Comments to Bacteria TMDL Cost-Benefit Analysis TAC

County of San Diego

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A Successful CBA if …

- It is viewed by experts, decision makers, and the public as objective and credible.
- It informs development of good regulations.
- It is used by implementing agencies to make smart management decisions.
- It encourages similar studies in other regions and for other regulations.

Objective & Credible?

- *Data and Methods: Are all appropriate data sources utilized? Does the study use state-of-the-art practice? Does it follow federal guidance?*
- *Uncertainties: Is the study transparent to the public?*
- *Assumptions: Are they reasonable?*
- *Sensitivity Analysis: Would management decisions change if the study assumptions changed?*

*** Need for Context ***

How does the uncertainty and sensitivity of this CBA's findings compare with findings from similar studies?

5 Principles of Good Regulation

- Proportionality: *Remedies should be appropriate to the risk posed, and costs identified and minimised.*
- Accountability: *Regulators must be able to justify decisions, and be subject to public scrutiny.*
- Consistency: *Government rules and standards must be joined up and implemented fairly.*
- Transparency: *Regulators should be open, and keep regulations simple and user-friendly.*

*** Targeting ***

Regulation should be focused on the problem, and minimise side effects.

Management Decision in the Context of Public Health

2010 TMDL Scenario

- Number of illnesses at TMDL beaches over next 50 years: 1.57 million
- WQIP reduce illnesses by 84,000 (5% reduction)
- Cost to implement over 50 years: $6 billion.
- $71K per avoided illness
- Per illness benefit range from study: $79 to $2,630.

Stream Restoration + 10% Wetland

- Scenario reduces illnesses by 31,871(2% reduction)
- Cost to implement over 50 years: $4.3 billion
- $135K per avoided illness
- Per illness benefit range from study: $79 to $2,630

Human Waste (High) Scenario

- Scenario reduces illnesses by 454,000 (29% reduction)
- Cost to implement over 50 years: $1.7 billion.
- $3,744 per avoided illness
- Per illness benefit range from study: $79 to $2,630.

Concerns

- Human waste scenarios
  - Sewer vs. Septic vs. Transient contributions
  - Sewer System Leakage Rate, Fate, and Transport
  - Septic System Leakage Rate, Fate, and Transport
  - # of Homeless Contributing Waste to Receiving Waters
  - Cost to House Each Homeless Person ($14K) Seems Low
- Stormwater scenarios
  - Lack of data on BMP pathogen reduction
- Restoration scenarios
  - Complementary to GHG reduction goals but …
  - Is it legal?