CITY OF SIGNAL HILL

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June 20, 2011

Jeanine Townsend, Clerk of the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-2000

commentletters@waterboards.ca.gov

Re: Comment Letter – Los Angeles Water Board Indicator Bacteria

Dear Ms. Townsend:

The City of Signal Hill appreciates the opportunity to submit comments regarding the State Water Resources Control Board's proposed approval of the Los Angeles Watershed Indicator Bacteria Total Daily Maximum Load (TMDL) Basin Plan Amendment. We support the and legal and technical comment letters submitted on behalf of the Cities of Downey and Signal Hill by Mr. Richard Montevideo from Rutan & Tucker and from the Dr. Susan Paulsen from Flow Science Incorporated. This letter incorporates those letters by reference and provides supplemental comments. Thank you for the opportunity to provide these comments.

Our City strives to provide for numerous public services and supports dozens of environmental programs, including one for improving and protecting water quality. One of our many objectives is to work collaboratively with the State and Regional Water Boards to find cost-effective solutions to reach our mutual water quality goals. However, we are concerned that if the Bacteria TMDL is approved in its current form, our water quality protection efforts will jeopardize the delivery of our City's other vital services. We believe that, at a minimum, the State Board should remand the TMDL back to the Regional Board for further evaluation of the appropriateness of recreational uses in the concrete lined portion of the Los Angeles River and its tributaries. This letter includes a brief background of the issues, as well as our concerns about the TMDL and our requests of the State Board. More detailed comments can be found in Exhibit A, attached to this letter.

Major Policy Issues

This TMDL raises significant policy issues for our local residents and businesses, since they will have to bear the costs of implementing the TMDL through new taxes or reduced municipal services. The State Board should consider the following major policy issues:

- Have the urban Los Angeles River and its urban tributaries been so extensively modified for flood control purposes that it is neither practical nor advisable from a public policy perspective to require that they be modified to accommodate REC-1 and REC-2 Beneficial Uses?

- Are the REC-1 and REC-2 Beneficial Uses realistic in the concrete-lined portions of the River? Does a Los Angeles River Watershed Master Plan exist that provides comprehensive projects and funding to achieve goal that the River be "swimmable?" Should the REC-1 and REC-2 Beneficial Uses be removed from the concrete-lined and other portions of the Los Angeles River and its tributaries? Should the Regional Board evaluate these standards prior to the implementation of the TMDL?

- Is it reasonable to expect that local municipal governments should bear the costs of achieving the water quality objective that would support "swimmable" uses, when the Federal government extensively modified the river and its tributaries for flood protection uses that prevent the attainment of the REC-1 and REC-2 uses? Is the Los Angeles River currently regulated under improper beneficial use designations and inappropriate Water Quality Objectives? Should municipal governments be expected to address natural sources such as wildlife?

Background

The Los Angeles River and its many urban and open space tributaries exceed the bacteria water quality objectives established in the Basin Plan to protect REC-1 and REC-2 beneficial uses. The River drains a unique and unusual 834-square mile watershed that is subject to extremes in topography and weather conditions, and is comprised of 44% open space. The San Gabriel Mountains can experience over 40 inches of mostly winter rain annually, making the control of storm flows difficult. Many of our communities were subject to significant flooding problems prior to the channelization of the River and some areas still require flood insurance.

Studies by the Army Corps of Engineers revealed that over 336 square miles of the watershed were threatened by floods prior to the development of a comprehensive flood control system. The government's response to a series of massive floods from 1919 to

1938 was to construct concrete banks along 94% of the River's course. The River is now an almost complete concrete channel, with paved beds and sides, for three-quarters of its 51-mile length. Over 53.2 miles of the tributaries are channelized. The channelization of the Los Angeles River remains the biggest public works project undertaken by the Army Corp of Engineers west of the Mississippi. Levees on the sides of the River in Reaches 1 and 2 were raised in 2002-2005.

The Basin Plan's indicator bacteria objectives are based on acceptable human health risks for fresh recreational waters, but with the massive public works project, one has to ask if recreational uses are practical and safe. Recreational uses for the channels were never considered by either the Army Corps of Engineers or the County Flood Control District's planners when the system was designed and constructed. In many places, public access to the River and its urban tributaries is restricted due to the inherent dangers in attempting to wade or swim in the channel (see Basin Plan Table 2-1, footnote "m. Access prohibited by Los Angeles County Department of Public Works in the concrete- channelized areas").

Many of the urban channels are extremely shallow during the dry season, rendering recreational uses impractical and dangerous. Wet-weather flows during major rain events can exceed the volume of water on the Mississippi River at St. Louis. Local fire departments have formed special "Swift Water Rescue Teams" to respond when persons enter the River during storms. Non-point sources are a significant source of the bacteria in the River and are attributable to wildlife, equestrian activities, and birds, in both the urban flood control system and the creeks in the forest area. Although the Regional Board states that the contribution of in-channel sources of bacteria, including re-growth or re-suspension from sediments, is unknown, studies performed by CREST during dry weather conditions indicate that even if all inflows to the river were eliminated, water quality criteria would continue to be exceeded in some reaches.

Unintended Consequences of the TMDL Consent Decree

We feel that we are caught in the middle of a very expensive "check the box" exercise, in which neither the State nor the Federal governments will commit sufficient resources to develop scientifically sound water quality standards applicable to storm water/urban runoff, or workable TMDLs. The State and Regional Boards feel they must comply with EPA's TMDL Consent Decree deadlines, even though neither the Boards nor the Cities are parties to the Consent Decree/settlement. Approval of this TMDL assists EPA in complying with its TMDL Consent Decree, but does not answer the underlying questions of the scientific validity and reasonableness of the TMDL. Cities will be required to develop implementation plans, based on unachievable standards and unrealistic compliance schedules. Municipal governments are being forced to shoulder expensive scientific studies after the adoption of TMDLs in order to ground their implementation planning on sound science.

Our City understands the motivation of U.S. EPA to have this TMDL adopted, since the agency does not want to be found in contempt of Court if it fails to adopt a TMDL within the time frame mandated by the Consent Decree. However, the State and Regional Boards have several options to assist in making this TMDL reasonable. The State Board should first reevaluate the propriety of the designated beneficial uses, since people should not swim in - at the very least - the concrete-lined portions of the River, and revise the water quality standards accordingly. This would eliminate the need for most, if not all, aspects of the TMDL. If the State Board rejects the important task of revising the Basin Plan to address the problem of recreating in the LA River, it could remand the TMDL back to the Regional Board and direct that the Regional Board limit the TMDL to dry weather only. The State Board could also direct the Regional Board not to use the TMDL's targets and allocations as numeric limits in the next MS4 Permits and instead provide that the Cities implement the TMDL through a non-numeric, "deemed compliant" best management practices (BMPs) approach.

CREST Effort – The River Will Continue to Exceed Standards even with MS4 Dry-Weather Flows Diverted at a Cost of over $1.1 Billion to Local Government

The CREST study revealed that human sources of bacteria to the Los Angeles River are not the main reason the River exceeds the REC-1 and REC-2 standards, particularly in certain reaches. Bacteria are prolific and regrow in the environment. Non-human sources are significant according to the CREST BSI study. This study found that in Reach 2 only 10-50% of bacteria present in the River enter it from storm drains and tributaries. Since storm drain and tributary inputs account for only a fraction of the bacteria loading, controlling the MS4 storm drains or eliminating inflows from storm drains and tributaries will not attain water quality standards. Natural sources of bacteria, bacteria re-growth, and bacteria in sediment are significant and uncontrollable sources. However, the TMDL does not allow revisions to be made to allocations until diversions to sewers are made, even though existing evidence is sufficient to conclude that such diversions will not attain the TMDL requirements. The Regional Board estimated the cost of the dry weather diversions to be $1.1 billion, which we believe to be a low estimate. This fact alone argues for the State Board to remand the TMDL back to the Regional Board in order to review and revise the designated beneficial uses.

Wet Weather TMDL – A $5.4 Billion Problem

The Regional Board has failed to provide a workable response to how the cities are supposed to deal with wet weather flows given the TMDL targets and allocations and compliance time schedule in the TMDL. The Board is proposing that the existing High Flow Suspension be applied to the River and its tributaries. However, the suspension applies only to major rain events (those with 0.5 inches of rain or more). The region deals, on average, with 32 days of rain annually, with storms varying in size. A close review of the storms that fall below the High Flow Suspension reveals major rain storms would have to be impounded and treated in order to comply with the TMDL's wet

weather requirements. For example, based on 2004-2005 rain data and even without accounting for the allowed exceedance days, roughly 507 million gallons of water per day would be subjected to the TMDL on the Arroyo Seco alone (where the High Flow Suspension does not apply) -- enough water to fill 7 Rose Bowls.

Root of the Problem - REC-1 and REC-2 Uses are Impractical

We believe that the REC-1 and REC-2 uses are improperly designated for the concrete-lined channels of the Los Angeles River and its tributaries. The Basin Plan lists many of the REC-1 and REC-2 uses as "potential" or "intermittent". In many of the channels, it is dangerous to enter and access is illegal. Despite this, the TMDL indicates that cities are to take "aggressive action to restore" the river to allow for "water contact recreation (REC-1)".

The Regional Board's July 9, 2010 hearing on the proposed TDML highlighted the problem of adopting the TMDL without first evaluating the propriety of the designated "uses" in the Basin Plan. At the hearing the Regional Board directed its staff to move forward with a recreational use survey, even while the Board approved the TMDL. We believe that this is tacit recognition by the Regional Board that many of the REC-1 and REC-2 uses are impractical. This places the cities in the impossible position of having to invest scarce public resources in developing implementation plans, while use surveys and possible use re-designations are underway.

Summary

We believe that the State Board should remand this TMDL back to the Regional Board to review and revise the beneficial use designations prior to re-adopting the TMDL. This remand would be based on the inappropriate recreational use designations in concrete flood control channels with steep channel walls and, in many cases, prohibited access. The great expense of implementing the TMDL as drafted, the lack of effective measures to address wet weather, and the problems with controlling natural sources of bacteria all further suggest that this TMDL should not be re-adopted in its current form.

The State Board has other options including remanding the TMDL back to the Regional Board to, at a minimum, delete the wet-weather component of the TMDL. The State Board should also instruct the Regional Board to rely on non-numeric deemed compliant Best Management Practices to implement the TMDL either through the MS4 permits, or alternatively through a Memorandum of Agreement or other legal contract.

The State Board should further specify that the cities are not to be responsible for controlling any natural sources of bacteria. The State Board also should direct that the Regional Board extend the High Flow Suspension to a more representative set of rain days, and should extend the High Flow Suspension to all of the concrete portions of the River and its tributaries, including the Arroyo Seco wash. Our City is committed to

working in a collaborative manner with the State and Regional Boards on a Los Angeles River Bacteria TMDL that is technically and legally supported, and that is both reasonable and improves water quality.

Sincerely,

Kenneth C. Farfsing
City Manager

cc: City Council
State Senator
Assembly Member

Attachment: Exhibit A

Exhibit A

**Detailed Comments on the
Los Angeles River Bacteria TMDL
For Consideration by the State Board
June 2011**

1. Public Notice

The City is concerned that the State Board's public notice on the TMDL indicates that "the commenter must explain why and in what manner each of the responses provided by the Los Angeles Water Board's response was inadequate or incorrect" or else "the State Water Board will presume that the Los Angeles Water Board's response adequately addressed the commenter's concern." We do not believe that this pre-condition to public comments is sanctioned either by CEQA or elsewhere in the law. The City has commented on several past TMDLs and other State Board actions and no such pre-condition was ever required. We believe that the State Board should respond to all relevant public comments that are presented in good faith and with reasoned analysis, and that the burden should not be on the general public to ferret through all of the Regional Board's responses to comments, various changes to the TMDL, and hearing transcripts to determine whether the Regional Board properly addressed concerns regarding the TMDL. It is evident that most if not all of the Cities' substantive comments on the TMDL were not addressed; nor did the Regional Board adequately explain the reason for not addressing such comments. The Cities and the public should not be required to, in effect, provide legal briefs and respond to all Regional Board comments. Instead, we believe that the merits or lack thereof of the TMDL should be determined by the record. This new pre-condition dampens public comments and is contrary to encouraging collaboration.

2. Dry-Weather Diversions – In Excess of $1.1 Billion in Costs to Local Governments

The City of Los Angeles should be commended for the CREST effort, for its investment in understanding the sources of bacteria, and for proposing an implementation plan for dry-weather conditions in Reaches 2 and 4 of the River. Based on CREST studies, it was estimated that compliance with the dry weather portion of the TMDL will require the diversion of 20% of the dry weather outfalls to the local sewer system. A total project cost was developed for 122 diversions, which would be installed by the cities over a 30-year period. Diversion costs were based on recent experience by the City of Los Angeles BOS/BOE.

It was assumed that the diversions could be located within 300 feet of the River; that flows would be 0.15 cfs per outfall and that no local/regional sewer upgrades would be

required. The total estimated costs of this program were estimated to be $1.1 billion. The annual capital costs of the program were estimated at $37 million over the 30-year time frame. Operational costs grow to $57 million annually in the later years of the TMDL. The County Sanitation Districts also provided cost information, stating that an additional $122 million in connection charges and annual surcharge fees of $3.1 million would apply. The County Sanitation District trunk sewers are actually located as far as 4,900 feet from the River, and the costs to reach these trunk sewers were not included. Thus, we believe that the dry weather cost estimate is unrealistically low.

The 40 watershed cities, Los Angeles County, and Caltrans agreed to a funding formula for special studies for metals on the Los Angeles River. Relying on this funding formula assists in comprehending the magnitude of the costs of the TMDL implementation on the watershed's communities.

Annual Estimated Costs for Dry-Weather Diversions
Selected Watershed Cities

City	Years 4-12	Years 13-23	Years 24-32
Alhambra	$250,566	$663,264	$884,352
Commerce	$227,626	$602,264	$803,352
Los Angeles	$6,207,963	$16,652,389	$22,203,152
LA County	$1,861,010	$4,926,208	$6,568,276
Monrovia	$331,005	$823,249	$1,097,855
South Gate	$247,919	$656,257	$875,010

The Great Recession began in December of 2008 and the financial effects will be felt on both the State and local governments for years to come. The economic recovery has been slow and uneven. As pointed out to the Regional Board in our comments, the unemployment and poverty rates in the watershed remain significantly higher than the State average. The Los Angeles River watershed contains some of the most economically distressed communities in the State. Several cities in the watershed are near bankruptcy, including the Cities of Bell, Compton, Maywood and Montebello. Other cities have large operating deficits and have eliminated staff and programs in order to balance their budgets. Cities are also facing either the elimination of their redevelopment agencies or reforms which will limit their ability to assist with water quality improvement programs in the RDA areas.

The Regional Board's response appears to be that municipal finances will improve in the next 15 to 25 years, yet our community is facing budget decisions for this TMDL in the upcoming year. In addition to this TMDL, our community is currently investing in implementing the Trash TMDL. We are also investing in funding the Coordinated Monitoring Plan and Special Studies for the Los Angeles River Metals TMDLs, which is a $2.6 million local government funded scientific effort. We have submitted

Implementation Plans for the Metals TMDLs and we are reviewing the draft Toxics TMDLs for the Los Angeles/Long Beach Harbors. The reality is that our City is struggling to fund multiple TMDLs

3. No Scientific Basis for the Wet Weather TMDLs Requirements – the $5.4 Billion Solution?

There was minimal scientific study of the river in wet weather conditions as part of the CREST effort and the TMDL is woefully deficient in scientific study of the wet weather bacteria issues. In 2002, the University of Southern California studied rain patterns over a century of records. The study found that wet weather averages over 32 days per year in the Los Angeles Region. Typically, 22 (70%) of the these wet days result in 0-0.5 inches of rain, 0.5-1.5 inches fall on about 7 (20%) wet days, from 1.5 to 2.25 inches are recorded on an average of only 2 (7%) days each year, and more than 2.25 inches falls about 1 day (3%) per year. Facilities constructed for wet-weather control would sit idle for approximately 333 of 365 days, or over 91% of the average rain year.

The Regional Board estimated that compliance costs with the full TMDL, including wet-weather compliance, would be $5.4 billion, excluding amortization and inflation. We have relied upon the cost sharing formula in the Metals TMDL special studies in order to give a sense of the order of magnitude of the wet-weather costs as compared to the dry-weather costs.

Aggregate Estimated Costs of Compliance
Wet Weather and Total Costs

City	Dry Weather	Wet Weather	Total Costs
Alhambra	$17,510,166	$66,332,166	$83,842,332
Commerce	$15,907,057	$57,294,230	$73,201,287
Los Angeles	$438,876,281	$2,446,090,101	$2,884,996,382
LA County	$130,051,862	$700,812,618	$830,864,480
Monrovia	$21,733,679	$90,143,650	$111,877,329
South Gate	$17,325,188	$65,289,327	$82,614,414

The Regional Board argued that the cities would be protected from the extremely high costs of controlling wet-weather flows by the High Flow Suspension. However, even some lower volume storms in streams subject to the high flow suspension are impossibly large to control. Flow Science analyzed storm flow volumes measured in the Los Angeles River in 2004-2005 and found that 924 million gallons per day (enough water to fill the Rose Bowl 11 times) would have required diversion and/or treatment, even after application of the High Flow Suspension and natural source exclusion. Further, in other streams, the High Flow Suspension does not apply. For example, in the Arroyo Seco, the volume that would have required diversion and treatment in 2004-

2005 was 507 million gallons per day (enough to fill the Rose Bowl 7 times). The Regional Board has not responded directly to these comments.

The Regional Board argues that the Cities are already implementing the Metals TMDL and that "the metals TMDL is expected to address much of the bacterial impairment." However, there is no detailed description of how the Regional Board came to this conclusion. Regional Board staff recently reported to the Board (on June 2, 2011), that the nine implementation plans vary in scope from conceptual to more detailed. The plans were approved in December of 2010, after the Bacteria TMDL was adopted. All entities implementing these plans face great difficulty in dealing with wet weather conditions and lack sufficient funding to treat wet weather flows.