From: Yakima County Farm Bureau

To: Lower Snake River Dams Stakeholder Engagement Committee

Sent to: info@lsrdstakeholderprocess.org

Date: 1-21-20

RE: Proposed Lower Snake River Dam Breaching

This correspondence is from the Yakima County Farm Bureau (YCFB). YCFB is a grass roots organization with 2700 members consisting of farmers and ranchers with operations both large and small as well as other folks with interest in agriculture affairs in Yakima and Klickitat Counties.

Recently our County Farm Bureau became aware of a study of the feasibility of breaching the Lower Snake River Dams.

The YCFB is categorically opposed to removing or breaching the Lower Snake River Dams (LSRD). The YCFB believes that these dams should remain in operation for their entire physical life span and that they are much more valuable intact than breached for a number of reasons.

First, it is a matter of necessity that our region and nation maintain a robust electrical production capability. Western societies are becoming less dependent on fossil fuels due to the desire to reduce our carbon foot print and nuclear energy has been sidelined due to perceived safety concerns. This leaves hydropower, solar and wind generation as our exclusive electrical generating base in the near future.

While there have been advancements in solar and wind generating technologies the YCFB believes that by the very nature of the natural resources they draw upon they are not "trust worthy" as a stand-alone energy source. The net result is that when we have the most need, they produce little or no electricity. This circumstance occurs during long stretches of low temperature, stagnant air and solid cloud cover and/or fog and the condition can last for weeks during most winters. Making matters most dire, electrical needs are also at their annual peaks due to heating and lighting needs during these periods of lowest electrical generation.

It is a fact that the total generating capability of wind and solar is far from substantial enough to satisfy our electric needs even when they are operating at full capacity. It is also understood that a variable and intermittent power source requires a "large battery" to help it through resource shortages (periods of no wind or sun). Manufactured battery technology such as Lithium Ion (Li-ion) has been advancing but there are still considerable hurdles with respect to creating ones large enough for a wind or solar farm. These new batteries require a considerable investment to manufacture and are largely built overseas due to environmental regulations in the United States and are expensive enough that they are currently used only

up to the size required to power compact automobiles. When their lifespan expires they present both an environmental challenge and are expensive to safely dispose of. Expensive replacement batteries would be required as the older ones fail. Traditional batteries containing lead which costs less would surely be a non-starter in the current legal environment.

Hydropower on the other hand is a perfect battery. A dam's lifespan is not measured in years or even decades but in centuries. They represent not just a "battery" but also a complete large scale power generating installation which is (unlike solar and wind) always able to generate power. More importantly the public does not have to purchase them.

There is an argument that our region does not need more power or even as much generation capacity as it presently has. The YCFB strongly disagrees with that assertion. It is obvious that there will be continued long term economic growth in Washington and neighboring States which will demand more electricity. The recent leveling off in electrical demand has been created largely through conservation but one can only conserve to a point. Soon our regional load will increase due to economic growth.

Further, our electric demand will increase due to a continued move towards mobile electric transportation in order to reduce carbon emissions. While autos have led the way, both heavy and light rail transportation and city buses have a history of utilizing electricity and there are companies testing the feasibility of producing large and small electric freight and utility trucks. The move to electrify personal and freight transportation will certainly produce an increased load on power generation and ignoring the impact is foolish and dangerous.

Another reason the YCFB believes our LSRD must be retained is because they are fitted with locks. This allows millions of bushels and tons of agricultural commodities and other freight to be transported by barge rather than truck or rail. Simply put, barging saves money and reduces carbon emissions. A single barge replaces many rail cars and countless trucks on our roads and rail lines in a more fuel and labor efficient manner, while subjecting our roads and rail lines to much less wear and tear. Most important, fewer trains and trucks on our roads directly enhance public safety.

<u>After all, when was the last time that a car collided with a barge?</u>

Finally, there are 40,000+ acres irrigated because of the LSRD. The loss of agricultural production caused by breaching would be unacceptable. The YCFB believes that the promises offered to make the farm families "whole" due to a loss of their irrigation are hollow. Even if their loss were to be fully compensated, simple money does not reimburse for the loss of one's way of life. Also, the true cost of compensation would be staggering.

The gain to migratory fish due to breaching is less certain. There is an issue as to what the effect of sudden, large releases of silt and mud built up behind the dams will have upon the river below each dam.

Furthermore, the issue of breaching has been debated for many years. During that time there has been much improvement to the technology to mitigate the fish issues around dams. Study of the other elements of the migratory fish environment has also been advancing. It is finally being recognized that issues such as predation and over fishing (both domestically and internationally) are very important factors. The YCFB believes that addressing those two issues would far outweigh losses due to dam passage.

An issue that has surfaced recently is that of a declining population of the Southern Resident Orcas. Advocates for breaching the LRSD blame a reduced salmon population due to losses because of them. The facts and history are illustrative because the Orca population is the same as it was before large scale fish hatchery operations began. The Orca count was about 66 individuals in the area of concern. Millions of salmon were reared and released from hatcheries for many years and the Orca's numbers rose to 99. The hatcheries were closed or scaled back considerably and the Orcas now number ……. 78.

The YCFB believes that the Orca's rise in numbers and then their subsequent decline is directly correlated to the rise and fall of artificial releases of the hatchery fish. It is a proven fact that salmon reared in the wild are dramatically faster and more elusive swimmers than hatchery fish. Orcas, as predators caught the slower hatchery fish which artificially boosted their numbers. As the releases of salmon declined, the Orcas finding fewer easy meals had to turn to the wild salmon which then also declined. If we need more Orcas, then it is pretty obvious that we need to resume rearing and releasing the hatchery fish to feed them.

Understanding where the Southern Resident Orcas reside is also important since they range within the Puget Sound and the Salish Sea for more than half of the year. The EPA has been closely monitoring pollution levels in the Sound and adjoining Salish Sea for decades and they have been finding alarming levels of PCB's and PBDE's in the marine life there.

The primary animals the agency is monitoring are the Pacific Herring and the Harbor Seal. Less often, the agency has pulled samples from Orcas and one individual, a "transient" (mammal eating) Orca was found to have alarmingly high levels of these harmful pollutants. The resident (Salmon eating) Orcas tested have shown heightened levels of the pollutant in question.

The EPA banned PCB's in the 1980's and PBDE's by 2003. Continued monitoring has shown that PCB levels are declining and PBDE concentrations are leveling off. Unfortunately these pollutants are very persistent in the environment and have been shown to bio-accumulate with marine animals higher in the food chain such as with Orcas. It is to be noted that PCB's and PBDE's have been implicated with interfering with many critical life functions in animals. We also find it interesting that the highest levels anywhere of these onerous pollutants in the test area and on an order of magnitude (a few hundred units vs. nearly 4000) <u>are right in the vicinity of Olympia</u>. The YCFB believes that transposing a Puget Sound pollution issue into an advocacy to breach the Lower Snake River Dams is scapegoating, at best.

Since the resident Orcas are in the Puget Sound a significant part of each year, expecting ocean bound Columbia River Salmon to range into there is complete folly. In the open ocean

Orcas running from Monterey Bay, California to South Eastern Alaska during the winter and spring would feed throughout their range and on the Columbia River Salmon only while they passed through their area of dispersal. This reduces the effect that Columbia River Salmon population variations would influence the well-being of the Orcas.

The YCFB opposes the trend to nationalize issues such as dam breaching which leaves the local people directly impacted by serious change side-lined. The Stakeholder Committee scheduled just two meetings, one in Clarkston and the other in Vancouver WA. The Pasco meeting was initiated not because this Committee realized more local input was prudent but rather, it is our understanding that because local Congressional leaders insisted upon it. We as Eastern Washingtonians thank them but share a disdain for outside forces which would chose to sideline the very people who must live with the repercussion of outside decision making. Finding real stakeholders begins at "ground zero", not in an urban area far removed from the impacts or in Olympia or Washington, DC.

Our hydroelectric generating dams economically provide reliable power and irrigation water as well as serving as an assist in flood mitigation. Further, our dams form an important transportation system along with great recreational opportunities. Trading this "sure bet" system that is the envy of the world for two less reliable generating systems that have serious short comings is nonsensical. The supposed environmental gains related to breaching are dubious. The argument that dam breaching would save the Southern Resident Orcas is fallacious when the facts speak otherwise. New technology is already boosting fish survival around the dams with the promise of more innovations in the future without breaching.

The YCFB urge that the Lower Snake River Dam Stakeholder Engagement Committee consider the whole picture and include all options in addressing the migratory fish and Orca issue in your findings. Further, we believe the facts show that breaching the Lower Snake River Dams would negatively affect our carbon foot print as well as being a poor tool to save these fish and that there are many other options that have been or are already about to be implemented to improve their survival without damaging our electric generation capacity and transportation system.

Mark Herke

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