

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

APR 2 5 2001

In response, refer to: SWR/F/SWR3:TL/JD

Erin Foresman U.S. Environmental Protection Agency 75 Hawthorne Street, WTR-3 San Francisco, California 94105

Dear Ms. Foresman:

NOAA's National Marine Fisheries Service (NMFS), Southwest Region thanks you for the opportunity to comment on the advanced notice of proposed rulemaking (ANPR) seeking comments on possible Environmental Protection Agency's (EPA) actions to address water quality conditions affecting aquatic resources in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay Delta Estuary) in California. The ANPR was published in the Federal Register on February 22, 2011. NMFS has reviewed the Unabridged ANPR and offers the following comments to EPA in order to accomplish EPA's stated goal:

Comment 1 - Explore the use of the State Revolving Fund loan program, partially funded by EPA, to increase the reuse of effluent from the Sacramento Regional Wastewater Treatment Plant. NMFS suggests exploring reuse options. For example, EPA could explore whether the Sacramento Regional effluent can be wholly piped along the route of the potential cross-Delta conveyance either within the tunnel or somewhere along the right of way. The agricultural districts south of Sacramento might be interested in this steady source of water which may already meet California reuse standards for non-raw consumption food crops.

Comment 2 – Seek to amend the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) to require registrants to collect sufficient information to generate water quality criteria as part of the FIFRA registration or re-registration process in order to streamline establishment of numeric water quality criteria. Use any and all authorities available to EPA to require water quality criteria generation as soon as possible for pesticides found to contaminate the Bay Delta Estuary.

Comment 3 – Require registrants to develop detection methodologies for all new and existing products at environmentally realistic concentrations before the products are registered or reregistered under FIFRA in order to improve the effectiveness of controlling pesticide contaminants and protect designated beneficial uses.



Comment 4 – Fund studies to test the Central Valley Regional Water Quality Control Board's assumption that one tenth of an established 96-hour LC50 for the most sensitive aquatic species is protective against sublethal effects, particularly to threatened and endangered species, components of their designated critical habitats and essential fish habitat in the Bay-Delta estuary.

Comment 5 – Require generation of toxicity data to determine if there are additive or synergistic interactions as part of the registration and re-registration processes under FIFRA. Put this on a fast track for the known pesticide contaminants in the Bay-Delta estuary through funding of independently conducted studies, if necessary.

Comment 6 – Seek to amend FIFRA to add testing requirements to the registration and reregistration processes of FIFRA that match the longer exposure times to pesticides observed in the Bay Delta Estuary in order to produce accurate effects information.

Comment 7 – Explore and implement additional restrictions on publically available pyrethroid formulations that are suspected to be leading sources of contamination in the Bay Delta Estuary. For example, EPA should explore banning sale of granular or flake formulations of pyrethroid products to the general public or prohibiting the sale of pesticides to the general public during the rainy season.

Comment 8 – Explore and implement changes to professional pesticide application methodologies and timing (*e.g.*, building infrastructure applications of pyrethroids on a monthly schedule throughout the entire year including the rainy season) to limit the potential exposure of water courses to pesticide runoff.

Comment 9 – Immediately begin enforcement of actions prescribed by the Washington Toxics Coalition v. EPA decision as well as other similar court orders, *e.g.*, application method requirements, watercourse setbacks and point of sale warnings.

Comment 10 – Set up a multi-agency program for the Bay-Delta estuary, similar to what is done for the Chesapeake Bay as mentioned in the ANPR, in order to evaluate water conditions more representative of actual aquatic conditions rather than focusing solely on isolated aquatic species for one or two pollutants.

Comment 11 – Require that all small, currently unregulated MS4s obtain National Pollutant Discharge Elimination System (NPDES) stormwater permit coverage and are required to utilize Standard Urban Stormwater Management Plan (SUSMP)/ low-impact development (LID) strategies, including best management practice (BMP) sizing criteria, to minimize the inputs of pesticides and other contaminants to the Bay Delta Estuary. NMFS believes that many of the development companies in the State of California are well versed in the SUSMP/LID requirements from their projects in already regulated areas and that completing coverage across the state should not be overly burdensome.

Comment 12 – Ensure that storm water permits require periodic testing of discharges from existing urban developments and that toxicity detections trigger a toxicity identification

evaluation (TIE) followed by an appropriate series of actions meant to prevent further toxic discharges. Ensure that storm water permits require periodic analysis of individual contaminants and receiving waters to determine the effects of discharges on water quality standards in a waterbody.

Comment 13 – Audit the Regional Water Quality Control Boards and the State Water Resources Control Board to determine if strict enforcement and reporting of the stormwater best management practices (BMP) requirements for redevelopment, as defined under the current and future stormwater NPDES permits, is taking place as required. Take corrective action against permittees who are not implementing the provisions properly.

Comment 14 – Require the State of California to prohibit stocking biological pollutants such as exotic, predatory, and competitive non-native species that are adversely impacting the native aquatic resources and designated beneficial uses of the Bay Delta Estuary such as Chinook salmon and Delta smelt.

Comment 15 – Prioritize reanalysis and revision of all Central Valley and San Francisco Bay Total Maximum Daily Load Plans and associated water quality standards for selenium in response to the forthcoming selenium criteria to protect threatened and endangered species, aquatic dependent species and aquatic life using the Presser-Luoma ecosystem based model referenced in the ANPR. Prioritization could include ensuring sufficient staff support and resources are dedicated to the effort in addition to an aggressive timeline for implementation being assigned to the regional water boards.

Comment 16 – Fast-track promulgation of methods to detect impacts from constituents of emerging concern under 40 C.F.R. Part 136 followed by the adoption of water quality criteria for pollutants covered by these methods.

Comment 17 - Fund research efforts to investigate the effect of the USFWS fall X2 RPA action on habitat and effects to estuarine species (beyond Delta/Longfin smelt) residing in the low salinity zone. Develop measurable performance metrics/criteria based upon research findings for incorporation into the State Water Board's Bay Delta Water Quality Control Plan.

Comment 18 – Fall-run Chinook produced in the major San Joaquin tributaries (Merced, Tuolumne, Stanislaus) have steadily declined with the increase of development on these rivers. Restoration of these runs to more sustainable levels will require habitat and flow improvements in the southern Delta and major San Joaquin tributaries. EPA should participate in the development and review of new flow standards to protect salmonid species in for the San Joaquin basin to replace the Vernalis Adaptive Management Plan (VAMP).

Comment 19- As reported in Zimmerman *et al* 2008 and elsewhere, steelhead have been found in both the Tuolumne and Merced Rivers. However, populations inhabiting these San Joaquin tributaries are low. The ANPR should amend the sentence on page 57 to properly reflect that the Central Valley steelhead DPS are found in other San Joaquin River tributaries, and not just the Stanislaus.

Comment 20- EPA should ensure that any approved water quality control plan for the Delta includes sufficient waste discharge requirements or other measures to ensure that ship traffic eliminate avoidable invasive species introductions.

Comment 21- The report should clarify on page 60 that, "measures were not included in the Delta for the adult (salmon) migration season, September to November..." reflects the fact that adult steelhead typically migrate later in the year to spawn (generally December through March). Therefore, measures taken during the fall period to improve fall-run Chinook migration are unlikely to provide benefits for returning adult steelhead.

Comment 22 – Similar to comment 21, the sentence that states, "the ability of steelhead juveniles to hold over in their natal streams for more than one year may buffer them from some of the effects suffered by fall-run salmon" is not clear in stating from which deleterious effects steelhead would be buffered. Steelhead may hold year-round in their natal stream before emigrating, and this can result in different survival outcomes. For example, steelhead that hold year-round may be subject to increasingly lethal water temperatures during the summer, may emigrate during periods not conducive to successful outmigration, and/or may be subject to varying levels of environmental variation not found in the ocean. The fact that steelhead have a greater flexibility in freshwater rearing life history strategies does not necessarily confer successful fitness to the species in the San Joaquin basin, where freshwater rearing conditions can be limiting.

Comment 23 – Metrics for determining the success of restoration efforts to improve migratory corridors could include: increased downstream juvenile salmonid survival, increased access to and acreage of floodplain rearing habitat, improved habitat complexity, reductions in bottlenecks and predatory hotspots, reductions in water temperatures, improvements in dissolved oxygen and other water quality parameters, and increased flow/reductions in travel time for juvenile salmonids to overcome tidal barriers. Such information could be used in developing criteria to meet fish migration objectives in the Water Quality Control Plan.

Comment 24 – Salmonid escapement to the San Joaquin system remains low. Improving juvenile survival through migration corridors is a very important goal, and should be coupled with broad array of actions to address underlying habitat problems found throughout the San Joaquin system. EPA should ensure that efforts to provide successful migration corridors through the southern Delta are coupled with increased spawning and rearing habitat upstream. Such improvements will likely come from hydropower proceedings, and/or new beneficial use criteria developed through the Bay-Delta Water Quality Control Plan.

Comment 25 – EPA should ensure that actions requiring approval under 404 of the Clean Water Act will restore lost habitat by requiring, where feasible, in-kind mitigation. EPA should investigate and report on the effectiveness of past mitigation efforts to ensure that 404 permitting efforts will not result in a significant or deleterious loss of wetland habitat.

Comment 26 – Various monitoring efforts, such as those performed in Suisun Marsh and Yolo Bypass, can provide inferences about the relationship between the quantity and quality of wetland habitat and fish abundance/health.

NMFS appreciates the opportunity to comment on the ANPR. We look forward to working cooperatively with you and are available for technical assistance as this process moves forward. Should you have any questions regarding our comments, please contact Joseph Dillon of my staff at Joseph.J.Dillon@noaa.gov, or Tristan Leong at Tristan.leong@noaa.gov.

Sincerely,

Kein Chu

For Rodney R. McInnis Regional Administrator

cc: Dick Butler, PRD, NMFS, Santa Rosa, CA Maria Rea, NMFS, Sacramento, CA