



# Municipal Water Rights Act of 1996

- Allows municipal providers to obtain water permits to develop within a planning horizon.
- Planning horizon must not be inconsistent with comprehensive land use plans of municipalities within the municipal provider's service area.
- Municipal provider must be (1) a municipality, (2) an entity with a franchise (PUC regulated) to provide water, or (3) a corporation or association providing water through a system regulated by DEQ as a "public water supply."

# Municipal Water Rights Act of 1996

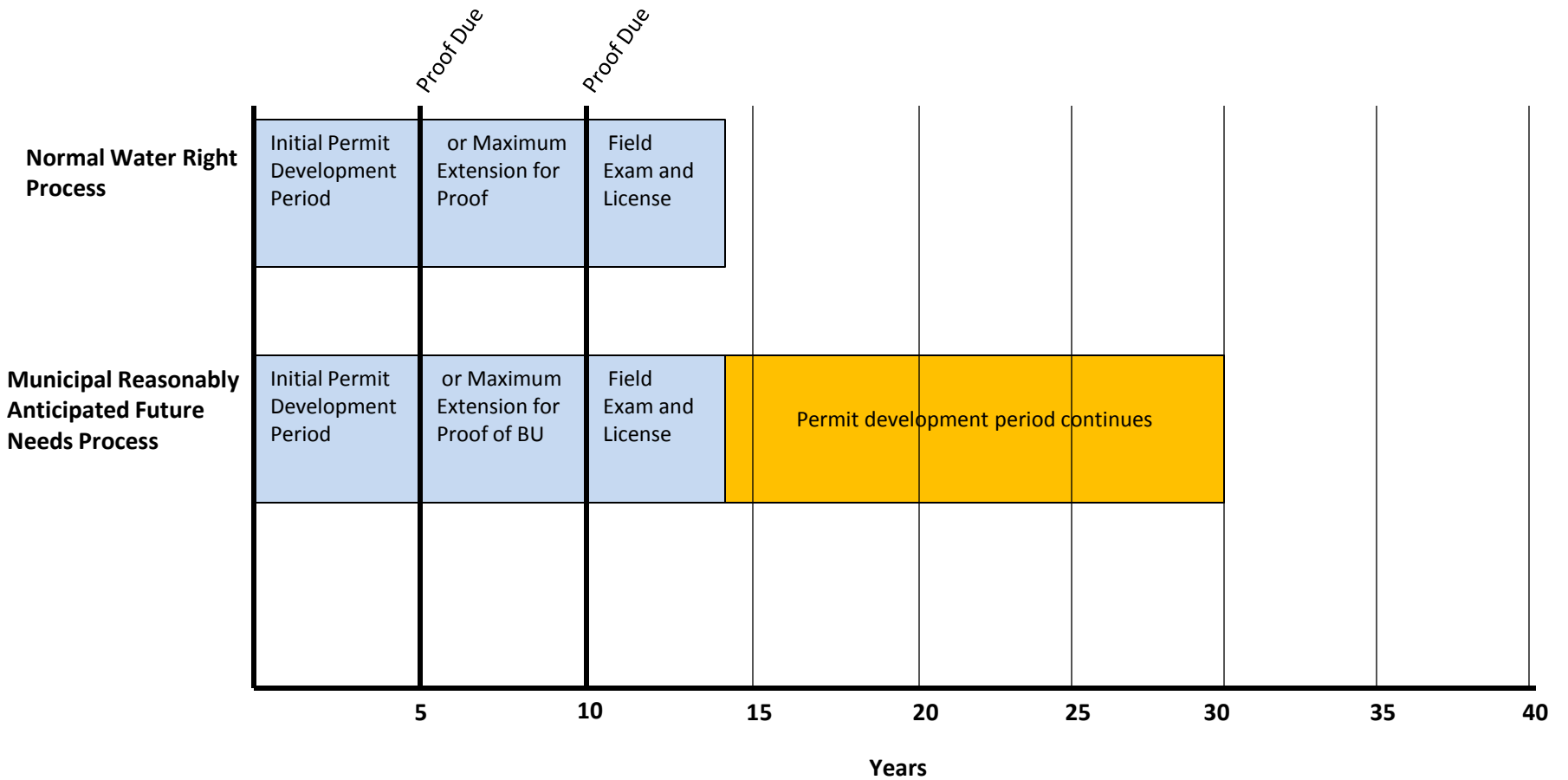
- To qualify as a “municipal provider,” the applicant must already be supplying water for municipal purposes:
  - Municipality must be an entity that “provides water for municipal purposes.”
  - Franchisee must be an entity that “does supply water for municipal purposes to users within its service area.”
  - Corporation or association regulated as a public water supply must be an entity “which supplies water for municipal purposes.”

# Concerns about Municipal Water Rights Act of 1996

- **Significant and irreconcilable time differences** between when proof of beneficial use of water is due and the planning horizon.

# Proof Due vs. Planning Horizon

- Proof due in 5 years + up to 5 year extension
- Difficult to require a full ten years before proof is due
- License is final representation of a water right
- Planning horizon may be 20 – 50 or more years
- No mechanism to adjust following the issuance of a license
- Development period continues after license issuance



# Concerns about Municipal Water Rights Act of 1996 (continued)

- Idaho Code § 42-219 states: “A license may be issued for an amount up to the **full capacity of the system constructed or used** in accordance with the original permit . . . .”

# What is the Underground Injection Control Program?

Regulates injection wells used to place fluids underground for disposal or storage.

1971 – Idaho

1985 – EPA



- Ag. Runoff
- Street Runoff
- Aquifer Recharge
- Heat Exchange Return



## Proposed Changes

1. Update Class V Rules
  - Reduce regulation of Heat Exchange Return.
  - Add improved sinkholes.
2. Add rules so Idaho can regulate Class II injection wells
  - Used in Oil & Gas Production: Disposal of brines produced with oil/gas, reservoir pressure maintenance, and storage of liquid hydrocarbons
  - Adapted Federal rules to be Idaho specific
  - EPA currently regulates Class II injection wells in Idaho.



## Negotiated Rulemaking

### Meetings Held

- April 18
- April 19
- May 2
- May 16
- June 20

### Participants

- Oil & Gas Industry
- Idaho Water Users Association
- Idaho Ground Water Appropriators Association
- Idaho Ground Water Association
- Idaho Conservation League
- Idaho Attorney General's Office
- Dept. of Lands
- Dept. of Environmental Quality
- District Health Departments
- EPA
- Private Citizen

### Comments

103 written  
comments  
received from 4  
entities.

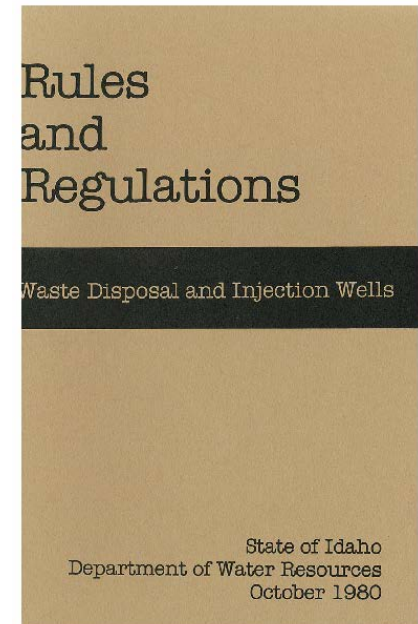
## Legislation

### Statutes

1. 42-3902. Definitions.
  - Define Class II Injection Wells
2. 42-3905. Fees -- Transmitted to state treasurer.
  - Class II Permit Fees - \$2,500
3. 42-3908. Permit approving construction and use -- Conditions -- Rejection of application.
  - Class II Bonding - \$10,000+ per well

### Rules

1. IDAPA 37.03.03 - “Rules and Minimum Standards for the Construction and Use of Injection Wells”.



# Timeline

October: Proposed Rules Advertised in Idaho Bulletin

November: Respond and Incorporate Comments.

Seek resolution from Idaho Water Resource Board approving pending rules.

Winter 2013: Consideration by the Legislature

## Summer 2013: Submit Primacy Revision Package to EPA





# Managed aquifer recharge operations at the Shoshone Recharge Site

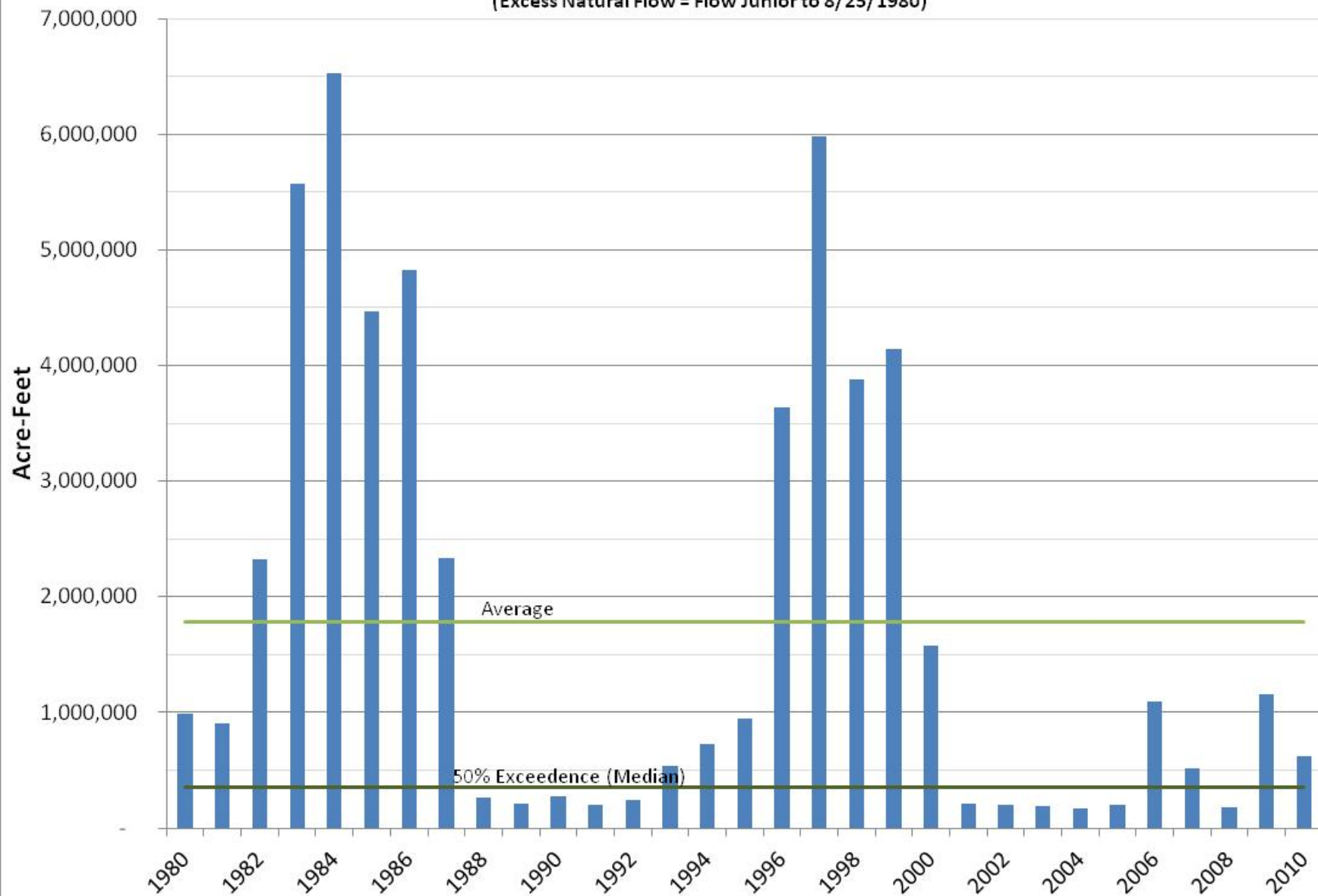


# Managed Recharge – Eastern Snake Plain Aquifer

- 2009 – 124,536 acre feet
- 2010 – 61,508 acre feet
- 2011 – 118,044 acre feet

# Total Annual Volume of Excess Natural Flow Passing Milner

(Excess Natural Flow = Flow Junior to 8/25/1980)



# Aquifer Management Activity

- Eastern Snake Plain Aquifer Monitoring and Modeling Costs
  - **2005** (Amended 2007) – **Enacted Section 42-620**
    - Authorized IDWR to add assessments to surface and ground water district budgets for costs of (1) monitoring the ESPA, (2) updating ground water models, (3) updating surface water models, and (4) updating water right accounting
    - Total costs not to exceed \$1.2 million (w/inflation added)
    - Director of IDWR to request half of \$1.2 in annual budget request
  - **Repealed in 2008**



# Aquifer Management

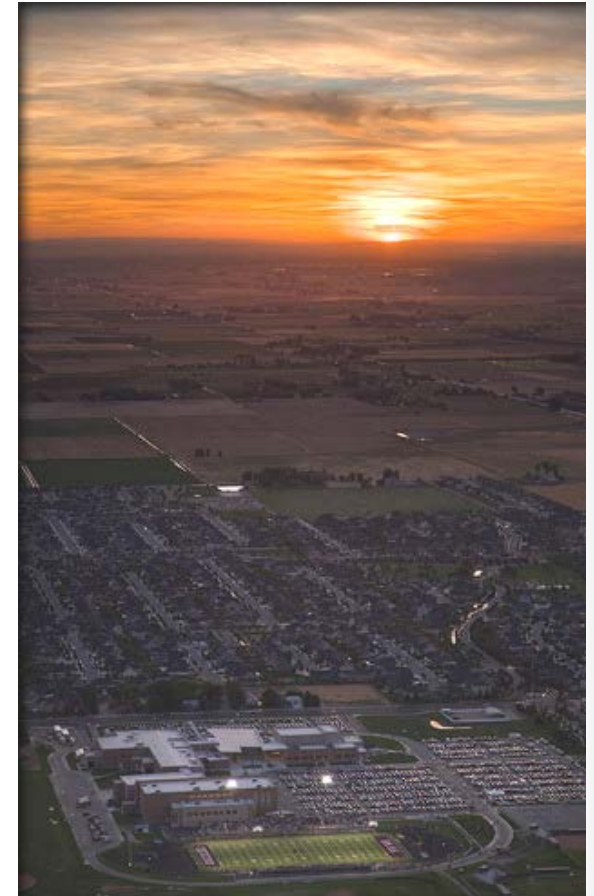
- Comprehensive Aquifer Management Planning (many aquifers in the state)
  - **2008** – Placed \$20 million in Aquifer Planning & Management Account
    - Technical studies, facilitation, measurement, monitoring, plan development
  - **2009** – Removed \$12 million from Aquifer Planning & Management Account to the General Fund
    - Effort reduced to three aquifers: ESPA, Rathdrum Prairie, and Treasure Valley

# Aquifer Planning & Management Fund

- ESPA Monitoring
  - Spring flows
  - Ground water levels
  - Surface water return flows
- ESPA Modeling – ESPAM V2.0
- Rathdrum CAMP studies (future water needs, etc)
- Treasure Valley CAMP studies (future water needs, etc)
- Treasure Valley aquifer investigations & ground water model
- Boise River storage feasibility study
- NEW PRIORITY – Wood River Basin Ground Water Model

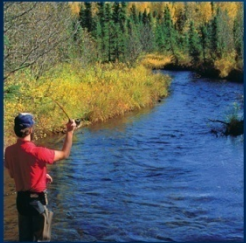
## Treasure Valley Comprehensive Aquifer Management Plan

- Currently out for public comment
- Key challenges documented in plan:
  - Need for new water supplies will increase by 80,000 to 170,000 acre-feet over next 50 years
  - Aquifer and surface water system have complex interconnection
  - Future needs can not be met solely with ground water
  - Wet years getting wetter and dry years getting drier, and Treasure Valley water storage capacity is not large enough to hold increased wet-year flows to meet needs in dry years



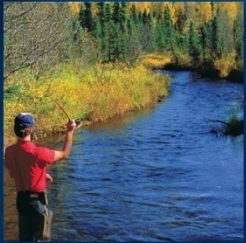
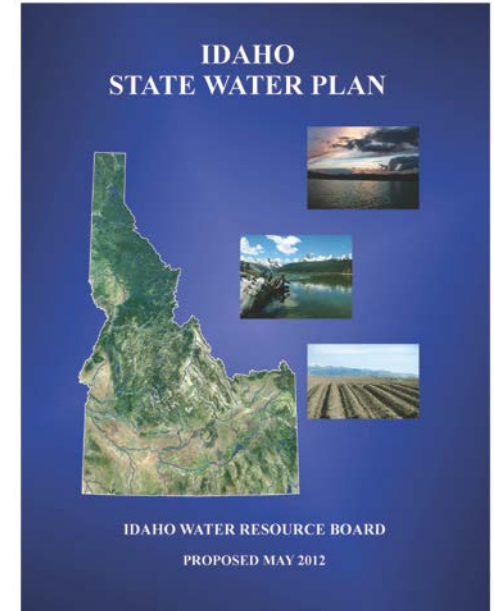
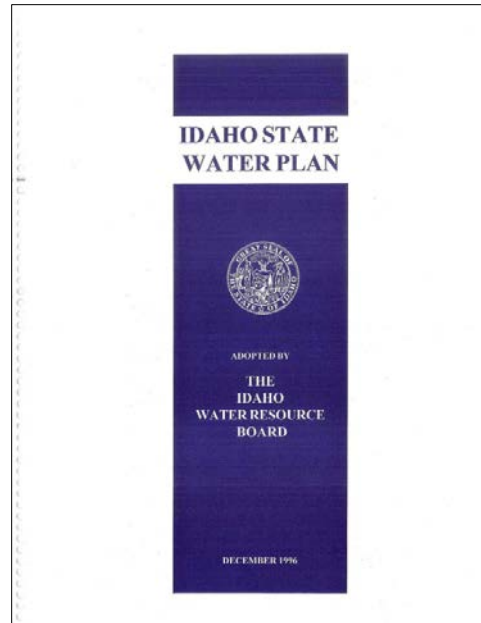
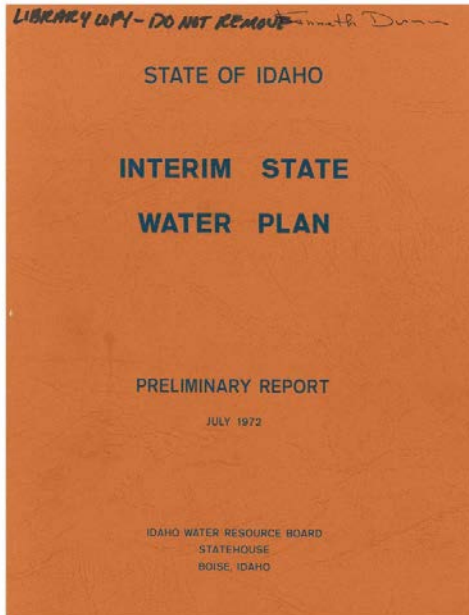
## Treasure Valley Comprehensive Aquifer Management Plan

- Key actions in current draft plan:
  - Promote new storage and other water supply solutions – water supply needs incorporated by Corps into Boise River Feasibility Study
  - Promote water conservation measures where they would not impact incidental recharge to aquifer
  - Maintain irrigation infrastructure in place as land use changes occur to supply outdoor needs
  - Develop technical tools for management and administrative needs, including ground water model
- Water Board approval expected this fall
- Submittal to upcoming Legislature for approval





## State Water Plan



# State Water Plan Policy Sections

1. Optimum Use
2. Conservation
3. Management

## River Basins

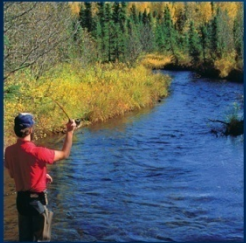
4. Snake River Basin
5. Bear River Basin
6. Panhandle Basins
7. Salmon-Clearwater Basin

## Key Changes

- New format - Implementation strategies and milestones
- Enhanced Basin Sections
  - More reflective of basin characteristics
  - Regional issues and policies
- More emphasis on strategies to meet Idaho's future water needs and avoid water conflicts
- Expect Water Board approval this fall and submission to Legislature this coming session

## Water Storage Investigations

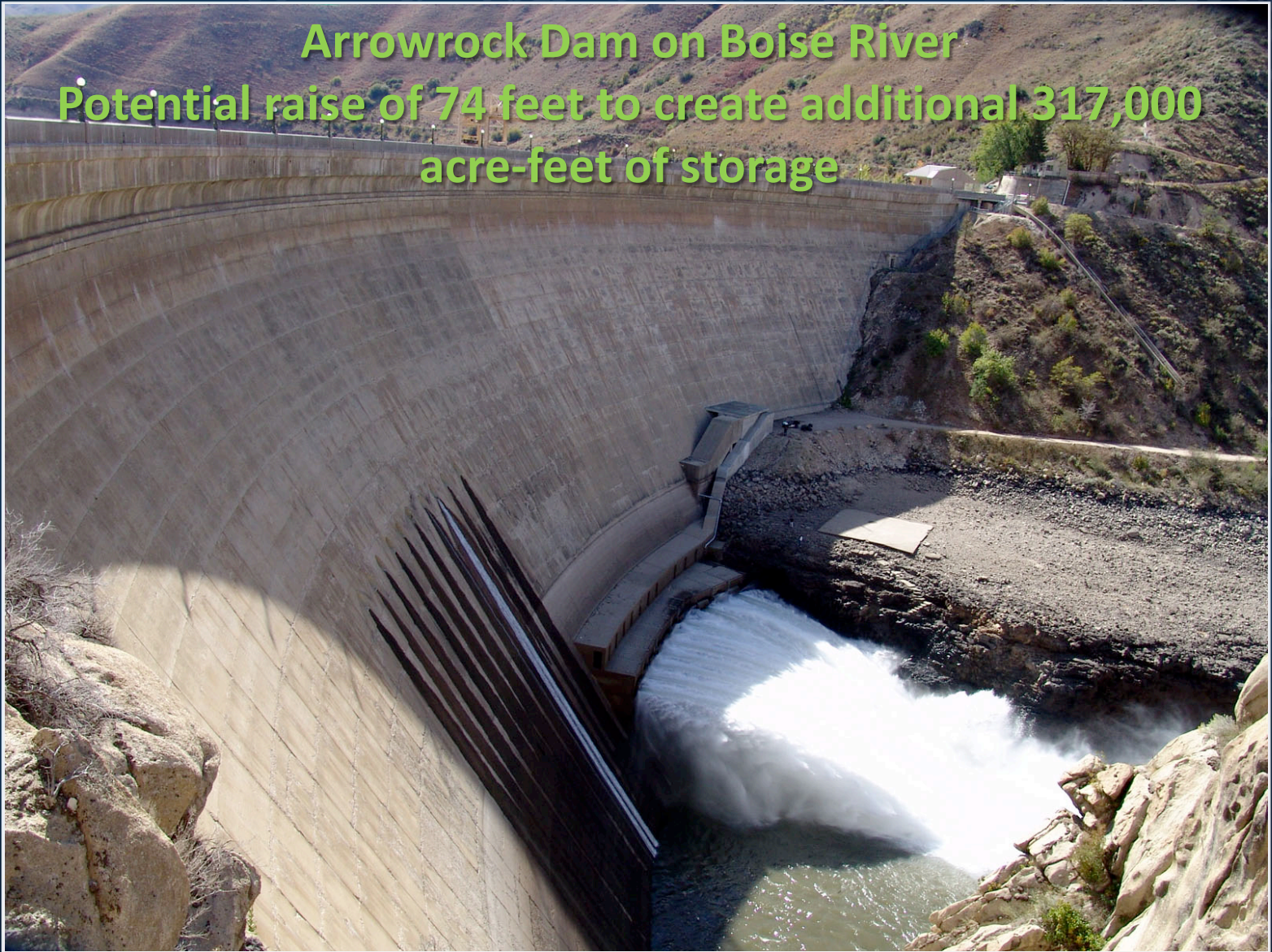
- Minidoka Dam Enlargement Study – study complete – dam could be raised to get additional 67,115 AF for \$215 Million (\$3,054/AF)
- Boise River Feasibility Study – partnering with Corps of Engineers – after examining alternatives, study focusing on raising existing Arrowrock Dam to get additional 317,000 AF to provide for flood control and future water needs
- Henrys Fork (Teton) Basin Study – partnering with Bureau of Reclamation – several options emerging as alternatives to rebuilding Teton, including raising Ashton Dam (20,000 AF), raising Island Park Dam (8,000 AF) and the potential off-stream Lane Lake (68,000 AF)
- Weiser Galloway Study – potential 900,000 AF reservoir on Weiser River – core drilling at dam site this summer and fall to verify adequacy of site to support dam and reservoir





## Arrowrock Dam on Boise River

Potential raise of 74 feet to create additional 317,000 acre-feet of storage

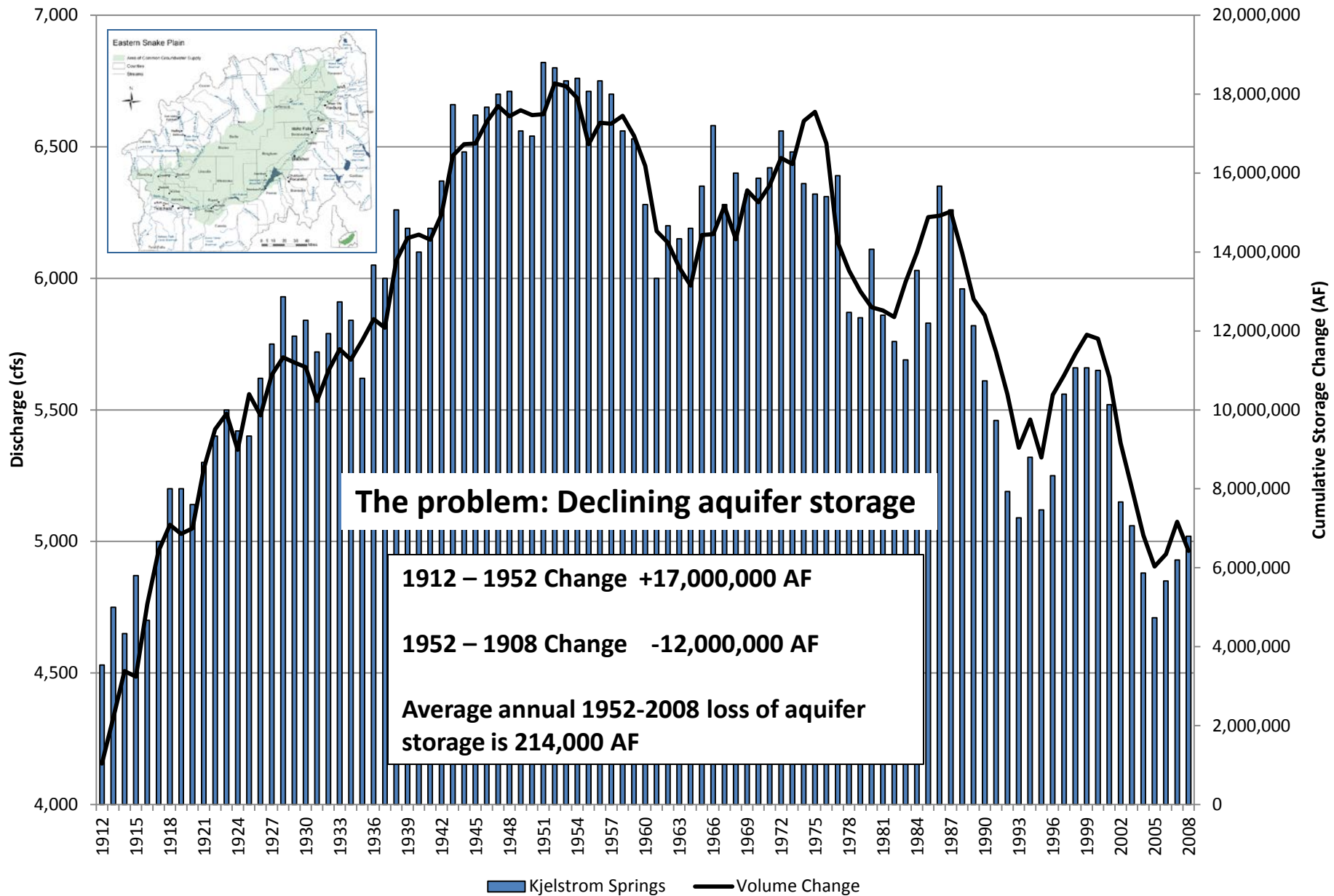




## Water Board examining drilling operations at Weiser-Galloway Dam site



# Thousand Springs Discharge and Eastern Snake Plain Aquifer Cumulative Storage Change





## Eastern Snake Plain Aquifer CAMP and Management Efforts

ESPA CAMP lays out four main strategies:

Strategy	Goal	Progress Since Plan Approval (early 2009)
Managed recharge	100,000 acre-feet/yr	2009-2011 average of 101,363 acre-feet/yr 85,083 acre-feet in 2012 to date
Conversions: GW to SW	100,000 acre-feet/yr	11,780 acres converted, including just-finished 5,400-acre Hazelton Butte Project offsetting ground water use by 15,000 acre-feet/yr.
Demand reduction	95,000 acre-feet	34,000 acre-feet through CREP. Additional demand reduction through structural improvements in the Thousand Springs area and hatchery buy-outs by ground water users.
Weather Modification (cloud seeding)	5-year pilot program with analysis of results	Idaho Power has installed 15 remote operated ground generator stations since 2009 to supplement existing county-led effort. Idaho Power estimates program will produce about 170,000 AF/yr.





# ESPA Aquifer Management - Recharge Operations at Shoshone Site, Spring 2012





# ESPA Aquifer Management - Hazelton Butte GW- SW Conversion Project South Pumping Plant Water Board trip to project





# ESPA Aquifer Management – Installation of Remote Operated Cloud Seeding Generator by Idaho Power







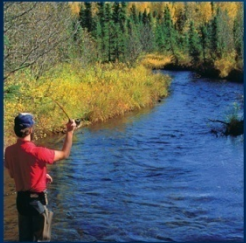
Back-up slides

## Eastern Snake Plain Aquifer CAMP and Management Efforts

Summary of expenditures since plan approval (early 2009):

Strategy	State (IWRB)	Federal	Idaho Power	Water Users	TOTALS
Managed Recharge	\$752,000			\$100,000	<b>\$852,000</b>
Conversions: GW to SW	\$2,000	\$3.98 Million		\$1.33 Million	<b>\$5.3 Million</b>
Demand Reduction		\$5.71 Million		\$487,000	<b>\$6.2 Million</b>
Weather Modification (Cloud Seeding)			\$600,000	\$208,000	<b>\$808,000</b>
Aquifer Monitoring	\$667,000				<b>\$667,000</b>
<b>TOTALS</b>	<b>\$1.4 Million</b>	<b>\$9.7 Million</b>	<b>\$600,000</b>	<b>\$2.1 Million</b>	<b>\$13.8 Million</b>

**Leveraging of state investment: nearly 10-to-1**



## CONVENTIONAL CLASS II INJECTION WELL COMPLETION

