Los Angeles Water Board Response to Specific Written Comments by NRDC, LA Waterkeeper, and Heal the Bay, dated August 31, 2015, on the Upper San Gabriel River Draft EWMP

Comment No.	NRDC, LA Waterkeeper, and Heal the Bay Comment	Los Angeles Water Board Response
III.A	A. The Proposed Financial Strategies are Inadequate The 2012 Permit requires that Permittees participating in an EWMP maximize the effectiveness of funding, and "[e]nsure that a financial strategy is in place" to implement the pollution control measures identified by the RAA and EWMP process. (2012 Permit, at VI.C.1.g.vi., VI.C.1.g.ix.) This Permit provision underpins the State Board's rationale for approving the EWMP process. In its Final Order upholding the 2012 Permit including its EWMP provisions, the State Board concluded that "the WMP/EWMP approach is a clearly defined, implementable, and enforceable alternative to the receiving water limitations provisions and that the alternative provides Permittees an ambitious, yet achievable, path forward for steady and efficient progress toward achievement of those limitations while remaining in compliance with the terms of the permit." However, without an adequate financial strategy to properly execute the BMPs proposed by the EWMPs, compliance with RWLs and TMDL-specific limitations will not be ensured. Failure to demonstrate a real financial commitment for implementing the EWMP, therefore, goes against the State Board's clearly stated goal of the EWMP approach – that is, to achieve compliance with water quality standards.	These comments on the proposed financial strategy were considered and reflected as appropriate in the Los Angeles Water Board's October 16, 2015 draft EWMP Review Letter (hereafter, Review Letter). The Upper San Gabriel River Group (hereafter, USGR Group) in Section 7 and Appendix E Section 7 of the revised EWMP, adequately addressed the Board's comments in the Review Letter. Specifically, the USGR Group addressed the following, among other aspects of a funding strategy: Priorities for obtaining funding that includes the selection of financing strategies that best fit the Groups' needs; Timelines for refining funding strategies for each Permittee within the Group with consideration of the milestones indicated in the EWMP; Development and integration of a stormwater Capital Improvement Plan with other street/sewer/water CIPs. The commenters state that, at a minimum, the Financial Strategy section must describe in detail certain elements. However, the permit provision stating that Permittees participating in an EWMP must "ensure that a financial strategy is in place" does not require the degree of specificity asserted by the commenters. Nevertheless, the Group has described the elements identified by the commenters, as indicated below. Selection and prioritization of the multiple financial approaches identified;

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	In all of the four EWMPs that Environmental Groups reviewed, Permittees' cost estimates for implementing the EWMP are substantial and orders of magnitude higher than have previously been committed by the agencies to their MS4 programs. For example, for the ULAR EWMP Group, the capital costs to address Water Quality Priorities by 2037 is estimated at over \$6.0 billion, with total operations and maintenance costs exceeding \$210 million per year once fully implemented. For the USGR EWMP Group, the total cost for implementation of the EWMP through 2040, including operation and maintenance, is approximately \$2.14 billion. For the NSMBCW EWMP Group, the estimated total capital and operation and maintenance costs for proposed structural BMPs over 20 years are \$54.2 million. Lastly, for the Beach Cities EWMP Group, the total 20-year life-cycle costs to implement each structural BMP plus the associated annual operation and maintenance costs over 20 years are \$150 million. Currently, none of these four watershed groups have sufficient funds or dedicated funding streams to construct the projects proposed in their EWMPs; thus, all four EWMP Groups must pursue additional stormwater funding from multiple sources in order to ensure that the additional costs of compliance with the 2012 Permit as a result of EWMP implementation can be covered. Unfortunately, none of the EWMPs that Environmental Groups reviewed provides a funding roadmap, let alone demonstrates a commitment to	 a. The Group has selected funding priorities by Permittee in Section 7.3.6 of the revised EWMP. 2) Identification of current funding streams, for each of the EWMP Group Members, sufficient to implement existing stormwater projects; a. The Group identified its current funding streams, in terms of each Permittee's annual budget in Section 7.3.5. 3) An articulation of the relative financial responsibility and contribution of each of the EWMP Group Members to EWMP implementation, and the Memorandum of Understandings or other legal documents memorializing this organization; a. The Group articulated each Permittee's relative financial responsibility in the EWMP. For structural BMPs, see Section 7.2 as well as Tables 7-2 to 7-8 and Figures 7-2 to 7-3. 4) An identification of the available grants, application timelines and requirements, and the lead EWMP Group Member(s) that will undertake and coordinate the grantwriting efforts; a. The Group identified potential funding sources in Section 7.3, and indicated which sources each Permittee(s) was planning to pursue in Section 7.3.6. 5) Model legislation or ordinance, and a timeline for seeking municipal stormwater fees, if any; a. A number of the Permittees in the Group already have developed model green streets policies, to help support implementation of distributed projects throughout the EWMP Area. Additionally, recently the Board of Supervisors adopted a motion calling for development of a Water Resiliency Plan to increase stormwater capture and improve water

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	securing funds, to implement the proposed control measures as required for achieving Permit compliance. While the EWMPs identify, to varying degrees, the potential funding sources/projects needed to achieve compliance with RWLs and TMDL-specific limitations, without an actual step-by-step plan or strategy to carry out the identified financial projects, however, the EWMPs are merely paper exercises. For example, the potential funding sources identified in the EWMPs generally included grants, bonds, State Revolving Funds, interagency partnerships, local funding opportunities, legislative or policy changes, and public private partnerships. A couple of the EWMPs also discuss, in general terms, barriers associated with some of the funding sources and ways those barriers might be overcome. However, all of the Financial Strategy sections reviewed end at the identification of these sources and barriers. To the extent any type of "strategy" is actually discussed, the draft EWMPs recognize the need for interagency collaboration and a coordinated, regional approach, but this need is merely described in a vague, cursory manner and again, with no specific details on how to accomplish the necessary interagency and regional collaboration.	quality. A task in the development of this plan is to evaluate and recommend the most appropriate funding mechanism to implement the plan. 6) A funding schedule, based on the interim and final compliance deadlines in the 2012 Permit, which sets forth the timeline for securing grants, loans, stormwater fees, or other funding mechanisms that will ensure funding is in place to timely implement the EWMP measures; and a. A schedule of required funding is laid out in Figure 7-1 and Tables 7-3 to 7-9 based on the compliance deadlines and the project implementation schedules. 7) A demonstration that the collective mix of funding sources identified in the Financial Strategy is sufficient to implement all of the proposed control measures in the EWMPs and consistent with the schedules established in the EWMPs. a. The revised EWMP states that the USGR Group has sufficient funds to implement the Permit through the current Permit cycle. The Group has identified a wide mix of potential funding sources that could be used to implement the proposed control measures. Establishment of some of these funding sources is a work-in-progress, while funding from other sources is readily available. The Group is pursuing both immediately available
	Mere identification of potential funding sources, with no details whatsoever regarding the specific action steps that Permittees will need to take in order to carry out some of the funding strategies proposed, does <i>not</i> constitute a sound financial strategy sufficient to meet the Permit requirement. In order for Permittees to provide the level of	funding and longer term funding sources. Regarding the commenters' concerns that there is a "failure to demonstrate a real financial commitment," the Los Angeles Water Board has made clear that once schedules are set in the EWMP, financial constraints cannot be used to justify a missed deadline. While Permittees will likely continue to refine their financial strategy and work to establish certain elements, as is appropriate,

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	assurance that the EWMPs will ultimately achieve compliance with water quality standards as required by the State Board, the Financial Strategy element of the programs must <i>actually</i> be "in place" before the Regional Board can approve the EWMPs. At a minimum, the Financial Strategy section must describe in detail the following elements:	the interim and final implementation milestones in the EWMP provide sufficient accountability relative to the Los Angeles Water Board's and State Water Board's goal that implementation of the EWMPs will effectively address MS4 discharges to achieve compliance with water quality-based effluent limitations and receiving water limitations. Any extensions to the schedules in the EWMPs must be justified and approved by the Los Angeles Water Board.
	 Selection and prioritization of the multiple financial approaches identified; Identification of current funding streams, for each of the EWMP Group Members, sufficient to implement existing stormwater projects; An articulation of the relative financial responsibility and contribution of each of the EWMP Group Members to EWMP implementation, and the Memorandum of Understandings or other legal documents memorializing this organization; An identification of the available grants, application timelines and requirements, and the lead EWMP Group Member(s) that will undertake and coordinate the grant-writing efforts; Model legislation or ordinance, and a timeline for seeking municipal stormwater fees, if any; A funding schedule, based on the interim and final compliance deadlines in the 2012 Permit, which sets forth the timeline for securing grants, loans, stormwater fees, or 	Further, it must be noted that the Los Angeles Water Board recognizes the sizable investment that Permittees will need to comply with the EWMPs and has committed to supporting, as it is able, Permittees' efforts to secure funding. Since submittal of the draft EWMPs, and in response to concerns raised regarding the cost of EWMP implementation, the Board has held and invited Permittees and other stakeholders to attend two additional workshops on the proposed EWMPs on November 5, 2015 and March 3, 2016. The costs of EWMP implementation were a central topic of both workshops. In particular, the November 2015 workshop included a staff presentation on cost considerations and a focused "funding strategies panel" that included presentations from the authors of the <i>Stormwater Funding Options</i> report prepared for the California Contract Cities Association and the League of California Cities (Los Angeles County Division); the City of Los Angeles; Heal the Bay; and the State Water Board Office of Chief Counsel. Public comments were also heard during this workshop. The Los Angeles Water Board also coordinated with USEPA Region IX to host an "East Coast/West Coast Knowledge Exchange" on local stormwater financing strategies in February 2015, which was attended by many Permittees participating in an EWMP.

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	funding is in place to timely implement the EWMP measures; and 7) A demonstration that the collective mix of funding sources identified in the Financial Strategy is sufficient to implement all of the proposed control measures in the EWMPs and consistent with the schedules established in the EWMPs.	
	The funding strategy aspect of the EWMP is one of, if not, <i>the most</i> important piece of the program because without an adequate financial strategy and commitment in place, it will be impossible for Permittees to successfully implement their EWMPs and thus the entire program development process would be a futile exercise and would only result in the delay of achieving ultimate compliance with water quality standards.	
III.B.i	B. Proposed Compliance Schedules are in Violation of State or Federal Law or are Otherwise Unreasonably Long i. Pollutants Subject to an Established TMDL In several instances, Permittees incorrectly incorporate interim milestones and final compliance deadlines for certain WBPCs addressed by TMDLs. For WBPCs addressed by TMDLs, the 2012 Permit requires the Permittees to incorporate the compliance schedules found in Attachments L through R of the Permit into the EWMP, and where necessary, develop interim milestones and dates for their achievement. (2012 Permit, at VI.C.5.c.) A Permittee participating in an EWMP that does not thereafter comply with the compliance schedule must instead demonstrate compliance with its	The compliance schedules set out in the USGR EWMP for TMDLs implementing California Toxics Rule (CTR) criteria, such as metals, do not violate state or federal law. The commenters have previously raised this assertion regarding the legality of compliance schedules for CTR-based pollutants to both the Los Angeles Water Board and the State Water Board. The Los Angeles Water Board responded to this comment during the Los Angeles Water Board's proceedings to adopt the permit and in response to the petition filed by the Environmental Groups with the State Water Board. In Order WQ 2015-0075, the State Water Board upheld the Los Angeles Water Board's inclusion of compliance schedules in the permit and stated the following with regards to CTR pollutants – "We also note that the State Water Board's Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2005) (State Implementation Policy) and the CTR itself

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	interim water quality-based effluent limitations (WQBELs) and/or RWLs of the Permit. (Id. at VI.E.2.d.i(4)(c).) The ULAR EWMP sets interim and final	(40 C.F.R. § 131.38(e)) restrict the scope of compliance schedules for effluent limitations addressing the discharge of toxic pollutants; however the policy does not apply to storm water discharges. (State Implementation Policy, p.3, fn.1.)."
	compliance dates for the LAR Metals TMDL and Harbors Toxics TMDL based on their preestablished implementation schedules. The pollutants addressed by these TMDLs, however, are regulated by the California Toxics Rule (CTR), which establishes water quality standards for priority toxic pollutants in California's inland surface waters and enclosed bays and estuaries. The CTR also states that the compliance schedules for the regulated pollutants cannot extend for more than five years from the date of permit issuance; however, the provisions authorizing compliance schedules in the CTR expired on May 18, 2005. This means that permits issued after that date may not incorporate compliance schedules for pollutants regulated by the CTR. As a result, EWMPs pursuant to the 2012 Permit may not incorporate compliance schedules for CTR-regulated pollutants, therefore the interim and final compliance deadlines for LAR Metals TMDL and Harbor Toxics TMDLs established by the ULAR EWMP are illegal because they violate the CTR.	The compliance schedules in the USGR EWMP are consistent with the TMDL implementation schedules set forth in the Los Angeles Water Board's Basin Plan and the compliance schedules set forth in the Los Angeles County MS4 Permit. The EWMP also contains interim requirements consistent with the permit requirements, where appropriate.
	Permittees of the ULAR EWMP Group must instead demonstrate immediate compliance with the pollutants addressed by these TMDLs.	
	For the USGR EMWP, the same situation exists. The USGR EWMP illegally incorporates interim and final compliance deadlines for SGR Metals and	

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	Impaired Tributaries Metals and Selenium TMDL	
	and DC and Greater LA and LB Harbor Water	
	Toxic Pollutants TMDL because the pollutants	
	covered by these TMDLs are governed by the	
	CTR. Because these TMDLs were established	
	based on CTR criteria, the USGR EWMP (which is	
	being developed pursuant to a permit issued after	
	May 18, 2005) may not incorporate their	
	implementation schedules, and instead, the	
	Permittees must demonstrate immediate	
	compliance with these CTR-regulated pollutants.	
	In the Beach Cities EWMP, for the Dominguez	
	Channel (DC) watershed, toxicity, copper, lead,	
	and zinc are all addressed by a Regional Board-	
	established TMDL and therefore their	
	corresponding compliance schedules are	
	incorporated into EWMP. However, copper, lead,	
	and zinc are pollutants covered by the CTR,	
	therefore their compliance schedules are illegal.	
III.B.ii	B. Proposed Compliance Schedules are in	This comment is not applicable to the USGR EWMP.
	Violation of State or Federal Law or are	
	Otherwise Unreasonably Long	
	ii. Pollutants in the Same Class as Those	
	Addressed in a TMDL	
	In several instances, Permittees establish incorrect	
	milestones and final compliance dates for WBPCs not addressed by a TMDL, but where the relevant	
	pollutant is in the same class as a TMDL pollutant	
	and for which the water body is identified as	
	impaired on the State Board's CWA section 303(d)	
	List. For these types of pollutants, the Permit	
	requires the EWMP to incorporate a schedule	
	consistent with the TMDL schedule for a pollutant	

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	of the same class. (Id. at Part VI.C.a.i.)	
No.		
	ULAR EWMP does not commit to specific BMP	
	types. Design of flow-through BMPs would likely be very different if the target pollutant is bacteria versus bacteria and dioxins.	
	In the Beach Cities EWMP, indicator bacteria has been defined as a Category 2 WMPC for the DC watershed. The 2012 Permit defines Category 2 pollutants as those "[p]ollutants for which data	

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	indicate water quality impairment in the receiving water according to the State's Water Quality	
	Control Policy for Developing California's Clean	
	Water Act Section 303(d) List (State Listing Policy)	
	and for which MS4 discharges may be causing or	
	contributing to the impairment." (Id. at	
	VI.C.5.a.ii(2).) The final compliance date for dry	
	weather bacteria (year 2025) was selected to be	
	consistent with the draft TMDL for indicator	
	bacteria in the SGR Estuary and Tributaries, and	
	the final compliance date for wet weather bacteria	
	(year 2032) was selected to be consistent with the	
	DC and Greater LA and Long Beach Harbor Toxic	
	Pollutants TMDL. However, selecting compliance schedules from TMDLs from other watersheds, or	
	for pollutants of different classes, is inconsistent	
	with the requirements of the Permit. The DC	
	watershed discharges to Los Angeles Harbor,	
	impacting the inner channel, and the San Pedro	
	and Long Beach area beaches. Thus, a more	
	appropriate bacteria TMDL compliance schedule	
	for consideration in the DC watershed is the	
	implementation schedule for the Los Angeles	
	Harbor Bacteria TMDL, the Long Beach City	
	Beaches and Los Angeles River Estuary Bacteria	
	TMDL, and/or the Santa Monica Bay Beaches	
W D :::	Bacteria TMDL.	
III.B.iii	B. Proposed Compliance Schedules are in Violation of State or Federal Law or are	Comments were considered and reflected if appropriate in the Los
	Otherwise Unreasonably Long	Angeles Water Board's Review Letter.
	iii. Pollutants Not in the Same Class as Those	In response to the Board's comments, in the revised EWMP, the
	Addressed in a TMDL	milestone for bacteria was changed to 2036, consistent with the
	In at least one instance, Permittees establish an	recently adopted SGR Bacteria TMDL, which establishes a 20-
	incorrect compliance schedule for WBPCs not	year implementation schedule.

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1101	addressed by a TMDL, and not in the same class	
	as a TMDL pollutant but for which the water body is	
	identified as impaired on the State Board's CWA	
	section 303(d) List. For these types of pollutants, if	
	retention of the 85th percentile, 24-hour storm	
	event is not feasible, the EWMP must either have a	
	final compliance deadline within the 5-year permit	
	term or Permittees are expected to initiate	
	development of a stakeholder-proposed TMDL and	
	incorporate a compliance schedule consistent with	
	the TMDL. (Id. at VI.C.2.a.ii(5).)	
	The USGR EWMP states that indicator organisms	
	(bacteria) are the sole Group B WBPC. The USGR	
	EWMP defines Group B pollutants as those	
	"pollutants that are not in the same class as those	
	addressed in a TMDL for the watershed, but for	
	which the water body is identified as impaired on	
	the 303(d) List as of December 28, 2012." The	
	USGR EWMP then proposes a 25-year schedule	
	for bacteria compliance in order to mimic the	
	scheduling adopted in TMDLs developed for other	
	areas of the Basin, namely the Los Angeles River	
	Bacteria TMDL. However, according to Permit	
	requirements, the USGR EWMP Group must either	
	propose a final compliance date within the 5-year	
	term of the Permit, or initiate a stakeholder- proposed TMDL and incorporate the	
	implementation schedule for that TMDL. Because	
	the Regional Board recently approved a bacteria	
	TMDL covering the SGR Watershed, at a	
	minimum, the USGR EWMP schedule for bacteria	
	should be consistent with the Regional Board-	
	adopted TMDL, which proposes a 20-year	

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	schedule for compliance, as opposed to the currently proposed schedule of 25 years from the Los Angeles River Bacteria TMDL.	
III.B.iv	B. Proposed Compliance Schedules are in Violation of State or Federal Law or are Otherwise Unreasonably Long iv. Exceedances of RWLs Not Addressed by a TMDL Lastly, for exceedances of RWLs not addressed by a TMDL, the EWMP must include milestones based on measurable criteria or indicators and a schedule for achieving the milestones, and demonstrate that the RWLs will be achieved "as soon as possible." (Id. at VI.C. 5.c. iii.) The time between interim dates shall not exceed one year. Milestones shall relate to a specific water quality endpoint and dates shall relate to taking a specific action or meeting a milestone. (Id. at VI.C.2.a.iii(2)(c).) For the ULAR EWMP, interim and final wet weather Category 3 WBPCs milestones are January 11, 2024 and January 11, 2028, respectively. The ULAR EWMP defines Category 3 pollutants are defined as those "pollutants with observed exceedances that are too infrequent to be listed, and parameters that are not considered typical pollutants." Permittees of the ULAR EWMP do not provide any explanation for why and how this schedule meets the "as soon as possible" standard; at the very least, some level of analysis should be provided to show how Permittees fail to provide interim milestones, in violation of Permit	Comment considered. However, a TMDL that is similar in addressing pollutants such as sulfate, chloride, alpha-endosulfan, MBAS, and lindane is the Harbor Toxics TMDL, which has a longer implementation schedule (2032) compared to the SGR Metals TMDL implementation schedule (2028). Considering that the proposed compliance schedule in the USGR EWMP is shorter than the Harbor Toxics TMDL compliance schedule, and the EWMP approach is based on a volume capture approach with zinc and E. coli as limiting pollutants, aligning the compliance schedule for these Category C pollutants with that of the SGR Metals TMDL is acceptable.

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	requirements.	
	The USGR EWMP concludes that most of the WBPCs in Group C are of the same class as the SGR Metals TMDL WBPCs, therefore it is proposed that the Group C WBPCs be linked to compliance schedules established in the SGR Metals TMDL Implementation Plan. The final compliance deadline for SGR Metals TMDL is 2032. The USGR EWMP defines Group C pollutants as those "pollutants for which there are exceedances of RWLs, but for which the water body is not identified as impaired on the 303(d) List as of December 28, 2012." The Group C pollutants identified by the USGR EWMP are: sulfate, chloride, alpha-endosulfan, MBAS, and lindane. However, fate and transport characteristics of these pollutants are different from that of metals, and potential control measures may be different, therefore these should not be categorized as being in the same class of pollutants as those addressed in the SGR Metals TMDL. Therefore, Permittees' reliance on the implementation schedule for the SGR Metals	
	TMDL for Group C pollutants is misplaced.	
III.C	C. Permittees' Use of the Exceedance Volume Approach is Flawed For the ULAR and USGR EWMPs, Permittees use a concept called "Exceedance Volume" to establish	Comments were considered and reflected in the Los Angeles Water Board's Review Letter Enclosure 2 (RAA comments), as appropriate.
	targets based on BMP capacity rather than strictly BMP load reduction. The Exceedance Volume was chosen based on an analysis of the 90th percentile 24-hour storm volume over a 10-year analysis period. The Exceedance Volume is the portion of	The USGR Group in Appendix C-9 of the revised EWMP adequately addressed comments in the Review Letter Enclosure 2 where a bar graph was added comparing 90 th percentile conditions for total zinc with the Exceedance Volume (EV) approach.

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	the storm volume associated with concentrations	
	exceeding WQBELs. Environmental Groups	
	acknowledge that there are benefits to the Exceedance Volume metric, in particular with	
	bacteria where concentrations are known to vary	
	widely; however, this approach is nevertheless	
	problematic for several reasons detailed below.	
	First, in parts of the EWMPs, for example for the	
	interim targets, load reductions are used as a	
	measure of progress. It is assumed that these load	
	reductions are based on the load produced from	
	the Exceedance Volume, but this is problematic because as the EWMPs acknowledge,	
	concentrations of pollutants may vary significantly	
	from one storm to another. In other words, the 90th	
	percentile storm volume may not represent the	
	90th percentile load.	
	This issue is of particular concern since the	
	EWMPs define the compliance strategy in terms of	
	volumes of stormwater and non-stormwater to be	
	managed rather than by specific project lists, and thus allow for a tremendous amount of flexibility	
	with regards to project location and project type. As	
	the two EWMPs note, "the identified BMPs (and	
	BMP preferences) will likely evolve over the course	
	of adaptive management" The EWMPs note that	
	as projects change, the EWMP Groups will	
	demonstrate equivalency between projects. While	
	demonstrating this equivalency is critical to the	
	success of the Exceedance Volume approach, the	
	EWMPs fall short of providing precise details on how this will be accomplished. Of particular	
	now this will be accomplished. Of particular	

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	concern are situations where the actual BMP type is switched, for instance, from a retention-type BMP to a flow-through BMP. Establishing equivalency in this case necessitates some translation from volume managed to actual load reduced, but as noted above, it is not clear how this would be accomplished and whether the load associated with the Exceedance Volume is appropriate.	
	Further, and importantly, the Exceedance Volume approach fails to take into account differences in loading from different land uses – load reductions from BMPs tributary to primarily low density residential areas will not be equivalent to load reductions from BMPs tributary to primarily industrial land uses, for instance, regardless of whether their actual volumetric capacities are identical. If specific projects in specific locations were outlined in the EWMPs, this may not be an issue; however, as noted above, both EWMPs instead set targets of Exceedance Volume managed rather than specific project lists. Finally, because the EWMPs use the Exceedance Volume approach to set metrics for compliance rather than detailing specific projects, it is impossible to evaluate error in the proposed compliance strategy and thereby establish the degree of confidence in the proposed plans to achieve compliance with water quality standards.	
III.D	D. The Implementation Strategy Relies Too Heavily on the Adaptive Management Process,	Comment considered. The USGR EWMP identifies specific signature projects that the Group has committed to implement.
	Which Itself Relies on Flawed and Inadequate Monitoring Programs	Furthermore, Part VI.C.8 of the Los Angeles County MS4 Permit

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	Due to the fact that the ULAR and USGR EWMPs use the Exceedance Volume approach to establish a "recipe for compliance" rather than name specific projects that will be implemented, the robustness of the adaptive management process is critical to success of the approach. As noted in the previous section, a detailed methodology must be developed to establish equivalency between projects selected and volume targets, particularly in cases where flow-through, rather than retention BMPs are proposed. The adaptive management sections in both EWMPs, however, do not come close to providing the level of detail necessary to achieve these goals. These sections merely describe the need to show equivalency, while failing to actually describe how this would be accomplished. Another issue that is significantly related to the adaptive management process and critical to its success is the strength and adequacy of the Coordinated Integrated Monitoring Programs (CIMPs). In addition to the EWMPs, Permittees also develop CIMPs to collect water quality data and measure the effectiveness of the EWMPs. The CIMPs, therefore, is the ultimate driver for Permittees' decisions regarding future adaptive management of their EWMPs. However, as Environmental Groups have pointed out previously, the draft CIMPs developed by the EWMP Groups suffered from a litany of flaws. Unfortunately, Permittees' revised CIMPs failed to address most	specifies provisions for the Adaptive Management process. Adaptive management is an accepted process that is used in many fields, including watershed and stormwater management. The Los Angeles Water Board has also provided additional direction to EWMP groups on the adaptive management process and the Board's expectations for the scope of this periodic program review and updating process. The Los Angeles Water Board found that the level of reliance on adaptive management in the Group's EWMP is appropriate given the time span for program implementation. Additionally, the Los Angeles Water Board disagrees with the commenters that the USGR Group's monitoring programs are flawed and inadequate. The approved USGR CIMP adequately addresses requirements of Attachment E of the Los Angeles County MS4 Permit. Therefore, the USGR Group's reliance on the CIMP as part of their adaptive management approach is appropriate and consistent with permit requirements. Further, comments submitted on the draft CIMPs (letter dated 9/16/14), some of which are also raised in this comment letter (in Appendix A) were considered during CIMP review and approval as appropriate.
	of the Environmental Groups' concerns. Despite the deficiencies that remain in the revised CIMPs,	

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	the Regional Board Executive Officer recently	
	conditionally approved all of the revised monitoring	
	programs; however, the conditions are themselves	
	insufficient because they fail to address all of the	
	CIMP inadequacies.	
	While Environmental Groups have not seen the	
	final draft CIMPs that were submitted by the	
	EWMP Groups pursuant to the conditional	
	approval letters (and we reserve the right to	
	comment on those final CIMPs once they are	
	issued to the public), the current state of the	
	revised CIMPs is alarming because without an	
	adequate CIMP in place, Permittees cannot	
	engage in a meaningful adaptive management	
	process. The State Board has stated that the	
	adaptive management provisions of the 2012	
	Permit is one of the main reasons the EWMP	
	process can ensure the necessary rigor and	
	accountability to effectively and timely achieve	
	water quality standards. However, the success of	
	the adaptive management process depends on the effectiveness of the CIMPs, therefore, at a	
	minimum, the CIMPs must meet the substantive	
	requirements of the Permit in order to ensure that	
	Permittees can appropriately adapt the EWMP in	
	response to monitoring results and make	
	modifications only when necessary.	
III.E	E. There is Insufficient Analysis to Back up the	Comments were considered and reflected in the Los Angeles
	Claims About What can be Achieved Through	Water Board's Review Letter where appropriate.
	Green Streets Implementation and Regional	
	BMPs Implemented on Privately Owned Lands	The revised USGR EWMP in Table 3-5 and Appendix E Section
	The ULAR and USGR EWMPs rely on a	3.3 provides milestones for green streets implementation,
	tremendous amount of green streets	therefore adequately addressing comments in the Review Letter.

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	implementation for compliance. While Environmental Groups are in favor of distributed projects conceptually, practically speaking, it is unclear whether the degree of implementation proposed is achievable. We do, however, commend the EWMP Groups for discussing the need for streamlining the process of green infrastructure project implementation, but more analysis is needed to demonstrate that the amount of proposed green street projects are actually feasible and achievable. In addition, the EWMPs also rely heavily on regional BMPs implemented on privately owned lands to achieve compliance, with this portion of the "recipe" accounting for around 30% of the total capacity. However, due to the uncertainty around the ability to acquire such lands as well as the associated costs of land acquisition, the practicality and achievability of this goal is questionable.	For Regional BMPs on Private Parcels, the revised EWMP in Table 3-9 states that "Each agency will implement regional projects on private land (other regional according to the specified capacities in Section 5During adaptive management, agencies will likely strive to find additional opportunities for BMPs on public land to avoid this category of BMP/land acquisition." The Group's commitment to implementing their EWMP as per Section 5 and willingness to search for public land BMP opportunities to substitute proposed private parcel BMPs during adaptive management is an appropriate approach. Additional analysis is not required at this time. As implementation progresses, the Group will be required to evaluate its assumptions and the effectiveness of green streets and regional BMPs on privately owned land and modify their EWMP if the effectiveness is not as expected.
III.F	F. The EWMPs Lack Sufficient Detail to Achieve Load Reductions Assumed From Institutional BMPs In all of the EWMPs reviewed by Environmental Groups, institutional BMPs are assumed to account for between 5% and 10% of the load reduction with no data to support these assumptions. These goals may be achievable but require a structure dedicated to their attainment. However, there is little evidence of the development of an institutional framework and programs to reach these levels, either in the EWMPs or, apparently, anywhere else in the jurisdiction's organizations. The mechanisms are straightforward technologically but much more	Comment considered. Note that, as part of the Technical Advisory Committee (TAC) RAA subcommittee meetings, a 5% pollutant load reduction as a result of implementing the additional requirements included in the provisions for Permittees' stormwater management programs/minimum control measures (MCMs) in the 2012 Los Angeles County MS4 Permit was determined to be reasonable. Stormwater management programs and MCMs have been implemented by Permittees in prior permit iterations. Hence, based on the reporting in Annual Reports, a reasonable assumption can be made that Permittees already have a structure to implement institutional control measures, including Enhanced MCMs. Requiring the USGR Group to provide the baseline

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	relies on a host of actions broadly spread through the affected communities, the participation of various jurisdictional agencies and numerous agency personnel, and cooperation by many private citizens. Lacking a structure to implement them makes the assumptions questionable and requires evaluation of the consequences of not meeting the goals.	EWMP is not required by the Permit. Regarding the use of institutional controls to address all dry weather discharges of metals, the USGR EWMP utilizes a non-storm water outfall screening and monitoring program, along with the Permittees' illicit connection/illicit discharge elimination programs, to address metals loading from the MS4 in dry weather.
	Further, the ULAR EWMP suggests that institutional controls will be sufficient to achieve compliance with Category 2 and 3 dry weather metals WBPCs, while the USGR EWMP states that these will be sufficient to control all dry weather metals. As stated above, there is little data and little structure built into the EWMPs to provide assurance that these load reductions will be achievable through these programs. In addition, it is not clear how it was determined that a 5% or 10% reduction would be what is required to achieve compliance with a number of the metals WBPCs since zinc, copper, and lead were the only metals that were modeled. The EWMPs state that this assumption is made in part due to the infrequency of dry weather metals exceedances, but it seems that the ability for minimum control measures to address these exceedances should be more dependent on the actual magnitude of the exceedances rather than their frequency.	The analysis of certain metals, or a limiting metal, to represent other metals is a reasonable approach. Additionally, where Permittees are implementing measures to eliminate non-storm water discharges that are a source of pollutants, the magnitude of the exceedance is not as important as the frequency of exceedance.
III.G	G. In at Least Two Instances, the RAA's Model	Comment considered and incorporated into the Los Angeles
	Calibration Regularly Diverges From Observed Values at Higher Stream Flows	Water Board's Review Letter Enclosure 2 as appropriate.
	For the ULAR and USGR EWMPs, although the	Representatives of the USGR EWMP Group met with Board staff
	model calibration met the parameters specified in	after submittal of the draft EWMP and prior to submittal of the

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	the RAA Guidelines, it seems to regularly diverge from observed values at higher stream flows. Both the ULAR and USGR EWMPs are designed around a relatively extreme condition (i.e., the 90th percentile storm), yet it is not clear whether an analysis was conducted to determine how the model would perform specifically at the stream flows expected from such a storm.	revised EWMP to discuss the model calibration results. Section 4.2.1 of the revised EWMP adequately addresses comments in Enclosure 2 of the Review Letter by committing to future data review efforts for stations and pollutants where calibration performance assessment was characterized as "Fair."
III.H	H. The Analysis for LID BMPs is Limited to the Consideration of Only Two Approaches: Biofiltration and Bioretention In all of the draft EWMPs that Environmental Groups reviewed, the analyses assume low impact development (LID) BMPs would be a 50/50 split between biofiltration (underdrained) and bioretention (not underdrained). First, these two practices are not the only LID BMPs that might be chosen for the applications, yet others received zero consideration. Second, their capabilities differ considerably. Open-draining bioretention can infiltrate and evaporate a large fraction, even all, of the influent runoff, thus greatly or even fully diminishing pollutant loadings. The best evidence is that underdrained biofiltration, as normally constructed, is limited to withholding through evaporation roughly 30% of the runoff received. Load reductions also benefit from pollutant concentration decreases but generally do not approach those achieved with open-draining bioretention. Furthermore, there was no examination in the EWMPs of the feasibility of reaching 50%	Comment considered. Given that the permit requires that Permittees utilize, in order of priority, bioretention and then biofiltration BMPs in the Planning and Land Development provisions, it is reasonable that the EWMP group similarly focuses its watershed analysis on these two broad categories of LID BMP approaches in its EWMP. In addition, biofiltration and bioretention BMPs are among the most effective for a wide range of pollutants based on data in the WERF/ASCE database. Further, choosing distributed LID BMPs to achieve the water quality requirements of the permit is at the discretion of Permittees. Apart from the RAA and other permit requirements, additional analysis of other LID BMP approaches is not required by the permit.
	bioretention capability, or, alternatively, of	

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	surpassing it and doing better with load reduction.	
	While the best procedure would be to conduct that	
	examination, as well as to consider other LID BMPs, a substitute in the absence of these steps is	
	to conduct a sensitivity analysis to examine the	
	implications of other arrangements (e.g., a 70/30 or	
	30/70 split) and see how the results change. The	
	purpose in this case would be to add assurance	
	that the LID BMPs proposed would actually reach	
	the target load reductions (TLRs) if field conditions	
	ultimately dictate a different scenario than	
	represented by the primary model assumption.	
III.I	I. The Assumptions Regarding Redevelopment	Comment considered. However, the draft EWMP in Section 3.2.3
	are Inadequate	subsection LID Ordinance (New/Redevelopment) states under
	For the NSMBCW and Beach Cities EWMPs,	Assumptions that "BMP implementation to capture 85th percentile
	achieving TLRs further relies on BMP installation	storm on redeveloped parcels, [were] based on land use-specific historical redevelopment growth rates reported by Los Angeles
	during redevelopment: (1) from 2003 to the present – as prescribed by the 2001 MS4 Permit's	Bureau of Sanitation (rates vary from 1.65% of commercial land
	Standard Urban Stormwater Management Program	use to 3.74% of industrial land)." Further, details given in
	(SUSMP) provisions; and (2) from the present	Appendix C-3 section C-3.2 subsection Private Parcel Screening
	forward – according to the 2012 Permit's LID	(Residential LID and Redevelopment) are sufficient.
	requirements. However, the Permittees did not	(
	conduct an examination of actual achievements of	Additionally, as per Appendix C-3 section C-3-1 of the draft
	stormwater treatment BMPs in the past. For	EWMP, existing and planned BMPs were considered via data
	various reasons, regulatory requirements are	request and literature review. The section also states that "all
	usually not completely fulfilled. Furthermore, there	BMPs constructed prior to September 2011 are implicitly included
	was no particular attention given to an enhanced	in the EWMP analysis through calibration of the WMMS, whereas
	institutional framework and programs to advance	BMPs constructed post- September 2011 were explicitly included
	application of the present Permit requirements. As	in the RAA."
	with the assumptions regarding programmatic	Additional analysis is not required by the normit. As
	BMPs and residential incentives, lacking verification of historical performance and a solid	Additional analysis is not required by the permit. As implementation progresses, the Group will be required to evaluate
	structure to advance future implementation makes	its assumptions regarding redevelopment rates and modify its
	the assumptions uncertain and requires appraisal	EWMP, if necessary.

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	of the repercussions of that uncertainty.	
	Moreover, Permittees' reliance on the	
	redevelopment rates used in the EWMPs lacks	
	justification. For example, in the Beach Cities	
	EWMP, BMPs added through redevelopment, in	
	the past and projected in the future, were based on	
	redevelopment rate data from the Cities of	
	Hermosa Beach and Manhattan Beach and, otherwise, from the Los Angeles region. There is	
	little explanation of how the specific city rates were	
	obtained, and no explanation at all for the regional	
	ones. On the presumption that they are statistical	
	means over some period, they have some	
	statistical variance, particularly because the period	
	over which they were likely to be derived	
	experienced substantial economic fluctuations	
	inevitably affecting redevelopment. This variance is	
	one more source lending uncertainty to predictions	
	that should be quantified and incorporated in the	
	overall potential error analysis. For the other three	
	EWMPs that Environmental Groups reviewed,	
	BMPs added through redevelopment, in the past	
	and projected in the future, were based on	
	redevelopment rate data from the Los Angeles	
	region. Again, there is no explanation of how these	
	rates were obtained, and as explained above, the	
III.J	statistic variance is problematic. J. In at Least Two Instances, There are Several	This comment is not directed to the USGR EWMP. However, the
111.5	Potential Sources of Error Associated with the	comment was considered and reflected in the Los Angeles Water
	Data Underlying the Model Calibration	Board's Review Letter, Enclosure 2 where appropriate. The
	In the NSMBCW and Beach Cities EWMPs, there	revised EWMP adequately addresses comments in the Review
	are several potential sources of error associated	Letter Enclosure 2.
	with the data underlying modeling, with no	

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	quantitative analysis of these sources and the associated level of certainty in the forecasts of load	
	reductions and BMPs needed to accomplish them. Potential error sources include:	
	For the NSMBCW EWMP, the model flow calibration was rated as "very good"	
	according to the Regional Board's RAA Guidance, but still has associated potential	
	error, as evident in the deviation of points	
	from the diagonal line in Figure 10. The same data was used in the model flow	
	calibration in the Beach Cities EWMP, and the calibration was also rated as "very	
	good" according to the Regional Board's	
	RAA guidance, but similar to the calibration in NSMBCW's EWMP, has associated	
	potential error, as evident in the deviation of points from the diagonal line in Figure 2-9	
	for the Santa Monica Bay (SMB) watershed	
	and Figure 3-4 for the DC watershed. These dispersions should be quantified (in	
	terms of confidence limits or some other statistical measure of the excursion of	
	model predictions from measured data) and	
	taken into account in an overall analysis of the level of certainty in the model	
	predictions and compliance demonstration.For the NSMBCW EWMP, the model water	
	quality calibration is not as "good" as the	
	flow calibration. Environmental Groups do not agree with the EWMP's conclusion that	
	Figure 11 portrays "very good" agreement. The distributions of modeled versus	

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	measured fecal coliform measurements	
	actually deviate fairly substantially,	
	especially in the higher portion of the data	
	range. Again, this dispersion should be	
	quantified and included in the overall	
	certainty analysis.	
	In Beach Cities' EWMP, there was no	
	model water quality calibration for the SMB	
	watershed because of lack of data for the	
	relevant WBPC (fecal coliforms). The	
	EWMP mentions possible calibration when	
	CIMP data accumulate, but it should firmly	
	commit to doing so. For the DC watershed,	
	water quality calibrations were performed	
	for fecal coliforms and total zinc, portrayed	
	in Figures 3-5 and 3-6. The fecal coliform	
	calibration is fairly good, but the zinc calibration is not. Especially for zinc, this	
	dispersion should be quantified and	
	included in the overall certainty analysis.	
	Neither EWMP directly models expected	
	compliance with the bacteria exceedance	
	day limits in the TMDL. Instead, a	
	relationship was developed between fecal	
	coliform loadings and exceedance days, so	
	that the latter can be estimated from a	
	model prediction of the former variable.	
	Figure 12 and Figure 2-10 present the	
	relationship, a statistical regression	
	equation, for the NSMBWC and Beach	
	Cities EWMPs, respectively. The R2 value	
	presented on the graphs indicates that	
	loading explains 83% of the variance in	
	exceedance days. While this represents a	

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	good relationship, it is not perfect and has potential error associated with it. It is also a product of only seven data points, and a relatively small data set itself spreads the confidence interval associated with a predictive relationship. As with the other potential error sources discussed, this one too should be quantified and brought into the overall certainty analysis. • When it was necessary to convert Escherichia coli (E. coli) measurements to fecal coliforms (FC), a ratio of E. coli/FC = 0.85 was assumed. A U.S. Geological Survey study found substantial variation in the ratio and quantified confidence limits. This is an additional potential source of error that should be taken into account in forecasting load reductions and specifying BMPs sufficient to provide a low risk of not meeting target reductions.	
III.K	K. The Margins for Error in Reaching TLRs as a Result of BMP Implementation are Extremely Small As explained above, for the NSMBCW and Beach Cities EWMPs in particular, there are a number of assumptions and potential error sources embedded in the analyses that create uncertainty in the predictions of load reductions achievable with the BMPs thought to be in place and proposed for future implementation. For NSMBCW, the Permittees did not make any attempt to quantify these uncertainties and their effects on the demonstration of compliance. Table	Comment considered, but not applicable to the USGR EWMP. The USGR Group does not use the TLR approach.

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	27 summarizes that demonstration. Its last two	
	columns show cumulative fecal coliform load	
	reductions (resulting from all BMPs) and TLRs.	
	Comparison of the data in these two columns	
	shows very small margins for error in reaching the	
	TLRs forecast to result from their implementation.	
	For non-zero TLRs, the difference between load	
	reduction provided and TLRs for the various	
	analysis regions averages only 1.98%. As	
	discussed above and shown in the table,	
	substantial contributions to load reductions are	
	from assumed 5% accruing from programmatic	
	BMPs, 10% participation in home downspout	
	disconnection, and BMPs already installed during	
	redevelopment. The fifth column of Table 27 shows	
	the load reductions estimated to occur as a result	
	of downspout disconnection and redevelopment	
	BMPs. The overall average is 4.91%. Thus, the	
	unexamined assumptions together are credited for	
	about 10% loading reduction. From the perspective	
	of averages, if they fall short by just 2%, the very	
	small 1.98% compliance margin will vanish.	
	Similarly, for Beach Cities, the Permittees made no	
	attempt to quantify the uncertainties created by the	
	EWMP's assumptions and potential error sources	
	and their effects on the wet weather RAA	
	demonstration of compliance. Tables 2-16 and 3-	
	12 summarize that demonstration for the SMB	
	watershed and DC watershed, respectively.	
	Columns toward the right side of each table show	
	cumulative pollutant load reductions (resulting from	
	all BMPs) and TLRs. Only two of 18 SMB	
	watershed analysis regions were modeled to have	

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No.	fecal coliform TLRs. Comparison of the data for these two regions in Table 2-16 shows very small margins for error in reaching the TLRs forecast to result from BMP implementation – only 1% in one case and 4% in the other. As discussed above and shown in the table, substantial, and questionable, contributions to loading reductions are from assumptions: (1) 5% accruing from programmatic BMPs, (2) 10% participation in home downspout disconnection, (3) BMPs already installed during redevelopment, and (4) assumptions that Caltrans and industrial areas will achieve their permit requirements. In the case with only 1% margin between load reduction (46% of base load) and TLR (45% of base load), these highly uncertain sources of reduced pollutant loadings are assumed to account in total for 11% of the 46%. In the case with 4% margin between loading reduction (50% of base load) and TLR (46% of base load), these	Los Aligeles Water Board nesponse
	highly uncertain sources of reduced pollutant loadings are again assumed to account in total for 11% of the 50%. The DC watershed has zinc, copper, and fecal coliform WBPCs. Only the Redondo Beach and Manhattan Beach portions of the watershed were modeled for the wet weather RAA. The Torrance part was not appropriately modeled or subjected to an adequate RAA, because beyond some non-structural measures, Torrance has committed only to catch basin inserts in a fraction (less than one-third) of its drain inlets. Because estimated load reductions are associated only with individual inserts, the estimates cannot be applied to the	

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	entire analysis region. Failure to perform an adequate RAA for a significant part of the watershed is a violation of Permit requirements, and undermines the validity of the RAA and the EWMP.	
	For the Redondo Beach and Manhattan Beach portions of the DC watershed, Table 3-12 indicates the final copper and fecal coliform TLRs to be met handily, but the final zinc and interim fecal coliform TLR achievements to be marginal (0-0.1% difference in estimated load reduction and the respective TLRs for interim fecal coliforms and 3% for zinc). The questionable assumptions regarding programmatic BMPs, home downspout disconnection, BMPs already installed during redevelopment, and the Caltrans and industrial permit compliance are credited for 20% of the 79% loading reduction forecast for zinc (against a TLR of 76%), with 6% from the latter exceptionably doubtful assumption. Thus, there is no real margin, the situation also existing for the interim fecal coliform requirements. The healthy margin for copper (23%) is heavily influenced by brake pad reduction, which is thus crucial to achieve. The margin for the final fecal coliform TLR is much greater (41%) and accounted for in large measure by new regional and distributed BMPs, the completion of which is thus also crucial.	
	The larger point underlying all of the discussion in this section is that, as pointed out above, there are more potential sources of error (beyond the assumptions Environmental Groups have pointed	

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III.L	out thus far). In the face of all this uncertainty, it is highly unlikely that the generally extremely slim margins allowed will lead to compliance. The responsible and essential procedure is to quantify all of these potential sources and determine what BMPs are necessary to give some set level of assurance (e.g., 90%) of achieving compliance. L. In at Least Two Instances, Permittees Fail to	Comment considered, although not specifically directed to the
	Consider the Possible Intermingling of Privately Owned Stormwater Infrastructure Within the Full MS4 System The analyses in the NSMBCW and Beach Cities EWMPs were based entirely on publically owned drainage outfalls, without consideration of intermingling of privately owned stormwater infrastructure with the MS4 system. The MS4 system is defined by the federal regulations as "a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) [o]wned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created to or pursuant to state law) including special districts under state law such as a sewer district, flood control district or drainage district" Comingled "public" and "private" stormwater, therefore, is regulated by the Permit, and is the responsibility of the municipal Permittees. Thus, the NSMBCW and Beach Cities EWMPs illegally exclude the analysis of a significant source of pollutant loads to receiving waters, and thereby limit the analysis of reductions required on that	USGR EWMP. Federal regulations at 40 CFR section 122.26(b)(8) define a MS4 as the following: Municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): • Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; • Designed or used for collecting or conveying storm water; • Which is not a combined sewer; and • Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
	basis. Without inclusion of all MS4 discharges, the	By its own terms, this definition does not include privately owned

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	EWMPs cannot ensure compliance with RWLs or TMDL-specific limitations, and therefore do not comply with the requirements of the 2012 Permit.	stormwater infrastructure. As such, privately owned stormwater infrastructure is not regulated by the Los Angeles County MS4 Permit. However, to the extent that there are discharges from privately owned infrastructure to the Permittees' MS4s, those discharged are regulated by the Los Angeles County MS4 Permit and the Permittees have provided documentation that they possess the legal authority to control such discharges through their MS4s, consistent with Part VI.A.2 of the permit. Further, the RAA was inclusive of runoff from all land area within the EWMP area. As a result, the EWMP inherently addresses runoff from private property that enters the Permittees' MS4.
III.M	M. In at Least One Instance, No Analysis of Standards Applicable to Discharges to ASBS are Included, and Existing Data for Discharges to ASBS are Not Included in the Modeling Exercise or the EWMP Beyond referencing the draft Compliance Plan and draft Pollution Prevention Plan (ASBS Plans), the NSMBCW EWMP ignores the standards applicable to the receiving waters, designated as Areas of Special Biological Significance (ASBS), as well as the data collected in the receiving waters pursuant to the State Board's ASBS program. The NSMBCW EWMP's approach to ASBS discharges is inadequate for at least two reasons: 1) The draft ASBS Plans are inadequate and do not meet the requirement of either the ASBS Exception or the 2012 Permit; 2) The EWMP applies the wrong water quality standards, and ignores extensive available sampling data, rendering its analysis incomplete and inconsistent with Permit requirements.	Comment considered, but not applicable to the USGR EWMP. The USGR EWMP Area does not include any ASBS.

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	and illegal definition eliminates dozens of MS4 discharge pipes from control. Receiving water sampling conducted pursuant to ASBS requirements demonstrate alteration of natural water quality concerning selenium, total polyaromatic hydrocarbon, and mercury. Although end-of-pipe sampling demonstrates exceedances of Ocean Plan Instantaneous Maximum limits for ammonia and a number of metals, the ASBS Plans neither acknowledge these exceedances, nor propose to meet compliance, either by meeting Ocean Plan limits or reducing baseline pollutant discharges by at least 90%. Rather than relying on these flawed plans, the	

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	NSMBCW EWMP must conduct its own RAA,	
	based on all available data, and the applicable	
	standards. Because the ASBS was the focus of	
	regulatory attention at the State Board level for a	
	number of years, considerable data is available.	
	The State Board collected outfall and receiving	
	water data in developing the ASBS	
	Exception. Under the terms of the Exception, Los	
	Angeles County and Malibu collected outfall and	
	receiving water data beginning in 2013. However,	
	the NSMBCW EWMP nowhere references this	
	data – data collected by the municipalities	
	conducting the EWMP analysis – and apparently	
	failed to include the data in the modeling exercise.	
	Further, the ASBS Exception requires that	
	dischargers develop plans to achieve either: 1)	
	Ocean Plan Instantaneous Maximum limits at all	
	discharges points, or 2) 90% reduction in pollutant	
	loads based on an articulated baseline calculation.	
	Compliance is required within six years, or 2019.	
	Again, the NSMBCW EWMP fails completely to	
	consider these applicable standards, or the	
	compliance deadline, as set out in the ASBS	
III.N	Exception. N. There is Insufficient Data to Demonstrate	Comment considered, but not applicable to the USGR EWMP.
III.IN	Reasonable Assurance of Compliance with	The draft EWMP included an adequate dry weather RAA in
	Applicable Dry Weather Permit Limits	Appendix C-2.
	For NSMBCW, the EWMP assumes reasonable	Appendix 0-2.
	assurance is demonstrated for a compliance	
	monitoring location (CML) if any one of four criteria	
	is met, namely:	
	Diversion or infiltration eliminates all dry	
	weather discharge, or disinfection is	
	provided and is effective (claimed for two	

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	 CMLs); There are no jurisdictionally owned MS4 outfalls (claimed for eight CMLs); If all bacteria exceedance day requirements are met in four of the past five years and in the last two years (claimed for one CML); and/or If dry weather discharges have been eliminated (claimed for 18 CMLs). 	
	Two of these claims are very questionable. Given the EWMP's failure to consider the interrelationship between private and public drainage, the second criterion and the claims asserted regarding it are problematic. Concerning the fourth criterion and the extensive claims associated with it, outfalls were screened on only eight dates in 2014 and 2015 for the EWMP effort. There is no detail on the observations, only the inclusion of a note to Table 29 stating that the associated column entry of "yes" indicates that no dry weather flows were present. However, the data collected in the ASBS assessment and summarized above shows extensive dry weather discharges occurring in the ASBS portion of the study area.	
	For the SMB watershed, the Beach Cities EWMP assumes reasonable assurance is demonstrated for a CML if any one of three criteria is met, namely:	
	Diversion or infiltration eliminates all dry weather discharge, or disinfection is provided and is effective (claimed for eight)	

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	 CMLs); There are no jurisdictionally owned MS4 outfalls (claimed for two CMLs); and/or If dry weather discharges have been eliminated (not determined). 	
	The claim relative to the second criterion is questionable due to the EWMP's lack of consideration of the interrelationship between private and public drainage. Additionally, no screening has been conducted to apply the third criterion. As a result, the dry weather RAA could not be completed for three of 12 CMLs. An incomplete RAA is a violation of Permit requirements.	
	The DC watershed did not receive even this level of attention. The analysis is brief, qualitative, and unconvincing. Its primary basis is " education, enforcement, and behavioral modification" in Torrance and, in each city, water conservation regulations. The only substantive provision is building two regional BMPs in Redondo Beach and Manhattan Beach, installed primarily for wet weather control but also available for dry weather service. This single feature does not constitute a full RAA.	
III.O	O. In at Least Two Instances, There is Very Little to No Discussion on How Trash Reduction Requirements will be Met Both the NSMBCW and Beach Cities EWMPs are very weak on specifying how trash reduction requirements will be met. The plans say no more than there will be phased catch basin retrofits to	Comment not applicable to the USGR EWMP. There are no WQBELs for trash assigned to Permittees in the USGR EWMP Group.

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III.P	meet the 20% per year reduction targets. Moreover, the plans give no information, or any sign of thinking about, such subjects as: (1) what trash source controls might be brought to bear on the problem, (2) the equipment that will be used in the retrofits, (3) the rate at which it must be installed to meet the targets, (4) where and when it can be most strategically placed, and (5) what options there are if targets are not met. P. The Claims About Removal Efficiencies by Catch Basin Inserts are Questionable Appendix B of the Beach Cities EWMP covers the RAA for the DC watershed within the city of Torrance. The central feature of Torrance's proposed contribution to meeting TLRs is the installation of inserts in less than one-third of the catch basins in the subwatershed. The appendix cites insert manufacturers' literature, an unreliable gauge of performance without independent verification, and a few studies to claim questionably high catch basin insert removal efficiencies for the pollutants of interest.	Comment considered, but not applicable to the USGR EWMP. The draft EWMP did not propose the use of catch basin inserts for pollutants other than trash. For trash, the draft EWMP only proposed use of certified full capture devices.
	Appendix B presents what it terms a "literature review" in its own Appendix B. However, this latter appendix omits some studies cited in the text and contains only some manufacturers' "fact sheets" and one very long report of a study completely concerned with removal of oil and grease, not one of the WBPCs. The items are just pasted into the appendix with no assessment of their contents and no development and justification of conclusions used in the RAA. It is thus not a literature review at all. The review also omits studies not supporting its	

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	claims. A particular example is the Caltrans BMP Retrofit Pilot Program. This study found two different inserts to provide only 0-7% mass loading reduction efficiencies for copper, lead, and zinc. The inserts also needed substantial maintenance attention, including during storms; i.e., they did not operate passively and unattended. With this	
	experience, Caltrans did not adopt inserts as an accepted BMP. An additional weakness of the Torrance RAA coverage of drain inlet inserts is citing performance in terms of pollutant concentration reduction efficiency, instead of mass loading reduction efficiency as used by Caltrans. As has been widely	
	discussed in the literature, percentage concentration reduction efficiency is a misleading concept. This measure can be manipulated by feeding high concentrations into the unit and measuring a respectable percentage reductions but still having relatively high concentrations in the effluent.	