Watershed Management Area Analysis
Water Quality Equivalency and Alternative Compliance

Presented by:
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County of San Diego

Agenda

- Overview
- Regional Efforts
  - WMAA
- County Efforts
  - Project List
  - Water Quality Equivalency
  - Alternative Compliance
- IRWM role?

2013 Region 9 MS4 Permit
- Section E.3. Development Planning
  - More Priority Development Projects
  - Stricter Retention requirements
  - Stricter Hydromodification requirements (bigger BMPs)
  - Will drive the need for an Off-Site Alternative Compliance option

Watershed Management Areas

Watershed Management Area Analysis
- (a): GIS Mapping of hydrologic process, existing streams, land uses, sediment yield areas, and location of flood control structures.
- (b): Use the results of (a) to compile list of candidate projects for alternative compliance.
- (c): Use the results of (a) to identify areas in watershed where PDPs are exempt from HMP with supporting rationale.

Regional Objective

- Provide regional WMAA for WQIPs
  - Develop (a) by building upon existing mapping and data
  - Develop (c) by conducting further analysis and providing justifications to support HMP exemptions
  - Develop template for (b) to provide jurisdictions/WQIPs a basis to identify candidate list of projects

Task 1: Mapping

B.3.b.(4)(a): GIS Mapping of:
1. Hydrologic process, i.e. infiltration or overland flow areas
2. Existing streams with descriptions
3. Current and anticipated future land uses
4. Potential coarse sediment yield areas
5. Location of existing flood control and channel structures

Task 2: Template

B.3.b.(4)(b): Candidate Project List:
- Develop a regional template that establishes a consistent format for watersheds/jurisdictions to generate candidate list of projects
- The template will be provided to the Copermittees for each watershed in December 2013

Potential Projects

- Stream rehabilitation
- Retrofitting existing infrastructure to incorporate storm water retention or treatment
- Regional BMPs
- Groundwater recharge projects
- Water supply augmentation projects
- Land purchases to preserve floodplains

WMAA Schedule
ALTERNATIVE COMPLIANCE PROGRAM DEVELOPMENT

County Efforts:

Regulatory Drivers

- Total Maximum Daily Load (TMDL)
- Jurisdictional BMP retrofits
- Jurisdictional channel/habitat rehabilitation
- Watershed Management Area Analysis (WMAA)

County TMDLs

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<th>Location</th>
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<td>Rainbow Creek</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>Santa Margarita</td>
<td>Rainbow Creek</td>
</tr>
<tr>
<td>Bacteria</td>
<td>San Luis Rey</td>
<td>San Luis Rey River mouth</td>
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<td>Bacteria</td>
<td>Carlsbad</td>
<td>Moonlight State Beach</td>
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<td>San Diego Lagoon mouth</td>
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<tr>
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<td>San Diego</td>
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<td>San Diego</td>
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<td>Diazinon</td>
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</tbody>
</table>

Alt. Comp. Program Impetus

1. TMDLs
2. JRMP retrofit BMPs
3. JRMP channel rehabilitation
4. WMAA

Water Quality Equivalency

Objective
- Create process to evaluate if a candidate project has a greater water quality benefit

Tasks
- Research model programs
- Form Technical Advisory Committee
- Propose equivalency evaluation
IRWM Role?

- WMAA Data call
- Call for Projects
- Urban Water Purveyor for WQE TAC
- Exploration of a Regional Project Database?

Thank You

Process Hierarchy

- WMAA
- Project List
- WQIPs
- Water Quality Equivalency
- Alternative Compliance Program

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