

#### EXECUTIVE SUMMARY

This report presents a thorough analysis of the benefits and costs of the four Lower Snake River dams in both “keep dam” and “breach dam” scenarios. The dams were originally purposed for hydropower and navigation benefits, but in order to achieve a positive benefit-cost ratio, indirect benefits for navigation and power and additional credits for the use of “cheap hydroelectric power” over coal-fired plants were included.<sup>1</sup> Additionally, the original analysis did not account for lost direct and indirect benefits, such as the recreational benefits associated with a free-flowing river or tribal fishing benefits.

This report concludes that the benefits created by the four dams are outweighed by the costs of keeping them. Furthermore, with the possible exception of navigation and irrigation water supply, the current benefits would not be lost, but rather increased, if the dams were breached. Due to subsidies and unclear rail and barge cost data, the verdict is still out on whether there is an economic benefit to shipping by barge over rail. The four Lower Snake River dams in southeast Washington do not provide a net benefit to the nation, and they may never have.

This document should be used to inform the Army Corps of Engineers, the Walla Walla District of the Corps, key decision-makers, and concerned ratepayers.

#### KEY CONCEPTS AND CONCLUSIONS

- The Snake River dams have two authorized purposes: hydropower and navigation. The direct benefits of these purposes do not surpass the costs of maintaining them.
- In many years, the costs of operating the dam outweigh the value of the electricity produced; these costs are then passed on to the ratepayers. Breaching the dams would save ratepayers money.
- The current state of the four Lower Snake River dams yield a yearly benefit-cost ratio of 0.15, well below a positive return on investment.
- A free-flowing river yields a yearly benefit-cost ratio of 4.3 in term of National Economic Development (NED). These benefits are not realized with the current state of the river.
- Wild salmon are keystone species in trophic webs from the North Pacific Ocean to the far reaches of the Lower Snake River and tributaries, but their stocks are not recovering. Salmon are important for food provision, cultural value, and for sustaining other key species throughout the Pacific Northwest.