

rainbow trout is sometimes used in various research settings and is a standard test organism for acute toxicity in fresh water, adding rainbow trout would not provide additional information on chronic toxicity to freshwater species.

- d. Comment: The SCRE is a dynamic system and there is variability in its condition as a function of hydrologic conditions (wet, normal dry). How is this dynamic system going to be captured in the water balance model and the water quality model?

Response: The hydrologic and water quality models capture only steady state conditions, and focus on capturing the average condition for the critical low flow/closed estuary condition that typically occurs in the summer months. However, the data collection has spanned both wet and dry hydrologic conditions, and the model will provide results for both of these conditions. Therefore, while the models do not dynamically simulate changing hydrologic conditions, the data and model results for both wet and dry years will capture the some of variability in the SCRE. It should be noted that ANY type of model has uncertainty and all of the inherent variability in the actual conditions at the SCRE will never be captured in any model.

- e. Comment: The beaches have changed in 2011. It is not surprising that the equilibrium stage has changed.

Response: Comment noted. The change in the configuration of the beach area is one of the factors that contribute to a different equilibrium stage.

- f. Comment: There are relatively high concentrations of nitrate in GW5. Expect that groundwater quality at this site is influenced by agricultural practices.

Response: Comment noted. Agricultural practices in this area are a likely cause of elevated nitrate concentrations in the shallow groundwater.

- g. Comment: Nitrate concentrations are elevated at GW5 but not at the downgradient GW4 well. Is the GW5 concentration representative of groundwater quality recharging the SCR if the same signal is not shown in GW4.

Response: Comment noted. Only limited sampling has been conducted to date. However, the results here suggest that ground water sources may at times have nutrient levels well in excess of levels in the SCRE. This calls into question what the appropriate SCRE background nutrient levels or equilibrium levels as a result of various diversion alternatives.

2. Alternatives Presentation – After the presentation on alternatives the stakeholders moved into small groups to discuss the alternatives. The direction to the small group leaders was to obtain feedback on:

- a. Are there any eliminated alternatives that should still be evaluated? Or remaining alternatives that should be eliminated?
- b. What alternatives put the effluent to best use?
- c. What are the criteria by which alternatives should be compared?
- d. Are there combinations of alternatives that would be more attractive?
- e. Other thoughts?

3. Summary of small group discussions:

- a. Any eliminated alternatives to be reconsidered?
 - i. In general stakeholders were in agreement with alternatives that have been eliminated (2 out of 3 groups in agreement, only one stakeholder in

- one of the groups did not agree and wanted more time to review the screened-out alternatives).
- ii. Include an alternative for an ocean outfall for discharging the VWRF effluent.
 - iii. Consider abandoned pipeline at the Fairgrounds site for VWRF ocean discharge.
 - iv. Assess/include the benefits (reduction in chloride) that could be achieved by water softening on a regional level and eliminating residential/commercial water softeners that result in increasing the chloride concentration in the VWRF effluent.
 - v. For the North Side Decentralized Treatment Plant, look at costs to mitigate for sea level rise.
 - vi. Investigate alternatives that include the State Parks. The campground may be moved and there may be options for wetland creation/estuary restoration on the campground site.
 - vii. Consider off-site wetland at other locations above the semiperched aquifer, with discharge either back to the SCRE or shallow aquifer.
- b. Effluent to best use
 - i. Alternatives that provide a water supply benefit
 - ii. Alternatives that provide habitat
 - iii. RO allows more beneficial use of the effluent (more attractive alternatives)
 - c. Evaluation Criteria
 - i. Improved discharge quality
 - ii. Reduced discharge flow
 - iii. Water supply benefit
 - iv. Reliable effluent management
 - v. Habitat creation (some stakeholders recognized this criteria was less important than others)
 - vi. Cost, including rate payer impacts
 - vii. Providing multiple benefits (appealing to various stakeholders)
 - viii. Providing benefits that are appealing to rate payers
 - d. Combinations of alternatives
 - i. Habitat and water supply benefits (blended alternatives)
 - e. Other comments
 - i. The Coastal Commission may not allow expansion of plants that will be inundated by sea level rise.

Prepared By:



Elisa Garvey