Idaho Water Resource Board

ESPA Comprehensive Aquifer Management Plan

ESPA CAMP

Advisory Committee

September 25, 2008

Outline

- **Background and Overview of CAMP Process**
  - Framework – Goal and Objectives
  - Initial CAMP Recommendations
- **Management Options and Packages**
  - CAMP Focus – 600 kaf change
  - Phase I Proposal – 1- 5 year actions
- **Additional Draft CAMP Recommendations**
- **CAMP Development Schedule and Review**

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

Initial CAMP Recommendations February, 2008

Initial recommendations to the legislature in 2008, included

- **Study of Minidoka Dam Enlargement**
  - On-going
- **Voluntary Demand Reductions**
  - A key component of Draft CAMP Recommendations
- **Recharge**
  - Key Component of Draft CAMP Recommendations

Management Options

- **Management Options Examined**
  - Managed and incidental recharge
  - Groundwater to surface water conversions (hard and soft)
  - Demand Reduction Strategies
    - Conservation Reserve Enhancement Program
    - Dry-year leasing
    - Crop mix (incentives to plant low-water use crops)
    - Buy-outs and subordination agreements
    - Water conservation measures
  - Additional surface water storage
  - Weather modification
  - Below Milner Dam salmon flow augmentation exchanges

Management Options Key Components

- Option Description
- Estimated Average Supply
- Estimated Cost
- Hydrologic Impacts
- Implementation Timeframe

Management Option Packages

Packages Developed include:

- Small (300 KAF); least expensive and quickest to implement
- Medium (600 KAF); more expensive and takes more time to fully implement
- Large (900 KAF); most expensive and will take decades to fully implement.
- Demand Reduction and Recharge Emphasis

Committee Direction – 600 kaf Water Budget Change

- **Medium Package of Improvements**
  - Incrementally work toward implementation
  - Robust mix of conversions, aquifer recharge and demand reduction strategies
  - Adaptively managed
- **Implementation Timeline – 20 years**
- **Cost – $600 million not including O&M**
  - Estimated annual revenue required - $30 M

Committee Focus – 600 kaf change

- **Implementation will likely result in:**
  - **Improved aquifer levels (stabilization and potential enhancement)**
  - **Increased river reach gains**
  - **Increased certainty and water supply for all users**
  - **Ability for municipal and industrial growth**
  - **Decreased demand for administrative remedies**
  - **Potential Fish and Wildlife opportunities and impacts in CAMP implementation**

Committee Direction
Phase I Actions

- **Focus on first 5 years of CAMP**
  - Implement agreed upon actions, within larger Plan framework,
  - Build institutional confidence with long-term plan implementation
- Hydrologic Goal of 200 – 300 kaf change

Sub-Committee Proposal Phase I Actions

- **Soft Conversions – Average Annual 100 kaf**
- **Managed Recharge – Average Annual 80 kaf**
- **Buyouts, Buy-downs in the Thousand Springs Reach**
- **Weather Modification Program**
- **Rotating fallowing, dry-year lease agreements and CREP enhancements**
- **Surface Water Conservation**
- **Crop Modification in the Aberdeen/Bingham Groundwater District**

Proposed Phase 1 Actions
Soft Conversions

- **Opportunistically pursue soft conversions equally above and below American Falls; locations identified.**
- **Examine capacity above American Falls for soft conversions**
- **Opportunistically acquire below-Milner Dam water to be exchanged for upper snake flow augmentation**
- **Execute soft conversion on the spring and fall shoulders as well as during irrigation season as capacity allows.**

Proposed Phase I Actions
Managed Recharge

- **20 kaf of recharge above Blackfoot on the Egin Bench including both fall and spring recharge efforts.**
- **30 kaf recharge above American Falls on Jensen Grove, Aberdeen Springfield Canal, and New Sweden systems and others.**
- **30 kaf recharge that impact the Thousand Springs Reach on the North Side Canal Company, Milner Gooding Canal and explore recharge options on North side of Lake Walcott.**
- **Maximize use of the Board's recharge right and/or flood control release on the Wood River system.**

Proposed Phase I Actions
Buy-downs

- **Opportunistically pursue buyouts, buy-downs and/or subordination agreements in the Thousand Springs reach.**

- **Set aside resources to enable transactions when the right deal becomes available.**

Proposed Phase I Actions
Weather Modification

- **Implement a five-year weather modification pilot project in the Upper Snake and potentially in the Wood River system,**

- **Idaho Power, State, local and other agency support for the Program.**

Proposed Phase I Actions
Fallowing, Dry-year lease, CREP

- **Implement fallowing and dry-year lease options equally above and below American Falls.**
- **Dry-year Lease options (surface water) are intended to provide water supply and incentives for soft conversions.**
- **Pursue opportunities to leverage federal resources by providing additional incentives to increase CREP participation.**

Proposed Phase I Actions
Surface Water Conservation

- **Implement check structures and automated gates and investigate reducing transmission loss**

- **Examine use of pump-backs and pursue potential re-regulating reservoirs**

Proposed Phase I Actions
Crop Mix

- **Implement a pilot project, administered through Aberdeen/Bingham Groundwater District**
- **Targets a reduction of groundwater use through alternate cropping patterns**
- **Incremental growth of program to 5 kaf annually**
  - **Aberdeen/Bingham Groundwater District will determine most effective methods to accomplish target goals.**

Phase 1 Implementation Costs

- Estimated $100 million dollars
- Approximately $7 to 10 million annually
- Repaid over a twenty year period

Phase 1 Funding Categories

- Irrigated Agriculture
  - Groundwater
  - Surface water
- Idaho Power
- Thousand Springs Users
- Recreation/Fish and Wildlife
- Commercial, Municipal, Industrial (DCMI)
- Self-Supplied Domestics or State

Potential CAMP Recommendations

- ***CAMP Implementation Committee.*** Refocus and restructure the CAMP Advisory Committee to focus on implementation, fundraising, and monitoring.

- ***Incidental Recharge.*** Explore providing support for existing incidental recharge to assist in aquifer stabilization.

Potential CAMP Recommendations

- ***Environmental Considerations.*** Continue toIntegrate environmental considerations into decision-making; include environmental interest representation on CAMP Implementation Committee.

- ***Outreach and Education.*** Develop and fund a broad water education and outreach effort.

- ***ESPA Clearinghouse.*** Working within the existing system, evaluate options to implement a flexible mechanism that connects willing participants in working toward ESPA water managements projects and goals

CAMP Process and Schedule

- Phase I Proposal and funding plan – September, 2008
- Committee review of recommendations – September, 2008
- Draft CAMP – end of October, 2008
- Board Review and Approval – Teleconference meetings, special meeting, finalize at November Board Meeting
- Public Meetings – Early December; Pocatello?
- Submit to Legislature – January, 2009

Funding Approach – Potential Water User Contribution

Water user contribution concepts discussed include:

- **Idaho Water Resource Board Contract**

  Issue revenue bonds, where principal and interest are payable entirely from the revenue received. Approach would be potentially taxable.

- **Water Management Improvement District**

  Assesses a fee to defray part or all of the costs of a specific improvement or service. New Board statutory authority required.

- **Pay-As-You-Go**

  An approach to describe a financial policy which finances all of its capital outlays from current revenues rather than borrowing.

Funding Approach – Potential State Contribution

State Water Management Project

- General Fund Appropriations from kilowatt per hour (kwh) franchise fee, a states sales or property tax, special product or service tax, etc. to pay for the state portion of the management plan.

- Develop a state-wide water fund, funded through a state water management project, to authorize and fund such projects.