



Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Re: Comment Letter – Lagunitas Creek Sediment TMDL

October 13, 2014

Dear Board,

Salmon Protection and Watershed Network, a project of Turtle Island Restoration Network dedicated to protecting and restoring the Coho salmon and steelhead habitat in Lagunitas Creek, respectfully submits the following comments on behalf of the organization and our 550 members.

We commend the State Water Resources Control Board for developing the TMDL for sediment for the Lagunitas Creek watershed, highlighting the threats faced by the Lagunitas Creek Watershed from sedimentation and from the damage done to stream channels from high velocity flows resulting from surrounding land uses. The populations of the Coho salmon are in precipitous decline, and the Lagunitas Creek population represents the last major population south of Mendocino and a major component of the Central California Coastal Coho Salmon Evolutionary Significant Unit (CCC Coho Salmon ESU) overall. Both Lagunitas Creek with its tributaries and the fish within these streams are the property of the People of the State of California and of the United States and the State has a key obligation as the trustee to protect those resources. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 446; *The People v Monterrey Fish Products Co.*, (Cal. 1925) 234 P. 398; Fish and Game Code §§ 711.7, 1801.) As members of the public and a public interest organization dedicated to the protection of those public trust resources, we are pleased to offer our support for the adoption of the Basin Plan Amendment to reduce the sediment inflows into Lagunitas Creek and its tributaries as part of the ongoing duty of the state, and its agencies and divisions to protect these resources.

In that spirit, several elements are necessary in order to fully protect the stream and its fish.

First, the goal of a population of 1,300 adult spawning Coho salmon is not adequate to ensure recovery of the species. We fully support the regional board's choice of Coho adult spawning population as an appropriate metric. The goals of the Basin Plan Amendment to establish a stable population of Coho salmon are clearly the strongest expression and indicator of water quality objectives supportive of the beneficial uses of the stream as cold freshwater habitat, wildlife habitat, fish spawning, recreation, and preservation of rare and endangered species. However, the numerical goals chosen are inadequate in light of the status of the Coho salmon. Achieving success in restoring the population must involve recovering the population to the point where the population is no longer threatened with extinction from ongoing threats of climate change, development, pollution, and simple stochastic population processes. According to the National Marine Fisheries Service Recovery Plan, that target is 2,600 adult spawners for Lagunitas Creek. See Table 23, National Marine Fisheries Service. 2012. Final Recovery Plan for Central California Coast Coho Salmon Evolutionarily Significant Unit. National Marine Fisheries Service, Southwest Region, Santa Rosa, California. The Basin Plan Amendment goal of 1,300 is only enough to downlist the CCC Coho Salmon ESU, which would still leave it threatened with extinction. We ask that the Board revise the goals of the Basin Plan Amendment to reflect the full recovery standard for the Central California Coast Coho Salmon ESU of 2,600 adult spawners in Lagunitas Creek.

Second, the proposed estimates that construction and urban runoff contribute on the order of 30 and 70 tons per year rest upon several assumptions that will not be achieved and must be revised. According to the Staff Report, these estimates assume a total of 10 acres per year of ground disturbance in the entire watershed and that such construction sites implement best management practices and are covered by the Construction Stormwater General NPDES Permit CAS000002. (Staff Report, section 3.9 at 41.) However, this permit does not in fact cover the majority of construction impacts in the watershed. The cited permit provides coverage and conditions that apply to ground disturbance of greater than one acre. However, by far the overwhelming majority of projects in the watershed, such as home construction, expansions, decks, patios, vegetation clearing, etc., involves discharges from much smaller areas and so are not subject to the best management practices of this General NPDES Permit. Instead, the cumulative impact of many small projects and disturbances in the watershed are certain to produce vastly more than the 10 tons per acre cited in the staff report. Furthermore, permit requirements or other permit conditions within the Lagunitas Creek watershed are generally not enforced, and so the Basin Plan Amendment cannot rely on such permit conditions in calculating a sediment budget for the watershed. As a matter of policy, County of Marin only enforces building violations if there is a citizen complaint. (T. Lai, Assistant Director of Community Development Agency, Marin County, pers. Comm.) Furthermore, a significant number of

projects, if not the majority of construction, occur without obtaining proper permits whatsoever, and so are not subject to best management practices as permit conditions. Indeed, the County of Marin regularly states that it does not want to require strong permit requirements because the County assumes that individuals will not obtain permits. (T. Lai, pers. com). Thus, any assumption that construction activities within the watershed are implementing any best practices, or any sediment reduction practices whatsoever, is not supported by the reality on the ground. We also note that Order no. 2009-00009-DWQ implementing the NPDES permit expired on September 2, 2014 and so provides no coverage for construction stormwater runoff. Therefore, the Basin Plan Amendment should not assume that these nonpoint sources are effectively controlled through existing programs, because the on-the-ground reality is that few if any such construction projects implement any best practices. Instead, the Basin Plan Amendment should proceed under a more realistic assumption that the prevailing regulatory regime, construction practices and culture typically fail to follow best practices. Therefore, the sediment load from construction is almost certainly many times greater than the 30 tons per year and urban sedimentation from poorly maintained sites is also likely to be significantly higher than estimated. In light of these issues, the Basin Plan Amendment should target reductions in construction sediment yields equivalent to those achievable under best management practices from NPDES Permit CAS000002 or better. However, we acknowledge that the primary responsibility for imposing and enforcing permit conditions and management practices rests with the building and planning authorities of the County of Marin. Therefore, we ask the State Water Control Resources Board to call for the County to implement a program of robust control measures in the watershed and also to implement an enforcement program within the watershed consistent with achieving the objectives of this Basin Plan Amendment, in lieu of crafting a firm regulatory program in this rulemaking.

Third, the Basin Plan Amendment must highlight the critical importance of addressing streamside development in order to promote complex habitat and to prevent further stream incision and bank erosion. In the NOAA Fisheries Recovery Plan, residential and commercial development is listed as the single greatest threat to the Lagunitas Creek Coho population, with the report's highest threat category of "very high," even higher than the threat posed by the roads that rightly receive considerable attention in the Staff Report and the Basin Plan Amendment. The threat posed by creekside development in particular relates directly to current and future sediment yields and delivery into the stream. As the Staff Report notes, one of the key features of any recovery plan is the development of habitat complexity through the accumulation of large woody debris within the channel. However, except for constructed structures, this woody debris derives entirely from streamside trees. Maintaining a robust population of large trees also requires protections for saplings from which adults are recruited. Furthermore, streamside vegetation plays a critical role in stabilizing stream banks to prevent channel erosion in both permanent streams as well as intermittent and ephemeral streams. However, currently the vast

majority of streamside trees are young will require time to develop into a significant source of large woody debris. (see Stillwater Sciences. 2009. San Geronimo Valley Existing Conditions Report. Prepared for Marin County Department of Public Works, San Rafael, CA, by Stillwater Sciences, Berkeley, CA, at Table 3-10.) This streamside woody vegetation must be protected to ensure the long term improvement of the ecological and hydrological function of the Lagunitas Creek watershed. Although we are not asking the SWRCB to adopt such regulatory protections at this time, we ask that the Amendment recognize the critical role of streamside vegetation for these ecosystem services and call on the County of Marin to take regulatory and conservation actions to protect and restore vegetation within a 100' buffer of permanent, intermittent and ephemeral streams within the watershed in order to reduce the incision in the mainstem creeks and tributaries consistent with achieving the objectives of this Basin Plan Amendment.

Fourth, the Basin Plan Amendment must address the impacts of streamside development. The Basin Plan Amendment and Staff Report do an excellent job of describing the impacts of past and present land uses in increasing fine sediment in the waterways and altering the hydrological regime of the waters of the Lagunitas Creek watershed. However, it is also important to address future land use changes and the impacts of continued development on the ecological and hydrological function of these waters. As noted above, these land uses represent the highest category of threat to the biological integrity of these waters. Development near the stream increases the impervious or slow percolating surfaces, which accelerates the surface flow velocities and sediment delivery from neighboring properties. In addition, the construction of structures near stream banks accelerates stream bank erosion, contributing to additional in channel sediment delivery. Finally, the construction of structures within a 35 foot setback foreseeably subjects those structures to risks of undermining as the result of accelerated stream bank erosion. This in turn foreseeably will induce the hardening of stream banks to protect poorly sited structures, further increasing stream velocities and incision. Since all three impacts contribute to discharges and exceedances of the water quality objectives, it is critical that the Basin Plan Amendment address these foreseeable impacts to water quality. Although we are not calling on the Board to adopt strict regulatory controls over stream bank construction at this time, the Basin Plan Amendment must call on the County of Marin to enact strong regulatory controls on such development consistent with achieving the objectives of this Basin Plan Amendment as the authority with oversight over development siting and conditions within the watershed.

Fifth, we wish to ask the Board to address or clarify the status of county-owned unpaved roads in the watershed. We commend the Board for standing firm on requirements that the County conduct a timely inventory and repair program to fix the many deficient paved roads within county jurisdiction. In the current form, the Basin Plan Amendment states that "all of the public agencies with the project area with jurisdiction over roads" have signed a Memorandum of Understanding governing maintenance and management of

unpaved roads. However, the County of Marin is not mentioned as one of the public agency signatories. (Basin Plan Amendment, at page 8.) Furthermore, although the Basin Plan Amendment describes the Marin County Open Space District or the Marin Municipal Water District as meeting the MOU performance standards, the Basin Plan Amendment does not elaborate on these standards and how they relate, for example, to the standards in Table 4.2. Beyond those roads under the jurisdiction of the Marin County Open Space District or the Marin Municipal Water District, the County of Marin has jurisdiction over several miles unpaved and unmaintained roads within its network that it does not necessarily maintain (often these are claimed as “private roads” by adjacent land owners) but to which the County does in fact retain legal title. We ask that the Board clarify whether the County is also a signatory to the unpaved road management MOU and the relationship between those standards and those of Table 4.2. In addition, if these roads are not covered under these reasonable assurances, we ask that the County of Marin include these unpaved and unmaintained county owned roads be included in the County’s paved road inventory, that the County of Marin bring them under the standards of this TMDL by signing the MOU governing unpaved roads in the watershed, and abide by the maintenance and management standards of that MOU or those required of the California Department of Parks and Recreation and US National Park Service listed in Table 4.2, whichever results in the least sediment delivery to the protected waterways.

Finally, we urge the Board to pursue additional actions to address further problematic locations and practices that hinder the achievement of the water quality objectives of the TMDL but are not covered by the current Basin Plan Amendment. We recognize that the Basin Plan Amendment is not intended to address all discharges through regulatory requirements (*e.g.*, of individual landowners, municipalities, or other parties) at this time. However, since there are potential future changes that may increase or alter the sediment budget or hydrological function of the waterway, we ask that the Board continue to exert vigilant oversight and pursue improvements in water quality in this watershed as quickly as possible. As has been documented by many parties, not least in the listing of the Coho salmon as endangered, the population of Coho salmon is in grave danger of extinction. Although a stepwise, piecemeal and go-slow approach may have been appropriate twenty years ago, the species has been allowed to decline so dramatically that there is simply no longer time or any margin for error remaining. Failure to improve the water quality immediately is likely to result in the extirpation of the species from the watershed. In light of this reality, we submit these comments in an effort to improve the protections for these important public trust resources.

Respectfully submitted,



Doug Karpa
Legal Program Co-Director