Comments for the Governor's Salmon Workgroup

December 11, 2020

Governor's Salmon Workgroup Written Comment 2 December 2020 Bert Bowler

A reservoir is the antithesis of a river. Snake River wild Chinook salmon and steelhead evolved over millennia in a reservoir free environment. The flow of water in reservoirs is significantly diminished compared with free-flowing rivers.

Data that defines the effects of dams and reservoirs on Snake River salmon and steelhead spans decades. They are consistent and very robust. A metric used to measure migration success is smolt-to-adult survival rate (SAR) – numbers of juvenile salmon entering the ocean linked to the numbers of returning adults. Snake River SARs are mostly calculated using Passive Integrated Transponder (PIT) tags, which are logged at each dam.

A recent study by Welch hypothesized that if Chinook populations have declined coastwide, then declines observed in the Snake River are largely the result of shifting ocean conditions and not the river environment. SARs were estimated using recovered Coded Wire Tags (CWT) that requires killing the fish to collect the tag. PIT tags proffer better SAR estimates than CWT tags because they allow for multiple recaptures and don't require killing the fish. PIT tag based SARs are more statistically precise than CWT because researchers can define Confidence Intervals (CI) around their estimates. The Welch study makes no attempt to measure CIs for any SAR estimates.

The authors make an unsupportable conclusion that ocean conditions define Chinook survival. The 5-year time period used precludes linking SARs to ocean conditions because of dispersed ocean entry points. Numerous studies describe marine survival with 300 miles of ocean entry so the influence of estuary and near shore ocean conditions can be highly variable across such a wide geographic range of populations.

Welch used subyearling hatchery Chinook as a surrogate for survival of Snake River wild yearling Chinook but their freshwater life history strategies are not related. There is considerable evidence describing population survival is mostly determined during estuary and early ocean life stages.

Numerous peer-reviewed publications have described both freshwater and ocean factors best explaining the variation in yearling Chinook SARs. Those studies are based on long time series encompassing considerable variation in both marine and freshwater environments. The Welch study ignores that literature.

Michele DeHart of the Fish Passage Center said, "boosting survival of juvenile salmon in fresh water is critical regardless of ocean conditions – if ocean conditions are really bad the best response is to take steps to ensure as many juvenile fish reach the ocean in good condition as possible. The same applies when ocean conditions are good."

SMARTS, LLC James W. Richel Thomas E. Goodwin, MD (208) 866-3441 19319 N. Eaglestone Place Boise, ID 83714

December 7, 2020

To: Governor Little's Salmon Workgroup:

Brian Brooks Paul Arrington John Simpson David Doeringsfeld Will Hart **Brett Dumas** Scott Hauser Chad Colter Jim Yost Joe Oatman Kira Finkler Mark Menlove Stacey Satterlee Senator Dan Johnson Rep. Fred Wood Richard Scully Aaron Lieberman Roy Akins

Merrill Beyeler Mike Edmondson

As a lifelong Idaho native, I (Jim RIchel) have been concerned about the plight of both the salmon population and the dams for many years. I have contemplated possible solutions that would allow the valued salmon population to thrive without necessitating breaching the dams which would have significant repercussions for the state of Idaho.

During the course of time and in consultation with a fish biologist and water hydraulics engineer, I developed a patent-pending potential solution addressing the downstream migration of smolt in the northwest. I have coined the acronym SMARTS to describe it. SMARTS refers to: Smolt Migration Aqueduct River Transportation System. I have attached a Power Point PDF which describes SMARTS in more detail.

Essentially, SMARTS is a pre-constructed conduit (that can float or be submerged) that collects smolt from a dam's reservoir then transports them to the estuary or pre-determined location in ultimate route to ocean. It uses natural flowing river water (un-reliant on flushing water). It is essentially a "river within a river" as it is a continuous tube to the next downriver dam eliminating the long, often unsuccessful swim through reservoir backwaters.

Some specific advantages of SMARTS include:

1. The system would be applicable to transporting both hatchery and native wild smolt and accounts for some thoughts on hatchery smolt acclimatization to fresh river water.

- 2. Tube transport would significantly decrease predation of smolt by other fish, mammals, and birds.
- 3. The system could well reduce or replace barging in smolt transport.
- 4. It would significantly reduce reliance on excess dam spillage thereby allowing more water to flow through the turbines.
- 5. It would therefore allow additional available water for usage upstream for agriculture and recreation.
- 6. It would allow for an efficient opportunity for smolt tagging to monitor and track survival etc.

Please see the attached SMARTS file for additional details. Please notify us if you cannot open the file. We could be available to discuss the project further.

Thank you for your time and consideration.

Sincerely, James W. Richel Thomas E. Goodwin, MD (208) 866-3441 (Tom) tegoodwin@live.com

So last meeting you had. I made a comment about our future harvest of these species. I didn't have much time to say what I wanted so I am doing it this way.

I have been fishing for these species for over a decade. I have seen the good and bad runs happen. But nothing can happen to improve runs that are on a downhill path. If our fish have to swim through 2 other states down river. We will always be short changed. Until Idaho can have a say of what happens down river. We most likely will not see a great improvement in our runs in Idaho.

My business I started to help sportsman/women target steelhead and salmon. I have seen customers are loosing interest in fishing for them in Idaho anymore. They would rather go down river and fish in other states. I feel if we do not get our fish back to Idaho. We will loose out on our economy benefits for our small towns and businesses that rely upon these fish. Thank you for your time.

Sincerely

Joey Hopkins JSH Customs Llc Thank you- I've attached the written version of most of the oral testimonies I've provided to the work group.

--

David A.Cannamela Fight On!

Testimony for Governor Brad Little's Salmon Working Group January 17, 2020 By: David A. Cannamela

With all due respect to the Governor, breaching the status quo means removing the lower Snake River dams. Dam removal shouldn't be off the table, it should and must be the centerpiece, because our salmon runs will not be restored until the lower Snake River is restored.

This is the biological reality we must address if we hope to claim success. The science and fish counts substantiate the prediction made by biologists in the 1940s and 50s; namely, "if the dams are built, we will lose the fish". Sadly, this may be the only prediction about the dams that has come true.

The promises of prosperity *and* abundant fish have not materialized: In truth, the real source of health and prosperity has been ransacked.

Needless to say, its impossible not to flounder in the ocean of science that's been generated by this issue. However, one particular genre of studies is invaluable because it prevents us from straying off course. The Comparative Survival Studies provide inescapable proof of where the problem lies. The 1996 PATH report captured it this way: "We are highly confident that the differences in stream-type chinook indicators of productivity and survival rates between upstream (Snake River sub-basin) and downstream (Lower Columbia (sub-basin) stocks are coincident in space and time with development of the hydro system." In other words, there are four glaring reasons why downriver stocks have not suffered the same fate as ours. I offer this analogy: When a person has a blockage in a major artery, there's no question of what the problem is, what to do and when to do it.

Mitigation plans developed in response to the anticipated negative impacts of the dams have failed. Mitigation hatcheries have not met their adult return goals, leaving the Tribes, sport fishers and those dependent on their business on the losing side of a broken promise.

On the wild side, our sockeye, chinook, steelhead and lamprey are on the brink of extinction while 98% of our abundant, high quality spawning and rearing habitat lies vacant. Notably, sockeye are on an extremely expensive life support system just to preserve the genome. And, Orca is signaling the collapse of the ecological pyramid whose foundation is our Snake River fish. This is the Status Quo!

So, are we really willing to sacrifice the cultural, spiritual, economic and ecological benefits these fish provide because we are unwilling to find alternatives to shipping, irrigation

and energy needs? Its time we commit to river restoration and begin developing dam removal mitigation plans that will work for all of us.

If we are unwilling to make this commitment, we should stop wasting our time and money and go to the bar until we figure out how we're going to tell future generations why we didn't have the courage, creativity, and decency to pass the gift of salmon on to them.

David A. Cannamela, Boise, Idaho Testimony for Governors Salmon Work Group, May 28, 2020.

I see that we are back to the 4 H's, though I have no idea why. I fail to see how following in the federal footsteps will lead us someplace other than where it led them.

The science, the empirical evidence, and five court cases (soon to be 6) make it abundantly clear and indisputable that there is only one H we need to be concerned with- the Habitat H. I don't mean spawning, rearing or even overwintering habitat, we've got the most and the best salmon production habitat anywhere in the world, and only 2% of it is occupied. Besides that, Mr. Beyeler and his crew are building more of it.

I'm referring to the migration corridor habitat that was once the lower Snake River; that 140-mile piece that had its identity stolen only to reappear as the Hydrosystem H. There is no Hydrosystem H. I've never Heard of a river coming complete with a built-in Hydrosystem – have any of you?

The 4-H approach created by the federal government was a red-Herring-intended to keep us from addressing the 4 Ds, the concrete overshoes that have dragged our salmon, and salmon-dependent cultures, economies, and ecosystems to the bottom of salmon poaching Hot tubs.

In my not-so-Humble view, this group only has to do one thing: Be Honest. Tell the boss the truth about dams and salmon, namely that any plan to save salmon must start with restoring the lower Snake River.

After that, he can follow the science and join forces with Congressman Simpson, and governors Brown and Inslee to draft The lower Snake River Restoration and Salmon Recovery Mitigation Plan or not. Either way, you will have done your job, leaving it to the citizens of Idaho and their governor to work it out.

I'd be willing to bet that Governor Little knows that there is no magic elixir, no HydroxychloroquinOncorhynchus that will fix this: The only magic is the magic that the River and only the River can perform.

We should welcome the opportunity to be part of one of the most promising and profitable restoration endeavors ever undertaken – our opportunity begins with reclaiming the migration corridor Habitat, which, in turn facilitates far-reaching and long-lasting cultural and economic prosperity.

For the record, Here's what I care about:

I care about salmon and orca and everything in between that relies on the life blood of salmon; I care about the native peoples who are still waiting for reciprocity and promises-made to be fulfilled:

I care about the blue-collar workers who make an honest living on the backs of these fish; the outfitters and guides, hotel, motel, restaurant, gas station, and tackle shop owners and their employees- people who value the fish; as opposed to those who are Highly paid to defend useless, senescent dams to the benefit of the few and impoverishment of the many.

I care about the people who in good faith, have invested time, sweat, and our money to restore spawning and rearing habitat, and who will not be rewarded with the sight and sound of salmon until the salmon Harvesting Hydroblockage is removed.

I care about future generations and my obligation to them. I care that I can say that I did something, however small, to preserve the gift of salmon for them.

Testimony for July 9, 2020 Governor's Salmon Workgroup

Governor Little has made the right decisions relative to the pandemic.

There are three reasons for this:

First, his decisions are science-based and data-driven.

Second, he cares about the people of Idaho and is doing what's best for them.

And Third, he has summoned the courage to make painful decisions because their benefits outweigh their costs.

If The governor applies the same formula to the Snake River Salmon issue, present and future generations of Idahoans, as well as others throughout the Pacific Northwest, will live lives greatly enriched by the gift of salmon.

Point number 1: science-based, data-driven. The science is clear. Fish runs below the lower Snake River dams are sustainable, those above are not. River restoration via dam removal is necessary to restore our fish. Even the federal government recognizes this biological reality; they just lack the courage to recommend it.

And so I find it very disturbing that this workgroup has been steered into the modus operandi of tobacco and tetraethyl lead proponents- looking for anything other than the destruction of the lower Snake River to blame for the loss of our fish...-hatcheries, harvest, spawning and rearing habitat, pikeminnow predation in the Salmon river, pinnipeds, sunspots and so on. Dams should display this warning label: "caution: dams may be hazardous to the health of your anadromous fish runs and lives they support".

Point number 2- What's best for Idahoans? Of course Idahoans will be better off with "abundant, sustainable, and well distributed populations of salmon and steelhead...". That's why it's the

heart of your mission statement. Idahoans from all walks of life are hurting badly from the loss of salmon, steelhead and Pacific lamprey. They are hurting economically, culturally, and spiritually.

The federal agencies don't give a flip about Idahoans. They have no intention of restoring our fish:

WE will have to do that and it will be a lot easier and much better for Idahoans if the governor is on the team.

Therefore, if this workgroup intends to fulfill its mission then it must do what the federal agencies have not; be true to the science and have courage. Advise the governor to adopt dam removal as the centerpiece of salmon restoration. Once we do that, we can begin addressing the real impediments to dam removal: meeting the needs of those who benefit from the current system configuration and entrenched archaic ideologies.

So, Where do we find the courage to do this difficult thing?

First and foremost, is a vision of the future that we know is worth the work and discomfort required to achieve it. So what is our vision? When we look beyond the proximal discomfort, do we see future generations shaking their heads in disbelief that we traded away the richness of salmon for obsolete concrete structures or do we see them enjoying the fruits of our hard work never even knowing there was a battle?

Secondly, company is empowering. The people of the Pacific Northwest, Congressman Simpson, and Governors Brown and Inslee have committed to doing the work. Governor Little won't be going it alone. We can do this!

Science-based and data driven, Best for Idahoans, Vision and Courage.

Lastly, consensus should not be the measure of value. If it were, we'd never make any decisions.

Testimony for Governor's Salmon Workgroup September 30, 2020

The German writer and statesman, Johan Wolfgang von Goethe (guh teh) is credited with this quote:

"Whatever you can do or dream you can, begin it; **Boldness** has genius, power, and magic in it.

One of my friends says it this way: "A ship is safe in the harbor, but that's not what ships are for"

And another friend puts it more bluntly "what do you want to be, a sheep or a shepherd?"

The common theme here is one of vision, courage and leadership- the first two of these being prerequisites for the third. Its about having the vision and courage to recognize and take advantage of an opportunity at hand.

Yes, we most definitely have an obligation to restore the Snake River and its essential anadromous fish runs: we owe it to the native peoples for countless reasons, we owe it to those whose livelihoods are dependent on consistent, sustainable runs, we owe it to those who find joy angling for them, seeing them on the spawning grounds or just knowing they are back home in our rivers, and we owe it to future generations who rely on us to leave them a healthy planet. But at the same time we are feeling the weight of this obligation, we should embrace the blessing of the opportunity to achieve something great.

The best and brightest future we can envision is the one that that begins with a healthy, free-flowing Snake River. This is the key to the re-creation of healthy, vibrant and sustainable cultural, economic and ecological communities.

The dams have reached their life expectancy and have laid bare the false advertising of power, prosperity and sustainable fish runs. Its time to retire these thieves of health and prosperity and begin anew.

It doesn't matter what the EIS or the ROD say or what this group recommends to the governor because the truth is out there:

The lower Snake River must be restored in order to restore our fish runs and removal of the four lower Snake River dams is necessary to achieve that;

We have overwhelming proof that dam removal is a highly reliable, if not guaranteed, restoration mechanism;

The citizens of the Pacific Northwest are ready and willing to participate in a process that removes the dams, recovers our salmon, and creates only winners.

So all that remains to be seen is what the governor will do. Will he join with other leadership and citizens of the Pacific Northwest in forging a river restoration plan that will benefit everyone, or will he stay in the harbor until the winds of opportunity are gone.

All this being said, here's what we have to look forward to by keeping the four lower Snake River dams:

More wasted taxpayer and ratepayer money,

Loss of invaluable cultures, economies, and salmon-dependent life forms

And abundant sadness, guilt and shame.

Testimony for governors salmon workgroup, October 27, 2020

At some point it becomes necessary to assess the value of our work. Did we help, hinder or just mark time. Will the time, effort and resources we consumed actually move us toward restoration of the lower Snake River and abundant, sustainable salmon and steelhead runs or will this just go

down as another activity on the salmon titanic and a report added to the coliseum full of reports that already exists?

One thing we know for sure is that the salmon will do their part as long as possible. The resources they consume will be plowed back into our cultures, economies and ecosystems for as long as the fish can hold on. The salmon don't waste time, movement and resources.

The latest Draft EIS, which is actually a Daft EIS, provides all too unnecessary reassurance of at least two things:

First, the federal government has neither the desire nor the capability to restore Snake River anadromous fish runs.

Secondly, it reassures us that "we the people", particularly Idahoans, will have to take control of OUR fish destiny.

The lunacy of the DEIS is defies description.

Let's see- We've identified the problem and the cure,

but we can't recommend that because we don't want to burden the region the challenges of replacing electricity we don't need and moving commodities the 140 miles from Lewiston to Pasco.

Never mind that breach is affordable, \$955 million spread out over the next 50 years versus the \$17 Billion we've spent over the last 20 years. That's 16 billion we could have spent on clean energy development, railway infrastructure, longer irrigation pipes and fishing gear.

And never mind the cultural, spiritual and economic losses to other stakeholders: the tribes, commercial and sport fisherpeople, outfitters and guides, food and lodging providers, tackle shops and more.

And then there's the small matter of the ecosystem which includes everything from orca to the plankton in Redfish lake. Some folks would assign a value to the ecosystem services salmon provide.

We need to take Congressman Simpson's observation to heart- in short, Idahoans are paying the bills and realizing none of the benefits.

"What the hell is going on" he said.

Dam good question.

Fellow Idahoans, its up to us.

12/06/2020 Betsey Thoennes 425-221-8174 lookforcanaries@gmail.com

Comments:

I understand you are working together to ensure that salmon do not go extinct on our watch. Please remember that ecosystems and habitats to not have political boundaries. Survival of humans and all other species are connected to and dependent upon the entire system working together as a cohesive whole.

Therefore, it is imperative that you encourage, promote, demand breaching the four Lower Snake River dams within the soonest possible water window for work on the river. There is no time to loose unless you want the burden of explaining to your children and grandchildren why salmon no longer return to Idaho.

Everyone knows that allowing the lower Snake River to flow free again is the LAST BEST CHANCE at recovering salmon. Incremental riparian restoration will not be enough. There are many ways to make all constituents whole during a change to the river. We all know that the power they generate is no longer necessary, and that irrigation can continue after modifications.

PLEASE ACT NOW TO BREACH 4 LOWER SNAKE RIVER DAMS. You will be responsible for whichever outcome we meet. Do you want to loose these salmon?