

**WRF Project #4494 update: Evaluation of Current and Alternative Strategies for
Managing Contaminants of Emerging Concern in Water**

TASK

Scope of Work, excerpts below
Periodic Reports (incl. Technical Summary & Web Update)
Draft Report
Final Report
Project End & Foundation Publication Date

DUE DATE

Jan 1, 2014
Mar 2014 – Jun 2015
Sep 1, 2015
Feb 1, 2016
Sep 1, 2016

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...Despite numerous, and often repetitive, studies...management plans for prioritizing and/or taking action remain nebulous...what is immediately needed is a holistic and comprehensive view of CEC management options...

Scope of Work: The ultimate objective of this study is to support the decision making on best-suited CEC management strategies to be considered for implementation in the U.S. to protect human health and the environment...provid[ing] highest overall benefit at the lowest overall costs to society.

PHASE 1 – Identifying Alternative Management Strategies for CECs

...a review of current and proposed policies, regulatory and non-regulatory programs [regarding control of] CECs in the U.S. and abroad...

PHASE 2 – Select Tools to Evaluate CEC Management Strategies

...this includes defining sets of representative CECs...to determine relative source contributions...and to evaluate treatment efficacy...suitable to assess impacts on human and ecological health. Endpoint criteria for conducting a triple-bottom-line analysis for selected management strategies will be identified.

PHASE 3 – Triple-Bottom-Line and Cost Benefit Analysis

...of selected CEC management strategies.

- What is the most cost-effective way of reducing the environmental and human risks caused by CECs to acceptable levels?
- Do all benefits associated with specific CEC approaches (e.g., upgrading drinking water facilities with CEC removal technologies) outweigh the environmental, social, and life cycle costs?
- What are the trade-offs between financial costs and environmental and social benefits for various CEC management strategies compared to the base case, “do-nothing”?

Applications Potential: Project deliverables that will directly benefit the water industry:

- Policy white papers
- Systematic analysis and documentation of all benefits, risks, and costs of various CEC management approaches
- State-of-the-art knowledge on risk factors of centralized CEC treatment (e.g. metabolite formation and generation of potentially harmful by-products)
- Utility tools
- Final project report (...background for public outreach initiatives, decision making support in regulatory negotiations, and strategic planning within their watersheds)