

REGIONAL MONITORING WORKGROUP – COPERMITTEES-ONLY MEETING SUMMARY

County of San Diego
5201 Ruffin Road, Suite P
San Diego, CA 92123
Tuesday, June 29, 2010
10:00am – 12:00pm

Attendees:

Name	Organization
Jo Ann Weber	County of San Diego
Scott Norris	County of San Diego
David Renfrew	Weston Solutions
Philip Gibbons	Port of San Diego
Marisa Soriano	City of Chula Vista
Kelly Barker	City of Del Mar (MOE)
Robert Griswold	City of El Cajon
Erik Steenblock	City of Encinitas
Guy Nelson	City of Imperial Beach
Joe Kuhn	City of La Mesa
John Quenzer	City of National City (D-Max)
Patty Tenboam Byrnes	City of San Diego
James House	City of San Diego
Eric Hoying	City of San Diego
Helen Perry	City of Santee
Doug Coppi	City of Vista

REGIONAL MONITORING

Regional Monitoring

Weston provided the group with the following updates on monitoring activities:

- Mass Loading Stations/ Temporary Watershed Assessment Stations
 - All field work is complete
- Source ID Monitoring Program 10-11
 - A draft workplan will be done by July 16th
- MS4 Outfall Monitoring Program
 - Targeted and Random Wet – All samples have been taken
 - Random Dry – 35 samples have been taken from 105 sites
- ABLM
 - Finishing up bioassessment
- SMC
 - Finishing up bioassessment

Regional Monitoring Contracts

JW update the group about the Regional Monitoring contracts. The Source Selection Committees are nearing the end of the process. 'Plan B' as discussed in previous meetings will go into effect July 1. Weston will start working on the installation of the MLS and TWAS stations. There are enough funds in the current contract to stay in compliance.

Third Party Data Inclusion

Several Third party data sets were nominated for inclusion in the Regional Monitoring Report for FY 10-11. The group discussed the data sets and came up with the following order of priority for inclusion:

1. San Diego River Watershed – Santee ambient data and Padre Dam data
2. Carlsbad Watershed – Buena Vista lagoon
3. Carlsbad Watershed – San Elijo lagoon
4. Carlsbad Watershed – Lake San Marcos
5. Carlsbad Watershed – Agua Hedionda
6. San Luis Rey Watershed – San Luis Rey County data

Data sets 1 and 2 will be included in the Monitoring report, others will be added as funding allows.

TWAS 10-11

Temporary Watershed Assessment Stations (TWAS) will be in the northern watersheds for the 10-11 year. A spreadsheet of the sites was sent to the group. The majority of WURMPS have replied with comments. A response is needed by July 1.

AB411 PROGRAM

Our regional board approached JW to ask the Workgroup for funding help with the AB411 (beaches monitoring) program. Funding is needed for the time period April 2011 – October 2011, which is approximately \$300k. In order to fund the monitoring, there could be a potential tradeoff of Permit-required regional monitoring such as ABLM or MS4 Outfall Monitoring. Any change we agree to will be brought forward by the RWQCB staff and reflected in our existing permit requirements. The group discussed this matter and expressed concern about trading off programs that would help the Copermittees collect useful data within our cities, rather than focusing on beaches, as well as the precedent it may set. Overall consensus was that it was not favored. JW will wait to hear more from the Regional Board.

OC PERMIT REQUIREMENTS

Weston gave the group a presentation on the monitoring requirements of the OC Permit. See the attached presentation.

ROWD/ LTEA

The ROWD is due to the Regional Board in 2011. JW discussed with the group the possibility of implementing a stakeholder-driven approach to updating the Regional Monitoring Program for the ROWD. The group discussed the pros and cons of using this method. Most likely there would be a facilitator involved and there would be workshops for stakeholders. ROWD preparation was budgeted at \$95k, and leftover funds from the Regional Monitoring budget would have to be used to move forward with this process. JW will keep the group updated as to the feasibility of this approach.

FUTURE MEETINGS

The next Regional Monitoring Workgroup meets on **Tuesday, July 27, 2010** from 10:00am – 12:00pm at the County of San Diego at 5201 Ruffin Road, Suite P, San Diego, CA 92123.

Upcoming meetings:
August 24

AGENDA

San Diego Regional Monitoring Workgroup – Copermittees Meeting Only

County of San Diego, 5201 Ruffin Rd, Ste. P, San Diego, CA 92123

Tuesday, June 29, 2010

10:00 PM – Noon

1. Introductions
2. Approve meeting notes from May 25, 2010 meeting
3. Regional Monitoring Activities Update (10:05 -10:20)
 - a. Update Field Activities (Weston)
 - b. Update on the “revamping the LTEA and Watershed Assessment Constituent Rating System “ Document
 - c. Update on 2010-2011 Source ID Monitoring Plan due Sept 1, 2010 to RWQCB
 - d. Nominate and select “third party” data inclusion in the annual Regional Monitoring Report due on January 30th, 2011
 - e. WURMP groups are requested to update/confirm locations of TWAS in the northern watersheds by June 29th. Permitting and Installation of equipment will begin in July.
4. Discussion: Consideration of the RWQCB request to trade off NPDES monitoring elements to fund the AB411 Program (Beach Water Quality Monitoring Program- \$300 K) from April 1, 2011 to Oct. 30, 2012. (10:20 to 10:35)
5. Review of County of Orange NPDES Monitoring Requirements (10:35 to 10:55)
6. Discussion - Potential Approaches for Updating Regional Monitoring Portion of NPDES Permit (Group) (10:55 to 11:15)
7. Review and Update; Biocriteria Development in California (11:15 to 11:30)
8. Annual Revisit of Regional Monitoring Workgroup Priorities (11:30 to 11:45)
9. Other Items (please bring to meeting)
10. Future Meetings - The following meetings are at the County of San Diego at 5201 Ruffin Rd, Ste. P, San Diego, CA 92123 from 10 am to Noon:

Tuesday, July 27th

Tuesday, August 24th

For updated meeting schedule, agendas and meeting summaries visit www.projectcleanwater.org

Review of the Orange County 2009 MS4 Permit-Order R9-2009-0002 Monitoring Requirements

Presentation to the San Diego Regional
Copermittees

06/29/10

Monitoring Programs

A. Receiving Waters

- (1) Mass Loading Stations
- (2) Urban stream Bioassessment Monitoring including algae
- (3) Follow Up Analysis and Actions
- (4) Ambient Coastal Receiving Water
- (5) Regional Monitoring Programs

Monitoring Programs (cont'd)

B. Wet Weather MS4 Discharge Monitoring

C. Dry Weather Non-Stormwater Effluent
Limitations

D. Special Studies

E. Monitoring Provisions

MLS Monitoring

Locations: 6 MLS

Frequency: 2 wet and 2 dry events

Timing:

- Wet – 1st wet event (no mention of October 1) and 1st event after Feb 1.
- Dry – 3 month spacing between May and October (can be done in wet season if no Sept or Oct flow).

MLS Protocols

- Swamp Protocols Specified
 - Wet Events
 - Time Weighted sampling over entire storm
 - Large watersheds can be 1st 3 hours of storm flow.
 - Dry Events
 - Time Weighted Composite of 24 discrete hourly samples
 - Calculate mass loads by sum of product and flow
- Automatic Samplers Must Be Used
- Must Measure or Estimate Flows for Each Event

Sampling

- Grab Samples

Temperature

pH

Conductivity

Biological Oxygen
Demand

Oil & Grease

TPH (if sheen
evident)

Total Coliform

Fecal Coliform

Enterococci

Table 1. Analytical Testing for Mass Loading, Urban Stream Bioassessment (excluding bacteriological), and Ambient Coastal Receiving Waters Stations

Conventionals, Nutrients, Hydrocarbons	Pesticides	Metals (Total and Dissolved)	Bacteriological
<ul style="list-style-type: none"> • Total Dissolved Solids • Total Suspended Solids • Turbidity • Total Hardness • pH • Specific Conductance • Temperature • Dissolved Oxygen • Total Phosphorus • Dissolved Phosphorus • Nitrite ° • Nitrate ° • Total Kjeldahl Nitrogen • Ammonia 	<p>Diazinon Chlorpyrifos <i>Malathion</i> <i>Carbamates*</i> <i>Pyrethroids*</i></p>	<p>Arsenic Cadmium Chromium Copper Lead Nickel Selenium Zinc</p>	<p>Total Coliform Fecal Coliform Enterococcus</p>
<ul style="list-style-type: none"> • Biological Oxygen Demand, 5-day • Chemical Oxygen Demand • Total Organic Carbon • Dissolved Organic Carbon • Methylene Blue Active Substances • Oil and Grease 			
<p>° Nitrate and nitrite may be combined and reported as nitrate + nitrite. * Carbamate and Pyrethroid pesticides must initially be monitored in Prima Deshecha and Segunda Deshecha watersheds. If carbamate and/or pyrethroid pesticides are found to correlate with observed acute or chronic toxicity, then that pesticide must be added to all stations displaying toxicity.</p>			

Table 2. Toxicity Testing for Mass Loading, Urban Stream Bioassessment, and Ambient Coastal Receiving Waters Stations

Program Component	Dry Weather Flows		Storm Water Flows	
	Freshwater Organisms	Estuarine & Marine Organisms	Freshwater Organisms	Estuarine & Marine Organisms
Mass Loading	2 chronic 2 acute	1 chronic**	2 acute	2 chronic 1 acute
Urban Stream Bioassessment	2 chronic* 2 acute*	n/a	n/a	n/a
Ambient Coastal Receiving Waters	n/a	2 chronic 1 acute	n/a	2 chronic 1 acute
Sediment Toxicity Special Study	1 chronic 1 acute 1	n/a	n/a	n/a

Table Notes

* Urban Stream Bioassessment on Aliso Creek must also include use of *Pimephales promelas* (fathead minnow) for chronic and acute toxicity testing.

** Dry weather toxicity monitoring at a mass loading station may be omitted if either (a) the channel flows are diverted year-round in dry weather conditions to the sanitary sewer for treatment; or (b) dry weather toxicity with marine species is occurring at an Ambient Coastal Waters Receiving station where that channel reaches the Pacific Ocean.

Species Notes:

1. Freshwater acute toxicity testing must include *Hyalella azteca*.

2. Acute toxicity for may be determined during the course of chronic toxicity monitoring per U.S. EPA protocols.

3. *Americamysis bahia* may be used as a marine test organism if *Holmesimysis costata* cannot reasonably be obtained. The use of, and justification for, of *A. bahia* must be clearly reported in each Monitoring Report.

Bioassessment Monitoring

Locations: 6 urban locations (1 per watershed) and 3 reference locations

Frequency: Annually (May or June) or September or October) for perennial streams and 2x per year for intermittent streams

Timing:

- Must coincide with dry event MLS monitoring and Inland Aquatic Habitat Stations

Bioassessment Methods

Must include triad (bioassessment chemistry, and toxicity)

- Chemistry and Toxicity – Same parameters as MLS and include pyrethroids
- Bioassessment – IBI, Swamp Protocols, and Include Benthic Algae (Periphyton)
- A qualified professional environmental laboratory must perform all sampling, laboratory, quality assurance, and analytical procedures (part d.).

Follow-up Analysis and Actions

If MS4 discharged induced degradation is identified at MLS, bioassessment or dry weather discharge station:

- Must evaluate extent and causes
- Implement management actions to eliminate or reduce sources
- TIEs must be conducted as per Table 3.
- Once cause is identified from TIE, source ID studies must be performed.
- Management actions to reduce or abate sources.

Table 3. Triad Approach to Determining Follow-Up Actions⁶

	Chemistry	Toxicity	Benthic Alteration	Example Conclusions	Possible Actions or Decisions
1.	Exceedance of water quality objectives	Evidence of toxicity	Indications of alteration	Strong evidence of pollution-induced degradation	Use TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a high priority
2.	No persistent exceedances of water quality objectives	No evidence of toxicity	No indications of alteration	No evidence of current pollution-induced degradation Potentially harmful pollutants not yet concentrated enough to cause visible impact	No immediate action necessary Conduct periodic broad scans for new and/or potentially harmful pollutants
3.	Exceedance of water quality objectives	No evidence of toxicity	No indications of alteration	Contaminants are not bioavailable Test organisms not sensitive to problem pollutants	TIE would not provide useful information with no evidence of toxicity Continue monitoring for toxic and benthic impacts Initiate upstream source identification as a low priority Consider whether different or additional test organisms should be evaluated
4.	No persistent exceedances of water quality objectives	Evidence of toxicity	No indications of alteration	Unmeasured contaminant(s) or conditions have the potential to cause degradation Pollutant causing toxicity at very low levels	Recheck chemical analyses; verify toxicity test results Consider additional advanced chemical analyses Use TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a medium priority
5.	No persistent exceedances of water quality objectives	No evidence of toxicity	Indications of alteration	Alteration may not be due to toxic contamination Test organisms not sensitive to problem pollutants	No action necessary due to toxic chemicals Initiate upstream source identification (for physical sources) as a high priority Consider whether different or additional test organisms should be evaluated
6.	Exceedance of water quality objectives	Evidence of toxicity	No indications of alteration	Toxic contaminants are bioavailable, but in situ effects are not demonstrable Benthic analysis not sensitive enough to detect impact Potentially harmful pollutants not yet concentrated enough to change community	Determine if chemical and toxicity tests indicate persistent degradation Recheck benthic analyses; consider additional data analyses If recheck indicates benthic alteration, perform TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a high priority If recheck shows no effect, use TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a medium priority
7.	No persistent exceedances of water quality objectives	Evidence of toxicity	Indications of alteration	Unmeasured toxic contaminants are causing degradation Pollutant causing toxicity at very low levels Benthic impact due to habitat disturbance, not toxicity	Recheck chemical analyses and consider additional advanced analyses Use TIE to identify contaminants of concern, based on TIE metric Initiate upstream source identification as a high priority Consider potential role of physical habitat disturbance
8.	Exceedance of water quality objectives	No evidence of toxicity	Indications of alteration	Test organisms not sensitive to problem pollutants Benthic impact due to habitat disturbance, not toxicity	TIE would not provide useful information with no evidence of toxicity Initiate upstream source identification as a high priority Consider whether different or additional test organisms should be evaluated Consider potential role of physical habitat disturbance

Ambient Coastal Receiving Waters Monitoring

Locations: All ecologically-sensitive areas need to be represented, ASBS and Marine Life Refuges with MS4 Discharges, and Dana Point Harbor (RHMP exception)

Parameters: Same as MLS (chem and tox)

Frequency: Dry and wet weather, and magnitude of plumes

Timing: Concurrent with MLS monitoring

Special investigations required with emphasis on answering Core Question 4.

Regional Monitoring Programs

- Copermittees may propose participation in additional regional monitoring programs to supplement and/or replace existing monitoring requirements.
- Must be approved by E.O.
- Must be included in the annual report.

Wet Weather MS4 Discharge Monitoring

Must develop, conduct, and report on pollutants violating or contributing to watershed problems

1. MS4 Outfall Monitoring

- Must comply with the order for storm water action levels (SALs)
- Collection of 24 hour composites or entire storm
- Grab samples may be utilized only for pH, indicator bacteria, DO, temperature and hardness
- All others are to be composites.
- If metals > SAL but < 1-hour maximum CTR criteria then no exceedance noted.

Wet Weather MS4 Discharge Monitoring (continued)

2. Source Identification Monitoring

- Must develop and implement a monitoring program to identify sources of pollutants causing the priority water quality problems within each watershed.
- Must include focused monitoring which moves upstream into each watershed as necessary to identify sources.

Non-Storm Water Dry Weather Action Levels (Dry Weather Monitoring Program)

Copermittees must conduct, and report on a year-round watershed based Dry Weather Non-Storm Water MS4 Discharge Monitoring Program.

Monitoring program must be designed to assess:

- Compliance with non-storm water dry weather action levels in section C of this Order
- Adopted dry weather Total Maximum Daily Loads Waste Load Allocations
- The contribution of dry weather flows to 303(d) listed impairments.

Non-Storm Water Dry Weather Action Levels (Continued))

- A. Each Copermitttee must conduct the following dry weather field screening and analytical monitoring tasks:
- Stations must be major outfalls.
 - Major outfalls chosen must include outfalls discharging to inland surface waters; to bays, harbors and lagoons/estuaries; and to the surf zone.
 - Other outfall points (or any other point of access such as manholes) identified by the Copermitttees as potential high risk sources of polluted effluent or as identified under Section C.3.e shall be sampled.
 - Locations must be plotted on a map

Non-Storm Water Dry Weather Action Levels (Continued))

- B. Must develop procedures for monitoring with the minimum specified:
- Must sample a representative number of stations and must be > 72 hours after last rainfall.
 - If ponded collect 1 grab, if flowing collect 1 hour composite.
 - Must analyze full list in table 1, plus Section C action level analytes, plus Chloride, Sulfate and Total Dissolved Solids
 - Action levels are specified but also need to assess LC₅₀ for appropriate species.
 - Source ID and IC/ID investigations required to be developed.

Non-Storm Water Dry Weather Action Levels (Continued))

C. Conduct Dry Weather Non-storm Water Effluent Analytical Monitoring

- If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and found in sections C, F.4.d and F.4.e of Order No. R9-2009-0002.
- Granted 1 year to switch from old program to new requirements.

Special Studies

1. Aliso Creek bacteria investigation
2. The Copermitees must conduct special studies
 - including any monitoring required for TMDL development and implementation, as directed by the Executive Officer.
 - A TMDL Monitoring Plan must be developed to comply with TMDL Resolution No. R9-2008-0027.
3. Stormwater Monitoring Coalition Regional Monitoring
4. Sediment Toxicity Study
5. Trash and Litter Impairment Investigation

Monitoring Provisions

1. SWAMP QAMP Compliant
2. Samples must be representative of the event and activity
3. Must preserve records for 5 years or greater if required
4. Records must be traceable to individuals
5. Sampling, preservation, and analyses in accordance with 40CFR136
6. Penalties and fines for tampering with equipment or methods
7. Calculation for averaging to use arithmetic mean or other as specified
8. ELAP Cert required
9. MLs must follow SIP for priority toxic pollutants.

Monitoring Provisions (continued)

10. E.O. may increase or decrease samples, events, or frequency as deemed necessary
11. Penalties and fines for falsification of records.
12. Monitoring conducted in accordance with 40CFR136
13. Additional monitoring must be included in calculation and reports to Regional Board.

End of Presentation

Remainder of slides are for additional supporting information.

Programs Similar to Our Permit

Same Goals and Core Questions

Monitoring Conducted on a Watershed Basis

- (1) Mass Loading Stations – 2 wet and 2 dry weather events per year
- (2) Urban stream Bioassessment Monitoring including algae- twice per year
- (6) Source Identification Monitoring: more vague than ours

Other Programs (Not clear Equivalents)

(3) Ambient Coastal Receiving Water –
Appears to be addressing ASBS-
(Areas of Special Biological Significance)

(4) Regional Bacteria Monitoring –
“collaborative regional bacteria monitoring”

Note: Need to review Technical report – may
be AB411 and/or bacteria TMDL
monitoring- to be further researched

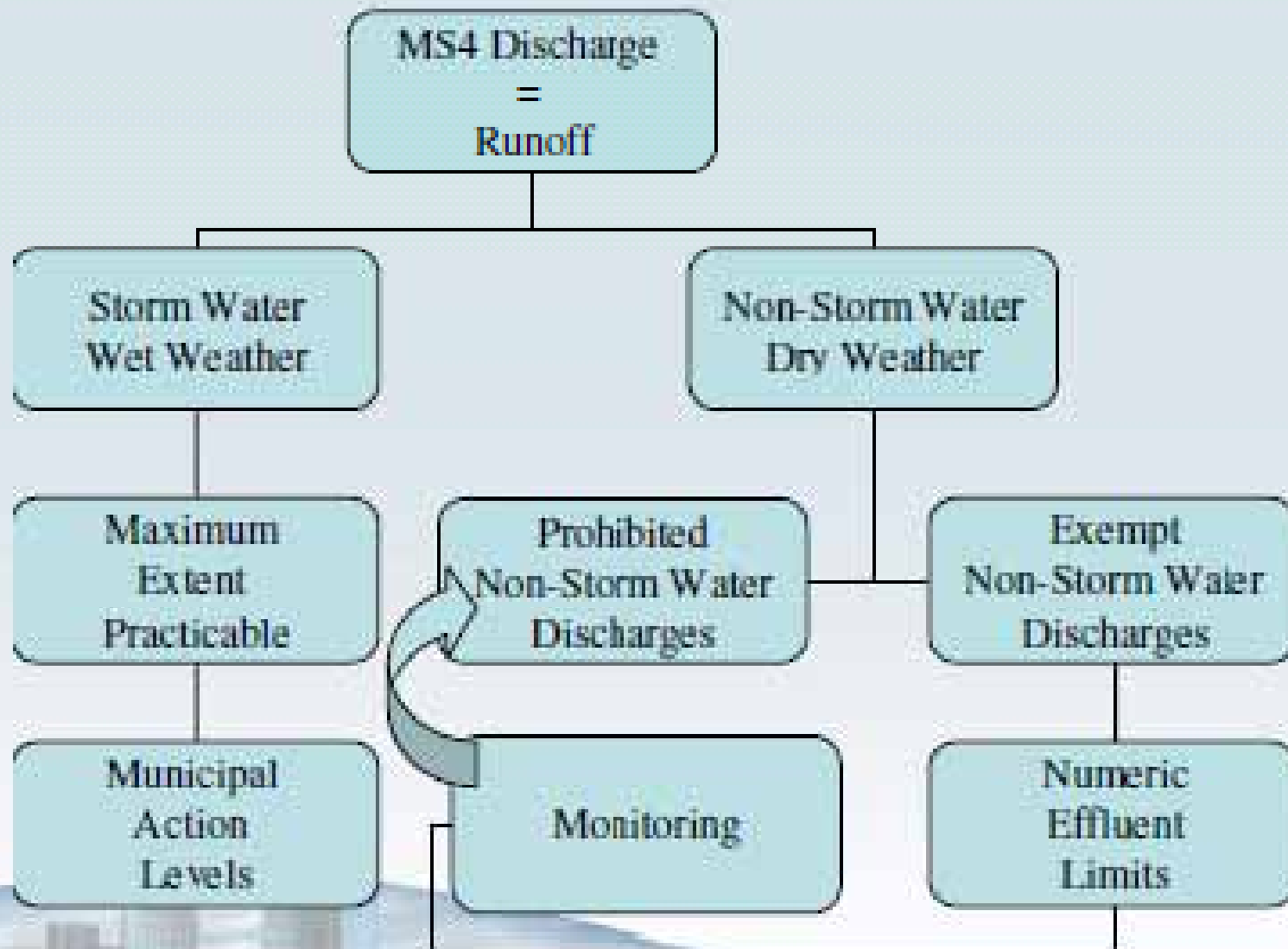
“New/Updated” Programs

(5) MS4 Storm Water Outfall Monitoring

- Only wet weather-
- SALs – stormwater action levels- will trigger detailed upstream investigations

(7) Dry Weather Non-Stormwater Monitoring

- **Prohibition of over-irrigation**
- NELs – non-stormwater dry weather action levels- the NELs are based on WQOs and will trigger many upstream investigations



Numeric Action Levels

(Non-stormwater, Dry Weather) Discharges to Inland Surface Waters

- a. Discharges to inland surface waters: Non-storm water discharges from the MS4 to inland surface waters shall not contain pollutants in excess of the following effluent limitations:

Table 4.a.1: General Constituents

Parameter	Units	AMEL	MDEL	Instantaneous Maximum	Basis
Fecal Coliform	MPN/ 100 ml	200 ^A 400 ^B	-		BPO
Enterococci	MPN/ 100 ml	33	-	104 ^C	BPO/OP
Turbidity	NTU	-	20		BPO
pH	Units	Within limit of 6.5 to 8.5 at all times			BPO
Dissolved Oxygen	mg/L	Not less than 5.0 in WARM waters and not less than 6.0 in COLD waters			BPO
Total Nitrogen	mg/L	-	1.0	See MDEL	BPO
Total Phosphorus	mg/L	-	0.1	See MDEL	BPO
Methylene Blue Active Substances	mg/L	-	0.5	See MDEL	BPO

A – Based on a minimum of not less than five samples for any 30-day period

B – During any 30 day period

C – This Value has been set to Ocean Plan Criteria for Designated Beach Areas

BPO – Basin Plan Objective

OP – Ocean Plan

MDEL – Maximum Daily Effluent Limitation

AMEL – Average Monthly Effluent Limitation

Numeric Effluent Limitations

(Non-stormwater, Dry Weather)
Discharges to Inland Surface Waters

Table 4.a.2: Priority Pollutants

Parameter	Units	Freshwater (CTR)		Saltwater (CTR)	
		AMEL	MDEL	AMEL	MDEL
Cadmium	ug/L	*	*	16	8
Copper	ug/L	*	*	5.8	2.9
Chromium III	ug/L	*	*	-	-
Chromium VI (hexavalent)	ug/L	16	8.1	83	41
Lead	ug/L	*	*	14	2.9
Nickel	ug/L	*	*	14	6.8
Silver	ug/L	*	*	2.2	1.1
Zinc	ug/L	*	*	95	47

CTR – California Toxic Rule

* - Effluent limitations developed on a case-by-case basis (see below)

- Metals based on CTR (Hardness based)

Numeric Effluent Limitations

(Non-stormwater, Dry Weather)

Discharges to Bays, Harbors, and Lagoons/Estuaries

- b. Discharges to bays, harbors and lagoons/estuaries: Non-storm water discharges from the MS4 to Dana Point Harbor and to saline lagoons/estuaries shall not contain pollutants in excess of the following effluent limitations:

Table 4.b: General Constituents

Parameter	Units	AMEL	MDEL	Instantaneous Maximum	Basis
Total Coliform	MPN/100 ml	1,000	-	10,000	BPO
Fecal Coliform	MPN/100 ml	200 ^A , 400 ^B	-		BPO
Enterococci	MPN/100 ml	35	-	104 ^C	BPO
Turbidity	NTU	75	-	225	OP
pH	Units	Within limit of 6.0 to 9.0 at all times			OP
Priority Pollutants	ug/L	See limitations in Table 4.a.2			

A – Based on a minimum of not less than five samples for any 30-day period

B – During any 30 day period

C – Designated Beach Areas

OP – California Ocean Plan 2005

MDEL – Maximum Daily Effluent Limitation

BPO – Basin Plan Objective

AMEL – Average Monthly Effluent Limitation

- Metals based on CTR (Hardness based)

Numeric Effluent Limitations

(Non-stormwater, Dry Weather)
Discharges to The Surf Zone

- c. Discharges to the surf zone: Non-storm water discharges from the MS4 to the surf zone shall not contain pollutants in excess of the following effluent limitations:

Table 4.c: General Constituents

Parameter	Units	AMEL	MDEL	Instantaneous Maximum	Basis
Total Coliform	MPN/100 ml	1,000	-	10,000 1,000 ^A	OP
Fecal Coliform	MPN/100 ml	200 ^B	-	400	OP
Enterococci	MPN/100 ml	35	-	104 ^C	OP

A – Total coliform density shall not exceed 1,000 per 100 ml when the ratio of fecal/total coliform exceeds 0.1

B – During any 30 day period

C – Designated Beach Areas

OP – California Ocean Plan 2005

1. Urban Runoff

- “Urban runoff” is not in federal regulations
- Clarifies that the permit regulates MS4 discharges regardless of source.

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



Non-Storm-water Dry Weather Monitoring

- Stations include major outfalls discharging o inland surface waters, bays, harbors, lagoon/estuaries and to the surf zone (submit plan)
- Collect grab if ponded and one-hour composite if flowing
- Analyze for Table 1 (MLS analytes), chloride, sulfate, TDS and other constituents with action levels in Section C (mainly metals, bacteria, nutrients & MBAS)--\$\$\$

Non-Storm-water Dry Weather Monitoring cont'd

- Stringent Follow-up Investigation Required if NALs exceeded – because NALs are based on WQOs- there will be many, many investigations and many results are required in 14 days to RWQCB, which will require expedited lab analyses.
- Consider this in your future budgeting!
- A process is given to exempt natural sources

4. Wet Weather Municipal Action Levels

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



Stormwater Action Levels for Wet Weather Section D of the Order

- Beginning Year 3 after Order adoption date, a running average of twenty percent or greater of exceedances of any discharge of storm water from the MS4 to waters of the United States that exceed the Storm Water Action Levels (SALs) for the pollutants listed in Table 5 (below) will require each Copermittee to affirmatively augment and implement all necessary storm water controls and measures to reduce the discharge of the associated class of pollutants(s) to the MEP standard.

Table 5. Storm Water Action Levels

Pollutant	Action Level
Turbidity (NTU)	126
Nitrate & Nitrite total (mg/L)	2.6
P total (mg/L)	1.46
Cd total (µg/L)	3.0
Cu total (µg/L)	127
Pb total (µg/L)	250
Ni total (µg/L)	54
Zn total (µg/L)	976

Stormwater Action Levels for Wet Weather

Section D of the Order

- The end-of-pipe assessment points for the determination of SAL compliance are all major outfalls, as defined in 40 CFR 122.26(b)(5) and (b)(6). The Copermittees **must develop their monitoring plans to sample a representative percent of the outfalls within each hydrologic subarea**. At a minimum, outfalls that exceed SALs must be monitored in the subsequent year. **Any station that does not exceed an SAL for 3 years may be replaced with a different station. SAL samples must be 24 hour time weighted composites.**
- 40 CFR 122.26
 - (5) *Major municipal separate storm sewer outfall* (or “major outfall”) means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of **36 inches or more** or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a **drainage area of more than 50 acres**); **or** for municipal separate storm sewers that receive storm water from **lands zoned for industrial activity** (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an **inside diameter of 12 inches or more or from its equivalent** (discharge from other than a circular pipe associated with a **drainage area of 2 acres or more**).