US Army Corps
of Engineers®
Walla Walla District

Lower Boise River Interim Feasibility Study, Idaho

Public Information Meetings and Public Comment Summary

August 2010

Introduction

This document describes the outcome of public information meetings conducted on June 29, June 30, and July 1, 2010. It also summarizes public comment received during the June and July 2010 period about the Lower Boise River Interim Feasibility Study, and specifically, the preliminary water storage screening analysis.

Background

The U.S. Army Corps of Engineers (Corps) and Idaho Water Resource Board (IWRB) conducted four public information meetings during the June 29 through July 1, 2010 period to provide an overview of the Lower Boise River Interim Feasibility Study and present preliminary information developed during the study. Meeting announcements were distributed to more than 300 agencies, organizations, local governments, or individuals on the study mailing list, and more than 200 contacts on the IWRB electronic mailing list. Meetings were conducted on the dates, at locations and times, listed below:

- June 29 – Caldwell, College of Idaho, Simplot Dining Hall, 2112 Cleveland Blvd., 6:30 p.m.
- June 30 – Boise, City Council Chambers, 150 North Capitol Blvd., 11 a.m
- June 30 – Eagle, City Hall Council Chambers, 660 East Civic Ln., 6:30 p.m.
- July 1 – Idaho City, Ray Robison Community Hall, 206 West. Commercial St., 6:30 p.m.

The meeting objectives included:

- Provide information about study scope, process, and timelines.
- Provide information about flood risk and future water demand.
- Describe the water storage screening analysis and preliminary results.
- Request feedback on
  - Water resource problems & issues that should be studied.
  - Other solutions & alternatives that should be considered.
  - Water storage screening analysis & recommendations.

Corps and Idaho Department of Water Resources (IDWR) staff in attendance included:

Greg Graham, Chief Planning Branch, Corps Walla Walla District
Ellen Berggren, Project Manager, Corps Boise Outreach Office
Nolan Harper, Landscape Architect, Corps Walla Walla District
Keith Duffy, Hydraulic Engineer, Corps Walla Walla District
Sandy Shelin, Environmental Resource Specialist, Corps Walla Walla District
Mark Mendenhall, Project Manager, Corps Boise Outreach Office
Helen Harrington, Planning Section Manager, IDWR

Meeting Attendance

A combined total of 259 people attended the four meetings, based upon individuals signing the attendance sheet. (Note: Not all meeting participants signed the attendance sheet.) Table 1 lists attendance by meeting; Table 2 identifies the interest groups represented at the meetings.

Table 1. Public Information Meeting Attendance.

Location	Attendance
Caldwell	17
Boise	93
Eagle	44
Idaho City	105
TOTAL	**259**

Table 2. Group Representation at Public Information Meetings

Group	Represented	Percent of Total
Federal agencies	Environmental Protection Agency, Forest Service, Bureau of Reclamation	1.9
State agencies	Idaho Department of Fish and Game, Idaho Department of Lands, Idaho Department of Water Resources	3.1
Local governments	Ada, Boise, Canyon and Gem counties; Cities of Boise, Eagle, Garden City, and Nampa; Flood Control District #10	8.5
Elected officials	Boise and Gem county commissioners, State representatives, Idaho Congressional delegation, Eagle City Council	3.1
Non-governmental organizations	Idaho Rivers United, Trout Unlimited, Sierra Club, Idaho Wildlife Federation, Boise Valley Fly Fishermen, Idaho Conservation League, Audubon Society	12.7
Agriculture	Water Districts 63 and 65, Boise Board of Control, irrigation districts	5.8
Resident	Basin resident, citizen, self, or homeowner	53.3
Other	Utilities, local business owners, media, Boise State University	11.6

Meeting Format

The meeting format included PowerPoint presentations, followed by a question and answer period. Attachment A summarizes questions, comments, and concerns discussed during the public information meetings question and answer sessions. A *Draft*

Water Storage Screening Analysis document and comment form was distributed at the meeting.

The meetings concluded with a breakout session in which attendees reviewed wall maps, interacted one-on-one with Corps and IDWR study team members, and provided feedback on comment boards. The breakout session requested feedback for three specific questions/topics:

1) What specific water resource problems and issues should the Lower Boise River Feasibility Study address?
2) What potential solutions and alternatives should be considered in the Lower Boise River Feasibility Study to address water resource problems and issues in the Lower Boise River Basin?
3) The Corps in partnership with the Idaho Water Resources Board is currently evaluating surface water storage as one potential strategy to reduce flood risk and meet future water demand. Seven criteria were considered to compare and rank seven water storage concepts. Please rank the seven criteria in level of importance to you from 1 to 7 (1 being most important, 7 the least important). Also include any other criteria or information that you believe should be considered when ranking water storage concepts.

Attachment B summarizes written responses to these questions submitted at the public information meetings.

Written Comment Summary

Feedback was requested on the Lower Boise River Feasibility Study as a whole and on the *Draft Water Storage Screening Analysis* document. A total of 154 agencies, organizations, or individuals submitted written comments during June and July 2010. Comments were received through July 31, 2010. Written comments were submitted during the public information meetings, and later received through the U.S. Postal Service, electronic mail, and facsimile. All comments received were reviewed and processed.

Groups providing written comments are summarized in Table 3. Each comment was reviewed and key points or issues were summarized. A summary of comments are provided below, organized by category.

Table 3. Written Comment by Group Representation

Group	Percent of Total
Federal agencies	0
State agencies	2.6
Local governments	2.0
Elected officials	1.3
Non-governmental organizations	5.8
Agriculture	1.3
Resident	60.4
Other	3.9
Unknown (submitted anonymously)	22.7

Comments by Category

WATER RESOURCES PROBLEMS AND ISSUES

- Meeting future water demands – is there a water supply problem?
- Shortage of water supply
- Overuse/misuse of water; water conservation needs to be practiced.
- Inefficiencies of agricultural irrigation
- Water quality problems
- Flood risk
- Development in floodplain resulting in flood risk
- Loss of floodplain function
- Land use planning – new development siting controls and restrictions
- Impacts associated with dam construction and regulated river, i.e. aquatic ecosystem, land use development in floodplain, water quality.
- Restore impacted riparian uplands.
- Loss of cottonwood.
- Healthy instream flows needed.
- Silt and sediment behind existing dams.
- Vegetation in river channels decreasing river channel capacity.
- Devastation caused by New Zealand mussels (clams).
- Climate change impacts

POSSIBLE ALTERNATIVES AND MEASURES

- Water Supply
  - Water conservation
  - Land use planning
  - Personal ponds for irrigation
  - Pricing/markets
  - Explore options other than dams
  - Include Lucky Peak, i.e. examine 4 options
  - Limit growth development
  - Improved water management
  - Change state gray water use laws
  - Place fines on those who use excess water
  - Waste water reuse
  - Improve irrigation efficiencies
  - Pump water out of the Boise River Basin
  - New dam
  - Multiple smaller dams
  - Planned communities with conservation for water use
  - Water use efficiency through zoning and building code
  - Educate public on water conservation
  - No new development that requires water
  - Limit growth in Treasure Valley
  - Sustainable growth with existing resources
  - Non-dam alternatives for water security should be studied

  - The use of an interbasin transfer should be looked at for all dams including storage in the existing dams/ tunnels is a better alternative to pumps

- Flood Risk
  - Land use planning - planned communities with water conservation
  - Rebuild bridges to pass higher flood flows
  - Modify canals or build bypass channels to divert flood waters to off stream storage, recharge basin, injection wells, or the Snake River such as new Lake Lowell
    - Acquire lowlands for storage, river volume control, and aquifer recharge
    - Enlarge New York Canal and other irrigation canals for routing flood waters
    - Irrigation companies complete maintenance by March 1st so irrigation ditches could be used to divert flood waters
  - Public relations and outreach to educate about hazards of developing in floodplain
  - Dredge deepen existing reservoirs so they hold more water
  - Flood warning systems
  - Other possible dam locations in the basin
  - Recharge for Mountain Home area
  - Raise three existing dams
  - Increase river channel capacity
  - Limit or prohibit growth/development in high risk areas /floodplain
  - New levees and improve existing levees
  - Levees in Eagle area
  - Raise bridge elevations (rebuild bridges as single span, to reduce debris dams potential)
  - Use/create wetlands/greenbelts to reduce flood risk, and for wetland banks that will generate revenue
  - Modify dam operations to allow for more flood risk reduction
    - Reexamine current flood control rule curves.
    - Reprogram existing storage
    - Return Lucky Peak priority to original purpose of flood control
  - Purchase of water rights/storage contracts from willing sellers
  - Dam modification to pass sedimentation through the dam
  - Make reservoirs deeper to hold more water
  - Moving structures/people out of the floodplain
  - Require flood insurance for those within the floodplain
  - Purchase flood easements
  - Purchase land in floodplain using revenues from hydropower or floodplain levy
  - Develop appropriate setbacks for development and enforce setbacks (zoning).
  - Floodplain development should be limited to parks, golf courses, parking areas
  - Use floodplain to absorb flood waters, restore floodplain function.
  - Educate the public on risk of flooding.
  - Mitigate flood risk through zoning and building code.
  - Remap floodplain to accurately assess impacts and flood risk.

- Ecosystem Restoration
  - Restore floodplain function, declining cottonwood habitat, and fish and wildlife habitat
  - Restore natural hydrologic and hydraulic regimes on the Boise River
  - Restore side channel and spawning areas
  - Use ecological based systems management for fisheries and riparian area restoration
  - Improve intakes to limit loss of fish from river to irrigation canals, pumps
  - Improve wintertime stream flows in lower Boise River
  - Restore areas damaged by dredge and placer mining in the Idaho City and Placerville areas
- Other
  - Explore solar, wind, and geothermal energy resources
  - Do nothing/no action

WATER STORAGE SCREENING ASSESSMENT

Screening Criteria

Water Storage/Flood Risk

- Criteria for a dam for storage and for flood risk are very different and can be opposite, how can we address this issue
- Conservation pool should be considered in the analysis.
- Additional maximum storage is not appropriate as a criteria; it should be based on actual demand and reliability. Counting maximum storage double counts flood risk.
- Average Residual Volume criteria.
- Basin Average Inflow – why is greatest inflow ranked higher when water is already appropriated?
- Clarify data provided for potential damage estimates at different flood stages.
- Reduction of System Ave Runoff Volume
- Maximum storage weighting should be 0.5 not 1.0
- Annual Refill Volume – consistency needed for treating tied scores.
- Calculate percentage of 1-day runoff volume for 60-day runoff at each site.
- Provide a clearer explanation of how an additional dam would provide additional water resources, especially when we are not even filling the existing dams.
- Eliminate statement that flood risk is the first priority when water storage is obviously the highest priority for this portion of the study
- The analysis tends to focus on water supply and not how flood risk targets are being met.
- No need to evaluate water transfer from Payette River when Boise River Basin already had runoff in excess of available storage.
- Need a better explanation of how Dunnigan helps reduce flood risk; explain concept more.
- Table 2 - There is an error in numbers for the Grimes Creek site row
- Table 2 - There appears to be an error for Dunnigan regarding 43 percent refill capacity and several years at 0 percent.
- Table 2 - Sites having the same score should be listed alphabetically.

- Table 7 - The table is titled future water demand but gives no further information of water demand.
- Table 8 - The order of information is confusing and it might help to sort it by additional storage volume.
- Table 10 - The table has errors in the heading; one column is head as both % and $.

Hydropower Potential

- Hydropower and cost index could be combined to show a true representation of final conditions
- Hydropower may not be acceptable in some areas due to long established regional policy (Protected Areas adopted by Northwest Planning Council)

Cost Effectiveness

- Dunnigan cost should include cost of moving highway
- Cost for bringing 50 MW to the pump for Dunnigan should be included in the cost
- Assess impacts of fault lines and landslide impacts on Arrowrock and Dunnigan Creek.
- Need more analysis of cost effectiveness
- Water storage screening fails to consider mitigation requirements, also a cost issue
- Cost index should be calculated based on reliable water not maximum storage.
- Cost index – expand discussion on what is included in cost estimates.
- Explain how changing political factors affect cost.
- Why no site contingency costs at Twin Springs?
- Arrowrock Dam, clarify notching statement.

Social Effects

- Impacts of highway construction on wildlife, landowners, and local economics also needs to be evaluated
- Add numbers of users of public land, hunting licenses, creel reports, and numbers of travelers on affected roads.
- Impacts to roads is not assessed properly, especially for State Highway 21
- Stakeholders need to include Idaho Transportation Department, as part of impacts for all dams, specifically Dunnigan Creek.
- Patented mining claims analysis is short sighted and should include mining claims held by individuals and corporations with tenure who are still waiting to file their land patent claim.
- The analysis gives less attention to county, Forest Service, and local roads. This needs to be explained and supported.
- Social effects should look at families and people, not structures.
- The number of homes affected by a Dunnigan Creek Dam is closer to 500, not what is stated in the screening document.
- Show impacts of a project on Boise County taxes, and loss of property tax values (including impacts to schools that may have to be shut down).
- Not only developed camping and recreation sites should be used in the analysis to determine recreation effects.
- The weight of not using private property should be higher.
- Defend why using public property is better than private (depends on who you ask).
- The screening criteria for Dunnigan Creek is missing recreational facilities, camping, motocross, snowmobile trails, gold dredging, and hiking trails.

- Table 12 - The data shows that there is no recreation at the Dunnigan site; this couldn't be farther from the truth.
- Grimes Creek – structures, roads and environmental affects are not documented.

Environmental

- Screening does not include impacts to native fish populations and associated habitats (redband trout, mountain whitefish). Add fish habitat rating impact.
- Analysis does not address upstream and downstream effects from dam.
- Natural resources should be given equal status as other criteria, including fish and wildlife habitat
- Environmental impacts should be calculated by acre feet of water divided by the acres of land devastated; and as acre feet of water provided divided by miles of free flowing stream devastated
- Add riparian habitat impacted.
- Table 13 - shows bull trout in Lucky Peak. Is this correct, and if so, how do you give Lucky Peak max a 6?
- Table 13 - The big game winter range appears to be incorrect in comparing Lucky Peak and Arrowrock. Arrowrock appears to be calculated using total acres and Lucky Peak is measured in incremental acres.
- Table 13 – Arrowrock Dam – "Acres Total" - There appears to be a math error affecting totals
- Archaeological analysis is it a resource management effect or a social effect instead?
- Analysis should consider all big game habitat as opposed to winter range only. What about migration corridors range during other seasons?

Resource Management

- Table 15 - Length of free flowing river that would be impounded should be closer to 25 miles not .25 miles

Scoring/Ranking/Weights

- Use of an ordinal ranking method is flawed for this type of application
- Use decisive factors as well in the ranking method, sometimes one issue is enough to make the whole alternative a no, not just a low score.
- How tie scores are handled needs to be reevaluated and consistent.
- Section 5.3.1 and Table 5 – The tables mix benefits and cost instead of comparing them.
- Resource Management and Environmental Effects categories should be weighed a 1; Hydropower Potential should be rated lower (0.2).
- Avoiding environmental effects and cost to tax payers in Boise County is more important to Boise County residents than reducing flood risk and providing water storage for Treasure Valley.

Other

- Table 4 – The table should include impacts to Idaho Scenic Highways.
- Effects to the Payette Basin are not properly identified for water transfer alternatives
- Show benefits of using an existing dam by showing that a new portion of a free flowing river will not be dammed.
- Screening criteria does not consider mitigation requirements.
- Legal criteria should be a category that includes ESA and State Protected Rivers
- Use current GIS data, not just what is readily available.

- Section 1.1 needs to be clearer on what the reports purpose is and separates it from the larger study purposes.
- Explain rational for criteria weighting.
- Create a map showing which homes at Dunnigan would be flooded by a new dam
- The risk associated with Lucky Peak, as defined in Section 3.2.1, need to be resolved now and not after additional dam studies
- Geology of Dunnigan includes soils subject to slump type landslides which would have serious impacts to the possibility of a dam
- Social effects, environmental effects, ESA-listed species, big game winter range, and resource management conflicts have not been given their full value in the screening process.
- Include Luck Peak Dam raise as a 4th alternative; it scores best regarding social and environmental impacts +
- Raise the existing 3 large dams on the Boise River
- A new off stream dam site should be evaluated located west of the divide between the South Fork of the Boise River and the drainages to the west. (See comment 53 for more explanation)
- A new off stream dam site should be evaluated located in the canyon between Rabbit Creek and the mouth of the North Fork
- Eliminate Dunnigan Creek from Study
- Build Dunnigan, it appears to be the most bang for the buck
- Raise Anderson Ranch Dam
- Table 16 shows reason to eliminate discussion of any dams above Arrowrock.

FLOOD RISK ISSUES

- Why provide a dam for flood risk, that requires an interbasin transfer to fill it; this is a water supply issue, not flood risk
- Don't make others pay for developers and local governments who built in and allowed the floodplain to be developed
- Pumping additional water from the Payette basin into the Boise basin increases flood risk.
- Explain that flooding is not the result of too much water or not enough storage, but as a result of people building in areas that put them at risk.
- Existing dams have allowed for the development of the floodplain; a new dam would promote further development of the floodplain
- Impacts of climate change may change the way we handle flood risk, i.e., warmer and wetter winters.
- There are no flood risks.
- The existing system is adequate and a new dam is not necessary.
- Inflated risk of flood is being presented to the public
- How do we address/prevent people from building even closer to the water after higher protection is provided?

WATER SUPPLY ISSUES

- Is there really a need for more water if we use conservation measures?
- How does a new dam provide additional water? In most years there is not enough water to fill the current reservoirs.

- IDWR and board must take the lead in water conservation. This should be the real topic of discussion at this time. Dams may be necessary in the long run but conservation can be implemented now.
- Future water supply study may be misleading because of false assumptions of increased water use in the future. (How do we address uncertainty on this issue?) (what if conservation and efficiency measures become part of the water supply equation).

ENVIRONMENTAL ISSUES

- A new dam will hinder elk and deer migration.
- A new dam would be a death sentence to bull trout and redband trout
- Dunnigan Creek would eliminate kokanee run in Mores Creek
- Kokanee are a landlocked salmon that does not need to migrate.
- Bear are feeding on the kokanee up Mores Creek
- What are the impacts to water quality of dam construction?

SOCIAL AND ECONOMIC ISSUES

- Why do people in East Boise County have to pay for the mistakes and carelessness of those in the lower basin?
- Population growth trends will not increase as they have historically.
- Why do people in East Boise County have to pay for the mistakes and carelessness of those in the lower basin?
- New highways will need to be constructed to mitigate for alternatives resulting in increased travel time and distances.
- Protect existing recreation resources of the Boise River
- The visual impacts of the waste lands (exposed banks during drawdown periods) of a dam need to be included in the social cost.
- An economic study needs to be completed first to determine economic values of achieving the goals and compare to investment of the nation's money.
- The study's dam proposal is impacting property values, even without the presence of a constructed project
- There will be economic impacts on the recreation and tourism industry.
- A dam will impact Boise County taxes and loss of property tax values (including impacts to schools that may have to be shut down).
- Idaho City businesses will be impacted if State Highway 21 is re-routed
- Explain where the monetary compensation might come from for homeowners, business owners, and counties
- What is the average cost per property that is required to carry federal flood insurance for each alternative
- The cost of this study should be borne by those who will profit from a new dam, i.e. irrigators and people that use lots of water, and those who live in the floodplain.
- How can the public be confident that the economic value of flood damages is accurate?
- Good to do it now during the economic hard times, help stimulate Idaho.
- What are the economic effects of doing this study?
- How do we address declining budgets and not being able to maintain what we have already constructed?

STUDY / PLANNING PROCESS

- Single focus on dams is an incorrect method for a planning study. Other water supply options should be considered
- Stop looking at dams and look at the other alternatives first
- Study is not following the Principles and Guidelines or Corps planning guidance.
- Provide documents prior to meetings to allow public to review and prepare applicable comments
- Allow time for more comments during public meetings
- Explain who makes the ultimate decision
- Explain the role and weight of the legal criteria to the study decision
- Explain why water storage was the first alternative studied, and why no other alternatives were analyzed
- More consultation with other agencies should occur in this phase and is necessary from the beginning in future phases.
- Do not spend taxpayer money to study something that could be fixed by wise water use
- Need to evaluate existing siltation and bed loading at proposed sites to identify long term success of projects.
- Explain how comments (negative comments) are received and the weight these comments will have on the study.
- The study should include an evaluation of the effects any alternatives would have to aquifers.

ANALYSES NEEDED

- How will dams affect hydropower?
- Look at historic climate trends to determine if using historical data is a good basis for decision.
- Include an analysis of downstream impacts including the effects of decreased flows, decreased channel capacity, and increased population density in the floodplain
- Address impacts of new dams on the current operations of the existing dams and facilities.
- Include a look at advancing the art of operational strategies
- Address the risk of dams, i.e. dam failure, seismic risk, and terrorist attack.
- Analyze Payette River water rights before and after diversion.
- How would new storage dams affect movement of aquatic invasive species?
- Impacts to Mores Creek kokanee run.
- What is the carrying capacity of Grimes Creek?
- Identify actual future water demands/requirements
- Study sediment transport.
- The study needs to consider flood risk of tributaries downstream of Lucky Peak Dam.
- Population growth trends will not increase as they have historically. The study should address multiple population growth scenarios when evaluating water demands and other social effects
- New highways will need to be constructed to mitigate for alternatives. Analysis should show increased travel time and distances.
- Evaluate the economic impacts a dam would have on the recreation industry, including fishing boat sales, repairs, manufacturing, fishing shops, and fishing outfitters

- Evaluate the economic effects to changes in tourism
- Show impacts of a project on Boise County taxes, and loss of property tax values (including impacts to schools that may have to be shut down)
- Need to address changes in property values as a result of feasibility study.
- Need to evaluate existing siltation and bed loading at proposed sites to identify long term success of projects.

OTHER

- Leave the Boise River the way it is, there is not a problem.
- Opposes construction of a dam.
- The existing system is adequate for flood risk and storage
- Do not allow the negative comments of environmentalists control the agenda for the larger public
- Dams are important for life protecting uses such as electricity and irrigation

SUMMARY OF RESPONSES TO QUESTION 3. SCREENING CRITERIA RANKING

The following table summarizes the responses to Question 3 which asked the respondents to rank the seven criteria in order from 1 to 7, 1 being the most important and 7 being the least important. The purpose of this question was to assist the Corps and IDWR in establishing the weights these criteria have in the screening matrix used to evaluate alternative storage locations.

Screening Criteria	1 = Most Important, 7 = Least Important																																								Ave.
Flood Risk	2	2	2	6	7	6	5	6	5	1	6	6	6	5	5	5	5	7	1	3	4	7	7	4	6	7	5	7		7	5	1	7	8	6	4		7		4	5.05
Water Demand	1	1	1	3	1	7	6	7	6	7	5	7	2	4	6	7	1	7	2	1	3	6	6	5	5	6	4	6		3	7	2	6	7	5	7		7		5	4.65
Cost	7	4	6	7	4	5	4	5	8	5	7	5	1	7	4	4	7	1	7	2	1	3	5	7	2		6	5	4	2	4	3	2	5	2	3	1	1	4	3	4.18
Hydropower	3	3	3	4	2	8	7	8	7	6	3	4	5	3	7	6	3	7	4	4	5	5	4	1	3		7			6	8	4	5	6	7	6		7	5	6	5.06
Social Effects	5	6	5	1	3	4	3	4	4	2	4	3	7	6	2	3	4	1	6	6	6	2	2	6	4	2	1	4	2	1	3	5	1	4	1	5	1	1	1	1	3.24
Environmental Effects	4	7	4	2	6	2	1	2	2	3	1	1	3	2	1	1	2	1	3	5	2	1	1	3	1	1		1	1	4	6	7	3	2	3	1	1	1	2	2	2.48
Resource Conflicts	6	5	7	5	5	3	2	3	3	4	2	2	3	1	3	2	6	1	5	7	7	4	3	2	7			2	3	5	9	6	4	3	4	2	1	1	6	7	3.92

Social Effects, Environmental Effects, and Resource Conflicts were the top three most important issues identified by those that responded to this question and Hydropower was considered to be the least important.

Attachment A

SUMMARY OF QUESTIONS, COMMENTS, AND CONCERNS VERBALLY PRESENTED DURING THE PUBLIC INFORMATION MEETINGS

Caldwell, Idaho

- If you raise Arrowrock Dam, could the maximum amount of irrigation storage continue during construction, or would the pool level have to be lowered?
- For the Arrowrock concept, would flood control and irrigation share benefits, or would one be emphasized over the other?
- Lucky Peak was touted as flood control when built, but turned into a storage dam for irrigation. The priority always turns into a storage dam at the expense of flood control. Would the priority shift to storage instead of flood control for a new dam?
- What is the timeframe for building another dam?
- Water users have contracts with the Federal government to obtain water from the current system. They probably don't want to open up those contracts to scrutiny.
- Has the Corps considered removing sediment behind the existing dams which reduces the capacity of those reservoirs. Arrowrock has lost some storage because of sediment buildup.
- The North and Middle Forks of the Boise River are the only two wooded ecosystems. They are unique. How do you put a price on those values? Those are values that can't be replaced. The study does not consider these aesthetic values.
- How was hydropower evaluated in the cost effective analysis?
- Would water from the Payette River be pumped rather than put through a tunnel?
- Flood insurance is subsidized by the Federal government. Was that considered when doing the cost estimates? Would lowering flood risk and the cost of flood insurance reduce the cost of the dam? Would it be considered in calculating the cost of a dam?

Boise, Idaho

- There is lack of equal status given to the alternatives. The study only looks at dams. It should look at off-system storage, flood plain management, purchasing of conservation easements. Why is nothing mentioned for ecosystem restoration? There is no discussion of impacts of powerline construction. Dams won't accommodate the snowpack.
- History is repeating itself. In 1972, an advisory group recommended no more building in the floodplain but levees allowed floodplain development. The dams are a lose – lose situation. A dam destroys riparian habitat where it is built. The dam promotes people building downstream and destroying more riparian habitat. Don't build more dams. Look at conservation and better floodplain management as options.
- Endangered Species Act (ESA), Wild and Scenic Rivers, and State Protected Rivers were downplayed in the screening analysis. They should have more

weight. How does the Corps plan to measure what is lost if new dams are built on the Boise River? It is hard to put a price tag on recreation, hunting, and fishing.

- Keep having public meetings in Boise. Encourage the Corps to help with flood risk management. Federal Emergency Management Agency floodplain maps are misleading. We need to show the real flood risk.
- Mitigation for construction of Black Canyon Dam has not occurred yet and it's been 80+ years. Will the Corps do better with mitigation for this dam? (Will the mitigation plan for Black Canyon be updated?)
- What other studies are being done on population trends and future water use? What are the future plans? We need a decision tree? What comes next? Will there be a special study for just one thing or another (population, conservation)?
- It is a lose-lose situation if we build a dam. There will be loss of bull trout, riparian habitat, etc. How many more dams are needed to make people feel safe to develop in the floodplain?
- This part of the study seems to focus on dams. Is it because IDWR gave the Corps money? Will the Corps look at alternatives other than dams only if someone gives the Corps money?
- Where in the Principles and Guidelines does it provide for an interim feasibility study? Doesn't it require decisions on a full range of alternatives? Will IDWR make decisions based on an incomplete study?

<u>Eagle, Idaho</u>

- Can you speak to aquifer injection? How well is it working? Could injection wells be used in the Boise area, too?
- The study needs to address the chance/impact of seismic activity on dams and flooding. If we get seismic activity when Lucky Peak Reservoir is full in the spring, the dam could fail. Has the Corps done a cost-benefit ratio evaluation on the top three dams or preferred alternative?
- It's very expensive to build dams compared to the dollars of damage caused by flooding. It doesn't look like the cost to construct is worth the damage prevented. If there is a flood, who pays for it now?
- Building a dam benefits the developers and those living in the floodplain, but the taxpayers pay for it.
- We could preclude the need to build dams by changing our water usage and conserving. A dam creates a blockage and changes the natural hydrologic regime every year, not just a flood year. Could we divert floodwater via a pipe instead of a dam?
- Conservation is not considered in the water model. If conservation were practiced, would that change water demand and the need for a dam or the size of facility required?
- The study should consider recreation development in the floodplain and keep floodplains from being developed. How many dams are needed on the Boise River? Look at the cost:benefit ratio to acquire land in the floodplain instead of building dams. Building dams leads to more dams to protect structures in the floodplain.
- Is the Corps partnering with the University of Idaho? Did the Corps pursue or promote this study?
- Why doesn't the Corps clean out the river channels instead of building dams? People should not be allowed to build in the floodplain.

- How much does the available water supply promote population growth?
- Did the Corps get information from IDWR, or did it talk to other agencies too?
- Given bull trout and Endangered Species Act requirements, could the U.S. Fish and Wildlife Service require the dams be removed after it was built?
- Will information developed during the Interim Feasibility Study be used in other study efforts? Will the Corps have sufficient money and partnerships to complete a comprehensive study? Will the Corps take shortcuts and pursue dam construction without looking at other alternatives?
- The weighted scores are useful, but imperfect. Why look at the top 3 dams instead of looking at the top 4?
- Does the Corps have benchmarks of capacity (storage) vs. annual flow?

Idaho City, Idaho

- Can the Dunnigan Creek site be taken off the list now so it is gone for good?
- Check the ranking numbers for social effects – Table 5 of the handout. The slide may have the wrong ranking.
- How many representatives on the Treasure Valley Comprehensive Aquifer Management Plan (CAMP) advisory board are from the counties other than Boise County?
- The number of houses and families that would be affected by the Dunnigan Creek site should be included in screening analysis instead of structures.
- Boise County should not have impacts to land and homes to benefit houses built in the floodplain in Boise. A new dam would affect fish, wildlife, and residents of Boise County to protect people in Boise who built in the floodplain. Examine appropriate management in the floodplain, i.e., we should not build expensive houses in the floodplain. The existing houses in floodplain should be converted to recreation sites. Boise should not be allowed to grow any more. We need to consider options other than dams and shouldn't build in floodplain.
- If new dams are built at Arrowrock and Lucky Peak sites, how far upstream would water backup even if the Dunnigan site were not built?
- If another dam is added to the system and there is an earthquake, what is the contingency plan for where the water would go if the dams break.
- What other alternatives besides storage dams will be considered?
- When will the final ranking of dams occur? Will the public be notified of the three sites that will be selected for further analysis?
- Where in the handout is the summary table of alternatives and final site ranks located?
- If we don't use the extra water in the basin, who will? How many thousands of houses could be supplied by a new reservoir? My house is located at Highway 21 mile marker 33. If the Dunnigan Creek site were built, would it flood my house?
- The Corps made the wrong presentation at Idaho City. Why should a dam be considered on a drainage that won't fill itself (requires interbasin transfer to fill)? Why does Idaho City have to fix Boise's problem?
- Did the Corps include the socio-economic effects that would occur on the South Fork Payette when evaluating the Dunnigan site?
- If Dunnigan is not in the top 3, will the Corps continue to study it?
- How did Dunnigan Creek get a 7 – highest value – for recreation sites?

- An interbasin transfer is ludicrous. There is 1 million acre-feet that leaves the Boise drainage, so why transfer water from the Payette River basin? Why pump water 1,000 feet? The Payette folks are very protective of water in their basin.
- People in Canyon County need to consider a dam at Canyon Hill to get the people out of the floodplain.
- Are impacts based on reservoir footprint? There are more structural effects that occur outside of the reservoir footprint, for example impacts associated with relocating the highway.
- The road to Arrowrock Dam is a pain to maintain. It is not difficult to build a dam at Dunnigan Creek or Lucky Peak because of better road access. Big government would go for the easier alternative – the ones with better roads and easier access.
- What was the Governor's response to this proposal? Does he have influence on this study and the decision? Should the public write to the Governor?
- How does the projected future water supply demand of 125,000 acre-feet break down by use, i.e., drinking water, irrigation, industrial, etc.?
- Local governments won't allow development unless water is found in the basin. People who want to develop in the valley should pay for a new storage dam.
- Will the value of property (structures) affected by Dunnigan be in the August 2010 final report? County assessed values can be used.
- How do we ensure that water rights and storage remain in Idaho and don't go to California or Washington?
- What happens to water rights associated with inundated properties – will owners be paid for them?
- The screening analysis should show how many residences are impacted by the reservoir.
- Has an economic impact study been done for Boise County for this project? How would the county be compensated? An economic impact analysis should be completed during the first study phase, not in a later phase.
- Is the Corps looking at dredging the existing reservoirs to remove sediment to create more storage space?
- Boise County should have more than two representatives on the Treasure Valley CAMP advisory committee.
- Study documents should clarify that solutions may occur outside of the study area shown on the map in the handout.

Attachment B

SUMMARY OF WRITTEN COMMENTS SUBMITTED DURING PUBLIC MEETINGS

(Comments are presented below verbatim as submitted.)

Question 1: What specific water resource problems and issues should the Lower Boise River Feasibility Study address?

Boise, ID

- Idaho Transportation Department is not listed in the Stakeholders. Robie Creek to Idaho City 17-mile stretch of highway is being paved beginning mid-August and estimated completion October 2010, If Dunnigan Creek Dam is selected as an "area of opportunity," newly repaired highway and bridges will be destroyed.
- Water conservation blend with mandates from state levels
- Valley Water Quality is problematic.
- Existing inefficiencies of ag irrigation use and implications on other water users & beneficial use. This study is focused upon dam building, despite the fact that alternatives will be considered. However, storage is your focus—right!

Eagle, ID

- I. Aquatic ecosystem
  II. Restoring riparian systems
  III. Hazardous areas (public risk)
  IV. Future water supply
- The devastation caused by dams
- Water quality in the lower Boise River
- Improve irrigation methods w/ the use of high tech. digital water control
- Who is responsible for evaluating funding alternatives that will not cost people who don't live in the floodplain and do not abuse water use? (do not draw lg. quantities of water)
- What flooding risk are you referring to?
- Why was one of the items called out as "of considerable interest" for the study not impact on wildlife health & migration?
- What are the risks to Boise River water quality that would be caused by dam construction?

Idaho City, ID

- Future water needs
- None. The Treasure Valley created the problem, let them solve it.
- Limit growth in Treasure Valley—limit growth in floodplains No development that needs H_2O
- There is no need to appropriate water from the Payette River when there is Runoff in excess of storage in the Boise Basin.

Question 2: What potential solutions and alternatives should be considered in the Lower Boise River Feasibility Study to address water resource problems and issues in the Lower Boise River Basin?

Boise, ID

- How will highway 21 be diverted between the Mores Creek Bridge and Idaho City? What will be the impact on wildlife and private & public lands in order to construct an approximately 17-mile stretch of highway? What will be the economic impact on commerce in Idaho City while highway construction would be underway?
- Personal holding ponds for personal irrigation
- Planned communities with conservation for water use
- *Demand/Response & Conservation for (1) Irrigators (2) residential & C/I
- Assess from conservation pricing standpoint
- Land Use Planning—New development strong controls/restrictions

Eagle, ID

- Implementation of state of the art engineering & technology in conjunction with serious cost-benefit analysis!
- Dredging existing reservoirs (not just sediment—dig, dig, dig) – Idaho City & Placerville will take the dirt!
    - Injection
    - Diversion
    - Conservation
    - Everything else first
- Raise the 3 large dams currently on the river
- Aquifer storage should be addressed.
- Water conservation (gray water)
- What is cost & ability to clean existing river channels to carry floodwater?
- What is feasibility of cleaning silt from existing dams?
- What does Corps do to measure & remove sitting behind existing dams?
- Can dam design mitigate this in future?
- Please explore costs v effectiveness of aquifer recharge & injection for expansion of storage & mitigation of flood
- It seems to me that we could learn a lot from the success of water reduction efforts in other cities (Seattle, eg.) as evidenced by the huge differential in our water use in winter vs. summer
- For each alternative, we should know the average cost per property that is required to carry federal flood insurance, and options should be explored to require all costs of reduced flood risk to be borne by those properties
- Who is responsible for studying and promoting the non-dam options related to water security? Some org must be indentified to do that. Is it CAMP? The provide opportunity for input.
- Why not include four alternatives (Lucky Pk Dam Raise)? It's only 5% different from #3, and is comparatively low in environmental effects.
- Leave it the way it is—is not a problem.

Idaho City, ID

- Limit/stop development in high risk areas—along the river!
- None
- Limit growth in the Treasure Valley—no growth or development in flood plain No new development that requires H_2O
- Levees
- Channels
- Injection
- New 'Lake Levels"
- Don't spend taxpayer $ to study where to get more supply—live within your means waterwise
- Emphasis should be on addressing water use efficiency through zoning and building code. I.E. Conservation Likewise, mitigate flood risk though zoning enforcement and building code i.e. land use planning
- Impact on families and people

Question 3: The Corps in partnership with the Idaho Water Resources Board is currently evaluating surface water storage as one potential strategy to reduce flood risk and meet future water demand. Seven criteria were considered to compare and rank seven water storage concepts. Please rank the seven criteria in level of importance to you from 1 to 7 (1 being most important, 7 the lease important). Also include any other criteria or information that you believe should be considered when ranking water storage concepts.

Caldwell, ID

Criteria Category	Rank		
Ability to reduce flood risk	2	2	2
Ability to meet future water demand	1	1	1
Relative cost index	7	4	6
Hydropower potential	3	3	3
Avoiding negative social effects	5	6	5
Avoiding negative environmental effects	4	7	4
Avoiding negative resource management conflicts	6	5	7
Other:			

Boise, ID

Criteria Category	Rank							
Ability to reduce flood risk	6	7	6	5	6	5		1
Ability to meet future water demand	3	1	7	6	7	6		7
Relative cost index	7	4	5	4	5	8		5
Hydropower potential	4	2	8	7	8	7		6
Avoiding negative social effects	1	3	4	3	4	4		2
Avoiding negative environmental effects	2	6	2	1	2	2	3 √	3
Avoiding negative resource management conflicts	5	5	3	2	3	3	2 √	4
Other: *(See below)*			1		1	1	1√√√	

Other:

- State highway construction
- Highway impact on public private lands
- Conservation use in planned communities Increased emphasis on D.R. & Conservation via pricing incentives/disincentives as main strategy
- Previous plan results ignored (Teton)
- The question is—<u>is</u> there a <u>need</u>? We probably <u>won't</u> need more water, (we could avoid needing it)
- No more dams on Boise R.

Eagle, ID

Criteria Category	Rank						
Ability to reduce flood risk	6		6	6	5	5	5
Ability to meet future water demand	5		7	2	4	6	7
Relative cost index	7		5	1	7	4	4
Hydropower potential	3		4	5	3	7	6
Avoiding negative social effects	4	1	3	7	6	2	3
Avoiding negative environmental effects	1		1	3	2	1	1
Avoiding negative resource management conflicts	2		2	3	1	3	2
Other: *(See below)*							

Other:

- Effect on bull trout migration
- Removal of river fisheries by Impoundment

Idaho City, ID

Criteria Category		Rank	
Ability to reduce flood risk	5	6	7
Ability to meet future water demand	1	5	7
Relative cost index	7	7	1
Hydropower potential	3	3	7
Avoiding negative social effects	4	4	1
Avoiding negative environmental effects	2	1	1
Avoiding negative resource management conflicts	6	2	1
Other: *(See below)*			

Other:

- Recreation
- This must look at families and people not ‘structures’! Include highway relocation impact.
- Social effects need to focus on people
- The road to Idaho City would have to be much longer. Impact?

OTHER COMMENTS

Boise, Idaho

- US Geological Survey has a map that shows fault lines and landslide risks near mile marker 24 on Highway 21. How would an earthquake impact flood control if Arrowrock and Dunnigan Creek (Mores Creek) dams were compromised?

- See attached letter on Patented Mining Claims & water conservation measures in Valley.

Location of Presentation/Notice: Boise City
Subject: Water Storage Screening Analysts of the Lower Boise River Interim Feasibility Study

Comments/Questions

On Page 37, Table 15 (15-criteria) Second-Level Screening Matrix – Resource Management Conflicts: At the bottom there is a reference to a; "Note: Information regarding patented mining claims was being compiled with Boise County at the time of this report was compiled."

I would like to point out the 'patented mining claims' should not be the only consideration. The current patent moratorium (that is now in place) was originally stated to be for only 3 years, yet it has been in place since September 1994. There are reputable claims held by families, corporations and individuals with clout and tenure that have been waiting to file their land patent claim. Hence, using only patented claims is a large shortcoming in your evaluation.

I would also like to address IDWR regarding conservation:

Since the City's & County's are responsible for "local land use development codes and permits; What are your plans (besides education and encouragement) to bring in water use relocation and flood management mandates?

- Dunnigan Creek is missing recreational facilities camping, motocross, snowmobile trails, gold dredging, and hiking trails.
- Note Table 13-Arrowrock Dam-acres total appears to be a math error effecting scores.
- I had asked for a decision tree for the regulation process—who/what/when/where & did not receive a response when this would be provided.
- You mention policy review, legal review, appreciation of "policy and guidelines", It would be helpful where all this fit in.
- $ damage from 100 yr flood = 11 homes in Eagle
- The big one will overwhelm the system, regardless, so forget about trying to "beat" it, & concentrate on moving structures out of the flood plain,
- The free running Boise River above Arrowrock and More's Creek are my primary recreation areas as they are for thousands of other Boise residents. Any one of the dams proposed would totally destroy access and the character of the rivers. Although I am not a professional, I can tell from what I hook that the work on ArrowRock Dam just about eliminated the bull trout from the Boise River and I would guess that building a new dam would be a total death sentence for the species in that river. The red band trout also. Though I am not a hunter, thousands use those areas as their hunting grounds and I feel sure that the proposed dams would greatly hinder the migration of elk and deer as well as greatly damaging access to the hunting grounds. More's Creek has developed a

most excellent run of kokanee in the last few years and you would eliminate that if you mess with that river.|

I don not understand how adding another dam would increase the amount of water. In water short years there isn't enough water to fill the existing reservoirs. I would guess that in most years a new reservoir would just be ghastly mudflats like Anderson Ranch already is most of the year. If you tried to carry water over you would lose any pretensions to flood control.

The flood control aspect is particularly irksome. The developers and the city of Eagle which permitted the building on the Eagle food plain were obviously acting corruptly, viewing only the large amounts of money they would both get. They knew that area was floodplain and that it had flooded as recently as 1997. They got their money. The developers no doubt millions, the city of Eagle gets lots of tax money, but I am sure puts none of it aside for the benefit of the flood victims to come. So they expect to pass the cost on to the state taxpayers by declaring a disaster area. Now they want the public at large to expend even more money on their behalf by having a multi million dollar dam built, as well as depriving us of our greatest recreation areas. And there is this totally out of date implication that natural areas have very little value where as McMansions built in known flood plains have a lot. Let them live with the security of the flood insurance which the rest of us already have to underwrite. Look into other alternatives to diminish flood risk- rebuilt bridges or modify the canals to dump excess into the Snake River. Don't mess with the free running rivers.

Basic outline for Salmon Fishermen Abusers

Fishing catch and release policy is wrong. They are fish predators instead of environmental enthusiasts. Thirty to fifty percent of the fish they release die from their mistreatments.

Salmon abuse also shows with the many, many salmon eggs that are for sale on the shelf to be used as bait. Think of how many salmon they would have added to the streams if allowed to live.

The demand of cutting the top fin off hatchery minnows to tell the difference in them and the natural spawned is a crock. This is the only way to tell the difference between hatchery and natural fish are just whether the fan is cut off.

Dams need to be left as they are, because of the important survivable of the humans. We come first! These dams are used for important life protecting uses; such as electricity and irrigation for the total northwest of the United States. The dams engaged in this system raises the potatoes, the bread and other foods that you eat with that Salmon meal you eat.

A local TV station received an award complaining that the dams kept the Kokanee me from being able to get upstream. Kokanee are merely a landlocked salmon and not a migrant to the ocean.

Actually salmon and steelhead fish returning from the ocean fish are added to the Boise River and in many other places above the dams, so even the poor

who cannot afford expensive vacation trips can fish for them and returns the salmon run to the Boise River and just as other places they are returned by alternate means.

Fish ladders should be remodeled for a longer more easy way for this salmon to reach up the dams. Many salmon are caught below the first dam and hauled up above the dams to above Lewiston Idaho. In this way this gives salmon the root of their normal natural run up to red fish lake. The sea fishing of salmon with the bad nets should be eliminated and prosecuted if they are used.

Sea lion's should be eliminated and returned to their normal habitat instead of at Portland where they gobble more salmon hourly than most of us eat in a year.

Indians abuse their rights to fish. Indians need to say that they will abide by the rules of all US Citizens. The U. S. Constitution outlaws interest groups. They are not a sovereign nation that they still want to claim anymore. They lost these rights when their fathers and older leading grandfathers who signed the treaty's allowed them to mingle and mix Indians are merely citizens of the United States now. We do need to help them to become better self supporting citizens.

Idaho City, ID

- Floods are inevitable acts of God—you can't always control.
- Focus on water needs in the future.
- If people chose to develop & live in an area prone to flood—that's their choice.
- If Dunnigan Creek is off the list than eliminate it!!!
- This is a stupid idea to give the yuppies in the Treasure Valley resources to fight a problem they knew about before approving development. Don't wish to enrich Gov't, land developers, and other pirates at the expense of US.