











Water Resource Board

S1511 and H644

- Senate Bill 1511 passed by the 2008 Idaho Legislature appropriated \$1.8 million to the Water Resource Board to study enlarging Minidoka Dam and replacing Teton Dam.
- House Bill 644 also passed in 2008 appropriated funds to the Water Resource Board to undertake Comprehensive Aquifer Management Plans (CAMPs) in several areas. Additional reservoir storage is one of several strategies to be considered in the Treasure Valley CAMP, therefore some of these funds were reserved for the storage in the Boise River basin.



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Water Resource Board



The Bureau of Reclamation originally

Henrys Fork Special Study



- constructed Teton Dam and its 300,000 acrefoot reservoir in the early 1970's. Teton Dam failed during its initial filling in 1976.
- The basin was identified by the Legislature for further study to evaluate options for replacing the benefits the original storage would have provided.

Water Resource Board



Henrys Fork Special Study

- The Water Resource Board entered into an agreement with the Bureau of Reclamation in June of 2009 to undertake this study.
- Study costs are projected to be approximately \$800,000. Reclamation and the Water Resource Board each committed up to \$400,000 toward the study costs.
- Reclamation is also seeking additional funding to support the study through the Secure Water Act - Water SMART Basin Study Program.
- The study is expected to take 2 years to complete.

6/10/2010





Water Resource Board

Weiser-Galloway Project

- The Galloway site on the Weiser River has been investigated in the past by multiple federal and state agencies (reservoir of up to 900,000 acre-feet).
- Currently recognized for its potential as a multipurpose reservoir site:
 - > Provide sustainable water supplies for agriculture
 - Could replace flow augmentation water released from the Upper Snake and Boise River basins freeing up water for needs in the respective basin
 - Hydropower generation
 - > Fisheries enhancement
 - > Water based recreation
 - > Local employment benefits



6/10/2010



Lower Boise Interim Feasibility Study

The Interim Feasibility Study will evaluate water storage options for flood risk reduction and water supply.

Water Resource Board

Lower Boise Interim Feasibility Study

- Although the reservoir system upstream of the City of Boise provides significant flood protection, it is generally acknowledged that the Treasure Valley has a low level of flood protection compared to its population.
- In 1999, the U.S. Army Corps of Engineers was given the authority to undertake feasibility studies leading to increased flood protection for the Treasure Valley in cooperation with a local partner. In 2007, this authority was modified to include ecosystem restoration and water supply.





Lower Boise Interim Feasibility Study

Water Resource Board

- Results of the study will provide the Treasure Valley CAMP Advisory Committee with technical information about water storage potential in the Boise River drainage in evaluating strategies for a recommended Comprehensive Aquifer Management Plan.
- Results will provide the US Corps of Engineers with the water storage component of a full Feasibility study to address flood management on the Boise River.







Underground Storage

IDAHO Water Resource Board

- Underground storage is not a component of the Interim Feasibility Study, but it is one of the studies being implemented for the Treasure Valley CAMP through a contract with the University of Idaho. Results of the study will be presented at a later date.
- An underground storage, or aquifer recharge, program is being implemented for the Eastern Snake Plain Aquifer (ESPA) as part of the ESPA Comprehensive Aquifer Management Plan. Approximately 125,000 acre-feet were recharged into ESPA in 2009 and just under 56,000 acre-feet so far in 2010.
- The potential for underground storage (recharge) will be evaluated in other areas of Idaho as Comprehensive Aquifer Management Plans are developed for those regions including the Treasure Valley CAMP.





Boise River General Investigation Interim Feasibility Study

U.S. ARMY CORPS OF ENGINEERS

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BACKGROUND: The lower Boise River flows approximately 64 miles through Ada and Canyon counties, from Lucky Peak Dam to its confluence with the Snake River. This area has experienced rapid growth over the past several decades; land use is changing from agricultural to urban.

Three federal dams upstream of the City of Boise are jointly operated for flood risk management and irrigation purposes by the U.S. Army Corps of Engineers and the Bureau of Reclamation. Although the reservoir system provides significant flood protection, reducing the 100-year natural discharge from 41,000 cubic feet per second (cfs) to 16,600 cfs, the levees do not provide reliable protection even at this reduced flood level.

Reports of flood damages in localized areas occur with flows of 4,500 cfs. Boise River flood stage is 7,000 cfs as measured at the Glenwood Bridge. Significant development in the river corridor and population growth has resulted in renewed interest in flood risk management and water supply. Interest has also been expressed in environmental restoration to include habitat preservation, as well as aesthetics and recreation along the Boise River.

The Idaho Water Resource Board (IWRB) has initiated the Treasure Valley Comprehensive Aquifer Management Plan (CAMP) to address future water supply and demand issues for the lower Boise River Basin for the next 50 years. The Corps has developed a two-phased feasibility study approach for the Boise River General Investigation (GI) to assist the IWRB with its regional planning effort. The Boise River GI - Interim Feasibility Study will provide technical information about water-storage potential in the Boise River drainage that will be used in the Treasure Valley CAMP.

STUDY AUTHORITIES: The Corps' study authorization is provided by Section 414, Water Resources Development Act (WRDA) of 1999, authorizing a feasibility study for flood control on the Boise River, and Section 4038, WRDA 2007, modifying the 1999 authority to include ecosystem restoration and water supply as project purposes.

The IWRB study authorization is provided by bills and memorials passed by the 2008 Idaho Legislature, including House Bills (HB) 428 and 644 which directed the IWRB to conduct a statewide comprehensive aquifer planning and management effort, including evaluation of additional surface water storage, and created an Aquifer Planning and Management Fund. House Joint Memorial (HJM) 8 encouraged the IWRB, in coordination with other public and private entities, to initiate and complete the study of additional water storage projects in the state of Idaho, including, but not limited to, the study of Twin Springs Dam in the Boise River drainage.

STUDY SCOPE: Both the Corps and IWRB have investigated water resource issues in the lower Boise River in previous studies. The Corps most recently completed reconnaissance studies for the lower Boise River in 1995 and 2001 that identified water resources problems and needs in the areas of flood risk management, water supply and quality, ecosystem restoration and recreational safety.

The Boise GI will be conducted using a two-phased approach. The partnership with the IWRB will initiate the first phase – an interim feasibility study. Additional partnerships will be formed to complete the feasibility study. The interim feasibility study will focus on water storage and flood risk in the lower Boise River, downstream of Lucky Peak Dam. Other identified issue areas will be studied in depth during the second phase of the feasibility study.

The interim feasibility study will

- 1) evaluate and document the existing conditions on the Boise River,
- 2) evaluate public safety issues related to flooding,
- 3) conduct detailed analysis of storage opportunities in the Boise River Basin (water storage analysis), and
- 4) develop a plan to complete the remainder of the feasibility study.

A draft report documenting the study analysis will be prepared and made available for public review and comment. Completion of phase 1 of the feasibility study is anticipated in 2012, pending congressional funding.

The evaluation of surface water storage will build upon the Bureau of Reclamation's *Boise/Payette Water Storage Assessment Report* completed in July 2006. The Reclamation study identified 12 sites or 'areas of opportunity' that merited further investigation. These sites are listed below.

Middle Fork Boise Drainage

- 1. Alexander Flats
- 2. Twin Springs

North Fork Boise Drainage

- 3. Rabbit Creek
- 4. Barber Flats

South Fork Boise Drainage

- 5. Anderson Ranch Dam
- 6. Krall Mountain

Main Boise Drainage

- 7. Arrowrock
- 8. Lucky Peak
- 9. Grimes Creek
- 10. Dunnigan Creek (Mores Creek)
- 11. Indian Creek-Mayfield 12. Firebird
 - (Willow Creek)



The project delivery team is conducting site investigations and a screening analysis to narrow down the 12 sites to three sub-options. The screening analysis will be multi-disciplinary and will include hydrologic, geologic, environmental, socio-economic and other information.

PUBLIC INFORMATION MEETINGS: The Corps and IWRB will hold information meetings to review study scope and the information collected about the water storages sites. Meeting dates and information are below.

June 30 – Eagle, ID	June 30 – Boise, ID	July 1 – Idaho City, ID
City Hall Council	City Council Chambers	Ray Robison
Chambers	150 N. Capitol	Community Hall
660 East Civic Lane	Boulevard	206 W. Commercial Street
6:30 p.m.	11 a.m.	6:30 p.m.
	June 30 – Eagle, ID City Hall Council Chambers 660 East Civic Lane 6:30 p.m.	June 30 – Eagle, IDJune 30 – Boise, IDCity Hall CouncilCity Council ChambersChambers150 N. Capitol660 East Civic LaneBoulevard6:30 p.m.11 a.m.

FOR MORE INFORMATION: Contact Project Manager Ellen Berggren with questions about the study. Call (208) 345-2065, or email Boise.Office@usace.army.mil, or visit the study Web page at www.nww.usace.army.mil.

U.S. ARMY CORPS OF ENGINEERS - WALLA WALLA DISTRICT - BOISE OUTREACH OFFICE

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