

Governor's Salmon Workgroup Meeting
May 27, 2020
Workgroup Meeting via Zoom

Workgroup Roll

- Richard Scully
- Justin Hayes
- Brett Dumas
- Joe Oatman
- David Doeringsfeld
- Aaron Lieberman
- Roy Akins
- Merrill Beyeler
- Brian Brooks
- Senator Dan Johnson
- Representative Fred Wood
- Kara Finkler
- Mark Menlove
- Paul Arrington
- Stacey Satterlee
- Will Hart
- John Simpson
- Chad Colter
- Jim Yost
- Mike Edmondson
- Katherine Himes

Small Group Report out: *Habitat*

Merrill Beyeler gave presentation for the group:

- Goal is to restore salmon and steelhead to abundance
- Began with an 1857 quote noting that there were only 4 antelope seen on a 300+ mile journey from Lemhi.
 - Quotes a 2019 hunting story
 - Relation is to the habitat we have seen in the area
- Group worked towards
 - Creating an overarching State policy
 - Statement to protect existing watershed functions and habitats that salmon/steelhead need
 - Implement a program of sufficient scale to restore the watershed functions and habitat that have been lost degraded
 - Do so with an overall goal of abundant populations and delisting as a step along the way
 - Creating a targeted policies and programs

- *Habitat:*
 - Restore: undertake programs and projects to restore
 - Advocate for all habitat in and outside of Idaho
 - Identify limiting elements
 - Have good inventory of habitat
 - Connect: undertake programs and projects to reconnect or improve connectivity within tributaries and to mainstem waters
 - Good inventories of connectivity breaks in all basins
 - Identify limiting habitat
 - Protect
 - Develop policies and programs to protect existing habitat and functions that are relied on
 - Good inventories
 - Resources to help community
 - Provide policy regarding coordination across Idaho agencies
 - Predators
 - Advocate for all habitat in and outside of Idaho
 - Good inventory of where predation occurs
 - Identify factors that favor predation
 - Identify actions
 - Water management
 - Sufficient flows
 - Water quality
 - Meet water quality standards – including temperatures
 - Good inventory
 - Identify limiting water quality
 - Coordination between agencies and governments
 - Protect watershed functions that are relied upon by salmon/steelhead
 - Policy regarding restoring connectivity
 - Public education
 - Expand existing programs with new funding
 - Outreach and general public engagement
 - Learning opportunities
 - State support for effort of private land
 - Possible opportunity for policy
 - Collaborative efforts
 - Increase funding/capacity
 - Should be reliable for a long-term period
 - Possible pursuit of economic stimulus activities
 - Advocating for increased capacity
 - *See above*

Justin Hayes: Habitat workgroup member

- great opportunity to work with folks and see different perspectives come together
- noted that they tried to stay at high level with policy stuff and not go down “bunny” holes

- also tried to represent State as whole so they could find things to discuss with Workgroup so they could create an umbrella for policy recommendations to incorporate everything

Q&A: *Habitat*

Paul Arrington:

- Q Were there any issues/things that the group discussed that they could not come to consensus on?
- A Mike Edmondson: from notes, there was consensus
- A Stacey Satterlee: points out who asked the question and that the plan underlies the necessity to work with the water users
- Tried to not go down to granular level
 - Discussed at outset what they would do if they did disagree
 - Stay general to find recommendations that work for everyone
- A Mike Edmondson: no stream flows or things like that but broad general language
Could be good so that the policy could be implemented at a site-specific level

Brian Brooks:

- Q Some are within and outside of Idaho, had this question in hydro workgroup – what can the governor control/prevue over versus advocacy role?
- A Mike Edmondson: granular – predators besides general policy recommendation they were talking about predation in Idaho
- A Justin Hayes: reducing predation of all types. Be an advocate broadly for things that affect Idaho’s fish
- A Mike Edmondson: everything should be categorized correctly but right now its important to get things down on paper

Mark Menlove: process focused question

- Q Is the plan that we will as a whole group take this framework and try to narrow it down to specific recommendations - is there some other processes in mind for how we take the recommendations from the subgroups and put them together?
- A Mike Edmondson: defers to answer till later in the meeting. Will discuss later

Brett Dumas: regarding habitat inventory

- Q Did you have a discussion on where you thought we were, as a State, on what our conditions related to habitat productivity (etc.) within the State? And do we have an opportunity to prioritize?
- A Justin Hayes: we had imperfect information and assumed that there was more information available that they didn’t know but they went forward with the limited life stages that are affected now
- A Stacey Satterlee: felt lame having “papery” things (not on the ground) things but without proper knowledge how are you supposed to make policy?
- A Mike Edmondson: will have something more concrete prior to July meeting

Joe Oatman:

- Q perusing economic stimulus activities, what does that involve

A Justin Hayes: needs to be predictable from year to year

Richard Scully: comment, enjoyed presentation and the Lemhi is beautiful area

Mike Edmondson: has 800-page document to dive into if Richard would like

Aaron Lieberman:

Q Predation related recommendations, any key habitat specific factors related to predation that the group discussed?

A Mike Edmondson: man-made alterations that create increased areas of predation

Small Group Report out: *Harvest*

- Highlighted Tribal treaties
 - Equitable harvest
 - Cooperation between agencies to manage/regulate harvest:
 - Harvest allocations being representative of Idaho's efforts/obligations under ESA
 - Allocations should be equitably apportioned recognizing cultural and economic benefits that terminal fisheries provide
 - Harvest of wild salmon and steelhead on LCR should be minimized, if not eliminated
 - Should consider all options to address and manage these needs including getting Idaho a seat at the table and through case law precedence established by U.S. v Oregon.
 - Idaho must recognize importance of salmon to the tribes by honoring their treaty rights and prioritizing tribal treaties and inherent harvest rights.
- Mentioned harvest moratorium needs to be addressed
 - Group decided that they would not come to a consensus
- Mentioned predation

Q&A: *Harvest*

Q Justin Hayes: did commercial fishing and allocation come up in any substantial way? And in regarding down river and in Idaho discussing something and spill take? (I couldn't hear on the last part of the question)

A Paul Arrington: did not spend a lot of in-depth time talking about gear

Caller:

Q eliminating or further reducing harvestable fish in Idaho? Should that be talked about?

A Would mean that no one would be fishing in Idaho- there are incidental take

Justin Hayes: follow up

Q question wasn't about further restricting tribal harvest but referenced what is happening downstream (at the mouth of the river). Did they group have a discussion about the need to regulate downstream harvest?

A Caller: harvest is so minimal, counted, recounted, and reported in Idaho. The problems I see with doing this work is downstream. The exploitation rates for downriver is 12% of Idaho fish being taken in CR. Idaho can remove roughly 3.5%. Difference is huge so we should get people to consider being as exact as we

are in Idaho so that we know if we are going over/under. Monitoring or terminal fisheries. A population for Idaho could benefit could reducing pressure on them downriver. This has been a struggle for years with numerous court cases. It's time Idaho look at other means to get ESA to work for us.

David Doeringsfeld:

Q Justin brought up gear type, regarding netting on LSR, is that something that would make a difference?

A Caller: notes there has been numerous studies on net sizes and moving away from large holed nets to tube nets. Group discussed nothing about netting. It is beyond his knowledge; this is the extent of it.

A Lance Hebdon: an issue that a couple of folks brought up is netting fish down river. It is important that nontreaty fisheries have shifted harvest from commercial (net) to selective sport fisheries. This affects all runs differently. Regarding selective gears, net mesh size is a tool they use to allow steelhead to escape in attempt to capture fall chinook. Oregon and Washington have shifted towards selective sport fisheries which are mark selective (fishery only).

Q Does commercial fishing include tribal?

A No

Q For tribal fishing, is the difference between selective v nonselective an issue?

A Still applies, how and where you fish and net determine what it encounters and how "selective" it is in catching the intended fish.

A Joe Oatman: there didn't seem to be a recognition of case law relative to allocation particularly as it related to treaty fisheries on the main stem. This may be an additional area of interest to study as we move forward. Court case in Idaho relative to equitable allocation between three states. Eastern Oregon court case. Regarding tribal rights and treaty, looks like a good start but should specifically find out that there are commercial fisheries, Nez Pierz.

Richard Scully: Heard that there was going to be some lower river fishing but that they can't keep nets in the river for longer than 45 minutes.

Q How many smolts do we lose from Bonneville to granite?

A Lance Hebdon: varies depending on stock but 70-75% generally

A Caller: there are numbers in the phase one report in the ten-year average

Small Group Report out: Hatchery

Brett Dumas gave presentation for the group

- Noted that group was able to have constructive conversations despite the different views
 - Will talk about the level on consensus among the different topics
- Group took all policy related proposals and categorized them into 6 draft policy statements
 - 1) Funding for agencies responsible for hatchery mitigation programs
 - Prioritized a list of areas in need
 - Questions posed on this topic: can we provide adequate water? Do we need a new pipeline or a new hatchery?
 - Relates to water issues & could be implemented immediately

- Governor has some influence over outcome
- 2) We have a lot of aged hatcheries that need to be addressed for them to meet their goals
 - Management plans, infrastructure and enabling the hatchery to fulfil its mission
 - Need to secure funding
 - Governor has the ability to address this in the short term
 - Recognizes that the result may not be notable until longer but can be address in the short term
 - Governor has some influence over outcome
 - Relates to a broader scale of operation and maintenance of hatcheries
- 3) Regarding release sites
 - An evaluation of the release sites should be done then determine if they should be prioritized
 - Near consensus however concern that it counters recommendations presented in Hatchery Scientific Review Group (HSRG) and the Idaho LSRCP
 - Could be implemented immediately
 - Governor would have some control over the outcome
- 4) Develop an expanded supplementation effort of hatchery returns in targeted areas to increase natural production
 - No consensus
 - Develop an integrated program where hatchery genetics are augmenting areas that do not have current wild fish populations
 - presenter noted there was contention within the group members about when to intervene
 - This may be limited by EPA/ESA
 - Could be implemented soon but that the Governor had minimal affect over the outcome
- 5) Increase hatchery production beyond current goals
 - no consensus
 - evaluate potential to increase returns to idea to increase hatchery production
 - provide put & take or ceremonial hatchery for blocked areas
- 6) adaptively manage production for a diversity of fish populations
 - plan to shift away from hatchery when wild fish can meet certain thresholds
 - run by run basis
 - sufficient wild returns would mean ceasing hatchery supplementation
 - long term goal

Scott Hauser: Hatchery workgroup member

- appreciated learning

Richard Scully: Hatchery workgroup member

- recapped draft hatchery recommendations 1-6 and had his own thoughts

rough overview: take care of the two hatcheries and get them to full capacity. Everyone in group was strongly supportive. Releasing smolts where we consistently get higher returns, we'd like to see that continue and maybe expanded. We want to get more fish back in Idaho from our fish hatchery to benefit everybody. We don't want to forego opportunities to recolonize wild fish in areas in which we have not previously done so. Exception to that for me was wanting to do something for the blocked areas.

Brian Brooks: on policy page, red flag was recommendations that ran counter to the hatch scientific review group. Wants to be careful that our recommendations are scientifically defensible. What was the convo surrounding that decision?

Eric Crawford: Hatchery workgroup member comments –

- crux of comments, to not be counter to the previously conducted studies that are rooted in sound science. Expresses concern that the majority of the hatchery recommendations were not aligned with those previous reports.
- Recognizes this is a “complex conundrum” of situation.

Brett Dumas: Hatchery workgroup member comments –

- range of perspectives regarding how we can meet our productivity goals but there may be an opportunity for the larger group, if they would like, to take a deeper dive into this topic.
- Notes that there would not be fall chinook without hatchery.
- There are ways to augment wild fish with hatchery, might not be acceptable to some regardless of whether or not it works.

Jim Yost: Hatchery workgroup member comments –

- very complex issues, there is room for a deeper dive, but we have not gotten there yet.

Q&A: Hatchery

Mike Edmondson:

Q Are there graphs associated?

A Brett Dumas: we have some, but I don't think the group was comfortable with where we put those numbers. So, it will require more time for subgroup to discuss and establish consensus.

Justin Hayes: to Brett regarding point 6

Q The group was realizing that hatcheries weren't part of a long-term solution, or maybe even a necessary solution once we have gotten abundance of harvestable fish. Can you speak more how the committee discussed a managed retreat from a hatchery system?

A Brett Dumas: didn't necessarily see it as a managed retreat. As SARs and wild fish increase, we have to recognize that – we have to have some threshold to determine when we do not need to supplement with wild fish. Thinks we all want to get to abundant, natural returns.

Joe Oatman:

Q Didn't see anything regarding what hatchery fish are to provide for in meeting treaty/nontreaty fishery needs. Was that intentional not to provide additional details?

- A Brett Dumas: no, it wasn't intentional, perhaps we missed it. Maybe that is an oversight on our part to recognize hatchery production and how they meet those allocations.

Roy Akins:

- Q Thinks foundation that we are creating is amazing work. Uses Rapid River as example and its ability to generate mass revenue for their community. This strain would be extinct but for the hatchery. Here's a chance to save a species.
- A Eric Crawford : that's the crux with how complex this issue is. Which are the programs to best invest in?

Scott Hauser: Comments

- I would like to dig deeper into the hatchery scientific review group and the concerns TU has with that. Thinks it is a worthwhile discussion as we delve deeper into policy.

Mike Edmondson to Jim Yost:

- Q how should we go about doing that?
- A Jim Yost: better understand exactly where concerns are. During first discussion: what are those actions that have not been implemented by the states and tribes in relation to SHRG. What would the SHRG say about taking a more aggressive approach to supplementation? We should have discussion on what it is you want exactly from that SHRG discussion.
- A Richard Scully: some hatcheries will have less need (regarding moving away from them) but likely the NFCW hatchery and rapid river may stick around a lot longer because those natural spawning areas are gone.

Report out: *Hydro*

Joe Oatman is presenting and shared his screen (slideshow)

- Couple of documents they produced over the course of their meetings
 - PowerPoint
 - excel spreadsheet that was used to compile all of the policy recommendations involving hydro
 - word document similar to what the other groups provided re their policy recommendations.
- Brian Brooks will have additional info to share with the workgroup.
- (gives Crystal permission to send files to group dependent upon other members objections – there were none)
- Met 8 times for about 6 hours to work on this assignment. There's a certain perspective that the group had
 - 37 + 5 recommendations
 - i. All that were submitted were deemed as a part of this assignment – tried not to omit or fall off the table or otherwise not be considered by the subgroup
 - ii. Additional 5 that did not quite fit the “first cut” (previous exercise) but they were relevant, so they wanted to incorporate them into assignment
- Policy ideas: [more on slides] – ranked by score and put into different categories

14: decrease powerhouse encounters

13: water transit time

11: increase spills

7: reduce temperatures

3: breach

- Tried to arrange 42 by policy recommendations by theme/topic area: [more on see slides]
 - Spill management
 - Flow management
 - Surface passage
 - Barging
 - Breaching
 - Education
- 6 major policy/theme/topic areas subgroup considered
 - 1) Spill management category
 - a. Broad support but additional technical information is needed to finalize recommendation
 - b. Scored fairly high on impact/effort implementation grid: 2,3
 - c. Exercise 1: 11-14 range
 - d. Governors ability to influence outcome is expected to be moderate
 - e. Likely to support group mission statement (would have a major impact
 - f. There is a likelihood of consensus
 - 2) Flow management category
 - a. Decreasing water temperatures and studying effectiveness of Idaho flow augmentation.
 - b. Received good support however additional technical information is needed
 - c. Impact/effort: 1-5
 - d. Exercise 1: 6, 7
 - e. Governors ability is expected to be moderate
 - f. Likelihood to support mission varies between major and minor
 - g. Likelihood of consensus is possible
 - 3) Surface passage
 - a. Impact/effort is 4
 - b. Exercise 1: 3.5
 - c. Governors ability to influence outcomes is expected to be moderate
 - d. Likelihood to support the mission of workgroup is minor
 - e. Likelihood of consensus is supportive
 - 4) Barging
 - a. Further evaluate the timing of implementing barging
 - b. Needs more discussion
 - c. Impact/effort grid score is 2, 3 or 5
 - d. Exercise 1: 3
 - e. Governors ability to influence outcome is expected to be moderate
 - f. Likelihood of it supporting mission is moderate
 - g. Likelihood of consensus is probable
 - 5) Breach
 - a. Remove one or more of the lower Snake River Dams.

- i. Identify importance of considering the consequences of the breach.
 - ii. Recognized that recommendation would not be a consensus recommendation for the full work group.
 - iii. No broad support and so no additional work is needed to possibly condense and finalize.
 - b. Impact/effort: 2(major impact but complex to achieve)
 - c. Exercise on 1: 3
 - d. Governors ability to influence outcomes may be expected to be marginal
 - e. Likelihood to support mission is major
 - f. Likelihood of consensus is ranging
- *Input from Brian Brooks*: what real power Governor has, how can he advocate for different hydro practices that impact entire region, Canada included, should we even talk about issues that we know we won't reach consensus?
- Decided to take weight off subgroups shoulders and share it with the workgroup so a recommendation is:
 - Finding a day for the workgroup to meet to talk about breach to talk about the "elephant in the room"
 - We want to use the opportunity of all of us together to air publicly, about what would happen to each of our interest if the dams were to be breached by
 1. Litigation or
 2. Reaching terminal lifespan of dams
 - We value that challenging dialog and we think that now is the time given the critically low returns of our fish
 - State that this is your (group members) opportunity to convince the other folks of why breaching is an impossibility
 - That is why they did not want to make the decision for everyone but wanted to share
 - Notes that it has been shown that breaching will get us to our goals (DEIS)
- *Sen. Johnson input* recognizes differences of opinions in how we talk about dam breaching but thinks there was some agreement in having discussion.
- One of more of these dams may come to the end of their useful lives. How should we approach that as a society?
 - If not the dams then what? How could we replace them or maybe find out we need to keep them?
 - Highlights keeping an open mind and listening to all sides
- 6) Reservoir drawdown: further evaluate the value of reservoir drawdown
- a. Impact/effort: 2 (see above)
 - b. Exercise 1: 2
 - c. Governors ability to influence is expected to be marginal
 - d. Likely to support mission majorly
 - e. Likelihood of consensus is low but ranges

John Simpson: hydro workgroup member

- Notes that addressing breaching and block zones were the two tougher areas.
- Advocacy and influence are important regarding Governors Power

Q&A: Hydro

Paul Arrington:

Q Grain shipping, does that mean/involve dam breaching?

A Joe Oatman: goal was to fit all policy recommendations into their categories, and we thought those categories aligned best within that category. Recognizes the overlap in determining where the best place to place something would be. How do you consider grain shipping relative to breach? Most people think those go hand and hand. There is more that should be done and that is what we are trying to set forth. We think this needs more clarification and refinement.

Paul Arrington: looked at excel and the shipping was regarding more of timing, so he understands it a little better now.

Aaron Lieberman: commented on holistic approach to viewing

Richard Scully:

Q Were subsidies considered in the hydro-conversation? The dams aren't free, the locks and dredging aren't free. A lot of federal money is spent for commerce using barges. How much is that? And would that same subsidies be able to help other industries such as the rail? Is federal government willing to give same benefits that it does to hydro to others?

A Brian Brooks: didn't really talk about it but we did bring up the comments that have been submitted throughout the court. Went through them and tallied what came up within the comments. Costs came up a lot. Thinks its something that should be discussed in the workgroup. How does that cost and how does it compare to other methods in DEIS or Idaho created alternatives?

Senator Johnson: comment regarding funding and economics.

- When moving about discussion regarding dams (any dams not just SR), when we talk about alternatives, some questions we should ask ourselves are:
 - o what should we do to provide movement of grain to point A to point B so that the "wine in the cellar" is indifferent?
 - look at things such as breaching – cost to provide alt mod of transportation. If there is an alternative, why would the shipper be indifferent to that?
 - Looking at what each side is looking for
 - Federal government may have to answer some of those questions.

Mark Menlove: Comment

- thinks it would be helpful to adopt uniform way to adopt these ideas and thinks that the matrix presented would be a good start

Aaron Lieberman: wants to get take on timing relative to Breach Talk Day

Brian Brooks: thinks DEIS may be able to supply some background information, so there may be some homework. Recommends a sub-committee to set up agenda and timing for organizing breach talk.

Joe Oatman: perspective on how we might undertake these next step – one idea may be consolidating a single or a shorter list of policy recommendations.

Richard Scully: thinking if rail and barge were same price, then one advantage to rail is that it could move you to more than one port.

Paul Arrington: We've talked a lot about breaching so trying to understand what else folks want to talk about. I have a pit in my stomach when thinking about devoting a full day to this topic. Thinks half a day would be sufficient. Unsure how effective it would be in the sense that everyone has jobs and interests groups they represent and they have been hammering over these issues for a long time so he's struggling to understand how in a day or in a half a day they are going to bring everyone into consensus or in the same camp on this.

Mike Edmondson: Effort put forth was great. Highlights uniformity in looking at these issues.

2:10 Broad conversation about Small Group Report Outs

Katherine Himes offers prompts:

1. Do you have any questions that were not answered earlier?
 2. Are there any crosscutting ideas/comments that span multiple groups?
 3. Is there anything you want to discuss?
 4. Do you think there is consensus about what has been discussed so far? (green, yellow red light)
- Seed/homework: think about everything you saw today and think how we can dig deeper on these ideas and move closer to policy recommendation language

Richard Scully: would like to see a list of policy recommendations that each member feels will recover Idaho salmon.

- What are the items that will really make a big move/increase in abundance/smolt returns?
- What policy recommendations will really recover Idaho salmon?

Aaron Lieberman: noted he liked the framework (scoring system) that hydro group came up with

Joe Oatman: bit unclear in terms of how small groups may be used moving forward. Will it be the same folks working on the same topics or are folks going to rotate amongst those?

- *Answer deferred to discussion during tomorrows meeting*

Justin Hayes: Sometimes ranking stuff is not as useful as saying we need to do all of this stuff. One thing we struggled with in habitat, was realizing we just needed to do a lot more of all of this stuff. We didn't sit down and just rank.

- Some of the hydro presentation became more difficult to look at.
 - o Struggling with different levels of preciseness and granularity of their proposals and things; it may be beneficial to look at it from a broader scale.

2:40 Agenda Subgroup Update

- Previously posed question: How do we be more effective during workgroup meetings?
 - o Shares highlights of poll

- Overwhelming support for meeting at least once a month or every 6 weeks (90%)
- Would like to review draft document?
 - most was late October early November (75%)
- Visiting different locations across the state
 - almost 50/50 split
- Want to have face to face meetings when it becomes safe to do so?
 - Almost everyone said yes
- Want to have video conference even if we are in person?
 - Majority is yes
- Want to hear public comment at the future meetings
 - 63% yes
 - About $\frac{3}{4}$ thought public comment was helpful

Aaron Lieberman: would like to get a schedule from now to December

Paul Arrington: thinks meeting monthly would be too much. Would cause too much homework.

Aaron Lieberman: any specific feelings about what should be deliverable by September?

- Scott Hauser: would like opportunity to review prospective agendas before they come out so that everyone can have some understanding and input on what those agendas are.
- Richard Scully: including July meeting, if we have one every month then the last meeting would be in October. And that's not very many meetings. Appreciates that it sounds like a lot but its almost over. Are the small groups (4 H groups) going to be going the whole time or will they come together?
 - o Katherine Himes: will talk about this in greater detail, but yes moving in that direction. Were getting deeper and deeper.

Adjourned at 3:02 by Mike Edmondson

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May 28, 2020
Workgroup Meeting via Zoom

Introduction – Dr. Katherine Himes

- *Gave background and purpose of group*
- *Going to start off with public comment this morning*
- *Described public comment process and parameters*

9:15 Public Comment

David Cannamela

- Highlights Oregon and Washington as well as the 5, soon to be 6 court cases regarding river operations
- There is one habitat that we should be concerned with
 - We have the best spawning habitat yet only 2% of it is occupied
- Hydro-system is not one of the 4 Hs
 - It is a red herring to prevent us looking at the four Ds
 - The “salmon poaching” hot tubs
- The group should be honest with the governor about what should be done
 - To restore the lower corridor
 - The governor can work with senators
 - If we are honest then we did our job and the citizens and the governor can work it out
- Our goal should be to restore the lower Snake River
- Highlights that he cares about the people who value the fish

Nic Nelson

- Governor of Oregon recommended breach of lower 4 dams
- Washington intends to act under §401 Clean Water Act – Oregon plans to do the same
- Measures will need to be in place for when dams come to their useful end
- Last June, group was charged with creating policy to bring abundance back
- Ocean and dams aren't within the state
 - Making policy that only affects within the state is a failure of power
- Idahoans are going extinct alongside these fish, how we have let these fish decline is mind-blowing
- He was encouraged by yesterday's conversation
- Dam conversation must be had, or else it is a failure by the members
- Hiding behind smokescreen that Governor Little can't do anything is a failure
 - Governors Little's voice would have impact

Shiva Rajbhandari – sophomore at Boise high

- Notes that Oregon and Washington on board with Salmon recovery
 - Congressman Simpson on board

- Governor Little is tired of Idahoans paying most and losing the most
- Now when we have the most to lose, he is standing in the way
 - Gov brad little decided to keep the dams
 - Over half million thrown at repopulating however they were fruitless
 - Bonneville is bankrupt
- Breach the dams and save our fish

Michael Machina – Whooshh Innovations

- Recognizes broad range of opinions
- There's a third alternative
 - There's technology to move salmon up and over the dams
- It's going to take a while to get the dams down
- As everyone debates, we can start moving salmon right now
- Example: using 2 million salmon in B.C. of Fraser River
- While debate continues, we can act now

Jonas Seiler– lost connection hopefully will come back – river guide based in salmon in Lemhi drainage

- Appreciates group for working together through this
- Pay attention over what we have control over in the short terms
 - Habitat
 - Work with downstream states, collaboration will be important
 - Harvest
 - Management of hatcheries for the benefit of wild fish as well
- Long term, Governor Little should work with Brown and Inslee and elected officials in Montana to come up with a more collaborative long-term solution
 - Breach? Cooling river? Whatever it may be, it is paramount he works with other states

Asa Menlove

- Read letter he wrote to Governor Little
- Notes that salmon may not be around when he is 40
- Requests that group raise standard for entire country

Seth Tonsmeire – River Outfitter

- Also a cattle rancher in Lemhi valley
 - Watches salmon spawn near his property
- Encourages Little to take a bold solution to bring fish back and work with the other governors downstream

Katherine Himes – at this point there are no other names on the list

Group members asked questions regarding meetings moving forward in person

***Katherine Himes* moves back towards public comment**

In chat

Brian Brooks: thanks Mike for comments. Notes that Fraser River is an interesting concept. And that they have heard comments regarding the low numbers therein in the past, but it is “undammed”. Asked to shed light on comments since he interpreted is as suggesting that its not undammed

Joe Oatman: notes that there was a big landslide in the upper reach of the Fraser River, barring Chinook, Sockeye and Coho from reaching the spawning areas. A good portion of that hillside slide into the river creates a barrier. People have been working to address this by including a fish passage structure.

Michael Machina: this is an instance of a natural barrier, not a dam. Significant slide that blocked the river and stopped migrating salmon from passing. “we are deploying out technology to provide the salmon a boost to the other side of the slide. The technology works for passing over dams or any barrier

Brian Brooks: thanks Joe and Michael. Asks when the event was.

Michael Machina: it was discovered last summer. The Canadian government has been working through the year to try to clear the area but it is quite significant, and the salmon are now approaching on their migratory journey

Brian Brooks: thanks again, very helpful

Merrill Beyeler to Mike Edmondson: had a question but Katherine has a public comment that just popped up so moving to that. See below for question

Public Comment

Kelsey Helfrich –

- resident and outfitter on middle fork of Salmon
- Thanks, members, for working as this project is extremely important
- 4th generation outfitter
 - Grown up on these rivers
 - Seeing their numbers dwindle has been heartbreaking
- Seeing this group together to keep these fish viable, as a food source, as a way to transport nutrients to and from the forest lands, can see the impact on tree rings
- Fish are the lifeblood of our lands
- These fish deserve our time and our energy to do whatever we can to protect them
 - Our future generations depend on us to do this

Colby Blair –

- Fish in Idaho have a big impact on us economically, so people depend on the fish for a living
- Appreciates workgroup trying to solve some of these issues

- As a group, everyone, needs to get together continually and represent ourselves proportionally to how these issues affect us so that were not looking at major economic downturns in the fishing industry like we are seeing

Katherine goes back to Merrill's question

Merrill Beyeler:

Q Regarding dead water

A Mike Edmondson: Talking about a stretch of Salmon River. Issue came up in regard to habitat and predation.

- Man made changes that create reservoirs of predators.
 - One example is a certain unused powerline that attracts avians as a perching place.
- "Dead water" came on radar as a result of NOAA, from Little Redfish Lake to Lower Granite dam. Norther pike
 - Juvenile chinook salmon study has noted that a lot of the fish don't get out of the dead water reach.
 - Fisheries survey to enumerate the number of predators, open population estimate was 11,000-17,000.
 - If you look at dead water reach, it's created by constriction at Dump Creek.
 - Challenge in looking at potentially altering to a more free flowing is that a lot of birdwatchers go to that area
 - it affords a unique viewing opportunity.
 - What opportunity to change the channel morphology?
 - What is the relative benefit in doing so?
 - Notes that a lot more work has to be done.

Brian Brooks: regarding dead water

Q when was that created what was it created for? (regarding the constriction in Dump Creek)

A Mike Edmondson: My recollection – I hate trying to remember and get quoted, a blowout, something to do with historic mining, maybe around 1800-1900's. Again, don't hold me to that.

Mike Edmondson to Merrill Beyeler:

Q Did I cover that issue to your satisfaction?

A Merrell Beyeler: Yes, seems like one of those things we just take a looksee at and evaluate so thank you

Mike Edmondson: We have a couple of reports well continue to work on it and evaluate the idea.

- Notes that salmon and steelhead pass through there

Mike: Corrected himself on the name of the fish mentioned above; should have said Norther Pike Minnow

Question: regarding Whooshh Technology

Q Can it take smolts downstream?

A Mike Edmondson: Whooshh is more about downstream movement, however, there is technology that is emerging. Technology is about keeping mucus membrane on fish. They use water and air to move the fish really rapidly down.

10:15 moves to Small Group Report-Out

Katherine Himes: gives overview of agenda discussion

- This is focused discussion on small groups
- Goes back to the four prompts assigned last night
 - i. Do you have questions for small groups that were not addressed during the report-outs?
 - ii. Do you have cross-cutting ideas that span multiple small groups, based on the report-outs?
 - iii. Does the content presented today sit well with you? In other words, is it at least a “yellow light”, if not a “green light”? Can small groups proceed with the material presented today?
 - iv. “A seed to plant”: Consider how to dig deeper on the ideas presented today, and move toward policy recommendation language.

Justin Hayes:

Q Can you review for us what the next homework assignment is so that I know if were going to talk about these things again so that I know if I should ask my questions now?

A Katherine Himes: Yes, but realizes that Kira did not get her point/question addressed yet even though she had her “hand raised” at the end of yesterday’s meeting

Kira Finkler:

- Crosscutting idea: relates to letter discussed in April meeting signed by diverse members calling for Governor to advance regional collaboration to create plan for meeting peoples needs and restoring fish
 - o We could recommend to Governor Little to vigorously support this
- Supports hydro groups day regarding developing a day for breach
- Agrees that we need a schedule for the rest of our meetings
 - o We need an overall approach
- Regarding Justin’s comment on doing all of these
 - o Asks him to elaborate more

Justin Hayes: When we did the habitat workgroup, speaking for myself, we didn’t say we know exactly what’s needed, we recognized that different areas have different needs.

- o It’s an opportunity to expand what is going on.
 - There’s a lot of things going on that are good but just not big enough on a scale.
- o Ranking and doing the top three or whatever isn’t enough.
 - It’s a mistake to make a punch list.
 - The status quo is not working.
 - We ought to be envisioning a much larger than the status quo version of salmon recovery.

- We need to move forward with a huge suite of issues across all of these issues now.

Mike Edmondson:

- Offers some ideas: May be beneficial to share the results of the small group poll then talk about the path forward then come back to the crosscutting questions or would you like to go back to the questions Katherine?

Katherine Himes: asks for groups opinion on whether they would like to postpone questions or not

- Group members with questions agree to wait

Mike Edmondson: Let's talk about poll results – *puts up slide on Proposed Path Forward*

Katherine Himes: At request of several members to gather information before meeting to have a focused meeting going forward so were not starting from scratch during the meeting

- Poll results:
 - Do you want to stay with your group or have new groups?
 - 80% says current
 - Do you want to change small group topics?
 - 2/3 said yes change topics
 - Would you like to see groups review and contribute to every policy recommendation?
 - Would you like your SME to stay with the small group regardless of the matter?
 - SME should remain with the group.

Brett Dumas: after listening to yesterday's subgroup I have a different take on how I would have answered the survey.

- As he listened to habitat and harvest, he feels like he would be beating a dead horse by taking those topics
 - the issues were pretty much covered
 - he would like to look at the proposed, but a few tweaks and it would be good.
 - While the other ones needed more work.

Q Should we put some on the more completed shelf and focus on the other ones?

A Mike Edmondson: small groups rotate the topics and for those areas where it has been fairly fleshed out I see two things.

- opportunity to do more work in those areas
 - mostly saw background and rationally but not language that represents policy. So, they need polishing.
- they can look at second area of the topic area if they put their gold seal on the certain policy recommendations.
 - So, we would be staying with the four 4 H's then doubling. Thinks pace at which they can work they could get through 4 subjects efficiently.

Scott Hauser: felt like hydro group knocked it out of the park. Lot of value in continuing that discussion. Maybe taking a full day. A very positive response from a lot of people.

John Simpson: didn't think it was fair to scratch certain things off the list without other subgroups to bring in their ideas.

- Value in rotation and an opportunity to give every subgroup and every member.
 - o Doesn't want any interests or perspectives being precluded.
- Thinks it's clear there are some concepts for which consensus or the likelihood thereof isn't there or won't be there.

Mike Edmondson: offers response

- we are going to have decisions to make on how to move forward with these tough conversations.
- There was a need, desire and ability to get started on policy recommendations. And getting started, the 4hs were a good place to start, were not limiting the discussion to that, we will add in more stuff.
 - Now we can have a much more informed discussion on how we would like to move forward and do so in a much more comfortable and collaborative manner

Mark Menlove: feels urgency around setting up schedule on how we anticipate getting to these policy recommendations.

- Also, the work of the small groups, he's unsure each small group taking on each small topic in an open-ended way may not be the best way to address what stays on and what goes off.
 - o Hydro would be a more beneficially large group discussion as opposed to passing that around.
 - o Structure in how we are passing topics around

Katherine Himes: *shares intent behind small groups.*

- Didn't know what the level of policy recommendation language would be so they were more on important fundamentals.
- There is ample time for the group to give feedback that the subgroups are working on.
 - o Envision how each topic may have governing philosophical, scene setting, language then the policy language.
- However, we reconfigure the small groups, everyone has opportunity to create and change language.

Joe Oatman: relative to harvest and habitat

- those may be further along in development and may require less time to put those together to the point where they're final recommendations.
- Would like opportunity to provide suggestive changes to each of those.
 - o Thinks relative to hatchery, things are clearly missing from his perspective. There needs to be additional work on hatchery.
 - Would like to provide some thoughts on those.
 - o Relative to hydro, was a product of the time that they had available to work on this.

Representative Wood: thinks there is significant value in each of small groups looking at each of the subjects we are eventually going to have to agree on.

- Thinks habitat is area of most consensus.
- But there is value in all of the small groups in looking at the more controversial issues.
- The areas where we know we are going to have more difficult consensus if consensus is going to be possible at all.
- Doesn't think that anything should be taken off the table.
 - o Just because we don't agree or can't find consensus doesn't mean that it shouldn't be in our report to the governor.
 - o Report should also delineate the areas where there is minimal or no consensus because he thinks that it would not be complete without it
 - o He doesn't think in so including something we don't have consensus on would give any sort of bad rap on the task force or group
 - Notes that there will be times groups of people will not have consensus.

Mike Edmondson: offers response

- One of values in highlighting areas we don't have concurrence is highlighting that transparency.
 - o If we don't put those things in the report and demonstrate to our audience, then we're potentially criticized and perceived at not having looked at an issue.

Richard Scully: regarding what was brought up yesterday

- At some point we will have a detailed conversation on how breach will affect each member.
 - o He thinks we should all look forward to this even though there will be differing opinions.
- He would like to hear what those opposing breach would propose to recover Idaho salmon
 - o If those points could be captured, then having a biologist do a "reality check" on whether those proposed methods would be feasible to get Idaho fish recovered.

Mike Edmondson: offers response

- we will have a discussion on how to move forward with the group's hydro discussion

Katherine Himes: *shifts to sharing proposal for the next steps*

- Notes that we're coming up on the more technical presentations.

Aaron Lieberman: **in chat**

- Seems we're conflating two separate questions:
 - o Whether certain topic areas, policy recommendations and respective, original, small groups should continue meeting on their topics and policy recommendations
 - o He thinks this is a question that requires a case by case evaluation
 - o Whether the policy recommendations of any given small group for their respective topic area be reviewed by all other small groups?
 - o In an input/feedback kind of way

- He thinks this is straightforward and generally agreed upon by group members

Chad Colter: in chat

- Concerned with time constraints
- Agrees that some topics are further along but need to be polished
- Suggests submitting individual written edits to draft recommendations to original small group or individual conversations to address concerns/changes?

Scott Hauser: in chat

- Agrees with Chad
- Thinks its important to have expertise and input from all workgroup members across all recommendations

Chris: in chat

- Hydro must analyze mainstem habitat aka Battelle and Corps Walla Walla and Recovery Plan reports

Chad Colter: in chat

- Big bucket issues like hydro and hatcheries should get more group time discussion
 - It would facilitate discussion if folks could provide written edits before the discussion
- Small bucket issues may be easily dealt with by submission of written edits

David Doeringsfeld:

- Notes each topic could be an all-day discussion.
- Philosophically, what turns into an all-day discussion and what doesn't?
 - are we going to reserve a day to breach even with these small groups and if so are we going to have a full day on each of the topics?

Justin Hayes:

- David raises an interesting point.
- All of these issues are worthy of longer discussions.
 - A day on breach would be good because there is so many implications on communities on all sides.
 - It would also be good to give a whole day on the other 3 Hs. Not to hear more from experts but to have these discussions. At some point devoting significant time to getting consensus and discussion on these would be good.

Katherine Himes: shares proposal to move forward

- Habitat: harvest/predation + economic impact studies
 - Take what habitat has done and dig deeper/polish policy then add economic impact studies.
- Harvest/predation: hatcheries + water broadly
- Hatcheries: hydro + systemic solutions
- Hydro: habitat + monitoring and evaluation + funding

Offers floor to questions/comments on this approach

Paul Arrington : is fine with this approach.

- Only tweak would be switching harvest to hydro group to discussion next as Joe had some comments/ideas on how that policy may need to be addressed.

Merrill Beyeler: thinks we should take hard look at water

Katherine Himes: Paul and Merrill felt that hydro should tackle harvest

Paul Arrington: responds

- just because there are particular interest with tribal interests involved so there may be some polishing and he thinks a lot of it will come from joes perspective

Aaron Lieberman: Is the concept to continue this method of shifting and deep diving until all have the permutations of group topic have been met (may not have heard ending correctly – it cut out)?

- Favors doing a case by case approach on whether we need a deep day dive.
- Asks to propose that any workgroup members that have identifies uncertain areas and think there is a need for additional concepts/content that they make that know and we make groups of people who want to provide addition information.

Mark Menlove: thinks we should do a grading of the topics more broadly.

- Some need more times than other.
- Allowing written comment edits maybe.

Q Thinks next step is creating policy language. Other question is systemic solutions, what does this mean?

A Katherine Himes: these categories refer to exercise 2 slides dated May 4.

- o Overarching ideas may be too much for any one group to take on so we are trying to figure out how to take bigger things and make them easier.

Katherine Himes: What I'm hearing is hydro still has a lot and one other group, hatchery.

Whereas habitat and harvest were close.

- What if, everyone stayed in the same topic area and what if the two groups that have a lot to do before they get to much policy recs, stays on that one topic. While the habitat group took on a little bit more?

11:33 *Katherine moves for short break before moving to presentation. Trying to respect speakers time.*

Marine Derived Nutrients (MDN) presented by **Andre Kohler** *Presentation Available on OSC website on Governor's Salmon Workgroup page*

- When talking MDN really talking about linking the ecosystems
- Blue block on “living ecosystem” slide can be thought to be Idaho lakes
 - o Marine subsidies: salmon carcasses
- Many species (including humans) are dependent upon annual return of abundant anadromous fish
 - o Ecological web of connections is profound
- Adult salmon deliver marine deprives nutrients.

- They are dragged into every nook and cranny of the forest by scavenging animals within the salmon watershed
 - Old growth tree even far away from salmon bearing area, you will find a salmon imprints in the tree
- Are central Idaho streams limited by available nutrients?
 - Invariably in upper Salmon, central Idaho: streams are limited by nitrogen
- Dr. Seuss study – compare and contrast marine derived nutrients
 - 171 live Chinooks released in early August in tributary of Yankee Fork (8-mile creek)
 - Dead fish in Rainy Creek: 66 chinook salmon carcasses
 - Fake fish: 94 kilograms of pasteurized, pelletized salmon nutrients designed to mimic salmon carcasses
 - Used 5-mile creek as control
 - Specifically wanted to focus on metrics relevant to fish community present (often ESA listed bull trout, chinook, steelhead)
 - Aquatic insect community:
 - July: prior to adding MDN subsidies
 - October: 60 days following adding
 - In streams with carcass, live or pellet, much more dramatic response in macroinvertebrate (5-10 million insects)
 - Fish (rainbow in Carcass stream) (bull trout in other 3) all grew better than in control stream
 - Conclusive evidence that adding MDN benefits insects and growth of fish
- During period where fish were actively spawning, they create bioturbation that benefits river
 - Live fish bring something special
- Measured metabolic in the 4 different streams
- Healthy and abundant salmon and steel head populations should be thought of as fundamental elements to restore ecosystems
 - Abundant sustainable solutions
- Import-export=nutrient flux
 - Positive if adults bring more
 - Negative if smolts leave more
 - Nutrient import from adults going upstream
 - Nutrient exports from smolts moving downstream
- Bristol Bay study measuring sockeye salmon populations going from the ocean to streams and lakes to spawn
 - Before adult fish get to a place where they reach fresh water, there is up to a 67% harvest rate
 - Even still in 67 lake/year they never saw a negative flux movement
 - Meaning that even with such high harvest rate, the incoming adult salmon brought more nutrients than the smolts
 - Recreated study in Idaho
 - Compare and contrast what they would find in relation to Moore’s work in Bristol Bay
 - Saw both positive and negative nutrient fluxes

- Notes that current situation is alarming
- Paleo-sediment core that was analyzed for marine derived nitrogen
 - nearly a 1500 year record within the sediment sample
 - Past century is when dams have been (shows on slides difference in core sample)

Q&A: Marine Derived Nutrients

Roy Akins:

- Q Asks for enlightenment over how agriculture barriers may block.
- A Imagine all of the nutrients flowing out and the plume out of the CR after an average or above average return.
- Dams are trapping sediment, large wood, and nutrients from reaching the tributary of CR.

Justin Hayes:

- Q Can you extrapolate your finding to some of the watersheds that are more developed and may be experiencing anthropogenic substances like Pahsimeroi or Lemhi, or are they being propped up by unintentional nutrients?
- A Good questions can't address directly. Too much non-pointsource nutrients (human activity) is detrimental and too little is also not good so there's a sweet spot between the two. Thinks that is certain influencing productivity but he is generally only working in watershed with pristine rivers.

Brett Dumas:

- Q Had a lot of integration/supplementation ideas on sub-workgroup. One of the issues he didn't think about was, what role integration/supplementation would have in replacing some of the functionality.
- A There's a roll in appropriate situations. Mitigation strategies could be effective on smaller scales in the appropriate places for the short terms until we address more of these issues and get abundance back.

Joe Oatman:

- Q If we had salmon coming back at healthy and harvestable numbers what benefits may that have to developed land? (like land used for agriculture)
- Q Has there been any investigation into what benefits salmon may provide to those lands?
- A Doesn't know of any specific studies but would say that salmon have been shown to increase nutrient availability to the streams while spawning and after dying by contributing nutrients as they decompose.

12:45 *Mikes moves to take a lunch break*

1:05 Flex Spill Implementation 2020 presented by **Jay Hesse** *Presentation Available on OSC website on Governor's Salmon Workgroup page*

- Entered into and supported by many parties in the basin
 - 3-year agreement to avoid litigation on 2019 CRS BIOP

- 2020 spring operation
 - 125 “Flex” 16 hours high spill, 8hrs performance standard spill
- Thinks for the most part conditions are being achieved
- Notes that low flows have been a factor

Q&A: Flex Spill

Dave Doeringsfeld:

- Q For gas levels, where are they normally measured on the dams?
- A In the tailrace areas of each dams. Water quality standards based on tailrace. So, placement of the monitoring equipment varies on each project
- Q What % of fish are being barged?
- A Not a metric we can monitor in season easily, we have to calculate that post season. Last year, I believe transport of fish was 34% on average, which was a higher percentage of transportation than in the years leading up. We started a week earlier last and it was repeated again this year. We’re expecting 30-35% of them to be transported this year.
- Q No or little gas bubble trauma, what is the difference between observing and extreme?
- Q Any thoughts on why you’re not seeing any gas bubble trauma?
- A Has been a long-standing effort in CRB, more information can be found on Fish Passage website. When developing this operation, we looked at that data extensively. The number used has taken into account the previous notes. Might happen around 130. When it’s happening at 110 it is a function of duration of exposure, environmental conditions and the fish’s ability to adapt to depth.
- A In terms of severity, the number and location of bubbles informs a raking of 1-4 of when you see gas bubble trauma. Low instances show up in dorsal or non-paired fin. When more problematic they’re in pair fins or eyes. Standardized rating system. No observations of 3-4 to date in their work.
- Q Would this be the same between salmon and steelhead?
- A The data used is on both salmon and steelhead so there is no difference

Justin Hayes: two things that caught his attention

- Significant period of time for lack of need for electricity generated from these dams
 - Interesting to see dams are making surplus energy that has no market and no value for the period in which we are looking

Andre Kohler: offers response

- Modeled SARs for various scenarios looked at in DEIS
 - For hydro is it flex 125 for 16 hours and performance for 8. Generally, what you would expect is model out put is generally higher than actual given variable ocean conditions

Richard Scully: comments that discrepancy shows how mother nature doesn’t give you the flows to run models how we are hoping for.

- Q How does the low flow in April affect the SARs? Does it make them lower?
- A PIT uses two-week average. How we manage SARs instantaneously is something we need to learn more about. He doesn’t think low flow is bad but the combo

between low flow and travel times is what will influence what the SARs will be in the long term. Is unsure what those may be.

Brian Brooks: asks to go back to SAR slide

Q No action alternative shows 2% yet you said its 1% or lower. What's the difference there?

A Function of modeling aspect. Modeling uses a long-term ocean condition, long term SAR aspects. They don't necessarily reflect the current conditions now. The model is an average of a long-term data set.

Blocked Areas presented by **Jim Chandler** *Presentation Available on OSC website on Governor's Salmon Workgroup page*

- Historically 9 major river basins accessible to anadromous fish
 - Lists the different rivers
 - Diversity of habitat within these tributaries
 - High elevation desert v Boise/Payette rivers
- Main stem of the snake river, 476 miles of river in Idaho and above Hells Canyon about 370 (rough estimate didn't get exact number down)
- Main stem is unique and diverse habitats because of Eastern Snake River Plain Aquifer influencing upper 200 miles of upper SR
 - This aquifer help define chinook spawning distribution
- Hells Canyon lower river often froze
 - So, thought not to be as productive as upper SR
- Put blocked areas in context
 - Impacts are not unique to basins in Middle Snake but it is important to consider other components
 - Fur trade
 - Westward expansion
 - Gold
 - Commercial fishing
 - Irrigated agriculture
 - Livestock
 - Timber
 - Railroad
 - Brought new fish species
 - Electricity
 - Dam construction
- There are many high quality habitat in tributaries above Hells Canyon
 - Some are in a degraded state due to activities listed above
- Bruno Dam was first dam put in that blocked passage – CJ Strike dam
 - Originally constructed for placer mining
 - As placer mining was reduced it was used for agriculture
 - Inedited in 1950
 - Had production of chinook and steelhead
 - Probably was productive for anadromous fish
 - Lower most dams, and as time progressed other dams, were constructed above

- Second was Swan Falls, main stem dam, that was significant to fall chinook migration
 - Boston investors to supply power to Silver City where mining was occurring
 - Fish ladder was constructed with dam in 1901
 - Ladder proved to be ineffective especially for fall chinook
- 1907 Lower Falls Dam
 - Reconstructed in 1947 with a fish ladder
 - 1922 Idaho Power reconstructed fish ladder
 - Still unimproved for fall chinook and uncertain on impacts other fish
- 1910 Salmon Falls Creek Dam
 - Owned by canal company over rivers that extend into Nevada
- 1915 first major blockage in Boise
 - There were previous blockages, but they were mostly passable
 - Arrowrock was complete barrier
 - To support irrigated agriculture
 - Good accounts that the Boise River, middle fork, was being impacted by mining in that area
- 1919 Warm Springs Dam – Oregon side
 - BLM dam to support irrigated agriculture
- 1924 Black Canyon Dam on Payette River
 - Complete block of significant sockeye production
 - production was lost
- 1827 Lewiston Dam on Clearwater River
 - Complete blockage
 - Chinook, blockage was complete
 - Steelhead were able to get past under some conditions
- 1932 Upper Salmon Falls
- 1932 Owyhee Dam
 - Complete barrier that blocked one of the larger basins in the Middle Snake River area
- 1932 Higgins dam
 - Irrigation
- 1935 Agency Valley Dam
- 1938 Valley Dam
- 1938 Bonneville Dam
- 1944 Willow Creek
 - Irrigation district
- 1948 Bliss Dam
 - Would have blocked any fish that did make it past swan falls dam
 - No passage system
- 1952 CJ strike
 - Idaho Power
 - No passage
- 1954 McNary
 - Army corps
- 1955 Lucky Peak

- Anadromous fish pretty much out of Boise Basin by this time
- 1957 The Dalles
- 1957 pre-Hells Canyon construction:
 - Most of the basin is blocked except for some lower portions that are still accessible
 - Most that were accessible were degraded due to sediment and nutrient loads
 - Weiser River Basin, Wild Horse, Indian Creek, Pine Creek and Eagle Creek still producing anadromous fish even though about 24% was accessible
 - This is prior to Hell Canyon construction
- 1958 Brownlee Dam
 - Effort to put in net barrier to intercept smolts
 - Barged adults
 - Program came from juveniles – sufficiently and efficiently collecting enough smolts to sustain run
 - This was seen to be successful
- 1962 one other
- 1962 Lower Ice Harbor Dam
- 1963 Brownlee passage
 - Terminated in 1964
- 1968 Hells Canyon Dam
- 1969 Lower Monumental Dam
- 1970 Little Goose Dam
- 1970 John Day Dam
- 1972 Dworshak Dam
 - Blocked clearwater
 - Set stage for removal of 1973 Lewiston dam removal
- 1975 Lower Granite Dam
- Not primarily limited to Clearwater and Salmon basin

Idaho Blocked Area Policy presented by **Mike Edmondson**

- Policy was developed in the context of the Columbia Basin Partnership
 - Worked to set numerical targets for all basins in Columbia
- Discussions date back to 2017 but kicked into gear around 2019
- Policy was approved by Governor’s office in Feb 24, 2020
 - 1) The task force is advised that no reintroduction of ESA listed fish to historical habitat upstream of the Hells Canyon complex is supported by the State of Idaho
 - a. There are other stocks that are not ESA listed
 - 2) The task force is advised that reintroduction of non-ESA listed fish to historical habitat upstream of the Hells Canyon complex needs to be consistent with the State statutes (§67-302) . . . (see slides)
 - 3) Task force is advised that reintroduction of non-ESA listed fish to historical habitat upstream has to be consistent with Idaho’s and Oregon’s commitment

in the 401-water quality certification statement with Idaho water. . . (see slides)

4) (see slides)

5) So long as above conditions are met, Idaho supports put and take in historical habitat upstream of the Hells Canyon with 3 provisions

- If party's want to move forward, this is the context in which the group must work
- Next steps/ongoing issues
 - Timing
 - Approval of this policy

Q&A for Blocked Areas

Richard Scully :

Q Why is it chinook salmon were unable to navigate Lewiston dam very well?

A Mike Edmondson: it was a low head dam for production of electricity but not above ability of steelhead.

Aaron Lieberman: asks to share penultimate slide

Q Is there a desire for introduction/addressing blocked areas in general? If so, would it be worthwhile to discuss briefly for a small group to try to put together "wordsmith"?

- response in the chat group - Hatchery group took this on

Scott Hauser: defers time to Chad's questions

Joe Oatman: defers time as he mentioned something in chat

- "want[s] to comment through Chat that the blocked areas are an interest to tribe. I may weigh in on this later"

Chad: blocked areas is of great interest of the Upper Snake River Tribe

- Direct policy recommendations towards finding solution
- Interested in preserving and enhancing what we have

David Doeringsfeld to Jim Chandler: regarding the various rivers highlighted in red that were high level productivity (shown on slides) -

Q Before the SR dams, I thought it was a through way not highly productive

A Jim Chandler: There's evidence to show that it was productive

- Today there's evidence of the tail end still being somewhat productive

Richard Scully: question has been answered

Aaron Lieberman: accidentally had hand up (in chat feature)

Katherine Himes: thanks Jim and Mike for responding the request of workgroup

Chris: **in chat**

- Working from the bottom up instead of the NW's top down approach is the only means to salmon recovery.

- Woody debris and large substrate component blockage are all primary enemies to dam construction
 - o The Corps on the lower Snake and Dworshak and the Columbia have tried and systematically failed to manage/program for debris movement and accumulation the removal across the decades, from collection and hauling/woodcutting/etc. during the early reservoir oligotrophic 'water cleansing' years until the fish spill program.
- Traditional deeper spill still passed few wood for challenge redistribution and productivity, surface still passes a little bit more, but requires spot days of releases during 'emergency' debris load evacuation. Never adequate for productivity but has led to reservoir aging to point of geographical and seasonal eutrophication due to shad passage colonization with massive mortalities and increases in detrimental algae blooming

Brett Dumas: in chat

- The other confounding issue is the current allocation of fish under US v Oregon and where do additional supplementation fish come from?
 - o Likely Idaho's share

Aaron Lieberman: offers response/question in chat

- Acknowledges that Brett's question seems like a highly complicated and highly relevant question.
- Q Does anyone have suggestions/ideas?

3:10 Adjourned