



August 25, 2017

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Sent via email

Re: REC-1 Triennial Review Project – Cost Benefit Analysis

Dear Ms. Santillan,

Please accept these comments on behalf of San Diego Coastkeeper (Coastkeeper) and the San Diego Chapter of Surfrider (Surfrider) on the REC-1 Triennial Review Cost Benefit Analysis.

As a preliminary matter, we have strong concerns that data gaps, uncertainties, and assumptions have led to an analysis that is incomplete at best, or misleading at worst. We wish to point out once again that against our objections, the TMDL was extended by 10 years to allow permittees to address multiple pollutants through the TMDL, though the benefits of that more comprehensive approach are at times ignored or discounted. Rather than reiterate each of our concerns voiced in August 2016, you can reference that letter [here](#) as our concerns are still relevant.

While the comments below are focused on the shortcomings of the study, we note that the basic premise underlying the study--that clean creeks and beaches can be traded away based on a cost-benefit analysis--is inconsistent with core legal requirements. The California Constitution gives access to all Californians access to all waters of the state for fishing and boating. Further, the State holds all waters and their resources in trust for the public, and has a duty for protect those resources. The Regional Board simply cannot eliminate public trust resources, or deny public access to waters, based on their view of the costs of compliance.

The Regional Board should require third party review of the analysis

The cost benefit analysis (CBA) is a unique document outside the technical scope of parties typically interested in water quality issues in San Diego, requiring costly third-party external review by consulting economists. Our groups and other public interest groups in the region do

not maintain the expertise or funds to adequately review this complex document within the short public review process. To ensure proper unbiased review, the Regional Board should conduct an external peer review among recognized experts from outside the region and approved by our groups and other local NGOs. Permittees continue to fail to live up to obligations under the Clean Water Act and our waters remain unsafe to swim and fish in for a substantial part of the year. As this novel analysis will almost certainly be used as a justification by permittees to undermine decades of effort aimed at reversing the degradation of our waters, an external peer review is appropriate. At a time when our federal government is moving towards eroding long-standing protections for our waterways, San Diego cannot afford to follow suit.

Data gaps and uncertainty in data and assumptions are significant throughout the analysis, limiting the utility of this analysis in future decision-making.

While these comments are not meant to comprehensively assess all instances where data gaps, uncertainties, and assumption could impact the reliability of the analysis and/or findings, we instead point to a very few specific concerns.

Despite the short time frame given, our initial review has led us to conclude that as conducted the analysis has considerable limitations which should be recognized in any attempt to use this analysis in future attempts to weaken or change existing regulations. These limitations include uncertainties surrounding data quantity and accuracy, as well as underlying assumptions.

Among our concerns and as mentioned in our August 2016 letter, we have continuing concerns that too much emphasis was put on the results of the Surfer Health Study. While we once again acknowledge the study is an important one 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 wet weather. Besides the reasons for our concerns conveyed in that letter, we further note that Mission Bay is heavily used by children and non-surfers regularly for contact recreation. Among the studies cited to in this analysis, at least one compiled data from 13 separate cohort studies and found greater water exposure and association between water pollution and illness among children than adults. As such, we once again relay our concerns over the degree to which the Surfer Health Study was relied upon in this analysis.

The analysis as applied to freshwater appears to be based on an assumption that few people would choose to engage in contact behavior during or after rainstorms, whether by choice or due to legal constraints. It notes that “residents of and visitors to the San Diego region have minimal access to fresh bodies of water in which swimming is feasible and legal.” Due to decades of poor development practices and a disregard for our freshwater bodies, the very entities regulated by the TMDL and MS4 permit have destroyed, concretized, or otherwise neglected our fresh water creeks, streams, and rivers, considering at times only flood control properties and little else. To premise current and future use opportunities on existing conditions that must be remedied, restored, and protected – as directed by the Clean Water Act – is improper. Chain link

fences around concretized creeks and streams must not be used as a baseline. As nearby as Los Angeles there are examples of increased use of freshwater resources when proper attention is given to restoring and protecting resources that are managed in a more natural state.

Finally, while we are hopeful that human sources of bacteria are appropriately addressed and regulated – in particular exfiltration from aging and failing wastewater infrastructure which we believe to be a major contributor to bacteria loading in the MS4 – we caution against relying too heavily on the underlying assumptions and data related to this issue in the analysis. The report upon which the human sources findings are based itself qualifies that, “the level of analysis in this report can be described as exploratory in nature... several data gaps limit the ability to draw conclusions about human-sources of bacteria...from this analysis.”¹

Several findings, including net benefits findings and financial burden findings, are unsupported and should be amended

“Net benefits negative” finding

Given the short time provided for review of this analysis, our below comments should not be interpreted as an attempt to account for and address in detail each area where the analysis fails to adequately consider or quantify benefits. Instead, we simply illustrate a few of the potentially significant benefits that remain unquantified in order to explain why the finding that “net benefits are negative in all scenarios”, *whether quantified or not*, is improper and should be removed from a final draft of this analysis. Furthermore, we strongly believe the shortcomings related to data gaps, uncertainties, and assumptions, in addition to the inadequate consideration of benefits, requires deletion of that finding.

Unfortunately, many of the concerns we conveyed in our letter dated September 9, 2016 remain. Among those concerns was our doubt that the analysis would, “adequately capture the value of the multitude of benefits that would accompany TMDL compliance under either the existing regulations or alternative scenarios.” This appears to continue to be the case as important benefits and co-benefits were qualitatively assessed rather than quantitatively, or not at all. While the analysis concludes that not all benefits could be quantified and is careful to point out that the appropriate UMB and EPA protocols for describing qualitative benefits and co-benefits were adhered to, the analysis somehow then inexplicably goes on to find that “net benefits are negative for all scenarios”. This, despite the fact that not all benefits and co-benefits were quantified and the analysis itself recognizes that even with unquantified benefits, “literature strongly suggests the actions would generate an economic benefit.”²

¹ San Diego County and South Orange County Bacteria TMDL – Human Sources Scenario, Brown and Caldwell, page 1.

² Page 85 of analysis. The analysis notes that a variety of benefits are derived from GI/LID implementation in stormwater and stream restoration scenarios, including improved birth weight, reduced ADHD, improved school performance, reduced crime, and reduced cardiovascular disease, though none of these benefits is quantified. It further qualitatively recognizes, though almost in passing, that “there are likely unquantified benefits through for

The OMB Circular is careful to point out that, “when important benefits and costs cannot be expressed in monetary units, BCA is less useful, *and it can even be misleading*, because the calculation of net benefits in such cases does not provide a full evaluation of all relevant benefits and costs.”³ The circular goes on to state that unquantified effects, “such as ecological gains, improvements in quality of life, and aesthetic beauty⁴,” should be included. Yet, it remains unclear how much detail and analysis went into describing and considering these additional benefits. We also note that at several points in the analysis costs may be overestimated while benefits may be underestimated. For example, the analysis notes that “it is possible the value shown overestimates the costs required to control Nitrogen and Phosphorous,⁵” while in evaluating increases in property values the analysis notes that literature reports value increases of 0.75 to 6.8% but the analysis applies a range only up to 3% “to be conservative.”⁶

As it relates to benefits related to removal of additional pollutants and strategies to address comprehensive load reductions in our region, for which permittees received an additional 10 years of compliance time, the lack of data on co-benefits bolsters our call for caution and for deletion of that finding. Co-benefits of metals and some other pollution reductions are not quantitatively discussed and could potentially be significant. Toxicity, benthic community impacts, and other impairments are common throughout our region and it is expected that often times BMPs utilized to address bacteria loads will also serve to assist in reducing metals and other pollutants and improve the chemical, biological, and physical integrity of San Diego’s waters.

The analysis also neglects to account for water supply and associated benefits. As noted in our August 2016 letter, a proper analysis should include the myriad benefits that accompany stormwater capture and use. Yet the analysis does not include or analyze stormwater capture as a water supply benefit in the analysis because, “it’s not currently practiced.” Yet our groups are aware of at least a few situations where stormwater is being captured⁷ and used either onsite for irrigation or being considered for addition to the sanitary sewer system or groundwater recharge where it is or will be recycled into potable and/or nonpotable water. With each passing year, we expect that stormwater will increasingly be used to supplement wastewater flows for recycled water or groundwater infiltration/injection projects and on-site irrigation. Our region’s municipal stormwater permit requires on-site infiltration and strongly encourages capture and use, going so far as to use the “new paradigm” of stormwater capture and use to augment water

people who appreciate and visit the waterways of County of San Diego...and would experience benefits from observing or knowing that the water is clear during storms.” Page 113. The analysis does not account for benefits associated with wellness and its impacts on families, mental well-being, general psychological value in knowing our waters are not polluted, and similar intangible benefits.

³ OMB Circular, emphasis added.

⁴ *Id.*

⁵ Page 101.

⁶ Page 91.

⁷ See for example, the San Juan Creek Watershed Project currently in the design phase:

http://sanjuanwatershed.com/wp-content/uploads/2016/11/Final-NOP_San-Juan-Watershed-Project.pdf?c74010

supplies to justify allowance of a safe harbor from enforcement.⁸ Stormwater capture projects, both centralized and distributed, are necessarily associated with some benefits to groundwater replenishment or environmental beneficial uses, carbon offsets through imported water reduction, and increased surface water flows. By neglecting to account for the myriad benefits that are associated with water supply and strategies that will almost certainly be implemented in the near future and beyond, the analysis fails to consider a substantial benefit to our region.

Finally, the analysis does not attempt to combine various scenarios to determine whether cost savings or benefits enhancements would result. That is, the analysis does not attempt to synthesize various approaches or elements of approaches to find the cumulative result, but instead appears to treat each as a separate and distinct approach. For instance, an integrated stormwater and human source contamination analysis was not conducted. As such, the analysis unfortunately limits its scope to artificially compartmentalized approaches when in reality a combination of programmatic, structural, and cross-departmental BMPs and infrastructure improvements are most appropriate to achieve compliance with the TMDL. In this regard, the analysis and its compartmentalized approach may significantly overstate costs and understate benefits.

Without an assessment that includes each of the benefits listed in our August 2016 letter as well as additional expected co-benefits, and especially in the absence of an economic impact analysis, **the finding that net benefits (whether quantifiable or otherwise) are negative in all scenarios should be rejected and deleted from this report.**

“High Financial Burden” finding

Rather than reiterate our concerns stated in our August 2016 letter as they relate to the FCA, we wish to simply incorporate them by reference.

We have strong concerns that in finding a “high financial burden”, the financial capability assessment looks at the totality of “residential water services”, including wastewater and stormwater, as well as “additional services”, though these services are not included in the TMDL. Instead, the FCA should have included those costs only related to the bacteria TMDL itself. By considering additional water service costs in the FCA, while ignoring the benefits of potential water supply and associated water service benefits in the CBA, the study appears disingenuous and biased towards a particular outcome.

Furthermore, the “burden” related to the bacteria TMDL alone is a small portion of the total water service costs in San Diego County. **As a result, the finding should be adjusted to**

⁸ We find it somewhat ironic that permittees have asked for – and received – exemptions from complying with clean water rules based on a more holistic and integrated approach to water management (the safe harbor), but they have spearheaded an analysis that fails to consider that holistic and integrated approach necessary to ensure our region implements an integrated approach to stormwater management and water supply augmentation. By way of example, water supply benefits to our region are not adequately considered in this analysis.

indicate a “low burden” for the bacteria TMDL as the bacteria TMDL burden does not exceed 2% of median household income.

Human Source Target finding

Considering our comments on human source targeting above and the data gaps and uncertainty that exist in this analysis, we suggest amending the human source target finding. We reiterate that we believe human sources of bacteria are a considerable contributor to stormwater discharges leading to impairments, particularly those related to wastewater infrastructure, and these sources must be prioritized through regulations, including incorporating wastewater agencies into the TMDL. It appears that insufficient and speculative data, the lack of consideration of benefits in stormwater scenarios as referenced above for comparison’s sake, and assumptions of 100% removal efficiencies would indicate that this conclusion is not supported.

Conclusion

Based on the inability of interested stakeholders to make a more in-depth assessment of the analysis in the limited time given, and considering the potential importance permittees are likely to place on this analysis in future requested amendments to existing regulations they continue to violate, our groups request a detailed, independent third-party review of this analysis from experts outside our region and unassociated with the permittees and approved by local NGOs. Further, as significant data gaps and uncertainties exist in this analysis and benefits remain unquantified, we request that findings be amended.

We strongly caution the permittees and the Regional Board against relying on this analysis to engage in amendments to well-established and conservative approaches to water quality improvement now that deadlines are looming and real expenditures are necessary.

We close by noting that several of the scenarios run afoul of the Clean Water Act and its regulations, and we will continue our longstanding work to ensure no backsliding or weakening of permit terms or regulations will occur and our waters are protected.

We look forward to working with the Regional Board and the regulated community toward development of a strong and consistent approach to addressing bacteria and other pollution in our region.

Sincerely,



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Executive Director
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Julia Chunn-Heer
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cc:

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