



# Great Salt Lake Water Quality Studies

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## A Preliminary Concept for Implementing a Selenium Water Quality Standard

February 22, 2008

# What do we understand?

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- **Lake appears to be in a dynamic equilibrium**
  - Lake integrates  $Se$  over space and time
  - $Se$  concentrations may vary over time
  - Need to assess the uncertainty of our model, i.e., false negatives/positives?
  - Want to allow time to respond



# Objectives

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- 1. Assess the predictive model developed as part of this program**
  - Make sure we address uncertainty
- 2. Regulatory control of discharges**
  - Permit compliance
  - Wasteload allocations



# Concept

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- **Includes ongoing baseline monitoring**
- **Identify and implement a decision process that uses trigger points to escalate monitoring and review if/as concentrations increase**

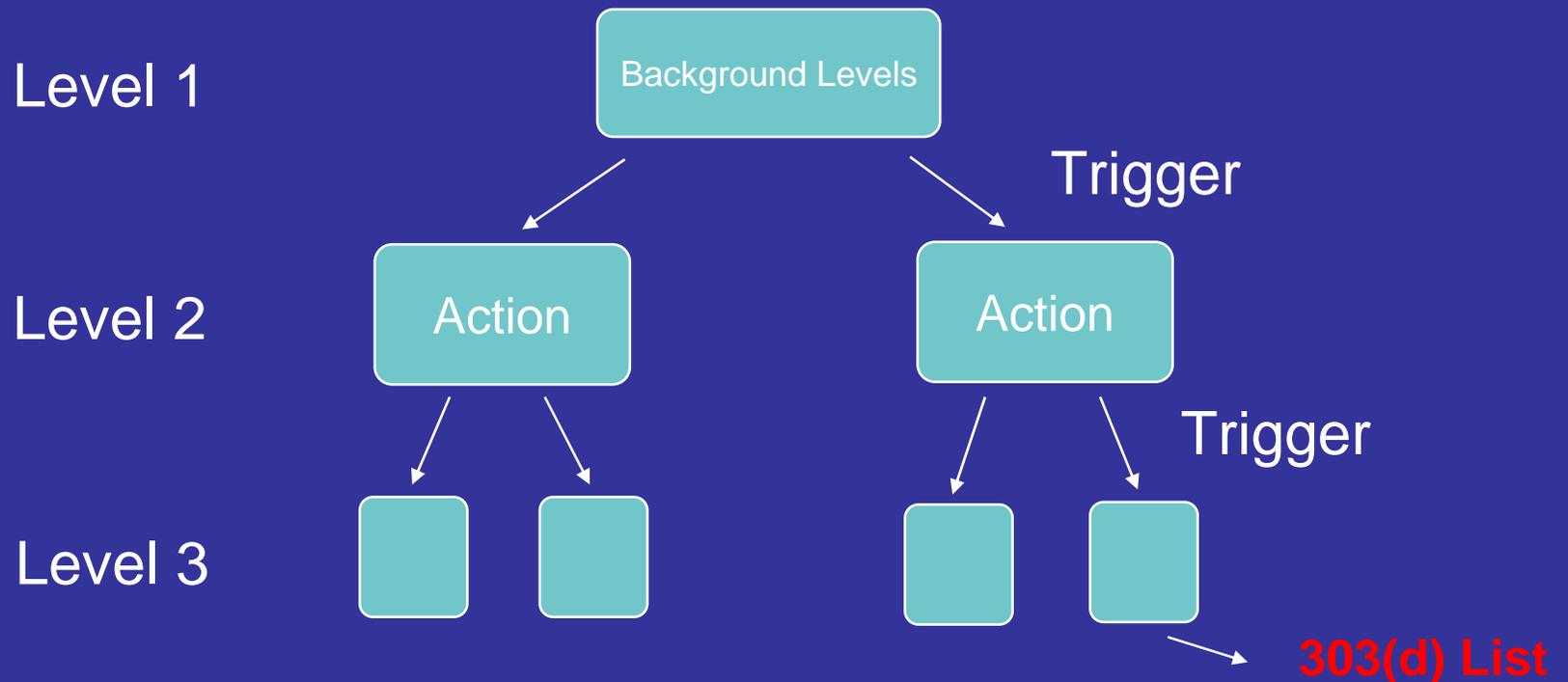
# Concept

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- **Identify trigger points that are used to:**
  - Verify an upward trend in Se concentrations
  - Evaluate condition of critical endpoint (eggs)
    - *Identify false positives, i.e., is a higher water concentration indeed reflecting higher egg concentrations?*
    - *Identify false negatives, i.e., are we observing higher egg concentrations regardless of water concentrations*
  - Allow for response prior to impairment:
    - *Assess WQ standard,*
    - *Antidegradation reviews, etc.*

# Next Steps

- CH2M HILL to develop draft decision tree



# Next Steps

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- **Recommendations for implementation will be reviewed by the Science Panel and included in the final report**