



September 9, 2016

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Sent via email

Re: Environmental Groups Comments on Cost Benefit Analysis Draft Work Plan; REC-1 Triennial Review Project – Indicator Bacteria

Dear Ms. Mata,

Please accept these comments on behalf of San Diego Coastkeeper and Surfrider Foundation. Our groups thank you for this opportunity to expand upon our oral comments made at the August 31, 2016 Regional Board meeting on the Draft Work Plan.

CBA Overview and Policies, Scenarios, and Analyses

Our organizations are aware of the various efforts through the Triennial Review process aimed at assessing REC-1 standards and regulations. We have already submitted written comments on the overall Triennial Review process¹, but wish to specifically comment on the Triennial Review language addressing the cost-benefit analysis. In particular, the language states that the Regional Board will, “continue to seek a third party cost benefit analysis regarding compliance with regulations of the San Diego Water Board, with a specific focus on the infeasibility of meeting wet weather TMDL water quality objectives for bacteria indicators.” This language is clear that the call and goal of the CBA is to specifically address the costs and benefits of meeting the existing TMDL wet weather water quality objectives for bacteria.

Our groups are concerned that by including multiple scenarios and policy proposals within a cost-benefit analysis there exists an inherent bias in this study. As drafted, the work plan appears instead to be an attempt to justify every imaginable type of TMDL amendment.

¹ See our joint comments submitted to Regional Board dated February 3, 2015 titled “Environmental Groups Comments on Triennial Review of the San Diego Basin Plan”.

We believe it would be more appropriate to do a cost-benefit analysis that considers only the existing TMDL and compliance schedule. This is especially true since alternative scientific endpoints have not been adopted. Water quality and human health, rather than costs assessments, are – and must continue to be - the driving factors behind implementation. We strongly believe a better place for strategies and policy assessments and considerations are under the rigorous processes that already exist for TMDL modification and compliance schedule amendments.

Benefits Calculations

For the reasons set out below we do not believe the current effort as drafted will adequately capture the value of the multitude of benefits that would accompany TMDL compliance under either the existing regulations or alternative scenarios.

First, any analysis that takes place prior to a proper reasonable assurance analysis (RAA) such as those performed in the Los Angeles region under their MS4 Enhanced Watershed Management Plans (EWMPs) cannot adequately characterize either true costs or the benefits that would result from such an assessment and its attendant strategies. This CBA draws heavily from the Water Quality Improvement Plans (WQIPs) which are not grounded in an adequate, rigorous assessment that chosen actions or strategies will actually result in stated outcomes and compliance with effluent and receiving water limitations. Only through a properly conducted RAA EWMP-style analysis can such assurance be gained. As such, a better process would be to conduct EWMP-style RAAs throughout the area covered by the TMDL (or, ideally, for all pollutants) that includes several strategy options. A cost-benefit analysis of those multiple modeled scenarios could then be conducted in order to determine which strategies best address pollutant loads while producing the most associated benefits. Only then can permittees be confident that strategies will not only meet the TMDL compliance schedule but that the chosen strategy is the most cost-effective, benefits-producing strategy for the cost.

The Draft plan states that no additional modeling will be conducted to develop the infrastructure plan that will be the basis of the cost benefit analysis. Green infrastructure feasibility, intensity, type, location, and cost, however, cannot be determined without an EWMP RAA type analysis. Similarly, the benefits cannot be accurately determined without the EWMP level analysis. Water supply benefits, property value benefits, community benefits, and receiving water benefits cannot be priced without determining what GSI mix will be applied and where. We are very concerned that the benefits of immediate compliance with the existing bacteria TMDL will be significantly undervalued in the analysis as proposed.

For example, the current Draft plan appears to value only lower water rates as the benefit of stormwater use as a result of Green Stormwater Infrastructure (GSI).² The analysis must also consider at least:

² See Table 3, page 18.

- a) The value of increased water security, especially in light of climate change. San Diego water agencies are paying a premium for water from ocean desalination based on water security. The savings from Low Impact Development (LID) investment avoiding additional investment in water security, including desal, must be considered and priced.
- b) Greenhouse gas savings from avoiding water pumping in the existing supply system, and desal carbon discharge, must be priced and considered. Also the natural resource costs of desal must be priced and included.
- c) Environmental impacts on existing water supply sources, including the Colorado River and the Sacramento Delta, that would be avoided if LID were implemented now, must be priced and included.
- d) Infrastructure costs to update, improve and upsize existing water supply sources to support projected growth, in the warming climate, that will not be avoided if compliance with the existing TMDL is not required must also be quantified and considered.
- e) System-wide energy savings from associated water supply augmentation benefits and offsets from imports, water transfers, and other high-energy sources.

Additionally, as written we are concerned that the costs of deferring compliance are also understated. Costs of O&M, and required CIP spending, on the existing stormwater conveyance system must be compared to costs of implementing GSI/LID now, and considered in the analysis. TreePeople³ in Los Angeles, among others, has conducted a series of analyses for LID in Los Angeles County and concluded, for example, that implementation of LID in Sun Valley will result in millions of dollars in annual savings over conventional stormwater conveyance systems, in O&M and CIP spending (not counting the other benefits described above). Our groups are confident that similar savings can be made and benefits realized in the study area. For a valid cost benefit analysis, these savings must be considered. We also urge the consulting team to carefully review and consider the USC/UCLA study⁴ on stormwater compliance costs and benefits for the Los Angeles region, which clearly demonstrates benefits far outweigh costs.

While we realize the Draft work plan mentions some of the below, we wish to emphasize and reiterate that a proper study must include, at a minimum, each of the following benefits of all strategies, and in particular green infrastructure strategies: ecosystem services, water supply

³ See: <http://www.ocwd.com/media/2013/c-temp-ocwdpress-2012-swcstormwatercapturereport2612.pdf>, Appendix 1; https://www.treepeople.org/sites/default/files/pdf/publications/TreePeople%20-%20Rainwater_as_a_Resource.pdf; <https://www.treepeople.org/sites/default/files/pdf/publications/SCMP%20General%20Public%20Mtg%20No%203.pdf>; and <https://blog.treepeople.org/policy/2015/01/ladwps-plan-source-water-sky>.

⁴See Los Angeles Water Board, 2004. *Alternative Approaches to Stormwater Control*, at: http://www.swrcb.ca.gov/rwqcb9/water_issues/programs/stormwater/docs/sd_permit/reissuance/usc%20ucla%20final%20report%202004.pdf

augmentation and reliability (with like costs for desal), recreational use and values, enhanced aesthetics and associated property value increases, water quality and aquatic habitat enhancements and values, wetland enhancement and creation, poverty reduction benefits of local green infrastructure jobs, energy use and related reductions in carbon and other emissions (e.g.: reducing emissions associated with transporting/treating imported water), air quality pollutant removal from added vegetation, flood mitigation and control, erosion control, greening of neighborhoods, rare/endangered species preservation, revitalized communities, community cohesion, mitigating urban heat island effect, increased open space, reduction in beach closures and advisories, and public health benefits for all user groups and in freshwater and marine systems subject to the TMDL.

Finally, and importantly, we wish to point out that the TMDL was originally written to incorporate a ten-year compliance timeline. Against our objections, the TMDL was amended to allow for twenty-year compliance timelines based on the idea that permittees would chose comprehensive load reductions strategies (or TMDL-plus strategies) to address multiple pollutant parameters as both convenience and cost-savings strategies. Furthermore, while we take issue with the WQIP strategies as being the strategies upon which this CBA is based, the WQIP process specifically calls for consideration and prioritization of strategies and BMPs that address multiple pollutant parameters. Thus, we can assume that the strategies within the WQIPs address multiple pollutants. We therefore have concerns that the co-benefits of addressing multiple pollutants impairing our water bodies will not be adequately assessed. We urge the CBA team to consider all the related benefits of compliance with those regulations addressing non-TMDL pollutants.

Policies, Scenarios and Analyses Considerations

While we do not consider this CBA to be the proper place to begin assessment of policy and scenario/analysis, and especially without an approved and amended revised scientific endpoint, we take this opportunity to briefly comment on several of the (many) proposed scenarios.

We strongly suggest removing the following scenarios and analysis from the assessment and from future assessments:

- a) Move compliance locations
- b) Flow-based regulatory suspensions
- c) Create beach-specific WQ objectives
- d) Adjust wet weather beach WQ objective
- e) Integration with CIP schedule
- f) Wet weather compliance by 2031
- g) Wet weather compliance by 2051.

Several of the listed scenarios are illegal and unsupported by the whole of scientific or other data. In an effort to find a meaningful and cooperative discussion on REC-1 standards and TMDL compliance, and in order to lower the cost of the CBA inquiry itself, we suggest removal

of the above. We take this opportunity to note that our groups strongly oppose – and will continue to oppose – adjusting schedules to allow more time for compliance, flow suspensions or variances, or changed compliance endpoints. We also note, however, that we believe wastewater system exfiltration is a significant contributing factor to human bacteria in MS4 discharges and as a result we support future inquiries and investigations, and ultimately inclusion, of wastewater agencies as part of the TMDL so long as they are subject the same rigorous requirements as the MS4 participants.

Data Consideration

Based on the Draft and our review of all Steering Committee and TAC meeting agenda and minutes to date, we are concerned that the Draft work plan places too much emphasis on the results of the Surfer Health Study. While we agree the study is an important study with respect to a particular demographic occupying a particular part of the surf zone at two beaches, we believe the subjects of the study are not representative of the typical beach-going public, even during winter/wet weather. Furthermore, it is our understanding that while samples for this study were taken at ankle-depth wading areas, surfers do not typically occupy this area or submerge themselves in the sampling area. While swimming and wading children are most susceptible to water-borne bacteria illness, and in fact EPA regulations on REC-1 standards particularly consider impacts to more vulnerable populations, the Surfer Health Study did not include as part of its methodology an assessment of non-surfers and those surfers under the age of 18 and thus it is of limited utility. As such, we caution against overemphasizing the results from this study in investigating alternative WQOs.

Furthermore, the Draft appears to give insufficient attention to the recreation and other activities in our freshwater systems covered by the TMDL, going so far as to consider altogether neglecting freshwater systems and treating them merely as pollutant conveyance systems in the “move compliance endpoints” scenario. We note that while not nearly as heavily utilized as our beaches by the public, our freshwater systems are of no less value. We ask, if not already considered, that the benefits of increased recreation in our freshwater systems be carefully considered.

Financial Capability Analysis

We are concerned that the Draft work plan will assess only Residential Indicators Scores (RIS), without also conducting the Financial Capability Indicator (FCI) analysis, resulting in only half the story of financial capability. The Draft notes that, “the results of a full FCA, including both calculation of RIS and financial capability scores (FCS), are used by the EPA to determine whether a longer compliance timeframe is appropriate for spreading costs over a longer time period,” but then fails to propose to conduct the full FCA analysis. By telling only half the story (the cost per household) and failing to tell the other half (the financial strength of the permittees by considering bond ratings, property values, income, tax revenue, and historic stormwater fees), as written the Draft fails to give a complete picture of our region’s ability to pay. As written, the

Draft fails to include what we believe is an even more integral part of the FCA in determining a permittee's financial capability (the FCI). As such we believe the work plan is biased towards accentuating costs without estimating our region's likely ability to meet any and all financial requirements of meeting both existing and amended TMDL requirements.

Conclusion

While these comments do not cover the entirety of our thoughts, suggestions, and concerns about the Draft plan, we are hopeful that they will be helpful in guiding future revisions to the work plan and, ultimately, the analysis that results.

We also remain available to meet with the Steering Committee, TAC, and other members of the CBA team to discuss our thoughts and concerns about the CBA, REC-1 standards, and the TMDL. We appreciate this opportunity to provide these brief written comments on the Draft CBA work plan and thank you for considering them.

Sincerely,



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Rick Wilson
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Surfrider Foundation

cc:

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