



CITY OF LONG BEACH

OFFICE OF THE CITY MANAGER

333 WEST OCEAN BOULEVARD • LONG BEACH, CALIFORNIA 90802 • (562) 570-8711 • FAX (562) 570-6583

PATRICK H. WEST
CITY MANAGER

June 2, 2010

LB Nye, Chief, TMDL and Standards Unit
Los Angeles Regional Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Mr. Man Voong

Re: Comments on the Los Angeles River Bacteria TMDL

Dear Dr. Nye and Mr. Voong:

The City of Long Beach (City), lies at the terminus of the two major rivers in Los Angeles County, the Los Angeles River (LAR) and the San Gabriel River (SGR). Both of these rivers impact the water quality along the City's coastline. The City has long supported efforts to improve the quality of storm water run-off which outfalls into these rivers. For example, before the Los Angeles River Trash Total Maximum Daily Load (Trash TMDL) was even adopted, the City had begun installing trash collection devices within its municipal storm drain system to reduce the trash impact on public beaches. Similarly, the City has already installed some bacteria filters and low flow diverters to begin addressing the issue of bacteria along the coastline and river outfalls.

The City is encouraged by the Los Angeles Regional Water Quality Control Board's (LARWQCB) recent release of a draft LAR Bacteria Total Maximum Daily Load (Bacteria TMDL) as a major step in helping to address the water quality along the coastline. City staff has completed their review of this draft document and is providing the following comments for the LARWQCB's consideration prior to finalizing and adopting this Bacteria TMDL at the Board meeting on July 9, 2010.

Rejection of an action-based compliance plan

The City was disappointed that the LARWQCB has rejected the premise of an action-based compliance plan in favor of a compliance plan based simply on meeting numeric targets. The science associated with reducing the natural and human generated bacteria found in the LAR

outfalls, as well as the LAR itself, is still in its infancy. Diversion of storm water flows either to a treatment plant, or to a retention facility are the only 100 percent effective means currently available for bacteria elimination. These methods are both capital and land intensive and likely unachievable in most cases. For the City, compliance by this method has an order of magnitude estimated cost of \$125 to \$250 million and would likely have an annual associated maintenance and operation cost of \$6 to \$10 million per year. In comparison, in-line filter media such as bacteria sponge filters, or sand/soil containment and percolation-basins can be installed and maintained for one-tenth the cost of full diversion. Unfortunately, longitudinal studies have not yet been developed to demonstrate that these devices will meet the numeric targets established in the draft Bacteria TMDL. This means that the City could spend \$12 to \$25 million installing these cost efficient bacteria sponge filters, or sand/soil containment and percolation basins on its entire storm drain system and still find itself subjected to Notices of Violation (NOV) from the LARQWCB. Further, the City could be subjected to lawsuits from third party groups for non-compliance with the Bacteria TMDL even though significant progress in bacteria reduction in the LAR would most likely have been achieved.

Compliance based on an action plan that would allow a city to cooperatively agree to the planned installation of specific solutions based on current available technology appears to make more sense. The City could be assured that its good faith effort through its investment in implementing such a plan would prevent NOV's and third party lawsuits. Once implemented, ongoing monitoring of the LAR and the coastline would be conducted, and based on those findings, any needed additional compliance plans could be initiated utilizing the advances in bacteria removal technology that will inevitably occur over the next fifteen years.

The City would like the LARWQCB in conjunction with the Environmental Protection Agency (EPA) to reconsider the possibility of an action-based compliance plan in lieu of the currently proposed draft Bacteria TMDL based on numeric exceedance compliance.

Third party exceedances

The City is concerned that, as written, the City bears the responsibility for third party exceedances that are detected in the City's outfall structures to the LAR. Simply put, the storm drain system leading to the LAR through the City of Long Beach is a complicated interconnected system of channels, pipes, and pump stations that both accept storm water from other agencies and LARWQCB permittees, and also discharges Long Beach storm water into these non-city facilities. Because of this interconnected system, and the current language in the draft Bacteria TMDL, the City, even though it may have spent hundreds of millions of dollars to comply with the bacteria TMDL, would find itself getting issued a NOV from the LARWQCB due to an omission, or deliberate act of non compliance, by one of the agencies or LARWQCB permittees

connected to these storm drain facilities. Of even more concern to the City is that such action would allow third party groups to sue the City for non-compliance.

To avoid this, the City would have to continuously test all upstream and downstream connections on its storm drain system. With such connections numbering in the hundreds, the City could find itself spending millions of dollars each year testing its storm water to prevent NOV's or third party lawsuits. Such funding would be better spent on improving the quality of storm water, not testing it.

The City's concern on this matter becomes more acute, when in the latter years of the Bacteria TMDL program, the compliance testing moves from a numeric level at the outfalls to an in-river testing based on exceedance days. The proposed language confers responsibility to the City for all bacteria that may end up in the Lower Reach of the LAR, even though most flows entering this Reach are not under the City's control. Additionally, the City cannot control human activity in this Reach of the LAR (the LAR is not within the City's jurisdiction), nor can the City account for the natural bacteria that may occur within this Reach. Inevitably, the City will be subjected to NOV's and third party lawsuits for non-compliance. In defense of these actions, the City will be forced to spend millions of general fund tax dollars performing elaborate source testing that most experts today tell us will end up being non-conclusive. As previously stated, such funding would be better spent improving the quality of storm water, not testing it for lawsuit purposes.

The LARWQCB, in conjunction with the EPA, needs to factor in an "agency good faith effort" provision on compliance testing to allow the LARWQCB to investigate an exceedance occurrence cooperatively with the agency deemed in violation and allow for administrative remedies including an appeal hearing before the LARWQCB prior to the full issuance of an NOV. This would allow LARWQCB staff to investigate in cooperation with the agency to determine if the agency had the reasonable ability to prevent or control the exceedance. This will prevent millions of dollars being spent unnecessarily on unproductive storm water testing and legal expenses, and instead of focusing on the exceedance, its health implications, and possible remedies.

Single occurrence storm water quality testing violations

Bacteria growth within the storm drain system, or the sources leading to the system, is neither predictable nor fully controllable. An outfall structure leading to the LAR may be tested and be in full compliance with the proposed Bacteria TMDL's 364 days in the year, and on a single day be out of compliance due to a variety of uncontrollable factors. These factors could include an animal in the system, an accidental discharge from a broken residential sewer, or warm weather growth or re-growth within the drain itself, etc. It is well-established that these types of single

occurrences will happen and are virtually impossible to trace back to their source. Based on the current language within the draft Bacteria TMDL, the City would be issued a NOV and be subjected to third party lawsuits as a result of these single, non-traceable occurrences. In addition the City may find itself having to spend millions of general fund tax funds to correct a problem that was actually just an anomaly and not a systemic problem or health issue.

The LARWQCB in conjunction with EPA should factor in a procedure to allow for a "verification testing" provision on compliance testing to allow the agency to perform an agreed upon series of verification testing over the following 60 days from the initial date of exceedance and allow for administrative remedies including an appeal hearing before the LARWQCB prior to the full issuance of an NOV. This would assure that testing anomalies are verified and that funding is not wasted on correcting single or rare occurrences, or on non-productive legal expenses.

Compliance with the proposed Wet-Weather TMDL is unrealistic

Based on current technology, land availability, and economic resources, the wet-weather component of the Bacteria TMDL appears to be unachievable. Although the TMDL specifies that wet weather compliance can be achieved by "employing any viable implementation strategy," the City is not aware of any measures that could reasonably be implemented that will achieve the wet-weather Waste Load Allocations (WLAs) specified in the Bacteria TMDL. The volumes of water that are required to be diverted and/or treated in wet weather are simply too large. For the 2004-2005 water year and after, application of the high flow suspension and the "natural sources exclusion" (as proposed in the staff Bacteria TMDL), in the LAR at Wardlow Road is roughly 5 billion gallons of water per day, which is more than 10 times the design flow rate of the Hyperion Wastewater Treatment Plant, or enough water in a single day to fill the Rose Bowl 40 times.

The Bacteria TMDL requires that cities develop the science and engineering for the wet-weather TMDL during the next ten-year period. During this period of time, cities will also be required to design, fund and construct a dry-weather plan. The LARWQCB Bacteria TMDL staff report mentions that as the cities implement the dry-weather Bacteria TMDL, these improvements will assist the City with their compliance with the wet-weather Bacteria TMDL requirements. In reality the dry weather Bacteria TMDL compliance effort will have little to no benefit in meeting the wet weather requirements since the dry-weather flows that are treated by in-line filtration, sewer diversions and infiltration devices are a small fraction of the wet-weather flows expected during even small storm events, and large storm flows will easily overtop these facilities.

The City of Los Angeles undertook a comprehensive study to determine what it would take to create and comply with a dry-weather Bacteria TMDL, known as CREST (Cleaner Rivers

through Effective Stakeholder-led TMDLs). The CREST effort developed detailed science, engineering, monitoring, implementation and scheduling for a dry-weather TMDL. There are several hundred pages of materials compiled by the CREST effort, which evolved over a two-year period of time and required hundreds of thousands of dollars of investment by the City of Los Angeles in Dry Weather TMDL development. At a minimum, a similar effort should be undertaken by the LARWQCB before adopting a Bacteria TMDL for wet-weather conditions. EPA and the LARWQCB should secure funding to complete a specific wet-weather science and engineering study and not continue to assume that the dry weather solutions can simply be expanded to accommodate the additional wet weather flows.

Concerns with exceedance days

The draft Bacteria TMDL includes interim waste load allocations (WLAs) in the form of allowable *E. coli* loadings from storm drains to a given LAR segment or tributary for permittees. However, the final WLAs are expressed in terms of an allowable number of exceedance days in the LAR itself, based upon a reference watershed approach.

As shown by the CREST studies, *E. coli* concentrations exceeded standards in one segment of Reach Two at the LAR 100 percent of the time, but these exceedances were mostly due to non-human sources. The CREST studies also showed that in Reach Two, tributaries and storm drains contribute only about 10 percent to 50 percent of the bacteria loading to the Reach, and the final WLAs would be exceeded. Thus, compliance with interim WLAs by reducing *E. coli* loadings from storm drain pipes is unlikely to result in compliance with final WLAs. This is because the *E. coli* loadings are measured in the LAR itself, because much of the bacteria loading is either natural or in-stream, and beyond the control of dischargers. Although no data is available for Reach One, it has physical characteristics and bacteria sources similar to Reach Two, and the same situation is to be expected there.

As previously stated, the LARWQCB in conjunction with EPA should factor in an "agency good faith effort" provision on exceedance day compliance to allow the LARWQCB to investigate an exceedance occurrence cooperatively with the agency deemed in violation and allow for administrative remedies, including an appeal hearing before the LARWQCB, before the full issuance of an NOV. This would allow LARWQCB staff to investigate in cooperation with the agency to determine if the agency had the reasonable ability to prevent or control the exceedance. This will prevent millions of dollars being spent unnecessarily on unproductive storm water testing and legal expenses, and instead focus on the exceedance, its health implications, and possible remedies.

Non-controllable delays related to implementation of a Load Reduction Strategy (LRS)

Compliance with the proposed Bacteria TMDL will require the City to develop and implement a LRS that will include many forms of bacteria reduction strategies. Many of these will require the preparation of environmental reports leading to CEQA and NEPA clearances, the acquisition of land, the construction of treatment plants, the expansion of existing sewer systems, and the execution of interagency cooperative agreements. It is not unreasonable to expect that some of the City's proposed projects under its LRS may get delayed due to inadequate funding, law suits, the need for eminent domain proceedings, or failure of other agencies to act in a timely manner. The current language in the draft Bacteria TMDL is clear: should the City not complete its LRS by the end of phase one, and as a result be in non-compliance, the City would be subject to the issuance of a NOV by the LARWQCB and be subjected to third party law suits for non-compliance.

The LARWQCB in conjunction with the EPA should factor in an "agency good faith effort" provision on the timely completion of an agreed upon LRS. This provision should grant the LARWQCB the ability, upon the timely request of an agency, to grant time extensions for compliance of Phase One Bacteria TMDL for specific locations. Assuming an agency has and continues to make a good faith effort to complete its LRS in a timely manner, it is clear that the issuance of a NOV will serve no purpose other than to divert resources, time, and funding from its intended purpose of improving storm water quality, and instead be spent unnecessarily on unproductive storm water legal expenses and possibly further delaying the full implementation of the LRS.

Recognition of the full intended purpose of the Bacteria TMDL

The City is concerned that the REC-1 beneficial use designation, which allows for swimming and other full immersion activity in the lower sections of the LAR is neither appropriate nor technically feasible. These Reaches and their tributaries are fenced and public access is restricted, due to dangerous conditions in both the low-flow channel during dry-weather conditions and in the LAR as a whole during rainstorms. People currently do not and cannot safely participate in recreational activity in Reaches One and Two of the LAR. The LARWQCB's estimated cost for this goal of restoring the concrete-lined and restricted LAR for human contact recreation is \$5.4 billion. The City believes the true focus of the Bacteria TMDL should be to improve the water quality at the public beaches and that some of the \$5.4 billion would be better spent on projects that would further reduce the bacteria along the coastline.

Through several studies conducted by the City and other agencies, it has been determined that the LAR contributes to the bacteria levels along the coastline, but is not the sole source. Even if

the LAR were to be in full compliance today with the proposed Bacteria TMDL, the lack of coastal circulation combined with the both human and feral animal contact, as well as other pollutants found in our coastal waters, would result in ongoing bacteria level exceedances resulting in beach advisories/closures. For this reason, the City has been working with the Army Corps to pursue the reconfiguration of all or a portion of the breakwater that prevents wave action and coastal circulation along the coastline. It is believed that, through the reconfiguration of the breakwater or to the changes of the LAR mouth, restoration of wave action and coastal circulation along the coastline could be achieved resulting in a significant improvement in the water quality at the public beaches.

To ultimately improve the water quality along the coastline, a more comprehensive approach to the issue of bacteria reduction that combines both the LAR and the reconfiguration of the breakwater should be considered. Because the lower Reach of the LAR cannot realistically accommodate a REC-1 beneficial use designation, which allows for swimming and other full immersion activity, the City would advocate that these lower Reaches receive a more moderate REC-2 designation as a more realistic goal. Resources from all agencies affected by the lower Reaches Bacteria TMDL that would otherwise have been applied to achieve compliance with the more stringent REC-1 criteria could then be re-directed to assist with the City's efforts to improve wave action and coastal circulation along the coastline through the reconfiguration of all or a portion of the breakwater.

The LARWQCB in conjunction with the EPA should evaluate a more comprehensive approach to improving the water quality along the coastline that may include a re-designation of the Lower Reaches of the LAR to a more moderate REC-2 designation, and the allocation of resources to improve coastline circulation.

Conclusion

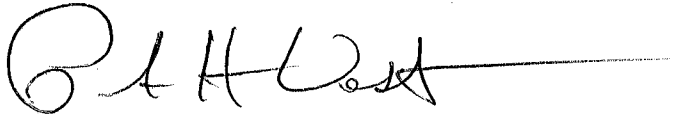
More than any other agency along the LAR, the City of Long Beach understands the need to reduce the bacteria loading within the LAR that ultimately impacts the public beaches along the coast. The City is encouraged that the LARWQCB in conjunction with the EPA is taking this initial step with the proposed draft Bacteria TMDL. The City is concerned, however, that many of the provisions contained within the draft document can not be realistically achieved and therefore, may result in the wasteful use of scarce general fund tax dollars on responding to LARWQCB issued NOV's and third party law suits. As recommended in this comment letter, the City believes that, with some modifications, an effective dry weather Bacteria TMDL can be implemented that will ultimately improve the storm water quality in the LAR and get us all to the goal of reducing bacteria related beach closures along the coastline.

June 2, 2010

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Should you have any questions regarding the City's comments stated herein, please contact Mark Christoffels, Deputy Director of Public Works/City Engineer at (562) 570-6771.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick H. West", followed by a long horizontal line extending to the right.

Patrick H. West

City Manager

P/pw/eng/ce/mark/npdes/lariverbacteriatmdlcomment letter

cc: Mayor

City Council