A letter to my neighbors in Eastern Washington.

It has been over 40 years since the last of the four lower Snake River Dams was completed and the promise of an "Inland Empire" was to be finally realized. Alas, we, especially those in the six counties adjacent to the lower Snake and our friends in Lewiston, have yet to realize this "empire." Yes, we have lived the days of cheap hydropower, but as they say, there is no "free lunch." This cheapness has come by, what we quietly acknowledged only to ourselves, significant federal subsidies. But they weren't subsidies at all, they were loans, and they are now coming home to roost.

While being taken in by lavish proclamations of the Bonneville Power Administration and the Corps of Engineers, we overlooked that these four dams were far more costly than their efficient counterparts on the Columbia River. Federal and ratepayer derived funds have never been enough to keep these four dams operating at the level of production their promised value was based on, leading to further degradation of turbines already past their life expectancy. Beyond replacement of the oldest three turbines, which are vastly more expensive to replace than the Corps or BPA are willing to tell us, there will be no replacement of other turbines. BPA simply finds it cheaper to get power elsewhere.

BPA tell us that because of the cost of salmon recovery they can't afford to fix things, but our power rates go up anyway. While these four impressive dams and reservoirs create a powerful picture of vast amounts of water piled 100 feet high to spin the massive turbines, it is an illusion. Unlike many of the dams on the Columbia, the lower Snake dams are "run of river," meaning they have almost no storage potential and can only generate hydropower based on the seasonal flows of the river. (Being run of river also means there's virtually no flood control value.) So when we need energy the most, on those hot and sunny August days, the dams can barely spin one out of six turbines. And when customers need the least power in the spring, all the dams spin all the turbines they can, generating surplus power that must be "dumped" at below market prices; often curtailing the wind turbines which many farmers now depend on to keep their farms operational. At the time of writing this document, the Mid-C price for BPA power is \$0.00 Mwh. This means we are giving surplus power to California at a loss of around \$32Mgh, which is the breakeven point for power produced by BPA. With all this financial hemorrhaging it is no wonder the the BPA Administrator finally admitted in recent testimony to the Northwest Power and Conservation Council that "I am not in a panic mode, but I am in a very, very significant 'sense-of-urgency' mode."

BPA and the Corps do this because heavy spring flows over the spillways creates immediately lethal or chronic doses of supersaturated gases that devastate salmon and other aquatic species. Slack water reservoirs do not allow for toxic levels of supersaturated gases to escape as they naturally would in a free-flowing lower Snake River. The Corps learned this the hard way in the 1970's when Congress only funded three of the six turbines in each dam because there was too much hydropower, leaving the Corps no choice but to "spill" water. The result of spilling water was supersaturated reservoir gases leading to massive fish kills. As mitigation for supersaturating, hundreds of millions more were spent on another 12 turbines for "our dams," because shredding fish through more turbines was considered 'less lethal' than the uncontrolled spill. In addition to the millions spent on more turbines, a further billion dollars has been spent on bypass piping in an attempt to keep fish out of the turbines, losing money on power sales at the same time.

All these expenditures and lost monies continue to pile debt for BPA, and eventually for us, the ratepayers. The interest payments on the debt for these four dams are 25% of revenues, resulting in the total cost to operate and maintain them exceeding the revenues from them; meaning that for as long as these dams exist, BPA loses money by spinning turbines on the lower Snake. The loss is even before BPA tries to pay off massive debt, now ~\$15-\$16 billion dollars, giving BPA the highest debt to asset ratio (99%) of any public utility in the country, excluding post-hurricane Puerto Rico.

The continued loss combined with BPA's ever-climbing rates, which still can't meet full-up costs, vs. open market prices show a clear trend that will undermine the entire hydro system, and our wallets, if they don't start dumping the losing assets and put our money to work on the winners. They are not hiding this detail from us; we just aren't reading the financial statements and strategic plans. Instead, we focus on text messages, LTE's, 'petition please for money', and listen to the old hype and pro Snake Dam protagonists extolling their virtues.

What did we get for all this? Supposedly "record" salmon runs some years back. In reality, these records were baselined on the near total loss in the 1990's, not the pre-dam days. In reality, runs are 3% of historic runs. In reality, our Idaho neighbors nearly lost their Sockeye, Steelhead runs are at record lows, the Chinook are spiraling down again, and NOAA says the "recovery" plans/actions will not recover spring/summer chinook. But the shad, pikeminnows, and walleye are doing great. Not bad for the billions spent on the dams, habitat, harvest, and hatcheries in salmon recovery efforts, but only if you enjoy slack water fishing, or are raking in the pikeminnow bounties in the tailrace of Lower Granite Dam.

In addition to these direct losses, we, and most especially the Tribal people who lived and fished for thousands of years along the river, lost a deep and irreplaceable connection to a place that stored much of the cultural identity and memories of those who once lived under these reservoirs. If one could put a dollar value on this reconnection to place and the ecosystem benefits, it would be many billions.

BPA, State and public contributions, and "sweat equity" have contributed billions to restoring salmon habitat in an attempt to avoid the only alternative that would work - Breaching. Much of this carefully executed work was performed by well-qualified practitioners and volunteers and is now going to waste. It is not because they didn't do it right, but because so few fish can make it down and back through 16 dams and reservoirs. Nevertheless, BPA has cut recovery funding, ~ \$40 million this year, and with the first cuts being to those people who did it right but can only report empty rivers. As long as we have four dams on the lower Snake River,

funding for habitat work will continue to be reduced. However, with a free-flowing river, this and additional habitat work will pay big dividends, with BPA and others investing in it.

And what about that "inland empire?" Well after the Corps flooded 20,00 acres of a once vibrant agricultural valley, flush with vineyards, orchards, villages, and tons of salmon to support tribes and farmers alike, per capita income in the reservoir area has been on the decline since 1980, four years after the construction camp closed. The number of small and mid-size farms capable of supporting a household also continues to decline. Small towns never boomed beyond the construction heydays, many now suffering from empty properties and youth flight to the cities. Our friends in Lewiston, stuck behind high levees prone to overtopping, have experienced growth rates less than half the rest of Idaho. The promise of significant savings for farmers shipping wheat by subsidized barging on the lower Snake never did see meaningful savings because the shippers set their rates only a few cents below rail rates.

The publicly owned Port of Lewiston (POL), in spite of significant taxpayer investments, is virtually out of the barging business. By failing to upgrade a few miles of rail to the most significant privately held grain terminal, Lewis and Clark, POL has held them hostage to the barging industry and the non-competitive rate increases that come along with that. In short, inspite of all the rosy projections, nothing but economic morbidity is in store for this part of the state.

When you add it all up, experienced economists using Corps data and planning guidance tell us the benefits over the remaining life of the projects is a humiliating .15-to-1, compared to a free-flowing river which ranges from 4-to-1 to 19-to-1. To clarify, operating the lower Snake River dams will return 15¢ on the dollar for every tax and ratepayer dollar spent on them, compared to a free-flowing river, which would yield 4 dollars for every 1 dollar spent, even if the power is replaced. The yield would be much more significant at 19 dollars for every dollar spent if the surplus power is not replaced.

Haven't we paid enough enough for false promises based on myth and slick bookkeeping? We are ready to take back the river lost to us by these four dams. The hidden beauty in all this is that under those stagnant reservoirs is a 140 mile valley awaiting its rebirth. What was once lost can be reclaimed. By removing the earthen berms of each dam, a well-preserved river and its flood planes, kept in cold storage for over 50 years, meets the light of day and is set free. This protection from the destructive effects of human development that make many river restorations an expensive challenge, along with prudent stakeholder planning by the State of Washington, the Tribes, the Corps, and local interests will free from the depths a highly valued place in terms of economic, ecological, cultural and aesthetic values. With a mindful and modern understanding of these values, the river can tell us where and to what extent a true gem of sustainable, resilient, redevelopment can take place. At a minimum, economists and engineers have estimated that 6,000 acres could be reclaimed for high-value crops, such as

vineyards and orchards, requiring little or no irrigation, while still allowing thousands of acres for wild riparian areas. And this is before consideration of hillside vineyards on land visible today.

Along with the restoration of salmon and steelhead fishing and encounters, boating, hiking, biking, horseback riding, restored agriculture, wineries, restaurants, country inns, etc., and supporting services, we can bring in over \$600 million in annual in expenditures. This translates to over 5,000 new jobs to the six-county area. Imagine for Lewiston what that one, 14-acre vacant lot behind the levees will be worth in job creation, expenditures, tax revenue, and just plain fun once the town is reconnected to the Snake and Clearwater Rivers. Not to mention the removal of the flood risk from overtopped levees that currently stymies their downtown development.

If this weren't enough, there is the interesting twist on land disposition. Typically, and very likely in this case, 40,000 acres of Corps project lands would be transferred to the State of Washington and be under management of the Department of Natural Resources. This means that any revenue from the sale of lease of these lands would go into the State School budgets. A quick calculation reveals if the 6,000 acres of land noted above was leased out as vineyard or orchards it would bring in somewhere between \$40-60 million biennium to the 6 counties along the lower Snake. Not a silver bullet for fixing the state school budget but a huge windfall for these rural counties.

Since 2000, when the Corps concluded that breaching would devastate the agricultural economy, much has changed the Corps did not expect. Farmers pulling together to form CoOps have built large 'unit train grain loaders' capable of quickly moving grain to seaports in quantities large enough for them to better compete in Asian markets. The State introduced the 'Grain Shuttle,'which can provide car lot service to smaller farms. These shuttles can move grain efficiently to port facilities on the Columbia where bargers can turn a profit, unlike the lower Snake, which is break-even at best. Also, over the last 15 years, several private railroads have upgraded trackage to handle heavier cars and speeds. Indeed, the enter length of the lower Snake River is now serviced by Class I and II railroads, further increasing the cost-effectiveness of rail over barging, which still must depend on federal tax subsidies. This improved rail line can service nearly all the grain elevators along the lower Snake. As part of the breaching costs, upgrading additional trackage to Dayton and building a unit train loader will allow farmers in this area to reap the benefits of an efficient rail system.

For those 15 or so irrigation farmers on Ice Harbor pool, you having been believing that with breaching replacing the irrigation would cost more than your land was worth. Not so, it turns out that after reanalysis by professional water supply/irrigation engineers, the cost of retrofitting your irrigation system is not the \$291 million estimated in the 2002 FR/EIS but something closer to \$15 million. In todays dollars that would be around \$19 million and well within the breaching cost estimates that provide BPA with net savings with breaching.

It is also time to recognize and rise above the long and divisive arguments brought on by agencies and environmental groups that have pitted one type of fisherman against another, and often for the sole purpose of diverting our attention from the one thing that can help them all; breaching the four lower Snake River Dams. Likewise, farmers have been pitted against recreationists, and private sector wind projects against government subsidized hydro. But, by focusing our energies on the real problem to get these reservoirs of entombment drained, all can benefit from a "rising tide" of prosperity, mutual appreciation, and cultural/aesthetic values.

Is this too an illusion or a vibrant achievable vision? It is very achievable, and in a matter of months, not years, by bringing the truth forward to defeat myth and pessimism. Since the dams are not economically viable and have proven to harm endangered species, the Corps of Engineers has an inherent fiduciary responsivity to take corrective action, and have never needed a congressional authorization to breach the dams. They can breach them by bypassing the river around the concrete structure and placing the projects in a "non-operational" status. Breaching is many \$100's of millions cheaper than originally estimated by the Corps "consultants," and does not require new appropriations from Congress. Under the authority given in the 1980 Northwest Power and Conservation Act, BPA can pay for breaching as the most cost and biologically effective means of "fish mitigation" for the Columbia/Snake system.

Does the Corps need to wait on the Federal Courts and Judges to tell them what to do? No, being in court for one offense does not relieve the Corps from committing another similar crime while debating the first offense in court. There are no "get out of jail free" cards. Nor is there a need to wait on another 5-year study process to spend \$100 million while salmon are dying on the concrete to non-recoverable numbers when in fact the Corps already has an extensive study/plan and Environmental Impact Statement in place that covers breaching. This EIS is the same one that tens of thousands of you committed to, or boldly stood up in public meetings and challenged the Generals and political appointees from the Corps, NOAA, and BPA with your well-articulated statements. You were never told that an overwhelming majority of you were in favor of breaching the dams.

So now is the last chance for us, the majority silenced by a political decision years ago, to come forth and let any agency leader of elected official know that we want our river back. And we are not going to wait for more studies; there is no more time. Given that all the means are in place, we must insist that breaching of two dams begin in December of this year, 2018. The reports, data, and EIS are clear, breaching is the only alternative left, and it must happen now.

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