact 5.7.1-10. Implementation of the Fish Habitat Flows and Water Rights Project could contribute to inundation by seiche, tsunami, or mudflow in the Russian River Estuary in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Available	Cumulatively Significant and Unavoidable
Impact 5.7.2-1. Implementation of the Fish Habitat Flows and Water Rights Project could result in a violation of water quality standards or waste discharge requirements or otherwise substantially degrade water quality relating to mercury accumulation in fish tissue in Lake Sonoma in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.2-2. Implementation of the Fish Habitat Flows and Water Rights Project could result in a violation of water quality standards or waste discharge requirements or otherwise substantially degrade water quality as it relates to aluminum and specific conductance in the Upper Russian River in combination Cumulative 1 through 4 Scenarios.	No Mitigation Available	Cumulatively Significant and Unavoidable
Impact 5.7.2-3. Implementation of the Fish Habitat Flows and Water Rights Project could result in a violation of water quality standards or waste discharge requirements or otherwise substantially degrade water quality as it relates to aluminum and specific conductance in the Upper Russian River in combination with the Cumulative 2 Scenario and Cumulative 3 Scenario.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.2-4. Implementation of the Fish Habitat Flows and Water Rights Project could result in a violation water quality standards or waste discharge requirements or otherwise substantially degrade water quality as it relates to aluminum in	No Mitigation Required	Cumulatively Less than Significant

Impact	Proposed Mitigation	Impact Significance
the Lower Russian River in combination with Cumulative 1 through 4.		
Impact 5.7.2-5. Implementation of the Fish Habitat Flows and Water Rights Project changes to minimum instream flows could result in a violation of water quality standards or waste discharge requirements or otherwise degrade water quality relating to biostimulatory substances in the Upper and Lower Russian River in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Available	Cumulatively Significant and Unavoidable
Impact 5.7.3-1. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flow that could substantially effect the quality of habitat for rearing Chinook juveniles by elevated water temperatures from April through June in the Russian River and in Dry Creek in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively not Considerable
Impact 5.7.3-2 Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flow that could substantially affect emigrating coho salmon through elevated water temperatures in the months of March through May in the Lower Russian River and in Dry Creek in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively not Considerable
Impact 5.7.3-3. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flow that could substantially affect the spawning and egg incubation of steelhead through elevated water temperatures in the months of December through	No Mitigation Required	Cumulatively not Considerable

Impact	Proposed Mitigation	Impact Significance
May in the Russian River (above Cloverdale) and in Dry Creek in combination with Cumulative 1 through 4 Scenarios.		
Impact 5.7.3-4. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flow that could substantially affect the habitat for spawning American shad in the Russian River in combination with Cumulative 1 Scenario and the Cumulative 4 Scenario.	No Mitigation Required	Cumulatively Less than significant
Impact 5.7.3-5. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flow that could substantially effect the habitat for spawning American shad in the Russian River in combination with the Cumulative 2 Scenario and Cumulative 3 Scenario.	No Mitigation Required	Cumulatively not Considerable
Impact 5.7.4-1. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in water surface elevations and flows that could adversely affect sensitive natural communities in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.4.-2. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in water surface elevations the could impede the use of nursery sites in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.4.-3. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes to minimum instream flows and water levels that could adversely affect special-status wildlife species in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.5-1. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in releases from Lake Mendocino	No Mitigation Required	Cumulatively not Considerable

Impact	Proposed Mitigation	Impact Significance
that could result in higher water surface elevations that could inundate Inlet Road and substantially alter or inhibit access to Bushay Campground during the recreational season in combination with the No Potter Valley Project (Cumulative 1 through 4 Scenarios.		
Impact 5.7.5-2. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in releases from Lake Mendocino could result in higher water surface elevations that could substantially alter or inhibit access to Kyen Campground during the recreational season in combination with Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively not Considerable
Impact 5.7.5-3. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flows that could result in impacts that substantially alter or inhibit access to recreational activities such as swimming and sunbathing in the Upper Russian River in combination with the Cumulative 1 Scenario and the Cumulative 4 Scenario.	No Mitigation Available	Cumulatively Significant and Unavoidable
Impact 5.7.5-4. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flows that could result in impacts that substantially alter or inhibit access to recreational activities such as swimming and sunbathing in the Upper Russian River in combination with the Cumulative 2 Scenario and the Cumulative 3 Scenario.	No Mitigation Required	Cumulatively not Considerable
Impact 5.7.5-5. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flows that could result in impacts that substantially alter or inhibit access to boating in the Upper Russian River from Rio Lindo Academy to the Confluence	No Mitigation Available	Cumulatively Significant and Unavoidable

Impact	Proposed Mitigation	Impact Significance
of Dry Creek in combination with the Cumulative 1 Scenario and the Cumulative 4 Scenario.		
Impact 5.7.5-6. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flows that could result in impacts that substantially alter or inhibit access to boating in the Upper Russian River from Rio Lindo Academy to the Confluence of Dry Creek in combination with the Cumulative 2 Scenario and the Cumulative 3 Scenario.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.5-7. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flows that could result in impacts that substantially alter or inhibit access to recreational facilities or activities such as boating in the Russian River from Wohler to the Pacific Ocean in combination with the Cumulative 1 Scenario and the Cumulative 4 Scenario.	No Mitigation Available	Cumulatively Significant and Unavoidable
Impact 5.7.5-8. Implementation of the Fish Habitat Instream Flows and Water Rights Project could result in changes in minimum instream flows that could result in impacts that substantially alter or inhibit access to recreational facilities or activities such as boating in the Russian River from Wohler to the Pacific Ocean in combination with the Cumulative 2 Scenario and the Cumulative 3 Scenario.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.6-1: Implementation of the Fish Habitat Flows and Water Rights Project could substantially increase reliance on fossil fuels in combination with the Cumulative 1 Scenario), Cumulative 3 Scenario, and Cumulative 4 Scenario.	No Mitigation Required	Cumulatively Less than Significant

Impact	Proposed Mitigation	Impact Significance
Impact 5.7.6-2: Implementation of the Fish Habitat Flows and Water Rights Project could conflict with existing energy policies and standards intended to protect the environment in combination with the Cumulative 1 Scenario, Cumulative 3 Scenario, and Cumulative 4 Scenario.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.7-1. Implementation of the Fish Habitat Flows and Water Rights Project could result in an increase in reservoir-generated greenhouse gas emissions in combination with the Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.7-2: Implementation of the Fish Habitat Flows and Water Rights Project could substantially affect the City of Ukiah's ability to meet State of California's Renewables Portfolio Standard requirements in combination with the Cumulative 1 through 4 Scenarios	No Mitigation Required	Cumulatively Less than Significant
Impact 5.7.8-1. Implementation of the Fish Habitat Flows and Water Rights Project could have a substantial adverse effect on a scenic vista or degrade the visual character or quality of the Upper Russian River and its surroundings from June through October in combination with the Cumulative 1 Scenario and the Cumulative 4 Scenario.	No Mitigation Available	Cumulatively Significant and Unavoidable
Impact 5.7.8-2. Implementation of the Fish Habitat Flows and Water Rights Project could have a substantial adverse effect on a scenic vista or degrade the visual character or quality of the Upper Russian River and its surroundings from June through October in combination with Cumulative 2 Scenario and the Cumulative 3 Scenario.	No Mitigation Required	Cumulatively not Considerable

Impact	Proposed Mitigation	Impact Significance
Impact 5.7.8-3. Implementation of the Fish Habitat Flows and Water Rights Project could have a substantial adverse effect on a scenic vista or degrade the visual character or quality of the Lower Russian River and its surroundings during June and July in combination with the Cumulative 1 through 4 Scenarios.	No Mitigation Required	Cumulatively not Considerable
Impact 5.7.8-4. Implementation of the Fish Habitat Flows and Water Rights Project could have a substantial adverse effect on a scenic vista or degrade the visual character or quality of the Lower Russian River and its surroundings from August through October in combination with the Cumulative 1 Scenario and the Cumulative 4 Scenario.	No Mitigation Available	Cumulatively Significant and Unavoidable
Impact 5.7-8-5. Implementation of the Fish Habitat Flows and Water Rights Project could have a substantial adverse effect on a scenic vista or degrade the visual character or quality of the Lower Russian River and its surroundings from August through October in combination with the Cumulative 2 Scenario and the Cumulative 3 Scenario.	No Mitigation Required	Cumulatively not Considerable
Impact 5.7.9-1. Changes in minimum instream flow requirements could adversely affect when water right permit holders may divert water from the Russian River while complying with the minimum bypass flow terms in their water right permits in combination with the (Cumulative 1 through 4 Scenarios.	No Mitigation Available	Cumulatively Significant and Unavoidable