

MYTHBUSTERS

FISH AND WILDLIFE MYTHS ABOUT THE NORTHWEST HYDROELECTRIC SYSTEM

Myth No. 3 Lost power generation costs are not real.



THE FACTS: A SCIENTIFIC OVERVIEW

◆ Spill and flow augmentation reduce the amount of water available to generate power

The Federal Columbia River Power System has reduced annual energy production by about 1,000 average megawatts as a result of operational changes related to fish passage. These changes come at an average estimated cost of \$350 million. During the 2001 power crisis, the Bonneville Power Administration spent about \$1.5 billion on purchases for replacement power.

◆ The Northwest Power Act requires lost generation to be identified to do a cost-benefit analysis of fish and wildlife mitigation

To pick a minimum economic cost alternative for a biological objective—as instructed by the Northwest Power Act—the Northwest Power and Conservation Council must have cost estimates. To compare the cost effectiveness of a new hatchery with a new operational measure, an estimate of the impact of lost generation is necessary to compare with the capital costs, and operation and maintenance costs of the hatchery.

◆ The method of calculating mitigation costs is based on fundamental economic theory

The cost of the Bonneville Power Administration's reduced ability to sell power is developed by estimating the amount of

power that could have been produced and the price at which it could have been sold, a method based on the fundamental economic theory of opportunity cost.

◆ Cost-based rates increase from the additional costs of replacement power and the loss of a source of power revenue

Revenue generated from the sale of surplus power is used to reduce cost-based power rates for utility customers. A reduction in surplus power revenue without a corresponding reduction in costs will increase cost-based power rates.

◆ To achieve an honest cost-benefit evaluation, estimates of specific biological benefit of hydro-system mitigation are needed

Effective cost-benefit analysis is based on good cost estimates and good estimates of the benefits received for those costs. The region has a limited number of meaningful measures for biological benefits associated with hydro-system mitigation. With benefit estimates, decision-makers are left with only half of the equation. Costs alone cannot determine the efficiency of a project.

◆ Read more about fish and wildlife myths at www.ruralite.org/mythbusters

Source: Public Power Council, based on research collected from state and federal agencies, universities and the private sector.