

RECLAMATION

Managing Water in the West

Henry's Fork Basin Study Workgroup Meeting 1/11/2011

In Cooperation with:
Idaho Water Resource Board



and



U.S. Department of the Interior
Bureau of Reclamation

Henry's Fork Watershed Council

Recap

1. Core Group
2. Three meetings - “reconnaissance” level analysis
3. Reconnaissance analysis complete August/September
4. Final study report – December 2012

Agenda – Overall

1. Needs Assessment
2. Revised Screening Criteria
3. Water Storage Presentation **
4. Group Discussion

Agenda - Surface Water Storage

1. Review Criteria
2. Present Surface Water Storage Opportunities
3. Apply Criteria
4. Group Input & Feedback
5. Discuss Other Opportunities

Screening Criteria – Available Information

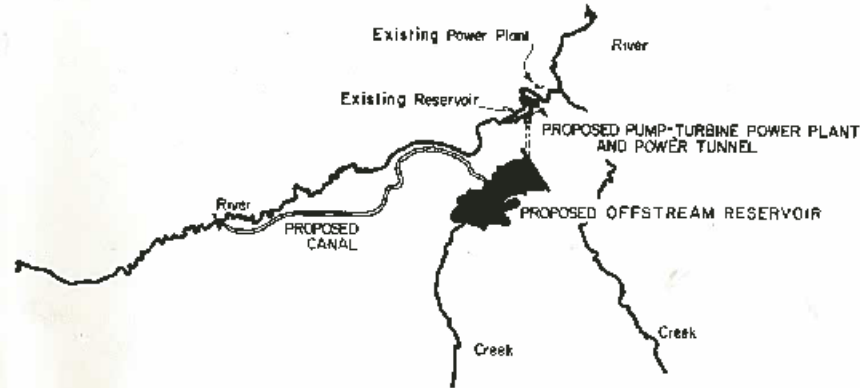
1. Water Supply – *Water availability, storage capacity*
2. Water Rights – *Not Yet Evaluated*
3. Natural Environment – *Impact to cold water fisheries, impact to potential wild and scenic*
4. Socioeconomic Environment – *Cost, hydroelectric potential, physical impacts*

233-052

Hampton

6-07-2

**A PRELIMINARY APPRAISAL OF
OFFSTREAM RESERVOIR SITES FOR
MEETING WATER STORAGE REQUIREMENTS
IN THE UPPER SNAKE RIVER BASIN**



**Idaho Water And Energy Resources
Research Institute**

For :



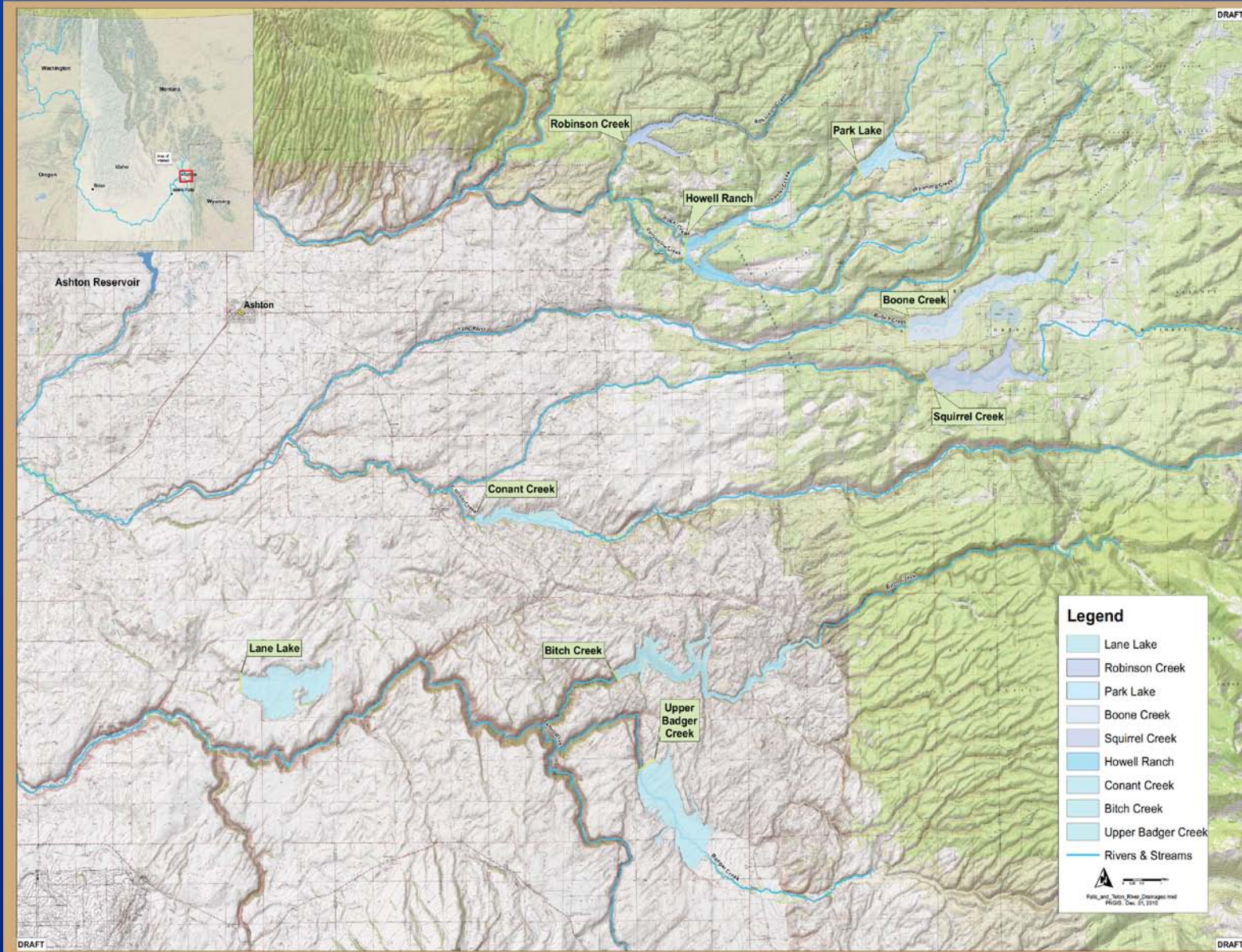
U.S. Army Corps
of Engineers
Walla Walla District

U.S. ARMY ENGINEER DISTRICT, WALLA WALLA

FEBRUARY 1981

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Falls River and Teton River Drainages



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IWWRI 1981 Report

<i>Name</i>	<i>Ac-Ft</i>	<i>Wat. Avail</i>	<i>Econ.</i>	<i>Impacts</i>
Lane Lake	69,000	A	B	B
Bitch Creek	142,000	A	B	C
Lower Badger Creek	73,000	A	C	A
Upper Badger Creek	49,000	A	B	B
Conant Creek	40,000	A	C	C
Squirrel Creek	126,000	A	C	B
Boone Creek	83,000	A	C	X
Robinson Creek	70,000	B	C	C
Howell Ranch	32,000	B	B	B
J Y Ranch	49,000	B	C	X
Park Lake	37,000	B	C	X

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Other Storage Opportunities

Name	Comments
Teton Dam	200,000 ac-ft active capacity Cost Indexing from 1991 Reappraisal ► 2010 Est. @ \$550 million
Raise Island Park Reservoir	Need group input
Raise Ashton Dam	Structure Under Modification – 1981 est. @ 29,000 ac-ft additional potential
Generic Reservoir In Flat Land	Estimated Storage Cost @ \$1,000 to \$3,000 per Ac-Ft

416 252-952

2520

TETON DAM REAPPRAISAL

WORKING DOCUMENT

Bureau of Reclamation
Boise, Idaho
February, 1991

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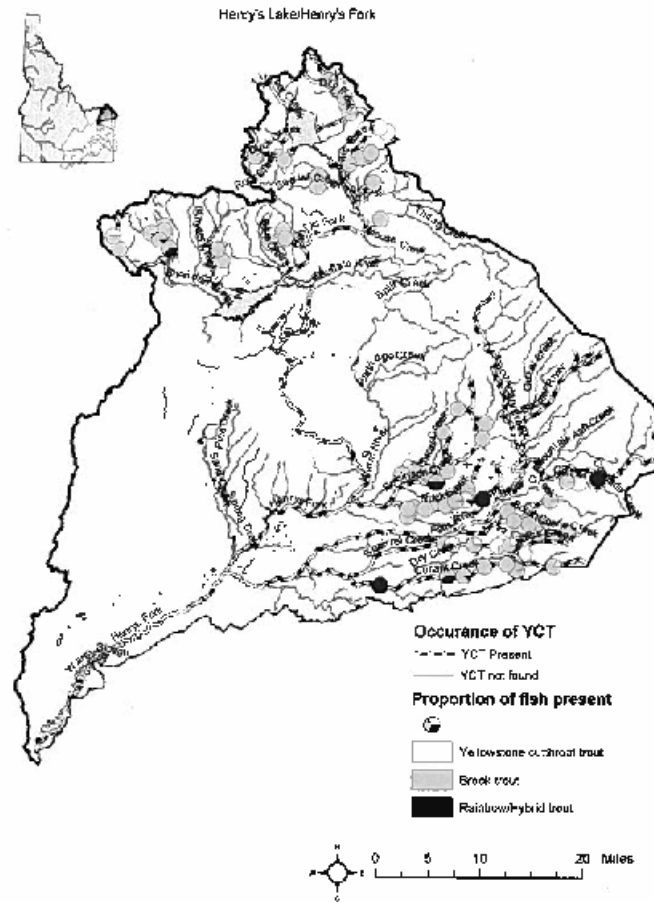
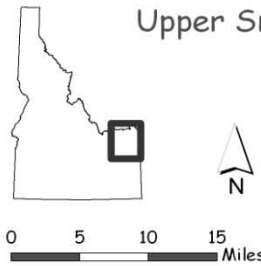
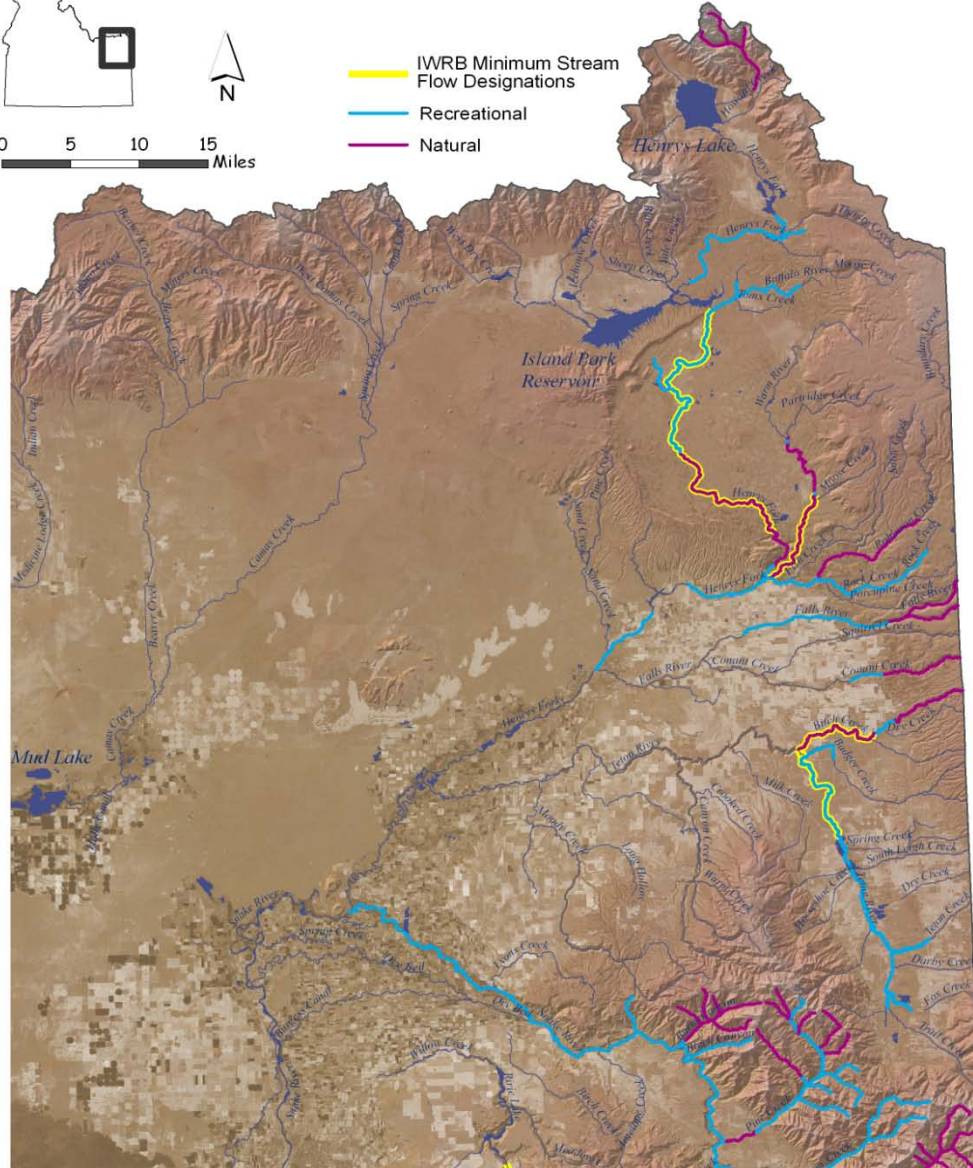


Figure 6. Henry's Fork Snake River and Henry's Lake GMUs. Streams that are currently thought to contain or lack YCT are labeled. Dots indicate survey sites from the Native Salmonid Assessment project and depict what species were present at the site in proportion to their abundance. Any brown trout captured were not included in these plots.

Upper Snake River Plain State Protected Rivers and Minimum Stream Flows



- IWRB Minimum Stream Flow Designations
- Recreational
- Natural

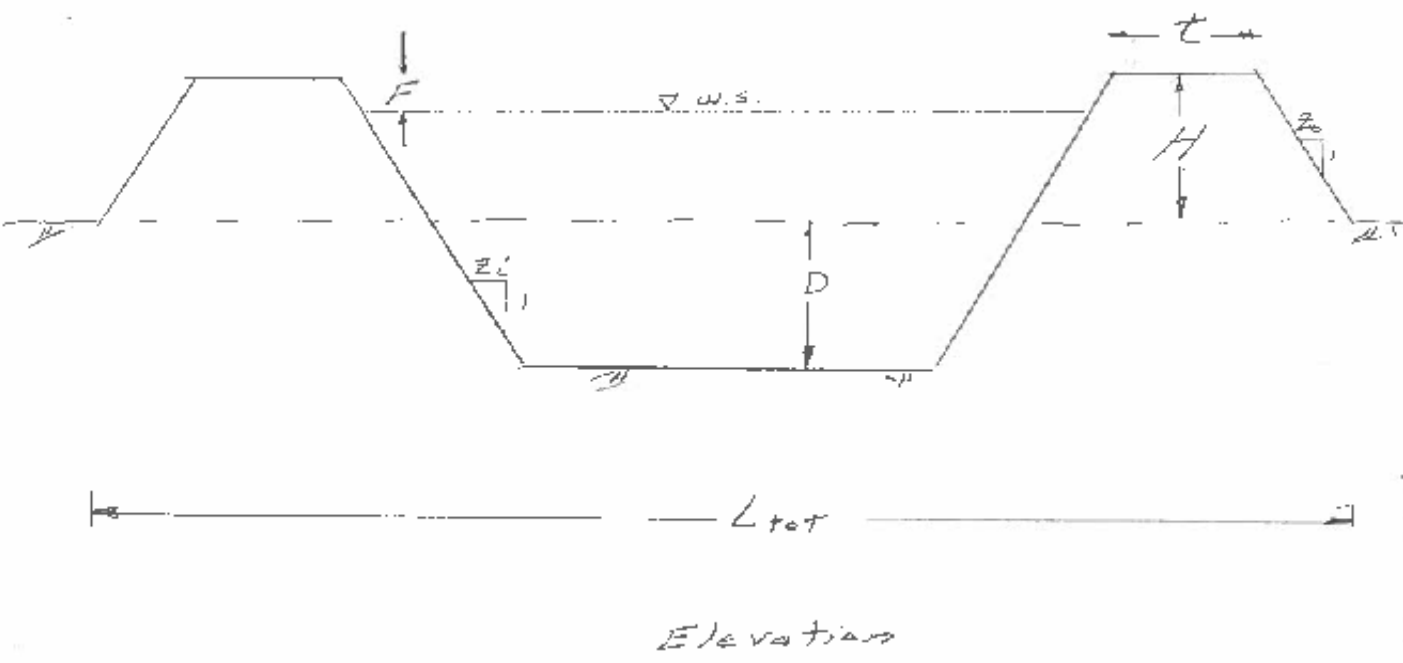


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1:1034 (11/94)
Board of Reclamation

COMPUTATION SHEET

BY <i>RS</i>	DATE <i>1/20/11</i>	PROJECT <i>Example</i>	SHEET ___ OF ___
CHKD BY	DATE	FEATURE	
DETAILS <i>Generic Flat Pond Design</i>			



Arthur V. Watkins Dam

West of Ogden
Utah

215,120 ac-ft
36 ft at max
dike

76,665 ft long
= 14.5 miles

Off stream –
Fed by canal



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Lane Lake Opportunity

Initial Analysis

<i>Name</i>	<i>Opportunity</i>	<i>Concerns</i>
Lane Lake	Water availability Off stream Hydroelectric potential Initial analysis shows low cost Location provides flexibility	Impact of water withdrawal Impact on land use Cost

High Watershed Opportunities Initial Analysis

<i>Name</i>	<i>Opportunity</i>	<i>Concerns</i>
<p>High Watershed Storage</p> <p>Howell Ranch, Park Lake, Boone Creek, Squirrel Creek</p>	<p>Water availability Located high in watershed provides greater flexibility</p> <p>Relatively lower impact to fish passage</p>	<p>Impact of water withdrawal Impact on land use Cost Impact on fish passage</p>

Generic Opportunity

Initial Analysis

<i>Name</i>	<i>Opportunity</i>	<i>Concerns</i>
Generic Reservoir in Flat Land	Flexible May be reasonable cost	No location specified yet Impact on land use Cost Impact of water withdrawal

Teton Dam Opportunity

Initial Analysis

<i>Name</i>	<i>Opportunity</i>	<i>Concerns</i>
Teton Dam	Water availability Large water storage Hydroelectric potential	Potential wild and scenic river Inundation of large amount of fish habitat High Cost History

Low Watershed Opportunities

Initial Analysis





























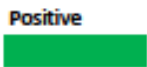

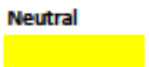
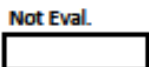
Name	Opportunity	Concerns
Low Watershed Storage Bitch Creek, Badger Creek, Conant Creek, Robinson Creek	Water availability	Some potential wild and scenic river Inundation of large amount of fish habitat Documented Yellowstone cutthroat trout

Dam Raise Opportunities

Initial Analysis

<i>Name</i>	<i>Opportunity</i>	<i>Concerns</i>
Raise Ashton Dam	Water availability Existing reservoir	Project currently underway, Impact to residents
Raise Island Park Reservoir	Water availability Existing reservoir	Likely high cost High impact to residents

Evaluation of Surface Water Storage

Opportunity / Project	<i>Water Supply</i>	<i>Natural Environment</i>	<i>Socioeconomic - Costs</i>	<i>Water Rights</i>
Lane Lake				
Generic Reservoir in Flat Land				
High Watershed Storage Howell Ranch, Park Lake, Boone Creek, Squirrel Creek				
Raise Ashton Dam				
Raise Island Park Reservoir				
Low Watershed Storage Bitch Creek, Badger Creek Conant Creek, Robinson Creek				
Teton Dam				
KEY →	 Positive	 Negative	 Neutral	 Not Eval.

Input & Feedback

Other Opportunities to Consider ?

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