

**Beaches and Creeks TMDL Cost-Benefit Analysis  
Steering Committee Meeting  
April 19, 2016**

**Committee Members Present**

Jimmy Smith, San Diego Regional Water Quality Control Board  
Jeff Van Every, City of San Diego Public Utilities Division  
Ruth Kolb, City of San Diego, Storm Water and Transportation  
Todd Snyder, County of San Diego, Watershed Protection Program  
Chris Crompton, County of Orange, Stormwater  
Rob Hutsel, San Diego River Park Foundation  
Ted Shaw, Atlantis Group

**Supporting Roles**

Lewis Michaelson, Katz & Associates  
Bree Robertoy, Katz & Associates  
Michelle Mata, San Diego Regional Water Quality Control Board  
Cynthia Gorham, San Diego Regional Water Quality Control Board  
Jian Peng, County of Orange, Stormwater  
Jo Ann Weber, County of San Diego  
Ken Schiff, Southern California Coastal Water Research Project

**February 24 and March 23 Meeting Notes**

- The committee had insufficient time to review the meeting notes; review and approval of the notes was postponed to the next meeting on May 17.

**Procurement Process Update [J.A. Weber]**

- The selected consultant is Environmental Incentives from Lake Tahoe, California.
- The kick-off meeting will likely take place during the next committee meeting in May.
- The consultant would like to meet with each committee member privately to obtain individual perspectives. This approach is subject to approval by the committee after discussing it with the consultant at the kick off.

**Technical Advisory Committee [K. Schiff]**

- The list of Technical Advisory Committee (TAC) candidates has been compiled and ranked. Formal invitation calls have yet to be made. The preferred candidate who is also available was identified by Ken for each category of expert, including:
  - Eric Strecker – Stormwater Engineer
  - Rhodes Trussel – Wastewater Treatment/Conveyance Engineer
  - Tim Wade – Public Health
  - Charles Colgan or James Hilger – Resource Economist

A discussion of each candidate's qualifications and why Ken ranked them in the order he had ensued.

### *Stormwater Engineer Expert*

- First choice: Eric Strecker, Geosyntec
  - E. Strecker is an expert on BMPs and is available and willing to participate on the TAC.
  - He has not worked on WQIPs in San Diego region, but his organization has.
- Second choice: Jonathon Jones, Wright Water Engineers
  - J. Jones is qualified. He is from Ohio, and the committee has not worked with him before.
- Third choice: Robert Pitt, University of Alabama
  - R. Pitt is not available.

### *Conflict of Interest Discussion*

- Concern was expressed about Strecker's company affiliation and whether it could affect the advice that he would give.
- C. Crompton: In regards to whether there is a conflict of interest in having Eric Strecker on the TAC, Orange County does work with Geosyntec, and Geosyntec may do future modeling work for the County. However, Eric would not be performing the modeling work, and he is very ethical and unbiased. He is also the most highly qualified and local.
  - R. Kolb: The City of San Diego uses Geosyntec as a consultant. However, they are usually used for design of a specific BMP, not regulatory support.
  - K. Schiff: Based on past experience, Eric is unbiased and will provide the advice the steering committee is looking for. He is the national leader.
- R. Kolb: The TAC committee will only be providing advice about the cost-benefit analysis, not making decisions.
- J. Smith: Opinions of the TAC will be made public. TAC members should be outside the process.
- R. Hutsel: When considering whether there is a conflict of interest, the following questions should be asked:
  - Does the TAC candidate work for the consultant?
  - Does the TAC candidate work for any committee members?
- K. Schiff: According to the process defined by the steering committee, the committee had an opportunity to decline to invite any TAC candidate, which included Eric Strecker. From the list vetted by the steering committee, the Southern California Coastal Water Research Project (SCCWRP) chose the TAC members, so the process was independent.
- T. Shaw: Potential conflicts need to be clearly disclosed.
- What about conflict of interest in the context of Water Quality Improvement Plans (WQIP) involvement?
  - J. Smith: There could be an inherent bias in accepting the WQIP if a firm helped develop the plan as Geosyntec did.
- K. Schiff: SCCWRP has overseen many such TACs and understands how to ensure TAC members stick to the technical aspects and remain independent. That is why SCCWRP was chosen to lead the TAC.

### *Wastewater Treatment/Conveyance Engineer Expert*

- First choice: Rhodes Trussel, Independent Consultant
  - R. Trussel is from southern California.
- Second choice: John Redner, Los Angeles County Sanitation Districts (retired)
- Third choice: John Larson, Independent Consultant
- The steering committee concurred with this choice.

### *Public Health Expert*

- First choice: Tim Wade, Environmental Protection Agency
  - T. Wade works as an epidemiologist at the EPA but does not make water quality standards.
  - He participated on the advisory team for the surfer health study and has already been through several federal economic analyses.
  - The only thing that might impede his involvement will be EPA management approval.
  - He will not be compensated for his participation in the TAC.
- Second choice: Sam Dorevitch, University of Chicago
  - S. Dorevitch has experience performing microbial analyses.
- The steering committee concurred with this choice.

### *Resource Economist Expert*

- The top three choices for the resource economist position - Linwood Pendleton, Judith Kildow, and Michael Hanemann - are all unavailable. SCCWRP is looking into two other options:
  - Charles Colgan, National Ocean Economics Program
    - C. Colgan has performed beach studies on both the east and west coast.
    - R. Kolb: He is the preferred choice because of his experience.
  - James Hilger, NOAA Southwest Fisheries
    - J. Hilger has performed beach economics studies and is local.
    - R. Hutsel: Hilger has some pretty strong and public opinions about public funding that could affect perceptions of his contributions to the TAC.

### *TAC Process*

- The consultant will need to review and provide input on the TAC schedule.
- The first TAC meeting with the steering committee will be the week of July 11.
  - The consultant's work plan will be provided two weeks prior (around June 21).
  - The consultant will present the work plan to the TAC. The committee would then break into private session after lunch, followed by a report to the consultant and steering committee later in the day. A written report will also be developed.
- Should the first TAC meeting be open to the public?
  - T. Snyder: It might not be necessary to have the public brought in at the work plan stage.
  - J. A. Weber: We have a public workshop scheduled after the final draft of the work plan is complete.
  - K. Schiff: A TAC member could be present at the scheduled public workshop.

- C. Crompton: The first meeting could be an opportunity for the public to listen in and possibly provide comments, but it wouldn't replace the public workshop.
- R. Hutsel: It seems premature to have the public at the first meeting. The public should have an opportunity to review the written comments provided by the TAC first.
- T. Shaw: This process should be as open to the public as is reasonable. However, the public meeting should be separate.
- R. Hutsel: What is the process if the TAC says the work plan needs to be revised; will the public workshop move forward?
  - T. Snyder: The work plan would be revised prior to the public meeting.
- The TAC will need to review the cost-benefit analysis (CBA) approximately in early 2017.

### **Alternatives [J. A. Weber]**

- Jo Ann Weber gave an overview of various alternative scenarios that could be modeled for the CBA that had been identified so far.
- R. Kolb: Drew Kleis, City of San Diego, thought it would be a good idea to have current conditions and full implementation as alternatives. He also thought an EPA affordability analysis should be included, as it provides documentation for TMDL schedule modifications. The CBA could also look at retrofits and coordinating with other planned projects to reduce costs.
- T. Snyder: The CBA should look at executing water quality projects at the same time as capital improvement projects to reduce the marginal cost.
  - R. Hutsel: The opportunity cost of delaying the project would have to be considered.
  - J. Smith: A lot of these costs are known; we need the consultant to provide intrinsic benefits.
- J. Smith: What year is being used as the baseline?
  - It will likely be 2014/2015, as the most data exist for that timeframe.
- J. Smith: Benefits and costs should be analyzed independently and then plotted out.
  - T. Snyder: Costs and benefits need to be correlated, not separate.
- T. Snyder: How is Alternative 4 different from current conditions?
  - C. Gorham: Alternative 4 only looks at wet weather.
  - J. Peng: Do we have a comparable number of illnesses for dry weather?
    - Yes, but the water quality doesn't correlate.
  - T. Snyder: The baseline could be 12 illnesses for wet weather and seven for dry weather. Then, the CBA could look at costs and benefits of driving those numbers down.
- R. Kolb: Should illnesses beyond gastrointestinal (e.g., rash, ear infections) be considered?
  - How would such illnesses from water exposure be separated from those that are not related?
    - K. Schiff: Adding other types of illnesses could provide additional benefits.
    - J. Smith: There would be more cost to bring the total illness rate down.
    - Can we calculate a background illness for more than just gastrointestinal illness?
      - Yes.
- Are there a finite number of scenarios that can be studied?
  - That number will depend on the consultant.
- The surfer study is a good source of data, but is it viable when it doesn't include the entire population and summer weather?

- T. Snyder: Current regulations are based on more limited epidemiology studies. It could be used to set a standard, and appropriately so.
- R. Kolb: Other studies will have to be used for context, including Mission Bay, Santa Monica and Doheny State Beach.
- T. Snyder: Reducing fecal indicator bacteria could increase benefits such as beach usage, but is the only way to reduce gastrointestinal illness by reducing human source pathogens?
  - K. Schiff - Most pathogens that infect humans come from humans, but not all. Some pathogens identified in the surfer health study were from birds, but it looked like those played a minor role.
- J. Smith: Where do human pathogen sources come from?
  - K. Schiff: SCCWRP is researching that now and should know more in May.
- T. Shaw: Could human pathogens be coming from something dumped in the past?
  - K. Schiff: Microbes can last for a while in groundwater, but probably not decades.
- T. Snyder: Alternatives should be packaged in four discreet scenarios to help decision makers. First is the point of comparison. Another is not altering the TMDLs. The third is making minor tweaks to the TMDLs. The fourth is a more significant overhaul of the TMDLs.
- The list of alternatives is a living document for now. Revisions should be sent to M. Mata.

#### **Draft SOW**

- A draft SOW has been provided to the consultant. J. A. Weber tweaked some of the meeting dates and other details.
- J. A. Weber will add more in-person meetings between the consultant and steering committee.