



California Regional Water Quality Control Board Santa Ana Region



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Linda S. Adams
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February 28, 2011

Dan Ilkay
San Bernardino County Storm Water Program
825 East Third Street
San Bernardino, CA 92415-0835

OBJECTIONS AND COMMENTS ON THE WATERSHED ACTION PLAN, PHASE 1

Dear Mr. Ilkay:

Regional Board staff has completed a review of the Watershed Action Plan ("WAP"), Phase 1 received on January 31, 2011, pursuant to Provision XI.B. of Order No. R8-2010-0036, NPDES No. CAS618036 ("Permit"). As described in Findings Section G, item 14 of the Permit, the purpose of the WAP is to "address cumulative impacts of development on vulnerable streams, preserve or restore to the maximum extent practicable the structure and function of streams in the permitted area, and protect surface water quality and groundwater recharge areas. The Watershed Action Plan should integrate hydromodification and water quality management strategies with land use planning policies, ordinances, and plans within each jurisdiction."

The WAP Phase 1 is the first step of a two-step process towards development of a final WAP. The WAP Phase 1 requires the approval of the Executive Officer before the requirements of the WAP Phase 2 must be met. The WAP Phase 1 may also be deemed approved unless the Executive Officer raises written objections within 30-days of the document's submittal. This letter transmits objections as well as general comments.

We are also providing detailed comments as an enclosure which may be editorial in nature. However, it is not Regional Board staff's intent to take on editorial responsibilities for the WAP or its related documents. Please make the necessary revisions as indicated by the detailed comments and in response to the objections and general comments below.

The objections and general comments below are made with the awareness that the WAP Phase 1 is an intermediate product per Provision XI.B. of the Permit. The WAP Phase 1 lays the foundation for the WAP Phase 2 and, ultimately, the final WAP¹. Objections must be addressed before consideration of the WAP Phase 1 for approval. Comments are being provided in order to affect the final WAP.

During our review of the WAP Phase 1, Regional Board staff considered: 1) how instructive the document is to the intended audience; 2) the transparency of the described processes;

¹ Throughout this document, "WAP Phase 1" refers to the document submitted for review. "WAP" refers to the final WAP or WAP Phase 2 where no objections are raised by the Executive Officer within 30-days of the WAP Phase 2 submittal. If no objections are raised, the WAP Phase 2 would become the final WAP in accordance with Provision XI.B.b.viii.

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3) how well the WAP Phase 1 moves towards achieving the stated purposes of the Permit; and 4) demonstrated compliance and consistency of the WAP Phase 1 with the requirements of the Permit.

The final WAP is a part of a larger process to achieve its purposes in conjunction with the Model Water Quality Management Plan ("MWQMP") and through Permittees' other planning functions. The WAP is not envisioned as a stand-alone plan. As a result, the intended audience includes Permittees' planning staff working at virtually all planning levels, developers in the early stages of project site selection, entities responsible for implementing other related plans and policies, and WQMP preparers and reviewers. To a lesser extent, the intended audience includes members of the public who may want to understand how the water quality impacts of urban development are being addressed by the Permittees. With these considerations, Regional Board staff provides the following:

- Objection 1: The WAP Phase 1 needs to identify and focus on the various users of the document. The WAP Phase 1 should include a clear, up-front description of the various intended users of the document; clear instructions on how Permittees are to use the WAP; guidelines on how non-Permittees are expected to use it; and an instructive description of the relationship between the WAP, the MWQMP, and Local Implementation Plans (LIPs). Various sections of the document are similarly written without focus and clear instructions for those responsible for implementing the WAP. Many of these sections are identified in the detailed comments, but not in an exhaustive manner.
- Objection 2: The WAP Phase 1 needs to be streamlined in order to promote its efficient use by the intended audience. Approximately half of the body of the WAP Phase 1 is dedicated to background and lead-up information. Some of the background and lead-up information can be assumed to already be part of the knowledge of the intended audience (i.e., location of the Santa Ana Watershed) and some of the same information appears superfluous (i.e., *Forbes* magazine rankings) or faintly relevant to the purposes of the WAP (i.e., descriptions of the batholiths of the Watershed). Unless the information is immediately relevant to the development of the WAP's objectives or its implementation, the information should be omitted or moved to a less obstructive portion of the WAP, such as an appendix, external reference, or footnotes.
- Objection 3: The WAP fails to identify clear, measureable objectives in its plan, as well as the parties responsible for achieving each of the objectives. Specifically, the nine statements in Section 4.3 of the WAP Phase 1 are not "objectives" as the term intended in the Permit or as is widely understood in planning professions. An objective is a tangible, precise, and verifiable outcome that is sought. One or more objectives are typically developed to achieve a stated goal, which is a more abstract description of a desired outcome. For example:

Goal: Preserve and restore the beneficial uses of Vulnerable Creek

Objective 1: A map of the tributary area for Vulnerable Creek will be developed by the permittees in order to identify projects that may impact its beneficial uses. This map will be incorporated into related general plans as the plans are updated.

Objective 2: Each new development and significant redevelopment project in the tributary area for Vulnerable Creek will be subject to flow restrictions and other development standards, as such projects, restrictions, and standards are defined in the Permit and/or by the municipality, in order to preserve the physical integrity of the Creek. These flow restrictions and development standards will be specifically referenced in related general plans as the plans are updated.

- Objection 4: The WAP Phase 1 does not adequately demonstrate that objectives have been developed in consideration of the watershed protection principles in Provision XI.C.3. of the Permit. This is partly because the statements identified as objectives are not objectives. But it is also because there is no explanation as to how these objectives relate to each of the watershed protection principles. The watershed protection principles may be thought of as “goals” as discussed above. Consequently, relating objectives to watershed principles and other goals is central to the WAP.
- Objection 5: The WAP Phase 1 (Section 4.2) does not clearly establish the linkages between the WAP and the Stormwater Quality Standards Task Force (SWQSTF), WQMP, the implementation of Low Impact Development (LID) and the Total Maximum Daily Load (TMDL) Implementation Plans, as required by the Permit. Most of the languages pertinent to how the information gathered from each of the agencies/plans/processes will be incorporated into the WAP are vague and uninformative.
- Objection 6: The WAP Phase 1 does not make use of the products of the required system-wide evaluations to identify retrofit opportunities or to address vulnerable stream segments. Section 4.8 and 4.9 of the WAP Phase 1 indicates that evaluations were completed and resulted in 144 “potential BMP retrofit opportunities” and 20 “potential restoration sites” identified through reconnaissance surveys. However, the WAP Phase 1 makes no concrete commitment to pursue any of these opportunities or sites further. Also, please see Comment 14 below.
- Objection 7: The WAP Phase 1 does not provide a “draft schedule for expected enhancements to increase functionality” as required by the Permit. Instead, the enhancements are “anticipated through the implementation of the permit Phase 2 requirements” (page 4-11). The WAP Phase 1 must identify specific planned enhancements and propose a draft schedule for their implementation pursuant to Section XI.B.3.a.vi of the MS4 permit.

Objection 8: The WAP Phase 1 does not provide adequate justification to support the large river exemption for the entire length of streams in Table 1. Appendix B, Table 1 identifies streams with flows of at least 25,000 cfs at their concentration point. The WAP Phase 1 proposes that watersheds that flow through Engineered, Hardened and Maintained (EHM) channels onto these streams are exempt from HCOC considerations as they are not subject to further hydromodification with upstream development. However, some segments in these streams are non-EHM and identified as high or medium risk for hydromodification using the WEST assessment method (Appendix C). The WAP Phase 1 must propose a plan to validate that the large river exemption is protective of the integrity of those exempted reaches. The WAP Phase 1 must also clearly define portions of the watershed proposed for HCOC exemption and those potentially at risk for hydromodification that will need to be managed in Phase 2. Also, please see related Comment 10 below.

In addition to the objections mentioned above, the following is a list of comments that should be addressed when revising the WAP Phase 1:

Comment 1: The WAP should include a stated planning horizon in which to frame achievement of its various objectives once they are developed.

Comment 2: The WAP should identify where LID practices may address multiple planning objectives of various jurisdictions in order to identify “linkages” as required in the Permit. For example, when considered in isolation for improving urban storm water runoff quality, green or brown roofs may be a less attractive option. However, when their benefits for providing green space and urban respite, improving air quality, reducing urban noise, promoting healthy communities, reducing energy consumption, and softening of urban viewsheds is considered, the attractiveness of such roofs increases. More generally, the WAP must identify where fulfillment of its objectives and goals interrelate, directly or indirectly, with other regional or local planning objectives and goals.

Comment 3: Page 48, Section 5.1.4 – Regional Treatment Regulatory Approval. It is not clear what design standards regional treatment systems would need to meet if not ultimately to a level that would meet the receiving water quality standards defined in the Basin Plan. Please clarify this statement.

Comment 4: The WAP Phase 1 (Section 5.2.5) indicates a desire to update the plan at “identified intervals”. Regional Board staff concurs to an extent. The permittees should reserve for themselves the right to modify various objectives with cause (i.e., the objective was not a valid measure of achieving its goal; the objective was overly ambitious given the resources available; etc.), and to the extent that those modifications do not conflict with the Permit. But the process for updating the WAP needs to be fully described and needs to allow stakeholder input and oversight by Regional Board staff.

- Comment 5: The WAP Phase 1 (Section 5.2.5) describes the need to “develop guidance for the frequency and details of the WAP program assessment”. Regional Board staff fully concurs. However, an assessment would be difficult to conduct without the desired measurable or verifiable outcomes defined (objectives), as indicated above and as required by the Permit. Please be reminded that the Permit already describes a vehicle and frequency for communicating the results of such an assessment: progress towards achievement of objectives, and proposed or completed modifications of objectives. These should be reported in the Annual Progress Report (See Provision VII.E. of the Monitoring and Reporting Program No. R8-2010-0036, NPDES No. CAS618036).
- Comment 6: The WAP Phase 1 contains implied goals and objectives, or objectives that could be developed as a logical follow-on to various statements scattered throughout the text. Other potential objectives are found misplaced in the document. Regional Board staff has sought to identify these in the specific comments where they have been found. These items should be restated as objectives and how these objectives relate to the watershed protection principles or other goals should also be discussed.
- Comment 7: The WAP Phase 1 must clearly link potential solutions to specifically identified water quality and stream protection goals and objectives in each sub-watershed and jurisdiction. Section XI.B.3.a.i.3 also specifies that the WAP Phase 1 identify potential impediments to implementing these solutions.
- Comment 8: The WAP Phase 1 does not specifically identify program-specific objectives for responsible Permittees and sub-watersheds that will implement TMDL Implementation Plans or constituent-specific specific control measures and/or other tasks pursuant to Section XI.B.3.a.i.4.
- Comment 9: Part of the HCOC exemption in the MS4 permit also requires a consideration that no sensitive stream habitat areas will be affected. The WAP Phase 1 should clearly describe such findings for portions of the watershed and associated receiving water proposed for HCOC exemption.
- Comment 10: Appendix B – Hydromodification Assessment Technical Memorandum: Since uncontrolled development typically causes increased flows into receiving streams, we are concerned that the proposed 25,000 cfs HCOC exemption may become a circular rationale for tributaries to the Santa Ana River that would promote EHMs and eventually exempt all watershed and tributaries due to the large river exemption. If the Permittees wish to pursue this exemption, the WAP Phase 1 must justify the use this exemption as well as monitor and ensure that implementation of this exemption does not promote EHMs in the rest of the watershed.

Comment 11: The specific watershed drainage area and location of the outfall of the EHMs that drains to the Prado Basin flood control facility proposed for HCOC exemption in section 3.3. should be clearly identified and delineated.

Comment 12: Appendix C – Channel Assessment and Classification. One concern that comes out from looking over this appendix is that some streams could, by their photos, need a classification of very high. When a stream has experienced 30 feet of downcutting over modern times, and their classification is no higher than streams with little downcutting, that might mean that some criteria is not being fully analyzed.

Comment 13: Appendix D - Causes of Stream Degradation: This appendix includes an analysis of channel classification tools done by SCCWRP. It includes a catchment analysis in addition to a channel analysis. Such a catchment analysis should be considered by Permittees in addition to the West Criteria.

Comment 14: Appendix E- System-Wide Evaluation Retrofit Opportunities. This appendix includes a list of all the 144 sites found to be potential retrofit sites in the RB area, a discussion of the types of retrofits that could occur and how the analysis will be made. The analysis will include how the retrofits will link to other regional goals such as TMDLs. There is no timeline included in the appendix for the analysis to occur. Such a timeline should be discussed at length as outlined in the discussion of how the analysis will be made.

Comment 15: The WAP Phase 1 and Appendix F of the WAP fail to identify how the 20 potential restoration sites are chosen. For example, Regional Board staff recently inspected City Creek located in the City of Highland and noticed that the creek was eroding. However, City Creek was not included in the list of potential restoration sites in Appendix F. The WAP Phase 1 should identify all the restoration sites that were evaluated and provide explanation as to why the 20 restoration sites were chosen over other sites.

Comment 16: Considering the varied backgrounds of the intended audience, Regional Board staff recommends the inclusion of a glossary of terms in the WAP.

We commend the Permittees for their efforts on the HCOC mapping and geodatabase development. This tool will facilitate implementation of the WAP with the capability to visually identify and communicate the goals and objectives for each watershed, jurisdiction and receiving water. However, the WAP Phase 1 submitted did not clearly communicate the vision discussed for its use during the mapping tool development or effectively describe the integration of water quality and stream protection with land use planning and development processes. The WAP Phase 1 submitted failed to fully meet the requirements of Section XI.B. of the MS4 permit. Please provide a revised WAP Phase 1 by April 1, 2011.

If you have any questions, please contact Adam Fischer at afischer@waterboards.ca.gov or at (951) 320-6363, Kathleen Fong at kyfong@waterboards.ca.gov or at (951) 774-0114, or Milasol Gaslan at mgaslan@waterboards.ca.gov or at (951) 782-4419.

Sincerely,



Kurt V. Berchtold
Executive Officer
Santa Ana Regional Water Quality Control Board

Enclosure: Marked-up version of the San Bernardino County Watershed Action Plan