R9-2009-0002
(formerly R9-2008-0001, R9-2007-0002)

So. Orange County
Municipal Separate Storm Sewer System (MS4) Permit

Staff Workshop - April 3, 2009
California Regional Water Quality Control Board – San Diego Region

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Permit History

- Replaces current Permit, R9-2002-001
- August 18, 2006 – Copermittees ROWD
- February 9, 2007 – R9-2007-0002 draft released
- March 12, 2007 – Previous Workshop
- April 11, 2007 – First Public Hearing
- Dec. 12, 2007 – Third Revision, R9-2008-0001
- February 13, 2008 – Second Public Hearing
Future Timeline

• **May 15** – Submittal date for written comments to receive a written response prior to the July hearing.

• **June 19** – Deadline for written comments for the July hearing.

• **July 1** – Public Hearing. Comment period closed?

• **August 12** – Regional Board adoption consideration.
Major Changes

1. Urban runoff
2. Dry weather numeric effluent limits
3. Over irrigation prohibition
4. Wet weather municipal action levels
5. Hydromodification
6. Low impact development
7. Retrofitting existing development
1. **Urban Runoff**

- “Urban runoff” is not in federal regulations

- Clarifies that the permit regulates MS4 discharges regardless of source.
MS4 Discharge
 = Runoff

- Storm Water
  - Wet Weather
    - Maximum
      - Extent Practicable
    - Municipal
      - Action Levels

- Non-Storm Water
  - Dry Weather
    - Prohibited
      - Non-Storm Water Discharges
    - Exempt
      - Non-Storm Water Discharges

- Monitoring

- Numeric Effluent Limits
2. Non-Storm Water Dry Weather Numeric Effluent Limits

- Non-storm water discharges are prohibited, unless exempt.
- Water Quality Based Effluent Limits at the end of pipe.
- Measureable Performance Criteria
2. Non-Storm Water Dry Weather Numeric Effluent Limits

- Water quality standards?
- Prohibited Discharge?
3. Over Irrigation

- Over irrigation identified as a pollutant source and conveyance; therefore

- Over irrigation discharges are prohibited
3. Over Irrigation

- Water conservation
- Does not stop lawn watering
4. Wet Weather Municipal Action Levels

- Wet weather
- Nationwide phase 1 MS4 monitoring data
- 90% comply, 10% exceed
- MS4 outfall monitoring
4. Wet Weather Municipal Action Levels

- Average of 20% or greater exceedance
- Compliance with MEP
- Measureable performance criteria
5. Hydromodification

Hydromodification Management Plan
• Flow rate and duration controls
• Stream health indicators
• Design criteria
• Stream restoration measures
5. Hydromodification

- Measureable Performance Criteria –
  - 5% Effective Impervious Area
  - Erosion Potential
  - Range of flows
  - Goodness of fit
- 2 years to draft
6. Low Impact Development

- Water reuse assessment
- Alternatives to conventional MS4s
- Conserve natural features
- Conserve pervious areas
- Review municipal code conflicts
6. Low Impact Development

- Full integration in the SSMP
  - Site Design
  - Source Control
  - Treatment Control
  - Hydromod. (5% EIA)
7. Retrofitting Existing Development

- Improve water quality
- Address existing Hydromodification
- Stream restoration
- Reduce pollutants
- Reduce flooding
7. Retrofitting Existing Development

- Identify and rank potential projects
- Cooperate with local landowners
- Alternative mitigation
Other Issues

- SWQPAs
- FETDs
- TMDLs
- Others?
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