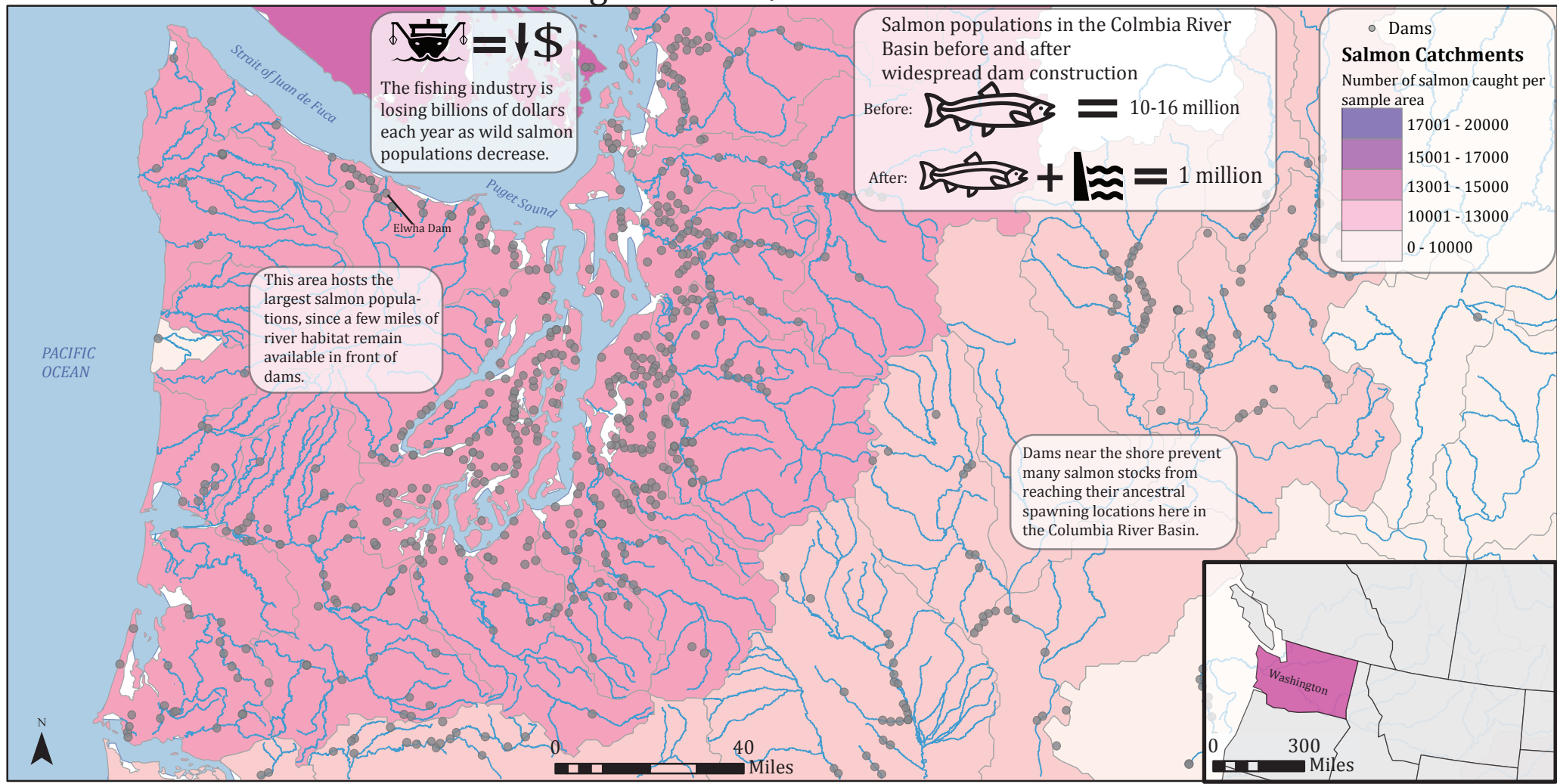


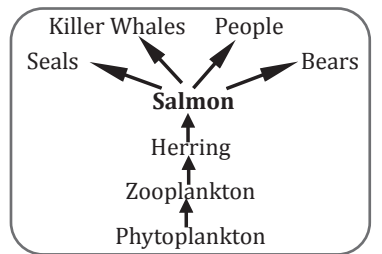
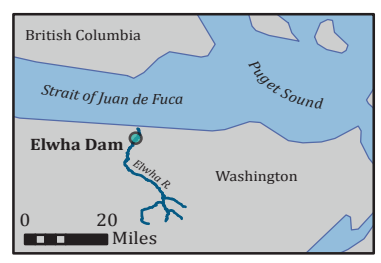
The Salmon Are Dammed in Washington State

by Liam Patton

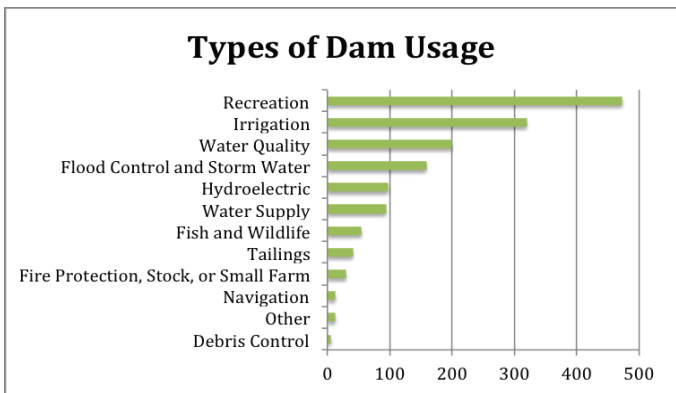


Case Study: The Elwha Dam Deconstruction Project

- 1) Before the Elwha Dam:**
400,000 returning salmon annually on Elwha River.
70 miles of habitat on the Elwha.
- 2) Elwha Dam completed in 1910:**
Hydroelectricity provided to region, but becomes inefficient.
4,000 returning salmon.
4.9 miles of habitat.
Fishing industry collapse.
- 3) Elwha Dam deconstruction in 2012:**
Salmon populations increase on Elwha.
400,000 salmon expected by 2020.
Economic revitalization of the area.



Depleting salmon populations leads to extinction of ecologically important keystone predators and unchecked population growth of small fish, which are disruptive to the food chain.



Why are dams bad for salmon?

- 1) Dams prevent access to spawning grounds.
- 2) Reservoirs create stagnant water that warms up under the sun to a temperature that is lethal to salmon.
- 3) Juvenile salmon are killed when swept into dam turbines.
- 4) Dams routinely alter the depth and velocity of rivers as they take in or block water, making it impossible for salmon to travel upstream.

Main Map Parameters: USA Contiguous Equidistant Conic ~ Central Meridian: -96.0° ~ Standard Parallels: 33.0° and 45.0° ~ Latitude of Origin: 39.0°
Sources: "Abundance Estimates of the Pacific Salmon Conservation Assessment Database, 1978-2008" Pinsky et al, Natural Earth, Washington State Dept of Ecology, Washington Dept of Fish and Wildlife.