



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

April 2, 2009

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

MRP Tentative Order Comments
Attn: Dale Bowyer
San Francisco Bay Water Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Dear Mr. Bowyer;

Thank you for the opportunity to comment on the Revised Tentative Municipal Regional Stormwater NPDES permit for the San Francisco Bay region dated February 11, 2009. NOAA's National Marine Fisheries Service (NMFS) is responsible for managing the Nation's living marine resources including anadromous salmonids (*e.g.*, Chinook salmon, steelhead trout) listed under the Endangered Species Act (ESA) and Essential Fish Habitat (EFH) as designated under the Magnuson-Stevens Fishery Conservation and Management Act. These responsibilities are comparable to the Water Board's responsibilities to protect and restore unimpaired beneficial uses such as COLD, RARE, and SPWN.

NMFS has reviewed the tentative order and wishes to express support for the draft permit while pointing out a few areas that could be strengthened to the benefit of both our agencies' missions. Overall, the draft permit should result in significant improvement to water quality over time with benefits to the aquatic life related beneficial uses logically following. NMFS expects these improvements to aid in the recovery of ESA listed salmonids (most notably for the Central California Coast steelhead trout that is found in several streams within the permit area) and an improvement of EFH conditions. Please consider the following comments and questions regarding the proposed permit:

1. Provision C.2.d.ii.(3) – Setting the dissolved oxygen (DO) threshold at 3 milligrams per liter (mg/L) or parts per million (ppm) for discharges from pump stations before requiring corrective actions may result in water quality impacts to receiving waters if sufficient dilution is not available. While the DO should easily be above this level during storm events when the retention time of stormwater in a pumping station may be very short, during drier portions of the year the retention time of water in a pumping station may be prolonged, resulting in poor DO conditions. This discharge to a waterbody during a low-flow time period may impact beneficial uses and ESA listed species. The permit should require the exploration of aerating these



discharges during these periods of the year or diverting them to the sanitary sewer system to prevent impacts.

2. Provision C.2.e.ii – We strongly support the requirement for all the listed post-construction treatment measures to treat runoff from rural public works construction and maintenance projects. We suggest requiring treatment of runoff from existing impervious surfaces as well, as mitigation for the overall increase in pollutant loading from the new surfaces to at least a zero net loading level. This is similar to the requirements presented later in the proposed permit under C.3.e.(2) for equivalent offset treatment.
3. We also suggest that the permit incorporate an explicit minimum riparian setback to protect water quality from impacts of rural road development (*e.g.*, loss of stream bank stability and filtration of sediments from overland flows due to loss of vegetation, increased water temperatures due to loss of shading, etc.). Typically the best available science suggests, and NMFS has recommended in Sonoma County, protecting perennial and ephemeral streams with a protection zone of at least 30 meters, more depending on slope. The proposed permit should also have a placeholder for incorporating the results of the developing Wetland and Riparian Area Protection Policy in this and related sections.
4. We strongly support the inclusion of Low Impact Development (LID) techniques as compliance options in the proposed permit for reducing the discharge of pollutants in stormwater runoff to the maximum extent practicable.
5. Provision C.3.b - We support this provision as it seems to include virtually all potential development and redevelopment projects, but the protections of this section could be greatly strengthened by requiring projects to address the stormwater pollutants from all existing, new, and/or replaced impervious surfaces. There is not a biological or water quality reason to set a “50% of impervious area” threshold before requiring inclusion of the entire site, as is done in Provisions C.3.ii.(1).(c) and C.3.ii.(3). We suggest elimination of these provisions in order to fully protect and restore beneficial uses. The Permittees could be required to set up a decision making system to address an alternative percentage of the site (*i.e.*, besides 0% or 100% of the existing site) for larger sites (*e.g.*, those with >1 acre (43,560 ft²) of impervious surface). In this way a greater amount of pollutants and pollution (*e.g.*, hydromodification impacts) affecting beneficial uses would be addressed to the maximum extent practicable as required. For example, a shopping mall covering 50 acres could be required to address the stormwater runoff from the entire property or from the surrounding parking lot area where their impervious surface redevelopment project is located. This may be more difficult for residential housing subdivisions and mixed-use projects where ownership of impervious surface areas may be unclear, but could be accomplished. For example, a drive-way replacement may be required to address runoff from the residential roof-top of the property, while a street replacement conducted by a municipality would be required to offset stormwater from a site-specific project area or from a project area generated by an approved formula. This could be accomplished by distributing and installing rain barrels or capturing additional runoff for treatment from streets that would naturally flow to the project area.

6. Provision C.3.c.ii – This grandfathering provision exempts development projects from the requirement to incorporate LID techniques if they have received final, major, staff-level discretionary review and approval before July 1, 2010. We object to this provision because most of the Permittees have been required to have a working stormwater program in place for many years. They should be more than capable of evaluating and requiring stormwater BMPs for all projects upon approval of this permit by the Water Board. Development projects coming through the approval process now should already be designed with stormwater BMPs in place and this provision seems to open the door for allowing a batch of projects to get through without fully addressing their impacts.

We similarly object to the exemption for public projects for which funding has been committed and construction is scheduled to begin by July 1, 2011 on the same grounds. This could result in many public projects claiming this exemption which would impact the water quality and attainment of beneficial uses in the San Francisco Bay area for a long time. It would be more efficient and less expensive to prevent these impacts in the first place.

7. Provision C.3.e.(1) – There does not seem to be a water quality or biological reason to give the listed categories a special exemption from the requirement for providing maximum site design treatment controls or requiring equivalent offsite treatment as required of other infill or redevelopment projects under provision C.3.e.(2). We object to this exemption, especially for projects that will occur in watersheds which still support ESA listed steelhead trout. The protections and expected improvements in water quality that should come out of this permit could be strengthened to the maximum extent practicable by eliminating this special-interest exemption.

8. Provision C.3.e.(2) – We strongly support the requirement for equivalent offsite treatment for infill and redevelopment projects that cannot meet the numeric sizing criteria for stormwater BMPs in most cases. This requirement could provide drastic benefits toward reducing stormwater pollution and help to bring some sectors expected to have difficulty meeting these permit requirements (*e.g.*, schools or churches) into compliance as potential beneficiaries of this provision. The requirement could be further strengthened, and more stormwater associated pollutants removed, if the equivalent offsite treatment requirement included addressing existing impervious surfaces as per our comment on Provision C.3.b.

We must also caution the Water Board that this requirement may still not protect designated beneficial uses, including ESA listed species, in all cases. Different sections of streams can serve different biological functions and the function of one stretch may be absolutely crucial to the beneficial use overall. For example, if a section of a stream supports spawning for ESA listed steelhead trout, it not only has a specific beneficial use (SPAWN) but also a biological function that must be protected at that specific location. If a project proposes to impact that spawning section of the stream, equivalent offsite treatment elsewhere in the watershed will not offset the biological impact or impact to the beneficial use. The proposed permit should clarify that site-specific beneficial uses such as this must be accounted for in project planning; and they should require approval by the Executive Officer before an allowance for equivalent offsite treatment is granted.

9. Provision C.3.f. – This provision allows “staff of another Permittee subject to the requirements of this permit” to certify a regulated project’s adherence to Provision C.3.d. Is there an auditing system in place to detect and eliminate unqualified certifiers and to prevent a quid-pro-quo certification trading system from developing among the Permittees? Allowing only California registered professionals in this role gives the Water Board the option of trying to remove the professional certification from a person found to certify projects incorrectly or fraudulently. What is the recourse for the “staff from another Permittee”?

10. Provision C.3.g – This section on hydromodification management should reiterate that all projects need to treat and/or infiltrate stormwater to the maximum extent practicable under provision C.3.c. whether or not the project meets the hydromodification management definition given in this provision. Some of these options (*e.g.*, cisterns, rain barrels, permeable pavements) would obviously aid in minimizing hydromodification impacts. We object to limiting the hydromodification management definition to only those projects that increase impervious surface area over the pre-project condition because this will miss addressing this form of pollution in already impacted watersheds. This could prevent the attainment of unimpaired beneficial uses in those watersheds and impair the recovery of ESA listed steelhead trout in watersheds impacted in this manner.

11. We wish to explicitly express our support for the following provisions:

Provision C.3.i – Site Design Measures for Small Projects and Detached Single-Family Homes

Provision C.7.f – Watershed Stewardship Collaborative Efforts

Provision C.7.g – Citizen Involvement Efforts

Provision C.7.h – School-Age Children Outreach

Provision C.7.i – Outreach to Municipal Officials

Provision C.8.e.iii – Geomorphic Project

Provision C.8.f – Pollutants of Concern Monitoring

Provision C.13.e. – Studies to Reduce Copper Pollutant Impact Uncertainties

12. Provision C.8.e.i – We strongly support the requirement to conduct a Toxicity Reduction Evaluation (TRE) or Toxicity Identification Evaluations (TIE), as appropriate, when monitoring results trigger these follow-up actions. This section should clarify if toxicity monitoring (but not necessarily another TRE or TIE) will continue to be required as a monitoring measure while a corrective action plan (*e.g.*, through a cease and desist order or a total maximum daily load) is developed and implemented.

13. Provision C.8.e.ii – Why are Fairfield-Suisun and Vallejo exempt from this requirement?

14. Provision C.9 – We suggest changing the introduction to this pesticides toxicity control section to include the carbamate insecticide class, of which the named pesticide carbaryl is highly likely to be the most commonly encountered in urbanized settings. However, all carbamates cause sublethal effects to salmonids similar to the organophosphate insecticide class with which effects may be additive or synergistic.

15. Provision C.9.h – The proposed permit should require that all Permittees shall insure that all point of purchase locations have properly posted point of sale notification warnings as required under the January 22, 2004, court order from the U.S. District Court in Seattle, Washington (Washington Toxics Coalition v. EPA). More information and a copy of the Court’s order (including a listing of affected communities that includes many of the Permittees) are available at www.epa.gov/espp/litstatus/wtc/pos.htm. Inspection could occur in conjunction with other stormwater related inspections (*e.g.*, outside storage areas, *etc.*).

16. Provision C.11 – We strongly support these provisions related to mercury controls especially the provisions related to retrofitting treatment systems and diverting dry weather and first flush flows to publically owned treatment works. We also strongly support similar provisions found later in the permit for polychlorinated biphenols (PCBs). These are novel, and needed, provisions to determine the effectiveness of the actions toward minimizing stormwater impacts to the maximum extent practicable.

17. Provision C.15.iii – We strongly support the requirement to use appropriate BMPs for dechlorination, erosion and sediment control for all planned potable water discharges. However, we are concerned that the allowable chlorine residual (0.080 ppm) in this and the next provision (C.15.iv) is too high to ensure the protection of aquatic life. Best available data shows this concentration to exceed acute toxicity thresholds for many aquatic species including ESA listed salmonids and their prey items. We urge the Water Board to explore, or cause to be explored, available test kits and determine which kits with lower detection limits are reliable enough to be used for this permit. For example, a quick search on the internet found one test kit from Hach with a range of 0-0.7 ppm and a smallest increment measure of 0.02 ppm. This is not an endorsement of that product, but it may produce monitoring data at a biologically relevant scale. The proposed permit should require the generation of laboratory data to validate the performance of the field tests and dechlorination BMPs.

Planned discharges should also determine how much dilution, if any, is available in a receiving waterbody prior to the discharge. This examination may obviate the need for repeated chlorine concentration monitoring at some locations. In areas where regularly scheduled discharges may affect aquatic life (especially in streams that support ESA listed species), exploring alternative means of capturing the discharges may be warranted (*e.g.*, flushing fire hydrants into a tanker truck).

18. Proposed permit attachments – The potential consequence of the “exceeds 2% of the project construction cost, excluding land costs” threshold is not presented in the draft documents. Will this exemption threshold result in numerous projects being excused from the hydromodification management requirements? Has the Water Board and/or the Permittees conducted an analysis of this issue that can be summarized in the permit?

19. Attachment C – In the Contra Costa Permittees Hydromodification Management Requirements, provision 1.a. seems to exempt redevelopment projects that do not increase impervious surface area, even in areas already experiencing hydromodification impacts, from addressing their contributions to the hydromodification. Please see our comment on Provision

C.3.g. This broad exclusion is not acceptable, particularly in watersheds that support ESA listed steelhead trout. In Contra Costa County, this includes Wildcat, San Pablo, Pinole, Rodeo, Alhambra, Pacheco and Mt. Diablo creeks.

In closing, let us reiterate that this draft permit should result in significant reductions of stormwater associated pollutants and pollution over time. We support the permit on that basis and applaud the large amount of work that went into it by both the Water Board staff and the Permittees. There are, however, some serious weaknesses that should be remedied at this time in order to achieve the Water Boards mission of protecting beneficial uses by maintaining and improving water quality. We are concerned that some of these weaknesses could hamper the recovery of ESA listed species in the permit area, particularly for steelhead trout which have the most direct interface with the consequences of development and the permit requirements through their usage of freshwater streams in the permit area. We urge the Water Board to reduce the number and scope of exemptions potentially granted through this permit and to set aggressive compliance schedules for our remaining concerns that may require further exploration. Please contact Joe Dillon of my staff at (707) 575-6093 or Joseph.J.Dillon@noaa.gov with any questions regarding this matter.

Sincerely,



Steven A. Edmondson
Northern California Habitat Supervisor

cc: Bob Hoffman, NMFS, Long Beach
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