

Regional Water Quality Questions to Address in CERP Project Management

DRAFT Strawman for Discussion by the RECOVER Water Quality Team

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1. **Expertise.** Have you established a subteam to address water quality issues? (What is your organizational structure?) Who on the PDT is focusing on water quality issues? Please provide a list of the members of the WQ subteam.
2. **Baseline.** What are the most important water quality problems and issues that currently exist within your project area? How did you determine this? What sources of WQ data have you identified and obtained? (Storet, SFWMD, FDEP, USGS, county programs, NOAA, others?) Do you need assistance in obtaining and interpreting available data? Describe the pre-project, baseline water quality conditions within your project area (especially nutrients, metals, dissolved oxygen, pesticides, salinity regimes)? Do you feel that existing data is adequate, can accurately describe current condition? How variable are these conditions in time and space? Does data capture both base flow and storm flow condition?
3. **Project effects.** How will your project improve water quality conditions within your project area, as well as regionally? How will the project reduce area loads to receiving waterbodies? Describe any possible CERP-wide impacts.
4. **Tools.** What water quality models or other evaluation tools have been identified to assess water quality conditions and effects for your project? Do you see a need for additional tools? Do you need assistance in identifying appropriate tools? If yes, describe specific issues.
5. **Performance Measures.** Have you defined any water quality performance measures or indicators as part of your project? For substances for which no numerical water quality standard has been promulgated, how will you determine the concentration of concern in water, sediment, or aquatic animals against which to evaluate the adequacy of the corresponding method detection limit? Examples include indicators of :
 - a. nutrient loading and stress (e.g., N:P ratio; chlorophyll-a concentration; algal community composition);
 - b. dissolved oxygen regimes
 - c. toxic compounds with potential to bioaccumulate (e.g., tissue concentrations in sentinel species);
 - d. other water quality issues specific to your project components (e.g., pharmaceuticals in reuse wastewater; changes in water chemistry and solids disposal issues associated with chemical treatment for nutrient removal).

6. Monitoring Plan. How have you developed a water quality monitoring and assessment plan (and budget) for your project? What are the questions (defined Performance Measures) that your monitoring plan is designed to answer? If available, please provide a copy of that plan. What water quality parameters are addressed? Will implementation of your project with this plan enable you to address the water quality problems and issues that you defined in #2 and #3 above? What is the timeline of implementation of the your project? Ensure that time line is consistent with the maturation of water quality processes in such a way that the results of the projects are readily usable (example for an STA, time should be selected in such a way that plant communities are developed to yield desired plant uptake of phosphorus)
7. Draft Water Control Plan and Water Quality Certification. Have you designed your water control plan to consider potential water quality issues? How will your monitoring plan meet certification requirements? Have you addressed the timing & sequencing of events necessary for development of the Water Control & Operations Plans in sufficient enough time to request/secure Water Quality Certification and/or other regulatory authorizations prior to the construction/operations for all of the project features.
8. Remediation. Has this project been sited? What evaluation tools will you use to consider possible on-site contaminants that may affect water quality performance? What type of screening program have you enacted? Is this program protective of fish and wildlife communities in addition to human health and welfare concerns. If your project could be affected by contaminants on agricultural or other lands to be used for water storage or delivery, how will the project accommodate special requirements for remediation and monitoring?
9. Methods. Is the method detection limit of the existing analytical method adequate to detect concentrations of concern? In addition to chemical water quality analyses, will toxicity bioassays be used? Are there other assessment tools that will be used (e.g., macroinvertebrate community analysis)?
10. QA/QC. What are the accuracy, precision, and reliability (confidence level) data quality objectives for distinguishing statistically significant differences in water quality between pre-CERP baseline and post-CERP conditions? Between post-CERP upstream and downstream sites?
11. Continuity with Regional WQ Programs. How does what this project fit into the context of other regional water quality programs (PLRGs, TMDL, SFWQPP, MFL)? Have you communicated with those project leads? Do you need assistance in identifying appropriate programs and personnel to interface with?
12. Other WQ Issues. Are there other issues or concerns related to your project that need to be addressed?