



Linda S. Adams
Agency Secretary

California Regional Water Quality Control Board Central Coast Region



Arnold Schwarzenegger
Governor

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February 17, 2009

BY ELECTRONIC AND REGULAR MAIL

Mr. Rob Livick
rlivick@morro-bay.ca.us
City of Morro Bay
955 Shasta Street
Morro Bay, CA 93442

Dear Mr. Livick:

NOTICE OF ENROLLMENT – NPDES SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS GENERAL PERMIT; CITY OF MORRO BAY, SAN LUIS OBISPO COUNTY, WDID # 3 40MS04032

The Central Coast Regional Water Quality Control Board (Water Board) received a Notice of Intent, Storm Water Management Plan (SWMP), map, and fee for the City of Morro Bay's (City's) Municipal Separate Storm Sewer System (MS4). These items are required to enroll in the National Pollutant Discharge Elimination System General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems, Order No. 2003-0005-DWQ (General Permit).

Water Board staff reviewed the City's SWMP and found it, combined with a number of specific revisions described in Attachment 1, to be in compliance with the General Permit and to meet the maximum extent practicable (MEP) standard set forth in the General Permit. The City's SWMP was available to the public for a 60-day comment period, and Water Board staff received comments from stakeholders. The comments are contained in Attachment 2. Water Board staff responses to these comments are contained in Attachment 3.

The public did not request a hearing for the Water Board to consider approval of the SWMP and enrollment of the City under the General Permit. The General Permit states that if no hearing is requested, the Water Board Executive Officer will notify the regulated MS4 that it has obtained permit coverage only after Water Board staff has reviewed the SWMP and has determined that the SWMP meets the MEP standard established in the General Permit.

I am hereby approving the City's SWMP with the following condition:

Pursuant to Water Code Section 13383, the City of Morro Bay is required to amend the SWMP no later than **March 17, 2009**, to include all the changes shown in the "Final Table of Required Revisions," Attachment 1 to this letter. Per Water Code Section

California Environmental Protection Agency



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February 17, 2009

13385, failure to make these revisions may subject the City of Morro Bay to Administrative Civil Liability for up to \$10,000 for each day of violation. The City of Morro Bay must provide a copy of the revised pages of the SWMP to the Water Board no later than **March 17, 2009**.

As of the date of this letter, discharges from the City's MS4 are authorized by the General Permit. The City is required to implement the SWMP and comply with the General Permit. The City's first annual reporting period ends February 28, 2010. The City's first annual report is due to the Water Board on June 1, 2010 (90 days after the reporting period ends).

Thank you for your cooperation and efforts to enroll the City of Morro Bay under the General Permit. If you have questions regarding this matter, please contact **Tamara Presser at (805) 549-3334**, or tpresser@waterboards.ca.gov, or Matt Thompson at (805) 549-3159 or mthompson@waterboards.ca.gov.

Sincerely,



Roger W. Briggs
Executive Officer

cc: (by electronic mail)

Jerry Bunin: jbunin@hbacc.org
Ann Kitajima: AnnK@mbnep.org
Neil Farrell: neil@tolosapress.com
Gordon Hensley: coastkeeper@epicenteronline.org
Bill Woodson: billandkayw@charter.net
Jill Falcone: jfalcone@co.slo.ca.us

Attachment 1: Final Table of Required Revisions
Attachment 2: Comment Letters Received during 60-day Public Comment Period
Attachment 3: Response to Comments

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FINAL TABLE of REQUIRED REVISIONS
Morro Bay September 2008 Draft SWMP for February 2009 – February 2014

Acronyms/Abbreviations:

- BMP - Best Management Practice
- City - City of Morro Bay
- General Permit - Phase II Small Municipal Separate Storm Sewer Systems General Permit
- SWMP - Storm Water Management Plan

Item Number	SWMP Section	Subject	Problem	Required Revisions
1	4.1 Public Education and Outreach	Public Education of Stormwater-related Ordinances	The City has not committed to providing public education on the proposed illicit discharge ordinance and municipal code amendments relating to post-construction control measures.	Modify existing BMPs or add a set of BMPs to commit the City to providing public education on the proposed illicit discharge ordinance and municipal code amendments relating to post-construction control measures. The education program must include a component that covers the enforcement and penalties for noncompliance.
2	Public Education and Outreach; Public Participation and Involvement	Community-based Social Marketing	<p>The Public Education and Outreach BMPs rely heavily on information campaigns that utilize education and advertising to encourage behavior change. While these efforts can be effective in creating public awareness and in changing attitudes, numerous studies show that behavior change rarely occurs as a result of simply providing information.</p> <p>One particularly promising approach to public education is community-based social marketing. Community-based social marketing is based upon research in the social sciences</p>	Include a BMP that commits the City to further assessing community-based social marketing strategies, and incorporating them into the City's program where appropriate, by Year 3.

Item Number	SWMP Section	Subject	Problem	Required Revisions
			that demonstrates that behavior change is most effectively achieved through initiatives delivered at the community level which focus on removing barriers to an activity while simultaneously enhancing the activity's benefits.	
3	4.5 Post-Construction Storm Water Management	Long-term Watershed Planning	The City commits to developing a strategy to develop long-term watershed planning, but the City does not commit to implementing the strategy.	<p>Modify BMP PCIB or add a Best Management Practice (BMP) equivalent to the following: The City will develop a strategy, including a schedule (of BMPs), to provide long-term watershed planning, to assist in the development of long-term hydromodification control criteria (Year 1).</p> <p>Add a BMP stating the following or equivalent: The City will begin implementation of their long-term watershed protection plan starting in Year 1.</p>
4	5.1 Assessment of Program Effectiveness	Assessment of Program Effectiveness	The SWMP does not indicate the City will document the specific BMP effectiveness assessment measures by Year 1.	<p>Add a BMP stating the following or equivalent: The City will document, in the Year 1 annual report, specific effectiveness assessments for each BMP.</p>
5	4.5 Post-Construction Stormwater Management; Appendix G Interim Standards for Hydromodification	Application of Interim Hydromodification Control Standards	BMP PC1 does not clearly state which projects at what time will be required to meet the City's interim hydromodification control criteria.	Modify BMP PC1 to clarify that after the City adopts interim hydromodification control criteria, approved by the Water Board, the City will require projects meeting the applicability criteria, and not yet 'deemed complete,' to satisfy the interim hydromodification control criteria.

Item Number	SWMP Section	Subject	Problem	Required Revisions
			<p>The section in Appendix G titled, 'Projects Exempt From Hydromodification Requirements,' explains that discretionary projects deemed complete prior to SWMP adoption are exempt from the criteria.</p>	<p>Modify Appendix G to clarify that discretionary projects deemed complete, prior to the adoption of interim hydromodification control criteria, are exempt from the interim hydromodification control criteria.</p>
6	Appendix G Interim Standards for Hydromodification	Hydromodification Control Criteria Exemptions	<p>In the November 26, 2008 Draft SWMP, submitted as a public comment, the City added exemptions for future interim hydromodification control criteria. Without having the proposed interim hydromodification control measures to accompany these exemptions, Water Board staff cannot approve exemptions from the criteria. Water Board staff considers exemptions part of the applicability criteria for applying interim hydromodification control criteria; therefore, exemptions are part of the interim hydromodification control criteria package. At the October 17, 2008 Water Board public hearing the Water Board approved the City of Lompoc's SWMP with a condition that, "the Water Board shall provide interested persons the opportunity for comment [on the City's proposed interim hydromodification control criteria] and a hearing before the Water Board if any party is aggrieved by the Water Board staff's determination, prior to Water Board</p>	<p>Water Board staff considers the proposed interim hydromodification control criteria exemptions reasonable, but requests the City remove the following exemptions from the SWMP prior to SWMP adoption: 'Geotechnical Concerns' and 'Depth to Groundwater and Potential Groundwater Pollution Concerns.' Additionally, we request the City remove the following components from the 'Road Maintenance Project' exemptions: street reconstruction and sidewalk replacement. The City may revise these exemptions, if necessary, and resubmit with the interim hydromodification control requirements.</p>

Item Number	SWMP Section	Subject	Problem	Required Revisions
			<p>action being final.” By approving the exemptions added in the City’s November 26, 2008, the public would not be provided an opportunity for comment.</p> <p>The City has included exemptions for all road maintenance projects. Public roads cover a large portion of the City and therefore have the potential to impact water quality. Exempting all street reconstruction projects from controlling hydromodification and incorporating low impact development design principles will not help improve the City’s watershed.</p> <p>Water Board staff worked with City staff to develop the waterfront area requirements and exemptions and these exemptions were in the posted September 2008 draft SWMP and available for public comment; therefore, the City can retain these exemptions in Appendix G.</p>	
7	4.5 Post-Construction Storm Water Management; Appendix G Interim Standards for Hydromodification	Interim Hydromodification Control Criteria Development	In BMP PC1 the City commits to implementing the hydromodification control criteria presented in the Water Board’s February 15, 2008 letter, yet language in Appendix G commits the City to developing criteria as effective as the criteria included in the February 15, 2008	<p>Modify BMP PC1 and Appendix G to include language stating the City will chose one of the following three options for developing interim hydromodification criteria:</p> <p>Option 1: The proposed criteria may include the</p>

Item Number	SWMP Section	Subject	Problem	Required Revisions
			<p>letter. To clarify this inconsistency, and to provide the City more flexibility in developing interim hydromodification control criteria, Water Board staff requests the City modify their SWMP language that details the interim hydromodification control criteria development.</p>	<p>following types of requirements, which provide a high degree of assurance of effective hydromodification control without regard to the nuances of individual watersheds:</p> <ul style="list-style-type: none"> • For new development and re-development projects, Effective Impervious Area¹ shall be maintained at less than five percent (5%) of total project area. • For new development and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, the post-construction runoff hydrographs shall match within one percent (1%) the pre-construction² runoff hydrographs, for a range of events with return periods from 1-year to 10-years. • For projects whose disturbed project area exceeds two acres, preserve the pre-construction drainage density (miles of stream length per square mile of watershed) for all drainage areas serving a first order stream³ or larger, and ensure that post-project time of concentration is equal or greater than pre-project time of concentration.

¹ Effective Impervious Area is that portion of the impervious area that drains directly to a receiving surface waterbody via a hardened storm drain conveyance without first draining to a pervious area. In other words, impervious surfaces tributary to pervious areas are not considered Effective Impervious Area.

² Pre-construction condition is defined as undeveloped soil type and vegetation.

³ A first order stream is defined as a stream with no tributaries.

Item Number	SWMP Section	Subject	Problem	Required Revisions
				<p>OR</p> <p>“As effective as” means the City may use other approaches (including other variables or numeric criteria, different than Option 1 criteria, appropriate for the Morro Bay Watershed) to control hydromodification and protect the biological and physical integrity of the City’s watersheds. Other acceptable approaches to develop interim criteria that are as effective as Option 1 include:</p> <p>Option 2: Adopt and implement hydromodification criteria developed by another local municipality and approved by the Water Board, such as the criteria the Water Board adopted for the City of Salinas, as interim criteria.</p> <p>OR</p> <p>Option 3: Use the following methodology to develop interim flow control and infiltration criteria:</p> <ul style="list-style-type: none"> • Identify a range of runoff flow rates for which post-project runoff flow rates and durations shall not exceed pre-development runoff rates and durations, where the increased discharge rates and durations will result in off-site erosion or other

Item Number	SWMP Section	Subject	Problem	Required Revisions
				<p>significant adverse impacts to beneficial uses. Pre-development refers to the soil type, vegetation and amount of impervious surface existing on the site prior to the development project.</p> <ul style="list-style-type: none"> • Establish numeric criteria for development projects to maximize infiltration on-site and approximate natural infiltration levels to the maximum extent practicable and to effectively implement applicable low-impact development strategies. • Identify the projects, including project type, size and location, to which the City will apply the interim criteria. The projects to which the City will apply the interim criteria will include all those projects that will cause off-site erosion or other significant adverse impacts to beneficial uses. • Identify methods to be used by project proponents to demonstrate compliance with the interim discharge rate and duration criteria, including continuous simulation of the entire rainfall record. • Identify methods to be used by project proponents to demonstrate compliance with the interim infiltration criteria, including analysis of site imperviousness.

Item Number	SWMP Section	Subject	Problem	Required Revisions
			<p>BMP PC1 does not include a schedule for submitting interim hydromodification control criteria to provide Water Board staff adequate time to review, prior to criteria implementation.</p>	<p>Modify BMP PC1 to commit the City to submitting their proposed interim hydromodification control criteria (numeric and non-numeric), no less than three (3) weeks prior to 365 days after enrollment under the General Permit, to provide Water Board staff adequate time to review the proposed criteria. Additionally, modify BMP PC1 to include the following language, "The Central Coast Water Board Executive Officer will notify the City and other interested persons of the acceptability of the City's proposed interim hydromodification control criteria for new development and re-development. The Water Board shall provide interested persons the opportunity for comment and a hearing before the Water Board if any party is aggrieved by the Water Board staff's determination, prior to Water Board action being final."</p>
8	4.5 Post-Construction Stormwater Management	Low Impact Development Public Education	<p>The SWMP does not commit to low impact development public education until Year 3, yet the City commits to implementing interim hydromodification control criteria starting 365 days after General Permit enrollment.</p>	<p>Modify BMP PC7 or BMP PE8 or add a new BMP to commit the City to developing initial low impact development outreach programs during the first implementation years, to prepare project applicants for the new hydromodification control requirements.</p>

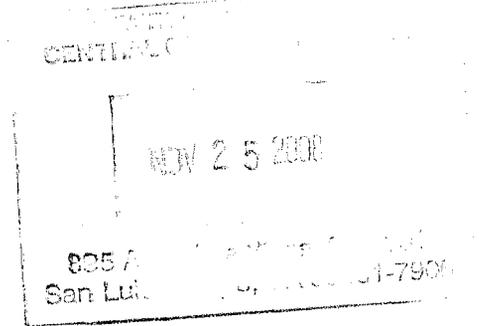


City of Morro Bay

Morro Bay, CA 93442 • 805-772-6200
www.morro-bay.ca.us

Attachment 2

Tamara



November 26, 2008

Tamara Presser
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Dear Tamara Presser:

On September 26, 2008 the City of Morro Bay received the Central Coast Regional Water Quality Control Board (Water Board) comments on the Draft Storm Water Management Plan (SWMP). The SWMP enclosed has been revised to meet the Water Boards requirements. The following items have been included with this submittal:

- A final copy of the February 2009 – February 2014 SWMP
- An electronic format version (MS Word and pdf.)
- The “*Table of Revisions*” along with our corrections and location of corrections
- A copy of the corrections with highlighted changes for clarity.

City staff has worked diligently to meet all the requirements in the “*Table of Revisions*”. Changes have been made to Appendix G: Interim standards for hydromodification and various BMPs identified in the “*Table of Revisions*”.

The City of Morro Bay believes the February 2009 – February 2014 SWMP achieves the six Minimum Control Measure requirements in the General Permit and the following conditions added by the Water Board:

- I. Maximizes infiltration of clean stormwater, and minimize runoff volume and rate.
- II. Protection of riparian areas, wetlands, and their buffer zones
- III. Minimizes pollutant loading
- IV. Providing long-term watershed protection

Should you have any questions or concerns please do not hesitate to contact Damaris Hanson at 772-6265 or dhanson@morro-bay.ca.us.

Sincerely,

Rob Livick, PE/PLS
City Engineer

FINANCE
595 Harbor Street
HARBOR DEPARTMENT
1275 Embarcadero Road

ADMINISTRATION
595 Harbor Street
CITY ATTORNEY
955 Shasta Avenue

FIRE DEPARTMENT
715 Harbor Street
POLICE DEPARTMENT
850 Morro Bay Boulevard

PUBLIC SERVICES
955 Shasta Street
RECREATION AND PARKS
1001 Kennedy Way

City of Morro Bay's response to the Water Boards revisions of the August 2008 Draft SWMP

Item Number	SWMP Section	BMP ID#	Subject	Problem	Revisions	Corrections made by the City of Morro Bay <i>Location of correction</i>
1	4.1	PE4	Residential Automotive washing	The public education section does not address proper automotive washing.	Modify BMP PE4 or add a new BMP to commit the City to educating its residents on proper automotive washing methods.	Proper automotive car washing has been added to BMP PE4 <i>PE4 Section 4 Page 4</i>
2	4.3	IL1	Non-stormwater discharges	Section 4, page 25 commits the City to identifying which 17 non-stormwater discharges, listed in the General permit, are significant pollutant contributors to the City's MS4. BMP IL1 commits the City to establishing an ordinance to address the non-stormwater discharges identified as a significant contributor of pollutants. In addition to the City establishing an enforcement mechanism to regulate non-stormwater discharges, the SWMP must detail how the City will manage each non-stormwater discharges that's identified as a significant contributor of pollutants to City's MS4.	In addition to creating an ordinance to address non-stormwater discharges, the City shall modify an existing BMP or add a new BMP that commits the City to adding language to the SWMP to clearly explain which of the 17 non-stormwater discharges listed in the general Permit are significant pollutants to the City's MS4 and how the City will manage each discharge.	Language has been included committing the City to determining which 17 non-stormwater discharges are deemed significant pollutants to the MS4 and prohibiting these discharges in an ordinance. <i>IL1 Section 4 Page 26 & 27</i>
3	4.4	CON3	Construction site inspections	The SWMP does not outline how the City will track site inspections and use the tracking information (i.e., site address, owner, violations etc.) to improve the site inspection process.	Modify BMP CON3 or add a new BMP, including a schedule for completion, to commit the City to developing a tracking system for construction site inspections.	The City has a developed tracking system which is used to track all building permit inspections. This program (HDL) has the ability to include additional inspections so the city can track all site inspections. <i>CON3B Section 4 Page 41</i>
4	4.5	PC5	Post-	Although the City plans to provide	Modify BMP PC5 or add a new	The City has included including the

City of Morro Bay's response to the Water Boards revisions of the August 2008 Draft SWMP

Item Number	SWMP Section	BMP ID#	Subject	Problem	Revisions	Corrections made by the City of Morro Bay <i>Location of correction</i>
			Construction site inspections	post-construction site inspection program details in future annual reports, the City must commit to including specific components in their inspection program, to give Water Board staff confidence they will develop a through inspection program.	BMP to commit the City to include, at a minimum, the following components in their post-construction site inspections program: inspections during construction to verify post-construction BMP are built as planned; specific timeframe after construction termination for the first post-construction site inspection; post-construction inspections to ensure proper BMP maintenance and BMP effectiveness (in coordination with the self-certification program); and tracking system for approved treatment and flow/volume – based BMPs.	specified components to ensure the Water Board that the City will develop a through inspection program. <i>PC5 Section 4 Page 49 & 50</i>
5	4.5	NA	Long-term watershed planning	Water Board staff expects the City to provide long-term watershed protection. The SWMP incorporates aspects of long-term watershed planning with a plan to develop long-term HM control standards and to incorporate these standards into the City's municipal planning process. However to establish and maintain meaningful standards, the City must assess watershed scale issues and conditions, coordinate with other municipalities/governments within the same watershed, and	Modify an existing BMP or add a new BMP to demonstrate the City is proactively working towards long-term watershed planning. This means your SWMP must include a schedule (of BMPs) to assess watershed conditions related to the City' with a plan to incorporate these issues during the long-term HM control standards development.	The City has modified BMP PC1B to commit the City to proactively working towards long-term watershed planning. <i>PC1B Section 4 Page 46</i>

City of Morro Bay's response to the Water Boards revisions of the August 2008 Draft SWMP

Item Number	SWMP Section	BMP ID#	Subject	Problem	Revisions	Corrections made by the City of Morro Bay <i>Location of correction</i>
				municipalities/governments within the same watershed, and specifically focus on future growth areas.		
6	5.1	NA	Assessment of program effectiveness	The City has developed a program effectiveness assessment strategy based on the CASQA six-level assessment approach. The City has committed to attaining up to Level 3, by the end of their first 5-year permit cycle. Water Board staff expects the City to achieve up to level 4, for applicable BMPs, by the end of their first 5-year Permit cycle. The City has already committed to some Level 4 type assessments (i.e. tracking the amount of material collected during sweeping).	Modify Section 5, or add a new BMP, that commits the City to 1) documenting in the Year 1 annual report specific effectiveness assessments for each BMP showing the highest outcome level the city will achieve, by the end of the 5-year Permit cycle, for each BMP; and 2) achieving Level 4, by the end of the first 5-year permit cycle, for all BMPs where this outcome level is feasible/applicable. Consider putting all effectiveness assessment measures into a matrix to easily track the level of assessment the City will conduct for each BMP and timing for assessment completion.	Each BMP and the level which the City will achieve will be included in our first annual report. The City has committed to achieving level 3 by the end of the first permit cycle for most BMPs; public education and outreach are areas where it may be difficult to achieve level 3. The City has also committed to achieving level 4 for applicable/feasible BMPs in this first 5-year permit cycle. The City has not included any commitments for the second permit cycle because this SWMP is written for the first permit cycle only. All commitments for the second permit cycle will be addressed in the next 5-year permit cycle. <i>Section 5 page 1</i>
7	Appendix G	N/A	HM control exemptions	The SWMP states that projects approved prior to the implementation of the HM interim standards are exempt from HM control. It is unclear what deems a project approved in the City's project review process.	Modify HM control exemptions to detail what deems a project "approved" in the project approval process to clearly designate which projects will not be required to adhere to the HM control interim requirements.	Appendix G has been updated to include a more detailed description of the projects that are approved. This section has also been updated to include areas within the city that some of the HM control standards may be exempt. The City of Morro Bay has unique conditions where some HM control standards are

City of Morro Bay's response to the Water Boards revisions of the August 2008 Draft SWMP

Item Number	SWMP Section	BMP ID#	Subject	Problem	Revisions	Corrections made by the City of Morro Bay <i>Location of correction</i>
						not applicable/feasible. The City plans to conduct a full investigation on all the areas within the watershed in the long-term watershed planning. <i>Appendix G</i>

STORMWATER POLLUTION PREVENTION PUBLIC EDUCATION AND OUTREACH										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	EFFECTIVENESS MEASURE	BMP IMPLEMENTATION TIMETABLE					POTENTIAL POLLUTANTS ADDRESSED
					1	2	3	4	5	
PE4	Distribute stormwater pollution prevention brochures and other printed materials (provided in multilingual and/or pictorial) targeting residential audiences. Topics may include, but will not be limited to: General stormwater pollution prevention information about the impacts of urban runoff and the distinction between municipal storm sewer and sanitary sewer systems; Proper lawn and garden care; Sustainable landscaping; Proper household hazardous waste storage and disposal including used motor oil; Proper pet waste disposal; Water conservation, proper automotive car washing; Integrated Pest Management and use of less toxic	To reduce the source of stormwater pollutants using printed materials to reach out to the public and provide educational information including both general and specific stormwater pollution prevention actions that people can take in their everyday activities to reduce stormwater pollutants such as sediment, pathogens, oil and grease, litter and trash, pesticides, herbicides, fertilizers, metals, and other chemicals.	<p>PE4A: Distribute printed materials throughout the City each year. Target to reach 20% of the households per year, with 100% of the households reached by Year 5.</p> <p>PE4B: Distribute appropriate printed materials to appropriate business (i.e. Distribute proper lawn and garden care in nurseries and hardware stores)</p> <p>PE4C: Post brochures on the City's website.</p>	<p>E4A: Identify the brochures have been created Number of households reached</p> <p>PE4B: Measure and record the number and types of brochures distributed.</p> <p>PE4C: Brochures posted on web site (Yes/No) Track number of hits</p>	X	X	X	X	X	Pathogens Fecal Coliforms Nutrients Sediment Litter and Trash Pesticides Herbicides Oil and Grease Metals Organics Oxygen demanding substances Other pollutants from urban surfaces which come into contact with stormwater

City of Morro Bay
Stormwater Management Plan

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)					POTENTIAL POLLUTANTS ADDRESSED
				EFFECTIVENESS MEASURE		BMP IMPLEMENTATION TIMETABLE			
				1	2	3	4	5	
IL1	Adopt an ordinance prohibiting illicit discharges and including enforcement provisions. The ordinance will include a system of enforcement and penalties. Model ordinances will be used to help draft this ordinance. The 17 categories of non-stormwater discharges or flows (i.e., authorized non-stormwater discharges) will be addressed only where they are identified as significant contributors of pollutants to the Small MS4. If any of the 17 non stormwater discharges are deemed significantly	To reduce pollutants in stormwater runoff by enforcing illicit discharge prohibitions.	<p>IL1A: Ordinance to be drafted and adopted by Year 2. The ordinance will include progressive penalties and enforcement provisions. The ordinance will go through the Cities public review process including, posting of a legal ad 10 days prior to the City Council meeting and available for viewing at the Library.</p> <p>IL1B: Determine which non stormwater discharges are deemed significant pollutants to the MS4. Any of the 17 non stormwater discharges that are determined to be significant pollutants to the City's MS4,</p>		X				<p>Pathogens</p> <p>Fecal Coliforms</p> <p>Nutrients</p> <p>Sediment</p> <p>Litter and Trash</p> <p>Pesticides and Herbicides</p> <p>Oil and Grease</p> <p>Metals</p> <p>Organics</p> <p>Oxygen demanding substances</p> <p>Other pollutants from urban surfaces which come into contact with stormwater</p>

ILLCIT DISCHARGE DETECTION AND ELIMINATION (IDDE)											
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	EFFECTIVENESS MEASURE	BMP IMPLEMENTATION TIMETABLE					POTENTIAL POLLUTANTS ADDRESSED	
					1	2	3	4	5		
	contributors to stormwater pollution, BMPs will be added to remediate these individual negative impacts		these discharges will be prohibited in the ordinance. IL1B: Establish a system of enforcement and penalties and train inspectors prior to ordinance adoption. IL1C: Adopt Ordinance	IL1B: Enforcement procedures developed and number of employees trained IL1C: Number of violations from year to year	X	X					
IL2	Use GIS to map the storm drain conveyance system showing the location of storm drain features all outfalls and the names and locations of all waters of the US that receive discharges from those outfalls. Also the storm drain filters will be mapped along with other	To reduce pollutants in storm water runoff by mapping the storm sewer system to facilitate tracking the source of stormwater pollutants.	IL2A: Start storm drain maps and finish by year 2. IL2B: Update maps on an annual basis to include new and modified storm drain facilities.	IL2A: Storm Drain map completed IL2B: Storm drain map updated.	X	X		X	X	X	Pathogens Fecal Coliforms Nutrients Sediment Litter and Trash Pesticides and Herbicides Oil and Grease Metals Organics Oxygen demanding substances Other pollutants

CONSTRUCTION SITE RUNOFF CONTROL										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPs)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	EFFECTIVENESS MEASURE	BMP IMPLEMENTATION TIMETABLE					POTENTIAL POLLUTANTS ADDRESSED
					1	2	3	4	5	
			<p>CON3B: The City will track erosion control inspections in the same way all inspections are tracked in our permit tracking program HDL.</p> <p>CON3B Inspectors shall attend the training course on Erosion and Sediment Control for Construction Projects to insure they are properly trained</p>	<p>CON3B: Number of inspections conducted, number of compliant sites compared to number of non-compliant sites, enforcement action for non compliant site</p> <p>CON3B: Training certificates if applicable will be included in the annual report</p>	X	X	X	X	X	
CON4	Conduct a public education and outreach program for construction runoff controls targeting project applicants, contractors, developers, property owners and other responsible parties. Also see BMP PE7.	To reduce pollutants in stormwater runoff by controlling the discharge of pollutants from construction sites using public education and outreach.	<p>CON4A: Issue construction site education and outreach information with 100% of all construction permit applications for all projects which are subject to Municipal Code chapter 14.48.</p> <p>CON4B: Include</p>	<p>CON4A: Number of brochures issued with building permits. Report in the annual report the number of compliant sites compared to the number of non-compliant sites and compare year to year for an effectiveness measures.</p>	X	X	X	X	X	Sediment Litter and Trash Building materials and chemicals associated with construction waste

POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPs)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	EFFECTIVENESS MEASURE	BMP IMPLEMENTATION TIMETABLE					POTENTIAL POLLUTANTS ADDRESSED
					1	2	3	4	5	
		during the development review process.								surfaces which come into contact with stormwater
PC5	Implement a post-construction stormwater management maintenance inspection program. The program will include the following components; inspections during construction to ensure BMPs are built as planned, specific timeframe after construction termination for the first post construction site inspection, post construction inspections to ensure proper BMP maintenance and BMP effectiveness (in coordination with a self certification	To reduce pollutants in stormwater runoff by inspecting for post-construction stormwater management controls during the site inspection and ongoing storm drain inspection processes.	<p>PC5A: Create a maintenance inspection program. Inspect project sites with post-construction runoff controls as defined in the revised City Municipal Code (see PC1).</p> <p>PC5B: Inspect projects one acre or more and sites less than one acre in size that are part of a larger common plan of development or sale in size for compliance with statewide General Construction Permit and SWPPP requirements for post-construction</p>	<p>PC5A: Number of site inspections for post-construction runoff controls. Number of sites in compliance with the maintenance inspection program</p> <p>PC5B: Number of inspections of construction sites subject to the General Construction Permit.</p>		X	X	X	X	Nutrients Sediment Litter and Trash Pesticides and Herbicides Oil and Grease Metals Organics Other pollutants from urban surfaces which come into contact with stormwater

City of Morro Bay
Stormwater Management Plan

POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT											
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	EFFECTIVENESS MEASURE	BMP IMPLEMENTATION TIMETABLE					POTENTIAL POLLUTANTS ADDRESSED	
					1	2	3	4	5		
PC6	<p>program) and tracking of approved treatment and flow/volumes based BMPS.</p> <p>Develop and implement a Low Impact Development (LID) Design Standards Manual. The San Diego County Low impact development handbook stormwater management strategies and San Luis County's low impact development handbook can be used as a model for developing this manual.</p>	<p>To reduce pollutants in stormwater runoff by implementing Low Impact Development Design Standards in Morro Bay.</p>	<p>BMPs (these inspections must occur until the City begins the PC5A inspections to ensure compliance.)</p> <p>PC6A: Develop and publish the LID Design Manual. Compliance with Design Standards required in the ordinance described in BMP PC1. The LID Design Manual is required to provide design specifications and guidance to help project proponents achieve compliance with the ordinance.</p> <p>PC6B: Provide copies of the LID Design Manual on the City website and at the Permit counter.</p>	<p>PC6A,B: LID manual created</p>	X						<p>Nutrients Sediment Litter and Trash Pesticides and Herbicides Oil and Grease Metals Organics Other pollutants from urban surfaces which come into contact with stormwater</p>
PC7	<p>Provide Low Impact Development public</p>	<p>To reduce pollutants in</p>	<p>PC7A: Distribute LID and impervious</p>	<p>PC7A: Number of LID manuals distributed.</p>		X	X	X	X		<p>Nutrients Sediment</p>

City of Morro Bay
Stormwater Management Plan

POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT						
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	EFFECTIVENESS MEASURE	BMP IMPLEMENTATION TIMETABLE	POTENTIAL POLLUTANTS ADDRESSED
					1 2 3 4 5	
PC1	Revise to the City Municipal Code chapter 14.48 to maximize infiltration of clean stormwater, and minimize runoff volume and rate, including enforcement provisions to ensure compliance. Criteria for Interim Hydromodification Criteria will be as effective as the water boards interim requirements see Appendix G. These requirements will be used implemented until the City develops acceptable control standards for hydromodification.	To reduce pollutants in stormwater runoff by requiring long-term post-construction BMPs that protect water quality and control runoff in new development and significant redevelopment projects.	<p>PC1A: Revise existing building regulations in the Morro Bay Municipal Code chapter 14.48 to require specific post-construction stormwater management controls using the interim measures proposed by the Central Coast Water Board see Appendix G. The final revisions will be adopted and enforcement provisions implemented within one year of the permit issuance.</p> <p>PC1B: Develop a strategy to provide long term watershed planning by assessing watershed conditions related to the City and</p>	<p>PC1A: Revised Municipal Code 14.48 to include post-construction stormwater management controls</p> <p>PC1B: Strategy developed to provide long term watershed planning</p>	X	<p>Nutrients</p> <p>Sediment</p> <p>Litter and Trash</p> <p>Pesticides and Herbicides</p> <p>Oil and Grease</p> <p>Metals</p> <p>Organics</p> <p>Other pollutants from urban surfaces which come into contact with stormwater</p>

POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	EFFECTIVENESS MEASURE	BMP IMPLEMENTATION TIMETABLE					POTENTIAL POLLUTANTS ADDRESSED
					1	2	3	4	5	
			incorporate these conditions with the new control standards for hydromodification which will include the requirements proposed in Appendix G including Low Impact Development to the maximum extent practicable. PC1D: Adopt the City's new Hydromodification requirements based on Appendix G to the maximum extent practicable.	PC1C: Adopted Hydromodification requirements					X	
PC2	Continue enforcing Morro Bay's current Zoning Ordinance with existing riparian buffer zones of 50 feet and wetland buffer zones of 100 feet.	To reduce pollutants in the riparian and wetlands areas by increasing the buffer zones, to the maximum extent	PC2A: Continue requiring projects to protect riparian and wetland areas by requiring a buffer zone, according to Morro Bay's Zoning Ordinance chapter 17.40.040, to the	PC2A: Continued enforcement of Morro Bay's Zoning Ordinance chapter 17.40.040	X	X	X	X	X	Nutrients Sediment Litter and Trash Pesticides and Herbicides Oil and Grease Metals Organics Other pollutants

Section 5 Program Effectiveness and Reporting

5.1 Assessment of Program Effectiveness

Effectiveness assessment is a fundamental and necessary component of developing and implementing a successful stormwater program. The SWMP focuses on reducing pollutants in stormwater to the maximum extent practicable by implementing BMP's in a manner that most effectively and cost-efficiently achieves regulatory compliance and protects the beneficial uses of receiving waters. To ensure the SWMP's effectiveness, the NPDES stormwater permit contains specific requirements for periodic assessments. The City of Morro Bay plans to report on the program's effectiveness assessment in our annual report. The California Stormwater Quality Association's (CASQA) Municipal Stormwater Program Effectiveness Assessment Guide will be used as a template for the city to address the SWMP's effectiveness and implement the SWMP.

The CASQA manual has a six-level approach, which the City plans to follow in order to assess the effectiveness of the SWMP. It is important to note that the SWMP aims to achieve a measurable impact (that is, improvement) in water quality as a result of program implementation as soon as possible; however, it is difficult to make a direct link between programmatic BMPs, such as public education, outreach BMPs, and water quality, especially during the early years of program implementation. Often such change takes many years to become apparent. However, using the CASQA assessment system, early program outcomes can be observed and often measured to determine if the program is progressing toward its goals. All six levels are very important in achieving a successful stormwater program. Since each of these levels all take a considerable amount of time, it is the City's goal to achieve Level 3, unless a higher level of effectiveness is specified in the first annual report, by the end of the first 5-year permit cycle. Level 4 will only be achieved for applicable/feasible BMP's where the City has already committed to achieving level 4 for those BMPs identified in the first annual report. The current SWMP is for the first 5-year permit cycle; (February 2009-2014) therefore the next permit cycle's program effectiveness will be covered in the next SWMP (February 2015-2020). The Phase II MS4 annual report process is intended to be an iterative, adaptive management process that enables continuous improvement as learning proceeds through program implementation. Therefore, the SWMP is a living document and the City plans to re-evaluate its effectiveness measures on an ongoing basis. Furthermore, new methods to measure effectiveness will be evaluated as they become available.

A summary of Level 1, 2, and 3 and examples¹ of how the City will achieve each level is contained below.

¹ For a complete list of all effectiveness measures used for each BMP refer to section 4, BMP tables.

APPENDIX G:

INTERIM STANDARDS FOR HYDROMODIFICATION

In order to maximize infiltration of clean stormwater and minimize runoff volume and rate, the City of Morro Bay will adopt interim standards for hydromodification which are as effective as the following requirements within one year of SWMP adoption. All projects the City has discretionary approval of will be subject to these requirements.

- For new and re-development projects, effective impervious area shall be maintained at less than five percent of the total project. (Effective impervious area is defined by the RWQCB as; the portion of the impervious area that drains directly to a receiving surface water body via a hardened storm drain conveyance without first draining to a pervious area.
- For new and re-development projects that create and or replace 5,000 square feet or more of impervious surface, the post construction runoff hydrographs shall match within one percent the pre construction runoff hydrograph for a range of events with return periods from 1 year to 10 years.
- For projects whose disturbed project area exceeds two acres, preserve the pre construction drainage density (miles of stream length per square mile of watershed) for all drainage areas serving a first order stream or larger and ensure that post project time of concentration is equal or greater than pre project time of concentration

Projects may be exempt from some Hydromodification Requirements based on there location.

- Direct Ocean Discharge:

Sites which drain directly to the ocean without discharging to a drainage channel, creek or closed storm drain system may be exempt from infiltration and other water quantity control requirements determined on a case by case basis.

- Geotechnical Concerns:

Increased water pressure in soil pores reduces soil strength, making foundations more susceptible to settlement and slopes more susceptible to failure. Infiltration areas and devices shall be set back from building foundations and steep slopes. Development on top of the Bluff and 2:1 back from the top of bluff line shall not be required to infiltrate stormwater. Also the City has known slip plane areas where infiltration may not be feasible and areas with high depth to bedrock or an impermeable layer, infiltration may not be feasible. These areas may be exempt from infiltration requirements on a case by case basis.

- Depth to groundwater and potential groundwater pollution concerns:
To protect ground water quality, the City will require devices designed for *direct infiltration* to have a minimum of 10-foot separation between the bottom of the device and the high seasonal groundwater level. Also the City prohibits *direct infiltration* of runoff from certain land uses, including but not limited to industrial or light industrial areas, arterial streets and highways, automotive repair shops, car washes, fleet storage areas, nurseries, hazardous and or chemical storage areas and waste disposal areas. These areas may be exempt from infiltration requirements on a case by case basis.

- *Direct infiltration* methods are designed to bypass surface soils and transmit runoff directly to groundwater. Devices include dry wells and infiltration trenches.

Due to the higher potential for pollutants entering the bay at the Embarcadero area the threshold requirement has been lowered to 500 square feet.

Development on Fill Areas (See Map in Appendix "C"):

"The Embarcadero Area" is built on fill and doesn't discharge to a natural conveyance system. Groundwater discharge and water quality mitigation through storm water retention (infiltration) is not a valid option. Infiltration in this area is equivalent to a direct ocean discharge. The Time of Concentration is short to the bay, and since the ocean doesn't have a hydraulic capacity issue water quantity control is not an issue. Protection of water quality is an issue therefore development and redevelopment projects will be required to provide water quality treatment as per the following requirements.

Requirements for Embarcadero area: Development or redevelopment which exceeds 500 square feet of new or redeveloped impervious area will be required to provide water quality treatment for the runoff from the entire site resulting from a two year storm event either through biofiltration, mechanical filtration or hydrodynamic separation, using the design guidelines from the California Stormwater Quality Association BMP handbook.

Projects exempt from Hydromodification requirements:

- Projects approved prior to the implementation of these requirements.
- *Approved projects* include projects under construction, projects with an approved building permit or Public Works construction plans, and discretionary projects approved or deemed complete prior to the adoption of the SWMP and that do not have specific conditions of approval reflecting the hydromodification control requirements.
- Road maintenance projects, including: Pavement sealing, Pavement overlays, Street reconstruction, Sidewalk repair and replacement, and utility repair or installation.

FUTURE STANDARDS FOR HYDROMODIFICATION

The City of Morro Bay will develop a strategy to control Hydromodification by developing new control standards for hydromodification which will include the following criteria.

- Numeric criteria for controlling stormwater runoff volume and rates from new and re-development.
- Numeric criteria for stream stability required to protect downstream beneficial uses and prevent physical changes to downstream channels that would adversely affect the physical structure, biologic condition, and water quality of streams.
- Specific applicability criteria, land disturbance acreage thresholds, and exemptions.
- Performance criteria for control BMP's and an inspection program to ensure proper long term functioning over time.
- Education requirements for appropriate municipal staff on hydromodification and Low Impact Development.



CRWQCB Staff
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

November 15, 2008

City of Morro Bay Storm Water Management Plan Draft
Public Comment

Greetings

Below are my personal comments on the Morro Bay Storm Water Management Draft:

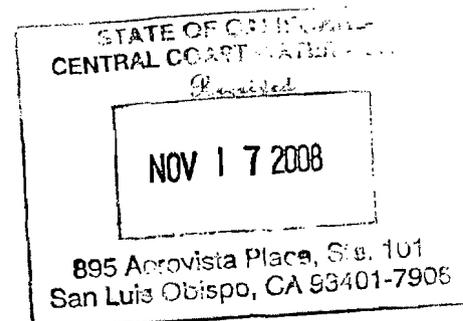
- APPENDIX G, INTERIM STANDARDS FOR HYDROMODIFICATION
 1. First bullet. It is not clear that smaller projects are exempted. The City of Morro Bay has interpreted this requirement to exempt planning projects that will build less than 500 square feet. These projects are typically residential, and involve adding a bedroom, bath, etc. This needs to be clarified. I personally believe any project that requires a building permit should be required to conform. After all, this is a seaside community, bordering a National Estuary.
 2. Page 2, Exemptions from Hydromodification, bullets 2 and 3. These exemptions allow the City to duck setting an example for the rest of the community. Recent advances in street and sidewalk materials that are tough, but can absorb water, should be required where practicable. Also, City runoff should be directed to parks, tree wells, etc. where practicable. Come on, CRWQCB, we are tough and can take it. Per fact, we want to set an example.
- Why aren't there models for CRWQCB expectations? I'm sure many other cities are going through the same drill. Why do you require each community to invent the wheel, much less re-invent it? I believe you are causing unnecessary expense and resource investment of each community to the extreme. Shame on you. These unfunded mandates should be as slick and polished as possible, to help both agencies. There should be software, signs, example ordinances and rules, roll-out examples, how other cities did it, etc.

Thank you for the opportunity to comment,

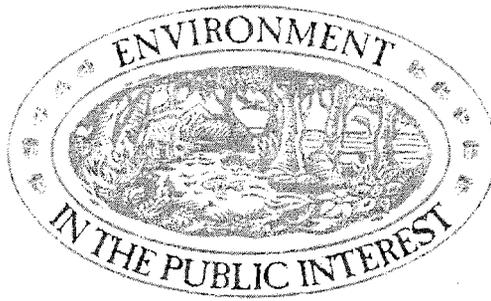


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San Luis Obispo COASTKEEPER®

November 28, 2008

Central Coast Regional Water Quality Control Board
ATTN: Tamara Presser
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Via: Email (tpresser@waterboards.ca.gov)

Subject: City of Morro Bay Stormwater Management Plan

Dear Ms Presser,

Thank you for the opportunity to review and comment on the proposed Stormwater Management Plan of the City of Morro Bay.

San Luis Obispo COASTKEEPER®, a program of Environment in the Public Interest, is organized for the purpose of ensuring that the public has a voice with agencies and officials responsible for enforcing water quality, watershed and coastal planning regulations on the California Central Coast. As such, the SLO COASTKEEPER® and our 800 central coast supporters are concerned that the proposed SWMP:

- Is impermissibly vague for many components.
- Does not clearly identify the proposed programs and the financial resources available to implement the proposed program.
- Fails to identify what and how proposed measures will identify the protection of water quality in the City of Morro Bay.

Specific comments follow for RWQCB to request the City of Morro Bay to include in the City's proposal.



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MINIMUM CONTROL MEASURES

MCM #1: PUBLIC EDUCATION AND OUTREACH

The Public Education and Outreach measures are vague and incomplete for many components.

For the Education Program BMP Intent additional to the stated BMP intents

The draft of Morro Bay Proposal must provide a mechanism to adapt its educational program in the future. This is to assure a definitive commitment to implement this program for all five years of the permit.

We urge that the permit include mechanisms facilitating the update of the educational programs.

For the BMP and BMP Implementation:

The draft Morro Bay Proposal must broaden its education plan and programs. For the proposed BMP to be effective it must demonstrate that it achieves education of the community about specific pollutant sources and includes follow-up measures demonstrating that urban runoff pollution has been reduced to the maximum extent practicable. It must also foster participation through outreach events to measurably increase the knowledge of the target audience regarding municipal storm sewers, impact of urban runoff on receiving waters, and potential BMP solutions for the target constituencies.

The draft Morro Bay Proposal must be more specific about the printed materials in terms of what types of brochure and what topics will be covered in each brochures and who to target audience will be pertaining to the types of brochures. Each type of brochure must get the message out and raise public awareness about urban runoff pollution and its impact on the Cities water resources to the maximum extent practicable.

The draft Morro bay Proposal must be more specific on what will be measured and recorded to demonstrate the effectiveness of implementing this BMP. The draft must specify how measures and records will identify improvement in water quality of the City. The draft must include measure that demonstrate changes in the behavior of target communities and thereby reduces pollutants released to the municipal storm drain system and the environment.

The draft Morrow Bay Proposal should identify topics covered in Educational materials to be broader in Scope. In addition to the topics currently included in the Draft SWMP, we urge the inclusion of the following topics to provide a broader range of additional relevant topics that support the proposed BMP:



- State and Federal water quality laws
- Requirements of local municipal permits and ordinances
- traffic reduction, alternative fuel use
- BMP maintenance
- Topics for restaurants: mat washing, cleaning up spills, water and energy conservation, waste reduction, and recycling

All of the topics covered in the Draft SWMP, plus those listed above are critical for consideration to develop a complete understanding of how everyday activities impact storm water pollution as well as meet MEP and protect water quality. The draft Morro Bay Proposal must demonstrate a commitment of budget and staff to implement BMPs for each of the listed topics by the end of the permit term. Messages could be easily conveyed through already proposed mechanisms by the draft Morro Bay Proposal: radio and TV broadcast, brochures, and events.

In addition, SLO Coastkeeper urges that the draft Morro Bay Proposal include activities that better target the specified audience. For the educational MCM, the draft must include activities tailored to address specific problems associated with each target audience and that can communicate these messages more effectively than programs for the General Public.

We also urge that the draft Morro Bay Proposal specifically identify an outreach event under the Storm Drain marking Education and Outreach Events. The intent and the measurable goals and outcomes of the BMP currently do not appear to comply with the BMP. There is no indication of the actually holding the outreach event proposed.

MCM #2: PUBLIC PARTICIPATION AND INVOLVEMENT

It appears that the City's public participation has confused goals and purposes of the public education and outreach MCM. Program development and implementation are what distinguishes this MCM from the Public Education and Outreach component.

For the Public Participation Program BMP Intent:

The draft Morro Bay Proposal must include a detailed Public Participation and Outreach Program that covers all five years in order to assure a definitive commitment to implement the programs.

The objective of the Public Participation and Involvement MCM is to include the public in developing, implementing, and reviewing the stormwater management program. The BMP intent must be more specific with program development and implementation to raise public awareness about urban runoff through involvement and involving the public



in the development and implementation process. This public involvement provides the opportunity to generate support of the stormwater management plan to protect water quality.

SLO Coastkeeper urges that the draft Morro Bay Proposal revise the intent of this BMP to be more consistent with the objective.

For the BMP and BMP Implementation:

The draft Morro Bay Proposal must provide opportunity for the public to provide input on the status of the program and the effectiveness of BMPs through workshops and meetings. The draft must state when the meetings and workshops will be held during the year. The purpose of these workshops should be to gather public input regarding the status of the program and effectiveness of BMPs. Such workshops should be formatted as roundtable discussions and opportunities for the gathering of measurable information by the City for use in the annual report to RWQCB.

The draft Morro Bay Proposal must include mechanisms for engaging the general public in activities by providing advertising and incentives for public participation to increase public participation. The current BMP is too vague and lacks a clear explanation of how the specific objective of the MCM will be achieved.

MCM #3 ILLICIT DISCHARGE DETECTION AND ELIMINATION:

The document is vague and unclear regarding how enforcement will be carried out given current staffing levels and budget allocations. The absence of a commitment to funding this element clearly does not provide enough information to determine if illicit discharges will actually be detected or, in fact eliminated.

For the Illicit Discharge Detection and Elimination BMP Intent:

The objective of this MCM is to adopt and enforce ordinances and to implement a program to detect and eliminate illicit discharge. The document includes these objectives but lacks the mechanisms to assure Regional Board of the public that eliminating illicit connection/discharge will result.

For the BMP and BMP Implementation:

The draft Morro Bay Proposal must require the adoption of ordinance within the first year of the permit coverage.

The draft Morro Bay Proposal must immediately develop a policy outlining what discharges are permitted into the storm sewer system and what discharges will be



considered illicit. The municipality needs to establish a policy specifying the flows or discharges that it will allow to be discharged to the storm drain system and those that it will control via its illicit connection/discharge program. As currently proposed, the City is committed to just determining what storm water discharges are a significant source of storm water pollution.

SLO Coastkeeper urges changes to the draft Morro Bay Proposal to include more specific enforcement and penalty provisions to eliminate illicit discharge. Typically, an ordinance outlining a progressive enforcement regime is appropriate. Administrative and/or legal action against an entity that continues illicit activity past the deadline for compliance must result in escalating enforcement until compliance is achieved. A program of escalating enforcement that includes educational efforts with mechanisms to facilitate a proper disposal to meet MEP and water quality standards will aid efforts to prevent improper disposal of wastes. Ultimately however, the ordinance must explicitly provide for fines for violators.

Further, we urge language in the draft Morro Bay Proposal that contains commitments by the city to respond to all sewage spills from all sources, and prevent the entry of sewage into the storm drain system. It must include a program for monitoring the entire storm drain system identified on the proposed map of the system.

MCM #4: CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

The Construction Site Storm Water Runoff Control Program is impermissibly vague, fails to include detailed requirements and commitments for implementation.

For the BMP and BMP Implementation:

The draft Morro Bay Proposal must develop a construction and grading review/approval process of construction plans to ensure that pollutant discharges be reduced to the MEP and assure compliance with water quality standards. The review process must specify ordinances, construction and grading project requirements, and verification of permits and plans.

The draft Morro Bay Proposal is impermissibly vague as to the development and implementation of a construction site inspection program that meets MEP and assures compliance with water quality standards.

The draft Morro Bay Proposal must develop construction site BMP policy and procedures guidance manual within the first year of the draft Proposal's adoption. It must inventory existing construction projects, require specific construction site BMPs and designate additional BMPs based on review EPA's Menu of BMPs that are MEP and assure



compliance with water quality standard. This must be completed within the first year of the adoption of draft proposal.

SLO Coastkeeper urges the inclusion of language to specify mechanisms that will be used to ensure commitment of the program by:

- Beginning construction site inspections immediately.
- Provide training for specific types of staff and rank criteria, frequency of inspections, and mode of enforcement.
- Identify prioritized sites and conduct inspections of all construction sites on a weekly basis which includes a checklist that provide enforcement requirements for complaint and non-compliant sites.

MCM #5 POST-CONSTRUCTION STORM WATER MANAGEMENT

We applaud the inclusion of requirements for "Low Impact Development". Many of the LID techniques incorporate greater use of permeable surfaces and have become accepted as Best Management Practice.

However, the lack of a budgetary commitment to this element may render this measure impotent and ultimately fail to meet the federally mandated maximum extent practicable (MEP) standard. The proposed BMP's intent fails to show that the BMPs meet the objective of the MCM.

For the Post-Construction Storm Water Management BMP Intent:

The draft Morro Bay Proposal must comply with its object to protect water quality and control runoff flow to be incorporated into new development and significant redevelopment projects by developing and implementing a Design Standard Requirement Manual. Within the first year of the adoption of the draft proposal, the City must require that all entities shall comply with design standards.

For the BMP and BMP Implementation:

The draft Morro Bay Proposal must provide specific procedures for review of post-construction management in the development review process. It must adopt a plan for review of construction projects to ensure that pollutants and runoff from the development will be reduced to the MEP and will not cause or contribute to exceedence of water quality standards. It must ensure that all development will be in compliance with applicable storm water ordinances, local permits, other applicable ordinances and requirements.

In order to obtain City approval, each construction plan must ensure that pollutant discharges and runoff flows from development are reduced to the MEP and that receiving water quality standards are not violated throughout the life of the project. To assure the City's authority to enforce this BMP, the draft Morro Bay Proposal must require



applicants to provide verification of maintenance provisions including a signed statement from developers.

The draft Morro Bay Proposal must provide for inspection commencing immediately upon the implementation of revised City Municipal code ch. 14.48. Procedure and guidance document development should occur simultaneously with the revision.

MCM #6 POLLUTION PREVENTION / GOOD HOUSEKEEPING

The Pollution Prevention/Good Housekeeping program is vague and fails to meet the federally mandated maximum extent practicable (MEP) standard. SLO Coastkeeper urges that specific pollution prevention programs that meet the MEP standard be identified.

For the Pollution Prevention BMP Intent:

The BMP intent must identify, develop, and implement BMPs/good housekeeping procedures to address urban runoff pollution associated with municipal operations.

For the BMP and BMP Implementation:

The draft Morro Bay Proposal is unclear which classifications of employees are to be trained. Likewise it is unclear what budget and personnel resources will be committed to support the training of specific categories of employees.

The draft Morro Bay Proposal must also provide specific hazardous material storage BMPs and require that these be incorporated into an ordinance to be adopted in year 1 of the program. Guidance documents and inspection procedures should be developed simultaneously with the ordinance no later than year 2 of the program.

The draft Morro Bay Proposal must develop a program to implement procedures to prevent stormwater runoff pollution from City vehicle fuel dispensing and maintenance facilities, City vehicle and equipment washing, and City landscaping and lawn care. This program must provide mechanisms that show commitment through the entire permit period.

While SLO Coastkeeper is not requesting a hearing on the Morro Bay SWMP proposal, we urge the Regional Board to direct additional modification of the proposal to meet federally mandated MEP standards prior to final approval.

Respectfully Submitted,



Gordon Hensley,
San Luis Obispo COASTKEEPER®





November 26, 2008

Tamara Presser
Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

RE: Phase II MS4 Storm Water Management Plan – City of Morro Bay

Dear Tamara Presser:

The Home Builders Association appreciates the opportunity to comment on the City of Morro Bay's Storm Water Management Plan (SWMP) published on your web site, with public comment due by Nov. 28, 2008.

Our goal remains to advocate for storm water management plans that achieve the maximum extent practicable for handling rainfall cleanly in a practical, achievable, and fiscally and technically feasible manner. We support solid science and the flexibility necessary to make sure each situation is treated based on local conditions and realities.

General Comments and Information Requests

City's Efforts to Comply Underestimate Complexity and Workload of Developing Interim Hydromodification Criteria: The Home Builders Association is concerned that Morro Bay's sincere interest in meeting the Central Coast Regional Water Quality Control Board deadlines and goals has led the city to overestimate what it can do in short time period and to underestimate the complex nature of the scientific assessments needed to develop Interim Hydromodification Criteria which could lead to copying criteria from other sources in order to meet the six month timetable.

Request that CCRWQCB Staff Provide the Public Record with Supportive Documentation: We request that the Central Coast Board introduce into the public record for Morro Bay's Storm Water Management Plan the economic and technical information and research that the Regional Board has publicly referenced regarding post-construction stormwater management on Page 3, Item 12, in the Oct. 17, Lompoc Resolution R-3 2008-0071. We assume Morro Bay's resolution will substantially resemble Lompoc's, where the Water Board stated that it:

- A. "... has been evaluating, as demonstrated in the administrative record, the various options for control of water quality conditions affected by post-construction stormwater discharges and has concluded that controlling hydromodification typically associated with urbanization is reasonably achievable."
- B. "... considered economics and found that the best information available indicated that controlling hydromodification through, among other approaches, implementation of low impact development principles, is technically feasible, practicable, and cost-effective"; and
- C. "... found that the required revisions would not affect regional housing supply. Hydromodification controls have been applied in this and neighboring regions with no demonstrated affect on housing availability."

We request that the public record specifically include (a) the methodology and standards used to determine what is "reasonably achievable" in item A above, (b) what "best information available" was used to determine what is "technically feasible, practicable and cost-effective" in item B above, , and (c) what data and methodology was used to decide that hydromodification controls will not impact housing supply or availability and which communities are referenced "in this and neighboring regions" in item C above.

811 El Capitan Way, Suite 120
San Luis Obispo, California
93401-3333

805.546.0418: phone
805.546.0339: fax
www.hbacc.org: internet

Request for a written, detailed comparison between state and regional stormwater criteria and standards:

The association is seeking a clear, step-by-step description of the differences between the criteria established in the California MS4 General Order, including Attachment 4, and the criteria identified in the Feb. 15 CCRWQCB letter, and what technical findings support the CCRWQCB differences.

Request Elaboration of the Interim Criteria language "as effective as"

The City of Lompoc SWMP approval resolution, and apparently other SWMP comments, stated that "The proposed criteria must be effective as ...". We would like clarification as to what "as effective as" means. Additionally, we request that the RWQCB assist in this analysis by providing the "technical findings" that demonstrate how effective actually is the RWQCB proposed Interim Criteria. In order to compare effectiveness, we believe that the RWQCB should provide it's analysis of the effectiveness of the criteria it is proposing.

Specific Comments Concerning Morro Bay's Storm Water Management Plan

1. Time to complete Interim Hydromodification Criteria should be 2 years:

It would be more realistic for Morro Bay to have two (2) years to create its interim hydromodification criteria, rather than the six (6) months proposed in the city plan. Our association members experience in Southern California found that a six (6) month deadline to properly develop interim criteria is unachievable. Morro Bay is not allowing itself adequate time to research and understand the economic, technical, geological, and hydrological features that such criteria must address in order to achieve a scientifically sound method for cleaning stormwater to the maximum extent practicable.

It is obviously critical to protect public safety by insuring that the interim criteria are thoroughly researched before being applied. Criteria should not be "hurried" into practice to meet an artificial deadline at the risk of unintended consequences relating to public safety or implementing criteria that does not have "technical findings" that demonstrate their feasibility and effectiveness. Morro Bay, like most Central Coast jurisdictions, has a small, hardworking staff and lacks the human and financial resources to realistically comply with a one (1) year deadline and guarantee public safety.

We are attaching for the public record on Morro Bay's plan the June 27, 2008, California Stormwater Quality Association (CASQA) letter to Central Coast Regional Water Quality Control Board Executive Officer Roger Briggs. CASQA, which provides stormwater quality management services to more than 26 million Californians, noted that it is a sequencing error to implement the criteria before determining what is technically possible and that it will take more than a year to do the appropriate, scientifically valid research. CASCQ also noted that larger cities "have been expending significant effort on the technical challenge of developing appropriate hydromodification criteria for a number of years. Since 2001, the San Francisco Bay Area Phase 1 permittees have been working to address this issue, yet there is still no accepted common approach." It would seem wisest to let the larger metropolitan communities, with more human and fiscal resources, conduct thorough technical and financial analysis of how hydromodification/LID can work and then let the smaller, fiscally and staff-challenged Central Coast communities base their storm water plans off those models.

We recommend that the city be given two years to develop interim hydro modification criteria.

2. SWMP Post-Construction Application Cut-Off Point should be at "Deemed Complete".

The most effective time to implement hydromodification/LID methods is at the start of a project's design phase. The later in the process a government tries to apply post-construction storm water methods to a project, the greater the cost and timing burdens that are placed on the jurisdiction and the project and the less likely that a technically effective, cost-efficient solution will be achieved.

A Tentative Subdivision Map cut-off point for the application of the new standards, as originally proposed by the Water Board is much too late in the design process. A better cut-off point is at the "deemed complete" stage of the project entitlement process. Projects that have not been "deemed complete" would be best able to implement new LID solutions without undue hardship on the jurisdiction or applicant. An application that has been accepted by a jurisdiction ("deemed complete") as ready for processing and a

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public hearings should not have to be re-designed to meet new standards. By deemed complete, both the jurisdiction and applicant have expended significant time and funds on the project. During the transition process, projects should be encouraged in their pre-application stage to voluntarily use LID methods in development design.

The term "deemed complete" comes from the Permit Streamlining Act. It requires public agencies (including charter cities like Santa Barbara and San Luis Obispo) to follow standardized time limits and procedures for specified types of land use decisions. The act applies to development projects that need adjudicatory approvals such as tentative maps, conditional use permits, and variances. It does not apply to legislative acts, like general plan amendments and rezonings (or development agreements or specific plans), or to such ministerial acts as lot line adjustments, building permits, or certificates of compliance.

Public agencies must establish one or more lists specifying the information an applicant must submit for a development project to be deemed complete. For instance, San Luis Obispo requires an application to include a vicinity map, statement on zoning, site development, description of any common areas and open space, CC&Rs, setbacks, drainage, faulting, slope analysis, technical reports like biological, cultural, noise, traffic, soils, engineering geology, and noise, archaeological recourse inventory, endangered species survey, preliminary title report, school site, environmental assessment, and an affordable housing plan. Some of these studies and reports will not be needed for each application, but getting a project to be "deemed complete" obviously takes extensive work. In addition, once an application is received, the agency has 30 days to either deem the application complete or notify the applicant what needs to be done to be deemed complete. If the city does not respond within 30 days, the application is deemed complete.

Once an application is deemed complete, the environmental review process begins. When the environmental report is approved, the city or county has 60 days if the environmental document is a negative declaration or 180 days if an environmental impact report was required to approve or deny the project. Cities and counties generally approve the environmental document at the same hearing as they approve/deny the project.

We recommend that projects whose application has been "deemed complete" by the City of Morro Bay be exempt from the new post construction standards, but should be encouraged to comply with the regulations on a voluntary basis. Obviously, all projects in later stages of the entitlement, design, or construction process would be exempt from the application of the regulations as well.

3. **Clarify Project Phase-In Period to recognize "Deemed Complete" approach.**

Although it does not seem spelled out in the current plan, we recommend that the plan should clarify that the application of the new post-construction regulations to projects in the entitlement process would begin at the adoption of the City's Interim Hydromodification Criteria (proposed at two (2) years in item 1 above) and be applied to all projects not "deemed complete" (item 2 above) at that time.

4. **Incorporating assessments from project geotechnical and soils consultants is imperative.**

All sites throughout the Central Coast do not have the same soils/site conditions. Specific site conditions may preclude applying the new standards due to low infiltration capability of soils or the potential for damage to other infrastructure. Applying the standards in those conditions can result in a public safety hazard or simply be impossible.

We suggest following the City of San Diego's Land Development Manual – Storm Water Standards in which a Geological Investigation Report is required by a registered geologist or certified engineering geologist to indicate where infiltration is feasible or infeasible and what it can achieve and how to mitigate impacts where it is feasible.

We recommend that the city's storm water plan include a communitywide analysis by a geotechnical engineer to determine which areas within the urban boundary are suitable for the application of BMPs.

We also recommend that the city's storm water plan state that it will rely on the applicant's professional geotechnical/soils consultant's analysis to determine if and where infiltration/low impact development BMP's are practical, how much is achievable, and what best management practices should be used when infiltration is not feasible.

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5. **Normal maintenance of existing infrastructure by public agencies, project developers, and home owners associations be exempted from the new standards.**

When maintaining existing infrastructure, existing site conditions may preclude applying the new standards. For example, when resurfacing an existing roadway that has no “extra” land available, it will not be possible to provide additional land for filtration purposes.

We recommend that normal maintenance of existing infrastructure by public agencies, developers, and home owners associations should not be considered new development and should be exempt from the new standards.

6. **The “pre-development” definition must be “immediate pre-project”.**

How pre-development is defined is critical as the baseline for determining the increase in storm water volumes and rates for new development on a site. Defining pre-development as the original natural condition, regardless of current usage, will make many urban infill, smart growth projects fiscally and technically infeasible. Defining pre-development as before anything has been changed on a site is counterproductive to the current sustainability and new urbanism planning concepts and will promote sprawl, long-distance commuting, and increased air pollution.

In addition, a “pre-development” standard harkening to when the land was vacant presents a liability issue that will hamper urban infill by making insurers refuse to support a project because adding more water to an area than has been the standard for a lengthy time period will threaten to undermine nearby buildings constructed to withstand less groundwater. Insurers will not take that risk. Projects will not get built. There will be no improvement in storm water management.

In Attachment C – Definitions, the San Diego Region California Regional Water Quality Control Board in order No. R9-2007-0001 for the incorporated cities of San Diego County, the San Diego Unified Port District, and San Diego County Regional Airport Authority defines:

“Pre-Project or Pre-Development Runoff Conditions (Discharge Rates, Durations, Etc.) – Runoff conditions that exist onsite immediately before the planned development activities occur. This definition is not intended to be interpreted as that period before any human-induced land activities occurred. This definition pertains to redevelopment as well as initial development.”

We recommend defining pre-development as “the immediate pre-project condition” just as the San Diego Regional Board has done.

7. **Economic balance:**

As previously mentioned, most Central Coast municipalities have small staffs and very limited financial resources. They and the construction industry face numerous regulations and requirements from a wide variety of government agencies, all with important and legitimate public benefit goals. Neither the governments nor the development community can resolve the often conflicting demands local, state and federal agencies impose.

San Luis Obispo County is preparing to adopt “smart” or “strategic” growth goals into its General Plan, pushing more intense residential development into urban areas at the same time as the storm water plans over-reliance on hydromodification/LID seems likely to make such development prohibitively expensive in places like Morro Bay. Similarly, making urban infill harder to achieve by over-emphasizing increased urban infiltration will leave cities like Morro Bay and San Luis Obispo County unable to meet green house gas reduction goals mandated by AB 32 and part of the efforts to address global climate change.

We recommend that Morro Bay’s plan include a clearly worded BMP that recognizes that maximizing storm water management improvement must be balanced against community need for affordable housing, reduced air pollution, market-place economics, municipal economics, and local public acceptance.

8. **Countywide Technical Advisory Committee Needed:**

As we have mentioned previously and now believe the Water Board concurred Oct. 17, the Water Board should encourage and assist the various jurisdictions of San Luis Obispo County in the formation of a Technical Advisory Committee to share information and advice on preparing stormwater management

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plans, hydromodification criteria and plans, and LID BMPs. San Diego County is successfully using such an approach. The result should be hydromodification criteria, plans, and BMPs that are feasible, practical, and usable, and achieve the intended objectives of the MS4 Order.

We recommend specifying in Morro Bay's plan that the Water Board staff will assist in creating and will participate in a Countywide Technical Advisory Committee.

We appreciate your consideration of our comments.

Sincerely yours,



Jerry Bunin
Government Affairs Director
Home Builders Association

cc: Rob Livick, Morro Bay City Engineer
Andrea Lueker, Morro Bay City Manager
Roger Briggs, Executive Officer, RWQCB

Attachment

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California Stormwater Quality Association™

Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation

June 27, 2008

Mr. Roger Briggs
Executive Officer
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

Subject: 2/15/08 Letter regarding Notification to Traditional Small MS4s on Process for Enrolling under the State's General NPDES Permit for Storm Water Discharges

Dear Mr. Briggs:

The California Stormwater Quality Association (CASQA) would like to take this opportunity to submit this comment letter regarding the subject notification and, in particular, Central Coast Regional Water Board staff's "expectations" for Phase II Stormwater Management Program (SWMP) content to receive approval for complying with the State's April 2003 Phase II General Permit.

CASQA is composed of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout California. Our membership provides stormwater quality management services to over 26 million people in California and includes most every Phase I and many Phase II municipal programs in the State. CASQA was formed in 1989 to recommend approaches for stormwater quality management to the State Water Resources Control Board (State Water Board).

CASQA typically refrains from commenting on issues associated with a specific Regional Water Board. However, the implications of your notification letter are significant and we believe inconsistent with the current standard of practice of stormwater quality management.

Beginning on page 4 of the subject 2/15/08 notification letter, Central Coast staff outlines its expectations for the smaller MS4s within the Central Coast region for meeting the following "conditions":

- Maximize infiltration of clean stormwater and minimize runoff volume and rate,
- Protect riparian areas, wetlands, and their buffer zones,
- Minimize pollutant loadings, and
- Provide long term watershed protection.

Our concerns primarily regard staff's expectations for meeting the first "condition." These are nearly identical to proposed requirements from the draft¹ Phase I Ventura permit written by Los

¹ Draft Tentative Order Ventura County MS4 permit, 4/29/08, Los Angeles Regional Water Board staff

Angeles Regional Water Board staff. Many of these draft proposed Phase I requirements have not been finalized and adopted by any Water Board. In fact, many of the draft proposed Phase I requirements are the subject of much scientific and technical study and discussion, and accordingly, are being debated and contested by a large number of municipalities and industry representatives. The final outcome of these discussions will likely not be known before December 2008.

We want to recognize and express our support for the Central Coast Regional Water Board's decision to support the implementation of Low Impact Development (LID) through the establishment of an endowment and provision of LID and hydromodification design and implementation services as needed. However, based on the knowledge gained by the Phase I MS4s with the most experience with LID and hydromodification, focusing on implementation before establishing technically sound and integrated criteria and approaches is akin to putting the cart before the horse. As a result, CASQA firmly believes that Central Coast staff has created requirements that the Phase II MS4s will be at a considerable disadvantage, compared to Phase I MS4s, to meet (and may never be able to meet due to technical and economic reasons). We make this statement based on the following insights:

- Hydromodification criteria – Phase I programs have been expending significant effort on the technical challenge of developing appropriate hydromodification criteria for a number of years. Since 2001 the San Francisco Bay Area Phase I permittees have been working to address this issue, yet there is still no accepted common approach (witness the different approaches between the Santa Clara and Contra Costa Counties). Given the need to establish an accepted approach that is fully integrated into water quality management programs, the Southern California Stormwater Monitoring Coalition and the Southern California Coastal Water Research Project have initiated grant-funded efforts to evaluate stream impacts and to develop a series of hydromodification management tools. These tools will support implementation of appropriate hydromodification management actions to better protect the physical, chemical, and biological integrity of streams and their associated beneficial uses². This study is currently in year two of a three-year schedule. These tools will ultimately assist both Phase I and II municipalities in developing appropriate hydromodification management approaches. Consequently requiring Phase II communities in the Central Coast region to independently develop their own criteria/approach to this technically complex subject is unreasonable.
- Effective impervious area – The possible creation of “Effective Impervious Area (EIA)” threshold requirements as a “driver” for LID approaches is currently the subject of intense controversy within the stormwater quality management/science community as well as among planners and practicing landscape architects. Specifically, there is disagreement as to: whether this EIA criterion should be used (and, if used, whether it should be translated from its originally conceived watershed scale and applied on a site-by-site or regional basis) along with the implications upon urban redevelopment – whether it is compatible with smart growth concepts, and possibly increase urban sprawl. For example, underground storage vaults for urban runoff may not be technically feasible on many project sites. Locations with shallow groundwater or underground contamination (i.e.,

² SCCWRP Research Project A6 – Assessment and Management of Hydromodification Effects.

brownfields) may not be able to install tanks to hold stormwater. There are other methods that permittees can use to meet maximum extent practicable (MEP) requirements that should not be eliminated with an EIA criterion. These requirements need thorough evaluation to ensure that societal goals, such as redevelopment of brownfields and infill development are not interfered with, but rather encouraged, by the permit.

Additionally, it is not clear that there is a reasoned technical basis to require such a relatively restrictive site design rule. The concept of total impervious area on a watershed scale has been shown to have a deterministic relationship with channel enlargement in the receiving stream. The studies that have demonstrated this relationship have been in watersheds without contemporary hydromodification mitigation controls. A recent study on this issue (Coleman et. al., 2005)³ notes that effective impervious area is one of the recommended management strategies to be considered, depending on the current conditions of the receiving stream and the future anticipated conditions. The report notes that in-stream strategies are more appropriate for application where the stream course alignment has been altered or there are other drainage improvements in the watershed.

This debate has been taking place on several tracks (e.g., technical, policy) at the local, statewide, and national scales. The recent deliberations of the California Ocean Protection Council (OPC) are particularly noteworthy because the OPC has taken the recent lead on examining from a broader perspective the status of the development and use of LID as a BMP strategy in California. OPC commissioned a report⁴, held two OPC meetings and two public staff workshops, and adopted a resolution last month promoting the use of LID principles, including planned and recommended actions. *Appendix A: Options for Enhancing LID in California Policies* in the report on LID policies provides a list of about 50 recommended "Opportunities and Action Items" (Legislative, Aspirational, and Funding) through which LID can be promoted or enhanced. That report makes several observations, lists issues, and provides recommendations that relate to the development and use of LID as a BMP strategy in California, including:

Observations

In California, there has been an upsurge in district planning. New models of district planning have been launched and fine-tuned in California, including form-based codes, new urbanism, transit-oriented development, and a new Leadership in Energy and Environmental Design (LEED) pilot for neighborhood development (LEED-ND).

Issues

H1. LID requirements are often written to apply to individual projects, which results in uneven application.

³ Coleman, D., MacRae, C., and Stein, E., "Effect of Increases in Peak Flows and Imperviousness on the Morphology of Southern California Streams", Technical Report 450, Southern California Coastal Water Research Project, April 2005.

⁴ *State and Local Policies Encouraging or Requiring Low Impact Development in California – Final Report*, Prepared by Tetra Tech, Inc. for Ocean Protection Council, January 2008

H3. *LID often designates hydrology as the indicator of environmental impacts.* By their regulatory nature, stormwater rules have the farthest reach into zoning codes. These rules tend to emphasize stormwater peak flow attenuation and volume capture, causing hydrologic performance to outweigh other important environmental issues that are considered in non-regulatory planning documents, such as infill and redevelopment priorities and regional growth patterns that can affect watershed health.

H4. *Suburban-style LID requirements can run counter to the planning, transportation and climate emphasis on compact design.* Meeting strict stormwater performance standards in urban areas can be much more difficult than in open areas with room for swales, infiltration and detention. While LID techniques can decrease costs for greenfields applications, they can pose higher costs for urban developers, since underground vaults are often needed to augment urban green building, streetscape and landscape BMPs to meet performance standards.

Actions

H12. Sponsor an analysis of pilot neighborhoods in the LEED-ND program to see if they meet stringent stormwater requirements (for volume, treatment and flow control).

H14. Sponsor a pilot study to align major water planning documents (e.g., Basin Plan, Integrated Regional Watershed Management Plan) with regional and local requirements (e.g., stormwater permit requirements and local zoning codes) with respect to LID goals and requirements.

H17. Fund a project to better describe LID techniques based on development settings in California similar to the effort underway within the Congress for New Urbanism⁵ based on the "transect." The transect establishes seven transect zones based on intensity of development and urban form. This approach was used to develop new street standards and could serve as a model for stormwater management as well.

Based on the commissioned report and input received at the OPC meetings and workshops, the Ocean Protection Council adopted a resolution on May 15, 2008 that CASQA supported (including amendments provided by NRDC) that included the following actions related to stormwater and LID (and by extension EIA) [underline added]:

2. State Regulatory Actions

a. *State Water Board LID Policy* – The State Water Board is encouraged to adopt a statewide policy for addressing all elements associated with changes in runoff due to hydromodification impacts, including those specifically related to urbanization. This policy would include direction on when and how to use LID to avoid, minimize and mitigate runoff so that downstream water bodies are protected.

⁵ At the national scale, NRDC, Congress for the New Urbanism, USEPA, and the U.S. Green Building Council have been developing the LEED-ND standard, which is a comprehensive attempt to integrate land use, financial, transportation, environmental, and urban design components into a single system for evaluating neighborhood design.

3. Incentives, Technical Support, and Research

c. Research and Development of LID – Promote and consider funding technical research for development of a LID design manual, including example designs and specifications for LID features, and post-construction evaluations of the effectiveness of constructed LID features in removing pollutants and controlling runoff flows.

- Consistency – We are not suggesting that the small MS4s not move forward with implementing LID strategies and provide protection of stream bed integrity. We do recommend that the Central Coast staff also review the approach being proposed by State Water Board staff in the Draft Construction General Permit. In making this recommendation, CASQA is not taking a position on this other approach; rather we are recognizing the approach being proposed by the Central Coast Water Board staff is inconsistent with (and will add considerable confusion) to the State Water Board proposed approach. At a minimum, the difference in approaches once again raises the question as to why the Water Boards are proposing such inconsistent approaches to basically the same ends and whether the inconsistency is necessary and appropriate.
- Patchwork – The somewhat patchwork approach being proposed by Central Coast staff for water quality management (i.e., the discharger is implementing treatment control BMPs, LID strategies, and hydromodification controls) will add confusion to an already confusing situation. We believe developing a statewide policy statement is the appropriate vehicle for considering and integrating these concepts. This will provide better public opportunities to consider potential conflicts and craft a fully integrated approach to water quality management.

All of the above demonstrates that Central Coast staff's expectations regarding hydromodification and LID criteria are not SWMP-ready. Given the current state of knowledge and experience, CASQA has recommended to Water Boards that they work with permittees, CASQA, researchers, and stakeholders to:

- Identify an initial list of LID strategies that must be considered for all development.
- Develop a performance standard for LID strategies that considers the lessons learned in translating the concept of LID into projects (e.g., San Francisco Bay Area Phase I research and experience) and recommendations from other drivers such as urban design (e.g., LEED-ND standard).
- Produce findings that can form the basis of permit provisions, guidance, SWMPs, implementation plans, etc.

In summary, CASQA believes Central Coast staff should reconsider their expectations for new development within the Phase II Stormwater Management Plans. Phase I communities are expending significant effort and resources, yet still struggling to meet the technical challenge of developing appropriate hydromodification and LID criteria that are both practical and that will lead to achieving our water quality goals. Placing such an effort on the Phase II communities is

inherently impractical as they lack the technical and financial resources to deal with this complex issue.

Thank you for the opportunity to provide comments. If you have any questions please contact Geoff Brosseau, CASQA Executive Director.

Very truly yours,

A handwritten signature in black ink, appearing to read 'CCJ', with a long horizontal stroke extending to the right.

Chris Crompton, Chair
California Stormwater Quality Association

cc: Tam Doduc, Chair, State Water Board
Gary Wolff, Vice-Chair, State Water Board / Liaison, Central Coast Regional Water Board
Dorothy Rice, Executive Director, State Water Board
Jonathan Bishop, Chief Deputy Director, State Water Board
Bruce Fujimoto, Section Chief-Stormwater, State Water Board
Christine Sotelo, Staff-Phase II Stormwater, State Water Board
Greg Gearheart, Unit Chief-Industrial/Construction Stormwater, State Water Board
Alexis Strauss, Director, USEPA Region IX
CASQA Executive Program Committee
CASQA Board of Directors

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part outlines the various methods and tools used to collect and analyze data. This includes the use of surveys, interviews, and data mining techniques to gather insights into the organization's performance and the needs of its stakeholders.

3. The third part focuses on the analysis and interpretation of the collected data. It describes how statistical methods and data visualization tools are used to identify trends, patterns, and key areas for improvement. The goal is to provide clear and actionable insights that can inform decision-making at all levels of the organization.

4. The final part of the document discusses the importance of communication and reporting. It highlights the need to present the findings of the analysis in a clear, concise, and accessible manner to all relevant stakeholders. This involves the use of reports, presentations, and other communication tools to ensure that the information is understood and acted upon.

**ATTACHMENT 3
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

**Response to Comments
City of Morro Bay Stormwater Management Plan September 2008**

Introduction

This document includes the Central Coast Regional Water Quality Control Board (Water Board) staff responses to the comments received during the Water Board's 60-day public comment period (September 29 – November 28, 2008) for the City of Morro Bay's (City) Stormwater Management Plan (SWMP) and Water Board staff's Draft Table of Required Revisions. Water Board staff received comments from the following parties:

November 26, 2008:	City of Morro Bay
November 17, 2008:	Bill Woodson
November 28, 2008:	San Luis Obispo Coastkeeper
November 26, 2008:	Home Builders Association of the Central Coast (also, included by reference, was the California Stormwater Quality Association's (CASQA) June 27, 2008 letter to the Water Board)

Comments from the City of Morro Bay

The City presented their comments in the form of a revised SWMP. The revisions reflect the City's efforts to address Water Board staff's Draft Table of Required Revisions. In Table 1, Water Board staff indicates whether or not the City's SWMP, including the November 26 revisions submitted as public comment, are responsive to Water Board staff's Draft Table of Required Revisions.

Table 1: Response to City of Morro Bay's November 26 SWMP Revisions Addressing the Draft Table of Required Revisions

Subject	Required Revisions (from September 26, 2008 Water Board staff comments on September 4, 2008 Draft SWMP)
Acronyms: BMP - Best Management Practice General Permit - Phase II Small Municipal Separate Storm Sewer Systems General Permit MS4 - Municipal Separate Storm Sewer Systems	
1 BMP PE4 Residential Automotive Washing	Modify BMP PE4 or add a new BMP to commit the City to educating its residents on proper automotive washing methods.
Response:	The City revised the SWMP as required by changing the text discussing BMP PE4 in Section 4, page 4.
2 BMP IL1 Non-stormwater Discharges	In addition to creating an ordinance to address non-stormwater discharges, the City shall modify an existing BMP or add a new BMP that commits the City to adding language to the SWMP to clearly explain which of the 17 non-stormwater discharges listed in the General Permit are significant pollutants to the City's MS4 and how the City will manage each discharge.

	Subject	Required Revisions (from September 26, 2008 Water Board staff comments on September 4, 2008 Draft SWMP)
	Response:	The City revised the SWMP as required by including language committing the City to determining which 17 non-stormwater discharges are deemed significant pollutants to the MS4 and prohibiting these discharge in an ordinance. The revision is in Section 4, pages 26 – 27.
3	CON3 Construction Site Inspections	Modify BMP CON3 or add a new BMP, including a schedule for completion, to commit the City to developing a tracking system for construction site inspections.
	Response:	The City explained in the SWMP revision justifications that the City currently has a developed tracking system, called program HDL, to monitor all building permit inspections. The City revised the SWMP, as required, to commit the City to amending the HDL program to include a construction site inspection tracking system. The revision is in Section 4, page 41.
4	PC5 Post-construction Site Inspections	Modify BMP PC5 or add a new BMP to commit the City to include, at a minimum, the following components in their post-construction site inspection program: inspections during construction to verify post-construction BMPs are built as planned; specific timeframe after construction termination for the first post-construction site inspections; post-construction inspections to ensure proper BMP maintenance and BMP effectiveness (in coordination with the self-certification program); and tracking system for approved treatment and flow/volume-based BMPs.
	Response:	The City revised the SWMP as required by changing the text discussing BMP PC5 in Section 4, page 49.
5	Long-term Watershed Planning	Modify an existing BMP or add a new BMP to demonstrate the City is proactively working towards long-term watershed planning. This means your SWMP must include a schedule (of BMPs) to assess watershed conditions related to the City, with a plan to incorporate these issues during the long-term hydromodification control standards development.
	Response:	The City revised the SWMP in Section 4, page 46, to include a commitment to develop a strategy to provide long-term watershed planning, but the SWMP does not commit the City to implementing the long-term watershed plan. Additionally, the City must develop their long-term watershed planning strategy earlier than Year 4 if they plan to implement the plan during the 5-year permit term. (See Final Table of Required Revisions, Item 3)

	Subject	Required Revisions (from September 26, 2008 Water Board staff comments on September 4, 2008 Draft SWMP)
6	Assessment of Program Effectiveness	Modify Section 5, or add a new BMP, that commits the City to: 1) documenting in the Year 1 annual report specific effectiveness assessments for each BMP showing the highest outcome level the City will achieve, by the end of the 5-year Permit cycle, for each BMP; and 2) achieving Level 4, by the end of the first 5-year permit cycle, for all BMPs where this outcome level is feasible/applicable. Consider putting all effectiveness assessment measures into a matrix to easily track the level of assessment the City will conduct for each BMP and the timing for assessment completion.
	Response:	The City revised the SWMP to clarify the City only plans to reach California Stormwater Quality Association's (CASQA) Level 3 effectiveness assessment, except for BMPs where the City has already committed to achieving CASQA Level 4 effectiveness assessments. The City must commit to documenting in the Year 1 annual report the specific effectiveness assessments they plan to conduct for each BMP for the 5-year permit cycle. Water Board staff understands this is an iterative process, therefore the effectiveness assessments may change over time. (See Final Table of Required Revisions, Item 4.)
7	Hydromodification Control Exemptions	Modify hydromodification control exemptions to detail what deems a project 'approved' in the project approval process to clearly designate which projects will not be required to adhere to the hydromodification control interim requirements.
	Response:	The City modified Appendix G, Interim Standards for Hydromodification, to clarify which projects the City will subject to the interim hydromodification control measures. The SWMP details that projects approved prior to the implementation of these requirements are exempt from hydromodification requirements, yet the definition of <i>approved projects</i> details that discretionary projects approved or deemed complete prior to SWMP adoption are exempt from hydromodification requirements. The City does not plan to adopt interim hydromodification control criteria until one year after SWMP adoption. It is unclear if the City plans to use the SWMP adoption date or interim hydromodification control criteria adoption date as the project cut-off point. The City also updated Appendix G to provide more exemptions from future interim hydromodification control criteria. Water Board staff considers these exemptions reasonable, but requests the City remove them prior to SWMP adoption and revise exemptions, if necessary, and resubmit with the interim hydromodification control requirements at least three weeks prior to 1-year after SWMP adoption. (See Final Table of Required Revisions, Items 5 and 6.)

Comments from Bill Woodson

Comment: The first bullet of Appendix G, Interim Standards for Hydromodification, does not clarify that smaller projects are exempted. The City of Morro Bay has interpreted this requirement to exempt planning projects that will build less than 500 square feet. These projects are typically residential, and involve adding a bedroom, bath, etc. This needs to be clarified. I personally believe any project that requires a building permit should be required to conform. After all, this is a seaside community, bordering a National Estuary.

Response: The City's final SWMP will include options for developing interim hydromodification control criteria. Therefore, the City will not necessarily use the criteria outlined in the September 2008 Draft SWMP, Appendix G. (See Final Table of Required Revisions, Item 7.) The City will also adopt applicability criteria to accompany their interim hydromodification control measures. The applicability criteria will detail what project types, project size, and level of impact will trigger required compliance with each hydromodification control numeric criterion. The City will determine what size projects must adhere to the interim criteria, based on what is practicable, to best protect water quality. The applicability criteria for the long-term hydromodification control criteria will most likely be more stringent than the applicability criteria for the interim hydromodification control criteria. The Water Board will provide an opportunity, prior to adoption of the interim hydromodification control standards, to comment on the City's proposed criteria.

The City has provided justification for exempting projects in the Embarcadero area from adhering to hydromodification control measures, because this area drains directly to Morro Bay, therefore the runoff from these sites will not cause hydromodification to downstream waterbodies. Apart from hydromodification requirements, any new or re-development in the Embarcadero, exceeding 500 square feet of new or re-developed impervious area, must adhere to more stringent treatment standards than other portions of the City, because these sites drain directly to Morro Bay. Water Board staff considers the 500-square foot threshold sufficient for protecting water quality in Morro Bay.

Comment: Bullets two and three of Exemptions from Hydromodification on the second page of Appendix G include exemptions that allow the City to duck setting an example for the rest of the community. Recent advances in street and sidewalk materials that are tough, but can absorb water, should be required where practicable. Also, City runoff should be directed to parks, tree wells, etc. where practicable. Come on, Central Coast Regional Water Quality Control Board, we are tough and can take it. Per fact, we want to set an example.

Response: Water Board staff agrees the City should lead by example, however, staff anticipates the City may need to provide some exemptions for regular maintenance projects, in order to maintain public areas. Our goal is not to stall regular City maintenance procedures. Water Board staff has requested the City remove language from their SWMP that exempts street reconstruction and sidewalk replacements, because municipal reconstruction and new construction projects have the potential to cause significant impacts to water quality. Water Board staff expects the City will readdress these exemptions when the City develops applicability criteria for their interim and long term hydromodification control criteria. (See Final Table of Required Revisions, Item 6.)

Comment: Why aren't there models for Central Coast Regional Water Quality Control Board expectations? I'm sure many other cities are going through the same drill. Why do you require each community to invent the wheel, much less re-invent it? I believe you are causing unnecessary expense and resource investment of each community to the extreme. Shame on

you. These unfunded mandates should be as slick and polished as possible, to help both agencies. There should be software, signs, example ordinances and rules, roll-out examples, how other cities did it, etc.

Response: First, the Water Board Board's role is to set protective water quality standards that local communities must meet, not specify exactly how local agencies meet those standards. Second, the Water Board recognizes that controlling hydromodification is relatively new and difficult, so it is doing everything in its authority to assist local communities. Water Board staff has provided guidance for developing hydromodification control criteria and plans to actively work with municipalities as they develop their interim and long-term hydromodification control criteria and their long-term watershed management plans. Water Board staff provided its July 10, 2008 letter, which included example numeric criteria. The Water Board has also developed the Central Coast Low Impact Development Center. Thirdly, there are numerous California communities that effectively control hydromodification (e.g., Contra Costa County) that could serve as a model for Central Coast communities. Federal law requires the City of Morro Bay to control stormwater pollution to the maximum extent practicable, regardless of available state or federal funding assistance. The Water Board has made special efforts to provide both technical and financial assistance to local agencies through providing the Central Coast Low Impact Development Center and supporting local agencies in receiving Proposition 84 Grant Funds.

Comments from San Luis Obispo Coastkeeper

Comment: Thank you for the opportunity to review and comment on the proposed Stormwater Management Plan of the City of Morro Bay. San Luis Obispo Coastkeeper, a program of Environment in the Public Interest, is organized for the purpose of ensuring that the public has a voice with agencies and official responsible for enforcing water quality, watershed and coastal planning regulations on the California Central Coast. As such, the SLO Coastkeeper and our 800 central coast supporters are concerned that the proposed SWMP:

1. Is impermissibly vague for many components.
2. Does not clearly identify the proposed programs and the financial resources available to implement the proposed program.
3. Fails to identify what and how proposed measures will identify the protection of water quality in the City of Morro Bay.

Response: 1) The City's SWMP is meant to establish a framework to outline how the City will manage stormwater runoff. It contains a full suite of minimum control measures to protect water quality from urban runoff. Water Board staff finds that the program, with the specified required revisions, provides adequate appropriate detail and focus. SWMPs are expected to evolve over the permit life and respond to new information and evolving conditions on the ground. The annual reports will convey programmatic details and allow the Water Board to determine if additional detail or additional control measures are necessary to achieve water quality protection to the maximum extent practicable (MEP). 2) The General Permit requires the City to submit a SWMP that meets the MEP standard and therefore include BMPs that are within the City's fiscal means. The permit contains no explicit requirement to demonstrate ability to pay. 3) The City has developed an effectiveness assessment strategy, included in Section 5, which includes a commitment to developing assessment effectiveness measures, for all applicable BMPs, by the end of Year 1. The purpose of measuring BMP effectiveness is to identify if the BMPs are providing a positive contribution to protecting water quality.

MCM #1: PUBLIC EDUCATION AND OUTREACH

Comment: The Public Education and Outreach measures are vague and incomplete for many components.

Response: Water Board staff finds the City's Public Education and Outreach BMPs meet MEP.

Comment: The draft of Morro Bay Proposal must provide a mechanism to adapt its educational program in the future. This is to assure a definitive commitment to implement this program for all five years of the permit.

We urge that the permit include mechanisms facilitating the update of the educational programs.

Response: The City has committed to implementing the majority of their proposed education programs every year of the 5-year enrollment under the General Permit. In Section 5, Program Effectiveness and Reporting, the City commits to establishing effectiveness measures for all BMPs where effectiveness assessments are appropriate. Based on the results of the effectiveness assessments, the City plans to update their BMPs on an annual basis. Section 5.1 states, "Therefore, the SWMP is a living document and the City plans to re-evaluate its effectiveness measures on an ongoing basis."

Comment: The draft Morro Bay Proposal must broaden its education plan and programs. For the proposed BMP to be effective it must demonstrate that it achieves education of the community about specific pollutant sources and includes follow-up measures demonstrating that urban runoff pollution has been reduced to the maximum extent practicable. It must also foster participation through outreach events to measurably increase the knowledge of the target audience regarding municipal storm sewers, impact of urban runoff on receiving waters, and potential BMP solutions for the target constituencies.

Response: The City has developed an extensive education program to implement during their first 5-year permit cycle. The City has included BMPs that incorporate education programs targeting the topics mentioned above. For example, a pollutant of concern for Morro Bay is pathogens and BMP PE15 specifically aims to educate pet owners on this pollutant source. BMPs PE4, PE5, and PE6 all commit the City to educating a range of target audiences about the difference between the municipal storm sewer and the sanitary sewer systems. BMP PE9 commits the City to educating children on the impacts of urban runoff on receiving waters. Section 5 discusses the effectiveness assessment levels the City aims to achieve throughout their 5-year permit cycle. In Morro Bay's November 26, 2008 comment letter, the City provides adequate justification for why achieving up to CASQA Level 3, as opposed to CASQA Level 4 (level specified in above comment), is achieving MEP. See Final Table of Required Revisions, Item 2. Water Board staff added a required revision requesting the City assess community-based social marketing strategies, which is a superior approach to public education.

Comment: The draft Morro Bay Proposal must be more specific about the printed materials in terms of what types of brochure and what topics will be covered in each brochures and who to target audience will be pertaining to the types of brochures. Each type of brochure must get the message out and raise public awareness about urban runoff pollution and its impact on the Cities water resources to the maximum extent practicable.

Response: The City commits in BMPs PE4, PE5, PE6, PE7, PE8, and PE10 to educate specified target audiences. These BMPs specify the content and topics of the proposed printed materials. These BMPs also commit to educating the target audiences about the impacts of

urban runoff. The City has committed to developing effectiveness measures for these BMPs and changing the outreach content and method if necessary.

Comment: The draft Morro Bay Proposal must be more specific on what will be measured and recorded to demonstrate the effectiveness of implementing this BMP. The draft must specify how measures and records will identify improvement in water quality of the City. The draft must include measure that demonstrate changes in the behavior of target communities and thereby reduces pollutants released to the municipal storm drain system and the environment.

Response: Section 5.1, Assessment of Program Effectiveness, addresses this comment. Water Board staff finds that the SWMP provides appropriate detail about demonstrating the effectiveness of BMPs.

Comment: The draft Morro Bay Proposal should identify topics covered in Educational materials to be broader in scope. In addition to the topics currently included in the Draft SWMP, we urge the inclusion of the following topics to provide a broader range of additional relevant topics that support the proposed BMP:

- State and Federal water quality laws
- Requirements of local municipal permits and ordinances
- traffic reduction, alternative fuel use
- BMP maintenance
- Topics for restaurants: mat washing, cleaning up spills, water and energy
- Conservation, waste reduction, and recycling

All of the topics covered in the Draft SWMP, plus those listed above are critical for consideration to develop a complete understanding of how everyday activities impact stormwater pollution as well as meet MEP and protect water quality. The draft Morro Bay Proposal must demonstrate a commitment of budget and staff to implement BMPs for each of the listed topics by the end of the permit term. Messages could be easily conveyed through already proposed mechanisms by the draft Morro Bay Proposal: radio and TV broadcast, brochures, and events.

Response: The City has committed to covering a range of topics for a wide range of target audiences. Requiring education on some of the above listed topics (i.e., traffic reduction, alternative fuel use, etc.) goes beyond the scope of what Water Board staff considers storm water education. BMP PE7 commits the City to educating contractors on stormwater ordinances and permits related to construction activities. Water Board staff is requiring the City to revise the SWMP to include the development of public education programs to educate relevant audiences on the illicit discharge ordinance and municipal code amendments relating to post-construction control measures. (See Final Table of Required Revisions, Item 1.) The City has committed to maintaining their BMPs by evaluating BMP effectiveness annually and revising their BMPs as needed. BMP IL4 details the Fats, Oils, and Grease Program targeting restaurants and includes an educational component. BMP PE19 outlines the City's commitment to partner with the San Luis Obispo County Integrated Waste Management Authority to educate the City's citizens on recycling and household hazardous waste disposal. The City is responsible for submitting a SWMP that meets MEP and therefore include BMPs that are within the City's fiscal means.

Comment: In addition, SLO Coastkeeper urges that the draft Morro Bay Proposal include activities that better target the specified audience. For the educational MCM, the draft must

include activities tailored to address specific problems associated with each target audience and that can communicate these messages more effectively than programs for the General Public.

Response: Water Board staff added a required revision requesting the City commit to further assessing community-based social marketing strategies, which is a superior approach to public education. (See Final Table of Required Revisions, Item 2.)

Comment: SLO Coastkeeper also urges that the draft Morro Bay Proposal specifically identify an outreach event under the Storm Drain marking Education and Outreach Events. The intent and the Measurable goals and outcomes of the BMP currently do not appear to comply with the BMP. There is no indication of the City actually holding the outreach event proposed.

Response: BMPs PE16 and PP4 both address the Storm Drain Marking Education and Outreach Events. Water Board staff finds that the SWMP clearly explains that the purpose of these BMPs is to reduce polluted runoff from entering the storm sewer systems and to increase awareness. The City has committed to developing more robust effectiveness measures by Year 1. Although the City has not committed to holding public outreach events, they commit to ensuring drains are marked. The City has already marked the majority of its storm drains; therefore, the City will most likely only hold marking events on an as-needed basis.

MCM #2: PUBLIC PARTICIPATION AND INVOLVEMENT

Comment: It appears that the City's public participation has confused goals and purposes of the public education and outreach MCM. Program development and implementation are what distinguishes this MCM from the Public Education and Outreach component.

Response: Water Board staff finds the City's Public Participation and Involvement BMPs meet MEP.

Comment: The draft Morro Bay Proposal must include a detailed Public Participation and Outreach Program that covers all five years in order to assure a definitive commitment to implement the programs.

Response: Every BMP in the Public Education and Outreach Program includes implementation every year of the 5-year permit enrollment.

Comment: The objective of the Public Participation and Involvement MCM is to include the public in developing, implementing, and reviewing the stormwater management program. The BMP intent must be more specific with program development and implementation to raise public awareness about urban runoff through involvement and involving the public in the development and implementation process. This public involvement provides the opportunity to generate support of the stormwater management plan to protect water quality.

SLO Coastkeeper urges that the draft Morro Bay Proposal revise the intent of this BMP to be more consistent with the objective.

Response: BMP PP2 commits the City to holding public workshops to review the SWMP in order to increase support for the stormwater program and solicit public input. The City has committed to developing adequate effectiveness assessment measures for all BMPs by the end of Year 1. The City's goal is to achieve CASQA assessment Level 3 for all BMPs. Levels 1 through 3 incorporate the following BMP outcome types: documenting activities, raising

awareness, and changing behaviors. Therefore, once the City conducts these assessments they will measure whether the BMP is achieving the expected effectiveness level. If not, the City will revise the BMP.

Comment: The draft Morro Bay Proposal must provide opportunity for the public to provide input on the status of the program and the effectiveness of BMPs through workshops and meetings. The draft must state when the meetings and workshops will be held during the year. The purpose of these workshops should be to gather public input regarding the status of the program and effectiveness of BMPs. Such workshops should be formatted as roundtable discussions and opportunities for the gathering of measurable information by the City for use in the annual report to RWQCB.

Response: The City has committed to holding at least one stakeholder meeting per year to facilitate public input on the City's SWMP. Water Board staff does not expect the City to commit to specific stakeholder meeting times prior to enrollment under the General Permit. Stakeholders will receive adequate notice for stakeholder workshops, since the City has committed to complying with public notice requirements for stormwater public participation and involvement activities.

Comment: The draft Morro Bay Proposal must include mechanisms for engaging the general public in activities by providing advertising and incentives for public participation to increase public participation. The current BMP is too vague and lacks a clear explanation of how the specific objective of the MCM will be achieved.

Response: Water Board staff provided a comment on the June 2008 draft SWMP regarding BMP selection requesting the City take a more hands-on and interactive approach to public education and involvement. The City added an effectiveness assessment plan in Section 5.1 that commits the City to achieve CASQA Level 3 by the end of the 5-year permit cycle. Therefore, the City has committed to implement and modify their BMPs to ensure they are raising awareness and changing the behavior of the City's stakeholders and community members. Also, Water Board staff has added a required revision, requesting the City re-evaluate areas to incorporate community-based social marketing into their stormwater program. (See Executive Officer's Approval Letter, Attachment 1, Final Table of Required Changes, Item 2.)

MCM #3 ILLICIT DISCHARGE DETECTION AND ELIMINATION:

Comment: The document is vague and unclear regarding how enforcement will be carried out given current staffing levels and budget allocations. The absence of a commitment to funding this element clearly does not provide enough information to determine if illicit discharges will actually be detected or, in fact eliminated.

Response: The City is responsible for submitting a SWMP that meets the MEP standard and therefore include BMPs that are within the City's fiscal means. Water Board staff finds the City has committed to developing adequate enforcement provisions to eliminate illicit connections and discharges.

Comment: The objective of this MCM is to adopt and enforce ordinances and to implement a program to detect and eliminate illicit discharge. The document includes these objectives but lacks the mechanisms to assure Regional Board of the public that eliminating illicit connection/discharge will result.

Response: Water Board staff finds the City's commitments to manage illicit discharges meet MEP. Some of these commitments include the implementation of regulatory mechanisms, development of inspection and enforcement program, establishment of educational program, and development of maintenance and cleanup and abatement procedures. The annual reports submitted to the Water Board will detail if the City is successfully preventing and eliminating illicit connections and discharges.

Comment: The draft Morro Bay Proposal must require the adoption of ordinance within the first year of the permit coverage.

Response: Water Board staff finds the schedule for adopting the ordinance in Year 2 to be appropriate in the context of the City's other scheduled commitments to illicit discharge elimination.

Comment: The draft Morro Bay Proposal must immediately develop a policy outlining what discharges are permitted into the storm sewer system and what discharges will be considered illicit. The municipality needs to establish a policy specifying the flows or discharges that it will allow to be discharged to the storm drain system and those that it will control via its illicit connection/discharge program. As currently proposed, the City is committed to just determining what stormwater discharges are a significant source of stormwater pollution.

Response: BMP IL1 commits the City to adopting an ordinance that prohibits illicit discharges and includes enforcement provisions. Additionally, the City explains the ordinance will address the 17 categories of non-stormwater discharges. The City commits to developing BMPs to address any of the 17 non-stormwater discharges that are deemed significant contributors to stormwater pollution and prohibiting the significant non-stormwater discharges in their illicit discharge ordinance.

Comment: SLO Coastkeeper urges changes to the draft Morro Bay Proposal to include more specific enforcement and penalty provisions to eliminate illicit discharge. Typically, an ordinance outlining a progressive enforcement regime is appropriate. Administrative and/or legal action against an entity that continues illicit activity past the deadline for compliance must result in escalating enforcement until compliance is achieved. A program of escalating enforcement that includes educational efforts with mechanisms to facilitate a proper disposal to meet MEP and water quality standards will aid efforts to prevent improper disposal of wastes. Ultimately however, the ordinance must explicitly provide for fines for violators.

Response: BMP IL1 specifies the ordinance will include progressive penalties and enforcement provisions. Therefore, the City has committed to including escalating enforcement provisions in their ordinance prohibiting illicit discharges. There will be a public review process prior to ordinance adoption where stakeholders, including the Water Board, can comment.

Comment: Further, we urge language in the draft Morro Bay Proposal that contains commitments by the city to respond to all sewage spills from all sources, and prevent the entry of sewage into the storm drain system. It must include a program for monitoring the entire storm drain system identified on the proposed map of the system.

Response: In BMP IL3 the City commits to responding to 100% of citizen stormwater reports of illicit discharges. In BMP IL4 the City commits to developing and implementing procedures for illicit connection/discharge inspections and dry weather screening for storm drain systems

connected to residential, restaurant, and industrial facilities. Additionally, BMP IL5 commits the City to checking construction plans and inspecting construction sites to prohibit illicit connections and discharges to the MS4. Water Board staff finds these stormwater BMPs, when combined with the City's separate Sewer System Management Plan, to be adequate measures to prevent entry of sewage into the storm drain system. In BMP MO3 the City commits to implementing semi-annual inspections and cleaning of the MS4 which means the City plans to monitor the entire storm drain system.

MCM #4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Comment: The Construction Site Stormwater Runoff Control Program is impermissibly vague, fails to include detailed requirements and commitments for implementation.

Response: Water Board staff finds the City's Construction Site Runoff Control BMPs meets the MEP standard.

Comment: The draft Morro Bay Proposal must develop a construction and grading review/approval process of construction plans to ensure that pollutant discharges be reduced to the MEP and assure compliance with water quality standards. The review process must specify ordinances, construction and grading project requirements, and verification of permits and plans.

Response: The City commits in BMP CON2 to conduct construction site building and grading plan reviews to verify that erosion and sediment control BMPs are adequate prior to issuance of a building permit. BMPs IL5 and CON3 include details about construction site inspections to ensure project applicants are properly implementing their BMPs. BMP CON1 is to revise the City's Municipal Code to incorporate more specific construction site runoff controls and include provisions and enforcement penalties. BMP CON1 commits the City to enforcing the updated Municipal Code.

Comment: The draft Morro Bay Proposal is impermissibly vague as to the development and implementation of a construction site inspection program that meets MEP and assures compliance with water quality standards.

Response: In BMP CON3 the City has committed to developing a construction site inspection program, developing a construction site inspection checklist and tracking system, imposing enforcement provisions for non-compliant sites, and training site inspectors. To meet MEP, the City need not provide extensive details about their programs in their SWMPs, just commitments to implement programs. Water Board staff will verify during annual report reviews and audits that the City is meeting MEP with its construction site inspection program.

Comment: The draft Morro Bay Proposal must develop construction site BMP policy and procedures guidance manual within the first year of the draft Proposal's adoption. It must inventory existing construction projects, require specific construction site BMPs and designate additional BMPs based on review EPA's Menu of BMPs that are MEP and assure compliance with water quality standard. This must be completed within the first year of the adoption of draft proposal.

Response: BMP CON3 commits the City to developing a construction site inspection checklist during Year 1. BMP CON5 commits the City to developing a BMP policy and procedures guidance manual. The City specifies they will use the CASQA Construction BMP Manual as a

model. Water Board staff finds these measures for managing construction sites meet the MEP standard and will sufficiently protect water quality.

Comment: SLO Coastkeeper urges the inclusion of language to specify mechanisms that will be used to ensure commitment of the program by:

- Beginning construction site inspections immediately.
- Provide training for specific types of staff and rank criteria, frequency of inspections, and mode of enforcement.
- Identify prioritized sites and conduct inspections of all construction sites on a weekly basis which includes a checklist that provide enforcement requirements for complaint and non-compliant sites.

Response:

Water Board staff anticipates the following BMPs, combined with relevant BMPs for other Minimum Control Measures, would provide water quality protection from construction-related stormwater runoff to the MEP:

- BMP CON3 commits the City to inspecting construction sites starting in Year 1.
- BMP CON6 details the City's commitment to train their staff on construction site runoff control BMPs.
- BMP CON3 commits the City to creating a construction site inspection checklist.
- BMP CON3 details the City's construction site inspection prioritization criteria.

MCM #5 POST-CONSTRUCTION STORMWATER MANAGEMENT

Comment: We applaud the inclusion of requirements for "Low Impact Development". Many of the LID techniques incorporate greater use of permeable surfaces and have become accepted as Best Management Practice.

However, the lack of a budgetary commitment to this element may render this measure impotent and ultimately fail to meet the federally mandated maximum extent practicable (MEP) standard. The proposed BMP's intent fails to show that the BMPs meet the objective of the MCM.

Response: The City is responsible for submitting a SWMP that meets the MEP standard and therefore include BMPs that are within the City's fiscal means.

Comment: The draft Morro Bay Proposal must comply with its object to protect water quality and control runoff flow to be incorporated into new development and significant redevelopment projects by developing and implementing a Design Standard Requirement Manual. Within the first year of the adoption of the draft proposal, the City must require that all entities shall comply with design standards.

Response: In BMP PC6 the City commits to developing a Low Impact Development (LID) Design Standards Manual by Year 4. Development of such a manual is typically costly and time consuming; therefore, Water Board staff finds the City's commitment to finalize this by Year 4 to be appropriate. It is important to not that interim hydromodification control criteria are what lead to hydromodification control, not necessarily a design standards manual (the manual simply helps project applicant to meet the criteria). In BMP PC1, the City has committed to requiring entities, which meet certain applicability criteria, to comply with its new interim hydromodification control criteria, by Year 1. Water Board staff has required the City to start providing low impact

development outreach programs during Year 1 to prepare project applicants for new hydromodification control criteria. (See Final Table of Required Revisions, Item 8.)

Comment: The draft Morro Bay Proposal must provide specific procedures for review of post-construction management in the development review process. It must adopt a plan for review of construction projects to ensure that pollutants and runoff from the development will be reduced to the MEP and will not cause or contribute to exceedance of water quality standards. It must ensure that all development will be in compliance with applicable stormwater ordinances, local permits, other applicable ordinances and requirements.

Response: BMP PC4 commits the City to reviewing post-construction stormwater management controls in the development review process, to ensure new projects meet the City's post-construction control measures. It is out of the scope of the stormwater program to require the City check that projects are meeting non-stormwater related ordinances and permits during plan reviews.

Comment: In order to obtain City approval, each construction plan must ensure that pollutant discharges and runoff flows from development are reduced to the MEP and that receiving water quality standards are not violated throughout the life of the project. To assure the City's authority to enforce this BMP, the draft Morro Bay Proposal must require applicants to provide verification of maintenance provisions including a signed statement from developers.

Response: BMP PC5 commits the City to developing a maintenance inspection program for sites with post-construction runoff controls and to developing a self-certification program. Water Board staff finds the City's current commitment meets MEP, and Water Board staff plans to monitor the City as they develop their long-term post-construction inspection programs. Water Board staff finds the above comments useful for when the City develops their inspection program. Water Board staff anticipates that long-term maintenance agreements will exist between the City and the property owner, not between the City and the developer, because the property owner will hold responsibility for maintaining post-construction control measures, not the developer.

Comment: The draft Morro Bay Proposal must provide for inspection commencing immediately upon the implementation of revised City Municipal code Chapter 14.48. Procedure and guidance document development should occur simultaneously with the revision.

Response: The Water Board does not require the City to implement interim hydromodification control criteria until 365 days after the date of enrollment. In BMP PC5 the City commits to inspecting sites starting in Year 2, therefore, all sites subject to hydromodification control criteria will be subject to site inspections directly following construction completion.

MCM #6 POLLUTION PREVENTION / GOOD HOUSEKEEPING

Comment: The Pollution Prevention/Good Housekeeping program is vague and fails to meet the federally mandated MEP standard. SLO Coastkeeper urges that specific pollution prevention programs that meet the MEP standard be identified. The BMP intent must identify, develop, and implement BMPs/good housekeeping procedures to address urban runoff pollution associated with municipal operations. The draft Morro Bay Proposal is unclear which classifications of employees are to be trained. Likewise it is unclear what budget and personnel resources will be committed to support the training of specific categories of employees.

Response: BMP MO1A, measurable goals and outcomes, commits the City to training specific City employees on pollution prevention measures for various municipal operations. The City is responsible for submitting a SWMP that meets the MEP standard and therefore include BMPs that are within the City's fiscal means.

Comment: The draft Morro Bay Proposal must also provide specific hazardous material storage BMPs and require that these be incorporated into an ordinance to be adopted in year 1 of the program. Guidance documents and inspection procedures should be developed simultaneously with the ordinance no later than year 2 of the program.

Response: In BMPs MO6 and MO7, the City commits to creating hazardous materials storage and spill prevention and control procedures for stormwater pollution prevention for municipal facilities and conducting inspections. The General Permit does not require municipalities to create ordinances or enforcement mechanisms for municipal operations. Water Board staff finds the current City commitments to create hazardous materials storage and establish spill prevention and control procedures meet the MEP standard.

Comment: The draft Morro Bay Proposal must develop a program to implement procedures to prevent stormwater runoff pollution from City vehicle fuel dispensing and maintenance facilities, City vehicle and equipment washing, and City landscaping and lawn care. This program must provide mechanisms that show commitment through the entire permit period.

Response: In BMP MO9 the City commits to developing procedures for City vehicle and equipment washing for Years 2-5. In BMP MO11 the City commits to auditing landscape and lawn care systems during Year 1, making changes to systems in Year 2, and inspecting systems Year 3 – Year 5.

Comments from Homebuilders Association of the Central Coast

Comment: City's Efforts to Comply Underestimate Complexity and Workload of Developing Interim Hydromodification Criteria: The Home Builders Association is concerned that Morro Bay's sincere interest in meeting the Central Coast Regional Water Quality Control Board deadlines and goals has led the City to overestimate what it can do in short time period and to underestimate the complex nature of the scientific assessments needed to develop Interim Hydromodification Criteria which could lead to copying criteria from other sources in order to meet the six month timetable.

Response: The Water Board requires the City to implement interim hydromodification control criteria within 365 days, not six months, after the date of enrollment, and the City has committed to the one year timetable. Water Board staff recognizes that developing robust long-term hydromodification control criteria may take more time and dedicated resources, but Water Board staff anticipates developing interim hydromodification control criteria will require fewer resources.

Comment: Request that Water Board Staff Provide the Public Record with Supportive Documentation: We request that the Central Coast Board introduce into the public record for Morro Bay's Stormwater Management Plan the economic and technical information and research that the Regional Board has publicly referenced regarding post-construction stormwater management on Page 3, Item 12, in the Oct. 17, Lompoc Resolution R-3 2008-

0071. We assume Morro Bay's resolution will substantially resemble Lompoc's, where the Water Board stated that it:

- A. "... has been evaluating, as demonstrated in the administrative record, the various options for control of water quality conditions affected by post-construction stormwater discharges and has concluded that controlling hydromodification typically associated with urbanization is reasonably achievable."
- B. "... considered economics and found that the best information available indicated that controlling hydromodification through, among other approaches, implementation of low impact development principles, is technically feasible, practicable, and cost-effective"; and
- C. "... found that the required revisions would not affect regional housing supply. Hydromodification controls have been applied in this and neighboring regions with no demonstrated affect on housing availability."

We request that the public record specifically include (a) the methodology and standards used to determine what is "reasonably achievable" in item A above, (b) what "best information available" was used to determine what is "technically feasible, practicable and cost-effective" in item B above, , and (c) what data and methodology was used to decide that hydromodification controls will not impact housing supply or availability and which communities are referenced "in this and neighboring regions" in item C above. [We] request a written, detailed comparison between state and regional stormwater criteria and standards: The association is seeking a clear, step-by-step description of the differences between the criteria established in the California MS4 General Order, including Attachment 4, and the criteria identified in the February 15, 2008 Water Board letter, and what technical findings support the Water Board differences.

Response: Water Board staff believes dissemination of the information requested may support greater understanding of hydromodification requirements. However, dissemination of the information would not cause Water Board staff to recommend substantive changes to the City's SWMP. Therefore, Water Board staff finds it unnecessary to make available the requested information in the context of approving the City's SWMP. Throughout the City's development of interim and long-term hydromodification control criteria, Water Board staff intends to provide the City with technical information, direction, and support. See the Executive Officer's July 10, 2008 letter (Attachment: An Example Approach for Including Quantitative Measures of Healthy Watersheds in Stormwater Management Programs), which includes 31 citations addressing the technical basis of hydromodification requirements.

Comment: Request Elaboration of the Interim Criteria language "as effective as:" The City of Lompoc SWMP approval resolution, and apparently other SWMP comments, stated that "The proposed criteria must be effective as ..." We would like clarification as to what "as effective as" means. Additionally, we request that the Water Board assist in this analysis by providing the "technical findings" that demonstrate how effective actually is the Water Board proposed Interim Criteria. In order to compare effectiveness, we believe that the Water Board should provide it's analysis of the effectiveness of the criteria it is proposing.

Response: At the October 17, 2008 Water Board public hearing for approval of the City of Lompoc's SWMP, the Water Board directed Water Board staff to ensure that any interim hydromodification control criteria developed by the City of Lompoc be as effective as the interim hydromodification control criteria we presented in our February 15, 2008 letter. Those criteria are as follows:

- For new and re-development projects, Effective Impervious Area shall be maintained at less than five percent (5%) of total project area.

- For new and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, the post-construction runoff hydrographs shall match within one percent (1%) the pre-construction runoff hydrographs, for a range of events with return periods from 1-year to 10-years.
- For projects whose disturbed project area exceeds two acres, preserve the pre-construction drainage density (miles of stream length per square mile of watershed) for all drainage areas serving a first order stream or larger, and ensure that post-project time of concentration is equal or greater than pre-project time of concentration.

Water Board staff expects that implementation of these criteria, together with other planning efforts that contribute to long-term watershed protection, will promote the following desired conditions of healthy watersheds:

- 1) Rainfall surface runoff at pre-development levels,
- 2) Watershed storage of runoff, through infiltration, recharge, baseflow, and interflow, at pre-development levels,
- 3) Watercourse geomorphic regimes within natural ranges (stream banks are stable within natural range; sediment supply and transport within natural ranges), and
- 4) Optimal riparian and aquatic habitats.

Interim hydromodification control criteria primarily focus on items 1 and 2 above. Therefore, Water Board staff will review the City's interim hydromodification control criteria to ensure that they:

- 1) Provide numeric thresholds that demonstrate optimization of infiltration in order to approximate natural infiltration levels (such as would be achieved by implementation of appropriate low-impact development practices), and
- 2) Achieve post-project runoff discharge rates and durations that do not exceed estimated pre-project levels, where increased discharge rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses.

On January 5, 2009, the Water Board Executive Officer approved the City of Santa Maria's enrollment under the General Permit. In Santa Maria's final table of required revisions, Water Board staff presented Santa Maria with options for methods of developing interim hydromodification that are as effective as the interim hydromodification control criteria presented in its February 15, 2008 letter. Based on the Water Board's direction regarding the City of Lompoc's SWMP and the City of Santa Maria's SWMP, Water Board staff has determined it appropriate to require similar language in other municipalities' SWMPs.

Water Board staff has requested the City of Morro Bay modify their SWMP to clarify they will develop interim hydromodification control criteria that follows the methodology of one of the three options included in the Executive Officer's Approval Letter, Attachment 1, Final Table of Required Changes, Item 7, and not commit to simply using the Water Board's interim criteria.

Comment: Time to complete Interim Hydromodification Criteria should be 2 years: It would be more realistic for Morro Bay to have two (2) years to create its interim hydromodification criteria, rather than the six (6) months proposed in the city plan. Our association members experience in Southern California found that a six (6) month deadline to properly develop interim criteria is unachievable. Morro Bay is not allowing itself adequate time to research and understand the economic, technical, geological, and hydrological features that such criteria must address in order to achieve a scientifically sound method for cleaning stormwater to the maximum extent practicable.

It is obviously critical to protect public safety by insuring that the interim criteria are thoroughly researched before being applied. Criteria should not be "hurried" into practice to meet an

artificial deadline at the risk of unintended consequences relating to public safety or implementing criteria that does not have “technical findings” that demonstrate their feasibility and effectiveness. Morro Bay, like most Central Coast jurisdictions, has a small, hardworking staff and lacks the human and financial resources to realistically comply with a one (1) year deadline and guarantee public safety.

We are attaching for the public record on Morro Bay's plan the June 27, 2008, California Stormwater Quality Association (CASQA) letter to Central Coast Regional Water Quality Control Board Executive Officer Roger Briggs. CASQA, which provides stormwater quality management services to more than 26 million Californians, noted that it is a sequencing error to implement the criteria before determining what is technically possible and that it will take more than a year to do the appropriate, scientifically valid research. CASQA also noted that larger cities “have been expending significant effort on the technical challenge of developing appropriate hydromodification criteria for a number of years. Since 2001, the San Francisco Bay Area Phase 1 permittees have been working to address this issue, yet there is still no accepted common approach.” It would seem wisest to let the larger metropolitan communities, with more human and fiscal resources, conduct thorough technical and financial analysis of how hydromodification/low impact development can work and then let the smaller, fiscally and staff-challenged Central Coast communities base their stormwater plans off those models.

We recommend that the city be given two years to develop interim hydromodification criteria.

Response: The Water Board requires the City to implement interim hydromodification control criteria within 365 days, not six months, after the date of enrollment. The City has proposed a process resulting in interim hydromodification control criteria at the end of Year 1 of program implementation (see BMP PC1 and Appendix G). The City will continue to refine their applicability criteria for projects exempt from interim hydromodification control criteria, develop interim hydromodification control criteria to align with Water Board expectations, and develop an implementation strategy, including revision of Municipal Code 14.48 to incorporate post-construction stormwater management controls, by the end of Year 1. Water Board staff finds this is an acceptable approach to achieving hydromodification controls, since it identifies interim criteria based on a preliminary assessment of conditions unique to the City, and employs these criteria after the first year by adopting them into the City code.

Water Board staff realizes that hydromodification control criteria development is an iterative process. Water Board staff has tasked the City with implementing interim criteria before developing long-term criteria to allow the City time to work through the hurdles of implementing hydromodification control criteria, to set the stage for the long-term criteria. Additionally, if the City postpones adoption of hydromodification control criteria until after conducting watershed analysis and developing long-term hydromodification control criteria, new projects have potential to cause significant hydromodification and negatively affect the City's watershed.

Comment: SWMP Post-Construction Application Cut-Off Point should be at “Deemed Complete.” The most effective time to implement hydromodification/low impact development methods is at the start of a project's design phase. The later in the process a government tries to apply post-construction stormwater methods to a project, the greater the cost and timing burdens that are placed on the jurisdiction and the project and the less likely that a technically effective, cost-efficient solution will be achieved... A better cut-off point is at the “deemed complete” stage of the project entitlement process. Projects that have not been “deemed complete” would be best able to implement new LID solutions without undue hardship on the jurisdiction or applicant. An application that has been accepted by a jurisdiction (“deemed

complete”) as ready for processing and a public hearings should not have to be re-designed to meet new standards. By deemed complete, both the jurisdiction and applicant have expended significant time and funds on the project. During the transition process, projects should be encouraged in their pre-application stage to voluntarily use LID methods in development design... We recommend that projects whose application has been “deemed complete” by the City of Morro Bay be exempt from the new post construction standards, but should be encouraged to comply with the regulations on a voluntary basis. Obviously, all projects in later stages of the entitlement, design, or construction process would be exempt from the application of the regulations as well.

Response: Water Board staff understands that, as a small city, Morro Bay has relatively few projects that may be potentially affected by the “deemed complete” cut-off point proposed by the commenter. For these projects, and others for which applications are submitted during the first year of SWMP implementation, the City can voluntarily notify applicants that they should consider LID and address hydromodification in designing their projects. (Central Coast Low Impact Development Center assistance may also be available to consult applicants on ways to integrate LID into project design.)

Water Board staff agrees with the commenter that the “deemed complete” milestone is an appropriate cut-off point in the entitlement process, after which projects would not be subject to new hydromodification requirements. Water Board staff requested in the September 29, 2008 Draft Table of Required Revisions that the City clarify what projects, in the City’s review process ‘pipe-line,’ the City will require to meet the interim hydromodification control criteria. The City has proposed, in their November 26, 2008 Draft SWMP, a specific cut-off point for projects required to adhere to the City’s interim hydromodification control criteria. (See Final Table of Required Revisions, Item 5.)

Comment: Clarify Project Phase-In Period to recognize “Deemed Complete” approach: Although it is does not seem spelled out in the current plan, we recommend that the plan should clarify that the application of the new post-construction regulations to projects in the entitlement process would begin at the adoption of the City’s Interim Hydromodification Criteria (proposed at two (2) years in item 1 above) and be applied to all projects not “deemed complete” (item 2 above) at that time.

Response: New post-construction requirements will be applied as conditions of approval, or through some other enforceable means, to all applicable projects not yet deemed complete by the date of adoption of the City’s interim hydromodification control criteria. (See Final Table of Required Revisions, Item 5.)

Comment: Incorporating assessments from project geotechnical and soils consultants is imperative: All sites throughout the Central Coast do not have the same soils/site conditions. Specific site conditions may preclude applying the new standards due to low infiltration capability of soils or the potential for damage to other infrastructure. Applying the standards in those conditions can result in a public safety hazard or simply be impossible.

We suggest following the City of San Diego’s Land Development Manual – Stormwater Standards in which a Geological Investigation Report is required by a registered geologist or certified engineering geologist to indicate where infiltration is feasible or infeasible and what it can achieve and how to mitigate impacts where it is feasible.

We recommend that the City's stormwater plan include a communitywide analysis by a geotechnical engineer to determine which areas within the urban boundary are suitable for the application of BMPs.

We also recommend that the City's stormwater plan state that it will rely on the applicant's professional geotechnical/soils consultant's analysis to determine if and where infiltration/low impact development BMP's are practical, how much is achievable, and what best management practices should be used when infiltration is not feasible.

Response: Water Board staff expects geotechnical/soils information to continue to inform site design for projects in Morro Bay. However, Water Board staff does not expect such information to necessarily preclude those sites from using low impact development BMPs or to necessarily be the basis for exemptions from requirements to mimic the natural hydrograph in post-development runoff events. The Water Board will review the City's hydromodification controls, stormwater treatment BMPs, and applicability criteria (where and when specific numeric criteria are to be met through post-construction BMPs for new and redevelopment) to determine if the City is achieving water quality protection from these pollution sources to the maximum extent practicable. Should the City propose to exempt certain developments from infiltration or low impact development BMPs, the City would need to demonstrate that alternative or conventional BMPs result in the desired conditions of healthy watersheds, including the conditions of rainfall runoff, groundwater recharge, sediment transport and supply, and riparian and aquatic habitat. To achieve the appropriate balance of environmental and societal goals, the City should consider and select BMPs and applicability criteria from a watershed perspective.

The City's SWMP includes hydromodification control criteria exemptions for the Embarcadero Area, because this portion of the City is built on fill and the City considers infiltration in this area equivalent to a direct ocean discharge. Therefore, projects in the Embarcadero Area while having less stringent, or no, hydromodification controls, will have to adhere to more stringent water quality treatment criteria than projects in other parts of the City. (See Final Table of Required Revisions, Item 6.)

Comment: Normal maintenance of existing infrastructure by public agencies, project developers, and home owners associations be exempted from the new standards. When maintaining existing infrastructure, existing site conditions may preclude applying the new standards. For example, when resurfacing an existing roadway that has no "extra" land available, it will not be possible to provide additional land for filtration purposes.

We recommend that normal maintenance of existing infrastructure by public agencies, developers, and home owners associations should not be considered new development and should be exempt from the new standards.

Response: At this time, the City is committed to developing new requirements for hydromodification control for new development and redevelopment. Maintenance activities for existing public infrastructure are subject to multiple BMPs to reduce their potential contribution to stormwater pollution (see the Pollution Prevention/Good Housekeeping for Municipal Operations). Through other management measures in the SWMP, private developments and home owners associations would be subject to education as well as potential enforcement on source control, pollution prevention, and illicit discharges, but would not be subject to hydromodification controls for maintenance activities. Appendix G of the City's SWMP includes applicability criteria for implementing interim hydromodification control criteria. The City has exempted some of their road maintenance projects from the City's future interim

hydromodification control criteria. Water Board staff anticipates the City will continue to develop and refine clear and effective applicability criteria. (See Final Table of Required Revisions, Item 6.)

Comment: The “pre-development” definition must be “immediate pre-project”: How pre-development is defined is critical as the baseline for determining the increase in stormwater volumes and rates for new development on a site. Defining pre-development as the original natural condition, regardless of current usage, will make many urban infill, smart growth projects fiscally and technically infeasible. Defining pre-development as before anything has been changed on a site is counterproductive to the current sustainability and new urbanism planning concepts and will promote sprawl, long-distance commuting, and increased air pollution.

In addition, a “pre-development” standard harkening to when the land was vacant presents a liability issue that will hamper urban infill by making insurers refuse to support a project because adding more water to an area than has been the standard for a lengthy time period will threaten to undermine nearby buildings constructed to withstand less groundwater. Insurers will not take that risk. Projects will not get built. There will be no improvement in stormwater management.

In Attachment C – Definitions, the San Diego Region California Regional Water Quality Control Board in order No. R9-2007-0001 for the incorporated cities of San Diego County, the San Diego Unified Port District, and San Diego County Regional Airport Authority defines: “Pre-Project or Pre-Development Runoff Conditions (Discharge Rates, Durations, Etc.) – Runoff conditions that exist onsite immediately before the planned development activities occur. This definition is not intended to be interpreted as that period before any human-induced land activities occurred. This definition pertains to redevelopment as well as initial development.”

We recommend defining pre-development as “the immediate pre-project condition” just as the San Diego Regional Board has done.

Response: Water Board staff views changing the definition of pre-development condition as described in the comment as lowering the standard for post-construction runoff control. Water Board staff agrees that hydrologic performance should not outweigh other important environmental goals such as infill, redevelopment priorities, and regional growth patterns that can also affect watershed health. Effective implementation that balances these goals, requires well-crafted applicability criteria, which define what types of projects and under what circumstances controls and quantifiable measures apply.

Water Board staff will consider applicability criteria, including baseline conditions defining “pre-development,” when the City prepares its interim and long-term hydromodification criteria. The options for developing interim hydromodification control criteria, presented in the Final Table of Required Revisions, Item 7, provide flexibility for defining the pre-development conditions. Specifically, the Water Board Executive Officer has approved the City of Santa Maria’s methodology for developing interim hydromodification criteria, including the City’s selection of pre-construction conditions as a baseline for hydrologic conditions in redevelopment projects.

Comment: Economic balance: As previously mentioned, most Central Coast municipalities have small staffs and very limited financial resources. They and the construction industry face numerous regulations and requirements from a wide variety of government agencies, all with important and legitimate public benefit goals. Neither the governments nor the development community can resolve the often conflicting demands local, state and federal agencies impose.

San Luis Obispo County is preparing to adopt “smart” or “strategic” growth goals into its General Plan, pushing more intense residential development into urban areas at the same time as the stormwater plans over-reliance on hydromodification/low impact development seems likely to make such development prohibitively expensive in places like Morro Bay. Similarly, making urban infill harder to achieve by over-emphasizing increased urban infiltration will leave cities like Morro Bay and San Luis Obispo County unable to meet green house gas reduction goals mandated by AB 32 and part of the efforts to address global climate change.

We recommend that Morro Bay’s plan include a clearly worded BMP that recognizes that maximizing stormwater management improvement must be balanced against community need for affordable housing, reduced air pollution, market-place economics, municipal economics, and local public acceptance.

Response: Water Board staff acknowledges that in determining compliance with the MEP standard, Water Board staff must take into account a range of issues potentially constraining local governments’ choices about land use development. Water Board staff also recognizes that cities are influenced by State requirements for affordable housing as well as State mandates and policies affecting, among other things, transportation infrastructure, greenhouse gas emissions, water supply, and public safety. Water Board staff understands these requirements affect development patterns. For this reason, Water Board staff has asked local agencies subject to the Phase II stormwater regulations to engage in long-term watershed planning, to provide a context for weighing the multiple objectives affecting development patterns. At the same time, Water Board staff has refrained from dictating specific applicability requirements, and instead, has provided the opportunity for MS4s to develop applicability criteria that strike an appropriate balance of social, economic, and environmental goals.

Table 2 presents examples of applicability criteria that might achieve this balance. These examples include a range of well-defined criteria by which a city could determine applicability of hydromodification control and/or water quality treatment requirements. These examples begin by defining project categories, then identify size thresholds and specific information required to exempt a project from hydromodification and/or water quality treatment requirements.

Water Board staff acknowledges that no stormwater management strategy, or suite of approaches, has been identified that can achieve full hydrologic mitigation for the impacts of urbanization. While recognizing the challenges of applying LID in certain circumstances, for example in poorly drained soils, staff nonetheless considers LID to represent a more comprehensive effort at mitigating the hydrologic impacts of urbanization.

Water Board staff subscribes to the following “Hydrologic Philosophy of Smart Growth,” as presented by Richard McCuen.¹ As this philosophy and its associated seven principles directly parallel the guiding principle of LID, to mimic the natural hydrograph, Water Board staff finds that LID and hydromodification control are fundamentally consistent with smart growth strategies.

Hydrologic Philosophy of Smart Growth:

¹ For further explanation refer to: Richard H. McCuen, Smart Growth: Hydrologic Perspective, *Journal of Professional Issues in Engineering, Education and Practice*, Vol. 129, No. 3, July 1, 2003. ©ASCE, ISSN 1052-3928/2003/3-151–154.

If society is to control urban sprawl, then guiding principles of smart growth are needed. These principles will form the basis for a philosophy of smart growth. Seven principles related to hydrologic aspects of smart growth include:

Principle 1: Control Runoff at Microwatershed Level

Principle 2: Consider Hydrologic Processes in Microwatershed Layout

Principle 3: Maintain First-Order Receiving Streams

Principle 4: Maintain Vegetated Buffer Zones

Principle 5: Control Spatial Pattern of Hydrologic Storage

Principle 6: Control Upland Flow Velocities

Principle 7: Control Temporal Characteristics of Runoff

Water Board staff supports the commenter's recommendation that the City should strive for a balanced community outcome when developing hydromodification control and applicability criteria, but Water Board staff is not requiring the City add a BMP to commit to achieving this.

Comment: Countywide Technical Advisory Committee Needed: As we have mentioned previously and now believe the Water Board concurred Oct. 17, the Water Board should encourage and assist the various jurisdictions of San Luis Obispo County in the formation of a Technical Advisory Committee to share information and advice on preparing stormwater management plans, hydromodification criteria and plans, and LID BMPs. San Diego County is successfully using such an approach. The result should be hydromodification criteria, plans, and BMPs that are feasible, practical, and usable, and achieve the intended objectives of the MS4 Order.

We recommend specifying in Morro Bay's plan that the Water Board staff will assist in creating and will participate in a Countywide Technical Advisory Committee.

Response: The City of Morro Bay, along with several other local communities, is part of the San Luis Obispo County Partners for Water Quality. This group is currently forming a technical advisory committee to support development of hydromodification control criteria. Water Board staff will be involved in this effort. Water Board staff encourages the Homebuilder's Association to get involved in this committee and help local communities work through its perceived challenges to developing hydromodification control criteria.

Table 2: Examples of Applicability Criteria for Stormwater Requirements²**Regulated Projects are Defined in the Following Categories:**Special Land Use Categories

(a) New Development or redevelopment projects that fall into one of the categories listed below and that create and/or replace 10,000 square feet or more of impervious surface (collectively over the entire project site). This category includes development projects on public or private land, which fall under the planning and building authority of the Permittees:

- (i) Auto service facilities, described by the following Standard Industrial Classification (SIC) Codes: 5013, 5014, 5541, 7532-7534, and 7536-7539;
- (ii) Retail gasoline outlets;
- (iii) Restaurants (SIC Code 5812); or
- (iv) Parking lots that are stand-alone or part of any other development project.

(b) For redevelopment projects, specific exclusions to this category are:

- Interior remodels;
- Routine maintenance or repair such as:
 - roof or exterior wall surface replacement,
 - pavement resurfacing within the existing footprint.

Other Development Projects

New development projects that create 10,000 square feet or more of impervious surface (collectively over the entire project site) including commercial, industrial, residential housing subdivisions (i.e., detached single-family home subdivisions, multi-family attached subdivisions (town homes), condominiums, and apartments), mixed-use, and public projects. This category includes development projects on public or private land, which fall under the planning and building authority of the Permittees.

Other Redevelopment Projects

Redevelopment projects that create and/or replace 10,000 square feet or more of impervious surface (collectively over the entire project site) including commercial, industrial, residential housing subdivisions (i.e., detached single-family home subdivisions, multi-family attached subdivisions (town homes), condominiums, and apartments), mixed-use, and public projects. Redevelopment is any land-disturbing activity that results in the creation, addition, or replacement of exterior impervious surface area on a previously developed site. This category includes redevelopment projects on public or private land, which fall under the planning and building authority of the Permittees. Specific exclusions to this category are:

- Interior remodels;

² This information is provided for purposes of example only are derived from the San Francisco Bay Regional Water Quality Control Board Draft Municipal Regional Stormwater NPDES Permit, Tentative Order R2-2008-XXXX. <http://www.waterboards.ca.gov/sanfranciscobay/mrp.shtml>

- Routine maintenance or repair such as:
 - roof or exterior wall surface replacement,
 - pavement resurfacing within the existing footprint

New Road Projects

Any of the following that create 10,000 square feet or more of newly constructed contiguous impervious surface: streets, roads, or highways; contiguous paved surfaces installed as part of a street, road or highway project (including contiguous sidewalks and bicycle lanes); or impervious trails that are greater than 10 feet wide or are creek-side (within 50 feet of the top of bank). This category includes new road projects that fall under the building and planning authority of the Permittees and excludes Caltrans new road projects.

Road Expansion or Rehabilitation Projects

Arterial streets or roads that are:

(a) Rehabilitated down to the gravel base (i.e., roads or pavement that are demolished and rebuilt from the gravel base up); (b) Widened with additional lanes, sidewalks, or medians; or (c) Replaced, and that create and/or replace 10,000 square feet or more of contiguous impervious surface.

Exemption from Installing Hydraulically Sized Stormwater Treatment Systems:

The following Regulated New Infill or Redevelopment Projects may provide alternative compliance with the permit by Maximizing Site Design Treatment Controls³ to provide as much on-site stormwater treatment as possible:

- a Projects that meet USEPA’s Brownfield Sites definition found in Public Law 107-118 (H.R. 2869) – “Small Business Liability Relief and Brownfields Revitalization Act” signed into law January 11, 2002, and that receive subsidy or similar benefits under a program designed to redevelop such sites;
- b Low-income housing as defined under Government Code section 65589.5(h)(3), but limited to, the actual low-income portion, or low income impervious area percentage, of the project;
- c Senior citizen housing development, as defined under California Civil Code section 51.11(b)(4); or
- d Transit-Oriented Development⁴ projects.

³ Maximizing Site Design Treatment Controls is defined as including a minimum of one of the following specific site design and/or treatment measures:

- Diverting roof runoff to vegetated areas before discharge to storm drain;
- Directing surface runoff to vegetated areas before discharge to storm drain;
- Installing landscaped-based stormwater treatment measures (non-hydraulically-sized) such as tree wells or bioretention gardens; or
- Installing prefabricated/proprietary stormwater treatment controls (non-hydraulically-sized).

⁴ Transit-Oriented Development — Any development project that will be located within ½ mile of a transit station and will meet one of the criteria listed below. A transit station is defined as a rail or light-rail station, ferry terminal, bus hub, or bus transfer station. A bus hub or bus transfer

All other Regulated New Infill or Redevelopment Projects may provide alternative compliance by satisfying one or more of the following requirements after minimizing the new and/or replaced impervious surface on-site:

- a. Installing, operating and maintaining Equivalent Offsite Treatment⁵ at an off-site project in the same watershed;
- b. Contributing Equivalent Funds⁶ to a Regional Project.⁷

Applicability of Hydromodification Management Standard:

The Hydromodification Management (HM) Standard shall apply in all areas except where a project:

- discharges stormwater runoff into creeks or storm drains that are concrete-lined or significantly hardened (e.g., with rip-rap, sackrete) downstream to their outfall in San Francisco Bay;
- discharges to an underground storm drain discharging to the Bay; or
- is located in a highly developed watershed.⁸

However, plans to restore a creek reach may reintroduce the applicability of HM controls, and would need to be addressed in the HM Plan.

station is required to have an intersection of three or more bus routes that are in service 16 hours a day, with a minimum route frequency of 15 minutes during the peak hours of 7 am to 10 am (inclusive) and 3 pm to 7 pm (inclusive).

- i. A housing or mixed-use development project with a minimum density of 30 residential units per acre and that provides no more than one parking space per residential unit; or
- ii. A commercial development project with a minimum floor area ratio (FAR) of three and that provides:
 - (a) For restaurants, no more than 3 parking spaces per 1000 square feet;
 - (b) For offices, no more than 1.25 parking spaces per 1000 square feet;
 - (c) For retail, no more than 2.0 parking spaces for 1000 square feet. Sharing of parking between uses within these maximums is allowed. Carshare and bicycle parking spaces are not subject to these maximums.

⁵ Equivalent Offsite Treatment—Hydraulically-sized treatment (in accordance with the permit) and associated operation and maintenance of:

1. An equal area of new and/or replaced impervious surface of similar land uses as that created by the Regulated Project;
2. An equivalent amount of pollutant loading as that created by the Regulated Project; or
3. An equivalent quantity of runoff from similar land uses as that created by the Regulated Project.

⁶ Equivalent Funds—Monetary amount necessary to provide both:

1. Hydraulically-sized treatment (in accordance with the Permit) of:
 - a. An equal area of new and/or replaced impervious surface of similar land uses as that created by the Regulated Project;
 - b. An equivalent amount of pollutant loading as that created by the Regulated Project; or
 - c. An equivalent quantity of runoff from similar land uses as that created by the Regulated Project; and,
2. A proportional share of the operation and maintenance costs of the Regional Project.

⁷ Regional Project—A regional or municipal stormwater treatment facility that discharges into the same watershed as does the Regulated Project.

⁸ Within the context of these requirements, “highly developed watersheds” refers to catchments or subcatchments that are 65% impervious or more.

Impracticability Provision:

Where conditions (e.g., extreme space limitations) prevent a project from meeting the HM Standard for a reasonable cost, *and* where the project's runoff cannot be directed to a regional HM control within a reasonable time frame, *and* where an in-stream measure is not practicable, the project shall use (1) site design for hydrologic source control, *and* (2) stormwater treatment measures that collectively minimize, slow, and detain runoff to the maximum extent practicable.

In addition, if the cost of providing site design for hydrologic source control and treatment measures to the maximum extent practicable does not exceed 2% of the project cost (as defined in "a." below), the project proponent shall provide for or contribute financially to an alternative HM project as set forth below:

- a. *Reasonable cost:* To show that the HM Standard cannot be met at a reasonable cost, the project proponent must demonstrate that the total cost to comply with both the HM Standard and the permit's treatment requirement exceeds 2 percent of the project construction cost, excluding land costs. Costs of HM and treatment control measures shall not include land costs, soil disposal fees, hauling, contaminated soil testing, mitigation, disposal, or other normal site enhancement costs such as landscaping or grading that are required for other development purposes.
- b. *Regional HM controls:* A regional HM control shall be considered available if there is a planned location for the regional HM control and if an appropriate funding mechanism for a regional HM control is in place by the time of project construction.
- c. *In-stream measures practicability:* In-stream measures shall be considered practicable when an in-stream measure for the project's watershed is planned and an appropriate funding mechanism for an in-stream measure is in place by the time of project construction.
- d. *Financial contribution to an alternative HM project:* The difference between 2 percent of the project construction costs and the cost of the treatment measures at the site (both costs as described in Section 2.a of this Attachment) shall be contributed to an alternative HM project, such as a stormwater treatment retrofit, HM retrofit, regional HM control, or in-stream measure. Preference shall be given to projects discharging, in this order, to the same tributary, mainstem, watershed, then in the same municipality or county.