

SALMON TECHNICAL TEAM REPORT ON RESEARCH AND DATA NEEDS

The Salmon Technical Team (STT) met August 14 and 15, 2008 to discuss the research and data needs document. The STT has the following comments:

Item 4.2.1 – Mark Selective Fisheries. A wide range of release mortality rates can be found in the literature reflecting strong dependence of release mortality on local conditions, maturity state, terminal gear, etc. The STT feels that information on sublegal, marked/unmarked encounter rates is more important at this time than additional estimates of release mortality rates.

Item 4.2.2 – Genetic Stock Identification. There is a need for finer stock resolution before genetic stock identification (GSI) can be used for inseason management. For example, there is currently insufficient resolution to distinguish between Klamath fall Chinook and Klamath spring Chinook. Until real time management issues are resolved, the STT feels that GSI should not be a high priority for research and data needs. The STT would like to point out that

- Canada does not generally use GSI on a real time basis for inseason management of Chinook or coho in West Coast Vancouver Island (WCVI) fisheries. Canada does use real time GSI estimates to some degree in northern troll fisheries.
- GSI, like coded-wire-tag (CWT) recovery data, can provide information of stock distribution but not migration patterns.
- GSI may be useful for annual catch limit (ACL) monitoring.

Item 4.3 – Mass marking. Delete the language regarding release mark rates. Mass marking may have an adverse impact on the CWT system.

Item 4.3 - Coast wide model. A coast-wide model may provide benefits over integrating results from separate models; however, the increase in model complexity may out weigh those benefits.

Item 4.4 - Genetics. The current three letter acronym (TLA) is PBT (parentage-based tagging), not full parental genotyping (FPG). The STT recommends the following topics be given a higher funding priority than GSI:

- Basic escapement monitoring (e.g., age and sex determination, carcass surveys, etc.)
- Double index tagging (DIT) of all exploitation rate indicator stocks and electronic sampling for them in all fisheries if mark selective fisheries become widespread.

Item 4.5 GSI. The costs of high resolution GSI sampling may out weigh the benefits to fishery management. Also:

- In the sentence about Klamath River fall Chinook triggering an Overfishing Concern, delete the word “technically”.
- Delete the first bullet; the KOHM has been thoroughly reviewed, including a positive review by the Center for Independent Experts in 2006.

Other items to include in the document include:

- Research is needed on monitoring tools for compliance with the ACL provision of the Magnuson-Stevens Reauthorization Act in time for implementation by 2011.
- Disease research including effects on population dynamics of adult and juvenile salmon.
- Development of forecast and harvest models for numerous west coast salmon stocks including Klamath River spring Chinook, California coastal Chinook, Oregon coastal Chinook, Central California coastal coho.
- Investigation of precision and accuracy in abundance forecasts, including examination of forecast models incorporating environmental variables.
- Full cohort reconstruction for all Council managed Chinook and coho salmon stock complexes.