UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
777 Sonoma Ave., Room 325
Santa Rosa, CA 95404-4731

June 9, 2009

In response refer to:
150502SWR2009SR00278

Steve Dee, Senior Environmental Scientist
County of Sonoma Permit and Resource Management Department
2550 Ventura Avenue
Santa Rosa, California 95403-2829

Dear Mr. Dee:

NOAA's National Marine Fisheries Service (NMFS) appreciates the opportunity to comment on the March 2009 Preservation Ranch Initial Study. The County of Sonoma Permit and Resource Management Department (PRMD) has received an application for a vineyard development and forest management plan on a 19,300 acre ranch, referred to as "Preservation Ranch", in the Gualala River watershed in northwestern Sonoma County, California. The proposed project involves development of 17 vineyard blocks, primarily on ridgetops, which would require the conversion of approximately 1,681 acres of timberland to vineyard. The proposed project would also build approximately 40 ten-to-49-acre-foot reservoirs to be used for vineyard irrigation. The applicant is applying to Sonoma County for a rezoning, conditional use permit, and voluntary merger of the existing 160 parcels down to 63 parcels. The proposed project would also include applications to the California Department of Forestry and Fire Protection (CalFire) for a timberland conversion permit and associated timber harvest plan. As you know, in this last year NMFS staff has attended several meetings and site visits regarding the proposed project.

NMFS is the Federal agency responsible for regulatory jurisdiction over salmon and steelhead populations across the nation that are listed as threatened or endangered under the Federal Endangered Species Act (ESA) of 1973, as amended. Once a species is federally listed, ESA section 9 applies which prohibits the death or harm to the species by any person subject to the jurisdiction of the United States. Section 3 defines "person" as "an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States." Hence, a wide variety of entities are subject to its 'take' prohibitions and state and local agencies are liable under the ESA if they issue permits which result in 'take' of Federally-protected species.

As noted in the Initial Study, the Gualala River watershed supports Federally listed salmonids

and their critical habitat, including the endangered Central California Coast (CCC) Evolutionarily Significant Unit (ESU) of coho salmon (*Oncorhynchus kisutch*) and the threatened CCC Distinct Population Segment (DPS) of steelhead (*O. mykiss*). The project area encompasses watersheds currently supporting CCC steelhead and designated critical habitat for CCC coho salmon and CCC steelhead. Additionally, the Gualala River watershed is expected to play a role in the recovery of California Coastal Chinook salmon (*O. tshawytscha*). Roads, agricultural practices, logging and droughts pose high risks to steelhead and coho salmon in the Gualala River watershed.

Absent Sonoma County having an ESA section 4(d) limitation on the prohibitions and activities allowed under Sonoma County laws and policies, or an ESA section 10(a)(1)(B) permit (Habitat Conservation Plan), incidental 'take' of listed salmonids is not authorized. Thus, it is our recommendation that Sonoma County work towards a permit for the proposed project that results in "no-take or harm" to salmonids to protect the County and landowners from possible ESA section 9 violations and enforcement. The County and the landowner bear full responsibility of ensuring activities are in compliance with the ESA and other applicable laws.

**Vineyard development**

Mortality of steelhead has been documented due to timber conversion and grading activities, therefore these are activities of a significant concern to NMFS. These activities have been implicated in a NMFS and NOAA Fisheries Office for Law Enforcement investigation that led to an assessment fine to a Mendocino County landowner for harming and killing steelhead. Because timber conversion and grading activities are proposed as part of the Preservation Ranch project, the Draft Environmental Impact Report (EIR) should demonstrate how the proposed activities will incorporate measures beyond the minimum standards for a timber harvest plan and conversion and how 'take' of salmon and harm to their essential behavior patterns will be avoided. The Draft EIR should also evaluate the short term and long term effects of ongoing vineyard operations to steelhead and their habitat (*e.g.*, chemical applications, water use [including frost protection], altered runoff patterns, *etc.*). Several agricultural chemicals have been identified by NMFS as harmful to salmonids[1] and discussions regarding the type and nature of chemical application and its transport through the waterways to salmonid habitats should be included.

As part of vineyard development, some Class III[2] streams may be filled and farmed over. Project application documentation indicates that approximately 363 Class III stream segments would be subject to grading operations within the footprints of the proposed conversion sites. The total length of these Class III segments is approximately 10.53 miles. Vineyard conversion grading would extend above Class III watercourses and therefore ultimately drain to the watercourses. We are concerned with the number and length of Class III watercourses that will be modified and the resultant effects to listed salmonids and their habitat.

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[1] Two recent biological opinions on chemicals issued by NMFS are available at http://www.nmfs.noaa.gov/pr/about/archive.htm.

[2] Watercourses that do not have aquatic life present but are capable of moving sediment to a Class I (fish-bearing) or Class II (aquatic habitat for non-fish aquatic species) watercourse.

From headwater channels to a river floodplain, the fluvial network in a watershed is a continuum and interaction of water, sediment and wood processes. Class III streams provide important microclimates and are an important source of wood, water and sediment. All channels play a role in storing and supplying wood to downstream reaches; a role that varies with the position of the stream reach in the landscape.

The Draft EIR should evaluate the feasibility of avoiding the filling and farming over of Class III watercourses. Operations adjacent to these watercourses should focus on limiting the generation and transport of sediment and preserving the integrity of the bed and banks of the channel. All Class III watercourses should have an adequate buffer (*e.g.*, 35 – 85 feet). It is appropriate to limit disturbance and compaction adjacent to the channel and upslope along the valley axis. Surface erosion in near stream areas is accelerated by mechanical disturbance. The proposed project must avoid the contribution of sediment transported by Class III watercourses to aquatic habitat.

We recommend Sonoma County not defer to the CalFire regarding specific measures associated with the proposed timber harvest and conversion because CalFire has no discretion regarding grading activities that occur once the timberland is converted. We request Sonoma County ensure that 'no take' measures are incorporated into the timber conversion planning process for Preservation Ranch. We understand the need to accommodate site specificity in developing appropriate measures and NMFS can provide you with additional technical assistance. However, to assist in your efforts please refer to the documents we recently provided you outlined below:

California Board of Forestry and Fire Protection. Notice of Proposed Rulemaking, Watersheds with Threatened or Impaired Values, 2009. Notice Published May 8, 2009.

California Board of Forestry and Fire Protection. Initial Statement of Reasons, Threatened or Impaired Watershed Rules, 2009. Published May 8, 2009.

California Board of Forestry and Fire Protection. Plead, Threatened or Impaired Watershed Rules, 2009. Published May 8, 2009.

California Department of Forestry and Fire Protection. Large Class II Flow or Drainage Area Based Concept Paper (Draft). May 28, 2009.

Jones and Stokes. Stream Setback Technical Memo. October 18, 2002.

National Marine Fisheries Service. Salmonid Conservation Measures for Forestry Activities for a Short-term HCP (Draft). 1999.

National Marine Fisheries Service (website). Salmonid Guidelines for Forestry Practices in California. February 8, 2000.

Last fall we provided you with a link to the following document:

Sound Watershed Consulting. Scientific literature review of forest management effects on riparian functions for anadromous salmonids. Final Report prepared for the California State Board of Forestry and Fire Protection. 2008.

**Rural residential development**

The proposed project may result in approximately 61 single-family homes being built. Rural residential development in Sonoma County has severely impacted listed salmonids and their habitat. All residential development as a result of the proposed project must avoid impacts to listed salmonids and their habitat if the development does not have ESA take coverage. Adequate road standards (*e.g.*, road standards in the California Forest Practice Rules, Weaver and Hagans 1994), water conservation, erosion control, and riparian protection measures across all Class I, II and III watercourses should facilitate meeting the goal of impact avoidance. The Draft EIR should evaluate how rural residential development will avoid impacts to listed salmonids and their habitat.

**Water Use**

Depletion and storage of natural flows have drastically altered natural hydrological cycles throughout the range of listed salmonids. Altering natural flows can result in depleted stream flows necessary for migration, spawning, rearing, and other processes. The proposed project's water use program must avoid impacts to listed salmonids and their habitat.

All water for vineyard irrigation would be supplied by the 40 proposed reservoirs only. However, the project proposes to provide the domestic water supply via groundwater for vineyard employee homes. Additionally, each of the 61 single-family homes on the individual parcels created under the proposed project will likely attempt to use groundwater; the Initial Study notes demand is estimated to be 82 acre-feet per year. The Initial Study states that further information and analysis is necessary to evaluate the potential that extraction of groundwater may adversely affect baseflow. We expect groundwater extraction will adversely affect baseflow and consequently listed fish and their habitat. It is believed that recent instantaneous flow reductions due to frost protection measures associated with vineyard operations has resulted in the death of endangered CCC coho salmon. Thus, the Draft EIR should evaluate avoiding the use of groundwater and include avoidance and minimization measures. Other options for water sources should be evaluated, including rain water harvesting.

**Timber Management**

The project proposes to protect and manage approximately 15,000 acres of timber resources. The Commercial Timberland Management Areas (approximately 11,366 acres) are proposed to be zoned "Timber Protection" with the primary objective of preservation and enhancement of commercial timberland.

Forest management practices can have significant adverse effects on the habitat conditions of listed salmonids and we are concerned timber management activities may degrade salmonid habitat. Although there have been substantial improvements in the California Forest Practice Rules for protecting listed salmonids, the rules were evaluated by a science panel and determined to be inadequate to protect salmon and their habitats. The proposed Sustainable Timber Management Plan contains beneficial measures (*e.g.*, stream habitat restoration, 200-foot

watercourse and lake protection zones on Class I streams). However, class IIs and IIIs also need appropriate protection and the Draft EIR should evaluate the proposed project under a 'no take' scenario. We are willing to work with the County on developing a timber management plan that meets the needs of the applicant and listed salmonids. This may include a habitat conservation plan pursuant to section 10 of the ESA, or receiving technical assistance from NMFS to ensure take avoidance.

Keys to improving habitat conditions for steelhead and coho salmon include increasing large woody debris recruitment to streams to improve shelter and pool habitats; increasing forest stand age, riparian cover and diameter-at-breast height to reduce sediment inputs and reduce water temperatures; and reducing the density of hydrologically-connected roads to reduce sediment sources. The Draft EIR should address how the proposed project in its entirety will not preclude the recovery of listed species.

The accumulation of land management activities in a watershed over time collectively result in impacts to watershed processes (*e.g.*, water temperature, hydrology, and sediment) that provide habitat for salmonids. The nature of cumulative effects are temporal as well as spatial and the Draft EIR must include a watershed analysis approach capable of assessing cumulative effects attributable to timber harvesting and other non-forestry activities on a watershed scale. It is critical cumulative effects to watershed processes are addressed.

Thank you again for the opportunity to comment on the March 2009 Preservation Ranch Initial Study. Please contact Mr. Bill Stevens at (707) 575-6066, or via e-mail at William.Stevens@noaa.gov if you have any questions concerning this letter.

Sincerely,

Dick Butler
Santa Rosa Area Office Supervisor
Protected Resources Division

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