

## Research, Monitoring, and Evaluation Goals

- 1) validate key assumptions and clarify critical uncertainties associated with the identification of primary limiting factors
- 2) monitor the status and trend of coho *populations* and their habitat
- 3) evaluate the effectiveness of key recovery actions.

**RME Need: Research on the relative importance of life stage specific limiting factors throughout a watershed at the population scale**

**In order to assure that recovery actions are directed at the appropriate limiting factors for each Oregon coastal coho population, new research is needed on the relative impact that lifestage specific habitat conditions have on juvenile coho and on the relative seasonal use of potential mainstem and tidal rearing areas.**

## **RME Need: Monitoring of the effectiveness of restoration actions**

**OWEB and IMST are developing recommendations for the design and implementation of an effectiveness monitoring program. In the interim, it is recommended that the State of Washington's "Monitoring and Evaluation Strategy for Habitat Restoration and Acquisition Projects" be used as the template for effectiveness monitoring of restoration actions for this recovery plan.**

[http://www.iac.wa.gov/Documents/SRFB/Monitoring/SRFB\\_Monitoring\\_Strategy.pdf](http://www.iac.wa.gov/Documents/SRFB/Monitoring/SRFB_Monitoring_Strategy.pdf)

## **RME Need: Refinement of Winter High Intrinsic Potential Model**

**Recovery actions outlined in this plan rely heavily on the Winter High Intrinsic Potential (WHIP) model developed by the Coastal Landscape Analysis and Modeling Study. Research needs to be conducted to validate and fine tune the spatial resolution of the model.**

## **RME Need: Evaluation of “passive” vs “active” approach to future large wood recruitment**

**In March of 2006, the ODF presented a framework for the “Alternative to Rule Concept #8”. The intent of the proposal is to create adequate incentives so that forest landowners choose to place large wood in-stream as part of a harvest operation where deficient large wood levels are identified. Where the choice is made not to place large wood, a higher level of riparian retention would be required.**

**Research on the assumptions and uncertainties associated with this specific program as well as a broader evaluation the relative benefit of passive or active approaches to large wood recruitment is needed.**

## **RME Need: Monitoring of the status and trend of coho and their habitat at the population scale**

**Beginning in 2006, ODFW and ODEQ will begin implementing a modified monitoring program designed to provide population scale, statistically rigorous data on the status and trend of: 1) abundance and distribution of naturally produced and hatchery coho; 2) physical habitat; 3) riparian conditions; and 4) water quality.**

# **RME Need: Research on managing beaver populations and their habitat to maximize their benefits to coho**

**Specific research is needed on:**

- 1) population dynamics and factors limiting coastal beaver populations**
- 2) influence of land management practices on beaver populations and their ability to construct and maintain dams**
- 3) design and use of instream habitat structures to assist beavers in building and maintaining dams**
- 4) potential of supplemental feeding of beavers to maintain them in areas where land management practices have diminished their food supply**
- 5) development of an intrinsic potential model for beavers that can aid in identifying prime areas for beaver habitat enhancement.**

**RME Need: Case-study research on the re-establishment of a self-sustaining population of coho in Salmon River once the hatchery program is eliminated**

**The question of how to reestablish a viable, self-sustaining fish population to an area adversely impacted by a maladapted hatchery program is becoming more commonplace in the Pacific Northwest. The removal of hatchery coho from Salmon River presents an excellent opportunity to provide some answers to this question.**



## **RME Need: Research on ways to reduce factors limiting the production of coho from Tahkenitch, Siltcoos, Tenmile, and Floras Lakes**

**Historically, Tahkenitch, Siltcoos, Tenmile, and Floras Lakes were some of the most productive areas for coho on the Oregon coast. Their production capacity has been greatly diminished from historic levels due to introduced exotic fish. Research is needed on ways to reduce these impacts.**

**Current and past landuse practices also may have an impact the productive capacity of the lakes. Increased sediment inputs from the tributaries feeding the lakes may be reducing the quality of littoral winter rearing areas. Increased human development along the lakes may be degrading water quality. Research is on the habitat specific use of the lakes by coho and of the impacts of past and current landuse.**

## **RME Need: Development and evaluation of tools to identify and prioritize restoration projects**

**The process of identifying and prioritizing local habitat restoration projects is currently undertaken using a variety of methods and approaches. An evaluation of the tools being used for this process needs to be conducted to insure that existing approaches are adequate and appropriate.**