

Appendix A

Issues Identified During Scoping

A.1 Introduction

This Scoping Report summarizes the scoping process completed for the Sonoma County Water Agency's (Water Agency) Fish Habitat Flows and Water Rights Project (Fish Flow Project) Notice of Preparation (NOP) for the Environmental Impact Report (EIR). It provides an overview of the scoping process completed in accordance with the California Environmental Quality Act (CEQA), as well as a summary of comments received during the scoping process.

The Fish Flow Project NOP was prepared by the Water Agency in accordance with CEQA Guidelines Section §15082 to provide responsible and trustee agencies and the Office of Planning and Research with sufficient information describing the proposed project and the potential environmental effects to enable agencies to make a meaningful response. The NOP comment period began on September 29, 2010, and ended on November 15, 2010. The Water Agency held publically noticed scoping meetings on November 4, 8, and 10, 2010, at the locations identified below.

<p>Thursday, November 4th 5:00 p.m. – 9:00 p.m. (Note changed starting time) Monte Rio Community Center 20488 Highway 116 Monte Rio</p>	<p>Monday, November 8th 6:00 p.m. – 9:00 p.m. Windsor Town Hall 9291 Old Redwood Hwy Windsor</p>	<p>Wednesday, November 10th 6:00 p.m. – 9:00 p.m. The Alex Rorabaugh Center 1640 South State Street Ukiah</p>
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The issues that were raised during the NOP comment period/scoping process have been summarized within this Fish Flow Project EIR Scoping Report and are describe below.

A.2 Comment Summary

A total of 45 written comment submittals (letters, emails, comment cards) were received. Table 1 provides a summary of the written comments received during the public scoping process, including identification of the commenter, affiliation, date and comment format, and summary of comments provided. Additionally, the Water Agency provided a court reporter at each NOP scoping meeting to record individual verbal comments. In total, six comments were received by the court reporter and are noted below.

A.2.1 Issues Identified During Scoping

This section contains a summary of public comments received during the EIR scoping process categorized by issue area. A general summary of the expected scope of the EIR for each issue area category is also provided in Section A.2.2.

Project Description (5)

- Incomplete project description, water-rights permit updates, hydrologic index methods and techniques, and the relationship of the Russian River Biological Opinion and project objectives.

CEQA Process (7)

- Relationship between CEQA and Federal and state Endangered Species Act (ESA) and Russian River Biological Opinion projects, and lead agency determinations.

Hydrology (6)

- Groundwater availability and underflow in combination with instream flow requirements.

Water Quality (18)

- Bacteria, temperature, algae blooms, non-native invasive plants species, other aquatic wildlife, and to include open and closed estuary scenarios for water quality.
- Concerns about a reduced volume of water available to dilute potential contaminants, especially water treatment and agriculture drainage returns to the river via surface and groundwater.
- Annual thermographs for project area based on maximum daily temperature.

Fisheries Resources (4)

- Fishing impacts, impacts to fish migration, spatial population structure.
- Proposed flows not enough for fish in lower Russian River.

Vegetation and Wildlife (7)

- Native and non-native aquatic and riparian vegetation, other aquatic animals and wildlife nesting wildlife along river banks, temperature, algae blooms, sediment buildup.
- Include requirements to alter flows to eliminate *Ludwigia* and other invasive species.

Recreation (12)

- Kayaking, canoeing, swimming, beach erosion, loss of surfing areas.

Geology, Geomorphology, and Soils (3)

- Impacts associated with the Vineyard Erosion & Sediment Control Ordinance, gravel mining, and erosion concerns.

Land Use and Agriculture Resources (3)

- Agriculture impacts to water supply and fish habitat.

Utilities and Service Systems (3)

- Analysis of regional water supply to include Russian River Project releases that meet instream flow and water supply needs. Evaluate impacts due to FERC's relicensing of PVP and the possibility of no diversions from the Eel River.

Climate Change (2)

- Effects of climate change and the Fish Flow Project.

Cumulative (10)

- Lake Mendocino, Russian River Estuary Management Project (Estuary Project), Eel River including no flow from Eel River, frost protection, AB2121, Vineyard Erosion & Sediment Control Ordinance, gravel mining, cumulative impacts to the species and prey. Relationship between flows and groundwater use, groundwater recharge, water quality, temperatures, channel morphology, treated effluent reuse projects, growth, agriculture growth, gravel mining, and groundwater management plans.

Growth Inducing (2)

- Ability to store additional water and use it to fulfill water contracts and create new contracts to enable further development.

Hydrologic Index (3)

- The analysis of the hydrologic index should include a minimum of 12 sub-watersheds, propose an algorithm for the true Hydrologic Index of the Russian River, using measurements at multiple individual sites, along the Russian River.
- Supportive of changing the hydrologic index and coordinate with instream flows.
- The relationship between Lake Mendocino water availability and the Eel River water diversions.

Beyond the Scope of the Project (34)

- EIR to address funding issues for Estuary Project, illegal diverters, low flows and impacts to existing appropriative rights, Coyote Valley Dam (height or sediment removal), Potter Valley Project reductions in flows or total collapse, potential impacts to the socioeconomics of recreation in the project area, water conservation issues and low lying structures near Jenner.

A.2.2 Consideration of Comments Received

This Scoping Report documents the process of soliciting and identifying comments from interested agencies and the public so that the Water Agency and the responsible agencies can determine the issues that interested participants consider to be the principal areas for study and analysis. The following discussion identifies the issues raised in scoping that will be addressed in the EIR and provides a brief explanation for those issues that will not be considered in the document.^a

Project Description or Process Clarifications

Comments regarding details in the Project Description, including project objectives, hydrologic index methods and techniques, and relationship of CEQA, ESA, and the Russian River Biological Opinion will be addressed in the EIR Introduction, Project Background, and Project Description Sections.

Primary concerns associated with the CEQA process related to: 1) the structure and format of the scoping meetings; 2) concerns about the lead agency determination for the project; and 3) the separation of the Fish Flow Project from other elements required under the Russian River Biological Opinion, including the

^a CEQA does not require direct response to each comment received during scoping; the comments must be considered and included in the environmental analysis, as appropriate.

Estuary Management Project. The relationship between the Fish Flow Project and other required elements of the Russian River Biological Opinion will be defined in the EIR Introduction, Project Background, and Project Description Sections.

CEQA Technical Issues

Vegetation and Wildlife

Comments related to vegetation and wildlife resources included concerns about impacts resulting from reduced minimum instream flows to native and non-native aquatic and riparian vegetation and nesting wildlife along river banks. The EIR will address the potential impacts on plants and wildlife that may result from implementation of the project or its alternatives. Analysis will include review of changes in water levels and conditions relating to reduced minimum instream flows. Mitigation will be identified and discussed as appropriate.

Fisheries Resources

Comments related to fisheries resources included concerns about impacts to fishing, fish population spatial structure, and migration timing. The EIR will address the potential impacts on fishing activities that may occur due to implementation of the project or its alternatives. Analysis will include review of flow changes and migration conditions.

Climate Change

Several comments expressed the need for consideration of climate change and project modeling. The EIR will include a discussion of the modeling and the analysis of climate change as it relates to the project.

Water Quality

The EIR will review whether reduction of flows will have the potential to adversely affect water quality in the Russian River or its tributaries, with respect to wildlife, fisheries, and human health. Analysis will also review water quality impacts related to temperature and dissolved oxygen.

Recreation

The EIR will discuss potential adverse effects on recreational activities, including but not limiting to kayaking, surfing, fishing, and beach access in the project area. The primary concern expressed during the scoping process was the potential impact to kayaking activities and its economy.

Cumulative

For each resource category, the EIR will include analysis of cumulative effects [impacts?] of the project, in combination with other past, present, and reasonably foreseeable future projects affecting the same resources. Where applicable, this analysis will address other required elements of the Russian River Biological Opinion relevant to each resource.

Range of Alternatives

The EIR will describe and discuss the direct and indirect environmental effects of implementing the proposed project and alternatives. The alternatives consist of a range of potential methods to achieve the project objectives, and to manage Lake Mendocino and Lake Sonoma releases to meet minimum instream flows that improve habitat for threatened and endangered fish. Potential alternatives to be included in the EIR are derived from modeling results. The alternatives analysis will be completed in accordance with CEQA and the “rule of reason,” which requires an EIR to describe a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the

significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR is not required to consider every conceivable alternative to a project; rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible.

As part of the evaluation of alternatives, the EIR will address two No Project Alternatives. The No Project Alternative 1 will reflect baseline conditions at time of NOP filing which includes the Water Agency filing an annual Temporary Urgency Change Petition (TUCP) with the State Water Resources Control Board to request temporary changes to Decision 1610 minimum instream flows to comply with the Russian River Biological Opinion. No Project Alternative 2 will reflect conditions with Decision 1610 minimum instream flow requirements, which could include as needed requests to the State Water Resources Control Board for Temporary Urgency Changes to minimum instream flow requirements due to dry or critical hydrologic conditions. The two No Project Alternatives will consider potential environmental effects of continuing the described management practices and not implementing the proposed project.

Comments Beyond the Scope of the EIR

Comments related to potential impacts to the socioeconomic effects of the proposed project will be addressed in the EIR. The EIR will not address Estuary Project's funding, water conservation issues, or raising low lying structures near Jenner.

Table 1 Fish Flow Project Notice Of Preparation Comments Received

COMMENTS RECEIVED	TOPICS
<p><u>State Agencies</u></p> <p>1. California Regional Water Quality Control Board, Matt St. John, Acting Division Chief, Timber/Non Point Source Division. Originally signed by Catherine Kuhlman, Executive Officer (Email) 11/15/2010</p> <p><u>Local Government</u></p> <p>2. Mendocino County BOS, John McCowen, Second District Supervisor (Email) 11/16/2010</p> <p>3. Sweetwater Springs Water District, Stephen Mack, General Manager (Email) 11/15/2010</p> <p>4. North Marin Water District, Chris DeGabriele, General Manager (Email) 11/17/2010</p>	<p>1. EIR must ensure that project complies with water quality standards within project area. BO and Basin Plan conflicts. Water quality monitoring and assessment; the assessment of changes in water quality should involve statistical analysis. Impacts to Estuary; A new 401 cert will be needed for new methods of creating the outlet channel.</p> <p>2. EIR should asses the beneficial impact of raising the Lake Mendocino Dam. The potential for carrying water forward if storage capacity were available.</p> <p>3. It is unclear what the permits include and the actual work involved in changing the Hydrologic Index. State Board should be the lead agency and responsible for the prep of the EIR. The EIR process should include multiple regional meetings. Consider having a technical advisory committee to review the technical flow analyses to evaluate the range of flow alternatives. Include all D1610 flow changes in one document. EIR should include alternatives that fix all current issues with D1610. Set a time period to evaluate BO flows. EIR should evaluate impacts of drought, water quality, water supply, and recreation. EIR should evaluate the claims and assumptions of the BO flows.</p> <p>4. Urge the Water Agency to move quickly to comply with the BO requirements and pursue permanent changes to D1610. Supportive of changing the hydrologic index from Eel River/Lake Pillsbury to Lake Mendocino. Suggested that the proposed instream flows be coordinated in conjunction with the hydrologic index. With regards to the proposed 40 cfs in Dry Creek as stated in the BO; please consider adaptive management to accommodate the</p>

<p>5. City of Santa Rosa, Miles Ferris, Director of Utilities (Email) 11/15/2010</p> <p><u>General Public</u></p> <p>6. Barbara Delonno (Sent in comment form from Windsor's NOP Scoping Meeting, & Email) 11/8/2010</p> <p>7. Betsy McConnell (Email) (Sent in comment form from Santa Rosa's NOP Scoping Meeting) 11/10/2010</p> <p>8. Bill Wadsworth (Email) 11/15/2010</p> <p>9. Carol Cowley (Email) 11/15/2010</p>	<p>future habitat enhancement projects and the potential Dry Creek bypass pipeline.</p> <p>5. Analysis of regional water supply to include Russian River Project releases that meet instream flow and water supply needs.</p> <p>6. New flows proposed, 70 cfs is not enough water for fish and recreation. D1610 flows are more sustainable. BO does not assess adverse effects for fish or recreation in the lower RR.</p> <p>7. Warmer, algae-swamped, nitrogen-sucking water is not better for fish. BO is flawed and subjected to pressure to comply with the City of Santa Rosa need to pull more water out of the river for selling and growth. Supports Doreen Atkinson letter</p> <p>8. Water conservation and Human consumption needs to be addressed. Consider Climate change in the project modeling. Water conservation measures and pricing needs to be evaluated. Lack of water right enforcement, illegal diverters needs to be evaluated.</p> <p>9. Concerned that the flow proposal would be bad for the health for the RR.</p>
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<p>10. Carol Sklenicka (Letter) 11/15/2010</p>	<p>10. Concerned about impacts to other species and overall health of the RR. Concerned that the BO did not address existing problems such as sediments, temperature, and bacteria issues. Wants assurance that the EIR will mitigate all potential impacts from the project.</p>
<p>11. Christy Cowley, Vacation Wonderland, Owner (Email) 11/15/2010</p>	<p>11. Please reconsider the low flow proposal of the project. Not able to kayak or canoe at the low flows. The water is stagnant and filled with moss, algae, and other non-native invasive plants.</p>
<p>12. Chuck Williams (4 Emails) 11/15/2010 Chuck Williams Court Reporter) (Ukiah</p>	<p>12. Email 1: Consider a concrete dam around the gravel pits along the RR to prevent erosion during high flood events. Email 2: Removal of jacks, more access points to the river, consider letting the river go almost dry for a period of time to allow removal of trash, invasive plants, and jacks. Email 3: Concepts for flood and contaminant control, building first flush contaminant basins. Another benefit would be increased seasonal wetland habitat and increased flood control. Email 4: Please encourage counties, cities, and residents to use permeable surfaces.</p> <p>Ukiah Court Reporter: Create a low flow of about 20 to 30 cfs and allow people to remove some of the trash fish, invasive plants, and remove jacks.</p>
<p>13. Don Kelsy, Ph.D. (Caltech '73) (Email) 11/4/2010 Don Kelsy attachments) (2</p>	<p>13. Email: Actual historical flow data does not support the proposed summer flows.</p> <p>Attachments: (1) A Summary of Myths about Russian River Flows 1940-2003. (2) An Analysis of Monthly Mean Flow Rates of the Russian River for the Period 1940-2003</p>
<p>14. Doreen Atkinson (Email 1) 11/9/2010 2/11/2011) (Email 2)</p>	<p>14. Comments from email 1: Assumes that the project name was changed from "Low Flow" to "Fish Flow" for a more positive spin. Questions need to be answered; how will the low flow affect the temperature, algae blooms, sediment buildup, other aquatic animals and wildlife. Effects on businesses and recreation when beaches are closed due to algae blooms and high bacteria counts. Comments from email 2: Will the project include qualitative and statistical assessment water quality data for upper, middle, and lower portions of the RR? Is the BO a mandate or an opinion that scwa can</p>

<p>18. Larry Hansen (Email) 11/14/2010</p> <p>19. Laura Wilson, Johnson's Beach Resort (Email) 11/7/2010</p> <p>20. Lisa Bourgea (Email) 11/9/2010</p> <p>21. Nancy Leras (Email) 11/15/2010</p> <p>22. Pinky Kushner (2 Emails,) 11/17/2010</p>	<p>18. Objects to the 70 cfs flow proposal. Fish Flow project is protecting low lying properties not fish. Algae blooms and ludwigia concerns. BO is only considering a flow regime based on an end point not the whole section.</p> <p>19. Against the petition to reduce flows to 70 cfs. Summer 09 had 14 positive bacterial tests for enterococcus at their property from June 15 to September 30. Prior to that, only one positive test from a sewage spill in 2002 during a ten year period. Water quality should be the first concern.</p> <p>20. Why are illegal water diversions (agriculture), gravel mining, and destruction of riparian corridors, waste water discharge/pollutants from all municipalities being addressed? [sic] Why do the susceptible structures at Jenner dictate flow related issues for the health of the river? Why can't the flow at Dry Creek be lowered to the 40cfs and the Russian River flow be maintained at 125 cfs flow? Why are we not attending to all the recommendations in the B.O. that pertain to water quality and preservation of habitat and not just concentrating on flow. Does the scwa benefit indirectly with the flow issue by being able to store more water and have it available to fulfill water contracts and create new ones to enable further development of the Santa Rosa plain? Do the summer dams reduce flow/velocity? Why can't the structures at Jenner be addressed either by raising them or let them flood and keep the flows with the exception of Dry Creek at decision 1610 levels. Let the estuary rise above sea level and breach on its own.</p> <p>21. Would not approve of permanently lowering flows from 125cfs to 70cfs in summer months. However, if flows were based on rainfall then possibly. Dept. of F&G killed nearly all the fish in the 50's with Rotenone. We were told that it took 125cfs to maintain the fishery. Water quality issues with low flow.</p> <p>22. EIR should explore in its fullest capacity all resources categories. EIR should evaluate the RR as a watershed. The analysis of the hydrologic index should include a minimum of 12 sub-watersheds. The analysis should propose an algorithm for the true Hydrologic</p>
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<p>27. Darlene Kersnar (Monte Rio Court Reporter)</p> <p>28. Brenda Adelman (Monte Rio Court Reporter)</p> <p>Brenda Adelman (2 Emails) with comment letter</p> <p>Russian River Watershed Committee, Brenda Adelman, Chair Russian River Watershed Protection Committee (Comment Letter)</p> <p>Russian River Watershed Committee, Brenda Adelman, Chair Russian River Watershed Protection Committee (List of Attachments: #1 RRWPC CommentsD1610 Permanent; Altered Laguna; Comments-Revised Storm Permit-7-6-091; D1610 Urgency Change Petition 6-101; List of Attachments-8-30- 10_2_; Ludwigia Control Project Final Report; RRWPC Complaint Response; RRWPC 2009 Photo Report; Scoping SCWA Estuary6-10; SCWA FAQ_2007; SWRCBJ Shu303_d_8-30-10; SWRCBOrderWater Cons 4-09; Water Project DEIR comments 3-10-09)</p> <p>29. Ellen Faulkner (Ukiah Court Reporter)</p>	<p>27. Objects to the “open house” format for a public meeting. Generally speaking, the lower RR folks are left out of the process.</p> <p>28. Court Reporter: Objects to the “open house” format for a public meeting. Concerned that Estuary EIR and D1610 EIR should be one project. Comment Letter: Objects to the meeting as a “workshop.” There is a CEQA problem because the BO has pre-determined the options of the projects. How can a permanent change to D1610 be predicated on an experimental Estuary Project? Included Estuary comments, Water Project comments, Friends of the Eel River Petition to State comments, comment letter to State Board on TUCP 2009, Protest regarding: Notice of Petition Requesting Modification to Water Rights Permits for Sonoma County Water Agency by modifying the minimum instream flow requirements, Protest regarding: Notice of State Water Resources Control Board, Division of Water Rights Order Approving a TUCP by the Sonoma County Water Agency regarding permits 12947A, 12949, 12950, AND 16596 (applications 12919A, 15736, 15737, AND 19351), Scoping comments on SCWA’s Notice of Preparation of a Draft EIR for the Russian River Estuary, Comments to State Board on 2012 303(d) List of Impaired Water Bodies, Waste Discharge Requirements on Storm Water and Non-Storm Water Discharges from Municipal Separate Storm Sewer Systems: RRWPC Comments July 5, 2009, and in general request that the EIR address the issue of limited funding for conducting the Estuary Project and what happens if the project cannot proceed, but low flow is implemented. Describe how State agencies are affected in the ability to oversee implementation of the low flow project. Want to have a regular meeting for the EIR hearing process.</p> <p>29. Concerned about the deep wells that the vineyards are installing and the effects to the underflow of the RR. Frost protection concerns. Concerned about vineyard water rights and less water diverted from Potter Valley.</p>
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<p>30. Don McEnhill, Russian River Keeper, (Email) 11/15/2010</p>	<p>30. EIR should use numeric values to quantify thresholds when assessing impacts, meeting recovery goals, and what happens if population continue to decline, will the project be modified? Project alternatives should include a barrier other than the RR sandbar. EIR should evaluate cumulative impacts to the species and prey eliminating the few favorable wet yrs from the proposed flows in combination with tributary diversions that won't contribute accretion flows well into summer due to diversions. Concerned that proposed flows will lead to concentrated population and would not improve spatial population structure. EIR should create annual thermographs for project area based on maximum daily temperature. Concerned about the effects of minimum flows on juvenile fish leaving tributaries in spring. Water quality concerns. EIR should study and compare always open and always closed regimes and water quality with such scenarios. Questions about the 2002 RR and DC Interagency Flow-Habitat Assessment Study; validity of the analysis, i.e. length of time, how many years, what area? EIR should review the assumptions in the 2002 study. Cumulative section should include gravel mining past and present.</p>
<p>31. Richard Holmer, Friends of the Villa Grande, President (Email) 11/17/2010</p>	<p>31. Estuary closures and flooding issues at the recreational beaches at Patterson Point Preserve. Water Quality. Nesting wildlife along river banks. Provide a MMP for proposed project. Include environmental justice with regards to loss of recreation. Fishing impacts. Impacts to birds.</p>

32. Patricia Spencer, Shute, Mihaly & Weinberger LLP, on behalf of Ellison Folk. (4 Emails) 11/12/10

32. Email 1 Letter sent on behalf of the FOER: NOP is vague in its description of changes in instream flow requirements for Chinook salmon and unspecified changes in water rights permits. The project description should include the water rights permits that will be affected and the changes sought. Agency should also clarify now whether it intends to seek nay right to use water from the Eel River as part of this project. EIR should discuss existing water rights, diversions, pumping and storing from the RR including both legal and illegal. EIR should include reasonable and foreseeable future projects, including a no flow scenario from Eel River. EIR should evaluate impacts to Lake Mendocino caused by reduction of flows to the RR and whether Lake Mendocino can store additional water not released to the RR. Impacts associated with additional releases to RR in the event Lake Mendocino is not able to store additional water i.e. Oct 8 & Oct 15, 2010. Impacts identified in the attached letter from Kamman Hydrology & Engineering (see below). Cumulative impacts including: reductions/changes in flows in RR mainstem and tribs during critical spring flow conditions due to frost control pumping regulations now being considered by scwa and swrcb. Changes in flows that may result from AB2121. Impacts associated with the Vineyard Erosion & Sediment Control Ordinance. Changes in estuary management. Dry Creek restoration, which will limit water diversions by scwa until new fish habitat or a pipeline is successfully constructed. Potential for Lake Mendocino to be increased in storage capacity (height or sediment removal). Potential reduction in PVP due to tunnel collapse or system malfunctions. Additional and continued gravel mining in the RR. Alternatives should include a project that does not rely on any diversions from the Eel River. EIR should evaluate whether reductions in flows from the Eel River would make it possible to meet minimum flow requirements of the project. If project will receive federal funding than scwa should prepare an EIR/EIS. **KAMMAN HYDROLOGY & ENG.** What flow schedule will apply during critically dry years under the proposed flow changes? If the proposed minimum flow schedule is the same during all year types within each of the river sections, the need for water year type classification methodology is moot. The NOP puts

	<p>considerable emphasis on the need to revise the water year type classification, however, the only project operations indicated in the BO and NOP that are tied to a water year type classification is the required minimum flow release schedule. Perhaps there are other water ops that are tied to water year type classes. Concerns about the Hydrologic Index changes: If there is no change in minimum flow requirements between year types, why is the HI needed? Why isn't the revised index tied to Lake Sonoma as well as Lake Mendocino? Majority of water deliveries to Lake Mendocino are driven primarily by PVP diversions from the Eel River watershed. The hydrologic conditions of Lake Mendocino are closely linked and controlled by the hydrologic conditions and water operations in the Eel River watershed. Determining the HI for the RR watershed based on the hydrologic conditions of Lake Mendocino is flawed. Therefore, scwa should consider alternative approaches that truly representative of hydrologic conditions in the RR watershed. Hydrologic Indices are based on unimpaired hydrologic conditions. The hydrologic conditions in Lake Mendocino are representative of altered streamflow diversions...therefore not reliable for determining water year type designations for the RR watershed. The EIR should identify and evaluate other methods that are more representative of unimpaired hydrologic conditions in the RR watershed including Lake Sonoma storage and/or flows on all principal tributaries. Possible FERC relicensing of the PVP and/or new upper Eel River BOs will cease diversions of Eel River water to Lake Mendocino, eliminating the usefulness of this gauge. Infrastructure damage, maintenance, and tunnel collapse could alter deliveries to Lake Mendocino, creating anomalies in lake levels and hydrologic conditions. The NOP's project description lacks information on how the project will operate under critically dry year types during prolonged drought periods when there may be insufficient water available to meet minimum flow requirements. D1610 flow schedules were developed through careful hydrologic modeling to balance available supply and demand which resulted in minimum flow schedule yielding minimum flows for critically dry year types that are two-to three-folds lower than the recommended BO flows-an inconsistency that leads me to</p>
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	<p>question the feasibility of the proposed BO flow changes during dry and critically dry year-types. As stated in the BO and D1610, excess water is typically discharged in order to account for summer losses, as part of the project description, it would seem prudent to better predict and present the likely flow releases in order to meet the low flow criteria. Concerned about the possibility of scwa, through anticipated water-right petition, to substantially control seasonal flow patterns, geomorphic and ecological conditions and variability within the watershed. This raises a number of concerns including: 1) a meaningful and definitive description of this action and potential impacts to the environment are not included in the NOP; 2) extension of scwa's ability to maintain the minimum flow the minimum flow schedule later into the year could allow them to capture and retain fall and early winter runoff in reservoirs in lieu of natural flow increases associated with early season storm runoff; 3) this action will provide scwa the power to manipulate the fall-early winter flow during an important time of fish immigration and spawning, potential changes and impacts that espoused to be avoided in the BO and D1610 by providing natural runoff and hydrologic conditions. The EIR needs to include considerable technical assessments as part of the development process. Analyses and impact assessments that will be to implemented include, but are not limited to: studies to determine if there is sufficient supply and carry-over storage to operate the project during normal yrs, dry yrs, critically dry yrs & multi-yr droughts. Specifically, will there be sufficient storage in Lake Mendocino to accommodate current PVP diversions and proposed summer flow reductions? If proposed minimum flow releases during critically dry yrs are higher than those expressed in D1610, studies will need to evaluate if there is sufficient supply available for project operations during single back to back critically dry water yr type. If the project HI based on Lake Mendocino storage and/or inflow via PVP diversions yields a water yr type that differs from the true unimpaired flow conditions in the RR watershed, will the project meet desired goals and objectives? Analyses should also look at the hydrologic record and evaluate how the proposed project would have fared over long-term historic periods. When considering all project alternatives, evaluate the loss of PVP water. NOP to provide</p>
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	<p>information on the modeling analysis tools used, the suite of alternative water supply and operations being incorporated into the impact assessments and the simulation year types and wet and dry periods incorporated into the analysis. In addition, numerical models to provide estimates of flow rates, velocities, water depths and water temperature while accounting for changes in reservoir and groundwater storage, diversions, infiltration and evaporative losses. Need to describe the model selection process in the EIR along with specific modeling goals and objectives and the rationale for the specific model choice. What does “update water rights permits to reflect current conditions” specifically mean? Concerned that reducing flow rates will not be sufficient to maintain a seasonal freshwater lagoon of satisfactory water quality. EIR will need to have an analysis regarding lagoon and barrier beach dynamics in response to flow changes and how the project will alter the frequency and duration of inlet opening/closing and seasonal effects on water quality, capturing hourly or daily changes in water level, flow velocity, water temperature, salinity and DO. This analysis will also require an assessment of off-shore wave energy, littoral drift, and sediment supply to characterize and predict seasonal barrier beach dynamics. How will the project assess impacts to existing riparian vegetation? Does the project need to address all eight of the elements (listed on pg 241 of BO) consisting the BO RPA, including instream channel work, pipelines, etc.? The NOP project description should include a statement that the water resources within the entire RR watershed area (both surface and ground) may be impacted by the project and the EIR will address such flow related changes and impacts including: a. changes in surface water diversions-assuming the opportunity to divert surface water would decrease in association with lower flows? b. will the project cause decreases in surface water diversions, leading to increased groundwater withdrawals? What would be the impact on local and regional groundwater levels and supply? c. dry season groundwater infiltration and recharge from the river-how will reduced flows alter river infiltration and groundwater recharge? d. how will river water quality be impacted considering a reduced volume of water available to dilute potential</p>
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contaminants, especially water treatment and ag drainage returns to the river via surface and groundwater? e. how will the changes in flow magnitudes alter water temps? f. how will the flow changes impact the existing riparian corridor and habitat to associated fish and wildlife species? g. if significant changes in the magnitude of winter high flows are proposed, how will these changes impact channel morphology especially with respect to area and usage of salmonid spawning habitat, fish passage, summer rearing of coho and steelhead and other aquatic species? h. the EIR should address the cumulative effects on surface and groundwater resources associated with proposed flow changes in terms of surface and groundwater interactions and water quality, including proposed treated effluent reuse projects, groundwater recharge projects, future anticipated urban and ag growth, gravel mining projects, and anticipated groundwater management plans.

<p>33. Paula Whealen, Wagner & Bonsignore, Consulting Civil (Email) 11/15/10</p>	<p>33. Low flows and impacts to existing appropriative rights. EIR should identify other sources of water i.e. groundwater discharge, incident precipitation... and indicate how these sources will be accounted for in the release of water to meet instream flow requirements.</p>
<p>34. Blake Ridgway, Surfrider (Email)11/15/10</p>	<p>34. Water quality, cumulative impacts of Estuary Project and Flow Project. Beach erosion and the loss of recreation (surfing).</p>
<p>35. Brent Reed, Surfrider (Email)11/15/10</p>	<p>35. SAME AS ABOVE</p>
<p>36. Carlos Mascolo, Surfrider (Email)11/15/10</p>	<p>36. SAME AS ABOVE</p>
<p>37. Caroline Higgins, Surfrider (Email)11/15/10</p>	<p>37. SAME AS ABOVE</p>
<p>38. Jim Adams, Surfrider (Email)11/14/10</p>	<p>38. SAME AS ABOVE</p>
<p>39. Miles Ragland, Surfrider (Email)11/14/10</p>	<p>39. SAME AS ABOVE</p>
<p>40. Terri McCracken, Surfrider (Email)11/15/10</p>	<p>40. SAME AS ABOVE</p>



Notice of Preparation of Environmental Impact Report

September 29, 2010

TO: State Clearinghouse
Responsible and Trustee Agencies
Interested Agencies and Parties

FROM: Sonoma County Water Agency
2150 West College Avenue
Santa Rosa, CA 95401

FISH HABITAT FLOWS AND WATER RIGHTS PROJECT

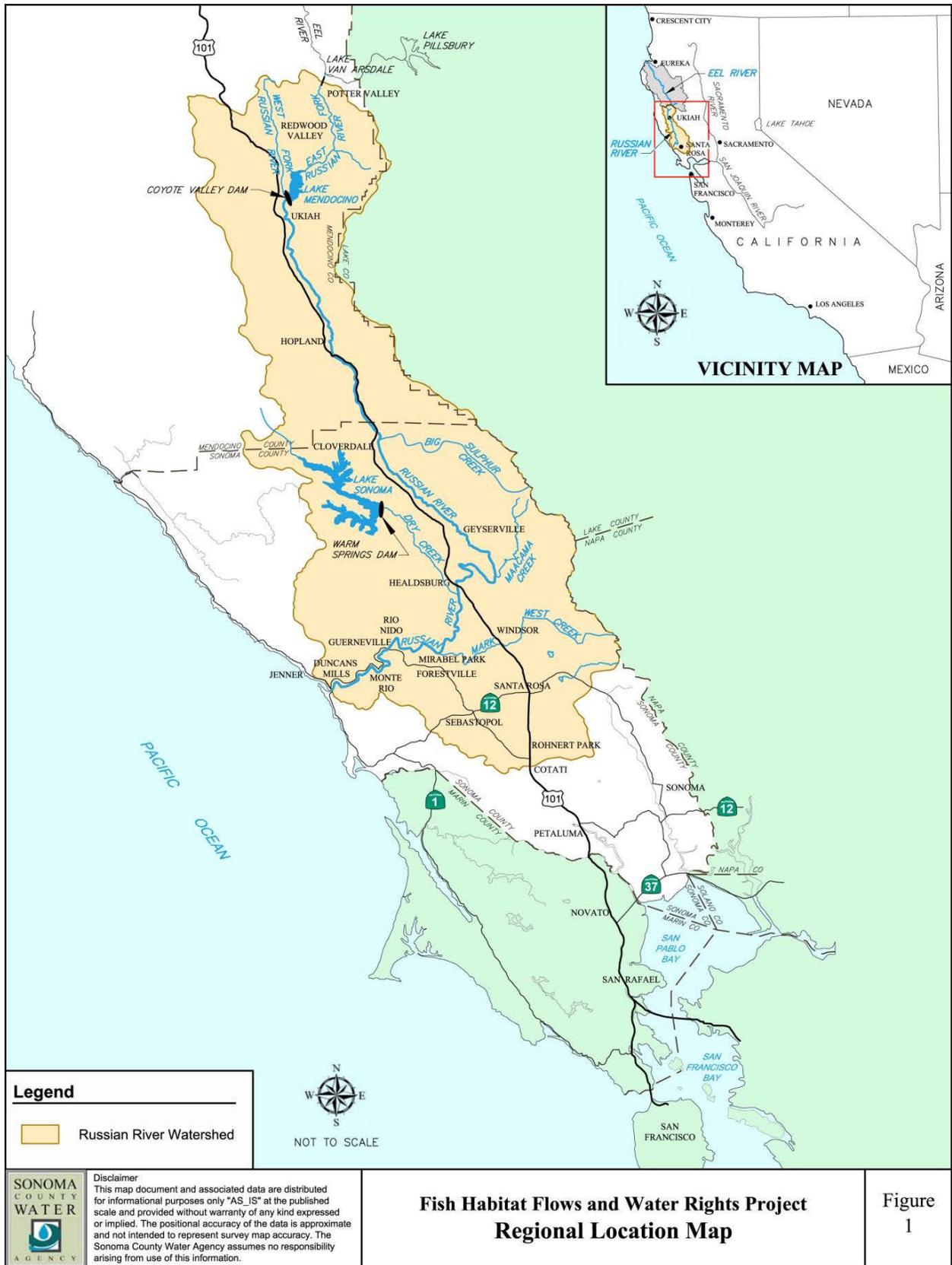
The Sonoma County Water Agency (Water Agency) is preparing an Environmental Impact Report (EIR) for the proposed *Fish Habitat Flows and Water Rights Project* (Fish Flow Project). The EIR will be prepared by the Water Agency in accordance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the Water Agency's "Procedures for the Implementation of CEQA." The Water Agency will be the lead agency and will consider all comments from responsible and trustee agencies, property owners, and interested persons and parties regarding the scope and content of the information to be included in the EIR. The Fish Flow Project is required by the 2008 National Marine Fisheries Service's Russian River Biological Opinion.

SONOMA COUNTY WATER AGENCY

The Water Agency is a special district created by the California Legislature and operates under the direction of a Board of Directors, composed of the members of the Sonoma County Board of Supervisors. The law that created the Water Agency and defines its powers and duties authorizes it to produce and furnish surface water and groundwater for beneficial uses, to control flood waters, to generate electricity, to provide recreational facilities in connection with Water Agency water supply facilities, and to treat and dispose of wastewater.

BACKGROUND INFORMATION

The Russian River originates in central Mendocino County approximately 15 miles north of Ukiah. The Russian River watershed is shown on Figure 1.



It drains an area of approximately 1,485 square miles, including much of Mendocino and Sonoma counties, and empties into the Pacific Ocean at Jenner in Sonoma County, about 20 miles west of Santa Rosa. The main channel of the Russian River is about 110 miles long and runs generally southward from its headwaters near Redwood and Potter Valleys, to Mirabel Park, where the channel's direction changes to generally westward as it crosses the Coast Range. Principal Russian River tributaries are the East Fork of the Russian River (which receives water diverted from the Eel River through Pacific Gas and Electric Company's (PG&E) Potter Valley Project (PVP), Big Sulphur Creek, Maacama Creek, Dry Creek, and Mark West Creek. Communities and cities along the Russian River include Ukiah, Hopland, Cloverdale, Geyserville, Healdsburg, Forestville, Mirabel Park, Rio Nido, Guerneville, Monte Rio, Duncans Mills, and Jenner.

Two major reservoir projects provide water supply storage in the Russian River watershed: 1) Coyote Valley Dam/Lake Mendocino, located on the East Fork of the Russian River three miles east of Ukiah, and 2) Warm Springs Dam/Lake Sonoma, located on Dry Creek 14 miles northwest of Healdsburg. The Water Agency is the local sponsor for these two federal water supply and flood control projects, collectively referred to as the Russian River Project. Under agreements with the United States Army Corps of Engineers (USACE), the Water Agency manages the water supply storage space in these reservoirs to provide a water supply and maintain summertime Russian River and Dry Creek streamflows.

The Water Agency holds water-right permits¹ issued by the State Water Resources Control Board (SWRCB) that authorize the Water Agency to divert² Russian River and Dry Creek flows and to re-divert³ water stored and released from Lake Mendocino and Lake Sonoma. The Water Agency releases water from storage in these lakes for delivery to municipalities, where the water is used primarily for residential, governmental, commercial, and industrial purposes. The primary points of diversion include the Water Agency's facilities at Wohler and Mirabel Park (near Forestville). The Water Agency also releases water to satisfy the needs of other water users 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. These minimum instream flow requirements vary based on defined hydrologic conditions (normal, dry, and critical) that are based on cumulative inflows into Lake Pillsbury in the Eel River watershed.

During the rainy season (October through May), natural streamflow, rather than reservoir releases, accounts for most of the flow in the Russian River. From June through September, some of the flow in the Russian River is composed of water released from storage in Lake

¹ SWRCB water-right permits 12947A, 12949, 12950 and 16596.

² Divert - refers to water diverted directly from streamflows into distribution systems for beneficial uses or into storage in reservoirs.

³ Re-divert - refers to water that has been diverted to storage in a reservoir, then is released and diverted again at a point downstream.

Mendocino (which includes water imported from the Eel River via PG&E's PVP) and Lake Sonoma.

The Russian River and Dry Creek minimum instream flow requirements of Decision 1610 may no longer be appropriate. Decision 1610 was adopted before the listings of three salmonid species under the federal Endangered Species Act, and did not specifically address the importance of fall storage in Lake Mendocino to the Chinook salmon migration. Although Decision 1610 assumed that higher instream flows were better for fishery resources, information developed in the last decade indicates this may not be so for salmonid species in Dry Creek, the Russian River, and the Russian River estuary. Decision 1610 expressly recognized that later fishery studies might identify a need to change the minimum flow requirements. Decision 1610 also expressly contemplated that such changes might be needed if PG&E's PVP imports changed, as they did in 2006.

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 District in the Russian River Watershed (Russian River Biological Opinion) on September 24, 2008.⁴ The Russian River Biological Opinion is a culmination of more than a decade of consultation between the Water Agency, the USACE, and NMFS regarding the impact of Water Agency and USACE water supply and flood control activities on three fish species listed under the federal Endangered Species Act: Central California coast steelhead, Central California Coast coho salmon, and California Coast Chinook salmon. Coho salmon are also listed under the California Endangered Species Act (CESA). The California Department of Fish and Game (CDFG) issued a consistency determination on November 9, 2009, finding that the NMFS' Russian River Biological Opinion was consistent with the requirements of the CESA and adopting the measures identified in the Russian River Biological Opinion.

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, together with the Water Agency's stream channel maintenance activities and estuary management, are likely to jeopardize and adversely modify critical habitat for 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 Decision 1610 result in high water 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 in the Russian River estuary and that allowing a lagoon to develop would likely enhance juvenile steelhead and salmon habitat.

⁴ NMFS' Russian River Biological Opinion may be accessed online at www.sonomacountywater.org and may be reviewed at the Water Agency's office at 404 Aviation Boulevard, Santa Rosa, CA.

NMFS' Russian River Biological Opinion concludes that reducing Decision 1610 minimum instream flow requirements will enable alternative flow management scenarios that will increase available rearing habitat in Dry Creek and the upper Russian River, and provide a lower, closer-to-natural inflow to 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.⁵

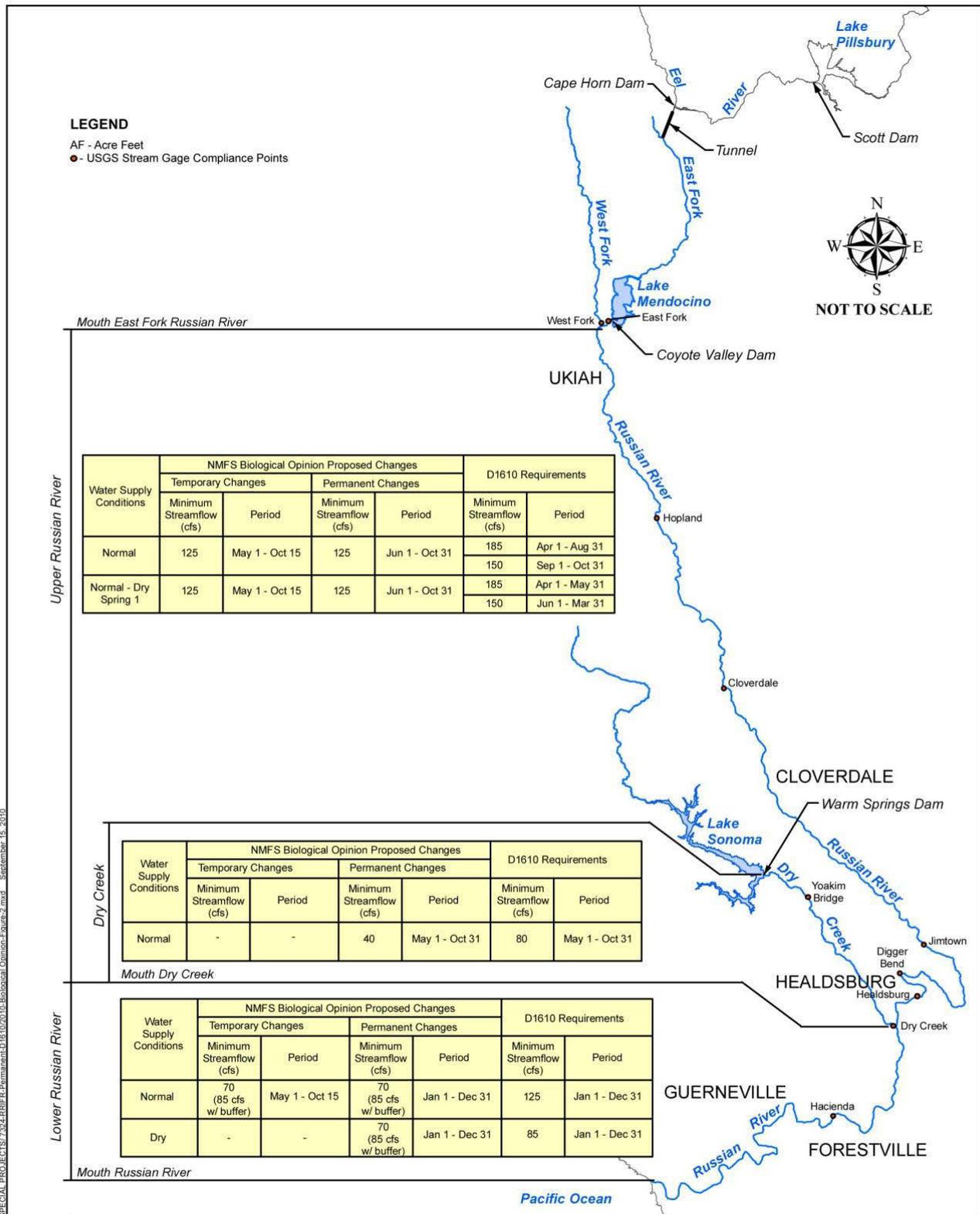
As required by NMFS' Russian River Biological Opinion, in September 2009 the Water Agency filed a petition with the SWRCB to permanently change the Decision 1610 minimum instream flow requirements, in order to improve habitat for endangered Central California Coast coho salmon and threatened Central California Coast steelhead. This petition presently is pending before the SWRCB. The SWRCB will act on this petition after the EIR that is the subject of this notice is prepared.

Until the SWRCB issues an order on this petition, the minimum instream flow requirements specified in Decision 1610 (with the resulting adverse impacts to listed salmonids) will remain in effect, unless temporary changes to these requirements are made by the SWRCB. NMFS' Russian River Biological Opinion requires that the Water Agency petition the SWRCB for temporary changes to the Decision 1610 minimum instream flow requirements each year until the SWRCB issues an order on the Water Agency's petition for the permanent changes to these requirements. NMFS' Russian River Biological Opinion only requires petitions for temporary changes to minimum streamflow requirements for the mainstem Russian River, and 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, and the SWRCB made a temporary urgency change in its Order WR 2010-0018-DWR. If approved by the SWRCB, the temporary changes required by NMFS will reduce the minimum instream flow requirement to 70 cubic feet per second (cfs) for the lower Russian River between May 1 and October 15. Additionally, to enhance steelhead rearing habitat in the Russian River between the East Branch and Hopland, the temporary changes, if approved, will reduce the minimum instream flow requirement to 125 cfs for the upper Russian River between May 1 and October 15.⁶

The permanent and temporary changes to Decision 1610 minimum instream flow requirements specified by NMFS in the Russian River Biological Opinion are summarized in Figure 2.

⁵ National Marine Fisheries Service. *Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation District in the Russian River Watershed.* p. 243. September 2008.

⁶ National Marine Fisheries Service. *Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation District in the Russian River Watershed.* p 247. September 2008.



LEGEND
 AF - Acre Feet
 ● - USGS Stream Gage Compliance Points



Upper Russian River

Water Supply Conditions	NMFS Biological Opinion Proposed Changes				D1610 Requirements	
	Temporary Changes		Permanent Changes		Minimum Streamflow (cfs)	Period
	Minimum Streamflow (cfs)	Period	Minimum Streamflow (cfs)	Period		
Normal	125	May 1 - Oct 15	125	Jun 1 - Oct 31	185	Apr 1 - Aug 31
					150	Sep 1 - Oct 31
Normal - Dry Spring 1	125	May 1 - Oct 15	125	Jun 1 - Oct 31	185	Apr 1 - May 31
					150	Jun 1 - Mar 31

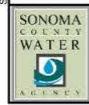
Dry Creek

Water Supply Conditions	NMFS Biological Opinion Proposed Changes				D1610 Requirements	
	Temporary Changes		Permanent Changes		Minimum Streamflow (cfs)	Period
	Minimum Streamflow (cfs)	Period	Minimum Streamflow (cfs)	Period		
Normal	-	-	40	May 1 - Oct 31	80	May 1 - Oct 31

Lower Russian River

Water Supply Conditions	NMFS Biological Opinion Proposed Changes				D1610 Requirements	
	Temporary Changes		Permanent Changes		Minimum Streamflow (cfs)	Period
	Minimum Streamflow (cfs)	Period	Minimum Streamflow (cfs)	Period		
Normal	70 (85 cfs w/ buffer)	May 1 - Oct 15	70 (85 cfs w/ buffer)	Jan 1 - Dec 31	125	Jan 1 - Dec 31
Dry	-	-	70 (85 cfs w/ buffer)	Jan 1 - Dec 31	85	Jan 1 - Dec 31

SPECIAL PROJECTS/734-RRFR-Permitts/D1610/Biological Opinion-Figure 2.mxd - September 15, 2010



**Russian River Biological Opinion
 Proposed Minimum Instream Flow Requirement Changes**
 Per National Marine Fisheries Service's Biological Opinion Issued September 24, 2008

Figure 2

NMFS' 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-stream river recreation."⁷ NMFS stated that the following changes 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 that the temporary changes are in effect, the Water Agency will monitor water quality and fish, and collect and report monitoring information as required by NMFS' Russian River Biological Opinion.

In 2002, 2004, 2007, and 2009, water storage levels in Lake Mendocino declined to dangerously low levels. In 2002, the terms of Decision 1610 authorized the necessary reductions in instream flows, but that was not the case in 2004, 2007 and 2009. In those years, the SWRCB made temporary urgency changes to Water Agency water-right permits, and adopted temporary lower instream flow requirements to preserve water in Lake Mendocino. The situation during these years was due to lack of rainfall and, in 2007 and 2009, also was due to lower inflows from PG&E's PVP. Because of the recent reductions in PG&E's PVP diversions from the Eel River into the Russian River, it is no longer reasonable to use cumulative Lake Pillsbury inflows to determine the water-year type (normal, dry, or critical) that governs the level of Russian River and Dry Creek minimum streamflow requirements. It would be more realistic for the water-year type to be based on Russian River watershed conditions rather than on Eel River watershed conditions.

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 District in the Russian River Watershed.* p. 244. September 2008.

FISH HABITAT FLOWS AND WATER RIGHTS PROJECT

Objective

The objective of the Fish Flow Project is to manage Russian River Project releases to provide instream flows that improve habitat for threatened and endangered fish, while updating the Water Agency's existing water rights to reflect current conditions.

Location

The Fish Flow Project would generally be located in the Russian River watershed in Mendocino County and Sonoma County, California, shown on Figure 1. Environmental impacts of the Fish Flow Project would potentially occur at Lake Mendocino, Lake Sonoma, in and along the Russian River downstream of Lake Mendocino/Coyote Valley Dam to Jenner, and in and along Dry Creek downstream of Lake Sonoma/Warm Springs Dam.

Description

The Water Agency would manage water supply releases from Lake Mendocino and Lake Sonoma to provide instream flows in the Russian River and Dry Creek that would improve habitat for listed salmonids. The proposed Fish Flow Project requires approval by the SWRCB of Water Agency petitions to modify the Water Agency's existing water-right permits. In addition to the water-right modifications related to changing the minimum instream flow requirements to improve habitat for fish, the Water Agency also will file petitions with the SWRCB to update the Water Agency's water-right permits to reflect current conditions. The Water Agency will implement the proposed Fish Flow Project if the water-right modifications are made by the SWRCB.

Minimum Instream Flows for Coho Salmon and Steelhead

To comply with the requirements of NMFS' Russian River Biological Opinion, the Water Agency has filed a petition with the SWRCB that asks the SWRCB to make the following changes in the instream flow requirements that are specified in Decision 1610 and the Water Agency's water-right permits:

- between June 1 and August 31 of each year the existing minimum instream flow requirement of 185 cfs is proposed to change to 125 cfs for the upper Russian River (upstream of the confluence with Dry Creek and downstream of the confluence of the East and West Forks)
- between September 1 and October 31 of each year the existing minimum instream flow requirement of 150 cfs is proposed to change to 125 cfs for the upper Russian River (upstream of the confluence with Dry Creek and downstream of the confluence of the East and West Forks)

- between January 1 and December 31 of each year the existing minimum instream flow requirement of 125 cfs is proposed to change to 70 cfs for the lower Russian River (downstream of its confluence with Dry Creek)
- between May 1 and October 31 of each year the existing minimum instream flow requirement of 80 cfs is proposed to change to 40 cfs for Dry Creek from Warm Springs Dam to the Russian River.

Minimum Instream Flows for Chinook Salmon

Operating water supply releases from Lake Mendocino to preserve or increase the pool of cold water available in Lake Mendocino to support the fall Chinook salmon migration runs is also desirable, and may aid in the conservation and recovery of these threatened species. Although the proposed lower minimum instream flow requirements in NMFS' Russian River Biological Opinion will help to achieve this goal, the Water Agency will file another petition with the SWRCB, requesting that the modifications to minimum instream flow requirements be extended beyond the months required by NMFS' Russian River Biological Opinion for the upper Russian River (upstream of the confluence of Dry Creek and downstream of the confluence of the East and West Forks). These additional months could include those earlier or later in the year, or could be extended to be in effect year-round.

Hydrologic Index

The Water Agency will file another petition with the SWRCB, seeking to change the methodology used to establish the water-year type classifications that determine minimum instream flow requirements for the Russian River, to reflect actual conditions within the Russian River watershed rather than conditions in the Eel River watershed. The proposed hydrologic index will be developed based on appropriate measurements and dates of storage in, or inflows into, Lake Mendocino.

Water-Right Permit Updates

The Water Agency also will file petitions as needed to update its water-right permits to reflect current conditions and to resolve the time extension petitions that are pending before the SWRCB. These actions are not required to implement the proposed new minimum instream flow requirements or to change the hydrologic index, but will ask the SWRCB to consolidate the process to modify and update the Water Agency's water-right permits so that the SWRCB may make all necessary changes to the Water Agency's water-right permits in one order. These actions will include the pending petitions to extend time to complete use of water to December 1, 2020, and also may include new petitions to amend the place-of-use maps for the Water Agency's water-right permits, so that they are based on actual current and expected uses, and to make other updates or clarifications.

The proposed changes to the minimum instream flow requirements and the criteria used to determine the hydrologic index, and the proposed requests for water-right permit updates may change as the Fish Flow Project description and alternatives are further developed.

ISSUES TO BE ADDRESSED IN THE EIR

In accordance with CEQA, the Fish Flow Project EIR will address the potential environmental impacts associated with the Fish Flow Project. Specific areas of analysis may include: Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation and Traffic, and Utilities and Service Systems. The EIR will also analyze potential cumulative impacts related to the Fish Flow Project, including potential impacts of other required elements of NMFS' Russian River Biological Opinion. Areas of analysis may be changed based on input received during the Notice of Preparation (NOP) review period. Mitigation measures will be proposed to avoid or reduce such impacts, where reasonably feasible.

The Fish Flow Project EIR will discuss alternatives to the proposed project, and alternatives may be added based on input from the public and regulatory agencies during the NOP review period.

Information to be included in the Fish Flow Project EIR will also be based on input and comments received during the review period for this NOP. Decision-makers, responsible and trustee agencies under CEQA, property owners, and interested persons and parties will also have an opportunity to comment on the Draft EIR after it is published and circulated for public review.

PUBLIC COMMENT PERIOD FOR THIS NOTICE OF PREPARATION

Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than 45 days after receipt of this notice. The public comment period will close at 5:00 p.m. on November 15, 2010. Please include a name, address, and telephone number of a contact person in your agency for all future correspondence on this subject. Please send your comments to:

Sonoma County Water Agency
Attn: Jessica Martini-Lamb, Principal Environmental Specialist
404 Aviation Boulevard
Santa Rosa, CA 95403

You may also submit comments electronically at the Water Agency's website:

www.sonomacountywater.org/rrifr

SCOPING MEETINGS

In order for the public and regulatory agencies to have an opportunity to ask questions and submit comments on the scope of the Fish Flow Project EIR, three Scoping Meetings will be held during the NOP review period. Comment forms will be supplied for those who wish to submit written comments at the scoping meetings; written comments may also be submitted anytime during the NOP review period. The dates, times, and locations of the Scoping Meetings are listed below:

Thursday, November 4th 6:00 p.m. - 9:00 p.m. Monte Rio Community Center 20488 Highway 116 Monte Rio	Monday, November 8th 6:00 p.m. - 8:30 p.m. Windsor Town Hall 9291 Old Redwood Hwy Windsor	Wednesday, November 10th 6:00 p.m. - 9:00 p.m. The Alex Rorabaugh Center 1640 South State Street Ukiah
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Documents or files related to the Fish Flow Project are available for review at the Water Agency's Administrative Office located at 404 Aviation Boulevard, Santa Rosa, CA, 95403.

If you have any questions, or if you wish to update your information on our mailing list, please contact Jessica Martini-Lamb, Principal Environmental Specialist, at (707) 547-1903 or Erica Phelps, Environmental Resources Coordinator, at (707) 547-1934.



Notice of Preparation of Environmental Impact Report

FISH HABITAT FLOWS AND WATER RIGHTS PROJECT

Upcoming Scoping Meetings:

Thursday, November 4th 6:00 p.m. - 9:00 p.m. Monte Rio Community Center 20488 Highway 116 Monte Rio	Monday, November 8th 6:00 p.m. - 8:30 p.m. Windsor Town Hall 9291 Old Redwood Hwy Windsor	Wednesday, November 10th 6:00 p.m. - 9:00 p.m. The Alex Rorabaugh Center 1640 South State Street Ukiah
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Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 95403



Linda S. Adams
Secretary for
Environmental Protection

**California Regional Water Quality Control Board
North Coast Region
Geoffrey M. Hales, Chairman**

www.waterboards.ca.gov/northcoast
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135



Arnold
Schwarzenegger
Governor

November 15, 2010

Ms. Jessica Martini-Lamb
Sonoma County Water Agency
404 Aviation Boulevard
Santa Rosa, CA 95403

Dear Ms. Martini-Lamb:

Subject: Comments on the Notice of Preparation of an Environmental Impact Report for the Fish Habitat Flows and Water Rights Project, SCH No. 2010092087

Thank you for the opportunity to comment on the Notice of Preparation (NOP) of an Environmental Impact Report for the Fish Habitat Flows and Water Rights Project (Fish Flow Project EIR). We appreciate the opportunity to participate early in the environmental review process. The North Coast Regional Water Quality Control Board (Regional Water Board) is a responsible agency for this project, with jurisdiction over the quality of ground and surface waters (including wetlands) and the protection of the beneficial uses of such waters.

The proposed project consists of the management of water supply releases from Lake Mendocino and Lake Sonoma to provide instream flows in the Russian River and Dry Creek. The project proposes to modify the Sonoma County Water Agency's (Water Agency) existing water-right permit to change the minimum instream flow requirements, consistent with the National Marine Fisheries Service's Russian River Biological Opinion dated September 24, 2008.

We have reviewed the NOP for the Fish Flow Project EIR and offer the following recommendations and comments.

General Comments

The mission of the State Water Resources Control Board and Regional Water Boards is to preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. The quality of surface and ground waters in the North Coast Region of California is governed by the *Water Quality Control Plan for the North Coast Region* (Basin Plan) and state-wide Policies. The Basin Plan identifies the existing and potential beneficial uses of water within the North Coast Region and the water quality

California Environmental Protection Agency

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objectives necessary to protect those uses. The relevant existing beneficial uses that apply to the Project area include: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Groundwater Recharge (GWR), Water Contact Recreation (REC1), Non-Contact Water Recreation (REC2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Estuarine Habitat (EST), Rare, Threatened, or Endangered Species (RARE), Migration of Aquatic Organisms (MIGR), and Spawning, Reproduction, and/or Early Development (SPWN). The water quality objectives of specific concern to Regional Water Board staff are outlined in the following sections. Together water quality objectives, beneficial uses, the anti-degradation policy, and implementation policies are known as water quality standards. The NOP identifies hydrology and water quality as specific areas of analysis for the EIR, including an analysis of potential cumulative impacts related to the Project. The Fish Flow Project EIR must ensure that the Project complies with the water quality standards within the Project area.

Russian River Water Quality Impairments

Section 303(d) of the federal Clean Water Act and 40 CFR §130.7 require states to identify water bodies that do not meet water quality standards and are not supporting their beneficial uses. These waters are placed on the Section 303(d) List of Water Quality Limited Segments (also known as the list of Impaired Waterbodies). The List identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment. On August 4, 2010, the State Water Board adopted the California 2010 303(d) List and the United States Environmental Protection Agency will likely approve or disapprove the 2010 List in November 2010. This 2010 List includes the following three impairments for the Russian River within the Project area: sedimentation/siltation, temperature, and indicator bacteria.

State Water Board staff have begun assessing available data in order to update the 303(d) List. State Water Board staff's assessment includes nutrient and algal biomass data collected within the Project area and submitted by interested parties. At a later date, Regional Water Board staff will consider whether the available data demonstrates that the Russian River within the Project area is impaired for nutrients/biostimulatory substances.

Regional Water Board staff is currently developing a pathogen total maximum daily load (TMDL) for the Russian River to address the indicator bacteria impairments and a temperature implementation policy to address the temperature impairment. The sediment impairment in the Russian River watershed is addressed, in part, by the *Total Maximum Daily Load Implementation Policy Statement for Sediment-Impaired Receiving Waters in the North Coast Region* (Resolution No. R1-2004-0087).

Water Quality Objectives of Concern

The following are the water quality objectives that we believe could be violated under the Fish Flows Project, and a brief explanation of why violations of these objectives are a concern.

Bacteria: *The bacteriological quality of waters of the North Coast Region shall not be degraded beyond natural background levels. In no case shall coliform concentrations in waters of the North Coast Region exceed the following: In waters designated for contact recreation (REC-1), the median fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed 50/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400/100 ml (State Department of Health Services).*

Per the *Draft Guidance for Fresh Water Beaches* (DHS 2006), freshwater beach posting is recommended when single sample levels exceed the following thresholds: 1) Total coliforms - 10,000 MPN/100mL; 2) E. coli - 235 MPN/100mL; and 3) Enterococcus - 61 MPN/100 mL.

Our working hypothesis, supported in part by preliminary empirical analysis of available data (Attachment 1), is that under a given loading of bacteria from existing sources, reduced flows provides less dilution and may lead to higher bacteria concentrations, potentially causing violation of the bacteria objectives and beach posting thresholds and not supporting REC1 and REC2.

Biostimulatory Substances: *Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.*

Biostimulatory substances include nitrogen and phosphorus. It is generally recognized that flow, along with channel morphology and riparian conditions, is a "risk cofactor" that can affect the biostimulatory response of nutrients in a waterbody (Tetra Tech 2006). Assuming all other factors are constant, a given concentration of nitrogen and phosphorus in a waterbody can lead to greater biostimulation under reduced flows. Biostimulation can result in more aquatic plant productivity under lower flow conditions.

Dissolved Oxygen: *The instantaneous minimum concentration of dissolved oxygen (DO) required is 7.0 mg/L. Half of the monthly mean DO values for the year must be 10.0 mg/L or greater.*

Reduced DO conditions can occur, particularly during pre-dawn and early morning hours, due to respiration of aquatic plants and decomposition of organic

matter, which can occur under biostimulatory conditions in a water body. As summarized above, biostimulatory conditions may result from reduced flows in the Project area.

Toxicity: *All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Water Board.*

The toxic parameters of concern are blue-green algae toxins. Algal productivity is a biostimulatory response. Algal biomass can include blue-green algae species. Some blue-green algae species produce algal toxins that can be harmful to humans, pets, and wildlife.

Temperature: *The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.*

At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature.

At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperatures.

“Natural receiving water temperature” is that temperature regime that would occur in the absence of human alteration of those factors, including flow, which can affect stream temperature. The Fish Flows Project EIR must demonstrate to the satisfaction of the Regional Water Board that the Project does not contribute to violation of the temperature objective. We recommend the use of a water quality model to evaluate temperatures representing baseline, with-project, and natural conditions. The natural condition representation should evaluate temperatures that would be expected to occur without flow augmentation from reservoirs. The model should be capable of predicting hourly temperatures so that the 5°F restriction can be properly evaluated.

Sediment: The Basin Plan contains the following four sediment-related water quality objectives:

Sediment: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Turbidity: Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

Suspended Material: Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

Settleable Material: Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

Flow is a factor that could affect in-stream sediment loads. One potential mechanism for increases in sediment discharges from the Project is a drop in the water table which might lead to loss of riparian vegetation and subsequent bank erosion.

Water Quality Monitoring and Assessment

As stated above, the Fish Flow Project EIR must ensure that the Project complies with the water quality standards within the Project area. This assessment should be based on not only available water quality data, but also new water quality data, the collection of which should be designed specifically to evaluate potential impacts to water quality standards from reduced flows.

The stated objectives of the Russian River Water Quality Monitoring Plan for the Sonoma County Water Agency 2010 Temporary Urgency Change (2010 Monitoring Plan) were, "to provide information to evaluate potential changes to water quality and availability of aquatic habitat for salmonids resulting from the proposed permanent changes to Decision 1610... and provide information to support the development of a CEQA document required for permanent changes to Decision 1610." We support these objectives, and expect the Water Agency to meet them through additional monitoring and assessment efforts in 2011 and beyond. We believe that the assessment of changes in water quality should involve statistical analysis. Statistical analysis of water quality data for trends often requires an adequate time period to detect a statistical change in constituent concentration. The amount of time required to detect a trend is dependent on the sample variability. Constituents like bacterial indicators have a high ambient variability and therefore require longer monitoring time periods before a trend can be detected.

As mentioned previously, Regional Water Board staff are conducting water quality monitoring and assessment in development of an indicator bacteria TMDL for the Russian River within the Project area. In addition, in 2011 Regional Water Board's Surface Water Ambient Monitoring Program will conduct monitoring and assessment of nutrient/biostimulatory conditions within the Project area. Regional Water Board staff will make our data from these projects available to Water Agency staff for your use in

preparing the Fish Flow Project EIR. In addition, Regional Water Board staff are available to work with Water Agency staff to design additional monitoring to support the preparation of the EIR. Finally, Regional Water Board staff are available to consult Water Agency staff on appropriate statistical analyses to conduct on relevant water quality data in order to meet the stated monitoring and assessment objectives of the 2010 Monitoring Plan.

Impacts to Estuary

The Project has the potential to cause elevated water levels within the Russian River estuary. The Fish Flow Project EIR should evaluate the potential for elevated water levels to inundate residential septic systems located near the estuary shore and cause system failures, which could lead to discharges in violation of the Basin Plan.

Though Regional Water Board staff recognize that this Project NOP does not address breaching of the barrier beach between the ocean and the Russian River estuary, we provide the following comments for your consideration. Past activities to artificially breach the barrier beach between the ocean and Russian River Estuary have been covered by a Clean Water Act Section 401 Certification (certification). The current certification (WDID No. 1B04001WNSO) and its amendment expire on December 31, 2010. On September 24, 2008, the National Marine Fisheries Service issued the Biological Opinion entitled "*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,*" (File No. 151422SWR2000SR150).

A new certification will need to be applied for and issued for new methods of creating the outlet channel and breaching the estuary that will be more protective of salmonids and the estuarine habitat by providing deeper, cooler, and less saline water for improved rearing habitat for salmonids within the estuary. Flow will be a critical factor to evaluate and include within the certification application. Information on our certification program may be found on our website at:

http://www.swrcb.ca.gov/northcoast/water_issues/programs/water_quality_certification.shtml.

Concluding Comments

Regional Water Board staff recognize the potential conflicts between compliance with the National Marine Fisheries Service Biological Opinion and the Basin Plan water quality standards that the Fish Flow Project poses. As summarized above, we are concerned that the Project may contribute to violations of some water quality standards that apply to the Project area. Further, Regional Water Board staff expect the Fish Flow Project EIR to include qualitative and quantitative (i.e. statistical) assessment of whether the Project will cause violations of water quality standards and to include appropriate measures, as necessary, to mitigate identified impacts to these water quality standards.

Regional Water Board staff are available to consult with Water Agency staff in identifying appropriate measures to mitigate potential water quality violations caused by the Project.

Again, we thank you for the opportunity to comment. We look forward to continuing to work with Water Agency staff on this Project in our efforts to protect water quality. If you have any questions regarding these comments, you may contact me or Matt St. John at (707) 570-3762 or MStJohn@waterboards.ca.gov.

Sincerely,

Original signed by

Catherine Kuhlman
Executive Officer

101115_MSJ_FishFlowProject_EIRCommentLetter

cc: Scott Morgan, State Clearinghouse, P.O. Box, 3044, Sacramento, CA 95812
Re: SCH No. 2010092087

Barbara Evoy, Division of Water Rights, State Water Resources Control Board,
P.O. Box 2000, Sacramento, CA 95812

Attachment 1 Assessment of Fecal Indicator Bacteria in the Lower Russian River

Regional Water Board staff assessed fecal indicator bacteria (FIB) samples collected from the Russian River for possible effects from variation in stream flow. FIB data for total coliform, E. coli, and enterococcus were compiled from several sources for the assessment.

SCWA conducted water quality monitoring at fifteen (15) sampling locations along the mainstem of the Russian River from May 28, 2009 through October 1, 2009. Samples were also collected by Regional Water Board staff at these same locations during 2009 for the routine beach assessment program. Regional Water Board staff also assessed historical FIB data (1995-2008) collected at six (6) sample locations within the Project area. Nearly 2,000 FIB data samples were available for this assessment (Table 1).

Table 1. Number of Fecal Indicator Bacteria data samples assessed

Location	Total Coliform		E. coli		Enterococcus	
	1995-2008	2009	1995-2008	2009	1995-2008	2009
Camp Rose	177	27	95	27	41	27
Healdsburg Memorial Beach	211	27	103	27	66	27
Steelhead Beach	83	27	81	27	30	27
Forestville Beach	10	27	10	27	10	27
Johnson's Beach	166	27	87	27	30	27
Monte Rio Beach	166	14	88	14	30	14

Data Assessment

The purpose of the Water Agency 2009 sampling was to assess whether the ambient FIB concentrations changed due to the reduction in flow resulting from the minimum flow requirement variance. Regional Water Board staff's assessment includes: (1) visual comparison of 2009 FIB concentration data to historical data, (2) linear regression between stream flow and FIB concentration, (3) FIB load durations curves, and (4) trend analysis.

While there is considerable variability in observed FIB concentrations, both spatially and temporally, within the Project area, Regional Water Board staff's assessment detailed below indicates that some of this variability is correlated with flow conditions. Lower flows appear to result in higher FIB concentrations, and violations of bacteria objectives and beach posting thresholds, in some instances.

Visual Comparisons

Box plots of the FIB data collected in 2009 are visually compared to box plots of all years of historical data collected at each site (Figures 1 – 6). Box plots show data set medians, quartiles, and outliers. The visual comparison suggests that with a few exceptions there is no large apparent difference between FIB concentrations collected in 2009 as compared to past samples collected at each location.

Figure 1. Comparison of the Distribution of FIB Concentrations Measured at Camp Rose.

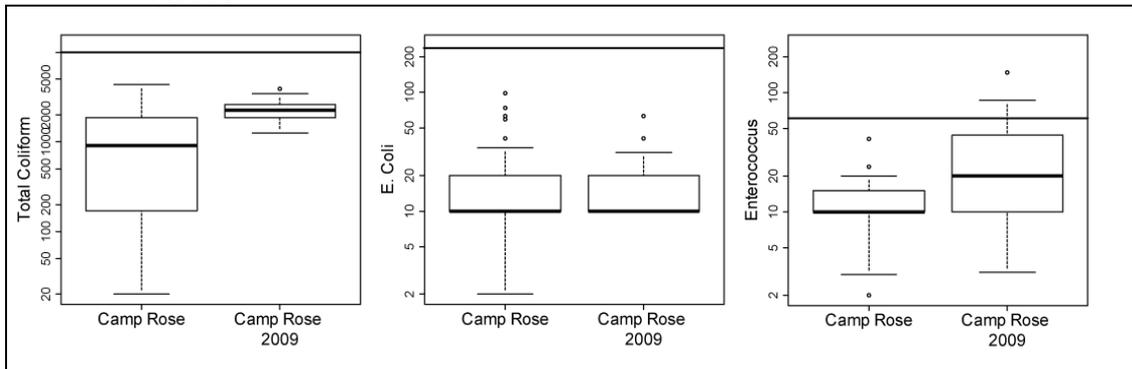


Figure 2. Comparison of the Distribution of FIB Concentrations Measured at Healdsburg Memorial Beach.

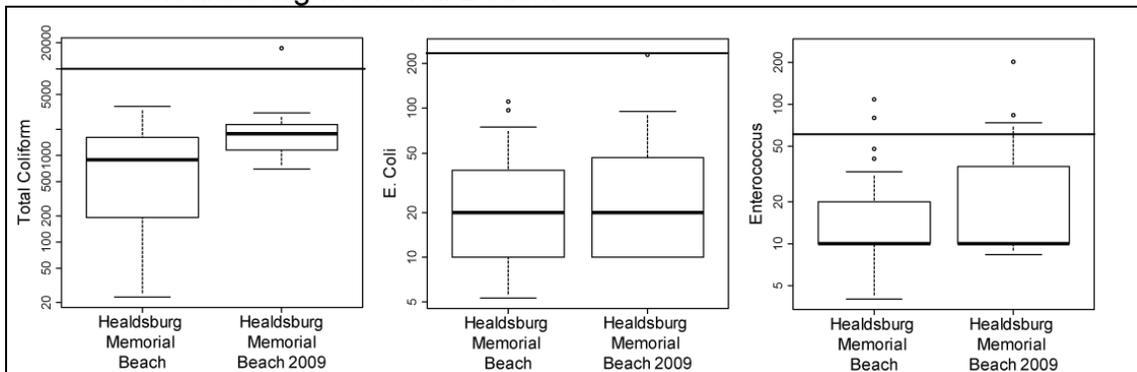


Figure 3. Comparison of the Distribution of FIB Concentrations Measured at Steelhead Beach.

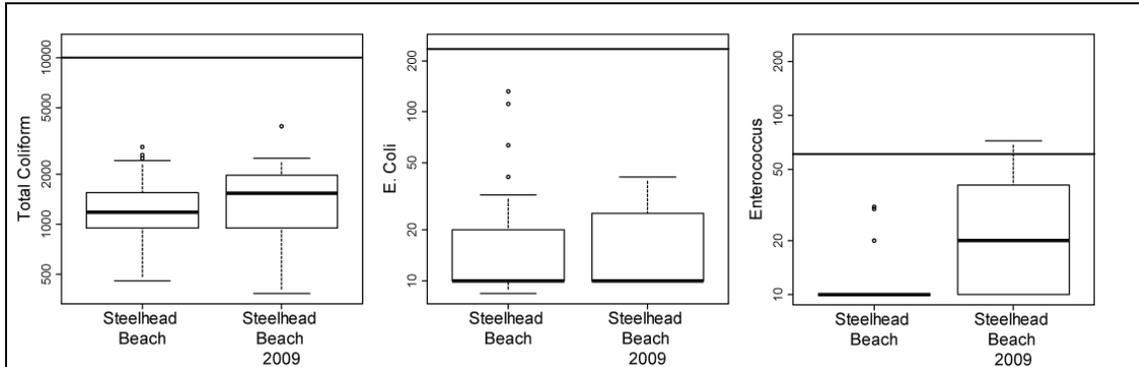


Figure 4. Comparison of the Distribution of FIB Concentrations Measured at Forestville Access Beach.

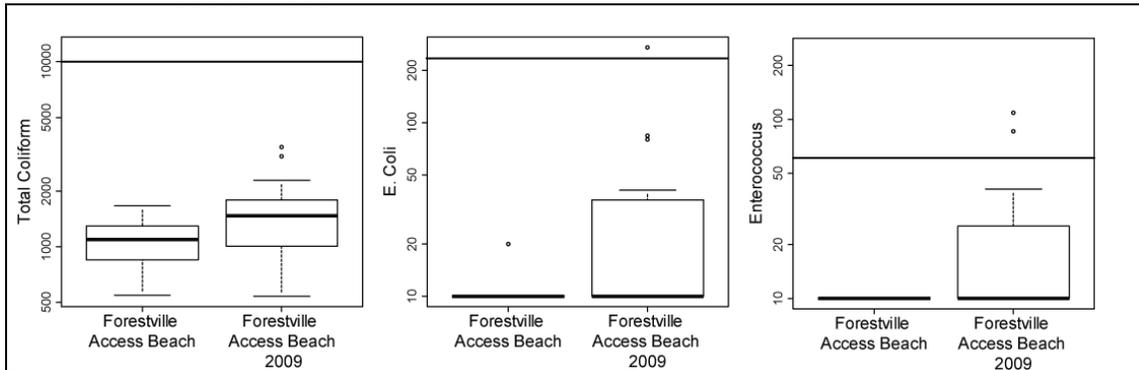


Figure 5. Comparison of the Distribution of FIB Concentrations Measured at Johnson's Beach.

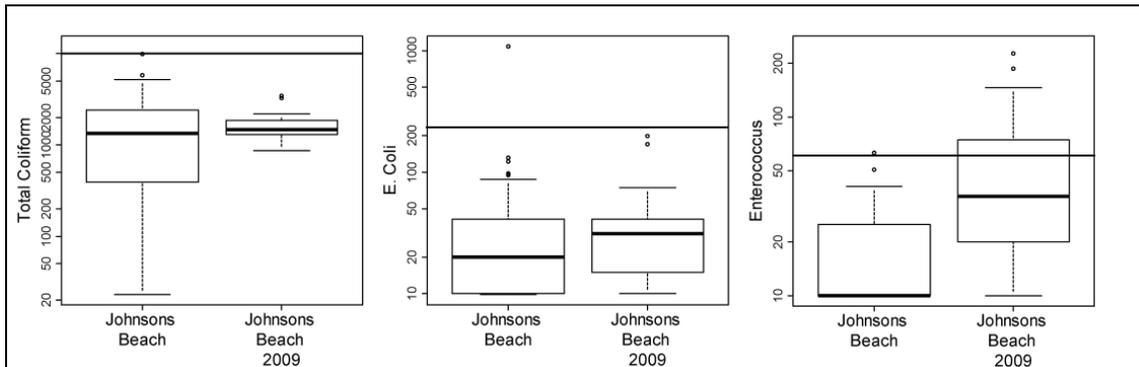
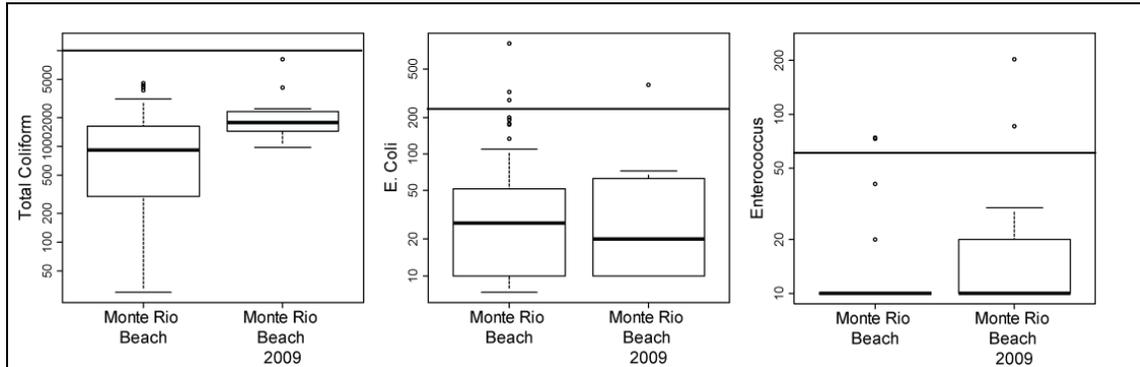


Figure 6. Comparison of the Distribution of FIB Concentrations Measured at Monte Rio Beach.



Linear Regression

The relationship between stream flow and FIB concentrations was assessed using linear regression. Daily stream flow data from the nearby U.S. Geological Survey (USGS) gauging station were matched with each FIB sample. FIB data from Camp Rose and Healdsburg Memorial Beach were compared to daily flows recorded at the USGS gauge near Healdsburg (#11464000). FIB data collected at the other four locations were compared to daily flow recorded at USGS gage near Guerneville (#11467000).

Data were log-transformed to address the normality distribution requirement of regression analysis. Visual inspection of the frequency distribution histograms show that log-transformation of the FIB data resulted in a distributions more normally distributed (Figures 7-10).

Figure 7. Frequency Distribution of Russian River Stream Flow Measurements at USGS Gauges near Healdsburg and Guerneville.

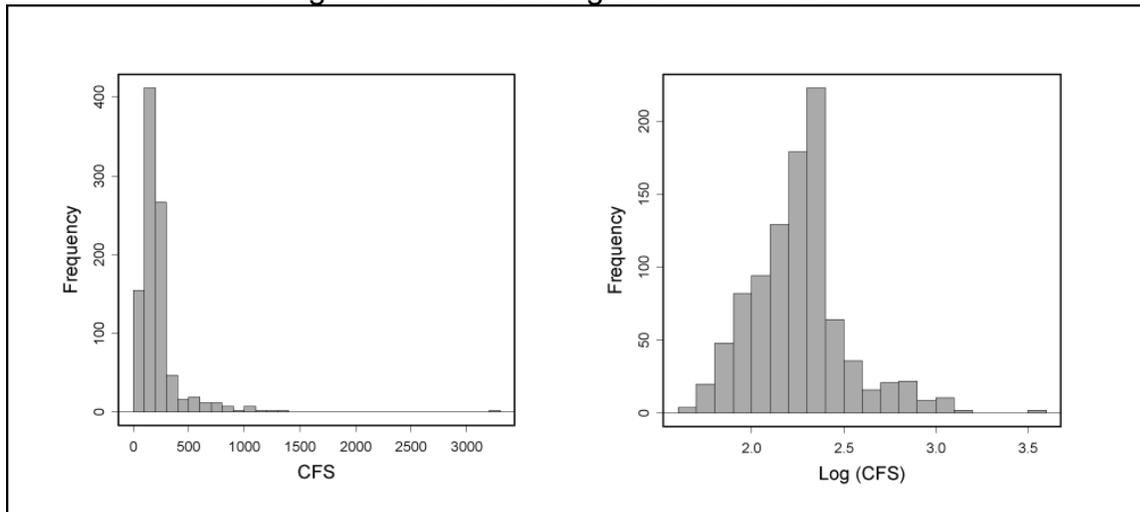


Figure 8. Frequency Distribution of Total Coliform Concentrations at all 6 Sites

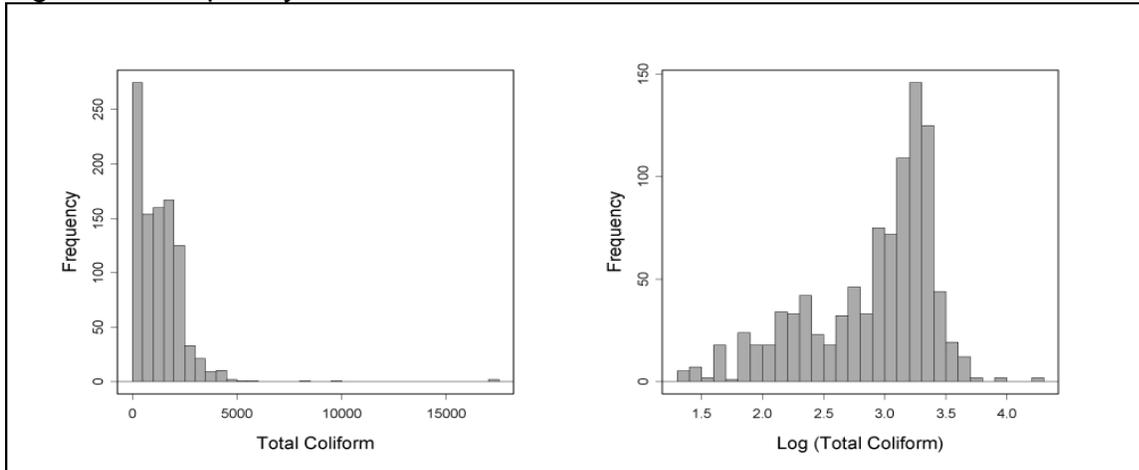


Figure 9. Frequency Distribution of E. coli Concentrations at all 6 Sites

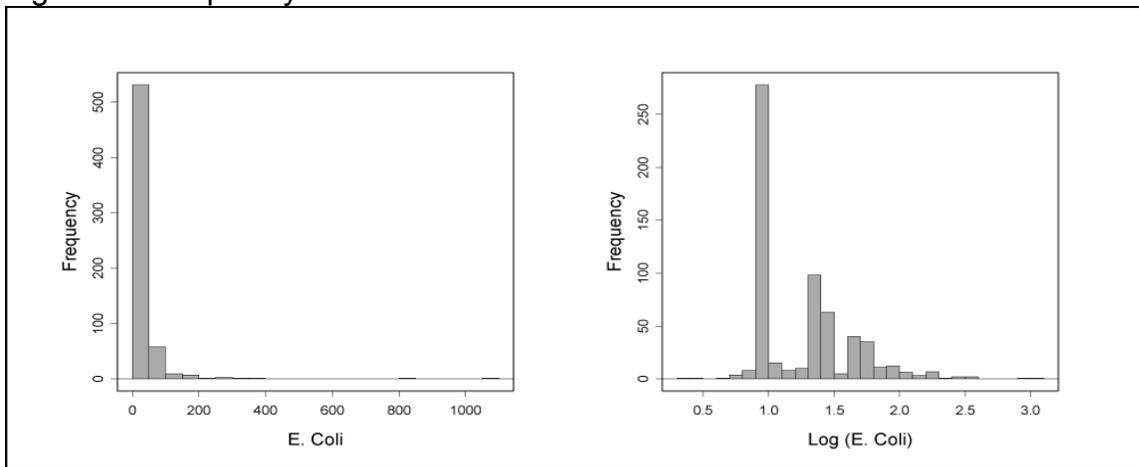
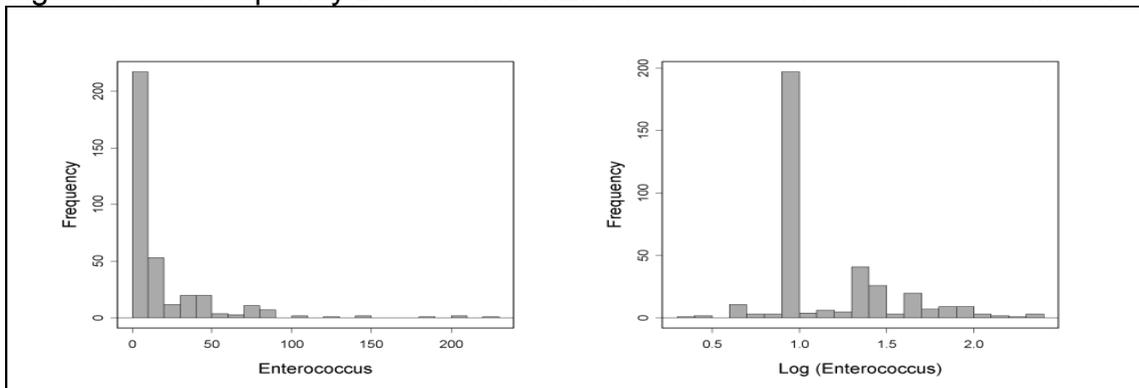


Figure 10. Frequency Distribution of Enterococcus Concentrations at all 6 Sites



Linear regression models were fitted using the Pearson least squares approach with the log-transformed FIB and flow data. Several of the regression analyses show a statistically significant relationship between flow and FIB concentration (Table 2). Most of these significant relationships explain less than 10% of the variance between the variables. However, several locations show a larger influence of flow on FIB concentrations. For example, analysis of enterococcus concentrations collected at Camp Rose show that flow explains nearly half of the variation. The negative slope of the regression line indicates that lower flows result in higher ambient concentrations.

Table 2. Relationship between Stream Flow and Fecal Indicator Bacteria Concentration. **Bold** font indicates a statistically significant regression.

FIB	Site	Explained Variance (%)	Probability	Slope
Total Coliform	Camp Rose	3%	0.02	-0.37
	Forestville Access Beach	27%	0.00	0.52
	Healdsburg Memorial Beach	0%	0.67	0.00
	Johnson's Beach	4%	0.00	-0.42
	Monte Rio Beach	1%	0.17	-0.21
	Steelhead Beach	4%	0.04	0.14
E. coli	Camp Rose	4%	0.02	0.19
	Forestville Access Beach	0%	0.71	0.11
	Healdsburg Memorial Beach	1%	0.21	0.13
	Johnson's Beach	0%	0.86	-0.02
	Monte Rio Beach	2%	0.16	0.24
	Steelhead Beach	0%	0.60	0.04
Enterococcus	Camp Rose	46%	0.00	-1.06
	Forestville Access Beach	1%	0.57	-0.14
	Healdsburg Memorial Beach	6%	0.02	-0.36
	Johnson's Beach	4%	0.13	-0.33
	Monte Rio Beach	0%	0.90	0.03
	Steelhead Beach	15%	0.00	-0.41

Load Duration Curves

Load duration curves are a useful tool identifying pollutant problems over the entire flow regime of a river (USEPA, 2007). A load duration curve provides a visual display of the relationship between flow and pollutants, like FIB. The load duration curve presents the frequency and magnitude of FIB measurements along with the allowable loads derived from water quality standards and stream flow data.

First, *flow* duration curves were generated for USGS Russian river flow gauging stations, near Healdsburg (#11464000) and near Guerneville (#11467000). The flow durations curves for the two USGS gauges were developed using daily flow measurements recorded from 1939 to present (Figures 11 & 12).

Figure 11. Flow Duration Curve for Russian River near Healdsburg (#11464000)

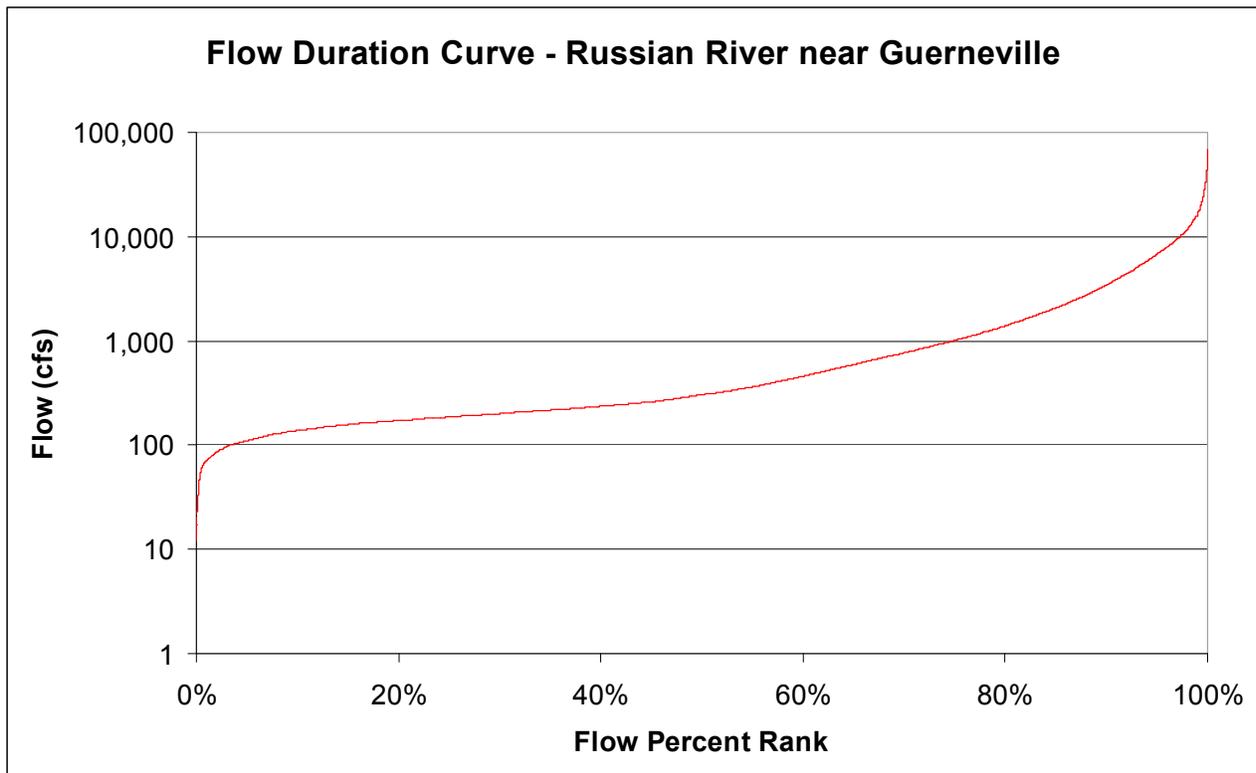
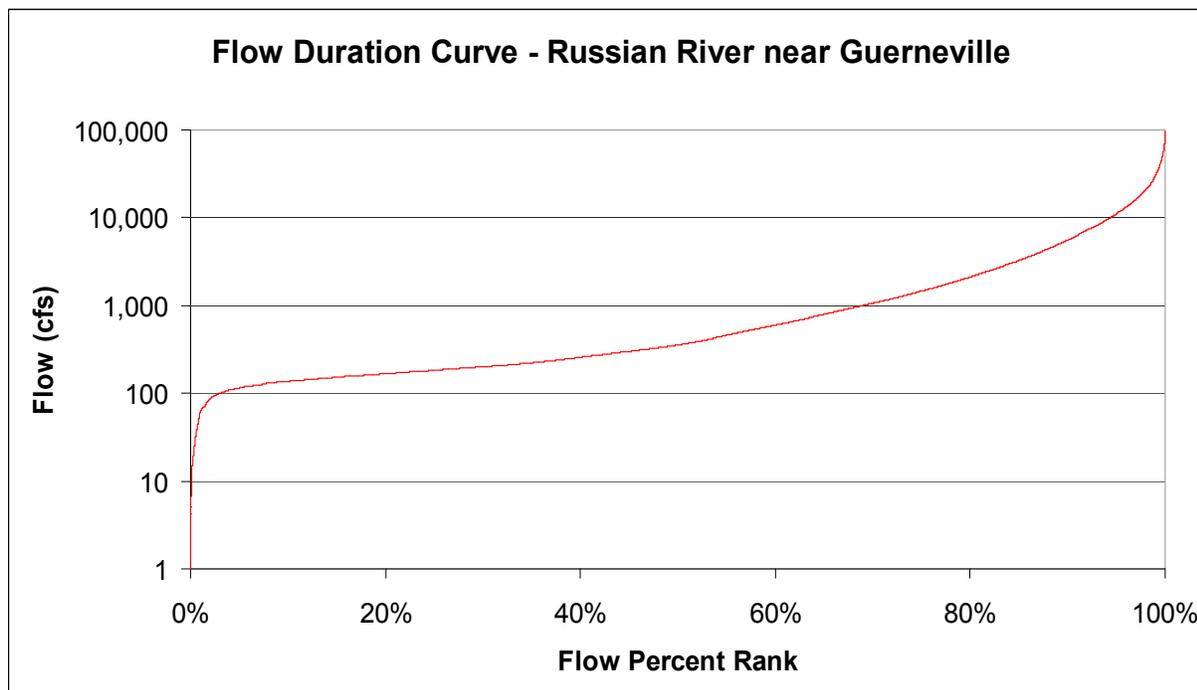


Figure 12. Flow Duration Curve for Russian River near Guerneville (#11467000)



Second, *load* duration curves were prepared for each sampling locations from the measured FIB data and the daily stream flow (Figures 13 - 18). FIB data from Camp Rose and Healdsburg Memorial Beach were compared to daily flows recorded at the USGS gauge near Healdsburg (#11464000). FIB data collected at the other four locations were compared to daily flow recorded at USGS gauge near Guerneville (#11467000). The allowable loads are shown as the solid curve lines; the allowable loads were derived from the water quality thresholds used for beach posting by Sonoma County Health Services (DHS, 2006): (1) Total coliforms not to exceed 10,000 MPN/100mL, (2) E. coli not to exceed 235 MPN/100mL, and (3) Enterococcus not to exceed 61 MPN/100 mL. The results show that exceedance of allowable loads within the Project area tend to occur during periods of lower flow.

Figure 13. Total Coliform Load Duration Curve for Russian River near Healdsburg

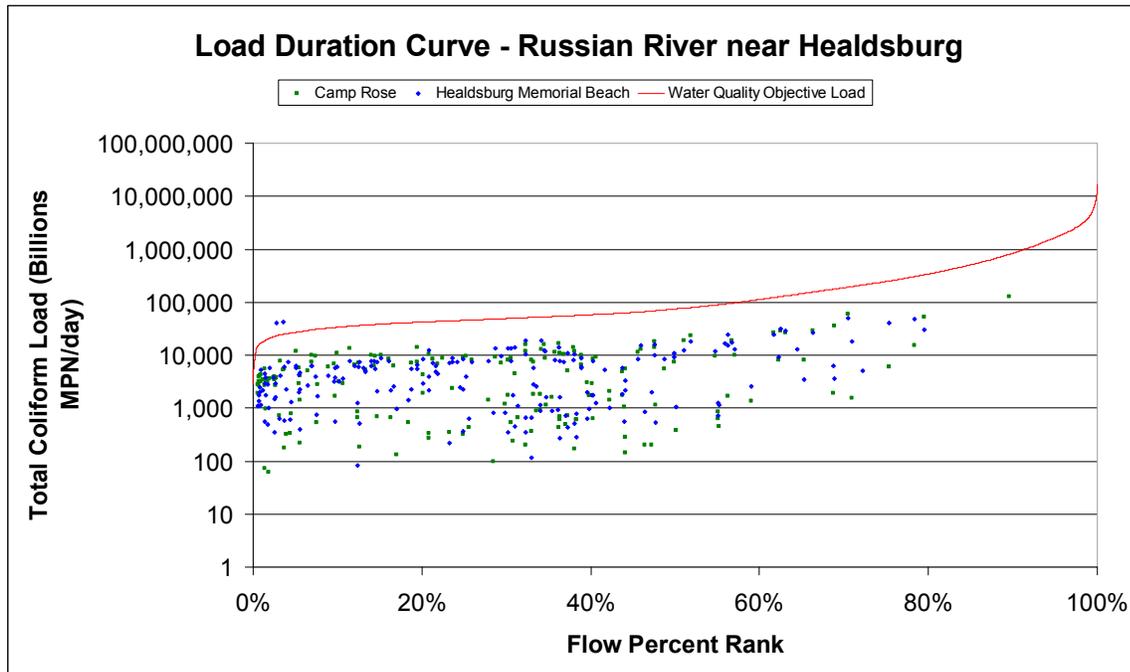


Figure 14. Total Coliform Load Duration Curve for Russian River near Guerneville

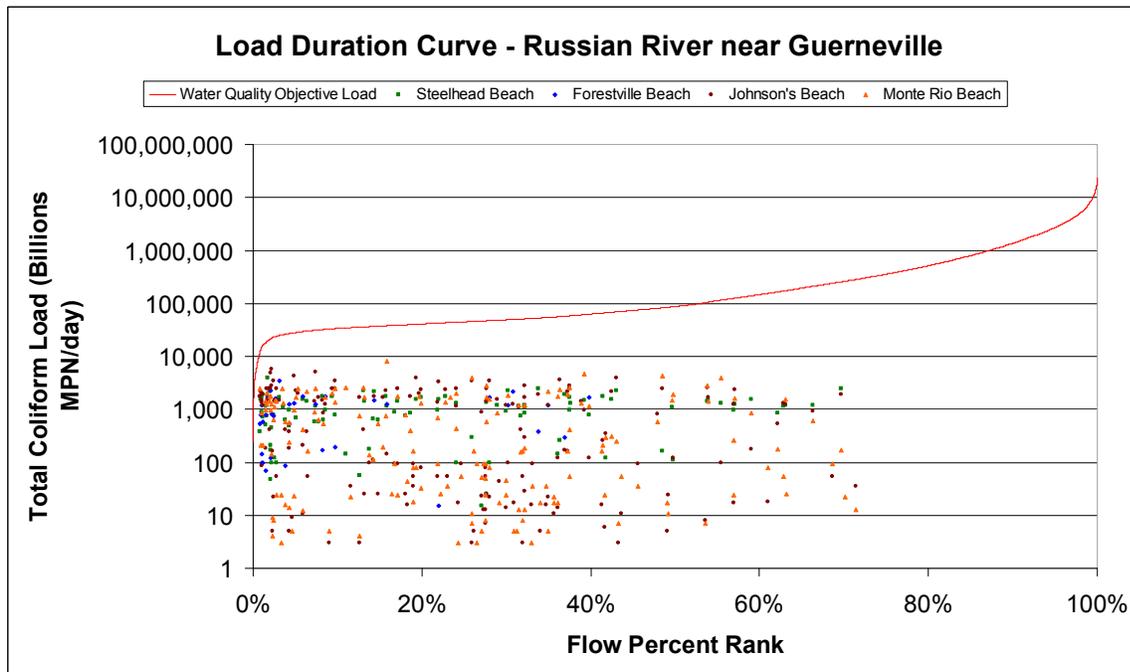


Figure 15. E.coli Load Duration Curve for Russian River near Healdsburg

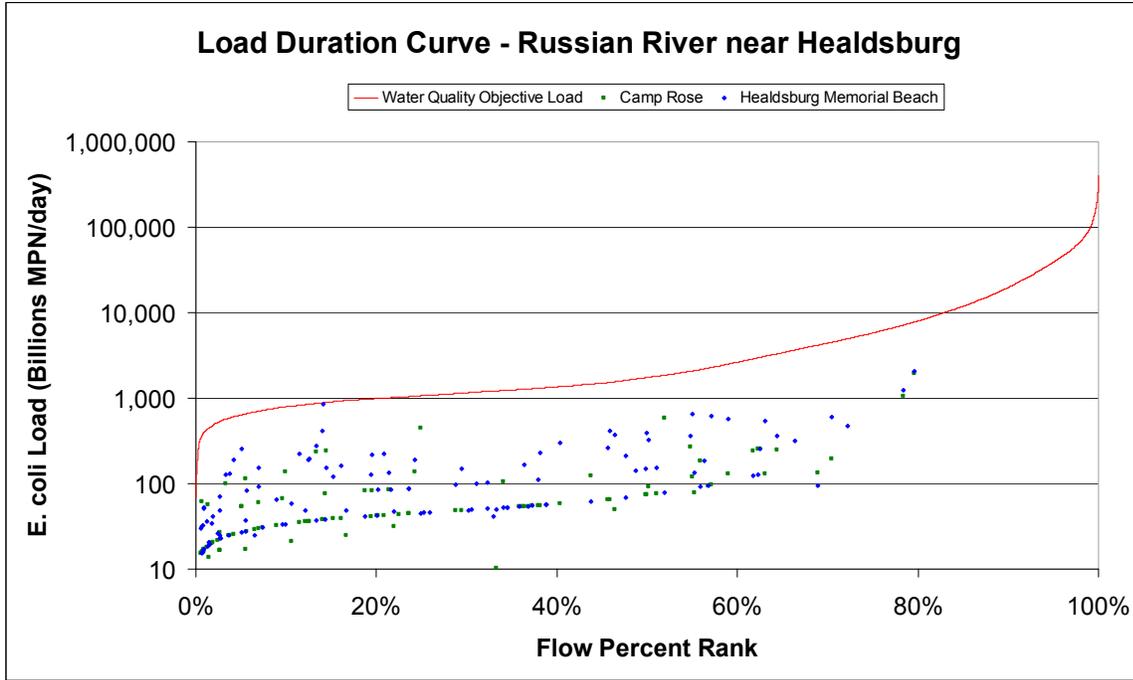


Figure 16. E. coli Load Duration Curve for Russian River near Guerneville

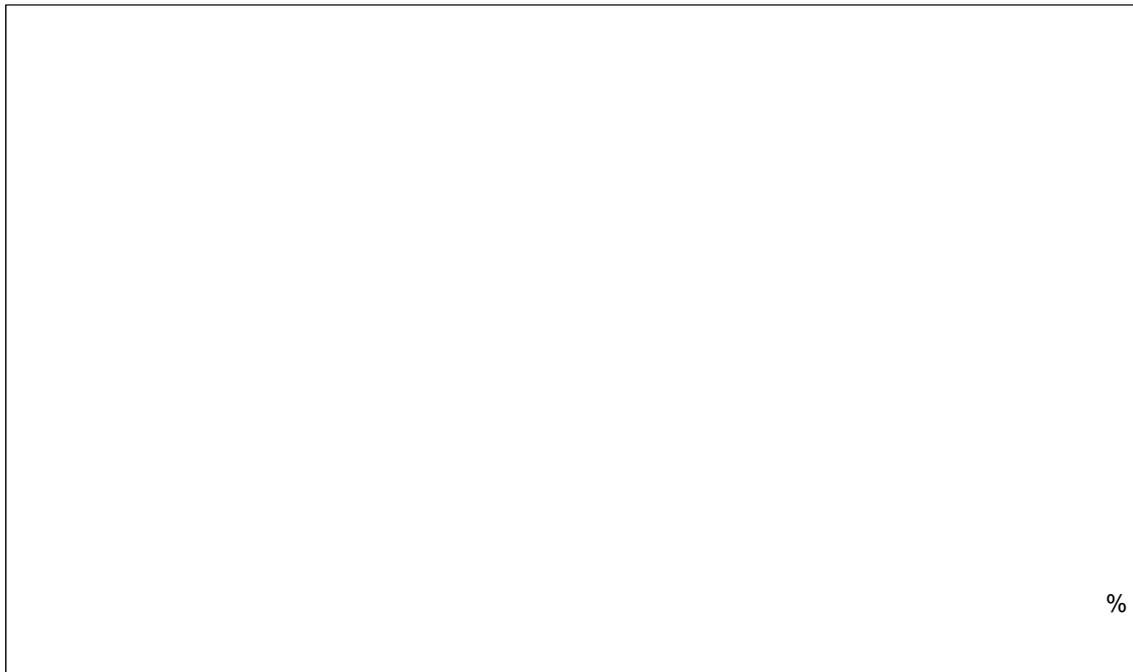


Figure 17. Enterococcus Load Duration Curve for Russian River near Healdsburg

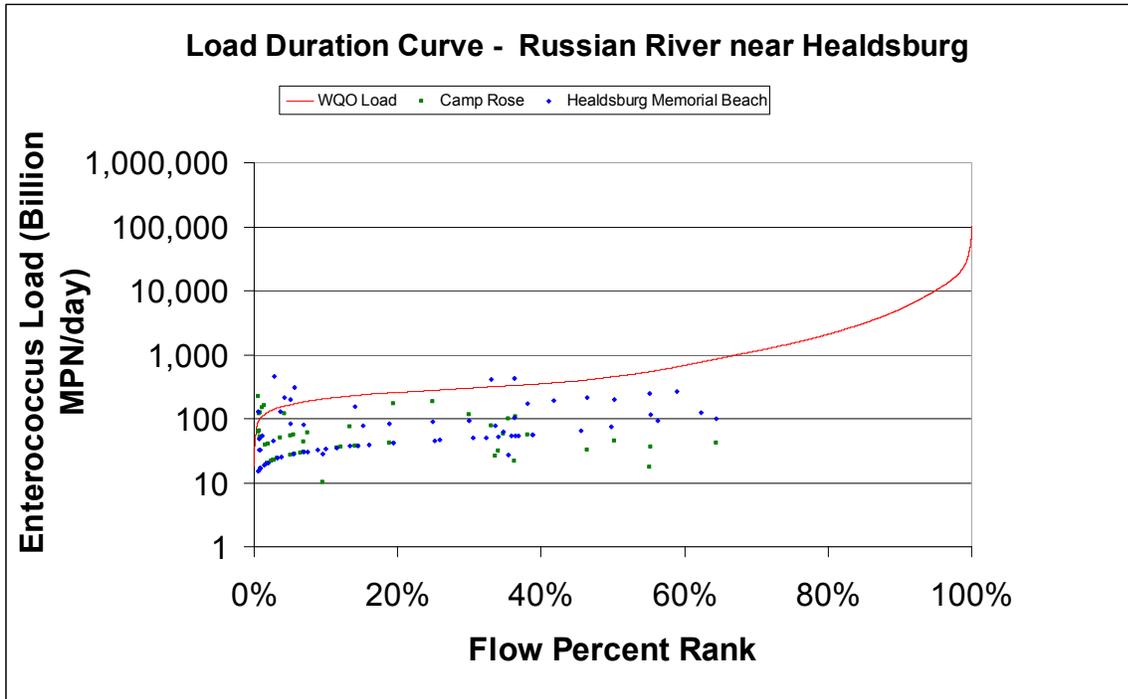
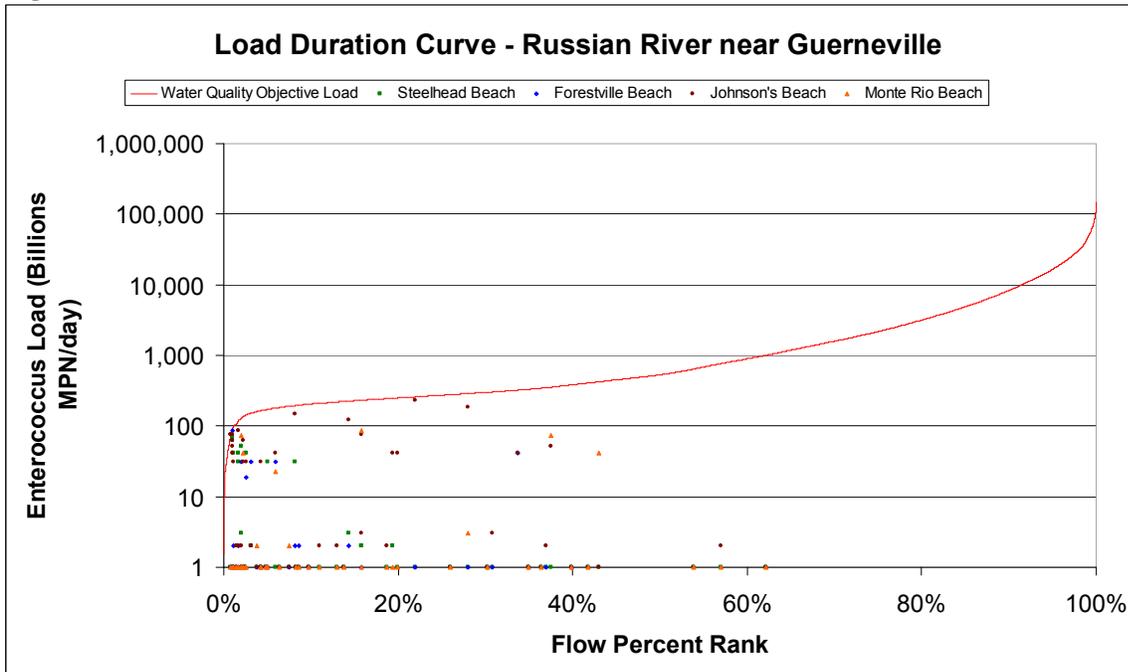


Figure 18. Enterococcus Load Duration Curve for Russian River near Guerneville



Trend Analysis

Trend analysis was conducted for FIB concentrations at each of the six monitoring stations within the Project area using current and historical data. Water quality data possess distributional characteristics that generally require specialized approaches to trend testing. Water quality data sets can contain censored (less than) values, outliers, multiple detection limits, missing values, and serial correlation. These characteristics commonly present problems in the use of conventional parametric statistics based on normally distributed data sets. The presence of censored data, non-negative values, and outliers generally lead to a non-normal data distribution which is common for many data sets. These skewed data sets require use of specific non-parametric statistical procedures for their analysis. Nonparametric statistical tests are more powerful when applied to non-normally distributed data, and almost as powerful as parametric tests when applied to normally distributed data (Helsel and Hirsch, 2002).

The nonparametric Mann-Kendall test for linear trend (Helsel et al. 2006) was used to evaluate whether FIB concentrations have increased or decreased significantly since the base year. The test is non-parametric, rank order based, and insensitive to missing values. Sen's slope estimator (Sen, 1968) was used to estimate the magnitude of change over time when a significant trend was observed. Sen's slope estimator is a non-parametric method that is insensitive to outliers and can be used to infer the magnitude of a trend in the data. Sen's slope estimator is not greatly affected by gross data error or outliers, and it can be computed when data are missing. Sen's slope estimator is closely related to the Mann-Kendall statistic in that all possible slopes are calculated between all possible data pairs and the resulting median slope is the Sen slope. The Sen's slope estimator was used to estimate the slope for the Mann-Kendall test.

The dataset contains FIB concentration measurements with levels below the detection limit of the analytical method. These values were assigned the value of the detection limit. Data sets having large numbers of values below detection limit (BDLs) may create statistical problems for trend analyses. The Mann-Kendall test for trend adjusts variance estimates upward for ties in magnitude. Since BDL values in the raw data set produce such ties, trend analyses of data sets with high percentages of BDLs will be based upon greater variances than those without BDLs. Thus, the power of the trend analyses for the data sets with BDLs are reduced compared to those without detection limits censoring. If the percentage of BDL observations is greater than 50, it is reported there are too many observations below the detection limit to determine the presence or absence of trend.

Trends in FIB concentrations were evaluated for the effect of flow (Table 3). Several of the sites show increasing trend in FIB concentrations. These trends may be due to natural trends in flow due to climate. For example, a trend may be observed if the last

few years in a set of data were collected during drought conditions with lower flows. The effect of the lower flows on the apparent trend can be addressed using the relationship observed between flow and FIB concentration. The regression equation resulting in statistically significant relationship between flow and FIB was applied to the data. The residuals resulting from the difference of the predicted values from the observed value were tested for trend. The results indicate a trend without the influence of flow.

Trends of FIB concentrations were also evaluated by removing the effect of flow from those sampling locations with a statistically significant relationship to flow. The residuals from the significant regression equations derived above were used to assess trend without the influence of flows. Only those locations with a relationship between a FIB and flow could be assessed for flow influence on FIB trend. Accounting for this flow effect did not change the detection of trend in the FIB data for most locations indicating that the flow did not influence observed trends. However, removing the flow effect did result in removing the observed trends for each FIB at Camp Rose.

Table 3. Trends Statistics for Fecal Indicator Bacteria Concentrations

FIB	Site	Probability	Trend Slope	Trend Inclination
Total Coliform	Camp Rose – with flow influence	<0.01	163.3	Increasing
	Camp Rose – without flow influence	<0.01	-0.001	Decreasing
	Forestville Access Beach – with flow influence	0.51	-61.7	None
	Forestville Access Beach – without flow influence	0.70	-38.4	None
	Healdsburg Memorial Beach	<0.01	105.2	Increasing
	Johnsons Beach – with flow influence	<0.01	158.4	Increasing
	Johnsons Beach – without flow influence	<0.01	62.0	Increasing
	Monte Rio Beach	<0.01	128.9	Increasing
	Steelhead Beach – with flow influence	0.56	14.5	None
	Steelhead Beach – without flow influence	0.29	25.4	None
E. coli	Camp Rose – with flow influence	0.34	0.0	None
	Camp Rose – without flow influence	<0.01	-0.001	Decreasing
	Forestville Access Beach	0.49	0.0	None
	Healdsburg Memorial Beach	0.06	0.0	None
	Johnsons Beach	0.59	0.0	None

FIB	Site	Probability	Trend Slope	Trend Inclination
	Monte Rio Beach	0.04	-0.7	Decreasing
	Steelhead Beach	0.53	0.0	None
Enterococcus	Camp Rose – with flow influence	<0.01	0.6	Increasing
	Camp Rose – without flow influence	0.19	0.00	None
	Forestville Access Beach	0.08	0.0	None
	Healdsburg Memorial Beach – with flow influence	0.18	0.0	None
	Healdsburg Memorial Beach – without flow influence	0.01	0.0	None
	Johnsons Beach	0.01	3.3	Increasing
	Monte Rio Beach	0.95	0.0	None
	Steelhead Beach – with flow influence	<0.01	0.0	None
	Steelhead Beach - without flow influence	0.133	0.0	None

CITATIONS:

California Department of Health Services. 2006. Draft Guidance for Freshwater Beaches. Last Updated May 8, 2006.

Helsel, D.R. and R. M. Hirsch, 2002. *Statistical Methods in Water Resources* Techniques of Water Resources Investigations, Book 4, Chapter A3. U.S. Geological Survey. 522 pages.

Helsel, D.R., Mueller, D.K. and J.R. Slack. 2006. Computer Program for the Kendall Family of Trend Tests. Scientific Investigations Report 2005-5275. U.S. Geological Survey, Reston Virginia.

Sen, P. K. 1968. Estimates of the regression coefficient based on Kendall's tau. *Journal of the American Statistical Association* 63:1379-1389.

Tetra Tech 2006. Technical Approach to Develop Nutrient Numeric Endpoints for California. Prepared for U.S. EPA and California State Water Resources Control Board – Planning and Standards Implementation Unit. Lafayette, CA. 120 pp.

U.S. Environmental Protection Agency. 2007. An Approach for Using Load Duration Curves in the Development of TMDLs. EPA 841-B-07-006. Washington, DC

Connie Barton

From: John McCowen [mccowen@co.mendocino.ca.us]
Sent: Tuesday, November 16, 2010 7:33 AM
To: Fish Flow
Cc: John McCowen
Subject: Public Comment

Sonoma County Water Agency
Attn: Jessica Martini-Lamb, Principal Environmental Specialist
404 Aviation Boulevard
Santa Rosa, CA 95403

RE: Public Comment for Fish Flow Project EIR

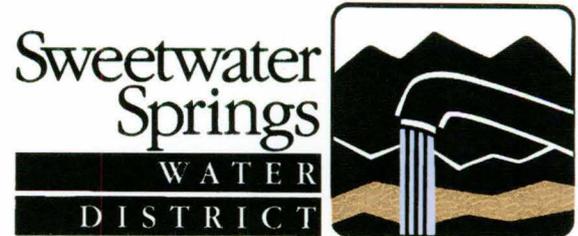
Although construction would be beyond the scope of this project, the EIR should assess the beneficial impact of raising the Lake Mendocino dam to the design standard originally contemplated, as well as the more commonly projected five and ten foot increases.

This year has demonstrated the potential for carrying water forward if storage capacity were available. Carrying water forward would provide a hedge against at least the first year of any future drought cycle and would make water available to meet desired minimum in-stream flows in a dry year, as well as provide stored water to satisfy other management criteria.

Thank you for your consideration of this comment.

Sincerely,

John McCowen
Second District Supervisor
Mendocino County Board of Supervisors
501 Low Gap Road,
Ukiah, CA 95482
463-4221



STEPHEN F. MACK, *General Manager*

November 15, 2010

Sonoma County Water Agency
Attn: Jessica Martini-Lamb, Principal Environmental Specialist
404 Aviation Boulevard
Santa Rosa, CA 95403

Ms Martini-Lamb:

Thank you for the opportunity to comment on the Notice of Preparation (NOP) for the Environmental Impact Report (EIR) for the proposed Fish Habitat Flows and Water Rights Project (Fish Flow Project). This is an important proposal that, if approved as outlined in the NOP, will have lasting effects on the many users of the Russian River. Comments that Sweetwater Springs Water District wishes to have considered in the preparation of this EIR include:

1. **NOP and EIR title are confusing with respect to exactly what this EIR is aiming to cover.** The project for which this NOP is issued is entitled "Fish Habitat Flows and Water Rights Project" which is shortened to the "Fish Flow Project". The Biological Opinion (BO) related flows are explained well and it is clear they are included in this EIR. However, it is unclear what else will be included. There are references to the Hydrologic Index and the need for its change and for updates to certain Sonoma County Water Agency (SCWA) permits, but the details of what those permits include and the actual work involved in changing the Hydrologic Index are not explained in this NOP. It is also unclear whether other changes to D1610 flows would be proposed along with the proposed change to the Hydrologic Index, although such changes may be needed for a new Hydrologic Index to work properly. Will the proposed changes to the permits also include changes to SCWA diversion amounts associated with those permits? Such changes may be needed to make the flow changes work in all years.
2. **The California State Water Resources Board (State Board) should be the lead agency and responsible for the preparation of this EIR.** The proposed lead agency, Sonoma County Water Agency SCWA has made its decision in regards to the Fish Flow Project – it negotiated certain flows with the National Marine Fisheries Service (NMFS) in agreeing to a BO of No Jeopardy for the endangered and threatened salmonid species covered by the BO. The State Board has to make a decision on the petition to change

D1610 and other requests by SCWA. In the past the State Board has aggressively defended its responsibility to be lead agency for its decisions. For example, the State Board is the lead agency for the EIR for the Cachuma Project permits in Santa Barbara County. These seem to be very similar situations, the State Board is clearly the agency making decisions in this situation, and should be lead agency and responsible for EIR preparation. In addition, it is not appropriate for a project proponent to also be the lead agency in the preparation of the EIR document.

3. **The EIR process should include multiple regional meetings so that there is opportunity for all those affected by the changes in Russian River flows have an opportunity to understand the impacts and effects of the flow regimes evaluated during this EIR process.**
4. **The EIR process should also consider having a technical advisory committee, or something similar, to review the technical flow analyses needed to properly evaluate the range of flow alternatives needed for this EIR.** There are many capable and interested parties who are not associated with SCWA – either in its employ or contracted by SCWA – who could provide valuable ongoing assistance to the needed technical analysis.
5. **Consolidate all D1610 and other anticipated or needed Russian River flow change requests into one EIR document.** The NOP states that SCWA anticipates other D1610 change requests and the comments included below (comment 7) request a much broader analysis and evaluation of Russian River flows. EIR's are expensive affairs. It only makes financial sense to save public money by consolidating the various actions described in this NOP and requested by these (and probably other) comments into one EIR. It is also important that EIR analyses and evaluations include all contemplated projects and actions so that the total impacts of all actions can be understood. This will also avoid potential improper project segmentation and potential challenges to the EIR based on contentions of improper segmentation. If SCWA is anticipating other changes to D1610, these changes should be evaluated as cumulative impacts.
6. **The EIR should include alternatives that fix all current issues with D1610, not just deal with the minimum flows negotiated between SCWA and NMFS for the BO.** As recognized by the NOP, D1610 is broken because diversions from the Eel River have been reduced and diversions from the Russian River have increased. Change in D1610 does not happen often and, if done, must be done correctly and the time used to evaluate changes used efficiently. A comprehensive analysis of Russian River flow requirements and possibilities is necessary.

7. **If the action on changing flows in the Russian River is limited to just the BO flows, a permanent change at this time is not appropriate.** The BO flows negotiated between SCWA and NMFS are experimental. Such a change as contemplated in this NOP should not be done for flow regimes that experience may show are inappropriate for the purposes of the BO. A better approach would be to set a time period, say 5 or 10 years, to evaluate the BO flows.
8. **EIR needs to evaluate a range of flow regimes to determine best approach to meeting all needs and beneficial uses of the river.** These flow regimes could include varying timings of minimum flows (earlier, later, longer, etc.).
9. **EIR needs full disclosure on likely flow regimes.** For example it was widely advertised that the minimum flows in the 2010 summer would be in the 80 cfs range, however in actual practice, summer flows at Hacienda Bridge ranged between 120 and 180 cfs. Wetter, cooler summers, like 2010, will have more water available for release downstream and the ultimately approved flow regimes must recognize that.
10. **The flow analysis (and EIR) should evaluate the impacts of drought – regional standards at various points on the Russian River need to be developed for minimum flows during drought conditions.** The current Russian River flow regime does not fit current water supply needs and other uses of the River. The events of the 2009 summer are evidence for that. The Russian River reservoirs should be operated so that a repeat of 2009 with similar weather conditions does not happen. The flow standard analysis needs to include all participants in the Russian River system – public meetings, access to flow models and model results.
11. **The EIR needs to evaluate the effects of the various flow regimes on regional water supply, river water quality, and recreation at all locations in the river.** This should include an evaluation of impacts to underflow along the entire stretch of river impacted by the proposed flow regimes as well as potential mitigation for any identified impacts.
12. **To follow up on Comment 1 comments on the Hydrologic Index, the proposed change to the Hydrologic Index needs to be better explained in the NOP and needs full regional participation.** According to the information in Figure 2 of the NOP, there is no need for a Hydrologic Index – the proposed Fish Flows do not change between normal and dry years. Clearly there are years in which flows may need to be adjusted downward – perhaps 2009 for example – and there are years such as this past (2010) summer in which the reservoirs have excess water which needs to be released at some point. We recognize a need for a new Hydrologic Index which will provide the trigger for adjusting flows depending on available

water supplies. Developing that Index needs to evaluate a wide range of flow alternatives and recognize the reduced diversions from the Eel River. And the process of developing a new Index will need to be fully explained to the many interested parties as the Index is being developed – this cannot be conjured up in some back room and presented as a *fait accompli*.

13. **The EIR should evaluate the claims and assumptions of the BO flows:** e.g., high water velocities in summer flows (page 4) – where is this happening? One can paddle upstream in the lower Russian River during current summer level flows – that’s an indication of low water velocities. The NOP claims a disruption of lagoon formation but summer 2010 flows did not conform to proposed minimum flows even though a Temporary Urgency Change flow reduction was requested and granted by the State Board.

Thank you for the opportunity to comment.



Stephen F. Mack
General Manager
Sweetwater Springs Water District
smack@sweetwatersprings.com
707-869-4000



999 Rush Creek Place
P.O. Box 146
Novato, CA 94948

PHONE
415.897.4133

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415.892.8043

EMAIL
info@nmwd.com

WEB
www.nmwd.com

November 17, 2010

Sonoma County Water Agency
Attn: Jessica Martini-Lamb
Principal Environmental Specialist
404 Aviation Boulevard
Santa Rosa, CA 95403

Re: North Marin Water District Comments on Fish Habitat Flows and Water Rights Project – Notice of Preparation of Environmental Impact Report

Dear Ms. Martini-Lamb:

Thank you for the opportunity to offer our comments on the subject project.

We urge the Sonoma County Water Agency to move quickly to comply with the Biological Opinion requirements and pursue permanent changes to Decision 1610 flows as proscribed in the Biological Opinion. We are also supportive of changing the hydrologic index from the Eel River/Lake Pillsbury to Lake Mendocino.

It's noted in the Notice of Preparation that minimum proposed instream flows for Chinook salmon may extend beyond the months required by the Biological Opinion for the Upper Russian River (upstream of the confluence of Dry Creek and downstream of the confluence of the east and west forks). While it may be appropriate to consider such extension of the minimum flow timing, it's suggested this be coordinated in conjunction with the hydrologic index change based on appropriate measurements and dates of storage in or inflows into Lake Mendocino.

Additionally, it's noted that minimum instream flows between May 1 and October 31 of each year for Dry Creek are proposed to be 40 cubic feet per second pursuant to the Biological Opinion. It's suggested that some means of adaptive management be considered to coordinate with and accommodate the future Dry Creek Habitat Enhancement Projects and potential Dry Creek bypass pipeline. Higher flows may be necessary in the reach of Dry Creek from the Warm Springs Dam to Yoakim Bridge in order to accommodate a diversion for a Dry Creek bypass pipeline.

Thank you for the opportunity to comment on the proposed Notice of Preparation.

Sincerely,

A handwritten signature in blue ink that reads "Chris DeGabriele".

Chris DeGabriele
General Manager

CD/rr

T:\GMSCWA\2010\comments on fish habitat flows and WR project.doc

DIRECTORS: JACK BAKER • RICK FRAITES • STEPHEN PETTERLE • DENNIS RODONI • JOHN C. SCHOONOVER

OFFICERS: CHRIS DEGABRIELE, General Manager • RENEE ROBERTS, Secretary • DAVID L. BENTLEY, Auditor-Controller • DREW MCINTYRE, Chief Engineer



November 15, 2010

Sent Via email
Original to Follow
Via U.S. Mail

Jessica Martini-Lamb
Principal Environmental Specialist
Sonoma County Water Agency
404 Aviation Boulevard
Santa Rosa, CA 95403

RE: Notice of Preparation of Environmental Impact Report for Sonoma County Water Agency's
Fish Habitat Flows and Water Rights Project

Dear Ms. Martini-Lamb,

Thank you for the opportunity to review the Notice of Preparation of Environmental Impact Report (EIR) for Sonoma County Water Agency's Fish Habitat Flows and Water Rights Project (Fish Flow Project NOP). The City of Santa Rosa staff reviewed the Fish Flow Project NOP and provides the following comments to be addressed in the EIR.

Background

We understand the Agency water right permits 12949, 12950 and 16596 expired in 1999 and the Agency filed petitions to extend the time within which water can be put to beneficial use to 2020 to allow the Agency to divert up to the present cap of 75,000 acre feet per year (AFY).¹ The Agency also has an application and petitions pending at the State Water Resources Control Board (SWRCB) to increase the amount it is allowed to divert and re-divert at Wohler and Mirabel from 75,000 AFY to 101,000 AFY. The Agency has contracted to provide approximately 101,000 AFY to the region.

Fish Habitat Flows and Water Rights Project

The Fish Flow Project NOP describes the water right changes needed to conform the Agency's water rights to the Biological Opinion (BO). The water supply plans and associated water right actions are not clearly set forth in the Fish Flow Project NOP. The City believes that the fish habitat flow and water supply elements should be addressed concurrently, and as soon as possible given the importance of both matters to the City and the region.

We appreciated the opportunity to meet with Agency staff and counsel last week to obtain a better understanding of the Agency's plans, which Agency staff stated to be as follows:

¹ We understand the Agency will also be filing a petition to extend time under Permit 12947A.

The Fish Flows Project is primarily for two purposes: (1) implementing the changes required in the BO, and (2) providing the basis for granting the extensions of time to put water to full beneficial use under the Agency's permits. The Agency will demonstrate its diligence and the need for the full volume of water authorized for diversion at Wohler and Mirabel, which is currently 75,000 AFY. As a collateral matter, the Agency will also propose to the SWRCB some clean up of the existing water rights, such as conformance of the place of use to its actual boundaries.

The Fish Flows Project will proceed on the schedule set forth in the BO. The Agency has decided to pursue the Fish Flows Project and the following water supply project in a phased manner in light of the schedules required by the BO and the Urban Water Management Planning process.

Water Supply Project

Agency staff explained that the Agency will promptly and diligently proceed with a water supply project that per Agency planning will rely on separate planning and CEQA compliance processes.

The water contractors are in the process, in coordination with the Agency, of preparing updates to their Urban Water Management Plans (UWMPs) that are due to be completed by July 1, 2011. The UWMPs will address water demand and supply through 2035 for those subject to the UWMP requirements. This includes many, but not all, who rely on the Agency and its water rights for water supply.

The Agency will use these UWMPs and other relevant material to develop a water supply project to provide adequate supply to meet these demands. This is likely to involve pursuit of the currently pending filings at the SWRCB originally intended to increase the amounts that can be diverted from 75,000 AFY to 101,000 AFY. The latter number may be updated to reflect demands projected in the UWMP process, general plans, and other relevant information. The water supply project will need to address all demands that are met exercising the Agency's water rights. It will address various sources of water, including but not limited to the Russian River.

Comments on the NOP

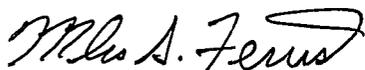
With respect to both of the foregoing projects, we understand the Agency will proceed diligently and will keep the contractors apprised, and will coordinate with them. Both the fishery and the water supply aspects of the Agency's responsibilities are of paramount importance to the region. The City and the Agency are aware that the demand for water is likely to well exceed existing surface water rights and groundwater supplies. We agree that conservation, recycling and other demand management tools are essential aspects of the portfolio. The reality is that they will not

be able, alone, to meet future regional demands for which the Agency is the wholesale water provider. Time is of the essence. We are all well aware that it takes a long lead time to develop water in a responsible manner.

While City staff believes that the scope of the Fish Flows Project should include Project level analysis of a regional water supply solution that includes managing Russian River Project releases to provide instream flows that improve habitat for threatened and endangered fish, while providing sufficient water supply for the Agency to meet its existing contractual commitments to the Water Contractors and all other Agency customers, it appreciates the Agency's commitment to proceed with both of the foregoing projects as expeditious as possible. Analysis of a regional water supply solution must include project alternatives which provide both adequate water rights and water delivery mechanisms to meet the Agency's contractual commitments to provide water supply, as well as detailed cost analyses and funding sources for each project alternative so that financially feasible projects can be identified.

The City looks forward to a more detailed description of the Agency's plans and this project in forthcoming documentation. Should you have any questions or need any additional information regarding the City's comments, please feel free to contact Glen Wright, Deputy Director Water Resources, at 707-543-3948 or email gwright@srcity.org.

Sincerely,



Miles A. Ferris
Director of Utilities

COMMENT CARD

**PUBLIC SCOPING MEETING
NOTICE OF PREPARATION FOR THE FISH HABITAT FLOWS &
WATER RIGHTS PROJECT**

Windsor Town Hall
9291 Old Redwood Hwy #400 Windsor, CA
Monday, November 8th, 2010: 6:00- 9:00 p.m.

(Please write legibly)

NAME	ADDRESS/EMAIL/PHONE NUMBER	ORGANIZATION	CHECK TO ADD TO MAILING LIST
Barbara DeJonno	707-887-9565 8175 Park Av. Forestville CA	citizen river resident swimmer	✓

COMMENT:

70 cfs at Hacienda Bridge, is not enough water for recreation, especially swimming. Decision 1610 seems to have assessed a reasonable level for sustaining recreation.

The biological opinion suggests that flows in the upper Russian River need to come down but it does not assess possible adverse effects for fish in the lower Russian River with low flow.

- water quality impacts
- invasive plants impacts
- water temperature impacts
- fish open to predators in shallow water
- fish have less habitat of all kinds in low flow
- fish share water with people & canoes less
- fish have less velocity refuge when there is less water in the lower river (water generally has current coming down one side and a puddled-out place on the other side. The velocity refuge is smaller when there is less water.)

The term "fish flow" feels like propaganda. There is no proof that this flow regime would be better for fish overall.

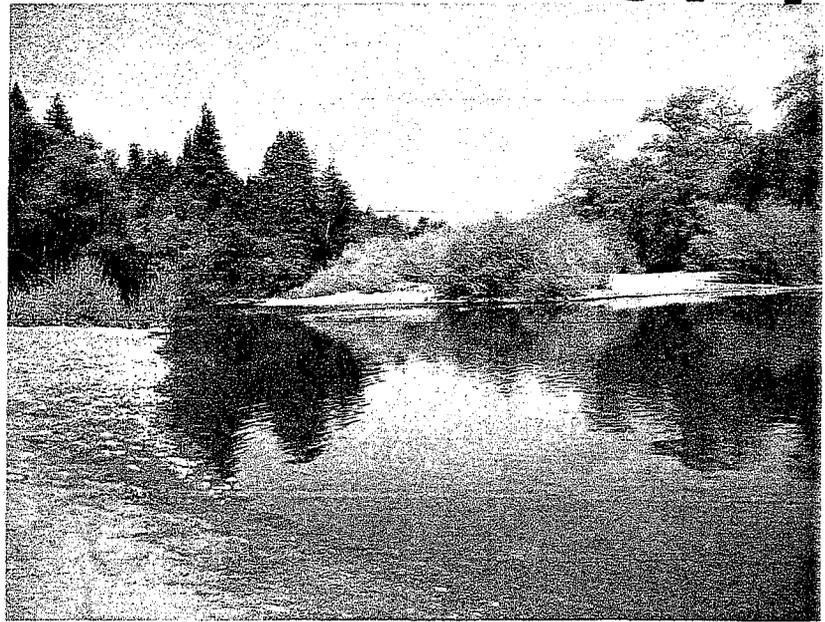
COPY

State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812-2000

Re: Sonoma County Water Agency's
(SCWA) Petition Requesting Change to
Instream Flow Requirements: Permits
12947A, 12949, 12950, and 16596

Dear Friends,

Thank you for your recent letter regarding proposed changes to the flow of the Russian River. I am a 27-year resident of Forestville and a homeowner, about 4 blocks away from the river. As someone who likes to be outdoors and loves to go swimming, I have a major interest in the Russian River.



Russian River at Steelhead Beach

I appreciate the statement that my concerns are being considered. However, since the board *did approve* the proposal to drastically lower the required flow of the lower Russian River, (from 125 cubic feet per second at Hacienda to 70 cfs at Hacienda,) I am not confident that you fully understand what you are approving.

We have seen what this flow is like in several recent years. "Emergency" low flows were approved because of drought, and because man-made Lake Mendocino was getting low. Last summer was hot and we went to the river a lot but didn't do much swimming. The water was too shallow in many places because of "low flow." (65-90 cfs at Hacienda Bridge.) This summer, you probably haven't heard much outcry because even though you approved the lowered flows, they didn't actually do it. This summer the river has been between 144 cfs and 180 cfs at Hacienda Bridge when I went swimming. We had a lot of rain this year and I think they had to empty the reservoirs some to allow for next year's rains.

The lower Russian River, at this rate, (144 cfs and 180 cfs at Hacienda Bridge,) is still a gently flowing river that is only two or three feet deep in most places. The flow that you approved makes it too shallow to swim in many places along the river. It makes the river narrow. The little lagoons that form at the edges of the main stem of the river dry up or become isolated stagnant pools. The flow is so low that it's hard to tell which way the river is going in many places - especially when the wind blows. The wind usually blows upriver in the late afternoon and it looks like the river might be going that way. It's hard to tell from your raft or canoe because with a low flow going downriver and breeze going upriver, it just sits there. The "rapids" turn into the only place where you can see current, and they're so shallow it's hard to even ride a raft down it because you hit the rocks on the bottom.

What I'm saying is that this decision threatens to ruin an **important habitat for humans**. The whole reason for this cluster of population here is because of the river. There are cabins and houses for rent to vacationers. There are businesses that depend on tourism. There are campgrounds and canoe rentals. There are resorts and restaurants on the river. But most important is the habitat that the river provides for people. It is a place where we can go and relax. To sit in the warm sun and talk to friends, to float on the gentle water on a raft and look at the sky and the tall trees - these are important things for our very happiness as human beings.

To: 1) Jeane 1) Schram 1) Martini-Lamb

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY

CF/42-0-9.1 SWRCB Modifying the Minimum Instream Flow
Requirements (Applications 12919A, 15736, 15737 and 19351)

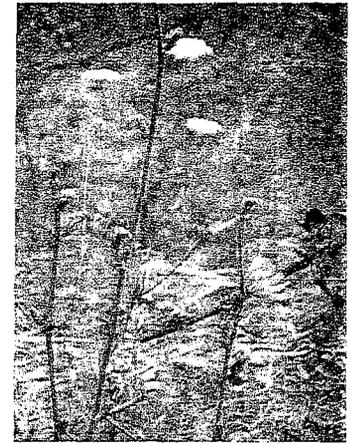
OCT 22 2010

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There is nothing to replace the river if you choose to take away the flow necessary for recreation. We would never be able to build enough recreation centers, parks and swimming pools to make up for the loss of the river. Even if you could, going to a park or a public pool is not the same as going to a natural area like the river. It is an irreplaceable facet of our lives.

Please work on ways to help endangered species that don't endanger our quality of life, our recreation, our economy and the spirit of our community.

Thank you for your consideration,
Barbara DeJonno
8175 Park Av
Forestville CA 95436



cc: Brenda Adelman
Russian River Watershed
Protection Committee
PO Box 501
Guerneville, CA 95446

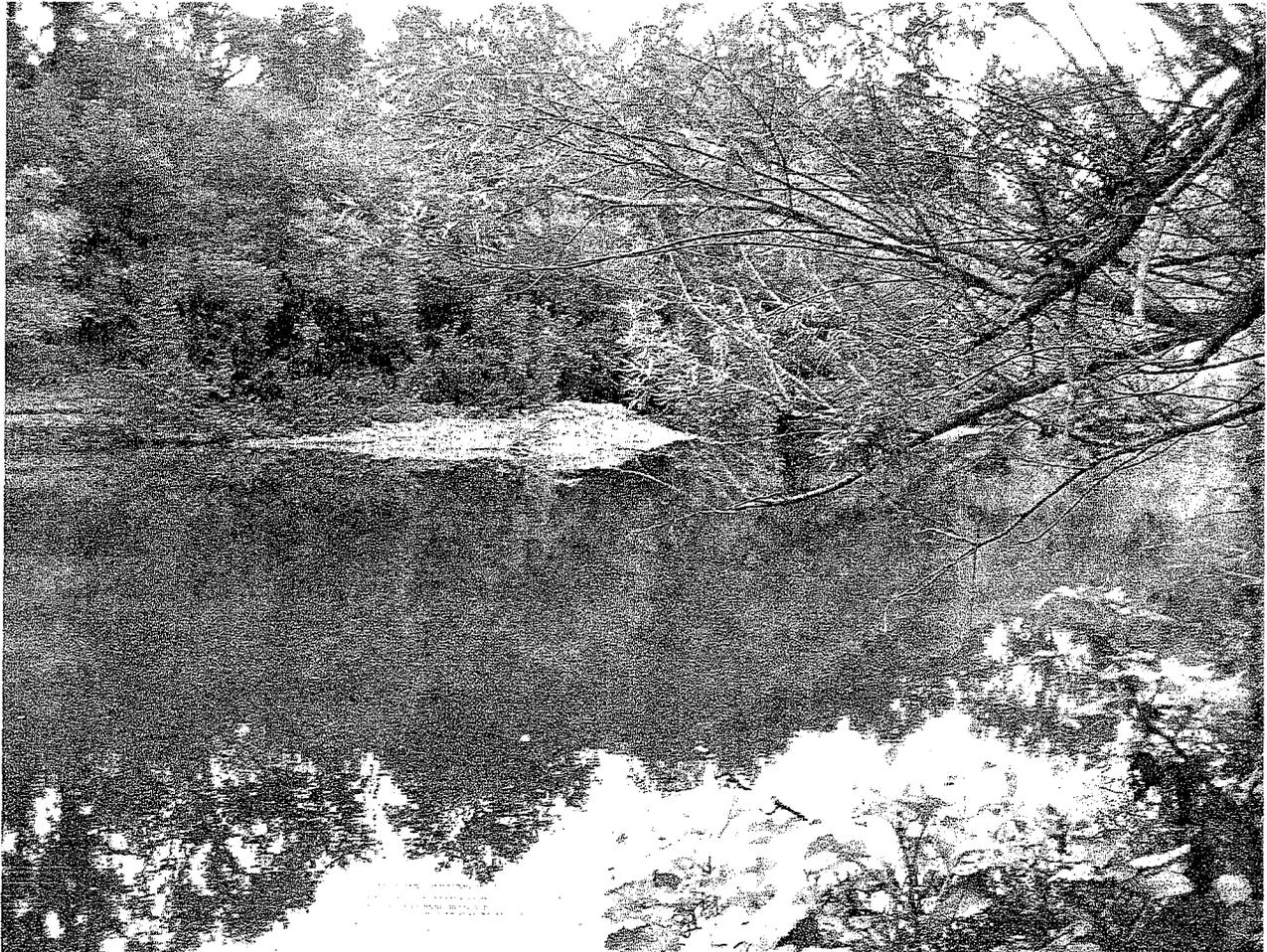
Sonoma County Water Agency
Jessica Martini-Lamb
404 Aviation Blvd.
Santa Rosa, CA 95403

Senator Pat Wiggins
50 D St., #120A
Santa Rosa, CA 95404

Jerry Brown 2010
291 3rd St.
Oakland, CA 94607

Governor Arnold Schwarzenegger
State Capitol Building
Sacramento, CA 95814

Rep. Lynn Woolsey
1101 College Avenue
Suite 200
Santa Rosa, CA 95404



Sonoma County Water Agency
Jessica Martini-Lamb
404 Aviation Blvd.
Santa Rosa, CA 95403



COPY
November 5, 2010

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY

NOV 08 2010

Dear Ms. Martini-Lamb:

I am writing today in response to the proposal to change decision 1610, which sets a minimum flow for the Russian River at certain points along the river. I have lived near the river for 27 years. I swim in the river, between Steelhead Beach and Sunset Beach, near the Hacienda Bridge. In recent years, we have experienced emergency low flows because of drought, so we have seen what this proposal would mean for recreation on the lower Russian River. I feel it degrades the environment for recreation to the point where it is unacceptable.

It is also difficult to believe that the lower Russian River would be better for fish with low flow. The Biological Opinion does not address what would happen to the lower river if the proposed action were to go through – the proposed action being: lowering the required river flow from 125 cfs at the Hacienda Bridge to 70 cfs, a 44% reduction. In fact, there are many reasons to think that habitat would be degraded and limited for fish in the lower Russian River by the low flow regime. The Biological Opinion stresses improving conditions for salmon in the upper river by lowering flows, but completely ignores what would happen in the lower river. One wonders if the overall effect would be any better for fish at all.

If what's going on is that the water agency has to blast juvenile salmonids with too much water at the top of the river in order to have enough water by the time it gets to Forestville and Guerneville, maybe the problem is too many diversions along the way. Maybe the water users need a pipeline for irrigation so that the Russian River isn't used so much as an irrigation canal.

Since 2004, when I first remember the Sonoma County Water Agency trying to talk the public into a permanently lower flow for the Russian River, I have been paying attention to flow levels. After I go to the river, I usually check the flow level at Hacienda Bridge on the Internet. So, I know what 70 cfs looks like, 85 cfs, 140 cfs, 180 cfs, 235 cfs. etc. My conclusion is that the people who arrived at decision 1610, which provided for a minimum of 125 cfs at the Hacienda Bridge, were right - that is a good minimum for recreation. It is low and slow at this level, but adequate.

I remember in 2004, when the water was around our ankles, the Water Agency announced on their website, that "canoes are still getting through!" I thought, that's nice, but I still can't go swimming. I want to emphasize the importance of swimming at the Russian River. I've been reading the Biological Opinion, and in 386 pages, I couldn't find any mention of swimming at the river. If I were just reading the Biological Opinion, I wouldn't know that people even use the river for swimming.

Swimming at the river is very important. There aren't any public pools in Forestville or Guerneville - we have the river. There is no replacement for swimming at the river, should adequate water be denied. It makes a big difference to people renting vacation cabins or houses, whether there is swimming or not. As you get off the freeway to head to Guerneville, the sign says,

To: Martini-Lamb

Y2002
"Russian River Resort Area." The difference between 70-85 cfs, the proposed, and 125 cfs, the lower limit now, is the difference between being able to swim and not being able to swim in many areas. The Biological Opinion dismisses our whole recreation scene and tourist industry in about three sentences on page 246. It cites one person's unsubstantiated opinion that effects to "recreational boating" were "negligible." It theorizes that the public will go along with this drastic reduction in water flow because California is a dry state and no other rivers have this artificially high flow. I object to the Eco-blame, Eco-guilt-trip put forth in this report. I don't think I am unreasonable to want to continue being able to swim in the river. This river had water in it for at least 70 years before I got here. Many things we do are artificial. Man-made lakes and dams are artificial. Irrigation itself is artificial. Having green irrigated vineyards on thousands of acres of naturally brown hillsides is artificial. Fish hatcheries are artificial. But we have decided these things are beneficial.

The recreation at the Russian River is vitally important to residents and our whole region. It cannot be replaced. We have a hundred years of culture, businesses and housing built around this being a river. You can't just turn it into a creek and expect everyone to be okay with it. How can you make a fifteen-year plan for the Russian River that doesn't include the people?

The other focus of the Biological Opinion is the estuary. Again, the opinion calls for low flow into the estuary without consideration of what that low flow would do to the lower river. It would seem to make sense to try to engineer the desired effect for the estuary on site, rather than ruining recreation for thousands of people on the lower river just for the convenience of having less flow. The biological opinion talks about building a channel to carry off excess water. Why can't it be engineered to carry off the necessary water for recreation? The Biological Opinion says that the closed estuary with a freshwater channel running through it is the best habitat for fish because the freshwater channel carries off salt. Why can't we make decisions to support recreation *and* fish?

In summary:

- Recreation in the Russian River is vital to our area
- 70 cfs at Hacienda Bridge is not enough water for recreation in the lower Russian River
- Low flows in the lower Russian may damage fish habitat there
- Decision 1610 sets a reasonable minimum for recreation, 125 cfs at Hacienda Bridge, and should not be changed
- A 15-year plan for the river needs to include the human users
- A plan for the river needs to include the whole river, not just the upper river and the estuary

Thank you for your consideration,

Barbara DeIonno
8175 Park Av
Forestville CA 95436

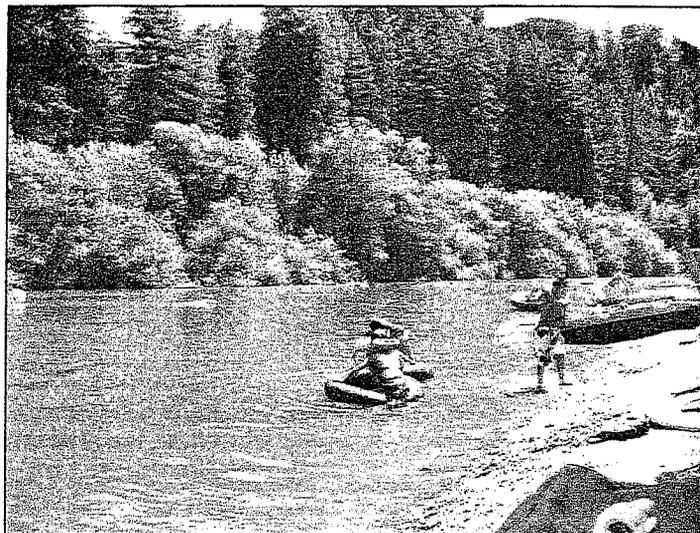
cc: Brenda Adelman
Russian River Watershed
Protection Committee
PO Box 501
Guerneville, CA 95446

cc: State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812-2000

cc: Jerry Brown 2010
291 3rd St.
Oakland, CA 94607

cc: Rep. Lynn Woolsey
1101 College Avenue
Suite 200
Santa Rosa, CA 95404

cc: Senator Pat Wiggins
50 D St., #120A
Santa Rosa, CA 95404



cc: Assembly member Wesley Chesbro
50 "D" Street, Suite 450
Santa Rosa, CA 95404

cc: The Press Democrat
427 Mendocino Ave.
P. O. Box 569
Santa Rosa, CA 95402

Connie Barton

From: Betsy McConnell [edmcconnell@sbcglobal.net]
Sent: Wednesday, November 10, 2010 9:27 AM
To: Fish Flow
Subject: Fw: Re:Comment Submission--Fish Flow Project/Nov.15th Deadline

I have also been wondering how it is possible for warmer, algae-swamped, nitrogen -sucking water can be better for the fish. The answer is, **it isn't** . This biological opinion is flawed and/or subjected to pressure to comply with Santa Rosa's need to pull more water out of the river for selling and growth. Cut it out! This is insane. Just look at old photos of people swimming and diving into **deep** water. I am so frustrated with this nonsense that I can't even write a civil response. So I will let Doreen's letter speak for me.

Betsy McConnell, Homeowner, resident of Monte Rio for 19 years.

----- Original Message -----

From: [doreen atkinson](mailto:doreen.atkinson)
To: [Betsy McConnell](mailto:edmcconnell@sbcglobal.net)
Sent: Wednesday, November 10, 2010 7:49 AM
Subject: Re: Re:Comment Submission--Fish Flow Project/Nov.15th Deadline

If you have some thoughts on this subject please just take a few minuts out to e-mail Jessica at SWCA by the 15th. Thanks!

--- On **Tue, 11/9/10**, Betsy McConnell <edmcconnell@sbcglobal.net> wrote:

From: Betsy McConnell <edmcconnell@sbcglobal.net>
Subject: Re: Re:Comment Submission--Fish Flow Project/Nov.15th Deadline
To: "doreen atkinson" <datkinson2000@yahoo.com>
Date: Tuesday, November 9, 2010, 9:35 PM

Great letter Doreen! I am interested if you get a reply.

Betsy

----- Original Message -----

From: [doreen atkinson](mailto:doreen.atkinson)
To: fishflow@scwa.ca.gov
Cc: [Brenda Adelman](#) ; [Lisa R Amador](#) ; [Trini Amador](#) ; [Amanda Atkinson](#) ; [Jane Barry](#) ; [John Bauer](#) ; [Efren Carrillo](#) ; [Assemblymember Chesbro](#) ; [Gail Culverwell](#) ; [Barbara DeCarly](#) ; [Tasha Derum](#) ; [Maren Derum](#) ; [Elise](#) ; [Robbi Ernst](#) ; [Tia G](#) ; [Lloyd G](#) ; [Gary Getchell](#) ; [peter or vicki halstead](#) ; [gene koch](#) ; [Sherry Kulczewski](#) ; [Johanna Lynch](#) ; [Betsy McConnell](#) ; [Nancy](#) ; [DA Ororke](#) ; [Ron](#) ; [John & Jean Sasso](#) ; [Linda Schmidt](#) ; [Matt St. John](#) ; [Todd Thompson](#) ; [John Uniack](#) ; [Pam Vale](#) ; [Chris Vale](#) ; [Vesta](#) ; [Ken White](#)
Sent: Tuesday, November 09, 2010 2:23 PM
Subject: Re:Comment Submission--Fish Flow Project/Nov.15th Deadline

The following letter to be mailed to Ms Martini-Lamb, SCWA in **opposition** to "Low Flow".

Jessica Martini-Lamb
SCWA/ Fishflow@scwa.ca.gov
404 Aviation Blvd.

Santa Rosa, CA 95403

Dear Ms Martini-Lamb: Re: Comment Submission—Fish Flow Project

I'm responding with comment to the Sonoma County Water Agency regarding "low flow" during the summer months, specifically the lower portion of the Russian River. A public seminar, a requirement by law in order for the SCWA to petition from the State Water Board the permanently lowering of water flows from 125 cf to 70 cf during the summer months, was just conducted in Monte Rio on November 5th. There were a lot of colorful hand outs, maps, and charts at various stations with each station staffed by water agency employees, all of whom suggested filling out "comment cards" and returning them by the November 15th deadline. The project, once referred to as "Low Flow", has now been renamed to "Fish Habitat Flows and Water Rights Project" or "Fish Flow" for short. I was told it was easier for people to remember, but I assume it was changed to shed a more positive spin within the general public. In a very simplistic explanation, the reason for the "lower flow" is to save the salmon, or at least that's what it's being billed as but at what cost to others?

It was very obvious that this past summer's water flow was much better than last year's due to the wet winter and late spring. From what I've read, the average flow this past summer at the Hacienda Bridge was 263 cfs as compared to 70 cfs in the summer of 2009 when algae blooms were at the highest levels I've ever observed. I've lived along the Russian River in Monte Rio for over 60 years and have witnessed many changes in the River. In the 1950's and 1960's the River at Monte Rio's public beach was at least 12 feet deep in the middle of the channel between the beach and the Highland Dell Hotel. There were two docks that you could dive from and a rope strung from one dock to the other to warn of deep waters. Now, that same public beach is called the "Monte Rio Kiddy Beach" because of its shallowness—no docks, no ropes, but lots of moss and algae! People can be seen ankle, knee or waist deep in places that once was over one's head! This change is mainly due in part to the buildup of silt from various negative conditions going on up stream, (i.e. gravel mining, bottom release from dams, agriculture, etc.). Certainly the River wasn't completely healthy back in the 50's. It was muddy, smelled of dead eels, and void of any wildlife as compared to that of today. Mistakes in the past have been made. One that I recently learned of was when the Department of Fish and Game began a "trash" fish eradication program in 1954 from the East Fork above Ukiah down to Healdsburg. Rotenone poison was sprayed and suffocated the fish by damaging their gills. According to an article dated November 12, 1956 in the Ukiah Daily Journal this was an experiment done to kill off all the undesirable non-game fish but nearly all the fish in the River were killed! With the completion of the Coyote Dam in 1959, (and by various accounts the beginning of the end of Salmon in the Russian River) the State asked Sonoma and Mendocino counties to specify what water flows they wanted and according to the Ukiah Daily Journals article, "Water Releases From Coyote Dam for Fish Asked by State", the answer, "**Guerneville needed 125 cfs to maintain its fishery.**" Came the late 1970's, 80's and 90's when osprey, ducks, turtles, otters, among others seem to have proliferated to the enjoyment of many. But, in the past few years, when kayaking from Guerneville to Monte Rio one is forced to get out and walk through blooms of algae, thick moss and an invasive plant called Ludwigia in various places because the River has become so shallow.

So, my questions:

- 1. How will the "low flow" affect the temperature of the River?**
- 2. Will "low flow" contribute to more algae blooms?**
- 3. Will the River be in danger of drying up due to the buildup of sediment and "Low Flow"?**

4. What about the other aquatic animals and wildlife upstream from the Estuary, what affects will “low flow” have on them?
5. The Russian River has had a rich history of tourism during the summer months. What will be the affect on businesses and water recreation use if and when beaches are closed because of algae blooms and high bacteria counts?

The Biological Opinion does not address these questions nor does the SCWA which has remained focused on “low flows” benefitting the salmon. While SCWA continues to meet the needs of its water contractors, what environmental considerations has the Russian River as a whole been given in return? There is no simple answer, water is a valuable commodity and will be getting even more valuable in the future—what will our priorities be? Until these questions can be answered I am **STRONGLY OPPOSED** to the “low flow” objective of the Sonoma County Water Agency. Mistakes have been made in the past, let’s learn from them and move in a more responsible manner towards saving our most valuable resource in Sonoma County, the **RUSSIAN RIVER!**

Sincerely yours,

Doreen Atkinson
Monte Rio, CA

Evard W. Wadsworth
3660 Church Street
Occidental CA 95465

November 15, 2010

Sonoma County Water Agency
Attn: Jessica Martini-Lamb, Principal Environmental Specialist
404 Aviation Boulevard
Santa Rosa, CA 95403

Ref: Formal Scoping Comment Regarding "Fish Flow" NOP

Dear Ms. Martini-Lamb:

The objective of the Fish Flow Project as stated in the NOP, "is to manage Russian River Project releases to provide instream flows that improve habitat for threatened and endangered fish ..." Due to the historical record of water shortages affecting the "Fish Flow" Project area and the future climate change modeling predictions, which reveal the potential for severe water shortages, the "Fish Flow" Project cannot be effectively managed without addressing human consumption in a new more effective manner. Human water consumption is not addressed in the NOP.

Human consumption from the projects segment of the Russian River must be managed more effectively to ensure a sustainable balance between human diversions and the water resource requirements regarding the health of the river and its aquatic life. As the recent draught has made clear, Lake Mendocino cannot be considered an adequate safeguard regarding future projected water shortages, which due to climate change, may likely be severe and prolonged. Water shortages due to Climate Change are not addressed in the NOP.

Two paramount issues concerning managing and reducing human consumption are water conservation and water right enforcement. At the present time neither of these two issues are being managed effectively. Many agricultural and community unlawful water diversions continue without enforcement. New development proceeds without water rights to support the development. Regarding conservation there is much potential for reducing human consumption by implementing effective conservation programs. Much of the water reductions during the recent mandated reduction periods were meet by withdrawing more water from ground water wells instead of effective water conservation. Depleting ground water resources is not a sustainable solution but

water conservation is sustainable. In addition, SCWA's conservation practices do not match their stated goals concerning water conservation. (See below.)

We ask that you broaden the scope of the NOP and EIR to address the impacts of:

1) the potential effects of climate change modeling projections that foresee the possibility of reductions of precipitation from 20% for Northern California to severe drought conditions. In light of the great uncertainty regarding climate change predictions we must act cautiously and consider the worst possible outcome. To not consider the predictions at all, as the NOP is doing, is not a rational or reasonable response. See Addendum Item 1, Water Shortage Predicted for Northern California, for supporting information.

2) the lack of water conservation measures and water conservation pricing in particular. The amount of water, which is being wasted due to ineffective water conservation practices, needs to be evaluated. Implementing and enforcing effective conservation measures not only instills conservation habits regarding consumer's water consumption behavior but also encourages the installation of water saving infrastructure. Both of these measures can be very valuable during future severe water shortages and are important tools regarding managing the flows from the river. In the future the problem may well be the issue of not having enough water to provide for even the minimum flows. Water conservation can forestall problems during these predicted shortages. We must address the NOP issues in light of the climatologist's projections regarding the future.

3) the impact of the lack of water right enforcement as this issue relates to effective management of the river. The amount of water being unlawfully diverted needs to be evaluated. Enforcement mechanisms need to be strengthened and established. (See below.) The management of the project water cannot effectively be managed, when considering the possibility of future climate change water shortages, without water right enforcement. Without enforcement, as future water shortages occur, more unlawful diversions will likely occur which will exacerbate the agency's ability to management river flows.

Details supporting the above comments are addressed below:

1) Require Implementation of Conservation Water Pricing. We ask that you expand the scope of the EIR and the "Fish Flow" Project to include a

requirement that all communities regardless of size, who receive water diverted from the segment of the Russian River included in the “Fish Flow” Project, implement conservation water pricing which is in compliance with the California Urban Water Conservation Council’s Best Management Practice #11.

Need for Conservation Pricing. The objective of the “Fish Flow” Project is to manage Russian River Project releases to provide instream flows that improve habitat for threatened and endangered fish. Historically we see that recently in 2002, 2004, 2007, and 2009, water storage levels in Lake Mendocino declined to dangerously low levels. Looking to the future we note that climate change is likely to cause further water shortages. Climatologists predict that climate change may cause from 20% reductions in precipitation for Northern California to severe drought conditions. See Addendum Item 1, Water Shortage Predicted for Northern California, for supporting information. Faced with future likely shortages it is imperative that human consumption be reduced.

Conservation Pricing Effectiveness. The US Environmental Protection Agency conducted a water conservation study and reports, “Water utilities across the United States and elsewhere in North America are saving substantial amounts of water through strategic water-efficiency programs”. Conservation water rates are a lynchpin in these studies to reduce water consumption. The EPA studies confirm that appropriately designed conservation pricing will decrease consumption by as much as 18%. See Addendum #2 for a summary of the EPA study entitled Cases in Water Conservation which supports our argument. In conclusion water conservation measures and conservation pricing in particular are effective ways to reduce human water consumption.

Many Communities Fail Conservation Pricing Standards. If SCWA is to effectively manage Russian River Project releases to provide instream flows that improve habitat for threatened and endangered fish, they must use every tool available to reduce human consumption. At the present time many communities who use the “Fish Flow Project” water do not have conservation pricing. Two districts for example, Occidental Community Service District (OCSD) and Camp Meeker Recreation and Parks District (CMRPD), have rates that recover more than seventy percent of their revenue from a service charge as CUWCC’s Best Management Practices #11 allows no more than 30% of the revenue to come from a service charge.

Effective Conservation Practices Needed to Change Attitudes. To effectively manage Russian River water SCWA must address the publics’ attitudes regarding water conservation. There is a prevailing attitude in the collective culture regarding water use and CO2 emissions that can be characterized like this, “The small amount of water, that will be saved (or CO2 emission reduced) by me

implementing conservation practices, is so small that it will not make any difference. Therefore I do not need to be serious about conservation.” This collective attitude must be reversed. SCWA is not now consistent in their efforts to address this issue as shown below. Requiring all project water users to have conservation pricing will help correct this inconsistency and help change the irresponsible attitudes held by many water users.

Need for Consistent Conservation Practices. The challenge that SCWA faces is to change the above prevailing and wrong-headed collective attitudes regarding individual responsibility and conservation. While SCWA has a public education program regarding water conservation, its actions regarding conservation are inconsistent. For example SCWA has assisted Occidental Community Service District to continue non-conservation water pricing for over 16 months. SCWA is providing SCWA water so that OCS D does not have to implement the conservation-pricing requirement on their permit. SCWA tailored an existing contract, which required conservation pricing, so that they could provide SCWA water to OCS D without the conservation-pricing requirement. These actions by SCWA are inconsistent with SCWA’s highly publicized claim of being a water agency concerned about conservation. Facilitating and therefore promoting the idea that some can be exempt from their conservation responsibility is not only not equitable which causes districts to be in violation of the California Constitution but sets wasteful attitude in individuals and districts who feel that their water waste will make little difference. However, the water and climate change challenges we face will only be solved by collective action.

Conservation Pricing Encourages Conservation Habits and Infrastructure. Water conservation, and in particular water conservation pricing, causes consumers to reduce their water use and to form conservation habits regarding their water use. When future water crises hit, those communities that have conservation pricing will have conservation habits in place and they will effectively conserve water. Also, conservation pricing provides the incentive for homeowners and businesses to install water-conserving infrastructure, which will help us meet future water shortages.

Conclusion. To solve the water and climate change problems we will likely face in the future irresponsible collective attitudes regarding water resources must be changed. Each of us and every water district large and small must assume our responsibility to conserve if we are going to effectively manage our water resources. It is very important that SCWA’s conservation message is consistent with its practice and that it use the powerful tools available like conservation pricing which can reduce water consumption. One very powerful way to change public attitudes is through their pocket book, which is why conservation pricing is so effective at reducing water consumption. By requiring all districts using the

“water flow” projects water to implement conservation pricing, SCWA can gain a powerful tool to reduce water consumption which will help it effectively manage the river flows during times of future projected water shortages.

2) Require Water Rights Before New Water Connections Approved.

We ask that you expand the scope of the EIR and the “Fish Flow” Project to include a requirement that no new connections be allowed in districts and communities that use “Fish Flow” Project water unless full long-term water rights are in place to support the new connection.

Currently new water connections and water zone expansions are proceeding using “Fish Flow” Project water when districts don’t have full long-term water rights. If SCWA is to effectively manage Russian River Project releases to provide instream flows that improve habitat for threatened and endangered fish, they must set in place procedures and intergovernmental agency coordination which will assure that new connections to water systems don’t occur without full long-term water rights. Due to conflicting understandings among the Department of Public Health Drinking Water Program, the Water Resources Control Board, and the Sonoma County Permit and Resources Management Department development has proceeded using “Fish Flow” Project water without full long-term water rights. These failures of water right enforcement will likely lead to future unlawful diversions and/or extreme water availability problems in the violating districts(s) when they are faced with future projected water shortages.

Case Studies Revealing the Problem.

HARMONY VILLAGE. The Occidental Community Service District (OCSD) provided “will serve” letters to Thiessen Homes claiming they had sufficient water rights for the Harmony Village development, which will increase the size of Occidental by about one-third. However, OCSD had no water rights to divert water from the Russian River, its water source. The Permit and Resources Management Department (PRMD), as the lead agency, issued the CEQA Mitigated Negative Declaration maintaining OCSD had sufficient water rights when it didn’t.

Concerned ratepayers, who must assume risk if new building development proceeds without water rights, informed PRMD that OCSD did not have water rights to divert from the Russian River. The ratepayers asked PRMD to stop the Harmony Village development from moving forward until the water rights deficiency was corrected. However, PRMD would not stop the permitting process regarding Harmony Village in response to this ratepayer’s request.

The ratepayers informed the Department of Public Health (DPH) of the water right shortfall and DPH issued a compliance order stopping the Harmony Village project until such time as OCSD “has acquired sufficient water rights and demonstrated to the Department that adequate source capacity is developed ...” When OCSD’s water permit was issued DPH withdrew the compliance order and let the Harmony Village project proceed. However, the new OCSD permit had a low flow/no pump requirement in it that did not give OCSD full water rights. Had OCSD been diverting under their permit in 2007 and 2008 they would have had to haul water due to the low flow/no pump requirement. The DPH compliance order was lifted prematurely. Even though Sonoma County Water Agency (SCWA) has made a temporary commitment through 2014 to provide water to OCSD through Camp Meeker Recreation and Parks District this agreement can be withdrawn at any time and does not provide water rights for OCSD into the future.

222-ACRE EXPANSION. The long-term OCSD water right shortfall remains a problem as OCSD is moving forward with a water zone expansion of 222 acres which will likely fuel even more development. The new expansion will increase the water use in OCSD by two-thirds. For this and another planned large expansion to continue OCSD must get DPH and WRCB approval. If the precedence of the Harmony Village project is followed with these new expansions even more connections will be made without full long-term water rights. This will increase the likelihood that OCSD will experience water shortages in the future.

As climatologists predict that climate change may cause from 20% reductions in precipitation for Northern California to severe drought conditions, (See Addendum Item 1), it is irresponsible to let the current practice of allowing building development without water rights to continue. SCWA cannot effectively manage Russian River Project releases to provide instream flows that improve habitat for threatened and endangered fish without firm enforcement of water rights.

Our Requested Scope Expansion Regarding Water Right Enforcement. We recommend that SCWA monitor new water connections in districts using “Fish Flow” Project water to assure that connections are not approved without full long-term water rights. Also, SCWA must be given authority to stop connection approvals which are not supported by water rights. One way to do this is for SCWA to sign off on all new connections in districts using “Fish Flow” Project water before the connection is approved. This could be managed efficiently by SCWA monitoring the water rights of each “Fish Flow” Project district’s water rights to assure that the district does not approve connections beyond its water rights.

Sincerely,



Evard W. Wadsworth
(707) 874-3348

ADDENDUM

1. Water Shortage Predicted for Northern California. We refer you to the Department of Water Resources Technical Memorandum Report, "Progress on Incorporating Climate Change into Planning and Management of California's Water Resources" (TMR). The TMR reports regarding the GFDL model, "In terms of average precipitation, for Northern California, the GFDL model predicts a 20 percent decrease in precipitation after 2050 for the A2 scenario and a 10 percent decrease for the B1 scenario." TRM 6-22 "For temperature there is a distinct increasing trend in average, maximum, and minimum temperature for both models and both scenarios." TRM 6-27 David Rind, a scientist at the Goddard Institute of Space Studies Climate Impacts Group, published findings showing as CO₂ levels rise California and the Rocky Mountain states would suffer draught first and with double CO₂ California would have a 80 to 100 percent chance of severe drought conditions. (*JGR: Journal of Geophysical Research*, "Potential Evapotranspiration and the Likelihood of Future Drought", David Rind.)

2. EPA Study Reports Significant Water Savings due to Conservation Pricing . We quote here from an EPA study entitled Cases in Water Conservation (on the web at http://epa.gov/watersense/docs/utilityconservation_508.pdf). The conservation efforts and achievements of 17 water systems are reported in this study.

Irvine Ranch Water District, California - IRWD's primary conservation strategy was a new rate structure instituted in 1991. The five-tiered rate structure rewards water-efficiency and identifies when water is being wasted. After the first year of the new rate structure, water use declined by 19%. Between 1991 and 1997, the district saved an estimated \$33.2 million in avoided water purchases.

We refer you to:

Albuquerque, New Mexico - Peak demand is down 14% from 1990.

Ashland, Oregon - Ashland's 1991 water efficiency program have resulted in water savings of approximately 395,000 gallons per day (16% of winter usage) as well as a reduction in wastewater volume.

Cary, North Carolina - Cary's eight element water conservation program will reduce retail water production by an estimated 4.6 mgd by the end of 2028, a savings of approximately 16% in retail water production.

Goleta California - Goleta established a water efficiency program resulting in a 30% drop in district water use.

If you average the various savings of the above studies you determine an average water savings of 19%.

Due to human nature there is water waste in any public water system due to wasteful behavior and infrastructure that wastes water. This is evidenced by the fact that Europe and Australia have urban technological societies very similar to the United States but use on the average around one-half as much water per person per day than the United States (United Nations Development Programme, Human Development Report (22 February 2007) Beyond scarcity: Power, poverty and the global water crisis 2006,) Clearly there is too much waste in the US systems. Also, it is a proven fact as shown above that water rate pricing incentives cause people to use less water by stopping some of this waste of water. Since conservation rates reduce water use by reducing some of this waste than not using this proven remedy to stop waste of water is in itself a waste of water.

In deed, non-conservation rates even promote water waste and unreasonable use because there is not an appropriate monetary incentive to cause people to establish habits that don't waste water and to install conservation friendly infrastructure. Therefore non-conservation rates are waste and unreasonable use of water because they do not provide an incentive for people to stop their wasteful practices.

EPA study entitled Cases in Water Conservation (on the web at http://epa.gov/watersense/docs/utilityconservation_508.pdf).

Connie Barton

From: CAROL COWLEY [cowley10s@sbcglobal.net]
Sent: Thursday, November 11, 2010 12:18 PM
To: Fish Flow
Subject: Russian River low flow proposal

I have read a couple letters addressed to you expressing grave concern for the health of the Russian River if the proposal to reduce flow during the summer months is put forth. I, too, would like to express my concern with this proposal. The economy of the Russian River area is dependent on the health of the river. It seems every entity wants a piece of the river: Camp Meeker, a few years back, laid pipe from their community to Monte Rio to take water and now sells some of that water to Occidental; the wineries use the river water at will, either directly to avoid frost damage during cold spells, or through irrigation from wells using ground water that will no longer flow into the river. And, still, more wineries are given permits to operate or expand without a thought to the damage done to the river. Bringing back the salmon is a noble idea, but at what cost to the people who live along the river.

Carol Cowley
Monte Rio

Carol Sklenicka
(Name: Please Print)
Po Box 21
(Street Address)
Duncans Mills CA
(Town) (Zip Code) 95430

November 15, 2010

SONOMA COUNTY WATER AGENCY
ATTN: JESSICA MARTINI-LAMB
404 AVIATION BLVD.
SANTA ROSA, CA 95403

Dear Ms. Martini-Lamb:

I wish to express my concerns about the FISH HABITAT FLOWS AND WATER RIGHTS PROJECT, or alterations to the State's Decision 1610. My primary concern is with changing the minimum flow during normal years from 125 cubic feet per second (cfs) to 70 cfs in the lower Russian River. I would like to see a broad range of water quality issues addressed that would result from diminished flows. Please put my name on your notification list for all meetings and document availability related to this project.

I utilize the Russian River in the following way(s): property owner, business owner, recreationist and/or tourist, for artistic expression, for spiritual well being, for exercise and personal health, fishing, swimming, and Kayaking.

I am concerned about the impacts to water quality from this action including possible added pollution from nutrients, regulated and emerging toxins, bacteria, temperature, invasive species, blue-green algae, etc. This action will seriously impede my enjoyment of the river and I am also concerned about the overall health of the watershed, including impacts to other species such as amphibians, sea birds, seals, unlisted fish, etc.,

I am concerned that the Biological Opinion did not address other existing problems in the river that harm fish including those of excess sediments, temperature, and bacteria. I also wonder if threatened fish species, for which this project is intended, will suffer from degraded water quality conditions during transitional months of October and November when migration normally begins and degraded conditions have not yet been diminished by winter temperatures and flows. Furthermore I wonder about the impacts on fish food sources and habitat conditions. (Chinook are in the main stem of the river as early as mid-September.)

I would like to see continued environmental monitoring and analysis, including recreational, public health, and economic impacts of the project. Please assure me that this EIR will mitigate all potential impacts from this project.

Sincerely,
Carol Sklenicka
(Signature)

Nov. 11, 2010
(Date)

Jessica Martini-Lamb
SCWA/ Fishflow@scwa.ca.gov
404 Aviation Blvd.
Santa Rosa, CA 95403

Dear Ms Martini-Lamb:

Re: Comment Submission—Fish Flow Project

I am a long time visitor and recent homeowner of the lower Russian River Resort Area. I spent countless summers in Monte Rio with my grandparents raising me while my mother and father worked in the Bay Area. The majority of my free time was spent playing at the Rocky Beach in Monte Rio. My very first swim lessons were in those waters in 1971 and more recently I have competed in several of the Vineman 70.3 race events held at Johnson's Beach. Unfortunately, the swim portion of the Vineman event has become a walk, since one is bound to scrape their hands if they dare swim the shallow course. Every year I have witnessed the lowering of these valuable waters and I've wondered where has all the water gone?

On November 5th, I attended a public seminar in Monte Rio that promoted the permanent lowering of water flows from 125 cf to 70 cf during the summer months. I was shocked to see that this proposal is in the works. Has anyone travelled down the Russian River in a kayak or canoe recently during the summer months? It's hard to tell the difference between the upstream and the downstream. There is no stream! The water is stagnant and filled with moss, algae and other non-native, invasive plants. I've been told that this lower flow proposal is to save the salmon. Saving the salmon (more like reintroducing them) is a noble goal, but at what cost to all of the families who live and vacation in this beautiful area? The Russian River is the centerpiece of Sonoma County. The wineries (which wouldn't exist without pilfering the waters of the River), the beaches, the fine lodging/dining facilities will all suffer or may even become non-existent without the "liquid gold" that flows through our valley.

Please reconsider your proposal to lower the flow of the Russian River. Raise the flow and bring more people to this slumped economic area. Find a balance between the salmon and the people of the Russian River area. I know we can find a solution that doesn't involve lowering the flow and yet still works for both the fish and the people.

Thank you in advance for allowing me to express my concerns with a topic that is so very important to me and my family.

Christy Cowley
Monte Rio, CA
"Vacation Wonderland"

cc: Efren Carrillo ecarrillo@sonoma-county.org
Johanna Lynch rrtimes@sonic.net
Vesta vesta@sonic.net

Connie Barton

From: Chuck Williams [chukwil@yahoo.com]
Sent: Monday, November 15, 2010 10:40 AM
To: Fish Flow
Cc: Chuck Williams
Subject: scoping comment re; gravel pit erosion

In regard to the deep gravel pits along the Russian River, whether in use or abandoned: what are the long range expectations? Are there any contingency plans if and when they are breached?

The river will inevitably flood and meander a connection to the deep (40-80 feet) gravel pits, causing upstream (headward) erosion trying to fill the pit by stripping sand and gravel from the river bottom. This will continue and aggravate the incising of the river and tributaries, leading to further and future dysfunction of the riparian system.

Once the pit has been breached, it will be too late. The erosion will be headed upstream and out of easy control. Prevention is the most logical action. Short of finding something to refill the pits with, a strong concrete dam around around the pits should be considered, ie-put them in a big bowl that might be filled with sand and gravel during a flood event without causing a lowering of the stream bottom upstream.

Thank you, Chuck Williams, 3 Betty St. Ukiah, Ca. 95482

Connie Barton

From: Chuck Williams [chukwil@yahoo.com]
Sent: Monday, November 15, 2010 1:26 PM
To: Fish Flow
Cc: Chuck Williams
Subject: scoping comment: jacks,recreation access

I doubt the presence of the jacks have any direct effect, good or bad, on the fish, but they are a danger to river users. As people tend to take care of that which they enjoy and love, river users are a big part of maintaining the long term health of the river system. They are the rivers fan club. We should encourage people to get involved and therefore informed. The jacks that are in the river where they can damage canoes, kyacks, innertubes and swimmers should be removed. The same holds for old cars, tires, trash and invasive plants.

.More access points to the river are needed, especially in the long stretches that take more then 5 or 6 hours to float between bridges or other (few) public access points. People should be able to float short distances like 2-3 hours. Local land trusts could hold such access easements if they could be secured.

To enable people to remove trash, jacks and invasive plants, consideration should be given to letting the river go almost dry for a week or so every summer in a similar fashion as it used to do before any dams were built. By doing this in late summer or fall the natural water inflow would be at its lowest, the farmers would be harvesting and most of the recreationists would be back to school, work or better yet volunteering to help maintain the health of the river. It might also serve to remove the predatory fish whose numbers have increased with the increased habitat caused by increased summer water flow.

Thank you,

Chuck Williams, 3 Betty ST. Ukiah, Ca.95482

Connie Barton

From: Chuck Williams [chukwil@yahoo.com]
Sent: Monday, November 15, 2010 3:45 PM
To: Fish Flow
Cc: Chuck Williams
Subject: comment; contaminant ,flood control

Please consider these concepts for flood and contaminant control.

Building FIRST FLUSH CONTAMINANT BASINS which would be constructed off stream to receive the first water that flows down the tributary streambed at the end of the dry season. The basin would be designed so when it is full, its water would back up the connecting inlet to the stream channel, thereby allowing the stream to flow on down its natural course. Thereafter the level of water in the contaminant basin would rise and fall with the depth of water in the stream. That first flush of water would contain an abundance of contamination that now are retained in the catchment basin and can be absorbed and decontaminated by plants grown in the basin (Sedges and Rush work well). Trash which also comes with the first flush could be removed manually. If there is concern that toxic levels may accumulate over time because of recycling composted plant tissue, the above ground plant material could be harvested in the dry season thereby removing the contaminants, yet leaving the dormant part of the perennial plants to grow next season.

If the plants used in the basin are natives, a secondary result would be the creation of a seasonal wetland habitat and potentially increased flood control via more permeable area for water to soak into the water table.
C.Williams 3 Betty St.Ukiah,Ca.

Connie Barton

From: Chuck Williams [chukwil@yahoo.com]
Sent: Monday, November 15, 2010 3:58 PM
To: Fish Flow
Cc: Chuck Williams
Subject: comment:permeable surfaces

Please consider encouraging the counties, cities and residents to use permeable surfaces as much as possible. Gutters, sidewalks, parking lots, driveways are all candidates to allow more rain to percolate into the soil where it belongs rather than run off causing flooding. In areas where it cannot be permeable concrete or asphalt, the runoff could be directed to landscaping to enable it to soak in before running into the nearest waterway.

This should help control flooding and contamination of the river, and keep water in the soil. I see federal EPA and state grants available to help with these projects.

Thank you, Chuck Williams, 3 Betty St. Ukiah, Ca 95482

Connie Barton

From: Don Kelsey [drkelsey1@comcast.net]
Sent: Thursday, November 04, 2010 5:40 PM
To: Fish Flow
Subject: comments on the proposed water flows of the Russian River
Attachments: Russian River Flow Data v3 - 2005.doc; Flow Myths - 2005.doc

Please find below and in the attached documents my comments about the proposed "low flow" proposals for the Russian River

USGS Water Flow Data for the Russian River Does Not Support Low Flow Operation

Concerning the proposal to reduce the flows in the lower Russian River to 70 cfs or less, the actual flow rates for the last 67 years don't support such a drastic reduction. Based on the *historic flow data*, I believe the proposed flow reductions are not based on credible science or data and are too drastic.

The mean river flow at Guerneville has been below 100 cfs only *three times* in July (1947, 1949, 1977) and *twice in August* (1947, 1977) between 1940 and 2006. For the other 64 years, the summer flows have always been over 103 cfs and averaged well above this level. (The monthly mean flows along the River 1939-2006 can be found at the U.S. Geological Survey website; see <http://nwis.waterdata.usgs.gov/nwis/>).

BEFORE the dams were built, July flows averaged 163 and August flows averaged 146 cfs for the 19 years between 1940 - 1958 (and those averages include two of the driest years). The proposed 70 cfs flow represents over 50% reduction compared to the flows in this period which were not affected by dam operations.

After the dams, the July and August flows have averaged roughly 10-40 cfs higher than before the dams were operating. After Lake Mendocino dam (1958) but before Lake Sonoma dam (1983), July and August flows averaged 176 and 177 cfs. After both dams were in place (1984 - 2006), the July and August flows averaged about 200 and 175 cfs. The 70 cfs flow would be over 60% reduction from recent average flows.

Another complication is that the Sonoma and Mendocino dams cannot adequately control the level of the River. In fact, the standard deviation for the average flows in June thru September are essentially the same or even higher (worse) for the flows after the dams were built compared to the data before the dams (see the "myths" analysis attached). Consequently, if the target were 70 cfs, the actual flow might be as low as 35 cfs based on the historical variation (after the dams).

The actual historical flow data does not support the proposed reduction in summer flows to 70cfs or below, as proposed. The 70 cfs level is comparable to the *three worst summers* on record the last 64+ years, which makes no sense whatsoever. Any permanent flow reduction below 103-140 cfs would be a dangerous ecological experiment, apparently fueled more by politics and guesswork than real data and facts, in my opinion.

This is just a summary of my analysis of the River flows. I have attached two detailed analyses I prepared in 2005 which are intended to be incorporated with the contents of this email:

(1) A Summary of Myths about Russian River Flows 1940-2003

(2) An Analysis of Monthly Mean Flow Rates of the Russian River for the Period 1940 - 2003.

At that time (2005), the flow reductions being proposed were actually not as drastic as the 70 cfs flow now being promoted. Consequently, the deviations from historic, PRE-DAM flows shown in these two analyses would be even larger if the 70 cfs flow were adopted. The attached reports used flow data through 2003 and I have not revised this to include the 2004-2008 period because that would not really alter the averages or conclusions.

If the agency and Federal government were really serious about returning the rivers to their "pristine" pre-dam conditions to restore the ancient (and unknown) population of salmon, then the logical solution would be to STOP the diversion of water from the Eel River into the Russian River East Fork entirely --- because that has artificially changed the habitat of the Russian River probably more than any other factor (and the habitat of the Eel River, as well). Of course, that "solution" would likely remove a huge amount of water for agricultural and human consumption and, I suspect, this alternative has never been considered.

Donald R. Kelsey, Ph.D. (Caltech '73)

Guerneville, CA

707-869-9617

A Summary of Myths about Russian River Flows 1940-2003

Donald R. Kelsey, Ph.D.

Guerneville, CA

Prepared June 2005

XData Source. Monthly mean flows (cubic feet/second) from 1940 to 2003 for “near Guerneville,” Healdsburg and Hopland published by the U.S. Geological Survey found at <http://nwis.waterdata.usgs.gov/nwis/>,

XCalculations: Average monthly mean flow and standard deviations were calculated for three periods:

1. **Pre-dam:** 1940 to Nov. 1958, when Lake Mendocino dam began operation (see: <http://ca.water.usgs.gov/archive/floods/flood98/11467000.html>).

2. **Interim:** 11/1958 - 10/1983 – after Lake Mendocino but before Lake Sonoma

3. **Post-dam:** 10/1983 - thru 2003 – after Lake Sonoma was dammed

Myth: the dams have provided significantly higher summer flow rates.

Fact: the data does not support this assumption. The flows have been only ~20% higher on average for July and August and almost no increase for other summer months.

	Pre-dam Average mean flow rates	Post-dam	
July	163 cfs	200 cfs	23 % higher
Aug	146	179	23 % higher
June	341	342	same
Sept	172	181	5% higher
May	883	741	16% lower
Oct.	349	211	40% lower

Fact: May and October actually show lower average mean flows – not higher – after the dams were built.

Myth: the dams have provided more consistent flows from year-to-year.

Fact: the year-to-year variations are generally the same or worse for all months except April and October. Examples of Standard Deviations in average mean flows near Guerneville:

	Pre-dam Std Dev	Post-dam Std Dev
May	488	753
June	143	312
July	56	69
Aug	43	38
Sept	45	43
Oct.	411	78

Myth: the proposed low flow rates (2004 Report proposal) are similar to the flows before the Sonoma and Mendocino dams

Fact: the low flow rates are much lower than the pre-dam flows, generally ~50% lower. And the proposed rates are even lower for the “buildout demand” level and dry years.

	Pre-dam flow*	Proposed low flow**	% Difference
May	883	672	-24
June	341	188	-45
July	163	78	-55
Aug	146	68	-53
Sept	172	78	-55
Oct.	349	119	-66

* near Guerneville **Hacienda bridge -

**Proposed in the “Russian River Biological Assessment” Sept. 29, 2004)

Myth: the dams can control the summer flow rates accurately.

Fact: the historical data shows that the year-to-year variation is at least 40 cfs in July and August. That means a low flow target of 68 cfs for August could drop as low as 28 cfs some years – matching the driest year on record since 1940 – because the dams cannot control the flows that well.

The large year-to-year variations experienced in the past suggests the low flow targets in the 2004 Biological Report are inherently unacceptable, unrealistic and probably unattainable.

Myth: the dams have helped reduce flows and flooding in the winter months

Fact: the dams have had no beneficial effect on winter flows or floods

For Nov., Jan. Feb. March, the post-dam year-to-year variations have actually been higher than in the pre-dam years.

Only April had less variation in flow rate (Std Deviation 2793 pre-dam vs 1403 post-dam) significantly lower flows (2818 cfs vs 1984 cfs)

_____ 10+-year floods: 1939, 1956, 1965, 1986, 1995 (1997almost).

	High pre-dam	High post-dam	Average pre-dam	Average post-dam	SD pre-dam	SD post-dam
Nov*	3171	6361	769	963	744	1481
Dec	17410	15050	5137	3302	5197	4119
Jan	16640	25219	6498	6067	5016	6831
Feb	26020	26939	6975	6788	6168	7511
Mar	10430	18280	4234	4536	2579	4181

SD = standard deviation

An Analysis of Monthly Mean Flow Rates of the Russian River for the Period 1940 – 2003

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Introduction

This study came about because I was looking for information about the “low flow” issue on the internet. In the process, I found information about the rationale behind the low flow proposal and the Biological Assessment Report itself (“Russian River Biological Assessment,” Entrix, Inc., Walnut Creek, CA, Sept. 29, 2004).

I also discovered a data base of Russian River monthly mean flow rates by the U.S. Geological Survey showing flows dating back to 1939, some twenty years before the dams at Lake Mendocino and Lake Sonoma.

So, I asked the question: **What were the average monthly mean flows before the dams were built compared to the flows after the dams?** To do this, I divided the previous ~60+ years of data into three periods:

Pre-dam period: from January 1940 to November 1958, when Lake Mendocino dam began operation (see: <http://ca.water.usgs.gov/archive/floods/flood98/11467000.html>).

Interim period: after Lake Mendocino (11/1958) but before Lake Sonoma (10/1983)

Post-dam period: after Lake Sonoma beginning October 1983 to 2003.

I’ve calculated the *average* mean flows and the standard deviations for May - October for each of the above periods using the data for three locations – near Hopland, near Healdsburg and near Guerneville.

Table 1 shows the averages along with the lowest and highest flows in each period and standard deviations. So, one can use this Table to compare the flows in the pre-dam period (before 11/1958) to the flows in the post-dam period (after 10/1983). The data is also shown graphically for May – October.

Table 2 shows a comparison of the pre-dam average flow rates to the proposed “low flow” rates in the Biological Assessment Report (2004) for May - October.

Table 3 shows the data and calculations for the wetter months, November - April.

My basic assumption is that the known flow rates for the River from 1940 - 1958 before the two major dams existed may be *more realistic*, natural and pertinent guides for the desirable flow rates than the imaginary “natural” pre-Columbus flow rates proposed in the Biological Assessment Report.

The comparison to the pre-dam flows suggests that the proposed “low flow” rates are not consistent with historical data, especially for the lower Russian River near Guerneville during May - October, and the proposed flow rates may be unrealistically low.

As far as I can determine, the Biological Assessment Report did not discuss or present the pre-dam and post-dam flow analyses that I have summarized here. I’m not sure why they didn’t, because this represents some of the actual, available data on flows during the period in which the salmon population has (presumably) declined. It also gives some perspective about how much the flow rates have varied over the 60+ year period.

A few caveats:

- a. I’ve tried to be objective in my Comments and I have not intentionally skewed the data.
- b. I am not an expert on water or fish. I have a Ph.D. in chemistry from Caltech (’73), so I have a good understanding of science and scientific methods. However, the calculations I present here (averages and standard deviations) could be done by a good high school student.
- d. The figures and data can be used so long as they do not quote this document and my comments out of context. The comments represent my opinion based on the data I have found and analyzed and do not imply a comprehensive study. I suggest that an independent, detailed analysis along the lines I have presented here could be useful.

Tables – Historical Water Flow Data

Table 1 – Mean Monthly Flows - May – October 1940-2003

		MONTHLY MEAN FLOWS				% Increase (decrease) to match pre-dam flows	
		Low	High	Average	Std. Dev		
		(cu. ft./sec)					
		Donald R. Kelsey January 2005					
HOPLAND							
May	pre-dam	1940-1958	106	714	373	138	
		1959-1983	77	820	313	173	
	post-dam	1984-2003	109	1013	324	234	+15%
June		1940-1958	60	382	204	82	
		1959-1983	125	354	228	55	
		1984-2003	104	490	213	99	(-4)
July		1940-1958	80	245	146	41	
		1959-1983	134	326	233	39	
		1984-2003	131	246	204	36	(-28)
August		1940-1958	105	252	160	42	
		1959-1983	125	369	245	46	
		1984-2003	125	261	204	36	(-22)
September		1940-1958	135	260	182	39	
		1959-1983	79	383	235	64	
		1984-2003	129	294	201	33	(-9)
October*		1940-1958	129	555	233	97	
		1959-1982	35	469	250	87	
		1983-2002	117	383	201	57	+16
Healdsburg							
May	pre-dam	1940-1958	210	1456	652	308	
		1959-1983	85	1638	516	356	
	post-dam	1984-2003	178	2080	584	533	+12%
June		1940-1958	100	492	284	116	
		1959-1983	81	518	247	101	
		1984-2003	103	972	282	215	+1
July		1940-1958	70	258	155	46	
		1959-1983	80	300	211	42	

	1984-2003	89	281	186	54	(-17)
August	1940-1958	83	252	146	45	
	1959-1983	85	316	221	48	
	1984-2003	93	239	177	39	(-18)
September	1940-1958	108	278	170	48	
	1959-1983	67	360	217	58	
	1984-2003	103	265	177	36	(-4)
October*	1940-1958	127	1605	313	331	
	1959-1982	34	1369	297	241	
	1983-2002	103	348	195	60	+61
Guerneville		Low	High	Average	Std. Dev	Relative to pre-dam flows
May pre-dam	1940-1958	257	2079	883	488	
	1959-1983	39	2789	659	582	
	post-dam 1984-2003	217	2796	741	753	+19%
June	1940-1958	127	609	341	143	
	1959-1983	23	681	257	145	
	1984-2003	112	1418	342	312	+0
July	1940-1958	70	285	163	56	
	1959-1983	32	270	176	46	
	1984-2003	105	350	200	69	(-18)
August	1940-1958	82	253	146	43	
	1959-1983	37	308	177	47	
	1984-2003	107	258	179	38	(-18)
September	1940-1958	112	256	172	45	
	1959-1983	36	345	193	63	
	1984-2003	118	273	181	43	(-4)
October*	1940-1958	128	1944	349	411	
	1959-1982	25	2515	345	471	
	1983-2002	113	429	211	78	+65

* Post-dam years adjusted for startup of Sonoma Lake dam in October 1983.

Russian River Flows Near Guerneville

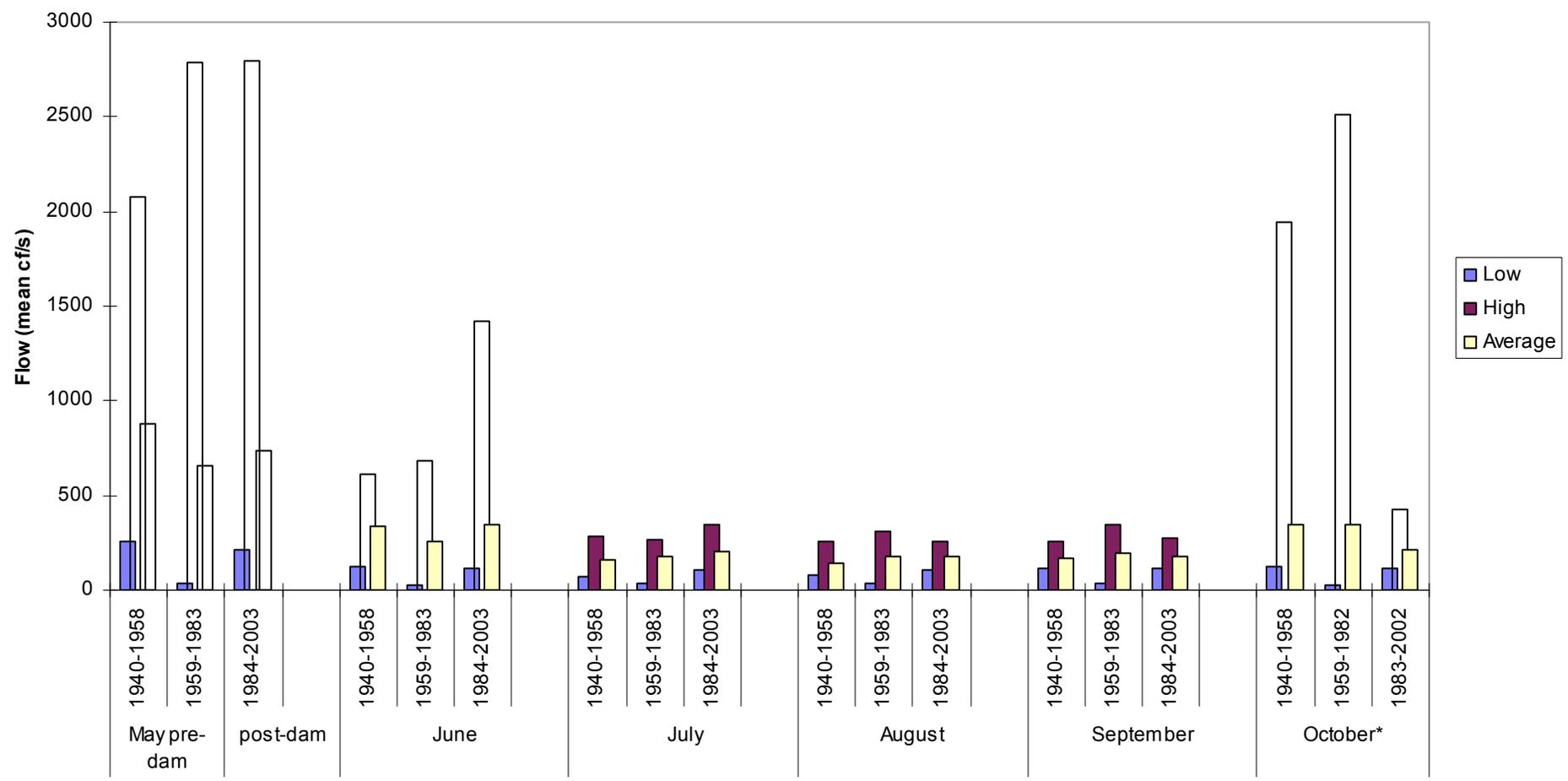


Table 2. Comparison of Pre-dam (1940 -1958) Monthly Average Mean Flows to the Proposed Mean Flows (cf/s) in the 2004 Report

	May	June	July	Aug	Sept	Oct
Hopland						
Pre-dam flow	373	204	146	160	182	233
Proposed flow*	312	184	152	150	137	124
% Difference	-16	-10	+4	-6	-25	-47
Healdsburg						
Pre-dam flow	652	284	155	146	170	313
Proposed flow*	501	181	119	128	126	141
% Difference	-23	-36	-23	-12	-26	-55
Guerneville**						
Pre-dam flow	883	341	163	146	172	349
Proposed flow*	672	188	78	68	78	119
% Difference	-24	-45	-55	-53	-55	-66

***Proposed flows** taken from Table 4-5 (p4-30) of the 2004 Report for the “All Water Supply Conditions” under “Current Demand Level”

** Proposed values are taken from the “Hacienda” location listed in Table 4-5, which is the closest to the Guerneville location for which there is USGS flow data. See Notes.

The “**% Difference**” is the change in flow that would be needed to meet the proposed “low flow” rates in the Biological Assessment Report (2004) compared to the historical average pre-dam flow rates. A negative sign is a **reduction** in flow rate from the pre-dam flow rates.

**Table 3. Monthly Mean Flow Data for “Wet” Months (November - April)
Near Guerneville**

		Low	High	Average	Std. Dev.	
November*	1940-1957	205	3171	769	744	pre-dam
	1958-1982	[^] 163	9425	1620	2148	
	1983-2002	179	6361	963	1481	post-dam
December	1940-1957	183	17410	5137	5197	pre-dam
	1958-1982	[^] 116	12850	4127	3903	
	1983-2002	184	15050	3302	4119	post-dam
January	1940-1958	368	16640	6498	5016	pre-dam
	1959-1983	[^] 127	25210	7826	6592	
	1984-2003	145	25219	6067	6831	post-dam
February	1940-1958	851	26020	6975	6168	pre-dam
	1959-1983	[^] 88	14760	6792	4430	
	1984-2003	297	26939	6788	7511	post-dam
March	1940-1958	842	10430	4234	2579	pre-dam
	1959-1983	[^] 201	23290	4759	4687	
	1984-2003	448	18280	4536	4181	post-dam
April	1940-1958	703	9898	2818	2793	pre-dam
	1959-1983	[^] 48	11700	2508	2950	
	1984-2003	231	3865	1984	1403	post-dam

*Mendocino dam started November 1958

[^] Nov 1976 to April 1977 was an exceptionally dry year. The next lowest flows for the post-Mendocino dam period were: 182 (Nov.), 166 (Dec.), 300 (Jan.), 502 (Feb.), 761 (March), 421 (April).

Comments on the Data

Year-to-year variations. One might assume that, particularly in the summer months, the dams would tend to even out the monthly flows from year-to-year. That is, water would be released in dry years and conserved in wet years, so the flows would not vary so much compared to the pre-dam period.. However, it appears that the **Mendocino and Sonoma dams have had relatively little effect on the year-to-year variations in the flows for most months.**

This is shown by the standard deviations (SD) in Table 1. For example, for July in the pre-dam period, the SD's are 41, 46, and 56 for Hopland, Healdsburg, and Guerneville, respectively. For the post-dam period, the July SD's are 36, 54, 69, respectively, which is not significantly better (smaller) and actually somewhat worse (higher). This is also true for August and September at all three locations.

For May and June, the SD's are generally significantly *higher* in the post-dam period than for the pre-dam period, i.e. the "control" of the flows have been generally worse after the dams were in place.

For October, the SD's are significantly *lower* after the dams were built. This is particularly true for Healdsburg (pre-dam 331 vs. post-dam 60) and Guerneville (pre-dam 411 vs. post-dam 78). The October average flows are also significantly lower in the post-dam period (211 cf/s compared to 349 pre-dam), suggesting a deliberate operation to restrict water.

Based on this SD data, it appears that the dams would have to be managed much more carefully than they have been operated in the past in order to meet and maintain any set of target flows, especially for June - September. **Especially under the "low flow" criteria, the large year-to-year variations that have been tolerated in the past for June - September would be unacceptably high compared to the target flows.**

Monthly flow rates. The data shows that for most months the average mean flows have not changed very much in the post-dam period (after Oct. 1983) compared to the pre-dam period (before November 1958). Column 7 in Table 1 shows the percent change in the post-dam average monthly flows that would be needed to match the pre-dam flows.

For **July and August, reducing the average mean flow in the post-dam period by about 20%** would match the historical July and August flows before the dams (1940-1958). The data is quite consistent, with the calculated reduction at Hopland just slightly more (22 - 28%) than for Healdsburg and Guerneville (both 17-18%). Flow reductions to the pre-dam levels would require an average flow of about 145-165 cf/s at all three locations for July-August which appears to be significantly higher flows than proposed in the 2004 Report, particularly for Guerneville (see below).

For **June and September**, the data suggests virtually **no change** would be needed in the average monthly flows to match the pre-dam flow rates. The calculated adjustment ranges from an increase of 1% to a decrease of 4%.

For **May and October**, the monthly flows would actually have to be **increased** to match the average mean flows in the pre-dam period. The increase for May would be about 15% (12-19%) for all three locations. The increase for October would have to be **over 60%** at Healdsburg and Guerneville to match the pre-dam flows. This large increase is consistent with the small standard deviations discussed above, indicating historical intentional restrictions in water flows for October in the post-dam period.

It certainly is **not true that the dams have caused significantly higher flows** (after October 1983) than the River experienced before the dams, particularly for May - October.

Extreme flows. The lowest flows for May - October for the post-dam period (after 1983) have been generally similar to the lowest flows before the dams (pre-1958). The highest flows for July - September have generally been similar for the pre- and post-dam periods. The highest flows have been even higher during the post-dam period for May and June but lower for October.

Comparison to proposed “low flow” rates. Table 2 shows that the proposed flows in the 2004 Report (Table 4-5, page 4-30) would be consistently lower than the average pre-dam flows (1940-1958) for May - October. The proposed reductions would be an unprecedented change in the river flows compared to the available historical data.

The difference between the proposed flow rates and the average pre-dam flows is smaller at Hopland but becomes larger as one goes downstream. For Guerneville, the proposed flows would appear to reduce the flows for May - October by about 50% or more compared to the historical average pre-dam flows. In other words, the historical pre-dam average flows appear to be about double (or more) the proposed “low flow” rates at Guerneville. (See also Notes above.)

These comparisons are based on the proposed flows for the “All Water Supply Conditions” for the “Current Demand Level” in Table 4-5. If the “Buildout Demand Level” proposals are used, then the differences between the proposed flows and the average pre-dam flows are even larger, particularly at Guerneville.

“Wet” months. Table 3 for November - April shows only the results for Guerneville. I didn't calculate averages for Hopland and Healdsburg for these months, but there is USGS data available (see attached) if someone wanted to compare the data for those locations, too.

The standard deviations for these months show that there was actually *more year-to-year variation* in the post-dam period for November, January, February, and March than for the pre-dam periods. November and March are particularly noticeable, being almost twice as much variation for post-dam compared to pre-dam.

April is the only month in this set showing significantly less year-to-year variation (SD 2793 for pre-dam dropping to SD 1403 for post-dam). And April shows significantly lower average mean flows after the dams (1984 cf/s) than before the dams (2818 cf/s). The lower flows and lower variation (SD's) for April are similar to the trend for October discussed above, which suggests that there has been intentional restriction and control of the water flows in April, as well.

Except for April and (to a lesser degree) December, the actual average flows for these months is not much different for the post-dam periods compared to the pre-dam periods. This suggests that the dams do not have much influence over the flows (at Guerneville). I don't know if this is due to how the dams are operated or because the flows are too large for the dams to have much effect.

The lowest flows in the post-dam period have generally been significantly lower than during the pre-dam period, particularly for January - April. This might be due to particularly dry years in the post-dam period, but also illustrates the apparent inability (or non use) of the dams to mollify extreme periods.

The highest flows in the post-dam period have generally been similar to or actually higher than the flows in the pre-dam period, with the exception of April. Again, this suggests relatively little influence (or use) of the dams to control water flows.

Summary of comments:

! Comparison of the average mean flows for the post-dam to the pre-dam periods suggests that a reduction of only about 20% in the flow rates for July and August would be needed to match the pre-dam average flow rates. The data indicates that no reductions would be needed for June and September and *increases* in flow rates would be required for May and October to match pre-dam rates. *The data does not support the assumption that the Mendocino and Sonoma dams have resulted in significantly higher flows during the summer months since October 1983.*

! The pre-dam average flow rates for May through October at Hopland, Healdsburg and Guerneville appear to be significantly higher than the proposed "natural" low flow rates shown in Table 4-5 of the 2004 Report. This is particularly true for the flow rates at Guerneville, where *the pre-dam average flows for May - October are about double the proposed (2004) "low flow" rates.*

! *The dams appear to have been largely ineffective (or not used) for managing the flow rates for most months, even in the summer months. The exceptions are April and October, where the post-dam average mean flows and year-to-year variations are significantly lower for these two months during the post-dam period compared to the pre-dam period, suggesting that water has been deliberately restricted in those months. Especially for June – September, the dams would*

have to be managed much more carefully than they have in the past in order to meet any proposed target flow rates, whether low flow or otherwise.

Comments on the Biological Assessment Report

I've read a large portion of the report ("Russian River Biological Assessment," by Entrix, Inc., September 29, 2004) although I can't claim to have read every word. I also do not claim to be an expert on water, fish, geology or environmental subjects. My training is in chemistry (Ph.D., California Institute of Technology, 1973), so I have a good understanding of scientific methods and statistics.

My impression of the 2004 Report is that it may contain some valuable suggestions regarding managing the Russian River watershed. However, I also think some of the assumptions and proposals in the 2004 Report have little scientific validity or tangible support by actual data. And there seem to be some basic questions that are not addressed by the report.

Some of my comments (below) might arise from having missed some fact in the Report or not having enough information. So, I would appreciate any additional information or correction that would clarify these issues.

A. The "pre-Columbus" assumption. The 2004 Report appears to suggest that the salmon would be better off if the river were returned to the "natural" flow rates and cycles that existed before civilization arrived, i.e. before the year 1500 or at least before about 1850. This is about the most unscientific assumption that I've ever encountered, for several reasons:

1. We don't know what the "natural" flow rates really were. The 2004 Report suggests a crude model, which seems to have no scientific basis that I could determine. And the model appears to have not been checked against any real data (or it may be impossible to check the model). A model cannot be valid unless there is some way to verify that the model works. Otherwise, it is just a guess.

2. The river channel has changed significantly since the 1860's due to natural and human-induced changes, particularly gravel mining, such as shown in the PWA white paper (<http://www.pwa-ltd.com/Documents/ProjSheets/Russian%20River%20PS.pdf>). It is certain that the river channel would have been quite different 500 years ago, even without any influence from humans.

So, the "natural" flow for the pre-Columbus river basin, even if those flows could be determined, would be completely inappropriate for the current configuration of the river because it has changed so much. And it would be very difficult or impossible to estimate accurately the "natural" flow rate for the river watershed for the configuration and topography as it exists now.

The closest data to the “natural” flow rates for the current configuration may be the pre-dam flow data from 1940-1958 that I have presented here.

3. We don’t know what the salmon population was in the pre-Columbus environment or even in the 1800’s. The populations might have been higher – or they might actually have been lower – than they are now. There is no data. The assumption seems to be that the “natural” flows would support more fish, but there is no data or evidence that I could see that supports that assumption.

B. The salmon population. The 2004 Report seems to say that the salmon populations have declined but, at the same time, it also says very clearly that there is very little data. For example:

“the present depressed condition [of the salmon population] appears to be the result of several long-standing, human-induced factors (e.g., habitat degradation, timber harvest, water diversions, and artificial propagation)” [page 2-43], but

“Data describing the historic abundance of coho salmon, steelhead, and Chinook salmon in the Russian River watershed are scarce. Investigations into historic estimates of abundance reveal that there have not been any accurate fish counts or population estimates conducted for coho salmon, steelhead, or Chinook salmon in the Russian River basin.” [p 2-44] and

“There are no recent population estimates for coho salmon or steelhead in the Russian River.” [p 2-44]

Specifically, for the major salmon species, the 2004 Report says:

Coho: “There have been no recent efforts to quantify coho salmon populations in the Russian River, and a reliable estimate of coho salmon abundance within the basin has never been developed.” [p 2-51]

Steelhead: “There is general agreement that the steelhead population has declined in the last 30 years (CDFG 1984, 1991), but limited quantitative data are available to support this assumption.” [p 2-51]

Chinook: “It is uncertain whether or not naturally-spawning Chinook salmon were historically present in the Russian River (NMFS 1999c). There is little information pertaining to Chinook salmon populations prior to the completion of the PVP project in 1922.” [p 2-52]

So, it appears that the effort to increase the salmon population in the Russian River basin is based only on sketchy evidence about what the population was or should be. And there’s some doubt that Chinook salmon are even native to the Russian River. There is no indication in the 2004 Report (that I could find) as to how much the salmon have declined nor how much increase is desirable.

There doesn't appear to be any goal other than "improving" the salmon population, even though the acceptable or historical populations are unknown. And the realistic salmon populations that the River could support on a sustained basis, with or without any changes in water flows or other variations, appear to be completely unknown.

C. Artificial enhancement. Not only is the "natural" or historical population of salmon in the Russian River unknown, humans have attempted to artificially boost the salmon populations even back in the 1800's. It seems likely that such efforts were not undertaken to save or preserve the salmon populations but to artificially increase the commercial attractiveness of the region. So, the "baseline" salmon populations have likely been skewed. For example, the 2004 Report states that "Chinook salmon population estimates beginning in the 1960s suggest that in the past, documented returns might have been associated with periods of sustained hatchery stocking." [p 2-52]

The 2004 Report lists the artificial boosting of the salmon population by both hatchery fish and "outplantings":

Coho: 2.3 million hatchery coho during 1937 - 1998 (p 3-89 and Table 3-17) PLUS 1.8 million outplants of "rescued" coho during 1940-1980 not included in Table 3-17 (p 3-90); Total 4.1 million

Steelhead: 33 million hatchery steelhead during 1870 - 1998 (p 3-94 and Table 3-21) PLUS 1.8 million outplants during 1939-1971 not included in Table 3-21 (p 3-95); Total 34.8 million

Chinook: 8.7 million hatchery chinook during 1881 - 1998 (p 3-100 and Table 3-25)

So, one has to ask the question: If the past salmon population of the river was boosted artificially by human intervention, then how can one determine whether or if the natural, sustainable fish population has actually declined? In other words, the "decline" in salmon populations believed to have occurred may be skewed by the past, artificially boosted populations from hatcheries and outplanting.

And even if it were true that the salmon populations, particularly steelhead, have declined over the past 30 years or so, which the 2004 Report seems to accept, then it is also possible that at least part of that decline may be only imaginary because of stocking activities before 1974 and even up to 1998.

Another way to state this: If the River had not been artificially stocked in the past, particularly for the period before 1959, what would the salmon population have looked like then and how would that population compare to the 30 years from 1974 - 2004? Unfortunately, the answer is completely unknown and unlikely to be determined, as far as I can determine.

A final point:

It seems likely to me that some corrective actions and improvements in the management of the River might be needed to help preserve reasonable, sustainable levels of salmon populations. However, the flow restrictions proposed in the 2004 Report seem to have relatively little scientific or historical basis that I can determine so far. There are probably more logical improvements and milder changes that should be tried first before making such drastic, artificial, man-made alterations to the river's ecology.

Notes on Tables 1, 2 and 3

1. *Data Source.* The data is based on the U.S. Geological Survey monthly mean flow (cubic feet/second) from 1940 to 2003 found at <http://nwis.waterdata.usgs.gov/nwis/>, specifically at

http://nwis.waterdata.usgs.gov/nwis/monthly?station_nm=Russian&search_station_nm_match_type=beginning&state_cd=06&obs_date_range=1&discharge_begin_date=01/01/1900&discharge_end_date=12/29/2004&sort_key=station_nm&group_key=county_cd&sitefile_output_format=html_table&column_name=agency_cd&column_name=site_no&column_name=station_nm&column_name=lat_va&column_name=long_va&column_name=state_cd&column_name=county_cd&column_name=alt_va&column_name=huc_cd&format=html_table&date_format=YYYY-MM-DD&rdb_compression=file&list_of_search_criteria=state_cd%2Cstation_nm%2Cobs_date_range

2. *Time periods.* The “pre-dam” period covers the years before Lake Mendocino dam (beginning November 1958) and the “post-dam” period covers the years after Lake Sonoma (beginning October 1983). I’ve also included the intermediate period after Mendocino but before Sonoma. For October – December, the years included in the average monthly mean flow calculation have been adjusted to take into account the startup of the dams.

3. *Calculations.* My Tables 1-3 show the lowest and highest mean flows from the USGS data for the months and time periods covered, the calculated average mean flows for each month, and the calculated standard deviations (variation) from the average.

4. *Exceptionally dry year.* The lowest flow for intermediate period after the Mendocino dam but before the Sonoma dam (1959-1983) reflects the exceptionally dry year from about November 1976 to November 1977. If this year is ignored, then the lowest mean flows near Guerneville during these years are more like the lowest flows for the pre-dam and post-dam periods: 151 (May), 114 (June), 122 (July), 144 (August), 140 (Sept.), 140 (Oct.). The average mean flows for this period are obviously slightly higher if this exceptional dry period is not included in the average, but the resulting increase in the average monthly mean flows is small.

The footnote for Table 3 also shows the next lowest flows for the winter months, too, if the 1976-77 period is ignored.

5. *Normal and dry years.* I have not tried to divide the data into “normal” and “dry” years because that would involve some criteria for determining which years were “dry.” If this distinction were made, the average mean monthly flows for both pre-dam and post-dam periods obviously would be higher for the normal years and lower for the dry years.

It might be worthwhile to have a water expert and/or statistician determine which years to count as “dry” and recalculate the monthly average mean flows for both the “normal” and “dry” conditions. However, this will not likely change my conclusion that the pre-dam average flow rates appear to be significantly higher than the “low flow” proposed flow rates, particularly for Guerneville.

6. *Comparison to “low flow” proposed rates.* Note that the proposed “low flow” rates in Table 4-5 of the 2004 Report shows the values for the Hacienda Bridge but the historical USGS flow data was taken near Guerneville. However, it appears that the Hacienda Bridge is the closest point listed to Guerneville and the flow rates at both locations should be reasonably comparable. If anything, the flows at Guerneville would likely be even lower than at Hacienda, especially for May - October. So, the differences between the proposed flows at Hacienda and the pre-dam average flows at Guerneville are probably on the conservative side, i.e. the actual difference for Guerneville could be even larger than I’ve listed in Table 2.

7. *Errors.* I hope there are no errors, but I can’t rule out that a data point or two might have been entered incorrectly in my calculations. It is unlikely this could change any of my comments or conclusions (and notice that the results for the three locations, Hopland, Healdsburg, and Guerneville, are very consistent). However, it would be useful for someone to check the calculated averages and standard deviations.

The following letter to be mailed to Ms Martini-Lamb, SCWA in **opposition** to "Low Flow".

Jessica Martini-Lamb
SCWA/ Fishflow@scwa.ca.gov
404 Aviation Blvd.
Santa Rosa, CA 95403

Dear Ms Martini-Lamb: Re: Comment Submission—Fish Flow Project

I'm responding with comment to the Sonoma County Water Agency regarding "low flow" during the summer months, specifically the lower portion of the Russian River. A public seminar, a requirement by law in order for the SCWA to petition from the State Water Board the permanently lowering of water flows from 125 cf to 70 cf during the summer months, was just conducted in Monte Rio on November 5th. There were a lot of colorful hand outs, maps, and charts at various stations with each station staffed by water agency employees, all of whom suggested filling out "comment cards" and returning them by the November 15th deadline. The project, once referred to as "Low Flow", has now been renamed to "Fish Habitat Flows and Water Rights Project" or "Fish Flow" for short. I was told it was easier for people to remember, but I assume it was changed to shed a more positive spin within the general public. In a very simplistic explanation, the reason for the "lower flow" is to save the salmon, or at least that's what it's being billed as but at what cost to others?

It was very obvious that this past summer's water flow was much better than last year's due to the wet winter and late spring. From what I've read, the average flow this past summer at the Hacienda Bridge was 263 cfs as compared to 70 cfs in the summer of 2009 when algae blooms were at the highest levels I've ever observed. I've lived along the Russian River in Monte Rio for over 60 years and have witnessed many changes in the River. In the 1950's and 1960's the River at Monte Rio's public beach was at least 12 feet deep in the middle of the channel between the beach and the Highland Dell Hotel. There were two docks that you could dive from and a rope strung from one dock to the other to warn of deep waters. Now, that same public beach is called the "Monte Rio Kiddy Beach" because of its shallowness—no docks, no ropes, but lots of moss and algae! People can be seen ankle, knee or waist deep in places that once was over one's head! This change is mainly due in part to the buildup of silt from various negative conditions going on up stream, (i.e. gravel mining, bottom release from dams, agriculture, etc.). Certainly the River wasn't completely healthy back in the 50's. It was muddy, smelled of dead eels, and void of any wildlife as compared to that of today. Mistakes in the past have been made. One that I recently learned of was when the Department of Fish and Game began a "trash" fish eradication program in 1954 from the East Fork above Ukiah down to Healdsburg. Rotenone poison was sprayed and suffocated the fish by damaging their gills. According to an article dated November 12, 1956 in the Ukiah Daily Journal this was an experiment done to kill off all the undesirable non-game fish but nearly all the fish in the River were killed! With the completion of the Coyote Dam in 1959, (and by various accounts the beginning of the end of Salmon in the Russian River) the State asked Sonoma and Mendocino counties to specify what water flows they wanted and according to the Ukiah Daily Journals article, "Water Releases From Coyote Dam for Fish Asked by State", the answer, "**Guerneville needed 125 cfs to maintain its fishery.**"

Came the late 1970's, 80's and 90's when osprey, ducks, turtles, otters, among others seem to have proliferated to the enjoyment of many. But, in the past few years, when kayaking from Guerneville to Monte Rio one is forced to get out and walk through blooms of algae, thick moss and an invasive plant called Ludwigia in various places because the River has become so shallow.

So, my questions:

1. **How will the "low flow" affect the temperature of the River?**

2. Will “low flow” contribute to more algae blooms?
3. Will the River be in danger of drying up due to the buildup of sediment and “Low Flow”?
4. What about the other aquatic animals and wildlife upstream from the Estuary, what affects will “low flow” have on them?
5. The Russian River has had a rich history of tourism during the summer months. What will be the affect on businesses and water recreation use if and when beaches are closed because of algae blooms and high bacteria counts?

The Biological Opinion does not address these questions nor does the SCWA which has remained focused on “low flows” benefitting the salmon. While SCWA continues to meet the needs of its water contractors, what environmental considerations has the Russian River as a whole been given in return? There is no simple answer, water is a valuable commodity and will be getting even more valuable in the future—what will our priorities be? Until these questions can be answered I am **STRONGLY OPPOSED** to the “low flow” objective of the Sonoma County Water Agency. Mistakes have been made in the past, let’s learn from them and move in a more responsible manner towards saving our most valuable resource in Sonoma County, the **RUSSIAN RIVER!**

Sincerely yours,

Doreen Atkinson
Monte Rio, CA

Connie Barton

From: Eric Sunswheat [erit@pacific.net]
Sent: Sunday, October 03, 2010 1:29 PM
To: NCWaterNet; Fish Flow
Subject: Lake Mendocino Russian River Water Rights/Flows public review CEQA NOP EIR modification State Water Board Decision 1610

The Sonoma County Water Agency on Sunday, October 3, 2010 placed a deceptively vague non-specific Public Notice in the Ukiah Daily Journal, which may not pass legal muster.

In short order, I am requesting SCWA staff to re-publish the Notice of the NOP for an EIR, in the UDJ with clear information that identifies the Project Area.

If the Agency does not cooperate, be prepared for a legal judgment that proper notice has not been served, perhaps invalidating the NOP proposed draft EIR time line and adequacy.

Also, I request to extend the deadline for public review of the Notice of Preparation, to reflect the delay in publishing an accurate disclosure notice in a Mendocino County Russian River Basin, newspaper of record of general circulation.

Eric Sunswheat, CA Health Security Catalyst
Potter Valley, CA 95469

THE UKIAH DAILY JOURNAL SUNDAY, OCT. 3, 2010 -B-5

777-10 10-3/10
NOTICE OF FISH HABITAT FLOWS AND WATER RIGHTS PROJECT NOTICE OF PREPARATION OF ENVIRONMENTAL IMPACT REPORT
The Sonoma County Water Agency (Water agency) has issued a Notice of Preparation of Environmental Impact Report for the Fish Habitat Flows and Water Rights Project. The document is available for public review at the agency's administrative office (404 Aviation Blvd, Santa Rosa.) The review period for this document begins September 29, 2010, and ends at 5 p.m. on November 15, 2010. Address written comments to Sonoma County Water Agency. ATTN: Jessica Martini-Lamb, 404 Aviation Blvd., Santa Rosa, CA 95403. Comments may be submitted electronically at the agency's website: www.sonomacountywater.org/r rifr Contact: Jessica Martini-Lam at (707) 547-1903 or Erica Phelps at (707) 547-1934 for additional information.

in part:

Operating water supply releases from Lake Mendocino to preserve or increase the pool of cold water available in Lake Mendocino to support the fall Chinook salmon migration run may aid in their conservation and recovery. Although the proposed lower minimum instream flow requirements in NMFS' Russian River Biological Opinion will help to achieve this goal, the Water Agency will file another petition with the SWRCB, requesting that the modifications to minimum instream flow requirements be extended beyond the months required by NMFS' Russian River Biological Opinion for the upper Russian River. These additional months could include those earlier or later in the year, or could be extended to be in effect year-round.

- ***Hydrologic Index***

The Water Agency will file another petition seeking to change the methodology used to establish the water-year type classifications that determine minimum instream flow requirements for the Russian River, to reflect actual conditions within the Russian River watershed rather than conditions in the Eel River watershed. The proposed hydrologic index will be developed based on measurements and dates of storage in, or inflows into, Lake Mendocino.

Three scoping meetings have been scheduled to obtain public comment on the proposed project and subjects that should be evaluated in the draft EIR:

- **Thursday, November 4th**, 6:00 p.m. – 9:00 p.m., Monte Rio Community Center, 20488 Highway 116, Monte Rio
- **Monday, November 8th**, 6:00 p.m. – 8:30 p.m., Windsor Town Hall, 9291 Old Redwood Hwy, Windsor
- **Wednesday, November 10th**, 6:00 p.m. – 9:00 p.m., The Alex Rorabaugh Center, 1640 South State Street, Ukiah

The 45-day NOP public review period will close at 5:00 p.m. on November 15, 2010.

Connie Barton

From: Kimberly Burr [kimlarry2@comcast.net]
Sent: Thursday, November 11, 2010 4:30 PM
To: Fish Flow
Subject: please confirm receipt. COMMENTS

November 11, 2010

Sonoma County Water Agency
ATTN: Jessica Martini-Lamb
404 Administration Blvd.
Santa Rosa, CA 95403
fishflow@scwa.ca.gov

RE: Scoping Fish Habitat Flows and Water Rights Project

Dear Ms. Martini-Lamb:

Please consider these comments as part of the official administrative record in the Fish Habitat Flows and Water Rights Project environmental review process.

Agriculture

The environmental review of the project must fully disclose, utilizing existing data and science, the impacts of agriculture on management of river flows. Agriculture is a major activity that affects and at times drives, the Sonoma County Water Agency's (SCWA) ability, timing, and methods of producing and furnishing surface and groundwater. Agriculture impacts water supply and critical fish habitat that SCWA is bound to protect.

Conclusions with respect to the necessity of flow reductions, and when and how much stored water must be released from Warm Springs or Coyote Dams, must be informed by an effort to quantify authorized and unauthorized diversions and storage in the watershed. The timing of agriculture water use that implicates flows in the river, and the source of the rivers flows including the tributaries, is also an important variable in managing flows for fish and must be studied. As I am sure SCWA appreciates, an environmental review that does not take into account these impacts and how they inter-relate with SCWA activities will be incomplete.

Low Impact Alternatives to Help Salmon

A detailed evaluation of the benefits of investing the same amount of money, currently estimated to implement the Fish Flow and Habitat Program, into a proactive low impact plan. Such an evaluation should look at incentives to landowners to return flows, conserve water, reduce waste, shift to dry farming, etc. in order that river flows are supplanted in a decentralized (not large releases from dams) and more natural process through groundwater, springs, and less demand during low flow periods is indicated.

A freshwater lagoon is highly desirable and avoiding breaching activities by exploring all potentially reasonable and feasible alternatives is required and the least damaging alternatives must be chosen. An evaluation of the impacts and costs of identifying and raising low lying structures near the Jenner estuary must undergo a detailed evaluation.

Thank you for your kind consideration of these points.

Kimberly Burr
POB 1246
Forestville, CA 95436

Connie Barton

From: Kimberly Burr [kimlarry2@comcast.net]
Sent: Thursday, November 11, 2010 4:48 PM
To: Fish Flow
Subject: please substitute revised comments

Dear Jessica: Please consider these comments my official comments instead of those submitted at 4:29. Thank you. Kimberly

November 11, 2010

Sonoma County Water Agency
ATTN: Jessica Martini-Lamb
404 Administration Blvd.
Santa Rosa, CA 95403
fishflow@scwa.ca.gov

RE: Scoping Fish Habitat Flows and Water Rights Project

Dear Ms. Martini-Lamb:

Please consider these comments as part of the official administrative record in the Fish Habitat Flows and Water Rights Project environmental review process.

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Conclusions with respect to the necessity of flow reductions, and when and how much stored water must be released from Warm Springs or Coyote Dams, must be informed by an effort to quantify authorized and unauthorized diversions and storage in the watershed. The timing of agriculture water use that implicates flows in the river, and the source of the rivers flows including the tributaries, is also an important variable in managing flows for fish and must be studied. As I am sure SCWA appreciates, an environmental review that does not take into account these impacts and how they inter-relate with SCWA activities will be incomplete.

Low Impact Alternatives to Help Salmon

A detailed evaluation of the benefits of investing the same amount of money, currently estimated to implement the Fish Flow and Habitat Program, into a proactive low impact plan is reasonable and will provide valuable and necessary information. Such an evaluation should look at incentives to landowners to return flows, conserve water, reduce waste, shift to dry farming, etc. in order that river flows are supplanted in a decentralized (not large releases from dams) and more natural process through higher groundwater and functioning springs in combination with less demand during low flow periods.

A freshwater lagoon is highly desirable and avoiding breaching activities by exploring all potentially reasonable and feasible alternatives is required and the least damaging alternatives must be chosen. A detailed evaluation of the impacts and costs of identifying and raising low lying structures near the Jenner estuary is indicated.

Thank you for your kind consideration of these points.

Kimberly Burr
POB 1246
Forestville, CA 95436

Connie Barton

From: Larry Hanson [larryjhanson@comcast.net]
Sent: Sunday, November 14, 2010 10:40 PM
To: Fish Flow
Subject: RE: Scoping Fish Habitat Flows and Water Rights Project
Attachments: CmmntltrFshHbttFlwsWtrRghtsPrjct.rtf; ATT00001.txt

Dear Ms. Martini-Lamb:

Please consider these comments as part of the official administrative record in the Fish Habitat Flows and Water Rights Project environmental review process.

November 14, 2010

Sonoma County Water Agency

ATTN: Jessica Martini-Lamb

404 Administration Blvd.

Santa Rosa, CA 95403

fishflow@scwa.ca.gov

Comment letter to Fish Habitat Flows and Water Rights Project

In this comment letter I am focused on the lower river and the estuary aspect of the project. The upper river section in the project may have different problems that are dealt with in comments by others.

I strongly object to the change of flows in the lower river to 70 cfs. Specifically, how did you arrive at the figure, 70 cfs, in the lower river?

Isn't it true that the few low-lying properties flooding are driving the lower river reduction of flows?

What I am suggesting here is that whereas high flows in the upper river may be a rationale for lowering flows, the rationale in the lower river lacks credibility. It appears it is not the fish you are protecting but a few low-lying properties. If it were not for the properties, the need for channeling would not be there and flows would be more or less the same as the ones listed in your project for the upper river. Is this not true?

If the few properties in question were raised or bought out, the necessity of having to mechanically open a channel would not be necessary. Instead, the river mouth would be subject to openings and closings that would provide for natural estuary development. Don't you think this is a worthier goal?

Rather, your plan indicates you would continue dredging (although a modified version) utilizing a permit for a "take" on sensitive species in this delicate ecosystem. Does this comprise the best science?

Does it make the best economic sense? Has an economic analysis been done on dealing with the properties in question verses money spent and will be spent on studies, data gathering, staff time, etc. to get around this?

If those properties in question did not exist, what would be the appropriate flows to maintain a salmonid rearing estuary? This is rhetorical. The appropriate flows to maintain the health of the river AND a productive estuary is unknown because a few properties have prevented the natural river mouth processes from developing. Salmonids developed and evolved over millions of years utilizing the natural processes of river mouths. With no dredging, these processes would return to the most optimum for supporting all the natural wildlife there. Do you agree?

I am not saying that the present flows could not be adjusted once natural processes of the river mouth were observed. What I am suggesting is that you do not know under present circumstances what the flows ought to be because of the artificial manipulation of the river mouth. The river wildlife not in the

estuary, the river economy, the recreationists of all types, the residents, the river itself should not be held hostage to the impacts of a few properties. This is reasonable, is it not?

I was part of a team that went out regularly to photograph and inspect the river during a low flow trial period. I observed large algae blooms and many areas of thick and deep ludwegia in many sections of the river I kayaked and walked. This appeared to be typical of other observations that covered all the sections of the lower river. Yet these infestations to the river were not scientifically evaluated in your study or a part of your project's determinations. Why would you not want to consider these important considerations in your report?

The aforementioned observations only indicates what is observable, not the scope of potential adverse impacts (lower temperature, dissolved oxygen, etc.) that may exist with the proposed lower flows. None of these parameters are considered in your report. Why not?

More importantly, how can you determine a flow level for a section of river based only on an end point and not the whole section? This gets back to my original question of how it was determined that a low flow of 70 cfs could be determined and justified when apparently only an endpoint was considered

Thank you. I await your formal responses to all my questions. Please add me to your contact lists for further notifications and responses. Thanks again.

Sincerely,

Larry Hanson

Connie Barton

From: Laura Wilson ~ Johnsons Beach [jbeach@sonic.net]
Sent: Sunday, November 07, 2010 5:11 PM
To: Fish Flow
Cc: rrwpc@comcast.net; ecarrillo@sonoma-county.org; innkeepers@ferngrove.com
Subject: Low Flow Comment
Attachments: swca letter 1110.pdf

SWCA,

Please find letter attached.

Thanks,
Laura Wilson

Johnson's Beach & Resort, Inc.
PO Box 386
16241 First Street
Guerneville, CA 95446
707 869-2022

Johnson's Beach & Resort, Inc.
16241 First Street
PO Box 386
Guerneville, CA 95446

Sonoma County Water Agency
Jessica Martini-Lamb
404 Aviation Blvd.
Santa Rosa, CA 95403

November 7, 2010

Dear Jessica,

This letter is to express continued dismay that the Sonoma County Water Agency is going forward with the petition to reduce the flows in the lower Russian River to 70 CFS. Last year the reasoning used to release less water was due to lack of rain and extremely low water levels in Lake Mendocino and Lake Sonoma. This year the rainfall has been normal and the reservoirs were filled to capacity. It was not a dry year and the releases were high.

Our family has owned and operated Johnson's Beach in Guerneville since 1967. Last summer when the flow was cut to 70-80 CFS, there were fourteen positive bacteriological tests for enterococcus at our property from June 15 to September 30. Before 2009 there had been only one positive bacteria sample at Johnson's Beach during the ten year period that the river has been undergoing monitoring. It was for e coli and it took place during a documented sewage spill upstream from the Santa Rosa area in 2002. In 2009 there were many positive samples up and down the Russian River throughout the summer season. The SCWA and Sonoma County Environmental Health indicated that they did not know the cause.

When the results are positive for a test sample, the property is posted with a no swim advisory. In fact there are many signs posted on one's property. This is not good if your business is based on swimming and boating! We did not hold swimming lessons at our beach in 2009 or 2010, a forty year plus tradition. The Vineman triathlon organization was concerned about their two swim stages held at our beach for the past 20 years as well as the Russian River Jazz and Blues Festival with a 34 year history.

This summer I am pleased to say that there were no positive bacteriological tests in the lower Russian River. The flow at Hacienda was an average of 150 -250 CFS during the summer season. When the summer dam was removed at Johnson's Beach, there was no algae on the river bottom unlike that past several years. When there is normal to high rainfall, it appears that it is beneficial to keep the summer flows up to 125+. So far over 2000 fish have been counted at Wohler Dam this fall.

More study about the effects of low CFS is necessary. Haven't toxins studies of been mandated? Wildlife, recreation and domestic wells could be jeopardized by the effects of lower flows due to increases in temperature, nutrients, pathogens and toxins. Many mistakes have been made in the past by various agencies with good intentions. The economy, well being and future of the the Russian River community is at stake.

There are many other effects that lower flows might have on a river or stream but the first concern should be one important factor: WATER QUALITY.

Sincerely,

Laura Harris Wilson

jbeach@sonic.net

707 869-2022

Connie Barton

From: Lisa Bourgea [kaptaindaisy@yahoo.com]
Sent: Tuesday, November 09, 2010 5:28 PM
To: Fish Flow

11/09/2010

SCWA,

These are questions and concern we have about the low/flow, fishflow project.

1. Why are illegal water diversions (agriculture), gravel mining, and destruction of riparian corridors, waste water discharge/pollutants from all municipalities being addressed?
2. Why do the susceptible structures at Jenner dictate flow related issues for the health of the river?
3. Why can't the flow at Dry Creek be lowered to the 40cfs and the Russian River flow be maintained at 125 cfs flow? It seems that the Dry Creek flow is the most detrimental fish spawning if it is not maintained at a lower flow.
4. Why are we not attending to all the recommendations in the B.O. that pertain to water quality and preservation of habitat and not just concentrating on flow.
5. We want to follow the money, does the scwa benefit indirectly with the flow issue by being able to store more water and have it available to fulfill water contracts and create new ones to enable further development of the Santa Rosa plain?
6. Do the summer dams reduce flow/velocity? We see varying populations of juvenile fish every year but they all seem significant at Drake's beach on the lower river as soon as the dam at Johnson's beach in Guerneville is in place.
7. Why can't the structures at Jenner be addressed either by raising them or let them flood and keep the flows with the exception of Dry Creek at decision 1610 levels. Let the estuary rise above sea level and breach on its own.

Connie Barton

From: doreen atkinson [datkinson2000@yahoo.com]
Sent: Monday, November 15, 2010 12:58 PM
To: Fish Flow
Subject: Fw: Re: Comment Submission--Fish Flow Project/Nov.15th Deadline

Attn: Jessica Martini-Lamb:

I'm forwarding this letter on from Nancy Leras of Monte Rio.

--- On Sun, 11/14/10, thegreekswife@aol.com <thegreekswife@aol.com> wrote:

> From: thegreekswife@aol.com <thegreekswife@aol.com>
> Subject: Re: Comment Submission--Fish Flow Project/Nov.15th Deadline
> To: datkinson2000@yahoo.com
> Date: Sunday, November 14, 2010, 11:28 AM
> >
> Re: Comment Submission-Fish Flow Project
>
>
> Ms. Martini-Lamb:
>
>
> I went to the Monte Rio open house 11/5.
>
>
> Certainly the new catcher name "Fish Habitat Flows and Water Rights
> Project" is a different "spin" on "Low Flow", which we in the lower
> Russian River objected to.
>
>
> The lower Russian River certainly had enough water this year 263cfs @
> Hacienda Bridge; but in 09 only 70cfs.
> Unusually late heavy spring rains really helped; but that is not the
> normal weather.
>
>
> This would permanently lower flows from 125cfs to 70cfs in summer
> months. Permanently is not something I would approve of; but I would
> listen to reason and might approve of something based on rainfall.
>
>
> I have lived here since 1942 and we can really only see it as a river
> when it floods; otherwise it looks like a small stream/creek.
>
>
> Remember when the Dept. of Fish and Game made a slight mistake, in the
> early 50's, using Rotenone poison.
> Nearly all the fish were killed.
>
>
> We were told before that it took 125cfs to maintain the fishery.
>
>
> Seems "low flow" would mean higher water temperatures on the river and
> that allow more algae blooms and even possible higher bacteria counts

Connie Barton

From: Pamala Dorsey [pamala9@yahoo.com]
Sent: Sunday, October 03, 2010 2:29 PM
To: mendocommunity-BB@yahoogroups.com; Fish Flow; erit@pacific.net
Subject: Re: [mendocommunity-BB] Lake Mendocino Russian River Water Rights/Flows public review CEQA NOP EIR modification State Water Board Decision 1610

Thank you Eric!

Joy to you! Pamala

--- On Sun, 10/3/10, Eric Sunswheat <eric.sunswheat@gmail.com> wrote:

From: Eric Sunswheat <eric.sunswheat@gmail.com>
Subject: [mendocommunity-BB] Lake Mendocino Russian River Water Rights/Flows public review CEQA NOP EIR modification State Water Board Decision 1610
To: mendocommunity-BB@yahoogroups.com, "Fish Habitat Flows and Water Rights Project" <fishflow@scwa.ca.gov>
Date: Sunday, October 3, 2010, 1:43 PM

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In short order, I am requesting SCWA staff to re-publish the Notice of the NOP for an EIR, in the UDJ with clear information that identifies the Project Area.

If the Agency does not cooperate, be prepared for a legal judgment that proper notice has not been served, perhaps invalidating the NOP proposed draft EIR time line and adequacy.

Also, I request to extend the deadline for public review of the Notice of Preparation, to reflect the delay in publishing an accurate disclosure notice in a Mendocino County Russian River Basin, newspaper of record of general circulation.

Eric Sunswheat

THE UKIAH DAILY JOURNAL SUNDAY, OCT. 3, 2010 -B-5

777-10 10-3/10
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in part:

Operating water supply releases from Lake Mendocino to preserve or increase the pool of cold water available in Lake Mendocino to support the fall Chinook salmon migration run may aid in their conservation and recovery. Although the proposed lower minimum instream flow requirements in NMFS' Russian River Biological Opinion will help to achieve this goal, the Water Agency will file another petition with the SWRCB, requesting that the modifications to minimum instream flow requirements be extended beyond the months required by NMFS' Russian River Biological Opinion for the upper Russian River. These additional months could include those earlier or later in the year, or could be extended to be in effect year-round.

· Hydrologic Index

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The 45-day NOP public review period will close at 5:00 p.m. on November 15, 2010.

To post to the list, send an email to mendocommunity-bb@yahoogroups.com If replying to a post, please reply directly to sender's email address

Yahoo! Groups Links

<*> To visit your group on the web, go to:

<http://groups.yahoo.com/group/mendocommunity-BB/>

<*> Your email settings:

Individual Email | Traditional

<*> To change settings online go to:

<http://groups.yahoo.com/group/mendocommunity-BB/join>

(Yahoo! ID required)

<*> To change settings via email:

mendocommunity-BB-digest@yahoogroups.com

mendocommunity-BB-fullfeatured@yahoogroups.com

<*> To unsubscribe from this group, send an email to:

mendocommunity-BB-unsubscribe@yahoogroups.com

<*> Your use of Yahoo! Groups is subject to:

<http://docs.yahoo.com/info/terms/>

Connie Barton

From: Pinky Kushner [pinkykushner@mac.com]
Sent: Wednesday, November 17, 2010 11:50 AM
To: Fish Flow
Subject: comments for scoping
Attachments: Scoping-SCWA EIR-amended.pdf; ATT00001.txt

Attached is an amended letter of comments for scoping. Please replace the letter I mailed yesterday with this new letter.
Thank you,
Pinky Kushner

November 17, 2010

Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 95403

RE: Scoping Comments for the Fish Habitat Flows and Water Rights Project

General Comments

In accordance with CEQA, both the Fish Flow aspect and the Water Rights aspect of the proposed project, should investigate thoroughly the aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use planning, noise, population and housing, public services, recreation, transportation and traffic, and urban blight.

At time of scoping, during the Ukiah scoping meeting and afterwards in telephone discussions with SCWA staff, Jessica Martini-Lamb and Todd Schram, there was no information provided to the public as to what the specifics of the proposed Project are.

There were no maps or any other types of information provided as to the existing and the proposed Place of Use for SCWA water services. There were only vague suggestions as to how the mandates of the Biological Opinion were to be addressed. For this reason, the EIR should explore in its fullest capacity every area of review listed above, including but not limited to land use planning, population and housing, public services, aesthetics, etc. Changes of Place of Use have the potential to erode the environment and its livability for all living organisms, fauna and flora. Without knowledge of the changes proposed, everything---“the kitchen sink”---must be evaluated for both the Fish Flows and Water Rights aspects of the Project.

Many of my comments pertain to issues/topics where the SCWA may have no direct regulatory oversight. No matter. The EIR should still explore all the dimensions of the effects on the environment, as mandated by CEQA, under California law, and offer appropriate potential mitigations, even if the enactment of these mitigations might require the actualization of these mitigations by any other agencies.

Fish Habitat Flows

It appears that the SCWA is proceeding to view the Russian River as a mere conduit for its water, shall I say, “A Pipe”. The EIR should evaluate the Russian River not only as a conduit but also as a *watershed*. The difference should be obvious in the below comments.

1. Hydrologic Index Changes

The SCWA proposes to change the Hydrologic Index for the Russian River by evaluating the levels of water at Lake Mendocino in place of Lake Pillsbury. Lake Mendocino

represents two sources of water: diverted water from the Pillsbury tunnel and the watershed of Lake Mendocino. Monitoring the hydrologic index at Lake Mendocino alone, as the sum of these two water sources, is not sufficient to describe the hydrologic index of the Russian River watershed. The EIR should evaluate changing the Hydrologic Index not to the Russian River itself, using the sub-watersheds that, like Lake Mendocino, feed into the Russian River. Given the length of the Russian River, this sub-watershed analysis should include probably a minimum of 12 sub-watersheds.

This analysis should propose an algorithm for the true Hydrologic Index of the Russian River, using measurements at multiple individual sites, along the Russian River.

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The EIR should also make recommendations to change the long-term problems with fish habitat along the Russian River. While SCWA may not have the regulatory authority to institute these changes, the EIR should disclose how certain changes can benefit the life of fish along the Russian River watershed.

The SCWA faces the dilemma of *selling* water to finance its agency, protecting its historic water rights, meeting new water demands, and protecting the environment. CEQA says that conditions that adversely affect the environment must be identified and explained fully to the public. In other words, on one level, the environment predominates in the State of California.

- a. **Gravel mining**---Gravel mining can be exceedingly harmful to the riverbed and to the fish. The EIR should explore changes to the current practices of commercial gravel mining that can lead to Best Practices and their advantages to the fate of the fish. This will include determining which mining practices can lead to an increase in flooding, as well as changes in currents that lead to bank erosions and pool reduction.
- b. **Frost-sensitive agriculture**---The potential contribution of a shift away from frost-sensitive agriculture to frost-tolerant agriculture should be explored in the EIR. Some grape vines are overly sensitive to frost, others not. A shift to species that are frost-insensitive may reduce a portion of the problem of demands for water releases in the spring during fish development.
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Changes to Place of Use

Changes to the place of use were mentioned informally at the scoping meeting in Ukiah. No maps were provided at the meeting. Nowhere have changes to the SWCA’s place of use been described to the public. Not on the web, not at the scoping meeting, not in personal discussions with SWCA staff. I am clueless as to whether these changes represent an expansion of place of use or a contraction or merely exchanges of place of use. This lack of disclosure is a disservice to the public and is contrary to what I understand are required by the laws governing water in the State of California.

Changes to place of use clearly have the ability to destroy the environment. All environmental issues listed above under instream flow requirements should be discussed

also for each of the different changes of place of use proposed---where ever they might be located. .

Urban blight---In the past few years, CEQA has added the concept of ‘urban blight’ to its list of issues an EIR must cover. The EIR for this project has great potential to increase urban blight if it makes more water available for new urban residential and commercial development. For instance, when water is provided enabling a new large residential project, that development can cause a slosh in the tilt of economic well-being and create urban decay.

Time Extensions

It is imperative that the EIR cover potential harm to the environment by the granting of the permit deadlines for reaching maximum diversion/use of allocated water. The EIR should especially focus on potential changes in climate that the next 20 years may bring and the potential for these changes to usher in drought alternating with extremely wet years. The EIR should examine who will be using this increased water resource. How will increased use/need of water in future years affect the environment? How will agriculture be protected? How will increased residential water use affect land use? How will increased residential use affect the ability of other utilities to accommodate this growth, especially sewer needs? Will a time extension increase the potential for urban blight? Is the time-extension merely a means for the SWCA to sell more water and that the water itself will not be used “beneficially” but cause environmental decay?

In Conclusion

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Sincerely,
Pinky Kushner
504 N. Oak Street, #1
Ukiah, CA 95482
pinkykushner@mac.com

Connie Barton

From: Pinky Kushner [pinkykushner@mac.com]
Sent: Wednesday, November 17, 2010 12:13 PM
To: Fish Flow
Subject: minus a typo or two
Attachments: Scoping for SCWA's EIR.pdf; ATT00001.txt

Here is the third version, minus a typo or two. Sorry. This one has a new title to reduce confusion. Pinky

NEW TITLE: Scoping for SCWA's EIR

November 17, 2010

Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 95403

RE: Scoping Comments for the Fish Habitat Flows and Water Rights Project

General Comments

In accordance with CEQA, both the Fish Flow aspect and the Water Rights aspect of the proposed project, should investigate thoroughly the aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use planning, noise, population and housing, public services, recreation, transportation and traffic, and urban blight.

At time of scoping, during the Ukiah scoping meeting and afterwards in telephone discussions with SCWA staff, Jessica Martini-Lamb and Todd Schram, there was no information provided to the public as to what the specifics of the proposed Project are.

There were no maps or any other types of information provided as to the existing and the proposed Place of Use for SCWA water services. There were only vague suggestions as to how the mandates of the Biological Opinion were to be addressed. For this reason, the EIR should explore in its fullest capacity every area of review listed above, including but not limited to land use planning, population and housing, public services, aesthetics, etc. Changes of Place of Use have the potential to erode the environment and its livability for all living organisms, fauna and flora. Without knowledge of the changes proposed, everything---“the kitchen sink”---must be evaluated for both the Fish Flows and Water Rights aspects of the Project.

Many of my comments pertain to issues/topics where the SCWA may have no direct regulatory oversight. No matter. The EIR should still explore all the dimensions of the effects on the environment, as mandated by CEQA, under California law, and offer appropriate potential mitigations, even if the enactment of these mitigations might require the actualization of these mitigations by any other agencies.

Fish Habitat Flows

It appears that the SCWA is proceeding to view the Russian River as a mere conduit for its water, shall I say, “A Pipe”. The EIR should evaluate the Russian River not only as a conduit but also as a *watershed*. The difference should be obvious in the below comments.

1. Hydrologic Index Changes

The SCWA proposes to change the Hydrologic Index for the Russian River by evaluating the levels of water at Lake Mendocino in place of Lake Pillsbury. Lake Mendocino

represents two sources of water: diverted water from the Pillsbury tunnel and the watershed of Lake Mendocino. Monitoring the hydrologic index at Lake Mendocino alone, as the sum of these two water sources, is not sufficient to describe the hydrologic index of the Russian River watershed. The EIR should evaluate changing the Hydrologic Index not to the Russian River itself, using the sub-watersheds that, like Lake Mendocino, feed into the Russian River. Given the length of the Russian River, this sub-watershed analysis should include probably a minimum of 12 sub-watersheds.

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Sincerely,
Pinky Kushner
504 N. Oak Street, #1
Ukiah, CA 95482
pinkykushner@mac.com

COMMENT CARD**PUBLIC SCOPING MEETING
NOTICE OF PREPARATION FOR THE FISH HABITAT FLOWS &
WATER RIGHTS PROJECT**The Alex Rorabaugh Center
1640 State Street Ukiah, CA
Wednesday, November 10th, 2010: 6:00- 9:00 p.m.

(Please write legibly)

NAME	ADDRESS/EMAIL/PHONE NUMBER	ORGANIZATION	CHECK TO ADD TO MAILING LIST
Susan Knopf	smknopf.		

COMMENT:

① Power Point Video —

It's what I call a power pointless
- too small + some windows too
small to read
- couldn't hear it

② Everytime I asked a question
the person at whatever table said
"I'm not an expert on that."

To: 1) Martini-Lamb 1) Phelps 2) Barton 3) Jeane

CF/45-0-2.1 Fish Habitat Flows and Water Rights Project -
EIR Comments

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY

NOV 15 2010

Sonoma County Water Agency

Ad Hoc Committee for Clean Water

P.O. Box 484 Occidental, CA 95465
707 874 3855ph 707 874-2493 fax

11/15/10
1 of 2

To Sonoma County Water Agency
re: NOP on EIR on Fish Habitat Flow Project on the Russian River

Analyze the Impact of the Jenner Jetty/Dam

As you know, there is a colossal construction at the mouth of the Russian River that is part of one of the biggest cover-ups in Sonoma County. Who knew that there is a DAM blocking Russian River outflow and the normal, natural, ebb and flow in the estuary? Not me!

Folks have been arguing about whether or not to "breach" the sand bar at the mouth to make habitat for salmon and steelhead. The reason one has to bring in bulldozers to breach the bar is largely because the "bar" is the tail end of a colossal DAM! Most of the mouth of the river has been plugged up -- plugged up since the 30's when a monster JETTY was constructed of steel boulders and concrete where the Russian River meets the sea.

There's a huge landfill that's on, under, over, and adjacent to the JETTY. The earth is so covered now with sand after 80 years since JETTY construction, and so rock-solid that one would probably think the DAM is "natural" and was always there. And, the JETTY has been so successful in blocking the ocean, that it now functions as a sand-covered DAM of the mouth!

Anyone seriously interested in salmon, steelhead and Russian River "restoration", must deal with this dam and its impacts on river levels and flows. This EIR must address it comprehensively -- its impact on flows, on abnormal fresh water retention at the mouth, on flooding, on oxygen content of the water, on salmonid habitat, on salinity, on filtration of the water through the sand bar, or lack of it, etc.

What foolishness to talk about "restoration of natural" conditions and NOT TALK ABOUT tearing down that DAM! What on earth is the reason for *not* taking that construction out!?

I've lived here 25 years and I only just found out about the Jetty/DAM last year! This EIR must not continue the "cover-up". Analysis of the impact of the DAM must be included in this EIR. Taking down the DAM should restore a natural rhythm of seasonal openings and closings. Russian River, salmon and steelhead were doing beautifully BEFORE WE SHOWED UP! Who are "we"? -- 'foreigners' meaning non-natives, managers, analysts, consultants and engineers.

What have we "managed" to do with computer models and mitigation measures, monitoring and "restoration projects"? We have collectively and cumulatively shut down the salmon season several years in a row, put hundreds of salmon fishermen out of business, put salmon and

2 of 2

steelhead on the threatened or endangered species lists so that wild caught California salmon are completely absent from markets and restaurants!

What have all the "guardians" of the Russian River and the estuary said about the Jetty/Dam? There should be dozens of articles, major press coverage, press releases from all "environmental" organizations that have claimed to have "restoration" of the "natural" habitat, the salmon and the River as their top priority.

We support SCWA's efforts at approximating "natural" or pre-European arrival conditions -- that's when the salmonid food resource was at its most abundant. The substitute ration of *farmed* salmon is cheap enough and employing Chileans. Younger generations of Americans will only know *farmed* salmon to go with their cheesy toodles, artificially flavored snackeroos and red and yellow gummy yummys.

Other Water Users

The Agency should be analyzing the impact on river levels of River drawdown by vineyards pulling water from tributaries or the underflow of the Russian River. The NOP says that "The Water Agency also releases water to satisfy the needs of *other* water users..." (Italics added). Who are those "*others*"? Grape growers? The Agency's responsibility to keep flows at a certain level, means that when water is pumped for frost protection, for example, and Russian river levels plummet, the Agency must release water to raise River levels right back up. This is an unreasonable water "subsidy", so to speak. Kindly include analysis of this phenomenon in your review.

Sincerely,

Ann Maurice

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY

NOV 15 2010

CF/45-0-2.1 Fish Habitat Flows and Water Rights Project -
EIR Comments

- 1) Martini-Lamb
1) Phelps 2) Barton 3) Jeane

Kate Fenton
(Name: Please Print)

29001 Willow Creek Rd.
(Street Address)

Jenner 95450
(Town) (Zip Code)

November 15, 2010

SONOMA COUNTY WATER AGENCY
ATTN: JESSICA MARTINI-LAMB
404 AVIATION BLVD.
SANTA ROSA, CA 95403

Dear Ms. Martini-Lamb:

I wish to express my concerns about the FISH HABITAT FLOWS AND WATER RIGHTS PROJECT, or alterations to the State's Decision 1610. My primary concern is with changing the minimum flow during normal years from 125 cubic feet per second (cfs) to 70 cfs in the lower Russian River. I would like to see a broad range of water quality issues addressed that would result from diminished flows. Please put my name on your notification list for all meetings and document availability related to this project.

I utilize the Russian River in the following way(s): property owner, business owner, recreationist and/or tourist, for artistic expression, for spiritual well being, for exercise and personal health, fishing, swimming, and _____.

I am concerned about the impacts to water quality from this action including possible added pollution from nutrients, regulated and emerging toxins, bacteria, temperature, invasive species, blue-green algae, etc. This action will seriously impede my enjoyment of the river and I am also concerned about the overall health of the watershed, including impacts to other species such as amphibians, sea birds, seals, unlisted fish, etc.

I am concerned that the Biological Opinion did not address other existing problems in the river that harm fish including those of excess sediments, temperature, and bacteria. I also wonder if threatened fish species, for which this project is intended, will suffer from degraded water quality conditions during transitional months of October and November when migration normally begins and degraded conditions have not yet been diminished by winter temperatures and flows. Furthermore I wonder about the impacts on fish food sources and habitat conditions. (Chinook are in the main stem of the river as early as mid-September.)

I would like to see continued environmental monitoring and analysis, including recreational, public health, and economic impacts of the project. Please assure me that this EIR will mitigate all potential impacts from this project.

Sincerely,

Kate Fenton
(Signature)

11/11/10
(Date)

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY

NOV 15 2010

CF/45-0-2.1 Fish Habitat Flows and Water Rights Project -
EIR Comments

- 1) Martini-Lamb
1) Phelps 2) Barton 3) Jeane

Ronald Lock
(Name: Please Print)

P.O. BOX 456
(Street Address)

GUERNEVILLE 95446
(Town) (Zip Code)

November 15, 2010

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404 AVIATION BLVD.
SANTA ROSA, CA 95403

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Sincerely,
Ronald Lock
(Signature)

10-12-2010
(Date)

NOV 15 2010

Dear Ms. Martini-Lamb,

I am writing to plead with you to stop the low-flow plan for our lower Russian River - The "Fish Has Project". I live on the River and see the impact of reduced flow every day of Summer. We have increased algae, aquarium grass & ludwigia. The tubathon swimmers even said they would not return if the River was the way it was in 2009. Last Summer was great - we have never had so many new people enjoying the River. - We live near Johnson's Beach. Our little town is so poor now - shops closed - people homeless. Please help us retain our summer tourist business. Experts claim the fish do not suffer from more flow. Also

Couldn't we raise those few
buildings at Guerneville? People here
in Guerneville are getting very
generous financial incentives
from FEMA to raise their buildings.
We believe that the water is
destined to be sold to northern
developers. It gives your agency
a bad name - deserved or not.

Please help us,

Sincerely

Sheila Detoy

Home owner 15981 Riverbonds
Rd. Guerneville, Ca 95446
207-869-3552

Thank you

Sheila Detoy
Box 847
Guerneville, Ca
95446
NOR
12 TH

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY

NOV 15 2010

CF/45-0-2.1 Fish Habitat Flows and Water Rights Project -
EIR Comments

- 1) Martini-Lamb
- 1) Phelps 2) Barton 3) Jeane

Shera Diaz

(Name: Please Print)

11820 River Rd.

(Street Address)

Forestville

(Town)

95436

(Zip Code)

November 15, 2010

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404 AVIATION BLVD.
SANTA ROSA, CA 95403

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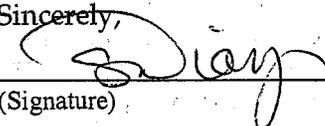
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Sincerely,

(Signature)



(Date)

11/17/10

Connie Barton

From: victoria wikle [victoriawikle@usa.net]
Sent: Sunday, November 07, 2010 11:25 AM
To: Fish Flow
Subject: NOP for Fish Habitat Flow EIR

Sonoma County Water Agency
Attention: Jessica Martini-Lamb,

I hope to have my comments considered in the preparation of the EIR for the proposed Fish Habitat Flows.

- 1) I recommend against requesting permanent changes when the BO has not finalized what exactly is needed to help the fish.
- 2) I recommend against requesting permanent changes when the Fish Recovery Plan has not been implemented and has yet to result fish recovery.
- 3) I recommend that the California State Water Resources Board be the lead agency for the preparation of this EIR. It is not appropriate for SCWA to be the lead.
- 4) At the NOP Scoping meeting in Monte Rio the map of put in and take out locations on the lower river showed Sportsman Lodge. This facility is not open to the public and should either be opened to the public or taken off your map.
- 5) I recommend including requirements to alter flows and other actions to eliminate or at least discourage Ludwigia and other invasive weed growth in the lower river. Ludwigia is a huge problem in the Laguna de Santa Rosa and is on the way to becoming a huge problem in the lower river. Every year new patches are established and the existing patches increase in size. Expensive efforts to control this invasive weed in the Laguna failed. The plant and other weedy plants thrive on warm nutrient rich slow moving water as was the case during recent low flow situations in the lower river, specifically downstream from the Guerneville Sewage treatment plan. I recommend that the EIR look carefully at the Ludwigia infestation, algae growth and other weed infestations then put in place whatever is necessary to stop these weeds from taking over the lower river, actions including but not limited to higher summer flows, no winter dumping of nutrients in the river because they seem to collect in the sediment at the bottom and planting native shade trees throughout the watershed.
- 6) I recommend that the EIR address the effects on native and non-native aquatic and riparian vegetation for the proposed flows.

Thank you for taking my comments into consideration.

Sincerely,
Victoria Wikle
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