



Via e-mail to:
Deborah Smith
Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

February 28, 2019

Re: Comments on the draft tentative approval of the Rio Hondo & San Gabriel River Enhanced Watershed Management Program.

Dear Ms. Smith:

Nature for All, the Natural Resources Defense Council (NRDC), Heal the Bay, and the Los Angeles Waterkeeper thank you for this opportunity to comment on the draft tentative approval of the Rio Hondo & San Gabriel River (“RH/SGR”) Enhanced Watershed Management Program (“revised plan” or “rEWMP”). We would also like to thank the EWMP group for their willingness to involve NGOs in the revision process, and we are open to further dialogue with the rEWMP group. Below, you will find a summary of our comments on the conditional approval, in addition to some comments which we previously submitted in response to the rEWMP which remain unaddressed.

Revised EWMP versus WMP

The Board’s approval is subject to three conditions, one of which is that the program as revised is considered a Watershed Management Program and not an Enhanced Watershed Management Program. The Board does not provide any detail on the implications of changing the Program from an EWMP to a WMP. The Board must provide details regarding how this change may affect the Program, including compliance requirements and deadlines. If this change is to take effect, it must not allow for any delays to compliance timelines, other permit requirements, or project implementation.

General Comments

Generally, the rEWMP illustrates one of the major concerns regarding the 2012 permit: that there would be little project analysis up-front, leading to constant revision and little actual implementation. Without up-front analysis, there remains significant potential for constant Program revision and little project implementation, allowing for continued pollution and resulting in continuous negative impacts to public and environmental health. This concern is borne out by the dramatic change in the proposed green streets—from 273 miles of green streets previously approved in the Rio Hondo to zero miles in the new revised plan. This presents a



missed opportunity to create multi-benefit projects in pollution-burdened cities such as Duarte and Monrovia. Specific examples of lack of analysis are provided below.

Potential Upstream Exceedances and Other Data Collection

Permittees should have a plan in place in the event that upstream water quality exceedances are detected. Permittees should not wait until exceedances are detected to develop a plan, but instead should have a draft contingency plan in place, including proposed projects, if upstream exceedances are an issue. The Board's approval should be conditioned on the development of such a plan by a date certain. The Board should also ensure that Permittee's monitoring plan is sufficient to inform a final determination of whether upstream exceedances are occurring, the determination of which should be made within the next year. If the Board agrees that the current monitoring plan is insufficient, approval of the rEWMP should be predicated on the development of an adequate plan.

In response to the Board's comment that Permittees' model underpredicted water quality for TSS, copper, lead and zinc, Permittees state that there is insufficient data for specific pollutants. If the current monitoring plan is insufficient as Permittee states, the Board's approval should also be conditioned on the development and implementation of a monitoring program sufficient to predict water quality related to specific pollutants. Alternatively, if sufficient data is available, the model should be adjusted per the Board's comments. As we stated in our previous comments on the proposed rEWMP, the underprediction of zinc is particularly troubling because of its role as the limiting priority pollutant. Additionally, elevated concentrations of zinc can have toxic effects on aquatic ecosystems, impacting many species of algae and macroinvertebrates.¹

Model Calibration

The rEWMP hydrology model was calibrated using "available monitoring data" from 10/1/1990 to 4/30/2012. The data used to calibrate the model should include more recent available monitoring data. Additionally, as we stated in our previous comments, the modeling used underrepresents flows from larger events; this is particularly troublesome as climate change will undoubtedly increase the frequency of larger events. See Attachment C's Table 2-5. The Regional Board's recent resolution to adapt to and mitigate the impacts of climate change recognizes the substantial impacts that climate change will have on water resources, impacts which include an increase in "extreme precipitation" and flooding events. These larger events must be accurately represented. Additionally, the draft rEWMP still does not contain model verification or a plan to do so when more data is available. As data accumulate in the future, though, the models should be revisited and verified or, if unverified, recalibrated and applied to reevaluate compliance with Permit objectives.

Assumptions and Conclusions

The revised plan assumes that control of one pollutant will also control other target contaminants. First, it assumes that implementation of the metals TMDLs will address much of

¹ R. Irwin, National Park Service, Environmental Contaminant Encyclopedia, Zinc Entry (July 1, 1997) <https://www.nature.nps.gov/hazardssafety/toxic/zinc.pdf>.



the bacteria impairment. However, there are known instances where addressing metals did not adequately address bacteria (e.g. in the Upper LA River, Reach 2). Also, the rEWMP assumes that base flows and dry-weather discharges from the RH/SGR area are *not* large contributors to the impairments identified in the relevant TMDL. While the revision states that more investigation is needed, it does not examine in any way the current level of confidence in these vital assumptions. A discussion of these assumptions and their effects must be submitted.

Metals mass loading is simulated as associated with sediment erosion and transport in rainfall and irrigation water runoff; this assumption is questionable for copper and zinc due to the variable solubility of these constituents depending on the contaminant source and on conditions of the receiving water. The validity of and support for this assumption is particularly important for zinc, as it has been selected as the limiting priority pollutant. Applicants must justify the use of this assumption.

Another key assumption that has not been justified is that all redevelopment projects will include low impact development (LID) BMPs required by the MS4 Permit providing a loading reduction based on capturing the runoff volume associated with the 85th percentile, 24-hour rainfall. As with other assumptions covered above, these premises are not justified with documentation (*e.g.*, data on actual achievements since Permit adoption) or investigated in terms of their repercussions if not borne out. For various reasons, regulatory requirements are usually not completely fulfilled. Furthermore, there is no attention given to an enhanced institutional framework and programs to advance application of the present Permit requirements. For example, the establishment of specific functions within each municipal stormwater program and development permitting department to implement MCMs and ensure that redevelopment projects actually install the required LID BMPs.

Project General Assumptions

One overarching category of assumptions pertains to all projects: the hydrogeological conditions at the sites, most instrumentally the soil types, infiltration rates, presence of confining subsurface layers, groundwater positions, and existing below-ground contamination. Soils must have sufficient porosity to store infiltrated runoff until it percolates farther down. The infiltration rate, absence of a confining soil or rock layer, and sufficient spacing to the highest water table position determine if the facility can drain rapidly enough and avoid operating problems; and legacy contamination in the percolating water path risks mobilizing and spreading pollutants.

Despite the crucial importance of these factors, there has been no geotechnical investigation to define them for *any* site. This is true of the green streets projects and the regional projects. It is necessary to conduct more investigation up-front regarding whether the projects discussed are feasible and will function as stated, rather than seeking revisions once it is revealed that projects weren't adequately vetted from the beginning. This confirms what we feared with the 2012 permit: that there would be constant revision of proposed projects with little to no implementation. Finally, more information is needed about proposed project conveyance(s), including the legality of such conveyance(s).



Project Details

The Board requested that Permittees provide more project details including the responsibilities of participating Agencies in the revised EWMP document. While Permittees did provide more detail in Table 1 of the rEWMP, this was only done for regional projects, and not distributed projects. Further, this table does not “clearly identify the responsibilities...for implementation.” LA County MS4 Permit Part VI.C.5.B.iv.(4)(e).

Specific Projects

Arcadia Arboretum Natural Treatment and Groundwater Recharge Project

This regional project is likely undersized as a single, 85th percentile 24-hour storm event would create about 50 acre-feet of runoff whereas the wetland cell has a storage volume of 1.4 acre-feet. Relatedly, the revised plan does not describe the expected treatment effectiveness for the runoff passing through the wetland and then discharging to downstream waters. This variable is subject to uncertainty, like so many other factors in the analysis and this is yet another area where uncertainty must be quantified and examined for its implications on achieving objectives. In addition to the lack of examination of hydrogeological conditions at the site, applicants have not yet examined dry weather flows for this project. The revised plan cites dry weather flow as a potential problem at the site, and this should be examined prior to approval.

Finally, the schedule of this project allows for five years for feasibility studies followed by another five years until completion. This extended, ten-year schedule must be justified. Further, the project timeline states that the feasibility study started over a year ago; on 1/11/2018. If this is accurate, the rEWMP should be updated to reflect this, including providing details on what information the study has produced.

Rio Hondo Ecosystem Restoration Project and Arcadia Wash Water Conservation Diversion

Once again, the size of the contributing area versus the project’s cited infiltration capacity call into question its functionality. The system will serve a contributing drainage area of 15,870 acres while infiltration rates of < 0.3 inch/hour, calculated by project analysts, are very limiting to recharge. Applicants state that “non-homogeneity could also affect significantly the infiltration capacity at the site, with infiltration rates below and above the minimum acceptable infiltration rate.” Attachment B, p.101. This must be addressed prior to rEWMP approval. Further, even if ample infiltration existed at the site, the project remains undersized for the drainage area.

Encanto Park Stormwater Capture Project

The proposed timeline for this project is unsupported. Feasibility studies are set to take place between September 2022 and March 2023, with project completion by September 2026. The schedule provided must be justified.

Basin 3E Enhancements at Santa Fe Spreading Grounds Project

While this project has a more compressed feasibility assessment period than the others, the proposed schedule is not justified. The feasibility study is set to begin at the end of March, just a



few weeks after the Board's proposed approval. Additionally, the project's follow-up steps appear to be exceedingly drawn out and also must be justified.

Green Streets

The revised plan does not go into site-by-site specifications of proposed green streets. As in the case of the regional projects, there has been no on-site geotechnical investigation. Particularly in light of the vast reduction in the amount of green streets proposed, the revised plan must have more details regarding feasibility and location of green streets projects. Without these specifics, these numbers should be regarded only as goals; goals which could be revised at any time with little to no implementation, as demonstrated by this revision. Again, this is a manifestation of our original fear with the 2012 permit: constant revision with little to no projects installed.

The Effect of Assumptions on the Model

Table 4-8 in Attachment C shows that there is little margin at any compliance point between the total expected and required decreases in zinc mass loading. The differentials range from 0.5 to 24 lbs/yr; these are small margins in light of the uncertainties introduced by the assumptions, calibration deviations, and project constraints discussed above.

The two regional projects in the Rio Hondo Drainage Area are being relied on for 68 percent of the total pollutant reduction. Both of those projects, especially the Peck Park Lake spreading grounds, pose significant questions about infiltration and sizing. It is fair to say that it is unlikely these regional projects will function exactly as planned; as such, additional distributed projects should be analyzed and included in the revision. These issues must be addressed prior to approval.

There has been no quantification of uncertainties introduced by assumptions; calibration issues with the hydrologic, water quality, and BMP models; and BMP projects. Not having this analysis has prevented examination of the effects of uncertainties on modeling results and conclusions regarding the prospects for actually achieving the Permit's objectives. Failing to include this analysis is likely contrary to the Permit. Finally, the revised RAA gives no estimates of the relative certainty of either the mass loading reductions or CTR compliance. Failure to quantify potential deviations and potential error magnitudes and failure to determine which projects are necessary for a certain level of assurance of achieving compliance seems contrary to the permit requirement in VI.C.5.b.iv.(5), which states that "...data shall be statistically analyzed to determine the best estimate of performance and the confidence limits on that estimate for the pollutants to be evaluated."

These comments include several comments which were submitted on June 22, 2018 and remain unaddressed, in addition to new comments on the tentative approval. Thank you again for this opportunity to comment. Nature for All, NRDC, Heal the Bay, and the Los Angeles Waterkeeper welcome the opportunity to work with the Board to ensure that water quality is protected for present and future generations, and for the survival and well-being of humans, plants and wildlife.



Regards,

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