An Environmental and Community Perspective on Receiving Water Limitations & Safe Harbors

State Water Board Informational Workshop
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Key Points

• Urban runoff remains the number one source of contamination of CA surface waters

• Failure of current scheme is not the language of the permit itself, but in its implementation

• The proposed Safe Harbors are illegal and represent bad public policy
Beneficial Uses and Water Quality Standards

State must adopt water quality standards – include maximum permissible pollutant levels sufficiently stringent to protect public health and enhance water quality consistent with designated uses.

33 U.S.C. §§ 1311(b)(1)(C), 1313
Receiving Waters Do Not Meet Water Quality Standards

• 170% increase in number of rivers, streams and lakes showing toxicity
• 83% percent of the total miles of California’s rivers and streams are impaired
• 96% of the total assessed acres of California’s lakes and reservoirs are impaired
Over 90% of Californians live within 10 miles of a severely polluted waterway.
Public Health Costs

• Depending on the cost model used, for Los Angeles and Orange Counties, excess cases of gastrointestinal illness from swimming in bacteria contaminated beachwater cost:
  – between $21 million and $51 million per year, or;
  – when non-market costs (e.g., willingness to pay not to get sick) are included, between $176 million and $414 million per year.

Pendleton et al., 2006
Beach Closures

• California reported 5,794 closing or advisory days in 2011 from all sources.

• An increase in water quality in Long Beach from a C grade to a B grade would create $8.8 million in economic benefits.

• A hypothetical closure of Huntington Beach due to poor water quality:
  – One day = losses of $100,000
  – One month = losses of $3.5 million
  – Three months (summer season) = economic losses of $9 million
California’s Ocean Economy

Beach goers in California spend as much as $9.5 billion annually and the non-market values associated with beach going in California may be as high as $5.8 billion annually.
Beneficial Uses and Water Quality Standards

State must adopt water quality standards – include maximum permissible pollutant levels sufficiently stringent to protect public health and enhance water quality consistent with designated uses.

33 U.S.C. §§ 1311(b)(1)(C), 1313

Water quality standards provide a basis for regulating discharges “to prevent water quality from falling below acceptable levels.”

Receiving Water Limitations – Order 99-05

2001 LA MS4 Permit:
Part 2.1 – “discharges from the MS4 that cause or contribute to the violation of Water Quality Standards or water quality objectives are prohibited.”
Receiving Water Limitations

The Regional Board “included Parts 2.1 and 2.2 in the Permit without a ‘safe harbor.’” These are independently enforceable requirements that prohibit discharges that cause or contribute to a violation of Water Quality Standards.


9th Circuit Court of Appeals

“no such ‘safe harbor’ is present in this Permit . . . . [there is] no textual support for the proposition that compliance with certain provisions shall forgive non-compliance with the discharge prohibitions.”

Natural Resources Defense Council v. County of Los Angeles (2011) 673 F.3d 880, 897
The Clean Water Act

Anti-Backsliding:

“when a permit is renewed or reissued, interim effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit.”

40 C.F.R. 122.44(l)(1)
“Backsliding is prohibited in NPDES permits. . . . Allowing additional time to complete a task that was required by the previous permit constitutes a less stringent condition and violates the prohibition against anti-backsliding.”

implementing regulations, have not been incorporated into the Prince George’s County permit.

EPA’s objection to the draft permit and identification of revisions needed before EPA can remove the objection, see 40 C.F.R. § 122.44(b)(2)(ii), are described below:

1. Water Quality Standards

Federal regulations require that all NPDES permits contain limitations to control discharges which may cause, have the reasonable potential to cause or contribute to an excursion above water quality standards. 40 C.F.R. §122.44(d)(1)(i). Part VI of the draft Prince George’s County permit (Enforcement and Penalties) contains general language
Exhibit 7-2 Application of anti-backsliding requirements

Is effluent limitation based on a state standard?
- Yes or
- No

402(o)(1)/303(d)(4)
Are water quality standards attained?
- Yes
- No

303(d)(4)(B)
Attainment waters
Is revision consistent with antidegradation?
- Yes
- No

Revision not allowed

303(d)(4)(A)
Non-Attainment Waters
Is existing limit based on a TMDL or WLA?
- Yes
- No

Revision not allowed

Is attainment of water quality standards assured? (including antidegradation)
- No
- Yes

402(o)(3)
Does revision comply with effluent guidelines and water quality standards? (including antidegradation)
- Yes
- No

Revision allowed

Revision not allowed

See existing regulations 40 CFR 122.44 (l)

If Not an Effluent Limit...

Anti-Backsliding:

“when a permit is renewed or reissued, interim effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit.”

40 C.F.R. 122.44(l)(1)
Antidegradation Policy

Protects existing uses and water quality necessary to support existing uses, or, for “high quality” waters, protects water quality better than necessary for “fishable/swimmable” uses.

Water quality may only be lowered in certain limited circumstances. In no case may water quality be lowered to a level which would interfere with existing or designated uses.

“The Regional Board has failed to make any such (required anti-deg) findings. Rather, it argues that the antidegradation policy is inapplicable because the Order states that it ‘does not authorize any further degradation to groundwater (. . .)’ We disagree. The wish is not the father to action.”

*Associacion de Gente Unida for El Agua v. Central Valley v. Regional Board*, at p. 5.
Impaired Waters and TMDLs

TMDLs are the means for bringing impaired waterways back into compliance for pollutants such as bacteria, metals, trash, etc.

Clean Water Act NPDES permits must be consistent with the waste load allocation (“WLA”) in each TMDL.

(40 C.F.R. § 122.44(d)(1)(vii)(B)

Ballona Creek, Los Angeles (California Coastal Commission)
Los Angeles - Example

• Local waterways are important to the local and state economy.
• Stormwater is the #1 cause of surface water quality problems in the Los Angeles Region.
• Polluted stormwater poses risks to public health and the ecology of local waterways.
• There have been thousands of exceedances of water quality standards in local receiving waters since 2001.
• Hundreds of millions of dollars in public funds have been raised to help the cities address these problems.
Current State of LA Waterbodies
2010 303(d) List (Impaired Uses)
Current State of LA Waterbodies
LA County Mass Emission Stations

Discharger Data
The LA County MS4 persistently contributes to violations of water quality standards and TMDLs.

The water quality limits for fecal bacteria, various heavy metals, ammonia, pH and cyanide, among other constituents were exceeded in Ballona Creek, Malibu Creek, the Los Angeles River, Santa Clara River, Dominguez Channel, and Coyote Creek 1105 times since 2003.
Current State of LA Waterbodies
Malibu Creek and Compton Creek

3rd Party Data: Heal the Bay

- **Malibu Creek** Watershed (1998 – 2010): regulatory limits for **nitrogen**, **ammonia**, **phosphate**, **E.coli** and **enterococcus** were **routinely exceeded** both during wet and dry weather.

Current State of LA Waterbodies

Los Angeles River

3rd Party Data: Friends of the LA River

- **13** of **22** sites received an **F grade for failing water quality standards** for PH, temperature, dissolved solids, nutrients, dissolved oxygen and turbidity. (2005)

- **Bacteria** monitoring data at **23 sites** in the LA River watershed reveal **fecal bacteria** indicator exceedances. (2003-2004)
Current State of LA Waterbodies
Ballona Creek and Malibu Beaches

3rd Party Data: LA Waterkeeper

• **18 storm drains** had consistently high levels of **bacteria** in dry weather discharges from these storm drains flowing into Ballona Creek.

• Receiving water sampling conducted in Ballona Creek together with the dry weather storm drain sampling demonstrates the link between polluted storm drain discharges and exceedances of water quality standards.

• Monitoring data at Malibu beaches confirm that the MS4 system is a **significant source of pollution** to receiving waters and contributes to violations of **bacteria water quality limits**.

Ballona Creek, 2012
Malibu beach, 2010
Beach Bacteria TMDL exceedances (Santa Monica Bay and Marina del Rey)

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* Santa Monica Bay Bacteria TMDL effective date (9-14-06)
** Marina del Rey Bacteria TMDL effective date (8-9-07)
+ Partial AB411 year (4-1-12 through 9-19-12)
Los Angeles MS4 Permit

Issued in 2001

• Cities have had 22 years to meet water quality standards (12 under 2001 permit).
• Most cities have never acknowledged that they contribute to exceedances of water quality standards.
• Very few cities have submitted RWL reports to address exceedances of water quality standards.
• The Regional Board has rarely undertaken enforcement of the current permit – even where public health is at risk.
Los Angeles MS4 Permit

Approved November 8, 2012

• New Permit takes a step backwards by including safe harbors for interim TMDL limits, receiving water limitations, and some final TMDL limits

• New Permit violates anti-backsliding, state Antidegradation Policy, requirement that NPDES permits be consistent with TMDLs, and the federal requirement that NPDES permits ensure compliance with water quality standards
Storm Water Impact to Inland Waterways

- Santa Ana River Watershed
- Largest river in Southern California
- One of California’s most densely populated areas

Santa Ana River near Yorba Linda
Water Quality Impairments in Santa Ana River Watershed

• 35 TMDLs
  – Big Bear Lake
  – Middle Santa Ana River
  – San Jacinto
  – Newport Bay/SD Creek

• Pollutants
  – Metals
  – Nutrients
  – Pathogens
  – Pesticides
How does impaired water quality impact inland families?

Riverside County

• Demographics
  – 2.2 million residents
  – 45.5% Hispanic
  – 78.5% under the age of 54
  – 31.6% between 0 and 19 years old

• Public waterways include:
  – Santa Ana River
  – Lake Elsinore
  – Canyon Lake
  – Lake Perris
  – Big Bear
Santa Ana River Water Safety
Protect Your Family and Your Health

• “[i]t is not uncommon for accidental discharges of waste to get into the river from homes and business alike.”
• “Animal waste, pesticides and other chemicals will routinely end up in the Santa Ana River.”
• “Swimming is NOT safe and is NOT encouraged in the Santa Ana River.”
• “You can get sick, exposed to chemicals, or come in contact with other hazardous materials. Some symptoms you may experience after contact...include rashes, allergic reactions, headache, diarrhea, upset stomach, chills, fever or infections. These symptoms may take several days to show up after exposure to contaminated water.”
• The pamphlet warns that “children, the elderly or those with compromised immune systems” are more likely to become sick or suffer from exposure to the river if they “swim, play or wade.”
Are you scared yet?

“How To Stay Safe”

• “[Y]ou can’t always see things like chemicals, bacteria and other hazards in the water. You and your family should avoid body contact with the Santa Ana River.”

• Look but don’t touch

“How Have Fun and Stay Safe”

• Riverside County Regional Park and Open-Space District redirects readers to Rancho Jurupa Splash Pad and Jurupa Aquatic Center.
  
  – Prices $9-18 per person
  – May 25 – Aug. 11 daily
  – Aug. 12 – Sept. 2 weekends
Water Quality Realities

• Permits are a vision of where we are going
• A working document driving progress v. a static plan cementing the status quo
• Decisions have impact and act as precedent for future decision makers

Kayakers on the Santa Ana River
Key Questions to Consider

• No change to Receiving Water Limitations language is warranted
• The State and Regional Boards must ensure that water quality standards are met – compliance by permittees paired with proper enforcement are critical
• The Clean Water Act prohibits weakening of permit standards or conditions