

## Northern Pikeminnow Management Program

Objective: Increase the survival of outmigtrating juvenile salmon and steelhead by reducing the number of larger, predatory pikeminnow in the mainstem Columbia and Snake rivers.

Its genesis is from basic research conducted between 1982-1986 in the John Day Reservoir to determine the magnitude and significance of predation on juvenile salmonids.

Of the 4 main predators, the northern pikeminnow accounted for 78% of the fish predation (smallmouth bass, walleye, channel catfish)

Researchers developed a hypothesis that keys into the long-lived life-history of the northern pikeminnow that by exploiting the larger older more predaceous fish a significant reduction in piscine salmonid predation would occur.

Tested many removal techniques and determined that hook and line fisheries could provide system-wide benefits to outmigrating juvenile salmon.



Began system-wide removal fishery in 1991.



## **Program Goals:**

- Remove 10-20% of predatory-sized pikeminnow per year.
- Evaluate response of pikeminnow to sustained fisheries.
- Check for compensatory predation by smallmouth bass and walleye.
- Evaluate effect of program on salmonid predation.



## Results

Over 3 million northern pikeminnow removed.

- Low impact to resident/anadromous species.
- 10-20% Exploitation achieved in 17 of 21 years.
- Estimated 38% reduction in salmonid predation.
- Compensation by remaining predators minimal.
- Credible science: ~30 journal articles published.

