ESPA Comprehensive Aquifer Management Plan

Presentation to Water District 1
Annual Meeting
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Outline

• Background and Framework Development process
• Formation and Operation of Advisory Committee
• Key Topics and Issues Addressed by Committee
• Initial Board and Committee Recommendations
  – Study of Minidoka Dam Enlargement
  – Voluntary Demand Reductions in the ESPA
  – ESPA Recharge
Idaho Water Resource Board
Comprehensive Aquifer Management Plan Background

- Framework Plan funded by 2006 Legislature, SCR 136
- Board conducted extensive stakeholder outreach to develop an ESPA CAMP Framework (2007)
- 2007 Legislative funding and authorization included technical studies and a facilitated planning effort, HCR 28 and HB 320.
- Framework identified a goal and objectives for aquifer management
- Currently finishing year two of a three year effort with the objective presenting a completed plan to the 2009 Legislature.
Framework Goal for Aquifer Management

Sustain the economic viability and social and environmental health of the Eastern Snake Plain by adaptively managing a balance between water use and supplies.
Framework Objectives for Aquifer Management

- Increase predictability for water users by managing for reliable supply
- Create alternatives to administrative curtailment
- Manage overall demand for water within the Eastern Snake Plain
- Increase recharge to the aquifer
- Reduce withdrawals from the aquifer
Background and Framework Development Process

• Framework identified interim measures
  – Recharge
  – Conservation Reserve Enhancement Program (CREP)
  – Targeted Demand Reduction
  – Groundwater Model

• Framework recommended creation of an Advisory Committee to develop the CAMP
Pursuant to House Bill 320 the Board created and convened the ESPA CAMP Advisory Committee

- Broadly based representatives across ESPA charged with developing consensus-based recommendations to Board (18-month process)
- Focus on long-term aquifer management plan
- Guided by the Framework Goal and Objectives
Formation and Operation of the Advisory Committee

• Committee composition established through a stakeholder nomination and Board selection process
• 16-member Committee met for first time in May 2007
• 10 Committee meetings and numerous sub-committee meetings held
• Meetings convened across the ESPA
• Operating Protocols established
  – Consensus-based decision making process
Formation and Operation of the Advisory Committee

- **Committee Work Plan Developed**
  - **Targets** – establish quantitative 5 and 10, 20 and 30 year targets
  - **Management Actions** – identify tools to achieve targets
  - **Funding Mechanisms** – develop funding strategies to implement actions
  - **Adaptive Management Plan** – develop plan to assess progress toward qualitative and quantitative goal and objectives
Key Topics and Issues Addressed by Advisory Committee

- **The Model** – The Eastern Snake Aquifer Hydrologic Model was discussed as a planning tool and aid to CAMP development
- **Settlement Efforts** – Reviewed and discussed previous efforts to address ESPA issues
- **Funding** – Initial funding strategy principles reviewed
Key Topics and Issues Addressed by Advisory Committee

- **Management Alternative Matrix**
  - Managed and incidental recharge
  - Conservation Reserve Enhancement Program
  - Additional surface water storage
  - Groundwater to surface water conversions
  - Buy-outs and subordination agreements
  - Below Milner dam salmon flow augmentation exchanges
  - Dry-year leasing
  - Crop mix (incentives to plant low-water use crops)
  - Weather modification
  - Water conservation measures
Key Topics and Issues Addressed by Advisory Committee

- **Quantitative Goal Analysis**
  - Evaluation of reach gain and water level changes from a 900kaf change in water budget
  - Review of management action assumptions to accomplish change
  - Deliberation regarding quantitative goal targets, implementation and benefit timeframe, impacts and magnitude of costs
  - Evaluation against goal and objectives
Initial Board and Committee Recommendations

- **Study of Minidoka Dam Enlargement**
  - Scheduled for reconstruction in 2011
  - Dam raise could increase available supply between 40kaf and 50kaf annually in ESPA
  - Management actions such as ground water to surface water conversions and others require increased surface water storage
  - Immediate allocation required to complete necessary studies or State will lose opportunity

**Estimated Cost:** $1.4 million to support feasibility analysis.
I added some text, because I think it is important to spell out exactly what the money will be used for. They'll ask!

Diane Tate, 2/18/2008
Initial Board and Committee Recommendations

- Voluntary Demand Reductions (to reduce demand component of ESPA water budget)
  - Buy down select water rights
  - Pursue subordination agreements
  - Execute short or long term dry-year lease agreements (including CREP augmentation in targeted areas)

Estimated Cost: $5 million to pursue demand reductions in 2008.
Initial Board and Committee Recommendations

• **ESPA Recharge**
  – Framework objectives include increasing recharge to aquifer.
  – Additional funds necessary to support activities within existing facilities (canals)
    • Measurement of recharge water
    • Construction of appropriate facilities
    • Water wheeling
    • Renting storage water

**Estimated Cost: $1 million** to conduct recharge activities in 2008.
Questions?