Comments for the Governor's Salmon Workgroup

December 15, 2020

Hello,

I stand for Southern Resident Orcas, salmon and steelhead. Please see that the four lower Snake River Dams are breached. They were built to be breached after 50 years and are not efficient. Repairs now do not make sense fiscally and are deceitful to the Nez Perce tribe. The Orcas are starving and scientists agree that breaching the dams will be the most effective way to provide them with Chinook Salmon, their primary diet.

Thank you,
Janet Higbee-Robinson

There is only one solution to saving Idaho's Salmon and Steelhead populations and that one solution is the REMOVAL of the four Snake River Dams ...Period End of Story.
If that doesn't happen very soon then those species will become EXTINCT. And that would be a travesty to the people of Idaho and the Northwest🙏 😡

Tom Monge

I am writing to express my lifelong hope that all avenues will be explored in the interest of saving and restoring wild salmon and steelhead across the Northwest. Please work as diligently as humanely possible to find a way to remove the four lower Snake River dams and restore this section of river to its natural free flowing state. All available science points to this being the most critical piece in restoring these fish.

Hilary Alan Bates
PO Box 723
Florence, MT 59833

406-880-1053

The Honorable Governor Brad Little,

I would like to express my intense support for breaching the four lower Snake River dams. These dams have outlived their planned lifetime and are becoming ridiculously expensive to operate. They are killing the vast majority of chinook salmon and other species, who need a clean, free-flowing river to survive in, and even thrive. Salmon are an iconic species of the Pacific Northwest and we cannot let them go extinct.

I urge you to participate in the Columbia Basin Collaborative in the effort to support dam breaching to save Idaho's (and Washington, and Oregon's) salmon and steelhead to abundant numbers.

Thank you,
Suzanne Steel

I support breaching the lower Snake River dams on behalf of salmon and steelhead and the people and wildlife who depend on them.

I ask that Governor Little become a participant and leader in the Columbia Basin Collaborative to achieve -- for once -- meaningful and effective action to save Idaho fish by breaching the dams. No more screwing around!

Thank you.

Pamela Williams, Boise
208-342-2423

Regarding efforts to recover anadromous fish in the Snake River basin. Removal of the four Snake River dams is the single thing that would do the most to accomplish this goal. There is much talk about adverse ocean conditions. There is essentially nothing we can do about that. However, we can mitigate the hazards fish encounter in the river systems. Looking at the research done on Idaho's Loon Creek, it appears that only one of the "4 H's" applies here: hydropower. That run has diminished from about 50,000 fish in the 1960's to less than 900 now – the one consistent change since then being the dams on the Lower Snake. What more evidence do you need? These fish will go extinct if we do not BREACH THOSE DAMS!

Walter

To the Idaho State Salmon Workgroup,

Time and again it's been shown that breaching the Snake River dams must occur to save salmon. The fish must have a restored river of cool water with healthy riparian area and access to healthy spawning grounds.
It is beyond doubt that these dams are costing ratepayers a lot of money and impeding wise regional power planing. Further, hydropower is not emissions-free. This is a fallacy repeated all too often. There are multiple recent peer reviewed studies showing that hydro reservoirs in our latitude produce significant GHG, especially methane which is more powerful at trapping heat than CO2. Some studies explain that every geographical region contains reservoirs that produce GHG amounts that surpass coal power plants. We cannot subscribe to saving expensive

deadbeat dams on the premise of climate change and we must restore the Snake River to free flowing for salmon, ecosystems and species. There is no other responsible choice.

Thank you for your work on this matter. I urge all of you to self-educate with science and facts and take this opportunity to go above and beyond to make wise choices that future humans and species will appreciate.

Thank you,
Heather Nicholson

Dear Salmon Workgroup,

It feels a bit odd to address a group called the Salmon Workgroup. I come from Salmon, Idaho, and so it feels like I'm addressing a workgroup made for my own hometown.

And I guess I really am. I am addressing a workgroup made for my hometown. My hometown was named for the same incredible, iconic fish for which your workgroup was established. The moves your workgroup decides to make will make an impact on Salmon, Idaho, one way or another. What happens with the fish as a result of your decisions will affect my business, one way or the other.

Your decision on this matters. Helping salmon and steelhead thrive will help Salmon, Idaho thrive.

I can't tell you enough how much I want you to move forward on finding a solution the includes **breaching the lower 4 Snake River dams**. All the research I've seen indicates that the breaching necessary for our fish populations to actually recover. It's the right move both ecologically and economically.

The governor needs to join the Columbia Basin Collaborative, and help make it happen.

Please, get it done.

Thank you,

--
Jo Schroeder
Gem Air, LLC
gemairflights.com
(208) 756-7382

While man dawdles species die. Lots of money and well intentioned efforts have been expended to save the salmon and each year their numbers decline. It appears that the only thing that hasn't been tried is dealing with the root cause of the problem - the dams. If we are serious about saving the salmon then it's time to address the cause of the problem directly and REMOVE THE DAMS.

Sincerely,

Richard 'Dick' English
831-539-3299

Thank you for your time on this panel! As a longtime Idahoan, I urge your group to ensure that salmon numbers are returned to Idaho in abundance once again for our children and grandchildren to witness and enjoy. Their safe migration has been a part of this area for millions of years, and they need our help to return their passage back to the free-flowing river that their ancestors knew.

I have been an elementary teacher for 25 years, and a highlight of all these years is that my class is raising fall chinook this year with the help of the Nez Perce Tribe. My students are about to observe eggs hatch in our aquarium this week and are enthralled with learning about this species and how they migrate up to 900 miles, with 7000 feet of elevation gain to return to the farthest reaches in Idaho to spawn, recreate life, and die to fulfill their life cycle. Many of my students were unaware that any Idaho fish migrate to the ocean and back, and learning of this, while raising them, has created a remarkable curiosity and passion. They are eager to see these fish make a comeback!

As we read about how perilous their outward migration to the ocean is, students are asking why we haven't made a channel around the four lower Snake River Dams when everything we research says the science compels that?

We've read that too much time and money has been spent to no avail, so it seems that we only have one choice at this point to do right by this keystone species. **We must make a channel around the four lower Snake River dams by removing the earthen section as soon as possible, as these fish are on the brink of extinction!** Increased spillways risk gas-bubble disease and delayed mortality from stress, we've learned. This is not a viable long-term solution that will make a critical difference for salmon.

Although good faith efforts have been made over the years, our children expect more from our state than variations of the same ideas which do not work. It is too late. Every year that we wait, costs millions of lives of Idaho-born wild and hatchery salmon at the hand of these economically unfeasible structures on their outward migration. We also know that it is causing the demise of Puget Sound killer whales who need our large Snake River chinook.

Kids are thinking of ideas and models to help farmers with irrigation and transportation of grains because farmers are one of the backbones of our country. We read about the incredible ranchers

in the Lemhi Valley who have worked hard to improve salmon habitat along the river on their land, and we suspect famers love salmon, too. We know that there is low-cost energy out there now in the form of wind and solar that can create jobs and make electricity to compensate for the LSR dams.

We have learned about the last wild sockeye that arrived home to Redfish Lake in 1992 and students have asked how adults allowed this to occur. I have no answers to that, other than that they should make their voices heard. Please listen to the science that says those 4 lower Snake dams must be reconciled in some way before we have a "Lonesome Larry" situation for Chinook on the Snake or Clearwater or Salmon Rivers. We have a job to do. Our young people are counting on us to get it right this time. The other solutions have not worked.

Again, my students and I thank you for your time and energy on bringing salmon back to abundance in Idaho!

Sincerely,

Mrs. Abrams's 5th Grade Class

Deirdre Abrams
5th Grade Teacher
Donnelly Elementary
Ph. 208.325.4433
Fax 208.325.5030
dabrams@mdsd.org
My Classroom Webpage

Greetings, I am hoping Idaho will stand tall and support strong measures to help protect and sustain our wild salmon and steelhead even if that means removing the lower Snake river dams.

Respectively, Win Green = 2409 Castleford Moscow, Idaho 83843

To Whom It May Concern,

For many years we have tried a number of strategies that are both costly and have not solved our issue of potential salmon extinction in Idaho. I strongly believe that it is time for us to breach the 4 lower Snake River dams because if we do not do this future generations will no not be able to see the salmon in Idaho. It also will impact tourism, disrespect native american Rights and culture, and the harm ecosystems surrounding the salmon.

Please do the right thing for current and future idahoans by breaching the dams!

Best wishes,
Jane Chandler

Greetings: I am writing to comment on the Salmon Recovery Plan. I stand with our fish, their "first right" to exist in the Pacific Northwest, specifically the Salmon River Salmon. These fish face near impossible odds in survival with the impediment of the dams on the lower Snake and Columbia rivers. The slack water affecting out migration of smolt is the biggest factor, as the science points out. Many use the the argument "declining ocean conditions and rising ocean temperatures are a huge factor in salmon and steelhead decline." There is truth to that statement. Yes, rising ocean temperatures affect all species. Following that line of thought, why then would you not want to remove obstacles that cause river and ocean temperatures to rise? The well documented and very troubling rise of the Columbia River temperature increases are mostly due to the stagnant water absorbing heat behind the dams. That water then raises ocean water temperature, and salmon and steelhead, just like human beings are affected in adverse ways. My family farms on the Palouse and I know the economic hardships of grain transportation but with an investment in rail, renewable energy resources, and green businesses, everyone can win. As it stand now, in reality no one is a winner. Remove the four lower Snake River dams, create cooler water for ocean repair, and restore Salmon to their historic numbers. Otherwise, we might as well rename the Salmon River after a non anadromous fish because there won't be any Salmon left in its waters for future generations. Please reconsider and do what science has been saying for years: Remove the four Lower Snake River Dams.

Respectfully, Bill Caccia

To the Governor's Salmon Workgroup:

Idaho salmon and steelhead need immediate and permanent action now! Alternative solutions to breaching the lower Snake River dams have not resulted in the recovery of these endangered and iconic fish.

The Bonneville Power Authority (BPA) has refused to release financial information on the lower Snake River dams to show if they are truly profitable enough to offset the millions of dollars being spent on alternative "recovery" solutions for Idaho salmon and steelhead. We have to presume since BPA continues to refuse release this information that the dams that they are operating at a net loss.

The time has come for decisive action to save Idaho salmon and steelhead before these fish become extinct. Breach the lower Snake River dams!

Stay safe,

Brady Turner
Meridian, Idaho

As salmon continue to swim toward extinction, and as BPA rate payors continue to pay more each year due to the increased costs of the failed methods of restoring salmon populations we are aware of multifactorial causes of their demise. Yet there remains one overarching cause that has

been manmade. That is the dams. They are a natural impediment in both directions to the life cycle of this anadromous species. This has been recognized by all fish biologists as the key issue for their survival. It is now time to do something about this and bring together the right people to bring down the dams and make the citizens whole by helping them get grain to market with the railroads for the right cost, and getting electricity by other means to all. This will not be rocket science to achieve. Our great state has had these fish here for many thousands of years, and it is criminal of us to watch them disappear and take them away from future generations. THE TIME IS NOW.....Future generations are counting on us. Thank you.

Scott D Friedman, MD
PO Box 2919
Sun Valley, ID 83353

I spend most of my camping, hiking, birding and outdoor time in the middle of Idaho. I am constantly looking for salmon, signs of salmon, redds of salmon, anything that lets me know that these iconic and important fish are still swimming in their pristine home waters.

Looking for Sockeye is depressing; searched Redfish Lake and Pettit Lake to no avail. Wild Chinook is hardly better but I managed to watch about 20 chasing around on their redds near Stanley in September. Along with many other people on the bank of the Salmon River we rejoiced in being able to see them.

This, what once was a world-class salmon run, is heading for extinction if we continue on our current path. The science is in and the best way to restore a sustainable salmon run and fishery is by **taking out the Lower Snake River Dams**.

Please make this a priority this coming year.
Thank you,
Debbie Stempf
4111 E Prairie Lane Ct
Spokane, WA 99223

The dams kill the fish.It has been proven for 40 years. Breaching the four dams would end up SAVING money. The C of E should be made to breach for nothing as they were the ones who built them without considering consequences. Just breach the dirt parts...

**No Name Given*

Dear Governor:

Wild salmon and steelhead are part of Idaho's heritage. Please don't support the useless dams on the river. Move with all deliberate speed to remove or breach them and save the wild fish.

Sincerely,
Bob Marsh
3460 E Boulder Heights Drive
Boise, ID 83712

To the Governor's Salmon Workgroup,

As an Idahoan, I urge you to support breaching of the lower Snake River dams. Idaho's salmon and steelhead are vital are too valuable to gamble on, and while I understand that there is commerce and agriculture that will be affected by the breaching of the dams, the impacts are nominal compared to the consequences of losing these iconic species. We still have a chance to restore these species to healthy levels, but the research has shown that if the dams remain, these species are likely to go extinct.

While I believe the dams should be breached immediately, if the workgroup chooses not to recommend that, I strongly believe you should support and advocate for the Idaho Conservation League's recommendation, whereby the state and stakeholders would pursue all means possible of encouraging salmon and steelhead recovery in the river, while also putting the necessary infrastructure in place so that if the salmon and steelhead do not recover substantially within 10 years, the dams could be removed with little impact to agriculture, power, and shipping. This seems to be a very reasonable and rational compromise.

Please be on the right side of history and be remembered as someone who stood up for our environment and species diversity at a critical time, rather than someone who ignored the warning signs that resulted in irreparable damage for the short term benefit of a few stakeholders unwilling to change their outdated practices.

Sincerely,

Tyler Pratt

I truly believe that after decades of failed expensive interventions that are salmon will not survive unless some dams are breached. I also firmly believe that this would be an economic boon to Idaho to have excellent fish returns again. I also believe that we could pay for shipping by rail what now goes by barge on the Columbia River from Lewiston with the savings from not having to dredge and the benefits of salmon to our economy. It is past time to move on and do what is right for the resource.
Thank you
James Irwin, MD

Please support efforts to breach the lower Snake River dams. Those dams are not needed, but we DO need salmon and steelhead.

**No Name Given*

Dear workgroup,

I'm an aquatic scientist well aware of the data regarding factors effecting Idaho's salmon and steelhead.
It is very clear that extinction is unavoidable unless the lower 4 Snake River dams are breached.

Thank you for listening,

Bruce Finney, PhD
Pocatello, ID

Please move on to the Columbia Basin Collective and help look to the future of species that are important to the northwest and the cultural heritage of the people that live here. we need to move toward more clean energy sources that do not threaten endangered species like Salmon and steelhead. Dams are not as clean as we would like to think and they detract from the wild rivers of Idaho. The economics involving tourism to wild outdoor spaces is critical for Idaho, especially in these times where people are looking for safe havens to enjoy the outdoors. Your efforts in this group can bridge the divide between stakeholders and help them see the true benefits over time, that dam breaching can lead to.
Thanks

Mike Sullivan

Breach the four lower Snake river dams and save Idaho's wild fish!

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To whom it may concern,

I recently purchased property on the South Fork Salmon River. I can't imagine having to explain to my grandchildren some day that the salmon are gone. So I have a lot riding on a successful outcome of your workgroup, namely one that ensures the abundant return of the keystone species after which the entire region is named and known. It's salmon country. We can engineer alternative shipping solutions and we can generate power by alternative means, but despite billions of federal dollars we have been unable to engineer our way out of steadily dwindling anadromous fish returns.

I am hoping that you are willing to entertain solutions that make whole those who will be impacted by dam removal. Local businesses that have come to rely on on the existing infrastructure in some way can and should be offered help if we truly want to make this a win-win for Idahoans. We need their support. And if we have to pay a bit more, it is an investment worth making.

I am also hoping you have looked carefully at the economics of this problem, which is a raw deal for Idaho. BPA is waging a losing battle against much cheaper sources of energy, even without federal subsidies, and should not be allowed to take the salmon down with them at our expense. Idaho stands to gain enormously from the return of anadromous fish. Outfitters, guides, equipment sales, lodging, dining, and many other businesses would expand dramatically with the restoration of our fishery. The overall productivity of the ecosystem also stands to benefit - more wildlife, bigger trout, and healthier forests. And of course the benefits won't all stay in Idaho - countless more downstream and out into the Pacific also stand to benefit. Not all of these things have been or can be valued monetarily, but many have. What is available strongly favors removing the dams, even without accounting for our treaty obligations to the Nez Perce. We don't default on our honor in Idaho.

I implore you - be creative, respectful, open minded, innovative, unconventional, but you've got to phase out those dams. Flood control is not a legitimate reason to extirpate salmon from Idaho and neither is the revenue generation needed to keep BPA afloat at Idaho's expense. It simply cannot be that only pictographs remain to document the abundance that was once one of Idaho's greatest assets.

Sincerely,
Darius Semmens
162 Dustin Rd.
Warren, ID 83671

The Nazi Government of WWII tried to eliminate a part of a species: they were called followers of the Jewish faith. The species was ours. Now, we have the option of being members of our species with the power to stop the elimination of another part of a species: fish. Without salmon, we lose a tribal contact with the native people of this land, we lose an economy from fisherman who would like to catch salmon in the high mountains and desert terrains of Idaho, and more importantly, we lose a part of our humanity. If we lose more, why do we exist? Are we just Nazis?

Get rid of the dams.

Patrick Lang
langpatr@isu.edu

Hello,

I know that you have by this time heard all the arguments, so I won't bring up the facts other than to say one thing. Look at the runs before the four lower snake River dams went in. And look at the rapid decline due to them. I went to the Work group when it was in Twin Falls and I was sad to hear many members of the committee say that there's no magic bullet for this problem. I sincerely sincerely disagree there's magic bullets 1. remove the four lower snake River dams and you'll see the runs return. 2. Stop pumping millions of hatchery fish into the system and you'll see the runs return. Please have the courage to recommend these things to the governor, you know it's the right thing to do. Sincerely,

Daniel Roper
Twin Falls Idaho

I stand for Southern Resident Orcas, salmon and steelhead trout. Please see that the four lower Snake River Dams are breached. They were built to be breached after 50 years and are not efficient. Repairs now do not make fiscal sense and are deceitful to the Nez Perce tribe who are promised the dams would be breached. The Orcas are starving and scientists agree that breaching the dams will be the most effective way to provide them with Chinook Salmon, their primary diet.

Thank you,
Liza Higbee-Robinson
Bellingham, WA

Look what is happening on the coast of Washington state major regulation changes

* *No Name Given*

I am writing to express my earnest desire that the four lower Snake River dams be removed. The preservation of the iconic salmon which come from our Idaho mountain streams is essential. We have worked on this for long enough. Now, it is finally time for action, before it is too late.

Sincerely,

Muriel R. Roberts
541 South Seventh Avenue
Pocatello ID 83201
208 417-0931

To: Members of the Governor's Salmon Work Group

I would like the public record to show that I <u>overwhelmingly support breaching</u> the lower Snake River dams to save Idaho's salmon and steelhead.

Thank You

Robert Marcinko
3315 Lundburg Ln
Pocatello, ID 83204
208 681-4863

I have lived in Idaho 69 years and nothing has really been done that really works to get our wild fish back to Idaho. We need to get more drastic and stronger on what needs to be done. Something must be done that will actually work.

Brent Bohman
Troy ID

As an undergraduate in wildlife conservation at WSU I worked on pre-impoundment studies in the Lower Snake River in 1957 and 1958; I'm familiar with the river. My interest begun as a child in a salmon fishing family. As an undergraduate student in 1957 I worked in the management of salmon on the Alaskan Peninsula. As a M.S. student at the UW I worked for FRI on Kodiak Island, and Bristol Bay. As a graduate student at Arizona State U my dissertation research was on investigation of endocrine regulation of salt and water balance in anadromous fishes. As a NIH Post-Doctoral Fellow at U.C. Berkeley, I continued those studies. My first faculty position was at ISU where my students and I pursued more research on water quality and smoltification of steelhead, as well as fisheries ecology and aquaculture studies. Subsequently I worked out of Hagerman on hatchery Chinook fry mortality. After retirement I devoted much

effort in the protection of headwater watershed as critical spawning and rearing salmon habitat. I have an understanding of salmon ecology, physiology, and mortality.

Saving Snake River salmon is not a single action solution. **Improving water quality by removing the lower Snake River dams would greatly increase successful spawning and downstream smolt survival.** Many other steps would also be important; upstream, downstream, estuary and spawning ground water quality all need improvement, as well as changes in hatchery management.

An excellent early step that would be economically efficient and physiologically beneficial to endangered runs would be the removal of the Lower Snake River dams.

Don Johnson
Retired Biology and Fisheries Professor
Member, Libby Creek Watershed Association

I am writing one more time to plead with Governor Little to do the right thing, the science based option and the best option for Idaho Salmon and Steelhead and the families and cities that depend on sustainable runs of these magnificent fish.

Governor Little should move all of his chips into the Columbia River Basin Collaborative which will provide connection and collaboration with officials from other states concerned with survival of these species.

Below I provide additional comments regarding past actions and efforts.

The Columbia-Snake river system was once the world's most productive Chinook salmon fishery, and the relatively abundant high-elevation, cold-water habitat in the Snake River basin still offers the single best opportunity for dramatic increases in salmon and steelhead abundance in the Columbia watershed. This potential has been affirmed many times:

1996 ***Return to the River*** report by the Independent Scientific Group concluded that a focus on technological solutions "*should be phased out in lieu of a return to more normative river conditions*";

1998 Plan for Analyzing and Testing Hypothesis (PATH) report concluded that removal of the 4 Lower Snake River Dams (LSRD) offered an 80% chance of recovering Snake River spring/summer Chinook and a 100% chance of recovering fall Chinook;

1999 American Fisheries Society Western Division resolution identifies the LSRD as a threat to the continued existence of remaining Snake River salmon populations.

1999 Concerned Scientists: more than 200 scientists send a letter to President Clinton saying, in part *"Due to habitat loss resulting from the construction of impassable dams, the Snake River*

basin now contains 70 percent of the potential production for spring/summer chinook salmon and summer steelhead in the entire Columbia basin... The weight of scientific evidence clearly shows that wild Snake River salmon and steelhead runs cannot be recovered under existing river conditions. Enough time remains to restore them, but only if the failed practices of the past are abandoned and we move quickly to restore the normative river conditions under which these fish evolved… Biologically, the choice of how to best recover these fish is clear, and the consequences of maintaining the status quo are all but certain";

2000 NOAA Biological Opinion stated that removal of the LSRD offered "*more certainty of long-term survival and recovery of Columbia-Snake salmon populations than other measures"*;

2002 U.S. Fish &Wildlife Service (USFWS) reported to the U.S. Army Corps of Engineers (USACE) Environmental Impact Statement "*the benefits to fish and wildlife from the Dam Breaching alternative exceed the benefits provided by the other alternatives… all available science appears to suggest that dam breaching has the greatest biological potential for recovering Snake River salmon and steelhead"*;

2004 American Fisheries Society Western Division (BiOp remand) comments that in contrast to uncertain benefits from other recovery measures "*the benefits to Snake River stock survival and recovery would be assured with the removal of the lower four dams on that system*";

2008 NOAA Fisheries SRKW Recovery Plan acknowledges orcas' historic reliance on Columbia Basin chinook and describes salmon population declines as "*perhaps the single greatest change in food availability for resident killer whales since the late 1800s… A new project that examines the relationship between the whales' survival and birth rates and range of risk factors–including salmon abundance, the ocean environment, vessel interactions, and gross exposure to contaminants–suggests that the whales' birth and death rates more strongly correlate with Chinook salmon abundance than with any of the other factors analyzed* ";

2011 American Fisheries Society Western Division (Resolution) again identifies the LSRD as critically limiting variable in Snake River salmon recovery and calls for breaching, stating: "*if society-at-large wishes to restore Snake River salmon, steelhead, Pacific lamprey, and white sturgeon to sustainable, fishable levels, then a significant portion of the lower Snake River must be returned to a free-flowing condition by breaching the four lower Snake River dams*";

2018 Concerned Scientists: more than 30 salmon scientists from the Pacific Northwest signed a letter to Governor Inslee's SRKW Task Force recommending "*the most effective measure we know of to permanently increase the sustained abundance of Chinook salmon from the Snake and Columbia Rivers: removing the four federal dams on the lower Snake River and restoring the ecological health of that river corridor. The Snake River basin now supports 70% of the habitat available for recovery of spring/summer Chinook and steelhead trout in the entire Columbia River watershed…Nonetheless, at that time (and since) the federal agencies involved in operating these dams have chosen to take other approaches to restoring Columbia and Snake River salmon, approaches that consistently have been rejected by the courts as legally inadequate. We too believe these past efforts demonstrate that the focus on nursery habitat restoration and other measures short of dam removal cannot deliver sufficient survival benefits*

for salmon and steelhead, and that Lower Snake dam removal remains the most effective and available action to increase Snake River salmon abundance in the long-term."

2018 The Fish Passage Center, in a written response to questions from the SRKW Task Force, addressing the futility of all other options relative to restoring normative flow conditions, stated "*it is clear that there are only two options left for the region, increase spill to the 125% gas cap and/ or remove the four lower Snake River dams*."

Below are responses to an off base op ed that appeared in the Idaho State Journal on March 29 othe 2020. The opiner had strung together a rash of sarcasm, disrespect and non-facts. For each of his points, I have provided a response based on the science of more than 30 years.

Points From the Idaho State Journal March 29 Op Ed on Lower Snake River Dam Removal. Facts from Science.

Op Ed Point - Breach the dam supporters are mostly "arm chair journalists with agendas."

FACT: The PATH analysis is the Plan for Analyzing & Testing Hypotheses, a collaborative process for formulating & testing hypotheses surrounding Columbia River Basin (CRB) Anadromous Fish Recovery (Marmorek et al 1998). This report was commissioned by the federal agencies responsible for dam operations and salmon and steelhead protection. The report was edited by three highly respected editors of the ESSA, and had input from over 30 contributors with personal, scientific knowledge of Snake River salmon and steelhead. PATH concluded the Natural River (Breach) is the only option that will provide recovery. This option has the highest certainty of success and the lowest risk of failure. PATH reported their findings in 1998 and for the past 20+ years independent scientists and scientific review panels have re-affirmed PATH conclusions. Recent collaborative scientific report that confirms PATH: Comparative Survival Study report (CSS 2019), which predicts a 2-3-fold increase in salmon abundance with removal of the four lower Snake River dams and a 4-fold increase if breach is coupled with maximum spill over the Columbia River dams. Dam breaching as the only mechanism to save Idaho salmon and steelhead is supported by the scientific evidence. Had the PATH recommendations been implemented in 1998, we would have already achieved recovery of Idaho's salmon and steelhead. *Available online.*

Op Ed Point - Nor would breaching definitively increase salmon numbers; even the most ardent salmon advocates don't make promises as to the likely recovery numbers.

FACT: As noted above, NOT true. Scientists from all over the Pacific Northwest have been promoting breaching LSRDs since 1999 when **200 fisheries biologists** sent a letter to President Clinton detailing the failed past processes and supporting breaching the dams as the ONLY mechanism for recovery. A 2000 National Oceanic and Atmospheric Administration (NOAA) Biological Opinion stated that removal of the LSRDs offered "*more certainty of long-term survival and recovery of Columbia-Snake salmon populations than other measures." Available online*.

A half dozen other reports and statements up until 2018 strongly support breaching the dams. In 2018 The Fish Passage Center, addressing the futility of all other options relative to restoring normative flows, stated "*it is clear that there are only two options left for the region, increase spill to the 125% gas cap and/ or remove the four lower Snake River dams*." Available online.

Five experts in salmon and orcas addressed PNW governors, policymakers, and members of Congress in a letter on February 20th, 2020. The letter provided a concise review of the best available science on the relationship between the LSRDs, Chinook salmon recovery, and Southern Resident orcas.

Decades of research by scientists were summarized in this white paper, consistently pointing toward restoration of the Lower Snake River through dam removal as the single most effective strategy for recovering salmon and steelhead in the Columbia River Basin. Experts stated that dam removal has a "uniquely high recovery potential" for Chinook salmon compared to other actions. Concluding that removal of the dams is necessary to restore salmon runs and avoid extinction of the Southern Residents orcas. The analysis identified the Lower Snake River dams as the primary cause of Chinook salmon decline and the low Chinook salmon populations as the largest threat to Southern Resident Orcas. *Available online.*

These scientific conclusions are based on facts evaluated by actual scientists, not pseudo experts and biased journalists.

Op Ed Point – In various forms throughout the Op Ed, the writer makes the point that power generation at the LSRDs is essential to the survival of the power grid, essential to Seattle. Loss of the LSRDs would significantly increase power rates, increase grain transportation costs and lead to economic failure for the thousands of irrigated acres now pumping water from the Snake.

FACTS: LSRDs operate best in high spring flows. In August through January, production from the LSRDs runs in the 1 – 3 K MWs. The LSRDs annual output is about 1,000 average megawatts, about one third of peak capacity. Notably less than stated in the Op Ed. Based on current capital costs for wind and solar, it is now an open question whether or not wind and solar and demand response could provide carbon-free power more cheaply than the dams. Given that average annualized costs to continue operating the dams for the next 30 years is $245Million per year, replacing the dams with alternative energy sources would benefit rate payers. *Information available online.*

Op Ed Point – LSRD breaching would somehow result in loss of flood control and threaten thousands of acres of Idaho farmland.

FACT: LSRDs are "run of the river," providing minimal, if any flood protection in the region. Even considering that there is "Idaho farmland" near Lewiston or Moscow, how does any action regarding irrigation at the LSRDs have any potential to threaten farmlands 20 to 30 miles away?

At least a dozen other counter points, based on solid science and the personal experiences of dozens of professional fisheries biologists could be made addressing the 3-39 Op Ed. Space considerations prevent this presentation but we encourage you to search credible online sources for FACTS.

I sincerely hope Governor Little will consider all of the FACTS related to the removal of the Lower Snake River Dams and take appropriate action, throwing his political support and that of the experts in the Idaho Fish and Game and the myriad of NGOs involved in this process into genuine recovery efforts --- i.e. #BREACHTHEDAMS.

I sent 14 pages of comments to BPA on their last EIS. A totally inadequate and flawed document. BPA piled pages of unrelated and nearly valueless minutia into the document and missed all analysis of the "Affected Environment" portion of EIS, the heart of an EIS.

Sincerely,

John W. Sigler
PS. I worked on Steelhead in the McNary Pool in 1977 and at the dams and Dworshak Hatchery tagging fish in 77 and 80.

Good morning, my email this morning is in support of removing (breaching) the lower Snake river dams. Times are a changing, with regards to clean energy. My opinion is any dam that is contributing to the decline of Salmon / Steelhead needs to be removed. As I'm sure you are aware, the ecology / ecosystem the fish bring to Idaho and beyond is very important. Thank you for your efforts.
V/r
Dan Lenihan
(208) 241-4501
Luckylenihan@gmail.com
Pocatello, Idaho

Our wild fish need bold action to stave off extinction. We are responsible for maintaining biodiversity in our world and have been failing miserably so far. Idahoans' salmon are a symbol of the wild Idaho we cherish. We must save them by breaching the lower Snake River dams; we want the governor to move into the new regional forum, the Columbia Basin Collaborative with a mandate to support dam breaching to save Idaho's salmon and steelhead.
Thank you for your consideration,
Kelley Cooper

Dear Salmon Recovery Task force,

After millions of dollars spent on the subject time is running out for native salmon runs on Idaho's premiere river - the Salmon.

What a sad day that will be.

When will we realize that doing the same thing gets the same failed result ? Warm river temperatures, poor downstream migration, issues with up-stream migration are ALL related to the dams. We can have great habitat in Idaho, but if we do not remove the dams we are throwing native salmon into the extinction graveyard.

We need to think big. We need to support alternative transportation for upriver agriculture products. We need to support ALL alternative power generation options including nuclear.

As we do this we need to do what should have already been done.....REMOVE the DAMS.

Lawrence Flournoy

Breach the 4 lower Snake River dams and save Idaho's wild fish! We owe it to future generations.
--
Matt Kelley


2700 N Yellowstone Hwy
Idaho Falls, ID 83401
1-800-394-1345
1-208-552-0622

If we fail to restore salmon populations, it’s one more step toward the demise of an overall ecosystem/culture that makes Idaho the uniquely precious environment we all love and cherish.

Brent Davy

Dear Governor Little,
Millions of dollars have been spent since the 1970's on salmon recovery. They have not worked. Salmon are near extinction. We know that they will return if we breach the dams. It is my hope that this letter along with others will let you know that the people of Idaho do not want the extinction of the salmon on their watch.

Please vote to breach the four Lower Snake River dams.
Linda Engle

Sirs,
At a time of global warming and increasing alternative energy sources, I firmly believe that the four lower Snake River dams should be breached. These Idaho breeding salmon are going extinct right in front of our eyes. Please strongly consider this drastic move to save them.
Thank you,
Charles, H. Trost, PhD

Greetings members of the board and thank you for the opportunity to give public comment. As you might recall, my name is Shiva Rajbhandari and I am a Sophomore at Boise High. I'm actually supposed to be tuned into school right now, but I recognize that the livelihood of the next hundred generations of Idahoans and the wilderness they will inherit is more important than my AP Physics class at the moment. Speaking of AP Physics, saving Idaho's keystone wild chinook, sockeye, and steelhead is not rocket science. Over Labor Day weekend, I went to Utah to visit family and I took my six-year-old cousin fishing on the Jordan River. I told her about dams and the water's journey from the mountains to the pacific ocean. "Well how do fish make it?" she asked. Now Elise is a smart girl, but the point is that even a six-year-old gets it:

In December this board will make a recommendation to the governor, and I understand that you all are writing a bunch of different policy proposals and ideas. Really though, it's simple: if you want the fish to survive, you're gonna have to breach all four Lower Snake dams. Otherwise these creatures which used to paint Idaho's rivers red and silver as they returned in the millions each Spring to their spawning grounds are damned to extinction.

I guess the theme of this testimony is school, so I'm going to tell you about my AP Art History class. In Ancient Rome, they were all about changing the environment to fit their needs. They would raize hills to build arenas. They would construct these massive aqueducts which transported water all across their empire. They dug roads that promoted trade all across Afro-Eurasia. Like the United States in the 20th Century, infrastructure made Rome the global superpower in the 1st Century. Guess what happened. Over the years, leadership grew weak. They became unable or unwilling to innovate and gradually lost the faith of their people. Then infrastructure became their demise. The roads allowed disease to spread. The aqueducts became contaminated with toxic lead. Foreign armies invaded and the empire crumbled.

I'm not anti-infrastructure. We need sustainable power generation. We need speedy transportation of paper and farm products. But infrastructure is a double edged sword. When it gets outdated and poor leadership fails to innovate, it can prove very destructive.

These dams were built in the mid-20th Century without a clear purpose. The power they produced wasn't really needed, they weren't particularly pretty, and they cost a lot of money. I'm sure you guys have seen the graphs, with each new dam put in, fish populations were decimated. Now we have some sort of crisis of the 3rd Century wherein the stability of the Snake River ecosystem and the livelihoods of thousands of Idahoans are at stake and the dams are just leaking money. What's different about 2020 and the Gordian Dynasty is that now other people literally think up the solutions for our leaders and all they have to do is approve them. We have the

solutions right in front of us. From every aspect, these dams are unnecessary. They can be replaced with cheap, clean solar and wind that would actually make money, imagine that, and, if breached Snake River fish populations could recover to support a 500 million dollar economy. All you guys and the governor have to do is say yes.

And if you don't: well I guess 18 hundred years from now some snarky 16-year-old will use you as an example of failure in opposition of some intergalactic highway for the alien overlords.

Prove you're smarter than a 6-year-old and Emperor Servius Alexander. Tell the governor to breach the dams and save our fish. Thank you, I cede my time.

Hello. My name is Shiva Rajbhandari and I am a Freshman at North Junior High. I'm a native Idahoan, and my mom was raised here too. It saddens me that I will never be able to see the places she describes from her childhood because they don't exist anymore. And it saddens me that my children won't ever experience the natural beauty that I take for granted because it'll be gone too. This just makes me think even more that maybe we ought to preserve some of this beauty. They're not making any more rivers. And they're not making anymore land. And I just think that we don't need to use up everything and leave nothing for our kids. The native Americans said it best: *We do not inherit the Earth from our ancestors, we borrow it from our children*. The salmon are an important part of Idaho's wilderness and culture. Let's keep it that way.

Good evening and thank you to the members of the workgroup for allowing the opportunity to give public comment. My name is Shiva Rajbhandari and I am a Sophomore at Boise High School and an avid outdoors person.

I'm testifying today for the same reasons I've testified in the past: **right now** is the time to act to save Idaho's wild salmon and steelhead. A common misconception in those who oppose the breaching of the dams is that this land belongs to us. The land in question is stolen land. Taken forcefully from the Cayuse, Nez Perce, Umatilla, and Walla Walla tribes. What little remains of their stewardship consists of government agreements that promise that wild Chinook, Sockeye, and Steelhead will swim in the Lower Snake River. By failing to breach these dams, and effectively damning these keystone species to extinction, the government is breaking its promise.

Guys, change is scary. My dad is from Nepal and he grew up in a time of a lot of change. The literacy rate was 30%. The king had banned books and education because he was afraid his monarchy would be overthrown. The UN, in their partitioning of India, had offered the king access to the Pacific Ocean, which would have allowed for a globalized economy, but afraid of change, the king refused the offer. Today, the monarchy **has** been overthrown. The literacy rate hovers around 94% and 90% of children are enrolled in school. All of the king's efforts to avoid change failed. The king's only success was to keep Nepal landlocked and isolated from the rest of the world, so they remain one of the poorest countries in the UN.

In the next 50 years, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite **will** all be breached. They are simply unnecessary. They don't generate enough power to

constitute their continued use when compared to other sustainable electricity generation. Barge travel out of Lewiston is only cheaper than rail due to taxpayer subsidies. Right now, all this workgroup and Governor Little, the kings of Idaho, get to decide is when. We can keep our fish, preserve our wild spaces, and allow the 580 million-dollar Idahoan economy that these fish could support to flourish. Or we could be foolish and afraid of change like King Gyanendra: forsaking all that we could gain for what little we could, and will, lose.

To be honest, this entire workgroup ought to be made up of children, for it is our fish, and the fish of our children and children's children, which you are condemning without our say. The day I caught my first fish out on the lake with my grandpa was one of the best days of my life. The Snake River Basin and the wilderness that surround it, supported by the species, continues to be a source of happiness and pride for me and my fellow Idahoans. As you make your recommendation to Governor Little, please think of the smiles, the beauty, and the joy, of the next hundred generations of Idahoans that you hold in your hands.

Thank you.

Greetings

My name is Shiva Rajbhandari and I'm going to be a Sophomore at Boise High next year. I'm writing to you today to express my lack of understanding. I cannot possibly understand what hesitancy you have to breach the four Lower Snake River dams that have pushed Idaho's renowned salmon and Steelhead to the brink of extinction. All the data are there, Governor. Since those dams have been put in place, regardless of the 17 billion taxpayer dollars that have been thrown at salmon "restoration", the number of salmon that have returned to spawn in Idaho streams has geometrically decreased, to the point that these valuable life-givers are at the edge of extinction. The dams provide no flood control, generate very little power which can be replaced by clean alternatives, cost the Bonneville Power Administration more to keep up than they bring in, and are only used for irrigation by 14 farmers, who would not lose their ability to get their water. Even some of these farmers have come out in favor of dam removal, so long as piping is installed to water their crops. We literally have nothing to lose! And keep in mind what we've already lost!

Governor, I know you love Idaho as I do. We may not be the biggest state by population or richest by per capita wealth, but we have something most others can only dream of. We have the beautiful, expansive outdoors. To me and many other Idahoans, there's nothing in the world that could replace that. That's why we choose to live here.

However, right now, your administration is giving off the vibe that you don't really care about Idaho's most valuable treasure. For millennia before the dams were built, the Snake River Basin was painted with streaks of red and silver as Chinook, Sockeye, and Steelhead, returned in the millions to Idaho to lay eggs and die. Sure, sportsmen loved to bring home these massive animals after a long day of fishing, but the anadromous fish meant more than just big game. They left Idaho as tiny smolts, and were carried by the rivers current over 900 miles all the way to the Pacific Ocean. There, they not only supported orcas and other sea life as valuable prey, they also got massive from feasting on krill and small fish. Fast forward three years and these things weighed up to 70 pounds! It was then that they made the long journey back, climbing over 6500 feet to get home. Once back in Idaho, the fish laid eggs and died. Their carcasses decomposed and fertilized the soil with incredibly valuable nutrients supporting important plants

and microbiota which, in turn, support the entire Snake River Basin ecosystem. And I'm not even going to mention the birds of prey and bears that need these fish for food. As you can see, not caring about the salmon means not caring about Idaho's outdoors. If you let these salmon go extinct, which, without dam breaching, will happen within your lifetime, you also let Idahoans' beloved wilderness die.

Governors Brown and Inslee and Congressman Mike Simpson are on board with finding a solution that saves our fish and maintains the services that the dams now provide. Governor Brown has endorsed dam removal aka river restoration and Congressman Simson has said :the fish "need a river". But Idaho's fish cannot be saved without you on-board. The decision is all yours. You can choose to preserve this keystone species for which Idaho is famous for generations to come, or you can keep the dams, for now, until BPA goes bankrupt and they're breached anyway, and force Snake River salmon and Steelhead to extinction. Please, join the effort to restore the lower Snake River and save our fish.

Yours Sincerely,
Shiva Rajbhandari
Resident

Dear Governor Little,

My name is Shiva Rajbhandari and I am going to be a Sophomore at Boise High. This Summer, you have the opportunity to make history. We've seen that the feds are unwilling to work with us to save Idaho's famous wild salmon and Steelhead, but there's a new hope. Governors Brown and Inslee have said Oregon and Washington are on board for helping to bring back our fish, and Congressman Simpson is determined to see the keystone species recovered in his lifetime. You established this workgroup because you were "tired of Idahoans paying the cost of the dams and getting none of the benefits." And yet, now, when Idaho has lost the most and has the most to gain, you are the limiting factor for breaching the four Lower Snake River dams. Today, I've prepared 2 readings from my grandkids' 2070 Idaho history textbook:

Here's the first: *In the year 2020, Idaho leaders dealt the wild salmon and Steelhead that had populated the Snake River Basin for millennia an ultimatum. Knowing that nothing but breaching the 4 unnecessary dams would bring back the fish, but afraid to break status-quo, Governor Brad Little decided to keep the dams. Although several billions more in taxpayer dollars were thrown at half-hearted efforts to bring back the fish, they were never able to repopulate their historic spawning waters. In 2030, when the CRSO met again to decide the fate of the now bankrupt Bonneville Power Administration's 4 dysfunctional assets, the red and silver animals that supported an entire ecosystem were long gone. Idaho's hometown hockey team is now, like everything else in the state, named for potatoes.*

The future sounds pretty bleak huh? Well here's scenario numero dos: *In the year 2020, Idaho leaders reversed course on a 50-year history of poor decisions in an attempt to turn around the declining populations of wild salmon and Steelhead. Governor Brad Little, working in conjunction with his counterparts in Oregon and Washington, decided it was time Idahoans got their fish back. Though it was a difficult decision to make, it was the right one. In the following years after the dams were breached, Idaho's renowned fish began to repopulate the lower Snake. Now, every year on Idaho Salmon Day, we celebrate the decision our bold state leaders made 50 years ago to embrace the wilderness God gave us. Each spring 4 generations of*

Idahoans can be seen on the lower Snake, fishing the best waters in the world and supporting a $500 million economy.

I don't know about you, but I really like the second option better. When I'm a grandpa in 2070, I want to wake my grandkids up at 4 in the morning and take them fishing. I want them to be able to see the streams run red and silver as massive game swim home to spawn. I want them to know that, when I was their age, I helped preserve our wild salmon and Steelhead for generations to come. But it doesn't matter what I want, does it. Really today, the decision belong to you. What do you want your grandkids and great grandkids to read in their history books? What legacy do you want to leave for Idahoans to come?

Breach the dams and save our fish.

Thank you for your time,

Shiva Rajbhandari, Idaho resident

This comment was written by Owen Begley-Collier (a 15-year-old sophomore and a realm leader of the Endangered Species Coalition's "Snake River Savers" campaign), Josh Caplan (a 15-year-old sophomore and member of the Sunrise Movement), Zoe Schurman (highschool freshmen and member of Climate Action Families) and, Azi Brannock (a 12-year-old student and a member of Climate Action Families), with editing help from Jim Waddell (35 years of experience with the Corps of engineers and founder of Damsense), and Nina Sarmiento (of Damsense).

I'm Owen Begley-Collier from Seattle Washington, and my reason for writing is that I've been obsessed with orcas since first grade. I've gone out to the San Juans at least once every year and I've seen the southern residents countless times. Some of my best memories are chasing the whales up and down the west side of San Juan Island, trying to get a glimpse of the black dorsal fins through the reflection of the glaring sun. It's been a while, but the last time I saw them, one of the whales I saw was J50, scarlet. She was 4 years old but was as big as a one-year-old. She used to be the acrobat of the group, constantly breaching and leaping out of the water, something I had thankfully experienced beforehand. But this time she was barely able to keep up with her mom clearly using large amounts of energy just to move. A couple of months later the news came out that she was dead. Another name on the long list of emaciated residents to slowly waste away from starvation. After that, I decided I was going to do everything in my power to make sure that this population survives while I'm here, and long after I'm gone. I've wanted to study the southern residents my whole life. But the sad reality is, I might not be able to because we are starving them. We are starving them all for the sake of keeping a system that isn't working for them or for us. Why should a stakeholder group in Idaho care about this? Well, when I see an orca, I see an extremely intelligent animal with emotional intelligence that we can't even come close to. I see an animal that while it looks different, isn't really all that different from me, in terms of intelligence and in terms of needs. The people of the northwest need these salmon runs as much as they do, and I think all our lives would be a little duller without them. So how do we save them?

Orcas:

First off, let's look at the threats these orcas face. Those threats being, sound pollution, toxins, and most importantly, a lack of food. The reason I say "most importantly" is because the

transient orcas live in the same habitat and are thriving. The only difference is that the transients have enough food since they've evolved to hunt mammals. Noise pollution matters less when there is a food surplus, and toxins matter less when the orcas aren't starved to the point of feeding off of the toxins stored in their blubber. While improvements on all other fronts are great and should keep happening, if the salmon problem isn't addressed effectively and immediately, all of this other work will have been for nothing.

So, how do we recover salmon? Well, the southern resident orcas have been getting more than 50% of their salmon from the Columbia River system, and the best shot that we have to save Columbia runs is to remove the Snake River dams. Puget Sound based efforts are great, but those salmon are obviously being filled with toxins, not to mention the sea walls covering forage fish habitat in that area, as well as the fishing and fish farms in this region. That situation isn't likely to improve unless radical changes are undertaken. Puget Sound salmon recovery efforts will take longer to succeed if they ever succeed. Compare that to the pristine practically untouched spawning grounds that the Snake leads to. These spawning grounds have more resistance to climate change being in the mountains and have little to no human interference. Recovering those salmon stocks has an extremely high probability of success compared to the Puget Sound. Thus, according to the Center for Whale Research, removing the Snake River dams is the biggest and quickest thing we can do to save this population.

Snake River dam removal is not a silver bullet, however, and we need to act now to save these orcas because the point of no return is in less than 5 years according to Ken Balcomb, the leading orca scientist in our region. These whales are a regional icon, and with them gone, the tourism industry would suffer, but we would also be losing a part of our region's identity. We would be losing a part of ourselves. As Ken Balcomb put it, "we're going to die of a loneliness of spirit." We don't have the time for more studies, litigation, or talking without action. We know what needs to be done, we just have to do it. This is why we're asking you to recommend that Brad Little put pressure on the Corps of Engineers to breach the Snake River dams.

Salmon:

Journalist Timothy Egan once referred to the Pacific Northwest as anywhere a salmon could swim, by that logic, our region has been cut in half by dams.

The lower snake river dams have caused the Salmon population to plummet. Despite having Salmon ladders and other passages, it is exceptionally difficult for salmon to pass through these dams. Salmon ladders only help Salmon getting back, and many fish die on their way out or simply cannot navigate these dams. Most of the smolts who die crossing the dams die in the slack water reservoirs behind the dams. These reservoirs not only affect the salmon's Migration by messing with their natural instincts to let the river do the work of moving them, but the stagnant water in these reservoirs also heats up past 68 degrees (the highest survivable temperature for a salmon). The lack of suspended sediment in the reservoirs makes the water clearer, which makes salmon more susceptible to predation by invasives. That's not even taking into account the delayed mortalities caused by the stress of passing through 4 dams on the Snake alone. The Snake River dams and reservoirs kill about 40% of the smolts which attempt to pass through them. A sustainable ratio of smolts becoming adult Salmon is over 2%, the ratio for wild fish in the Columbia is below that and the ratio for hatchery fish is even lower. Both being well below 1%. The ratio for hatchery fish is lower because hatchery-bread fish are often smaller and weaker. This is because they are inbred, and there is no natural selection in a hatchery

environment. This makes it so the few smolts who make it to adulthood will weaken the salmon population when they breed, essentially watering down the wild genetics. So, even if we increase hatchery production, those salmon will not be able to sustain themselves. Breeding fish in a hatchery is not a sustainable solution.

Bonneville Power Administration has been working on a recovery effort that has cost several billion dollars. Likewise, the Corps of Engineers has spent a billion on improving juvenile passage at the dams. These efforts have been largely unsuccessful. It is clear, the sustainable solution to this population decline is the removal of the lower Snake River dams.

Fisheries:

Orcas and salmon are not the only creatures at stake, however. The communities who rely on these salmon runs are being deprived, and are collapsing. As your own member, Aaron Lieberman said, "It's not a hypothetical future contingency in which they (fishermen) might be hurting, it is real, it is immediate, and it's been long endured." For fisheries from Idaho to Alaska, these salmon are a staple food, source of income, and a piece of many people's identity. But now it's hard to make a living being a recreational fishing outfitter. In Alaska, dipnetting is also a staple of the culture, but they have had to watch the fish size plummet due to lower numbers causing higher pressure on the stocks, and the genetically watered-down hatchery fish that have crippled this and many other runs.

If you want to look at the economics, when John Lumis was asked by the Army Corps to find what the economic growth on a free-flowing Snake River would be, his estimate was somewhere in between $80 million and $500 million **per year**. The Army Corps (being the Army Corps) took the lower estimate, and thus, the massive economic benefits of dam removal are often overlooked. While this point has been somewhat debated among scientists, many researchers believe we may have to halt commercial fishing entirely for a few years, and put heavy restrictions on recreational fishing (even if the dams are removed) to save pacific runs for orcas and fisherman. The stakes are insanely high and are increasing. If we don't remove these dams now, these fishing communities will be on a certain path to extinction as well. This is why breaching must be a recommendation if you want to make any meaningful impact on salmon stocks.

Tribes:

"We are losing inherited rights, losing part of a relationship, even a part of ourselves. These for us are human rights issues. Without these (salmon) we lose everything, identity, language, spirituality, our way of thinking. That is what is at stake." -Nakia Williamson (Nez Peirce Cultural Resource Program Director).

The tribes on the Columbia and Snake rely on the salmon as a source of income and a staple part of their culture. In particular the Nez Peirce and Palouse tribes on the lower Snake. The dams' reservoirs also covered up much of where the natives used to fish as well as burial sites and places of extreme cultural importance. Carrie Chapman Nightwalker Schuster who is a Palouse tribal elder said this about when the Ice Harbor Dam was built. "I had the most glorious life any child could ever live. We had the best water to drink... we pulled out some of the biggest salmon, salmon that weighed over 100 pounds. ...the earth sustained us, it's very different today. I remember the day where we had to move, and that's when I finally realized that my life was going to change. I would never again wake up by the falls. Then finally there were sheriffs' cars, that's when they escorted us off and we were never allowed to come back to our village, and

after that, we'd seen the water coming up right to our road and it started covering our road. That's how fast the build-up was on that water once they closed that dam off. That's how right to the very end, my mother and my grandfather held on to that site. That was when we got over that ridge I could see our logs that we played with. They were floating now, and it's all underwater now." We have the moral and legal responsibility under treaties, to keep these salmon runs alive for the sake of these tribes. We've tried everything except removal, and even NOAA and the Army Corps will admit that dam removal has the greatest chance of working. Jesse Nightwalker also spoke about how his elders were promised in the 50s by the senators at the time, that the dams would be removed by 2010. These people have been consistently let down and manipulated. No amount of good-intentioned actions are going to mean anything unless these dams are removed. The economic and cultural costs if we lose these salmon runs is immeasurable and is something that cannot be understated.

Farmers:

If we get rid of the Snake River dams, wheat wouldn't be shipped by barges, but according to Burlington Northern Santa Fe and Watco, the owners of the upgraded rail lines along the snake, trains could replace them. In 2017, the lower snake navigation system was down for 4 months and it didn't affect the farm shipments in any noticeable way. In fact, the snake is so underutilized, that it is under "negligible use" by the Army Corps' own definition. Additionally, the dams have flooded about 20,000 acres of an agricultural valley, and with the dams gone, the 20,000 acres can be reclaimed to support orchards and vineyards. The removal of the dams will also give large growth to riverside communities that have been in decline since the dams were built. Improving the irrigation for farmers would cost approx. $22 million, while improving the rail lines so they can continue to ship by rail would cost about $40 million. Without the subsidy on barging, rail is quite a bit cheaper, and could also be subsidized if need be.

Many people claim that we will experience great job loss were the dams to be breached, but a 2002 RAND study found that "the four dams on the lower snake river could be removed without negative consequences to economic growth and net employment." We know how to make farmers whole, but this fact has been covered up with scare tactics and misinformation from various groups. It is time that we come to our senses and employ these mitigation methods so farmers and salmon can live in harmony.

Hydropower:

But the dams are a major source of energy for our state, and if we were to remove them, it would cause region-wide power outages. After all, the dams have enough energy to power Seattle, is what I would say if I gave in to the blatant misinformation around these dams. In reality, these dams create surplus power that is rarely used, they provide less than 3% of the region's energy, and can power Seattle… if they are at their max capacity of 3,000 megawatts, which is something that has never happened. In reality, the dams typically produce just under 1,000 megawatts. Power outages are something that people like to use as a reason for keeping the dams. But even if we need the surplus power, it can simply be bought on the open market. If we want that power to come mostly from our state, we could use the Northwest Energy Coalition's power replacement plan which involves no new fossil fuel or natural gas infrastructure and would cost $1.38 per household per month to pursue. Even if we were to replace the dams' power, we would still have a $4-$1 benefit-cost ratio, a much better deal than we are currently getting out of the dams. These dams are also (as far as hydropower goes) not extremely reliable. They are run of river dams, which

means they store little to no water behind them to run through the turbines during times of high demand. This also makes them incapable of flood control. The dams create surplus power that is unneeded and is often sold at a loss. We can remove the dams, save salmon, and have clean, reliable, and cheap power.

Economics:

These dams are an economic travesty. They have a $.15 to $1 benefit-cost ratio (according to Earth Economics), they flooded a once vibrant agricultural valley, they kill keystone species, and they have halted all free-flowing river related tourism. Supporters of the dams may want you to think otherwise, but let's take a quick look at their figures. When the dams were built the Army Corps had to do a study to justify the Lower Granite Dam through barging benefits. When that study was reviewed by UW professors and economists, they found that the Army Corps overestimated petroleum shipments, grain shipments, pulp shipments, and paper shipments. Today wheat is virtually the only commodity shipped on the Snake, and wheat shipments have gone down significantly over the years due to more farmers switching to rail. When the Army Corps was forced to look at dam breaching in the form of the Lower Snake Feasibility study. Based on its results, Army Corps worker Jim Waddell gave the recommendation to breach the dams. His recommendation was removed, the study and money spent on it were wasted and he was branded as disloyal. In 2002 the study was finished, and when it was looked over by Earth Economics, they found that the Corps underestimated maintenance by $160 million and overestimated the cost of breaching by $656 million. They also found that the dams have a benefit-cost ratio of 15 cents on the dollar. The nail in the coffin, however, is the fact that no Army Corps study has looked at the intrinsic value of salmon as a keystone species making all of these studies flawed from the start. For an agency with this bad of a reputation, it's baffling that these studies get as much attention as they do when things like the updated Army Corps study and the ECONW study exist. According to ECONW, operating the dams for the next 30 years will cost $245 million per year on average, and the costs for keeping the dams outweigh the benefits. The new EIS claims that the cost of replacement for these dams would be too great of a cost to BPA ratepayers. But this study among many other issues had an unrealistically short time frame to replace the power. A much more thorough study to look at would be the Northwest Energy Coalition's power replacement study, which found the dams' power could be replaced with no extra cost to ratepayers compared to keeping the dams. These dams have torn apart communities, killed millions of salmon, and are costing the people of our region millions every year.

Climate:

Hydropower is often thought to be 'clean energy'. A greenhouse gas-free, green power source. Well, research over the past few years has proven that wrong.

Dams actively release greenhouse gases. More specifically, they release CO2 and methane - which is, as you probably know, is 86 times more potent than CO2. Dammed rivers provide the perfect conditions for methane (and CO2) generating microbes, which will feed on decaying algae. The river continuously provides large amounts of organic matter and sediment from upstream, plus nutrients like nitrogen and phosphorus from agricultural activities (nitrogen and phosphorus boost their methane production), all of which drives algae growth and provide even more material for microbes to break down and convert to methane.

The Snake River Dams are no exception.

The Snake River has been transformed from a free-flowing beauty into a dammed, high temperature, slow, nutrient-filled habitat for these microbes. One paper that looked at a study by the Pacific Northwest National Laboratory found that these dams released around 1,447,531 kg of methane, and 1,527,950 kg of CO2 that year, and with some basic elementary school math, you'll find that's equivalent to 126,015,616 kg of CO2 - or over 125,000 metric tons. They produce the equivalent greenhouse gas emissions as a 150 MW gas-fired plant.

Consider this: these dams are destroying ecosystems. They are hurting our communities - tribes, fishermen, ratepayers and so many more. For so long, people have excused that by saying "At least it's green energy! Don't you want to save the planet?" Now, that one benefit, the single pillar of support these dams have is starting to crumble.

Logistics:

Now, to get into the logistics of dam removal. First of all, many people believe that we need Congress to authorize the removal of the Snake River Dams. This is false. The Army Corps has the responsibility to make sure that their projects are profitable and don't hurt the environment, and they do not need a federal judge to make corrections if one of their projects doesn't achieve that goal. So, they can put the dams into a non-operational status and remove the earthen berm portion without congress. Given the way these dams were built, there is little engineering involved with performing a controlled hydraulic breach. This means you create a notch in the earthen berm with a bulldozer and let the water run through that notch. Within 8 hours or so the river is free-flowing.

Now, when people throw around cost estimates of $3-5 billion, it's because they are talking about removing the whole dam, spillways, powerhouse, and all. We don't need to do that, all we need to do is remove the earthen berm and let the river run around the rest of the non-operational dam. Because of that, the removal of the Snake River dams would cost less than the removal of the 2 dams on the Elwha at about $280 million. We would need to do this in the winter because increased sediment following could have adverse effects on salmon, and winter is when there is the least amount of salmon in the river. The policies and engineering are all in place, all we need are major region politicians like Brad Little to call the Army Corps of Engineers and pressure them to breach the dams. The Corps acts on political pressure, and that is what they are currently lacking.

Now, we would like to leave you with this final question. What do you want to be remembered for? Do you want to be remembered as a group that knocked down the first domino in the salmon recovery chain, and stood up in support of the country's biggest salmon restoration project? Or as a group that strengthened a status quo that isn't working for us, salmon or orcas? Change is scary, but the ability to change is necessary if we want ourselves and our animal counterparts to survive and thrive.

We thank you for the opportunity to comment and for the work you have already done. We hope that this comment will motivate you to do more for salmon, orcas, and the communities that love and rely on them.

As a devoted Idaho conservationist, I strongly urge the Workgroup to take bold measures to restore our wild fish and stave off their extinction.

I strongly urge you to support the breaching of the four lower Snake River dams that impede their migration and reproduction.

I also ask that the Governor join the Columbia Basin Collaborative, a new regional forum, with a mandate to support dam breaching to save Idaho's salmon and steelhead.

Thank you, Elaine French, Ketchum

Salmon Workgroup Members -

I offer these final comments on the pending extinction of salmonids in the Snake River drainage.

At the proverbial last minute, a Dr. David Welch has published a study that blames changes in the North Pacific Ocean for the decline in anadromous fish return to the Snake River. There are several points here:

First, the study was funded by the Bonneville Power Administration, hardly a neutral player. History has taught us to be very wary of industry-funded research. I suggest that each member of the workgroup read Oreskes and Conway's book, *Merchants of Doubt*, and see if the pattern of conduct by Dr. Welch and BPA isn't a reflection of the pattern by the tobacco industry, the refrigerant industry, the fossil fuel industry and other examples that Oreskes and Conway carefully document. It's a tried and true technique, and the timing, the funding and the skeptical reaction by almost all other fisheries biologists suggest that BPA has adopted the same strategy as its colleagues: sow doubt, hire bespoke psuedoscience and muddle the issues. Again, read *Merchants of Doubt* and you will finds pretty much the same pattern.

Second, I remind you again that you cannot afford to get this wrong. Let's suppose that Dr. Welch is right and human-caused changes in the North Pacific have so altered its ecology that smolt and young salmonid survival is down. That doesn't mean that the four dams in the lower Snake River are not also contributing to the crisis. Indeed, there are decades of published research – not just one, last minute study – that document the Lower Snake River dams are the primary cause of the decline. And our salmonids have been in decline for decades; nothing in Dr. Welch's work points to changes in the past.

Third and last, anadromous fish seem to be doing just fine in Bristol Bay and Lower Cook inlet in Alaska. Copper River returns were down, but not drastically or extremely so. Dr. Welch's study would imply there's a condition in the North Pacific – a body of water shared by all salmonids – that affects only Columbia Basin fish. (California and Klamath fish are another story: their habitat is badly degraded.) That seems pretty doubtful.

Please, get this right. Call for the expedited removal of the Lower Snake River Dams.
Jim DeWitt

Dear Governor Little and the members of the Salmon Workgroup,

Our wild fish need bold and decisive action now to prevent their extinction! This action is needed for the salmon, the whales that depend upon them as an essential food source, and the communities that benefit from Salmon fishing.

The public record clearly shows that comments made over this past year overwhelmingly support breaching the lower Snake River dams. Dams that are no longer useful, are a drain on taxpayers and devastating to both Salmon and Steelhead runs.

I want the Governor and his workgroup to move into the new regional forum, called the Columbia Basin Collaborative, with a mandate to support dam breaching to save Idaho's Salmon and Steelhead.

My request is being made on behalf of the fish, who have no voice. It is also on behalf of my late husband - an avid and highly responsible fisherman - who provided our family with nutritious Salmon and Steelhead for many years.

Please do not fail to protect these beautiful and essential fish.

Thank you for your attention to this matter.

Sincerely,
Alida Bockino
Moscow Idaho
alidabockino@gmail.com

Please breach the lower Snake River dams and save our wild fish. I want my daughter to have the opportunity to fish for wild steelhead. At the rate we're going, she likely never will. We owe it to our children and the greater ecosystem to breach the dams now!

Sincerely,

Jess Kelley

I'm writing to request MORE ACTION to save Idaho's salmon and steelhead.

It's time to breach the dams on the lower Snake River.

Some of my earliest memories are fishing with my father on the Columbia. And seeing the runs decline. Then as an adult seeing the livelihood of people dependent on the river decline. It doesn't have to be this way for the non-critical, especially problematic dams of the lower snake.

We now stand to be the generation that snuffed out the very last of our great wild fish, forever impacting river and ocean health and species up and down the greater Pacific Northwest ecosystem.

I support and request more intensive action to save our salmon and steelhead.

Thank you,

Rebecca Reed
Registered Voter, State of Idaho, Ada County.

To whom it may concern. I attended a meeting of the Governor's Salmon Workshop last year in Lewiston, and would like to reiterate my strong conviction that the only way to save imperiled species of Snake River salmon and steelhead, as well as Orca pods that rely on these species for survival, is to breach the 4 lower Snake River dams.

There have been many studies that indicate potential harm from dam removal to farmers and local businesses can be fairly easily mitigated at a relatively low cost. We cannot let this iconic species of wild fish die so that inefficient means of transporting crops and other freight downriver persists.

I would also like to encourage Governor Brad Little join the join fellow NW governors in a new regional forum, the Columbia Basin Collaborative, that is seeking common sense solutions to solve the region's economic challenges, with a mandate to support dam breaching. Scientific studies over the past 20 years have shown that dam breaching is the only truly effective means of saving Idaho's salmon and steelhead, thus sustaining Tribal fisheries and supporting local tourism and outdoor recreation industries that rely on the presence of these iconic species.

Thank you for your attention to these comments.

Joanne Richter
60065 River Bluff Trail
Bend, OR 97702
541-420-4861
joanneerichter@gmail.com
"The idea of wilderness needs no defense. It only needs more defenders." Aldo Leopold

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The time has come for correcting our mistake of damming our rivers.
We did not realize the impact our actions would have on the natural world. We as humans can devise other ways to solve our problems (i.e., generate the power we need), but the salmon and steelhead cannot solve the migration problems we caused for them by obstructing their natural route to the ocean. This route and their lives are quite a miracle to think about and we are so blessed to have them in our world. How can we treat them and the species that depend on them, in such a horrible way?

Please turn this into an opportunity and show what we are capable of. The Governors of Idaho, Montana, Oregon and Washington can work together to make history by breaching the dams, creating jobs and saving the salmon, steelhead, and all the other species (orcas for one) impacted.

Thank-you for your efforts and your time spent reading my comments.

Best Regards,
Nancy Holcomb

Breach the dams, Dave the salmon!!

Brenda Boyle

Dear Idaho Governor's Salmon Workgroup,
We need the new regional forum, called the Columbia Basin Collaborative, to move with a mandate to support Snake River dam breaching to save Idaho's salmon and steelhead.
The four lower Snake River dams restrict coho salmon's migration and therefore have a huge impact on salmon populations. That in turn massively affects the food supply of the Puget Sound's resident orca population. Removing the dams will have the dual effect of improving salmon and steelhead runs and increasing the food supply of whales.
Please support the removal of the lower Snake River dams, and support our wildlife and environment in the Pacific Northwest.
Sincerely,
Leslie Kreher,
Monroe, WA

Dear Governor Little and the Governor's Salmon Workgroup:

Idaho's wild salmon and steelhead need bold action to be saved from extinction. BREACH THE DAMS !!!!!

Thank you,
Anne Herndon
6110 Bay Street
Boise, Idaho 83704
208-377-8767

Dear Madam or Sir:

Our wild fish need bold action now to prevent extinction! I totally support breaching the lower Snake River dams. And I urge the Governor to move into the new regional forum called the Columbia Basin Collaborative with a mandate to support dam breaching to save Idaho's salmon and steelhead.

Please do the right thing and join the Columbia Basin Collaborative and support dam breaching to save our salmon and steelhead.

THank you for your consideration in this very important matter.

Sincerely,

Theresa Kaufmann
Pocatello ID 83204

Thank you very much for your effort to bring many parties to the table and discuss solutions to a very serious and pressing issue.

The dire situation the salmon in Idaho face is clearly evident. The issue is not only about our duty to protect the environment we share with other species, salmon are a vital part of Idaho's economy, they are an integral part of the cultural of the people who have lived here for countless generation, and they are a unique legacy we have been tasked with preserving for our children. We have made valiant attempts for decades to find a path forward that does not impact the dams of the lower Snake.

Unfortunately these efforts have been unsuccessful. It is time to take a different tactic. Breaching the 4 lower snake dams is what needs to occur. Fortunately, we can solve the issues that arise if the dams are breached. One aspect of this situation is the energy production that comes from the dams. As someone currently working in the renewable energy industry I am in a position to let the working group know that we can replace the reliable, affordable, and clean energy coming from the dams with other sources of power that are equally reliable, affordable, and clean (if not more so). Not only do we have the opportunity to protect an iconic species that represents so many different things for our region, we can at the same time help spur an energy transition and next wave of job creation.

Let's make use of this opportunity!
Alex McKinley

_____
Alex McKinley
Empowered Solar

Idahoans believe our wild fish need bold action to stave off extinction.

I am reaching out to request the Governor to move into the new regional forum, called the Columbia Basin Collaborative, with a mandate to support dam breaching to save Idaho's salmon and steelhead.

Please support Idaho's wild fish, rivers and resources!

Thank you,
Todd Walton

We support breaching the Snake River dams to restore salmon runs. The Pacific NW has abundant renewable energy resuorces which can more than replace the dams' electric output. Rail and (maybe soon electric?) trucking can replace the shipping; perhaps at a higher price but restoring the species is worth it. Salmon are the lifeblood of several Idaho commuties situated on the Salmon River whose survival relies upon the fish' survival. For the sake of the salmon and the communities, breach the dams.

Todd & Stephanie Haynes
Boise, Idaho

Work group:

Well here we are again talking about saving wild Salmon and Steelhead. I'm sure I don't need to review the timeline of the decline of anadromous fish in Idaho. We all realize (or should) that losing these entire species would be an unimaginable tragedy. The pressure on these fish is great: over fishing the oceans, climate change, disease from aquaculture, and the barriers we erect impeding their migration to and from the ocean. YET……we do little or nothing to improve the situation. In 1998 The Idaho Statesman did an excellent feature on Salmon, The Port of Lewiston, the 4 lower Snake River dams, the cost of dredging, and how much money taxpayers would save by breaching the dams. You should read it.

I was fishing in Riggins recently and saw quite a few signs reading:" Salmon Lives Matter, Give a Dam". Sadly, there are more signs in town than fish in the river. I have never understood why some people see these dams as monuments and just can't fathom breaching them. As I understand it, even BPA would like them gone. So, one last time, BREACH the Dams, save some fish, jobs, and towns. It really is the right thing to do.

Thank you for your work and time.

Respectfully, Russell McKinley

It’s simple Idaho fish and wildlife needs to raise the rates of non-resident fisherman to help support the hatcheries and all the staff and science that is taking place on the ground raise your rates to non-residence adults and children if you’re going...

As Idaho’s steelhead and salmon come out of the ocean and enter the Columbia river and their journey up the Columbia river to Idaho the state of Washington residents and Oregon residents pound the hell out of them before they get to Idaho the state of ...

**No Name Given*

Dear Governor Brad Little and members of the Governor's Salmon Workgroup,

Born and raised in Idaho, after getting a degree in Biochemistry at ISU and working at the INL for 7 years I resigned to pursue a masters in Hydrology, but was hired by the USFS in the summer of 1992, at the listing of the Chinook salmon, and was sent off with one of a number of crews to inventory anadromous habitat in the Frank Church wilderness. I never looked back. Over the next few years we waded up every pool, riffle and run measuring miles of habitat on tributaries to the Middle Fork of the Salmon: Marble, Indian, Rapid River, Elkhorn, Soldier, Loon, Little Loon, Camas, Big Creek... Front country tributaries to the Main Salmon were inventoried, miles of habitat on Marsh, Beaver, Bear Valley, Yankee Fork, Thompson, Squaw…East Fork, North Fork, Panther and Horse Creek to name a few. The list goes on. Miles and miles of the most incredible habitat, beautiful, clean, perfect, ready and waiting for the return of salmon. Since then, going on 30 years I’ve worked measuring and monitoring salmon habitat in the upper Salmon Basin for the USFS, BLM and IDFG - studying salmon to death. In the 90’s it was well know and accepted truth that the decline in salmon populations were primarily caused by the completion of the last dams in the Columbia Hydropower System, the 4 lower Snake dams, and filling of the reservoirs behind them. Idaho Fish and Game has clear proof of this from monitoring their populations before, during and after. The primary loss was found to be in the outmigration of juveniles/smolts. I’ve also come to believe that our decline in Bulltrout is linked to the loss of food directly and indirectly provided by the Salmon runs. IDFG was one of the most vocal advocates for dam removal in those days and I was so proud of them. In the 90’s when I first heard of BPA funding “restoration” projects in the upper watersheds as mitigation I knew it was going to be hard to resist, and would in effect distract the public away from the most significant cause in salmon decline. Now that money includes contracts to silence the recipients by preventing lawsuits and has the name of “Accord”. Accord money now silences IDFG and also silences the Tribes of the Pacific Northwest who by 1868 Fort Bridger Treaty right – and proven in the courts - are entitled a "fair apportionment" of these salmon with nonnatives, meaning 50%. Nonnatives “take” way more than 50% through ocean harvest and killing of smolts in the Columbia River Hydropower system. So we’re talking of more than just a violation of ESA. BPA is fully aware of how powerful a say the autonomous Tribal Nations have in the status of these fish. I personally knew we had plenty of excellent available habitat already, all along, in Idaho even with some loss from cattle damage or water mismanagement. One of my favorite jaw dropping landscapes in Idaho is the BLM Challis Field

Office. You wouldn't think BLM land as salmon habitat but it is also, and doing so well, improving and coming together with pressure from the listings, and, including the USFS, with no loss of cattle grazing other than voluntary, or sell out. This is true. Over these years I've seen timber harvest and mining ventures come and go, relatively unrestricted, given the green light, able to accommodate the needs of ESA, but ultimately at the mercy of the market. After working in the nuclear industry I don't want to see us use nuclear power. It uses radioactive material, which truly is serious, and other components which are highly toxic with numerous carcinogens; and its process, maintenance and waste storage are too complex, too highly technical, requiring a commitment that we cannot keep over eons of time and the natural rise and fall of civilizations – yes we're talking those spans of time. I am not in favor of giant windmills spread across the landscape, marring the incredible ridgeline vistas of Idaho, killing bats and birds, nor of acres of solar panels stretched out on our vast open public lands; both seem so viscerally wrong. Rather than these concentrated big energy producing ventures I think energy should be made at a local level, where it is needed, small windmills at every home, community; solar panels on every roof and giant store. And I still see hydropower as one of the cleanest and most natural, going back millenniums in use. It is of all the most simple, least complex, movement as power, the run of the river. I believe when we get people together, give them free voice, let science and innovation take hold and all work together, for all of our desires to see salmon come back, we can make this happen. Yes there is climate change and unfavorable ocean conditions but I believe at this point we'll never catch up to reverse what has been done, we're too late. We should prepare for the fallout and save what we can. I want to see the Snake, Salmon and Columbia Rivers run free again. I want us to give Canada back its salmon as a neighborly thing to do (Nevada might want their salmon back too!). I want the river to run free, rise and fall with its own power and timing and for us to harness a portion of that power, harness the run-of-the-river with a parallel perspective, all along its length, generating electricity and watering fields. I'm excited about our 4 governor approach. I believe our strength lies with the vested states, in understanding the West. Let's start with Lower Granite. I hear the silt behind it is burying Lewiston and is taking a lot of tax dollars to dredge. Let's start with one dam. The Klamath might have the right approach with the creation of a separate non-profit entity to handle the process, an organization that can bring us together, all stakeholders, one giant think tank. Above all don't give up. You are doing the right thing.

Julia Markham
Challis, Idaho

To: The Idaho Salmon Work Group

From: Sharon Grace

Date: December 14, 2020

Re: The Idaho Work Group Recommendations on Idaho Salmon Recovery

Sadly for Idaho, it is losing its salmon, while getting little benefit from the Federal Columbia River Power System. Yet Governor Brad Little's Idaho Salmon Work Group was destined to fail at the outset, because the governor took lower Snake River dam breaching off the table. In doing so, the governor wasted many people's precious time. More than five decades, two horrendously expensive federal studies, and multiple scientific studies have taught us that breaching is not only the best way to recover Idaho's Snake River salmon, but also the only way.

Since the Work Group's recommendations are likely to be set in stone at this time, and since the recommendations are prohibited from endorsing dam breaching, I strongly suggest that Idaho replace its members on the Northwest Power and Conservation Council and urge the other three states to do the same. If the Council were to do its job as mandated by the Northwest Power Act, the lower Snake dams would be breached.

Sarah Michael
President, Michael Policy Solutions
P.O. Box 3060
Sun Valley, ID 83353

December 14, 2020

Dear Members of the Salmon Workgroup,
Removal of the four Snake River Dams is needed to restore salmon and steelhead runs to the population levels recommended by the Columbia Basin Partnership. The Columbia Basin Partnership developed target fish population numbers to reach. This diverse Northwest industry and environmental group concluded that for spring/summer chinook salmon, 124,000 naturally reproducing adults in the Snake system would be an appropriate recovery goal. For steelhead, the recovery goal was set at 104,000 naturally reproducing adults. The group also concluded that the Snake River has, by a wide margin, the greatest potential for increasing spring/summer chinook and steelhead runs.

More than $16 billion has been spent to mitigate the impacts of the Columbia Basin hydro system on fish and wildlife. This is extremely costly and has not worked. These ratepayer dollars would be better spent on developing alternative clean energy sources to replace the clean hydro-electric power lost from the four Snake River dams. Developing alternative transportation options to the river barge system would also save money. A 2015 study conducted by Rocky Mountain Econometrics found that farmers who use the river instead of rail save about 2.4 cents per ton, or about $7.6 million annually. But the report states the Army Corps of Engineers spends $17.8 million per year of our tax dollars to maintain the river transportation system. The study also showed that the volume carried by barge since 1998 has declined by over 71 percent.

Please do not be convinced by David Welch's November 2020 research that states that the Columbia federal hydropower system is not to blame for the crash in the fish population on the Snake. This BPA sponsored study is contrary to the findings of decades of research, including from the U.S. Army Corps of Engineers, NOAA Fisheries, the Fish Passage Center, state and tribal agencies, and many independent scientists. These studies have concluded, over and over

again, that the four dams on the lower Snake River continue to hinder salmon and steelhead recovery and that breaching of these dams would bring immediate results for Idaho's fish.

I hope that the Salmon Working Group will reach more creative alternatives than those reached in July 2020 by the U.S. Army Corps of Engineers, Bureau of Reclamation and Bonneville Power Administration. The Environmental Impact Statement supported the status quo, with minor management changes, over the survival of salmon. The 2020 report is similar to the one that was rejected by a federal judge in 2016 in Portland, Oregon, as being inadequate, ordering dam managers to go back and consider removing the four dams.

It is time for an innovative, cost-effective, dam-removal salmon recovery plan. There are new technologies and cost- effective alternatives to clean electricity production, transportation, and irrigation strategies; dam removal and new solutions will create jobs and benefit the entire region. Time is running out for the salmon and the entire ecosystem and other species that depend on them.

Sincerely,

Sarah Michael

Salmon Workgroup,

My name is Jonas Seiler, a river and fishing guide for Wilderness River Outfitters based year round in Salmon.

First, I want to thank each individual workgroup member for the service you are doing Idaho by participating in this forum. This was no easy task even without a pandemic, and I applaud you for staying vigilant. This workgroup has laid the foundation upon which future action for the betterment of Idaho's salmon and steelhead runs can be built.

The limited scope of the recommendations for Governor Little highlights the differences of opinion that remain among workgroup members. While this is disappointing to those Idahoans hoping for bolder action, those differences are equally and understandably persistent among all Idahoans with a stake in this issue. While this is frustrating, we must also focus on the positive.

Recommending an aggressive spill regime to aid migrating salmon and steelhead smolts in getting to the ocean safely is an important step; albeit the first step. I hope that Governor Little will take this recommendation to the Columbia Basin Collaborative (CBC) in good faith. While we wait for more decisive change, Governor Little must assure Idahoans that the Columbia River hydro system is being managed in a way that is least harmful to our precious fish.

I am glad that the workgroup has recognized <u>abundance</u>, rather than recovery, as the goal we are ultimately shooting for. Abundance is what will drive prosperity and create opportunity in our rural river communities. Abundance is what will do right by the tribes and allow the Nez Perce,

Shoshone-Bannock and other Native American tribes to practice and perpetuate their peoples' traditions. Abundance is what will allow our increasingly sterile headwater streams to recover with waves of marine nutrients each year. The science is clear in saying that a free flowing lower Snake River is the clearest path to abundance. Again, I hope Governor Little will make abundance his goal as he moves into the CBC with his fellow PNW colleagues.

Additionally, I want to remind the workgroup of the many public comments that have been given over the past year and a half. Many of them encouraged you to recommend actions such as modified spill regimes, improved habitat, and modified hatchery practices. A few of them prioritized low energy costs or industry over fish, or blamed ocean condition for our troubles. The majority of them supported breaching the dams. ALL of them were caring citizens concerned enough to comment, and nearly every comment supported bringing strong and abundant fish runs back to Idaho.

No matter where we stand, a few things remain factual;

1. Salmon and Steelhead have a long history in Idaho. Our fishing guides, rural river communities, and tribes rely on these fish for a multitude of economic and cultural reasons. Anadromous fish are an integral part of our state.
2. The current state of our fish runs is not acceptable.
3. The 4 Lower Snake River dams are responsible for a high rate of mortality among salmonids.
4. We have failed to achieve recovery or abundance of our fish. Instead, we tolerate a constant state of decline.

Finally, while your recommendations are largely finalized, I ask that each of you remain involved and up to date on this issue. Over the course of this workgroup, you all have gained the most up to date and accurate information on this issue, making you experts, and thus, important advocates for our state and our fish. As we continue to take steps to save Idaho's salmon and steelhead, we must prepare for the future. We must not only ensure that we can return our fish runs to abundance, but ensure that economic opportunity all throughout the Snake River basin remains abundant, with or without a modified hydro system.

Again, thank you for the opportunity to comment. Stay safe.

Happy Holidays,

Jonas Seiler

Date: 12.14.2020
Name: Ed Chaney
Phone: 208.939.0714
Email: edchaney@nwric.org

Comments:

Idaho Governor Little's Salmon Workgroup is a transparent fraud. It was designed to con credulous Idahoans into providing tacit support to federal agencies' ongoing effort to drive Snake River salmon to extinction. This effort is manifest in the Biological Opinion prepared pursuant to the Endangered Species Act and repeatedly rejected by the federal court.

The Workgroup's mission statement is based on the fatally flawed premise that Snake River salmon can be restored as required by law without breaching the four Army Corps of Engineers dams on the lower Snake River in southeastern Washington.

Idaho Governor Little and his federal co-conspirators in this Workgroup fraud know that is a lie. Two studies costing $100 million—prepared by the federal salmon killers themselves—found that nothing less than breaching the dams can restore Snake River salmon to formerly productive levels.

The dams were not designed according to law to allow juvenile salmon from Idaho to safely pass downstream. Disaster happened. Many hundreds of millions of dollars were spent trying to correct the fatally flawed design without success. All Idaho salmon are listed as threatened or endangered under the Endangered Species Act. The responsible federal agencies have spent decades and many hundreds of millions of dollars to protect the dams from the law.

Idaho has lost hundreds of millions of dollars and many jobs and small businesses were destroyed. One of the world's unique and most valuable, perpetually renewable natural resources is at risk of extinction. For decades Idaho governors have aggressively partnered with the Idaho salmon killing federal agencies to make it happen.

This goes beyond betrayal of the public trust. It is self-destructive madness.

It costs far more to kill Snake River salmon than it would cost to save them from extinction and restore them to economically productive levels. Breaching the dams would produce enormous economic net benefits to the region, nation and Idaho.

The Northwest Power Act of 1980 mandated restoring Snake River salmon. Since then the region has replaced an estimated 20 times more energy─with non-fossil fuel sources─than would be foregone by deconstructing the lower Snake River dams.

The Sixth Power Plan produced by the multi-state council established by the Act states that the region can retire all of its existing coal plants, and remove the four lower Snake River dams, and customer's monthly power bills will actually decline due to more efficient use of energy.

Irrigators pumping from the reservoir behind the lowermost dam, Ice Harbor, and waterway shippers out of Lewiston and Clarkston could easily be kept whole. They could be even better off with a comprehensive lower Snake River economic development plan to compensate the region for the damage done by the federal agencies' malfeasance in improperly designing the dams then for decades fanatically trying to cover it up.

The prologue to the Workgroup stated that breaching the dams would not be part of the Salmon Workgroup deliberations because the dams are not located in Idaho. That is layering bullshit on top of the brazen con. Governor Little has a legal mandate under the Power Act to develop a plan to restore the salmon.

The Power Act gave the governors of Idaho, Oregon, Washington and Montana a mandate to develop a plan to restore Snake River salmon. They refused and, in an incredible dereliction of public duty, defaulted to the federal agencies responsible for driving Snake River salmon toward extinction.

Governor Little's Salmon Workgroup is the product of collaboration with the federal salmon killers determined to protect the four economically and ecologically destructive dams on the lower Snake River no matter what the cost to Idaho, the region and Nation.,

This is criminal in fact if not in law, and will live in infamy. Well intentioned, woefully uninformed people duped into becoming pawns for the agents of extinction of Snake River salmon will likely come to rue their willingness to participate in and have their fingerprints on such a transparent, destructive con.

Date: December 14, 2020
Name: Carl Hoerger
Phone: 208-841-6191
Email: carlhoerger@gmail.com

Comments:

The Salmon Working Group has done a good job of identifying the issues and the stake-holders regarding returning salmon populations to Idaho. It seems to me the choice has become clear between re-establishing salmon by elimination of the lower Snake dams or keeping the dams and driving salmon to extinction. The science just does not support keeping dams and growing the salmon populations, let alone maintaining them.
I think the working group should consider 2 proposals:

1) Keep the dams and lose salmon
2) Remove the dams and keep salmon

The proposals should consider the economic impacts of each and particularly the cost of mitigating the economic impacts to affected parties as well as the potential ripple effects to other

ecosystems. From what I have seen, I believe that dam removal will be a far better alternative, even with mitigating its economic impact on affected parties. In addition, we certainly have a hard time understanding and valuing the impact to the greater eco-system and its impact on humans. With this consideration as well, dam removal is the wisest choice for now and our future.

Salmon Working Group ...
I am writing to encourage you to take **bold action** in recommending to Governor Little that he join the Columbia Basin Collaborative and push for removing the lower Snake River Dams. The recommendations from the committee must tell Governor Little that time is running out for salmon and steelhead. Only through his direct and intentional actions with the members of the collaborative will the future of these native fish of Idaho have a chance at returning to the wonder and enjoyment of current and future Idahoans.

We have watched, waiting for the promises offered and proposed by the dam administrators, Bonneville Power Administration, and other agencies, to bring back salmon and steelhead to their one-time numbers and prominence. But the promises in the management plans have not returned these fish to naturally sustaining numbers, in fact the fish populations have declined.n Further the dams operations and BPA have great debit, cannot provide electricity (energy) at rates now offered by greener sources, and have failed to provide some of the other benefits proposed many decades ago by the construction and operation of these dams.

It is time for bold action. The Governor needs to understand that he must lead, with others in the collaborative, to bring back these natives, to provide economical and low emission energy to Idaho and neighboring states, and to return the river to a free-running system that benefits people and fish.

Thank you for time and efforts this past year to learn and help return these native fish to Idaho.

Bruce Connery
7812 S 4500 W
Victor, ID 83455

Breach the Lower Snake River Dams.

This is critical. Thanks

Chris Stevens

Gov. Little's Salmon workgroup
I have grown up in Boise, Idaho. My dad was a wildlife biologist for Fish and Game and US forest service. I grew up fishing and enjoy our great outdoors. I have grown up understanding the balance of all species and the whole interconnectedness of our world. My dad taught me to value each species for its special part in the ecosystems. I have taught elementary school in the treasure valley for 30 years. I started off in college wanting to be a biologist but decide I can teach our child about our wonderful world and all the species that live in it. I have also worked for the Idaho dept of Fish and Game being facilitator for their education program, Project Wild for 23 years. This program is offered to teacher K-12 across the state. Being involved with this program has given me the opportunity to be involved with fish biologist and many other biologists in the department. I have been at the fish traps sorting wild and hatchery fish. The wild fish numbers are in desperate need of a bold solution to their survival. I have seen the declining numbers of fish over the decades. Our band aid fixes are not working! The numbers of our wild Salmon are drastically declining. The hatchery fish allow for sport fishing only! Hatchery fish are not helping the wild Salmon and Steelhead genic pool or maintain the Wild numbers of fish.

We need drastic solutions to bring back wild fish. We've tried the same things over decades there are just band aids for quick fixes. We need bold ideas to bring back our fish, including putting removal of the four Lower Snake River dams on the table.
Sincerely,
Tori Doell

Date: 12/14/2020
Name: Jerry Myers North Fork, ID
Phone: 208 394-2126
Email: jmyersicr@gmail.com

Comments:

Thank you Workgroup members. This Workgroup process has been arduous, educational, frustrating and fruitful. And hopefully it will be a successful template for how we as Idahoans go about protecting and enhancing anadromous salmon, steelhead and lamprey runs into the future. It seems apparent that we are still far from identifying solutions. But losing Idaho salmon is never going to be an option. Those of us that have been involved with salmon recovery for years hope to see a plan from this Workgroup that will incorporate a process for finding solutions in the near future. This could include timelines and funding for transportation changes, bringing alternative power sources on line, adjusting sport and commercial take and many of the other impacts that your group was asked to address. Timelines, funding, action!

We often talk about leaving a better place for our kids and the children of our children. Hard choices and difficult work can transform that same talk into an action that actually makes a better difference. A BETTER difference. Not just a change in how we operate the hydro system or how we manage hatcheries but actions that result in healthy sustainable runs of wild fish. There is no longer a "can to kick down the road".

I count myself as one of those extremely fortunate folks who was born and raised among the mountains, elk herds, verdant fields and healthy rivers of Idaho. My kids and grandkids are likewise fortunate to live here. Our bones and flesh hold the dirt, the water, the sustenance of game and crop, the history, the culture and the promise of this place we call Idaho. It will always be our spiritual center, where we find peace and beauty, friendship and challenge, bounty and grace. Idaho cannot remain this place without salmon.

Dear Governor Little:
Sir I know that the Corp of Engineers has said that the dams on the Snake will not be breached to save the salmon. Yet when the salmon is gone so will other creatures in the wild will be gone; starved out of existence. If we show such disregard for other species, who will come to our rescue when our time for our own extinction is here.

We humans as a species have dodged the bullet this time but only because we were willing to pool our resources to mobilized our scientific
community to develop a vaccine against the corona virus. How is that for socialism?

I know you do not want to go down in the Idaho and Northwest history books as the governor who refused to save our way of life by helping to exterminate the salmon because of your refusal to do the right thing. I also know that Idaho Power and their investors have a huge vested interest in keeping the dams and that all the politicians including you are kowtowing to their demands to do their bidding so they can get richer while our environment and its creatures go by the wayside. Thank you for your time and I hope you have a nice
day. Catalina

Community Wellness Center, Inc.
Catalina Steckbauer

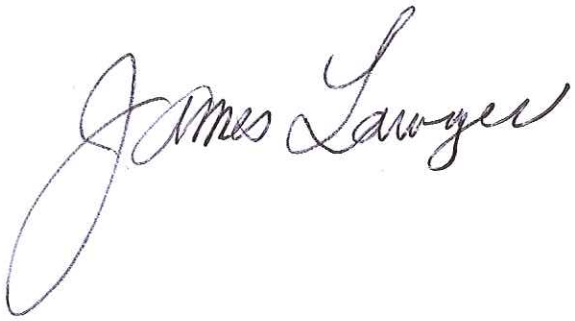
As continuation of my advocation for restoring fish from my presentations at the governor's for a day at Grangeville on July 20, 2019 and the governor's workshop for fish at Lewiston on September 20, 2019. There were since that time two issues by the United States Supreme Court decided in favor of the Indian tribes. One was that Federal Indian water rights exists even if they are (I. not quantified) or (II. not adjudicated.) My youngest brother's schoolmate friend was John Steigner now Idaho Supreme Court Justice who wrote the Coeur d'Alene water rights decision. He didn't include these issues in his ruling. No misdeed here since it had not been decided at the time. Dave and John Steigner's mom was a great frend of the Nez Perce. Whenever I entered a resturant which she was at she would beckon me over to eat with her. Dave Stowers was the other former Grangeville resident who would sit at the table I was eating to eat.

Second was the rejection of the assertion by agencies that meeting the number goals of the Endangered Species act also satisfied the United States Trust Responsibility to the Indians. I as a Nez Perce do not go along with this claim that less than a fish per year per tribal member satisfies The United States Trust Responsibillity to the Nez Perce. I find more compatable a number coming from the statement of The United States Supreme Justice Sotamayor in the oral hearing for the culvert case: "They caught X amount. If the proof is that Y amount would have happened absent the obstruction, they're entitled to 50 percent of the Y amount." I have presented before the Nez Perce General Council a resolution that a goal of 10 million fish should be established by the tribe.

A while back a division of the fish on the high seas resulted in a share for Canada including a share for the First Nations, for California, for Oregon, for Washington and also for the treaty Indian tribes. With this division of shares established whenever the Nez Perce share comes into Nez Perce territory then crosses the Idaho State border the Idaho fish and games immediately divides out a share for the sportsmen. I believe any person of high substatial standing of honesty and integrity would buy a Nez Perce fishing license whether fishing on or off the Tribe's Reservation.

This Stribnite gold mine proposal is in the backcountry where my dad as a young boy spend a lot of time. He told me about when the Gold mining company's cook and kitchen staff would toss dynamite into the water to gather fish for their meals and that many dead fish were left floating.

James Lawyer
Grangeville, Idaho



**The following are suggested edits provided by The Conservation Angler*[1]

Develop policy recommendations for Governor Little through a collaborative, consensus driven, public process to restore abundant, sustainable, and well-distributed populations of wild ~~salmon~~wild salmon and steelhead in Idaho for present and future generations, while recognizing diverse interests throughout the State.

- Idaho Governor's ~~Salmon~~Wild salmon Workgroup Mission Statement

Wild s~~Salmon~~Wild salmon and steelhead are a vital part of a vast ecosystem encompassing the headwaters of natal streams out to the ocean. In Idaho, these anadromous fish spawn and rear in some of the best habitat in the continental United States. As a result of the altered environment we have created in developing our current way of life, these iconic species have been driven towards extinction. It is time to turn things around.

Idaho Governor Brad Little sent out an urgent call to action, recognizing that the status quo approach to ~~salmon~~wild salmon recovery and restoration is not working. These fish and their integral place in our Northwest heritage require our action. Our children's children will inherit these lands, rivers, and fish, and it should be our calling and our duty to improve what we pass on to them. While it's clear that Idaho cannot restore ~~salmon~~wild salmon and steelhead on its own, the State can play an important role in local, regional, and national efforts to do so.

Anadromous Fish

~~Salmon~~Wild salmon and steelhead are anadromous fish. Anadromous fish hatch from eggs buried in gravel and rear as juveniles for varying periods in freshwater. Next these fish migrate to the ocean and reside for periods typically of 1 to 3 years, but some up to 8 years. Finally, they return to freshwater as adults to spawn in their natal waters.

Idahoans want abundant, sustainable, and well-distributed populations of ~~salmon~~wild salmon and steelhead in Idaho for present and future generations. To that end, the members of the Idaho Governor's ~~Salmon~~Wild salmon Workgroup respectfully submit these recommendations to Gov. Little. It is our desire that the State will act on these recommendations in a way that recognizes and fulfills the following overarching principles:

- Recognize Tribal dependence on ~~salmon~~wild salmon and steelhead to meet spiritual, cultural, subsistence, and economic needs as a prevailing necessity of their culture and society. Honor federal treaty, executive order, and trust obligations to the Columbia Basin Tribes.
- Make Idaho's diverse river-dependent communities and economies whole, while equitably sharing the conservation/restoration obligations and benefits among impacted sovereigns and stakeholders.

[1] This sentence is only annotation for context and is not part of the original comment from The Conservation Angler

- Support policies and actions that go beyond current efforts to recover Idaho ~~salmon~~wild salmon and steelhead populations.
- Restore ecological functions throughout the basin necessary for ~~salmon~~wild salmon and steelhead to thrive.

What follows in this report is a first for Idaho. It is the first time in our State's rich history that Tribes and diverse stakeholders, as represented in this Workgroup, have collaborated on shared visions for ~~salmon~~wild salmon and steelhead. The report reflects a significant effort by all members to find consensus. In this light, the importance of these recommendations cannot be overstated.

The recommendations below will not end the conversation in Idaho or the region. If we are to enjoy abundant, sustainable, and well-distributed populations of ~~salmon~~wild salmon and steelhead, more conversations are necessary. More collaboration will be needed. More work must be done.

As these collaborative meetings end, each Workgroup member commits to continue efforts to find consensus-driven, collaborative solutions aimed at restoring these iconic fish.

All of us in the Workgroup want to sincerely thank Gov. Little for providing us the opportunity to participate in this effort. We also thank the diverse interests represented on the Workgroup for their hard work and dedication. Finally, we thank the citizens of Idaho, and the region, for their passion and engagement on this issue.

~~Salmon~~Wild salmon & Steelhead Lifecycle

Lakes, rivers, and streams in Idaho are named for these iconic fish – including the ~~Salmon~~Wild salmon River and Redfish Lake. ~~Salmon~~Wild salmon once came to these areas with such plentitude it was said you could walk across the water on the backs of the fish.

The ~~salmon~~wild salmon and steelhead lifecycle is an arduous journey. They start as eggs, in redds (i.e., nests) built by the females in Idaho rivers and streams. Their spawning and rearing habitats range from small mountain streams to large mainstem rivers. The eggs grow into fry, then smolts. Smolts then make their way down river, travelling hundreds of miles to reach the ocean. [1] The fish will spend from one to eight years in the ocean, gathering nutrients.[1] They then begin their journey home to their natal streams to spawn in spring, summer, and fall. For Idaho's ~~salmon~~wild salmon and steelhead populations, this journey takes them over 8 dams, as many as 900 miles and as high as 6,500 feet in elevation.

After spawning the ~~salmon~~wild salmon die, giving vital nutrients back to the ecosystem. Steelhead may not die after spawning, instead they may return to the ocean before returning to spawn.

"As go the ~~Salmon~~Wild salmon runs; so goes the ~~Salmon~~Wild salmon People" –

I. Backdrop

Populations of ~~salmon~~wild salmon and steelhead in Idaho and throughout the Pacific Northwest are at a fraction of their historical numbers. These declines are caused by many factors and

impact Idaho's Tribal and fishing communities. Currently, Snake River sockeye[2], Chinook ~~salmon~~wild salmon[3], and steelhead[4] are listed as either threatened or endangered under the Endangered Species Act (ESA). Within the Columbia River Basin, including the Snake River, and its tributaries, 16 ~~salmon~~wild salmon and steelhead stocks are listed under the ESA and some stocks have gone extinct. [2] For a broader explanation of the backdrop of ~~salmon~~wild salmon and steelhead in Idaho and the region, including a discussion of factors leading to the decline, review the Phase 1 and Phase 2 reports of the Columbia Basin Partnership (CBP). [3]

Factors Affecting Snake River ~~Salmon~~Wild salmon and Steelhead – the 4-Hs, an O, and a P

Habitat: A healthy habitat is key for healthy ~~salmon~~wild salmon and steelhead. These fish need clean, cold water, a healthy and unobstructed migratory corridor, well -distributed ~~a~~places to stage as adults before spawning and rear and feed while juveniles, and the ability to be unmolested by people once they ~~a way to~~ access their natal spawning ground. Healthy r~~R~~iparian areas provide shade to cool water ~~and promote oxygenation~~ in summer and reduce icing in winter, provide cover for protection from predators, and bank stability to reduce impacts of erosion. In portions of Idaho, historical mining, ranching, agricultural, and other practices have degraded what once was prime habitat. Other areas of once prime habitat have been blocked by developments on Idaho's rivers. Through collaborative efforts with Tribes, landowners, and others, work to reverse the historical degradation is being done. Currentl~~y,~~ 3700 miles [4] or about 62% of Idaho's historical spawning and rearing habitat for spring/summer Chinook and steelhead remains accessible.(citation: IDFG 2019-2024 Fisheries Management Plan). ~~3,700 miles of high-quality habitat is intact and accessible. [4]~~ Of this, about half lies in designated Wilderness, Wild and Scenic or roadless areas and are of high quality for spawning and rearing anadromous fish.

Hatchery: In Idaho, hatchery programs are operated by the Idaho Department of Fish and Game (IDFG), the Nez Perce Tribe, and the United States Fish and Wildlife Service (USFWS). Hatchery fish ~~are managed to~~ are intended to provide fish to meet Treaty obligations, as mitigation for developments that destroyed or blocked access to spawning reaches, and as a conservation tool for severely depleted populations. ~~(useful information)?? harvest for the region~~. Hatchery programs are vital to Idaho's Tribes and the economies of rural riverside communities, providing harvest and conservation opportunities that would otherwise not exist ~~under current conditions~~because of depressed wild populations. While Idaho realizes many benefits from hatchery programs, there are also risks that hatchery fish ~~can~~ pose to wild stocks.

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[2] *See* 56 Fed. Reg. 58619 (Nov. 20, 1991); *See also* https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/snake-river-sockeye-~~salmon~~wild salmon.

[3] *See* 57 Fed. Reg. 14653 (April 22, 1992); *See also* https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/snake-river-fall-run-chinook-~~salmon~~wild salmon (Fall-run Chinook); https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/snake-river-spring-summer-run-chinook-~~salmon~~wild salmon (Spring/Summer Chinook).

[4] *See* 62 Fed. Reg. 43937 (Aug. 18, 1997); *See also* https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/snake-river-basin-steelhead.

The current ~~salmon~~wild salmon and steelhead hatchery programs have undergone ESA consultations and have hatchery and genetic management plans (HGMPs) in place that set guidelines to help address or mitigate the effects of hatchery production on wild/natural fish.

Harvest: Harvest is regulated under laws, treaties, and agreements, including the Columbia ~~Basin~~ River Compact and U.S. v. Oregon. Each season, Tribes, IDFG, and others use their sovereign authorities to determine when, where, and how much harvest is available for a particular species. In addition, biological opinions ensure that ~~salmon~~wild salmon and steelhead harvest and fishing effort do~~es~~ not jeopardize ESA-protected stocks. ~~Due~~ Facing long-term ~~to the large~~ decline~~s~~ in wild salmon and steelhead natural production caused by habitat loss and modification, past hatchery and harvest practices, ~~today's harvest in~~ Idaho's fisheries are still ~~is~~ dependent upon the health and abundance of wild salmon and steelhead returns which drive fishing effort despite extensive hatchery production. ~~However, some wild populations are still harvested in downriver states.~~

Hydro: Hydroelectric dams alter riverine habitat, flow, velocity, and temperature of water to varying degrees, creating a source of mortality for ~~salmon~~wild salmon and steelhead. Juveniles rely on fast-moving water to carry them downstream and adults need to return to their spawning grounds in a timely manner. Dams hinder this endeavor by creating physical barriers, life threatening passage conditions and slowing water velocity in the reservoirs they create. What was once a two-day migration to the ocean now takes between 20-40 days for smolts. [4] The fish must find a way ~~around~~ past these dams – generally through a spillway or powerhouse intake where they either pass through the turbine or are screened, then barged or put back into the river. Adult ~~salmon~~wild salmon and steelhead ascend the dams in ~~Fish~~ fish ladders attached to the dams, ~~are available to help returning adult salmon~~wild salmon ~~and steelhead navigate around the dam.~~

Ocean: ~~Salmon~~Wild salmon and steelhead from the Columbia River Basin enter and exit the Pacific Ocean ~~via~~ at the mouth of the Columbia River. While in the ocean, they may travel thousands of miles, gaining nutrients and maturing to adulthood before their migration back to their spawning grounds. Therefore, ocean conditions -- changing temperatures, salinity, acidity, and other factors -- have a significant impact on ~~salmon~~wild salmon and steelhead. During 2014-2016, a marine heat wave created a "blob" of hot water in the northeastern Pacific Ocean, resulting in devastating effects on marine and land species, including Columbia Basin ~~salmon~~wild salmon and steelhead. [5] Mixed-stock, non-selective harvest in ocean and marine waters off Alaska and along the coast of British Columbia and Washington State does affect adult salmon and steelhead returning to Idaho. Additionally, excessive hatchery production from multiple sovereigns has negatively affected the food chain and reduced salmon and steelhead productivity while in ocean waters.

Predation: The amount of predation affecting ~~salmon~~wild salmon and steelhead has ~~gone up~~increased in recent years, exacerbated by construction of the hydroelectric dam system. [6] [7] These predators include birds, other fish, and pinnipeds (i.e., seals and sea lions). [8] In

recent years, due to a sharp increase in seal and sea lion populations and a change in migration behavior~~, as many as~~from 10% to 40% of upriver destined spring Chinook ~~salmon~~wild salmon ~~____% of returning adult salmon~~wild salmon ~~and steelhead~~ were killed in the lower Columbia River. Data on these recent trends is limited and requires further survey and study. Management strategies have been implemented to curtail predation and some studies have been completed to better understand the effects of migration timing. Large hatchery releases of salmon and steelhead can have a predator-attraction affects that may disproportionately impact portions of the wild juvenile salmon and steelhead outmigration.

II. A Call to Action – The Idaho Governor's ~~Salmon~~Wild salmon Workgroup

In April 2019, Gov. Little established his ~~Salmon~~Wild salmon ~~Workgroup~~ "Workgroup on ~~Salmon~~Wild salmon Recovery in Idaho". The Workgroup allowed diverse stakeholders to work together to collectively and collaboratively find Idaho-centric solutions to address the decline of ~~salmon~~wild salmon and steelhead, and craft policy recommendations for the governor.

Groups Represented on the Governor's ~~Salmon~~Wild Salmon Workgroup

Idaho Wildlife Federation • Idaho Water Users Association • Upper Snake River Water Users • Idaho Power • Port of Lewiston • Idaho Consumer Owned Utilities Association • Upper Snake River Tribes Foundation[5] • Shoshone-Bannock Tribes • Northwest Power and Conservation Council • Nez Perce Tribe • Trout Unlimited • Idaho Conservation League • The Nature Conservancy • Idaho Grain Producers • Idaho State Senate • Idaho House of Representatives • Sportsman Interests • Idaho Outfitters and Guides Association • Idaho River Community Alliance • Rancher/Landowner Interests • Office of Species Conservation

Since the Workgroup's first meeting in June 2019, members have met, on average, every six weeks over 18 months, for a total of 16 meetings. Meetings were held throughout Idaho, providing a more comprehensive understanding of the diverse needs and interests across the State and an opportunity to tour relevant field sites. Moving locations also facilitated public involvement. When COVID-19 prevented in-person meetings, Workgroup members continued to meet and take public testimony online.

Public engagement was a vital part of this process. Workgroup members received and reviewed hundreds of written comments. An opportunity for public comment also was available at every meeting, resulting in hundreds of remarks delivered in person or online. A website was maintained with meeting agendas and other information to further enable public involvement in this process. Comments represented a broad range of perspectives that informed the Workgroup as it developed its policy recommendations.

[5] Members of the Upper Snake River Tribes Foundation include the Fort McDermitt Paiute and Shoshone Tribe, Burns Paiute Tribe, Shoshone-Paiute Tribe, and Shoshone-Bannock Tribes.

The Workgroup was supported by two co-facilitators. One was from the University of Idaho McClure Center for Public Policy Research, a nonpartisan entity committed to convening diverse stakeholders and fostering bipartisan collaboration. The other was from the Governor's Office of Species Conservation (OSC), which is largely dedicated to restoring ~~salmon~~wild salmon and steelhead in Idaho. Additional support was provided by Gov. Little's Director of Policy and the Idaho Department of Fish and Game.

III. Workgroup Process

"At the end of the day we are here to achieve ~~salmon~~wild salmon recovery."
- Governor Little, June 28, 2019 Welcome to the Workgroup

A. Developing a Mission Statement and Goals for Healthy and Harvestable Stocks

The Workgroup developed a Mission Statement to serve as an overarching guide throughout the process. That Mission Statement, which is located on the first page of this report, goes beyond "recovery," as it is commonly understood relative to the ESA, by setting a goal of restoring ~~salmon~~wild salmon and steelhead to healthy and harvestable levels.

After adopting the Mission Statement, the Workgroup agreed that specific goals would be helpful for future discussions. Relying on the qualitative and quantitative goals established through the reports of the CBP,[6] the Workgroup adopted the following statement:

> *Columbia Basin Tribes and diverse Northwest stakeholders, including many of the Idaho interests and sovereign Tribal nations that are participating in this workgroup, participated in NOAA Fisheries Marine Fisheries Advisory Committee's CBP and helped to craft provisional quantitative goals for ~~salmon~~wild salmon and steelhead restoration in the Columbia and Snake River Basins and metrics to track progress.*
>
> *The Workgroup adopts the quantitative goals outlined in the Phase 1 and Phase 2 reports prepared by the CBP (the "CBP Reports"), to the extent endorsed by the Idaho Fish and Game Commission. The CBP goals represent not only delisting (the low-end goals), but also include the levels of abundance (high goals) that this workgroup and Idahoans desire. The Workgroup views the high goals defined in the CBP Reports as*

[6] The Columbia Basin Partnership (Partnership) was convened by NOAA Fisheries and its Marine Fisheries Advisory Committee (MAFAC) in 2017 and concluded in September 2020. The Partnership brought together diverse representatives from throughout the Columbia Basin to establish a common vision and goals for the Columbia Basin and its ~~salmon~~wild salmon and steelhead. Representation on the Partnership included Columbia Basin Tribes; fishing, agriculture, conservation, river transportation, port, and hydropower interests; and the states of Idaho, Montana, Washington, and Oregon. Idaho representation on the Partnership included the Governor's Office, the Office of Species Conservation, water users and conservation groups. During Phase 2 of the Partnership process, representatives from Idaho, Oregon, Tribes, water users, and other stakeholders worked to develop goals for restored fisheries in blocked areas above the Hells Canyon Complex on the Snake River.

intended to represent "healthy and harvestable" abundance levels that would sustain species viability, significant fisheries opportunity and harvest, a fuller range of ecological values, and an "equivalent to empirical estimates of abundance under conditions when populations were previously considered to be reasonably healthy."

Achieving these abundance goals will require actions that address hatchery management, harvest, habitat, the hydro system, predation, and ocean conditions. There are several metrics that can be used to measure success, including, but not limited to, smolt-to-adult return (SAR) rates in the 2% to 6% range (with an average 4%) and other metrics identified in the 2014 Northwest Power and Conservation Council's Fish and Wildlife Program and the CBP Reports.

The Workgroup recognizes that reaching Idaho's goals will require immediate, ongoing, and persistent efforts by federal, state, local, and Tribal governments and stakeholders. The Workgroup further understands that reaching Idaho's goals will vary among Snake River stocks and that significant actions and adaptive management measures may be necessary to ensure that goals are reached as quickly as possible.

B. Agenda Subgroup

An Agenda Subgroup was created to ensure the process, presentations, and meetings were in accord with how the Workgroup wanted to proceed. Throughout the process, Workgroup members suggested topics to aid in the Workgroup's understanding of the issues related to ~~salmon~~wild salmon and steelhead. Using these suggestions, the Agenda Subgroup, working with the co-facilitators and IDFG, gathered presenters and developed meeting agendas. After obtaining consensus on agendas, the subgroup posted them on the OSC website.

C. Gaining a Common Understanding

The Workgroup acknowledged that learning more about ~~salmon~~wild salmon and steelhead needed to come before drafting policy recommendations. The learning process provided members with a greater understanding of topics, such as previous and current restoration efforts, hatchery and fishery operations, habitat and water quality, estuary and ocean conditions, Tribal involvement and governance, and different methods of quantifying fish returns. The full range of technical presentations made to the Workgroup is available on the OSC website.

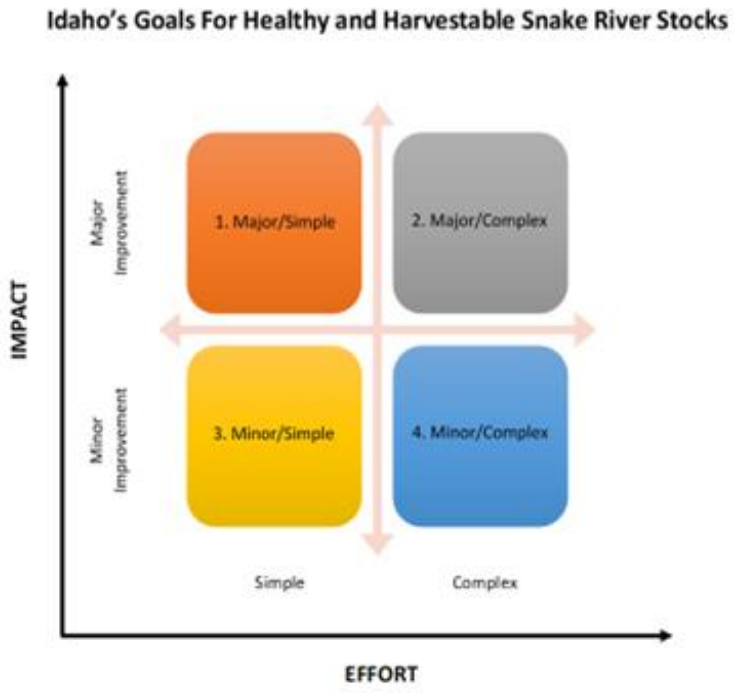
Presenters included federal and state agency representatives, Tribal representatives, and others. Along with presentations, Workgroup members participated in site visits to tour facilities and understand topics, such as stream restoration projects, PIT tagging, hatchery programs, and dam operations. The presentations and site visits provided the Workgroup with a shared foundational understanding of current efforts to conserve, protect, and restore ~~salmon~~wild salmon and steelhead, and what more could potentially be done.

D. Drafting Policy Recommendations

In April 2020, the Workgroup started drafting policy recommendations. Each member was tasked with developing recommendations based on the information received through Workgroup meetings. Key considerations while drafting these potential recommendations were: (i) feasibility and time to implement, (ii) impact on achieving the Mission Statement, (iii) probability of consensus, and (iv) movement towards recovery and then to healthy and abundant stocks. Each Workgroup member developed and submitted policy recommendations for consideration.

After proposing recommendations, Workgroup members were divided into four small groups tasked with reviewing and refining them. An assigned subject matter expert supported each small group's efforts. Initially, each small group was assigned one area – generally from Habitat, Harvest, Hatchery, and Hydrosystem, known as the four Hs. The recommendations then rotated through the other small groups, with additional topics being added for consideration.

In an effort to help some members determine whether the proposed policy recommendations support achieving the Mission Statement, the Workgroup used an "impact/effort grid" to rank the recommendations.[7] This approach enabled Workgroup members to consider how impactful a policy recommendation might be (minor or major improvements to fish) and what kind of effort it might involve (a simple or complex policy to implement).



E. Finding Consensus

[7] The "impact/effort" grid involved "impact" on the y-axis and "effort" on the x-axis with four quadrants to assign a policy recommendation to. Each policy recommendation is assigned a "type" and the characterization of the benefits to fish (Type 1 "Major/Simple" is one that provides major fish benefits and a simpler pathway to implement, Type 2 "Major/Complex" is one that provides major fish benefits and a more complex pathway to implement, Type 3 "Minor/Simple" is one that provides minor fish benefits and a simpler pathway to implement, and Type 4 "Minor/Complex" is one that provides minor fish benefits and a more complex pathway to implement.

The Workgroup was tasked with identifying consensus recommendations for policies that would help restore Idaho ~~salmon~~wild salmon. This process highlighted to the Workgroup the fundamental challenge with any collaboration: not all policy recommendations will receive unanimous support and some may not receive consensus support. Limiting our recommendations to only those that would enjoy consensus support meant that there were many policy ideas discussed but not advanced. This report, including Appendix B, provides a complete list of all policy ideas discussed by the Workgroup – including those for which consensus was not reached.

F. Lower Snake River Dams

One of the most controversial discussions surrounding ~~salmon~~wild salmon and steelhead in the Pacific Northwest involves the hydropower system – particularly, the lower Snake River dams (LSRD). The LSRD benefit certain communities and associated economies by providing slack water recreational opportunities, ~~access to~~ hydropower, and a navigation route to deliver Idaho's wheat and other commodities to the Columbia River and ocean ports. ~~and then the world~~. However, the LSRD also altered recreational opportunities and significantly impact Idaho's ~~salmon~~wild salmon and steelhead returns, resulting in devastating effects on Idaho's Tribal, fishing, and other communities and economies. Calls to breach the LSRD to restore ~~salmon~~wild salmon and steelhead fisheries are echoed throughout the region and were a regular part of discussions and public comments at Workgroup meetings.

The Workgroup had extensive discussions about the dams, their impacts on fisheries, efforts to mitigate those impacts, and breaching. Key impacts to fish involve prolonged juvenile travel time, increased in-river mortality, cumulative stress (delayed or latent mortality), adult passage delay/blockage, increased predation risk (birds, mammals, fish), degraded water quality, and altered water quantity. Some of the policy recommendations considered by the Workgroup are intended to address water flow/spill, passage routes, predator risk, and water quality. A part of this discussion highlighted the need to address powerhouse encounters of fish (PITPH) and decrease water travel time (WTT) for improved fish migration and survival.

Breaching the four lower Snake River dams and investing in affected communities has been an approach some have proposed for consideration. A part of this regional dialogue has emphasized the need to prioritize Snake River issues and to provide sustainable solutions to meet the needs of fish and wildlife, Tribal treaty and trust resources, electricity, food production, transportation, and recreation.

Issues surrounding the LSRD are complicated and highly technical. Any decisions about the maintenance or breaching of the LSRD will require broad discussions among the region's states, Tribes, and stakeholders, and would require Congressional actions. Although consensus on dam breach/retirement was not reached, the Workgroup encourages the State to engage the federal government, regional congressional delegates, states, Tribes, and stakeholders in a process to restore thriving and abundant ~~salmon~~wild salmon and steelhead fish stocks for Idaho and for the region.

IV. Policy Recommendations

Idaho desires abundant, sustainable, and well-distributed populations of ~~salmon~~wild salmon and steelhead. These healthy and harvestable levels require more than recovery pursuant to the ESA. We must restore ~~salmon~~wild salmon and steelhead to levels of abundance that will sustain social, cultural, and economic opportunities for present and future generations and provide a fuller range of ecological benefits.

This document is not a recovery plan. Rather, these recommendations constitute a list of the actions on which we could find consensus. We believe that if these are implemented, it would help ~~salmon~~wild salmon and steelhead. Many of these policy recommendations are for actions that are already being implemented. By including them here we are signaling that we believe that these measures should continue but that they need to be done at a greater scope and scale than currently underway. For example, good habitat restoration work is happening but much more needs to be done. There is an urgency to implementing these recommendations and more needs to be done quickly to stave off extinction and to begin moving in the right direction.

A. Habitat Policy Recommendations

Restoration, Connectivity, and Protection: Expand, support, further develop, undertake, and collaborate on programs and projects of sufficient scope, scale, and distribution to restore, enhance, and protect habitat and watershed functions needed to support all life stages of ~~salmon~~wild salmon and steelhead.

This policy will be supported by continuing and expanding the following actions:

- Create and maintain state-wide inventories of habitat in all basins, including identification of limiting factors for various life stages and watershed functions, to provide the best available information and science to assess and plan habitat projects.
- Restore habitat and watershed functions on federal, state, and private lands to conditions that most closely represent the ecological features of a natural riverine ecosystem.
- Protect functioning habitat and watersheds on federal, state, and private lands to ensure that it continues to provide meaningful support for ~~salmon~~wild salmon and steelhead.
- Reconnect or improve connectivity within tributaries and mainstem waters for fish access.
- Provide resources to help landowners, communities, agencies, and Tribes protect habitat and watershed functions (e.g., easements, incentives).

Coordination across Agencies: Develop and manage processes that allow and encourage coordination between federal agencies, state agencies, local governments, Tribes, and

stakeholders to increase the pace of implementation and ensure that Idaho is attaining its ~~salmon~~wild salmon and steelhead goals.

Collaborative Focus: Continue to support voluntary, collaborative programs with property owners, water users, Tribes, and other stakeholders to restore, enhance, and protect anadromous fish habitat and watershed functions.

The following actions support this policy:

- Pursue ESA Section 6 agreements [PA1]to provide "safe harbors" for those implementing habitat conservation or restoration projects.
- Establish specific anadromous fish financial incentive programs similar to the Good Neighbor authority or conservation reserve enhancement programs (CREP).
- Explore opportunities for new initiatives.

B. Harvest Policy Recommendations

[**TITLE**]: Restoring abundant, sustainable and well distributed populations of ~~salmon~~wild salmon and steelhead (and other anadromous fish) in Idaho for present and future generations will support management/implementation of treaty and non-treaty fisheries to provide important economic, livelihood, and tourism/recreation benefits to communities in Idaho.

Downstream Non-Tribal Recreational and Commercial Fishing: Coordinate with other relevant managers involved with mainstem Columbia River non-treaty fisheries to ensure Idaho stocks of wild and hatchery ~~salmon~~wild salmon and steelhead and fisheries/harvest are considered in Columbia River management decisions.

Encourage the State of Idaho to pursue more significant involvement and decision-making authority in all regional forums and groups that regulate harvest of Columbia Basin ~~salmon~~wild salmon and steelhead, including support of federal legislation to add IDFG as a member of the Columbia River Compact, to protect Idaho's wild fish, and to ensure that Idaho has equitable access to Idaho-origin hatchery and ~~salmon~~wild salmon and steelhead for harvest.

In-State Non-Tribal Fishing: Idaho will continue to assess and seek new opportunities to protect wild fish in non-tribal fisheries consistent with the ESA. Idaho will continue to coordinate with NOAA Fisheries to maintain authorization to conduct fisheries. This includes managing fishery timing, ~~,~~locations, take limits, gear types to maximize protection for endangered populations, and access to harvest shares as described in NOAA authorized Fisheries Management and Evaluation Plans.

This policy will be supported by completing studies on the movement of adult fish within Idaho to inform new restrictions on fishing locations or timing such as Feaken et al. 2019 and XXX in progress.

Mitigation: With input from interested stakeholders, review the current Lower Snake River Compensation Plan (LSRCP) program to evaluate its impacts on wild ~~salmon~~wild salmon and steelhead stocks, mitigation goals, and the adequacy of existing funding and facilities to meet these goals. Using the results of this review, work with federal agencies and Tribes to change the program and/or its funding such that LSRCP mitigation goals are met ~~and~~ to improve harvest opportunities in Idaho all while reducing or eliminating hatchery impoacts on wild salmon and steelhead.

Ocean Commercial Fishing: Engage with regional forums to identify and implement measures which address the impact of ocean fishing on wild Snake River spring and fall Chinook ~~salmon~~salmon.

This policy is supported by promoting greater stakeholder involvement where the State of Idaho is involved in regional forums ~~where the State of Idaho is involved~~ that discuss and regulate Pacific Ocean harvest (e.g., PFMC).

C. Hatchery Policy Recommendations

In Idaho, hatchery programs are operated by the Idaho Department of Fish and Game (IDFG), the Nez Perce Tribe, and the United States Fish and Wildlife Service. Hatchery fish are managed ~~in a way~~ to provide fish to meet mitigation, supplementation, and conservation objectives for the region. Hatchery programs are vital to Idaho's Tribes and the economies of rural riverside communities, providing harvest ~~and conservation~~ opportunities that would otherwise not exist ~~under current conditions~~due to depressed stocks of wild ~~salmon~~wild salmon and steelhead. While Idaho realizes many benefits from hatchery programs, there are risks that hatchery fish ~~can~~ pose to wild stocks. The current ~~salmon~~salmon and steelhead hatchery programs have undergone ESA consultations and have hatchery and genetic management plans (HGMPs) in place that set guidelines to help address the potential effects of production on wild/natural fish.

Hatcheries are operated as either segregated or integrated programs with clearly stated goals and objectives. Segregated hatchery operations are managed to be genetically isolated from wild/natural populations by minimizing both the number of hatchery origin fish that spawn naturally and the number of natural origin fish used as hatchery brood stock. Examples include Dworshak Hatchery steelhead and Rapid River Spring Chinook ~~salmon~~salmon.

Integrated hatchery operations are managed to be genetically similar to an associated natural population through intentional natural spawning of hatchery origin fish and hatchery spawning of natural origin fish (e.g., hatchery supplementation). Supplementation is used to maintain or increase natural production, while maintaining the long-term fitness of the target population and keeping the ecological impacts on ~~not~~non-target populations within specified biological limits. For at risk wild populations, supplementation may be considered to prevent extirpation and maintain genetic diversity. Though there may be impacts to future evolutionary capacity, continued integrated hatchery supplementation may~~can~~ maintain or enhance genetic diversity,

increase adult returns, and maintain and build populations of very low abundance, and support fisheries (e.g., Snake River fall chinook, South Fork ~~Salmon~~Wild salmon summer Chinook, Redfish Lake sockeye). Decisions about the use of hatcheries need be made in the context of the specific populations and habitats that would be affected.

While some supplementation programs address conservation objectives, these types of hatchery programs alone will not achieve healthy and harvestable populations as envisioned by the CBP or the Workgroup until limiting factors in the smolt-to-adult phase of the life cycle are addressed.

Supporting Wild Fish: The State of Idaho supports wild fish management-only drainages for wild salmon and steelhead. Such areas are prime for production of wild Idaho wild salmon and steelhead and should be maintained for future generations. In its hatchery programs outside of wild reproduction zones, Idaho will adaptively manage production and release practices such that remaining wild fish populations are not negatively impacted. Before implementing hatchery programs in previously un-supplemented populations, Idaho, in coordination with other managers, will consider potential impacts of supplementation and potential changes in hatchery production should natural production improve to healthy and harvestable levels.

Meet Hatchery Mitigation Obligations: Idaho will remain committed to ensure that Lower Snake River Compensation Plan (LSRCP), Dworshak Mitigation, Northwest Power Act, and Idaho Power Settlement Agreement goals are met. Currently, some of these programs, e.g., the LSRCP production of spring Chinook ~~salmon~~salmon are chronically underperforming and should adjust their program to achieve mitigation goals.

Maintain Existing Infrastructure: Advocate for essential funding to restore, repair, or maintain hatchery infrastructure (including release sites, fish weirs, and equipment) ~~within the Columbia River Basin~~, and, where appropriate, enhance infrastructure with capital improvements (e.g., improving the Dworshak and Clearwater Fish Hatcheries water supply) to ensure that production goals as well as mitigation, supplementation, and conservation objectives are met ~~.~~and without impairing wild production and only when wild-origin recovery demonstrates measurable progress .

Enhance and Expand Production: Enhance existing hatchery capacity to meet current mitigation, supplementation, and conservation program goals~~.~~ without impairing wild production and only when wild-origin recovery demonstrates measurable progress .

Idaho will only s~~S~~upport expansion of production capacity of existing hatchery facilities where funding, management, and program goals align to provide additional benefits without impairing wild production and only when wild-origin recovery demonstrates measurable progress .

Optimize Hatchery Production: The State of Idaho in collaboration with Tribal, federal, and other partners shall operate and maintain anadromous fish hatcheries to maximize adult returns for both non-tribal and tribal harvest, and to ensure that hatchery mitigation goals are being achieved through improved artificial production techniques and management practices, ~~.~~without impairing wild production and only when wild-origin recovery demonstrates measurable progress .

Idaho will use research, monitoring, and evaluation to adaptively manage and improve performance of hatchery programs.

Supplementation: The State of Idaho shall seek opportunities to support expanded and new supplementation where funding, management and conservation goals align to bolster natural production in support of achieving healthy and harvestable levels, without impairing wild production and only when wild-origin recovery demonstrates measurable progress.

~~.~~

~~**Supporting Wild Fish:** The State of Idaho supports wild fish management-only drainages for salmon and steelhead. Such areas are prime for production of wild Idaho salmon and steelhead and should be maintained for future generations. In its hatchery programs outside of wild reproduction zones, Idaho will adaptively manage production and release practices such that remaining wild fish populations are not negatively impacted. Before implementing hatchery programs in previously un-supplemented populations, Idaho, in coordination with other managers, will consider potential impacts of supplementation and potential changes in hatchery production should natural production improve to healthy and harvestable levels.~~

D. Hydropower Policy Recommendations

Spill Regime: Advocate for an aggressive spill regime that maximizes benefits to juvenile fish while minimizing impacts to power generation.

- Support operations at lower Columbia and lower Snake River dams that minimize PITPH and WTT for juvenile migrants.
- Support spill operations that include spill up to 125% Total Dissolved Gas at times that benefit fish and recognize a balance with power generation.
- Support adaptive management of this program to provide real-time adjustments (including hours of day, season, duration) to ensure that spill results in the greatest benefits to Idaho's ~~salmon~~wild salmon.

Flow Augmentation: Optimize programs that use water from Idaho to continue to improve conditions for anadromous fish during the migratory period by reducing temperatures, consistent with existing agreements.

Surface Passage: Advocate for Columbia River System (CRS) operations and infrastructure that further minimize powerhouse encounters and maximize surface passage by out-migrating juvenile ~~salmon~~wild salmon, steelhead, and lamprey.

E. Blocked Area Fisheries

Blocked Area Fisheries: Support adult ~~salmon~~wild salmon and steelhead put-and-take Tribal and non-Tribal fisheries in blocked areas, consistent with State policy, through use of state allocated, non-ESA listed adults. Collaborate with Tribes and other implementation partners on plans to increase hatchery capacity and adult returns available for blocked area fisheries.

In addition to the above proposed policy recommendations, the Workgroup recommends that the Governor amend existing Idaho State Policy related to blocked areas as indicated below. During Phase 2 of the CBP, the States of Idaho and Oregon, the Upper Snake River Tribes, Nez Perce Tribe, Idaho Power, water users, and others discussed restored fisheries in the blocked areas above the Hells Canyon Complex (HCC). As a result of those conversations, the State of Idaho adopted a Blocked Areas Policy. The current Idaho State Policy does not apply to blocked areas outside the areas above the HCC. The following amended Idaho State Policy ensures that all blocked areas in the State are treated consistently. These amendments do not affect policies of other sovereigns.

As used in this policy, the term "blocked areas" refers to the historical ~~salmon~~wild salmon and steelhead habitat above the HCC, on the North Fork of the Clearwater above Dworshak Dam, and on Hangman Creek, (tributary of ??).

1. ~~The Task Force is advised that n~~No reintroduction of ESA-listed fish to blocked areas ~~upstream of the Hells Canyon Complex~~ is supported by the State of Idaho.

2. ~~The Task Force is advised that~~ The ~~re~~introduction of non-ESA-listed fish to blocked areas ~~upstream of the Hells Canyon Complex needs to~~ must be consistent with Idaho state statutes (§ 67-302 and 67-818(5)), which require approval by both legislative (§67-6302) and executive branches of Idaho government (§67-818(5)) and is otherwise prohibited.

3. ~~The Task Force is advised that~~ The ~~re~~introduction of non-ESA-listed fish to blocked areas ~~upstream has to~~ must be consistent with Idaho's and Oregon's commitments in the 401 Water Quality Certification Settlement Agreement with Idaho Power Company pertaining to the FERC Application for the HCC Re-licensing (2019 Settlement Agreement).

4. Idaho will continue to focus the following funding sources to ESA-listed fish recovery and achieving mitigation objectives in connected areas: BPA's Fish and Wildlife Program, Idaho Fish Accord, NOAA's PCSRF Program, USFWS's Lower Snake River Compensation Plan (LSRCP), and/or other federal funding sources intended to implement the 2019

FCRPS BiOp or subsequent FCRPS BiOps. The intent is to ensure recovery of stocks and to meet LSRCP mitigation objectives in connected areas with the above referenced funding sources and not diminish these efforts by diverting from the above referenced funding sources to implement put and take fisheries in blocked areas ~~above Hells Canyon Complex~~.

5. So long as the above conditions are met, Idaho supports put and take fisheries in blocked areas ~~upstream of the Hells Canyon~~ with the following provisions:
    a. A non-ESA listed hatchery stock must be identified and agreed upon among the parties intending to stock fish in blocked areas ~~upstream of the Hells Canyon Complex~~ with state fisheries managers.
    b. Locations and timing for stocking of non-ESA listed fish must be identified and agreed upon by the parties intending to stock fish in blocked areas ~~upstream of the Hells Canyon Complex~~ with state fisheries managers.
    c. Idaho does not support the collection or transport of any juvenile fish that may be produced by adult outplants intended for harvest in the agreed upon put and take fisheries.

F. Predation Policy Recommendations

Predation Management

Promote more aggressive programs and projects of sufficient scope, scale, and distribution to protect anadromous fish from the effects of predators (e.g., piscivorous fish, pinnipeds, ~~avian~~birds).

Promote more aggressive engagement with federal partners for increased funding of predator control programs, and advocate for removal of regulatory/legislative constraints on predator control, where necessary.

Continue to manage non-native sport fish that prey on ~~salmon~~wild salmon and steelhead with no size or limit restrictions. In addition, implement bounty programs, where appropriate.

Support predation management with the following actions:

- Creating and maintaining inventories of where predation occurs in all areas, consolidated at a state-wide level.
- Identifying factors that favor predators and work to modify them to reduce or eliminate impacts to anadromous fish both in and outside of Idaho. Work should be prioritized according to the most limiting predator-prey life stages and locations (e.g., ~~natal habitat~~, migratory pathway~~,~~ and estuary) and coordinate with federal agencies, other states, and Tribes to maximize the scope and impact of predator control. Monitor and record results and adaptively manage to improve effectiveness~~record as "lessons learned" for future use.~~

G. Other Policy Recommendations

Regional Dialogue: Utilize the October 2020 Four State Agreement on Columbia River ~~Salmon~~Wild salmon, now called the Columbia Basin Collaborative, or subsequent similar agreements, to build a collaborative, regional dialogue with Northwest governors, congressional delegations, Tribal nations, and other stakeholders to develop and implement a comprehensive package of investments and actions to restore abundant, harvestable populations of ~~salmon~~wild salmon and steelhead to the Snake River Basin while ensuring that impacted Tribes, stakeholders, and interests are kept and/or made whole.

Education: Undertake efforts to provide up to date information and educate Idahoans on key aspects relating to ~~salmon~~wild salmon and steelhead including but not limited to: the status of runs, the impact of recovery/restoration measures, and what more needs to be done to ~~support~~ achieve healthy and harvestable populations.

Water Management and Water Quality: Support collaborative efforts with water users and other stakeholders to provide adequate fishery flows and conditions, anadromous fish habitat, and watershed functions to protect and restore anadromous fish in a manner that is collaborative and consistent with Idaho law.

- Continue and expand efforts and programs including, but not limited to, local rental pool and water transaction programs, recharge, flow augmentation, barrier removal, and minimum streamflow projects, and watershed councils.

Science-Driven Policy: Identify areas where key scientific models align in their identification and assessment of significant limiting factors to survival, sources of mortality, and actions to support restoration of Idaho stocks of ~~salmon~~wild salmon and steelhead. Prioritize infrastructural and operational changes and policies accordingly.

Tribal Outfitting and Guiding: Support expanded Tribal economic opportunities in guiding and outfitting, as part of the broader economic, livelihood, and tourism/recreation benefits that ~~salmon~~wild salmon and steelhead fisheries provide to the region.

Climate Change: Climate change has affected and continues to significantly impact ~~salmon~~wild salmon and steelhead populations throughout the region. Adopt an unambiguous position acknowledging the reality of climate change and commit to actions and policies to mitigate its impacts.

- Factor climate change and its impacts into planning and policies in order to insulate ~~salmon~~wild salmon and steelhead from its effects, where possible, and optimize ~~salmon~~wild salmon and steelhead habitat and population resiliency.

CRSO ROD: Monitor the implementation of the Columbia River System Operations Record of Decision and its impact on Idaho ~~salmon~~wild salmon and steelhead.

Monitoring and Evaluation: Increase support for research, monitoring, and evaluation programs that support ~~salmon~~wild salmon and steelhead abundance objectives.

Goals and Timeline for Recovery: Idaho desires abundant, sustainable, and well distributed populations of wild ~~salmon~~wild salmon and steelhead. To reach healthy and harvestable levels requires more than recovery pursuant to the ESA. We must restore ~~salmon~~wild salmon and steelhead to levels of abundance that will sustain social, cultural, and economic opportunities for present and future generations and provide a fuller range of ecological benefits. Time is of the essence.

Funding: Develop Idaho-specific funding strategies to meet the intent and spirit of our mission and goal statements.

V. Conclusion

Idahoans want abundant, sustainable and well-distributed populations of ~~salmon~~wild salmon and steelhead in Idaho for present and future generations. While it's clear that Idaho cannot restore the ~~salmon~~wild salmon and steelhead on its own, the State can play a critical role in local, regional, and national efforts to do so.

This report represents the work product of Tribes and a diverse group of stakeholders with a shared interest in reversing the decline of Idaho's ~~salmon~~wild salmon and steelhead runs and restoring them to healthy and harvestable levels. As such, it is intended to go beyond current efforts to recover Idaho ~~salmon~~wild salmon and steelhead populations. This report does not catalogue all actions that could be taken. Rather, a significant amount of effort was made by all members to find areas where consensus could be achieved given our diverse views and connection to rivers and fish.

Many of these recommendations are actions that are currently being implemented to some degree – yet fish numbers continue to decline. As such, some may question whether we accomplished the Governor's directive to develop "effective ~~salmon~~wild salmon and steelhead policy." While this report represents a meaningful step in identifying goals for ~~salmon~~wild salmon and steelhead, the Workgroup recognizes that more ~~may~~ will need to be done to achieve those goals.

The key highlights of this Report are summarized as follows:

- it acknowledges the importance of fish to tribes and the need to honor federal treaty, executive order, and trust obligations to them, as well as making Idaho's diverse river-dependent communities and economies whole;
- it focuses in on policies and actions that are tailored to address some of the known causes of decline to those ~~salmon~~wild salmon and steelhead that originate in Idaho waters;
- the policies found in 'Section IV Policy Recommendations' represent a consensus-based package in support of our Mission statement and goals;
- Section F. addresses the four Lower Snake River dams and the suggestion from the Workgroup that the State should engage the federal government, regional

congressional delegates, regional states, tribes and stakeholders in a process to work to restore thriving and abundant ~~salmon~~wild salmon and steelhead fisheries for Idaho and the region; and

- given current status and low abundances of these fish, there is an urgent need to implement these recommendations quickly to stave off extinction and to begin moving in the right direction. NOAA Fisheries Consultation Handbook recognizes that "the longer a species remains at low population levels, the greater the probability of extinction from chance events, inbreeding depression, or additional environmental disturbance". We must act quickly and effectively.

It is the desire of the Workgroup that the Governor will rely upon these recommendations to guide recovery actions within the state and to inform Idaho's position in regional discussions on ~~salmon~~wild salmon recovery. We thank the Governor for recognizing the urgency and importance of action needed to address chronically low returns and accomplish the Mission Statement and Goals for ~~salmon~~wild salmon and steelhead. More conversations are necessary. More collaboration will be needed. More work must be done.

APPENDIX A [OA(2]**– Workgroup Record**

The record for the Workgroup is housed on the Office of Species Conservation's website on the Governor's ~~Salmon~~Wild salmon Workgroup page. In addition to housing this final report, this page includes agendas, meeting notes, media advisories, and presentation materials for each meeting as well as all public comment received. Review of the meeting materials illustrate the wide range of topics reviewed and discussion had by the Workgroup.

Public comment was accepted throughout the entire Workgroup process. Time was set aside at meetings to allow members of the public to provide oral comment directly to the workgroup and written comment was accepted at all points during the process. All written comment received was compiled and presented to the Workgroup members for their consideration. Written public comment is available on the webpage in pdf format, organized chronologically, and oral public comment is captured in each meeting's notes. Overall, the Workgroup received over 850 public comments.

The Governor's ~~Salmon~~Wild salmon Workgroup page can be found at this link: https://species.idaho.gov/governors-~~salmon~~wild salmon-workgroup/

APPENDIX B – Recommendations Considered That Did Not Reach Consensus
Reds, yellows, etc. from our prior exercises on a separate table, with that table included here.

APPENDIX C – Valuable Projects

This is where we can list the specific projects that were not included in the report body, such as Dworshak Dam/hatchery water supply issues, Clearwater Exchange, the predation examples from Richard, etc.

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