#### ATTACHMENT D

VENTURA COUNTYWIDE PROGRAM "ISSUE PAPERS" (ALTERNATIVE APPROACHES) ON THE VENTURA COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT (NPDES NO. CAS004002) FOR THE VENTURA COUNTY WATERSHED PROTECTION DISTRICT, COUNTY OF VENTURA, AND THE INCOPRORATED CITIES DATED

Routine Maintenance Issue Paper

Alternative Language Issue Paper

Land Use LID Issue Paper 1st draft

Hydromodification Issue Paper 1st draft

Swimming Pool Discharges Permit Language

Ventura County Jurisdictional Area Issue Paper

Principal Activities Issue Paper

Construction Issue Paper VC Permittees Issue Paper

MAL Alternative Approach Issue Paper

Small Communities Tiered Permit Issue Paper

Time Frames Issue Paper

Watershed Ecological Restoration Plan Issue Paper

Land Use Planning and LID Language Changes

### **ISSUE PAPER**

#### for

# ROUTINE MAINTENANCE REQUIREMENTS Contained in the Draft Stormwater Permit for the Ventura Countywide Stormwater Program

**Statement of Issue**: Should the Ventura permit require routine and long-term maintenance activities to be covered under the State Construction General Permit (CASGP)?

## **Draft Permit Language:**

The Draft Permit addresses coverage of routine and long-term maintenance activities under the CASGP in several places, as presented below.

Part 4 G 2. Public Construction Activities Management (page 73)

- (c) Each Permittee shall obtain coverage under the CASGP for construction activities and projects that are:
  - (1) Covered under 1 (or more) Capital Improvement Projects (including but not limited to street repaving, new streets, channel clearing<sup>1</sup>) or contract, and that individually or cumulatively disturb 1 acre or more of land; or
  - (2) Less than 1 acre, but are part of a larger common plan of development that in total disturbs 1 or more acres of land; and
  - (3) Linear construction project(s) that disturb 5 or more acres of land.
- (d) Each Permittee shall obtain coverage under the Small LUP General Permit when disturbing at least 1 acre, but less than 5 acres of land during linear construction (land area includes trenching and staging areas).
- Part 4 G 3. Vehicle Maintenance/Material Storage Facilities/Corporation Yards Management/Long Term Maintenance Programs.(page 76)
  - (b) Each Permittee shall obtain coverage under the CASGP no later than (7 days of adoption of Order 07-xxx) [Note: Refer Here To Ventura Permit Adoption Date Only]) for long-term maintenance programs including maintenance of flood control channels (such as vegetation removal), maintenance or replacement of streets, sidewalks, roads, and any other project that the Permittee undertakes including all Capital

Improvement Projects (CIP) if either 1 or more acres of land are disturbed by grading, clearing or excavation activities for an individual project or cumulatively as part of several projects involving a soil disturbance.

# Definition of Construction (page 93)

Construction - means any construction or demolition activity, clearing, grading, grubbing, or excavation or any other activity that results in a land disturbance. Construction also includes structure tear down, routine maintenance to maintain original line and grade if greater than 5 acres total but not necessarily at once, hydraulic capacity, or original purpose of facility; but does not include emergency construction activities required to immediately protect public health and safety; interior remodeling with no outside exposure of construction material or construction waste to storm water.

#### Discussion:

The Draft Permit requires coverage of routine and long-term maintenance activities under the CASGP as a result of the following permit requirements: (1) by including routine maintenance within the definition of construction; (2) by specifically identifying certain routine maintenance activities, such as street repaving and channel clearing, as Capital Improvement Projects that need to be covered under the CASGP; and (3) by specifically identifying certain long-term maintenance activities, such as maintaining flood control channels, as activities that need to be covered under the CASGP.

The Permittees believe that coverage of routine and long-term maintenance activities under the CASGP is inappropriate for the following reasons:

The requirement that routine maintenance activities be covered under the CASGP is new and not covered under the current NPDES permit. The current Ventura Countywide NPDES Permit explicitly excludes from the definition of construction: "...routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility..." There is no explanation in the Draft Permit findings as to why this new requirement is being imposed.

The requirement for coverage of routine maintenance activities under the CASGP is inconsistent with the CASGP itself. Requirement for coverage under the CASGP "...does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility." Since the SWRCB does not require that long-term maintenance activities be required to get coverage under the CASGP, it is inappropriate for the Draft Permit to include such a requirement.

# For Discussion Purposes Only

The requirement for coverage of routine maintenance activities under the CASGP is inconsistent with other MS4 permits. The Permittees are unaware of any other MS4 permit in the State that requires routine maintenance activities, explicitly excluded under the CASGP permit, to obtain coverage under that permit.

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The requirement for coverage of routine maintenance under the CASGP serves no significant beneficial purpose. The most significant threats to water quality with respect to routine or long-term maintenance activities are activities within or adjacent to streams, including those cited in the permit (channel clearing, maintenance of flood control channels, vegetation removal). But such maintenance activities are already addressed under other regulatory programs. Specifically, any activity, such as channel clearing or vegetation removal within channels, that may result in soil disturbing activities within or adjacent to waters of the U.S. are required to obtain a 401 certification from the Regional Water Board as well as permits from other State and Federal permitting authorities. Thus, a permit requirement that coverage also be obtained under the CASGP is duplicative, unnecessary, and may have conflicting requirements.

If the definition of construction is to be modified, it should be modified in the CASGP. The CASGP is the primary document which addresses requirements for construction. If the definition of construction is to be expanded to include routine and long-term management activities, it should be expanded in the GASGP, not in individual MS4 permits. Until that time, MS4 permits should utilize the definition of construction contained in the current GASGP.

For the reasons cited above, the Permittees believe that these particular sections should be modified to reflect the traditional definition of construction, which excludes routine and long-term maintenance.

#### Alternative:

It is proposed that the definition of construction be modified to reflect the definition in the current NPDES permit and the current CASGP. It is also proposed that the Draft Permit provisions which identify routine and long-term maintenance activities as requiring coverage under the CASGP be deleted. Specifically, it is proposed that the Draft Permit language cited above be modified as follows:

Part 4 G 2. Public Construction Activities Management (page 73)

<sup>(</sup>e) Each Permittee shall obtain coverage under the CASGP for construction activities and projects that are:

# Routine Maintenance Requirements

- (4) Covered under 1 (or more) Capital Improvement Projects (including but not limited to street repaying, new streets, channel clearing1) or contract, and that individually or cumulatively disturb 1 acre or more of land; or
- (5) Less than 1 acre, but are part of a larger common plan of development that in total disturbs 1 or more acres of land; and
- (6) Linear construction project(s) that disturb 5 or more acres of land.
- (f) Each Permittee shall obtain coverage under the Small LUP General Permit when disturbing at least 1 acre, but less than 5 acres of land during linear construction (land area includes trenching and staging areas).

# Part 4 G 3. Vehicle Maintenance/Material Storage Facilities/Corporation Yards Management/Long Term Maintenance Programs.(page 76)

(b) Each Permittee shall obtain coverage under the CASGP no later than (7 days of adoption of Order 07-xxx) [Note: Refer Here To Ventura Permit Adoption Date Only]) for long-term maintenance programs including maintenance of flood control channels (such as vegetation removal), maintenance or replacement of streets, sidewalks, roads, and any other project that the Permittee undertakes including all Capital Improvement Projects (CIP) if either 1 or more acres of land are disturbed by grading, clearing or excavation activities for an individual project or cumulatively as part of several projects involving a soil disturbance.

# Definition of Construction (page 93)

Construction - means any construction or demolition activity, clearing, grading, grubbing, or excavation or any other activity that results in a land disturbance. Construction also includes structure tear down. It does not include street maintenance such as street overlays, —routine maintenance to maintain original line and grade if greater than 5 acres—total but—not necessarily at—once, hydraulic capacity, or original purpose of facility. Nor does it; but does not include emergency construction activities required to immediately protect public health and safety; interior remodeling with no outside exposure of construction material or construction waste to storm water.

Or alternatively use the actual definition from the State Construction General Permit:

Construction activity subject to this General Permit includes clearing, grading, disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of at least one acre of total land area. Construction activity also include activity that results in soil disturbances of less than one acre is subject to this General Permit if the construction activity but is part of a larger common plan of development that encompasses one or more acres of soil disturbance or if there is significant water quality impairment resulting from the activity. Construction activity does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility, nor does it include emergency construction activities required to protect public health and safety. Dischargers should confirm with the local RWQCB whether or not a particular routine maintenance activity is subject to this General Permit.

# **ISSUE PAPER**

For

# Alternative Language for Permit Requirements Contained in the Draft Stormwater Permit for the Ventura Countywide Stormwater Program

# Trash Excluders (Page 78, Part 4, G.6.(e)(1))

### **Draft Permit Requirement:**

"Each Permittee shall install trash excluders or similar devices on catch basins to prevent the discharge of trash to the storm drain system on all catch basin inlets no later than (180 from permit adoption)."

### Alternative:

- 1) Each Permittee shall install trash excluders or similar devices on catch basins and/or outlet trash capture systems at outfalls sufficient to serve major commercial areas and areas of high density residential development to prevent the discharge of trash to the storm drain system; **or**
- 2) Each Permittee shall have a Trash Management Program in place within 1 year of permit adoption. This program shall consist, at a minimum, of the following actions and activities:
- (a) Perform street sweeping of curbed streets in commercial areas at least two times per month and perform street sweeping of curbed streets in residential areas at least six times per year.
- (b) Install trash receptacles at all transit stops and at other appropriate locations in commercial areas. Trash receptacles shall be routinely cleaned out to prevent trash overflow.
- (c) Perform trash collection on public property and right-of-way on a routine basis.
- (d) Implement procedures to promptly remove and properly dispose of trash and bulky items that have been illegally deposited on public property or right-of-way.
- (e) Promptly enforce laws prohibiting the accumulation of trash on private property.
- (f) Implement a program that allows residents to dispose of unwanted materials at no or low cost at least once per year (community cleanup days, free landfill days, or other activities).
- (g) Actively support citizen involvement events such as creek/beach cleanup events, Adopt-a-Creek/Beach programs, group service activities, community riparian restoration activities, community grant programs and other opportunities to collect and properly dispose of trash.
- (h) Incorporate litter prevention messages in outreach programs and, if appropriate, coordinate with other local programs.

# Treatment BMPs at Critical Sources

### **Draft Permit Requirement:**

Page 42, Part 4, D.2.(a) Commercial Facilities:

"...At each facility, inspectors shall verify that the operator is implementing the mandatory source control BMPs. The Permittees shall require implementation of additional treatment control BMPs where storm water flows from the MS4 discharge to an ESA or a CWA § 303(d) listed waterbody (see section 3(b) below)...."

Page 47, Part 4, D.2.(b)(2)(B) Industrial Facilities:

"....Permittees shall require implementation of additional treatment control BMPs where the storm water flows from the MS4 discharges to a CWA § 303(d) listed waterbody;..."

Page 48, Part 4, D.3.(b) Ensure Compliance of Critical Sources:

"(b) ESAs and Impaired Waters: For critical sources that discharge to ESAs or are tributary to CWA § 303(d) impaired waterbodies, the Permittees shall require operators to implement additional controls to reduce pollutants in storm water runoff that are causing or contributing to exceedences of MALs and/or water quality objectives."

#### Alternative:

Remove the language requiring treatment control BMPs at commercial and industrial facilities (Pages 42 and 47). Treatment control BMPs should only be required when a pollutant generated from a facility is causing or contributing to exceedences of the water quality objective for the same pollutant in the receiving water. Treatment control BMPs should not be required at all critical sources simply because an MS4 discharges to a 303(d) listed waterbody. Section D.3.(b) recognizes this perspective.

The language in section D.3.(b) should be amended to read as follows:

"(b) ESAs and Impaired Waters: For critical sources that discharge to ESAs or are tributary to CWA § 303(d) impaired waterbodies, the Permittees shall require operators to implement additional controls to reduce pollutants in storm water runoff that are causing or contributing to exceedences of MALs and/or water quality objectives."

For Permittees named as a Responsible Parties in a TMDL, the TMDL implementation plan shall supersede this requirement.

# Screening for Illicit Connections (Page 84, Part 4, H.3.(a)(2))

### **Draft Permit Requirement:**

- (2) Permittees shall conduct field screening of their storm drain systems in accordance with screening procedures described in the <u>Illicit Discharge Detection and Elimination</u>, A <u>Guidance Manual for Program Development and Technical Assessments (2004)</u> <sup>1</sup>. Permittees shall conduct field screening for illicit connections in accordance with the following schedule:
  - (A) All portions of the storm drain system consisting of storm drain pipes 36 inches in diameter or greater no later than (5 years after the adoption of this Order).
  - (B) High priority areas identified during the mapping of illicit connections and discharges no later than (5 years after the adoption of this Order).
  - (C) All portions of storm drain systems 50 years or older in age no later than (5 years after the adoption of this Order).

#### Alternative:

During the first term of the Ventura County Municipal Permit, Permittees conducted an illicit discharge/connection investigation of high priority drainages within their jurisdictions. The investigation, which was very resource intensive, consisted of field screening through visual inspections and a limited amount of monitoring. The results are documented in the September 1995 Ventura County Stormwater Quality Management Program Annual Report to the Regional Board. Alternative language for the third term permit could consist of the following:

"The Permittees shall continue to prohibit all illicit connections and illegal discharges to the MS4s through their ordinances, inspections, and monitoring programs. Permittees shall perform routine surveys for illicit discharges and illegal dumping in above-ground check points in the collection system, including elements that are typically inspected for other maintenance purposes, such as end of pipes, creeks, flood conveyances and catch basins, in coordination with routine Public Works and Watershed Protection District maintenance and inspection activities."

# **Swimming Pool Discharges**

# **Draft Permit Requirements:**

Page 32, Part 3, B.1.(b)(5)

- 1. Permittees shall have the necessary legal authority to prohibit, including, but not limited to:
  - (b) The discharge of non-stormwater to the MS4 from:

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- (5) Swimming pool(s) that have a concentration greater than:
  - (A) Chlorine/bromine 0.1 mg/L.
  - (B) Chloride 250 mg/L.
  - (C) Cyanuric acid of 50 ppm;
  - (D) E. coli of 235/100 ml (fresh waters)
  - (E) Fecal coliforms of 400/100 ml (fresh waters and marine waters)
  - (F) Enterococcus of 104/100 ml (marine waters)
  - (G) Total coliforms of 10,000/100 ml, or 1,000/100 ml if the ratio of fecal-to-total coliform exceeds 0.1 (marine waters).

Page 97, Definitions

**Dechlorinated/ Debrominated Swimming Pool Discharge -** means any swimming pool discharge with a residual chlorine or bromine level of 0.1mg/L; and does not contain any detergents, wastes, algaecides, or cyanuric acid in excess of 50 ppm, or any other additional chemicals including salts from pools commonly referred to as "salt water pools". The term does not include swimming pool filter backwash or swimming pool water containing bacteria.

#### Alternatives:

- 1. Permittees shall have the necessary legal authority to prohibit, including, but not limited to:
  - (b) The discharge of non-stormwater to the MS4 from:
  - (5) Swimming pool discharges that drain directly to receiving waters or with a residual chlorine level of greater than 0.1 mg/l and/or containing detergents, wastes, algaecides, sediment, or salts from pools commonly referred to "salt water pools".

Page 97, Definitions:

Dechlorinated/ Debrominated Swimming Pool Discharge - means any swimming pool discharge with a residual chlorine level of less than or equal to 0.1 mg/L; and does not contain any detergents, wastes, algaecides, sediment or salts from pools commonly referred to as "salt water pools". The term does not include swimming pool filter backwash.

#### **ISSUE PAPER**

# Land Use Planning and Low Impact Development

Statement of Issue: The Ventura Draft Permit requires the Permittees to implement a development-planning program that requires all new development and redevelopment projects to implement several strategies (including low impact development concepts) aimed at reducing impacts from storm water runoff on natural drainage systems and water bodies. However, these strategies may actually place local agencies in conflict with other environmental concerns (e.g. air pollution) and policy (e.g. General Plan) and may actually work against "smart growth" principles.

#### **Draft Permit Language**

Among other requirements, the Draft Permit requires the Permittees to modify their land use planning program to address water quality through a set of guiding principles and standards.

Part 4 E Planning and Land Development Program (page 50)

- 1. The Permittees shall implement a development-planning program that will require all New Development and Redevelopment projects to:
  - (a) Minimize impacts from storm water runoff on the biological integrity of Natural Drainage Systems and water bodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21100), CAL. WATER CODE §13369, CWA § 319, CWA § 402(p), CWA § 404, CZARA § 6217(g), ESA § 7, and local government ordinances.
  - (b) Minimize pollutants emanating from impervious surfaces by reducing the percentage of Effective Impervious Area<sup>1</sup> to less than 5 percent of total project area.
  - (c) Minimize the percentage of impervious surfaces on development lands to support the percolation and infiltration of storm water into the ground.
  - (d) Minimize pollution emanating from impervious surfaces on developed land such as roof-tops, parking lots, and roadways through the use of appropriate Source Controls (good housekeeping practices), Low Impact Development Strategies, and Treatment Control BMPs.

<sup>&</sup>lt;sup>1</sup> Effective Impervious Area means that portion of the impervious area that is hydrologically connected via sheet flow or a discrete hardened conveyance to a drainage system or a receiving water body. Impervious surfaces may be rendered "ineffective" if the storm water runoff is dispersed through properly designed vegetated swales (native vegetation) using approved dispersion techniques.

- (e) Properly design and maintain Treatment Control BMPs (in Permit to avoid the breeding of vectors).<sup>2</sup>
- (f) Select an integrated approach to mitigate storm water pollution by utilizing a suite of controls in the following Permit of preference to remove storm water pollutants, reduce storm water runoff volume, and beneficially reuse storm water:
  - (1) Low Impact Development Strategies.
  - (2) Integrated Water Resources Management Strategies.
  - (3) Multi-benefit Natural Feature BMPs.
  - (4) Prefabricated/Proprietary Treatment Control BMPs.

### Part 4 I Low Impact Development (page 51)

- 1. All new development and redevelopment projects shall integrate Low Impact Development (LID) principles into project design. LID is a storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect predevelopment hydrologic functions. LID is primarily a source control strategy, and minimizes the need for large sub-regional and regional treatment control BMPs.
- 2. The Permittees shall develop a LID Technical Guidance Document no later than (18 months from the Permit's adoption date) for use by Land Planners and Developers. The LID Technical Guidance Document shall include objectives and specifications for LID in the areas of:
  - (a) Site Assessment.
  - (b) Site Planning and Layout.
  - (c) Vegetative Protection, Revegetation and Maintenance.
  - (d) Techniques to Minimize Land Disturbance.
  - (e) Integrated Management Practices.
  - (f) LID Design and Flow Modeling Guidance.
  - (g) Hydrologic Analysis.
  - (h) LID Translators.
- 3. The Permittees will facilitate implementation of LID by providing key industry, regulatory, and stakeholders with LID objectives and specifications developed in the LID Technical Guidance Document through a training program. The LID training program will include the following:
  - (a) LID targeted sessions and materials for builders, design professionals, regulators, resource agencies, and stakeholders.
  - (b) A combination of awareness on national efforts and local experience gained through LID pilot projects and demonstration projects.
  - (c) Materials and data from LID pilot projects and demonstration projects including case studies.

<sup>&</sup>lt;sup>2</sup> Treatment BMPs when designed to drain within 72 hours of the end of rainfall minimize the potential for the breeding of vectors.

- (d) Guidance on how to integrate LID requirements into the local regulatory program(s) and requirements.
- (e) Availability of the LID Technical Guidance Document.

#### **Discussion**

The Permittees and other interested parties have identified a number of significant issues or concerns with the Draft Permit. For each issue, the discussion provides a rationale for the concern (including related problems that will result from adoption of the Draft Permit); alternative approaches used by other regional boards, and recommended changes to the Draft Permit aimed at addressing each issue. In addition, an underline-strikeout version of Section E.1, which illustrates the changes needed to address problem areas is provided in Attachment 1.

The application of hydromodification requirements to all projects is too broad. The Draft Permit's broad applicability to all new development and redevelopment projects greatly exceeds applicable thresholds in other regional water quality jurisdictions. Furthermore, there is no supporting documentation to support the inclusion of all new development and redevelopment projects. This extraordinary treatment of storm water entities in Ventura County raises serious concerns about the fair and equal application of storm water management rules on a statewide basis. The inclusion of all development projects will cause significant burdens upon Permittees and development projects in relation to compliance monitoring, enforcement, and increased costs. For example, unlike in other jurisdictions, home improvement projects would be subject to the Permit even if no land disturbing activities are conducted. Such broad requirements are unwarranted and will discourage home improvement to the detriment of local communities. The solution to this problem is to narrow the applicability of the development planning requirements in a fashion similar to the approaches taken in other water quality jurisdictions. Below is a delineation of project size threshold in storm water NPDES permits from the San Francisco Bay and San Diego Regional Water Quality Control Boards.

Permit No. R2-2003-0021 (San Francisco Bay Region)

The Permit applies only to Group 2 Projects.<sup>3</sup> Group 2 Projects generally include only projects creating 10,000 square feet or more of impervious surface, excluding sidewalks, bicycle lanes, trails, bridge accessories, guardrails, and landscape features for streets, roads, highways, and freeway projects. Redevelopment projects under Group 2 are subject to the Permit only if classified as "significant," which includes projects on a previously developed site that results in addition or replacement of impervious surface totaling 10,000 square feet or more, excluding routine maintenance and repair and interior remodels. Under this provision, single family homes not part of a larger common plan of development are excluded from the Group 2 Project definition. (See Region 2

<sup>&</sup>lt;sup>3</sup> The former Group 1 projects, which involved projects having larger impervious surface area have been subsumed under Group 2 projects under the Permit as of August 15, 2006 (See C.3.c.ii or Permit No. R2-2003-0021).

Board (2003) Sec. C.3.c.i and C.3.c.ii).

<u>Tentative Permit No. R-9-2007-002 (San Diego Regional Board)</u>
This Permit applies only to "Priority Development Projects." In short, these projects include:

- Redevelopment projects that create, add, or replace at least 5,000 square feet of
  impervious surfaces on an already developed site having certain size minimums such
  as a housing division of 10 or more dwelling units, commercial developments greater
  than one acre, etc.
- Development projects disturbing one acre or more of land within three years of adoption of the Permit.
- For new development projects, housing subdivisions of ten or more dwelling units, commercial developments greater than one acre, heavy industry developments greater than one acre, and specific development types such as automotive repair shops, restaurants, gasoline stations, medium sized parking lots, etc.

Draft Permit's five percent impervious surface requirement is overly protective, not reflective of local conditions and may lead to urban sprawl. The Draft Permit's five percent limit on effective impervious area will hinder smart growth and encourage urban sprawl. The primary reason for this is that smart growth projects involve high density development and re-development in a manner resulting in little to no opportunity for storm water infiltration. Thus, complying with the Permit's five percent limit would be nearly impossible for smart growth while convenient for urban sprawl where sufficient land is available for infiltration purposes. Resulting sprawl will then create more urban impacts on a watershed scale. Moreover, the five percent limit would require Permittees to verify compliance, which would be unnecessary where effective LID strategies are utilized, as the Contra Costa Clean Water Program has shown (see below). Where LID strategies are emphasized, the focus should be on proper construction and maintenance of LID practices.

One solution to the problem the five percent limitation poses would be to exempt smart growth development from the impervious surface limitation. In the alternative, Section E.1 (b) could be rephrased to require reduced impervious surfaces at the watershed scale through promotion of site design practices such as clustering development and promoting infill on a watershed basis to preserve open space. At the project scale the requirement could call for narrower streets and sidewalks, utilization of pervious sidewalks and parking areas, minimizing cul-de-sacs, reducing parking requirements, and providing treatment opportunities where available. This is the approach taken on Tentative Permit No. R9-2007-002 (San Diego Region) (See Section d (4)).

Although the five percent limit in the Draft Permit applies only to the "effective" impervious surface area, allowing only vegetated swales to render such surfaces "ineffective" under Footnote 1 is inadequate. Conveying site runoff through *any* type of vegetation or treatment would help reduce hydrologic impacts of impervious areas. In fact, the use of vegetated swales is only one subcategory of recognized practices utilized

in LID strategies. In relation to the above issue, the fact that impervious surface can be rendered "ineffective" under Footnote Note 1 will not make compliance with the five percent limitation on such surfaces achievable for high density and in-fill projects because only one option is provided to render impervious surfaces "ineffective." Other forms of LID strategies and treatment control BMPs such as planter boxes, dry wells, and bioretention areas are available to render an impervious surface ineffective. Lastly, the reference to "native" vegetation in the footnote should be modified because it is unclear what is meant by "native" and the fact that other vegetation besides native is effective in treating stormwater (see Ventura County Technical Guidance Manual for Stormwater Quality Control Measures).

The five percent limitation is inconsistent with other tentative storm water planning requirements such as those contained in the San Francisco Bay and San Diego Regional Permits referenced above, neither of which contains this limitation. In addition, the limitation is not necessary where LID strategies are implemented effectively at a development site. For example, as part of its "C.3" requirements, the Contra Costa Clean Water Program developed a sizing factor of 0.04 for LID practices, which represents the ratio of surface area utilized as a LID practices to the area of impervious surfaces in the developed area. This factor is based on a Portland, Oregon criterion, which is based on an infiltration rate of 5 inches per hour. Assuming proper construction of LID practices and the minimum Portland infiltration rates, the Contra Costa sizing factor indicates LID surface area need only be roughly four percent of the total area (impervious and pervious surface area). Therefore flexibility should be provided to allow other approaches to minimize from impervious areas other than limiting the effective impervious area.

The Draft Permit should encourage LID through existing site design BMPs. Unlike in other regions, the Draft Permit establishes a stand alone LID Guidance Manual different from the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures. As an example Tentative Permit No. R9-2007-002 (San Diego) does not specifically require a LID based program. Rather, this permit requires Priority Development Projects to implement Site Design BMP consistent with LID principles. Thus the Permittees may augment their site design BMPs to create a LID based program. This provides a consistent and singular message to the development community. Instead of mandating LID programs, the permit authorizes parties to implement LID site design BMPs in place of Treatment Control BMPs with specified conditions. The flexible nature of these provisions enables Permittees to design SUSMP-based requirements to meet site-specific concerns and criteria as opposed to the one-solution-fits-all approach favored in the Draft Permit.

The deadline and schedule for the Technical Guidance Document is unrealistic. Eighteen months is an insufficient amount of time to develop a LID Technical Guidance Document because materials needed to support the guidance document must first be developed before developers can be expected to implement LID strategies. A more realistic time frame for developing the LID guidance document is three years.

Likewise, the Draft Permit lacks a realistic and sensible schedule for development and implementation of LID strategies. Under the Draft Permit, all development projects must integrate LID principles into project design without an apparent grace period during which compliance is tolled until after LID research, development, and training programs are completed. The Draft Permit should instead delineate a schedule that focuses first on research and development of LID guidelines, then on training programs utilizing the guidelines' principals, and finally on integration of LID into development projects. This approach will avoid haphazard enforcement by Permittees, unnecessary project delays, and premature and ineffective LID strategies.

The Draft Permit is inconsistent and contradictory in its recommended approach for addressing stormwater runoff from new development and redevelopment. In section E.1.d the Permittees are required to minimize pollutants from impervious surfaces through the use of source control, site design (and the use of LID) and treatment control BMPs. However, in Section E.1.(f) the permittees are required to select an approach that mitigates pollution through (in order of preference) LID strategies, Integrated Water Resources Management Strategies, Multi-benefit natural feature BMPs and prefabricated /proprietary treatment control BMPs. The two approaches appear in conflict with each other. First in Section E.1. (d) source control measure is a fundamental approach to minimizing pollutants while in Section E.1 (f) there is not mention of it in the preferred approach. Likewise it's unclear how integrated water resources management strategies. multi-benefit natural BMPs and proprietary BMPs relate to the requirements of E.1 (d). The section should be modified to indicate that a comprehensive approach to addressing pollutants from impervious surfaces includes site design, source control and treatment control BMP and that within each of these categories an identity of which BMPs are preferred. If Section E.1 is intended to specify that LID strategies shall be the primary means of managing the impacts storm water runoff from development projects, it should clearly state this and focus the discussion of LID requirements in only one section dedicated to LID strategies.

# Summary of Comparison to Approaches Utilized in Other Regions

Table 1 below highlights the differences between the Draft Permit and NPDES stormwater NPDES permits in other regional water quality in regard to onsite design measures.

Table 1. Comparison of Significant Provisions in Draft Permit 07-xxx and MS4 Permits in the San Francisco Bay and San Diego Bay Regional Water Quality Control Boards

Provision	Draft Permit	San Diego Region	SF Bay Region
Applicability	All new development & redevelopment projects. Applicable even to small projects involving single dwelling units.	Priority Development Projects, as defined.	Group 2 projects, as defined.
Percent Effective Impervious Surface Limit	5% of total project area	None	None
Onsite alternatives	None. Preference for LID strategies	LID not specifically required except as an alternative to some or all treatment control BMPs. Site design BMPs required on equal footing with treatment control BMPs except must only serve to infiltrate a "portion of impervious areas." Specified site design BMPs required only where applicable and feasible. (Sec. d(4))	Dischargers may request alternatives to site design measures based on impracticability. Showing of impracticability not required for regional or watershed-based storm water treatment facilities. (Sec. C.3.g).
LID Technical Guidance Document (TGD)	Permittees must develop TGD within 18 months of Permit's adoption.	Not specifically required. Copermittees must develop criteria for site designs listed in local SUSMP to ensure effective implementation.	Permittees must make necessary revisions to existing guidance and design standards to control runoff.

### References

Dalziel and Cloak. Simplified Low Impact Development Design for Compliance with Stormwater Treatment Requirements

Portland, Oregon (1999). Stormwater Water Management Manual. The 2004 Update to this manual is available at <a href="http://www.portlandonline.com/bes/">http://www.portlandonline.com/bes/</a>

Region 2 Board (2003). California Regional Water Quality Control Board San Francisco Bay Region. Contra Costa Countywide NPDES Municipal Stormwater Permit Amendment, Permit No. R2-2003-0022 Amending Permit No. 99-058 NPDES Permit No. CAS0029912, February 19, 2003.

Region 4 Board (2007). California Regional Water Quality Control Board for the Los Angeles Region. Permit No. 07-xxx, NPDES No. CAS004002, (Ventura County MS4 Permit), March 7, 2007.

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# **ISSUE PAPER**

#### for

# Hydromodification Requirements for Ventura County NPDES Permit

#### Issues:

The Co-permittees have identified the following issues in the Hydromodification section of the Draft Permit (pages 52 to 54) for discussion and resolution before the permit is finalized:

- Add practical, measurable interim criteria that applies to Ventura County conditions until such time as the SMC Study is completed in 3-5 years.
- Standardize vocabulary to agree with other parts of permit
  - use pre-project not pre-development
- Identify exemptions and use interim exemptions until local studies can be completed
- Re-locate background information about SMC up-front and outside of requirements.
- Include reference and linkage to requirements for Low Impact Development
- Coordinate hydromodification requirements with other Integrated Watershed Management Planning in Ventura County

#### **Suggested Revisions to Draft Permit:**

Additions/proposed changes are shown in highlight

# II. Numeric Hydromodification Mitigation Criteria

**Background:** The Southern California Storm Water Monitoring Coalition (SMC) has initiated a study to develop a regional set of methods to eliminate or mitigate the adverse impacts of hydromodification as a result of urbanization, including hydromodification assessment and management tools. The SMC has identified the following objectives for the second Phase of the Hydromodification Control Study (HCS):

- (1) Establishment of a stream classification for Southern California streams.
- (2) Development of a deterministic or predictive relationship between changes in watershed impervious cover and stream-bed/stream bank enlargement.
- (3) Development of a numeric model to predict stream-bed/stream bank enlargement and evaluate the effectiveness of mitigation strategies.
  - 1. Hydrologic (Flow/Volume/Duration) Control
    - (a) Each Permittees shall require all new development and redevelopment projects to implement hydrologic control measures to prevent accelerated downstream erosion and to protect stream habitat in natural

<sup>&</sup>lt;sup>1</sup> Coleman, D., C. MacRae, and E. Stein. 2005. Effect of Increases in Peak Flows and Imperviousness on the Morphology of Southern California Streams. Technical Report 450. Southern California Coastal Water Research Project. 70 pp.

- drainage systems. Hydrologic control measures may include on-site, regional, or in-stream runoff control measures, or a combination thereof.
- (b) Hydrologic control measures for hydromodification objectives are to be consistent with local watershed plans and will accommodate or work in combination with Low Impact Development or other hydrologic control measures for other objectives.
- (c) Natural drainage systems, including tributaries, are located in the following watersheds:
  - (1) Ventura River.
  - (2) Santa Clara River.
  - (3) Calleguas Creek.
  - (4) Miscellaneous Ventura Coastal.
- (d) The following projects are exempted from hydromodification analysis and from implementing new hydrologic control measures:
  - 1. Projects that do not increase the effective impervious area compared to the pre-project conditions
  - Projects that discharge to a sump, a lake or area under tidal influence.
  - 3. Projects that discharge into hardened channels on three sides that discharges into a lake or tidal zone or to enclosed pipelines.
  - Projects that discharge to aggrading channels, where there is accumulation of sediments over decades with no indication of erosion.
  - 5. Projects in single-family residential areas that are less than 10,000  $\rm ft^2$  of new impervious area.
  - 6. Infrastructure projects less than 10,000 ft<sup>2</sup> in the jurisdiction of the Permittees.
  - 7. Projects for which it can be shown that there is not a potential for significant hydromodification impact downstream with planned hydrologic control measures that may include on-site, regional, or instream runoff control measures, or a combination thereof; such as discharge from a small catchment area into large river systems.
  - 8. When the project is a replacement, maintenance, or repair of a Permittee's existing Capital Improvement Project.
- (e) Until the completion of the SMC's HCS, Permittees shall implement the following <u>Interim Hydromodification Criteria</u> to control the adverse impacts of changes in hydrology that result from new development and redevelopment projects. The Interim Hydromodification Impact Criteria are:

- (1) Exemptions to Hydromodification Interim Criteria:
  - Redevelopment Projects, affordable housing, or "transit" commuter planned housing of 10 acres or less.
  - Infill projects in highly developed sub-watersheds (i.e. that are 90 percent or more built out, or more than 65 percent impervious) (Santa Clara Permit).
- (2) Allowable flows rates: Flow duration controls may be designed to discharge at a very low rate that does not threaten to erode the receiving body. This flow rate, called "Qcp" shall be no greater than 20 percent of the pre-project 2-year peak flow, (Bay Area Permit, Fairfield-Suisun May 2007)

In Ventura County, the equivalent of the 2-year peak is 10 percent of the 50-year peak (Ventura Countywide 2002). For the interim criteria, the allowable Qcp flow rate will be 2 percent of the 50-year peak flow.

(3) Projects increasing impervious area by less than fifty acres
Hydrologic control for projects in this size category shall involve
matching the 2-year post project peak flow, volume and duration to
the pre-project peak flow, volume and duration for the 2-year 24
hour storm event.

Where percolation is not feasible because of groundwater quality, groundwater level issues, or because of Ventura County soil types that are low in permeability, the post-project peak needs to match the pre-project peak. The additional volume can be discharged at below the Qcp flow level.

Alternatively, the Permittees may develop flow duration or peak flow control requirements which would maintain pre-project sediment transporting flows. In this case the Permittees shall use a continuous simulation model or other analysis tool with local rainfall data and soil types, to develop nomographs or other design tools for relating percent impervious area and other variables with hydrologic control measures.

(4) Projects increasing impervious area by fifty acres or greater <sup>2</sup>
Hydrologic control for projects in this size category shall involve the completion of a Hydromodification Analysis Study (HAS) by the project proponent to demonstrate that post project conditions are not expected to alter the sediment transport in receiving streams and tributaries. The HAS must demonstrate that the

<sup>&</sup>lt;sup>2</sup> 91<sup>st</sup> percentile of all construction projects covered under the general construction permit (CASGP) in Southern California.

selected hydrologic control measures will be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of changes in flow from impervious surfaces, or significantly damage stream habitat in natural drainage system all tributaries.

(f) The Permittees shall participate in the second phase of the SMC's HCS to develop a regional stream classification system, a numerical model to predict the hydrological changes resulting from new development and to identify effective mitigation strategies and hydrologic control measures. Should the SMC not proceed with the HCS, Permittees shall complete a similar study limited to the area of Ventura County no later than 18 months from the Order's adoption.

#### (g) Hydromodification Control Plan

- (1) On completion of the HCS (SMC HCS or Permittee HCS), the Permittees shall develop and implement Watershed Hydromodification Control Plans (HCPs), no later than 18 months after the completion of the HCS. The HCP shall identify tributary classifications, flow rate and duration control methods, subwatershed mitigation strategies, and any in-stream controls, which will be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and damage stream habitat in natural drainage system tributaries.
- (2) The HCS shall become part of an integrated and comprehensive Ventura County manual that defines hydrologic control guidelines. This Manual will incorporate guidelines for LID, water quality treatment, and hydromodification, and will build upon the current "Technical Guidelines for Stormwater Quality Control Measures" developed for the NPDES permit, and guidelines in the Ventura County Hydrology Manual for detention and retention basins..
- (3) The HCS shall contain the following elements:
  - (A) Hydromodification Management Standard: Storm water discharges from applicable new development and redevelopment projects shall not cause an increase in the erosion potential of the receiving creek over the pre-project (existing) condition.
  - (B) Consideration of sediment balance will be included.
  - (C) Natural Drainage Areas and Hydromodification Management Control Areas.
  - (D) Projects subject to Controls including Redevelopment Projects.

- (E) Description of authorized Hydromodification Management Controls.
- (F) Hydromodification Management Control Design Criteria.
  - Range of flows to control namely matching post development discharge rates and durations from critical flow on up to the pre-project 10-year peak flow (or equivalent alternative criteria).
  - Goodness of fit criteria.
  - Allowable low flow rate.
- (G) Hydromodification Modeling
  - Description of the approved Hydromodification Model.
  - Any alternate Hydromodification Management Model and Design.
- (H) In-Stream Measures Design Criteria.
- (I) Record Keeping.
- (J) Requirements for exempting a project from hydromodification requirements including consideration of cost, regional facilities, and in-stream measure practicality. Alternative financing requirements shall also be addressed. (see Alameda Permit Impracticability Section, May 2007).

#### Reference:

Ventura Countywide Stormwater Quality Management Program 2002. Technical Guidance Manual for Stormwater Quality Control Measures

# **Swimming Pool Discharges**

### **Draft Permit Requirements:**

Page 32, Part 3, B.1.(b)(5)

- 1. Permittees shall have the necessary legal authority to prohibit, including, but not limited to:
  - (b) The discharge of non-stormwater to the MS4 from:
    - (5) Swimming pool(s) that have a concentration greater than:
      - (A) Chlorine/bromine 0.1 mg/L.
      - (B) Chloride 250 mg/L.
      - (C) Cyanuric acid of 50 ppm;
      - (D) E. coli of 235/100 ml (fresh waters)
      - (E) Fecal coliforms of 400/100 ml (fresh waters and marine waters)
      - (F) Enterococcus of 104/100 ml (marine waters)
      - (G) Total coliforms of 10,000/100 ml, or 1,000/100 ml if the ratio of fecal-to-total coliform exceeds 0.1 (marine waters).

Page 97, Definitions

**Dechlorinated/ Debrominated Swimming Pool Discharge -** means any swimming pool discharge with a residual chlorine or bromine level of 0.1mg/L; and does not contain any detergents, wastes, algaecides, or cyanuric acid in excess of 50 ppm, or any other additional chemicals including salts from pools commonly referred to as "salt water pools". The term does not include swimming pool filter backwash or swimming pool water containing bacteria.

### Alternatives:

Page 28. Table 1

Type of Discharges:	Conditions under which allowed:	Required BMPs for discharge to occur:
Dechlorinated / debrominated swimming pool discharges [see definition Part 7]	Prior notification to Permittee has been made, and pool discharger educated on requirements.  Provided discharge to a sanitary sewer is not available. Swimming pool discharges shall be dechlorinated, pH adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of	Pool water may be dechlorinated using time, aeration, and/or sodium thiosulfate.

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sediments.

Cleaning waste water and filter back wash shall not be discharged to municipal separate storm sewers.

Water that has been hyperchlorinated shall not be discharged to municipal separate storm sewers, even until after de-chlorination.

Chlorine residual in discharge shall not exceed 0.1mg/L.

<u>Discharge shall not cause or contribute to an exceedence of any water quality objective.</u>

# Page 32, Part 3, B.1.(b)(5)

- 1. <u>Permittees shall have the necessary legal authority to prohibit, including, but not limited to:</u>
  - (b) The discharge of non-stormwater to the MS4 from:
  - (5) Swimming pool discharges that drain directly to receiving waters or with a residual chlorine level of greater than 0.1 mg/l and/or containing detergents, wastes, algaecides, sediment, or salts from pools commonly referred to "salt water pools".

#### Page 97, Definitions:

Dechlorinated/ Debrominated Swimming Pool Discharge - means any swimming pool discharge with a residual chlorine level of less than or equal to 0.1 mg/L; and does not contain any detergents, wastes, algaecides, sediment or salts from pools commonly referred to as "salt water pools". The term does not include swimming pool filter backwash.

# ISSUE PAPER ALTERNATIVE LANGUAGE FOR PERMIT COVERAGE FOR ALL AREAS OF VENTURA COUNTY

#### Issues

The Draft Order proposes that the provisions of the Order shall apply to "the urbanized areas of the municipalities, areas undergoing urbanization and areas which the Regional Water Board Executive Officer determines are discharging storm water that causes or contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States pursuant to CWA §402(p)(2)(E)." In addition, the Draft Order describes the area covered by the order as the whole County of Ventura except for agricultural lands and forest lands. The Permittees have identified several issues of concern related to Draft Order's permit coverage.

• The Regional Board's ability to include areas into the municipal separate storm sewer ("MS4") permit pursuant to CWA §402(p)(2)(E) is not as broad as is indicated in the language of the Draft Order. EPA has adopted extensive federal regulations that implement the stormwater provisions of the CWA. The federal regulations clarify that inclusion of discharges under section 402(p)(2)(E) of the CWA applies to discharges of stormwater from conveyance facilities. According to the federal regulations, designations under section 402(p)(2)(E) may include

a discharge from any conveyance or system of conveyances used for collecting and conveying storm water runoff or a system of discharges from municipal separate storm sewers, except for those discharges from conveyances which do not require a permit under paragraph (a)(2) of this section or agricultural storm water runoff which is exempted from the definition of point source at §122.2.

(40 CFR §122.26(a)(1)(v).)

 Stormwater discharges subject to the provisions of this Order must be part of a municipal separate storm sewer system ("MS4"). The federal regulations define MS4 as

a system of conveyances (i) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity....[That is] (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

(40 CFR §122.26(b)(8).) Thus, the Regional Board cannot expand permit coverage to discharges from areas that do not go into a system of conveyances that are not owned or operated by the Permittees.

- The terminology as used in the Draft Order implies that the Regional Board intends to apply the permit provisions to all "areas" of the County, except for agricultural and forest areas. This terminology is inconsistent with the language as contained in the CWA and federal implementing regulations. Permit coverage should be limited to conveyance systems of stormwater that are within the jurisdictional areas of the Permittees. The inclusion of broader "area" language could result in the Permittees being responsible for stormwater runoff that is outside of their jurisdictional boundaries.
- The federal regulations require that the Permittees have the legal authority to control discharges to the MS4. (40 CFR 122.26(d)(1) & (d)(2).) Thus, the Regional Board's ability to include discharges to conveyance systems outside of urban areas is limited to discharges that are within the jurisdictional boundaries of the Permittees.
- The Regional Board cannot subject agricultural discharges to the provisions of the MS4. As indicated above, agricultural storm water runoff is exempted from the CWA. In Ventura County, stormwater discharges outside of the urban areas typically contains agricultural stormwater even if the "area" in question may not be considered an agricultural "area". Thus, it would be practically impossible for the Regional Board to subject non-urban areas of the County to the MS4 provisions without also including discharges from agriculture.

### **Alternative Approach**

- Permit coverage should be limited to the city boundaries of the Permittees and the urban areas of the unincorporated areas of Ventura County.
- Permit coverage language should mirror the language as contained in the existing MS4 permit for Ventura County.
- The Permittees continue to work through stakeholder, watershed processes to address all areas of Ventura County. The many TMDLs adopted for areas within the County provide an appropriate mechanism for dealing water quality standard impairments for areas outside of the urban areas covered by the MS4 permit. Because the TMDLs cover all types of discharges, it is not necessary to cover non-urban stormwater under this MS4 permit.

# ISSUE PAPER FOR PRINCIPAL PERMITEE ACTIVITIES

# **Special Studies**

**Issue:** Several special studies are required without a proper nexus to urban stormwater pollution or considering other studies in the region, are of questionable value, or are proposed on a countywide scale when smaller logical studies can be taken to conserve resources.

#### Pyrethroids G.1 page F19

The Pyrethroid Monitoring requirement is unnecessarily burdensome; monitoring for pyrethroids is costly and labor intensive and should be done in an economically logical process. This requirement requires an extensive countywide study with a potentially large number of sites. For example, on the Santa Clara River there would be 3 major tributaries with 2-6 stations (6-18 stations total), and secondary tributaries (undefined) would have 2-3 stations. Assuming 2-3 secondary tributaries, the total sampling sites could be from 10 to 27 sites. This is an inefficient shotgun approach to a problem that has not been observed in the lower watershed. The Program's proposed monitoring approach based on the Model Monitoring Program would first devote resources to answer the question "Is there a pyrethroid problem in Ventura County?"

Additionally, this study duplicates much of the effort set forth in the alternative pesticides study required under the monitoring plan for the Calleguas Creek organochlorine TMDL. This study will determine if pesticides that will be used to replace diazinon and chlorpyrifos are a concern in urban runoff. Information from this study should be used to assess the need for any additional pyrethroid study in the county, and any pyrethroid monitoring in other watersheds should begin at the base of the watershed before resources are spent upstream.

Notwithstanding, Water Code 13267 section (b)(1) requires that a study should be justified by "a reasonable relationship to the need for the report and the benefits obtained by the reports". The expansive monitoring requirements contained in the draft order do not bear a reasonable relationship as it requires monitoring in areas that are not likely to be impacted by municipal stormwater discharges, and requires monitoring for constituents that may not be of concern.

# Alternative Approach and Suggested Language:

Allow the pesticides study required under the monitoring plan for the Calleguas Creek organochlorine TMDL to be completed and results available before requiring a resource-extensive Region-wide pyrethroid study. Alternatively, If it is an inappropriately long time before the Calleguas study provides results, pyrethroid monitoring at the base of the Santa Clara and Ventura Rivers could be required.

### Trash Page F-17, F

This requires the Permittees to perform special studies to quantify pollutants from non-MS4 sources. Trash and debris are a problem in urban runoff and the Permittees are aware of their responsibility for controlling that problem. However, there needs to be a nexus between the required study and the MS4s. The trash and debris study required has a focus on ocean beaches where the referenced study showed that the most abundant items were from overboard disposal from ocean vessels. Requiring the MS4 Permittees to study trash from ocean vessels does not meet the reasonable relationship criteria.

# Alternative Approach and Suggested Language:

The required study should be focused on inland waters and coastal waters where trash and debris have a direct nexus to MS4 sources, providing useful assessment and source reduction information for Permittee's MS4 programs.

# Southern California Bight Project page F-22 J.

The Principal Permittee is already a volunteer Commission member of SCCWRP at a cost of \$75,000 to the Program, and as such is contributing to future Southern California Bight Project updates. This required additional contribution to Southern California Bight Project is not justified. It is unclear how the \$250,000 amount (over \$0.30 per Ventura County resident) was determined, and how this compares to the contributions from the other NPDES dischargers to the Southern California Bight. Multiple stakeholder projects such as the So. Cal. Bight normally will have funding equations and an MOU to formalize the agreement. It is not necessary to require a specific dollar amount in the permit.

# Alternative Approach and Suggested Language:

Require membership and participation in SCCWRP Commission, CTAG and Stormwater Monitoring Coalitions meetings.

# Total Suspended Sediment Monitoring page F-2, A.9

The purpose for collecting information on every 0.25 inch storm is unclear. This requirement will consume valuable resources for results of questionable value. The relationship between TSS and pollutant loading has not been well-established, and with Ventura County's open space and agriculture-dominated watersheds the urbanized contributions of total TSS would only be a very small part. A statistical review of past monitoring data shows the R-square values for TSS and various metals on the three watersheds to be mostly below 0.5 – a very poor correlation.

Sampling every 0.25 inch storm is a significant increase in Program cost and will require staff to be prepared for 10-18 sampling events per year. The 0.25" trigger is also problematic in watersheds with agriculture and open space because the streams do not show a significant increase in flow from even a larger 0.50" rain event, meaning that a sample from a 0.25 inch storm will not be sampling storm runoff but rather base flow.

The value of beginning this effort is questionable. The Program has years of data where TSS was sampled at the same time as other constituents. A preliminary review shows poor correlation with pollutant loading. If using TSS as correlation to total loading is desired, then a more thorough study of historical data could be done to detect significant trends.

# Alternative Approach and Suggested Language:

Replace this requirement with a special study to evaluate historical data for trends correlating TSS with other pollutant loads. If that study shows a need for this requirement, a 0.5" storm event trigger would be more appropriate for Ventura County due to the predominant open space and agriculture land uses.

# **Mandatory Participation and Organization of Watershed Groups**

**Issue:** The Draft Order requires Permittees to attend and hold meetings regardless of need or the topics on the agenda. Additionally, the Draft Order requires Permittees to develop new watershed groups without considering the ongoing efforts of existing watershed groups. The Ventura Countywide program has been working for 15 years. The need for mandatory meetings may have been necessary to get all the parties at the table when it was first forming, but that is not the case now.

Mandatory participation and organization of various groups and mandatory meeting attendance is discussed in several areas in the Draft Order: Part 3 E. 1. (a) (p. 35); Part 3 F. 1. (e)(f) (p. 36); Part 4, B.1. (p.36); Part 4, C. 1. (c) (1) (E) (p. 38). As written these requirements represent burdensome and time consuming efforts and do not provide the Permittees with the flexibility needed to implement an efficient program. The Permittees need to be able to decide when it is necessary and efficient to hold and attend meetings, and should not be required to attend meetings whose agendas have nothing to do with improving Stormwater Quality. Each section should be addressed by permit writers to allow the Permittees this flexibility.

Difficult to determine compliance - Part 4, B.1 (p.36)

The Draft Order requires "Watershed Initiative Participation" by the Principal Permittee to be met by participating in an open ended list of regional meetings and programs. Although the Permittees are supportive of the various watershed efforts and research programs identified, and have participated in the past, it is inappropriate for the Regional Board to mandate in a stormwater permit participation in voluntary watershed programs. Furthermore, the Draft Order does not state how the Regional Board would determine compliance with this provision, or rather how non-compliance with participating with "other appropriate watershed planning groups" would be determined.

Notwithstanding this requirement does not provide flexibility for the Permittees to decide how to meet the requirement. Placing mandates on which staff attends certain meetings may create costly and inefficient duplication of efforts. For instance, if a co-permittee is already participating on the County Environmental Crimes Task Force, and is willing to represent the Countywide Stormwater Program at the Task Force, and to report on

these issues at the Countywide stormwater meetings, why should the Principal Permittee also attend?

# Alternative Approach and Suggested Language:

Allow flexibility so that Permittees can pick the most economical way to comply. Change language from require attendance to "the Permittees are encouraged to attend".

Redundant Groups Required Under Part 4, C. 1. (c) (1) (E) (p. 38)

This permit provision requires the Permittees to "organize watershed Citizen Advisory Groups/ Committees". As the Draft Order noted in the previous requirement there are already watershed based groups in the major watersheds of Ventura County such as Calleguas Creek Watershed Steering Committee, Santa Clara River Watershed Committee, and Ventura River Watershed Council, additionally there are already broad based watershed groups including Friends of the Santa Clara River and the Malibu Creek Watershed Advisory Council. Notwithstanding the statements regarding the Regional Board's authority to require participation, requiring organization of new groups when similar ones already exist is an unnecessary burden.

### Alternative Approach and Suggested Language:

Working within the existing group structures will be more effective than starting a new group or committee. The sentence should be revised to read: "Work with existing local watershed groups or organize Citizen Advisory Groups/Committees"

Burden of Excessive Meetings Part 4 F(e)(f) (p. 36)

Mandatory meeting attendance for mandatory monthly program meetings is not an efficient use of time. This is to be a five year permit, and after the first two years many new programs and requirements will have been developed and implemented. During the later half of the permit term the Permittees may not have to meet as frequently. The frequency of these unnecessary meetings will be a huge 20-25 staff hours/month drain on city resources (especially smaller cities with small staffs). Additionally, circumstances beyond the Permittee's control can cause them to miss a meeting.

# Alternative Approach and Suggested Language:

Change the attendance requirement to 90% for all subcommittees and the management committee mandatory meeting requirement to quarterly.

# **Public Outreach and Participation**

**Issue:** Draft Order has excessive requirements on where and how much public outreach is required. The prescriptive nature of these requirements does not allow for a flexible program to focus resources on public outreach methods found effective, but

rather insists that the number of impressions is made each year while still holding the Permittees responsible for effectiveness.

# **Number of Impressions** Part 4, C. 1. (c) (5) (p. 38)

The existing permit requirement is 2.1 million impressions based on three times the population of Ventura County. That is similar to other permits in the state that have such a requirement, however several have no such numeric standard. The latest US Census data (2005) shows Ventura County with a population of 820,000. The requirement in the Draft Order for 10 million impressions is 12 times the population, an inappropriately large increase.

# Alternative Approach and Suggested Language:

During the last reporting period an extra effort was made by all Permittees to ensure the success of a new outreach campaign, made possible without the inkind donations given by several media organizations, resulting in impressions above and beyond our current permit requirement.

5 million impressions, four times the previous requirement, would be realistically achievable and leave resources available for more in-depth educational opportunities.

# Outreach to School-aged Children Part 4 C 1. (c) (6) (p.39)

We are in agreement that educational outreach to children is an important way to affect a change in behavior. However, requiring this be done in schools presents difficulties. The Permittees do not have the authority to put any material into a classroom. It will be up to the discretion of the educational system to use anything provided to them, including resources from AB1721. Targeting all grades from K-12 compounds the obstacles because not all those grades have in their curriculum subjects that are open to the stormwater pollution message. For example, the stormwater message may be perceived as appropriate to include in earth and life sciences which are taught in grades 6 and 7, but not for physical science which is taught in grade 8. In grades 9-12 science is presented as discipline-specific courses - which are not required to be taken by all students.

The Environmental Education Account is an option, however, there is no guarantee that money given to the account will be spent in Ventura County or on stormwater pollution, or that it will even be used in the classroom. According to the Cal/ Environment and Education Initiative website, spending money in the account requires both Legislative appropriation and consultation with the California Integrated Waste Management Board, but no consultation with the State Water Resources Control Board. There is a concern that these funds will be used exclusively for solid waste and recycling programs, and that the Permittees will still be responsible for measurable improvements.

Measuring improvements in the classroom would require teachers to share information on their students with the Program, something that they have no incentive to do. Measuring the effectiveness of outreach to children is an appropriate part of the

program. However, we believe a more effective program would be one that is outside the classroom.

Requiring Permittees to demonstrate improvement in public school students' knowledge is beyond the authority the authority of the Regional Board. Education standards are set by the Board of Education.

#### Alternative Approach and Suggested Language:

The Permittees need flexibility in providing outreach to children. The cost of this approach prevents creative alternative approaches that would use other known effective outreach methods such as television, radio and the internet. Also, reaching a target audience in multiple ways is considered a more effective method to affect a behavior change. We would suggest a focused requirement to provide educational outreach to the same number of school-aged children. This would allow the Permittees the flexibility to develop a program that will have a better chance of success and maximize the benefit of their resources.

### Corporate Outreach Part 4 C 2. (a) (2) (p. 40)

The requirement that Ventura County Permittees must confer with corporate managers is both vague and burdensome. It is highly likely that corporate management offices are outside of Ventura County and possibly outside of California. Ventura County Permittees can only be responsible for educating the operators of franchises within Ventura County and cannot be expected to change the behavior of entire corporations.

# Alternative Approach and Suggested Language:

Please define corporate managers as those managers directly operating franchises in Ventura County.

# **Annual Reporting Program**

**Issue:** The reporting section is in a cumbersome format. To date, the Permittees have not received feedback from the Regional Board on the adequacy or any deficiencies in the current Annual Report format. The previous effort to reformat and revise the Annual Report cost the Permittees over \$130,000. This will increase staff time, for both the RWQCB and Permittees, with little or no improvement in water quality.

# Alternative Approach and Suggested Language:

We request the current Annual Report format be retained. As an alternate:

Using language based on the Stockton permit

#### PART 2 - PROGRAM REPORT

On an annual basis the Permittees shall complete an Annual Monitoring Program Report that responds adequately to the evaluative questions below which

correspond to the Order, <u>or propose an alternative form in the revised SWMP to be used instead of the questions below.</u>

# ISSUE PAPER FOR DEVELOPMENT CONSTRUCTION PROGRAM

Statement of Issue: Absent a prohibition variance, the Draft Ventura Stormwater MS4 Permit prohibits construction site grading during the "wet season" (October 1 – April 15) on "hillsides," from areas discharging to water bodies listed as impaired under CWA Section 303(d), and within or adjacent to environmentally sensitive areas. If adopted, this restriction on grading operations would (1) improperly give the Regional Board a de facto permitting power over local land use decisions, (2) impose unnecessary burdens upon the Permittees authority to permit local land uses, (3) create unnecessary delays and unjustified costs in construction projects, (4) impose procedural uncertainties in the granting of variances from the grading prohibition, and (5) create inconsistencies with State Water Resource Control Board policy in relation to numeric limits on construction site discharges,

#### Discussion

The Permittees and other interested parties have identified a number of significant issues with the Draft Permit's Development Construction Program. These issues are delineated below with a discussion of the problems that may result from adoption of the Draft Permit, as well as suggested alternative approaches aimed at addressing these problems. In addition, an underline-strikeout version of Part 4 Section F, which illustrates the recommended changes to the permit, is included in Attachment 1.

The wet season grading prohibition in Section F.1(a)(1) improperly gives the RWQCB a de facto power to grant construction permits, a function properly reserved to Permittees. Under the proposed terms of the Draft Permit, this de facto power is created because:

- 1. The authority of the Permittees to grant variances from the grading prohibition is sidestepped in favor of the RWQCB with no exception. (Section F.1(b)(1))
- 2. The RWQCB would have the final authority in deciding whether a grading project can occur during the wet season. (*Ibid.*)
- 3. Use of the term "prohibition" in the grading authorization reinforces the notion that the RWQCB is the final decision maker for construction projects occurring during the wet season. (Section F.1)

The Draft Permit essentially requires the MS4s to implement the State Constructin General Permit. In addition to the new permitting powers discussed above, Section F.1(b) is problematic for several other reasons. First, it places the Permittees in the conflicting role of acting as the "middle man" between the project proponents and the RWQCB. Thus, Section F.1(b) sets up the Permittee to act as an advocate of the project proponent before the RWQCB because the Permittee, instead of the project proponent, must petition the RWQCB to grant the variance based on site BMPs the Permittee has already approved. Under the practical terms of this provision, as a condition for the

Board's granting of the variance, the Permittee must make the case for the project proponent that proposed BMP measures will meet the specified water quality standards in Section F.1(b)(1). This process will effectively dismantle the local agencies' role as the final authority in the permitting of grading operations.

In addition, Section F.1(b)(1) creates severe procedural uncertainties because it is unclear whether the RWQCB would grant the variance to the Permittee or the project proponent. Thus, it is unclear whether the Permittee would receive the variance and subsequently authorize the project proponent to conduct wet season grading, or whether the variance would be granted to the project proponent who would then provide it to the Permittee as a condition for grading authorization.

The Permittees firmly believe the public interest would be better served if the Draft Permit gave Permittees the power to grant or deny variances along with primary responsibility for compliance monitoring. This practical approach would reaffirm the local agency as having primary responsibility local land use decisions. In the alternative and if the Regional Board is unwilling to accommodate this request, the Permittees should be removed from the role of "middle men" and instead the project proponents should apply directly to the RWQCB for the variance. In this alternative is pursued, the RWQCB should also have primary responsibility for inspecting, enforcing, and the monitoring BMPs implemented as part of the variance.

The "wet season" grading prohibition and requirement for variance from the prohibition represents unreasonable bureaucratic requirements and restrictions on project proponents and Permittees, and will unnecessarily create delays and excessive costs on project development on a regional basis. Under the Draft Permit, before a project could be authorized to conduct grading operations during the "wet season" several unnecessary hurdles would need to be met. First the project proponent would have to demonstrate to the Permittee it qualifies for a discharge prohibition variance. This would require a demonstration that proposed project BMPs meet the four requirements in Section F.1.(b), which would entail, among other requirements, a showing by Permittees that project BMPs will ensure that discharges contain less than 100 mg/L TSS and less than 50 NTU turbidity. Next, the Permittee would have to demonstrate (to the RWQCB) it has approved the BMPs for the project and the BMPs will meet the Section F.1(b) requirements. And as noted above, the RWQCB would have to grant the variance. These problematic restrictions would apply even to projects that are anticipated to have little or no discharge to the waterbody such as sites with properly designed and constructed detention basins. In addition the restrictions would apply over a six and one-half month period (from October 1 to April 15), which is primarily devoid of precipitation based on historical rainfall data for Ventura County.

To address these concerns, the RWQCB should restructure the prohibition/variance provisions to a strategy similar to the approach on other regional MS4 permits, which do not have such provisions. For example, Tentative Order No. R9-2007-002 (County of Orange MS4) avoids the burdens inherent in finding exceptions to a grading prohibition, and instead requires measures aimed at ensuring Permittees take direct steps to prevent

and control erosion and sediment runoff. This permit simply requires Permittees to incorporate into construction permits requirements for BMPs to reduce pollutant discharge to the maximum extent practicable with advanced sediment treatment for impaired water bodies and environmentally sensitive areas as necessary. While the Draft Permit is designed to accomplish similar goals, the approach it utilizes to achieves these goals is unnecessarily cumbersome and should be changed to reflect a more streamlined approach such as the approach taken on the Orange County MS4 Permit.

Another alternative would be to require BMP implementation in two tiers, with more stringent BMPs employed during the wet season for sites with high erosion potential and for sites tributary to Section 303(d) water bodies impaired for sediment or turbidity or environmentally sensitive areas. Examples include increasing the inspection frequency and enhancing corrective action measures, deadlines, and follow-up inspections, requiring stabilization of graded soils, and requiring advanced treatment for sediment at construction sites determined by the Permittee to be exceptional threats to water quality, as appears on the Orange County MS4 permit.

It would appear to the Permittees that the long term solution for this concern is to modify the State Construction General Permit to address wet season grading restrictions. Such an approach would provide Statewide consistency to the construction program.

The numeric effluent limitations on construction site runoff that must be met to obtain a variance from the wet season grading prohibition cannot be achieved without advanced treatment methods, which would result in substantial costs to construction projects. According to research conducted by the Construction Industry Coalition on Water Quality (CICWQ), achieving the 50 NTU turbidity requirement under Section F.11(b)(1)(C) will likely require both the existing BMPs required in Ventura County and the advanced treatment methods.1 Using reasonable assumptions, implementation of these strategies the combined cost of construction phase erosion and sediment control BMPs plus advanced treatment on a per acre basis is approximately \$28,000 per acre according to the CICWO study.<sup>2</sup> The Permittees believe these cost represent substantial burdens and should have been considered in establishing the effluent limitations in accordance with both MEP principles and State law. In addition, the Regional Board should provide some evidence that the turbidity and TSS effluent limitations are necessary to protect beneficial uses and ensure compliance with applicable water quality objectives.

In establishing the turbidity and TSS limits as a condition for variance, the Regional Board has not made the prerequisite findings and recommendations of the State

<sup>&</sup>lt;sup>1</sup> See Building Industry Legal Defense Foundation, Building Industry Association of Greater Los Angeles and Ventura Counties Major Issues and Comments on the 12.27.06 Draft NPDES MS4 Permit for Ventura County, Ventura Watershed Protection District, and Incorporated Cities.

<sup>2</sup> *Ibid.* at p 20.

Water Resources Control Board Blue Ribbon Panel Report.<sup>3</sup> This Report establishes at least five pre-requisites studies and conditions that must precede imposition of numeric limits on construction site run-off. These include consideration of the toxicity of active treatment systems, issues associated with long-term use of chemicals, and consideration of run-off flow and peak volume.

The wet season grading prohibition and variance requirements for hillsides with slopes 20% or steeper is excessive and vague and would subject project proponents and Permittees to unreasonable procedural burdens. The term "hillside" is defined in Part 7 as "property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is 20% or greater and where grading contemplates cut or fill slopes." Under this definition, even sites where insignificant portions have a 20% slope could be subject to the grading prohibition. The Permittees believe these requirements are excessive and should be amended. The provision is also unnecessarily vague because it is unclear what constitutes "known" erosive conditions. The RWQCB should address these concerns by eliminating the prohibition and variance provisions altogether, or if this is not possible, the RWQCB should:

- 1. Amend the definition of "hillside" to establish readily verifiable standards for erosive conditions including a requirement that "areas of known erosive conditions" be identified before the effective date of the "hillside" provision;
- 2. Authorize an exemption from the prohibition and variance provisions for properties with relatively small portions meeting the 20% slope trigger as determined necessary by the RWQCB, or
- 3. Clarify what area or portion of a site must have a 20% slope before the provisions would apply.

The Draft Permit is unclear as to whether the Permittee must require project proponents to implement all of the BMPs in Tables 5, 6, and 7 or some of the BMPs depending on site conditions. For example, Section F.2 does not state in plain terms that all of the BMPs in Table 5 must be implemented at construction sites less than one acre. Thus, it is unclear whether the language, "Each permittee shall require the implementation of a minimum set of BMPs at all construction sites (See the following Table 5) to prevent erosion . . ." is intended to require that all of the BMPs in Table 5 are required. In addition, Tables 6 and 7 list duplicative BMPs designed to solve similar problems. For example, Table 6 has six erosion control BMPs, which each would independently solve erosion problems if properly implemented. Because it does not appear the RWQCB intends to require Permittees to require all the BMPs in these tables for each project, Sections F.2 and F.3 should be changed to clarify this point. In addition, since the selection of BMPs should depend on the specific site characteristics for activities one acre or greater, Tables 6 and 7 should be combined and the Permittees

<sup>&</sup>lt;sup>3</sup> Storm Water Panel Recommendations to the California State Water Resources Control Board – The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities (June 19, 2006) ("Blue Ribbon Panel Report").

should be able to work with the applicant to choose the appropriate combination of BMPs. To achieve these objectives, the language in Part F.2 and F.3 might read:

"Depending on project type and area, each Permittee shall require the implementation of an effective combination of appropriate erosion and sediment control following BMPs chosen from the table below. . ."

The language used in the Certification Statement in Section F.4(a)(2) is difficult to interpret and excessively harsh to the extent that the landowners may refuse to sign the statement or will not reasonably understand what they are certifying by signing the statement. A better certifications statement would read: "I, (owner's name or owner's representative/designee), am the property owner and agree to implement and maintain the SWPPP as prepared by (name of engineer or architect) for the duration of my construction project. I further understand that my failure to provide adequate sediment and erosion control in accordance with the requirements of my grading and/or building permit from the Local Agency could lead to a stop work order and possible citation by the Local Agency and RWQCB. I further agree to grant access to my property to the Local Agency to conduct all grading and building permit inspections including the mandatory rainy season inspection to verify that I am implementing and maintaining the proper BMPs that my SWPPP requires."

The specifications of titles that are required to sign the certification statement in Section F.5(a)(2)(B) is unnecessary and should be eliminated in favor of more simplified language. If would be preferable if this section were revised to read: The Local SWPPP certification shall be signed by the property owner or owner's representative/designee. If the Local SWPPP is being prepared by the Local Agency then the appropriate authority for the Local Agency shall sign the document."

Section F.7(b) would unnecessarily shift the burden of inspecting and maintaining post construction controls on private property from the property owners and their engineers and architects to the Permittee. Section F.7(b) states that "[p]rior to approving and/or signing off for occupancy or issuing a Certificate of Occupancy for all construction projects subject to post construction controls, each permittee shall inspect the constructed site design, source control and treatment control BMPs to verify that they have been constructed in compliance with all specifications, plans, permits, ordinances, and [the draft Permit]." (emphasis added). The Permittees believe this language represents an unreasonable shift in responsibility and should be changed to read: "Prior to the release of the grading permit or building permit, the Engineer or Architect of record who prepared the SWPPP, shall provide a letter to the Local Agency that states that all the temporary BMPs implemented by the property owner worked satisfactorily and will be removed by (date) and that post control devices will be in place and satisfactorily working by (date)." This language will not only remedy the aforementioned burden shift, but will address the fact that not all construction projects obtain a certificate of occupancy at the completion of the permit, as Section F.7(b) would require.

Requiring proof of coverage under a State NPDES permit as a condition for issuance of specified permit types in Section F.8(a)(1) for projects requiring coverage under the CASGP or Small LUP General Permit could unnecessarily delay construction projects which have already applied for coverage and are waiting for the SWQCB to reviews and respond to the Notice of Intent. These changes can be accommodated amending Section F.8(a)(1) read:

"Proof of application for coverage or coverage under a State NPDES is demonstrated ..."

Similarly, Section F.9(b) should be revised to exclude from referral to the RWQCB projects that have applied for coverage and are awaiting issuance of a valid Waste Discharger Identification Number (WDID). This change to Section F.9(b) could be accommodated as follows:

"Each Permittee shall refer to the Regional Water Board any non-filers (i.e., those projects which that cannot demonstrate that they it either haves a WDID number under the CASGP or Small LUP General Permit or that a Notice of Intent (NOI) application has been submitted to the Regional State Water Quality Control Board . .."

## References

Region 9 Board (2007) California Regional Water Quality Control Board San Diego Region. Tentative Permit No. R9-2007-0002 NPDES No. CAS0108740 (Orange County MS4 Permit), February 9, 2007.

Building Industry Legal Defense Foundation, Building Industry Association of Greater Los Angeles and Ventura Counties Major Issues and Comments on the 12/27/06 Draft NPDES MS4 Permit for Ventura County, Ventura Watershed Protection District, and Incorporated Cities

Ventura Countywide Issue Paper - MALs and Permit Implementation and Compliance

Issue: The Draft Permit proposes to use municipal action levels (MALs) expressed as numeric values to assess compliance with the Permit. Outfalls greater than 36 inches are subject to MALs. If MALs are exceeded more than twice then the Permittees are judged to be out of compliance with the MEP standard (and out of compliance with the Permit). If MALs are exceeded then the Permittees must augment control measures to reduce the discharge of pollutants to not violate the MEP standard.

## Ventura Countywide Alternative Approach

The Ventura Countywide Program proposes an alternative to the "MAL equal MEP" approach used in the Permit. The fundamental difference between the Regional Board and the Countywide approach is in the use (and definition) of MALs. The Countywide approach proposes to use MALs as an assessment tool (1) to identify "bad actors" or catchments (through outfall monitoring) and (2) to identify inadequate levels of program implementation (through annual program evaluation). In the first case numeric values will be developed using local monitoring data and be applied to land use outfalls. In the second case the action levels will be developed by the Permittees and Regional Board and be applied to all Permittees. MALs would not be used as a compliance tool as currently proposed in the draft Permit.

Our approach is summarized below and shown graphically in the attached flow chart:

- 1. Basic Assumptions Definitions:
  - Action Level The level of implementation or performance where, if below the action level, the municipality's effort is inadequate and immediate action must be taken to correct.
  - Benchmark The level of implementation or performance that reflects an adequately managed and comprehensive stormwater program. Ultimately the goal of all municipalities is to attain benchmarks.
  - Compliance determination Dischargers must reduce pollutants to the maximum extent practicable, meet water quality standards through the iterative process, and comply with all other provisions of the Permit.
- 2. Monitoring program will primarily be based on the southern California model stormwater monitoring program. As such the initial monitoring will focus on determining the extent of the water quality issues in the receiving water<sup>1</sup>. The water quality issues will be as previously identified by the Countywide program and TMDLs.
- 3. Municipal pollutant concentration action levels will be developed from local monitoring data for pollutants of concern. MALs will be based on the mean plus two standard deviations. The MALs will be used as an assessment tool not a compliance metric. Tentatively, MALs would be developed for the following:

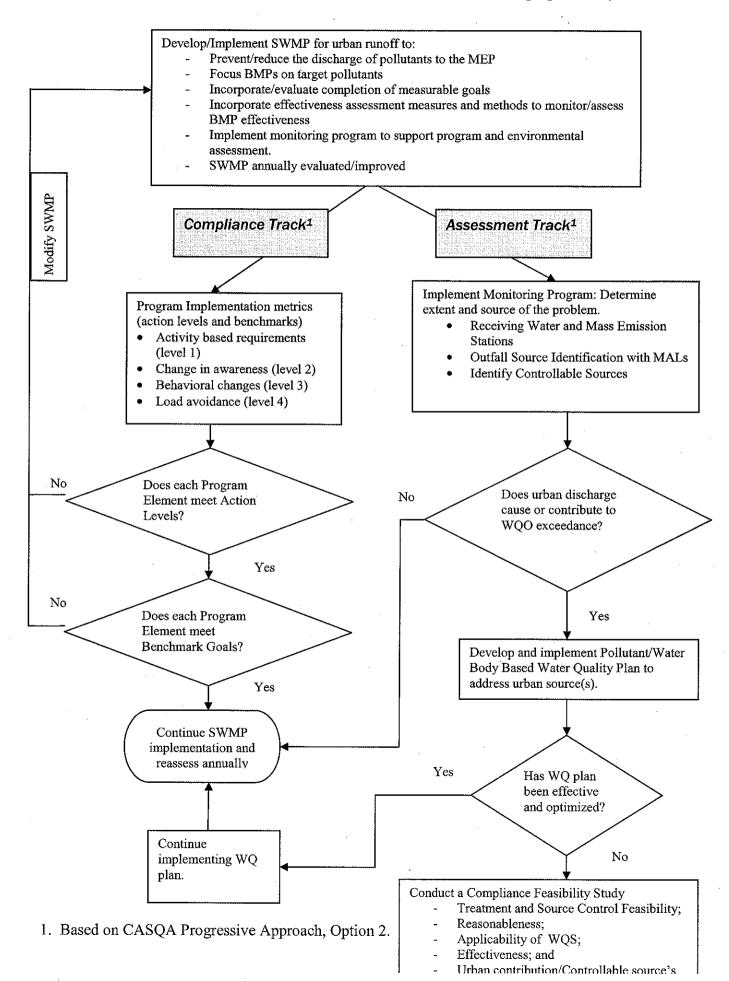
<sup>&</sup>lt;sup>1</sup> Previous monitoring conducted under the Ventura Countywide monitoring program has identified the problematic constituents in the lower part of the three major watersheds.

## Wet Weather

- E. Coli
- Fecal Coliform
- Dissolved Copper
- Dissolved Zinc
- Total Selenium
- Total Mercury
- Nitrate as N

## Dry Weather

- E. Coli
- Fecal Coliform
- TDS or electrical conductivity
- Nitrate as N
- 4. Pending the results of item 2 above the Dischargers will focus outfall monitoring on the problematic constituents and in the geographical areas identified as potential sources.
- 5. Municipalities must conduct follow up investigation and develop and implement a corrective action plan for outfalls exceeding MALs.
- 6. Permittees will develop performance metrics (action levels and benchmarks) for program implementation. There will be a permit provision requiring that when an action level is not met, then the Permittee must take immediate actions (within a specified time period) and address the source or inadequate level of performance. Permittees will strive through the iterative process to meet benchmarks levels. A tentative list of performance metrics are provided in the attached table.



## VENTURA COUNTYWIDE STORMWATER MANAGEMENT PROGRAM SMALL COMMUNITIES TIERED PERMIT APPROACH DRAFT FOR DISCUSSION August 15, 2007

There are currently six small, incorporated communities listed as co-permittees in the Ventura Countywide Stormwater NPDES permit. Based on the most recent census data, the City of Ojai has 8,156 citizens. Fillmore has 15,400; Port Hueneme, 21,845; Santa Paula, 29,400; Moorpark, 36,150; and Camarillo, 62,739. These urban areas are significantly smaller than the population threshold trigger of 100,000 for Phase I requirements. Additionally, Ojai, Santa Paula, and Fillmore are not contiguous with the remainder of the urban areas of Ventura County.

The U.S. EPA established Phase I regulations with the understanding that discharges from larger communities MS4's have the potential to have greater water quality impacts than those from smaller communities. Phase II regulations were implemented with the knowledge that the Phase II programs would not necessarily conform to the programs implemented by Phase I entities based upon the understanding that the potential of water quality impacts from the smaller communities were not as significant. The Phase II regulations wisely allow smaller communities to learn from the successes and failures of the Phase I programs and use the information as a guide in developing their programs.

Catch Basin Excluders – The small communities support the "Trash Management" option outlined in the issue paper titled "Alternative Language for Permit Requirements" submitted on June 13, 2007 to regional board staff by the Ventura Countywide Stormwater Quality Program. Due to the minimal resources available to smaller communities we request that smaller communities be required only to implement the second option of a "Trash Management Program". This will allow for a better use of those limited resources in making a difference in water quality. This meets the intent of the draft permit to reduce trash entering the receiving waters by using proven techniques already in use. Water bodies impaired for trash are addressed through the TMDL process.

Meeting Frequency – Attendance at management committee meetings is mandatory and will be attended 100% of the time. Subcommittee attendance is required at a minimum of 50% of meetings for communities with a population of 50,000 to 100,000; 30% for smaller communities. Because of limited staff, small communities usually have only one or two persons who can devote a portion of their time to the program. Mandatory attendance at all subcommittee meetings is infeasible with small communities' limited staffing resources. An update of key subcommittee activities is received at management committee meetings so copermittees consistently stay informed. Small communities will make a good effort to attend as many subcommittee meetings as possible.

## SMALL COMMUNITIES TIERED PERMIT APPROACH DRAFT FOR DISCUSSION August 6, 2007 Page 2 of 3

Public Outreach —The small communities support the Ventura Countywide Program's alternative approach for public outreach activities that was provided to regional board staff in the "Principal Permittee Activities" issue paper on June 27, 2007. Smaller cities lack the resources required to provide a monetary contribution to a Statewide Environmental Education Account and hereby request they not be required to participate in that endeavor. The recommended approach in the aforementioned issue paper would allow small communities to focus limited resources on the most effective outreach tools and continue to participate in delivering a consistent, countywide stormwater message.

Time Frames – Modify program timelines for small communities as follows:

- 1. Modification of stormwater programs, protocols, practices, municipal codes 3 years
- 2. Obtain coverage under Construction Activities Stormwater General Permit 90 days from Order adoption
- 3. Order shall serve as NPDES permit and take effect 90 days from Order adoption
- 4. GIS Stormdrain pipe exempt small communities from this requirement and therefore eliminate this timeline. There is no water quality benefit to this requirement. Many of the small communities do not have such a program and do not plan on purchasing such a program, nor do they have the technical staff and equipment to support such a system.

All other timeframes set forth in draft permit to be amended based on overall Countywide program comments already submitted.

**Special Studies and Plans** – The scope of work for the special studies will not be extended to the communities that have a population of less than 50,000.

As stated in the second paragraph, the U.S. EPA Phase II provision wisely allows smaller communities to learn from the successes and failures of the Phase I programs and use the information as a guide in developing their programs.

**Electronic Tracking** – Exempt small communities from electronic tracking requirements. Many of the small communities do not have such a program nor do they have the technical staff and equipment to support such a system. There is no water quality benefit to this requirement. Limited resources for the stormwater program should be maximized to benefit water quality.

**Public Construction Activities Management** – Exempt small communities from participating in public construction activities management program. Small communities typically have to schedule public construction projects based on very limited budgets. The budgets come from grant programs and other sources.

SMALL COMMUNITIES TIERED PERMIT APPROACH DRAFT FOR DISCUSSION August 6, 2007 Page 3 of 3

For example, road projects are funded from gas taxes that do not sufficiently meet the needs of road rehabilitation. This requirement would add 15 to 20% to the project costs crippling an already struggling system.

## **Time Schedules for Permit Implementation**

### Issue

The implementation schedules for most of the program provisions are extremely compressed and will lead to poor execution and the misdirection of resources. In the Draft Order where there was an opportunity to provide an implementation schedule it was commonly decided that 180 days or 6 months was the appropriate time frame. But when all the implementation provisions are put together, the Draft Order creates an impossible schedule. For example, individually the following requirements' time frames do not seem unreasonable, but when combined are impracticable.

- 1. Update Stormwater Ordinance and enforce all requirements of Order within 6 months (Draft Order at p. 33) new 365 days
- 2. Modification of SWMP, policies, codes, etc. within 90 days (Draft Order at p. 34) new 365 days
- 3. Ethnic community education strategy within 180 days (Draft Order at p. 38) no change
- 4. 4. In-school effectiveness strategy within 180 days (Draft Order at p. 39) no change
- 5. 5. Behavioral change assessment strategy within 180 days (Draft Order at p. 39) new 365 days
- 6. Pollutant of Concern outreach program within 180 days (Draft Order at p. 39) no change
- 6. 7. Install trash excluders on all catch basins within 180 days (Draft Order at p. 78) new 365 days
- 8. Develop Electronic Reporting Format within 6 months (Draft Order at p. 85) no change
- 9. Watershed based tributary monitoring plan within 6 months (Draft Order p. F-8) deleted

The Draft order must be modified to provide for an overall, practical and realistic schedule to allow Permittees to create an effective program.

## **Alternative Approach**

Below is a matrix of all the time frames listed in the draft order. With each permit requirement is summary of our original comment submitted as Attachment B of the Permittee's comment letter on the Draft Order, including our suggested time frame. These time frames were selected based upon our understanding of the requirement involved and the logistics needed to effectively implement programs to meet that requirement.

The Permittees understand that the new permit will represent an increase in program requirements, and they are committed to meeting that challenge. But to do so a realistic amount of time must be granted to create workable, effective programs.

Condition or Requirement Discharger comply with TMDL waste load allocations Order shall serve as NPDES permit and take effect Receiving Water Limitation Compliance Report Adopt and implement applicable terms of this Order	Condition or Requirement       Effective Date/ Applicable Deadline         Discharger comply with TMDL waste load allocations       No later than 20 years from effective date of policy allocations         Order shall serve as NPDES permit and take effect       90 days from adoption         Receiving Water Limitation Compliance Report       w/ Annual Report implement 30 days after 30 day approval         Adopt and implement applicable terms of this Order       No later than (60 new 90 days from Order Adoption) unless otherwise specified per Order	# # # 14 30 30 31 31	# no. 14 E.9 25 Finding G4 30 Part 2.3(d) 31 Part 3.A.1	Permit Section Reference Federal State & Regional Regulations Public notifications Receiving Water Limitations Implementation-General Requirements	Time Requested in Comments Letter Agreed to time frame Conflicts with Part 3.A.1 page 31: Adopt and implement applicable terms of this Order no later than (60 days from Order Adoption) Agreed to time frame Conflicts with finding G4 page 25: "shall take effect 90 days from Order adoption"
No later than 365 days	No later than 6 months from Order Adoption) new 365 days  No later than 180 days after Adoption date new 365 days	83 83	Part 3.B.3	Implementation-Legal Authority Implementation-Legal Authority	2 Years  Requiring legal counsel to declare Permittee has "obtained and possesses all necessary legal authority to comply with this Order" is infeasible, given that it is unclear how Permittees will have legal jurisdiction to propress of the possition of the provision of the pr
No later than	No later than 90 days after Adoption date NeW 365 days্য	34	Part 3.D.1	Implementation- Modifications/Revisions	Ninety days is insufficient time to complete revisions to "programs, protocols, practices and municipal code". We suggest two years. Also, this requirement conflicts with Part 3, B. 4 which provides for six months to complete revisions.
No late	Organize Citizen Advisory Groups/Committees to No later than 365 days after Adoption date develop methods for education	38	Part 4.C.1 ( c)(1)(A)	Special Provisions-PIPP(*)- Residential-Outreach & Ed	Watershed groups already exist. The sentence should be revised to read: "Work with existing local watershed groups or organize Citizen Advisory Groups/Committees"
No late	No later than 180 days after Adoption date	38	c)(2)	Special Provisions-PIPP(*)- Residential-Outreach & Ed	1 Year

	ir requested for les - 4.C.1 (c)(9)					requiring les to ESA or	
Agreed to time frame	Object to in-school programs, 1 year requested for effectiveness measurement strategies - 4.C.1 (c)(9)	1 Year	Agreed to time frame	Agreed to time frame	Agreed to time frame	Inspection time frame not an issue, requiring treatment control BMPs for discharges to ESA or 303(d) water bodies is.	Agreed to time frame
Special Provisions-PIPP(*). Residential-Outreach & Ed	Special Provisions-PIPP(*)- Residential-Outreach & Ed	Special Provisions-PIPP(*)- Residential-Outreach & Ed	Special Provisions-PIPP(*)- Residential-Pollutant-specific	Special Provisions-Business- Corporate Outreach	Special Provisions-Business- Corporate Outreach	Special Provisions-Industrial/ Commercial Facilities-Inspect Critical Sources	Special Provisions- Industrial/Commercial Facilities-Inspection Frequency
Part 4.C.1 ( c)(7)	Part 4.C.1 ( c)(8)	Part 4.C.1 ( c)(9)	Part 4.C.1 (d)	Part 4.C.2 (a)(1)	Part 4.C.2 (a)(2)	Part 4.D.2 (a)	Part 4.D.2 (b)(1)(A)
30	39	39	39	04	40	42	47
No later than 30 days after change occurs	No later than 180 days after Adoption date	No later than 180 days after Adoption date NeW 365 days	No later than 180 days after Adoption date	To begin no later than 2 years after Adoption of this order	Corporate outreach for all target facilities shall be conducted not To begin no later than 2 years after Adoption of this less than 2 times order order	To begin no later than 2 years after Adoption of this order. Mandatory interval of 6 months.	To begin no later than 2 years after Adoption of this order. Mandatory interval of 6 months.
Provide contact info on staff responsible for public outreach activities	Develop & Implement strategy to measure effectiveness of inschool education programs	Develop & Implement a behavioral change strategy to ensure PIPP effectiveness	Develop outreach programs that focus on watershed-specific pollutants identified in Attachment B POCs (*)	Develop and implement Corporate outreach program	Corporate outreach for all target facilities shall be conducted not less than 2 times during term of this order.	Inspect all facilities identified in Part 4D.2 twice during the term of this Order, provided the first inspection occurs no later than 2 years from adoption of this Order	Perform Initial Inspection of the Industrial facilities identified in 40 CFR 122.26 ( c)

# For Discussion Purposes Only

Develop LID(*) Technical Guidance Document	No later than 18 Months from the Order Adoption Date new 365 days	51	Part 4.E.1.1.2	Special Provisions-Planning Land Development- LID(*)	3 Years
Participate in second phase of SMC's HCS to develop regional stream classification system or complete similar study.	No later than 18 months from Order's Adoption deleted	53	Part 4.E.1.II.(f)	Special Provisions-Planning & Land Development- Numeric Hydromodification Mitigation	Please change " (18 months from the Order's adoption.)" to "(18 months from the Order's adoption, or the date the Regional Board notifies the Permittees that the SMC is not proceeding with the HCS, whichever is greater.)
Develop and Implement watershed Hydromodification Control Plans.	No later than 6 mos. Of completion of HCS new 180 days	53	Part 4.E.1.II.(g)(1 )	Special Provisions-Planning & Land Development- Numeric Hydromodification Mitigation	One year.
Obtain coverage under CASGP	7 days after adoption	92	Part 4 G 3(b)	Special Provisions	Conflicts with finding G4 page 25: "shall take effect 90 days from Order adoption" and Part 3.A.1 Adopt and implement applicable terms of this Order no later than (60 days from Order Adoption).
Eliminate discharge from vehicle washing	365 days	92	Part 4 G 4(a)	Vehicle and Equipment Wash	Agreed to time frame
Pesticides Procedures	180 days	22	Part 4 G 5(b)	Landscape, Park, and Recreational Facilities Mgmt.	Agreed to time frame
Catch Basin Trash Excluders	180 days new 365 days	78	Part 4 G 6(e)	Storm Drain Operation Mgmt.	Trash excluders should not be required without other options to control trash such as trash management programs and end-of-pipe collection devices.
Storm Drain Maintenance Program	180 days	62	Part 4 G 6(f) (1)	Storm Drain Operation Mgmt.	Agreed to time frame
GIS Storm Drain Pipe	Channeled portions -365 days All greater than 36" – 3 years All greater than 18" – 5 years	84	Part 4 H. 3. (a) (1) (A)	Storm Drain Operation Mgmt.	Agreed to time frame
Develop Electronic Reporting Format	6 months	85	Part 4   1 (a)	Special Provisions	Agreed to time frame
Watershed Ecological Restoration Plans	18 months Deleted	87	Part 5 4 (a)	Watershed Ecological Restoration Planning	See Issue Paper
Begin Trash Study	2 <sup>nd</sup> October following adoption	F-19	Part 5 F58	Watershed Ecological Restoration Planning	The required study should be limited to only the inland waters and coastal waters where trash and debris monitored could be assumed from MS4 sources, and therefore provide useful information for the MS4 programs.

# For Discussion Purposes Only

-	anomal.				
Ventura River Bioassessment Plan	6 months prior to SMC (year 2010) Deleted	F-15	Part 5 E7 & H4 4(a)	Part 5 E7 & Watershed Ecological H4 4(a) Restoration Planning	Agreed to time frame
Participate w/ SMC Regional Bioassessment	Year 2010 Deleted	F-15	F-15 Part 5 E6	Watershed Ecological Restoration Planning	Agreed to time frame
Watershed based tributary monitoring plan	6 months Deleted	F-8	F-8 Part 5 C2	Watershed Ecological Restoration Planning	Tributary monitoring not a part of adaptive monitoring plan submitted to Regional Board.
Monitoring Results Report	45 days	<u>5-</u>	Part 4(a)15	I-3 Part 4(a)15 Special Provisions	Preliminary data only.

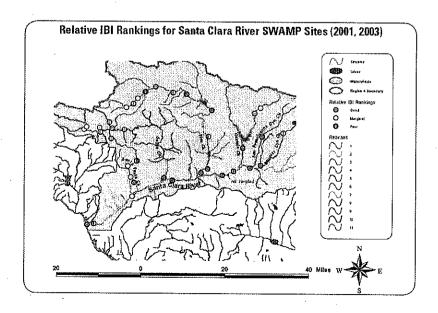
(*) Acronym Key:	/m Key:
POC=Pollutant of Concern	HCP=Hydromodification Control Plan
PIPP=Public Information and Participation Program	LID=Low Impact Development
SMC=Southern California Stormwater Monitoring Coalition HCS=Hydromoffication Control Study	HCS=Hydromofification Control Study

## Ventura Countywide Stormwater Program's Proposed Alternative to Watershed Ecological Restoration Plan Requirements

## Issue

Part 5 of the Draft Order requires the Permittees to develop and implement Watershed Ecological Restoration Plans (ERPs) for all areas that have obtained poor scores through the required bioassessment monitoring. There are several issues regarding this requirement.

- The Regional Board's justification for this requirement is to "reestablish insofar as possible the ecological integrity of degraded aquatic ecosystems." (Draft Order p.4.) However, the Regional Board fails to indicate how ERP is required for the Permittees to meet MEP or any specific legal requirement or water quality standard. The Regional Board also fails to identify its authority that would allow it to require the Permittees to develop and implement Ecological Restoration Plans. The Regional Board's authority is limited to issuing permit requirements that implement NPDES permit regulations and compliance with water quality standards. It does not extend to requiring watershed wide ecological restoration planning.
- If it is determined that the Regional Board does have the legal authority, the Permittees are concerned with the broad scope of the language as drafted, the Permittees would be made responsible for writing and implementing restoration plans regardless of the Permittees' contributions to causing the condition. This indirectly makes the Permitees responsible for impact from agriculture and other discharges. The Permittees jurisdictional areas make up only a portion of the watersheds in question and are therefore only part of the solution. A low index of biological integrity could be caused by a number of factors and contributors including: Other NPDES permitted dischargers; Nonpoint Sources of Pollution; Natural sources; Invasive Species; Natural conditions, such as the absence of surface flows; and, others. Additionally, many stream segments areon private property where Permittees have no access to make improvements.. The Permittees do not possess the authority to control discharges of others to a stream segment or the authority to implement on the ground changes to comply with this requirement.

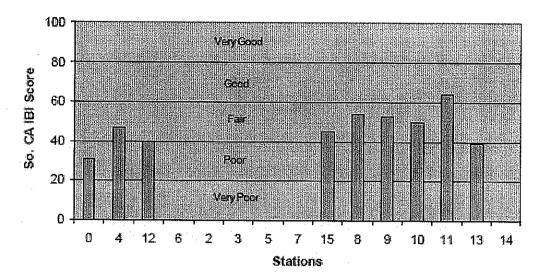


For example, SWAMP data for the Santa Clara River watershed show numerous areas with relative IBI ranking of "poor". Some of these areas are in Los Angeles County, some are in open space areas in the upper watersheds, some are upstream of Ventura County urban areas, some are meant to be dry and are expected to score poorly, and some are in the depositional zones of the lower watersheds. For many years, we have been participating with numerous watershed groups to address a multitude of issues, most of which have little or nothing to do with urban runoff. The impacts to watershed ecology must continue to be solved through the watershed-based stakeholder process. The Permittees are willing to work with the watershed groups to define criteria, identify proportional contributions to the problem, and help develop plans for areas the Permittees have easements and rights-of-way.

• The Draft Order would require that the Southern California Index of Biological Integrity (SoCal B-IBI) be used to develop a score for assessed sites and identify areas for restoration. (Draft Order at p. F-16.) The SoCal B-IBI is not applicable to all of Ventura County. This index was developed for high gradient, riffle-pool dominated systems with perennial flow. The majority of streams with urban runoff contribution in Ventura County are low gradient streams. Data was not collected for the SoCal B-IBI index to evaluate non-perennial streams, low gradient streams where deposition rather than erosion is dominant. Using the SoCal B-IBI to require ERPs will lead to mis-identified stream segments, misused resources and may potentially harm stream segments if attempts are made to 'restore' these streams to contain ecological conditions that never existed.

## Alternative Approach

Instead of requiring ERPs within the text of the stormwater permit, the Permittee's instead encourage the Regional Board to work with the Permittees to evaluate bioassessment monitoring in order to determine what actions may be appropriate for the Permittees. For example, the Ventura County Stormwater Program has submitted results of bioassessment monitoring for the Ventura River annually to the Regional Board for the last 7 years. We recommend that Regional Board staff meet with existing stakeholder groups to address concerns raised by the data. In this case, the monitoring data from one annual report resulted in the following index scores:



As expected, station 0 is not expected to score well as it is at the base of the watershed and is the estuary. The requirement for an ERP should not be based on this one, inappropriate site. The two marginal sites (#12 and #13) are above the urban areas of the watershed and outside the jurisdictional boundaries of the Permittees. It cannot be concluded that the impairment to these sites is caused by discharges from an MS4 and therefore no MS4 should be responsible for ecological restoration.

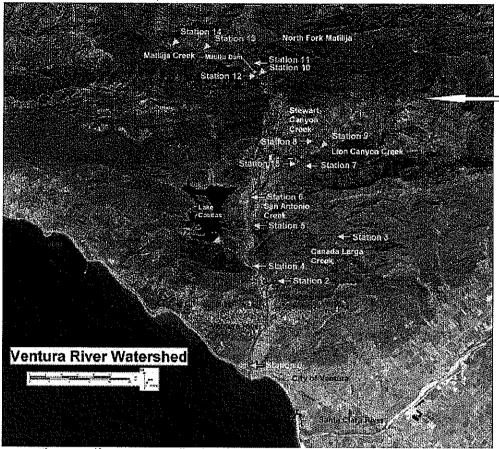


Figure 1. Fifteen BMI sampling locations in the Ventura River watershed.

Furthermore, the California Department of Fish and Game, the State Water Board's surface water ambient monitoring program ("SWAMP"), and other entities are currently working to refine the SoCal B-IBI in order properly assess a wider range of habitats. Until the SoCal B-IBI is refined to include habitats that are predominate in Ventura County, it is an inappropriate tool for use in Ventura County. Once an appropriate assessment index is developed, the Regional Board should work with the Permittees and other appropriate stakeholders within Ventura County to properly determine the County's restoration needs. Because stream degradation can be caused by a variety of stakeholders, we contend that a successful ERP needs to be developed with the cooperation and commitment from all the stakeholders in a watershed.

In the meantime, the Permittees propose an alternative approach for addressing ecological conditions. We propose that if program monitoring discovers a stream segment that obtained a score of "poor" or "very poor" on the refined index that is directly downstream of an urban area, and the area above the urban area scored above "poor" or "very poor", the permit should encourage the Permittees to work with the watershed groups to define criteria, identify proportional contributions to the problem, and help develop plans for areas the Permittees have easements and rights-of-way. This plan will identify the steps needed to identify sources of degradation and determine a course of action towards restoration.

## Conclusion

The Permittees understand the value in restoring creeks and streams as it improves natural habitat and the quality of life for local residents. The Permittees also understand the value in working through the watershed process as is supported by Finding E. 15 of the Draft Order. "The Regional Water Board supports Watershed Management to address water quality protection in the region...It emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with available resources." The Permittees suggest that the development of ERPs will be more effective if developed through a watershed-wide process with all stakeholders responsible for the health of the stream or creek. Improvements brought forward by one entity will have little effect if the impacts of others are not addressed at the same time.

## **Recommended Changes to Draft Permit** Regarding Planning and Land Use Development and **Low Impact Development**

### Ε. Planning and Land Development Program

- The Permittees shall implement a development-planning program that has the 1. following goals for New Development and Redevelopment projects:
  - (a) Minimize impacts from storm water runoff on the biological integrity of Natural Drainage Systems and water bodies in accordance with requirements under CEOA (Cal. Pub. Resources Code § 21100), CAL. WATER CODE §13369, CWA § 319, CWA § 402(p), CWA § 404, CZARA § 6217(g), ESA § 7, and local government ordinances.
  - (b) Minimize pollutants emanating from impervious surfaces by reducing the percentage of Effective Impervious Area<sup>1</sup> to less than 5 percent of total project area (new development projects only). Alternative reductions may be considered if adequate documentation is provided.
  - (c) Minimize pollutants emanating from impervious surfaces by reducing the percentage of effective impervious area to the maximum extend practicable (redevelopment projects only).
  - (d) Minimize the percentage of impervious surfaces on development lands to support the percolation and infiltration of storm water into the ground.
  - (e) Minimize pollution emanating from impervious surfaces on developed land such as roof-tops, parking lots, and roadways through the use of appropriate Source Controls (good housekeeping practices), Low Impact Development Strategies, and Treatment Control BMPs.
  - (f) Properly design and maintain Treatment Control BMPs (in order to avoid the breeding of vectors).<sup>2</sup>
  - (g) Select an integrated approach to mitigate storm water pollution by utilizing a suite of controls to remove storm water pollutants, reduce storm water runoff volume, and beneficially reuse storm water.

<sup>2</sup> Treatment BMPs when designed to drain within 72 hours of the end of rainfall minimize the potential for the breeding of vectors.

<sup>&</sup>lt;sup>1</sup> Effective Impervious Area means that portion of the impervious area that is hydrologically connected via sheet flow or a discrete hardened conveyance to a drainage system or a receiving water body. Impervious surfaces may be rendered "ineffective" if the storm water runoff is dispersed through properly designed vegetated swales, planter boxes, bioretention areas or other site controls recognized as effective in absorbing runoff from impervious surfaces using approved dispersion techniques.

2. The planning and land development program shall incorporate a comprehensive and inclusive approach to addressing runoff from new development and redevelopment. The approach shall include as appropriate low impact development practices, hydromodification controls and post construction storm water mitigation measures.

## I. Low Impact Development

- 1. All new development and redevelopment projects shall integrate Low Impact Development (LID) principles into project design. LID is a storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect predevelopment hydrologic functions.
- 2. The Permittees shall incorporate LID design standards into the Countywide Technical Guidance Document no later than three years from the Order's adoption date for use by Land Planners and Developers. The LID standards shall address:
  - (a) Site Assessment.
  - (b) Site Planning and Layout.
  - (c) Vegetative Protection, Revegetation and Maintenance.
  - (d) Techniques to Minimize Land Disturbance.
  - (e) LID practices.
  - (f) LID credits.
  - (g) Limitations for using LID related to high groundwater, soil constraints, drinking water aquifer impacts, redevelopment projects, and other site-specific factors reducing the feasibility of LID practices.
- 3. The Permittees will facilitate implementation of LID by providing key industry, regulatory, and stakeholders with LID objectives and specifications developed in the LID Technical Guidance Document through a training program. The LID training program will include the following:
  - (a) LID targeted sessions and materials for builders, design professionals, regulators, resource agencies, and stakeholders.
  - (b) A combination of awareness on national efforts and local experience gained through LID pilot projects and demonstration projects.
  - (c) Materials and data from LID pilot projects and demonstration projects including case studies.
  - (d) Guidance on how to integrate LID requirements into the local regulatory program(s) and requirements.
  - (e) Availability of the LID Technical Guidance Document.