

Weight of Evidence Process

- Approach used in scientific forums as a informational and decision-making tool
- Approach to help inform the water quality agencies regarding effects of discontinued use of forebay monitors that restrict TDG to 115% with the overall goal of best protecting the beneficial fisheries use
- Include scope of AMT members that have specific expertise and data and analyses to contribute

Weight of Evidence (cont)

- Suite of hypotheses created by subgroups within the AMT and are organized in series of hierarchal impacts that are increasingly detailed
- Each subgroup provides evidence for and against each hypothesis and presents to the AMT
- Each subgroup within the AMT develops a set of overall conclusions and recommendations for each hypothesis assigned to them

Weight of Evidence (cont)

- A neutral facilitator keeps record of the discussions and information submitted for and against each hypothesis
- Facilitator charged with summarizing the evidence for and against each hypothesis
- These summaries are incorporated into a proceedings document
- Water quality agencies use the process to make an informed decision

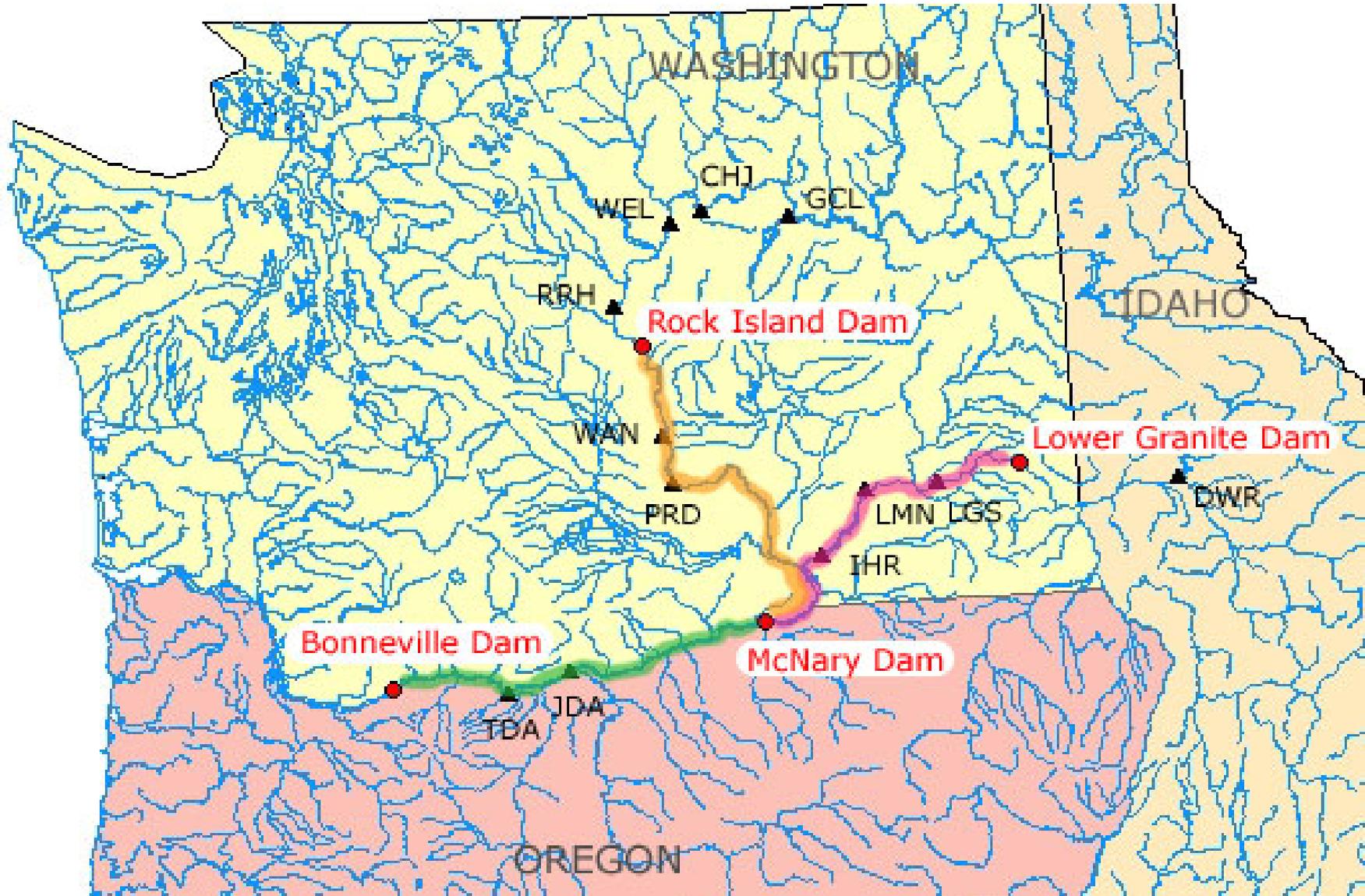
Potential Hypotheses

- Juvenile survival at the concrete(dam) under different spill levels
- Juvenile reach survival under different spill levels
- SARs under different spill levels
- Delayed mortality under different spill levels
- Water particle and fish travel time under different spill levels
- Adult survival at the concrete under different spill levels

Examples of Weight of Evidence Approaches in the Columbia Basin

- PATH (Process for Analyzing and Testing Hypotheses) - examining different hydro operational hypotheses for CB salmon recovery (Carpenter et al. 1998)
- Comparative Survival Study Workshop- examining the comparative survival of juvenile salmon through different routes of dam passage (Marmorek et al. 2004)

Juvenile Salmon River Reach Areas



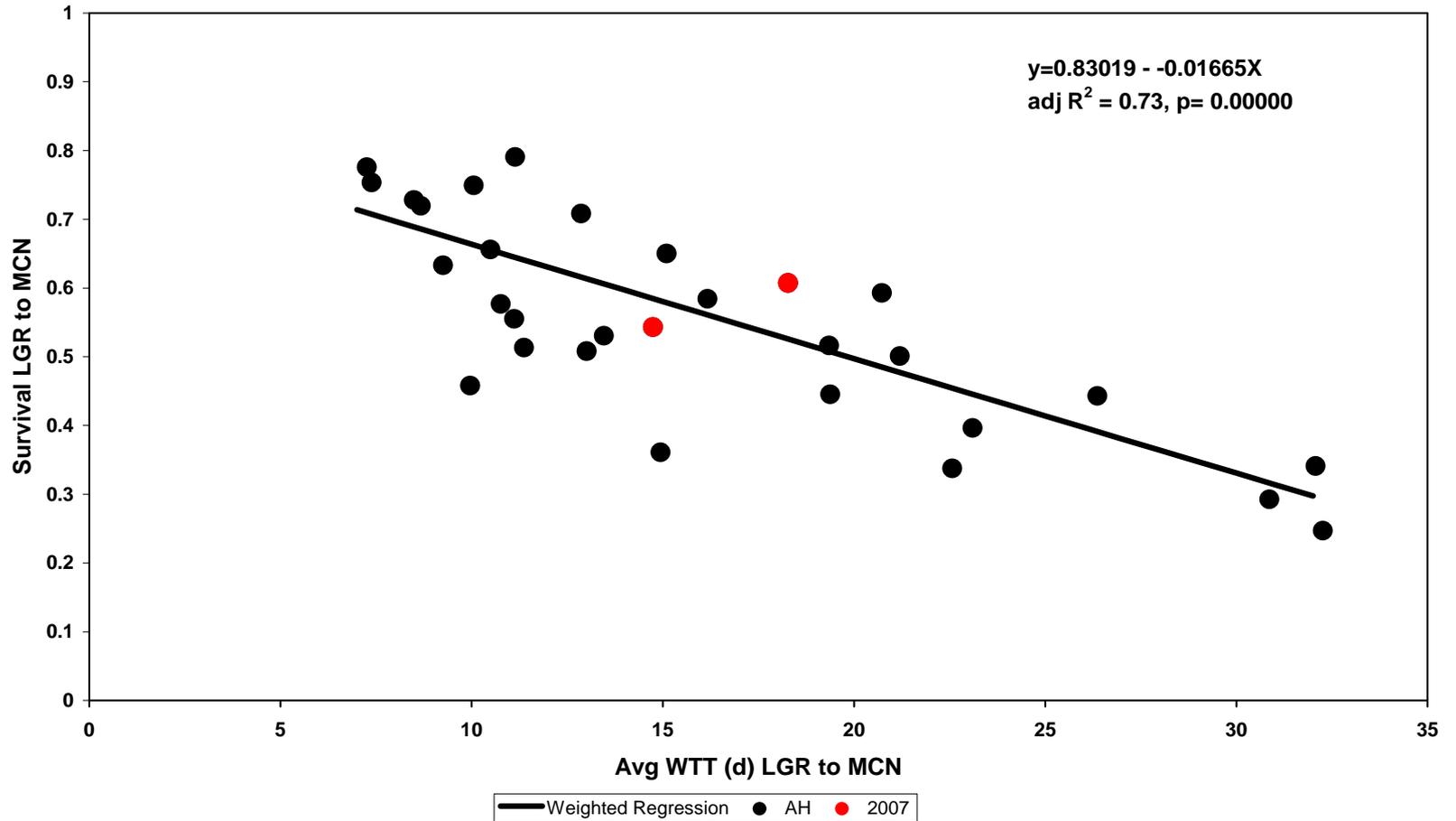
Direct Reach Survival For Snake River Steelhead

Survival From 2001 to 2006

	2001 <i>(No Spill)</i>	2002 <i>(12 hour)</i>	2003 <i>(12 hour)</i>	2004 <i>(No Spill)</i>	2005* <i>(No Spill)</i>	2006 <i>(24 hour)</i>
Reach						
Snake Trap to Bonneville	3.8%	23.4%	28.8%	N/A	N/A	37.39%
Lower Granite to McNary	16.8%	53.6%	59.7%	37.9%	59.3%	69.3%

*2005 Nearly meet the Spill Target Run Off Volume. In 2005 a period of nearly 10 days caused forced spill at all the Snake Projects, during this time large numbers of juveniles passed the project in spill. A significant portion of these are included in the 2005 estimate.

Hatchery Subyearling Chinook Survival vs sum WTT LGS, LMN, IHR, McN



Hatchery Subyearling Chinook Survival vs WTT and Spill Proportion

