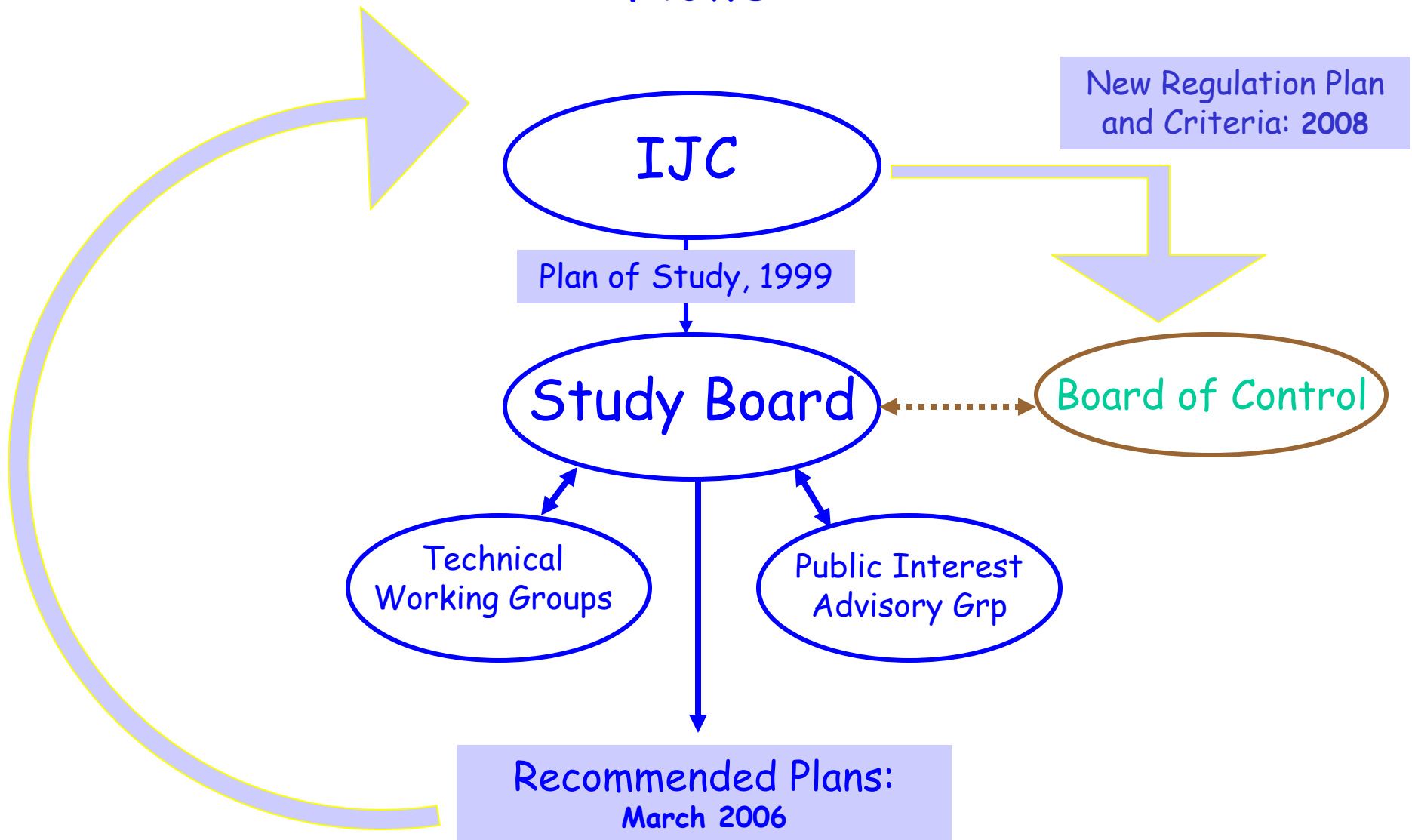


Applying Adaptive Management in a New Regulation Plan - Lake Ontario/St. Lawrence River

- Definition and examples
- Recommendations



Structure of IJC 5-year Study - Lake Ontario/St. Lawrence River Levels and Flows



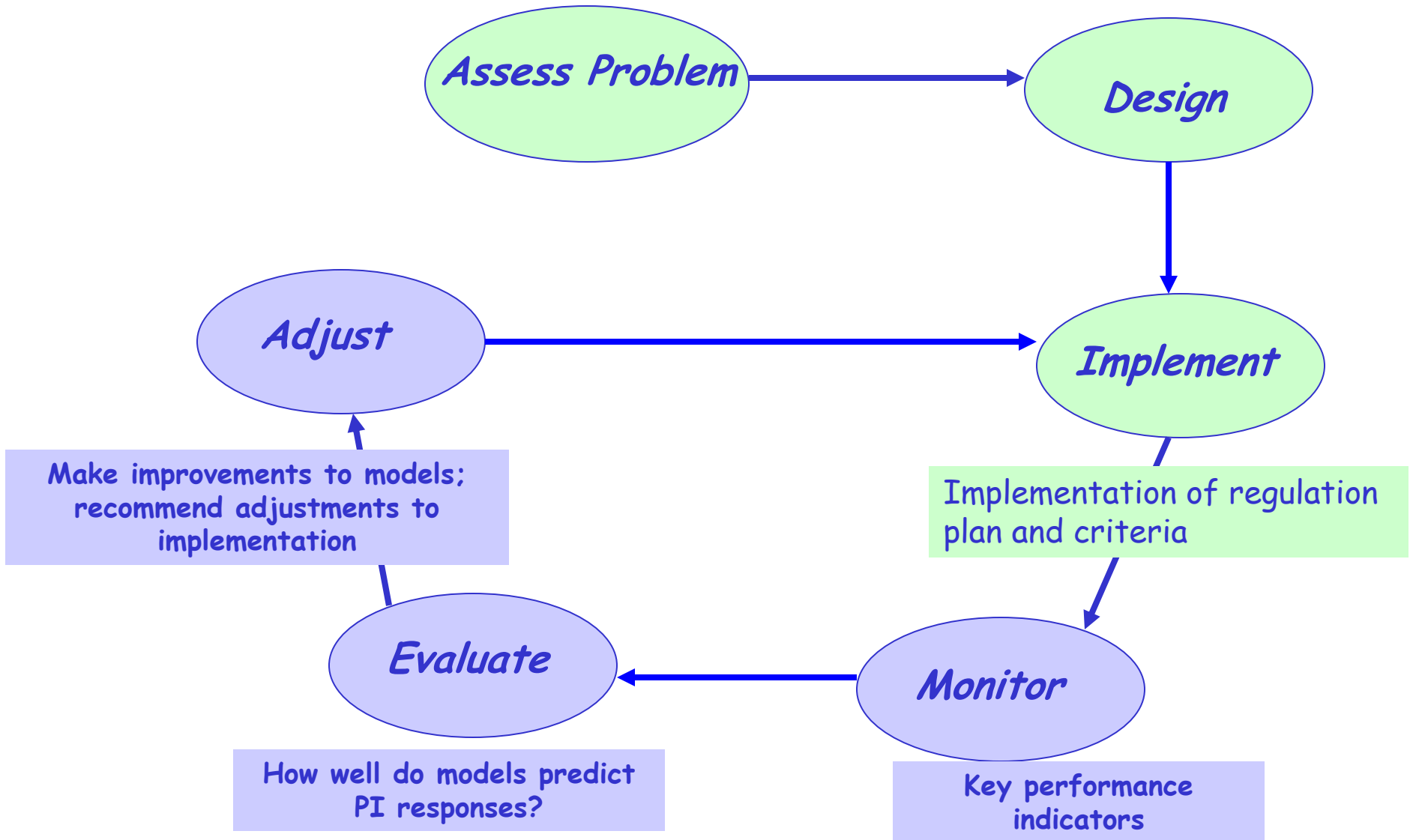
Study Board Guiding Principles - IJC Lake Ontario/St. Lawrence Study

- Environmental sustainability
- Net benefits for users; no disproportionate loss to any interest
- Ability to respond to unusual conditions
- Mitigation alternatives to limit damages
- Adaptable to changes in water supply
- Transparent decision-making; stakeholder input
- Flexibility to adapt to advances in knowledge

Adaptive Management

- Systematic process for continually improving management...
- ...by observing outcomes of management and learning from them
- Promotes flexibility in decision-making as outcomes of management become better understood
- Aims to enhance scientific knowledge and thereby reduce uncertainties
- To an extent, already in place in Lake Ontario/St. Lawrence
- Use the tools from the Study to enhance current procedures

Adaptive Management Cycle



Applications of Adaptive Management

(Some necessary elements are missing from most examples)

- British Columbia Forest Service
- Glen Canyon Dam/Colorado River
- Savannah River
- San Pedro River
- Everglades
- Missouri River Dam and Reservoir System
- Upper Mississippi River

Adaptive Management - Necessary Elements

- **Sound science**
 - Predictive models of ecosystem function
 - Recognition of uncertainty
 - Monitoring
- **Management Commitment and Flexibility**
 - Management objectives - define goals
 - Feedback to system managers
- **Public participation**
- **Dedicated funding**

Key Performance Indicators



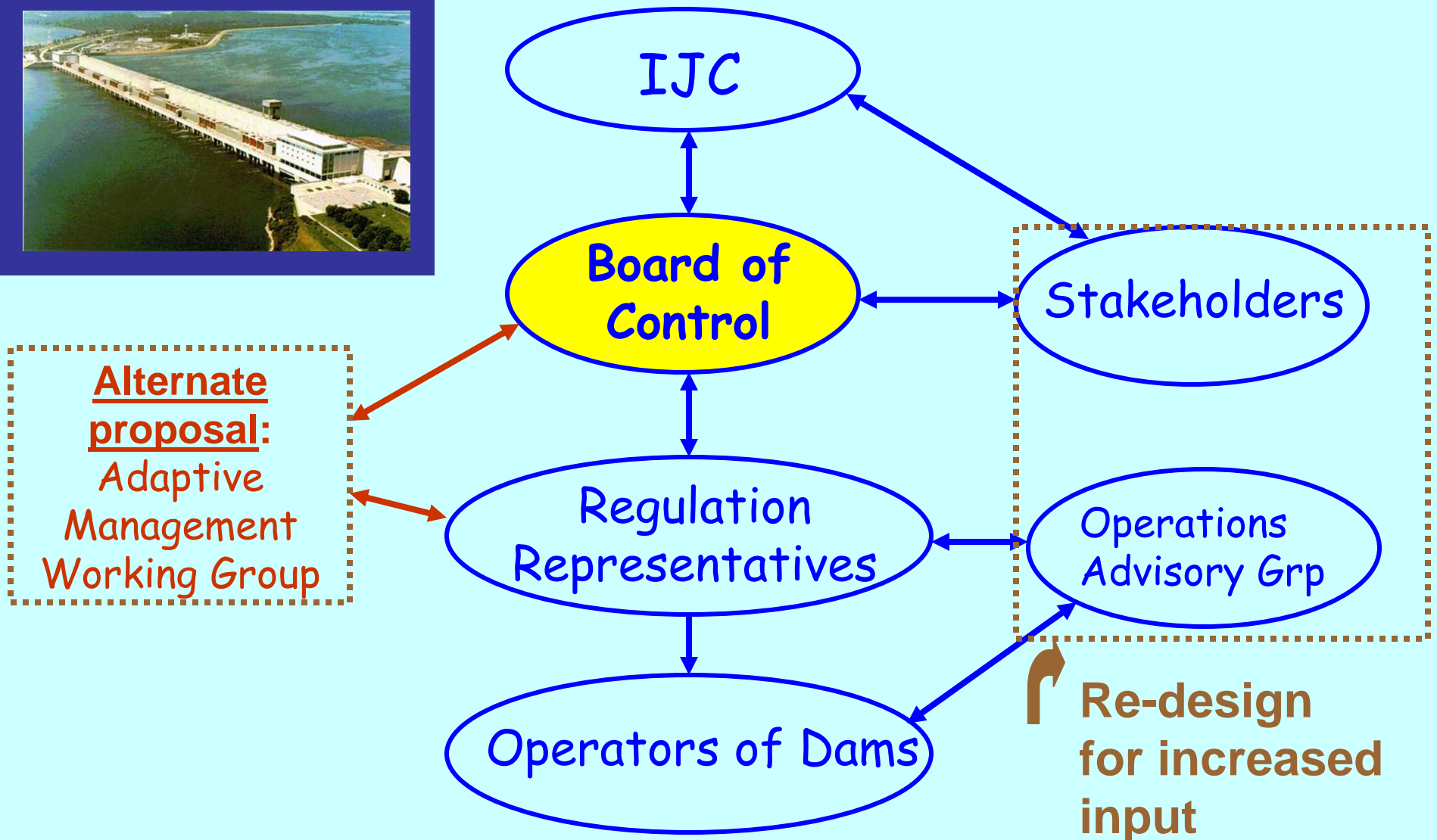
- meadow marsh area
- Virginia rail reproduction
- black tern reproduction
- muskrat house density
- northern pike recruitment
- warm-water fish guild

Potential Partners

- Great Lakes Coastal Wetlands Consortium,
(Great Lakes Commission, EPA, EC)
- Marsh Monitoring Program, Bird Studies
Canada
- Durham Region Coastal Wetland Monitoring
- NYS DEC
- Environment Canada - St. Lawrence Centre
- LaMP

Present Operating Structure

St. Lawrence River





Recommendations

- Partnerships: Great Lakes Coastal Wetlands Consortium; Environment Canada - Centre St. Laurent; local partners in ON and NY
- Adapt current structure for feedback from all interests
- Review of results at 5 year intervals