CRSO's Preferred Alternative from Draft EIS Report

- The **Preferred Alternative** identified in the Columbia River System Operations draft EIS **maintains** the progressive **balance** of economy and environment that is so important to Pacific Northwest life and culture. The preferred alternative focuses on benefitting fish recovery using water management measures while balancing our communities' needs for water, power, navigation, and trade.
- The preferred alternative rightly **avoids the extreme measure of dam breaching.** Dam breaching would have devastating effects to our Northwest communities, which rely on the clean power, irrigation supply, and navigable waters made possible by our federal system of locks and dams.
- By identifying the preferred alternative, federal **agencies acknowledge** the world-class investments in **fish passage facilities** completed over the years that now **allow over 95% of fish to pass each of the federal dams** safely. Breaching any of these dams would have very negative consequences to our Northwest communities while yielding marginal improvements to salmon recovery.
- The draft EIS is correct to call for further action outside the scope of the Columbia-Snake River System to accelerate the recovery of anadromous fish like salmon. The most updated science from the National Oceanic and Atmospheric Administration finds that conditions in ocean waters need to improve for fish numbers to increase. We need to consider the whole ecosystem that salmon depend on and not limit our focus to the dams on the Columbia-Snake River System, where so much investment and improvement has been made in world-class fish passage infrastructure.
- Marine mammals who forage in the Salish Sea/Puget Sound region have toxin levels 4 to 6 times higher than marine mammals that forage in more remote waters. Chinook in urbanized areas are exposed to greater toxin levels from being in more contaminant-laden environments. Wastewater and other human-produced toxins being introduced into the Salish Sea/Puget Sound must be immediately addressed.
- The Preferred Alternative that is designed to achieve a reasonable balance of competing river resource needs and satisfies the mission requirements of the co-lead agency is the flexible approach that the agriculture and navigation industries have been recommending for over 20 years.

Balanced Economy and Environment

- The benefits of the Columbia-Snake River System have contributed to thriving communities in the Pacific Northwest, where we enjoy a **healthy economy and environmen**t.
- The system's hydroelectric dams and locks provide us with **clean affordable energy** for our homes and businesses, irrigation water for agriculture and **navigable waterways that ship goods** to and from the farthest inland port in the country. The environmental effects of these economic benefits are managed with world-class investments that help maintain salmon populations and other ecological benefits.
- Salmon and other fish are an important part of the river system that need to be protected, and their challenges are multifaceted. Over time, the dam system has improved to help over 95% of fish pass the dams on their journeys up and down river. Fish populations on the Snake River have trended upward for the past 25 years. **Breaching the dams would have marginal and uncertain improvements to fish populations** and deprive our communities of the dams' substantial benefits.
- Salmon populations are cyclical, with periods of high and low numbers. The ocean conditions directly impact the population during colder water cycles, as in 2010-2015 where record numbers of salmon returns were recorded, and during unfavorably warm ocean conditions – beginning in 2016 with a significant downward trend in populations. *Laurie Weitcamp, NOAA Research Fisheries Biologist*.
- We call on our leaders to **address the many factors** that **affect salmon populations**, including avian and pinniped predation, ocean conditions, and climate change. The Columbia-Snake River System makes significant contributions to the fight against climate change in the forms of clean hydropower and fuel-efficient cargo shipping.
- Dam breaching would negatively affect agriculture, manufacturing, transportation, trade, and tourism businesses that are physically or functionally related to safe navigation, freight movement, and river access.

- **Barging is the most efficient and least carbon-intensive mode of cargo transportation.** Our clean energy economy cannot rely on conventional freight trains and trucks to reduce carbon.

Navigation and shipping

- The Columbia-Snake River system of dams and locks enables **cost-effective and fuel-efficient transportation** of goods—connecting the farthest inland port in the country to markets in the Northwest and abroad.
- **Overseas trade is the lifeblood of our regional economy.** The Columbia-Snake River System enables our region to provide essential foodstuffs around the globe at an affordable price.
- **More wheat is transported** along the Columbia-Snake River System than anywhere else in the U.S.
- **Barging is nearly 40% more fuel-efficient than freight trains, and 270% more fuel-efficient than semi-trucks.** In 2018, it would have taken 38,966 rail cars or 149,870 semi-trucks to move the 3.9 million tons of cargo shipped on the Snake River alone.
- Grain suppliers and shippers that our economies depend on will likely see an **increase in transportation** and **storage costs by 50 to 100% if barging is lost as a transportation option.** The loss of barging could increase transportation and storage costs from $0.40 per bushel to up to $0.80 per bushel. With crop prices that have been weak in recent years, this would be a devastating blow to many farm families.
- **Our economies are not prepared to function with the loss of barging on the Columbia and Snake rivers.** Our highway, rail, and grain elevator networks would need over $2 billion in capital investments to adapt. This includes hundreds of miles of shortline rail track that have been abandoned; new rail; major highway improvements; and retrofits for grain elevators that do not have rail-loading capabilities.
- Regional deep-draft ports, such as the ports of Portland, Vancouver, Kalama and Longview, rely on barging to help move products from inland communities to export facilities. **Grains** and other commodities **are barged via the Columbia-Snake River System** to these deep-water ports and shipped to trade partners all over the world, **supporting more than 40,000 local jobs.**
- River cruises continue to be a growing market in our region. Each summer, thousands of passengers enjoy the Columbia and Snake rivers on cruise vessels, which travel the 325 river miles between Vancouver and Clarkston, relying on the locks to get up and down the rivers. More than 18,000 cruise passengers visited riverside communities in 2017, contributing over $15 million to the local and regional economies.

Hydroelectric power

- Our system of affordable and renewable **hydroelectric power is the backbone** that will support our new clean energy economy—**providing reliable energy** for our communities when wind and solar cannot. 90% of the Northwest's renewable energy comes from hydroelectric dams.
- Removing our hydroelectric dams would worsen climate change by reducing our renewable energy supply and requiring less efficient trains and trucks to replace barging.
- **Breaching** the Lower Snake River dams **would cause diesel fuel consumption to increase by nearly 5 million gallons per year** as barges are replaced by less efficient truck-to-rail shipments. At least 201 additional unit trains and 23.8 million miles in additional trucking activity would be required annually, resulting in increases in CO2 and other harmful emissions by over 1.2 million tons per year.
- The combined loss of clean power and fuel efficiency from the river system would result in equivalent carbon emissions generated by a Boardman coal-fired power plant every five to six years.

The comment period ends April 13th: Review the Draft EIS and provide your comments!
Visit the Columbia River System Operations Web page at **https://www.nwd.usace.army.mil/CRSO/**.