



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

May 21, 2013

In response, refer to:

151416SWR2013SR00140

Tony Linegar, Agricultural Commissioner
County of Sonoma
133 Aviation Boulevard, Suite 110
Santa Rosa, California 95403

Dear Mr. Linegar:

This letter transmits comments from NOAA's National Marine Fisheries Service (NMFS) to the Sonoma County Agricultural Commission (Commission) regarding proposed agricultural development within watersheds in Sonoma County, California. NMFS is responsible for the protection, maintenance, and recovery of anadromous salmonids listed as threatened or endangered under the federal Endangered Species Act (ESA). As such, NMFS has been coordinating with staff at the Sonoma County Agricultural Commissioner's Office to obtain information relative to proposed vineyard development in Sonoma County subject to the Vineyard Erosion and Sediment Control Ordinance (VESCO). While NMFS recognizes the progressive steps Sonoma County has taken towards reducing potential hillside erosion impacts resulting from agricultural grading through VESCO, the ordinance does not address the potential serious impact that water extraction linked to agricultural development may have on federally threatened and endangered salmonids. Specifically, our staff has concerns about the potential impact vineyard-related well pumping and direct stream diversions may have on ESA-listed salmonids or their critical habitat. We have previously commented on this issue in our letters to the Commission dated April 6 and May 1, 2012.

To reiterate, while the direct diversion of surface flow can lower flow levels and stress rearing salmon and steelhead, groundwater pumping can also impact stream hydrology. Alluvial aquifers are often interconnected to surface flow and, depending on geologic and morphologic constraints, can either augment or diminish that flow. Where the groundwater aquifer supplements streamflow, the influx of cold, clean water can be of critical importance to maintaining adequate water temperature and flow volume, especially during summer dry periods. Pumping from these aquifer-stream complexes can lower groundwater levels and interrupt the hyporheic flow between the aquifer and stream. When this happens, summer streamflow can recede and water quality degrade to the point where juvenile steelhead and salmon suffer. Adequate site-specific analysis is necessary to avoid these impacts. With these general concerns in mind, we offer the following specific comments regarding currently proposed vineyard development on the following parcels within Sonoma County.



Parcels ACO13-0004, ACO12-0090, ACO13-0012, ACO12-0018, and ACO12-0072 (Green Valley Creek watershed)

The Green Valley Creek (GVC) watershed harbors federally endangered Central California Coast (CCC) coho salmon (*Oncorhynchus kisutch*) and threatened CCC steelhead (*O. mykiss*), and their designated critical habitat. The GVC watershed is identified as a *core* watershed in the NMFS Central Coast Coho Recovery Plan (NMFS 2012a), which contains numerous strategies for habitat restoration through water conservation projects. The draft CCC steelhead recovery plan (NMFS 2012b) states...”impaired water flow is the primary concern for summer rearing juvenile salmonids in Green Valley Creek watershed”, while a California Department of Fish and Wildlife habitat assessment of the creek (CDFW 2006) stated...

A major problem noted was the unusually low summer flow, which was mostly subsurface due to high sediment. Intensive agricultural development and increased diversions of water from the stream added to the above effects.

Furthermore, portions of Green Valley and Atascadero creeks are classified as “Fully Appropriated” during the drier portions of the year by the State Water Resources Control Board (SWRCB), which means that all available supplies of water are being used and that no water is available for appropriation during the specified season. Moreover, SWRCB (1997) states that based on their analysis, there is a sufficient basis to declare the entire Russian River watershed a fully appropriated stream and that their staff “recommend[s] that all tributaries within the entire Russian River watershed be added to the list of Fully Appropriated Streams from April 1 through December 14.”

Restoring habitat and salmonid populations within the GVC watershed are important toward the goal of re-establishing viable steelhead and coho salmon populations within the Russian River. As an example of the importance of GVC to ongoing recovery efforts, several thousand hatchery-reared coho salmon fry are released annually within the watershed as part of the Russian River Coho Salmon Captive Broodstock Program. Also, the GVC watershed is a focus area of the Coho Water Resources Partnership, a collaboration of landowners and regulatory agencies that formed in 2009 with the goal of developing a systematic approach to improving streamflow and water supply reliability in Russian River tributaries. The GVC watershed was chosen as a location for these two important programs due to its high potential for streamflow enhancement and coho salmon recovery. Further streamflow depletion may thwart these efforts and undermine coho salmon and steelhead recovery efforts.

Parcel ACO13-0015 (Miller and Sausal creeks)

Miller and Sausal creeks are small tributaries that flow into the Russian River from the east side of Alexander Valley. Both watersheds contain populations of CCC steelhead, and the populations are critical toward preserving the required spatial connectivity of the Russian River steelhead population as a whole. Parcel ACO13-0015 appears to extend over a portion of the upper Sausal Creek channel, which is designated critical habitat for steelhead. Similarly, the northern section of ACO13-0015 overlays an upper tributary of Miller Creek.

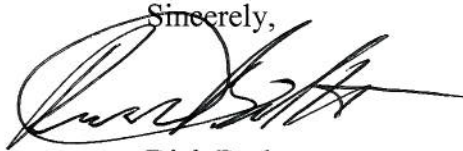
Parcel ACO12-0016 (Agua Caliente and Hooker Creek)

Agua Caliente is a tributary of Sonoma Creek located north of the town of Sonoma, and drains an approximately 10-square mile watershed. Parcel ACO12-0016 appears to span a section of the channel identified as critical habitat for CCC steelhead, and the large amount of acreage proposed for development appears to overlap a significant portion of both the Agua Caliente and Hooker Creek watersheds. Steelhead have been documented within Hooker Creek and Agua Caliente (Leidy *et al.* 2005), and the watersheds are an important focus for future CCC steelhead recovery efforts (NMFS 2012b). During recent summer surveys, Agua Caliente was noted as having a large distance of dewatered stream channel, and was considered to be at high risk for fish stranding and habitat loss resulting from water development and extraction (NMFS 2012b).

NMFS urges the County to require adequate analysis of the water demands of proposed vineyard development projects and their associated potential streamflow impacts, to include an assessment of cumulative water-withdrawal effects, as part of the permitting process. This analysis is especially critical when development is proposed within watersheds identified as critical to ESA recovery efforts, as is the case with the above-mentioned parcels.

NMFS appreciates the opportunity to work with the Commission to protect ESA-listed salmonids and their habitat. If you have any comments or concerns regarding this letter, please contact Rick Rogers of my staff at 707-578-8552, or by email: rick.rogers@noaa.gov.

Sincerely,



Dick Butler
North Central Coast Office Supervisor
Protected Resources Division

cc. Scott Wilson, California Department of Fish and Wildlife, Yountville
Matt St. John, North Coast Regional Water Quality Control Board, Santa Rosa
Grant Davis, Sonoma County Water Agency, Santa Rosa

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- Leidy, R.A., G.S. Becker, B.N. Harvey. 2005. Historical distribution and current status of steelhead/rainbow trout (*Oncorhynchus mykiss*) in streams of the San Francisco Estuary, California. Center for Ecosystem Management and Restoration, Oakland, California.
- NMFS. 2012a. Final Recovery Plan for Central California Coast coho salmon Evolutionarily Significant Unit. National Marine Fisheries Service, Southwest Region, Santa Rosa, California.
- NMFS. 2012b. Recovery Plan for the North Central California Coast Domain, Northern California Steelhead, California Coastal Chinook Salmon, and Central California Coast Steelhead. Co-Manager Review Draft. National Marine Fisheries Service, Santa Rosa, California. 305 pp.
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