

UNRBA
Monitoring Project
PFC Meeting
April 2015



Pursuit of Regulatory Options





Multi-part Re-examination Strategy (Developed Under Previous Contract)

- Collection of monitoring data
- Revisions of the lake modeling to recalculate load allocations
- Pursuit of regulatory options
 - Sub-classification use attainability analysis
 - Variance for the Stage II Rules
 - Site specific chlorophyll *a* criterion for the Upper Lake



Justifications for a UAA/SC-UAA or Variance

- **Naturally occurring** pollutant concentrations, physical **conditions** or flow conditions prevent the attainment of the use; or
- Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause **more environmental damage to correct** than to leave in place; or
- Dams, diversions or other types of **hydrologic modifications** preclude the attainment of the use; or
- Controls would result in **substantial and widespread economic and social impact.**



Justifications for a SSC

- The species at the site are more or less sensitive than those included in the national criteria data set; or
- Physical and/or chemical characteristics of the site alter the biological availability and/or toxicity of the chemical; or
- Criteria have not yet been developed.



Recommended Studies to Support Regulatory Options

- **Monitoring**
 - Internal lake processes
 - Additional lake water quality monitoring data
 - Diurnal pH and DO monitoring with water quality sampling
 - Fish monitoring with water quality sampling
 - Terrestrial and avian species monitoring*
 - Recreational data and water quality sampling
 - Event-based water quality sampling*

*Not approved in current monitoring plan



Recommended Studies to Support Regulatory Options

- **Analyses**
 - Lag time studies*
 - Economic impact analyses*
 - Preliminary lake modeling*
 - Emperical models to link water quality to designated uses*

*Not approved in current monitoring plan



Meetings with EPA headquarters, Region 4, and DWR to discuss alternative regulatory approaches

- Identify their data expectations for support of alternate regulatory approaches and be sure the UNRBA monitoring program collects or has access to this information.
- \$13,300 for Cardno preparation of strategy and presentations for EPA and DWR \$9,900 for Cardno participation in meetings



Next Steps to Prepare for These Monitoring Studies

- Brainstorm with legal team to prepare meeting plan and hear lessons learned
- Meet with DWR and EPA staff locally, regionally, and nationally to gain their perspective on
 - What data, studies, and analyses would be needed for each regulatory option: frequency, parameters, species, etc.?
 - What regulatory options would they be most resistant to?
 - What hurdles have others experienced in the past and what could we do to prevent those?
- Prepare monitoring plans to ensure UNRBA Monitoring Program is collecting data in an acceptable manner to support these options

