## Los Angeles Water Board Response to Specific Written Comments by Joyce Dillard, dated August 30, 2015, on the Ballona Creek Draft EWMP

Comment No.	Joyce Dillard Comment	Los Angeles Water Board Response
1	EWMP IMPLEMENTATION COSTS AND FINANCIAL STRATEGY	Comments considered.
	ES.5 EWMP Implementation Costs and Financial Strategy states:	Financial Strategy Comments were included in the Los Angeles Water Board's Ballona Creek (BC) EWMP Review Letter, dated October 21, 2015, directing the BC Watershed Management Group to
	The total estimated capital cost is approximately \$2.7B, over the course of six years. The costs provided here are considered to be planning level only (order of magnitude), and can be refined as EWMP implementations progresses with the use of	provide additional information regarding their financial strategy. In response, the revised EWMP included additional information and specificity in Section 9 EWMP Implementation Costs and Financial Strategy. Overall, Section 9 of the BC EWMP adequately discusses the Group's financial strategy and meets the permit requirement.
	actual BMP implementation costs. Funds have not been identified in the EWMP Implementation Plan but will be pursued. Potential funding sources and alternatives that could be evaluated by each Group Member include grants, fees and charges, legislative and policy remedies.	Part VI.C.1.g.ix of the Los Angeles County MS4 Permit requires EWMP groups to "ensure that a financial strategy is in place." The permit does not require that each element of the financial strategy is fully developed before the Board can approve an EWMP. Further, the permit does not require projected costs for monitoring to be included in an EWMP. Monitoring will be conducted in accordance with the Group's CIMP.
	The costs to implement the EWMP will require orders of magnitude increases in stormwater program funding. The capital costs to address Water Quality Priorities by 2021 are approximately \$2.7B, which is approximately \$9,422 per parcel, with total operations and	Permittee efforts to fund EWMP implementation that involve increases in fees or taxes will, as appropriate, require voter approval or separate public notification process (e.g., Proposition 218 (1996)).
	maintenance costs exceeding \$77M per year (Table ES-1). Expenditures for the EWMP Implementation Strategy will need to be coordinated with other regional efforts to improve habitat, promote greenways and increase access	Authorities Regarding authorities, Section 2 of the revised EWMP discusses legal authority. Appendix 2.A provides legal authority citations from each Group member's municipal codes and ordinances. Appendix 2.B provides legal authority

Comment No.	Joyce Dillard Comment	Los Angeles Water Board Response
No.	to Ballona Creek. In order to garner community support for financing the costs, it will likely be necessary to quantify the multi-benefits of the LID, green streets, and regional projects including improved aesthetics, increase recreational opportunity, water supply augmentation and climate change resiliency. The financial strategy presented in this EWMP outlines a set of multiple approaches that allows each jurisdiction to consider and select the strategies that best fit their specific preferences and  9.1 EWMP Implementation Costs  The costs for structural BMPs are considered to be planning level only (order of magnitude), and can be refined as EWMP implementation progresses with the use of actual BMP implementation costs. Costs for enhanced minimum control measures and other institutional BMPs have not been included because they will vary by jurisdiction and are estimated to be a small percentage of the overall program costs. Monitoring and stormwater program costs are not included.  COMMENTS  There is no Financial Strategy but an intent to pursue and no projected costs for monitoring.	documentation.  Public Health The comment concerning public health inspections and costs is unclear; however, public health and safety has been considered.  A key purpose of the BC EWMP is to implement projects to improve public health related to water recreation. The County Department of Public Health has been a long-standing partner in notifying the public of the health risks of recreating in waters contaminated by elevated levels of bacteria. Potential vector control issues were discussed with local vector control district representatives and addressed in certain sections of the permit.  Also, stormwater structural BMPs that may be implemented as a result of the BC EWMP may require discretionary approval subject to review under the California Environmental Quality Act (CEQA). Public agencies responsible for carrying out or approving stormwater structural BMPs are identified as the lead agency. The environmental review required imposes both procedural and substantive requirements. At a minimum, the lead agency must adhere to the consultation and public notice requirements set forth in the CEQA Guidelines, make determinations whether the proposed stormwater structural BMP is a "project", and if so, conduct an initial review of the project and its environmental effects. The lead agency must identify and document the potential environmental impacts of the proposed project in accordance with CEQA (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (Title 14 of the California Code of Regulations, Section 15000, et seq.).
	Regional Projects on Private Land are 52% of the	Permit Expiration Date

Comment No.	Joyce Dillard Comment	Los Angeles Water Board Response
	implementation with no sources identified.  LID Ordinances are 2% of the implementation and the remaining LID strategies are 10%.  Green Streets are 17% of the implementation and involves the area of extensive Bioretention and Biofiltration through subwatersheds. State highways are not delineated and categories of streets are not defined. Authorities are not cited.  Public Health inspections and costs are not addressed as those costs are borne by the inspecting agency.  MILESTONE Capital Costs are \$2,723,650,000.  Operation and Maintenance costs are \$764,200,000 through the 2021 compliance period. This Permit, however, expires December 28, 2017.  It is not clear how Storage Costs are addressed. The IMPERVIOUS SURFACE is: 1,100,527,170 square feet producing 358,583.447,168,496 gallons of water.  No Circulation Element facts are presented and we have no idea who has the Mineral Rights, Groundwater Rights or Pipeline Leases. The area is not adjudicated and groundwater is owned by the	The permit's Watershed Management Program provisions require that EWMPs achieve applicable water quality-based effluent limitations outlined in Part VI.E and Attachments L through R pursuant to the corresponding compliance schedules, and do not cause or contribute to exceedances of receiving water limitations in Parts V.A and VI.E and Attachments L through R.  For Ballona Creek, Attachment M of the permit includes compliance deadlines in 2021 for the Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL and the Ballona Creek Metals TMDL, which the EWMP must address.  Although the permit does expire on December 28, 2017, the compliance deadlines from the Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, and the Ballona Creek Metals TMDL will be included in future renewals of the permit and will therefore remain applicable to Permittees participating in the Ballona Creek EWMP.  Furthermore, the terms and conditions of an expired permit continue in force until the effective date of a newly issued permit.  Storage Costs The Los Angeles Water Board does not understand the commenter's reference to storage costs and cannot respond to this comment.
	property owners. It is unclear as to how extraction will be achieved on properties not owned by the agencies involved.  As a sample, the City of Los Angeles	Circulation Elements, Rights, GW Extraction The Los Angeles County MS4 Permit regulates discharges of storm water and non-storm water from the MS4, which extends throughout the cities' and unincorporated County's land areas. The EWMP proposes regional and distributed projects to

Comment No.	Joyce Dillard Comment	Los Angeles Water Board Response
NO.	CONSOLIDATED ANNUAL FINANCIAL REPORT (FY June 30, 2015) requires disclosure under NOTES TO BASIC FINANCIAL STATEMENT:  Total Maximum Daily Loads (TMDLs)  The USEPA and the LARWQCB are required to develop TMDLs for impaired water bodies. Various watersheds in the Los Angeles area have water body segments that are listed as impaired due to a variety of pollutants. Although some TMDLs have already been released, additional TMDLs will be under development and compliance with both existing and new TMDLs will continue into the next decade. At this time, it is difficult to predict the full impact of TMDLs on the National Pollutant Discharge Elimination System (NPDES) effluent limits at the City's four water reclamation and wastewater treatment plants. In addition, the proposed Greater Los Angeles County Municipal Separate Stormwater Sewer Systems (MS4) permit, adopted by the LARWQCB in November 2012, contains provisions that require compliance with all the adopted TMDLs. It is expected that significant capital improvements funded by Sewer may be required to comply with the TMDLs and their resulting impact on the City's NPDES permits.  This statement discloses Sewer funds as the source for "significant capital improvements." This permit goes beyond the sewer system into streets and land and the taxpayer has not been notified of the	address pollutants in MS4 discharges, including multi-benefit regional projects involving stormwater capture. Potential water rights issues, such as adjudication and groundwater extraction, are outside the scope of the Board's review of the EWMPs. By approving the EWMP, the Board is not granting any water rights to the EWMP Group. To the extent necessary, separate processes would take place concerning these issues.  In addition, as these projects are implemented, implementation details pertaining to circulation elements related to transportation, mineral rights, groundwater rights, and pipeline leases will be evaluated and addressed by the Permittees through other approvals and processes, as appropriate. However, these issues are outside the scope of the review and final determination regarding the EWMP.

Comment No.	Joyce Dillard Comment	Los Angeles Water Board Response
	tremendous expected costs.	
2	ROLE OF GREEN INFRASTRUCTURE	Comment considered.
	5.2 What is the Role of Green Infrastructure in the EWMP states:  To quantify the potential benefit of green streets for pollutant reduction and integrate them into the EWMP Implementation Strategy, all available streets throughout the watershed were screened to define the maximum available green street length, as shown in Figure 5-4. The RAA evaluated a series of detailed green street implementation parameters (described in detail in the RAA, Section 6.3), and determined the percent of available streets opportunities to be retrofitted with green infrastructure to meet EWMP objectives, as shown in Figures 5-5 and 5-6. While it is anticipated that the implementation of green streets will evolve over the course of adaptive management, the EWMP Implementation Strategy provides the foundation of a robust watershed-wide green streets program going forward.  COMMENTS  All streets were addressed regardless of agency authority including the State. Not considered are the Methane issues of the area and the Fault Zones.	As noted previously, Section 2 of the EWMP discusses legal authority. Appendix 2.A provides legal authority citations from each Group member's municipal codes and ordinances. Appendix 2.B provides legal authority documentation.  Any potential methane issues and fault zones are outside the scope of the Board's review of the EWMP. As noted previously, stormwater structural BMPs that may be implemented as a result of the BC EWMP may require discretionary approval subject to review under CEQA. Public agencies responsible for carrying out or approving stormwater structural BMPs are identified as the lead agency. The environmental review required imposes both procedural and substantive requirements. At a minimum, the lead agency must adhere to the consultation and public notice requirements set forth in the CEQA Guidelines, make determinations whether the proposed stormwater structural BMP is a "project", and if so, conduct an initial review of the project and its environmental effects. The lead agency must identify and document the potential environmental impacts of the proposed project in accordance with CEQA and the CEQA Guidelines.

Comment No.	Joyce Dillard Comment	Los Angeles Water Board Response
3	MODELING	Comment considered.
	6.1.1 LSPC  The watershed model included within WMMS is the LSPC (Tetra Tech and USEPA 2002; USEPA 2003; Shen et al. 2004). LSPC is a watershed	The Group's use of LSPC for the RAA is appropriate. LSPC is a model contained within the WMMS suite of modeling tools. The Los Angeles County MS4 Permit lists WMMS, along with HSPF and SBPAT, as a model to be considered for the RAA.
	modeling system for simulating watershed hydrology, erosion, and water quality processes, as well as in-stream transport processes. LSPC	WMMS itself is freely available to download from the Los Angeles County Department of Public Works website.
	also integrates a GIS, comprehensive data storage and management capabilities, and a data analysis/post-processing system into a convenient Windows-based environment. The algorithms of LSPC are identical to a subset of those in the Hydrologic Simulation Program—FORTRAN (HSPF) model with selected	Regarding capital and operations & maintenance (O&M) cost estimates, Table 6-10 of the EWMP shows the cost functions used to estimate 20-year life cycle costs (including O&M costs) for BMPs. These functions are based on WMMS cost functions and information from interviews with maintenance professionals from municipalities in Southern California.
	additions, such as algorithms to dynamically address land use change over time. USEPA's Office of Research and Development (Athens, Georgia) first made LSPC available as a component of USEPA's National TMDL Toolbox (http://www.epa.gov/athens/wwqtsc/index.html).	As shown in Section 6.4, the Group considers cost- effectiveness in its optimization and selection of BMP solutions for the EWMP area. However, the permit does not require model comparison based on capital costs and operations and maintenance.
	LSPC has been further enhanced with expanded capabilities since its original public release	The Group's planning level BMP cost estimation outlined in Table 9-1 includes formulas for capital costs and annual O&M costs. These formulas, where appropriate, are based on the
	COMMENTS The Modeling Systems offered in the Permit are:	area of the BMP footprint or the volume of the BMP; and are presented for various stormwater retention BMPs including bioretention (with and without underdrain) and regional projects.
	<ul> <li>Watershed Management Modeling System (WMMS)</li> </ul>	Section 9.1 discusses what is covered by these cost functions.
	<ul> <li>Hydrologic Simulation Program-FORTRAN (HSPF)</li> </ul>	Further detail on cost functions in WMMS can be found in the Phase II Report: Development of the Framework for Watershed-Scale Optimization Modeling
	- Structural BMP Prioritization and Analysis	Scale Optimization Modeling

Comment No.	Joyce Dillard Comment	Los Angeles Water Board Response
	Tool (SBPAT)  LSPC modeling costs are not compared to the other models for the CAPITAL COST and OPERATIONS AND MAINTENANCE.	(http://dpw.lacounty.gov/wmd/wmms/docs/Phase_II_Report_FIN_AL_20111013.pdf). This report describes the development of the BMP cost functions as well as the planning, permitting, design, and construction cost assumptions that were used.
4	PEER REVIEW COMMENTS  Peer Review is not addressed.	Comment considered.  The Group is not required to conduct peer review of its EWMP or the associated modeling. However, WMMS is a peer-reviewed model, as required by the permit.
5	8.2.3 Updates to the RAA Model Parameters  Over time, the parameters in the watershed and BMP models used for the RAA may be updated based on newly available data. For example, as additional control measures are implemented in LA County, new data may become available regarding performance of control measures for reduction pollutants.  In turn, the performance metrics in the RAA could be updated. Other types of data that could support RAA updates include soil infiltration data, revised catchment delineations, modified operations to impoundments/reservoirs, changes in rainfall patterns, water conservation efforts, and major changes to the quality or volume of effluent discharges from POTWs.	Comment considered.  The Adaptive Management process will use newly available monitoring data collected as required by the permit, as well as information and data from sources other than the Permittees' monitoring program(s), which inform the effectiveness of the actions implemented by the Permittees. The monitoring data and other relevant information will be used to refine the hydrologic and pollutant fate and transport modeling of the EWMP area. Such refinements will allow the BC Watershed Management Group to better identify pollutant sources, estimate pollutant loads, and predict pollutant load reductions resulting from implementation of effective watershed control measures.  Currently available data and studies were used to develop the BC watershed model.

Comment No.	Joyce Dillard Comment	Los Angeles Water Board Response
	We do not understand how these updates coordinate with monitoring and pollutant reduction load identification other than outfall monitoring. Proposition O projects from the City of Los Angeles have no data that can verify load reductions. This is an NPDES permit based on Source Point discharges.	
6	ADAPTIVE MANAGEMENT	Comment considered.
	8.2.4 Updates to Preferences for Control Measure Implementation states:	Monitoring will be conducted in accordance with the Group's CIMP, which establishes receiving water and outfall monitoring locations.
	In Figure 8-2, the "recipe for compliance" is split to emphasize that the Compliance Targets (on the left-hand side) are fixed, enforceable goals, whereas the plan (on the right-hand side) is subject to adaptive management. The objective is for each BC EWMP Group member to meet the Compliance Target (left-hand side) and manage a certain amount of runoff in a 24-hour period with a suite of BMPs. The right-hand side represents the control measures identified by the RAA based on the assumptions described in Section 6. However, over time, the EWMP Implementation Strategy will be adjusted. In some cases, it may be possible to use alternative control measures or designs in such a way that the overall constructed size (and associated cost) of the suite of BMPs is reduced.	Regarding point sources, runoff that enters the Group's MS4 and is discharged into receiving waters is a point source regulated by the federal NPDES program. Regional projects, LID, and green streets are constructed on land area that drains to the MS4; these control measures treat and/or retain runoff that would otherwise flow freely into the MS4 and subsequently into receiving waters. These control measures, which manage runoff before the MS4, are sound and established practices used to improve downstream water quality.  Further, as previously noted, the Adaptive Management process will use newly available monitoring data collected as required by the permit, as well as information and data from sources other than the Permittees' monitoring program(s), which inform the effectiveness of the actions implemented by the Permittees. The monitoring data and other relevant information will be used to refine the hydrologic and pollutant fate and transport modeling of the EWMP area. Such refinements will allow the BC
	COMMENTS	of the EWMP area. Such refinements will allow the BC Watershed Management Group to better identify pollutant sources, estimate pollutant loads, and predict pollutant load

Comment No.	Joyce Dillard Comment	Los Angeles Water Board Response
	It is unclear if how Monitoring will be achieved for Regional Projects, LID Low Impact Development and Green Streets. They are not Source Point discharges. Managing runoff is not a Source Point issue. It is not clear how water quality improvement is attained by these adaptive management strategies.	reductions resulting from implementation of effective watershed control measures.