

STANDARDIZING FISH TRANSPORT

Lower Snake River Compensation Plan
Annual Meeting March 15-17, 2016

Purpose

- ▣ To examine current fish transportation procedures and techniques
- ▣ Standardize to the best of our abilities fish transportation in Idaho
- ▣ Revisit Integrated Hatchery Operations Team from 1995 (IHOT)
- ▣ Four work groups were made, Fish Transport Trucks and Equipment, Loading Densities and Transport Efficiency, Oxygen Demand and Requirements, Identifying Stressors and Monitoring (pre-loading, during loading, post loading, in transit)

Integrated Hatchery Operations

- ❑ The Integrated Hatchery Operations Team is a multi-agency group called for by the Northwest Power Planning Council (Confederated Tribes of the Colville Reservation Confederated Tribes of the Umatilla Indian Reservation Confederated Tribes of the Warm Springs Reservation of Oregon Confederated Tribes and Bands of the Yakama Indian Nation Idaho Department of Fish and Game National Marine Fisheries Service Nez Perce Tribe of Idaho Oregon Department of Fish and Wildlife Shoshone-Bannock Tribes of Fort Hall U.S. Fish and Wildlife Service Washington Department of Fish and Wildlife)
- ❑ Because hatcheries are operated by several entities and for different purposes, these facilities have often used different guidelines for operating hatcheries. The need to improve the coordination and operation of these facilities was formally recognized in the Northwest Power Planning Council's Strategy for Salmon (NPPC 1992). This salmon strategy is a regional effort to try and double existing adult salmon populations in the Columbia River Basin without losing biological diversity.

Fish Transport Trucks and Equipment

- ▣ Develop standards and guidelines for transport equipment
- ▣ Transport Logs
- ▣ Routine checks of maintenance schedules
- ▣ Benefit is that staff from any station would be familiar with transport systems used throughout the Department and would be familiar with the systems when moving or helping other facilities

Loading Densities and Transport Efficiency

- ▣ Look at current IDFG loading densities for most widely transported species
- ▣ Compare these to the IHOT guidelines that were set in 1995
- ▣ Benefits would be to identify reasonable maximum loads and the potential for increased hauling efficiencies and possible cost savings

Oxygen Demand and Requirements

- ▣ Research and summarize information on O_2 consumption for fish both at rest and times of stress
- ▣ Look at recommendations on pre loading O_2 and during transport (supercharging water prior to loading, optimum % saturation during transport etc.)
- ▣ Benefit is to maintain ideal transport environment for our products and ensure the efficient use of O_2

Identifying Stressors and Monitoring

(pre-loading, during loading, post loading, in transit)

- ▣ Identify stressors in transport process
- ▣ Develop guideline to minimize stress (pre-loading, during and at release)
- ▣ Benefit is to provide ideal transport environment for our products

Different RAM air systems



Down the Road

- ▣ Post release survival
- ▣ Tempering/acclimation

Questions??