



UNRBA
Modeling and
Regulatory Support
Board of Directors Meeting
March 2017



March 15, 2017



Brief Overview of Falls Lake Challenges

- > In 2010, the Environmental Management Commission passed the Falls Lake Nutrient Management Strategy
 - Goal: achieve the chlorophyll *a* water quality standard
 - The highest load reduction requirements ever passed
 - Estimated to cost \$1 billion to \$2 billion to implement
 - Not technically feasible given the limits of technology
 - Because of the uncertainty, the Strategy allowed for a Reexamination
- > In 2011, the UNRBA began planning for the Reexamination
- > Monitoring Program and Credits Project began in 2014
- > In 2016, the UNRBA began the Modeling and Regulatory Support Project



Goals of the Modeling and Regulatory Support Project

- > Revise the watershed and lake models with new data
- > Incorporate results of multiple models and a cost benefit analysis into the reexamination
- > Evaluate the impacts of nutrient management scenarios on lake water quality and designated uses
- > Consider regulatory options as needed
- > Revise the Strategy for Falls Lake

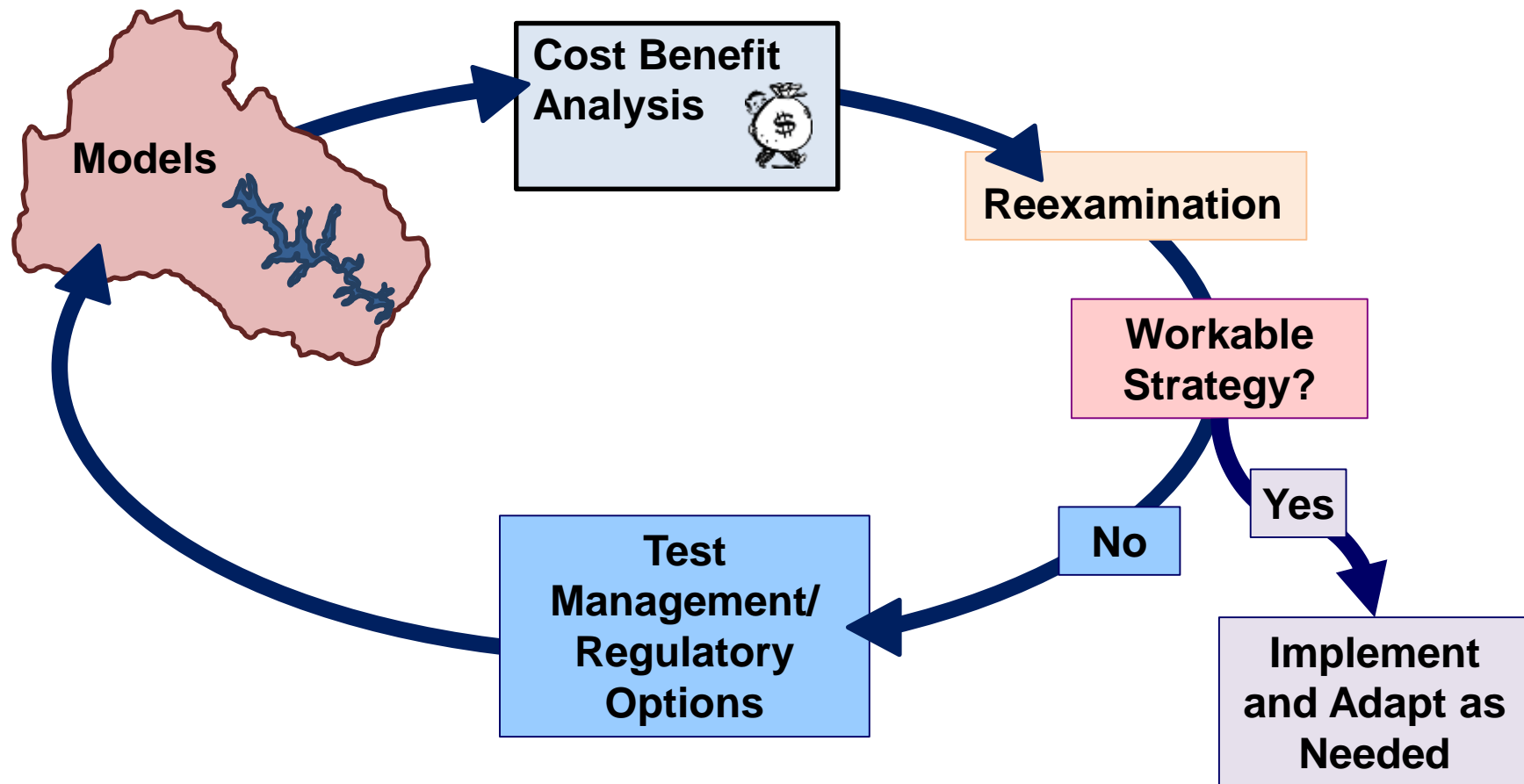


Year 1 Goals for the Project (Sep 2016 to Sep 2017)

- ✓ > Project Kickoff Meeting on September 28th to hear concerns of stakeholders
- ✓ > Select modeling packages to support the reexamination
 - Watershed
 - Lake
- ✓ > Describe how multiple models will be used together in the Conceptual Modeling Plan memo
 - > March 16th WRRRI Falls Lake Session to engage stakeholders
 - > Develop a Modeling Quality Assurance Project Plan (QAPP)
 - > Develop a two-year work plan (October 2017 through September 2019)

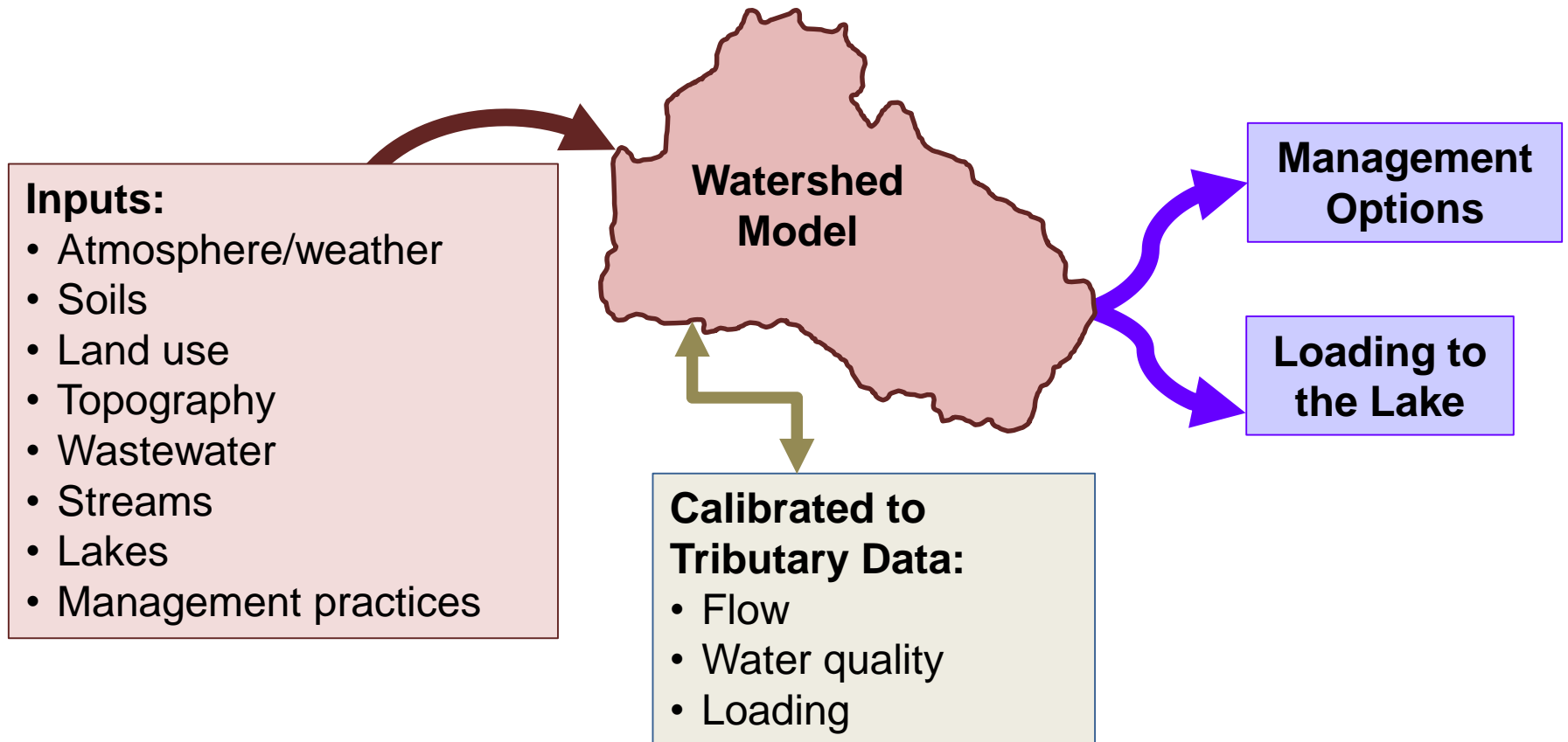


Conceptual Modeling Plan for the Reexamination



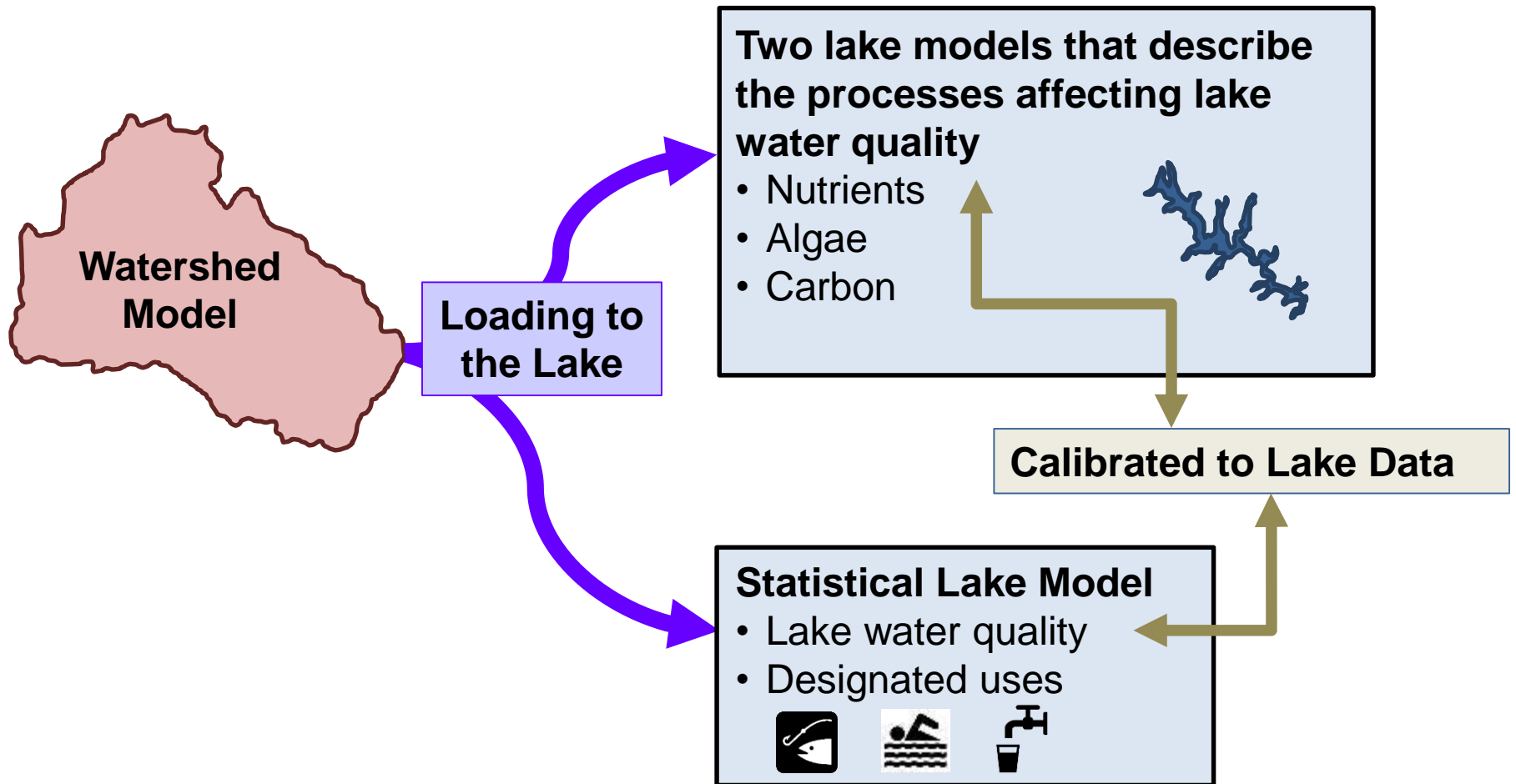


Watershed Modeling



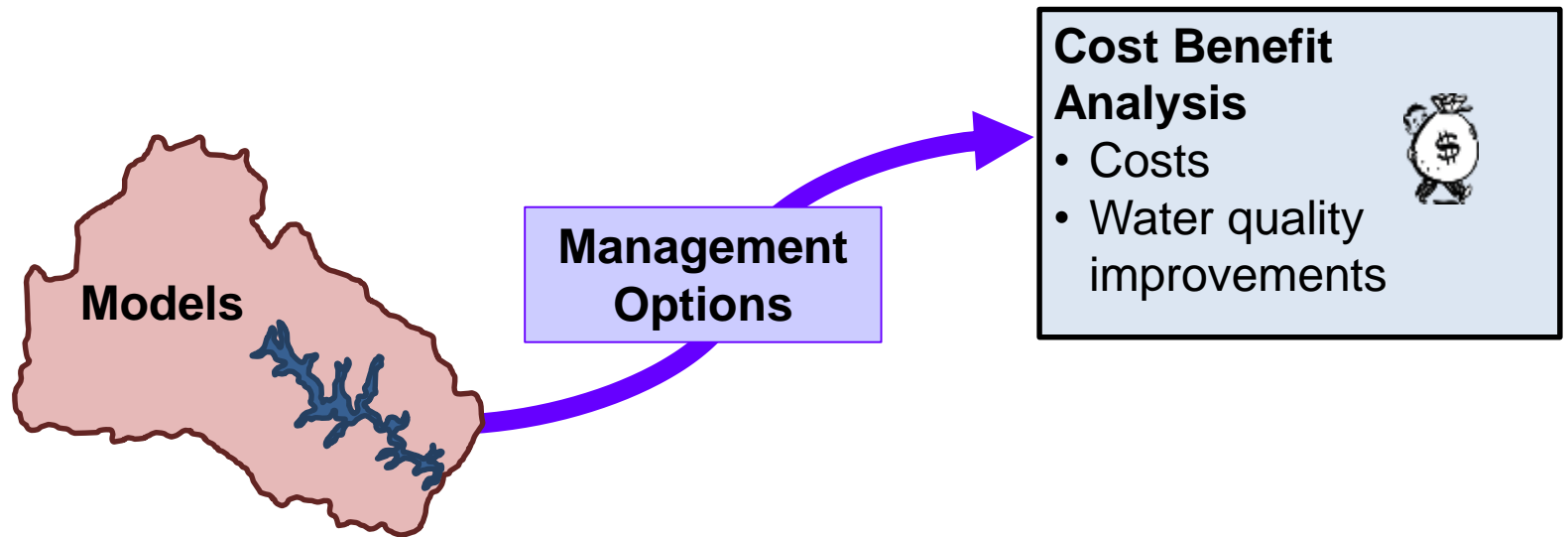


Lake Water Quality Modeling



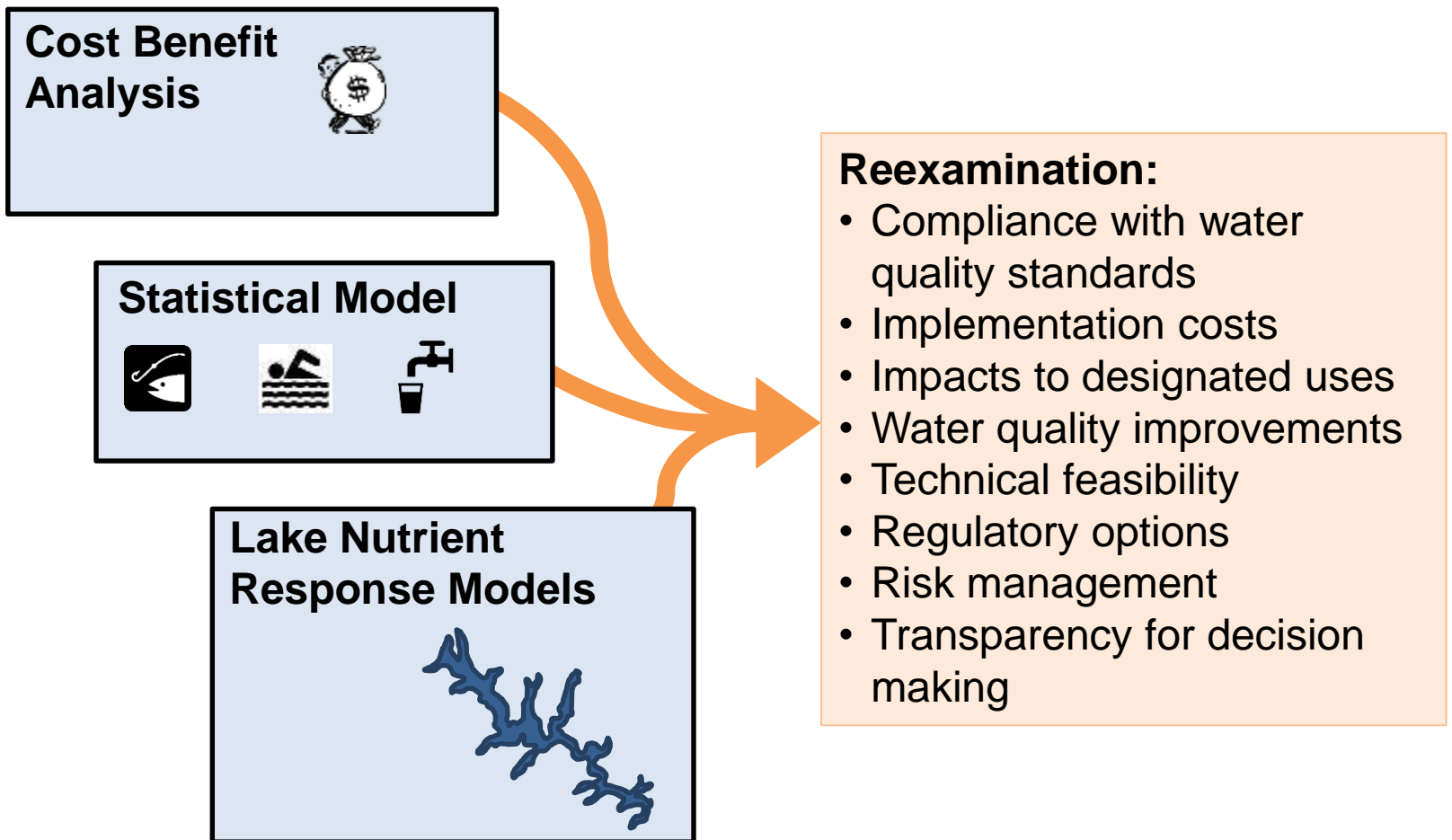


Cost Benefit Analysis



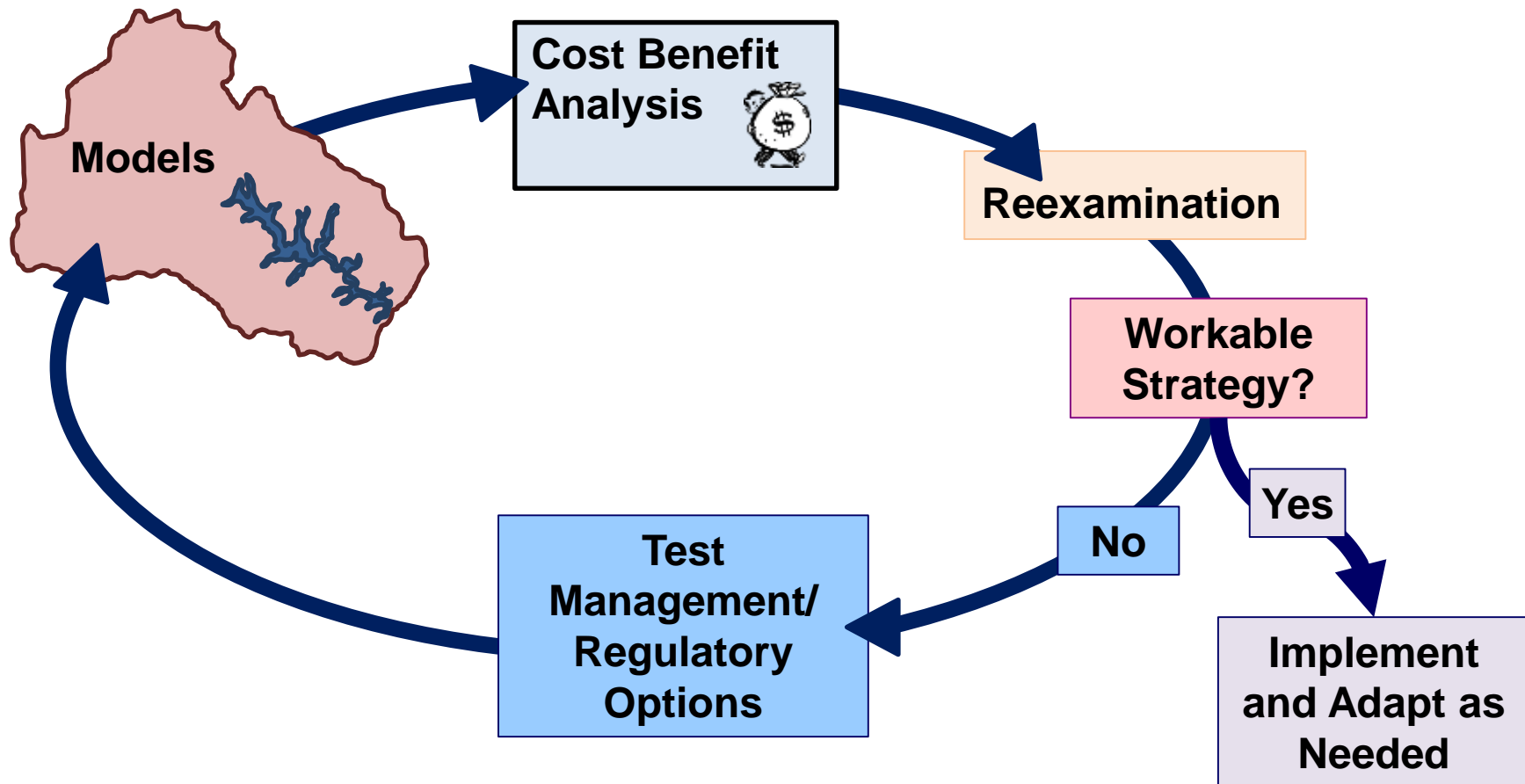


Reexamination of Stage II





Conceptual Modeling Plan for the Reexamination





Next Steps

- > Develop the Modeling QAPP (Quality Assurance Project Plan)
 - Modeling and Regulatory Support Workgroup review is planned for March/early April
 - Path Forward Committee review in April
- > Continue working on the two-year work plan
 - Legal group is discussing legislative scheduling constraints
 - FY2018 monitoring budget will determine the extent of modeling next year