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

February 10, 2012

In response reply to:
151422SWR2001SR920

Patrick M. McCormick
Executive Officer
Santa Cruz Local Agency Formation Commission
701 Ocean Street, Room 318-D
Santa Cruz, California 95060

Dear Mr. McCormick:

This letter is in response to a January 13, 2012, letter from the Santa Cruz Local Agency Formation Commission (LAFCO) to NOAA's National Marine Fisheries Service's (NMFS) North Central Coast Office. The letter explained that LAFCO is preparing to draft a resolution to conditionally approve the "North Campus" application for the City of Santa Cruz's (City) proposal to expand their sphere of influence and their water and sanitary sewer services for the University of Santa Cruz, located in Santa Cruz County, California. LAFCO directed staff to request additional information regarding the status of NMFS' negotiations and potential conclusions regarding the City's draft Habitat Conservation Plan (HCP). LAFCO is requesting this information in order to improve their understanding of potential adjustments to the City's water supply with implementation of the HCP. LAFCO indicated they will use this information to condition expansion of the City's proposed water service area by incorporating revised diversion practices that NMFS will require in order to provide the City with an incidental take permit for protected species.

NMFS administers the Federal Endangered Species Act (ESA) of 1973, as amended, for Central California Coast (CCC) Distinct Population Segment (DPS) steelhead (*Oncorhynchus mykiss*) and CCC Evolutionarily Significant Unit (ESU) coho salmon (*O. kisutch*). Central California Coast steelhead are listed as a threatened species and CCC coho salmon are listed as an endangered species. Central California Coast coho salmon are at high risk of extirpation from the Santa Cruz Mountains and are restricted to two to three streams whereas under historical conditions they were distributed throughout most of the coastal streams in Santa Cruz and coastal San Mateo counties. NMFS is currently developing recovery plans for both species. Increasing populations of salmon and steelhead to the streams of Santa Cruz County is essential for the

conservation and recovery of both species. The San Lorenzo River, where the City diverts the majority of its water supply, is of particular importance to steelhead and coho salmon recovery due to the role it played in the overall viability of these populations.

NMFS has provided technical assistance to the City on the development of the HCP for more than a decade. The majority of effort to date has focused on assessment of the City's water diversions and the impacts of these diversions to listed salmonids. Section 9 of the ESA prohibits the "take" of any fish or wildlife species listed under the ESA as endangered. An HCP is a mechanism that provides an avenue for non-Federal entities to obtain an incidental take permit for listed species. To receive an incidental take permit, section 10(a)(1)(B) of the ESA requires an applicant to submit a "conservation plan" specifying, among other things, that the impacts will be minimized and mitigated to the greatest extent practicable.

The adverse impacts associated with the diversion of water have been identified as one of the major factors behind the decline of both CCC coho salmon and CCC steelhead (61 FR 56138; 62 FR 43937; 69 FR 33102; 71 FR 834). Water diversions can impair flows necessary for successful adult and smolt passage, egg incubation, and juvenile rearing. We believe the City's diversions have particularly adverse impacts to the juvenile life stages for both species.

In the August 10, 2011, *DRAFT City of Santa Cruz Habitat Conservation Plan: Conservation Strategy for Steelhead and Coho Salmon* (City of Santa Cruz 2011), the City identified streams where they divert water and analyzed the likely impacts of these diversions to specific salmonid lifestages across four water year types; (a) critically dry, (b) dry, (c) normal, and (d) wet. Based on these water years and associated impacts, the City has identified flow reductions, particularly during the summer low flow period, as the largest adverse impact to salmonids in the HCP planning area. To address these impacts, the City has proposed a conservation strategy that specifies minimum instream flows through flow bypasses at the City diversions. Three sets, or tiers, of instream flow targets are specified for each month for different hydrologic year types. According to the City's proposal, Tier 1 flows maintain habitat at existing levels, Tier 2 flows increase baseflows and provide additional habitat for various salmonid lifestages, and Tier 3 flows would have the goal of maintaining 80 percent of unimpaired instream habitat. However, according to the City's future water demand analysis (projected build-out in 2030), Tier 3 flows will not be available in many water year types. If the City is not capable of meeting the higher tiers during certain periods of the year, flows will return to the lower tier amounts.

NMFS has encouraged the City to seek additional alternative water supplies to augment their current and projected future demands. The proposed implementation of conservation flows is dependent on an additional uncertain water supply. The City is proposing to meet the Tier 3 flows with a desalination plant that may or may not be constructed. Regardless of the methods and infrastructure used to increase the City's water supply, we cannot authorize an HCP without assurances additional water supply will be available to support future flow regimes.

We are currently analyzing the information provided in the August 2011 Draft Conservation Strategy. Both NMFS and the Department of Fish and Game (DFG) are in preliminary negotiations with the City regarding our assessment and interpretation of the information in the plan. The resource agencies have provided recommendations to the City to optimize water

operations in a manner beneficial to listed species. At this time, it is difficult to provide a definitive answer to the question in your letter regarding changes we "… are asking the City to make in its water diversion practices." However, to provide LAFCO with some guidance, NMFS does not agree with the current conservation flows proposed by the City. We believe they are inadequate to both conserve and recover these species. Flows substantially greater than the City's proposed Tier 2 - Tier 3 flows are likely to be necessary to meet HCP issuance criteria.

To date, it does not appear that current water supplies are sufficient to meet current demand *and* protect listed salmonids, let alone allow for increased demands resulting from expansion of the City's service area. Decisions by LAFCO that facilitate the expansion of the City's service area, absent additional water supply, will exacerbate ongoing and future impacts to listed salmonids in the Santa Cruz Mountains.

Thank you for your inquiry into this matter. If you have questions or concerns regarding this letter please contact Mr. Jonathan Ambrose at (707) 575-6091 or at jonathan.ambrose@noaa.gov.

Sincerely,

Dick Butler
North Central Coast Office Supervisor
Protected Resources Division

cc: Scott Wilson, DFG, Yountville
Corrine Gray DFG, Yountville
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References Cited

City of Santa Cruz. 2011. DRAFT City of Santa Cruz Habitat Conservation Plan: Conservation Strategy for steelhead and coho salmon. August. 135p.

National Marine Fisheries Service. 2010. Public draft recovery plan for Central California Coast coho salmon (*Oncorhynchus kisutch*) Evolutionarily Significant Unit. National Marine Fisheries Service, Southwest Region, Santa Rosa, California.

Federal Register Notices Cited

61 FR 56138. 1996. Endangered and threatened species: Threatened status for Central California Coast coho salmon Evolutionarily Significant Unit. Federal Register, 61: 56138-56149.

62 FR 43937. 1997. Endangered and threatened species: Listing of several evolutionarily significant units (ESUs) of west coast steelhead. Federal Register, 62: 43937-43954

69 FR 33102. 2004. Endangered and threatened species: Proposed listing determinations for 27 ESUs of West Coast Salmonids. Federal Register, 69: 33102-33179.

71 FR 834. 2006. Endangered and Threatened Species: Final Listing Determinations for 10 Distinct Population Segments of West Coast Steelhead. Federal Register, 71: 834-862.