# Response to Los Angeles Regional Water Board Comments on the Los Cerritos Channel Watershed Management Program

Richard Watson, A.I.C.P
On Behalf of the LCC Watershed Group
Presented to the Regional Water Board
13 April 2015

#### Response to Regional Board Comments on the LCC WMP

Response to Los Angeles Regional Board Comments on Los Cerritos Channel Watershed Management Program 1-29-2015

LA MS4 Permit Provision (equivalent provisions are also found in the Long Beach MS4 Permit)	Regional Water Board Staff Comment and Necessary Revision	Response/Actions Taken
Part VI.C.5.a.ii(2)-(3) (Category 2 and 3 Pollutants - Receiving Water Limitations)	The Group should clearly identify the applicable receiving water limitations for the Category 2 and 3 pollutants it has identified in Tables 2-11 and 2-12 of the draft WMP by referring back to Table 2-3. Table 2-12 includes a column for "Standard of Exceedance" and identifies the document where the standard is found, but not the standard itself. However, it appears that all of the applicable receiving water limitations are included in Table 2-3, including those for the "Low Priority Pollutants" listed in Table 2-13.	Columns were added to Tables 2-11 and 2-12 showing applicable receiving water limitations.
Part VI.C.5.a.iv.(2) (Prioritizations - Ammonia)	The draft WMP notes that ammonia has been proposed for delisting and therefore will not be addressed. To justify this position, the Group should present the data demonstrating that there is no longer an impairment due to ammonia to support delisting.	New material was added to sub-section 2.4 describing the 13 years of data collected by the City of Long Beach at the mouth of the channel, and a new Appendix C was added containing data about ammonia and pH in the Los Cerritos Channel for Regional Board review. Data from several special studies document that the few recent dry-weather exceedances of ammonia standards have been due to natural pH cycling in the greatly reduced dry-weather flows. The data show that flows to the channels from the outfalls during the dry season are well within Basin Plan pH standards and that the diurnal cycles in pH are not the result of waste discharges.

The Prioritization Method language in Table 4-4 was The Group proposes to alter the commercial and industrial modified to clarify that any alternative prioritization facility inspection frequencies in Parts VI.D.6.d and VI.D.6.e of method used by a City will be based on water quality. the LA County MS4 Permit. The initial prioritization in most cases will occur after the first round of inspections. However, in situations The proposed modification includes a prioritization process in where the second round of inslpections has started which the member Cities rate applicable facilities as high, before the WMP is approved, the initial prioritzation medium, or low priority. High priority facilities are inspected may not occur until the next permit cycle. In all cases, the ratio of low priority to high priority facilities will more frequently and low priority facilities are inspected less remain at 3:1 or lower to maintain inspection frequently. The prioritization scheme included in Figure ICF-1 frequencies. prioritizes facilities by their potential water quality impact. Part VI.C.5.b.iv.(1)(a)(ii) (Minimum Control However, the draft WMP also notes that Cities "may follow an Measures alternative prioritization method provided it results in a similar Industrial/Commercial three-tiered scheme." The revised WMP should ensure, and Facilities Program) explicitly state that any alternative prioritization method used by a City must also be based on water quality impact. Furthermore, the draft WMP also notes that Cities can prioritize and reprioritize facilities at any time based on their discretion. The Group should revise their draft WMP to clearly state when the initial prioritization of facilities will occur. Additionally, the Group should be explicity clear that during any reprioritization, the ratio of low priority to high priority facilities must always remain at 3:1 or lower to maintain inspection frequencies identified in the draft WMP. New language was added to sub-sections 5.2.2 and Where data indicate impairment or exceedances of RWLs and 5.2.3 explaining the strategies for bringing Category 2 the findings from the source assessment implicate discharges and Category 3 pollutants into compliance as soon as from the MS4, the Permit requires a strategy for controlling possible. Trash reduction will follow the new pollutants that is sufficient to achieve compliance as soon as statewide trash amendments requirements. The Part VI.C.5.a.iv.(2)(a) possible. Although Section 5.0 describes compliance with RWLs schedule for elimination of Bis(2-ethylhexyl) phthalate (Prioritization) and Section 6.0 includes an implementation schedule, the exceedances is tied to the trash schedule because program needs to more clearly demonstrate that the compliance Bis(2) is a plasticizer that enters the receiving waters

	askedula described in Costian E.O. annuan consilience is "	
	schedule described in Section 5.0 ensures compliance is "as soon	as a component of plastic trash. The inspection
	as possible."	process will be used to educate maintenance
		organizations and individuals about not letting
		detergents and other products enter the storm drain,
		and that we will target elimination of MBAS
		exceedances by 2022 (end of next permit term).
		Further reductions in dry weather discharges will
		reduce dry-weather bacteria exceedances and possibly
		eliminate them within 10 years. The only way we
		currently know to reduce wet-weather bacteria
		exceedances is to obtain a high-flow suspension and
		to capture stormwater. 20-25 years will be needed to
		design, fund, and build enough capacity to significantly
		reduce wet-weather bacteria exceedances. The
		Permittees do not propose addressing ammonia and
		pH in the watershed through control measures.
		Rather, as explained above, they believe there is
		sufficient documentation to delist them.
		Language was added to Section 6.0 reiterating that,
		consistent with the Water Quality Improvement
	This RAA identifies potential areas for green street conversion	Hierarchy shown in Figure 3-1 and the overall Water
5	and assumes a 30% conversion of the road length in the suitable	Quality Improvement Strategy discussed in Section 3,
	areas; however, the specific locations and projects are not	the Permittees will construct the necessary mix of
	identified. Although it may not be possible to provide detailed	water capture facilities, green streets, LID projects,
Part VI.C.5.b.iv.(4)(b)-	information on specific projects at this time, the WMP should at	and treatment controls in the various sub-basins to
(c)(Selection of Watershed	least commit to the construction of the necessary number of	supplement the true source control, runoff reduction,
Control Measures)	projects within specific sub-basins to ensure compliance with	and TSS reduction measures to ensure compliance
	permit requirements per applicable compliance schedules.	with permit requirements per applicable compliance
	permit requirements per applicable compliance sollectures.	schedules. The mix of measures will be periodically
		adjusted through the adaptive management process.

	The draft WMP does not include clear information on the nature, scope, and timing of implementation of all its watershed control measures.	Sub-sections 4.5.1 and 4.5.2 were strengthened by adding more information about the control measures discussed in Section 3.0.
Watershed Control Measures - Part VI.C.5.b.iv.(4)(c)	Regional Water Board staff recognizes the amount of information that the Group has provided on watershed control measures in its draft WMP. However, this information at times lacks specificity or is interspersed within different sections of the draft WMP (e.g., street sweeping is discussed in the draft WMP's chapter on strategy, but not in the chapter on control measures). Regional Water Board staff suggests that the Group construct a concise table or other organized listing of all its discussed control measures that contains the required information, This would clarify the descriptions that the Group includes in Sections 3 and 4 of its draft WMP.	Preliminary information on the number, type, and location(s) and/or frequency of implementation of structural control measures and non-structural best management practices, as well as the nature, scope, and timing of implementation of pollution prevention measures is found in the revised implementation tables in Section 6.
7 Part VI.C.5.b.iv.(4)(c) (Watershed Control Measures - Enhanced Street Sweeping)	The description of the enhanced street sweeping program lacks detail. It is discussed in Section 3 as part of the group's strategy, but details regarding implementation do not appear to be included in Section 4. In particular, since the City of Long Beach does not use vacuum or regenerative street sweepers, as indicated in Table 3-3, the WMP should be clear as to what enhancement to street sweeping the City of Long Beach will implement.	The description of the enhanced street sweeping program was expanded and details concerning the program included in sub-section 4.5.1. A general statement about the City of Long Beach street sweeping program was also added.
Part VI.C.5.b.iv.(4)(c) (Watershed Control Measures - SB 346 Copper Reductions)	The draft WMP appears to rely mostly on the phase-out of copper in automotive brake pads, via approved legislation SB 346, to achieve the necessary copper load reductions. Given the combination of other Cu sources identified in various LA TMDLs such as building materials, other vehicle wear, air deposition from fuel combustion and industrial facilities, and that SB 346 progressively phases out Cu content in brakes of new cars (5% by	Sub-section 4.5.1 was revised to add a discussion of the implementation of SB 346 and mention the non-brake pad sources of copper shown in Figure 3-2. In addition, two brake pad copper reduction technical memos were added to the WMP in a new Appendix C;  1) The "Estimate of Urban Runoff Copper Reduction in Los Angeles County from Brake Pad Copper Reduction

	weight until 2021, 0.5% by weight until 2025), then other	Mandated by SB 346" study and 2) a "Brake Pad
	structural and non-structural BMPs may still be needed to reduce	Copper Reduction - Metrics for Tracking Progress."
	Cu loads sufficiently to achieve compliance deadlines for interim	
	and/or final WQBELS.	
	The MS4 Permit requires that the WMP provide specificity with	
	regard to structural and non-structural BMPs, including the	
	number, type, and locations(s), etc. adequate to assess	
	compliance. In a number of cases, additional specificity on the	
9	number, type, and general locations(s) of watershed control	
	measures as well as the timing of implementation for each is	
	needed.	
	Section 6 of the draft WMP includes a four-phase WMP	Section 6.0 was strengthened by adding an
	implementation schedule for control measures (MCMs, source	explanation of actions to be taken to encourage
	control measures, stormwater capture, etc.). Some of these	actions by others. Tables in Section 6.0 were revised to
	actions are listed as, "encourage the use of" (e.g., p. 6-6);	specify quarters by which control measures will be
	greater specificity is required as to what actions will be taken by	implemented and were restructured to separate
Part VI.C.5.b.iv.(4)(d)	the group to encourage these actions by others.	ongoing measures from interim milestones for
(Watershed Control		structural controls and non-structural BMPs in the
Measures - Milestones)	Items in the schedule only reference the year (or years) that a	implementation schedule. In addition, where possible
	measure of milestone will be implemented. This should be	and appropriate, more specificity on actions within the
	revised to include more specific and/or exact dates where	current and next permit terms was provided to
	appropriate. Furthermore, some items discussed as control	demonstrate how compliance with interim
	measures do not appear to have milestones within the	requirements are to be met.
	implementation schedule (e.g., enhanced street sweeping in	
	Table 6-4).	
	Additionally, many items in the implementation schedule are	
	ongoing measures that are not new interim milestones (e.g.	
	MCMs, implementation of SB 346, enhanced street sweeping,	
	etc.). For transparency, Regional Water Board staff recommends	
	that ongoing measures clearly be separated from interim	
	that ongoing measures treatly be separated from litterini	

	milestones for structural controls and non-structural BMPs in the implementation schedule.  Regional Water Board staff recognizes uncertainties may complicate establishment of specific implementation dates, however there should at least be more specificity on actions within the current and next permit terms to ensure that the following interim requirements are met; (1) a 10% reduction in metals loads during wet weather and a 30% reduction in dry weather by 2017 and (2) a 35% reduction in metals loads during wet weather and a 70% reduction during dry weather by 2020.	
Part VI.C.5.b.iv.(4)(e) (Watershed Control Measures - Permittee Responsibilities)	For MCMs and NSW discharge screening control measures, the draft WMP clearly lists responsibilities in Table 4-3. However, for other control measures, it is harder to identify Permittee responsibilities.  The WMP Implementation Schedule groups together all actions that are being implemented. Although City specific items are marked (e.g. Skylinks Golf Course), it is hard to clearly read amongst the other group actions. The WMP could be improved by including a separate schedule for each City.	A new Section 4.10 was added to the WMP, generally describing individual Permittee responsibilities within a watershed management program that is initially emphasizing true source control/pollution prevention and runoff reduction, without a separate implementation schedule for each city. In addition, information was added to Table 6-8 listing the responsible jurisdictions for each sub-basin.
	Table 6-8 also breaks down control measure implementation; however, this is broken up into sub-basins rather than by City, making the responsibilities not immediately clear.	
Part VI.C.5.b.iv.(5)(c) (Selection of Watershed Control Measures)	For waterbody-pollutant combinations not addressed by TMDLs, the MS4 Permit requires that the plan demonstrate using the reasonable assurance analysis (RAA) that the activities and control measures to be implemented will achieve applicable receiving water limitations as soon as possible. The RAA demonstrates the control measures would be adequate to	The new language in sub-sections 5.2.2 and 5.2.3, discussed above, and the new sub-section 5.4, discussed below, together respond to this comment.

	comply with the limitations/deadlines for the "limiting pollutants" for TMDLs and concludes that this will ensure compliance for all other pollutants of concern. However, it does not address the question of whether compliance with limitations for pollutants not addressed by TMDLs could be achieved in a shorter time frame.	
Part VI.C.b.iv.(5) (Reasonable Assurance Analysis - Limiting Pollutants)	The RAA identifies zinc and <i>E. coli</i> as the limiting pollutants for wet weather and dry weather, respectively. They note that these two pollutants will drive reductions of other pollutants.  If the Group believes that this approach demonstrates that activities and control measures will achieve applicable receiving water limitations, it should explicitly state and justify this for the category 2 and 3 pollutants. (This appears to have been done for category 1 pollutants and <i>E. coli</i> in Tables 5-6 and 5-9 and Figure 5-13, but not for other categories 2 and 3 pollutants.)	A new sub-section 5.4 was added to the WMP entitled "Addressing Limiting Pollutants Drives Other Pollutant Reductions." This new sub-section describes how the control measures to address zinc in wet weather and <i>E. coli</i> in dry weather will drive reductions in exceedances of RWLs for ammonia, pH, trash, Bis(2-ethylhexyl) phthalate, and MBAS.
Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - New Non- Structural Controls)	The draft WMP assumes a 10% pollutant reduction from new non-structural controls. Although 10% is a modest fraction of the overall controls necessary, additional support for this assumption should be provided, particularly since the group appears to be relying almost entirely on these controls for near-term pollutant reductions to achieve early interim milestones/deadlines. Additionally, as part of the adaptive management process, the Permittees need to commit to evaluate this assumption during program implementation and develop alternate controls if it becomes apparent that the assumption is not supported.	A new paragraph was added to sub-section 4.5.1 supporting the assumption of a 10% pollutant reduction for new non-structural measures by explaining the expected impacts of implementing SB 346, implementing the TSS reduction program, implementing plastic bag bans, and implementing the commercial/industrial inspection program. In addition, sub-section 10.3 was amended to include a commitment to evaluate the assumption as part of the adaptive management process and to develop alternative controls if it becomes apparent that the assumption is not supported.

Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - Irrigation Reductions)	For dry weather, the WMP assumes a 25% reduction in irrigation (RAA, section 7.1.2). Additional support should be provided for this assumption, particularly since the group appears to be relying almost entirely on this non-structural BMP for near-term pollutant reductions to meet early interim milestones/deadlines. Additionally, as part of the adaptive management process, the Permittees need to commit to evaluate this assumption during program implementation and develop alternate controls if it becomes apparent that the assumption is not supported.	A new paragraph was added to sub-section 3.3 explaining the reduction in average 2001-2008 dry-weather runoff from 2.35 CFS to less than 0.5 CFS and comparing this reduced flow to the modeled 2003 and 2008 dry-weather flows in the RAA. This reduction reflects a successful water conservation program based in large part on reduction of landscape irrigation. Also, sub-section 10.3 was amended to include a commitment to evaluate this assumption as part of the adaptive management process and to develop alternative controls if it becomes apparent that the assumption is not supported.
Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - Regional BMPs)	Section 1.4.2 of Attachment A to the RAA points out that additional potential regional BMPs were identified to provide the remaining BMP volume noted in Table 9-5. It indicates they can be found in Section 3 of the WMP. It is unclear if the RAA is referring to the "First Order Major BMP Sites" listed in Table 4-5 and the "Second Order Major BMP Sites" listed in Table 4-6. The RAA should clarify that sufficient sites were identified. Additionally, the WMP should mention how these sites relate to the RAA.	Language was added to sub-section 4.5.2 explaining the relationship of the first and second order regional BMP sites to the RAA and explaining the need to find and evaluate additional Regional BMP sites through the adaptive management process. This language also explains that the regional capture volume for regional BMPs will be reduced due to implementation of green streets and LID projects as well as effective implementation of source control measures.
Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - Permitted Industrial Facilities)	The draft WMP, including the RAA, excludes stormwater runoff from non-MS4 facilities within the WMA from the stormwater treatment target. In particular, industrial facilities that are permitted by the Water Boards under the Industrial General Permit or an individual stormwater permit were identified and subtracted from the treatment target.  Regional Water Board staff recognizes that this was done with the assumption that these industrial facilities will retain their	Sub-section 4.3.2.2.2 was amended to clarify that the Industrial/Commercial Facilities Program will include tracking critical industrial sources and educating industrial facilities with the intent of ensuring that all industrial facilities are implementing BMPs as required.

	runoff and/or eliminate their cause/contribution to receiving water exceedances, as required by their respective NPDES permit. However, it is important that the Group's actions under its Industrial/Commercial Facilities Program - including tracking critical industrial sources, educating industrial facilities regarding BMP requirements, and inspecting industrial facilities - ensure that all industrial facilities are implementing BMPs as required.  The draft WMP, including the RAA, takes a similar approach for areas under the jurisdiction of the California Department of Transportation (Caltrans). Caltrans facilities that are permitted under the Caltrans MS4 permit (Order No. 2012-0011-DWQ) were also identified and subtracted from the treatment target.  It should be noted that the Amendment to the Caltrans Permit	Language was added to sub-section 3.7, explaining the Watershed Group's coordination with Caltrans and the potential for collaborative implementation of projects through Collaborative Implementation Agreements.
17 Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis - Caltrans Facilities)	(Order WQ 2014-0077-DWQ) includes provisions to address TMDL requirements throughout the state. Revisions to Attachment IV of the Caltrans Permit require that Caltrans prioritize all TMDLs for implementation of source control measures and BMPs, with prioritization being "consistent with the final TMDL deadlines to the extent feasible."  Additionally, the Caltrans Permit also includes provisions for collaborative implementation through Cooperative Implementation Agreements between Caltrans and other responsible entities to conduct work to comply with a TMDL. By contributing funds to Cooperative Implementation Agreements and/or the Cooperative Implementation Grant Program, Caltrans may receive credit for compliance units, which are needed for compliance under the Caltrans Permit.  In a similar manner, the LA County MS4 Permit includes provisions for Permittees to control the contribution of	

pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with other MS4 owners - such as Caltrans - to successfully implement the provisions of the Order (see Parts VI.A.2.a.viii and VI.A.4.a.iii). Therefore, the Group should ensure that it is closely coordinating with appropriate Caltrans District staff regarding the identification and implementation of watershed control measures to achieve water quality requirements (i.e. applicable Receiving Water Limitations and WQBELs). Regional Water Board staff recognizes that the Group has taken the initial steps for such collaboration since Caltrans participates in the Group and the draft WMP notes Caltrans in its strategies for runoff reduction and total suspended solids reduction. Attachment D to the draft WMP includes a copy of legal The following language was added to the new Attachment F explaining the status of Long Beach's Part VI.C.5.b.iv.(6) (Legal certifications for all Group members except for Long Beach. The legal certifications for Long Beach should be submitted in the legal certifications: Authority) revised WMP. The legal authority certifications of the cities of the LCC are included in this section. The City of Long Beach's MS4 permit is on a separate timeline (effective date 15 months after the Los Angeles County-Wide MS4 Permit) and a legal authority letter will be submitted separately. A status report will be included in the Long Beach separate area WMP when submitted on or before March 28, 2015.

Part VI.C.5.c.iii(3)(Compliance Schedules - Bacteria)	The draft WMP proposes a final compliance date of September 2040 for <i>E. coli</i> and <i>Enterococcus</i> . However, the Group does not provide sufficient justification for this date. Additionally, milestones and a schedule of dates for achieving milestones are not defined for these two pollutants.  In revising this draft WMP, the Group should evaluate compliance schedules of bacteria TMDLs that have been established within the region and modify the proposed compliance schedule for these pollutants to include interim milestones and dates for their achievement and a final compliance date that is as soon as possible. Justification for the final compliance date as well as interim milestones should also be included.	Sub-section 2.4 was amended to provide greater justification for the final compliance date and interim milestones for <i>E. coli</i> and enterococcus. Tables 6-5, 6-6, and 6-7, as subdivided, were amended to include interim milestones for reduction of <i>E. coli</i> and enterococcus, including dry-weather compliance by the fourth quarter of 2025.
20 Part VI.C.5.iii(3) (Compliance Schedules - Ammonia and pH)	The draft WMP does not propose milestones or final compliance dates for ammonia and pH, which were both identified as Category 2 pollutants. The WMP should include milestones and compliance date for these pollutants and address them through watershed control measures, or alternatively, provide the data to support delisting (in the case of ammonia) and to support that exceedances of pH outside the acceptable range are due to natural causes.	The WMP does not propose milestones or final compliance dates for ammonia and pH because, as noted above, both are being proposed for delisting.  Naturally occurring cycles in pH in the shallow dryweather flows are causing the exceedances of chronic ammonia standards. In the absence of dry-weather pH cycling, there would be no ammonia exceedances.  Language was added to sub-section 2.4 explaining the rationale for delisting ammonia and pH, and a new Appendix C was added containing data about ammonia and pH in the Los Cerritos Channel.
21 Figures and Symbols in Draft WMP	Some figures in the draft WMP are distorted. Examples include:  • Figures 1-2 and 1-3 (on pages 1-6 and 1-8, respectively) have legends that are missing information  • Table 4-4 (on page 4-13) does not display Figure ICF-1  • Mathematical symbols used on pages 5-4 and 5-5 do not correctly display	The distorted figure in the draft WMP and the display of mathematical symbols in Section 5.3 (pages 5-4 and 5-5) were corrected.

#### **Contact Information**

Richard Watson Tel.: 949.855.6272

Email: rwatson@rwaplanning.com