SNAKE RIVER DAMS – BENEFITS TO THE REGION & NATION

The Snake River dams are a critical component of the Columbia Snake River System, a 465-mile federal waterway that provides access to international markets for farmers as far as the Midwest.

Inland Navigation Facts:

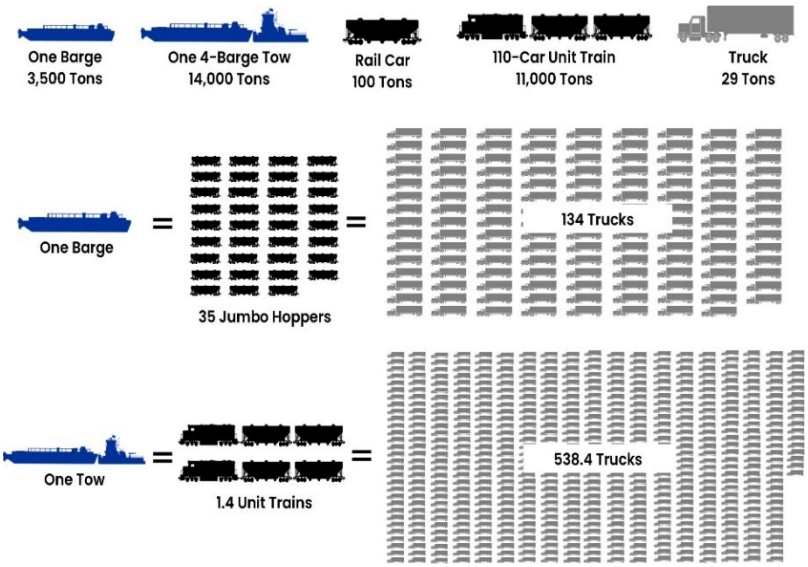
- 360 miles, 14 feet deep, from Portland/Vancouver to Lewiston, Idaho
- 141 miles, navigable Snake River
- Important gateway for U.S. wheat and forest products
- In 2023, 3.7+ million metric tons of commercial cargo
- In 2024, 21,100+ cruise passengers with $21+ million in direct economic benefits to the region

Columbia Snake River System is Efficient

The Columbia Snake River System utilizes barging, which is touted as the most efficient, safest, and environmentally friendly mode of cargo transportation in the United States.

Key Efficiencies of Barging:

- **Fuel Efficiency:** Barges can move one ton of cargo 675 miles on a single gallon of fuel. This makes them 30% more efficient than rail and 78% more efficient than trucks.
- **Environmental Benefits:** Barging has the lowest emissions per ton-mile of any transportation mode, leading to reduced air pollution compared to increased truck and rail traffic.
- **Safety:** Barging is more than twice as safe as trucking and nearly three times safer than rail, with significantly fewer spills.
- **Cost-Effectiveness:** It provides the most cost-effective transportation, helping to control freight rates and reduce congestion on roads and railways.



Potential Impacts of Dam Breaching (Shifting Away from Barging):

- **Infrastructure Costs:** Over $100 billion in capital investment would be needed for highway, rail, grain elevators, and local infrastructure.
- **Increased Traffic:** An estimated 201 additional unit trains and 23.8 million more miles of truck travel per year on highways would be required.
- **Safety Concerns:** Increased truck and rail traffic would lead to more fatalities and associated costs.
- **Operational Costs:** Annual increases of over $69 million in fuel, highway maintenance, terminal facility maintenance, driver time, and vehicle maintenance costs.
- **Environmental Degradation:** Diesel fuel consumption would increase by nearly 5 million gallons per year, and CO2 and other harmful emissions would rise by over 1,251,000 tons per year.

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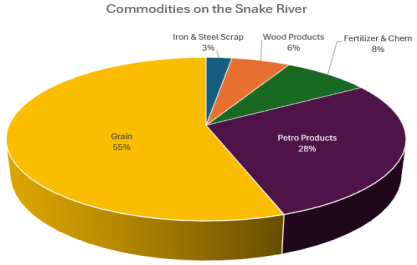
Economic and Agricultural Significance

The Snake River is vital to the economy and agriculture of the Pacific Northwest. It supports regional growth through farming, clean energy generation, and efficient, low-emission freight transportation.

As a key part of the Columbia-Snake River System, the largest wheat export gateway in the U.S., the Snake River facilitates the movement of millions of tons of agricultural products, wood, petroleum, and containerized goods to international markets. Barges offer a fuel-efficient, safer, and cleaner alternative to road or rail, significantly reducing carbon emissions and highway congestion.

The river irrigates 48,000 acres of farmland, producing high-value crops such as apples, sweet corn, potatoes, and nearly all of the nation's hops. This robust agricultural sector supports thousands of family farms. Overall, the Snake River system supports approximately 15% of the regional workforce across various sectors, including agriculture, shipping, manufacturing, energy, and tourism.



Beyond its critical role in freight, the Snake River also supports a growing cruise industry. In 2024, over 21,000 passengers explored its 325 scenic miles between Astoria and Clarkston, generating more than $21 million for local economies and fostering cultural tourism and small businesses.

Key freight transported on the Snake River includes:

- Grain: In 2023, grain accounted for 2,052,000 tons, representing 55% of all Snake River cargo. In 2023, over 3 million tons of wheat were barged to the Lower Columbia, with nearly 10% of all U.S. wheat exports moving via the Snake River.
- Wood Products: Approximately 297,000 tons of wood chips are shipped annually to regional mills for paper production.
- Containers: Municipal solid waste from Clark County, WA, is efficiently barged to Boardman, OR, reducing emissions and transportation costs.
- Petroleum: In 2023, refined fuels and renewable energy products made up 28% of Snake River barge traffic. Tidewater Barge Lines safely transports these materials under strict safety and environmental standards.

The Snake River is an indispensable asset to the Northwest, ensuring food security, energy reliability, promoting economic development, and facilitating global trade.

Salmon & dams can (and do!) co-exist

PNWA is committed to advancing science-based, collaborative salmon recovery while sustaining the vital benefits of the Columbia-Snake River system. We champion strategic investments in habitat restoration, fish passage, and environmental stewardship—working closely with tribes, agencies, and stakeholders.

- Advocates for full federal funding of the Columbia River Fish Mitigation Program and Columbia River Basin Restoration Act.
- Partners with tribal groups like CRITFC (Columbia River Inter-Tribal Fish Commission) and UCUT to advance salmon reintroduction and habitat recovery.
- Supports fish passage improvements at dams
- Endorses beneficial use of dredged materials to create shallow-water habitats and provide cold-water refugia.
- Promotes predator management, eradication of invasive species, toxics reduction, and restoration of spawning and rearing habitats.

Latest return numbers show positive trends:

- Juvenile salmon survival rates at Snake and Columbia dams remain strong at 95–97%.
- Adult sockeye returns at Bonneville Dam and spring Chinook are near historical highs—sockeye returns in 2024 ranked among the best, while adult Chinook nearly met or exceeded the 10-year average.
- 2024 upriver summer steelhead returns to Bonneville were ~179,000, over 140% of forecasts, with Lower Granite passage ~102,000 fish (133% of average)

These data reinforce that **dams and salmon can—and do—coexist**, especially when guided by science, modern mitigation technology, and robust collaboration.