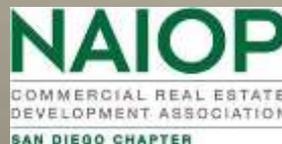


Suggested Improvements to RWQCB Tentative Order No. R9-2013-0001

Coalition Members



Coalition's Technical Experts

- **Dennis Bowling**, PE, MS,--Rick Engineering
- **Mark Grey**, PhD—Technical Director, CICWQ- Construction Industry Coalition Water Quality
- **Luis Parra**, PhD, PE, MS, CPSWQ, ToR, D.WRE.—Tory R. Walker Engineering, Inc.
- **Tory Walker**, PE, CFM, LEED GA—Tory R. Walker Engineering Inc.
- **Shawn Weedon**, PE—GEOCON San Diego
- **Jim Whalen**, Environmental Consultant— J Whalen & Associates

What we support

- The development of Water Quality Improvement Plans as the Core of the Permit
 - An open process involving all of the stakeholders
 - A blue-ribbon panel consisting of experts to assist in the development of the WQIPs
 - An outcome-based process that will achieve cleaner stormwater
 - Watershed/regional solutions—not a property-by-property approach

Request for additional time

- The Tentative Order, R9-2013-001, is **388** pages
- Of the first 148 pages (Cover sheets, finding and provisions) there are 138 pages with changes **92%**
- Attachments A-F contain 236 pages, no changes in A or B (27 pages) **0%**
- 9 pages of changes (out of 12) in Attachment C **75%**
- Attachments D&E every page has a change **100%**
- Attachment F, 109 out of 136 pages have changes **80%**
- Comment letters, staff responses, reports, draft permit, court cases, correspondence, etc. are **2,271** pages total

Request for additional time

- Revised permit was released on March 27th 2013
- Coalition Sent RWQCB letter on April 1st requesting extension to review revisions and comments
- 14 calendar days before adoption hearing
- 8 working days including Good Friday
- **81%** of the revised permit's pages contained changes or strikeouts
- 8 working days is not a reasonable amount of time to review the changes and consult with fellow stakeholders and RWQCB staff

Suggested Improvements

- Preserve the existing Hydromodification Management Standards while the WQIPs are being developed
- Keep urban infill Hydromodification Management Standard exemptions per the existing San Diego HMP process; modify, if shown necessary, as part of WQIPs
- Provide more time to develop the WQIPs
- Delete “Retain....100% of the pollutants....” added to the latest draft Order in Section E3C(1)(a). See slide #14 for suggested revision
- Redefine Priority Development Projects for large area, low impervious projects
- Change land use restrictions as they pertain to sediment transport
- Change the definition of Ground Water

Hydromodification Management Standards

- Concerns:
 - The Coalition and RWQCB staff agree it is the intent of the Tentative Order that current hydromodification management standards will remain in place until such time as the WQIPs are approved by the RWQCB
 - The Coalition believes that the current hydromodification management standards should be based on good science. Given the limited resources available to the Co-permittees, the Coalition believes that the current hydromodification management standards should be presumed appropriate unless shown otherwise through the development of the WQIPs

Hydromodification Management Standards

- Background:
- More than one million dollars of cumulative effort went into the development of a HMP for San Diego County.
 - Copermittees paid a consultant team \$1,000,000.00.
 - 14 member Technical Advisory Committee participated in 11 meetings and additional hours of research and review.
 - Other interested parties donated time at TAC meetings and additional hours of research and review.
- RWQCB reviewed the HMP and *approved* the Final HMP July 14, 2010.

Hydromodification Management Standards

- Concerns:
- The Tentative Order invalidates or removes exemptions that were included in the *approved* Final HMP.
 - Exemptions that are based on reducing existing impervious area and reducing peak flows will be invalidated by the requirement to consider pre-development conditions as a baseline rather than pre-project conditions.
 - This list of criteria for exemptions omits certain exemptions that were included in Order No. R9-2007-0001.

(See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>)

Hydromodification Management Standards

- Concerns:

The following have been omitted from the list of exemptions in Provision E.3.c.(2)(d):

- Channels that are "significantly hardened (e.g., with rip-rap, shotcrete, etc.)"
 - Projects where "the sub-watersheds below the projects' discharge points are highly impervious (e.g., >70%) and the potential for single-project and/or cumulative impacts is minimal" have been omitted from the list of exemptions.
 - The list of exemptions does not acknowledge exempt river reaches that were approved as part of the Final HMP dated March 2011 (portions of Otay River, San Diego River, San Dieguito River, San Luis Rey River, and Sweetwater River).
- These will now require new analysis and public review through the WQIP process, despite being *approved* in the Final HMP.

(See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>)

Hydromodification Management Standards

- Recommendations:
 - Add the following two findings to the Tentative Order:
 - The Regional Board finds that the hydromodification management standards approved in the Final HMP for San Diego County based on Order No. R9-2007-0001 shall apply until the such time as the WQIPs have been developed.
 - The Regional Board finds that there is substantial evidence to support the use of the current hydromodification management standards in each WQIP unless there are unique characteristics in the watershed to the contrary.

See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>

Storm Water Pollutant Control BMP Requirements

- Concerns:
 - LID and Onsite Retention Requirements are largely infeasible within the Region
 - Infiltration difficult because of soil conditions
 - Harvest and Reuse raise additional concerns—reliable demand
 - Requirements have unintended consequences
 - There is no evidentiary support for ability to comply with 100% Pollutant Retention Requirement
 - Conflicts with other regional requirements
 - Conflicts with USEPA LID guidelines
 - See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>

Storm Water Pollutant Control BMP Requirements

- Concerns:
 - New language was added to Section E.3.C.(1)(a) & (b)
 - 100% pollutant retention is practically impossible--especially for bacteria and nutrients--unless infiltration of the entire DCV is shown to be feasible, or if reliable harvested water demand exists
 - Existing, adopted, 4th term Phase I MS4 permits in California contain clear, unambiguous retention standard language that recognize technical feasibility analysis procedures and a prescribed LID BMP selection hierarchy
 - The standard is not legally enforceable
 - Exceeds the MEP and BAT/BCT standards for discharges
 - Exceeds the water quality objectives for receiving waters
 - Exceeds requirements for POTWs and for meeting drinking water standards
 - See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>

Storm Water Pollutant Control BMP Requirements

Recommendation:

Revise Sections E.3.C.(1)(a) (b) to read:

(a) “Each Priority Development Project must be required to implement LID BMPs that are designed to retain (i.e. intercept, store, infiltrate, evaporate, and evapotranspire) onsite the pollutants contained in the volume of storm water runoff produced from a 24-hour 85th percentile storm event.”

(b) “If a Co-permittee determines that implementing BMPs to retain the full design capture volume onsite for a Priority Development Project is not technically feasible, then the Co-permittee may allow the Priority Development Project to utilize flow-thru treatment control BMPs, selected and designed to remove pollutants to the MEP, for the portion of the design capture volume that cannot be reliably retained. Biofiltration LID BMPs must be considered as a first option before other types of flow-thru treatment control BMPs may be considered.”

(See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>)

Unintended Consequences

- No runoff deprives Effluent Dependent Watersheds of water to sustain critical habitat



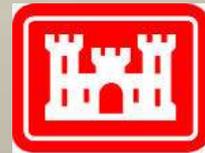
Otay River, Looking East (SR 125 bridge in background)

Unintended Consequences

- Pollutants redistributed onsite during reuse of captured water



- Has US Fish & Wildlife, US Army Corps of Engineers, CA Fish & Wildlife agreed with this provision?



**US Army Corps
of Engineers®**



Geologic Unintended Consequences

- La Jolla Landslide



- La Jolla Landslide



Water in Clay Soils-Ardath Shale-Clay Soil Group D

Unintended Consequences



Water migration through concrete slab

Change the definition of Ground Water

- Concern:
 - The current definition of Ground Water in the permit remains vague.
 - Determining what constitutes ground water requires professional expertise.
- Recommendation:
 - Revise the definition in the draft permit as follows:
 - Groundwater – Subsurface water that occurs beneath the water table as determined by a Licensed Professional Geologist or Engineer

(See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>)

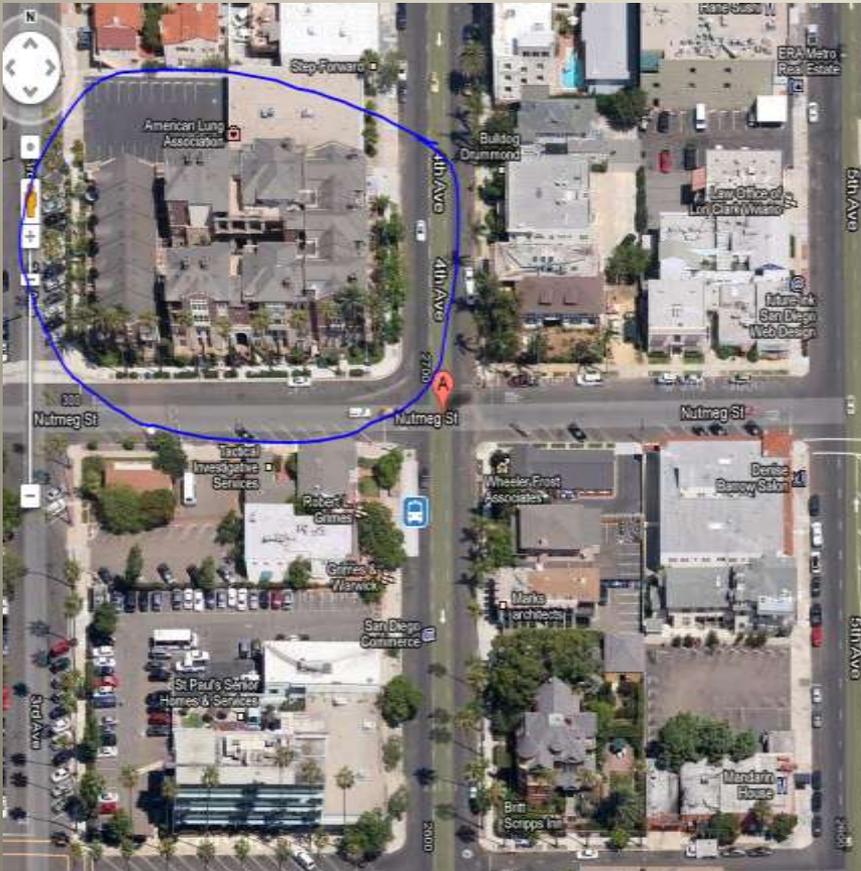
Change restrictions as they pertain to sediment balance/land use

- Concern:
 - The current language concerning sediment balance appears to require Co-permittees to modify their zoning ordinances to prohibit development of properties that are potential sources of “coarse sediment”
 - Such a requirement appears to conflict with the RWQCB’s authority to impose land use regulations and potentially constitutes a taking (See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>)
- Recommendation: Include a finding in the draft Order to state that the RWQCB does not have the authority to require Copermittees to revise their land use regulations

Typical Urban In-fill Project

Rationale to keep the urban infill exemption

- 4th & Nutmeg Streets, San Diego-Bankers Hill, NW Corner
- Street View- Podium type construction with underground parking



Revise the pre-existing condition standard for urban infill projects

- Concerns:
 - Requiring that urban infill projects use a “pre-development condition” standard conflicts with other land use policies and State laws such as AB-32 & SB-375
- Recommendation:
 - Keep the urban infill project exemption from the pre-development condition standard; use the pre-project condition standard

(See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>)

Change the definition of Priority Development Projects for large area low impervious projects

- Concern:
 - The current definition of PDP permits pulls in projects such as renewable energy and public parks that have more than 10,000 square feet of impervious area but are less than 3% total impervious area
 - Recommendation:
 - Revise the permit to remove from the definition of PDP projects those projects with over 10,000 square feet of impervious area but less than 3% total impervious area

(See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>)

Provide more time to develop the WQIPs

- Concerns:
 - This will be the first attempt to develop WQIPs
 - This is an ambitious effort which will likely include issues that have not been anticipated
 - There is no assurance at this time that eight **high quality** WQIPs can be produced within 24 months.
- Recommendation:
 - Modify the draft Order to grant more time for Co-permittees to develop the WQIPs when cause is shown

See Bowling, D., Grey, M., Parra, L., Walker, T., Weedon, S.F., "San Diego Regional Water Quality Control Board Draft MS4 Permit: A Case Study" <http://www.cicwq.com/>

Alternative Compliance

- We need to ensure that Alternative Compliance methods and framework need to be included beyond the limited options included in the permit
- Need to ensure project applicants can actually use the option of Alternative Compliance
- Copermittees have a valid point of needing resources to maintain retrofit devices installed as result of Alternative Compliance

Conclusions

- We seek to build on the collaborative effort started by RWQCB, with co-permittees and NGOs
- Take as much time as necessary to develop a consensus based permit
- The HMP deserves the time to see measurable results
- WQIPs are supported by all stakeholders-Let's get it done right