Model Applications

Utah Lake Nutrient Criteria Development Technical Support
“Essentially, all models are wrong, but some are useful”

- How are we to use these models?

George E. P. Box
Model(s) structure

Watershed

Lake
Reference mode

- Use models to recreate minimally disturbed condition

- Dial the landscape to natural source loads only

- Observe model response

- Florida lakes, Saint Louis Bay, Weeks Bay, etc.
“Stressor-response” mode

- Use models to create load scenarios (e.g., half current load, current load, 2X current load)

- Examine response
Post-criteria applications

- Models can be used for testing scenarios

Let’s do things here

That lead to a response here
Some important questions for today:

- Which models do you plan to need?
- Are the watershed models sufficient/appropriate?
- If the models are applied as above, then what is needed for those to succeed?
- Will you have what you need at hand off?