
Santa Ana Regional Water Quality Control Board

December 18, 2013

Mr. David Garcia
Riverside County Flood Control & Water Conservation District
1955 Market St.
Riverside, CA 92501

COMMENTS ON THE REVISED DRAFT WATERSHED ACTION PLAN

Dear Mr. Garcia:

We reviewed the revised draft Watershed Action Plan (WAP) submitted on June 27, 2013. The revised WAP was submitted in accordance with Section XII.B of Order No. R8-2010-0033, NPDES No. CAS818033 (MS4 Permit). We find the following information is needed prior to Regional Board consideration of approval of the WAP. Please submit a revised WAP addressing the comments below.

Except as indicated, the following comments correspond to the item numbers as listed in the response to comments matrix.

1. Page 1, General Comments: Our March 26, 2013 comment was not adequately addressed. The WAP contains some information for the permit area in Chapter 4, WAP Components, regarding the current conditions of surface water, groundwater and hydromodification. However the WAP does not utilize this information to identify opportunities for integrated solutions to water quality and hydromodification issues and to anticipate future constraints.

To facilitate identification and management of potential local, regional water quality and cumulative impacts with development, please sub-divide the permit area into drainage areas or sub-watersheds based on surface drainage. For each drainage area or sub-watershed, identify water quality and/or hydromodification issues to be managed and beneficial uses to be protected so that the Permittees and/or project proponents can selectively review the section(s) of the WAP pertinent to the project area and find the information they need. This subgrouping will facilitate identification and management of common issues and approach for that drainage area.

For example, the permit area can be broken down into a number of hydrologic sub-watersheds based on topography and current stream and storm drain systems. Pertinent information for each sub-watershed, such as any existing water quality issues, limitations or priorities, retrofit and restoration opportunities

can be included in each section. Section 2 may be an appropriate location to include a Fact Sheet format for each drainage area or sub-watershed that briefly describes the surface and groundwater setting, the management objectives and contributing jurisdictions within that watershed. Specific details for each drainage area or sub-watershed may be located in one of the appendices to the WAP. These drainage boundaries may also be well illustrated in the geodatabase.

We offer the following additional comments as to how the information or analysis may be presented for each drainage boundary or sub-watershed identified:

- a) Provide a brief evaluation of the streams within each drainage area or sub-watershed (natural, channelized, effluent dominated, ephemeral streams, spring fed, etc., hydromodification potential, riparian/wetland area location, floodplain connection, flood control measures/plans, WQOs, beneficial uses, pollutants of concern for 303d listing and TMDLs adopted or in process, current characteristics of the sub-watershed with respect to imperviousness, land use breakdown, (existing, developable), soils and recharge potential, ground water basins, storm water and groundwater connection, if and how storm water is managed as a resource (i.e. regional capture and ground water recharge). If some of these features are not available, please provide a schedule as to when the information will be available.
- b) As part of management of storm water as a resource within each drainage area or sub-watershed, identify groundwater plumes that may be prohibitive of large volume infiltration that needs to be considered, investigated, or monitored, historic information about impacts on surface and groundwater storage and utilization related to urbanization, recycled water usage and other conservation approaches implemented in the watershed or specific jurisdictions that affect or modify the stream flows.
- c) Briefly describe current BMPs/strategies implemented, for new development, existing development, re-development plans, if available. The intent is to characterize the BMPs implemented in the drainage area or sub-watershed.
- d) Identify areas in each drainage area or sub-watershed that may provide retrofit or restoration opportunities to restore or maintain watershed processes.
- e) Describe any monitoring being conducted in the drainage area or sub-watershed, the purpose of the monitoring, and what the data shows in the context of changes/conditions in the drainage area or sub-watershed. Identify any new monitoring (i.e. hydromodification monitoring).

Also, please consider adding a discussion to Section 1.3, Planning Development Process Overview, in a flow chart format, that would clearly relate the general idea of the watershed conditions to the land use approval process.

2. Item 2, the response matrix stated that information on potential causes of stream degradation will be incorporated upon completion and approval of the Hydromodification Management Plan (HMP). Since the HMP will be submitted in January 2014, we would prefer that the revised WAP responding to our comments include hydromodification monitoring and management for an integrated watershed approach. We intend to provide comments on the HMP such that response to our comments on the HMP can be included in the revised WAP. Should the analysis required to address our comment on the HMP require additional time, please provide specific tasks and associated schedule in the revised WAP.
3. Item 5: The response matrix stated that no specific measures in the IRWMP and Chino Basin Master Plan are being implemented as part of the land approval process and land use permits, or other elements of the Permittee's stormwater program. The response matrix further stated that the Permittees will evaluate identification and implementation of IRWMP as part of the land approval process, land use permits and other elements of the Permittee's stormwater program. One of the purposes of the WAP is to integrate the groundwater recharge and supply management with storm water management and land use approval. Water supply availability is a potential constraint to land development. Please design this nexus evaluation on a drainage area or sub-watershed scale rather than per jurisdiction.

The response matrix and the revised WAP did not respond to the comment regarding linkage of the Chino Basin Master Plan with water quality benefit and land use approval process, land use permits, or other elements of the Permittees' storm water program.

4. New comment: Section 2.3, page 2-2: While it is useful to briefly provide land use information inclusive of the 3 counties within the SAR watershed, the watershed resources and characteristics description in this WAP should focus on land use, population, and resource information applicable to the Riverside County portion of the SAR.
5. New comment: Section 3.1.4, page 3-2, Integrated Regional Water Management – One Water, One Watershed: This section identifies “interruptions in hydrology and groundwater recharge caused by population growth and development” as one of four major threats to water supplies. This section of the WAP should outline or develop the linkage with the land use planning and development process to provide current activities and any other possible solutions or implementation plan to manage these impacts to groundwater basins and water supply from urbanization.

6. Item 6: Our comment regarding groundwater protection procedures in the new Section 3.1.7 was not adequately addressed. The addition of SAWPA's website for beneficial use information and well TDS concentration contributes to the integration of watershed information. However, without clear and specific management action or strategy linked to land use development and approval, it is not clear how a plan checker's access to groundwater information and groundwater quality objectives will protect groundwater.

The WAP must include identification of applicable specific measures that plan checkers can use as conditions of development project approval. The geodatabase must show the drainage areas that these conditions of approval apply. The information for each drainage area or sub-watershed as described in Comment 1 above must include measures specified in the TDSMP, if any, or other ground water protection management plans to protect groundwater basins that may be impacted by land use decisions of contributing jurisdictions.

If specific measures or management action specified in the TDSMP or other ground water protection plans have a nexus to other elements of the contributing jurisdictions' storm water program, the WAP must identify the specific action or measure, the drainage area and the storm water program element affected.

7. Item 7 Section 3.1.8: The added text describing the linkage could be made more clear with a flow chart showing where in the land use approval process project proponents are typically informed of permit requirements and where planners verify that the requirement(s) for a project outside and within the MSHCP area.
8. Item 8, Section 3.2: Please clarify how a land use process or other storm water element would vary depending on the master drainage plan, water agency or encroachment permit.
9. Item 10, Section 3.3: In addition to evaluating hydromodification as it relates to flood risk, an evaluation of hydromodification as it relates to the possibility that in-stream habitat will be destroyed due to flow modification with increased urbanization should be included.
10. Item 11, Section 4.2.1.1: It is not clear if the measures identified in this section are unique to MSAR jurisdictions. The section does not identify any linkage between specific measures in the CBRP, if any, that apply to the development or redevelopment land use approval process. Beyond water conservation programs, please indicate the likelihood of your evaluation on the need to update irrigation overflow ordinances to address bacterial indicators. The geodatabase should also be updated to show areas where specific BMPs will be implemented as part of the CBRP, as requested in the March 26, 2013 comment letter.

11. Item 12, Section 4.2.1: Please remove reference to "...Regional Board and...". The Regional Board and the Office of Administrative Law did not both approve the amendment on September 1st. Only the Office of Administrative Law alone approved the amendment on that date.
12. Item 20, Section 5.1.3.1: Please provide a brief discussion how controlled release points (CRPs) are a critical issue regarding hydromodification. We recognize that CRPs are critical for flood control, but for hydromodification, controlled release typically results in a longer duration of flow, and thus there would still be an HCOC for a downstream unlined channel. Please include in the discussion how this may not be a concern for certain drainage areas.
13. Item 21: Appendix A, Page 7 and WAP Section 4.3.1, Channel Assessment and Classification: Please state where information to support the HCOC applicability map or for restoration prioritization and retrofit opportunities will be presented. The response matrix stated that cross sectional analysis and channel stability risk assessment were not performed as part of the susceptibility analysis. At a minimum, geomorphic assessments of stream segments designated as EPHM and EEM must be conducted to support the conclusion that they are not susceptible to hydromodification. The WAP should state that stream designated under the potentially susceptible category will be subject to hydromodification controls.

The purpose for the large river exemption as indicated in the added text in Section 4.3.1 is unclear. The permit already identifies an exemption to projects that discharge to large sumps such as Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, etc. as long as flows from the project are conveyed through engineered channels that are regularly maintained to ensure design flow capacity and no sensitive stream habitat areas will be affected. We agree that the HMP is the appropriate document for discussion of this issue.

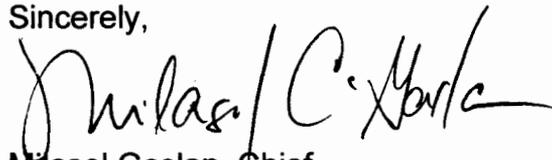
14. Item 22: The channels in question, such as the channel upstream of Prado Basin in Temescal Wash should not be considered engineered. As indicated in our March 26, 2013 comment, Regional Board's field visit of the area indicated susceptibility to hydromodification.

We agree that the HMP is the appropriate location for discussion on the request for hydromodification exemption at the 10 year inundation level. We recommend that the discussion include an impact analysis that identifies a) the drainage area that will be required to demonstrate that post-development equals pre-development hydrology at the 10 year and 2 year inundation levels, b) the length of stream between the 10 year inundation and 2 year inundation levels and, c) the frequency that the length of stream between the 10 and 2 year inundation levels are submerged.

15. Item 24: The new entry indicates hydromodification is evaluated with regard to flood risk. Please update your approach to include evaluation to also include maintenance of habitat as well, not just flood risk.
16. Item 25: The response matrix stated that the WAP does not require specific analysis of susceptible streams, protected waterways and high pollutant concentrations as it is beyond the scope and intent of the WAP. Section B.2 of the MS4 Permit states in part that "The objective of the Watershed Action Plan is to address watershed scale water quality impacts of urbanization in the Permit Area associated with Urban TMDL WLAs, stream system vulnerability to Hydromodification from Urban Runoff, cumulative impacts of development on vulnerable streams, preservation of Beneficial Uses of streams in the Permit Area, and protection of water resources, including groundwater recharge areas." It is unclear how this objective may be achieved without analysis of the issues within each watershed. Please also see our comment 1 above.

Please submit a revised WAP addressing the comments above and that incorporates the HMP no later than May 12, 2014. We recommend that a meeting be scheduled to clarify any questions you may have regarding our comments prior to submittal of the revised documents. Should you have any questions or comments, please contact me at mgaslan@waterboards.ca.gov or at (951)782-4419 or Michael Roth at mroth@waterboards.ca.gov or at (951)320-2027.

Sincerely,



Mirasol Gaslan, Chief
Inland Storm Water Unit

cc: Jason Uhley, juhley@rcflood.org, Chief of Watershed Protection, Riverside County Flood Control and Water Conservation District

Julianna Gonzalez, juliannagonzalez@rcflood.org,
Riverside County Flood Control and Water Conservation District