



Great Salt Lake Water Quality Studies

Development of Water Quality Standards for Willard Spur

Willard Spur Workgroup

December 16, 2010



Goal for Today

- **Set the stage for the development and implementation of a research program**
- **Review and seek input on “straw man” process**
- **Define action items**





Setting the Stage

- **Objectives**

- Complete the scientific studies required to determine if and what changes to water quality standards are required to ensure the long-term protection of Willard Spur's beneficial uses
- Open & transparent process
- Driven by best available science
- Independent peer review





Proposed Approach

- **“Straw man” concept**
- **Very similar approach as was used for developing a numeric water quality standard for selenium in Gilbert Bay**



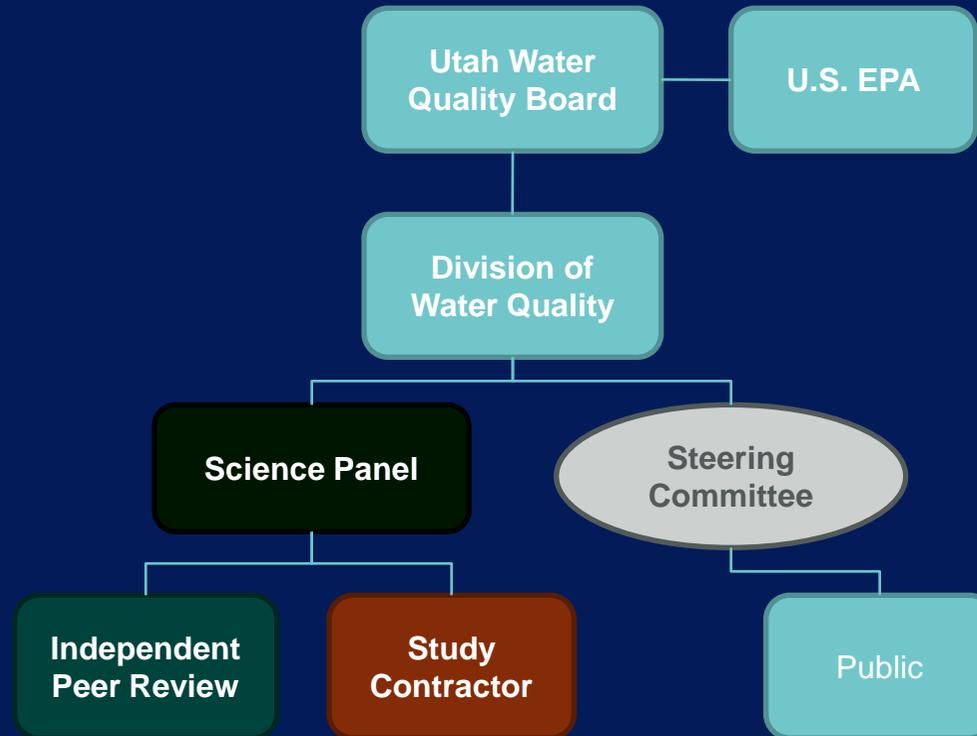


Proposed Approach

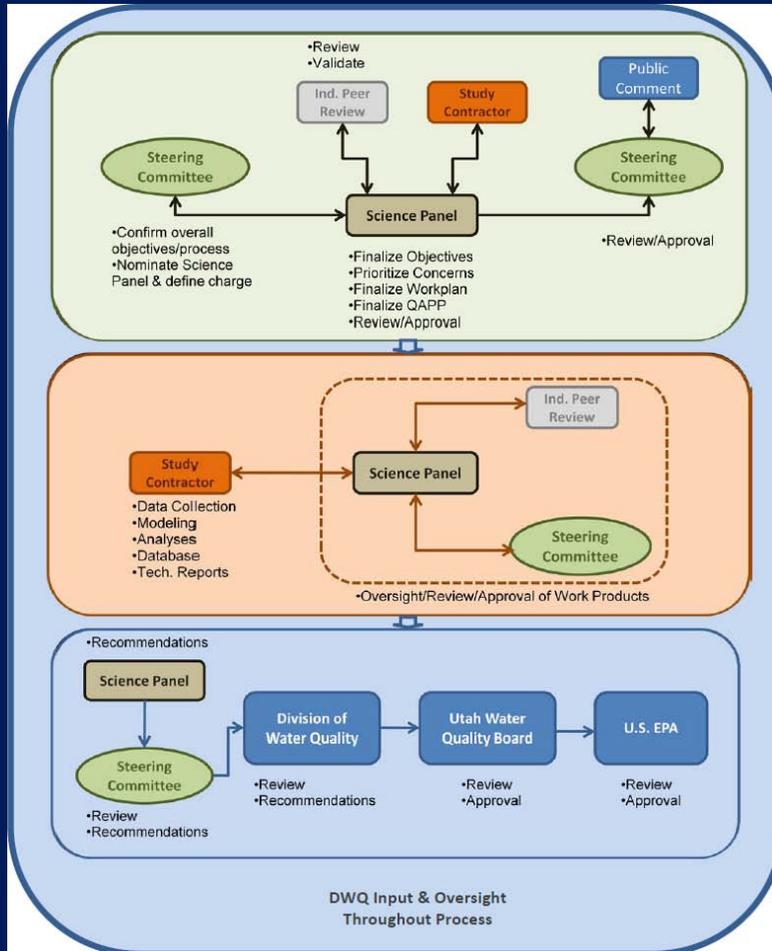
- **Handouts**
 - Organizational Chart
 - Process Summary
 - Steering Committee Charter
 - Science Panel Charter
 - Proposed Schedule for Phase I



Organizational Chart

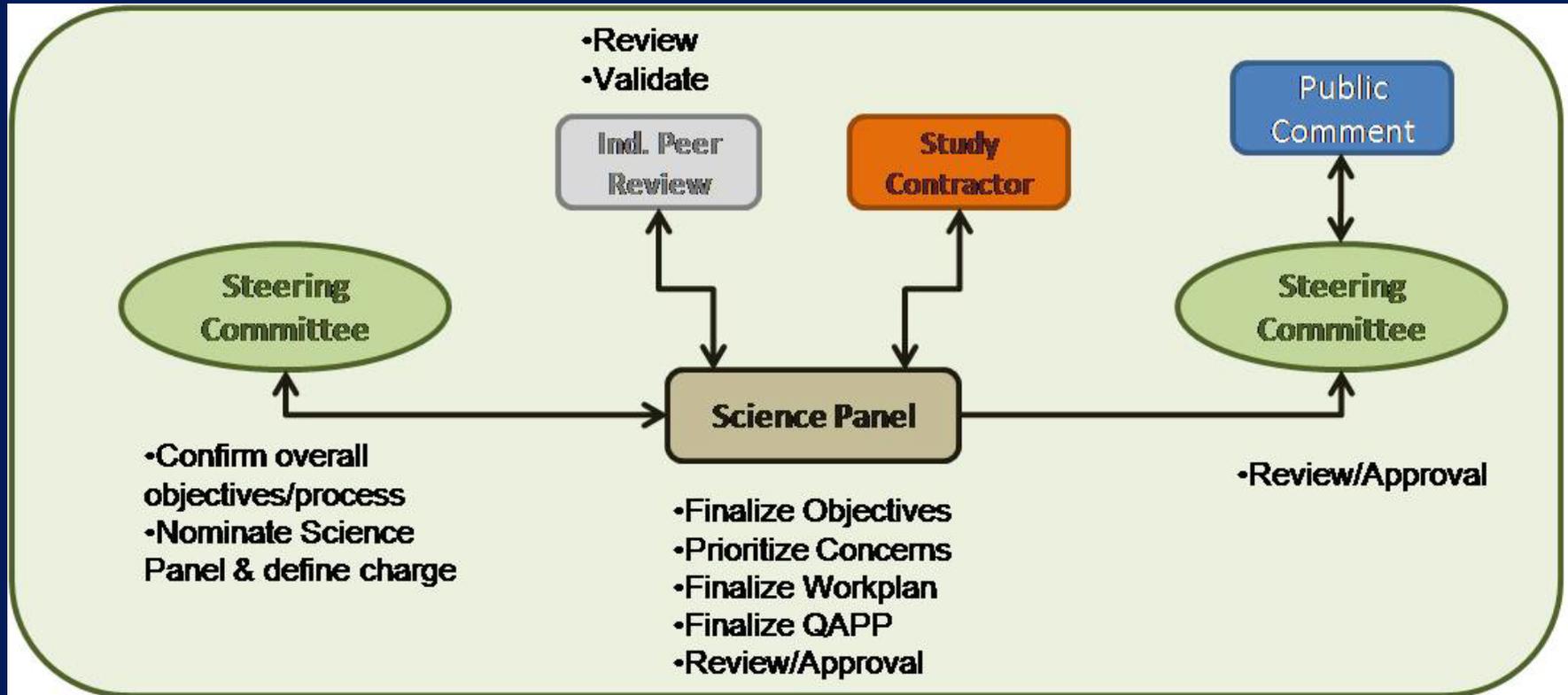


Process Summary



- Guided by Steering Committee & Science Panel
- Oversight by DWQ
- Driven by science

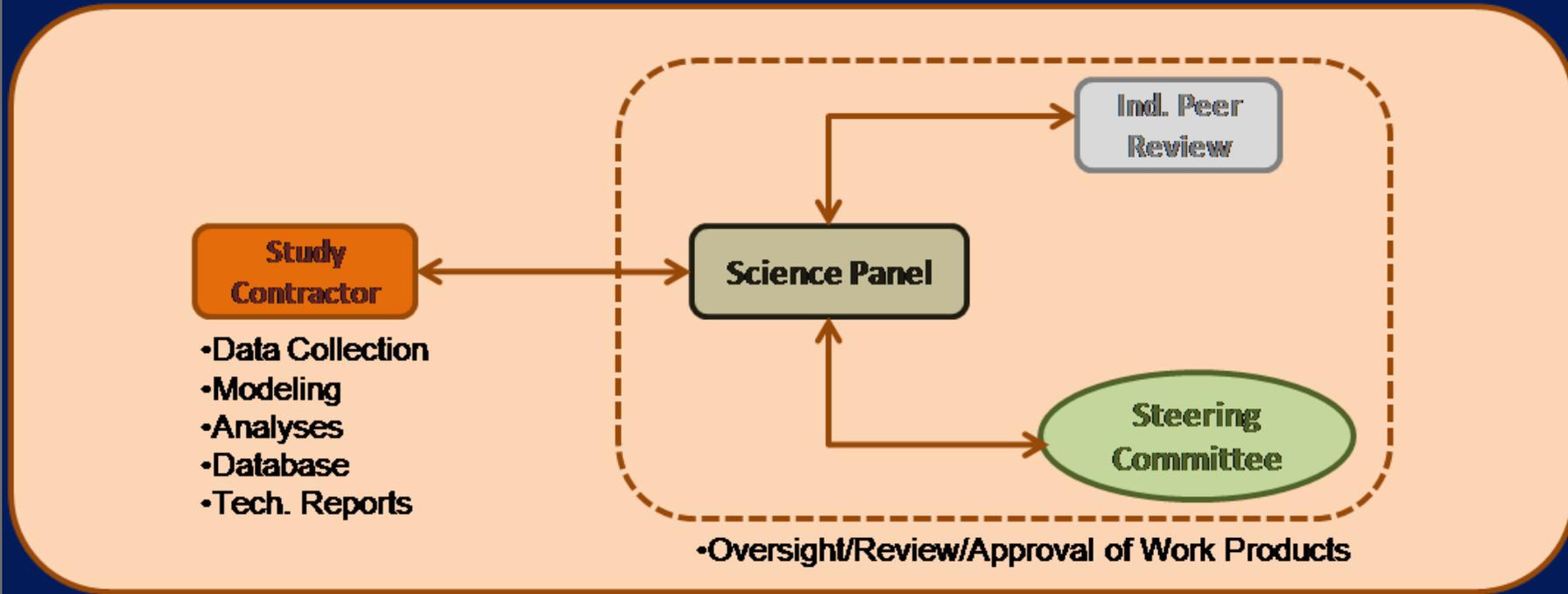
Process Summary



Phase I – Develop Workplan



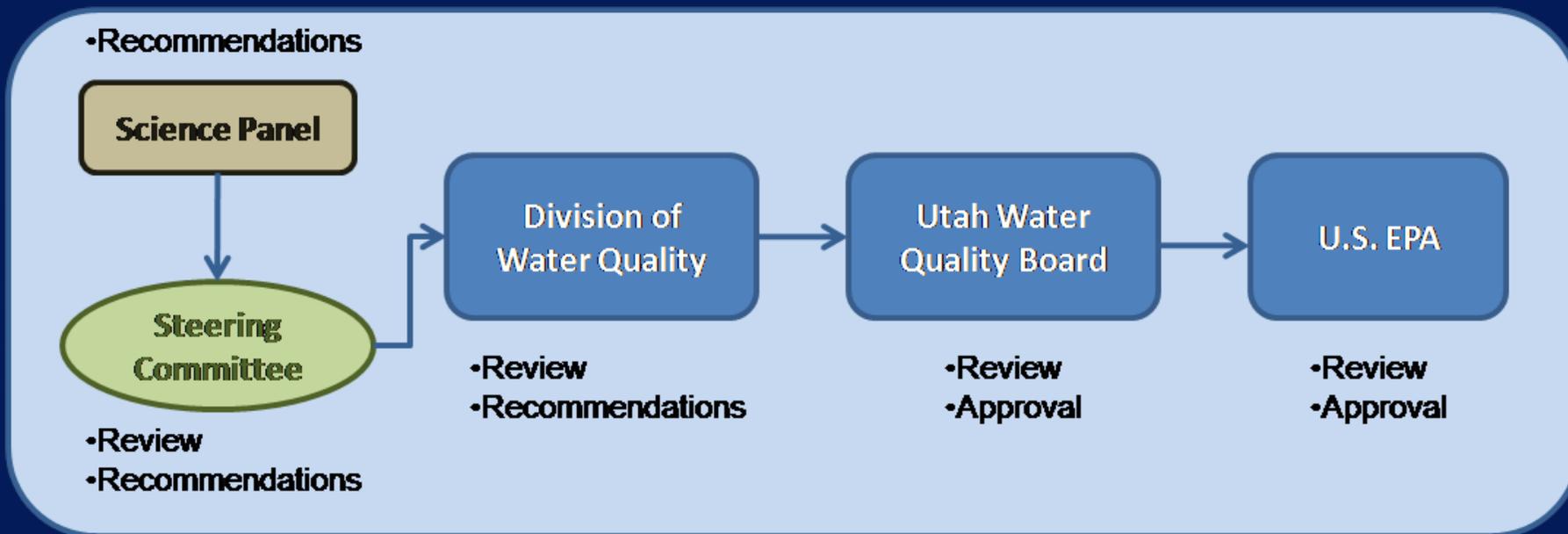
Process Summary



Phase II – Implement Workplan



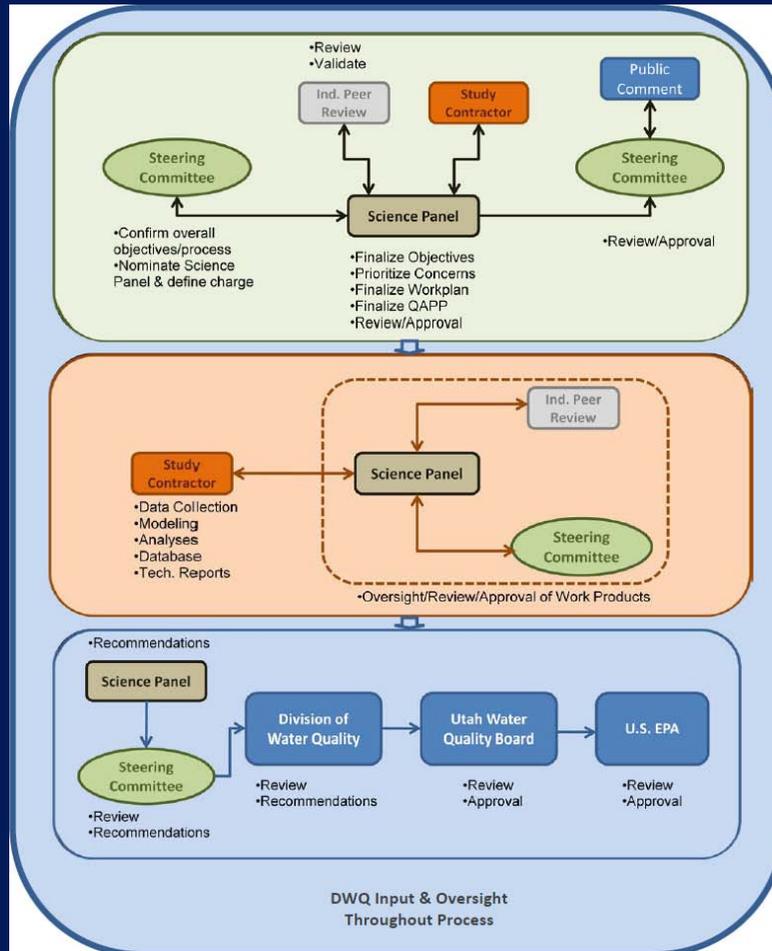
Process Summary



Phase III – Recommendations



Guiding the Process



- Steering Committee
- Science Panel
- Lets look at the “straw man” charter for each



Steering Committee Charter

- **Handout is for discussion purposes only**
- **Utilizes very similar language, structure, and process as used for selenium water quality standard**
- **Please review and provide written comments/improvements**





Steering Committee - Purpose

- The Willard Spur Steering Committee is charged with the responsibility to **guide the process of developing** and, in the end, **provide recommendations to DWQ** for site specific numeric water quality standards—or other appropriate water quality regulations—for Willard Spur that are **protective of its beneficial uses and sustain the natural resources of Great Salt Lake and its associated wetlands.**





Steering Committee - Objectives

- 1. Create a partnership among stakeholders**
- 2. Conduct a transparent process**
- 3. Establish and maintain a scientific advisory panel**
- 4. Adhere to federal and state regulations and guidelines**
- 5. Work towards consensus**



Steering Committee - Duties

- Engage
- Review
- Advise
- Advocate
- Recommend



Steering Committee - Composition

- **Leverage stakeholders who are already engaged**
- **Representative of Willard Spur interests**
- **13 representatives, committee chaired by Walt Baker**
- **DWQ will work with interest groups to identify members**



Steering Committee - Composition

Name	Entity	Representing:
Walt Baker ^(chair)	Div of Water Quality	UT Div of Water Quality
		UT Div of Forestry Fire & State Lands
		UT Div of Wildlife Resources
		US Fish & Wildlife Service
		US EPA
		Cities of Willard & Parry
		GSL Advisory Council
		Duck Clubs
		Conservation Interests
		Conservation Interests
		Regulated POTW Community
		Regulated Industrial Community
		Regulated Extractive Industry



Steering Committee – Misc.

- Each member to identify an alternate
- Meetings at least quarterly but as needed
- Meetings open to the public
- Decisions by supermajority (3/4)
- Quorum is 2/3
- Written recommendations





Science Panel Charter

- **Handout is for discussion purposes only**
- **Utilizes very similar language, structure, and process as used for selenium water quality standard**
- **Please review and provide written comments/improvements**





Science Panel - Purpose

- The purpose of the Willard Spur Science Panel is to **advise the DWQ and Steering Committee** regarding regulatory and technical considerations related to the development of water quality standards for Willard Spur and **guide the research program.**





Science Panel - Objectives

- **Identify gaps**
- **Develop objectives for and prioritize studies**
- **Finalize workplan**
- **Implement independent peer review**
- **Recommend any required changes to water quality standards**





Science Panel - Duties

- Review and finalize workplan
- Develop and guide research program
- Review deliverables and report to SC
- Interpret results
- Review membership
- Collaborate with other groups and research on GSL





Science Panel - Composition

- **Steering Committee to nominate 5-7 members for panel**
- **Members should reflect scientific/regulatory disciplines**
 - Hydrology, limnology, biogeochemistry, modeling, aquatic/wetlands/avian ecology, regulatory process, water quality standards
- **Jeff Ostermiller – chair**
- **One member from US EPA**



Science Panel – Misc.

- **Meetings at least quarterly but as needed**
- **Meetings open to the public**
- **Decisions by supermajority (3/4)**
- **Quorum is 2/3**
- **Will request written recommendation from each panel member in the end**



Schedule

- **Overall goal is as follows:**
 - Field data collection – 2011
 - Modeling – winter 2011
 - Field data collection for model validation 2012
 - Data/model evaluation – 2012/2013
 - Recommendations in 2013
- **Three year process**

Aggressive!





Schedule

- **Key elements for 2011 field work**
 - Flow monitoring
 - *Start before spring runoff (~ March)*
 - Sample collection
 - *Capture full growing/nesting season (~May)*





Proposed Schedule – Phase I

- **December 16 – TODAY**
 - Set the Stage
- **January 20 – SC meeting**
 - Review charters
 - Nominate Science Panel members
- **February 7 – Notify SP members**





Proposed Schedule – Phase I

- **February 17 – SP meeting**
 - Review Background
 - Define objectives
 - Present “straw man” study framework
- **March 17, 2011 – SP/SC meeting**
 - Review/approve study framework
 - Identify elements that can begin right away





Proposed Schedule – Phase I

- **April 14**
 - Submit detailed workplan to Science Panel
- **April 28 – SP Conf Call**
 - Discuss detailed workplan
- **May 19 – SP/SC Meeting**
 - Review/approve detailed workplan



Logistics

- **Contact Jeff with comments/questions**

Jeff DenBleyker

CH2MHILL

215 South State, #1000

Salt Lake City, UT 84111

Ph: 801-350-5215

Email: jeff.denbleyker@ch2m.com

- **www.willardspur.utah.gov**





Action Items

- **Review handouts - all**
 - Provide written comments to Jeff D. by January 6, 2011
- **Empanel Steering Committee**
 - DWQ to contact/confirm members
 - Will provide final list via email
- **Consider SP nominees - all**
- **Consider objectives for research program - all**

