AGENDA

IDAHO WATER RESOURCE BOARD

Work Session for Board Meeting No. 6-18
September 13, 2018
8:30 a.m.
City of Salmon
Conference Room
200 Main Street
SALMON

1. Roll Call
2. Flood Management Grants*
3. Columbia Basin Partnership
4. Upper Salmon Water Transactions Program
   a. History & Background
   b. Current Status & Outcomes
   c. Future Considerations

The Board will break for lunch at approximately 11:30 a.m.

12:15 p.m. – 5:00 p.m.: The Board will depart for a Field Trip of Lemhi River Basin.

Transportation will be provided for Board members, IDWR staff, and invited guests.

*Action Item: A vote of recommendation regarding this item may be made at this meeting. Identifying an item as an action item on the agenda does not require a vote to be taken on the item.

Americans with Disabilities

The meeting will be held in facilities that meet the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email nikki.regent@idwr.idaho.gov or by phone at (208) 287-4800.

MEMO

To: Idaho Water Resource Board
From: Brian Patton
Subject: Columbia Basin Partnership Task Force
Date: September 5, 2018

The Columbia Basin Partnership Task Force is a special task force organized by NOAA Fisheries. It will be making recommendations on common goals and helping to define a shared path to long-term salmon recovery. The Columbia Basin Partnership Task Force will recommend a shared vision for Columbia basin salmon and quantitative goals to meet conservation needs and provide harvest opportunities.

Jim Yost is Idaho's representative on the Columbia Basin Partnership Task Force. As you may know, Jim is one of Idaho's Governor-appointed representatives to the Northwest Power and Conservation Council, and he is currently Chairman of the Council. In addition, the Office of Species Conservation and the Idaho Water Users Association are part of the Columbia Basin Partnership.

The Idaho representatives on the Columbia Basin Partnership will provide the Water Board with a update on the Partnership, and its goals and objectives.

Northwest **Power** and **Conservation** Council

August 7, 2018

MEMORANDUM

TO: **Council Members**

FROM: **Nancy Leonard and Tony Grover**

SUBJECT: **Update on NOAA Columbia Basin Partnership Task Force Provisional products**

BACKGROUND:

Presenter: Katherine Cheney (NOAA), and Council members and staff engaged in the Task Force.

Summary: Columbia Basin Partnership (CBP) Task Force members have agreed in principle to a vision statement and provisional goals. These will be shared with Council members along with a brief update on the Task Force process to-date, current outreach effort, and next steps. The provisional qualitative and quantitative goals for the 24 stocks are included in Attachment 1 and are also available on the CBP Task Force Member Outreach Package Summer 2018 . Input received from council members will be shared with the CBP Task Force during the August and October CBP Task Force meetings.

Relevance: Contributes to the 2014 Fish and Wildlife Program task for refining natural origin adult salmon and steelhead abundance quantitative objectives.

Background: The NOAA Fisheries' Marine Fisheries Advisory Committee's (MAFAC) Columbia Basin Partnership (CBP) Task Force met on June 19-20, 2018 and reached agreement, in principle, on the provisional goals and vision statement, and other elements included in the CBP Task Force Member Outreach Package Summer 2018. A subset of the CBP Task Force members provided an update on the Task Force's

progress to the MAFAC committee meeting on June 27, 2019 in Portland Oregon. The next meeting for the CBP Task Force is scheduled for October 2-3, 2018 in Portland Oregon, with a tentative webinar scheduled for August 22, 2018 to check-in on the outreach progress made by CBP members with their constituents.

The input received from CBP Task Force members' constituents during the June-October 2018 outreach period will be discussed during the October 2-3, 2018 Task Force meeting and will inform recommendations submitted to the MAFAC in January 2019. By the end of the October meeting the CBP Task Force members will finalize what elements they support moving forward as part of their Recommendations Report to MAFAC. This Recommendation Report may include a description of the Task Force process, related work products, provisional goals, vision statement, and description of a Phase 2 process to continue the Task Force's work in integrating the goals across species and to begin analyzing how these goals can be achieved.

The Columbia Basin Partnership Task Force is a task force organized under NOAA Fisheries' Marine Fisheries Advisory Committee. The CBP task force consists of 28 members and 1 ex-officio representing states, tribes, and diverse stakeholder groups. The CBP is focused on developing goals for 24 stocks. These stocks represent groupings of the recognized 331 salmon and steelhead populations in the Columbia Basin, consisting of the 214 extant, 117 extirpated, and 22 reintroduced populations. 186 of the extant populations are ESA listed. The CBP workgroups, comprised of the region's tribal, state and federal fish managers, and NOAA staff have been instrumental in drafting (see first link below) provisional low, medium and high potential goal ranges for natural and wild components of these 24 stocks, leveraging the objectives compiled in the Council's Fish Objective Mapping tool. The CBP Task Force has met 5 times during 2017 (January, April, June, September, and December) and 3 times in 2018 (February, April, and June). Two more meetings are currently scheduled during 2018, an August 22, 2018 webinar and an October 2-3, 2018 meeting in Portland, Oregon. The CBP Task Force Recommendations Report is anticipated to be submitted to MAFAC by the end of January 2019.

The Northwest Power and Conservation Council agreed to merge their efforts of refining Program salmon and steelhead quantitative goals with the NOAA'S Columbia Basin Partnership Task Force effort. The Council has been providing update of the Task Force effort and progress through its Council meetings. The Council is currently engaged in its Program amendment process and looks forward to recommendations submitted by September 14, 2018 from state and federal fish and wildlife agencies and the region's Indian tribes, as well as other interested parties, about whether some or all of these provisional quantitative goals should be considered for amendment into the Program.

More Info:

- Columbia Basin Partnership Task Force membership and meeting materials web-page
- CBP Task Force Member Outreach Package Summer 2018 available here
- Columbia River Basin Fish and Wildlife Program amendment process web-page.

Attachment 1: Columbia Task Force Member Outreach Package Summer 2018

The Outreach Package provided to the Columbia Task Force Members to communicate with their constituents during the June-October 2018 outreach period consists of 8 documents.

- MAFAC CBP Task Force Vision & Proposed Guiding Principles - 6.21.2018 (1 page)
- MAFAC CBP Task Force Qualitative Goals Matrix - 6.21.2018, revised draft 6.28.2018 (4 pages)
- MAFAC CBP Task Force Prototype Team Leads and Members - 10.4.2017 (2 pages)
- CBP Task Force Talking Points Summer 2018 (2 pages)
- CBP Task Force Members (1 page)
- CBP Overview Slides for Summer 2018 (24 PowerPoint slides)
- CBP Task Force Backgrounder - 6.19.2018 (4 pages)
- CBP Quantitative Goals Methodology Summary 07.02.2018 (14 pages)

The content of the outreach package is included in this attachment for your review.

August 7, 2018

MEMORANDUM

TO: **Fish and Wildlife Committee Members**

FROM: **Tony Grover and Nancy Leonard**

SUBJECT: **Discussion on NOAA Columbia Basin Partnership Task Force's Provisional Goals**

BACKGROUND:

Presenter: Council members and staff involved with the Columbia Basin Partnership Task Force.

Summary: Staff will present the provisional vision statement, the 4 groups of qualitative goals, and quantitative goals developed for the 24 stocks based on the low, mid, and high range goals developed through the Columbia Basin Partnership Task Force (CBPTK) members and its five regional workgroups. Staff will also present information related to the questions posed by the committee during the July 2018 update (Attachment 1). The information that will be discussed with the Committee have been agreed to in principle by the CBPTF members who are also engaged in outreach to receive input on the content of CBP Task Force Member Outreach Package Summer 2018. Input received from the Council members will be shared with the CBPTF.

Relevance: Contributes to the 2014 Fish and Wildlife Program task for refining natural origin adult salmon and steelhead abundance quantitative objectives.

Background: The NOAA Fisheries' Marine Fisheries Advisory Committee's (MAFAC) Columbia Basin Partnership (CBP) Task Force met on June 19-20, 2018 and reached agreement, in principle, on the provisional goals and vision statement, and other elements included in the CBP Task Force Member Outreach Package Summer 2018. A subset of the CBP Task Force members will be providing an update on the Task Force's

progress to the MAFAC committee meeting on June 27, 2019 in Portland Oregon. The next meeting for the CBP Task Force is scheduled for October 2-3, 2018 in Portland Oregon, with a tentative webinar scheduled for August 22, 2018 to check-in on the outreach progress made by CBP members with their constituents.

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More Info:
Columbia Basin Partnership Task Force membership and meeting materials web-page
CBP Task Force Member Outreach Package Summer 2018 available here
Columbia River Basin Fish and Wildlife Program amendment process web-page.

Attachment 1: Summary material based on the Columbia Basin Partnership Task Force (CBPTF) Outreach Package Summer 2018, focusing on the topics touched upon during the July Committee meeting, will be presented by staff for discussion with committee members. The below information is included in this attachment:

A. CBPTF Draft Vision Statement

B. CBPTF Provisional Qualitative Goal 1
C. CBPTF Provisional Qualitative Goal 2
D. CBPTF Provisional Qualitative Goal 3
E. CBPTF Provisional Qualitative Goal 4

F. CBPTF Provisional Quantitative Goals – Aggregate Adult Run Size
G. CBPTF Provisional Quantitative Goals – Natural Production/Escapement
H. CBPTF Provisional Quantitative Goals – Harvest & Fisheries
I. CBPTF Provisional Quantitative Goals – Hatchery Production

J. CBPTF Timeline and Next Steps

A. CBPTF Draft Vision Statement *(06/20/18 version)*

A healthy Columbia River Basin ecosystem with thriving salmon and steelhead that are indicators of clean and abundant water, reliable and clean energy, a robust regional economy, and vibrant cultural and spiritual traditions, all interdependent and existing in harmony.

B. CBPTF Provisional Qualitative Goal 1

Natural Production

Goal 1. Restore salmon and steelhead in the Columbia Basin to healthy and harvestable/fishable levels.

[Add explanatory paragraph here. Include definition of "healthy" (i.e., implies that fish abundance, productivity, spatial structure and diversity are at high levels; addresses needs for dependent wildlife); address "fishable"; explain ESA recovery and broad-sense recovery, discuss time-frame issue – although some of these are long-term goals, strive to do them sooner (e.g., could achieve goal 1-Cb in a shorter timeframe, like 24 years, for some populations), take action as soon as practicable and move as fast as possible. Highlight the need for strategic prioritization in phase2, etc.]

Subgoals	*Within 25 years*	*Within 50 years*	*Within 100 years*
1-A. *Prevent Declines*: Reverse and prevent declines of both listed and unlisted salmon and steelhead.	*a. Reverse and prevent declines of both listed and unlisted salmon and steelhead.*		
1-B. *Achieve ESA Delisting*: Recover ESA-listed salmon and steelhead to a point where they are no longer threatened or endangered.	*a. Achieve ESA delisting for at least some salmon ESUs and steelhead DPSs.*	*b. Achieve ESA delisting for additional salmon ESUs and steelhead DPSs.*	*c. Achieve ESA delisting for all listed salmon and steelhead.*
1-C. *Achieve Broad Sense Recovery*: Restore listed and unlisted salmon and steelhead to healthy and harvestable levels.	*a. Make significant, measurable progress toward broad sense recovery of all salmon and steelhead.*	*b. Achieve healthy and harvestable levels for some salmon and steelhead.*	*c. Achieve healthy and harvestable levels for all salmon and steelhead.*
1–D. *Expand Spatial and Temporal Range*: Rebuild spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within the historical range.	*a. Make significant, measurable progress toward rebuilding spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including beginning to study, develop, and implement plans for restoring salmon and steelhead to currently inaccessible areas within their historical range.*	*b. Continue rebuilding spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within their historical range.*	*c. Complete rebuilding of spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within their historical range.*
1-E. *Expand Diversity and Resiliency*: Rebuild salmon and steelhead runs that are adaptive and resilient to climate change and other environmental perturbations.	*a. Rebuild salmon and steelhead runs that are adaptive and resilient to climate change and other environmental perturbations.*	*b. Continue rebuilding adaptive and resilient salmon and steelhead runs and proactively and adaptively manage for a changing climate.*	*c. Ensure continued resiliency of salmon and steelhead runs and continue to adaptively manage for a changing climate.*

C. CBPTF Provisional Qualitative Goal 2

Harvest & Fishing Opportunity

Goal 2. Provide diverse, productive, and dependable tribal and non-tribal harvest and fishing opportunities for Columbia Basin salmon and steelhead in fresh and marine waters.

[Add explanatory paragraph – include explanation of "harvest," "fisheries" – also still need to work on consistency of usage within this document]

Subgoals	*Within 25 years*	*Within 50 years*	*Within 100 years*
2-A. <u>*Ensure Sustainability*</u>: Manage harvest and fisheries at levels consistent with conserving natural salmon and steelhead populations	*a. Ensure that fishery impacts on weak and listed stocks allow rebuilding of natural stocks and do not impede recovery.*	*b. Manage fisheries based on annual abundance to promote rebuilding of natural production and share the recovery burden.*	*c. Manage for optimum sustainable harvest and fishing opportunity as healthy stocks are restored.*
2-B. <u>*Optimize Harvest and Fishery Opportunity*</u>: Optimize fishery opportunity and harvest of healthy natural and hatchery stocks based on availability.	*a. Optimize fishery opportunity and access to harvestable surpluses of unlisted and hatchery stocks consistent with conservation.*	*b. Expand fishery opportunity concurrent with progress toward ESA delisting and broad sense recovery.*	*c. Fully realize harvest potential with increasing opportunity throughout the range of salmon and steelhead stocks.*
2-C. <u>*Share Benefits*</u>: Realize all fishery obligations and share benefits among users.	*a. Meet fishery obligations and share available harvest within the constraints imposed by conservation.*	*b. As constraints are reduced, move into focusing fisheries on sharing the benefits of increasing numbers of harvestable stocks.*	*c. Realize all fishery obligations and share benefits among users.*

D. CBPTF Provisional Qualitative Goal 3

Hatcheries / Mitigation

Goal 3. Produce hatchery salmon and steelhead to support conservation, mitigate for lost natural production, and support fisheries, in a manner that strategically aligns hatchery production with natural production recovery goals.

[Add explanatory paragraph, including explanation that supplementation is a tool. Also add supplementation to the definitions section. Mention broader uses of artificial production.]

Subgoals	Within 25 years	Within 50 years	Within 100 years
3-A. <u>Support Natural Production</u>: Utilize hatcheries to maintain, support and restore natural production where appropriate.	*a. As appropriate, continue to utilize hatcheries to maintain, support and restore at-risk populations, including those affected by climate change.*	*b. Use conservation hatchery strategies as needed to proactively address future threats, including climate change.*	*c. Achieve a future where conservation hatcheries are not necessary unless unforeseen natural events require an emergency response.*
3-B. <u>Mitigate for Lost Production and Support Fisheries</u>: Produce hatchery fish to support tribal treaty/trust responsibilities and meaningful fishery opportunities to mitigate for historical losses due to development and to enhance fisheries.	*a. Make progress in reducing reliance on hatchery production for mitigation consistent with improvements in natural production.*	*b. Consider changes in hatchery objectives and production levels as overall fishery opportunities are maintained through increased fish abundance.*	*c. Achieve a future where we rely less on hatchery production for mitigation and fishery enhancement only when natural production has increased.*
3-C. <u>Fish Protection</u>: Strategically align hatchery production with natural production recovery goals, consistent with tribal treaty/trust responsibilities, and with other legal and mitigation requirements.	*a. Continue to implement changes in hatchery practices and programs based on best available science (including, in some cases, changes in stocks or species produced) to minimize adverse effects of hatchery-origin salmon and steelhead on naturally produced salmon and steelhead.*	*b. Continue to refine hatchery production, strategies and practices based on assessments of effectiveness and technology advances to minimize hatchery impacts on natural salmon and steelhead.*	*c. Reduce long-term hatchery impacts by rebuilding abundance, productivity, diversity, and distribution of natural salmon and steelhead.*

E. CBPTF Provisional Qualitative Goal 4

Social, Cultural, Economic & Ecological	
	Goal 4. Make decisions within a broader context that reflects, and considers effects to, the full range of social, cultural, economic, and ecosystem values and diversity in the Columbia Basin. *[Add explanatory paragraph, including the concept of inter-generational equity and considerations for future generations]*
	4-A. *Social Goal:* Make decisions that reflect the social importance of salmon and steelhead to people throughout the Columbia Basin, recognizing the full range of social diversity and values that are present.
	4-B. *Cultural Goal:* Make decisions that reflect the cultural importance of salmon and steelhead to people throughout the Columbia Basin, recognizing the full range of cultural values that are present.
	4-C. *Economic Goal:* Make decisions that are based on the principle of equitable sharing of costs and benefits across economic sectors. Also, make decisions that recognize the great economic value of the Columbia River and its tributaries, and the importance of this natural capital as a major driver of the present and future economy for all in the Pacific Northwest.
	4-D. *Ecosystem Goal:* Make decisions that consider the role of salmon and steelhead in the ecosystem and that support a full range of ecological benefits, including the needs of dependent wildlife.

F. CBPTF Provisional Quantitative Goals – Aggregate Adult Run Size *(in development)*

Aggregate run size goals for adult returns to the Columbia River mouth are in development and will be consistent with the natural productions/escapement and harvest goals already developed by the CBPTF. The CBPTF Outreach file - CBP Quantitative Goals Methodology Summary's Table 4 on page 14 provides for this goal category the approximate current total Columbia River mouth return of salmon and steelhead based on 2008-2017 adult average returns to the mouth of the Columbia River, the minimum adult run size estimates for the Columbia River Basin produced by Chapman 1986 and cited by ISAB in its Density Dependence report (ISAB 2015-1) and estimated abundance in NPCC's 1987 Fish and Wildlife Program's historical salmon and steelhead run size estimates appendix.

		Current Abundance (2008-2017 averages)[a]				Historical Abundance	
Species		**Wild/Natl**	**Hatchery**	**Total**	**% Hat**	**ISAB 2015**	**NPPC 1986**
Chinook	Spring	58,400	233,600	292,000	80%	0.5 mil	1.4-2.3 mil
	Summer	30,100	45,200	75,300	60%	2.0 mil	2.7-4.6 mil
	Fall	376,500	376,500	753,000	50%	1.25 mil	1.3-2.3 mil
	Subtotal	*465,000*	*655,300*	*1,120,300*	*58%*	*3.75 mil*	*5.4-9.2 mil*
Sockeye		295,700	32,900	328,500	10%	2.25 mil	1.5-2.6 mil
Coho		40,900	368,100	409,000	90%	0.56 mil	1.0-1.8 mil
Chum		13,600	700	14,300	5%	0.45 mil	0.8-1.0 mil
Steelhead	Winter	8,200	8,200	16,500	50%	--	--
	Summer	79,200	317,000	396,200	80%	--	--
	Subtotal	*87,500*	*325,200*	*412,700*	*79%*	*0.45 mil*	*0.8-1.4 mil*
Total		**902,600**	**1,382,100**	**2,284,700**	**60%**	**7.46 mil**	**9.6-16.3 mil**

Note: Values in red are working approximations.

G. CBPTF provisional quantitative goals - Natural Production/Escapement

The natural production/ escapement to spawning grounds goal values developed for the 24 stocks are less than total Columbia River mouth adult returns due to harvest, other mortality sources, and straying in between the mouth and spawning ground locations.

The three-provisional goal range for natural production / escapement to spawning ground developed by the CBPTF are:

- Low range escapement abundance goal: represent the best scientific knowledge for the abundance necessary to avoid extinction or avoid being listed under ESA.
- Mid- range escapement abundance goal: are approximately half-way between the low-range goals and the high range goals.
- High range escapement abundance goal: reflect aspirational “healthy and harvestable” levels that might potentially be achieved with aggressive improvements in habitat and other conditions currently limiting stocks.

The quality of the data/information used to develop the natural production/escapement quantitative goals will be conveyed in the detailed documentation for each stock in the report being drafted for review by the CBPTF later this year.

ESA status of listed stocks in the below figures and are included for context.

Note that there are three groupings of populations that are not NOAA-Fisheries designated ESU/DPS: Columbia upriver (fall) coho, Mid Columbia (summer) sockeye, and Upper Columbia (summer) sockeye. These groupings are not true ESUs that have been designated by NOAA Fisheries. These are groupings of populations that managers identified for convenience while developing Columbia Basin Partnership Task Force products. The CBPTF will develop more accurate terminology for these groupings in final Task Force products. Under the Endangered Species Act, an **evolutionarily significant unit**—or ESU— is a Pacific salmon population or group of populations that is substantially reproductively isolated from other conspecific populations and that represents an important component of the evolutionary legacy of the species. The ESU policy (56 FR 58612) for Pacific salmon defines the criteria for identifying a Pacific salmon population as an ESU, which can be listed under the ESA.

The below figure is from the CBPTF Outreach file - CBP Quantitative Goals Methodology Summary's Figure 1 on page 4, and shows where the current 10-year mean escapement abundance fits relative to the low- to high- quantitative natural production/escapement goal range for each of the 24 stocks. The relative values are shown in this figure, the specific current 10-year mean abundance and quantitative goal values for the 24 stocks are in the below Natural Production/ Escapement Table. This figure is modified from the CBPTF original to highlight topics and depict ESA stocks.

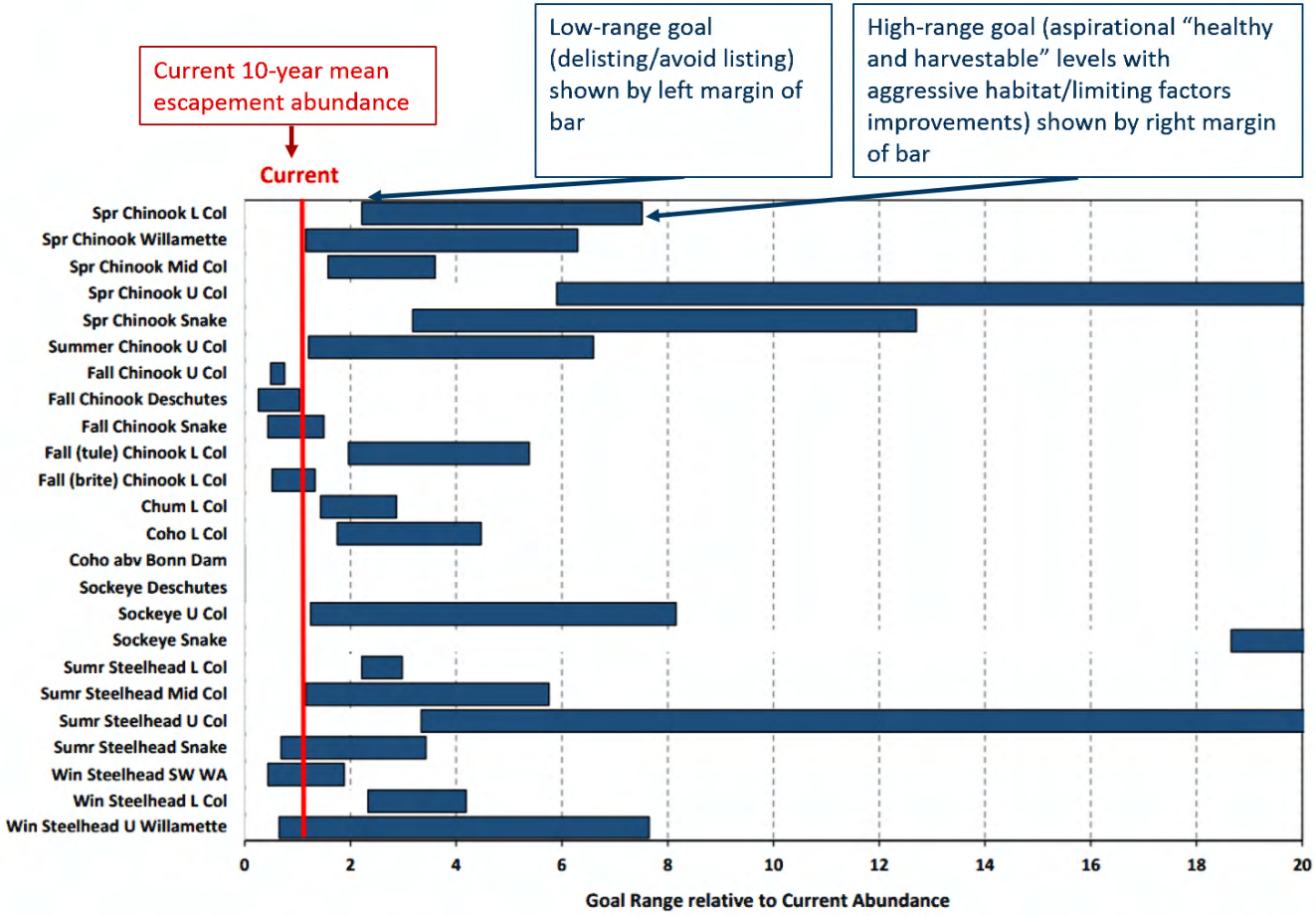


Figure 1. Aggregate abundance values for natural-origin escapements under current, historical (pre-development), and low, medium and high escapement goal ranges.

This Natural Production/Escapement Table is modified from the CBPTF Outreach file - CBP Quantitative Goals Methodology Summary's Table 1 on page 5 to show the ESA status..

Species	ESA status	ESU/DPS (run)	Current 10-yr mean natural escapement abundance	Historical natural escapement abundance	Low goal	Med goal	High goal	High goal as % of historic
All species	***Grand total of values:***		***531,394***	***8,841,957***	***611,425***	***1,410,098***	***2,950,904***	***33%***
Chinook	Threatened	Lower Columbia (spring)	4,431	101,700	9,800	21,550	33,300	33%
Chinook	Threatened	Upper Willamette (spring)	4,095	312,173	4,725	15,262	25,798	8%
Chinook	Not Listed	M Columbia Spr (spring)	*10,000*	*103,700*	*15,750*	*26,875*	*38,000*	35%
Chinook	Threatened	U Columbia Spr (spring)	1,090	259,432	6,433	16,968	25,452	10%
Chinook	Threatened	Snake Spr/Sum (spring / summer)	10,000	671,000 (1800s abundance)	31,750	79,375	127,000	19%
Chinook	Not Listed	U Columbia Sum/Fall (summer)	18,771	693,952	22,704	81,398	123,841	18%
Chinook	Not listed	U Columbia Sum/Fall (fall)	85,500	533,900	41,950	53,188	64,425	12%
Chinook	Not listed	Deschutes Sum/Fall (summer/fall)	15,400	17,000	4,000	13,000	16,000	94%
Chinook	Threatened	Snake Fall (fall – brights)	9,626	500,000	4,200	9,280	14,360	3%
Chinook	Threatened	L Columbia (fall – tules)	12,510	166,100	24,550	46,300	67,300	41%
Chinook	Threatened	L Columbia (fall – late brights)	11,593	33,000	6,000	9,200	15,400	47%
Chum	Threatened	Columbia (late fall)	11,178	900,000	16,050	24,075	32,100	4%

Species	ESA status	ESU/DPS (run)	Current 10-yr mean natural escapement abundance	Historical natural escapement abundance	Low goal	Med goal	High goal	High goal as % of historic
Coho	Threatened	L Columbia (fall-early & late)	31,401	288,200	54,900	98,150	140,400	49%
Coho	Not Listed *	Columbia upriver (fall) *		1,111,800				
Sockeye	Not Listed *	Mid Columbia (summer) *	5	50,000	1,000	3,000	5,000	10%
Sockeye	Not Listed *	U Columbia (summer) *	228,000	1,850,000	283,500	685,000	1,860,000	101%
Sockeye	endangered	Snake (summer)	134	150,000	2,500	5,750	9,000	6%
Steelhead	Threatened	L Columbia (winter)	8,570	58,000	20,000	27,900	35,900	62%
Steelhead	Threatened	L Columbia (summer)	2,100	7,600	4,650	5,500	6,250	82%
Steelhead	Threatened	Mid Columbia (summer)	18,155	132,800	21,000	62,750	104,500	79%
Steelhead	Threatened	U Columbia (summer)	2,011	577,500	6,713	29,252	43,878	8%
Steelhead	Threatened	Snake (summer)	30,500	172,200	21,000	62,750	104,500	61%
Steelhead	Not listed	SW Washington (winter)	11,200	41,900	4,900	13,200	21,100	50%
Steelhead	Threatened	U Willamette (winter)	5,150	110,000	3,350	21,375	39,400	36%

Note:
- the red text indicates placeholder values for work in progress by workgroups.
- the symbol '*' indicates ESU/DPS names that have not been formally defined by NOAA.

H. CBPTF provisional quantitative goals – Harvest & Fisheries

Fishery goals are defined based on exploitation or harvest rates for wild/natural fish Goals are identified as average values and ranges. Goal ranges reflect abundance-based annual harvest strategies as well as normal annual variation in fisheries.

Collaborative work is ongoing to identify fishery goals (exploitation rates) consistent with restoration of healthy, productive natural stocks for abundance-based goal ranges with revised products to be reviewed during the October 2018 CBPTF meeting. Ongoing work will also estimate numbers of fish harvested corresponding to specific exploitation rate.

The three-provisional goal range for wild/natural fish in combined marine and freshwater fisheries for Columbia Basin salmon and steelhead stocks:

- Low-range fisheries goal: based on existing fisheries management frameworks for weak stocks and currently-healthy stocks.
- Mid-range fisheries goal: based on existing fisheries management framework for currently-healthy stocks. For currently weak or depleted stocks the goal value is an intermediate value between low and high range goals for these stocks.
- High-range fisheries goal: based on existing fisheries management framework for currently-healthy stocks. For currently weak or depleted stocks, the goal value is based on reasonably-realistic harvest rates expected to be sustainable by healthy abundance for these wild/natural stocks.

For reference purposes, the CBPTF also provided, based on the current management frameworks, the current exploitation/harvest rates per stock and the projected approximate increases in harvest rates based on the Provisional Natural Production/Escapement Abundance goals.

Harvest rate goals are not specifically identified for hatchery fish at this time.

Higher harvest rates may be achieved for hatchery-origin fish than can be achieved for natural-origin fish through fishery time, area or gear measures.

The below Harvest Table shows the current exploitation/harvest rates based on the existing management frameworks (green box) and expected increases under existing management frameworks with achievement of Provisional Natural Production/Escapement Abundance Goals (Blue box). The Provisional Fisheries Exploitation/Harvest Rate Goals are show as an average rate and the rate range for each stock in the 6 columns to the right (Black box). The below table is modified from the CBPTF Outreach file - CBP Quantitative Goals Methodology Summary's Table 2 on page 10, to depict ESA stocks, topics and stocks that are currently managed with an abundance-based management framework.

Application of existing management framework's exploitation/harvest rate to current wild fish abundance levels

Application of existing management framework's rate to Provisional Natural Productions/Escapement Goal levels

Provisional Fisheries Low- Mid- and High- Range Exploitation / Harvest Rate Goals

Stock	Current Exploitation Rates (wild/natural)							Increments (existing plans)			Low goal		Medium goal		High goal	
	Ocean	Fresh water	Total (avg)	Range	Related guidance		Guidance includes	@ low natl	@ med natl	@ high natl	Avg.	Range	Avg.	Range	Avg.	Range
Spr Chinook L Col ★	10%	8%	18%	10-40%				18%	18%	18%	18%	10-40%	27%	15-45%	35%	20-50%
Spr Chinook Willamette ★	8%	10%	18%	8-25%	<15%	/a	Freshwater	18%	21%	23%	18%	8-25%	27%	15-40%	35%	20-50%
Spr Chinook Mid Col	--	11.6%	11.6%	5.5-17%	5.5-17%	/a	Freshwater	12%	16%	17%	12%	5.5-17%	24%	25-35%	35%	20-50%
Spr Chinook U Col ★	--	11.6%	11.6%	5.5-17%	5.5-17%	/a	Freshwater	12%	16%	17%	12%	5.5-17%	24%	25-35%	35%	20-50%
Spr Chinook Snake ★	--	11.6%	11.6%	5.5-17%	5.5-17%	/a	Freshwater	12%	16%	17%	12%	5.5-17%	24%	25-35%	35%	20-50%
Summer Chinook U Col	36%	24%	60%	40-80%	5.2-50%	/a	Freshwater	60%	60%	60%	60%	40-80%	60%	40-80%	60%	40-80%
Fall Chinook U Col	36%	26%	62%	40-80%	21.5-45%	/a	Freshwater	65%	65.0%	65%	65%	40-80%	65%	40-80%	65%	40-80%
Fall Chinook Deschutes	36%	17%	53%	30-70%	21.5-45%	/a	Freshwater	55%	55%	55%	55%	30-70%	60%	30-70%	65%	30-70%
Fall Chinook Snake ★	33%	10%	43%	30-70%	21.5-45%	/a	Freshwater	43%	46.6%	50%	43%	30-70%	47%	30-70%	50%	30-70%
Fall (tule) Chinook L Col ★	29%	9%	38%	30-41%	30-41%	/a	All	41%	41%	41%	41%	30-41%	46%	30-55%	50%	30-70%
Fall (brite) Chinook L Col ★	38%	15%	53%	35-70%		/a		53%	53%	53%	53%	35-70%	53%	35-70%	53%	35-70%
Chum L Col ★	--	2%	2%	<5%	<5%		Freshwater	2%	3.5%	5%	2%	<5%	10%	5-15%	20%	10-30%
Coho L Col ★	10%	6%	16%	<10-30%	<10-30%	/a	All	18%	23%	30%	18%	<10-30%	24%	10-40%	30%	10-50%
Coho abv Bonn Dam	10%	9%	19%	<10-35%	<10-30%	/a	All < BON	21%	26%	33%	21%	<10-40%	30%	10-50%	40%	20-60%
Sockeye Deschutes	--	3.2%	3.2%	3-11%	6-8+%	/a	Freshwater	3%	9%	12%	4%	3-11%	15%	10-30%	25%	10-40%
Sockeye U Col	--	6.3%	6.3%	6-11%	6-8+%	/a	Freshwater	6%	9%	12%	7%	6-11%	15%	10-30%	25%	10-40%
Sockeye Snake ★	--	6.3%	6.3%	6-11%	6-8+%	/a	Freshwater	6%	9%	12%	7%	6-11%	15%	10-30%	25%	10-40%
Sumr Steelhead L Col ★	--	<10%	10%	<10%	<10%		Freshwater	10%	10%	10%	10%	<10%	18%	10-25%	25%	10-40%
Sumr Steelhead Mid Col ★	--	7.5%	7.5%	15-22%	15-22%	/a	Freshwater	8%	14.8%	22%	8%	15-22%	21%	15-30%	35%	20-50%
Sumr Steelhead U Col ★	--	13.9%	13.9%	20-34%	20-34%	/a	Freshwater	20%	27%	34%	20%	20-34%	28%	20-40%	35%	20-50%
Sumr Steelhead Snake ★	--	18.9%	18.9%	15-22%	15-22%	/a	Freshwater	19%	20.5%	22%	19%	15-22%	27%	20-40%	35%	20-50%
Win Steelhead SW WA ★	--	<10%	10%	<10%	<10%		Freshwater	10%	10%	10%	10%	<10%	18%	10-30%	25%	10-40%
Win Steelhead L Col ★	--	<10%	10%	<10%	<10%		Freshwater	10%	10%	10%	10%	<10%	18%	10-30%	25%	10-40%
Win Steelhead U Willamette	--	5%	5%	<20%	<20%		Freshwater	5%	5%	5%	5%	<20%	15%	10-30%	25%	10-40%

/a Abundance-based management framework

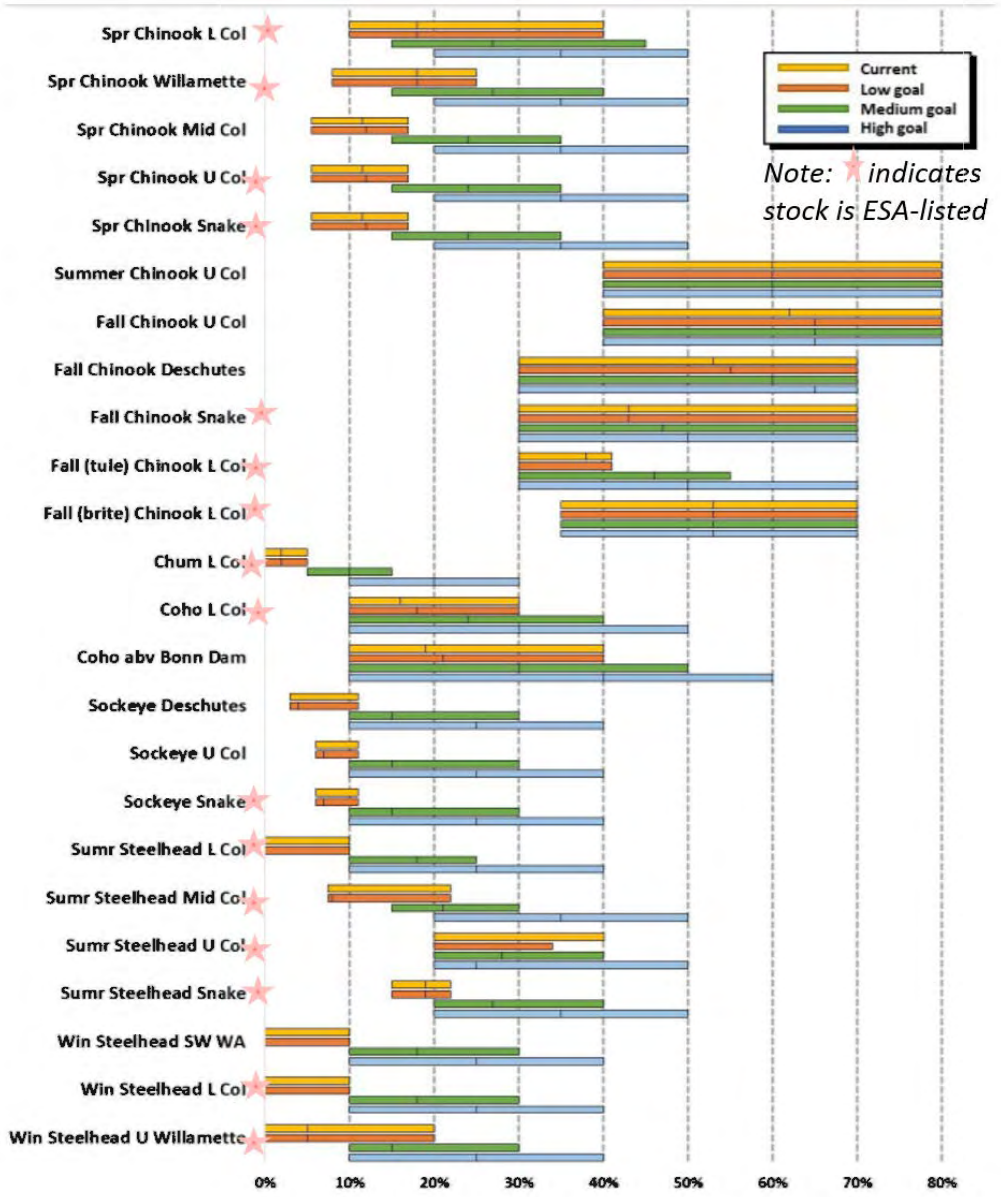
Note: ★ indicates the stock is ESA-listed

The figure to the right identifies provisional Fishery/Harvest goals that can be sustained by wild/natural stocks with restoration to higher levels of abundance and productivity. The CBPTF goals for fisheries go beyond the modest increments that can be expected under existing management frameworks due to natural abundance increases alone.

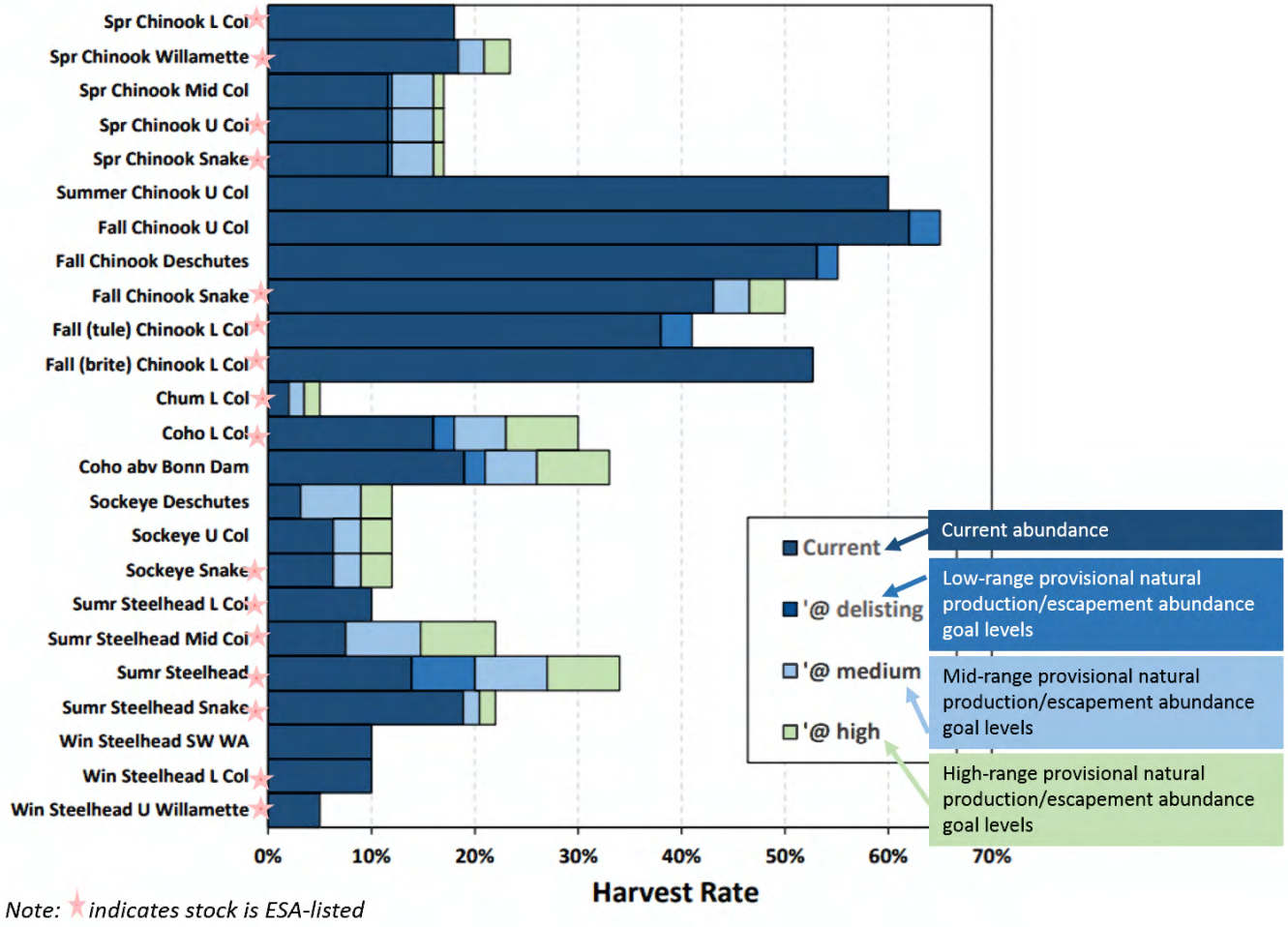
This figure to the right illustrates how the low-, mid-, and high- Provisional Fishery Exploitation/Harvest Rate Goal ranges compare to the current exploitation/harvest rates. This is modified from CBPTF Outreach file - CBP Quantitative Goals Methodology Summary' Figure 3 on page 9, and reflects the rates shown in the above Harvest table under 'Low Goal – Medium Goal – High Goal (black box).

As illustrated in the figure to the right and in the above harvest table, the current harvest rate and the provisional low-goal harvest rate range align, although some low-goal harvest rate averages (vertical line within the orange colored bars) are slightly higher than the current average rate (vertical bar in the yellow colored bars). The harvest rate average and range are also shown for the medium goal range (green bar) and the high goal range (blue bar).

This figure is modified from the CBPTF figure to depict ESA listed stocks.



The below figure illustrates how the current harvest rate may change under existing management frameworks if the increased fish abundance levels (low-, mid-, high- goals) developed for the Provisional Natural Production/Escapement Abundance Goal levels are attained. Relatively modest increases occur because existing management frameworks were generally not designed to include healthy stock levels This is modified from CBPTF Outreach file - CBP Quantitative Goals Methodology Summary's Figure 2 on page 12 and reflects the rates shown in the above Harvest Table under 'current exploitation' (green box) and ' increment' (blue box). The below figure is modified from the CBPTF original figure to highlight topics and depict ESA stocks.



Note: ★ indicates stock is ESA-listed

I. CBPTF provisional quantitative goals - Hatchery Production

Current hatchery production goals are defined in different fashions for conservation and mitigation programs throughout the basin. Some programs define goals based on adult returns. However, goals for many programs are identified solely in terms of juvenile production.

For the quantitative Hatchery Production goal category, the CBPTF documented in the below Hatchery Table from the CBPTF Outreach file - CBP Quantitative Goals Methodology Summary's Table 3 on page 13:

- Current hatchery production levels:
  - Current juvenile (yearling and subyearlings) production levels from all existing programs. For context, the CBPTF also included the recent average numbers of hatchery adult returning to the Columbia River mouth by stock.

- New Production:
  - *Planned hatchery production levels*: planned / in-development additional hatchery juvenile productions defined in existing processes and plans (e.g., John Day Mitigation). Corresponding adult returns also provided as defined or inferred from current program return rates.
  - *Additional hatchery production needs*: additional or reduced hatchery juvenile production needs to address specific purposes identified by Task Force members (e.g., currently blocked historical anadromous production areas). Corresponding adult returns also provided as defined or inferred from current program return rates.

The below table is modified from the CBPTF original to highlight table sections and depict ESA listed stocks.

Current juvenile hatchery production

Recent hatchery adult returns to the Columbia River mouth

New Production:
-Planned/in-development
-Additional needs

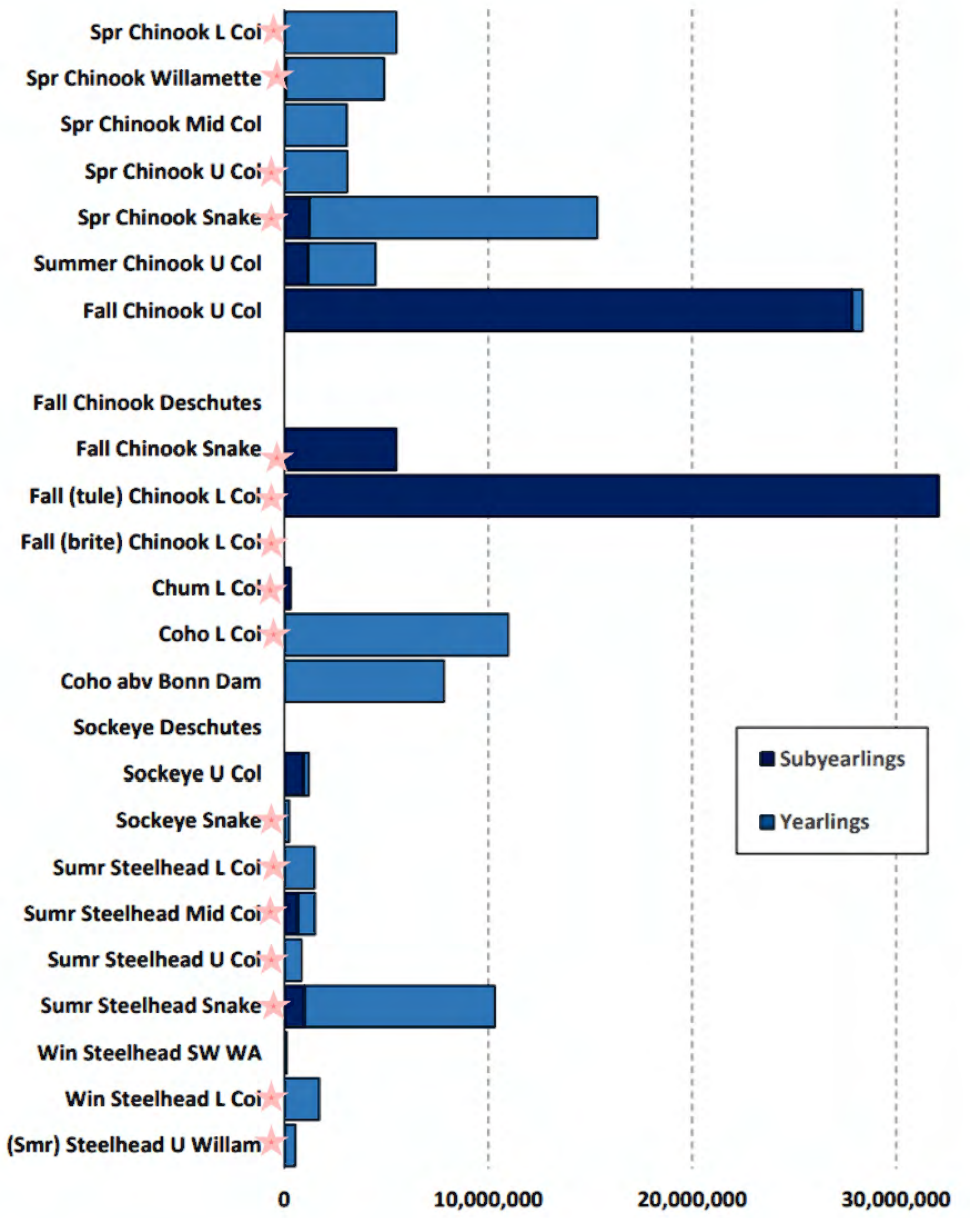
Evolutionarily Significant Unit or Distinct Population Segment		Run Type	Fishery Management Unit	Current production (avg.)			Col R	New production	
				Yearlings	Subyearlings	Total	Adults	Total	Col R Adults
Chinook	L Columbia ★	Spring	Lower River Spring	5,500,000	0	5,500,000	13,800	--	--
Chinook	U Willamette ★	Spring	Willamette Spring	4,800,000	100,000	4,900,000	48,506	--	--
Chinook	M Columbia Spr	Spring	Upriver Spring	3,080,000	0	3,080,000	54,674	--	--
Chinook	U Columbia Spr ★	Spring	Upriver Spring	3,090,000	0	3,090,000	19,422	0.7-13.5 mil	4,400-85,000
Chinook	Snake Spr/Sum ★	Spring/Summer	Upriver Spring	14,120,000	1,230,000	15,350,000	85,555	--	--
Chinook	U Columbia Sum/Fall	Summer	Upper Columbia Summer	3,310,000	1,180,000	4,490,000	45,151	0.9-18 mil	53,000-220,000
Chinook	U Columbia Sum/Fall	Fall	Upriver Bright (URB)	500,000	27,850,000	28,350,000	223,553	~11 mil	~45,000
								0.3-5.4 mil	2,000-40,000
Chinook	Deschutes Sum/Fall	Summer/Fall	Upriver Bright (URB)	0	0	0	0	--	--
Chinook	Snake Fall ★	Fall (brights)	Snake River Bright (SRB)	0	5,500,000	5,500,000	42,893	--	--
Chinook	L Columbia ★	Fall (tules)	Lower River Hatchery (LRH)	0	32,100,000	32,100,000	82,568	--	--
Chinook	L Columbia ★	Fall (late brights)	Lower River Wild (LRW)	0	0	0	0	--	--
Chum	Columbia ★	Late Fall	Chum	0	320,000	320,000	289	--	--
Coho	L Columbia ★	Fall (early & late)	Lower Columbia Coho	10,990,000	0	10,990,000	246,829	--	--
Coho	(Columbia upriver)	Fall	Upriver Coho	7,830,000	0	7,830,000	137,731	--	--
Sockeye	(Mid Columbia)	Summer	Mid Columbia Sockeye				95	--	--
Sockeye	(U Columbia)	Summer	U Columbia Sockeye	250,000	950,000	1,200,000	32,701	--	--
Sockeye	Snake ★	Summer	Snake Sockeye	250,000	0	250,000	1,096	--	--
Steelhead	L Columbia ★	Summer	L Col summer run	1,505,000	0	1,505,000	50,400	--	--
Steelhead	Mid Columbia ★	Summer	Summer A run	840,000	670,000	1,510,000	58,000	--	--
Steelhead	U Columbia ★	Summer	Summer A run	860,000	0	860,000	24,000	0.9-3.9 mil	25,000-110,000
Steelhead	Snake ★	Summer	Summer A & B runs	9,330,000	1,000,000	10,330,000	160,000	--	--
Steelhead	SW Washington	Winter	Winter run	120,000	0	120,000	1,500	--	--
Steelhead	L Columbia ★	Winter	Winter run	1,720,000	0	1,720,000	4,000	--	--
Steelhead	U Willamette ★	Winter	(Summer run only)	550,000	0	550,000	16,000	--	--
				68,645,000	**70,900,000**	**139,545,000**	**1,348,764**	**13.8-51.8**	**86,000-274,000**

Note: Values in red are working approximations.

Note: ★ indicates the stock is ESA-listed

The figure to the right shows the current total juvenile hatchery production by stock.

This figure is modified from CBPTF Outreach file - CBP Quantitative Goals Methodology Summary Figure 4 on page 12 to depict the ESA listed stocks.



NOAA Columbia Basin Partnership Task Force's Provisional Salmon and Steelhead Goals

Tony Grover, Fish and Wildlife Division Director
Nancy Leonard, Monitoring, Evaluation and Reporting Manager

August 14, 2018
Fish and Wildlife Committee

Discussion Outline

1. Columbia Basin Partnership Task Force (Task Force)
2. Detailed Review of Provisional Vision and Goals
3. Task Force Timeline
4. FW Program amendment and Task Force
5. Specific Input Sought by Task Force

Purpose: NOAA Columbia Basin Partnership (CBP) Task Force

- Common and shared goals for all Columbia River Basin anadromous salmon and steelhead
  - to facilitate achieving existing management, mitigation and recovery responsibilities
  - implement a more coherent, integrated, and efficient means of addressing the complexities of salmon recovery
  - developed through a NOAA fisheries convened regional process engaging regional sovereigns and stakeholders

Outcomes: NOAA Columbia Basin Partnership (CBP) Task Force

- Goals that address both conservation and harvest/fishing aspirations.
- Goals that are understandable and consider various users of Columbia Basin resources.
- Quantitative adult abundance goals for both listed and non-listed stocks.
- Better coordination, more effective use of resources, and alignment of strategic priorities.
- Enhanced relationships, trust, and knowledge.

Provisional Products Overview:

NOAA Columbia Basin Partnership (CBP) Task Force

Draft Vision Statement

Provisional Qualitative Goals

Natural Production	Hatchery / Mitigation	Harvest / Fisheries	Social, Cultural, Economic, and Ecological

Provisional Quantitative Goals for 24 Stock Units

Low, Medium, High - continuum of numbers reflecting aspiration for progressive improvements considering ESA requirements, habitat constraints, future protentional, density dependence, cultural needs, fishing interest, mitigation responsibilities, sustainability.

Natural Production Escapement to spawning sites	Hatchery / Mitigation	Harvest / Fisheries

Aggregated Run Sizes to the Basin
(considers Natural Production, Hatchery/Mitigation, Harvest/Fisheries)

Working Quantitative Goals for Populations within Stock Units

Natural Production Escapement to spawning sites	Hatchery / Mitigation	Harvest / Fisheries

Provisional Products: NOAA Columbia Basin Partnership (CBP) Task Force

The following tables and figures are in the packet memo attachment.

Questions to Consider

- Do we understand what these goals represent?
- Do we support the Task Force recommending these goals?
- Do we support the Task Force continuing its work (Phase 2)?
- Would we like more information?

DRAFT VISION STATEMENT

A healthy Columbia River Basin ecosystem with

thriving salmon and steelhead that are indicators of clean and abundant water, reliable and clean energy, a robust regional economy, and vibrant cultural and spiritual traditions, all interdependent and existing in harmony.

PROVISIONAL QUALITATIVE GOALS

Describe the desired outcomes CBP Task Force members hope to achieve within selected timeframes which guide development of the quantitative goals

Natural Production

Goal 1. Restore salmon and steelhead in the Columbia Basin to healthy and harvestable/fishable levels.

[Add explanatory paragraph here. Include definition of "healthy" (i.e., implies that fish abundance, productivity, spatial structure and diversity are at high levels; addresses needs for dependent wildlife); address "fishable"; explain ESA recovery and broad-sense recovery, discuss time-frame issue – although some of these are long-term goals, strive to do them sooner (e.g., could achieve goal 1-Cb in a shorter timeframe, like 24 years, for some populations), take action as soon as practicable and move as fast as possible. Highlight the need for strategic prioritization in phase2, etc.]

Subgoals	*Within 25 years*	*Within 50 years*	*Within 100 years*
1-A. *Prevent Declines*: Reverse and prevent declines of both listed and unlisted salmon and steelhead.	*a. Reverse and prevent declines of both listed and unlisted salmon and steelhead.*		
1-B. *Achieve ESA Delisting*: Recover ESA-listed salmon and steelhead to a point where they are no longer threatened or endangered.	*a. Achieve ESA delisting for at least some salmon ESUs and steelhead DPSs.*	*b. Achieve ESA delisting for additional salmon ESUs and steelhead DPSs.*	*c. Achieve ESA delisting for all listed salmon and steelhead.*
1-C. *Achieve Broad Sense Recovery*: Restore listed and unlisted salmon and steelhead to healthy and harvestable levels.	*a. Make significant, measurable progress toward broad sense recovery of all salmon and steelhead.*	*b. Achieve healthy and harvestable levels for some salmon and steelhead.*	*c. Achieve healthy and harvestable levels for all salmon and steelhead.*
1–D. *Expand Spatial and Temporal Range*: Rebuild spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within the historical range.	*a. Make significant, measurable progress toward rebuilding spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including beginning to study, develop, and implement plans for restoring salmon and steelhead to currently inaccessible areas within their historical range.*	*b. Continue rebuilding spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within their historical range.*	*c. Complete rebuilding of spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within their historical range.*
1-E. *Expand Diversity and Resiliency*: Rebuild salmon and steelhead runs that are adaptive and resilient to climate change and other environmental perturbations.	*a. Rebuild salmon and steelhead runs that are adaptive and resilient to climate change and other environmental perturbations.*	*b. Continue rebuilding adaptive and resilient salmon and steelhead runs and proactively and adaptively manage for a changing climate.*	*c. Ensure continued resiliency of salmon and steelhead runs and continue to adaptively manage for a changing climate.*

Harvest & Fishing Opportunity

Goal 2. Provide diverse, productive, and dependable tribal and non-tribal harvest and fishing opportunities for Columbia Basin salmon and steelhead in fresh and marine waters.

[Add explanatory paragraph – include explanation of "harvest," "fisheries" – also still need to work on consistency of usage within this document]

Subgoals	*Within 25 years*	*Within 50 years*	*Within 100 years*
2-A. <u>*Ensure Sustainability*</u>: Manage harvest and fisheries at levels consistent with conserving natural salmon and steelhead populations	*a. Ensure that fishery impacts on weak and listed stocks allow rebuilding of natural stocks and do not impede recovery.*	*b. Manage fisheries based on annual abundance to promote rebuilding of natural production and share the recovery burden.*	*c. Manage for optimum sustainable harvest and fishing opportunity as healthy stocks are restored.*
2-B. <u>*Optimize Harvest and Fishery Opportunity*</u>: Optimize fishery opportunity and harvest of healthy natural and hatchery stocks based on availability.	*a. Optimize fishery opportunity and access to harvestable surpluses of unlisted and hatchery stocks consistent with conservation.*	*b. Expand fishery opportunity concurrent with progress toward ESA delisting and broad sense recovery.*	*c. Fully realize harvest potential with increasing opportunity throughout the range of salmon and steelhead stocks.*
2-C. <u>*Share Benefits*</u>: Realize all fishery obligations and share benefits among users.	*a. Meet fishery obligations and share available harvest within the constraints imposed by conservation.*	*b. As constraints are reduced, move into focusing fisheries on sharing the benefits of increasing numbers of harvestable stocks.*	*c. Realize all fishery obligations and share benefits among users.*

Hatcheries / Mitigation

Goal 3. Produce hatchery salmon and steelhead to support conservation, mitigate for lost natural production, and support fisheries, in a manner that strategically aligns hatchery production with natural production recovery goals.

[Add explanatory paragraph, including explanation that supplementation is a tool. Also add supplementation to the definitions section. Mention broader uses of artificial production.]

Subgoals	*Within 25 years*	*Within 50 years*	*Within 100 years*
3-A. *Support Natural Production*: Utilize hatcheries to maintain, support and restore natural production where appropriate.	*a. As appropriate, continue to utilize hatcheries to maintain, support and restore at-risk populations, including those affected by climate change.*	*b. Use conservation hatchery strategies as needed to proactively address future threats, including climate change.*	*c. Achieve a future where conservation hatcheries are not necessary unless unforeseen natural events require an emergency response.*
3-B. *Mitigate for Lost Production and Support Fisheries*: Produce hatchery fish to support tribal treaty/trust responsibilities and meaningful fishery opportunities to mitigate for historical losses due to development and to enhance fisheries.	*a. Make progress in reducing reliance on hatchery production for mitigation consistent with improvements in natural production.*	*b. Consider changes in hatchery objectives and production levels as overall fishery opportunities are maintained through increased fish abundance.*	*c. Achieve a future where we rely less on hatchery production for mitigation and fishery enhancement only when natural production has increased.*
3-C. *Fish Protection*: Strategically align hatchery production with natural production recovery goals, consistent with tribal treaty/trust responsibilities, and with other legal and mitigation requirements.	*a. Continue to implement changes in hatchery practices and programs based on best available science (including, in some cases, changes in stocks or species produced) to minimize adverse effects of hatchery-origin salmon and steelhead on naturally produced salmon and steelhead.*	*b. Continue to refine hatchery production, strategies and practices based on assessments of effectiveness and technology advances to minimize hatchery impacts on natural salmon and steelhead.*	*c. Reduce long-term hatchery impacts by rebuilding abundance, productivity, diversity, and distribution of natural salmon and steelhead.*

Social, Cultural, Economic & Ecological	
	Goal 4. Make decisions within a broader context that reflects, and considers effects to, the full range of social, cultural, economic, and ecosystem values and diversity in the Columbia Basin.
	[Add explanatory paragraph, including the concept of inter-generational equity and considerations for future generations]
	4-A. *Social Goal:* Make decisions that reflect the social importance of salmon and steelhead to people throughout the Columbia Basin, recognizing the full range of social diversity and values that are present.
	4-B. *Cultural Goal:* Make decisions that reflect the cultural importance of salmon and steelhead to people throughout the Columbia Basin, recognizing the full range of cultural values that are present.
	4-C. *Economic Goal:* Make decisions that are based on the principle of equitable sharing of costs and benefits across economic sectors. Also, make decisions that recognize the great economic value of the Columbia River and its tributaries, and the importance of this natural capital as a major driver of the present and future economy for all in the Pacific Northwest.
	4-D. *Ecosystem Goal:* Make decisions that consider the role of salmon and steelhead in the ecosystem and that support a full range of ecological benefits, including the needs of dependent wildlife.

PROVISIONAL QUANTITATIVE GOALS

AGGREGATE ADULT RUN SIZE

HARVEST & FISHERIES

NATURAL PRODUCTION

HATCHERY PRODUCTION

Describe the low, medium, and high ranges that reflect a continuum aspiration for progressive improvements to be achieved over an extended time period.

Take into account factors such as ESA delisting requirements, habitat constraints, habitat production potential, density dependence, cultural needs of tribes, fishing interests and sustainability, mitigation responsibilities.

PROVISIONAL QUANTITATIVE GOALS
AGGREGATE RUN SIZES

CBPTF Provisional Quantitative Goals
Aggregate Adult Run Size to Columbia River Mouth
(in development)

Species		Current Abundance (2008-2017 averages)[a] Wild/Natl	Hatchery	Total	% Hat	Historical Abundance ISAB 2015	NPPC 1986
Chinook	Spring	58,400	233,600	292,000	80%	0.5 mil	1.4-2.3 mil
	Summer	30,100	45,200	75,300	60%	2.0 mil	2.7-4.6 mil
	Fall	376,500	376,500	753,000	50%	1.25 mil	1.3-2.3 mil
	Subtotal	*465,000*	*655,300*	*1,120,300*	*58%*	*3.75 mil*	*5.4-9.2 mil*
Sockeye		295,700	32,900	328,500	10%	2.25 mil	1.5-2.6 mil
Coho		40,900	368,100	409,000	90%	0.56 mil	1.0-1.8 mil
Chum		13,600	700	14,300	5%	0.45 mil	0.8-1.0 mil
Steelhead	Winter	8,200	8,200	16,500	50%	--	--
	Summer	79,200	317,000	396,200	80%	--	--
	Subtotal	*87,500*	*325,200*	*412,700*	*79%*	*0.45 mil*	*0.8-1.4 mil*
Total		**902,600**	**1,382,100**	**2,284,700**	**60%**	**7.46 mil**	**9.6-16.3 mil**

Note:
- *red text indicates approximations*
- *values under the ISAB 2015 column are Chapman 1986 minimum run size estimates cited in ISAB 2015-1 report*

PROVISIONAL QUANTITATIVE GOALS NATURAL PRODUCTION / ESCAPEMENT TO SPAWNING GROUND

CBPTF Provisional Quantitative Goals
Natural Production / Escapement to Spawning Sites

Low range escapement abundance goal

- represent the best scientific knowledge for the abundance necessary to avoid extinction or avoid being listed under ESA.

Mid- range escapement abundance goal

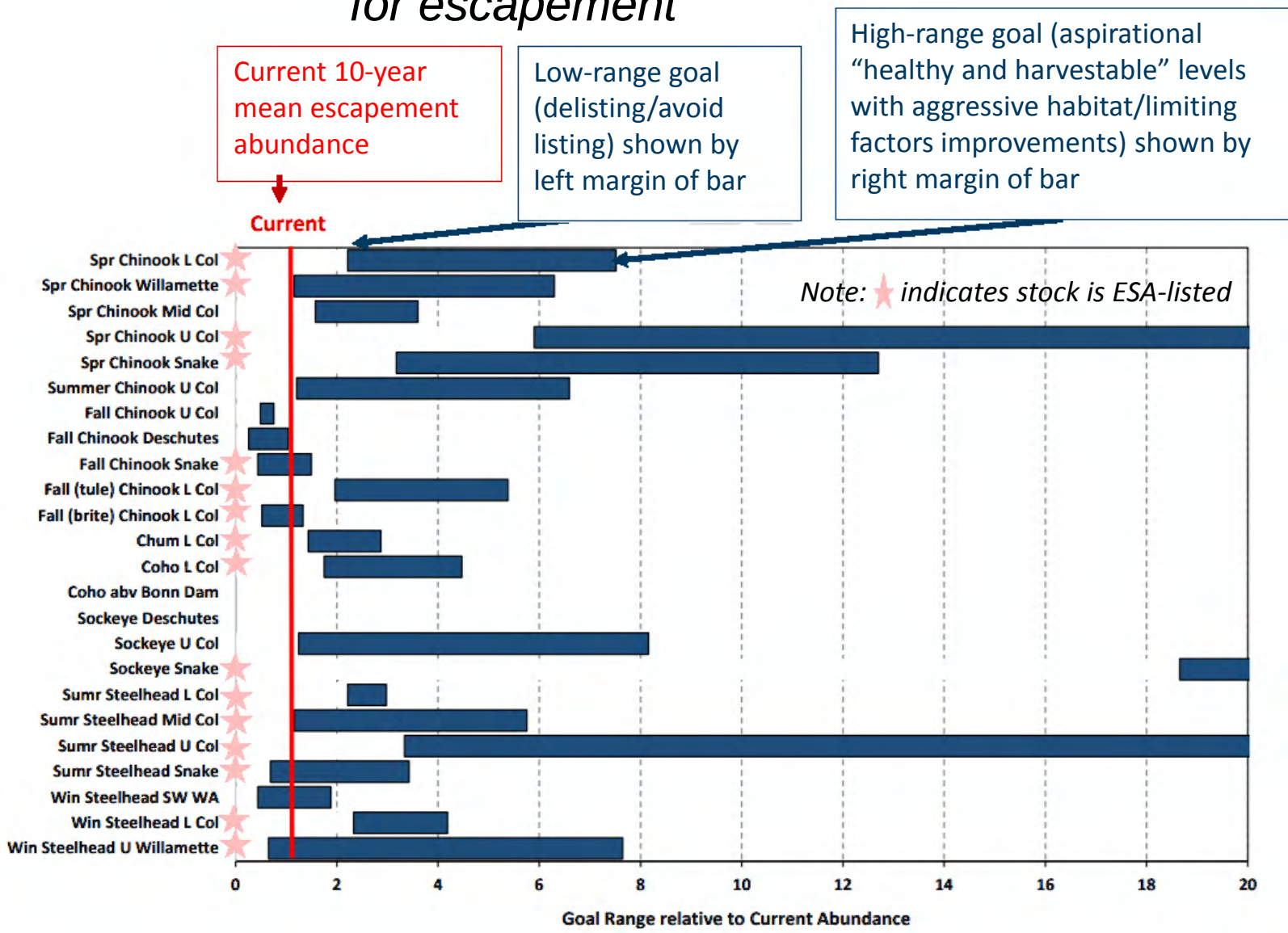
- are approximately half-way between the low-range goals and the high range goals.

High range escapement abundance goal

- reflect aspirational “healthy and harvestable” levels that might potentially be achieved with aggressive improvements in habitat and other conditions currently limiting stocks.

CBPTF Provisional Quantitative Goals
Natural Production / Escapement to Spawning Sites

Compares current escapement abundance to provisional goal ranges for escapement



Northwest P
Conservatio

CBPTF Provisional Quantitative Goals
Natural Production / Escapement to Spawning Sites

Species	ESA status	ESU/DPS (run)	Current 10-yr mean natural escapement abundance	Historical natural escapement abundance	Low goal	Med goal	High goal	High goal as % of historic
Chinook	Threatened (Th)	Lower Columbia (spring)	4,431	101,700	9,800	21,550	33,300	33%
Chinook	(Th)	Upper Willamette (spring)	4,095	312,173	4,725	15,262	25,798	8%
Chinook	Not Listed	M Columbia Spr (spring)	10,000	103,700	15,750	26,875	38,000	35%
Chinook	(Th)	U Columbia Spr (spring)	1,090	259,432	6,433	16,968	25,452	10%
Chinook	(Th)	Snake Spr/Sum (spring / summer)	10,000	671,000 (1800s abundance)	31,750	79,375	127,000	19%
Chinook	Not Listed	U Columbia Sum/Fall (summer)	18,771	693,952	22,704	81,398	123,841	18%
Chinook	Not listed	U Columbia Sum/Fall (fall)	85,500	533,900	41,950	53,188	64,425	12%
Chinook	Not listed	Deschutes Sum/Fall (summer/fall)	15,400	17,000	4,000	13,000	16,000	94%
Chinook	(Th)	Snake Fall (fall – brights)	9,626	500,000	4,200	9,280	14,360	3%
Chinook	(Th)	L Columbia (fall – tules)	12,510	166,100	24,550	46,300	67,300	41%
Chinook	(Th)	L Columbia (fall – late brights)	11,593	33,000	6,000	9,200	15,400	47%

Note: - See packet for population level goal values within each stock

- Red numbers are placeholder values for work in progress

CBPTF Provisional Quantitative Goals
Natural Production / Escapement to Spawning Sites

Species	ESA status	ESU/DPS (run) and *other organization grouping**	Current 10-yr mean natural escapement abundance	Historical natural escapement abundance	Low goal	Med goal	High goal	High goal as % of historic
Chum	Threatened (Th)	Columbia (late fall)	11,178	900,000	16,050	24,075	32,100	4%
Coho	Th	L Columbia (fall- early & late)	31,401	288,200	54,900	98,150	140,400	49%
Coho	Not Listed *	*Columbia upriver (fall) **		1,111,800				
Sockeye	Not Listed *	*Mid Columbia(summer)**	5	50,000	1,000	3,000	5,000	10%
Sockeye	Not Listed *	*U Columbia (summer)**	228,000	1,850,000	283,500	685,000	1,860,000	101%
Sockeye	Endangered (En)	Snake (summer)	134	150,000	2,500	5,750	9,000	6%

Note: - See packet for population level goal values within each stock

- Red numbers are placeholder values for work in progress

- '' indicates groupings of populations that managers identified for convenience while developing Columbia Basin Partnership Task Force products. These are not ESUs designated by NOAA Fisheries.*

CBPTF Provisional Quantitative Goals
Natural Production / Escapement to Spawning Sites

Species	ESA status	ESU/DPS (run)	Current 10-yr mean natural escapement abundance	Historical natural escapement abundance	Low goal	Med goal	High goal	High goal as % of historic
Steelhead	Threatened (Th)	L Columbia (winter)	8,570	58,000	20,000	27,900	35,900	62%
Steelhead	Th	L Columbia (summer)	2,100	7,600	4,650	5,500	6,250	82%
Steelhead	Th	Mid Columbia (summer)	18,155	132,800	21,000	62,750	104,500	79%
Steelhead	Th	U Columbia (summer)	2,011	577,500	6,713	29,252	43,878	8%
Steelhead	Th	Snake (summer)	30,500	172,200	21,000	62,750	104,500	61%
Steelhead	Not listed	SW Washington (winter)	11,200	41,900	4,900	13,200	21,100	50%
Steelhead	Th	U Willamette (winter)	5,150	110,000	3,350	21,375	39,400	36%
All species combined		Grand total of values:	531,394	8,841,957	611,425	1,410,098	2,950,904	33%

Note: - See packet for population level goal values within each stock

- Red numbers are placeholder values for work in progress

PROVISIONAL QUANTITATIVE GOALS
HARVEST / FISHERIES

CBPTF Provisional Quantitative Goals Harvest/Fisheries

Low-range fisheries goal

- based on existing fisheries management frameworks for weak stocks and currently-healthy stocks.

Mid-range fisheries goal

- currently-healthy stocks, based on existing fisheries management framework.
- currently weak/depleted stocks, an intermediate value between low and high range goals.

High-range fisheries goal

- currently-healthy stocks, based on existing fisheries management framework.
- currently weak/depleted stocks, based on reasonably-realistic sustainable harvest rates healthy abundance for natural stocks.

CBPTF Provisional Quantitative Goals
Harvest/Fisheries

Application of existing management framework's exploitation/harvest rate to current wild fish abundance levels

Application of existing management framework's rate to Provisional Natural Productions/Escapement Goal levels

Provisional Fisheries Low- Mid- and High- Range Exploitation / Harvest Rate Goals

Stock	Current Exploitation Rates (wild/natural)							Increments (existing plans)			Low goal		Medium goal		High goal	
	Ocean	Fresh water	Total (avg)	Range	Related guidance		Guidance includes	@ low natl	@ med natl	@ high natl	Avg.	Range	Avg.	Range	Avg.	Range
Spr Chinook L Col	10%	8%	18%	10-40%				18%	18%	18%	18%	10-40%	27%	15-45%	35%	20-50%
Spr Chinook Willamette	8%	10%	18%	8-25%	<15%	/a	Freshwater	18%	21%	23%	18%	8-25%	27%	15-40%	35%	20-50%
Spr Chinook Mid Col	--	11.6%	11.6%	5.5-17%	5.5-17%	/a	Freshwater	12%	16%	17%	12%	5.5-17%	24%	25-35%	35%	20-50%
Spr Chinook U Col	--	11.6%	11.6%	5.5-17%	5.5-17%	/a	Freshwater	12%	16%	17%	12%	5.5-17%	24%	25-35%	35%	20-50%
Spr Chinook Snake	--	11.6%	11.6%	5.5-17%	5.5-17%	/a	Freshwater	12%	16%	17%	12%	5.5-17%	24%	25-35%	35%	20-50%
Summer Chinook U Col	36%	24%	60%	40-80%	5.2-50%	/a	Freshwater	60%	60%	60%	60%	40-80%	60%	40-80%	60%	40-80%
Fall Chinook U Col	36%	26%	62%	40-80%	21.5-45%	/a	Freshwater	65%	65.0%	65%	65%	40-80%	65%	40-80%	65%	40-80%
Fall Chinook Deschutes	36%	17%	53%	30-70%	21.5-45%	/a	Freshwater	55%	55%	55%	55%	30-70%	60%	30-70%	65%	30-70%
Fall Chinook Snake	33%	10%	43%	30-70%	21.5-45%	/a	Freshwater	43%	46.6%	50%	43%	30-70%	47%	30-70%	50%	30-70%
Fall (tule) Chinook L Col	29%	9%	38%	30-41%	30-41%	/a	All	41%	41%	41%	41%	30-41%	46%	30-55%	50%	30-70%
Fall (brite) Chinook L Col	38%	15%	53%	35-70%		/a		53%	53%	53%	53%	35-70%	53%	35-70%	53%	35-70%
Chum L Col	--	2%	2%	<5%	<5%		Freshwater	2%	3.5%	5%	2%	<5%	10%	5-15%	20%	10-30%
Coho L Col	10%	6%	16%	<10-30%	<10-30%	/a	All	18%	23%	30%	18%	<10-30%	24%	10-40%	30%	10-50%
Coho abv Bonn Dam	10%	9%	19%	<10-35%	<10-30%	/a	All < BON	21%	26%	33%	21%	<10-40%	30%	10-50%	40%	20-60%
Sockeye Deschutes	--	3.2%	3.2%	3-11%	6-8+%	/a	Freshwater	3%	9%	12%	4%	3-11%	15%	10-30%	25%	10-40%
Sockeye U Col	--	6.3%	6.3%	6-11%	6-8+%	/a	Freshwater	6%	9%	12%	7%	6-11%	15%	10-30%	25%	10-40%
Sockeye Snake	--	6.3%	6.3%	6-11%	6-8+%	/a	Freshwater	6%	9%	12%	7%	6-11%	15%	10-30%	25%	10-40%
Sumr Steelhead L Col	--	<10%	10%	<10%	<10%		Freshwater	10%	10%	10%	10%	<10%	18%	10-25%	25%	10-40%
Sumr Steelhead Mid Col	--	7.5%	7.5%	15-22%	15-22%	/a	Freshwater	8%	14.8%	22%	8%	15-22%	21%	15-30%	35%	20-50%
Sumr Steelhead U Col	--	13.9%	13.9%	20-34%	20-34%	/a	Freshwater	20%	27%	34%	20%	20-34%	28%	20-40%	35%	20-50%
Sumr Steelhead Snake	--	18.9%	18.9%	15-22%	15-22%	/a	Freshwater	19%	20.5%	22%	19%	15-22%	27%	20-40%	35%	20-50%
Win Steelhead SW WA	--	<10%	10%	<10%	<10%		Freshwater	10%	10%	10%	10%	<10%	18%	10-30%	25%	10-40%
Win Steelhead L Col	--	<10%	10%	<10%	<10%		Freshwater	10%	10%	10%	10%	<10%	18%	10-30%	25%	10-40%
Win Steelhead U Willamette	--	5%	5%	<20%	<20%		Freshwater	5%	5%	5%	5%	<20%	15%	10-30%	25%	10-40%

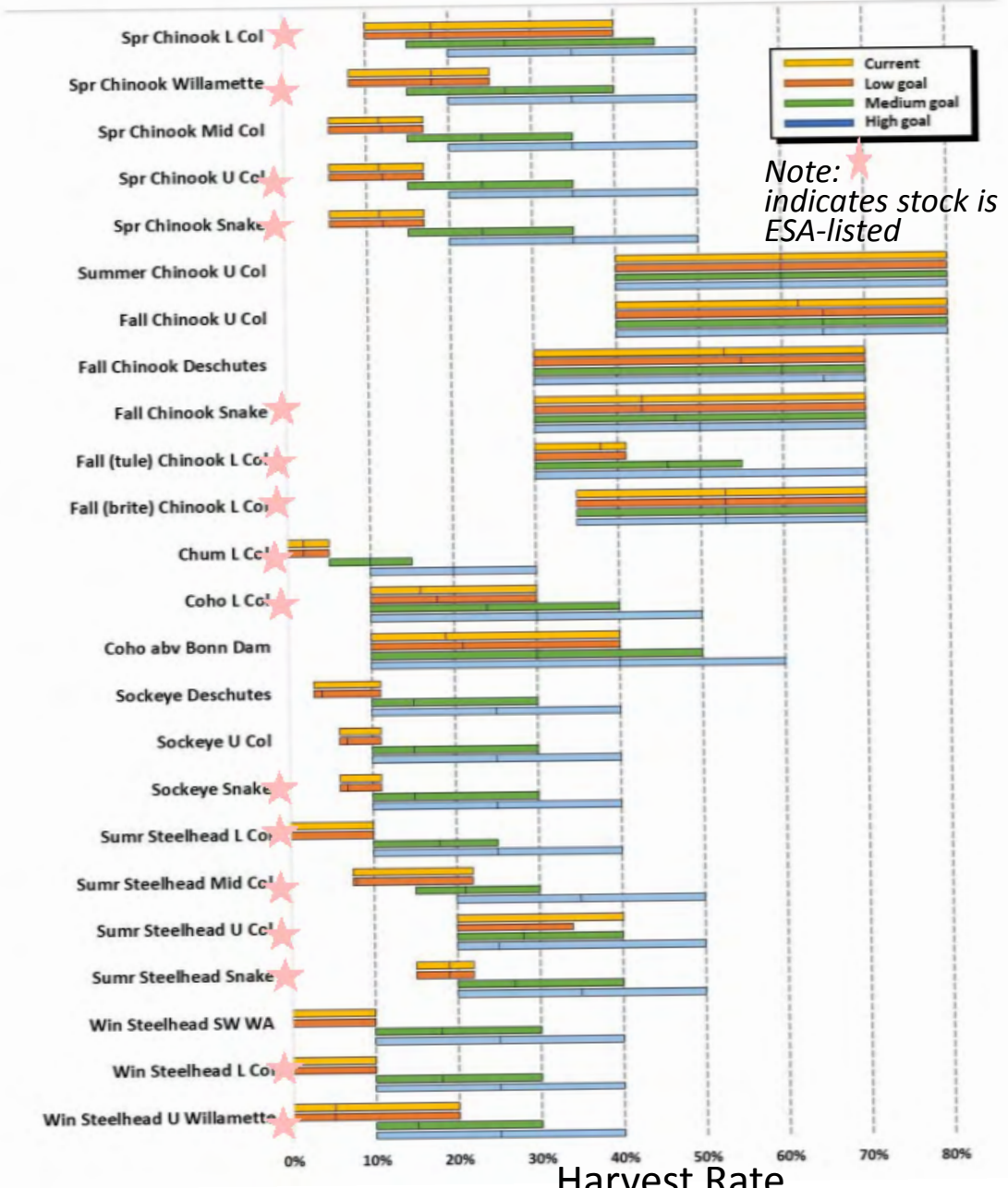
/a Abundance-based management framework

Note: indicates the stock is ESA-listed

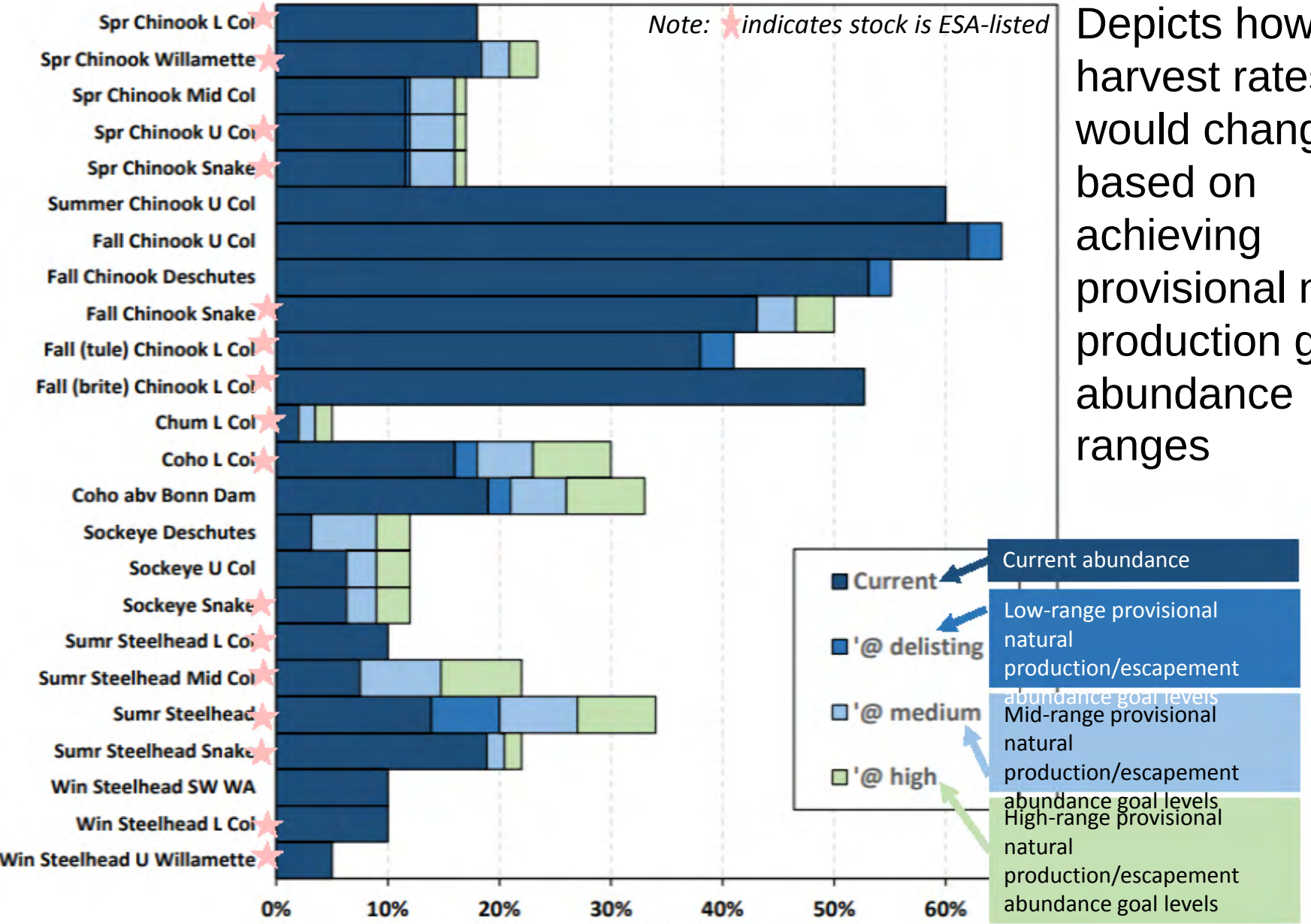
CBPTF Provisional Quantitative Goals
Harvest/Fisheries

Compares the provisional harvest rate goal ranges to current harvest rates.

The provisional harvest rate goal depicts harvest that can be sustained by natural-origin fish stocks when restored to higher levels of abundance of productivity (greater than under existing rates).



CBPTF Provisional Quantitative Goals
Harvest/Fisheries



Depicts how harvest rates would change based on achieving provisional natural production goal abundance ranges

PROVISIONAL QUANTITATIVE GOALS
HATCHERY PRODUCTION

CBPTF Provisional Quantitative Goals
Hatchery Production

Current hatchery production levels

- Current juvenile production levels from existing programs.
- Recent average hatchery adult returning to the Columbia River mouth by stock.

New Production

- *Planned hatchery production levels*: planned / in-development additional hatchery juvenile productions
- *Additional hatchery production*: hatchery juvenile production needs to address specific purposes identified by Task Force members

CBPTF Provisional Quantitative Goals
Hatchery Production

Current juvenile hatchery production

Recent hatchery adult returns to the Columbia River mouth

New Production:
-Planned/in-development
-Additional needs

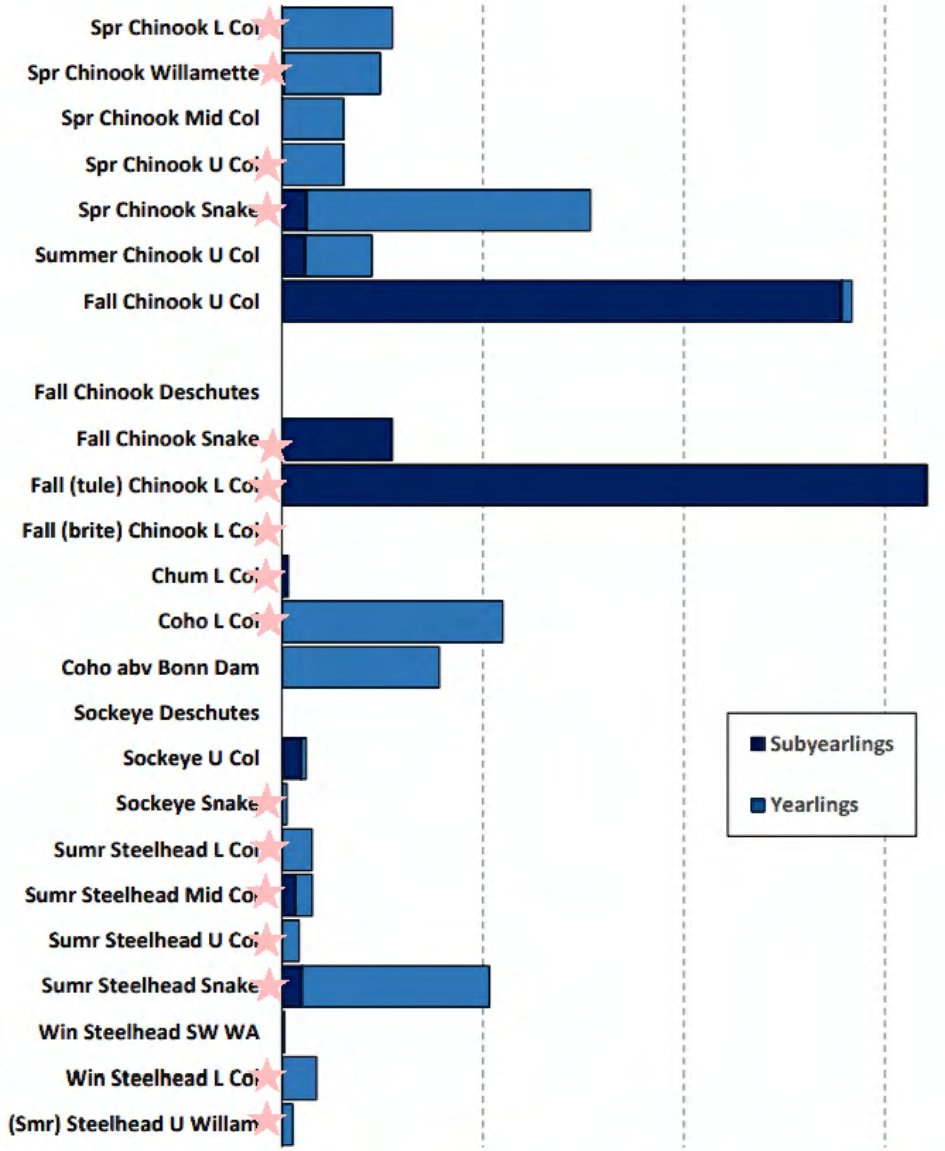
Evolutionarily Significant Unit or Distinct Population Segment		Run Type	Fishery Management Unit	Current production (avg.)			Col R Adults	New production	
				Yearlings	Subyearlings	Total		Total	Col R Adults
Chinook	L Columbia ★	Spring	Lower River Spring	5,500,000	0	5,500,000	13,800	--	--
Chinook	U Willamette ★	Spring	Willamette Spring	4,800,000	100,000	4,900,000	48,506	--	--
Chinook	M Columbia Spr	Spring	Upriver Spring	3,080,000	0	3,080,000	54,674	--	--
Chinook	U Columbia Spr ★	Spring	Upriver Spring	3,090,000	0	3,090,000	19,422	0.7-13.5 mil	4,400-85,000
Chinook	Snake Spr/Sum ★	Spring/Summer	Upriver Spring	14,120,000	1,230,000	15,350,000	85,555	--	--
Chinook	U Columbia Sum/Fall	Summer	Upper Columbia Summer	3,310,000	1,180,000	4,490,000	45,151	0.9-18 mil	53,000-220,000
Chinook	U Columbia Sum/Fall	Fall	Upriver Bright (URB)	500,000	27,850,000	28,350,000	223,553	~11 mil	~45,000
								0.3-5.4 mil	2,000-40,000
Chinook	Deschutes Sum/Fall	Summer/Fall	Upriver Bright (URB)	0	0	0	0	--	--
Chinook	Snake Fall ★	Fall (brights)	Snake River Bright (SRB)	0	5,500,000	5,500,000	42,893	--	--
Chinook	L Columbia ★	Fall (tules)	Lower River Hatchery (LRH)	0	32,100,000	32,100,000	82,568	--	--
Chinook	L Columbia ★	Fall (late brights)	Lower River Wild (LRW)	0	0	0	0	--	--
Chum	Columbia ★	Late Fall	Chum	0	320,000	320,000	289	--	--
Coho	L Columbia ★	Fall (early & late)	Lower Columbia Coho	10,990,000	0	10,990,000	246,829	--	--
Coho	(Columbia upriver)	Fall	Upriver Coho	7,830,000	0	7,830,000	137,731	--	--
Sockeye	(Mid Columbia)	Summer	Mid Columbia Sockeye				95	--	--
Sockeye	(U Columbia)	Summer	U Columbia Sockeye	250,000	950,000	1,200,000	32,701	--	--
Sockeye	Snake ★	Summer	Snake Sockeye	250,000	0	250,000	1,096	--	--
Steelhead	L Columbia ★	Summer	L Col summer run	1,505,000	0	1,505,000	50,400	--	--
Steelhead	Mid Columbia ★	Summer	Summer A run	840,000	670,000	1,510,000	58,000	--	--
Steelhead	U Columbia ★	Summer	Summer A run	860,000	0	860,000	24,000	0.9-3.9 mil	25,000-110,000
Steelhead	Snake ★	Summer	Summer A & B runs	9,330,000	1,000,000	10,330,000	160,000	--	--
Steelhead	SW Washington	Winter	Winter run	120,000	0	120,000	1,500	--	--
Steelhead	L Columbia ★	Winter	Winter run	1,720,000	0	1,720,000	4,000	--	--
Steelhead	U Willamette ★	Winter	(Summer run only)	550,000	0	550,000	16,000	--	--
				68,645,000	**70,900,000**	**139,545,000**	**1,348,764**	**13.8-51.8**	**86,000-274,000**

Note: Values in red are working approximations.

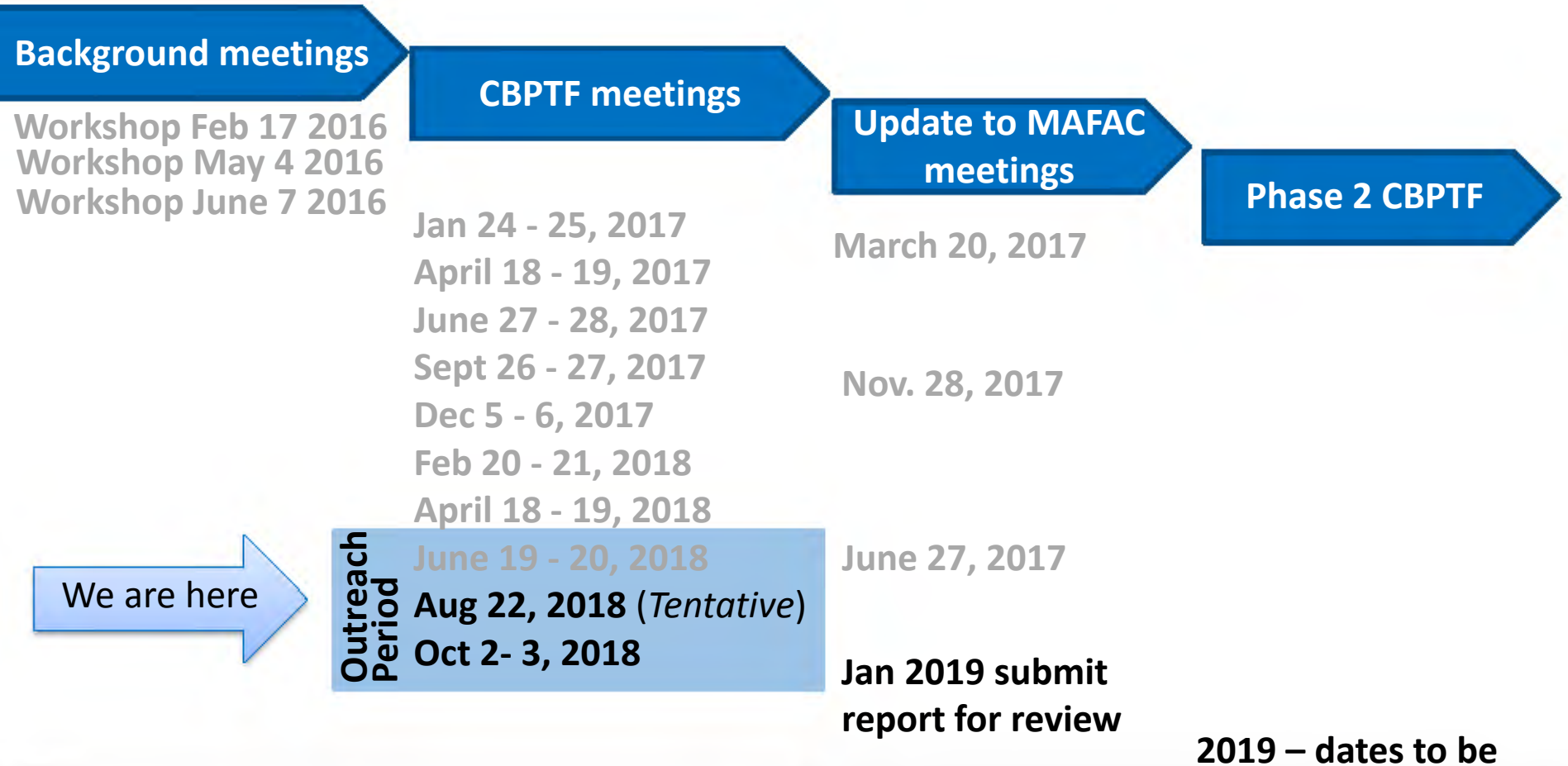
Note: ★ indicates the stock is ESA-listed

CBPTF Provisional Quantitative Goals
Hatchery Production

Current total juvenile hatchery production by salmon and steelhead stock.

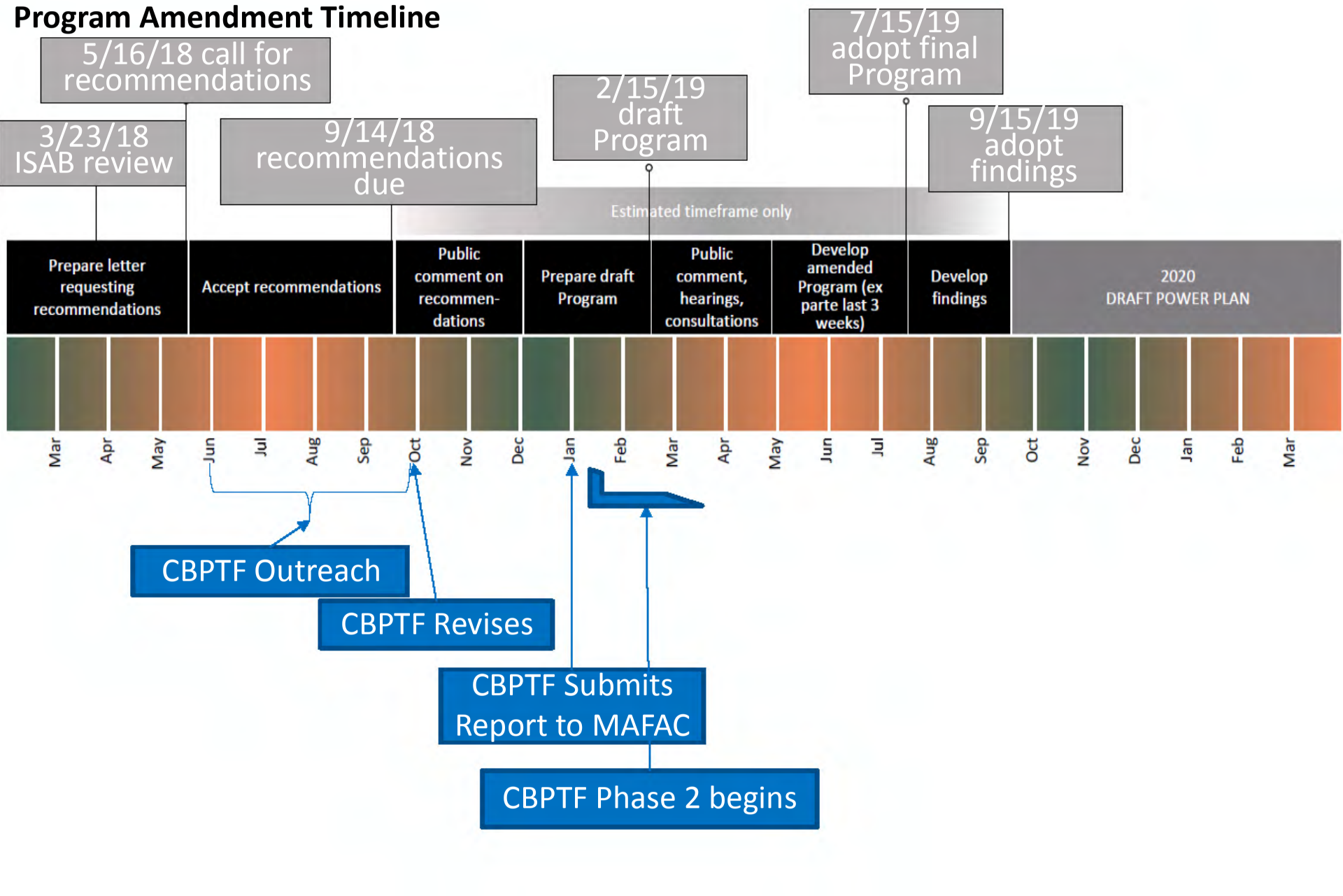


Timeline: NOAA Columbia Basin Partnership Task Force (CBPTF)



CBPTF – Columbia Basin Partnership Task Force
MAFAC - Marine Advisory Fisheries Committee

FW Program and the CBPTF Task Force Goals



Discussion on Input Sought by Task Force

- Do we understand the Task Force provisional goals and what they represent?
- Do we support the Task Force recommending these provisional goals to MAFAC and NOAA Fisheries? If not, why not?
- Do we support the Task Force continuing its work to further explore and refine these provisional goals (Phase 2)?
- Would we like more information?
- Would we like to keep up to date on Task Force activities?

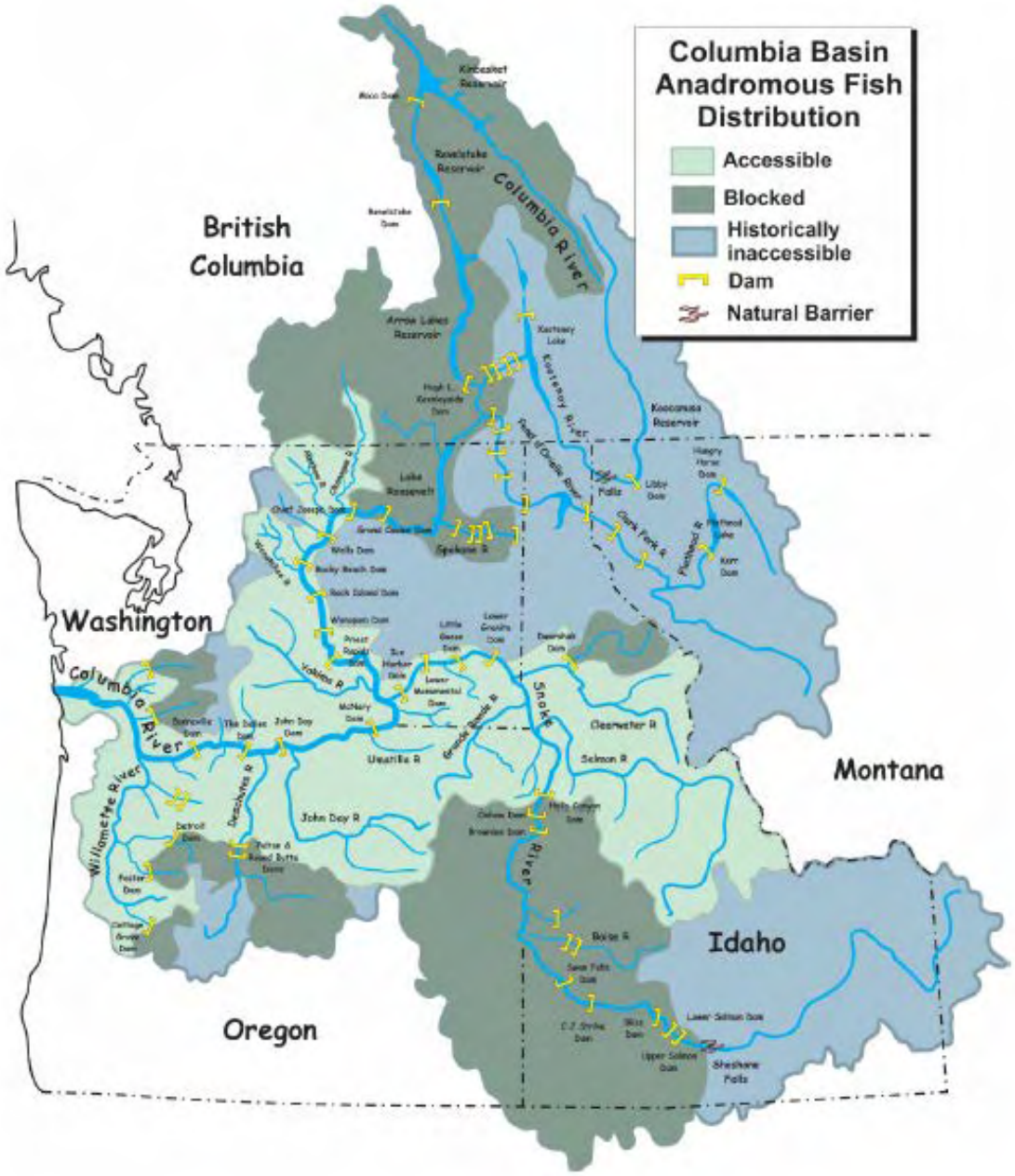
Idaho Water Resources Board Meeting – September 13-14, Salmon, Idaho

Columbia Basin Partnership Presentation

State of Idaho Team
Jim Yost
Paul Arrington
Norm Semanko
Mike Edmondson
John Simpson
Paul Kline

Packet Table of Contents:

The Columbia Basin Partnership Task Force
Background and Update
June 2018



In 2012, NOAA Fisheries commissioned two neutral, university-based institutions – the Oregon Consensus Program at Portland State University and the William D. Ruckelshaus Center at the University of Washington – to gather the views of representatives of Columbia Basin states, tribes, federal agencies, and stakeholders regarding long-term salmon recovery strategies. The resulting Columbia Basin Situation Assessment Report (Assessment Report), issued in December 2013,[1] highlighted the absence of common goals and called for bold leadership to address the complexities of salmon recovery in a more coherent, integrated, and efficient way.

In the spring of 2016, after additional discussions with Columbia Basin managers and stakeholders, NOAA Fisheries presented the outcome of the Columbia Basin Situation Assessment Report to its Marine Fisheries Advisory Committee (MAFAC). NOAA Fisheries identified the opportunity to establish a task force within the MAFAC framework as a way to convene regional stakeholders and sovereigns to collaborate on long-term salmon and steelhead recovery goals. The MAFAC agreed to support the task force, and NOAA Fisheries then held an open nomination process for members. In January 2017, NOAA Fisheries formed the Columbia Basin Partnership (CBP) as a MAFAC Task Force. The CBP Task Force consists of 28 members, including:

- Four representatives from the states in the Basin (Oregon, Washington, Idaho, and Montana; one representative per state),
- Four tribal representatives (covering 13 tribes), and
- 20 stakeholders representing commercial and recreational fishing, navigation and river users (e.g., ports and navigation), public utilities, agriculture, irrigation, environmental groups, and local recovery planning entities.

The purpose of the CBP Task Force is to provide a science-based, results-driven, transparent, and publicly embraced process for identifying "broad-sense" goals for Columbia Basin salmon and steelhead based on the multiple overlapping federal, state, and tribal recovery and management responsibilities and plans that currently exist. These goals will address long-term conservation, harvest/fishery, and hatchery production/mitigation needs across the basin for both ESA-listed and non-listed species.

So far, the CBP Task Force has developed various interrelated, draft components of its recommendations to MAFAC, including a draft vision statement, guiding principles, provisional qualitative goals, and provisional quantitative goals. The CBP Task Force identified provisional qualitative goals that describe desired outcomes they hope to achieve within selected timeframes, or sooner. Qualitative goals cover natural production; harvest fishing opportunities; hatchery/mitigation, and social, cultural, economic, and ecological considerations. The qualitative goals guide the development of quantitative goals.

The CBP Task Force is also developing provisional quantitative goals for 24 salmon and steelhead stocks including historical production areas in the Columbia River Basin, some of which are currently blocked to salmon. To develop the goals, the CBP Task Force convened regional teams composed of technical experts with expertise in the subject area. The regional teams identified draft goals in several categories (natural production, harvest, hatchery production, and total run size) for each stock. Low, medium, and high range numbers were identified to reflect a continuum of aspiration for progressive improvements to be achieved over an extended time period. The goals take into account a number of factors, including ESA de-listing requirements, habitat constraints and production

potential, density dependence, cultural needs of tribes, fishing interests and sustainability, and mitigation responsibilities including currently blocked historical anadromous production areas. In addition to developing shared goals, the CPB Task Force provides a venue to foster engagement and build relationships among different interests. Task Force members have increased their knowledge of each other's perspectives and developed a common understanding of the complexities of salmon recovery. Constructive relationships and opportunities for building common ground, based on joint interests, have emerged from these interactions.

As of June 2018, the CBP Task Force has agreed in principle on these provisional products and is seeking feedback from communities across the Columbia Basin throughout the summer. In the fall 2018, the CBP Task Force will be drafting its recommendations to MAFAC for consideration and transmission to the NOAA Fisheries Administrator.

The CBP Task Force is also seeking an extension from the MAFAC to continue its work to further refine the provisional goals. These refinements may include integrating the goals across all species and considering limiting factors and potential constraints to achieving the goals.

The CBP Task Force represents an opportunity to define a clear measure of success and a shared future for Columbia Basin salmon and steelhead. Having common, long-term goals would allow the region to align on a common path and means to measure progress and maintain accountability. It would also help to maintain public support for regional efforts.

The intent is that NOAA Fisheries will use the goals the CBP Task Force recommends to guide its future management decisions, While the CBP Task Force recommendations will not result in any regulatory decisions or commit any party to specific activities, it is our hope that the prospect of a common set of long-term goals will inspire our many partners to use them in similar ways, and to integrate efforts and seek efficient ways to achieve them.

Columbia Basin Partnership Task Force Members

Stakeholders

Bert Bowler, Idaho Rivers United, Idaho Conservation League, Idaho Wildlife Federation, International Federation of Fly Fishers, Idaho Sierra Club, and Snake River Waterkeeper

Ben Enticknap, Oceana

Kevin Scribner, Salmon Safe

Steve Fick, Fishhawk Fisheries

Joel Kawahara, Coastal Trollers Association

Glen Spain, Pacific Coast Federation of Fisherman's Association

Liz Hamilton, Northwest Sport Fishing Industry Association

Heath Heikkila, Coastal Conservation Association, Pacific Northwest Fisheries

Rob Masonis, Trout Unlimited

Jeff Grizzel, Grant County Public Utility District

Joe Lukas, Western Montana Electric Generating and Transmission Cooperative

Marla Harrison, Port of Portland

Kristin Meira, Pacific Northwest Waterways Association

Jess Groves, Port of Cascades Locks

Norm Semanko, Idaho Water Users Association

Mike Edmondson, Idaho Governor's Office of Species Conservation

Deb Marriott, Lower Columbia Estuary Partnership

Steve Martin, Snake River Salmon Recovery Board

Urban Eberhart, Kittitas Reclamation District

Liza Jane McAlister, 6 Ranch, Inc.

State & Tribal Representatives

Guy Norman, Northwest Power and Conservaton Council, Washington

Jim Yost, Northwest Power and Conservation Council, Idaho

Jennifer Anders, Northwest Power and Conservation Council, Montana, Salish-Kootenai Tribes and Kootenai Tribe of Idaho

Bill Bradbury, Northwest Power and Conservation Council, Oregon

Bob Austin, Snake River Tribes Foundation, Shoshone-Paiute Tribes of the Duck Valley Reservation, Shoshone-Bannock Tribes of the Fort Hall Reservation, Fort McDermitt Paiute Shoshone Tribe and Burns Paiute Tribe.

BJ Kelffer, Spokane Tribe

Randy Friedlander, Colville Tribes

Zach Penny, Columbia Inter-Tribal Fish Commission, Nez Perce, Yakama, Umatilla and Warm Springs Tribes

Tony Grover, Northwest Power and Conservaton Council, *ex-officio*

MAFAC CBP Task Force
Vision Statement
(06/20/18 final)

A healthy Columbia River Basin ecosystem with thriving salmon and steelhead that are indicators of clean and abundant water, reliable and clean energy, a robust regional economy, and vibrant cultural and spiritual traditions, all interdependent and existing in harmony.

MAFAC CBP Task Force

Guiding Principles Small Group

(06/20/18 version)

Proposed Guiding Principles

FAIRNESS: Foster a culture of respect, equity and generosity and be accountable for our interests.

OPENNESS & TRANSPARENCY: Everything is on the table – recognize yours and others' needs, acknowledge fears, threats and limitations to success, and be willing to re-evaluate them together.

OBLIGATIONS & RESPONSIBILITIES: Honor legal, statutory, treaty/trust and regulatory obligations, rights, and responsibilities.

CLARITY: Collaboratively arrive at solutions that improve regulatory and legal certainty.

SUSTAINABILITY: Strive for durable and practical outcomes, seeking clarity while acknowledging a dynamic social/cultural, economic and natural landscape.

KNOWLEDGE & WISDOM: Ground decisions and recommendations in science, while accepting that science may not be definitive.

INNOVATION & ADAPTIVENESS: Plan for the long term, act in the short term and be bold in the face of uncertainty and change.

INTERCONNECTION & COMPLEXITY: Envision a healthy and resilient ecosystem. Assume there are multiple solutions to resolving Basin issues.

QUALITATIVE GOALS

[Add intro paragraph that discusses timeframes and numbering of goals (i.e., does not relate to priority); timeframes are indicators of progress, not goals themselves]

Natural Production

Goal 1. Restore salmon and steelhead in the Columbia Basin to healthy and harvestable/fishable levels.

[Add explanatory paragraph here. Include definition of "healthy" (i.e., implies that fish abundance, productivity, spatial structure and diversity are at high levels; addresses needs for dependent wildlife); address "fishable"; explain ESA recovery and broad-sense recovery, discuss time-frame issue – although some of these are long-term goals, strive to do them sooner (e.g., could achieve goal 1-Cb in a shorter timeframe, like 24 years, for some populations), take action as soon as practicable and move as fast as possible. Highlight the need for strategic prioritization in phase2, etc.]

Subgoals	*Within 25 years*	*Within 50 years*	*Within 100 years*
1-A. Prevent Declines: Reverse and prevent declines of both listed and unlisted salmon and steelhead.	*a. Reverse and prevent declines of both listed and unlisted salmon and steelhead.*		
1-B. Achieve ESA Delisting: Recover ESA-listed salmon and steelhead to a point where they are no longer threatened or endangered.	*a. Achieve ESA delisting for at least some salmon ESUs and steelhead DPSs.*	*b. Achieve ESA delisting for additional salmon ESUs and steelhead DPSs.*	*c. Achieve ESA delisting for all listed salmon and steelhead.*
1-C. Achieve Broad Sense Recovery: Restore listed and unlisted salmon and steelhead to healthy and harvestable levels.	*a. Make significant, measurable progress toward broad sense recovery of all salmon and steelhead.*	*b. Achieve healthy and harvestable levels for some salmon and steelhead.*	*c. Achieve healthy and harvestable levels for all salmon and steelhead.*
1–D. Expand Spatial and Temporal Range: Rebuild spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within the historical range.	*a. Make significant, measurable progress toward rebuilding spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including beginning to study, develop, and implement plans for restoring salmon and steelhead to currently inaccessible areas within their historical range.*	*b. Continue rebuilding spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within their historical range.*	*c. Complete rebuilding of spatial distribution and run timing of salmon and steelhead at local and basinwide scales, including in currently inaccessible areas within their historical range.*
1-E. Expand Diversity and Resiliency: Rebuild salmon and steelhead runs that are adaptive and resilient to climate change and other environmental perturbations.	*a. Rebuild salmon and steelhead runs that are adaptive and resilient to climate change and other environmental perturbations.*	*b. Continue rebuilding adaptive and resilient salmon and steelhead runs and proactively and adaptively manage for a changing climate.*	*c. Ensure continued resiliency of salmon and steelhead runs and continue to adaptively manage for a changing climate.*

Harvest & Fishing Opportunity

Goal 2. Provide diverse, productive, and dependable tribal and non-tribal harvest and fishing opportunities for Columbia Basin salmon and steelhead in fresh and marine waters.

[Add explanatory paragraph – include explanation of "harvest," "fisheries" – also still need to work on consistency of usage within this document]

Subgoals	*Within 25 years*	*Within 50 years*	*Within 100 years*
2-A. <u>*Ensure Sustainability*</u>: Manage harvest and fisheries at levels consistent with conserving natural salmon and steelhead populations	*a. Ensure that fishery impacts on weak and listed stocks allow rebuilding of natural stocks and do not impede recovery.*	*b. Manage fisheries based on annual abundance to promote rebuilding of natural production and share the recovery burden.*	*c. Manage for optimum sustainable harvest and fishing opportunity as healthy stocks are restored.*
2-B. <u>*Optimize Harvest and Fishery Opportunity*</u>: Optimize fishery opportunity and harvest of healthy natural and hatchery stocks based on availability.	*a. Optimize fishery opportunity and access to harvestable surpluses of unlisted and hatchery stocks consistent with conservation.*	*b. Expand fishery opportunity concurrent with progress toward ESA delisting and broad sense recovery.*	*c. Fully realize harvest potential with increasing opportunity throughout the range of salmon and steelhead stocks.*
2-C. <u>*Share Benefits*</u>: Realize all fishery obligations and share benefits among users.	*a. Meet fishery obligations and share available harvest within the constraints imposed by conservation.*	*b. As constraints are reduced, move into focusing fisheries on sharing the benefits of increasing numbers of harvestable stocks.*	*c. Realize all fishery obligations and share benefits among users.*

Hatcheries / Mitigation

Goal 3. Produce hatchery salmon and steelhead to support conservation, mitigate for lost natural production, and support fisheries, in a manner that strategically aligns hatchery production with natural production recovery goals.

[Add explanatory paragraph, including explanation that supplementation is a tool. Also add supplementation to the definitions section. Mention broader uses of artificial production.]

Subgoals	*Within 25 years*	*Within 50 years*	*Within 100 years*
3-A. <u>*Support Natural Production*</u>: Utilize hatcheries to maintain, support and restore natural production where appropriate.	*a. As appropriate, continue to utilize hatcheries to maintain, support and restore at-risk populations, including those affected by climate change.*	*b. Use conservation hatchery strategies as needed to proactively address future threats, including climate change.*	*c. Achieve a future where conservation hatcheries are not necessary unless unforeseen natural events require an emergency response.*
3-B. <u>*Mitigate for Lost Production and Support Fisheries*</u>: Produce hatchery fish to support tribal treaty/trust responsibilities and meaningful fishery opportunities to mitigate for historical losses due to development and to enhance fisheries.	*a. Make progress in reducing reliance on hatchery production for mitigation consistent with improvements in natural production.*	*b. Consider changes in hatchery objectives and production levels as overall fishery opportunities are maintained through increased fish abundance.*	*c. Achieve a future where we rely less on hatchery production for mitigation and fishery enhancement only when natural production has increased.*
3-C. <u>*Fish Protection*</u>: Strategically align hatchery production with natural production recovery goals, consistent with tribal treaty/trust responsibilities, and with other legal and mitigation requirements.	*a. Continue to implement changes in hatchery practices and programs based on best available science (including, in some cases, changes in stocks or species produced) to minimize adverse effects of hatchery-origin salmon and steelhead on naturally produced salmon and steelhead.*	*b. Continue to refine hatchery production, strategies and practices based on assessments of effectiveness and technology advances to minimize hatchery impacts on natural salmon and steelhead.*	*c. Reduce long-term hatchery impacts by rebuilding abundance, productivity, diversity, and distribution of natural salmon and steelhead.*

Social, Cultural, Economic & Ecological	
	Goal 4. Make decisions within a broader context that reflects, and considers effects to, the full range of social, cultural, economic, and ecosystem values and diversity in the Columbia Basin. *[Add explanatory paragraph, including the concept of inter-generational equity and considerations for future generations]*
	4-A. Social Goal: Make decisions that reflect the social importance of salmon and steelhead to people throughout the Columbia Basin, recognizing the full range of social diversity and values that are present.
	4-B. Cultural Goal: Make decisions that reflect the cultural importance of salmon and steelhead to people throughout the Columbia Basin, recognizing the full range of cultural values that are present.
	4-C. Economic Goal: Make decisions that are based on the principle of equitable sharing of costs and benefits across economic sectors. Also, make decisions that recognize the great economic value of the Columbia River and its tributaries, and the importance of this natural capital as a major driver of the present and future economy for all in the Pacific Northwest.
	4-D. Ecosystem Goal: Make decisions that consider the role of salmon and steelhead in the ecosystem and that support a full range of ecological benefits, including the needs of dependent wildlife.

8.4.4 Columbia River Run Sizes

Estimates of historical abundance were identified as a point of reference for current abundance. Historical abundance is uncertain but the various estimates were recently reviewed by the ISAB (2015). Total annual abundance of adult salmon and steelhead in the Columbia River Basin during the pre-development period (~mid 1800s) has been estimated to range from 7.5 to 8.9 million fish (Chapman 1986) and 10 to 16 million fish (NPPC 1986). The ISAB's (2015) re-analysis of the limited data suggested that the potential capacity for all species combined was likely in the range of 5 to 9 million adult fish per year with the primary evidence from probable harvest rates supporting an estimate of around 6 million fish per year. The ISAB concluded that Chapman's lower potential abundance estimated be considered reasonable estimates of pre-development capacity of each species.

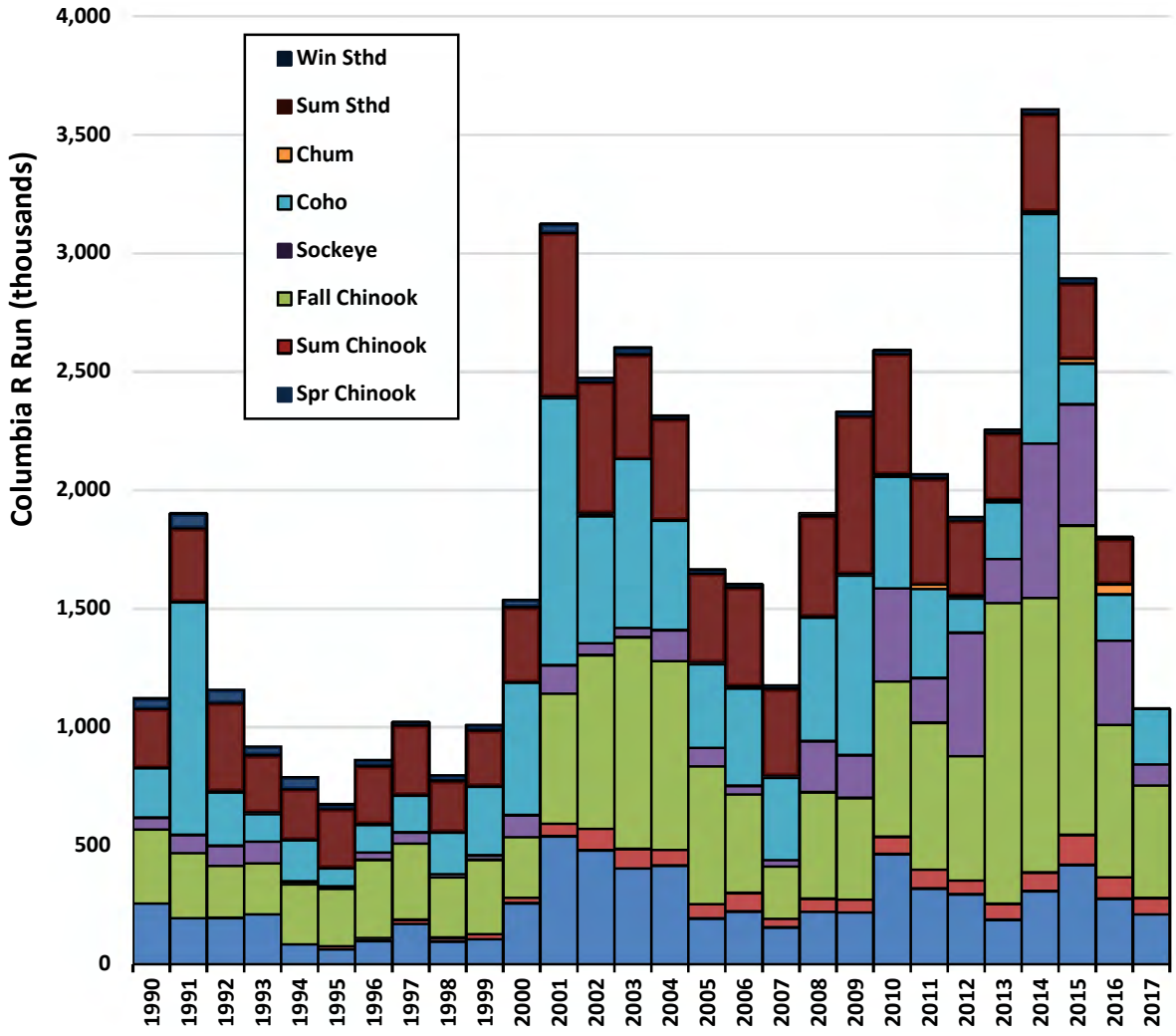


Figure 8-1. Annual salmon and steelhead run size to the Columbia River by stock. 1990-2017.

Table 8-1. Historical run size estimates, current run sizes, and harvest of salmon and steelhead in the Columbia River.

Species	Historical Col R Run (millions)			Current Col R Run (2008-2017 averages)				Col Basin Harvest	
	Chapman 1986	NPPC 1986	PFMC 1979	Natural origin	Hatchery origin	Total	% Hat	Total	% of run
Chinook	***3.75-4.34***	***5.4-9.2***	***3.44***	***465,000***	***656,000***	***1,121,000***	***58%***	***406,700***	***36%***
Spring	0.5-0.6	1.4-2.3	--	58,000	234,000	292,000	80%	65,700	23%
Summer	2.0-2.5	2.7-4.6	--	30,000	45,000	75,000	60%	38,200	51%
Fall	1.25	1.3-2.3	--	377,000	377,000	754,000	50%	302,800	40%
Chum	0.45-0.75	0.8-1.0	0.95	14,000	1,000	15,000	2%	0	0%
Coho	0.56-0.62	1.0-1.8	1.2	41,000	368,000	409,000	90%	134,900	33%
Sockeye	2.25-2.62	1.5-2.6	0.65	296,000	33,000	329,000	10%	20,900	6%
Steelhead	***0.45-0.55***	***0.8-1.4***	***2.04***	***87,000***	***325,000***	***412,000***	***79%***	***92,800***	***23%***
Winter	--	--	--	8,000	8,000	16,000	50%	5,000	31%
Summer	--	--	--	79,000	317,000	396,000	80%	87,800	22%
Total	**7.5-8.9**	**9.6-16.3**	**8.28**	**903,000**	**1,383,000**	**2,286,000**	**60%**	**655,300**	**29%**

8 Quantitative Goals

The CBP Task Force agreed that there was a need for a complementary set of qualitative and quantitative goals. *Qualitative goals* (described in section 6) are defined as a statement of purposes or outcomes consistent with an overarching vision for Columbia Basin salmon and steelhead. Qualitative goals are largely conceptual descriptions of desired outcomes and reflect values and policy choices. *Quantitative goals* are measurable and specific conditions that would indicate whether a qualitative goal has been achieved. Quantitative goals translate qualitative outcomes into numerical values and ideally are derived as a technical exercise consistent with the values and policies reflected in the qualitative goals.

The CBP Task Force adopted provisional quantitative goals for all salmon and steelhead in the Columbia River Basin and its tributaries, including listed and non-listed salmon and steelhead, as well as historical production areas that are currently blocked. Below we describe the approach and methods used to develop these quantitative goals.

8.1 Overview

To develop the goals, the CBP Task Force convened regional technical teams with subject matter and geographic expertise. A NOAA Fisheries project team provided technical guidance to the Task Force and the regional teams. Regional technical team members were identified by Task Force members and generally included staff from state and tribal entities and other Task Force organizations. These regional teams operated under the guiding principles adopted by the Task Force, including the principle that recommendations be grounded in sound science. Where possible, the quantitative goals are based on existing goals established by state, federal, and tribal entities. Products developed by the technical teams and NOAA Fisheries project team were then reviewed by the Task Force.

The goals are identified at the scale of 24 "stocks" defined for the purposes of the Task Force's goal-setting effort.[1] For each stock, regional technical teams collaborated with the NOAA Fisheries project team to identify goals, expressed in terms of adult abundance, for the categories of natural production, harvest, hatchery production, and total run size.[2] In each category, goals

[1] For the purposes of the CBP Task Force, a stock is defined based on species (Chinook Salmon, Coho Salmon, Sockeye Salmon, Chum Salmon, Steelhead), region of origin (e.g., Lower Columbia, Middle Columbia, Upper Columbia, Snake, or Willamette) and run type (e.g. spring, summer, fall, late fall).[2] Total r*un size goals* are aggregate numbers of salmon and steelhead that would be needed to meet natural production, fisheries, and hatchery production goals. They are identified at basin, species and stock scales and used for evaluating status and goals relative to a variety of needs across the basin.

[2] Total r*un size goals* are aggregate numbers of salmon and steelhead that would be needed to meet natural production, fisheries, and hatchery production goals. They are identified at basin, species and stock scales and used for evaluating status and goals relative to a variety of needs across the basin.

were identified in a series of ranges – low, medium, and high – that represent a continuum of decreased extinction risk and increased ecological and societal benefits.

Natural production goals are expressed at the population level and in terms of numbers of natural-origin spawners.[3] For listed salmon and steelhead, the low-range natural-production goals are consistent with ESA de-listing goals. Generally, this is defined as the abundance number consistent with a viable population (i.e., a population with a 5 percent risk of extinction over a 100-year time frame). In some cases, however, ESA recovery plans identified an abundance target consistent with an ESA "recovery scenario." Under these scenarios, the abundance goal for a specific population might be higher or lower than the abundance number consistent with a viable population.[4] In these cases, the Task Force adopted the specific recovery plan abundance target for that population. For non-listed species, low-range goals were based on application of the same technical guidance used in ESA recovery plans to identify abundance levels consistent with a viable population. In some cases, non-listed populations are already meeting these low-range goals, and in these cases, the low-range goal serves as a reference point rather than a management goal.

High-range goals reflect "healthy and harvestable" levels that are reasonably consistent with the potential (i.e., restored) capacity of habitat. They are typically about three times greater than low-range goals but generally are still 50 percent or less than historical average abundance estimates. Mid-range goals are approximately half-way between the low-range goals and the high-range goals for listed stocks. For unlisted stocks, mid-range goals are generally defined as the number of natural-origin spawners that could effectively use available habitat and sustain high levels of harvest.

Harvest and fishery goals are expressed in terms of numbers of fish harvested and harvest rates (the proportion of total adult salmon that die as a result of fishing activity in a given year) by species and run type. To identify harvest goals, regional technical teams used the abundance-based management plans that are currently in place under existing harvest management processes to project harvest levels and exploitation rates that would result if natural production increased consistent with the CBP Task Force natural production goals. The technical teams also identified aspirational fishery goals based on harvest rates that would be sustainable by healthy salmon and steelhead stocks. Healthy stocks would likely support higher harvest rates than those currently in place to protect weak or listed stocks.

Hatchery/mitigation goals are expressed as juvenile production levels and corresponding adult returns under existing conservation and mitigation programs throughout the basin. Regional

[3] Natural-origin spawners are adult fish returning to spawn that were spawned and reared in the wild, regardless of parental origin (natural or hatchery).[4] To achieve ESA recovery, not all populations are required to achieve "viability." Instead, a sufficient number of populations, identified based on spatial distribution, historical population size, historical productivity, and other factors must achieve viability, a few populations must achieve highly viable status, and others can be maintained at lower levels of viability.

[4] To achieve ESA recovery, not all populations are required to achieve "viability." Instead, a sufficient number of populations, identified based on spatial distribution, historical population size, historical productivity, and other factors must achieve viability, a few populations must achieve highly viable status, and others can be maintained at lower levels of viability.

technical teams also identified additional hatchery production targets where they are defined in existing processes and plans (e.g., the John Day Mitigation program) or where they were proposed by CBP Task Force members to address specific purposes (e.g., currently blocked historical anadromous production areas).

Run size goals are aggregate numbers of salmon and steelhead that would be needed to meet natural production, fisheries, and hatchery production goals. They are identified at basin, species and stock scales and used for evaluating status and goals relative to a variety of needs across the basin.

8.3 Methods for Developing Quantitative Goals

8.3.1 Natural Production Goals

CBP Task Force qualitative goal #1 calls for restoration of Columbia Basin salmon and steelhead to healthy and harvestable/fishable levels. Achieving this goal will require substantial improvements in natural production of these species. Natural production goals are expressed in terms of natural-origin adults spawning naturally and identified in three ranges – low, medium, and high (Figure 8-1). These ranges represent a continuum of decreased extinction risk and increased ecological and societal benefits. Box 8- summarizes how the regional technical teams and NOAA Fisheries project team identified the low-, medium-, and high-range natural production goals. To place the goals into context, estimates of current and historical abundance were also developed. More detailed discussion of the derivation of the goals and the estimates of historical and current abundance follows.

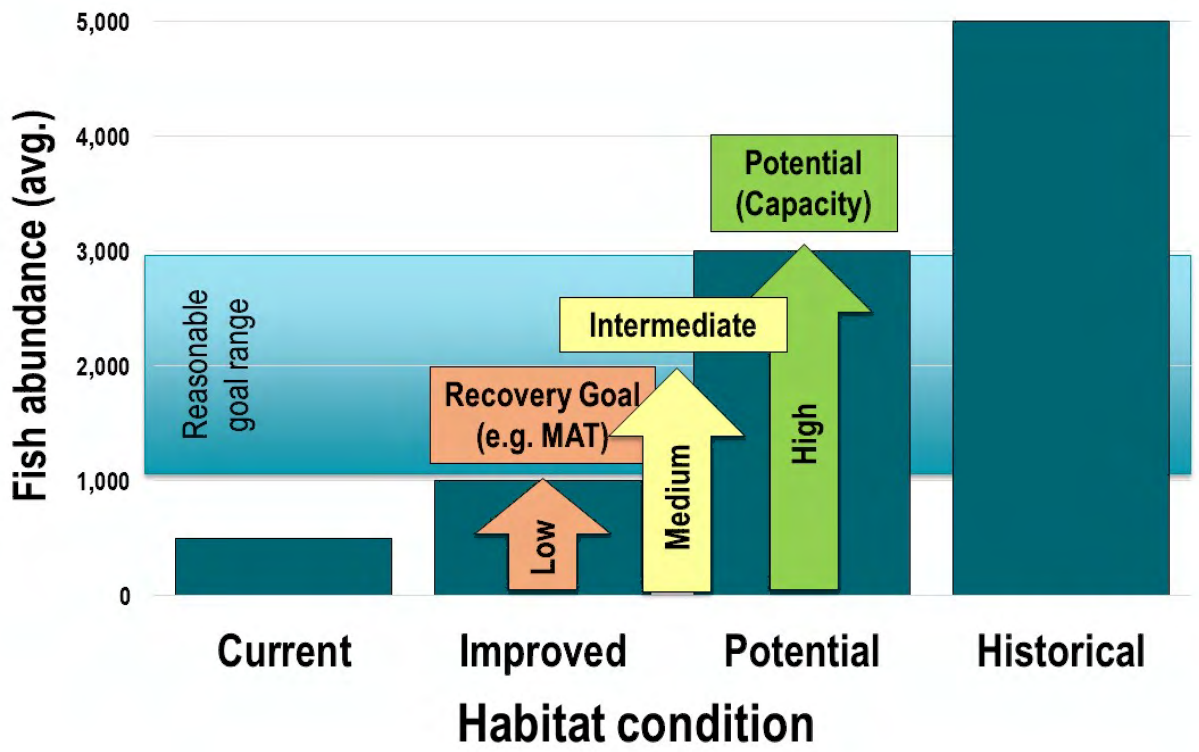


Figure 8-1. Concepts for defining natural-production goals.

Box 8-1. Rule set for quantifying low, medium, and high range goals for natural production. Rules are numbered in priority of application.

Low range	1. Delisting abundance goal consistent with recovery scenario as specified in ESA recovery plan. (Not every population required to achieve high level of viability.) 2. Minimum abundance threshold (equivalent to a viable population with ≤5% risk of extinction in 100 years) inferred from rule set developed and applied by Technical Recovery Teams to similar populations by species. (Applicable where population-specific viability goals were not otherwise identified.)
Medium range	1. From existing plans where identified. 2. Mid-way between low and high range goals for listed populations where not otherwise identified in existing plans. 3. Yield-based escapement goals where defined for unlisted populations based on stock-recruitment analyses. 4. Based on current abundance where yield-based goals have not been identified for unlisted populations.

High range	1. Based on broad sense goals identified in existing plans where consistent with qualitative goals identified by the CBP. 2. Equivalent to empirical estimates of abundance under historical conditions when populations were considered to be reasonably healthy. 3. Based on habitat-model inferences of abundance that would result from reasonably feasible habitat restoration actions and/or favorable habitat conditions. 4. Default value (generally three times the low range value) were used where historical or model-derived values were not available (not to exceed the estimated pre-development habitat potential).

Table 8-1. Aggregate abundance values for natural-origin escapements under current, historical (pre-development), and low, medium and high escapement goal ranges. Numbers reflect current progress by work groups and may be revised based on new information.

Evolutionarily Significant Unit or Distinct Population Segment		Run Type	ESA	Current	Historical	Low goal	Med goal	High goal	High as % of historical
Chinook	L Columbia	Spring	X	4,431	101,700	9,800	21,550	33,300	33%
Chinook	U Willamette	Spring	X	4,095	312,173	4,725	15,262	25,798	8%
Chinook	M Columbia Spr	Spring		10,000	103,700	15,750	25,875	36,000	35%
Chinook	U Columbia Spr	Spring	X	1,090	259,432	6,433	16,968	25,452	10%
Chinook	Snake Spr/Sum	Spring/Summer	X	10,000	671,000	31,750	79,375	127,000	19%
Chinook	U Columbia Sum/Fall	Summer		18,771	693,952	22,704	81,398	123,841	18%
Chinook	U Columbia Sum/Fall	Fall		85,500	533,900	41,950	53,188	64,425	12%
Chinook	Deschutes Sum/Fall	Summer/Fall		15,400	17,000	4,000	13,000	16,000	94%
Chinook	Snake Fall	Fall (brights)	X	9,600	500,000	4,200	9,280	14,360	3%
Chinook	L Columbia	Fall (tules)	X	12,510	166,100	24,550	46,300	67,300	41%
Chinook	L Columbia	Fall (late brights)	X	11,593	33,000	6,000	9,200	15,400	47%
Chum	Columbia	Late Fall	X	11,178	900,000	16,050	24,075	32,100	4%
Coho	L Columbia	Fall (early & late)	X	31,401	288,200	54,900	98,150	140,400	49%
Coho	(Columbia upriver)	Fall			1,111,800				
Sockeye	(Mid Columbia)	Summer		5	50,000	1,000	3,000	5,000	10%
Sockeye	(U Columbia)	Summer		86,434	879,000	14,000	256,500	634,000	72%
Sockeye	Snake	Summer	X	134	150,000	2,500	5,750	9,000	6%
Steelhead	L Columbia	Summer	X	2,100	7,600	4,650	5,500	6,250	82%
Steelhead	Mid Columbia	Summer	X	18,155	132,800	21,000	62,750	104,500	79%
Steelhead	U Columbia	Summer	X	2,011	577,500	6,713	29,252	43,878	8%
Steelhead	Snake	Summer	X	30,500	172,200	21,000	62,750	104,500	61%
Steelhead	SW Washington	Winter		11,200	41,900	4,900	13,200	21,100	50%
Steelhead	L Columbia	Winter	X	8,570	58,000	20,000	27,900	35,900	62%
Steelhead	U Willamette	Winter	X	5,150	110,000	3,350	21,375	39,400	36%
				389,828	***7,870,957***	***341,925***	***981,598***	***1,724,904***	22%

Table 8-2. Columbia River salmon and steelhead numbers corresponding to Columbia Basin Partnership goals.

Species	Natural-origin spawners				Columbia River Run @ high goals							Col Basin Harvest[b]	
	Historical (minimum)	Current	High goal	Goal / current	Natural origin			Hatchery origin[a]	Total			% Hat	% of historical	@ High goal	% of run
Chinook	*3,390,000*	*184,000*	*549,000*	*3.0*	1,270,000	-	*1,540,000*	*656,000*	*1,926,000*	-	*2,196,000*	32%	61%	*1,222,000*	59%
Spring	1,450,000	30,000	248,000	8.3	400,000	-	490,000	234,000	634,000	-	724,000	34%	47%	321,000	47%
Summer	690,000	19,000	124,000	6.5	330,000	-	400,000	45,000	375,000	-	445,000	11%	59%	250,000	61%
Fall	1,250,000	135,000	177,000	1.3	540,000	-	650,000	377,000	917,000	-	1,027,000	39%	78%	651,000	67%
Chum	900,000	11,000	32,100	2.9	40,000	-	50,000	1,000	41,000	-	51,000	2%	5%	10,000	21%
Coho	1,400,000	31,000	140,400	4.5	230,000	-	280,000	368,000	598,000	-	648,000	59%	44%	347,000	56%
Sockeye	1,080,000	87,000	648,000	7.4	1,140,000	-	1,400,000	33,000	1,173,000	-	1,433,000	3%	121%	531,000	41%
Steelhead	*1,100,000*	*78,000*	*355,500*	*4.6*	*530,000*	-	*640,000*	*325,000*	*855,000*	-	*965,000*	*36%*	*82%*	*390,000*	*43%*
Winter	890,000	53,000	259,100	4.9	370,000	-	450,000	8,000	378,000	-	458,000	2%	47%	107,000	26%
Summer	210,000	25,000	96,400	3.9	160,000	-	190,000	317,000	477,000	-	507,000	64%	234%	283,000	58%
Total	**7,870,000**	**391,000**	**1,725,000**	**4.4**	**3,210,000**	-	**3,910,000**	**1,383,000**	**4,593,000**	-	**5,293,000**	**28%**	**63%**	**2,500,000**	**51%**

a Based on current production for illustration purposes.

b Combined hatchery and wild harvest in the Columbia River Basin (not including ocean).

Note: Values in red are working approximations.

Next Steps

The next meeting for the CBP Task Force is scheduled for October 2-3, 2018 in Portland Oregon, with a tentative webinar scheduled for August 22, 2018 to check-in on the outreach progress made by CBP members with their constituents.

The input received from CBP Task Force members' constituents during the June-October 2018 outreach period will be discussed during the October 2-3, 2018 Task Force meeting and will inform recommendations submitted to the MAFAC in January 2019. By the end of the October meeting the CBP Task Force members will finalize what elements they support moving forward as part of their Recommendations Report to MAFAC. This Recommendation Report may include a description of the Task Force process, related work products, provisional goals, vision statement, and description of a Phase 2 process to continue the Task Force's work in integrating the goals across species and to begin analyzing how these goals can be achieved.

Memorandum

To: Idaho Water Resource Board

From: Amy Cassel

Date: September 4, 2018

Re: Idaho Water Transaction Program – Lemhi River Basin Tour

REQUIRED ACTION: No action is required at this time. The following information is provided for information only.

Background

The Lemhi River Basin Water Transactions Field Tour will be held the afternoon of September 13, 2018. Prior to the tour and during the Work Session meeting, the following presentations will be provided to introduce the history and background of the program, highlight the current program status, observed outcomes thus far, and areas for future consideration in the implementation of the program.

- Brian Patton and Jim Yost (Northwest Power and Conservation Program) will present on the history and background of the Idaho Water Transaction Program
- Jeff DiLuccia (Idaho Department of Fish and Game) will present on the history of the Lemhi River fisheries and the implementation of projects from IDFG's perspective
- Chris Beasley (Principal Scientist, Biological Services, Biomark) will present Lemhi River Basin fisheries data
- Amy Cassel will present on the current status, outcomes to date, and areas for future consideration for the Idaho Water Transaction Program.

The fact sheet is attached for reference about the Idaho Water Transaction Program.

IDAHO
Water Resource Board

Idaho Water Transactions Program

Amy Cassel
September 13, 2018

Upper Salmon River Basin

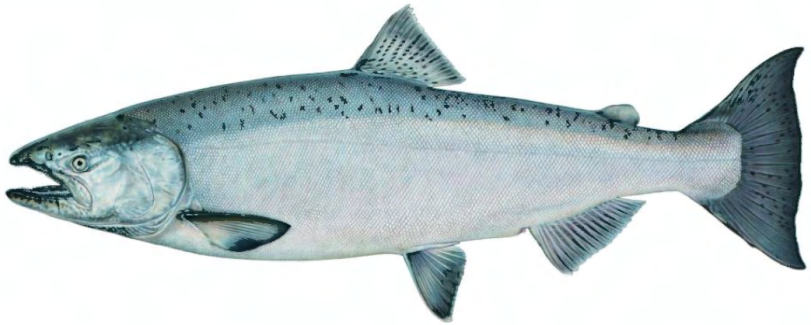
Issue:

- Local economies depend on the diversion of tributary water, but diversions can dewater streams and lead to migration barriers and habitat degradation for Endangered Species Act listed fish.

Solution:

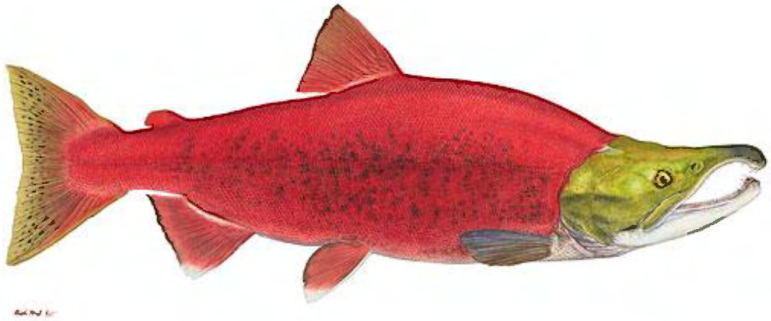
- Implement a voluntary program that compensates water right owners for changes in irrigation practices that protect the local economy while providing the flows required for recovery of ESA-listed species in accordance with Idaho water law.

ESA – Listed Species



Chinook Salmon

Steelhead



Sockeye Salmon

Bull Trout

Water Transactions Philosophy

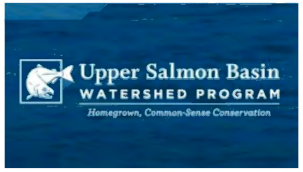
- Improve ESA-listed fish habitat with flow restoration
- Respect private property rights using a voluntary cooperative approach
- Respect the values of irrigated agriculture
- Use market-based strategies
- Take a balanced approach

Benefits for the State of Idaho

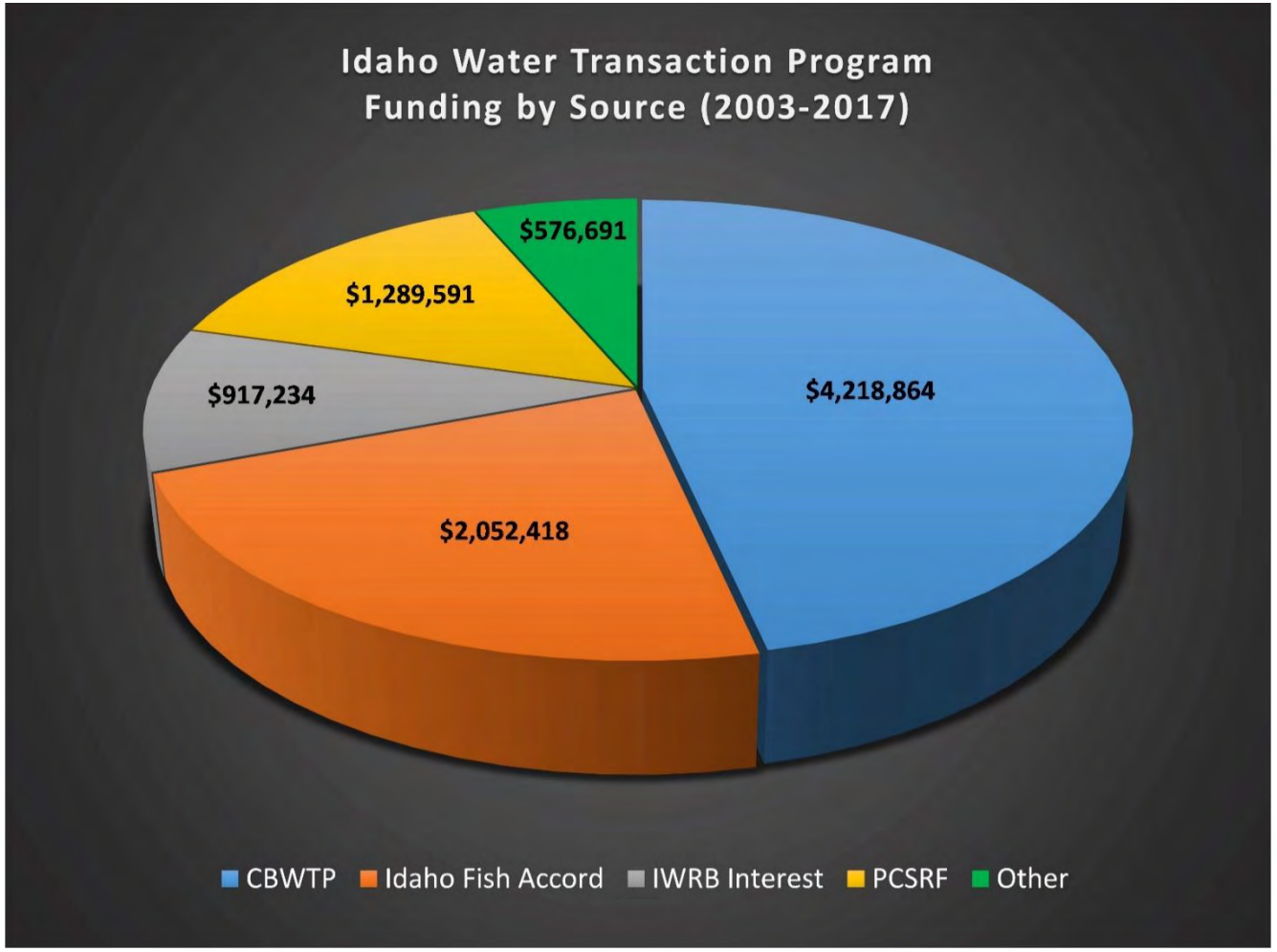
- Maintain local economies
- Protect individuals from third party ESA “take”
- Recovery of ESA-listed species & state management
- Improved recreation opportunities
- Improved natural resources for the State

Upper Salmon Basin Watershed Program Technical Team

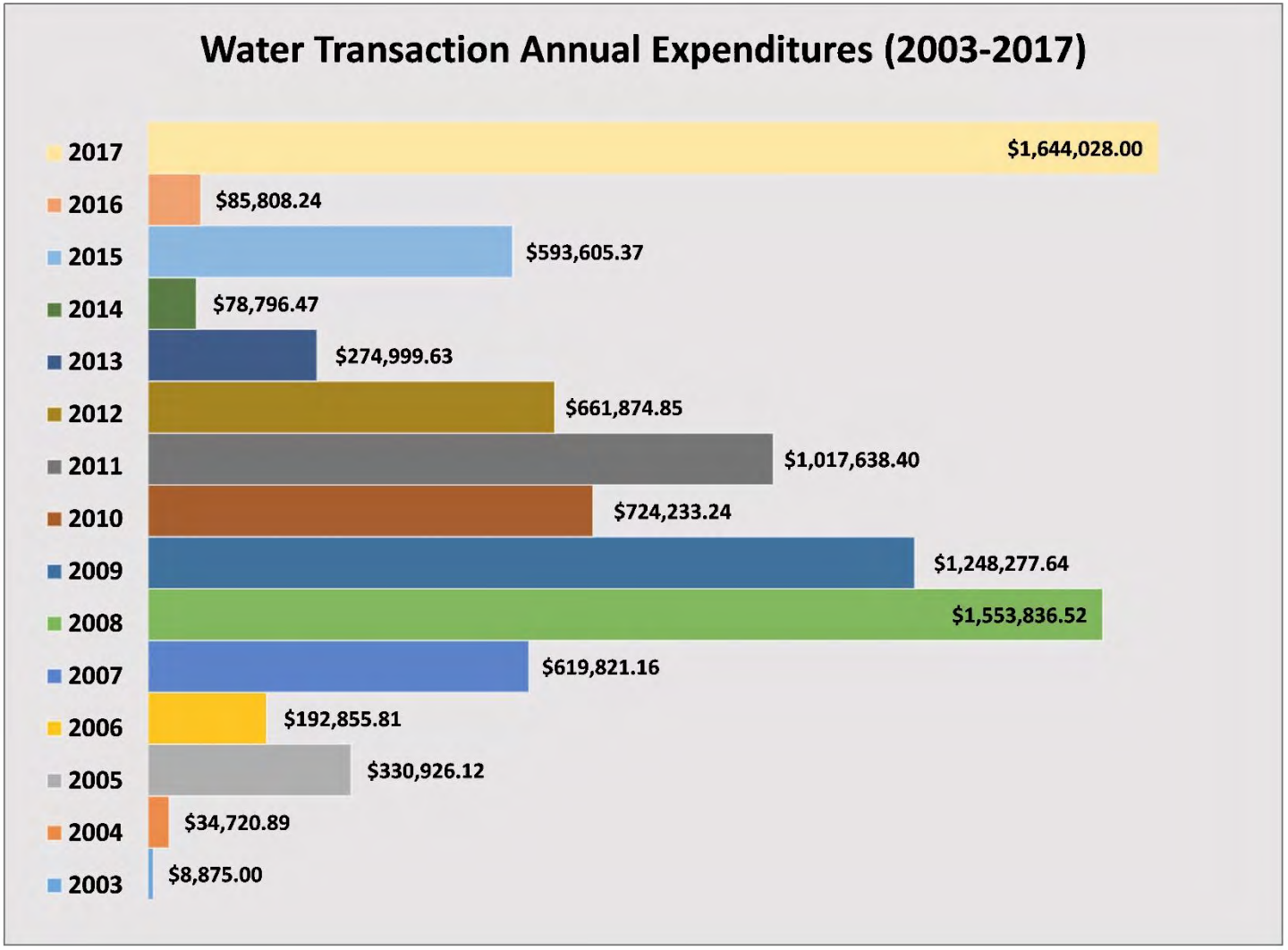
aka “the Tech Team”



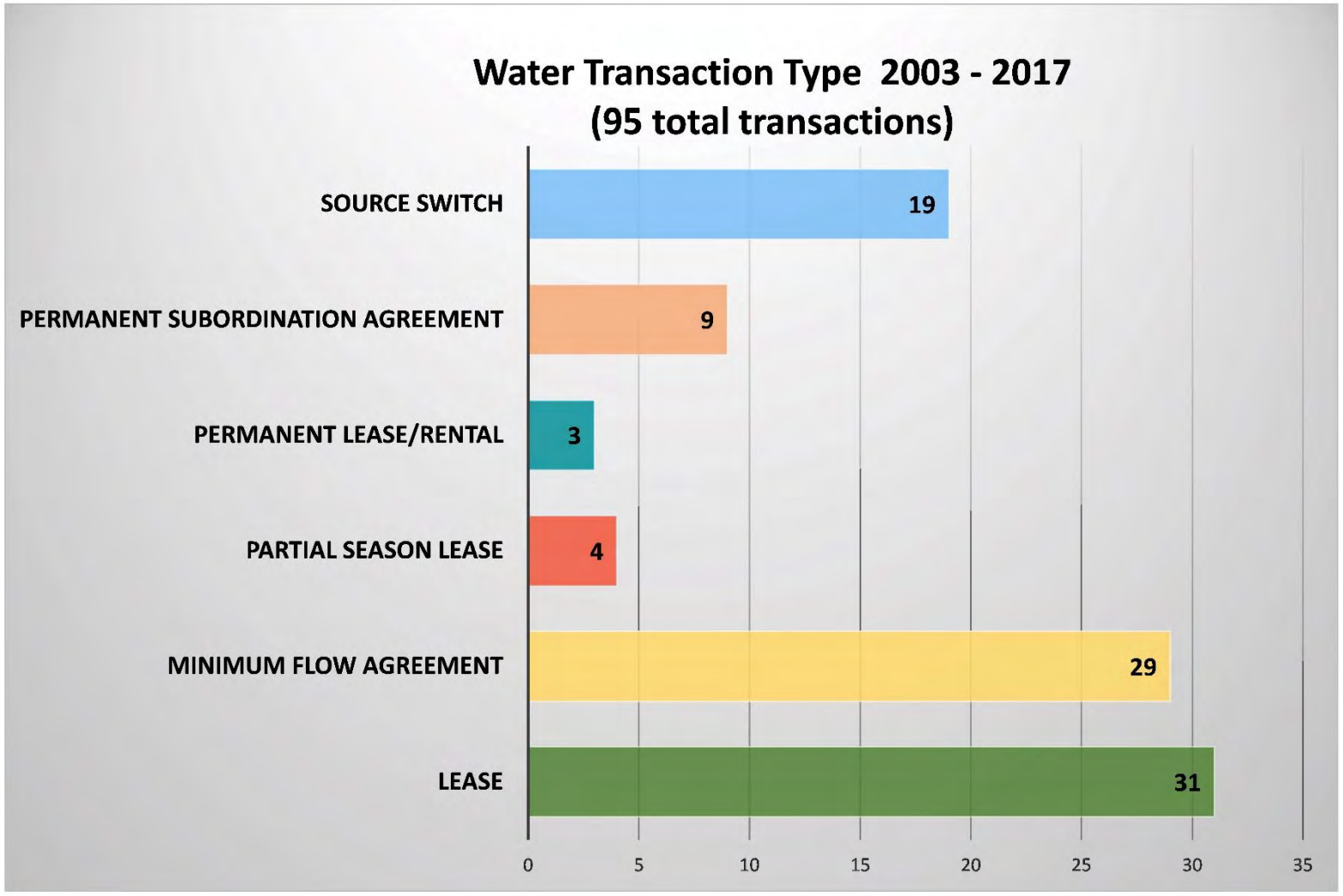
Program Funding



Program Funding



Progress to Date



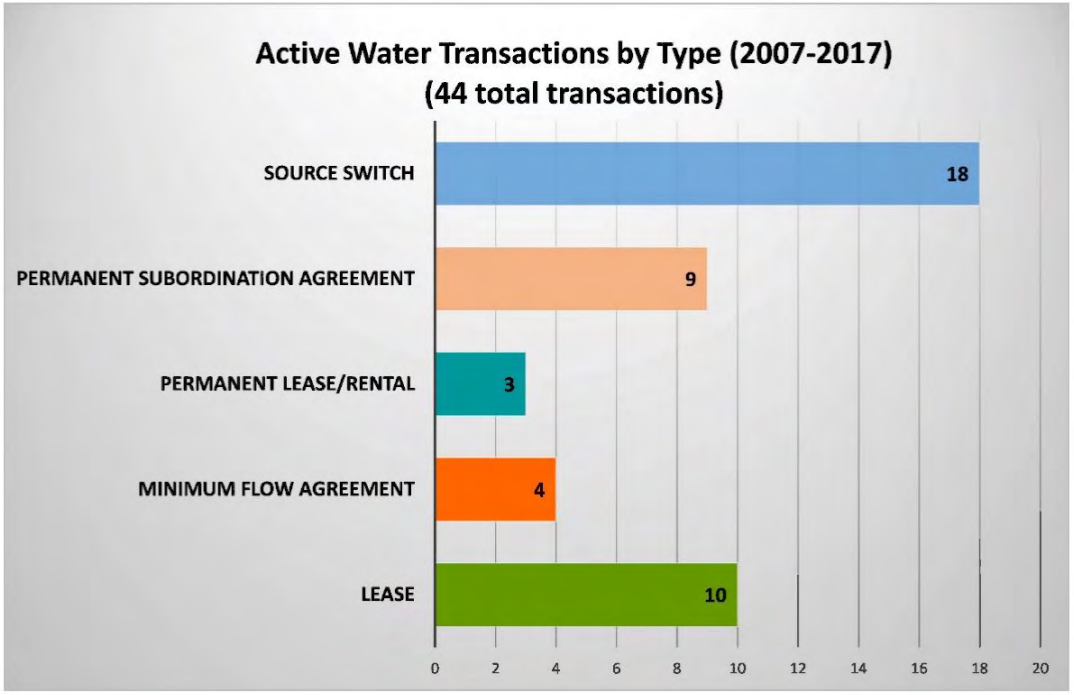
Progress to Date

Source Switches
- Reconnect tributaries

Lemhi Permanent Subordination & Annual Agreements
- Maintain passage at the Lemhi-6 diversion

Lease
- Idle irrigated acres to increase flow, primarily to connect tributaries to mainstem habitat

Permanent Lease/Rental
- Acquisitions of irrigated acreage; water rights now owned by IWRB and water delivered to meet a minimum stream flow; increased flow allows for juvenile rearing habitat



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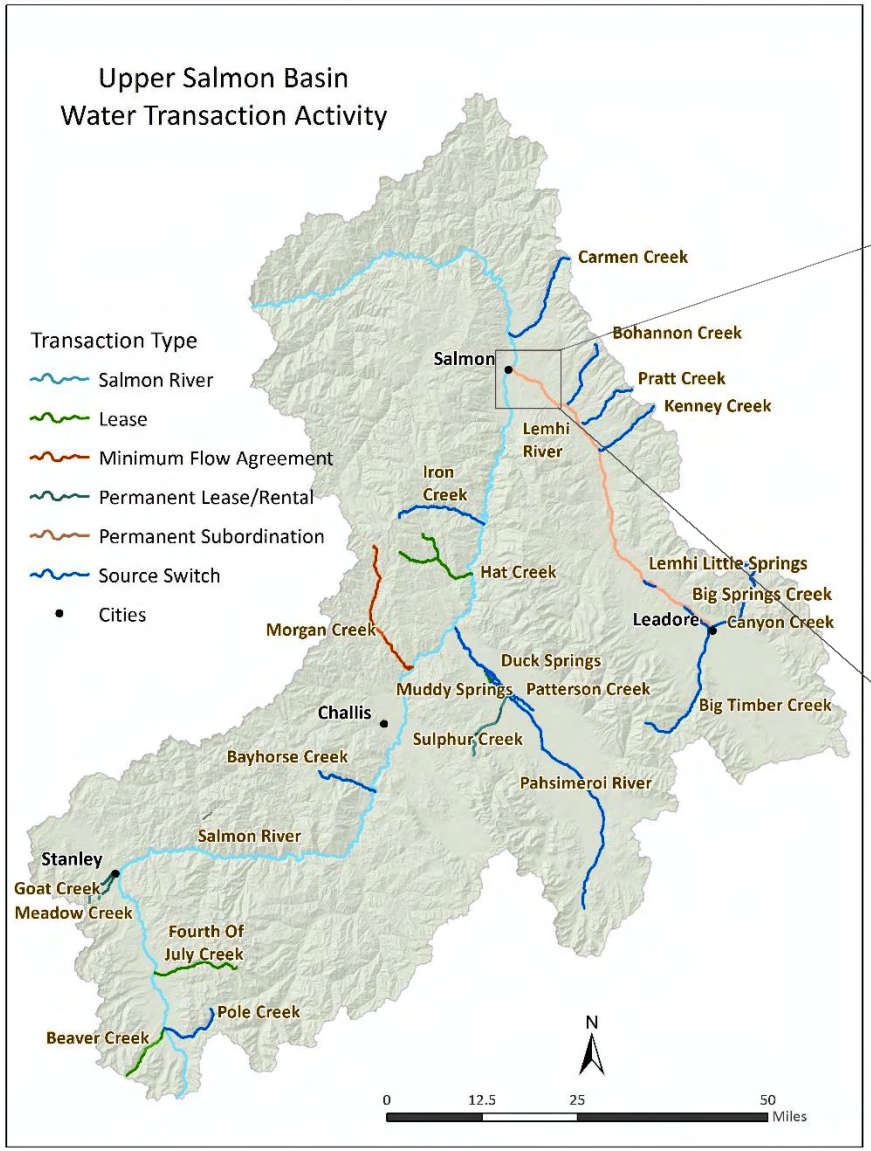
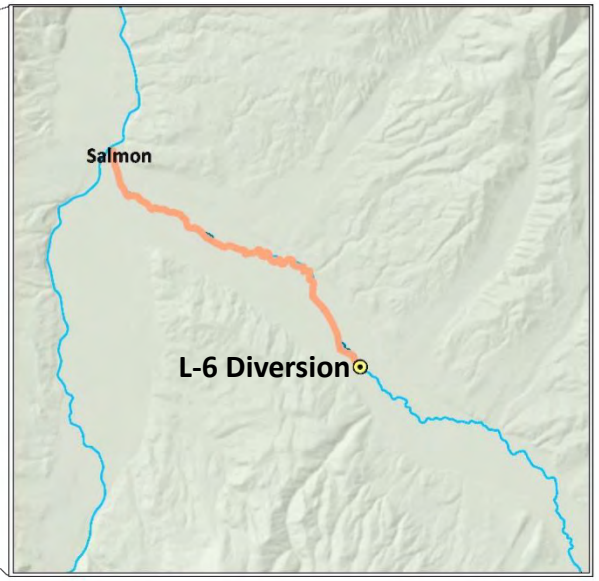




Lower Lemhi Agreements

- Permanent Subordination
- Annual Subordination

Progress to Date – Nez Perce Agreement Sect. II.A.8 of the Nez Perce Term Sheet

Conservation Strategies for Lemhi River Tributaries

Goal: The goal is to reconnect at least 10 tributaries with the mainstem Lemhi River during the first 20 years of the MOA to benefit both anadromous and resident salmonids by providing access to historical spawning and rearing habitat.

Timeframe for Implementation: As funding is available, the State will work with local landowners and water users to reconnect ten (10) tributaries during the first twenty years of the MOA. Four (4) tributaries will be reconnected during the first five (5) years of the MOA to provide immediate benefits to Chinook salmon, steelhead, and bull trout. The remaining six (6) tributaries will be reconnected by year twenty of the MOA, taking into consideration the biological benefits and criteria for each tributary.

Progress towards Obligations
* includes partner efforts

Lemhi River Basin – Goal of 10 reconnects in first 20 years

2018 Fully re-connected tributaries

- Bohannon Creek *
- Wimpy Creek
- Pratt Creek *
- Kenney Creek *
- Lee Creek
- Lemhi Little Springs Creek *
- Big Timber Creek *
- Canyon Creek *
- Eighteenmile Creek

Partially reconnected tributaries

- Hawley Creek

*Transacted Reconnects

Progress to Date – Nez Perce Agreement Sect. II.A.8 of the Term Sheet

Lemhi River – Mouth to L-6
Objective. The objective is to provide passage conditions for juvenile and adult Chinook salmon, steelhead, and bull trout that are adequate to allow upstream and downstream movement without undue stress or delay

- During the first 10 years of the MOA, an interim strategy of 35 cfs (average daily flow) not less than 80% of the time and 25 cfs not more than 20% of the time from March 15 through June 30 will be maintained. A flow of 25 cfs will be maintained from July 1 to November 1.

- By year 10 of the MOA, the goal is to maintain a minimum stream flow of 35 cfs throughout the irrigation season.

Progress towards goals – Lower Lemhi

9 Permanent Subordination Agreements

- 15.83 cfs permanently protected in Lower Lemhi River (additional 1.14 cfs expected in 2018)

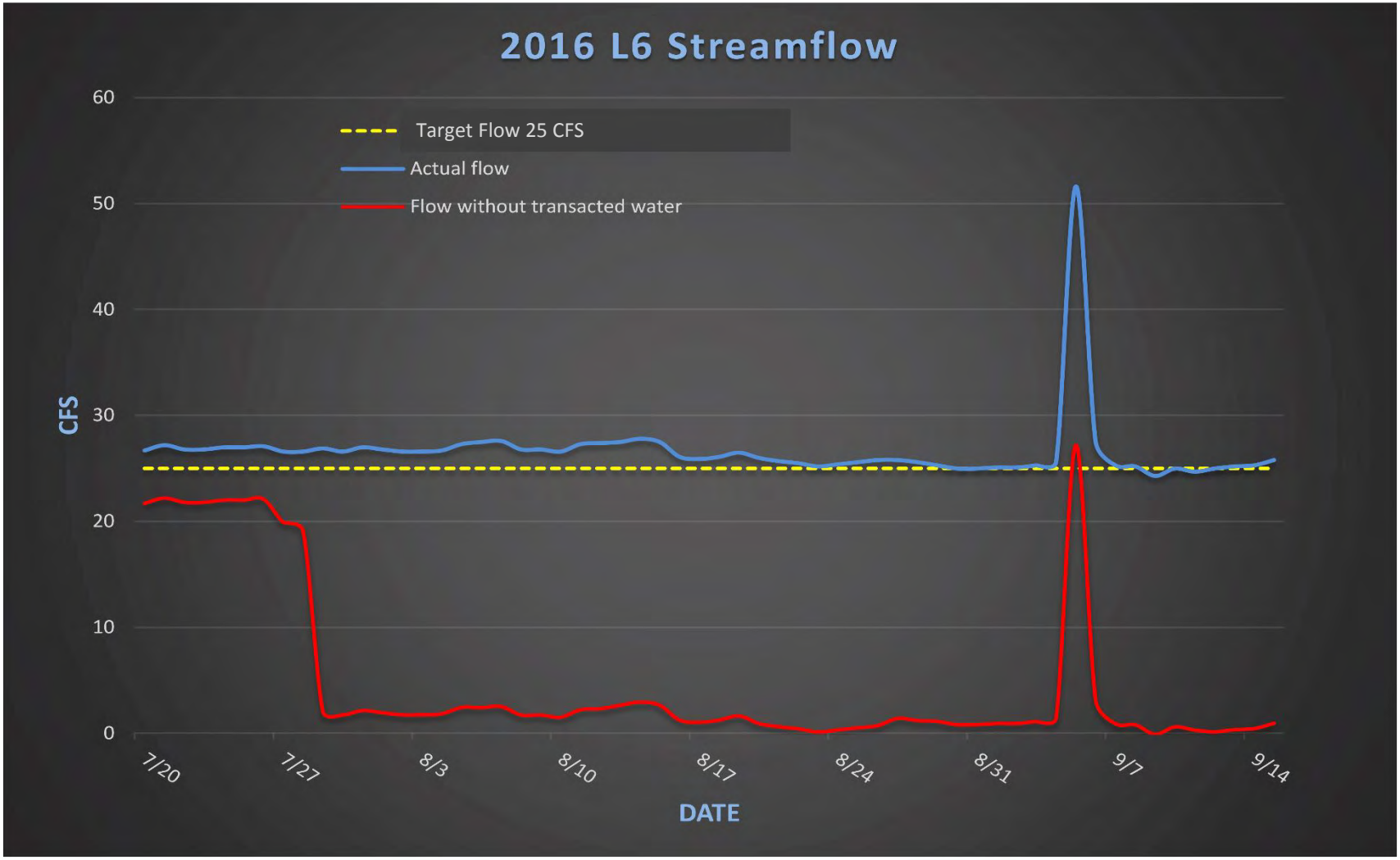
6 Annual Agreements

- 16.21 cfs protected through annual agreements

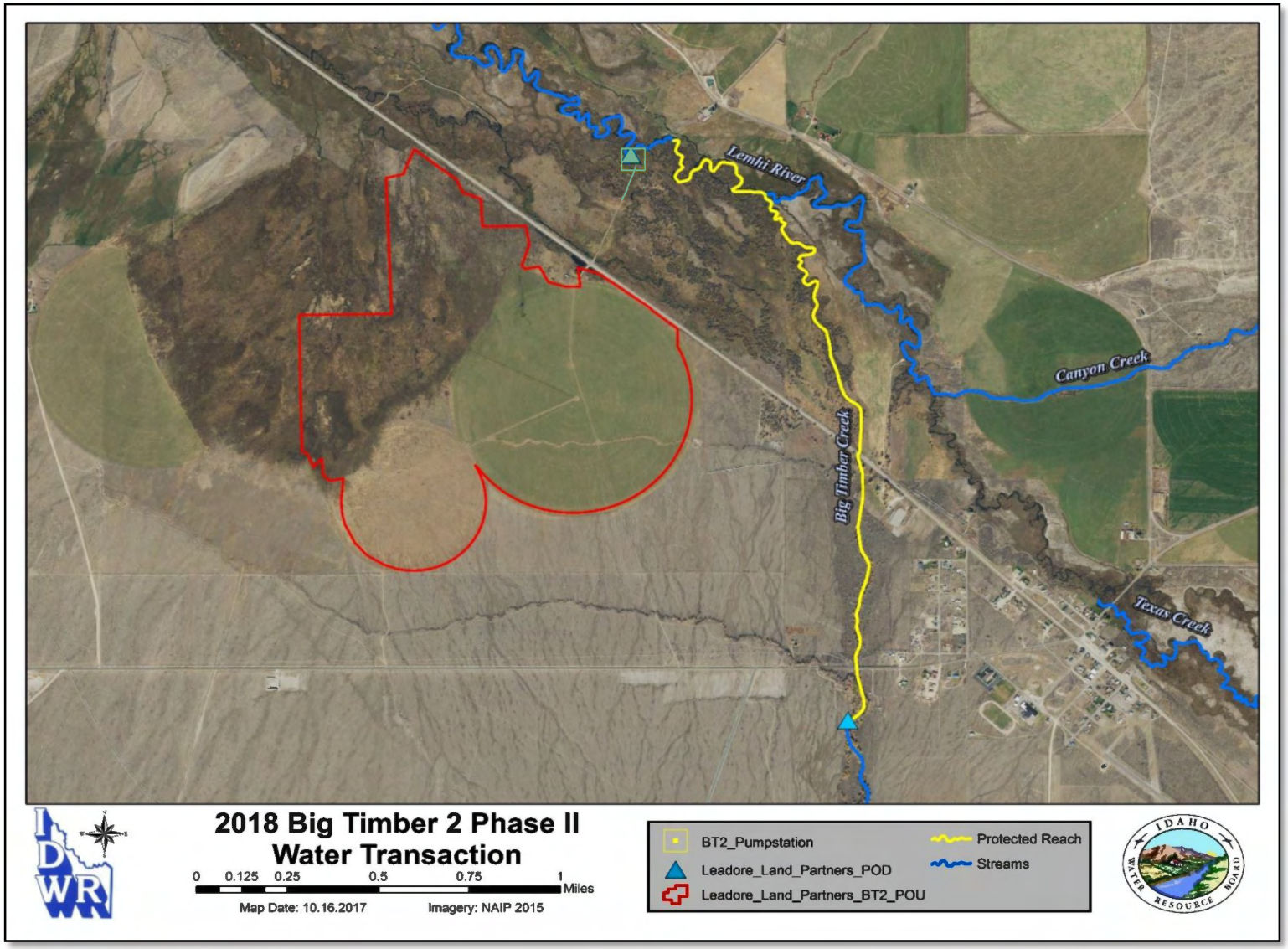
2 Long-term Agreements

- 3.56 cfs

Lower Lemhi 2016 Gage Data



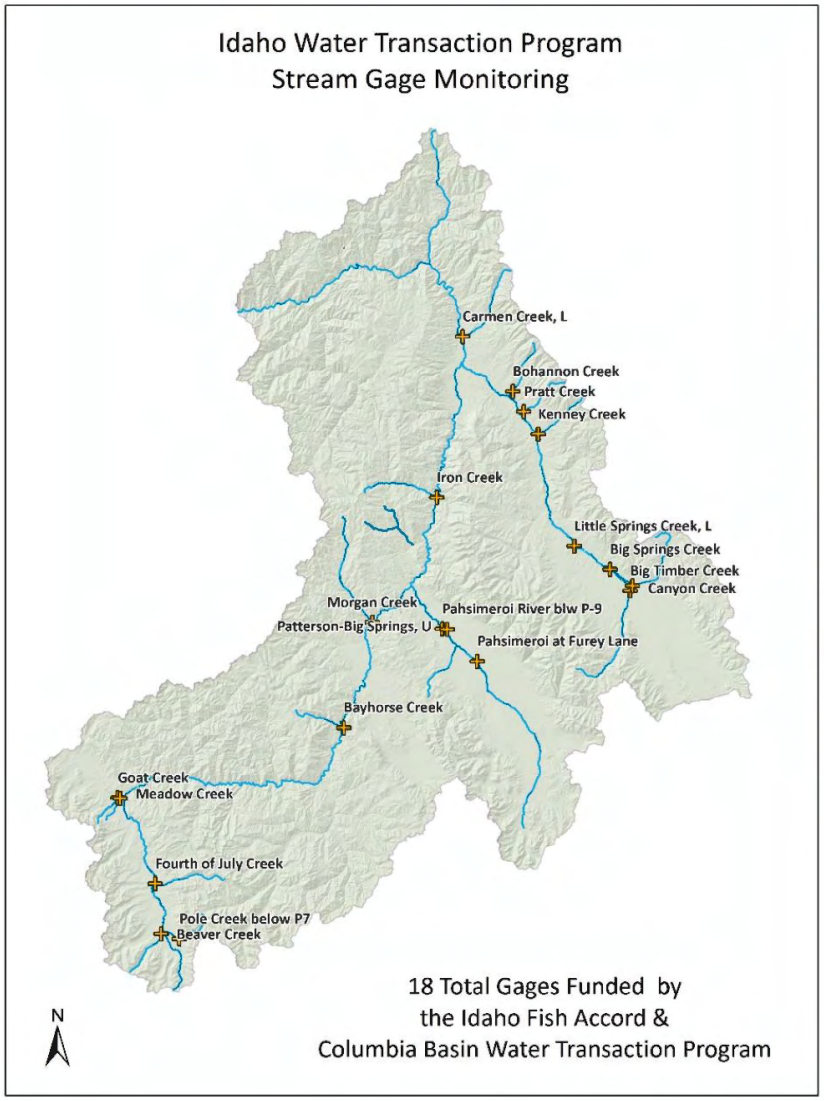
Big Timber Creek – Source Switch Tributary Reconnect



Big Timber Creek – Source Switch Tributary Reconnect

- 5.8 cfs
- 2 senior water users
- 20-year agreements

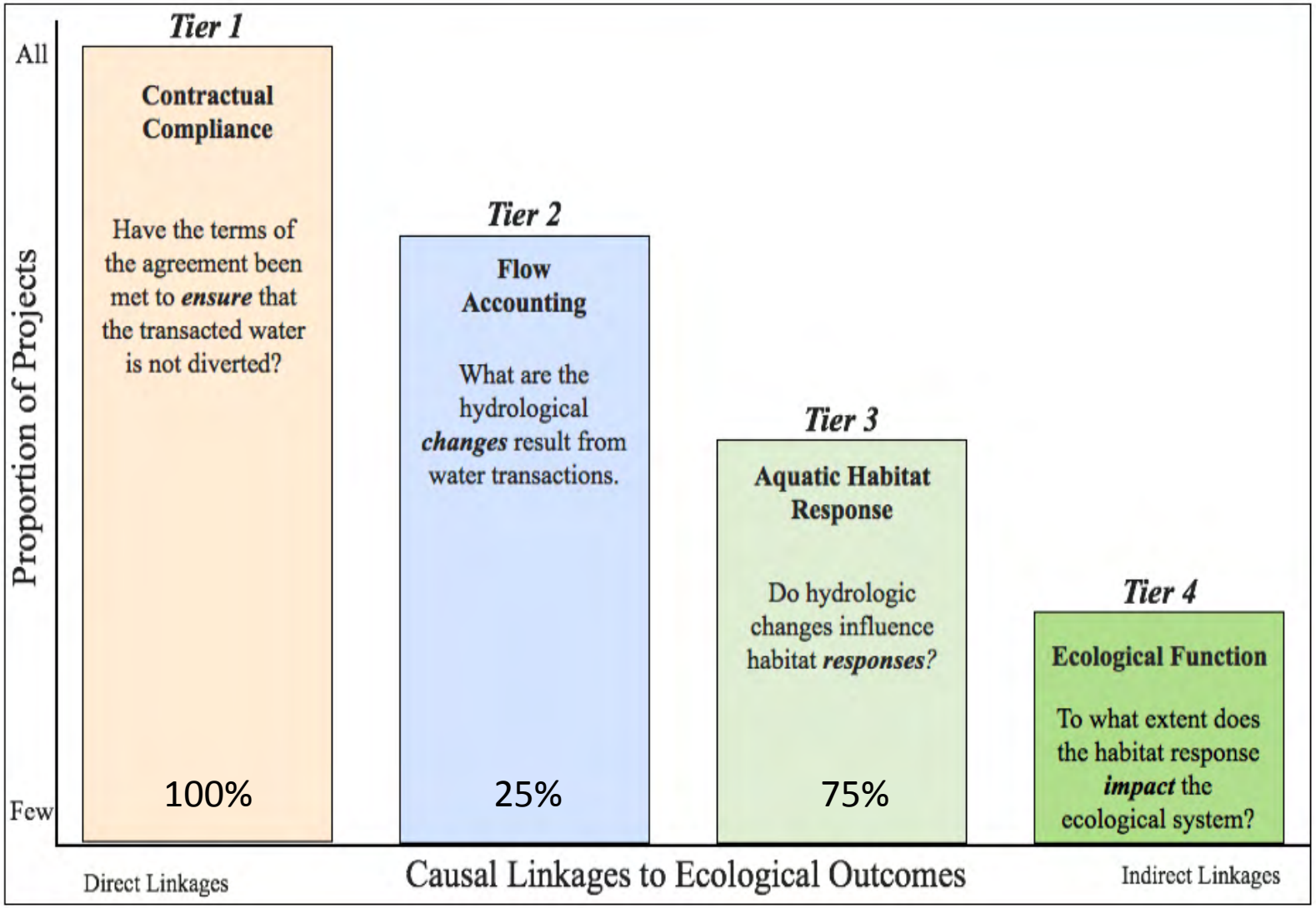
Monitoring


Idaho Water Transaction Program
Stream Gage Monitoring
Carmen Creek, L
Bohannon Creek
Pratt Creek
Kenney Creek
Iron Creek
Little Springs Creek, L
Big Springs Creek
Big Timber Creek
Canyon Creek
Morgan Creek
Patterson-Big Springs, U
Pahsimeroi River blw P-9
Pahsimeroi at Furey Lane
Bayhorse Creek
Goat Creek
Meadow Creek
Fourth of July Creek
Pole Creek below P7
Beaver Creek
N
18 Total Gages Funded by
the Idaho Fish Accord &
Columbia Basin Water Transaction Program

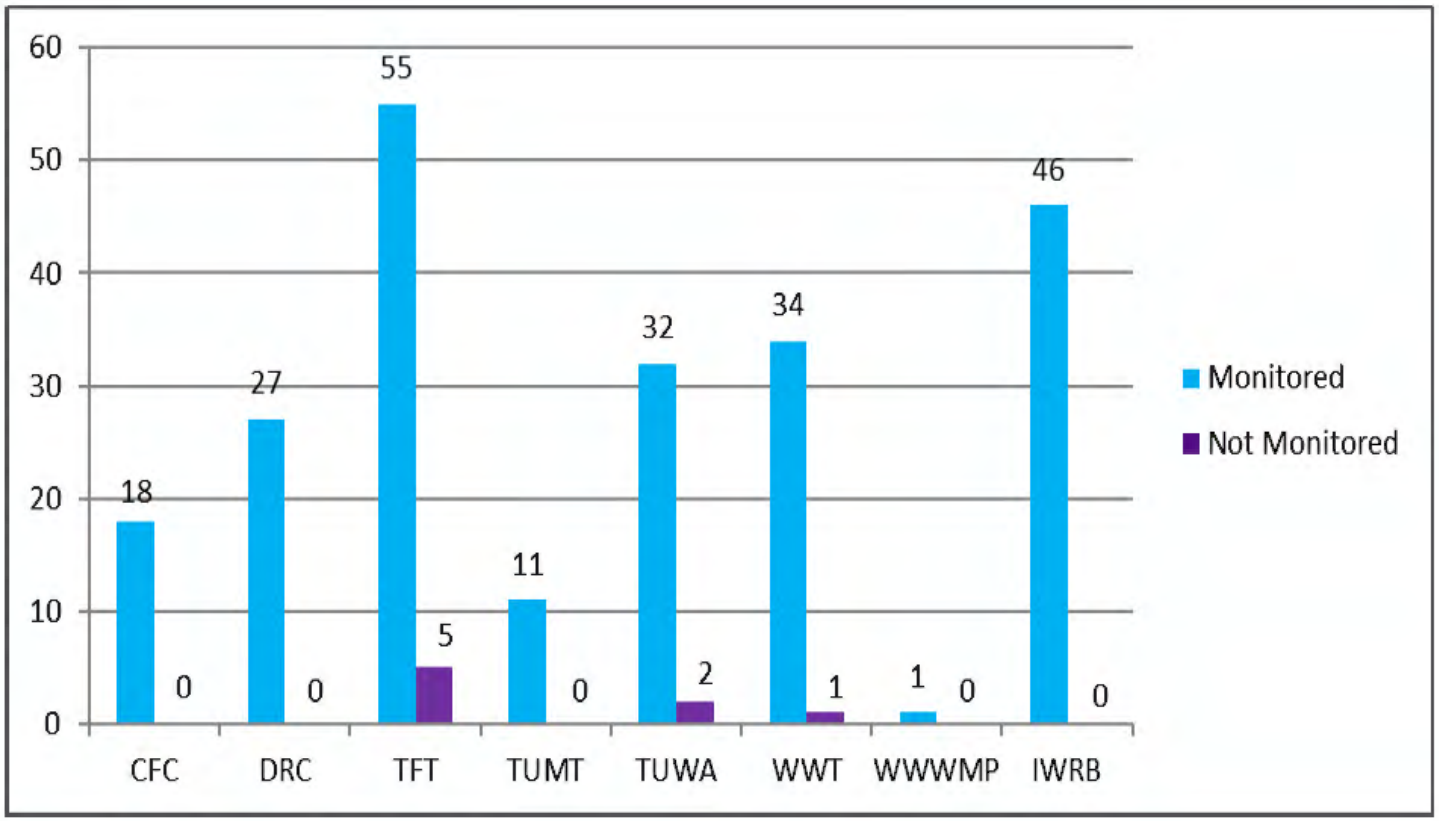

E
SE
S
SW
90
120
150
180
210
240
44.691174°N, 113.363625°W ±16.4ft ▲ 5929ft
22.1 cfs at gage
A. Cassel IDWR
Canyon Creek
16 May 2017, 12:49 PM


Photo by Paddy Murphy

Monitoring – *Flow Restoration Accounting Framework*



Monitoring – Compliance Reporting



Future Challenges

Source Switches

- funding after 20 years??
- Ability for water user to go back to original POD
- Applications to transfer back to POD – IWRB response? Protest?

Minimum Stream Flows

- MSF is being met (Pahsimeroi) or lacking entirely (Upper Salmon)

New Transactions

- Low-hanging fruit has been picked
- Projects are becoming increasingly complex and expensive

Gaging and Monitoring Costs

- Programmatic budgets (expected to remain static) are used to cover streamflow gaging contracts
- Additional gages for new transactions will have to be managed internally to save on contracting costs
- Equipment costs for new gages will have to come out of programmatic budgets
- Some gages may need to be eliminated or shifted to other agencies/partners for funding

Looking Forward

Lemhi Basin

- Priority is maintaining flows at the L-6 diversion
  - Work towards 25 cfs of permanent subordination agreements
  - Continue to enter into annual agreements to meet our flow objectives
  - Source switch opportunities increasing flow at L-6

Pahsimeroi Basin and Upper Salmon Basin

- Investigate Minimum Stream Flow strategies
  - Additional Minimum Stream Flow water rights?
  - New beneficial uses for banked water rights such as streamflow maintenance?
  - Increasing the minimum stream flows on existing MSF's?

General Objectives

- Emphasis will be placed on long-term and permanent transactions, including leases, acquisitions, and permanent subordination agreements

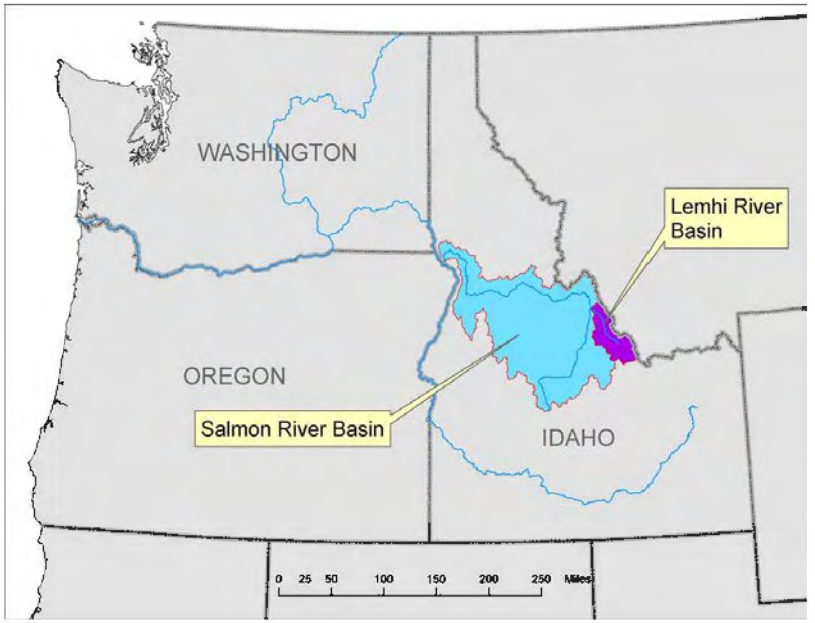
- Prioritize continuous streamflow gages and manage new gages internally

Parting Shots….

The Lemhi Basin Effort

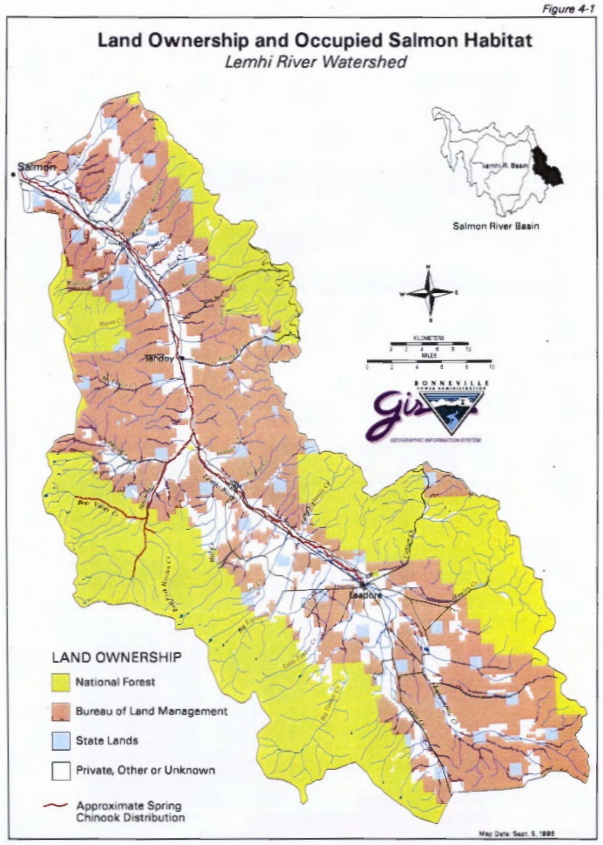
Location of Lemhi River Basin

- Located approximately 775 miles from the Pacific Ocean
- High Mountain Desert
- Annual Precipitation of 9” in the valley and 40” in the mountains.



Land Ownership

- Basin is approximately 807,130 Acres
- Private Lands 145,100 acres
- Forest Service Lands 316,460 Acres
- BLM Lands 316,050 Acres
- State Lands 25,780 Acres
- Other 3,740 Acres



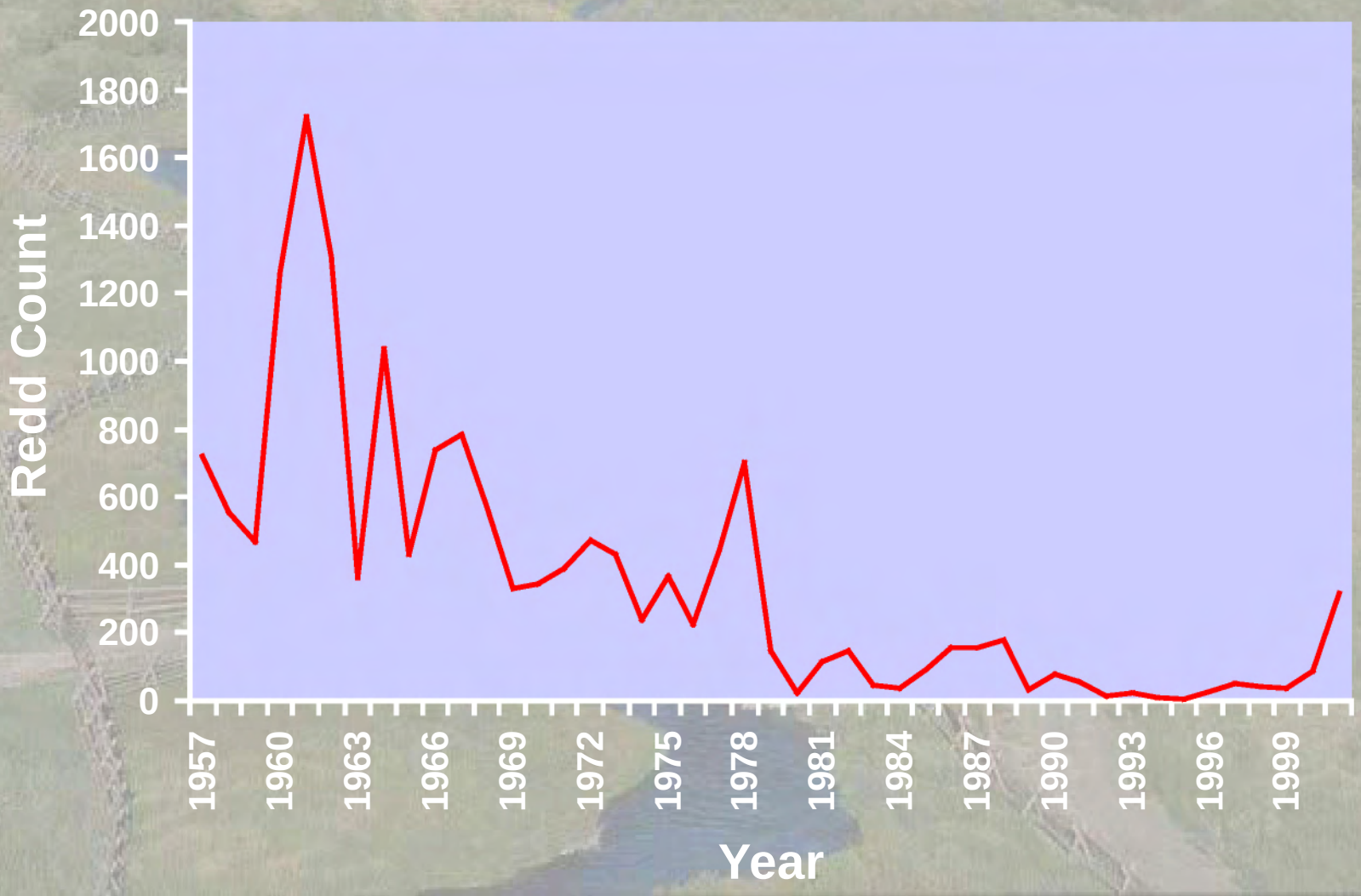
Development of Lemhi Basin

- Irrigated agriculture and ranching developed in the Lemhi Basin between the 1855 and 1920.
- Approximately 37,000 acres of irrigated lands.
- Because of dry summers and the lack of reservoirs, there is a practice of diverting early spring flows to wet up the land.

History of Salmon in the Lemhi Basin

- Historical records suggest the Lemhi River Basin was one of the highest salmon and steelhead producing rivers in the Snake River Basin.
- In 1909, a hydroelectric dam was placed near the mouth of the Lemhi River. The dam in combination with egg take for hatcheries substantially reduced the number of salmon and steelhead in the Lemhi River Basin.
- In late 1957, the dam was removed and salmon and steelhead returned to the Lemhi River Basin.

Lemhi Redd Counts



Land Owner Commitment

- In 1985, Bruce Mulkey, Chairman of Lemhi Soil Conservation District as part of its 5 year plan agreed to bring other groups together to develop a plan for rebuilding salmon and steelhead runs in the Lemhi Basin.
- In 1989, Bruce Mulkey, Don Olson and R.J. Smith led an effort of the Lemhi Soil Conservation District, Water District 74 and Lemhi Irrigation District to develop the Irrigators' Anadromous Fish Recovery Plan.

The Lemhi Model Watershed Project

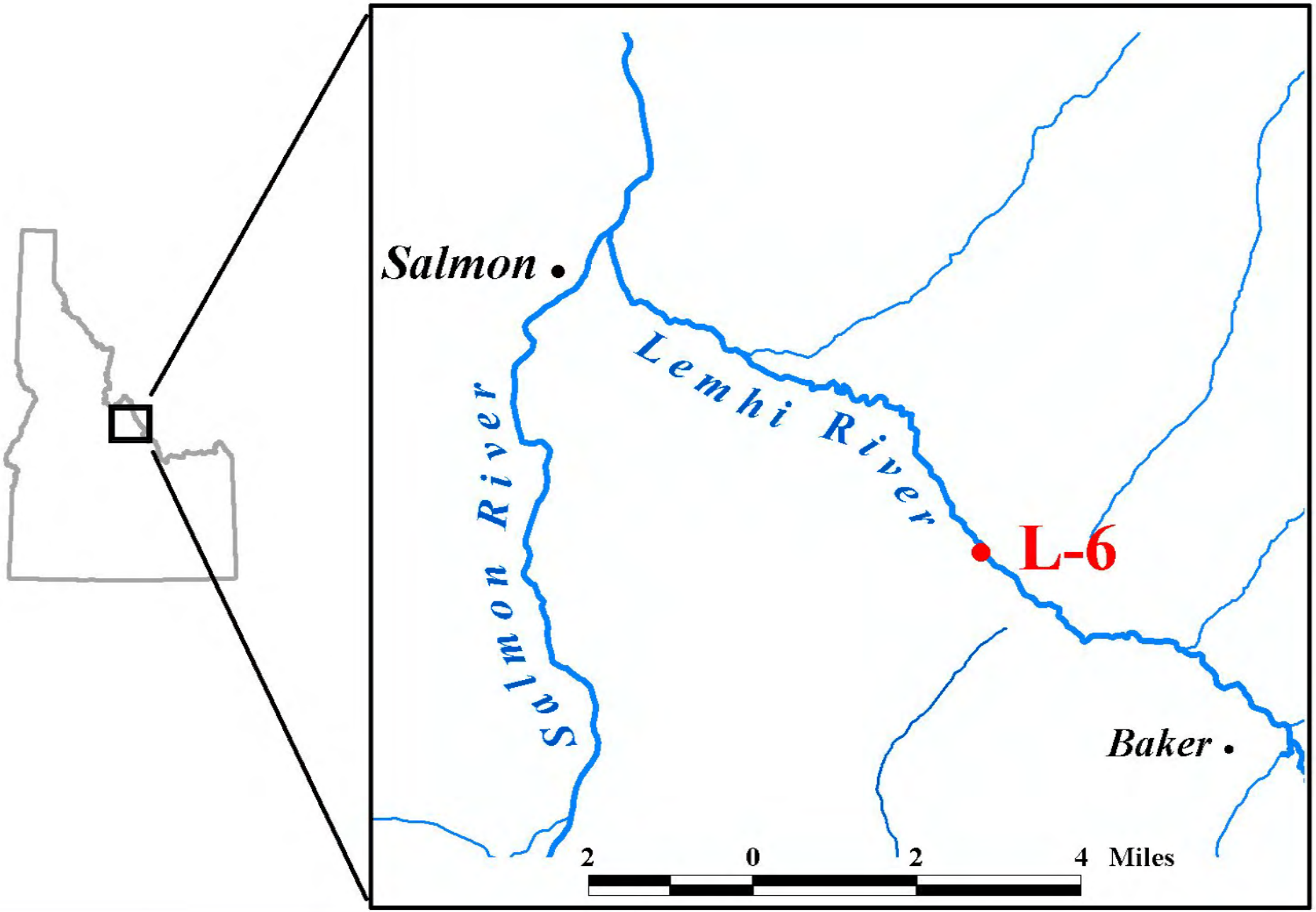
- In 1992, the Irrigators formed a partnership with state and some federal agencies to form the Lemhi Model Watershed Project. The Shoshone-Bannock Tribe also participate in the Project.
- In 1993, the Irrigators with the assistance of the Bruce Smith of the Forest Service developed a voluntary fish flush program.
- In 1995, the Lemhi Model Watershed Project with the assistance of the Idaho Soil Conservation Commission published the Model Watershed Plan.

1995 Model Watershed Plan

- Provided an assessment of the fish habitat conditions.
- Established habitat goals for the Lemhi River Basin
- Established priorities for implementation of the habitat goals.
- Central feature of the plan was local solutions for local problems.

The Crisis

- In May 2000, flows in the Lemhi dropped to almost zero and 3 juvenile chinook were found dead.
- Prior to taking an enforcement action, NOAA Fish contacted the State officials for assistance in resolving the dewatering problem.
- The State agreed to facilitate discussions with the irrigators.
- An agreement was reached to provide a 10 cfs flow with up to 3 flushes of 35 cfs and to engage in discussions for development of a long-term plan.


Salmon
Lemhi River
Salmon River
L-6
Baker
2 0 2 4 Miles


AUG 12 2002

2001 Interim Agreement

- Provided for the creation of an instream flow water right of up to 35 cfs in the Lower Lemhi River – Idaho Code 42-1506
- Provided for the creation of the Lemhi Water Bank to rent water to provide instream flows.
- Provided for other riparian enhancement efforts
- Established the framework for development of a long-term conservation plan.

2002-2003 Lemhi Conservation Agreement

- Provided for a 35 cfs flow from April 15 to June 30 and a 25 cfs flow from July 1 to the end of the irrigation season.
- Provided for rental of water to achieve these flows.
- Provided for short-term habitat measures.
- Provided for development of a long-term conservation plan by December 2003.

2004 Snake River Water Rights Agreement

- Salmon/Clearwater Component
  - Established 205 state based minimum stream flow water rights
  - Salmon/Clearwater Habitat and Restoration Initiative
  - Habitat Trust Fund
- Section 6 Agreement - not yet completed

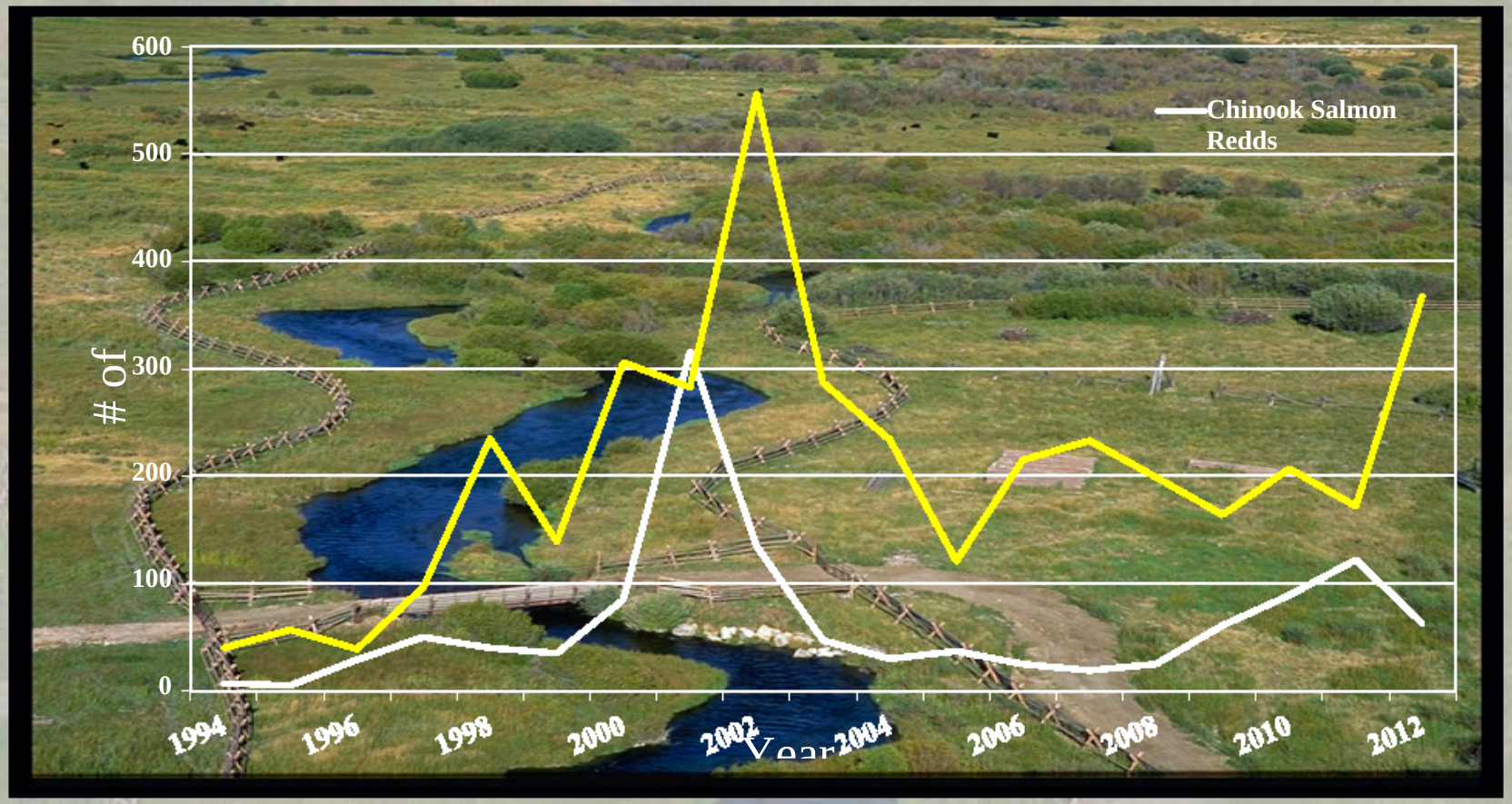
Water Board Role

- Idaho was able to access funds through BPA-Water Transactions Program, BPA-Fish Accords, Pacific Coast Salmon Recovery Fund, SRBA Habitat Fund.
- Water Board's role is the flow enhancement efforts (including water rights)
- Other agencies take lead in other areas (channel restoration, culvert replacement, etc.)

Lemhi Habitat Restoration Goal

- Conserve, restore, and enhance sufficient habitat to sustain viable fish populations while protecting private property rights and preserving and enhancing the farming and ranching lifestyle and economy of the Lemhi River Basin.

Lemhi River Basin Redd Count 1994- 2012



CONCLUSION

Habitat Improvement and Preserving the Farm Economy are not incompatible goals.

Conservation in The Lemhi River Sub-basin

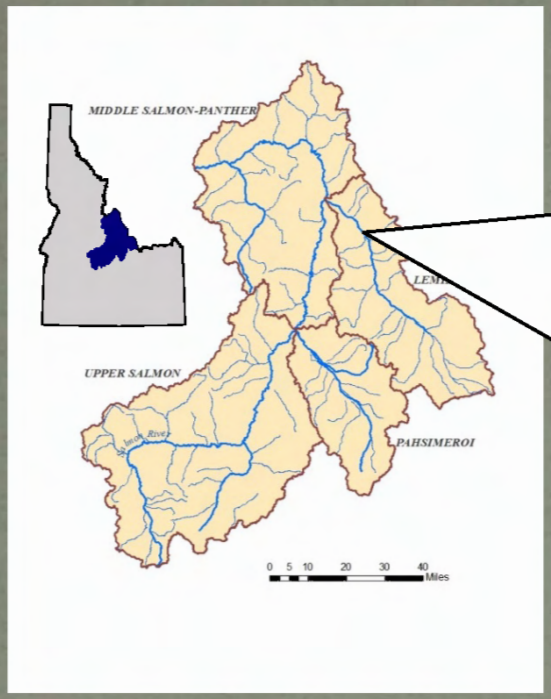
Historical Perspective and Effectiveness Monitoring

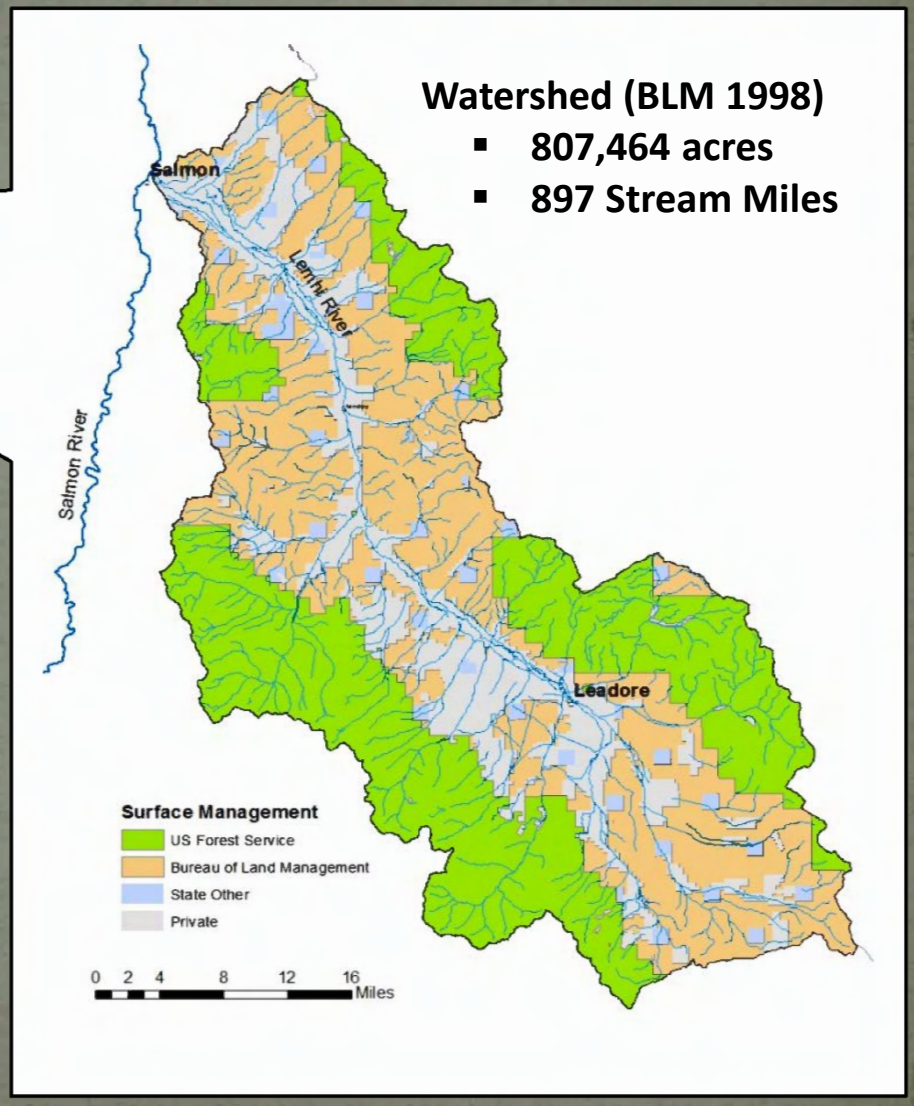
Jeffrey Diluccia
Staff Fishery Biologist
Idaho Department of Fish and Game

Outline

- Historical Prospective of Lemhi Productivity
- Anthropogenic Effects to Habitat
- Historical Timeline of Conservation Efforts
- Recent Targeted Habitat Actions
- Effectiveness Monitoring of Actions

Lemhi River Sub-basin





- **Groundwater Influenced** (Donato 1998)

  ~ 8 – 14 cfs/river mile (Dorraquatac 1998)
- **Surface – High Elevation (12,195’)**

Historical Perspective

Lemhi Sub-basin Productivity

Lemhi Shoshone-Bannock Reliance on Anadromous and other Fish Resources (Walker 1994)

- 30,000 to 60,000 pounds of salmon captured annually
- During 1832 Captain Bonneville drew a useful parallel between reliance of Plains tribes on bison and reliance of the Lemhi Shoshone-Bannock on Salmon

The Salmon River Mission of 1855 (Nash 1974)

- Mormon missionaries at Fort Lemhi first commercially exploited the Shoshone and Bannock subsistence fishery
- It is reported in their journals that they exported seven wagonloads of dried salmon to Salt Lake City in 1857

Historical Perspective

Lemhi sub-basin Productivity

U.S. Bureau of Commercial Fisheries 1920-1947

Reference of the amount of salmon trapped

Reconnection of Tributary Habitats

(1926, 20,000,000 eggs ~ 5000 females were collected)

Targeted Restoration

Historical Perspective

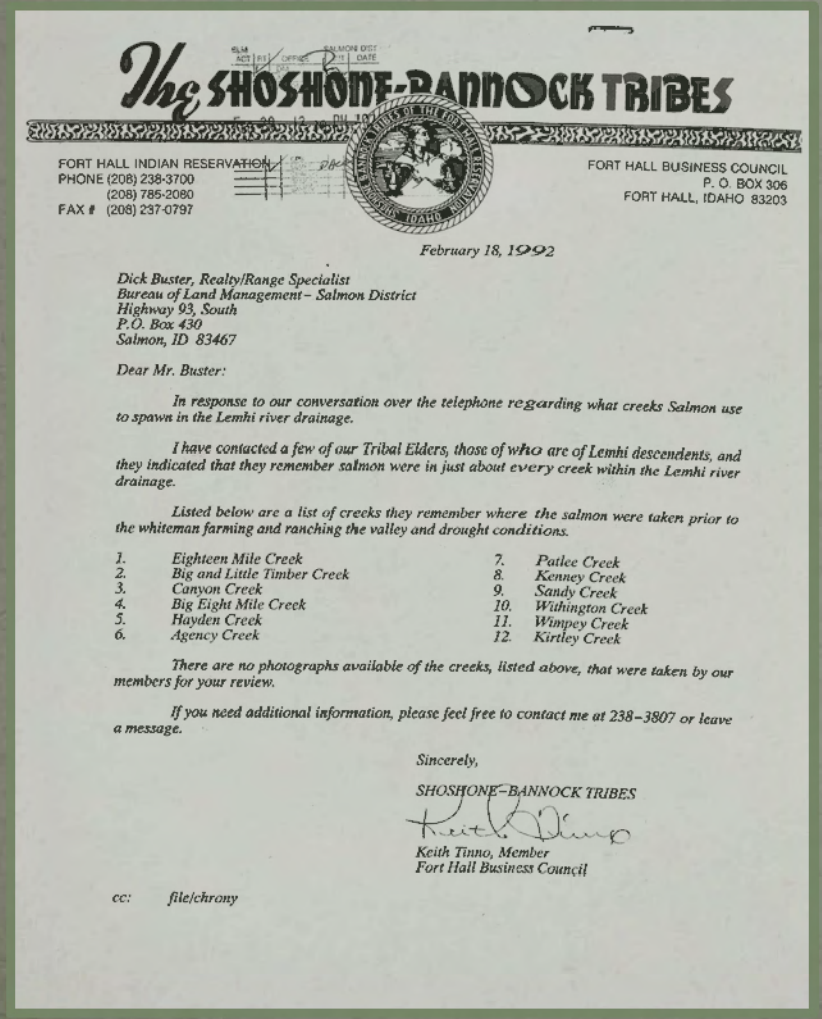
Tributary Productivity

Warren Angus Ferris – Life in the Rocky Mountains

- *On the 23d (August) (1832) we arose in the morning, and found ourselves in the valley of the east fork of Salmon river (Lemhi River). There were large herds of buffalo slowly moving up the valley, which led us to believe, that the Indians were not far below us. One of their encampments appeared to have been evacuated, but five or six days since; and was at this time a rendezvous for wolves, ravens, and magpies.* ***We likewise saw numbers of salmon, forcing their way up the small streams, in this valley - many had so worn out their fins, that they could with difficulty avoid us when we endeavored to catch them, in our hands.*** *With clubs and stones, we killed several of them, with which we regaled ourselves at noon, and my companions, amused themselves, whilst our horses were feeding,* ***by adding to the numberless carcasses scattered along the shore, that had been taken and thrown away by the Indians.***

Historical Perspective

Tributary Productivity



The SHOSHONE-BANNOCK TRIBES

FORT HALL INDIAN RESERVATION
PHONE (208) 238-3700
(208) 785-2080
FAX # (208) 237-0797

FORT HALL BUSINESS COUNCIL
P. O. BOX 306
FORT HALL, IDAHO 83203

February 18, 1992

Dick Buster, Realty/Range Specialist
Bureau of Land Management – Salmon District
Highway 93, South
P.O. Box 430
Salmon, ID 83467

Dear Mr. Buster:

In response to our conversation over the telephone regarding what creeks Salmon use to spawn in the Lemhi river drainage.

I have contacted a few of our Tribal Elders, those of who are of Lemhi descendents, and they indicated that they remember salmon were in just about every creek within the Lemhi river drainage.

Listed below are a list of creeks they remember where the salmon were taken prior to the whiteman farming and ranching the valley and drought conditions.

1. Eighteen Mile Creek
2. Big and Little Timber Creek
3. Canyon Creek
4. Big Eight Mile Creek
5. Hayden Creek
6. Agency Creek
7. Patlee Creek
8. Kenney Creek
9. Sandy Creek
10. Withington Creek
11. Wimpey Creek
12. Kirtley Creek

There are no photographs available of the creeks, listed above, that were taken by our members for your review.

If you need additional information, please feel free to contact me at 238-3807 or leave a message.

Sincerely,

SHOSHONE-BANNOCK TRIBES

Keith Tinno, Member
Fort Hall Business Council

cc: file/chrony

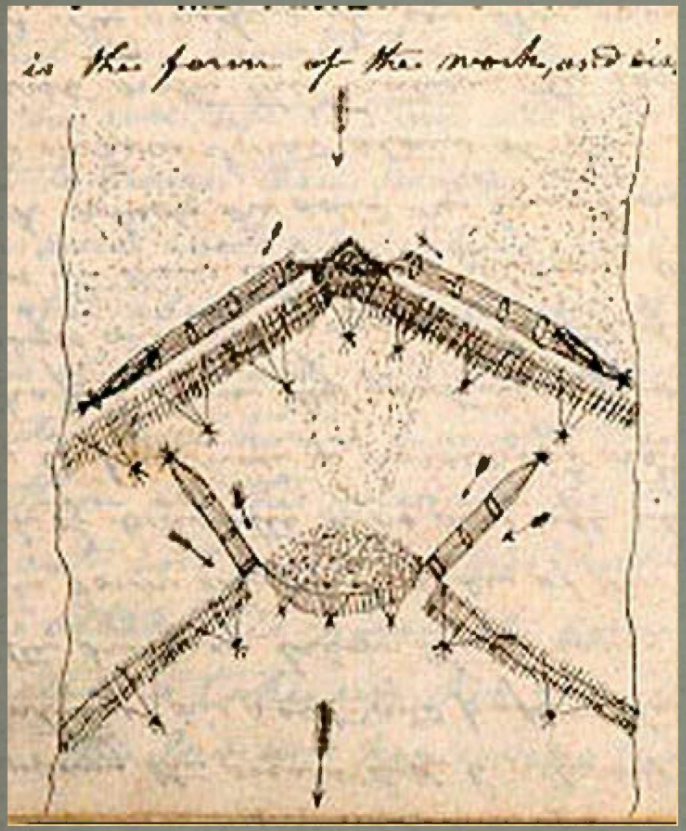
….they remember salmon were in about every creek within the Lemhi River drainage….

….creeks that they remember where the salmon were taken prior to the whiteman farming and ranching the valley and drought conditions…..

- **Eighteen mile Creek**
- **Big and Little Timber Creek**
- **Canyon Creek**
- **Big Eightmile Creek**
- **Hayden Creek**
- **Agency Creek**
- **Patee Creek**
- **Kenney Creek**
- **Sandy Creek**
- **Wimpey Creek……**

Historical Perspective

Mainstem Lemhi River



First recorded historical observation of Lemhi Shoshone-Bannock Fishing
(Journals of the Lewis and Clark Expedition, Moultin 1998)

…. he found the wear extended across four channels of the river which was here divided by three small islands. three of these channels were narrow, and were stoped by means of trees fallen across, supported by which stakes of willow were driven down sufficiently near each other to prevent the salmon from passing……

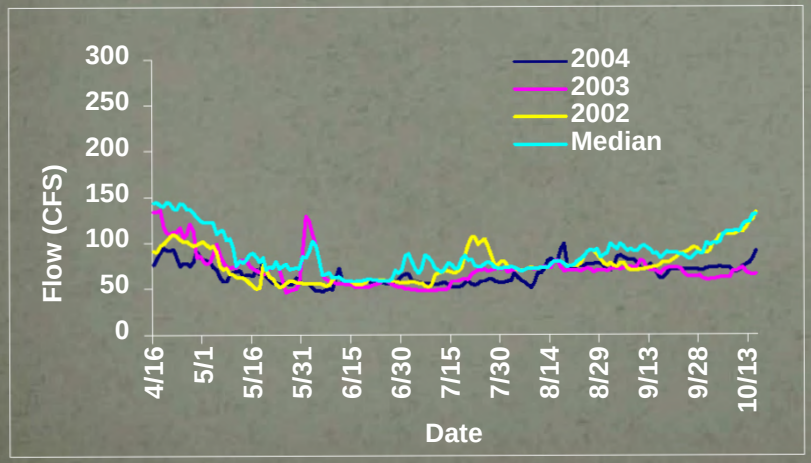
Historical Perspective

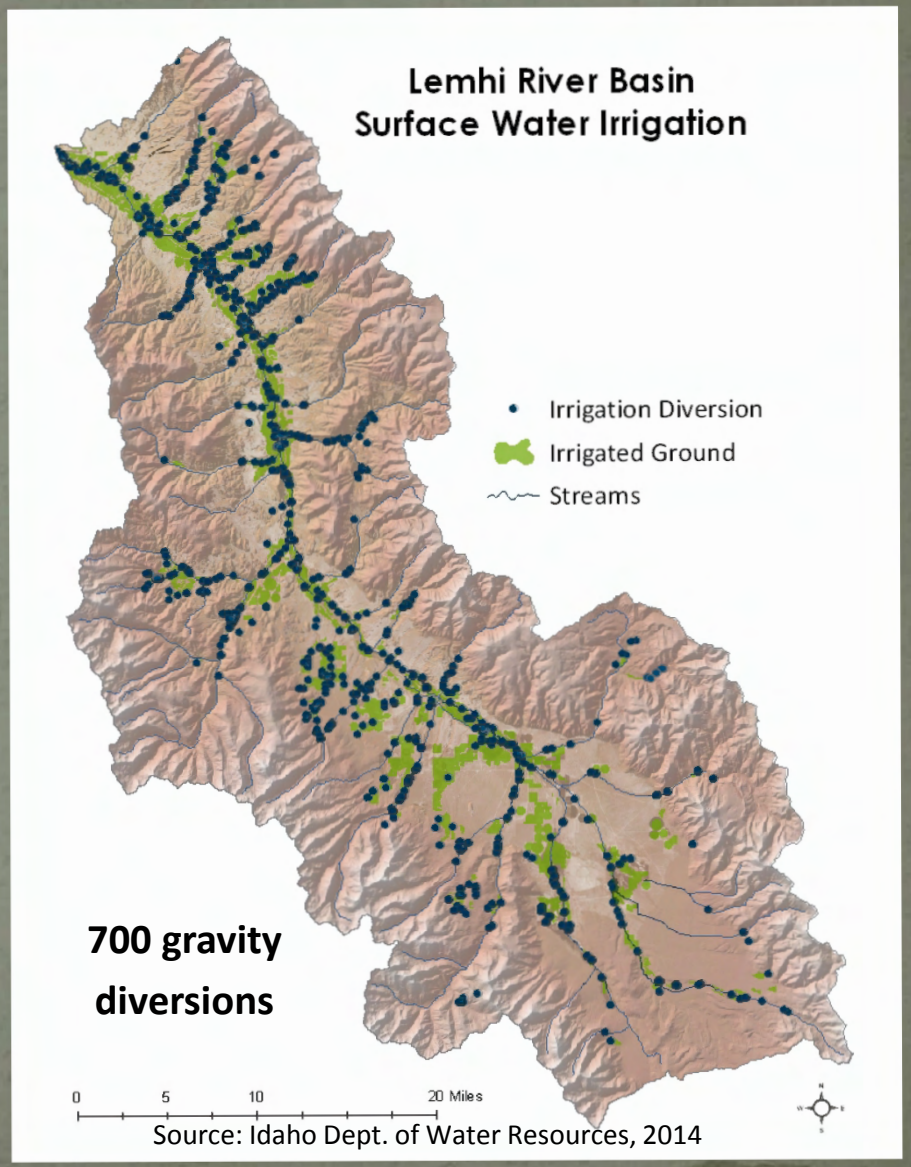
Lemhi River Affects to Habitat and Fish

- Mormon Missionaries Diverted Pattee Creek for irrigation in 1855 (Loucks, 2000)
- 77,646 acres of irrigated agriculture by 1987 (Census for Agriculture, U.S. Dept. of Commerce)

Lemhi Basin Water Development

Mainstem River Effects

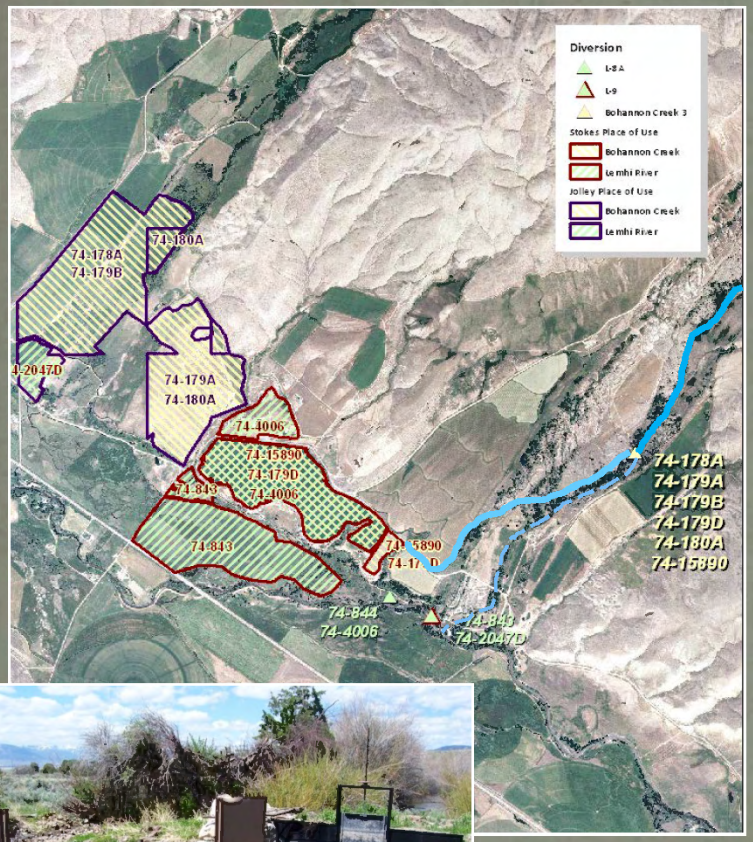


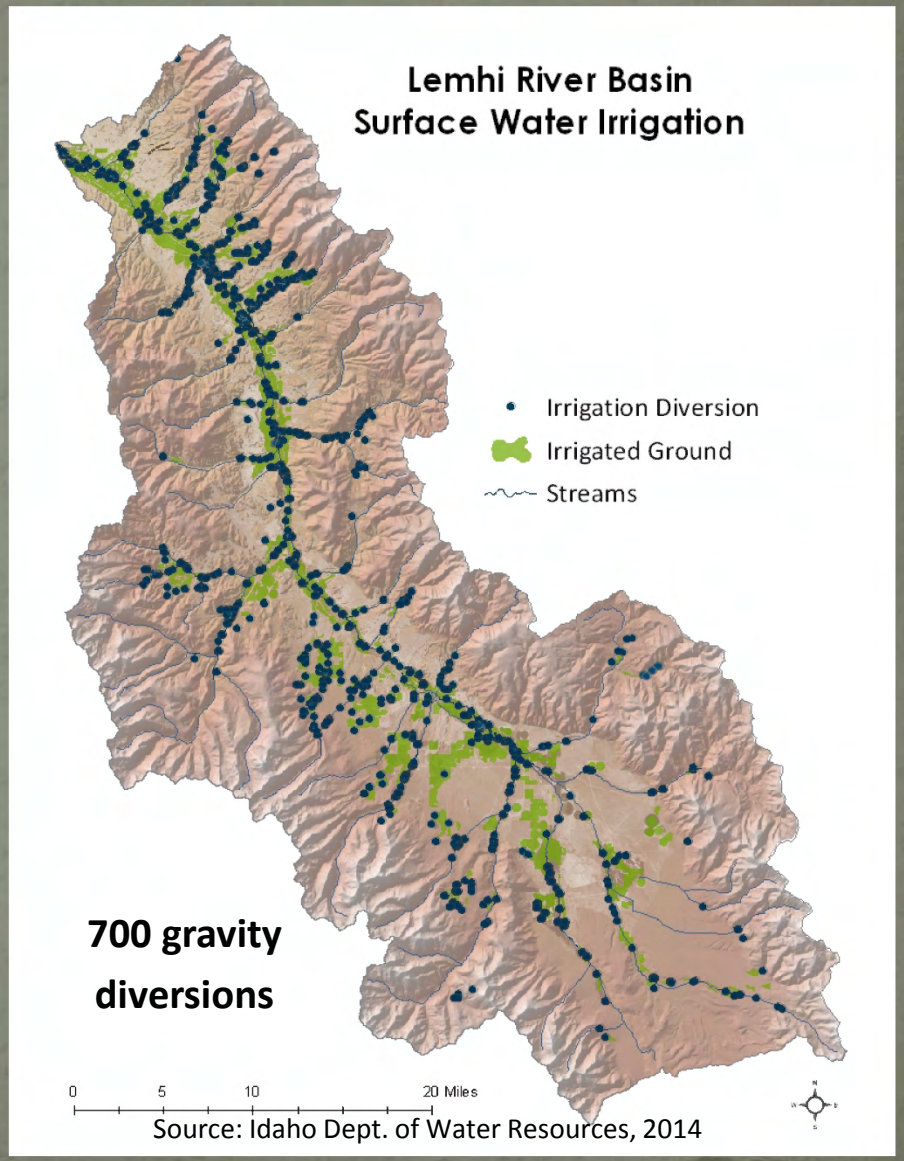


Source: Idaho Dept. of Water Resources, 2014

Lemhi Basin Water Development

Tributary Effects





Source: Idaho Dept. of Water Resources, 2014

Historical Perspective

Lemhi River Limiting Factors

Railroad was removed in 1939, and transferred to the State of Idaho 1952. The highway engineers preferred to “move the river” rather than construct the many bridges required.

Conservation Timeline

Relevance to Lemhi Efforts

1954 - Present

1954 IDFG SP

1986 Ott Report

1991 USBOR

1992- ESA Listing

1992 Irrigators Plan

1995 Model Watershed Plan

2000 BIOP

2001 LCA

2001 Sub-Basin Assessments

2004 Section 6 Agreement

2004 PCSRF

2005 SRBA

2005 USR SHIPIS

2006 BIOP

2008 BPA Accords

2017 IRA

Conservation Timeline

Relevance to Lemhi Efforts

Irrigation Canal Screening

- Mitchell Act 1938 expanded to Snake River
- 1957 Dedicated Funding MA + BPA
- Accelerated 1980's
- Capital Construction and Maintenance
- Currently 250 + Screens

Lemhi River Habitat Improvement Study

- Minimum Flow for Adult Migration
- Define Low Flow in River
- Alternatives for Enhancing Passage
- Describe an Efficient Conservation Program

Lemhi Basin Pilot Study

- 1 of 4 Studies
- Address Critical Fish Passage
- Lower Lemhi based on Ott Recommendations
- L4 – L7

Conservation Timeline

Relevance to Lemhi Efforts

1992

- Irrigators Plan

1992, 1997, 1998

- Anadromous/ Freshwater Resident Fish

1995

- Model Watershed + Plan

LID and WD 74 Proposed to Enhance Anadromous Fish

- Fish Passage
- Improve Water Control
- Water Conservation
- Improve Fish Habitat

ESA Listing

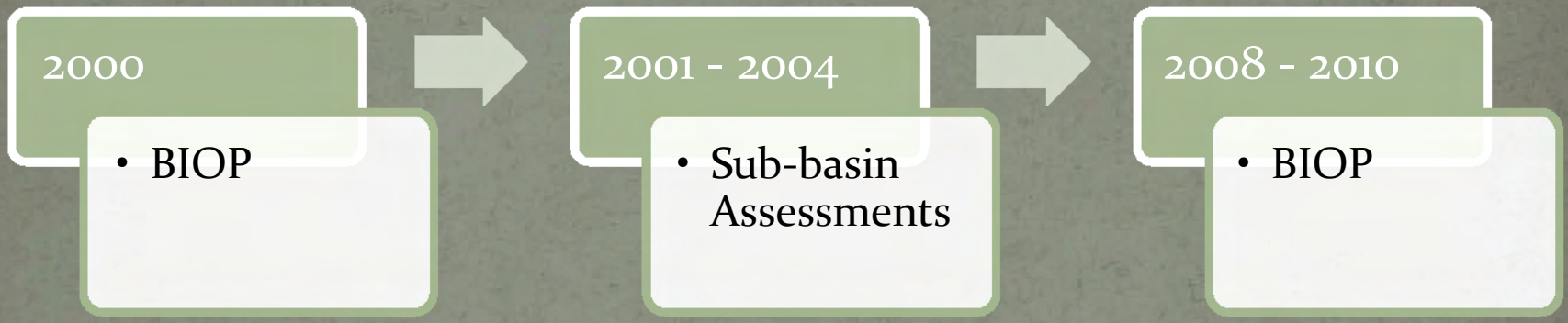
- Snake River Spring Summer Chinook Salmon 1992
- Snake River Steelhead 1997
- Columbia River Bull Trout 1998

USB MWP Formed With Associated Plan – Balance Resource Protection/Use

- Increase Flow
- Reduce Barriers
- Develop Pools and Resting Areas
- Riparian Vegetation
- Reduce Fine Sediment

Conservation Timeline

Relevance to Lemhi Efforts



FCRPS Biological Opinion

- 4 "H"'s – Hatchery, Hydro, Harvest, Habitat
- *Offsite Habitat Mitigation

Salmon sub-basin Summary/Assessment and Plan

Upper Salmon River and Lemhi Specific

FCRPS Biological Opinion and Remand

- Jeopardy
- RPA Driven
- 2011 Remand

Conservation Timeline

Relevance to Lemhi Efforts

2001 - 2002
- Lemhi Conservation Agreements

2004 - 2008
- Lemhi Section 6 Agreement

2005
- SRBA

Interim Party Agreements
- Avoid Irrigator Prosecution under ESA
- Address Fish Passage
- Ott Recommendations
- L4 – L7

ESA Section 6 Negotiations
- 2000 "Take" Issue
- Section 6 Agreement – Avoid ESA Prosecution
- Stakeholders Signatories
- Conservation Plan

Comprehensive Water Rights Settlement
- Stakeholders/Federal/State Signatories
- Lemhi Framework and Habitat Actions Table

Targeted Restoration

- **Improve Quality of Occupied Habitat (mainstem)**
- **Increase Quantity of Unavailable Habitat (Tributaries)**

Conservation Timeline

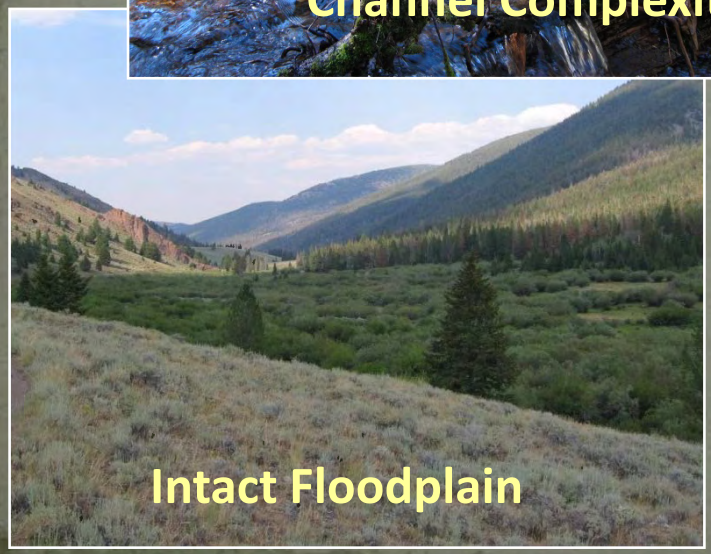
Relevance to Lemhi Efforts

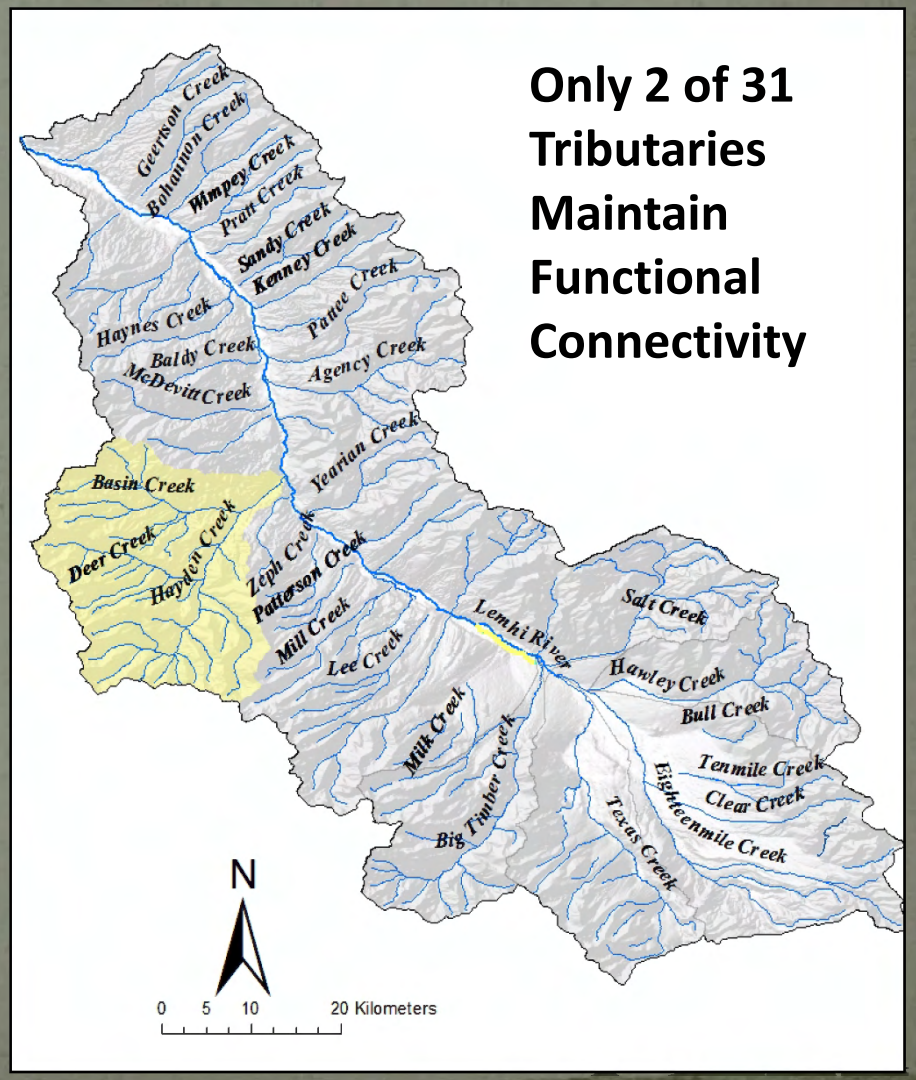
- **2004** — PCSRF to Idaho
- **2005** — Upper Salmon Sub-basin Screening and Habitat Improvement Prioritization/work windows
- **2008** — BPA Accords
- **2017** — Integrated Rehabilitation Assessment

Building Upon Targeted Restoration

Lemhi Basin Water Development

Loss of Historically Available Complex Spawning and Rearing Habitat



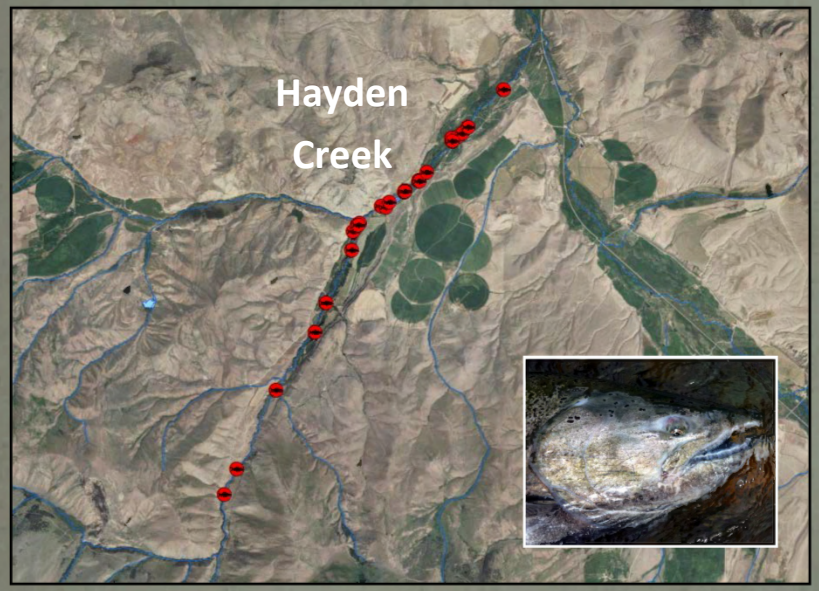


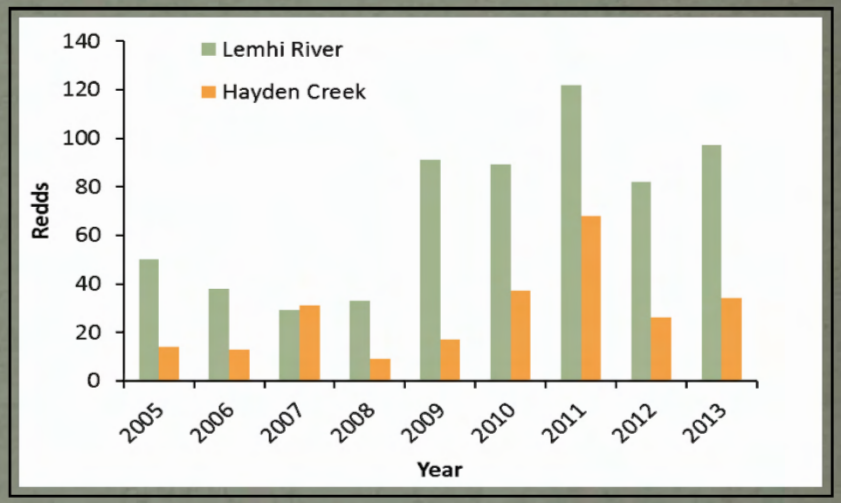
Tributary Watershed Connectivity

Hayden Creek Anadromous Fish Production

Only Tributary w/ Documented:

- **Chinook Production (>50% of basin)**
- **Fluvial Bull Trout**



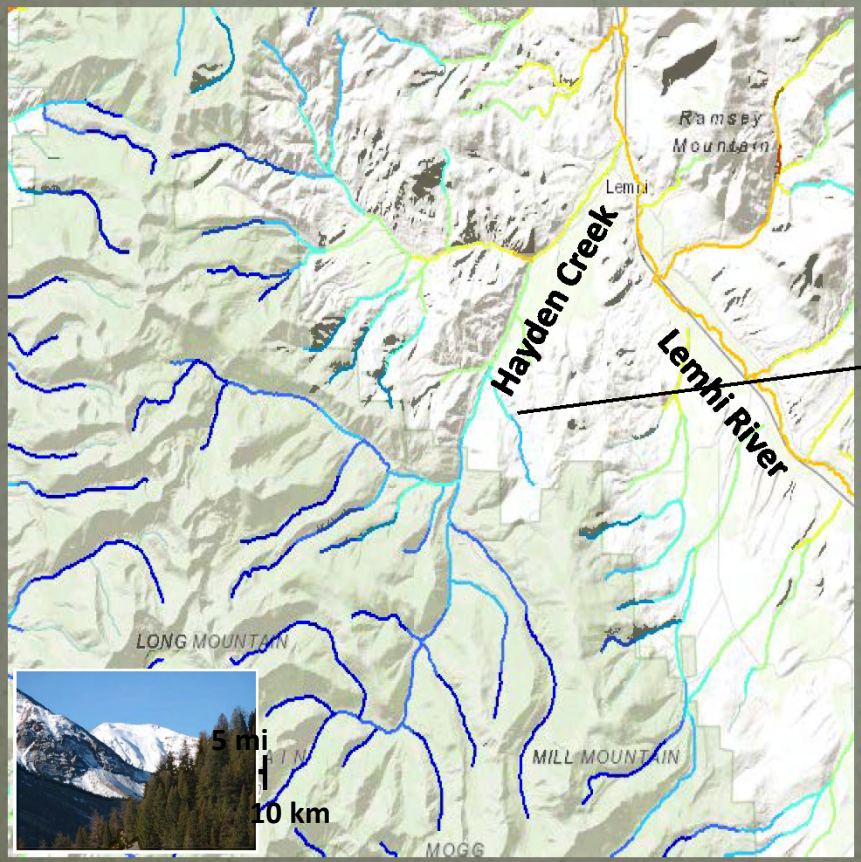


Steelhead Production

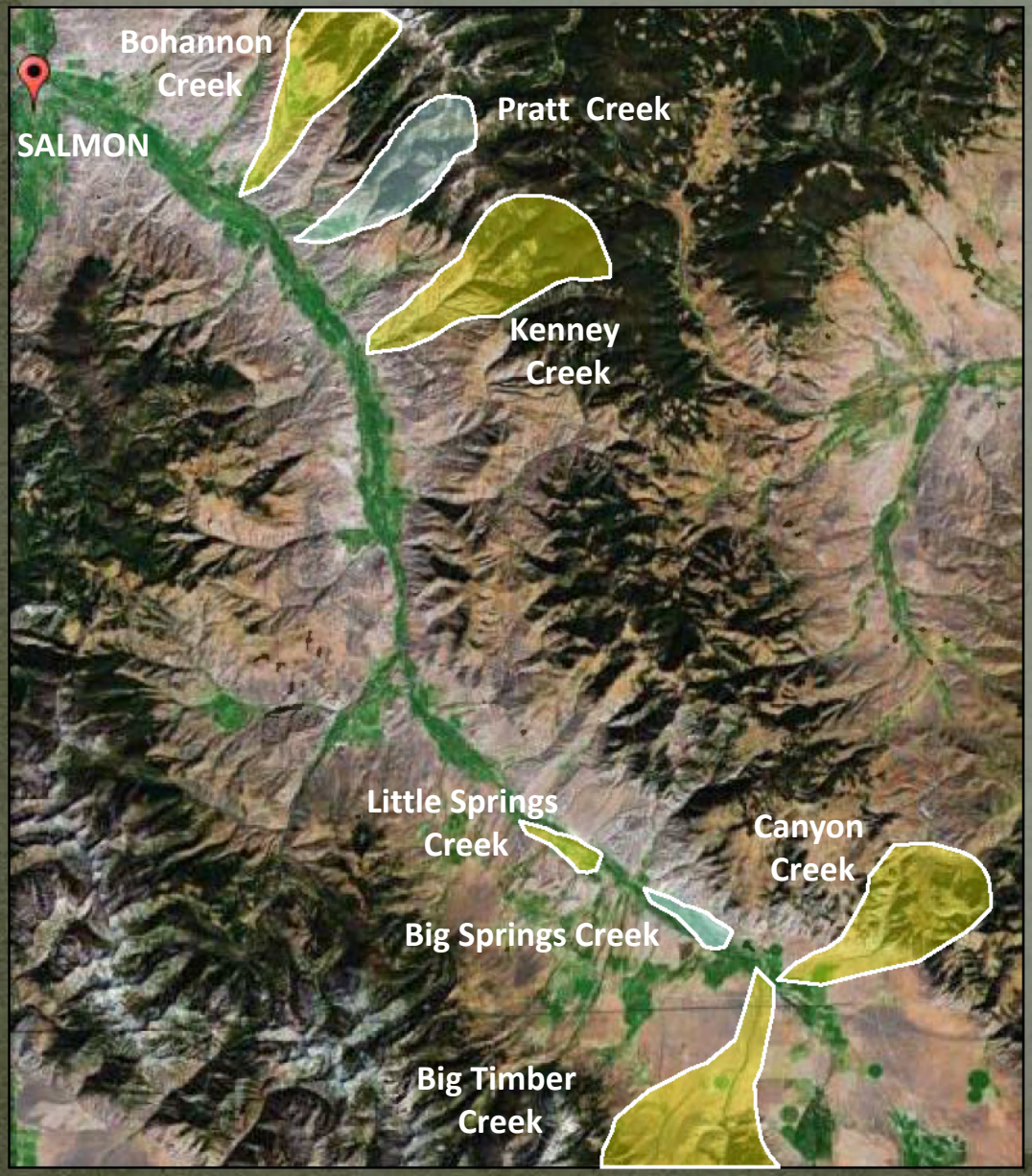
Tributary Watershed Connectivity

Hayden Creek Thermal Refugia

Lemhi Produced Fish - Access to cold, complex, diverse habitats



Lemhi Conservation Progress



Tributary Reconnections

Substantial Efforts

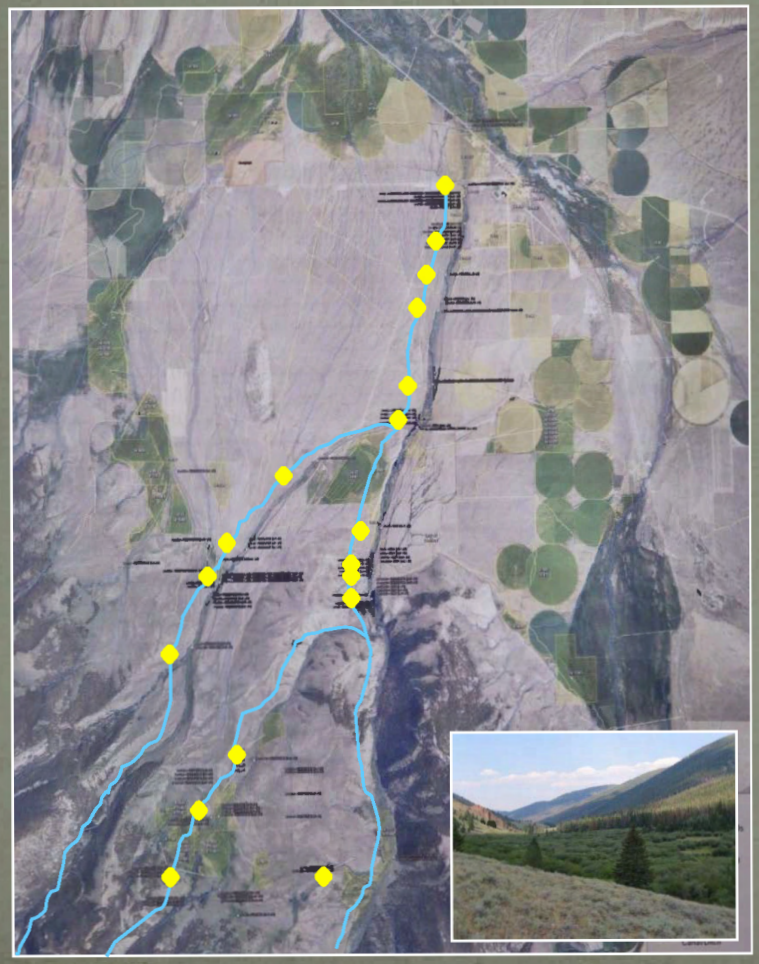
- Lemhi Little Springs Creek
- Canyon Creek
- Kenney Creek
- Bohannon Creek
- Big Timber Creek

Beginning Phases

- Pratt Creek
- Big Springs Creek

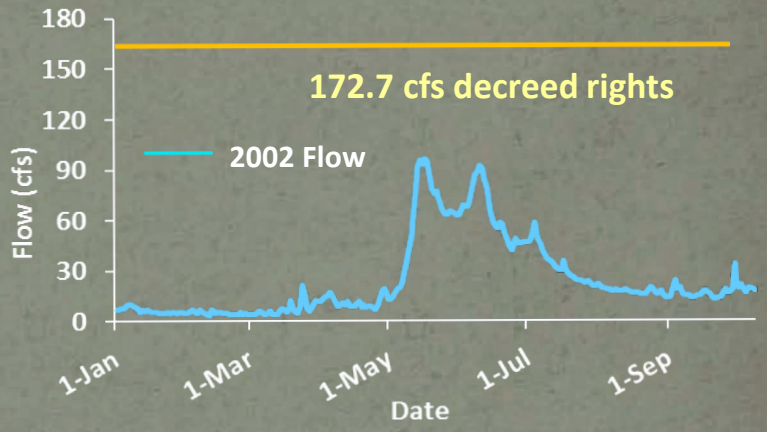
"Fix it" Tools

Water Transactions

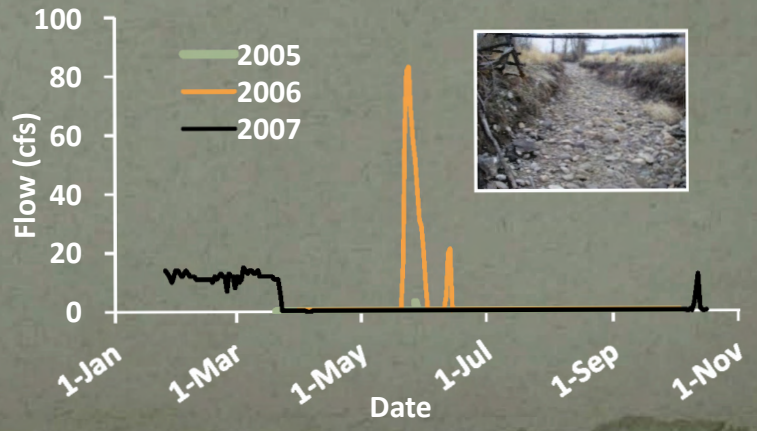


Big Timber Creek

Pre-Diversion

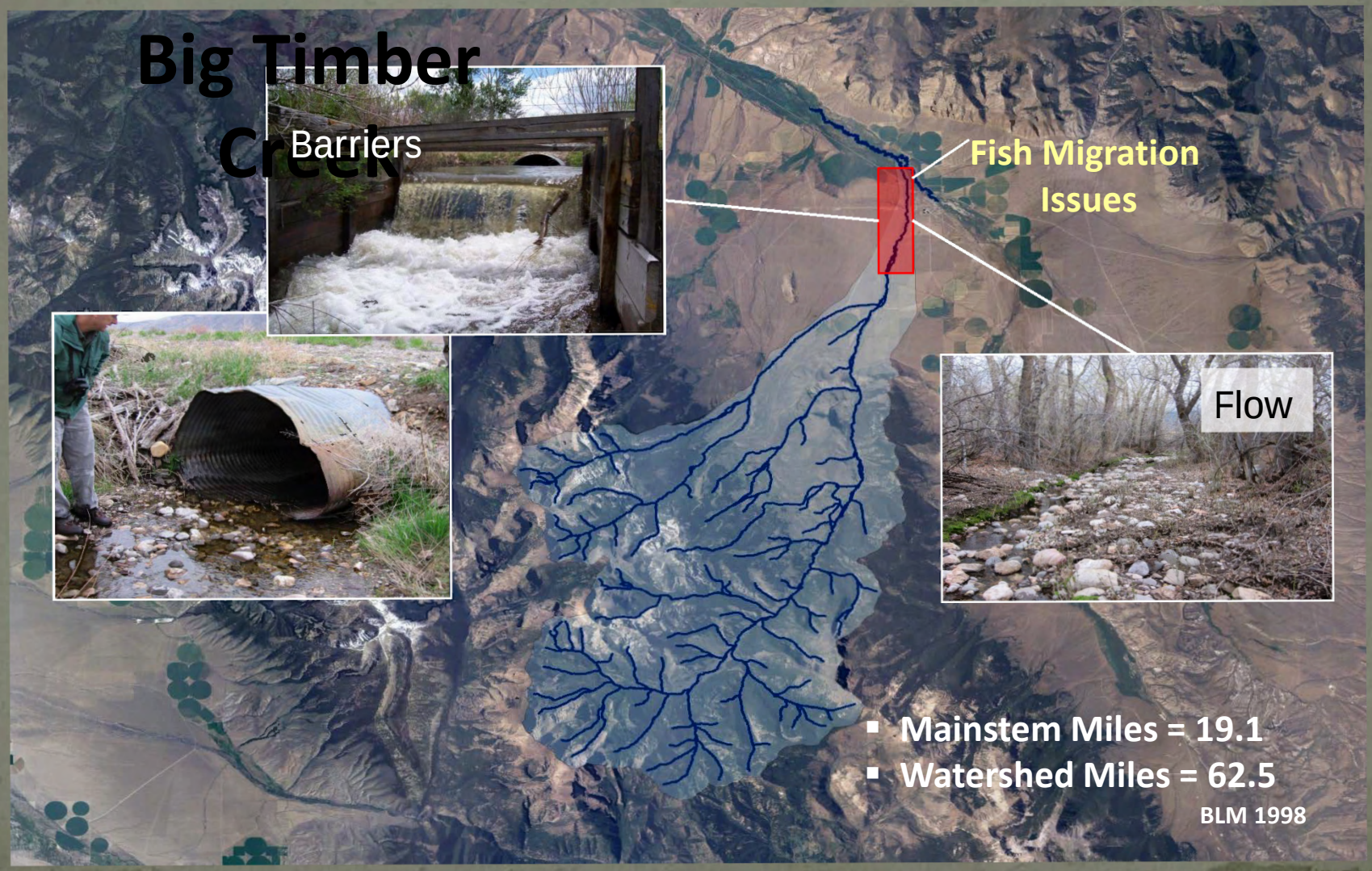


Below Diversions

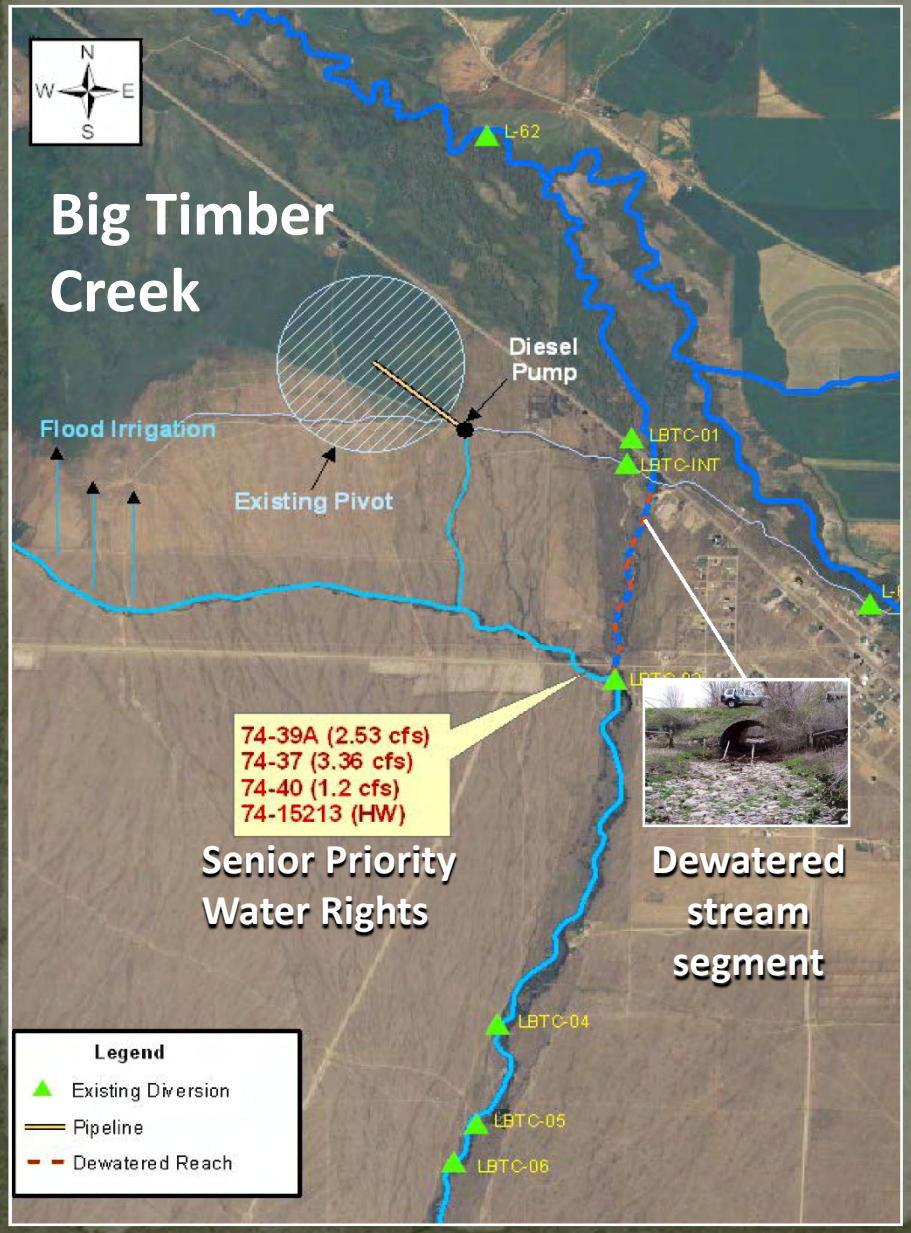


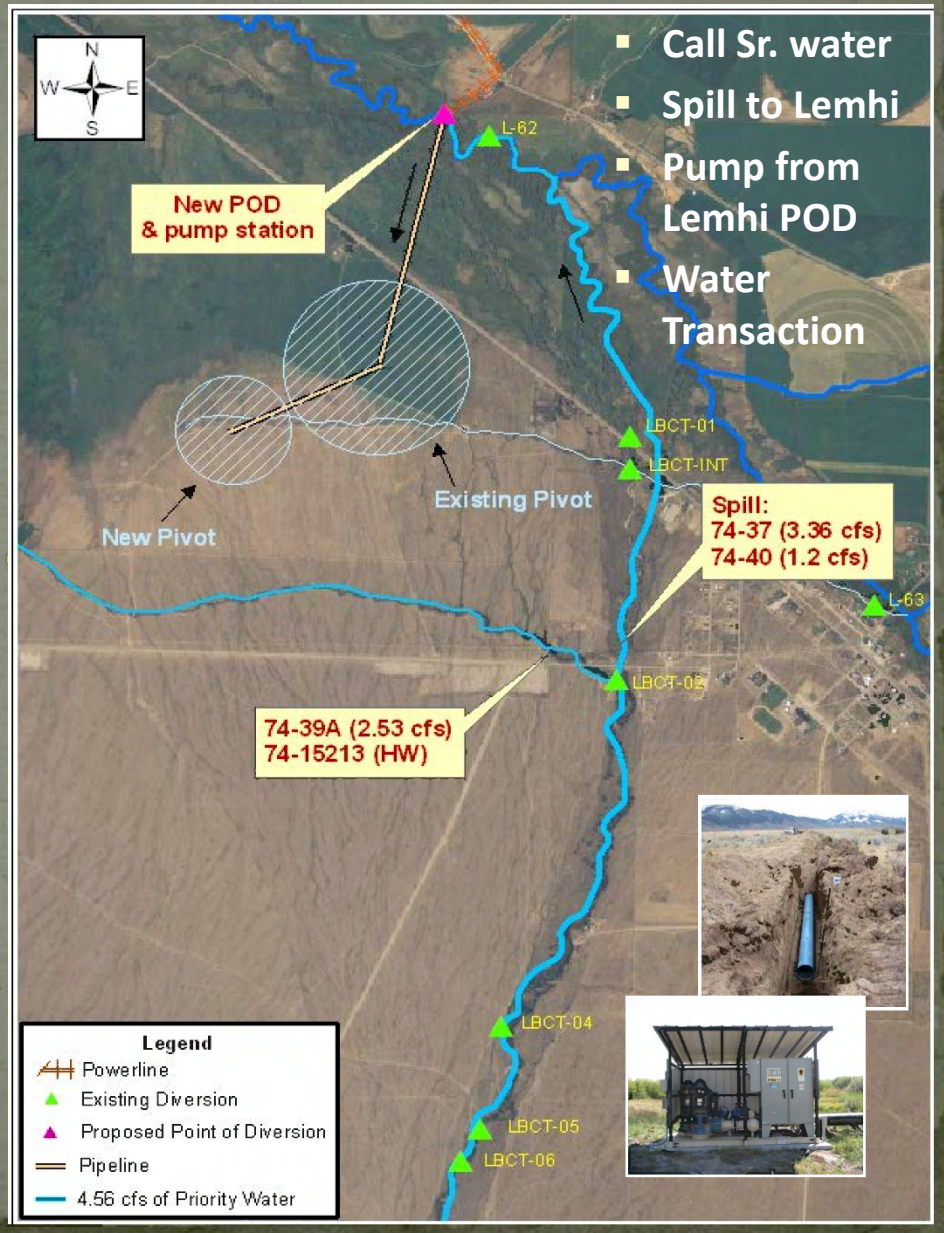
Watershed Connectivity

Passage Objective – "Sling Shot" Concept

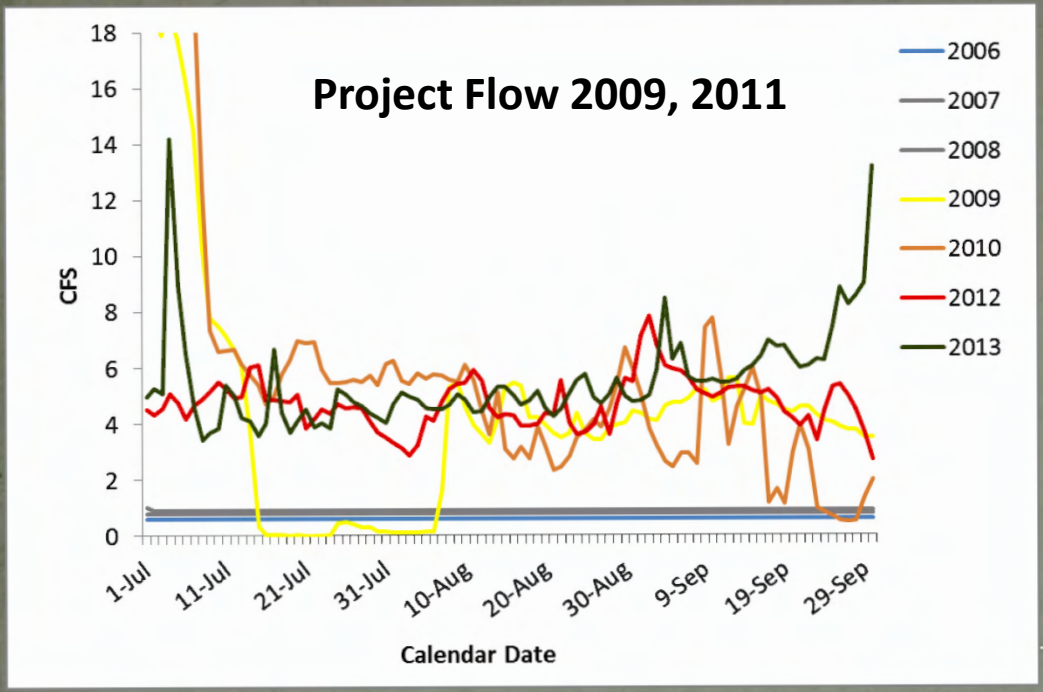


Flow Augmentation





Big Timber Creek



- L63 Ditch Intercept Removal
- Highway 28 Culvert Removal
- BT #1 Diversion Removal
- Lower BT Floodplain Improvement
- BT 4.5 CFS Flow Improvement
- BT 1.5 CFS Flow Improvement
- Lower BT Easement (Floodplain Protection)

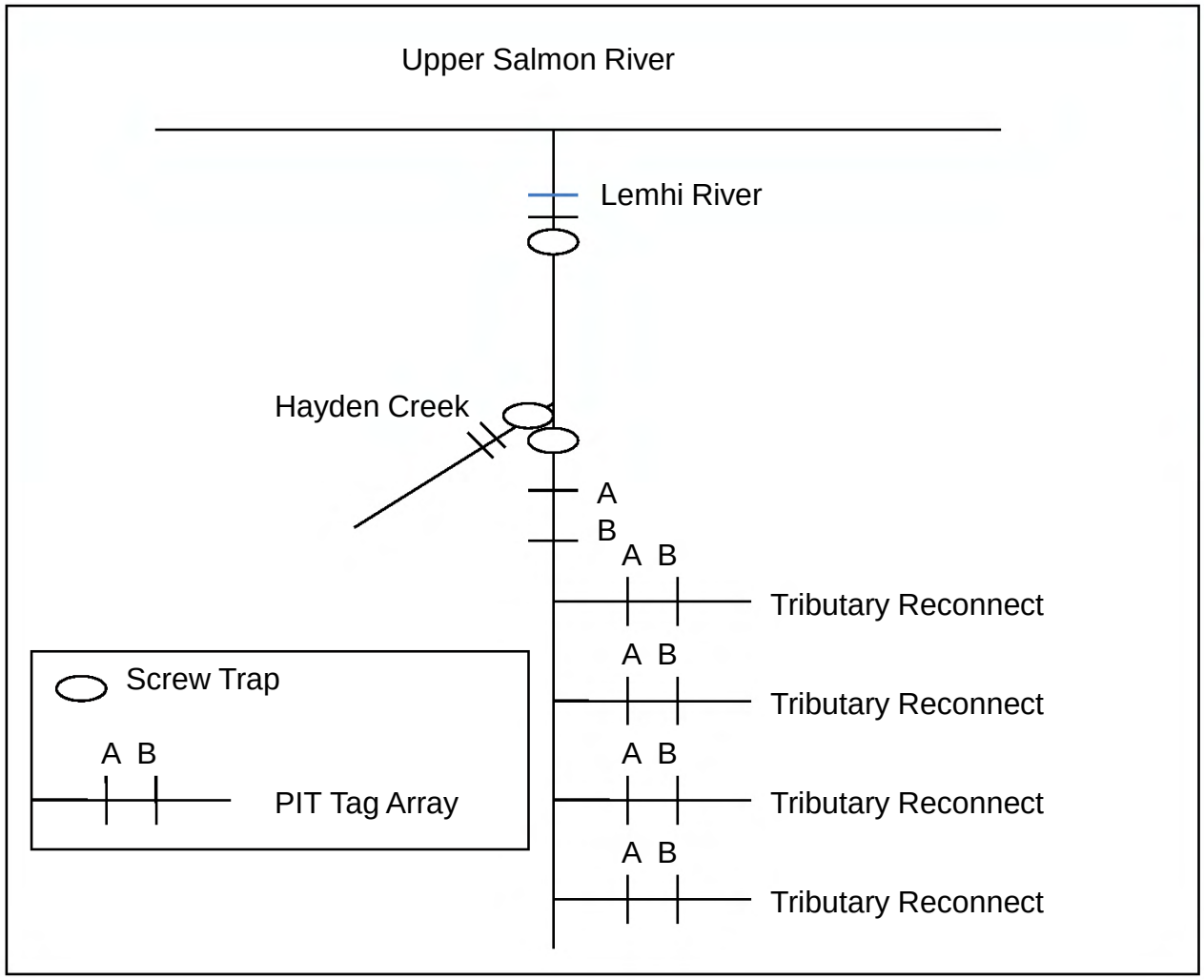
Lemhi Effectiveness Monitoring

ISEMP/CHaMP/IMW

- Fish/Habitat RME mandated by 2008 BiOp:
  - Freshwater productivity improvement targets (Lemhi):
    - 4% increase in steelhead smolt/adult
    - 7% increase in sp/su Chinook salmon smolts/adult
- Intensive evaluation to assess effectiveness of restoration efforts
  - Lemhi Pilot selected due to aggressive restoration
- “Brute force” RME within a model-based design
  - Focus on exportability.

Monitoring Framework

Fish in – Fish out Study Design



- Adult Production
  - -Redds
  - -Adult escapement
- Juvenile Abundance
  - -Growth
  - -Survival
- Fish Distribution

Lemhi RM&E

Infrastructure

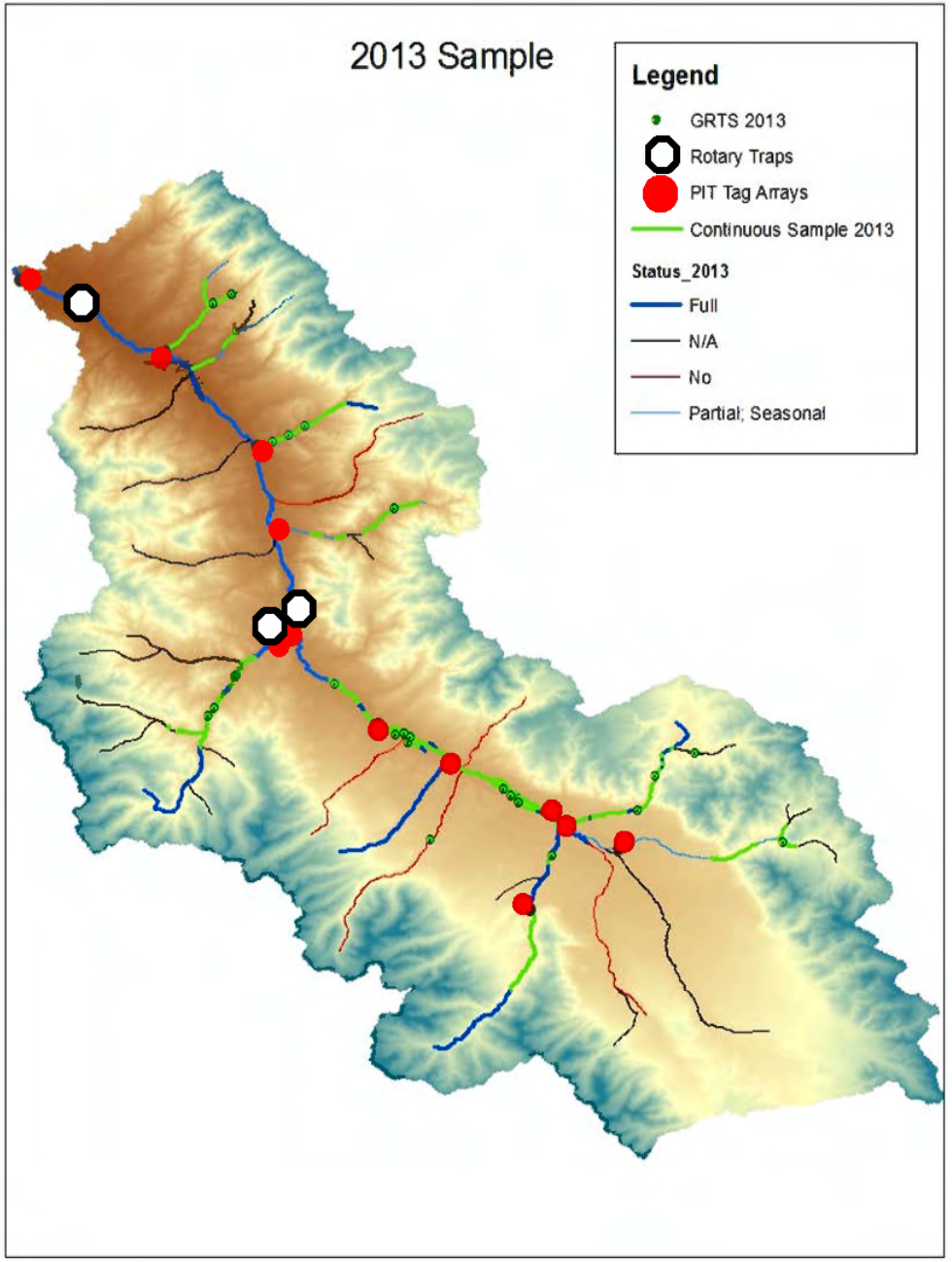
- ❑ PIT Arrays Tribs/Mainstem
- ❑ RST's
- ❑ Habitat Surveys (CHaMP)

Adult Escapement

- PIT tagging LGD
- Escapement Estimates (Arrays)
- Spawning Surveys (Redds)
- Radio Telemetry

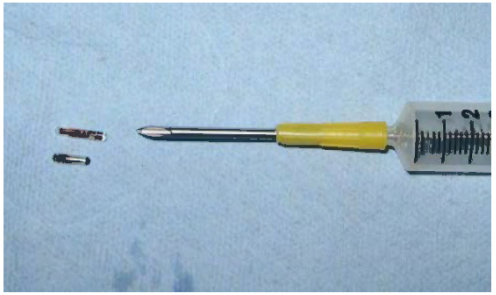
Juvenile Production

- GRTS Electrofishing Surveys
- Continuous Mark/ Resight
- Rotary Screw Traps



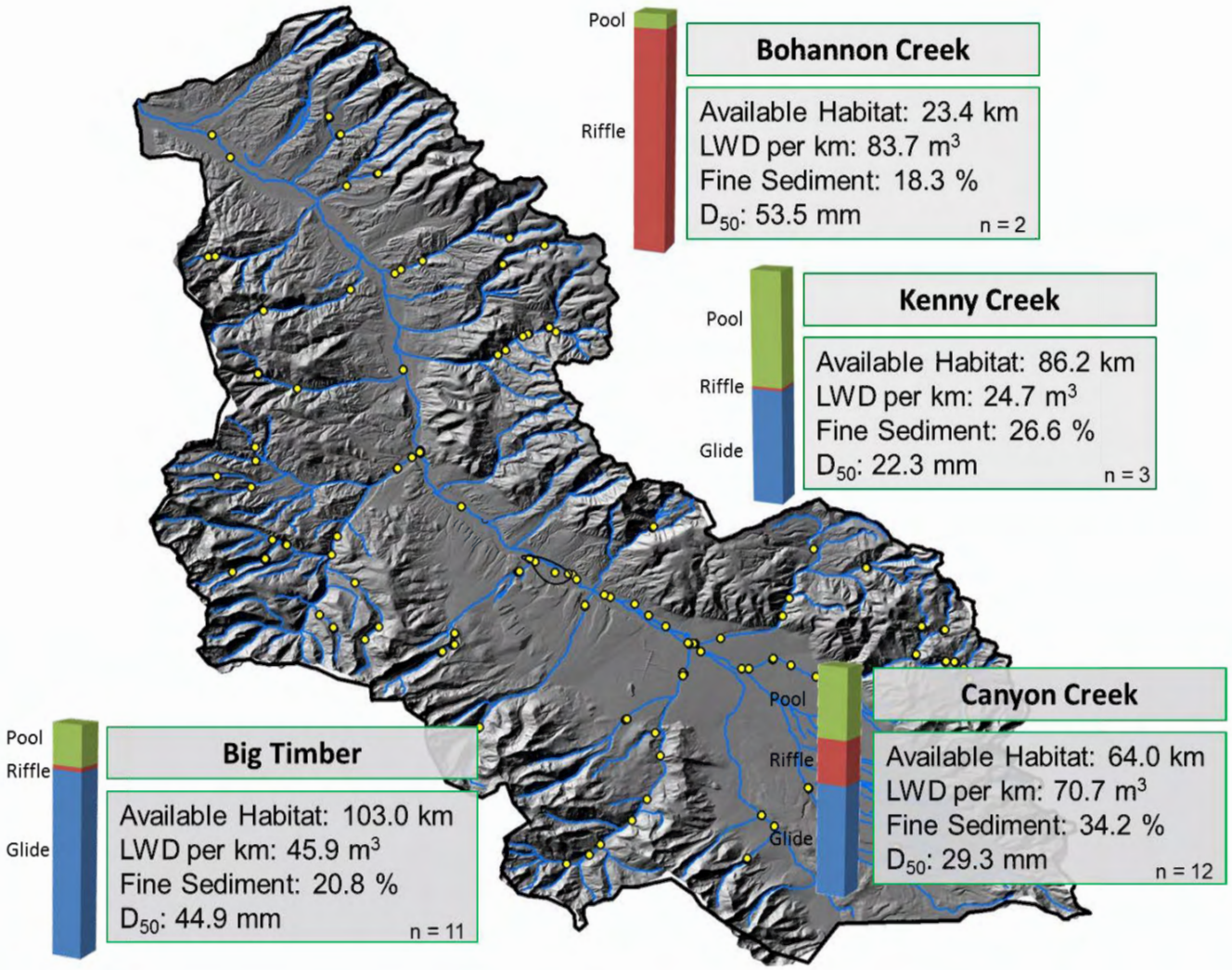
PIT Tag Array System

Specific Tributaries



Habitat Capacity

Specific Tributaries



Juvenile Capacity - Water Transaction Tributaries

Chinook Salmon

Tributary	Juvenile Capacity	Percent of overall capacity
Kenney Creek	3176	0.89%
Pratt Creek	NA	NA
Little Springs Creek	13323	3.72%
Big Springs Creek	15159	4.23%
Canyon Creek	17946	5.01%
Big Timber Creek	11012	3.08%
Bohannon Creek	3950	1.10%
	Total	**18.04%**

Steelhead/O. mykiss

Tributary	Juvenile Capacity	Percent of overall capacity
Kenney Creek	24784	3.34%
Pratt Creek	19331	2.61%
Little Springs Creek	NA	NA
Big Springs Creek	20428	2.75%
Canyon Creek	49159	6.63%
Big Timber Creek	63252	8.53%
Bohannon Creek	34454	4.65%
	Total	**28.51%**

Adult Capacity - Water Transaction Tributaries

Chinook Salmon

Tributary	Redd Capacity	Percent of overall capacity
Kenney Creek	39	1.22%
Pratt Creek	NA	NA
Little Springs Creek	106	3.32%
Big Springs Creek	156	4.89%
Canyon Creek	144	4.51%
Big Timber Creek	66	2.07%
Bohannon Creek	30	0.94%
	Total	**16.95%**

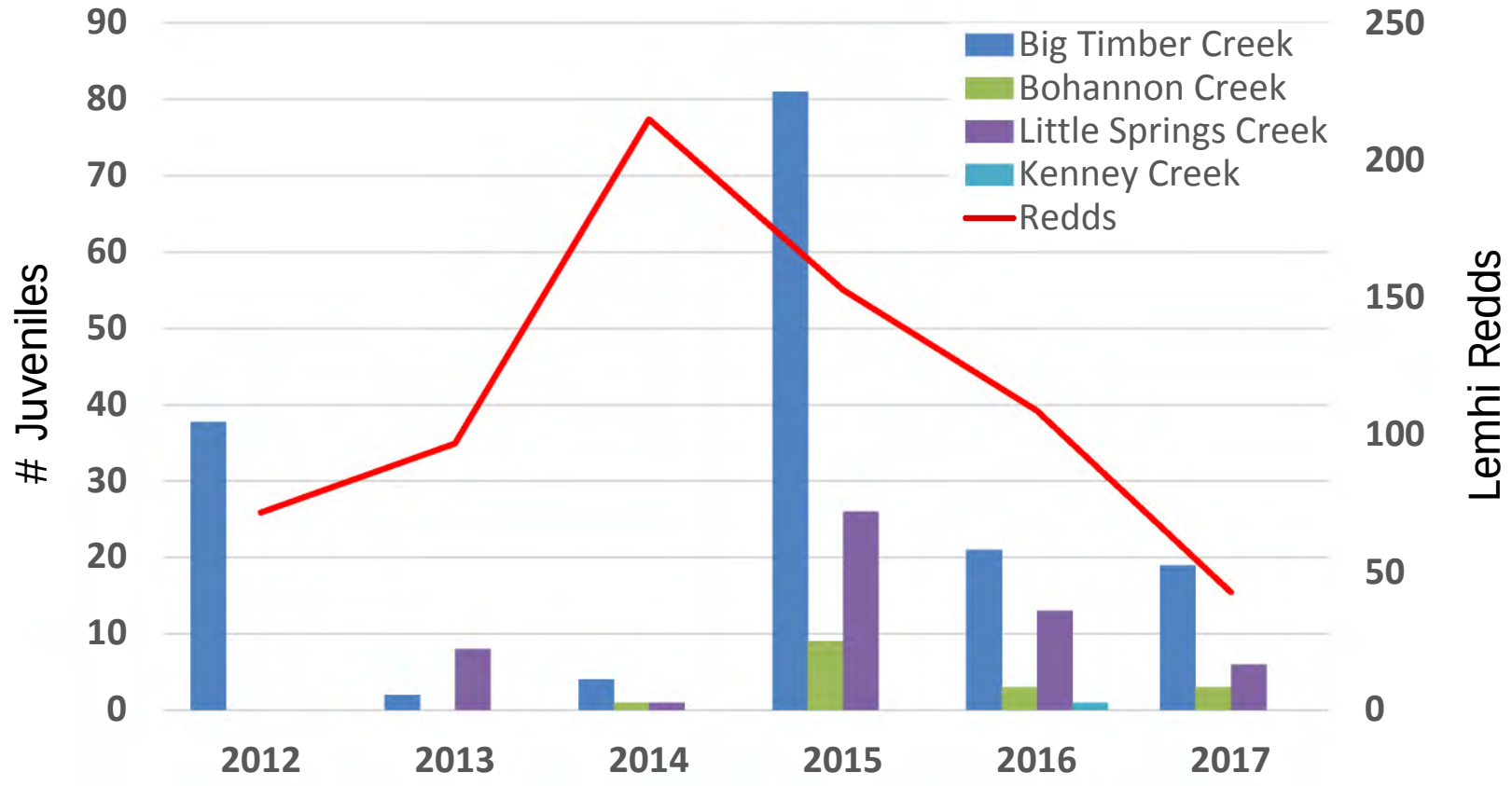
Steelhead/O. mykiss

Tributary	Redd Capacity	Percent of overall capacity
Kenney Creek	90	2.63%
Pratt Creek	75	2.19%
Little Springs Creek	NA	NA
Big Springs Creek	80	2.34%
Canyon Creek	221	6.45%
Big Timber Creek	273	7.97%
Bohannon Creek	129	3.77%
	Total	**25.34%**

Juvenile Annual Abundance

Water Transaction Tributaries

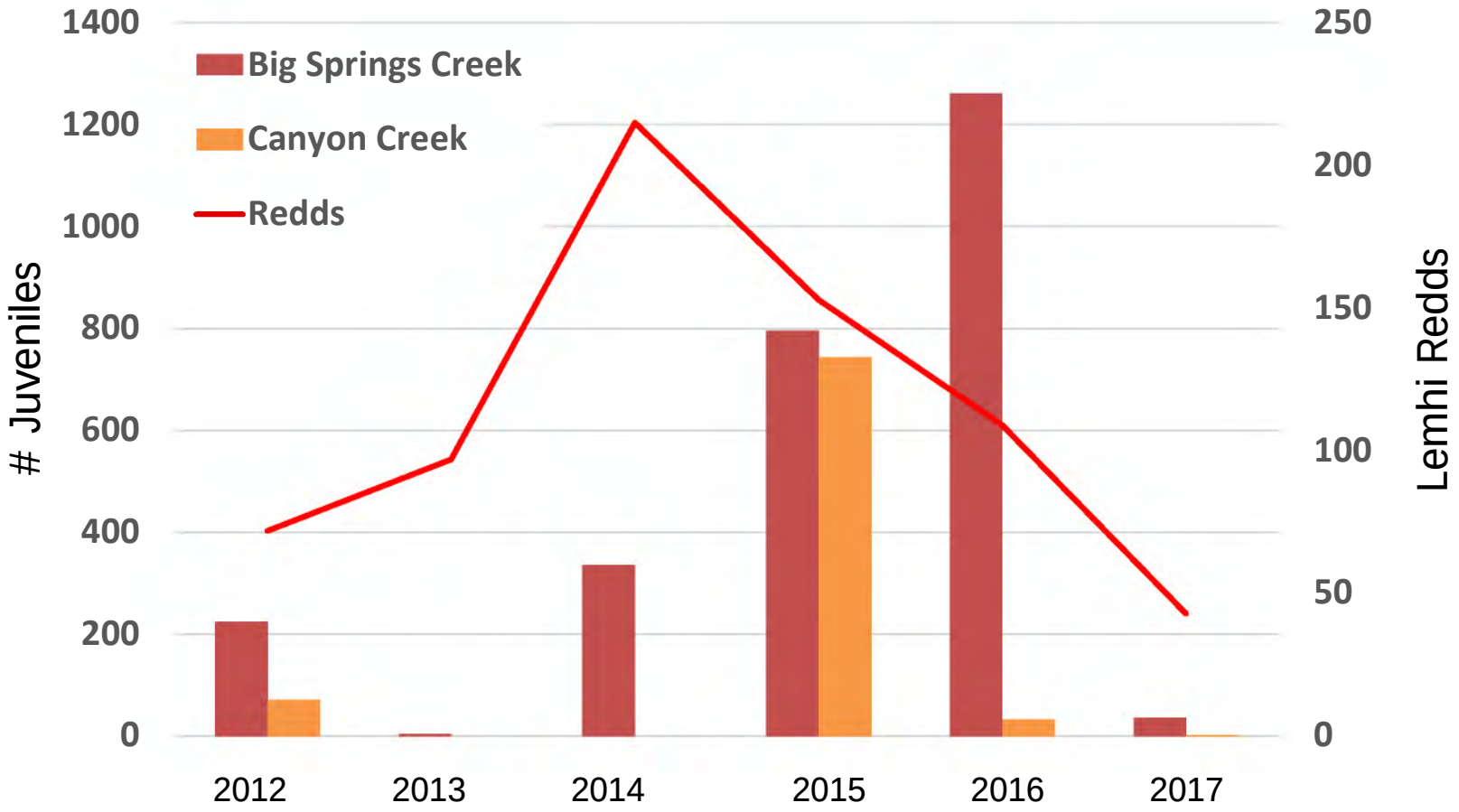
Chinook Salmon



Juvenile Annual Abundance

Water Transaction Tributaries

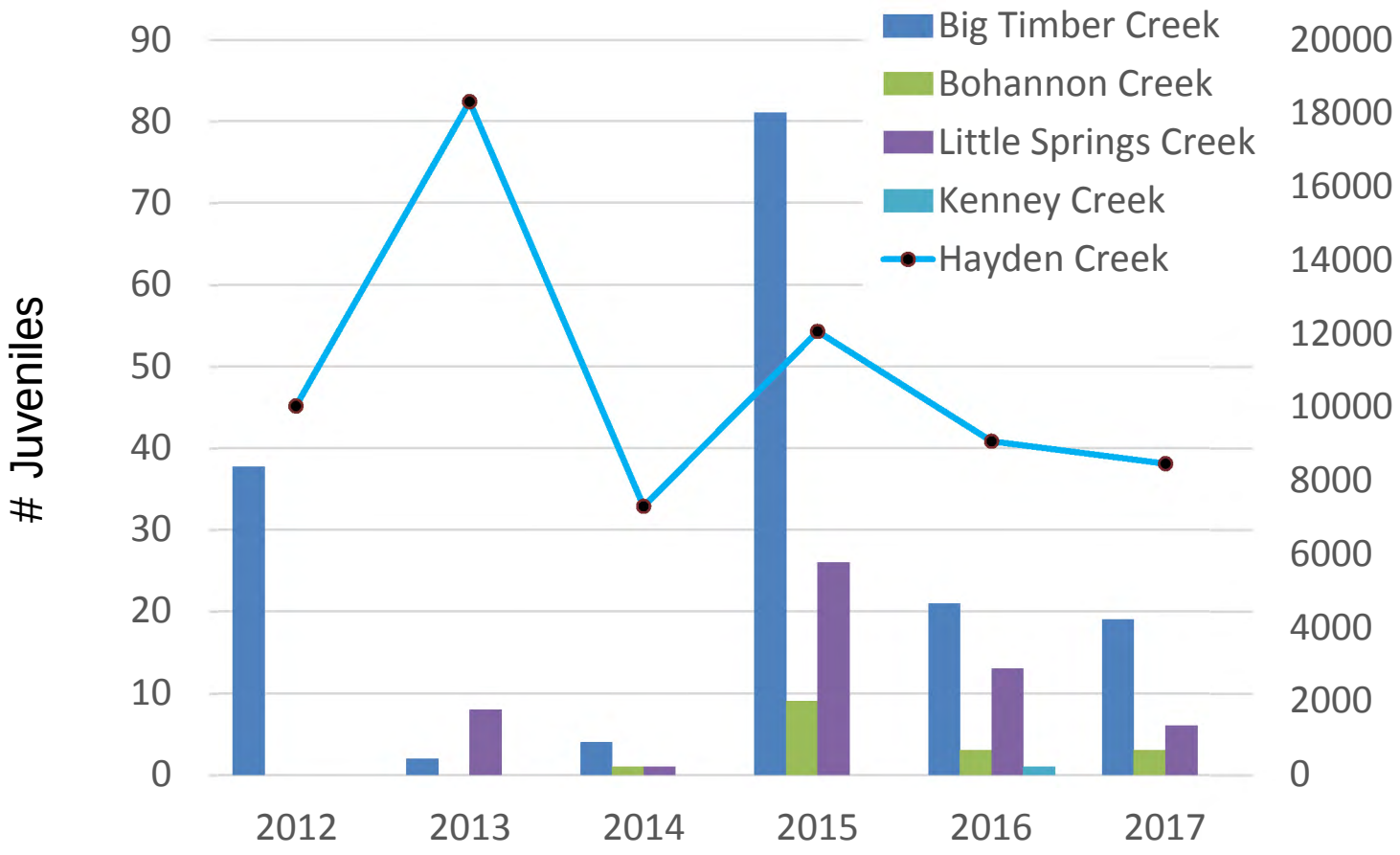
Chinook Salmon



Juvenile Annual Abundance

Water Transaction Tributaries

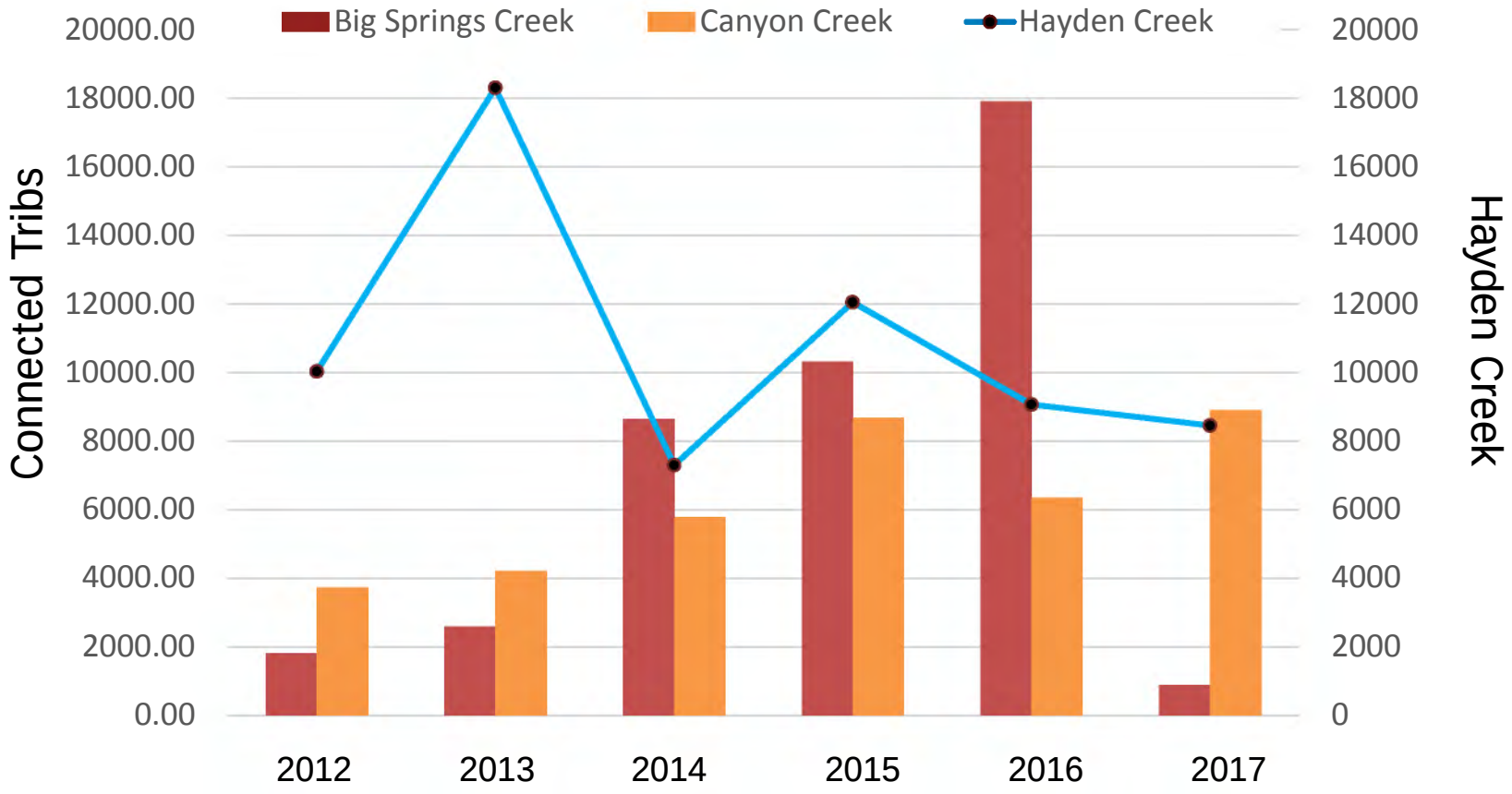
Steelhead/O. mykiss



Juvenile Annual Abundance

Water Transaction Tributaries

Steelhead/O. mykiss



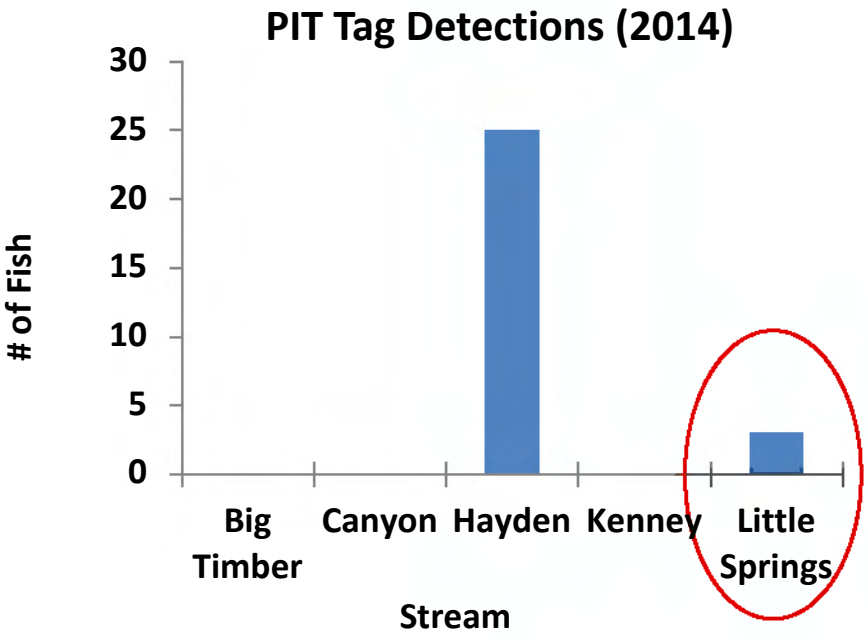
Chinook Salmon Detections

Lemhi Connected Tributaries

PIT Tagging

- **Within – Basin (Juveniles)**
- **LGR (Adults)**

Array Detections



*** No Previous Years Documented**

Lemhi Little Springs Creek

Chinook Salmon Detections

Date	Site	Event Site Type	Event Site RKM
3/14/2012	Lemhi River Weir	Screw Trap – PIT Tagged	522.303.416.050
5/09/2014	Lower Granite Dam	Adult Fishway	522.173
6/03/2014	Lower Lemhi River	Instream Remote Detection	522.303.416.001
6/29/2014	Lemhi River Weir	Instream Remote Detection	522.303.416.050
8/30/2014	Lemhi Little Springs	Instream Remote Detection	522.303.416.066.000
8/31/2014	Lemhi Little Springs	Instream Remote Detection	522.303.416.066.000

Date	Site	Event Site Type	Event Site RKM
5/16/2014	Lower Granite Dam	Adult Fishway – PIT Tagged	522.173
6/17/2014	Lower Lemhi River	Instream Remote Detection	522.303.416.001
6/18/2014	Lower Lemhi River	Instream Remote Detection	522.303.416.001
6/24/2014	Lemhi River Weir	Instream Remote Detection	522.303.416.050
9/6/2014	Lemhi Little Springs	Instream Remote Detection	522.303.416.066.000
9/7/2014	Lemhi Little Springs	Instream Remote Detection	522.303.416.066.000

Date	Site	Event Site Type	Event Site RKM
6/9/2014	Lower Granite Dam	Adult Fishway – PIT Tagged	522.173
6/30/2014	Lower Lemhi River	Instream Remote Detection	522.303.416.001
7/5/2014	Lemhi River Weir	Instream Remote Detection	522.303.416.050
9/2/2014	Lemhi Little Springs	Instream Remote Detection	522.303.416.066.000

Questions?

AGENDA

IDAHO WATER RESOURCE BOARD

Board Meeting No. 6-18
September 14, 2018
8:30 a.m.
City of Salmon
Conference Room
200 Main Street
SALMON

1. Roll Call
2. Public Comment
3. Agenda & Approval of Minutes*
4. Financial Report
5. Flood Management Grants*
6. Recommended Orders on Recreational Dredge Mining Permit Nos. S01-20253, S82-20066 and S82-20067*
7. Priest Lake Water Management Project
8. Boise River Storage Study Update
9. ESPA Recharge Update
10. MHAFB Water Supply Project – BLM ROW*
11. Basin 74 High Flow – Lemhi Irrigation District
12. Update on Water District 170
13. Director's Report
14. Non-Action Items for Discussion
15. Next Meeting & Adjourn

* Action Item: A vote regarding this item may be made this meeting. Identifying an item as an action item on the agenda does not require a vote to be taken on the item.

Americans with Disabilities

The meeting will be held in facilities that meet the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email nikki.regent@idwr.idaho.gov or by phone at (208) 287-4800.

Memorandum

To: Idaho Water Resource Board

From: Brian Patton & Neeley Miller

Date: August 31, 2018

Re: Financial Status Report

As of **July 31** the IWRB's available and committed balances are as follows:

Secondary Aquifer Fund:	
Committed/earmarked but not disbursed	$30,729,721
Loan principal outstanding	$0
Uncommitted Balance	$0
Revolving Development Account:	
Committed/earmarked but not disbursed	$20,492,695
Loan principal outstanding	$27,186,222
Uncommitted Balance	$2,508,350
Anticipated loanable funds available next 1 year	$6,008,350
Water Management Account	
Committed/earmarked but not disbursed	$1,111,376
Uncommitted Balance	$9,915
Total committed/earmarked but not disbursed	**$52,333,792**
Total loan principal outstanding	**$27,186,222**
Total uncommitted balance	**$2,518,265**

- The committed/earmarked balance in the Water Management Account includes the $1M legislative appropriation for the Flood Management Grant Program per HB 712. As grant awards are made and contracts are signed the balance of this account will be adjusted to reflect those changes.

- Loan applications that we are tracking include:

Potential Applicant	Project	Loan Amount	Comment
Twin Falls Canal Company	Check Structures	$2M	Planning to use BOR WaterSmart for matching dollars
North Fremont Canal Company (Marysville)	Continue installing gravity-pressure delivery system (Phase 3)	$3.5M	Anticipated NRCS match.

Idaho Water Resource Board
Budget and Committed Funds
as of July 31, 2018

SECONDARY AQUIFER PLANNING, MANAGEMENT, & IMPLEMENTATION FUND

FYE 2018 Cash Balance		**25,684,783.11**
FY 2019 Revenue		
Interest Earned State Treasury	39,896.45	
HB547 - State Recharge & Aquifer Stabilization (SRAS)		
SB1176, Section 4 - Water Sustainability	5,000,000.00	
Department of Energy Grant	18,700.00	
TOTAL FY 2019 REVENUE		**5,058,596.45**
FY 2019 Expenditures		
SRAS Equipment & Supplies - FY 18	(1,402.45)	
SRAS Conveyance Costs - FY 18	(39,755.32)	
SRAS Site Monitoring - FY 18	(6,084.68)	
SRAS Regional Monitoring - FY 18	(49,179.88)	
Water, Civil, & Environmental Inc (CON01269)	(30,040.27)	
Quadrant Consulting Inc (CON01261)	(10,710.65)	
New Sweden Irrigation District (CON01212)	(7,820.00)	
Big Wood Canal Company (CON01226)	(21.75)	
Steve Stuebner - Media Services	(1,631.75)	
Lost Valley Reservoir Company (CON01282)	(7,421.00)	
WS Hydrology Monitoring - FY 18	(2,174.51)	
Franklin & Marshall College (CON01266)	(650.00)	
Misc Costs for Lewiston Study (FedEx, etc.)	(47.36)	
Wood River Model Misc Expenditures (room rentals, refreshments, etc.)	(50.00)	
USGS - 6605 (Treasure Valley Modeling) FY18	(61,840.31)	
University of Idaho (CON01210, TV Model)	(9,246.95)	
Department of Energy Grant expenditures	(66,764.50)	
Brown & Caldwell (CON01201, MHAFB Project)	(132,993.06)	
TOTAL FY 2019 EXPENDITURES		**(427,834.44)**
FY 2019 Cash Balance		**30,315,545.12**

COMMITTED FUNDS THRU FY 2018	**Budget**	**Amended**	**Obligated**	**Expenditures**	**Carry forward**	**Committed**
Cooperative Weather Modification Program (Cloud Seeding - CON01109)	492,000.00		492,000.00	(354,917.64)		137,082.36
Department of Energy SEP grant	**200,000.00**		**251,000.00**	**(223,096.40)**		**27,903.60**
Mountain Home Air Force Base (PCA 29800)	**1,000,000.00**	**900,000.00**	**1,900,000.00**	**(641,264.23)**		**1,258,735.77**
Remaining Initial Funds	**1,692,000.00**	**900,000.00**	**2,643,000.00**	**(1,219,278.27)**	**0.00**	**1,423,721.73**
ESPA Recharge Operations						
FY 2018 Equipment & Supplies	100,000.00		100,000.00	(87,872.39)		12,127.61
FY 2018 Conveyance Cost	2,500,000.00	900,000.00	3,400,000.00	(336,483.28)		3,063,516.72
FY 2018 Site Monitoring	150,000.00		150,000.00	(81,165.86)		68,834.14
FY 2018 Regional Monitoring	200,000.00		200,000.00	(167,172.57)		32,827.43
Total ESPA Recharge Operations	**2,950,000.00**	**900,000.00**	**3,850,000.00**	**(672,694.10)**	**0.00**	**3,177,305.90**
ESPA Managed Recharge Infrastructure						
Milner-Gooding Dietrich Drop hydro plant bypass	50,000.00	1,450,000.00	1,500,000.00			1,500,000.00
NSCC Wilson Lake Infrastructure Project (CON01199)	4,000,000.00	800,000.00	4,800,000.00	(207,283.04)		4,592,716.96
Northside Canal Recharge Site (CON01240, CON01261)	328,636.45		328,636.45	(57,635.59)		271,000.86
Richfield Site Development (CON01226, 1234)	150,000		150,000.00	(128,067.93)		21,932.07
AFRD2 MP 28 Hydro Plan Tailbay (CON01247)	81,800.00		81,800.00	(11,800.00)		70,000.00
NSID Recharge Site Development	250,000.00		250,000.00			250,000.00
Egin Lakes Phase II	500,000.00	80,000.00	580,000.00	(95,275.75)		484,724.25
Total ESPA Managed Recharge Infrastructure	**5,360,436.45**	**2,330,000.00**	**7,690,436.45**	**(500,062.31)**	**0.00**	**7,190,374.14**

Managed Recharge Investigations						
South Fork Engineering & Site Evaluation (CON01163, 1164, 1165)	200,000.00	(34,000.00)	166,000.00	(114,758.97)		51,241.03
NSID Recharge Feasibility (CON01212)	200,000.00		200,000.00	(52,855.00)		147,145.00
Butte & Market Lake Canal Co (CON01168)	39,000.00		39,000.00	(32,512.46)		6,487.54
Woodville Canal Co (CON01169)	17,000.00		17,000.00	(7,536.69)		9,463.31
AFRD2 - MP 34 Investigation (CON01238)	45,000.00		45,000.00	(11,750.04)		33,249.96
Reserved for additional investigations and engineering (CON01269)	104,471.25		104,471.25	(104,974.73)		(503.48)
Total Managed Recharge Investigations	**605,471.25**	**(34,000.00)**	**571,471.25**	**(324,387.89)**	**0.00**	**247,083.36**
STATEWIDE STUDIES & PROJECTS						
TREASURE VALLEY						
Treasure Valley Modeling (USGS 6605)	500,000.00		500,000.00	(193,608.54)		306,391.46
Boise River Storage Studies	1,000,000.00		1,000,000.00	(500,000.00)		500,000.00
TREASURE VALLEY TOTAL	**1,500,000.00**	**0.00**	**1,500,000.00**	**(693,608.54)**	**0.00**	**806,391.46**
WOOD RIVER VALLEY						
Wood River Valley Aquifer GW Model (USGS 6601)	200,000.00		200,000.00	(31,764.90)		168,235.10
Canyon Creek Recharge Site	50,000.00	90,000.00	140,000.00			140,000.00
WOOD RIVER VALLEY TOTAL	**250,000.00**	**90,000.00**	**340,000.00**	**(31,764.90)**	**0.00**	**308,235.10**
WEISER BASIN						
Weiser River Basin Project/Lost Valley Reservoir	30,000.00		30,000.00	(7,421.00)		22,579.00
WEISER BASIN TOTAL	**30,000.00**	**0.00**	**30,000.00**	**(7,421.00)**	**0.00**	**22,579.00**
NORTHERN IDAHO AQUIFERS						
Lewiston Study Phase II	109,273.09		109,273.09	(43,685.68)		65,587.41
NORTHERN IDAHO AQUIFERS TOTAL	**109,273.09**	**0.00**	**109,273.09**	**(43,685.68)**	**0.00**	**65,587.41**
OTHER STATEWIDE STUDIES & PROJECTS						
Aquifer monitoring network enhancements in priority aquifers	100,000.00		100,000.00	(65,274.30)		34,725.70
Cooperative Cloud Seeding Program						
Operations & Maintenance (1/3 of total)	600,000.00	18,000.00	618,000.00	(580,000.00)		38,000.00
Administrative expenses (public information, staff training, etc)	80,000.00		80,000.00	(34,574.32)		45,425.68
Professional Assistance for securing Federal Funding	100,000.00		100,000.00	(96,399.29)		3,600.71
NRCS Snow Survey contribution USDA (CON01177)	100,000.00	100,000.00	200,000.00	(100,000.00)		100,000.00
Total Statewide Studies & Projects	**980,000.00**	**118,000.00**	**1,098,000.00**	**(876,247.91)**	**0.00**	**221,752.09**
TOTAL COMMITTED FUNDS THRU FY 2018	**13,477,180.79**	**4,304,000.00**	**17,832,180.79**	**(4,369,150.60)**	**0.00**	**13,463,030.19**

FY 2019 BUDGET	**Budget (as approved - May 2018)**	**Amendments**	**Budget (as amended)**	**Obligated**	**Expenditures**	**Carry forward**	**Committed**
ESPA Managed Recharge Operations							-
Equipment & Supplies	89,000.00		89,000.00				0.00
Conveyance Cost	3,500,000.00		3,500,000.00				0.00
Recharge Monitoring	554,550.00		554,550.00				0.00
Regional Monitoring	200,000.00		200,000.00				0.00
Total ESPA Managed Recharge Operations	**4,343,550.00**	**0.00**	**4,343,550.00**	**0.00**	**0.00**	**0.00**	**0.00**
ESPA Managed Recharge Infrastructure							
North Side CC - Wilson Canyon Site	1,750,000.00	150,000.00	1,900,000.00				0.00
AFRD2 MP29 Site	2,150,000.00		2,150,000.00				0.00
AFRD2 MP28 Hydro Plant Tailbay	1,000,000.00	400,000.00	1,400,000.00				0.00
South Fork & other small Upper Valley sites	1,000,000.00		1,000,000.00				0.00
A&B Irrigation - Injection Wells	550,000.00		550,000.00				0.00

Reserved for Additional Recharge Projects	500,000.00	(400,000.00)	100,000.00				0.00
Total ESPA Managed Recharge Infrastructure	**6,950,000.00**	**150,000.00**	**7,100,000.00**	**0.00**	**0.00**	**0.00**	**0.00**
Managed Recharge Investigations							
North Side CC - Recharge Sites	200,000.00		200,000.00				0.00
Large Upper Valley Sites	200,000.00		200,000.00				0.00
Big/Little Wood Sites	200,000.00		200,000.00				0.00
Reserved for additional investigations and engineering	300,000.00		300,000.00				0.00
Total Managed Recharge Investigations	**900,000.00**	**0.00**	**900,000.00**	**0.00**	**0.00**	**0.00**	**0.00**
ESPA Hydrologic Monitoring (DOE - Year 1 of 3 = $928,000)							
	310,000.00		310,000.00				0.00
ESPA Hydrologic Monitoring (DOE - Year 1 of 3 = $928,000)	**310,000.00**	**0.00**	**310,000.00**	**0.00**	**0.00**	**0.00**	**0.00**
TREASURE VALLEY							
Treasure Valley Modeling Year 3 of 5 (USGS 6805)	500,000.00		500,000.00				0.00
Boise River Storage Studies (final payment)	1,000,000.00		1,000,000.00				0.00
Southeast Boise Groundwater Management Area Monitoring	100,000.00		100,000.00				0.00
Treasure Valley DCMI Water Conservation Study	200,000.00		200,000.00				0.00
TREASURE VALLEY TOTAL	**1,800,000.00**	**0.00**	**1,800,000.00**	**0.00**	**0.00**	**0.00**	**0.00**
CAMAS PRAIRIE							
Ground & Surface Water Monitoring	75,000.00		75,000.00				0.00
CAMAS PRAIRIE TOTAL	**75,000.00**	**0.00**	**75,000.00**	**0.00**	**0.00**	**0.00**	**0.00**
BIG LOST							
Hydrologic Monitoring (DOE - Year 1 of 3 = $1.14M)	380,000.00		380,000.00				0.00
BIG LOST TOTAL	**380,000.00**	**0.00**	**380,000.00**	**0.00**	**0.00**	**0.00**	**0.00**
PALOUSE BASIN							
Water Sustainability Projects	100,000.00		100,000.00				0.00
PALOUSE BASIN TOTAL	**100,000.00**	**0.00**	**100,000.00**	**0.00**	**0.00**	**0.00**	**0.00**
BEAR RIVER BASIN							
Water Sustainability Projects	250,000.00		250,000.00				0.00
BEAR RIVER BASIN TOTAL	**250,000.00**	**0.00**	**250,000.00**	**0.00**	**0.00**	**0.00**	**0.00**
STATE-WIDE							
Aquifer monitoring network enhancements in priority aquifers	200,000.00		200,000.00				0.00
Cooperative Cloud Seeding Program							
Operations & Maintenance (1/3 of total)	800,000.00		800,000.00				0.00
Cloud Seeding Modeling Project	470,000.00		470,000.00				0.00
Operations Costs for add'l generators & Upper Snake aircraft	425,000.00		425,000.00				0.00
Administrative expenses (public information, staff training, etc)	80,000.00		80,000.00				0.00
Professional Assistance for securing Federal Funding	100,000.00		100,000.00				0.00
STATE-WIDE TOTAL	**2,075,000.00**	**0.00**	**2,075,000.00**	**0.00**	**0.00**	**0.00**	**0.00**
Unspecified Projects in Other Areas or Carry-over	**505,210.00**	**(150,000.00)**	**355,210.00**				

TOTAL FY 2019 BUDGETED FUNDS.....	17,688,760.00	0.00	17,688,760.00	0.00	0.00	0.00	0.00

IDAHO WATER RESOURCE BOARD
Sources and Applications of Funds
as of July 31, 2018
REVOLVING DEVELOPMENT ACCOUNT

Original Appropriation (1969)		$500,000.00
Legislative Audits		($49,404.45)
IWRB Bond Program		($15,000.00)
Legislative Appropriation FY90-91		$250,000.00
Legislative Appropriation FY91-92		$260,700.00
Legislative Appropriation FY93-94		$500,000.00
IWRB Studies and Projects		($249,067.18)
Loan Interest		$10,497,947.84
Interest Earned State Treasury (Transferred)		$1,919,347.95
Filing Fee Balance		$47,640.20
Bond Fees		$1,469,601.45
Arbitrage Calculation Fees		($12,000.00)
Protest Fees		($995.00)
Series 2000 (Caldwell/New York) Pooled Bond Issuers fees		$43,657.93
2012 Ground Water District Bond Issuer fees		$373,300.00
Bond Issuer fees		$21,107.59
Attorney fees for Jughandle LID		($3,600.00)
Attorney fees for A&B Irrigation		($4,637.50)
Water Supply Bank Receipts		$6,101,728.39
Legislative Appropriation FY01		$200,000.00
Pierce Well Easement		$2,000.00
Transferred to/from Water Management Account		$317,253.80
Legislative Appropriation 2004, HB643		$500,000.00
Legislative Appropriation 2009, SB 1511 Sec 2, Teton/Minidoka Studies		$1,800,000.00
Legislative Appropriation 2009, SB 1511 Sec 2, Teton/Minidoka Studies Expenditures		($1,229,460.18)
Weiser Galloway Study - US Army Corps of Engineers		($1,533,047.30)
Boise River Storage Feasibility Study		($333,000.00)
Geotech Environmental (Transducers)		($6,402.61)
Priest Lake Improvement Study (16-Mar-16)		($289,252.25)
Treasureton Irrigation Ditch Co		($5,000.00)
Mountain Home AFB Water Sustainability Project		
Legislative Appropriation 2014, HB 479 Sec 1 and 2	$4,000,000.00	
JR Simplot - WR Purchase	($2,500,000.00)	
LeMoyne Appraisal LLC	($10,500.00)	
IWRB WSB Lease Application	($750.00)	
Integrated Delivery Solutions - Mark Alpert	($34,459.18)	
Brown & Caldwell - Owner's Advisor	($1,218,298.11)	
SPF Engineering - WR Transfer	($118,715.75)	
Skinner-Fawcett - Bond Counsel	($31,602.41)	
Pillsbury, Winthrop, & Shaw - DBO Counsel	($79,839.30)	
Project Costs (mailings, travel, teleconference calls)	($1,769.91)	
Publishing Costs	($1,648.16)	
Water District 02 Assessments	($2,417.18)	
Balance for Mountain Home AFB Water Sustainability Project	**$0.00**	
Galloway Dam & Reservoir Project		
Legislative Appropriation 2014, HB 479 Sec 1 and 2	$2,000,000.00	
Galloway Dam & Reservoir Project Costs (HB 479)	($124,708.68)	
Balance Galloway Dam & Reservoir Project	**$1,875,291.32**	
Boise River (Arrowrock Enlargement) Feasibility Study (HB479)		
Legislative Appropriation 2014, HB 479 Sec 1 and 2	$1,500,000.00	
Boise River (Arrowrock Enlargement) Feasibility Study Costs (HB479)	($543,661.63)	
Balance Boise River (Arrowrock Enlargement) Feasibility Study (HB479)	**$956,338.37**	
Island Park Enlargement (HB 479)		
Legislative Appropriation 2014, HB 479 Sec 1 and 2	$2,500,000.00	
Island Park Enlargement Costs (HB 479)	($182,927.65)	
Balance Island Park Enlargement (HB 479)	**$2,317,072.35**	
Water Supply Bank Computer Infrastructure (HB 479)		
Legislative Appropriation 2014, HB 479 Sec 1 and 2	$500,000.00	
Water Supply Bank Computer Infrastructure Costs (HB 479)	($497,350.75)	
Balance Water Supply Bank Computer Infrastructure (HB 479)	**$2,649.25**	
Balance of Legislative Appropriation 2014, HB 479 Sec 1 and 2	**$5,151,351.29**	
Priest Lake Water Management Project		
Legislative Appropriation (2018, HB 677 Sec 5)	$2,400,000.00	
Legislative Approval (2018, HB 677 Sec 6)	$2,419,580.50	
Balance for Priest lake Water Management Project	**$4,819,580.50**	
Aqualife Hatchery Sub-Account		
Aqualife Hatchery, HB644, 2014	($1,885,000.00)	
Aqualife Lease receipt from Seapac	$114,720.00	
Tax Payments	($1,419.15)	
Lemoyne Appraisal for Aqualife facility	($10,500.00)	
Loan payments received	$2,900,000.00	
Loans Outstanding		
ESPA Ground Water Districts (Aqualife purchase)	$0.00	
Total Loans Outstanding	$0.00	
Balance Aqualife Hatchery Sub-Account		**$1,117,800.85**
Bell Rapids Water Rights Sub-Account		
Legislative Appropriation 2005, HB392	$21,300,000.00	

Interest Earned State Treasury			$696,558.29
Bell Rapids Purchase			($16,006,558.00)
Bureau of Reclamation Principal Amount Lease Payment Paid			$8,294,337.54
Bureau of Reclamation Interest Paid			$179,727.97
Bureau of Reclamation Remaining Amount Lease Payment Paid			$9,142,649.54
First Installment Payment to Bell Rapids			($1,313,236.00)
Second Installment Payment to Bell Rapids			($1,313,236.00)
Third Installment Payment to Bell Rapids			($1,313,236.00)
Fourth Installment Payment to Bell Rapids			($1,040,431.55)
Interest Credit due to Bureau of Reclamation (Part of Fourth Installment)			($19,860.45)
Fifth Installment Payment to Bell Rapids			($1,055,000.00)
Transfer to General Fund - Principal			($21,300,000.00)
Transfer to General Fund - Interest			($772,052.06)
BOR payment for Bell Rapids			$1,040,431.55
BOR payment for Bell Rapids			$1,313,236.00
BOR prepayment for Bell Rapids			$1,302,981.70
BOR prepayment for Bell Rapids			$1,055,000.00
BOR payment for Alternative Financing Note			$7,117,971.16
Payment to US Bank for Alternative Financing Note			($7,118,125.86)
Payment for Water District 02 Assessments			($60,383.27)
Payment for Ongoing Bell Rapids Finance Costs (trustee fees, water bank, etc.)			($6,740.10)
Commitments			
Ongoing Bell Rapids Finance Costs (trustee fees, WD02)			$124,034.46
Committed for alternative finance payment			$0.00
Total Commitments			$124,034.46
Balance Bell Rapids Water Rights Sub-Account			**($0.00)**
Pristine Springs Project Sub-Account			
Legislative Appropriation 2008, SB1511, Pristine Springs			$10,000,000.00
Legislative Appropriation 2006, HB870, Water Right Purchases			$5,000,000.00
Interest Earned State Treasury			$59,688.93
Loan Interest			$2,119,124.67
Transfer from ESPA Sub-Account			$1,000,000.00
Payment for Purchase of Pristine Springs (3)			($16,000,000.00)
Payment from Magic Valley & North Snake GWD for Pristine Springs			$4,912,500.23
Appraisal			($25,500.00)
Insurance			($47,500.25)
Recharge District Assessment			($26,605.25)
Water District 130 Annual Assessment			($3,841.45)
Hydro Plants Engineering Certification (Straubhar)			($4,200.00)
Payment to EHM Engineers for pipeline work			($1,200.00)
Payment to John Root for Easement Survey			($1,000.00)
Payment to MWH Americas Inc			($11,326.27)
Payment to Dan Lafferty Contruction			($16,846.68)
Telemetry Station Equipment			($15,193.92)
Rein Tech LLC (Satellite phone annual payment)			($1,980.00)
Standley Trenching (Trac system for communication equip)			($2,863.99)
Property Taxes and other fee assessments (Jerome County)			($9,980.95)
Rental Payments			$1,767,694.18
Payments to Scott Kaster			($180,196.67)
Utility Payments (Idaho Power)			($38,509.38)
Costs for property maintenance			($203,267.04)
Travel costs for property maintenance			($517.31)
Pipeline repair (IGWA)			($170,000.00)
Transferred to Secondary Aquifer Fund (2011 Legislature; HB 291)			($2,465,300.00)
Transferred to Secondary Aquifer Fund (2012 Legislature; SB 1389)			($1,232,000.00)
Transferred to Secondary Aquifer Fund (2013 Legislature; HB 270)			($716,000.00)
Transferred to Secondary Aquifer Fund (2014 Legislature; HB 618)			($716,000.00)
Transferred to Aquifer Planning Fund (2015 Legislature; HB 273)			($716,000.00)
Transferred to Aquifer Planning Fund (2016 Legislature; SB 1402, Sec 3)			($716,000.00)
Transferred to Aquifer Planning Fund (2017 Legislature; SB 1176, Sec 3)			($716,000.00)
Transferred to Aquifer Planning Fund (2018 Legislature; HB 677, Sec 3)			($716,000.00)
Pristine Springs Hydropower Projects			
Net power sales revenues			$721,375.59
Pristine Springs Committed Funds			
To be transferred to Aquifer Planning Fund	$0.00		
Repair/Replacement Fund	$0.00		
TOTAL COMMITTED FUNDS	$0.00		
Loans Outstanding			
North Snake and Magic Valley Ground Water Districts	$5,087,499.77		
Total Loans Outstanding	$5,087,499.77		
Funds to RP CAMP & TV CAMP Sub-Account			**$271,672.34**
Pristine Springs Revenues into Main Revolving Development Account			**554,882.10**
Rathdrum Prairie CAMP & Treasure Valley CAMP Sub-Account			
Pristine Springs Hydropower and Rental Revenues			$271,672.34
Interest Earned State Treasury			$573.11
Spokane River Forum			($18,000.00)
Treasure Valley Water Quality Summit			($500.00)
Kootenai-Shoshone Soil & Water Cons. Dist. - Agrimet Station			($20,000.00)
Rathdrum Prairie-Spokane Valley Aquifer Pumping Study (CON00989)			($70,000.00)
Idaho Washington Aquifer Collaborative			($10,000.00)
Committed Funds			
Kootenai-Shoshone Soil & Water Cons. Dist. - Agrimet Station	$0.00		
Spokane River Forum	$0.00		
Rathdrum Prairie-Spokane Valley Aquifer Pumping Study	$0.00		
Treasure Valley Water Quality Summit	$0.00		
Idaho Washington Aquifer Collaborative	$0.00		
TOTAL COMMITTED FUNDS	$0.00		
Balance Rathdrum Prairie CAMP & Treasure Valley CAMP Sub-Account			**$153,745.45**
Upper Salmon/CBWTP Sub-Account			

Water Transaction Projects Payment Advances from CBWTP/Accord		$4,575,064.82
PCSRF Funds for Administration of Non-Diversion Easements on Lemhi River		$222,257.16
Interest Earned State Treasury		$180,578.28
Transfer to Water Supply Bank		($101,144.84)
Change of Ownership		($600.00)
Appraisals/Closing Costs		($13,386.48)
Payments for Water Acquisition		($1,625,553.76)
Committed Funds		
Administration of Non-Diversion Easements on Lemhi River	$129,089.39	
Alturas Lake Creek (Breckenridge)	$0.00	
Bayhorse Creek (Peterson Ranch)	$30,508.94	
Badger Creek (OWBP)	$18,634.10	
Beaver Creek (DOT LLP)	$120,558.78	
Big Hat Creek	$0.26	
Big Timber Tyler (Leadore Land Partners)	$445,695.89	
Canyon Creek/Big Timber Creek (Beyeler)	$415,872.49	
Carmen Creek (Bill Slavin)	$205,121.60	
Carmen Creek (Bruce Slavin)	$128,715.39	
Fourth of July Creek (Vanderbilt)	$15,671.59	
Iron Creek (Phillips)	$0.00	
Iron Creek (Koncz)	$207,922.32	
Kenney Creek Source Switch (Gail Andrews)	$23,409.27	
Lemhi - Big Springs (Merrill Beyeler)	$57,834.68	
Lemhi River & Little Springs Creek (Kauer)	$19,969.16	
Little Springs Creek (Snyder)	$266,686.22	
Lower Eighteenmile Creek (Ellsworth Angus Ranch)	$1,777.78	
Lower Lemhi Thomas (Robert Thomas)	$1,200.00	
Pahsimeroi-Little Mud Creek (Bar G Farm)	$4,978.71	
P-9 Bowles (River Valley Ranch)	$272,388.78	
P-9 Charlton (Sydney Dowton)	$18,029.50	
P-9 Dowton (Western Sky LLC)	$216,050.70	
P-9 Elzinga (Elzinga)	$267,237.07	
Patterson-Big Springs (PBSC9)	$176,627.56	
Pole Creek (Salmon Falls Land)	$634,475.70	
Pratt Creek (Mulkey)	$80,306.87	
Spring Creek (Richard Beard)	$542.88	
Spring Creek (Ella Beard)	$795.69	
Whitefish (Leadore Land Partners)	$162,188.81	
Total Committed Funds	$3,922,290.13	
Balance CBWTP Sub-Account		**($685,074.95)**
Water District 02 WaterSmart Grant Sub-Account		
Received from BOR for BORWS2		$118,058.42
Received from BOR for BORWS3		$59,960.43
Payments made to contractors for BORWS2		($118,058.42)
Payments made to contractors for BORWS3		($59,960.43)
Committted Funds:		
Grant Approval for BORWS2	$0.00	
Grant Approval for BORWS3	$0.00	
Total Committed Funds	$0.00	
Balance WaterSmart Grant Sub-Account		**$0.00**
Water Supply Bank Sub-Account		
Interest Earned State Treasury		$14,082.81
Payments received from renters		$3,514,316.11
Payments made to owners		($2,859,652.73)
Water Supply Bank Sub-Account Subtotal		**$668,746.19**
Committted Funds:		
Owners Share	$654,663.38	
Total Committed Funds	$654,663.38	
Balance Water Supply Bank Sub-Account		**$14,082.81**
Eastern Snake Plain Sub-Account		
Legislative Appropriation 2005, HB392		$7,200,000.00
Legislative Appropriation 2005, HB392, CREP Program		$3,000,000.00
Interest Earned State Treasury		$1,996,467.56
Loan Interest		$256,260.39
Bell Rapids Water Rights Closing Costs		($6,558.00)
First Installment Payment to Bell Rapids Irr. Co. (Partial)		($361,800.00)
Second Installment Payment to Bell Rapids Irr. Co. (Partial)		($361,800.00)
Third Installment Payment to Bell Rapids Irr. Co. (Partial)		($361,800.00)
Fourth Installment Payment to Bell Rapids Irr. Co. (Partial)		($614,744.00)
Fifth Installment Payment to Bell Rapids Irr. Co. (Final)		($1,675,036.00)
Reimbursement from Commerce & Labor W-Canal		$74,709.77
Transfer to Pristine Springs Sub Account		($1,000,000.00)
Reimbursement from Magic Valley GWD - Pristine Springs		$500,000.00
Reimbursement from North Snake GWD - Pristine Springs		$500,000.00
Reimbursement from Water District 1 for Recharge		$159,764.73
Palisades (FMC) Storage Costs		($3,519,790.74)
Reimbursement from BOR for Palisades Reservoir		$2,381.12
W-Canal Project Costs		($326,634.11)
Black Canyon Exchange Project Costs		($158,872.00)
Black Canyon Exchange Project Revenues		$23,800.00
2008 Recharge Conveyance Costs		($14,580.00)
2009 Recharge Conveyance Costs		($355,253.00)
2010 Recharge Conveyance Costs		($484,231.62)
Transfer to Priest Lake Sub-Account (2018 HB 677, Sec 6)		($2,419,580.50)
Additional recharge projects preliminary development		($28,909.30)
Pristine Springs Project Costs		($8,863.91)
Loans and Other Commitments		
Commitment - Remainder of Bell Rapids Water Rights Purchase (1)		$361,620.00
Commitment - CREP Program (HB392, 2005)		$0.00

Commitment - Priest Lake Water Mgmt Project (HB677, 2018)		$0.00	
Commitment - Additional recharge projects preliminary development		$337,594.00	
Commitment - Palasades Storage O&M		$10,000.00	
Commitment - Black Canyon Exchange Project (fund with ongoing revenues)		$442,252.95	
Total Loans and Other Commitments		$1,151,466.95	
Loans Outstanding:			
American Falls-Aberdeen GWD (CREP)	$58,040.75		
Bonneville Jefferson GWD (CREP)	$37,408.43		
Magic Valley GWD (CREP)	$55,176.62		
North Snake GWD (CREP)	$26,331.95		
TOTAL ESP LOANS OUTSTANDING	$176,957.75		
Uncommitted Balance Eastern Snake Plain Sub-Account		**$688,305.69**	
Dworshak Hydropower Project			
Dworshak Project Revenues			
Power Sales & Other	$9,293,232.73		
Interest Earned State Treasury	$613,753.74		
Total Dworshak Project Revenues		$9,906,986.47	
Dworshak Project Expenses			
Transferred to 1st Security Trustee Account	$148,542.63		
Construction not paid through bond issuance	$226,106.83		
1st Security Fees	$314,443.35		
Operations & Maintenance	$2,763,373.68		
Powerplant Repairs	$171,327.49		
Bond payoff	$391,863.11		
Capital Improvements	$318,386.79		
FERC Payments	$81,693.07		
Total Dworshak Project Expenses		($4,415,716.95)	
Dworshak Project Committed Funds			
Emergency Repair/Future Replacement Fund	$1,486,857.80		
FERC Fee Payment Fund	$5,973.89		
Total Dworshak Project Committed Funds		$1,492,831.69	
Excess Dworshak Funds into Main Revolving Development Account			$3,998,437.83
TOTAL			**$26,764,539.46**

Loans Outstanding:	Amount Loaned	Principal Outstanding	
A&B Irrigation District (Pipeline & Pumping Plant, Dec)	$3,500,000.00	$3,108,449.84	
A&B Irrigation District (Pipeline & Pumping Plant, Sept)	$3,500,000.00	$3,240,797.39	
Aberdeen-Springfield Canal Company (WRB-491; Diversion structure)	$329,761.00	$41,857.30	
Bee Line Water Association (Sep 23, 2014; System Improvements)	$600,000.00	$560,341.34	
Canyon County Drainage District No. 2 (28-Nov-12; Drain tile pipeline	$35,000.00	$19,733.66	
Chaparral Water Association (21-Jan-11; Well deepening & improveme	$68,000.00	$13,795.21	
Clearview Water Company	$50,000.00	$36,655.11	
Cloverdale Ridge Water Corp. (irrigation system rehab 25-sep-09)	$106,400.00	$5,850.47	
Consolidated Irrigation Company (July 20, 2012; pipeline project)	$500,000.00	$468,835.82	
Dalton Water Association	$1,036,900.00	$797,077.08	
Enterprise Irrigation District (14-Jul-06; Pipeline project)	$37,270.00	$660.60	
Enterprise Irrigation District (North Lateral Pipeline)	$105,420.00	$8,438.62	
Evans Water Corporation & HOA	$20,000.00	$18,258.44	
Foothill Ranch Homeowners Association (7-oct-11; well rehab)	$150,000.00	$101,088.16	
Goose Lake Reservoir Corp	$320,000.00	$32,825.00	
Idaho Ground Water Appropriators (IGWA)	$3,208,115.35	$3,208,115.35	
Jefferson Irrigation Company (9-May-2008 Well Replacement)	$81,000.00	$13,377.13	
King Hill Irrigation District (24-Sep-10; Pipeline replacement_	$300,000.00	$31,129.93	
Lake Reservoir Company (29-July-11; Payette Lake-Lardo Dam Outle	$594,000.00	$15,156.69	
Last Chance Canal Company (14-July-2015, diversion dam rebuild)	$2,500,000.00	$2,053,889.63	
Lava Hot Springs, City of	$347,510.00	$51,346.67	
Lindsay Lateral Association (Engineering Design Project & Pipeline Stu	$19,700.00	$8,166.12	
Marsh Center Irrigation Company (13-May-05; Hawkins Dam)	$236,141.00	$72,558.88	
Marysville Irrigation Company (18-May-07, Pipeline Project Phase 1)	$625,000.00	$73,627.27	
Marysville Irrigation Company (9-May-08, Pipeline Project Phase 2)	$1,100,000.00	$287,600.75	
North Fremont Canal Systems (25-Jan-13; Marysville Project)	$2,000,000.00	$1,286,835.77	
North Side Canal Company (Phase I - canal rehab project)	$1,846,092.61	$1,763,160.02	
North Side Canal Company (Phase II - canal rehab project)	$3,353,907.39	$2,255,394.32	
Outlet Water Association (22-Jan-16; new well & improvements)	$100,000.00	$94,024.52	
Pinehurst Water District (23-Jan-15)	$100,000.00	$57,008.60	
Point Springs Grazing Association (July 20, 2012; stock water pipeline)	$48,280.00	$31,403.98	
Preston-Whitney Irrigation Company (29-May-09; Fairview Lateral Pipel	$800,000.00	$0.00	
Producers Irrigation Company	$173,000.00	$46,719.16	
Skin Creek Water Association	$188,258.00	$12,507.67	
Spirit Bend Water Association	$92,000.00	$0.00	
St. Johns Irrigating Company (14-July-2015; pipeline project)	$1,429,775.00	$1,366,627.34	
Sunset Heights Water District (17-May-13; Exchange water project)	$48,000.00	$20,597.40	
Twin Lakes Canal Company (Winder Lateral Pipeline Project)	$500,000.00	$203,423.58	
Valley County Local Improvement District No. 1/Jughandle HOA (well pi	$907,552.00	$514,429.20	
TOTAL LOANS OUTSTANDING			**$21,921,764.02**

Loans and Other Funding Obligations:	
Senate Bill 1511 - Teton Replacement and Minidoka Enlargement Studies	$678,161.82
Boise River Storage Feasibility Study	$13,578.15
Weiser-Galloway Study (28-May-10)	$461,620.87
Priest Lake Improvement Study (16-Mar-16)	$81,141.01
Bee Line Water Association (Sep 23, 2014; System Improvements)	$39,658.66
Dalton Water Association	$239,822.92
Dover, City of (23-Jul-10; Water Intake project)	$194,063.00
Evans Water Corporation & HOA	$0.00
Goose Lake Reservoir Corp	$287,175.00
Idaho Ground Water Appropriators (IGWA)	$0.00
North Side Canal Company (16-sep-16; canal rehab project)	$1,098,513.07
Producers Irrigation Company (23-May-16; new wells)	$70,872.50

St. Johns Irrigating Company (14-July-2015; pipeline project)	$11,869.78	
TOTAL LOANS AND OTHER FUNDING OBLIGATIONS		**$3,176,476.78**
Uncommitted Funds		**$1,666,298.66**
TOTAL		**$26,764,539.46**

(1) Actual amount needed may vary depending on final determination of water actually purchased and interest income received.

Idaho Water Resource Board
Sources and Applications of Funds
as of July 31, 2018
WATER MANAGEMENT ACCOUNT

Original Appropriation (1978)		$1,000,000.00
Legislative Audits		($10,645.45)
IWRB Appraisal Study (Charles Thompson)		($5,000.00)
Transfer funds to General Account 1101(HB 130, 1983)		($500,000.00)
Legislative Appropriation (6/29/1984)		$115,800.00
Legislative Appropriation (HB988, 1994)		$75,000.00
Turned Back to General Account 6/30/95, (HB988, 1994)		($35,014.25)
Legislative Appropriation (SB1260, 1995, Aquifer Recharge, Caribou Dam)		$1,000,000.00
Interest Earned		$120,475.04
Filing Fee Balance		$2,633.31
Water Supply Bank Receipts		$841,803.07
Bond Fees		$277,254.94
Funds from DEQ and IDOC for Glenns Ferry Water Study		$10,000.00
Legislative Appropriation FY01		$200,000.00
Western States Wate Council Annual Dues		($7,500.00)
Tranfer to/from Revolving Development Account		($317,253.80)
Legislative Appropriation (SB1239, Sugarloaf Aquifer Recharge Project)		$60,000.00
Legislative Appropriation (HB 843 Sec 6)		$520,000.00
Legislative Appropriation (SB1496, 2006, ESP Aquifer Management Plan)		$300,000.00
Legislative Appropriation (HB 320, 2007, ESP Aquifer Management Plan)		$849,936.99
Legislative Appropriation (HB 712, Sec 1, 2018, Flood Management Program)		$1,000,000.00
TOTAL		**$5,497,489.86**
TOTAL GRANTS DISBURSED		**($1,632,755.21)**
IWRB Expenditures		
Lemhi River Water Right Appraisals	$31,000.00	
Expenditures Directed by Legislature		
Obligated 1994 (HB988)	$39,985.75	
SB1260, Aquifer Recharge	$947,000.00	
SB1260, Soda (Caribou) Dam Study	$53,000.00	
Sugarloaf Aquifer Recharge Project (SB1239)	$55,953.69	
ESPA Settlement Water Rentals (HB 843 2004)	$504,000.00	
ESP Aquifer Management Plan (SB1496, 2006)	$300,000.00	
ESP Aquifer Management Plan (HB320, 2007)	$801,077.75	
TOTAL IWRB AND LEGISLATIVE DIRECTED EXPENDITURES		**($2,732,017.19)**
WATER RESOURCE BOARD RECHARGE PROJECTS		**($11,426.88)**
CURRENT ACCOUNT BALANCE		**$1,121,290.57**
Committed Funds:		
Grants Obligated		
Cottonwood Point Water & Sewer Association	$0.00	
Preston - Whintey Irrigation Company	$7,500.00	
Water District No. 1 (Blackfoot Equalizing Reservoir Automation)	$35,000.00	
Flood Management Program grants (HB712, Sec 1, 2018)	$1,000,000.00	
Legislative Directed Obligations		
Sugarloaf Aquifer Recharge Project (SB1239)	$4,046.31	
ESPA Settlement Water Rentals (HB 843, 2004)	$16,000.00	
ESPA Management Plan (SB 1496, 2006)	$0.00	
ESP Aquifer Management Plan (HB320, 2007)	$48,829.24	
TOTAL GRANTS & LOANS OBLIGATED & UNDISBURSED		**$1,111,375.55**
Uncommitted Funds		**$9,915.02**
CURRENT ACCOUNT BALANCE		**$1,121,290.57**

Memorandum

To: Idaho Water Resource Board

From: Neeley Miller

Date: August 31, 2018

Re: Flood Management Grant Applications

REQUIRED ACTION: Approve Award of Flood Management Grant Applications

Background

House Bill 712 passed and approved by the 2018 Legislature included a FY 2018 transfer of $1,000,000 from the General Fund to the Water Management Fund in the Department of Water Resources budget. This funding was intended for a grant program administered by the Idaho Water Resource Board to provide competitive grants for flood-damaged stream channel repair, stream channel improvement, flood risk reduction, or flood prevention projects.

Round One

On May 18, 2018 the Board adopted by resolution an evaluation criteria for the award of Flood Management Grant funding. The criteria establish an application deadline of June 15, 2018 and indicated that funding awards would be announced at the July 27, 2018 Board meeting.

Staff received ten (10) applications during the applications period. The applications and sponsor's grant documents were evaluated, scored, and ranked according to criteria adopted by Board.

On July 17, 2018 the Finance Committee reviewed the applications, scores and rankings and made a recommendation to the Board to fund all the applications for a total of $767,000. Leaving $232,930

On July 27, the Board passed a resolution authorizing funding for all ten applications and directed staff to issue a statewide solicitation for a second round of Flood Management Grant funding with an application deadline of Friday August 17, 2018.

Round Two

Staff received an additional eight (8) applications for the second round of funding. The applications and sponsor's grant documents were evaluated, scored, and ranked according to criteria adopted by Board.

On September 7, 2018 the Finance Committee reviewed the applications, scores and rankings and made a recommendation to the Board. Staff is here to discuss the Finance Committee recommendation with you today.

FLOOD MANAGEMENT GRANT PROGRAM

PROJECT SUMMARIES

1. **TWIN FALLS CANAL COMPANY – East Perrine Pond/Wetland Project**

Twin Falls Canal Company (TFCC) is requesting a $95,000.00 flood management grant for the $591,800.00 East Perrine Pond/Wetland flood reduction project. Of the $591,800.00 total project costs, $350,000.00 is associated with TFCC's purchase of the parcel for constructing the project. The project goal is to reduce flood damage to properties downstream of the East Perrine Coulee. This project will be located within the East Perrine Coulee, which is major natural drainage for several thousand acres of farmland. After leaving the East Perrine Wetland, the coulee delivers irrigation water to two farms, and conveys water through two rural subdivisions, and finally through the City of Twin Falls for two miles before discharging into the Snake River. The Coulee has a history of occasional flooding during the summer and winter. Downstream of the Coulee, upscale housing developments have replaced farm lands. Due to the change in land use, there has been a corresponding increase in property damage due to flooding on the East Perrine Coulee. The objective of the proposed 24-acre project pond/wetland project is to retain and moderate flood flows to create a buffer from flood damage downstream of the Coulee, and to remove an estimated 3,000 tons of sediment and associated nutrients annually prior to discharging to the Snake River. The removal of the sediments in the pond and wetlands will help the Snake River attain the Clean Water Act TMDL water quality targets that have been unachievable in the past.

2. **CAREY FLOOD CONTROL DISTRICT NO.2 – Little Wood River Flood Mitigation Project**

Carey Flood Control District No.2 is requesting a $6,000.00 flood management grant for the $12,000.00 Little Wood River Diversion Structure Flood Mitigation project. The goal of the project is to place rock/rip rap along the toe of the east and west diversion structures at the river split diversion, to prevent scouring of rock and material that generally occurs during high spring runoff.

3. **BLAINE COUNTY – Broadford Road Fisherman' Access Project**

Blaine County is requesting a $101,820 flood management grant for the $254,550.00 Broadford Road Fisherman's Access project. The remaining matching funding of $152,730.00 will be provided by Blaine County in the form of $140,610.00 in cash and $12,120.00 with in-kind administrative costs. The spring flooding of 2017 resulted in channel migration, severe bank erosion, and loss of critical habitat at many locations throughout the Big Wood River and tributaries. The project goal is to repair and restore an area commonly referred to as the Fisherman's Access area near Broadford Road. Flood damage is threatening the stability of the

road due to severe bank erosion and potential materials deposition. Emergency work was implemented in May, 2017, to prevent further erosion and infrastructure loss.

4. **CITY OF POCATELLO – Pocatello Creek Bank Stabilization and Flow Control Project**

The City of Pocatello is requesting a $35,000.00 flood management grant for the $70,000.00 Pocatello Creek project. The City of Pocatello will provide the matching funding of $35,000.00, of which $10,000 will be in-kind services. The goal of the project is to implement streambank stabilization and flow control measures along 300-feet of Pocatello Creek that will reduce flow velocities and down cutting of the banks. This section of Pocatello Creek has experienced annual flooding, which has destroyed irrigation pipes and fence posts, and the City is critically close to losing a street light post. The streambank and flow control measures include sloping back of eroded stream banks, installation of weirs to reduce flow velocities and minimize additional flood damage, and stabilization of the banks with the planting of willows and sedge mats.

5. **NEZ PERCE SOIL & WATER CONSERVATION DISTRICT – Bear Creek Flood Reduction Project**

Nez Perce Soil & Water Conservation District (NPSWCD) is requesting a $200,000.00 flood management grant for the $556,681.00 Bear Creek Flood Reduction project. The remaining matching funding of $356,681.00 will be provided by a Pacific Coast Salmon Recovery grant, Nez Perce County, and NPSWCD. Of the matching funding, Nez Perce County and NPSWCD will provide $91,861.00 of in-kind services. The goals of the project are to repair a 500-foot section of stream channel along Bear Creek to reduce annual flooding, installation of two rock weirs, and replacement of the Bear Creek Bridge. This site requires annual gravel removal and channel repairs to prevent damage to the Bear Creek Bridge, which provides public transportation for the local community.

6. **FLOOD CONTROL DISTRICT NO.10 – Payne Gravel Removal Project**

Flood Control District No.10 is requesting a $22,300.00 flood management grant for the $44,600.00 Payne project. Flood District No.10 and Jim Payne will provide the matching funding of $22,300.00. The goal of the project is to remove gravel to restore the river channel capacity and reduce flooding and erosion of the adjacent property owner's agricultural land. The project is a gravel removal project, with a total estimated removal volume of 4,500 cubic yards.

7. **FLOOD CONTROL DISTRICT NO.10 – Porter Bank Repair Project**

Flood Control District No.10 is requesting a $25,450.00 flood management grant for the $50,900.00 Porter Bank Repair project. Rich Porter and Flood Control District No.10 will provide

the matching funding of $25,450.00. The goal of the project is to stabilize an area of ongoing bank erosion, prevent flanking of an irrigation structure that is being impacted by the bank erosion, and reduce out of bank flooding. The project addresses the potential for a massive bank failure and river deposition of sediment which poses a flood risk for the City of Middleton. The proposed project will repair 250 feet of river bank, and the construction of three bank barbs upstream of the bank repairs to maintain river flows in the normal channel of the Boise River.

8. **RIVERSIDE VILLAGE HOA – Boise River Diversion Project**

Riverside Village HOA is requesting a $6,740.00 flood management grant for the $15,980.00 Boise River Diversion project. Riverside Village HOA and Garden City will provide the matching funding of $9,240.00, which includes $2,500.00 in in-kind services. The goal of the project is to repair the diversion structure that delivers irrigation water to the Riverside Homeowners Association and Garden City's Riverside City Park, and perform stream channel repairs near the diversion structure. The river channel was lowered in the vicinity of the diversion structure during the 2016/2017 flooding where water cannot be diverted late in the irrigation season due to low water levels in the Boise River.

9. **PORTNEUF SOIL AND WATER CONSERVATION DISTRICT**

The Portneuf Soil and Water Conservation District (PSWCD) is requesting a $200,000.00 flood management grant for the $485,000.00 Marsh Creek project. The PSWCD, NRCS, USFWS, and landowners will provide matching funding of $250,000.00, which includes $25,000.00 of in-kind services between the PSWCD and landowners. Land use practices have resulted in excessive sedimentation in Marsh Creek, contributing to flooding of the stream. Likewise, historic wetlands are not available for surface water flooding due to the construction of numerous small levees. The goal of the project is to make flood damage repairs to Marsh Creek from Arimo to the confluence of Marsh Creek with the Portneuf River. The flood damage repairs include reconnection to historic wetlands, streambank stabilization, and reducing the flow velocity of runoff into Marsh Creek.

8-17-18:	**AVAILABLE FLOOD MANAGEMENT GRANT FUNDS:**	**$232,930.00**
	TOTAL PROJECT FUNDING REQUESTS:	**$692,310.00**
	TOTAL STUDY FUNDING REQUESTS (NOT ELIGIBLE):	**$ 17,805.00**

Flood Management Grant Application Ranking Sheet - Round 2

Entity	Funds Requested	Total Project Costs	Will project proceed if funded at reduced level?	Finance Committee Recommendation
Twin Falls Canal Company	$95,000.00	$591,000.00	Yes	$85,340
Nez Perce Soil & Water Conservation District	$200,000.00	$556,681.00	Yes	$115,460
Riverside Village/Garden City	$6,740.00	$15,980.00	Yes	$6,025
City of Pocatello	$35,000.00	$70,000.00	Yes	$26,105
Portneuf Soil & Water Conservation District	$200,000.00	$485,000.00	Yes	Invite to reapply
Carey Flood Control District	$6,000.00	$12,000.00	Yes	Invite to reapply
Blaine County*	$101,820.00	$242,430.00	Yes	Invite to reapply
Flood Control District 10*	$25,450.00	$50,900.00	Yes	Invite to reapply
Flood Control District 10*	$22,300.00	$44,600.00	Yes	Invite to reapply
Total funds requested	**$692,310.00**			$232,930

*Funded in first round

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF FLOOD MANAGEMENT GRANTS	RESOLUTION TO AWARD FUNDS AND AMEND THE CRITERIA

WHEREAS, House Bill 712 passed and approved by the 2018 legislature transferred $1,000,000 from the General Fund to the Water Management Fund creating a Flood Management Grant Program administered by the Idaho Water Resources Board (IWRB) to be used for the purpose of flood-damaged stream channel repair, stream channel improvement, flood risk reduction, or flood prevention projects; and

WHEREAS, House Bill 712 allows for the award of grants larger than $50,000 for the Flood Management Program, at the discretion of the IWRB; and

WHEREAS, House Bill 712 directs the IWRB to require the availability of fifty percent (50%) matching funds for all projects to be considered under the grant program; and

WHEREAS, House Bill 712 directs the IWRB to prioritize projects on a competitive statewide basis; and

WHEREAS, on May 18, 2018 the IWRB adopted criteria for the award of Flood Management Grants, and

WHEREAS, on July 27, 2018 the IWRB adopted a resolution authorizing funding for ten (10) Flood Management Grant applications, amending the criteria to remove the application dates/deadlines, and directing staff to issue a statewide solicitation for a second round of Flood Management Grant funding with an application deadline of Friday August 17, 2018; and

WHEREAS, nine (9) Flood Management Grant applications were received by the deadline of Friday August 17, 2018 and the applications were evaluated, scored and ranked according to the criteria adopted by IWRB; and

WHEREAS, requests for Flood Management funding exceeds the IWRB's remaining Flood Management Grant funding available; and

WHEREAS, the IWRB wishes to amend the criteria to 1) exclude those entities from funding in the second round that received funding in the first round, 2) allow the IWRB to authorize partial funding awards for projects in the second round, and 3) allow the Board to

reallocate funds to the next highest project when remaining funds are insufficient to cover the higher ranked project; and

NOW, THEREFORE BE IT RESOLVED that the IWRB approves the award of Flood Management Grants as specified in Attachment A to this resolution.

DATED this 14 day of September, 2018.

_____
ROGER W. CHASE, Chairman
Idaho Water Resource Board

ATTEST _____
VINCE ALBERDI, Secretary

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF APPLICATION FOR STREAM CHANNEL ALTERATION PERMIT NO. S01-20253	RESOLUTION TO ADOPTING RECOMMENDED ORDER AS FINAL

WHEREAS, on February 12, 2018, David Shackleton ("Shackleton") filed Joint Application for Permits No. S01-20253 ("Application S01-20253") with the Idaho Department of Water Resources ("Department"), seeking a stream channel alteration permit to conduct suction dredging on Iowa Creek, a tributary of McCoy Creek, near Palisades Reservoir, from July 10, 2018, to August 10, 2018; and

WHEREAS, on April 10, 2018, the Department sent a letter to Shackleton denying Application S01-20253; and

WHEREAS, on April 14, 2018, Shackleton timely requested a hearing on the Department's denial of Application S01-20253; and

WHEREAS, by Resolution dated May 18, 2018, the Idaho Water Resource Board ("Board") appointed James Cefalo as the hearing officer for Shackleton's requested hearing; and

WHEREAS, the hearing officer held a hearing on July 6, 2018; and

WHEREAS, on July 24, 2018, the hearing officer issued a recommended order affirming the Department's denial of Application S01-20253, a copy of which is attached hereto as **Attachment A**; and

WHEREAS, Shackleton had fourteen days from the service date of the recommended order to file a petition for reconsideration with the hearing officer or a brief taking exceptions to the recommended order with the Board (*see* IDAPA 37.01.01.720.02.a-b); and

WHEREAS, Shackleton did not file a petition for reconsideration with the hearing officer or brief taking exceptions with the Board; and

WHEREAS, in accordance with Rule 720.02.a of the Board's Rules of Procedure, a recommended order will only become final after action of the Board (*see* IDAPA 37.01.01.720.02.a);

NOW THEREFORE BE IT RESOLVED, in accordance with the Board's Rule of Procedure 720, the Board hereby adopts the recommended order issued by the hearing officer in its entirety; and

NOW THEREFORE BE IT FURTHER RESOLVED, in accordance with the Board's Rule of Procedure 740, this Resolution shall be considered a final order of the Board.

DATED this 14th day of September, 2018.

_____
ROGER W. CHASE, Chairman
Idaho Water Resource Board

ATTEST _____
VINCE ALBERDI, Secretary

BEFORE THE WATER RESOURCE BOARD

OF THE STATE OF IDAHO

IN THE MATTER OF JOINT APPLICATION FOR PERMITS S01-20253 IN THE NAME OF DAVID SHACKLETON	))))	**RECOMMENDED ORDER AFFIRMING DENIAL**

BACKGROUND

On February 12, 2018, David Shackleton ("Shackleton") filed Joint Application for Permits No. S01-20253 ("Application S01-20253") with the Idaho Department of Water Resources ("Department"), seeking a stream channel alteration permit to conduct suction dredging on Iowa Creek, a tributary of McCoy Creek, near Palisades Reservoir. The Department issued a letter denying Application S01-20253 on April 10, 2018. Shackleton filed a timely request for hearing on April 14, 2018.

On May 18, 2018, the Idaho Water Resource Board ("Board") adopted a resolution appointing James Cefalo, an employee of the Department, to serve as hearing officer for the Board pursuant to Idaho Code § 42-1735. The hearing was conducted on July 6, 2018. After carefully considering the evidence in the administrative record, the hearing officer finds, concludes and orders as follows:

FINDINGS OF FACT

1. On February 12, 2018, Shackleton filed Application S01-20253 with the Department, seeking a stream channel alteration permit to conduct suction dredging on Iowa Creek within the McCoy Creek drainage. Ex. IDWR #1 at 1. The dredge site is located near the confluence of Iowa Creek and Bilk Creek in Section 36, T03S, R44E. *Id.* The purpose of Application S01-20253 is to obtain a permit to "dredge in the waterway in order to extract and recover minerals on [a] federal mining claim (Iowa Creek, IMC 218931)." *Id.*

2. The proposed dredge site is located entirely within the Caribou-Targhee National Forest, managed by the United States Forest Service ("USFS"). *Id.* at 5.

3. Application S01-20253 proposes a dredging season of operation from July 10, 2018 to August 10, 2018. *Id.* at 1. The application states: "This period of time is more feasible as the water is warmer in late July and early August." *Id.*

4. On December 13, 1996, the Board adopted a comprehensive basin plan for the South Fork Snake River Basin ("SF Plan") pursuant to Idaho Code § 42-1734B.

5. The SF Plan identifies McCoy Creek and certain perennial tributaries as important spawning habitat for native cutthroat trout species:

> Thirteen tributaries to the main stem are considered biologically significant, because they are perennial with known cutthroat spawning. McCoy, Bear, Indian, and Big Elk creeks flow into Palisades Reservoir and are considered important spawning tributaries (Moore, Aslett, and Corsi, 1981). Palisades, Rainey, Pritchard, Pine, and Burns creeks are important spawning tributaries to the main stem. Dean (1996a) reported that healthy, stable reproducing populations of cutthroat exist in McCoy, Bear, Palisades, Pine, and Burns creeks.
>
> *SF Plan* at 49.

6. The SF Plan included a short statement of the history of small scale suction dredging (also known as recreational dredge mining or recreational dredging) within the basin:

> Historically, commercial gold mining occurred on Caribou Mountain in the McCoy Creek drainage from the 1870's to 1920's (Jones, 1996). The area is covered by lode and placer claims for gold. Today recreation gold dredging, sluicing and panning occur.
>
> Impacts from recreational dredging were significant enough to require closing McCoy Creek to use under a simple one stop permit system. Individuals must now apply for a stream channel alteration permit from the [Department] and a special use permit from the [USFS] (Verner, 1995). Activity is limited to five individuals a year and is closed to all activity from May 1 to September 1 to protect spawning cutthroat (Jones, 1996).
>
> *Id.* at 44.

7. Within the SF Plan, the Board designated McCoy Creek and its perennial tributaries, including Iowa Creek, as "recreational rivers", pursuant to Idaho Code § 42-1734A(4). *Id.* at 88-90.

8. The SF Plan prohibits recreational dredge mining on the streams within the basin designated as recreational rivers. *Id.* at 88-92; *see also* Idaho Code §§ 42-1734A(5) and (6). However, the SF Plan includes the following exception for recreational dredge mining occurring in the McCoy Creek drainage:

> Stream channel alterations for recreational dredge mining may continue on McCoy Creek from the headwaters to Fish Creek confluence, and on the following perennial tributaries: City Creek, Camp Creek, Miners Delight Creek and Iowa Creek. This activity is allowed as regulated by the Caribou National Forest through a Special Use Permit issued according to the guidelines established in the "Environmental Assessment for Small Placer Mining Operations in the Caribou Basin Area" (Record of Decision issued December 12, 1994) [("1994 EA")], and with a Stream Channel Alteration Permit from the [Department].
>
> *SF Plan* at 92.

9. The 1994 EA provides a short statement of the purpose of the document:

> Analysis presented in this document will cover only small scale placer mining operations on and adjacent to McCoy Creek and it's [sic] tributaries in Caribou Basin. The intent is to provide environmental guidance for small scale placer mining. . . . This Environmental Analysis will provide a list of mitigation [sic] that would be required for operations before permission to operate would be granted.

Ex. IDWR #6 at 1.

10. The 1994 EA identifies the importance of McCoy Creek and its tributaries for fish spawning:

> Snake River fine-spotted Cutthroat Trout (also a sensitive species) are known to reside in McCoy Creek. A spring migration of spawning age fish enters McCoy Creek annually. These fish remain in the stream until early July when they return to Palisades Reservoir on the Snake River. Eggs deposited during the spring run, hatch and become mobile by the first of September. Some of the offspring could remain in the stream for as many as two years before migrating to the Snake River or Palisades Reservoir.

Id. at 6.

11. The 1994 EA also described mitigation measures that had already been adopted to protect spawning cutthroat trout populations:

> Currently, an agreement has been reached with the [Department] that no dredging of the stream channel will be permitted along McCoy Creek or it's [sic] reaches between May 1st and September 1st. Closure during that period is intended to protect spawning beds from extraordinary siltation and disturbance caused by dredging. . . . During the closure period eggs and fry are particularly susceptible to placer mining. Eggs and fry that physically pass through placer mining equipment can suffer significant mortality. Until the offspring have become active in the water column, the fish are susceptible to the direct effects of placer mining.

Id.

12. The 1994 EA concluded that small scale dredging could continue within the McCoy Creek drainage as long as specific mitigation measures are implemented. Ex. IDWR #6 at 2-4. A restricted season of operation for dredging is identified as one of the mitigation requirements:

> Adherence to seasonal operating closures, on McCoy Cr. and it's [sic] reaches, agreed to with the [Department] will be ensured. To protect spawning beds and

fry, no suction dredging will be permitted between May 1 and September 1 of any year within McCoy Creek or any of it's [sic] live tributaries.

Id. at 3.

13. Every year, the Department issues a set of instructions for small scale (recreational) suction dredging activities within the state. The 2018 instructions state that McCoy Creek and its tributaries, including Iowa Creek, are only open for small scale dredging between September 1 and November 30. Stream Channel Alteration by Recreational Mining Activities – IDWR Instructions for 2018 at 26.

14. On March 13, 2018, Bryan Fuell, a District Ranger for the Caribou-Targhee National Forest sent a letter to the Department, identifying concerns with Application S01-20253. Specifically, Mr. Fuell was concerned about the proposed season of operation:

> The [Department's] seasonal restrictions are in place to protect the Yellowstone Cutthroat Trout (YCT), a designated U.S. Forest Service (USFS) Sensitive Species. In support of those restrictions, the USFS completed studies in 2016 with regards to YCT documenting, observed spawning activity, and emergence as well as projected emergence based upon spawning dates and stream temperature data on McCoy Creek proper. This data would also apply to Iowa Creek, a tributary to McCoy Creek. Young of the year YCT and older trout were observed in Iowa Creek upstream of the confluence with Bilk Creek in 2003 in the area proposed for dredging, and multiple ages classes were reported downstream of Bilk Creek. For these reasons, we would strongly object to the approval of the 01-20253 Joint Application by IDWR.

Ex. IDWR #8.

15. In 2016, the USFS completed a study about the timing of Yellowstone cutthroat trout spawning in McCoy Creek. Ex. IDWR #7. The report summarizing the study concluded that "[i]n all but the wettest and coldest years a Sept 1 work window [for suction dredging] protects emergent cutthroat fry in McCoy Creek." *Id.* at 6.

RELEVANT LEGAL PROVISIONS

Article XV, Section 7, of the Idaho Constitution states, in pertinent part:

> STATE WATER RESOURCE AGENCY. There shall be constituted a Water Resource Agency, composed as the Legislature may now or hereafter prescribe, which shall have power to . . . formulate and implement a state water plan for optimum development of water resources in the public interest. The Legislature of the State of Idaho shall have the authority to amend or reject the state water plan in a manner provided by law. Thereafter any change in the state water plan shall be submitted to the Legislature of the State of Idaho upon the first day of a regular session following the change and the

change shall become effective unless amended or rejected by law within sixty days of its submission to the Legislature.

Idaho Code § 42-1734A states, in pertinent part:

(1) The board shall, subject to legislative approval, progressively formulate, adopt and implement a comprehensive state water plan for conservation, development, management and optimum use of all unappropriated water resources and waterways of this state in the public interest. The comprehensive state water plan shall consist of: Part A — statewide policies, goals and objectives; and Part B — component water plans for individual waterways, river basins, drainage areas, river reaches, ground water aquifers or other geographic designations. As part of Part B of the comprehensive state water plan, the board may designate selected waterways as protected rivers as provided in this chapter.

• • •

(2) The board may develop a comprehensive state water plan in stages based upon waterways, river basins, drainage areas, river reaches, groundwater aquifers, or other geographic considerations. The component of the comprehensive state water plan prepared for particular water resources and waterways shall contain, among other things, the following:

(a) A description of the water resources and waterway or waterways that are the subject of the plan, including pertinent maps detailing the geographic area of the plan;

(b) A description of the significant resources of the water resources and waterway or waterways;

(c) A description of the various existing and planned uses for these resources including currently undeveloped areas of the waterway and future plans for those areas, with a discussion of the advantages and disadvantages associated with each planned use; and

(d) A discussion of goals, objectives, and recommendations for improving, developing, or conserving the water resources and waterway or waterways in relation to these resources, including an examination of how different uses will promote the overall public interest, a statement as to the goals the plan expects to achieve, and an analysis of how any specific recommendations further those goals. A description of the methodology used in developing the plan shall be included.

• • •

(4) The comprehensive state water plan may designate protected rivers. Designations shall be based upon a determination by the board that the value of preserving a waterway for particular uses outweighs that of developing the waterway for other beneficial uses and shall specify whether a protected river is designated as a natural or recreational river. The plan may also describe those water resources and waterways which are not designated as protected rivers.

(5) In designating a natural river, the board shall prohibit the following activities:

(a) construction or expansion of dams or impoundments;
(b) construction of hydropower projects;
(c) construction of water diversion works;
(d) dredge or placer mining;
(e) alterations of the stream bed; and
(f) mineral or sand and gravel extraction within the stream bed.

(6) In designating a recreational river, the board shall determine which of the activities listed in subsection (5) of this section shall be prohibited and may specify the terms and conditions under which activities that are not prohibited may go forward.

(7) Any prohibition or terms and conditions imposed pursuant to subsections (5) and (6) of this section shall remain in effect until the legislature acts upon the recommendation of the board as provided in section 42-1734B, Idaho Code, or until the legislature revokes its earlier approval of a protected river by law.

Idaho Code § 42-1734B states, in pertinent part:

All state agencies shall exercise their duties in a manner consistent with the comprehensive state water plan. These duties include but are not limited to the issuance of permits, licenses, and certifications; provided, however, that nothing in this chapter shall be construed to affect the authority of any state agency with respect to activities not prohibited by the comprehensive state water plan.

ANALYSIS

Article XV, Section 7 of the Idaho Constitution empowers the Board to formulate and implement a state water plan. Idaho Code § 42-1734A describes the various components of the state water plan. Part B of the state water plan includes comprehensive basin plans for specific drainages within the state. The Board may designate protected rivers (natural or recreational) "based upon a determination . . . that the value of preserving a waterway for particular uses

outweighs that of developing the water way for other beneficial uses . . . ." Idaho Code § 42-1734A(4).

If the Board designates a reach of river as a "natural river," the Board shall prohibit dredge or placer mining within that reach. Idaho Code § 42-1734A(5)(d). If the Board designates a reach of river as a "recreational river," the Board shall determine whether certain activities, such as dredge or placer mining, should be prohibited, and, if the activities are not prohibited, the Board may specify the terms and conditions under which such activities may go forward. Idaho Code § 42-1734A(6). Those terms and conditions remain in place until the Idaho legislature revokes or amends the prior designation. Idaho Code § 42-1734A(7).

In the SF Plan, the Board designated McCoy Creek and its perennial tributaries, including Iowa Creek, as recreational rivers. As such, the Board could prohibit dredge mining or could establish terms and conditions for dredge mining to occur on those streams. The SF Plan states that dredge mining on McCoy Creek and its perennial tributaries is subject to the terms of the 1994 EA, which sets forth a list of specific mitigation requirements for small scale suction dredging. Included in this list is a restriction on the season of operation for suction dredging. Suction dredging may not occur between May 1 and September 1. The same concerns addressed in the 1994 EA are still present today. *See* Ex. IDWR #7 and Ex. IDWR #8.

Idaho Code § 42-1734B(4) states: "All state agencies shall exercise their duties in a manner consistent with the comprehensive state water plan. These duties include but are not limited to the issuance of permits, licenses, and certifications . . . ."

To comply with the SF Plan, the Department must deny any application for suction dredging on McCoy Creek or its perennial tributaries proposing a season of operation between May 1 and September 1. Application S01-20253 proposed a season of operation of July 10 to August 10. Therefore, the Department properly denied Application S01-20253. If Application S01-20253 had proposed a season of operation within the season established in the SF Plan, the application could have been approved.

During the hearing, Shackleton argued that the Department has been inconsistent in its review of recreational dredging applications in the McCoy Creek drainage. The SF Plan does not designate all streams within the McCoy Creek drainage as "recreational rivers" pursuant to Idaho Code § 42-1734A. Further, the SF Plan does not authorize small scale dredging in all of the "recreational rivers" within the McCoy Creek drainage. For this reason, every application for small scale dredging in the McCoy Creek drainage must be evaluated on a case by case basis. The Department's prior approvals or denials cannot be challenged within this contested case.

CONCLUSIONS OF LAW

The SF Plan authorizes small scale (recreational) dredging in the McCoy Creek drainage, as long as it is conducted within the limits of the 1994 EA, which prohibits dredging activities between May 1 and September 1. Pursuant to Idaho Code § 42-1734B(4), the Department must follow the state water plan, including comprehensive basin plans such as the SF Plan, when

evaluating applications for stream channel alterations. The Department's decision to deny Application S01-20253 is consistent with the SF Plan and the 1994 EA because the application proposed a season of operation during a time when the McCoy Creek drainage is closed to suction dredging activities. The Board should affirm the Department's denial of Application S01-20253.

RECOMMENDED ORDER

IT IS HEREBY ORDERED that the Department's action denying Application S01-20253 filed by David Shackleton is AFFIRMED by the Board.

Dated this 24th day of July 2018

James Cefalo
Hearing Officer

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 24th day of July, 2018, true and correct copies of the document described below were served by placing a copy of the same with the United States Postal Service, certified mail with return receipt requested, postage prepaid and properly addressed to the following:

Document Served: **Recommended Order Affirming Denial**

David Shackleton
26505 Stonesiffer Lane
Unionville, VA 22567
Email: david.a.shackleton@gmail.com

Idaho Water Resource Board
PO Box 83720
Boise, ID 83720-0098

Sharla Cox
Administrative Assistant

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF APPLICATION FOR STREAM CHANNEL ALTERATION PERMIT NOS. S82-20066 AND S82-20067	RESOLUTION TO ADOPTING RECOMMENDED ORDER AS FINAL

WHEREAS, on August 2, 2017, the Idaho Department of Water Resources ("Department") denied Joint Application for Permit No. S82-20066 in the name of Gay Richardson ("Richardson") and No. S82-20067 in the name of John Stickley ("Stickley") for suction dredge mining within the Red River, a tributary of the South Fork Clearwater River; and

WHEREAS, the Department received letters from Richardson (August 15, 2017), and Stickley (August 17, 2017), requesting a hearing on the denial of their respective Joint Application for Permit; and

WHEREAS, by Resolution dated March 3, 2018, the Idaho Water Resource Board ("Board") appointed Nick Miller as the hearing officer to preside over the hearings requested by Richardson and Stickley and issue a recommended order or recommended orders in accordance with Idaho Code §§ 67-5243(1)(a) and 67-5248; and

WHEREAS, the hearing officer issued an order on May 4, 2018, adopting deadlines, scheduling hearing dates, and setting a continued prehearing conference; and

WHEREAS, the hearing officer held a continued prehearing conference on August 20, 2018; and

WHEREAS, on August 20, 2018, Richardson and Stickley verbally withdrew their requests for a hearing regarding their respective Joint Application for Permit; and

WHEREAS, on August 22, 2018, the hearing officer issued an order recommending that the Board dismiss the above-captioned matters, a copy of which is attached hereto as **Attachment A**; and

WHEREAS, Richardson and Stickely had fourteen days from the service date of the recommended order to file a petition for reconsideration with the hearing officer or a brief taking exceptions to the recommended order with the Board (*see* IDAPA 37.01.01.720.02.a-b); and

WHEREAS, Richardson and Stickely did not file a petition for reconsideration with the hearing officer or brief taking exceptions with the Board; and

WHEREAS, in accordance with Rule 720.02.a of the Board's Rules of Procedure, a recommended order will only become final after action of the Board (*see* IDAPA 37.01.01.720.02.a);

NOW THEREFORE BE IT RESOLVED, in accordance with the Board's Rule of Procedure 720, the Board hereby adopts the recommended order issued by the hearing officer in its entirety; and

NOW THEREFORE BE IT FURTHER RESOLVED, in accordance with the Board's Rule of Procedure 740, this Resolution shall be considered a final order of the Board.

DATED this 14th day of September, 2018.

_____
ROGER W. CHASE, Chairman
Idaho Water Resource Board

ATTEST _____
VINCE ALBERDI, Secretary

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF APPLICATION FOR STREAM CHANNEL ALTERATION PERMIT NOS. S82-20066 and S82-20067	Docket No. IWRB-2017-001 **ORDER VACATING DEADLINES AND HEARING DATES; RECOMMENDED ORDER DISMISSING CONTESTED CASES**

BACKGROUND

On August 2, 2017, the Idaho Department of Water Resources ("Department") denied Joint Application for Permit No. S82-20066 in the name of Gay Richardson ("Richardson") and No. S82-20067 in the name of John Stickley ("Stickley"). Both applications were for suction dredge mining within the Red River, a tributary of the South Fork Clearwater River.

The Department received letters from Richardson (August 15, 2017), and Stickley (August 17, 2017), each requesting a hearing on the denial of their respective Joint Application for Permit.

On March 3, 2018, the IWRB appointed Nick Miller as the hearing officer to preside over the hearings requested by Richardson and Stickley and issue a recommended order or recommended orders in accordance with Idaho Code §§ 67-5243(1)(a) and 67-5248.

The hearing officer held a prehearing conference on April 27, 2018. Richardson and Stickley attended the prehearing conference by telephone. Based upon and consistent with discussion at the prehearing conference, the hearing officer issued a *Prehearing Order* on May 4, 2018, adopting a schedule for a hearing and setting a continued prehearing conference.

The hearing officer held the continued prehearing conference by telephone at 11 am on August 20, 2018. Richardson did not participate in the conference due to telephone issues. Stickley participated in the conference and stated Richardson had authorized him to speak on Richardson's behalf.

Stickley stated that both he and Richardson submitted a Joint Application for Permit for suction dredge mining within the Red River for the 2018 season. The Department approved both applications.

Stickley stated that he and Richardson both wished to withdraw their petitions for a hearing regarding Joint Application for Permit Nos. S82-20067 and S82-20066.

The hearing officer telephoned Richardson following the conference and confirmed Stickley accurately represented Richardson's intention to withdraw his petition for hearing.

Based on the statements by Richardson and Stickley that they wish to withdraw their petitions for hearing, the hearing officer will vacate the hearing dates and associated schedule and issue a recommended order dismissing the above-captioned matters.

ORDER

Based upon and consistent with the foregoing, IT IS HEREBY ORDERED that the August 27, 2018, deadlines and September 11-12, 2018, hearing dates set forth in the May 4, 2018, *Prehearing Order* are VACATED.

RECOMMENDED ORDER

IT IS HEREBY ORDERED that the contested cases in the matters of application for stream channel alteration permit nos. S82-20066 and S82-20067 are hereby DISMISSED.

DATED this 22nd day of August 2018.

NICK MILLER
Hearing Officer

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 22nd day of August 2018, I served a true and correct copy of the foregoing document by the methods indicated to the following:

GAY RICHARDSON
PO BOX 314
ELK CITY, ID 83525
gayrichardson@idaho.net

- ☒ U.S. Mail, postage prepaid
- ☐ Hand Delivery
- ☐ Overnight Mail
- ☐ Facsimile
- ☒ Email

JOHN STICKLEY
1900 WOODWORTH ROAD
GRANDVIEW WA 98930
goldfinder2013@hotmail.com

- ☒ U.S. Mail, postage prepaid
- ☐ Hand Delivery
- ☐ Overnight Mail
- ☐ Facsimile
- ☒ Email

Courtesy Copies to:

AARON GOLART
STREAM CHANNEL COORDINATOR
ID DEPT OF WATER RESOURCES
PO BOX 83720
BOISE ID 83720-0098
aaron.golart@idwr.idaho.gov

- ☐ U.S. Mail, postage prepaid
- ☐ Hand Delivery
- ☐ Overnight Mail
- ☐ Facsimile
- ☒ Email

BRIAN PATTON
WATER PLANNING & PROJECTS
BUREAU CHIEF
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brian.patton@idwr.idaho.gov

- ☐ U.S. Mail, postage prepaid
- ☐ Hand Delivery
- ☐ Overnight Mail
- ☐ Facsimile
- ☒ Email

Rachel Neely
Administrative Assistant

EXPLANATORY INFORMATION TO ACCOMPANY A RECOMMENDED ORDER

(Required by Rule of Procedure 720.02)

The accompanying order is a "**Recommended Order**" issued by the agency pursuant to Section 67-5243, Idaho Code. This order will only become a final order after review by the Idaho Water Resource Board ("Board").

Each party to these proceedings who appeared at the hearing may file a petition for reconsideration, briefs and exceptions to the recommended order and may request oral argument before the Board as further described below:

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a recommended order with the hearing officer issuing the order within fourteen (14) days of the service date of the order as shown on the certificate of service. **Note: the petition must be received by the hearing officer within this fourteen (14) day period.** The hearing officer will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. *See* Section 67-5243(3), Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after (a) the service date of this recommended order, (b) the service date of a denial of a petition for reconsideration from this recommended order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this recommended order, any party may in writing support or take exceptions to any part of a recommended order and may file briefs in support of the party's position on any issue in the proceeding. Written briefs in support of or taking exceptions to the recommended order shall be filed with the Board. Opposing parties shall have fourteen (14) days to respond.

If no party files exceptions to the recommended order, the Board will issue a final order within fifty-six (56) days after (a) the last day a timely petition for reconsideration could have been filed with the hearing officer, (b) the service date of a denial of a petition for reconsideration by the hearing officer; or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration by the hearing officer.

ORAL ARGUMENT

The Board may schedule oral argument in the matter before issuing a final order. Oral argument on exceptions to a recommended order shall be heard at the discretion of the Board. If oral arguments are to be heard, the Board will, within a reasonable time, notify each party of the place, date and hour for the argument of the case. Unless the Board orders otherwise, all oral arguments will be heard in Boise, Idaho.

CERTIFICATE OF SERVICE

Any petition for reconsideration or other motion to the hearing officer shall be served upon all other parties to the proceeding. All exceptions, briefs, requests for oral argument and any other matters filed with the Board in connection with the recommended order shall be served on all other parties to these proceedings in accordance with Rules of Procedure 302 and 303.

FINAL ORDER

The Board will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The agency may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The agency will serve a copy of the final order on all parties of record.

APPEAL OF FINAL ORDER TO DISTRICT COURT

A party aggrieved by a final order of the Board is entitled to judicial review in compliance with sections 67-5271 through 67-5279, Idaho Code.

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Neeley Miller

Date: August 31, 2018

Re: Priest Lake Water Management Project Update

ACTION: No action needed at this time

Background

- As a result of limited water supply and drought conditions in northern Idaho in 2015 and 2016 it was difficult to maintain required pool levels and downstream flow in the Priest River during the recreational season.
- Priest Lake Water Management Study (Phase 1) was completed in February 2018. The study included the following recommendations:
    - Temporarily raising the surface level of Priest Lake 3 to 6 inches during the recreational season of dry years and integrating real-time streamflow data to allow more flexibility
    - Outlet structure improvements to the scour apron, modifying and strengthening gates, and electrical gate operation
    - Replace the current existing porous breakwater with an impervious sediment retention feature and dredging a portion of the Thororfare channel
- The Phase 1 estimated cost to implement recommendations is approximately $5 million ($2.4 million for outlet structure improvements, and $2.4 - $2.6 million for Thorofare improvements).
- On January 26, 2018 the IWRB passed a resolution asking the Idaho Legislature to repurpose the remaining balance of $2,419,600 in a 2005 CREP appropriation that had not been utilized and direct it towards the Priest Lake Water Management Project. In that resolution, the IWRB also indicated that it expects local contributions of at least $200,000 for the project.
- House Bill 677 passed and approved by the 2018 Legislature included 1) a $2.4 million transfer from the General Fund to the Revolving Development Account, and 2) $2,419,600 of funding in the Revolving Development redirected from the Conservation Reserve Enhancement Program (CREP) to be used for the Priest Lake Water Management Project. On March 27, 2018 Governor Otter signed the budget bill (FY 2019) which includes the funds for the Priest Lake Project.
- On May 18, 2018 the Board adopted a resolution authorizing $600,000 for Engineering and Design work associated with Phase 2 of the Priest Lake Water Management Project.

- Funding Status: $2.4 million + $2.4196 + $200K local contribution -$600K for preliminary engineering design & permitting = $4,419,600 remaining for Final Engineering Design, Bidding Solicitation, Construction and Construction Management.

- In July 2018 Mott MacDonald submitted to IWRB staff the final Priest Lake Water Management Project Phase 2 – Preliminary Engineering Design & Permitting Scope of Work.

- July 2018 – executed contract with Mott MacDonald for Phase 2: Preliminary Engineering Design & Regulatory Permitting

Phase 2 Schedule

Task 1 Data Collection – July to August, 2018

- Kickoff Meeting
- Existing & New Data Collection.
- Site Assessments – Dam, Wetlands, Erosion areas on lake, Thorofare.
- Design Recommendations – Refinement of recommendations from last phase and any new information gathered that could affect the scope of preliminary design.
- Basis of Design – Refinement and update from last phase.
- Steering Committee Meeting #1 – Late July/Early August

Task 2 Preliminary Engineering Design – September to January, 2019

- Regulator Agency & Stakeholder Engagement.
- Steering Committee Meeting #2 – Early September.
- Public Meeting/Open House – Late September.
- Permitting Level Plans – Draft November; Final December.
- Updated Construction Cost Estimates – Draft November; Final December.
- Dam Improvements & Dam Safety Report Submittal. Includes discipline reports (Geotechnical, Structural, Hydraulic, etc.) – Draft November; Final December.

Task 3 Regulatory Permitting – August 2018 to June 2019

- Consultation with Agencies regarding proposed concepts – August/September 2018.
- Permit Application Documents – Initiate development of documents starting in September and working on through winter 2018.
- Permit Application Submission – January 2019.

Task 4 Public/Stakeholder Involvement – Ongoing with large emphasis during the preliminary design and permitting tasks.

- Steering Committee Meeting #1 – Late July/Early August (in person or telecon).
- Steering Committee Meeting #2 – Early September 2018 (telecon).
- Public Open House – Scheduled for Thursday September 27, 2018 (in person, Priest Lake).
- Steering Committee Meeting #3 – October 2018.
- Steering Committee Meeting #4 – November 2018.
- Steering Committee Meeting #5 – December 2018 or January 2019.

Phase 3 Schedule

Final Engineering Design – TBD Based on status off regulatory permitting process. Likely starting mid-2019.

Final engineering and design and services during bidding and construction are not included in this Phase 2 scope of work but will likely include the following elements:

- Sealed plans, specifications, cost estimates.
- Final computation package for dam safety review.

Bidding and Construction

- Bidding is anticipated in late 2019, with construction starting early 2020.

Memorandum

To: Idaho Water Resource Board

From: Cynthia Bridge Clark, Emily Skoro

Date: September 3, 2018

Re: Boise River Storage Feasibility Study

REQUIRED ACTION: No action is required at this time.

Background

The Idaho Water Resource Board (IWRB) is partnering with the Bureau of Reclamation (Reclamation) to complete a feasibility study of new surface water storage options on the Boise River (study). The study includes an evaluation of small raises of the three large dams on the Boise River system: Anderson Ranch, Arrowrock and Lucky Peak Dams. The total study cost is estimated to be $6 million. The IWRB, as the non-federal sponsor, has committed to funding fifty percent of the study costs up to $3 million.

Reclamation initiated the feasibility study under the authority of Public Law 111-11 (P.L. 111-11), which authorized the study of projects to address water shortages in the Boise River system and sunsets in March 2019. The Water Infrastructure Improvements for the Nation Act (WIIN Act, P.L. 114-322) provides a second authority for the study, and potential authority and funding for design and construction. The act states that continuing authority only applies to projects determined to be feasible before January 1, 2021. Projects can only receive Federal funds under the WIIN Act if recommended by the Secretary of the Interior and designated by name in Federal appropriations legislation. Reclamation received $750,000 of WIIN Act funding in 2018 for the Study. Reclamation is continuing to pursue additional funding under the WIIN Act and through standard budget processes.

After initial technical review of the three dams, Reclamation concluded that an increase in reservoir storage at Arrowrock and Lucky Peak Dams is significantly more complicated than a raise of Anderson Ranch Dam due to the physical and procedural complexities of each facility. Given the WIIN Act requirement to determine project feasibility before January 1, 2021, Reclamation recommended that study efforts should be focused on the raise of Anderson Ranch Dam at this time.

On July 27, 2018, the IWRB passed a resolution authorizing Reclamation to focus current study analyses on a raise of the Anderson Ranch dam in order to meet the deadlines associated with the WIIN Act with the understanding that the feasibility of small raises at Arrowrock and Lucky Peak Dams would be evaluated further in future analyses as agreed upon by the IWRB and Reclamation. The resolution also authorized Reclamation to complete land, structure, infrastructure and real estate impact assessments for all three reservoirs to provide information for current and future feasibility analyses, and it specified that Reclamation and IWRB consult upon the costs of the modified study scope. Finally, through the resolution, the IWRB agreed to continue to pursue an extension to P.L. 111-11 and other authorities and encouraged Reclamation to pursue authorization and funding under the WIIN Act and other authorities to achieve the greatest support for development of multi-purpose water projects in the Treasure Valley, including potential raises or increases in reservoir capacity of Anderson Ranch, Arrowrock and Lucky Peak Dams.

Updates

A Legislative Infrastructure Tour was held on August 28,1018 to discuss large water infrastructure projects in Idaho with representatives from Idaho's Congressional delegation. The tour included a visit to Anderson Ranch Dam to discuss the study and the importance of the WIIN Act. Other attendees included members of the IWRB, representatives from a work group formed to identify infrastructure projects in Idaho, and staff from the Idaho Department of Water Resources and Reclamation. Fact sheets for the Boise River Storage Feasibility Study and for the Anderson Ranch Dam are attached for reference. Details of the tour will be discussed further at the September IWRB meeting.

Boise River Basin (Storage) Feasibility Study Fact Sheet

History

- Reclamation's 2006 Boise/Payette River Basins Water Supply Assessment Study identified raising Reclamation's Arrowrock and Anderson Ranch Dams, and the U.S. Army Corps of Engineers' (USACE) Lucky Peak Dam, as opportunities for additional water storage in the Boise River Basin.
- Approximately 78% of active capacity in the three reservoirs is contracted for irrigation purposes. The remaining capacity is used for municipal and industrial uses, flow augmentation for endangered species, winter streamflow maintenance, and flood control. The reservoirs are operated as a system to provide flood control, and additional benefits including hydropower and recreation.
- Omnibus Public Land Management Act of 2009, P.L. 111-11, gave Reclamation authority to conduct feasibility studies (FS) on projects identified in the 2006 study, with a $3M ceiling. The authority expires on March 30, 2019.
- USACE's Boise General Investigation (GI), initiated in 2012 in partnership with IWRB, evaluated raising Arrowrock Dam by 70 feet for flood control and water supply purposes.
- The study was terminated in January 2017 because costs did not exceed benefits.
- During the Boise GI, Reclamation discussed initiating a feasibility study for raising Anderson Ranch Dam with water users, but did not receive sufficient non-Federal cost share commitments to proceed. The Boise GI had potential greater benefits, and potential partners were concerned that Reclamation could not commit new space to funding partners at the feasibility stage.
- Following termination of the Boise GI, IWRB and Reclamation partnered to initiate a FS and environmental compliance for increased storage at the three Boise River dams. In October 2017, the IWRB committed to provide up to $3M as the 50% non-Federal cost share partner.

Legislative Considerations

- Reclamation activities have been performed under both P.L. 111-11 and WIIN Act authority.
- Projects can only receive WIIN Act funds for feasibility study and construction if recommended by the Secretary of the Interior and designated by name in Federal appropriations legislation.
- WIIN Act authority only applies to projects determined to be feasible before January 1, 2021 – completion of the FS prior to then could be followed by construction authority and funding.
- Current appropriations ceiling and expiration date of P.L. 111-11 limit Reclamation activity absent WIIN Act authority.

Current Activity and Path Forward

- Initial data collection and screening for all three reservoirs is complete.
- Reclamation and IWRB have agreed to focus the FS on Anderson Ranch due to the water supply benefits, combined with lower risk and complexity than the other two reservoirs, which allow for determination of feasibility prior to the January 1, 2021 WIIN Act deadline.
- Reclamation is conducting analysis of land impacts in the potential footprints for all three reservoirs, and performing geotechnical analysis, design, and other analysis for Anderson Ranch Dam.
- Reclamation is in the process of acquiring a contractor to prepare the FS and environmental compliance documents.
- Potential raises at the other two dams may be evaluated in future years.

RECLAMATION
Managing Water in the West

U.S. Department of the Interior
Bureau of Reclamation

Boise River Basin (Storage) Feasibility Study Fact Sheet

GENERAL STUDY INFORMATION	
Initial study authority	Omnibus Public Land Management Act of 2009, (P.L. 111-11); $3M ceiling
Additional authority	WIIN Act (P.L. 114-322); requires feasibility determination prior to January 1, 2021
Estimated study cost	Up to $6M
Primary objective of study	Increase water supply
Secondary objective of study	Decrease flood risk

Dam	Raise (ft)	Additional Storage Capacity (AF)	Estimated Annualized New Storage (AF)	
			Historical Hydrology	2080's Climate Change Hydrology
Anderson Ranch	6	29,000	15,950	18,560
Arrowrock	10	20,000	18,200	18,200
Lucky Peak	4	10,000	5,500	not yet evaluated

SCHEDULE MILESTONES	
IWRB passed resolution to study raises of all three reservoirs	October 24, 2017
MOA between IWRB and Reclamation signed	May 2018
Initiated technical evaluations	Spring 2018
IWRB passed resolution to focus study on Anderson Ranch	June 28, 2018
Award contract for FS and environmental compliance	Fall 2018
Public Open House	Fall 2018
Complete technical analysis; 30% Design and cost estimate	March 2019
P.L. 111-11 authority expires	***March 2019***
Initiate formal environmental compliance Issue Environmental Impact Statement Notice of Intent	June 1, 2019 (tentative)
Complete analysis of alternatives: structural, non-structural, no action	June 2019
Complete Environmental Impact Statement / Record of Decision (one year completion requirement per Secretarial Order 3355)	May 31, 2020 (tentative)
Finalize Feasibility Report	June 2020
Complete approval process through Secretarial level	August 2020
WIIN Act feasibility determination deadline	***January 1, 2021***

BUDGET AND FUNDING SOURCES	
Funding in Place	
$500,000 in FY18	Federal appropriations - P.L. 111-11 authority
$500,000 in FY18	Non-Federal - IWRB
$750,000 in April 2018	Federal appropriations - WIIN Act
$2,500,000 as needed	Non-Federal - committed by IWRB
Additional Funding Needed	
Up to $1,750,000	Federal – pursuing under WIIN Act and P.L. 111-11

Contact Information

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Anderson Ranch Dam and Powerplant Fact Sheet

Overview

Owned and operated by the U.S. Bureau of Reclamation, Anderson Ranch Dam and Powerplant is a multiple purpose structure that provides benefits of irrigation, power, and flood and silt control. The dam is 456 feet high and is on the South Fork of the Boise River, 28 miles northeast of Mountain Home, Idaho. It has a total storage capacity of 474,900 acre-feet (active 413,100 acre-feet) and was the world's highest earthfill dam at the time of its completion in 1950.

Anderson Ranch Dam is part of the Arrowrock Division of Reclamation's Boise Project. The Boise Project furnishes irrigation water to about 225,000 acres of project lands and 165,000 acres under special and Warren Act contracts. The irrigable lands are in southwestern Idaho and eastern Oregon. The Arrowrock Division consists of 164,680 irrigable acres, with supplemental water to an additional 111,115 acres. Water for the division is stored in Anderson Ranch Reservoir on the South Fork of the Boise River; Arrowrock Reservoir on the Boise River; and in Lake Lowell, an offstream lake in a large depression. Anderson Ranch Dam, the uppermost storage facility on the Boise system, is located 42 miles upstream from Arrowrock Dam.

The Anderson Ranch Powerplant supplies power to irrigation loads within Reclamation's Boise, Owyhee, and Minidoka Projects. Surplus power is delivered to the Bonneville Power Administration for marketing and distribution to regional industries and municipalities. The powerplant originally had a rated capacity of 27,000 kilowatts with two generator units installed. These units were up-rated in 1986, increasing the capacity to 20,000 kilowatts each for a total of 40,000 kilowatts.

Anderson Ranch Dam and Powerplant Fact Sheet

GENERAL INFORMATION	
Owner and Operator	Bureau of Reclamation
Project	Boise
Dam Type	Zoned Earthfill
Longitude	-115.4501724
Latitude	43.3595096
Reservoir	Anderson Ranch
Original Construction	1941-1950
4 ft Crest Raise	2011
National ID Number	ID00279
Location	28 miles northeast of Mountain Home, ID
Watercourse	South Fork of the Boise River

DIMENSIONS	
Crest Elevation	4206 ft
Structural Height	456 ft
Hydraulic Height (Normal Operating Depth	330 ft
Top of Joint Use Pool (Elevation)	4196 ft
Top of Active Conservation Pool (Elevation)	4196 ft
Top of Inactive Conservation Pool (Elevation)	4039.6 ft
Top of Dead Storage Pool (Elevation)	3992 ft
Streambed at Dam Axis	3866 ft
Spillway Crest Elevation	4174 ft
Crest Length	1350 ft

HYDRAULICS AND HYDROLOGY	
Normal Water Surface Elevation	4196 ft
Spillway Capacity at Elevation	20,000 cfs at 4198 ft
Auxiliary Spillway	No
Outlet Works Capacity at Elevation	10,000 cfs at 4198 ft
Drainage Area	960 sq mi
Surface Area at Elevation	4,815 acres (19.5 km^2) at 4198 ft
Hydrometeorological Report (HMR)	HMR 57
Total Water Storage at Elevation	474,900 ac-ft at 4196 ft
Spillway Type	Concrete-lined chute located on left abutment, controlled by two 25-by-22 foot radial gates

POWERPLANT	
Commission Date	1951, 1986
Turbines	(2) 20 MW Francis
Original Nameplate Capacity	27 MW
Installed Capacity	40 MW
Net Generation	151,014,000 kWh in 2011

Memorandum

To: Idaho Water Resource Board

From: Wesley Hipke

Date: August 30, 2018

Re: ESPA Managed Recharge Program Status Report

REQUIRED ACTION: No action is required at the September 15, 2018 IWRB meeting.

I. 2017/2018 Recharge Season Summary

IWRB Recharge:

Table 1 provides the final summary of IWRB recharge for the 2017/2018 season.

Table 1. IWRB ESPA Recharge 2017/2018*

System	Area	Start/End of IWRB Recharge	Time of Recharge (Days)	Median Recharge Rate (cfs)	Volume Recharged (Acre-feet)*	IWRB Delivery Cost*
Snake River	Lower Valley	Sept 14 – Jun 13	273	559	295,655	$2,972,024
	Upper Valley	Aug 30 – Jun 26	296	293	232,966	$1,434, 914
	Snake River Total		**298**	**686**	**528,621**	**$4,406,938**
Big & Little Wood Rivers		Nov 30 – Jun 13	**168**	**15**	**7,380**	**$81,069**
		ESPA TOTAL	**298**	**700**	**536,001**	**$4,488,007**

II. 2018/2019 Recharge Season Status

SWC Storage Water:

Similar to 2017, the Surface Water Coalition (SWC) donated 58,500 acre-feet (af) of storage water for recharge under the IWRB's Recharge Program. In accordance with the settlement agreement, the storage water was provided to the SWC by the Idaho Ground Water Association (IGWA) and the Water Mitigation Coalition (the food processors), who contributed 50,000 af and 8,500 af respectively.

The IWRB currently intends to recharge the entire 58,500 af above American Falls Reservoir (Upper Valley). Table 2 provides a breakdown of the identified recharge locations, estimated duration, and volume per canal partner. IWRB recharge of the storage water began on August 16 and are currently scheduled to continue into November.

Recharge is currently only occurring in off-canal recharge sites. To optimize available recharge capacity, off-canal sites will be utilized as much as possible and then canals will be used once irrigation deliveries cease. The intention is to prioritize off-canal sites and canals with higher retention while ensuring all of the water available is recharged by the end of November.

Table 2. IWRB Managed Recharge Plan – SWC Storage Water - Fall 2018

Canal System	Recharge Start Date	Estimated Recharge End Date	Recharge Volume (Acre-feet)
Fremont-Madison ID	Aug 16	Nov 15	20,000
New Sweden ID	Aug 18	Oct 15	4,000
Snake River Valley ID	Aug 21	Nov 15	10,000
Aberdeen Springfield Canal Co.	Oct 10	Oct 31	10,000
Canals after Irrigation Deliveries Cease	Mid-Sept to Mid-Oct	Oct 31	14,500
		TOTAL	**58,500**

Natural Flow Water Availability:

Water District 01 has predicted that the reservoir system carryover will be slightly above average (currently the system is at 58%). The Bureau of Reclamation's (USBR) preliminary plan is to keep flows out of American Falls at minimal levels and to capture as much of the upstream releases as possible. The USBR will reevaluate operations in December/January based upon snow pack conditions (per Upper Snake Advisory Committee meeting on August 30th). It is unlikely that natural flow will be available in the Upper Valley for managed recharge and a limited volume of water is expected to be available in the Lower Valley this fall (approximately 500 cfs).

Lower Valley IWRB Recharge Status:

The IWRB recharge rights on the Snake River are predicted to come into priority in the Lower Valley (below Minidoka Dam) around October 20th.

The IWRB recharge capacity will be limited this fall in the Lower Valley due to maintenance and construction requirements on AFRD2's Milner-Gooding Canal and the North Side Canal. The Milner-Gooding Canal has planned extensive maintenance (8 to 12 weeks) after it shuts down for the irrigation season on approximately Oct. 15th. Therefore, the MP31 recharge site will not be able to recharge until after the first of the year. The North Side canal will be shut down until the first of the year due to the infrastructure improvements on the canal.

Inspection activities are also planned on the Twin Falls Canal's main canal between the Milner pool and Murtaugh Lake; however, Twin Falls Canal Co. is postponing the inspection until after the first of the year.

Southwest Irrigation District is planning to recharge as soon as the IWRB's water rights come into priority.

Recharge capacity is projected to be 80 to 100 cfs at the start of the recharge season. After the first of the year, recharge capacity under the IWRB's Program is estimated to increase between 700 to over 900 cfs. The following is a summary of the projected recharge capacity for the next season in the Lower Valley.

- **ARFD2 – Milner-Gooding Canal (available Jan 2019)**
    - MP31 Recharge Site: Jan 1-Mar 31 500-600 cfs
    - Shoshone Recharge Site: Jan 1-Mar 31 200 cfs
- **NSSC (available Jan 2019)**
    - Wilson Lake Jan 1-Mar 31 130 cfs
- **TFCC**
    - Murtaugh Lake Oct 1-Mar 31 30-50 cfs
- **SWID**
    - Cassia Pipeline Injection Wells Oct 1-Mar 31 50 cfs

Big/Little Wood River Summary:

Last year the Big Wood Canal Co. (BWCC) was able to conduct managed recharge throughout the winter at a rate of between 10 to 15 cfs. If this rate of recharge is accomplished this year, assuming there is not excess water in the spring, BWCC could contribute an additional 3,500 af of recharge in the Lower Valley.

IWRB Recharge 2018/2019 Projections:

Given that is too early to have confidence in water supply predictions for the coming year, projections for recharge during the 2018/2019 season incorporate a number of assumptions. Recharge is currently projected to be between 160,000 to 210,000 af based primarily on the assumption that no natural flow will be available for recharge in the Upper Valley and there will be a minimal amount of water available for recharge on the Big/Little Wood Systems. The lower bound considers the minimum amount of flow in the Lower Valley (500 cfs), while the high bound assumes there is sufficient natural flow available in the Lower Valley to exceed the managed recharge capacity (approximately 950 cfs from January 1 to March 31). As the year progresses, efforts will be made, in cooperation with our recharge partners and stakeholders, to focus on maximizing managed recharge with the water available.

III. ESPA Recharge Program Projects and Buildout Activities

The IWRB is focused on the development of additional recharge capacity throughout the ESPA to meet the managed recharge goal of an average 250,000 af/yr. For managed recharge projects involving infrastructure improvements to which the IWRB provided funding, a Memorandum of Intent (MOI) was developed to establish a long-term agreement (twenty years) between the IWRB and the entity implementing the project. The MOI acknowledges: 1) the IWRB provided financial assistance for a project; and 2) the entity agrees to deliver and prioritize delivery of the IWRB's recharge water as compensation for financial assistance from the IWRB.

ESPA Managed Recharge Infrastructure Project Summary

The IWRB allocated over $20 million dollars from 2013 through fiscal year 2019 for infrastructure improvements to increase managed recharge throughout the ESPA. For the fiscal year 2019, the IWRB budgeted $8 million for managed recharge infrastructure projects and investigations. The status of the current projects in the Lower and Upper Valleys is included in Tables 2 and 3, respectively. A summary of the projected projects is presented in Tables 4.

Table 2. Current IWRB ESPA Managed Recharge Projects - Lower Valley						
IWRB Partner	**Project Name**	**Project Type**	**Status**	**Approved Funds**	**Scheduled Completion**	**Description /** Key Items
AFRD2	Dietrich Drop Hydro Plant Winter By-pass	Design / Construction	Active	$1,500,000	Spring 2020	**Winter recharge by-pass of the Dietrich Drop Power Plant** • Finalize cost and project schedule – May 2018 • FERC review of improvements – Fall 2018 • Start Construction – Fall 2018
AFRD2	MP 28 Hydro Plant Tailbay	Design / Construction	Active	$1,400,000	Spring 2019	**Isolating tailbay and improving forebay of the hydro plant during winter recharge** • Design Completion – Sept 2018 • Start Construction – Oct 2018 • Cofferdam for winter by-pass – Nov 2018
North Side CC	Hydro Plants (4) Improvements for Winter By-pass	Design / Construction	Active	$5,074,581	Dec 2018	**Winter recharge by-pass of the hydro plants between the Milner Pool and Wilson Lake** • Phase I const. complete – Mar 2018 • FERC approval for const. – Apr 2018 • Contractor hired - July 2018 • Construction started – Aug 2018
BLM	Wilson Canyon & MP 29 Right-of-Way	EA / Investigation	Active	$100,000	Dec 2018	**BLM Right-of-Way for Wilson Canyon & MP29 Site** • Meet with BLM concerning the Draft EA – Sept 2018 • Public Comment – Oct/Nov 2018 • Final EA / Easement – Dec 2018
North Side CC	Wilson Canyon Site	Design / Construction	Active	$1,900,000	Spring 2019	**Design & construction of recharge site** • Design completed & Bid advertisement – Sept 2018 • Start construction potentially in the canal - Nov 2018 • Start work outside the canal – Jan 2019 (Dependent on BLM Right-of-Way)

Table 3. Current IWRB ESPA Managed Recharge Projects - Upper Valley						
IWRB Partner	**Project Name**	**Project Type**	**Status**	**Approved Funds**	**Scheduled Completion**	**Description /** Key Items
Fremont-Madison ID	Egin Lakes Phase II	Construction	Active	$580,000	Fall/Winter 2018	**Construction of Egin Lakes Phase II - recharge capacity expansion** • Est. BLM approval – Aug 2018 • Construction on new recharge areas – Fall 2018 (after BLM approval)
Farmers Friend Irrigation Co.	H. Jones Site	Construction	Active	$170,000	Fall 2018	**Construction of recharge site & monitoring plan** • Evaluation of site complete – Jan 2018 • Start of construction – Aug 2018 • Draft GW monitoring plan submitted to IDEQ – Aug 2018
Great Feeder Canal Co.	Ward Site	Construction	Active	$120,000	Fall/Winter 2018	**Construction of recharge site** • Evaluation of area complete – Jan 2018 • Start of construction – Oct 2018 • Draft GW monitoring plan – Sept 2018
Butte Market Lake Co.	Injection Well Test	Testing / Construction	Active	$110,000	Fall 2018	**Development of injection well** • BMLCC System Evaluation – Feb 2018 • Develop Design – Sept/Oct 2018 • Install injection well – Fall 2018
New Sweden ID	New Sweden Site Testing & Groundwater Monitoring Plan	Evaluation of Sites	Active	$200,000	2018	**Testing potential sites on the New Sweden system and development of GW monitoring plans if necessary** • Approved $200,000 for testing of sites and a GW Quality Monitoring Program – May 2017 • May 2018 – Testing of Porter Pit complete – site is not suitable for managed recharge

Table 4. Projected Lower & Upper Valley - IWRB ESPA Managed Recharge Projects						
IWRB Partner	**Project Name**	**Project Type**	**Status**	**Approved Funds**	**Scheduled Completion**	**Description /** Key Items
AFRD2	MP 29 Recharge Site	Design	Planning	None at this time	Fall 2019	**Preliminary Design of potential recharge site at MP29** • Survey data delivered - Feb 2018 • Concept Options and Cost Estimate – Sept 2018 • Design - Spring 2019
North Side CC	Additional Managed Recharge Sites below Wilson Lake	Survey, Design	Planning	None at this time	Fall/Winter 2019	**Preliminary Design of potential recharge site** • Staff Evaluation and additional survey data – Summer 2018 • Survey Data – Oct/Nov 2018 • Design and Cost Estimate – Fall/Winter 2018
	Upper Valley – Large Scale Recharge Project	Evaluation	Planning	None at this time	Fall/Winter 2018/2019	**Evaluation of the Upper Valley to determine the potential of developing a large scale managed recharge project** • Analysis of available data – Spring/Summer 2018

Memorandum

To: Idaho Water Resource Board

From: Randall Broesch P.E.

Date: August 28, 2018

Re: Mountain Home Air Force Base Sustainable Water Supply Project

REQUIRED ACTION: Staff is seeking approval of a resolution to authorize the execution of the Right-of-Way (ROW) Grant from the Bureau of Land Management (BLM).

Project Concept

The MHAFB currently relies on groundwater for its water supply, but diverts its water from a critical declining aquifer. The Idaho Water Resource Board (Board) intends to develop a pipeline and water treatment facility to deliver water from the Snake River to the MHAFB as an alternate water supply to their existing use of groundwater (Project). In 2014, with support from the Governor and Idaho State Legislature, the Board purchased senior Snake River water rights from the Simplot Corporation to provide a water supply to the MHAFB. The surface water will be diverted out of the C.J. Strike Reservoir and delivered to the MHAFB where it will be treated and used for municipal purposes on the base. The Board is expected to retain the senior water rights and enter into a water utility service contract with the MHAFB for the delivery of water. The Governor's office, the State Legislature, and the Board are committed to supporting the MHFAB as a $1 Billion annual economic generator in the local Idaho economy.

Project Update

BLM ROW Grant – The majority of the property between the Snake River and the MHAFB is federal land administered by the BLM. Since the Board holds the water rights and is responsible for developing the infrastructure to convey water to the base, the Board was required to secure an easement for the project. A final Environmental Assessment (EA) was issued on December 6, 2017 with a signed Finding of No Significant Impact and Record of Decision. Since then a ROW Grant has been issued to the Board for execution.

The ROW Grant is for a 30-year term. The ROW Grant provides a short term ROW width of 100 ft with a permanent ROW width of 75 ft. Both widths cover the 14.4 miles from the shoreline of the C.J. Strike Reservoir to the MHAFB. The ROW Grant does not contain a yearly rental fee. However, as part of the determinations in the EA, the Board will owe the Birds of Prey Partnership a one-time assessment of $58,129 upon execution of the ROW Grant. Also, the terms of the ROW Grant require that the Board submit a Plan of Development (POD) for approval prior to the BLM issuing a Notice to Proceed for construction. Staff will prepare the POD in conjunction with the Contractor once a Contractor has been selected to perform the work. Finally, the executed ROW Grant can be assigned to a third party. Staff recommends the Board execute the ROW Grant with the BLM that will secure the pipeline corridor for the project.

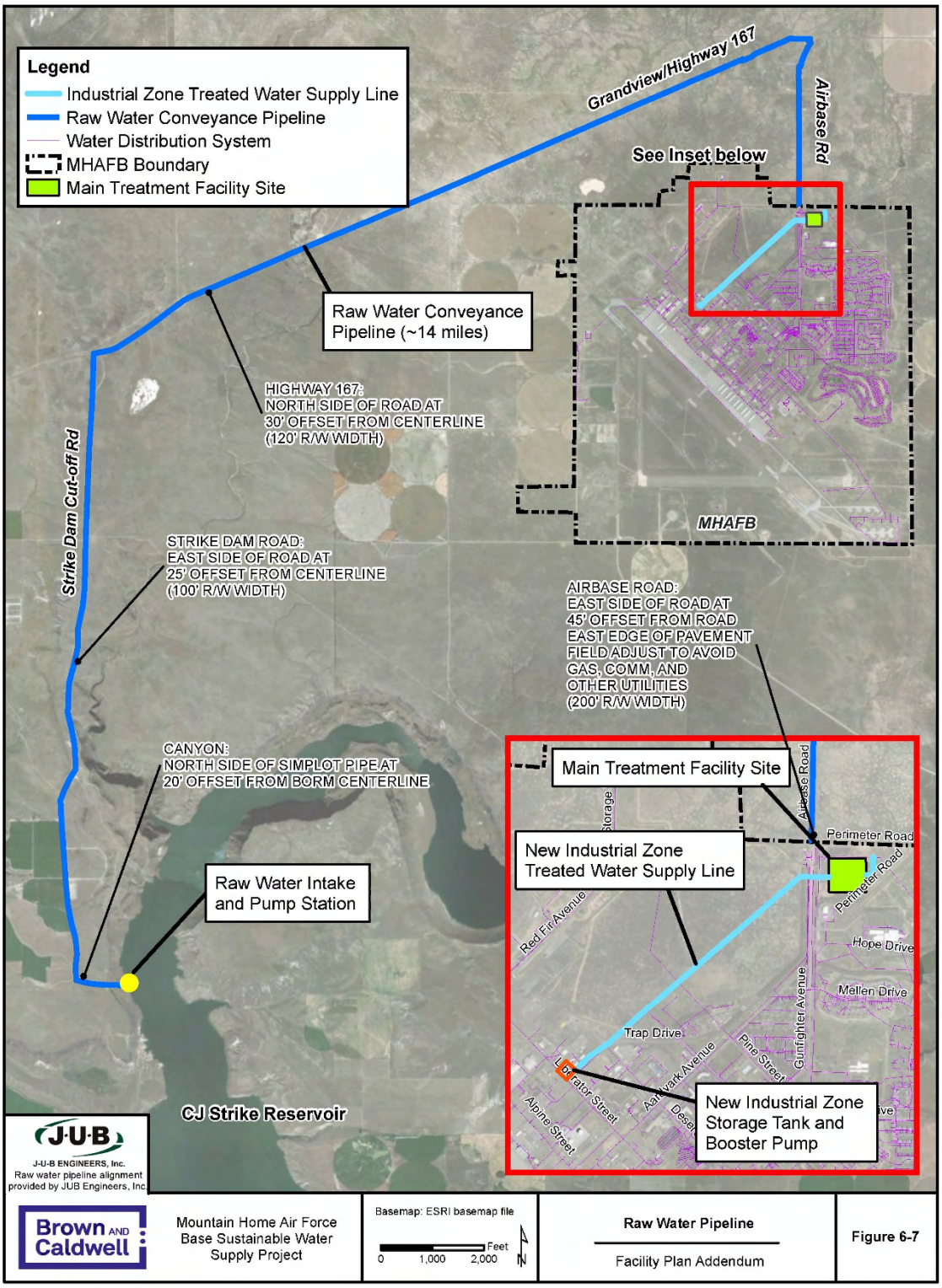

Figure 1.BLM ROW Grant Vicinity Map

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF MOUNTAIN HOME AIR FORCE BASE SUSTAINABLE WATER SUPPLY PROJECT	RESOLUTION TO APPROVE FUNDS AND PROVIDE SIGNATORY AUTHORITY TO EXECUTE THE RIGHT-OF-WAY GRANT

WHEREAS, the Idaho Water Resource Board ("Board") is a constitutional agency of the State of Idaho and empowered by Idaho Code §42-1734 to acquire, purchase, lease or exchange land, rights, water rights, easements, franchises and other property deemed necessary or proper for construction, operation and maintenance of water projects, and

WHEREAS, the Mountain Home Air Force Base ("Base"), as well as surrounding agricultural wells and municipal wells, draw their supply from the Mountain Home Aquifer; and

WHEREAS, the Idaho Department of Water Resources ("IDWR") estimates that the rate of withdrawal from the Mountain Home Aquifer exceeds the rate of natural recharge to the aquifer and due to declining ground water levels, IDWR established the Cinder Cone Butte Critical Ground Water Area in 1981 and the Mountain Home Ground Water Management Area in 1982; and

WHEREAS, the State of Idaho recognizes the economic value of the Base to the local and state economy and supports the United States military in achieving its national security functions; and

WHEREAS, the Board purchased senior Snake River water rights and is coordinating with the Military to develop a pipeline and water treatment plant (project) to deliver treated Snake River water to the Base as a long-term sustainable water supply to support the Base and its mission; and

WHEREAS, an Environmental Assessment (EA) was completed and a Finding of No Significant Impact (FONSI) was issued by the BLM to construct a pipeline for the project in the Morley Nelson Birds of Prey (BOP) National Conservation Area (NCA); and

WHEREAS, in accordance with the Enhancement Framework Plan specified in the EA, which allows the BLM to assess the impacts from construction and calculate a monetary value for enhancements to the NCA. The BLM calculated an enhancement cost of $58,129 for constructing a 14.4 mile pipeline across federal lands from the C.J. Strike Reservoir to the MHAFB. The Birds of Prey Partnership (BOPP) is the recipient of the enhancement costs from the Board and the enhancement costs will support the BOPP's mission to enhance the Morley Nelson BOP NCA; and

WHEREAS, the BLM has issued a Right-of-Way Grant to the Board to construct the 14.4 mile pipeline on BLM property; and

WHEREAS, the funding authorized by the Board for project development services is disbursed from the following accounts: $1.365 Million from the Revolving Development Account, $1.9 Million from the Secondary Aquifer Planning Management and Implementation Fund; and

WHEREAS, the Board executed a resolution on March 23, 2018 to issue expenditures of $58,129

to the BOPP from the Secondary Aquifer Planning Management and Implementation Fund;

NOW, THEREFORE BE IT RESOLVED that the Board execute the ROW Grant with the BLM to construct a 14.4 mile pipeline from the C.J. Strike Reservoir to the MHAFB. Upon execution of the ROW Grant the Board will pay enhancement costs of $58,129 to the BOPP from the Secondary Aquifer Planning Management and Implementation Fund; and

NOW, THEREFORE BE IT FURTHER RESOLVED that the Board authorizes its chairman or designee, Brian Patton, Board Executive Officer, to execute the necessary agreements or contracts to continue with project development services and for the project enhancement costs associated with the Final Environmental Assessment.

DATED this 14th day of September, 2018.

_____
ROGER CHASE, Chairman
Idaho Water Resource Board

ATTEST:

_____
VINCE ALBERDI, Secretary

Memorandum

To: Idaho Water Resource Board

From: Amy Cassel

Date: September 4, 2018

Re: Preserving General Provision High Flow Use in Lemhi River Basin

REQUIRED ACTION: No action is required at this time. The following information is provided for information only.

Background

The Lemhi River Basin (Basin 74) Water Users have extended their water supplies by diverting high flows exceeding the amount required to satisfy all existing water rights. This practice has been especially important in Basin 74 which lacks any surface water storage facilities. In the absence of storage facilities, water users divert high flows onto their place of use and the ground acts as a reservoir that saturates the root zone of the soil and has the effect of supplementing surface flows later in the irrigation season when natural flows decrease. While the amount of available high flow varies from year to year, water users generally divert up to their ditch capacity for as long as the high flow is available. The diversion of high flow ends when the surface water rights go into regulation and rights are administered by priority.

Basin 74 Water Users filed claims in the SRBA seeking to have high flow water use decreed as individual water rights. The SRBA Court held that the previous Lemhi Decree did not create water rights for high flow use and instead the Court decreed a Basin 74 General Provision that included a "high flow" provision allowing for the historic practice of high flow use to continue.

The use of high flow is limited to those times when there are flows in excess of the quantity of water needed to fully satisfy all existing rights. As flows diminish, General Provision High Flow water use is incrementally shut off to provide water to water right holders. As each new water right is issued in Basin 74, those new rights slowly reduce the quantity and duration of high flows available to water users each season and thus over time the General Provision High Flow water will be diminished. The Basin 74 Water Users would like to find a means to protect and preserve the General Provision high flows.

The goal of preserving the General Provision High Flow use may best be addressed in the State Water Plan. The State Water Plan, a policy document formulated and adopted by the IWRB, would require that IDWR comply with the document when reviewing new applications for water right permits in Basin 74.

Several Lemhi water users attended the IWRB meeting on May 18, 2018 to present this topic and discuss the idea of adding language to the State Water Plan. During the September 14, 2018 IWRB meeting in Salmon Lemhi water users will provide an update on their progress.

WHITE PAPER

To: Basin 74 Water Users

From: Ann Y. Vonde, Deputy Attorney General

Date: February 27, 2017

Re: Preserving General Provision High Flow Use and Criteria for Eligibility for Salmon Wild and Scenic Subordination Set Aside

Statement of the Issues

On December 7, 2016 Deputy Attorneys General Clive Strong and Ann Vonde, along with the Idaho Water Resource Board ("IWRB") Chairman Roger Chase, met with various Basin 74 Water Users in Salmon, Idaho to discuss several water-related issues. After hearing discussion at the meeting, our understanding of the issues are : (1) that the Basin 74 Water Users would like to preserve the historic practice of using high flows under the Basin 74 High Flow General Provision and, (2) that they would like to craft a solution that would ensure the subordination protections set forth in the Partial Decree for Federal Reserved Water Right 75-13316 and 77-11941 for the Salmon Wild and Scenic River ("Salmon Wild and Scenic Partial Decree") are used in accordance with the goals and purposes of the Basin 74 Water Users.

Background on the Issues

1. General Provision High Flow Use

The Basin 74 Water Users have, for decades, extended their water supplies by diverting high flows exceeding the amount of water required to satisfy all existing water rights. This practice is especially important in Basin 74, which lacks surface water storage facilities. In the absence of storage facilities, irrigators divert high flows onto lands that are authorized as places of use under existing water rights. The ground acts as a reservoir that saturates the root zone of the soil and has the effect of augmenting or supplementing surface flows during the later portion of the irrigation season. While the amount of high flow water varies from year-to-year, the Basin 74 Water Users make an effort to divert as much high flow water as their ditches can accommodate. High flow water is shared collectively among the Basin 74 Water Users and distribution of high flow water is done informally.

The Basin 74 Water Users filed 294 claims in the SRBA seeking to have high flow water use decreed as individual water rights. The SRBA Court held, however, that the previous Lemhi Decree did not create water rights for high flow use and that, under the principle of res judicata, the SRBA Court was precluded from decreeing high flow water rights in the SRBA. Instead, the

SRBA Court decreed a Basin 74 General Provision that included a "high flow" provision allowing for the historic practice of high flow use to continue in the basin. The Basin 74 High Flow General Provision does not create a water right but explains how high flow use will be administered.

The use of high flow water is limited to those times when there are flows in excess of the quantity of water needed to fully satisfy all existing water rights. As flows diminish, General Provision High Flow use is incrementally shut off to provide water to water right holders. Each new water right issued in Basin 74 takes precedent over General Provision High Flow water use. Thus, each new water right issued in Basin 74 slowly reduces the quantity and duration of high flows available for use each season. Thus, over time General Provision High Flow water will be diminished.

The Basin 74 Water Users expressed concern at our meeting regarding this diminishment of historic high flow water use. The Basin 74 Water Users would like find a means for preserving the General Provision high flows.

2. Wild and Scenic River Agreement

In 2004, the SRBA Court issued the Salmon Wild and Scenic Partial Decree. It sets forth the United States' instream flow water right for the Salmon River and includes several provisions that subordinate the right to future development. The subordination provision pertinent to the discussion here is found in Section 10.b.(6).(A) of the Salmon Wild and Scenic Partial Decree. It states that the water right will be subordinated to water rights acquired after the effective date of the Wild and Scenic Stipulation "with a total combined diversion of 150 cfs (including not more than 5,000 acres of irrigation with a maximum diversion rates of 0.02 cfs/acre)."[1] In this provision, the United States agreed to subordinate its water right to 150 cfs of future uses (100 cfs of irrigation and 50 cfs of other uses).[2] The purpose of Section 10.b.(6).(A) was to preserve an opportunity for future development in the Salmon River basin. Without the subordination protection of Section 10.b.(6).(A), new water rights could be called out by the Wild and Scenic right and would provide only a tentative water supply.

[1] For brevity only the 150 cfs provisions of Section 10.b.(6).(A) is discussed. However, the analysis laid out herein also applies to the 250 cfs subordination set aside found in Section 10.b.(6).(A).(ii)

[2] The 150 cfs is a "combined diversion rate." The plain meaning of "combined diversion rate" is that is must include at least two separate categories of diversion rates that total 150 cfs. The parenthetical information "(including not more than 5,000 acres of irrigation with a maximum diversion rate of 0.02 cfs/acre)" makes clear that a portion of the "combined diversion rate" includes irrigation uses totaling 100 cfs, which is calculated by taking "5,000 acres . . . with a maximum diversion rate of 0.02 cfs/acre." The remainder of the "combined diversion rate" is calculated by subtracting the 100 cfs of irrigation use from the 150 cfs total combined rate to come to 50 cfs for non-irrigation uses that are not "described in paragraphs (3) through (5)" of Section 10.a.

The Basin 74 Water Users recognize the importance of the Section 10.b.(6).(A) subordination set aside in ensuring a supply of water for future development in the Salmon Basin. They expressed interest in developing a means to ensure the limited supply of subordination water is used to support the goals of the local water users.

Discussion

The Basin 74 Water Users seek to shape future water use in Basin 74 in accordance with local needs and local objectives. The Basin 74 Water Users have expressed a desire to preserve historic General Provision High Flow use and to judiciously allocated the Wild and Scenic subordination set aside. Although factually and legally distinct, addressing these two issues in tandem provides an opportunity for the Basin 74 Water Users to holistically address future allocation of water in Basin 74.

1. Preserving General Provision High Flow Use

Addressing the number and types of new water rights that are approved in Basin 74 would reduce the incremental reduction of General Provision High Flow Use discussed above. The Basin 74 Water Users could consider limiting the issuance of new water rights in Basin 74 to those that are found to be eligible to enjoy the subordination protections of Section 10.b.(6).(A) of the Wild and Scenic Agreement. IDWR would issue new water right permits only up to the 100 cfs/5,000 acres (irrigation) and 50 cfs (industrial, commercial, and other) amounts set forth in Section 10.b.(6).(A). Once those amounts were used, new water rights would be junior to the Salmon Wild and Scenic water right and would be subject to curtailment.[3] This would preserve the opportunity for some new water development in the basin, but would also effectively limit the amount of new development that could affect General Provision High Flow water use.

The goal of preserving General Provision High Flow use is best addressed in the State Water Plan. The State Water Plan is a policy document that is formulated and adopted by the IWRB. All state agencies must "exercise their duties in a manner consistent with the comprehensive state water plan. These duties include, but are not limited to the issuance of permits, [and] licenses." I.C. § 42-1734B(4). Thus, when reviewing new applications for water right permits, IDWR would have to comply with the State Water Plan.

The IWRB may initiate changes to the State Water Plan on its own initiative. I.C. § 42-1734B(7). Using the State Water Plan process outlined in I.C. § 42-1734B, the Basin 74 Water Users would work with the IWRB to develop either changes to the Part A portion of the plan, or a new Lemhi River Part B component. The proposed changes would be presented to the local

[3] Water rights enjoying subordination under Section 10.b.(A).(1)– (5) and Section 10.b.(C) Wild and Scenic Agreement would be excepted from this preclusion.

communities at public hearings and a public comment period is also provided. I.C. § 42-1734A(1). After adoption by the IWRB, changes to Part A would be presented to the Legislature for review and would become effective automatically unless amended or rejected by law within 60 days. Idaho Const. Art. XV § 7. A new Part B component would also be subject to review or amendment by the Legislature but would not become effective after 60 days. Idaho Const. Art. XV § 7, I.C. § 42-1734B(6).

Changes to Part A of the State Water Plan would likely be succinct. They would contain some historical or contextual background but would not provide an opportunity to discuss other issues. Changes to Part A could be drafted relatively quickly and have the advantage that they would become effective automatically after 60 days if the Legislature does not act on them. Developing a Part B plan is more involved and would include discussion of Basin 74 as a whole. Part B plans contain, among other things, descriptions of existing and planned uses, discussions of goals and objectives, protected and natural river designations, and descriptions of the water resource in genera. *See* I.C. § 42-1734A(2)–(7). Development of a Part B plan would require considerable time and effort on the part of IWRB staff and would take more time to develop and draft. In addition, Part B components do not become effective after 60 days but must be affirmatively acted on by the Legislature.

The Basin 74 Water Users could choose either the Part A or Part B addition to the State Water Plan. In considering Part A or Part B addition to the State Water Plan, the Basin 74 Water Users should consider how quickly they would like to see these changes implemented, how important they view the 60 day Legislative automatic approval timeframe, and whether they see benefits to having a broader or more narrow discussion of water use issues in Basin 74. Alternatively, they could consider making a change to Part A and then later adding a Part B component if they found it beneficial.

2. Allocation of the Section 10.b.(6).(A) Subordination Set Aside

If the amount of new development in Basin 74 is limited as discussed above, qualifying for the Section 10.b.(6).(A) subordination set aside will be required before a new water right may be issued. Therefore, the Basin 74 Water Users should develop criteria to further define and interpret the language of Section 10.b.(6).(A) to achieve local objectives for new development in the basin. Unlike the General Provision High flow issue, use of the Section 10.b.(6).(A) subordination set aside affects the entire Salmon River basin. These criteria should be developed with input from all affected water users.

The goal of Section 10.b.(6).(A) was to promote economic development in the Salmon Basin by providing a reliable water supply for *new* water uses. It was not contemplated that the subordination set aside of Section 10.b.(6).(A) would be used on lands already covered by existing water rights. The concept of conservation of water resources is firmly established in

Idaho water law. Irrigation water rights are normally limited to a diversion rate of 0.02 cfs of water per acre. Idaho Code Section 42-202(6) states: "no one shall be authorized to divert for irrigation purpose more than one (1) cubic foot of water per second of the normal flow for each fifty (50) acres of land to be so irrigated . . . unless it can be shown to the satisfaction of the department of water resources that a greater amount if necessary." In addition, Section 10.b.(6).(A), makes clear that, to enjoy subordination, an irrigation right must have "a maximum diversion rate of 0.02 cfs/acre."

The concept of using no more than 0.02 cfs of water per acre would provide a clear and simple criteria for determining who could enjoy subordination under Section 10.b.(6).(A). The Salmon Basin water users could consider imposing criteria such as the following:

- Any water right application with an irrigation purpose of use seeking a diversion rate of more than 0.02 cfs of water per acre cannot enjoy subordination under Section 10.b.(6).(A) of the Wild and Scenic Partial Decree.

- Any water right application listing a place of use that is already covered by water right(s) with a (combined) diversion rate of at least 0.02 cfs of water per acre is precluded from enjoying subordination under Section 10.b.(6).(A) of the Wild and Scenic Partial Decree.

- Any water right application with an irrigation purpose of use that is determined by IDWR to enjoy subordination under Section 10.b.(6).(A) of the Wild and Scenic Partial Decree under these criteria must be deducted from the 100 cfs portion of the subordination set aside.

- IDWR is not precluded from amending, dividing, or adjusting a new water right application to allow a portion of the new water right application to enjoy subordination under Section 10.b.(6).(A) of the Wild and Scenic Partial Decree, so long as the conservation of water resource criteria listed above are met and the right is conditioned to clearly indicate administration of the portions enjoying and not enjoying subordination.

These criteria would ensure that water users who are seeking to invest in new irrigation projects in the basin on lands that have not been irrigated before will enjoy subordination. It would also allow water users whose existing water rights do not provide a diversion rate of 0.02 cfs of water per acre to boost productivity by bringing the diversion rate on those acres up to 0.02 cfs of water per acre. Given the limited amount of subordination set aside water available it makes sense to husband the water by requiring conservation.

These criteria also help achieve the Basin 74 Water Users' goal of preserving General Provision high flow use by preventing new water rights, whose purpose is to formalize their

historic general provision high flow use, from enjoying subordination under Section 10.b.(6).(A). Because high flow use is tied to existing water rights, a person seeking to formalize their high flow use by getting a water right will necessarily have existing water rights on the place of use. The new application would be additive to those existing water rights and, in most cases, would bring the total diversion rate for the place of use to more than 0.02 cfs of water per acre.

The 50 cfs portion of the subordination set aside is for any non-irrigation uses not "described in paragraphs (3) through (5) above."[4] Such uses could include future industrial, commercial, and other uses. Although not discussed at our meeting, future uses enjoying subordination under the 50 cfs portion of Section 10.b.(6).(A) could also have impacts on general provision high flow use. Therefore, the Salmon Basin water users should consider developing additional criteria to govern distribution of the 50 cfs portion of the subordination set aside. Further discussions on this issue need to occur before any recommendations can be made regarding specific criteria.

Criteria defining who can enjoy subordination under Section 10.b.(6).(A) could be memorialized either in the State Water Plan or in statute. As discussed above, the State Water Plan must be followed by IDWR when issuing new water right permits. Implementing the additional criteria in the State Water Plan would ensure that the local water users were informed and involved in the development of the changes through the public comment period. However, because this issue involves the whole Salmon Basin, the changes would need to be made in Part A of the State Water Plan rather than in a new Part B component that covered only the Lemhi River.

The criteria could also be memorialized in legislation. There is precedent for using the legislative process to memorialize water right approval criteria. For example, I.C. § 42-203C sets forth criteria that must be followed for the distribution of Swan Falls trust water. The legislative process would provide opportunity for local input, but would also be subject to legislative politics that could include other outside influences.

Conclusion

The Basin 74 Water Users have expressed an interest in preserving General Provision High Flow use and further defining what water rights will be eligible to enjoy subordination s under Section 10.b.6.(A) of the Wild and Scenic Agreement. The General Provision High Flow issue would be best addressed by an addition or change to the State Water Plan that describes the

[4] Paragraphs 10.b.(3)–(5) provide subordination for water right claims filed in the SRBA as of the date of the Stipulation, applications and permits on filed with IDWR as of the date of the Stipulation, *de minimis* domestic uses, *de minimis* stockwater uses, and certain municipal uses. In addition, irrigation uses cannot enjoy subordination under the 50 cfs portion of the set aside because the 150 cfs is a combined diversion rate and irrigation is dealt with in the parenthetical setting forth the 100 cfs portion.

local importance of high flow water use and further defines the issuance of new water right permits in Basin 74. The Section 10.b.(6).(A) subordination set aside issue could be addressed by the development of eligibility criteria that could be described either within the State Water Plan or in statute.

This paper has been prepared at the request of the Basin 74 Water Users. Therefore, this document does not necessarily reflect the views of any state agency or official.

Memorandum

To: Idaho Water Resource Board

From: Cindy Yenter

Date: September 4, 2018

Re: Water District 170 Update

REQUIRED ACTION: No action is required at this time. The following information is provided for information only.

Background

The Salmon Field Office was re-opened in June, 2016 and the WD170 Watermaster was relocated to provide local support to WD170 sub-districts and other Salmon area water districts. The Salmon Field Office offers IDWR customer service for Lemhi and North Custer County water users and facilitates Idaho's continued progress toward full satisfaction of the Wild and Scenic mandates.

2017 Highlights

- Implementation and enforcement of the Basin 73 (Pahsimeroi) ground water measurement order
- Pahsimeroi tributary diversion inventories and measurement compliance

2018 Highlights

- Measuring device compliance in WD71 (Stanley Basin) and WD72D (Clayton Area, EF Salmon River)
- Expansion of Water District 170 to include Basin 74 (Lemhi Basin)
- Preparation and pending issuance of Basin 74 Measurement Order

Next Steps

- Public information meetings regarding expansion of WD170 to include Basin 75 (Main stem Salmon and tribs from Ellis to Middle Fork) – Fall 2018
- Formation of steering committee to recommend B75 sub-district boundaries – Fall/Winter 2018/19
- Basin 75 inventories – Summer 2019
- Hearings to form Water Districts in B75 - 2019