

**California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612**

RESPONSE TO COMMENTS

**PROPOSED AMENDMENT OF PROVISION C.3.
NEW DEVELOPMENT AND REDEVELOPMENT PERFORMANCE STANDARDS**

**SANTA CLARA VALLEY URBAN RUNOFF POLLUTION
PREVENTION PROGRAM (PROGRAM'S)
NPDES PERMIT NO. CAS00297818**

This document summarizes the Water Board staff's responses to public comments on the May 6, 2005, Tentative Order amending Provision C.3. of the Program's Permit. The Tentative Order was transmitted for public comment on May 6, and the public comment period closed on June 27, 2005. Each comment is summarized and followed by staff's response.

Comments from Baykeeper, an environmental advocacy group

Baykeeper comment 1

We are disappointed with the concessions that have been made to the City of San Jose and its implementation of the Santa Clara County stormwater permit. The Board should not allow the exceptions and concessions granted to San Jose to swallow the rule, as legal counsel for the Board so accurately phrased it at the February 2005 Board hearing.

Response:

While a number of changes have been made in this Tentative Order (Tentative Order) to allow phasing of implementation, these changes do not "swallow the rule". Because the New/Redevelopment Provision was first adopted and implemented in the Santa Clara Valley Permit, it specifies implementation dates that are much earlier than those contained in other Bay Area Stormwater Permits. The Tentative Order attempts to reduce the early implementation inconsistency between the Santa Clara Program and other Bay Area Permits by phasing in the Program's requirements for treatment Best Management Practices (BMPs) at smaller new and redevelopment projects (Group 2 Projects). As a point of clarification, the Tentative Order applies to all the Permittees in the Santa Clara Program, not just to San Jose.

Baykeeper comment 2

It is unfortunate that the City has chosen to challenge and evade the new regulations rather than embrace them in the best interests of our city and our Bay. In fact, a 1995 EPA report shows that basic stormwater control measures, such as vegetated swales, actually increase property values by about 28%. Implementing the C.3 provisions would benefit both the public and developers by protecting the property values and environmental quality in Santa Clara County and the City of San Jose.

Response:

We agree that implementation of the C.3. Provisions benefits the public. The Permittees are currently implementing Provision C.3. requirements to properly size treatment BMPs for large new and redevelopment projects creating 1 acre or more of new impervious surface (Group 1 Projects), in accordance with their Permit requirements. As stated in response to comment 1, the Tentative Order allows the phase-in of treatment requirements only for the smaller “Group 2” development projects. The Tentative Order also approves and requires implementation of key provisions of the Program’s Hydromodification Management Plan (HMP) Report while Program and Board staff continue working, on a region-wide basis, on various hydromodification control issues.

Baykeeper comment 3

Baykeeper is opposed to phasing allowing dischargers additional time to comply with C.3 provisions.

Response:

We are allowing both additional time for the Permittees to comply with the Group 2 implementation requirements, and for those requirements to be implemented in a phased manner, to reduce the inconsistency between the Permittees’ requirements and those of the other stormwater programs. Board staff has reviewed data for the smaller, Group 2 projects¹ for some of the larger cities (i.e., San Jose, Milpitas, Palo Alto, Santa Clara, and Sunnyvale). The data show that 68 Group 2 projects were approved by these cities in fiscal years 2002-2004, and 28 out of the 68 (41%) were in San Jose. Based on these data, Board staff determined that for San Jose, using the definition of Group 2A Projects (certain categories of land uses of concern) in the Tentative Order would capture roughly 52% of the total new impervious surface area from projects greater than 10,000 square feet and less than 1 acre. The Group 2A definition, along with the requirement for Group 2B projects (all other projects creating 10,000 square feet or more but less than 1 acre of new impervious surface) to include stormwater treatment BMPs by August 15, 2006, will allow the regulation of Group 2 Projects to be completed in phases. This phasing-in of requirements for Group 2 Projects and setting a final implementation date for all Group 2 Projects (Group 2A and 2B) of August 15, 2006, is consistent with the date contained in other Bay Area Permits.

Baykeeper comment 4

Baykeeper is opposed to a compliance deadline set at August 15, 2006, after the expiration of current permit. By setting the compliance date for this Tentative Order six months after the expiration of this permit, the Board creates a situation in which enforcement for non-compliance may be impossible. Whether the proposed compliance date is legal or enforceable must be determined by the Board and Staff before this Tentative Order can be adopted.

¹ Group 2 projects are new/redevelopment projects (with some exceptions) that create or replace more than 10,000 square feet of impervious surface.

Response:

The comment relates to the implementation date for Group 2B projects, which are all of the remaining land uses for projects 10,000 square feet and above as proposed in the Tentative Order. Permittees would have been required to implement C.3. for those projects by August 15, 2006. That date is later than the current expiration date of the permit. The provision at issue has been revised so it would no longer provide that the implementation date is after the permit expiration date. Instead it would state that the Board intends to require implementation by August 15, 2006, when it adopts a new permit or issues a region-wide permit. The revised Tentative Order would continue to require implementation by August 15, 2006, in one instance. It would be required in the event that the current permit is administratively extended until August 15, 2006, or thereafter. In that case the permit term would extend until or after August 15, 2006, thus the permit would not set a deadline for implementation that would occur after the end of the permit.

Baykeeper comment 5

There is a fairness issue here that must be considered by the Board before adopting this Tentative Order. If the Board does not require these erosion control measures, creeks will degrade as a result of increased runoff from newly developed impervious surfaces. This creek degradation will result in flood damage, property loss, and habitat modification, repair and restoration of which will be paid for by ratepayers and the general public. Requiring developers to implement these measures will ensure that the cost of development stays with the developers, and is not shifted to the general public.

Response:

We agree that excess runoff from newly developed impervious surfaces can cause erosion of creeks, flood damage, property loss, and habitat modification – all of which are commonly repaired using public funds. We also agree that, economically, it is best to prevent such excess runoff so that these problems (and their associated costs to the public) are minimized. That is why the Tentative Order requires implementation of the HMP – the first time such a requirement has been imposed in this region.

The Tentative Order has been revised so that it would require very large projects, in the parts of the Santa Clara Valley that are likely to be the most sensitive to erosive discharges, to implement erosion control measures within 3 months of adoption of the order. This 3-month period is a revision from the Tentative Order date of June 15, 2005. These requirements are stated in Attachment A to the Tentative Order, Key Provisions of the HMP Report. The revised Tentative Order represents a balancing of the need to protect creeks from erosion with the need to allow municipal planners and developers time to gain design, construction, operation, and maintenance experience with implementing the hydromodification requirements in this region.

Board staff intends to continuing working with the Program, and in conjunction with the other Bay Area Permittees², on technical and implementation aspects of the hydromodification control requirements. The Board may consider making revisions of the Program's HMP provisions if needed to make the Program's HMP consistent with the HMPs of other Bay Area Permittees. The Board may do this through approval of a region-wide permit, through a blanket permit amendment for all Bay Area Permittees, or through reissuance of the Program's permit accomplished in a consistent fashion with the other Bay Area Permittees.

Baykeeper comment 6

We urge the Board not to adopt such a weak Tentative Order, and instead require Santa Clara and San Jose to achieve the original intentions of the C.3 provisions recently adopted by this Board. By allowing the City of San Jose to manipulate and negotiate its way around the requirements, the Board is in danger of setting the bar too low for the rest of the Bay Area counties and cities.

Baykeeper comment 7

If the Board chooses to adopt this Tentative Order, Baykeeper urges the Board to at least require Staff to end the phased approach once the other County permits are reissued or the General Permit is issued. Phasing must be an interim provision, otherwise the Santa Clara permit will be inconsistent with other County's permits or the General Permit. In order to ensure a fair playing field for developers in all Bay Area counties and provide strong protection against stormwater pollution, any exemptions and/or phasing in Santa Clara's permit must be terminated upon Board approval of other County permits or the General Permit.

Response to comments 6 and 7:

The purpose of the Tentative Order is to provide a more level playing field between the Permittees subject to this order and those subject to other stormwater permits issued by this Board by 1) requiring full implementation of requirements to treat stormwater discharged from small development projects to be done simultaneously across the Bay Area, and 2) requiring implementation of hydromodification controls in certain areas while continuing to work on technical and implementation aspects of the overall HMP on a regional level.

Board staff intends to propose a municipal regional permit for all Bay Area Phase I stormwater programs in 2006. If the Board adopts such a regional permit, Provision C.3. requirements would become consistent and be uniformly applied to all Bay Area stormwater programs. In the interim, we believe the phase-in of requirements is appropriate to capture at least certain projects that are considered "land uses of concern" or are larger in acreage.

Comments from Morrison Foerster, Legal Counsel for the Dischargers
Morrison Foerster comments

² The other Bay Area Permittees include the Alameda Countywide Clean Water Program, Contra Costa Clean Water Program, Fairfield-Suisun Sewer District, and the San Mateo Stormwater Pollution Prevention Program.

These comments were received before the close of the comment period on the Tentative Order but relate to proposed revisions to the Tentative Order rather than to the Tentative Order. The commenter suggested that two provisions of the revised Tentative Order should be further revised as follows:

For Finding 6:

This Order also amends the Permit to approve the *Hydromodification Management Plan (HMP) Final Report*³ (hereinafter referred to as the HMP Report) required under this Permit, the key provisions of which are set forth as Attachment A of this Order, which is hereby incorporated into this Permit.

For Provision C.3.f:

No later than 3 months after the date of adoption of this Order, tThe Permittees shall manage increases in peak runoff flow and increased runoff volume, for all Group 1 Projects, where such increased flow and/or volume is likely to cause increased erosion of creek beds and banks, silt pollutant generation, or other impacts to beneficial uses through implementation of **the Hydromodification Management Plan (HMP) Final Report⁴, the key provisions of which are set forth as Attachment A of this Order, which is hereby incorporated into this Permit.**

Response

Board staff disagrees with the comments. Board staff considered the phrasing suggested by the commenter and discussed the underlying concepts with the Program representatives on several occasions. Our discussions centered around three points: 1) that much of the HMP Report is technically sound, but Board staff cannot recommend Board approval of the **entire** report as written; 2) in the interest of moving forward, Board staff can recommend Board approval of some aspects of the HMP Report, while continuing work on overall HMP implementation; and 3) for purposes of public involvement, Permittee implementation, Board approval, and enforcement, the approved provisions of the HMP Report would be set forth in the attachment to the permit (which is titled “key provisions”).

The HMP Report contains seven chapters that include summaries of previous work, methods, and data; technical evaluations of hydromodification control structures; guidance for developers and planners; and hydromodification control standards. Board staff found the HMP Report to have many strong points, and sought ways to move forward with approval of concepts within the Plan while continuing to work on overall HMP implementation⁵. In

³ *Hydromodification Management Plan Report, Final Report*, Santa Clara Valley Urban Runoff Pollution Prevention Program, April 21, 2005.

⁴ *Hydromodification Management Plan Report, Final Report*, Santa Clara Valley Urban Runoff Pollution Prevention Program, April 21, 2005.

⁵ The other Bay Area Permittees submitted their own HMP Reports on or about May 15, 2005. Water Board staff will review all of the HMP reports; comment on the technical merits of each report; participate in collaborative meetings to encourage consistency in HMP requirements across the Bay Area; require any necessary revisions to HMP reports; and issue public notices of intent to approve the HMPs. Following those steps, the Water Board will consider approving the other Bay Area Permittees’ HMPs in a public hearing(s). The Board may consider making revisions of the Program’s HMP provisions if needed to make the Program’s HMP consistent with the HMPs of other Bay Area Permittees. The Board may do this through approval of a region-wide permit, through a blanket

addition, Board staff found that, given the broad range of content of the HMP Report, including guidance, it is possible for a Permittee or project proponent to claim compliance in unintended ways. Summarizing the performance criteria in the “key provisions” greatly helps clarify what is expected of Permittees and project proponents. The next question was whether the “key provisions” would exist as enforceable permit provisions, or merely as additional “guidance.” The rephrasing suggested by the commenter would render the “key provisions” guidance for Permittees, but not enforceable provisions of the permit. These provisions were developed by the Permittees themselves. Board staff is recommending that the Board make these enforceable permit provisions.

Comments from Ruth and Going, Civil Engineers involved with land development projects in the South Bay Area

Ruth & Going comments

We are writing this letter to express concern that the HMP methodology proposed in the Program’s Final Report may over-constrain solutions in the field. The Glossary of the Program’s Final Report states “The HMP will be implemented so that the post-project runoff shall not exceed estimated pre-project rates and/or durations...” Of particular concern is our understanding that the calculation of the release rate from a proposed development project is compared to ten percent of the two-year **pre-urban** discharge rather than the **pre-project (existing) condition** discharge. Therefore, a property that has some amount of existing impervious area may be significantly penalized when the pre-urban discharge is used as the base runoff for a new proposed use of the property.

We are concerned that a pre-urban mitigation criterion may serve as a disincentive for property owners considering the urban revitalization of parcels already substantially developed in terms of impervious surface (i.e. the so-called “smart growth” initiative strongly advocated by the City of San Jose). HMP mitigation may prove to be easier for undeveloped properties than for previously developed properties in the same vicinity, all else being equal.

Response

The commenter appears to express two concerns: 1) that paved parcels may be at a disadvantage compared to unpaved parcels (i.e., that it is easier for undeveloped properties to meet the HMP requirements), and 2) that the “release rate”, or rate at which water is released from a detention basin, may be unachievable, or nearly so.

To address the first concern, all properties, whether initially paved or not, are subject to the same release rate (also referred to in the Program’s HMP as the “allowable low flow discharge”) for hydromodification control. Both the Tentative Order and the Program’s HMP state:

*In computing Q_{cp} , the allowable low flow discharge from a flow control structure on a project site, the original condition of the site before development must be considered.
This does not imply that the developer is being required to provide flow controls to*

permit amendment for all Bay Area Permittees, or through reissuance of the Program’s permit accomplished in a consistent fashion with the other Bay Area Permittees.

match pre-development conditions; rather, it is a means of apportioning the critical flow in a stream to individual projects that discharge to that stream, such that cumulative discharges do not exceed the critical flow in the stream (emphasis added).

Thus, whether or not the property was paved prior to initiation of a development project, the allowable release rate would be the same.

So, does that mean that previously paved (i.e., redeveloped) properties are at a disadvantage over new development? Most likely, no. The Permit requires that only **incremental** (difference between post-project and pre-project) runoff be controlled, not all runoff. Properties that were already paved generally have little or no incremental runoff. That is why new development projects on sandy soils have to make the greatest effort to meet HMP requirements: because they have the greatest incremental runoff. Clay soils (which Permittees state are common to the South Bay) and paved surfaces provide an advantage in that they generate far less incremental runoff.

In addition, the Program's HMP (and this Tentative Order) excludes from all or most HMP requirements the areas in San Jose and the Santa Clara Valley where "smart growth" projects are expected to exist. Thus, those areas will have an advantage, rather than a disadvantage, over projects in undeveloped areas. As the Permittees and developers gain experience implementing HMP requirements, and as HMP requirements are established across the Bay Area, future permit requirements may broaden the area of HMP implementation.

Regarding the achievability of the release rate, there are two factors to consider. First, the release rate is based on the physical properties of Santa Clara Valley streams and is necessary to protect these streams from erosive flows. The Program determined the critical flow (the stream flow that produces critical shear stress and initiates stream erosion) for Santa Clara Valley creeks. This was an important step, because it provides the basis for controlling flows that could erode streams. The Program then developed the method for allocating discharges from developing properties so that *cumulative* new discharges could reasonably be expected to be below or near the critical flow⁶. The Program's analyses demonstrated that this release rate provides for hydromodification control structures that are of a reasonable size (e.g., in terms of land area and cost). The methodology is documented in Draft HMP Report Chapter 5, Appendix F, 3/18/05 version, as well as in supporting Technical Memoranda.

Finally, if flow duration matching with its release rate is unachievable within an acceptable cost⁷, then the Tentative Order and the HMP allow the project to "use appropriate site design, source control, and treatment control measures with flow control benefits to the maximum extent practicable," in lieu of flow duration matching (Performance Criterion 3 of the Tentative Order). Treatment control measures with flow control benefits include bioretention areas (also called "rain gardens"), planter boxes, tree wells, and others.

⁶ The reader should keep in mind that at this time the HMP does not cover exempted new development (e.g., small sites) or existing development. As a reasonable first step in an effort to protect streams from erosive flows, the HMP is meant to focus on only **increased flows** from **certain new** development projects only.

⁷ The criterion to determine practicability is 2% of project cost (not including land cost or costs of normal site enhancements such as landscaping or grading that is required for other purposes) for both treatment and hydromodification control. In those cases, projects are allowed to implement flow control measures onsite to the maximum extent practicable, with the 2% cost criterion used to define the level of effort needed to comply.

Comments from the City of San Jose, a Discharger subject to the Permit

San Jose comment 1

We specifically want to acknowledge that the proposed revised draft Tentative Order that was electronically transmitted to SCVURPPP staff on June 24, 2005 is substantially more acceptable to San Jose than the original Tentative Order that was circulated for public comment, and addresses many of our concerns that we raised with the original Tentative Order. We specifically support the portions of the June 24th revised draft concerning stormwater treatment BMP provisions, as these provisions would conform the SCVURPPP permit to the permits issued to other stormwater programs in the Region.

Response

Comment noted.

San Jose comment 2

We continue to have concerns with the aspects of the Tentative Order that would order San Jose and other SCVURPPP Dischargers to implement peak flow control measures before the Board has even reviewed, much less approved the HMPs submitted by other stormwater programs. We would be interested in an explanation of how the Board intends to ensure that HMP requirements are not delayed for other cities in the region, and that if less stringent requirements are adopted for other cities, the SCVURPPP permit will be quickly amended so that San Jose and other Santa Clara County cities will not, in effect, be penalized for early HMP implementation.

Response

We understand that San Jose would wish to state for the record its concern that other Bay Area Permittees be held to consistent standards in the very near time frame. This clearly remains a concern, even though Board staff and San Jose staff met repeatedly and worked out a Tentative Order that was acceptable to San Jose's representatives in terms of timing and content of the HMP requirements. The Board and its staff are on record⁸ as fully supporting Bay Area-wide consistency in implementing Provision C.3. in general and the HMP requirements specifically.

While developing this Tentative Order, Board staff is simultaneously reviewing HMP Reports submitted by other Bay Area Permittees. Board staff will comment on the technical merits of each report; participate in collaborative meetings to encourage consistency in HMP requirements across the Bay Area; require any necessary revisions to HMP reports; and issue public notices of intent to approve the HMPs. Following those steps, the Board will consider approving the other Bay Area Permittees' HMPs in a public hearing(s). The Board may consider making revisions of the Program's HMP provisions if needed to make the Program's HMP requirements consistent with those of other Bay Area Permittees. The Board may do this through approval of a region-wide permit, through a blanket permit

⁸ October 17, 2001, November 2004, January 2005 Board meetings.

amendment for all Bay Area Permittees, or through reissuance of the Program’s permit accomplished in a consistent fashion with the other Bay Area Permittees.

San Jose comment 3

The remainder of these comments will focus on our legal issues with the Tentative Order provisions relating to the SCVURPPP HMP.

Response

Comment noted.

San Jose comment 4

The Record Does Not Demonstrate That The Proposed Requirements Are Practicable Or Necessary To Protect Water Quality. We do not believe that the record developed to date demonstrates that the HMP requirements that would be imposed through the proposed modification meet the maximum extent practicable (“MEP”) standard, which the U.S. Court of Appeals has determined to be *the* applicable statutory standard governing the substance of permits regulating municipal stormwater discharges under the Clean Water Act. *Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9th Cir. 1999).⁹

Given the procedural requirements contained in the NPDES regulations discussed below, the initial burden of demonstrating that the Tentative Order requirements are within the MEP standard is on the permit writer, not the Discharger. We are particularly concerned with the lack of solid evidence that these requirements are practicable and necessary in light of the fact that the requirements are not yet uniformly applicable throughout the Bay Area. The Tentative Order will impose significant administrative, budgetary, and economic development burdens on San Jose that are not currently being imposed on similarly situated cities, without any factual foundation for this disparate treatment.

Response

To a large extent, this comment appears centered around the issue of timing between when the Commenter and the other Bay Area Permittees will implement HMP requirements. This issue is addressed in our response to comment 2.

Regarding the record developed for this action, which amends Permits 01-024 and 01-119, the record includes the records for Permits 01-024 and 01-119. We believe the proposed language is justified by, and fulfills the requirements of, the Clean Water Act (CWA) and its implementing regulations. The conditions established by this permit are based on Section 402(p)(3)(B) of the CWA, which mandates that a permit for discharges from municipal separate storm sewer systems (MS4) must: effectively prohibit the discharges of non-storm water to the MS4; and, require controls to reduce pollutants in discharges from MS4 to the maximum extent practicable (MEP) including best management practices (BMP), control techniques, and system, design and engineering methods, and such other provisions

⁹ To the extent the Board may claim that “beyond-MEP” requirements are authorized under Porter-Cologne, the California Supreme Court recently held that analysis of economic impacts and burdens must be conducted pursuant to sections 13241 and 13263 of the Porter-Cologne Act. *See City of Burbank v. State Water Resources Control Board*, 05 C.D.O.S. 2861 (April 5, 2005).

determined to be appropriate. MS4s are not exempted from compliance with Water Quality Standards. Section 301(b)(1)(C) of the CWA, requiring that NPDES permits include necessary requirements to meet water quality standards. The intent of the permit conditions is to meet the statutory mandate of the CWA.

NPDES permits must protect receiving water quality standards. Federal NPDES regulation 40 CFR 122.44(d)(1) requires municipal storm water permits to include any requirements necessary to “achieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality.” Finding 7 of Order 01-119 includes evidence that altered flow regimes resulting from new development and significant redevelopment can negatively impact water quality standards. As such, the Permit includes requirements for the management of flow in order to protect receiving water beneficial uses and water quality objectives, as it is required under the federal NPDES storm water regulations. In addition, the Basin Plan contains standards for urban runoff NPDES permit programs in Chapter 4 at p. 4-14, 4-15 and 4-28, 4-32. This Basin Plan language is comprehensive and addresses the types of requirements in the Tentative Order. The requirements in the Tentative Order are also supported by the EPA federal stormwater regulations at 40 CFR 122.26, and fall within the NPDES permitting authority of the Board, and a Basin Plan amendment is not necessary for their inclusion in an NPDES permit.

As authorized by 40 CFR 122.44(k), the permit will utilize BMPs as the mechanism to implement statutory requirements. Section 402(p)(3)(B)(iii) of the CWA clearly includes structural controls as a component of maximum extent practicable requirement.

The language in the Tentative Order is an update of the existing performance standard to ensure that implementation in this vital municipal stormwater permit program area meets MEP. Because the MEP standard is the standard for BMP implementation of the Phase I NPDES permit, the necessary finding is that the changes proposed meet MEP. The State Water Board and other Regional Water Boards have addressed the question of what constitutes MEP in other stormwater permits. (See for example the Cities of Bellflower precedential State Board Order (State Board Water Quality Order WQ-2000-011.)) The Tentative Order is based on an evaluation of MEP for the area covered by the Santa Clara permit.

Further support for the necessity for the hydromodification requirements of the Tentative Order is contained in the following, which San Jose staff requested be removed from the Findings section of the Tentative Order:

- During urban development natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops, and parking lots. Natural vegetated soil can both absorb rainwater and remove pollutants, providing a very effective natural purification process. Because pavement and concrete cannot absorb, detain or infiltrate water, or remove pollutants, the natural infiltration, detention and purification characteristics of the land are lost. As a result, the runoff leaving the developed urban area is significantly greater in volume and velocity than the pre-development runoff from the same area.

- The increased flows and volumes of stormwater discharged from new impervious surfaces resulting from development projects can significantly impact beneficial uses of aquatic ecosystems due to physical modifications of watercourses, such as bank erosion, incision and widening of channels. The physical modifications of watercourses that result from increased flows and volumes of stormwater discharged from new impervious surfaces are collectively referred to herein as “hydromodification.”
- Hydromodification can result in loss of property as stream banks erode; increased flooding from increased runoff volume and duration as eroded sediment is deposited in downstream stream reaches with low slopes; threats to the structural stability of bridges and other structures as stream banks erode; loss of spawning, wetland, and wildlife habitat due to sediment deposition and damage to riparian vegetation; and loss of habitat and aesthetic value as streams are hardened to counteract hydromodification impacts.
- In response to hydromodification impacts, eroding stream banks are commonly armored (encased in concrete, rip-rap, gabions or similar structures) resulting in loss of beneficial uses of the removed aquatic ecosystem and riparian vegetation. Like all man-made structures, the armoring must be periodically maintained, and sediment must be removed regularly to reduce flooding. Channel maintenance and sediment removal are public programs financed by taxes and fees.
- Degradation of watercourses increases with percent imperviousness. The increased volume and velocity of runoff from developed urban areas can greatly accelerate the erosion of downstream natural channels. Hydromodification control measures can reduce or eliminate the creek damaging effects of increased impervious surface construction associated with land development. A number of studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of beneficial uses of downstream receiving waters. Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as a 10% conversion from natural to impervious surfaces. Typical medium-density single-family home projects range between 25 to 60% impervious. Even at very low densities, such as 1-2 housing units per acre, standard subdivision designs can exceed the 10% imperviousness threshold that, as noted above, is theorized to be the threshold for degradation of streams and other waters with increasing imperviousness of their catchment.¹⁰ Studies on the impacts of imperviousness on beneficial uses of waters include “Urbanization of aquatic systems: Degradation thresholds, stormwater detection, and the limits of mitigation,” Derek B. Booth and C. Rhett Jackson, *Journal of the American Water Resources Association* 33(5), Oct. 1997, pp. 1077-1089; “Urbanization and Stream Quality Impairment,” Richard D. Klein, *Water Resources Bulletin* 15(4), Aug. 1979, pp. 948-963; “Stream channel enlargement due to urbanization,” Thomas R. Hammer, *Water Resources Research* 8(6), Dec. 1972, pp. 1530- 1540; and, summaries of work on the impacts of imperviousness, including “The Importance of Imperviousness,” in *Watershed Protection Techniques* 1(3), Fall 1994, pp. 100-111, and “Impervious surface coverage: The emergence of a key environmental indicator,” Chester L. Arnold et al., *Journal of the American Planning Association* 62(2), Spring 1996, pp.243-259.

¹⁰ A discussion of imperviousness based on type of development and time of construction is provided in Heaney, J.B., Pitt, R, and Field, R. **Innovative Urban Wet-Weather Flow Management Systems**, 1999. USEPA Doc. No. EPA/600/R-99/029 (Chapter 2).

Therefore, the record provides justification that implementation of hydromodification control measures proposed in the Tentative Order will reduce one or more pollutants in stormwater runoff, as well as impacts to beneficial uses caused by excess flows, in the area covered by the Santa Clara permit.

San Jose comment 5

The Proposed Requirements Impermissibly Specify The Manner Of Performance. Porter-Cologne specifically prohibits the Board from specifying the “design, location, type of construction, or particular manner in which compliance may be had” Cal. Water Code § 13360. However, the proposed requirements of the Tentative Order do just that – they attempt to prescribe for the municipalities, the types of planning, design, and land use standards and programs they are to impose at the local level. These requirements limit the manner in which San Jose might satisfy MEP. By specifying exactly how San Jose is to comply with MEP, the proposed Tentative Order violates the requirements under Porter-Cologne. **We are particularly concerned that issuance of the Tentative Order could lead to a situation where the requirements imposed on San Jose are more onerous than the requirements that are ultimately imposed on other similarly situated cities in the Region.** Indeed, this scenario is precisely what occurred with the hydraulic sizing requirements for stormwater treatment BMPs; and the disparate treatment of San Jose and other Santa Clara County municipalities is only now being corrected, over four years after the permit containing these provisions was issued.

Response

The Revised Tentative Order approves key provisions of a plan developed by San Jose and the other Permittees, thus the Board is not specifying the particular manner in which compliance may be had. The Tentative Order is not unlawfully prescriptive. First, the standards do not prescribe the methods of compliance. Instead they establish criteria for compliance. The State Board addressed this issue in its precedential decision “In the Matter of the Petitions of the Cities of Bellflower, et al., the City of Arcadia, and Western States Petroleum Association,” State Board Water Quality Order: WQ-2000-011 (hereinafter, the “Bellflower decision”). The State Board held that the “...design standards required by the Los Angeles Regional Board are objective criteria that developers must achieve in designing their BMPs. The design standards are not separate BMPs. The standards tell what magnitude of storm event the BMPs must be designed to treat or infiltrate. They do not specify the BMPs that must be employed.” (Id. at page 12.) The Board also stated that “[t]he addition of measurable standards for designing the BMPs provides additional guidance to developers and establishes a clear target for the development of the BMPs.” (Id. at page 18.)

Second, even if the standards were prescriptive, such prescription is not unlawful under section 13360. First, it is not a violation of section 13360 to give a discharger a range of alternative methods of compliance. (Orders No. WQ 87-9, 90-5.). Second, it is not a violation of section 13360 if there is only one practical manner of compliance with an order, whether that fact is explicit (*Tahoe-Sierra Preservation Council v. Water Board* (1989) 210 Cal. App. 3d 1426.) or implicit in the record (*Pacific Water Conditioning Association v. City Council* (1977) 73 Cal. App. 3d 546.) Furthermore, the prohibition in section 13360 does not apply to NPDES permits because they are governed by federal law. To the extent that federal law governing NPDES permits allows the prescription of methods of compliance

(i.e., Best Management Practices), federal law will control over California Water Code section 13360. (Orders No. WQ 80-19, 82-15.)

Flexibility is provided in the Tentative Order. For example, hydromodification control may be achieved by a number of site design techniques or BMPs or both. The design and type of BMP is left to the discretion of the developer and the Permittee.

San Jose comment 6

The Tentative Order Seeks To Impose An Unfunded Mandate. The Tentative Order's requirements constitute imposition of an unfunded mandate on San Jose in violation of the California Constitution. *See* Cal. Const. Art. 13B § 6. Under the California Constitution, the State is required to reimburse local governments for State mandated programs. *See* Cal. Const. Art. 13B § 6. While the Clean Water Act is a federally mandated program, case law makes clear that the prohibition on unfunded mandates applies, unless the State has "no true choice" in the manner of implementing the federal program. *See Hayes v. Commission on State Mandates*, 11 Cal.App.4th 1564, 1593 (1992) (emphasis added).

Here, the State, through the Regional Board, has a very real choice about whether to impose the requirements in the Tentative Order. The U.S. Environmental Protection Agency has issued no mandate to require numeric design standards or the hydromodification management controls proposed here; indeed, they have not even issued a recommendation to this effect.

Hence, the costs associated with these requirements are not "costs mandated by the federal government" and may not be imposed in the absence of a concurrent provision of funding to the local government entities involved. Cal. Gov't Code § 17513. **Again, one of our biggest concerns is that the costs being imposed on San Jose are not being imposed on similarly situated cities.**

Response

The requirements of the Tentative Order are not within the definition of "unfunded mandate" that would require reimbursement of costs under the California Constitution, because they are derived from the federal Clean Water Act, as opposed to State Law. Because the Tentative Order would implement a federal requirement, rather than a State requirement, the Tentative Order is not an "unfunded mandate" by the State. The State Water Board has previously determined in several circumstances that regional water board orders are exempt from the requirement for reimbursement under the California Constitution.

San Jose comment 7

Issuance Of The Tentative Order Is Subject To CEQA. The California Environmental Quality Act (CEQA) applies to permits issued by the Regional Board to the extent any such permit is not an action required by the federal Clean Water Act ("CWA").¹¹ As indicated above, the HMP provisions of the Tentative Order are not required by the CWA.

¹¹ See, e.g., *Committee for a Progressive Gilroy v. State Water Resources Control Board*, 192 Cal.App.3d 847,962 (1987) (limiting the CEQA exemption of Section 13389 of the California Water Code to those "actions required under" the federal CWA).

CEQA contains very specific procedural and substantive requirements, which have not been met. For example, CEQA requires a thorough analysis of the cumulative impacts of all potential environmental impacts. (CEQA Guidelines § 15130). No such analysis appears in the staff report, or anywhere in the record. For example, there has been no analysis of the cumulative impacts to the affordable housing supply resulting from imposing a 2% "surcharge" on housing project costs. Also troubling is the lack of analysis of the functionality of controlling very low peak flows (which has not been tried in any other jurisdiction to our knowledge¹²), and whether mitigation measures will be needed to avoid unintended adverse consequences, such as standing water. **Deferring imposition of HMP requirements on San Jose until the Board is ready to move forward on a regional basis would allow time for these analyses to be performed in a cost effective and efficient manner for all municipal stormwater programs.**

Response

We disagree that the Tentative Order requires actions that go beyond the CWA. The Tentative Order is based upon the requirements of the CWA and pursuant regulation. The State Board considered the issue of whether CEQA review is required in its Bellflower decision and concluded that under Water Code section 13389, a Regional Water Board is not required to comply with CEQA requirements regarding adoption of environmental documents in approving NPDES permits. (*Bellflower, supra*, at 15.) Thus, CEQA review is not required.

Regarding analysis of the cumulative impacts to the affordable housing supply, projects within "Redevelopment Project Areas" (as defined by Health and Safety Code Section 33000, et seq.) that redevelop an existing Brownfield site or create housing units affordable to persons of low or moderate income as defined by Health and Safety Code Section 50093, are excepted from the requirements of this Order. Transit village type developments within ¼ to within ½ mile of transit stations and/or intermodal facilities are also exempt. As a point of clarification, the Tentative Order does not impose a surcharge on housing or any other type of development project.

Regarding analysis of the functionality of controlling very low peak flows, please see our response to the Ruth and Going comments regarding the allowed release rate.

San Jose comment 8

Procedural Concerns With Tentative Order: Lack of Allowable Cause for Modification.

The Tentative Order proposes that federal regulations governing permit modifications (40 C.F.R. §122.62) and condition C.11 of the existing permit establishes sufficient cause to reopen and modify the permit and incorporate new land use planning provision restrictions.

We are particularly concerned with reopening the permit to impose these new requirements so late in the current cycle, and before the Regional Board has completed its review of the HMPs submitted by other stormwater programs.

¹² We note that in Western Washington, flows are controlled only down to 50%, not 10%, of the 10-year flow, as currently proposed by Contra Costa County.

Neither the Tentative Order nor the Fact Sheet provide any explanation of how conditions are changed, much less significantly so, from the time the permit was issued. There is no evidence water quality has deteriorated as a result of the previously permitted discharge or that significant changes justify removing the “maximum certainty” that permittees require.

Response

There is no procedural irregularity in implementing what Order No. 01-119 expressly allows and requires: approving an alternate Group 2 definition and an HMP. Modifying the permit to reflect the new Group 2 definition and new HMP requirements is necessary and authorized because they are major revisions to the Management Plan, through which provision C.3 is implemented. Provision C.11. of the existing permit makes clear that amendments, revisions and modifications to the Management Plan and existing permit would be necessary from time to time, and that changes requiring major revision of the Management Plan shall be brought before the Board as permit amendments.

With respect to timing, the reason that the permit is being amended well into the permit cycle is because the Program requested, in 2003, and was granted the opportunity to submit further an alternate Group 2 definition. Likewise, it is only now that acceptable provisions of the HMP are ready for approval by the Board. Under the terms of the permit, approval of an alternate Group 2 definition and the HMP could have occurred sooner.

San Jose comment 9

Procedural Concerns With Tentative Order: Deficiencies in Draft Permit and Fact Sheet.

Numerous state and federal procedural requirements have not been complied with in issuing this proposed modification to the Program members’ National Pollutant Discharge Elimination System (“NPDES”) municipal stormwater permit. Specifically, neither the Tentative Order, nor the accompanying Fact Sheet, contains a meaningful explanation of the basis of, or rationale for, how its requirements were calculated. Nor has any meaningful effort been made to conduct the required analysis of the reasonableness, practicality, or calculated benefits and/or impacts of the proposed modifications.

The fact sheet provided with the Tentative Order (“Fact Sheet”) fails to contain the information required by these regulations (40 CFR §§ 124.6, 124.8, and 124.56). Nowhere are there references to the factual basis for the proposed modifications. Nor is there an analysis of the methodological and policy questions involved, the relevant administrative record, the numerous requests received from members of the Program concerning alternatives to these permit conditions, or the reasons why they (and not the alternatives suggested by the Program) are appropriate.

To the extent that the proposed modifications seek to go beyond the Clean Water Act’s “maximum extent practicable” standard (see discussion above), sections 13241 and 13263 of the Porter-Cologne Act require that waste discharge requirements take into consideration “(a) [p]ast, present and probable future beneficial uses of water[,] (b) [e]nvironmental characteristics of the hydrographic unit under consideration . . . , (c) [w]ater quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area[,] (d) [e]conomic considerations[,] [and] (e) [t]he need for developing housing within the region.” See *City of Burbank v. State Water Resources*

Control Board, 05 C.D.O.S. 2861 (April 5, 2005). Porter-Cologne also requires that an analysis be conducted to ensure that the burden imposed through waste discharge requirements bear a “reasonable relationship to the need for the report and the benefits to be obtained” Cal. Water Code §§ 13263 and 13267.

Response

Please refer to the response to San Jose comment 4. The proposed modifications do not go beyond the Clean Water Act’s “maximum extent practicable” standard, thus sections 13241 and 13263 are not applicable under the case cited by the commenter.

San Jose comment 10

We are submitting these comments because the draft Tentative Order that is being circulated for public review and comment is not acceptable to San Jose, and we believe it is necessary to ensure that San Jose's comments are part of the record in this proceeding.

Response

Comment noted.