The Collaborative, Systemwide Monitoring and Evaluation Project (CSMEP)

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CSMEP Vision

A coordinated effort to **collaboratively** improve
the quality and consistency of **fish monitoring** data,
and the methods used to **evaluate** these data,
to answer key **questions** relevant to
major **decisions** in the Columbia Basin.

CSMEP Objectives

- **Collaboratively serve M&E needs** of federal, state, tribal, intergovernmental entities
- **Inventory, assess** and **make available** existing fish monitoring data
- **Collaboratively design** improved M&E methods
- **Implement** and **evaluate** pilot M&E approaches
- Work towards consistent, reliable **systemwide** M&E
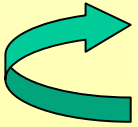
Design: Pilot for Snake Basin
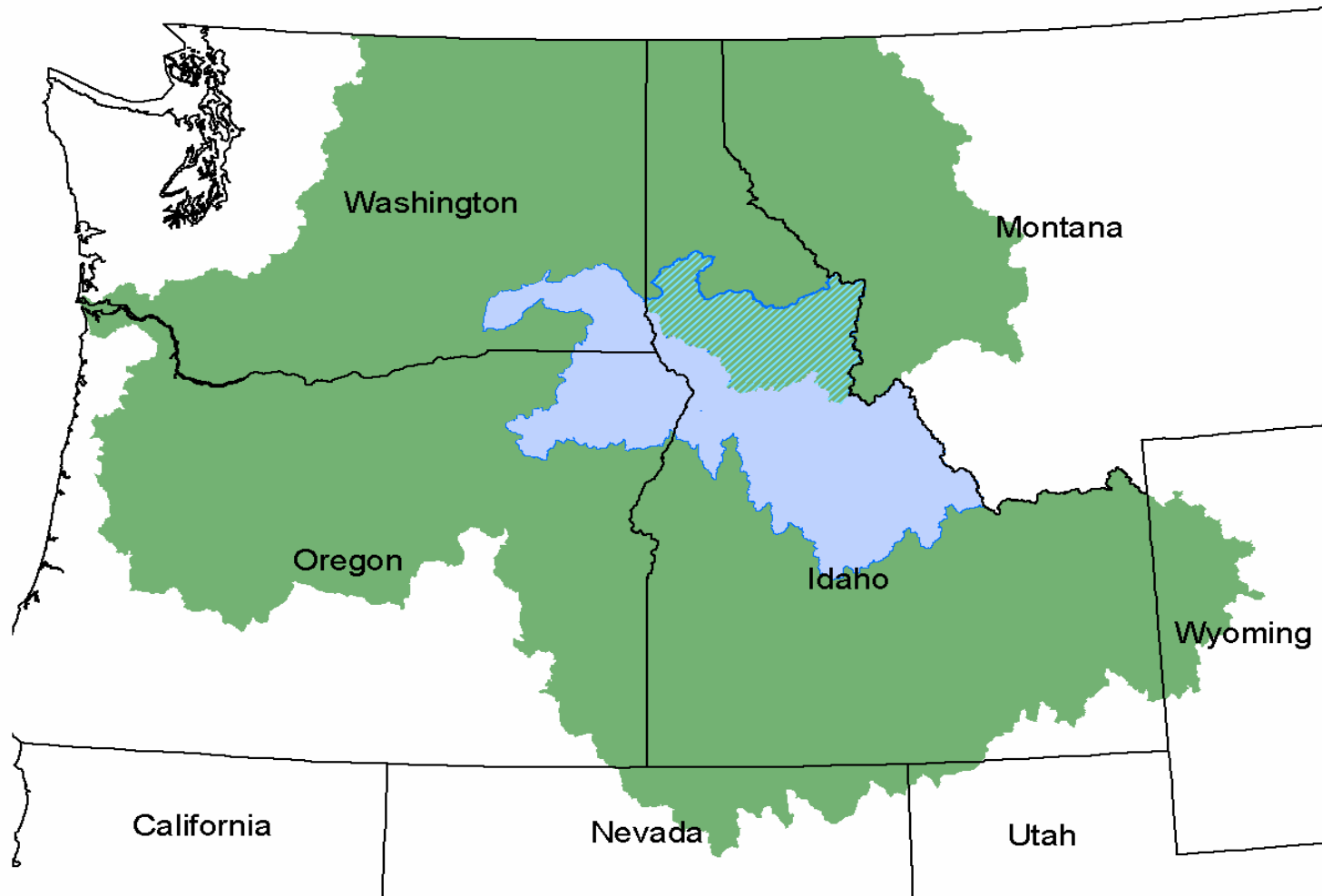
TASK GROUPS

- Inventory and Assessment
- Status and Trends
- Hydrosystem
- Harvest
- Hatcheries
- Habitat
- Design Integration

INVENTORY AND ASSESSMENTS

- Inventory metadata for anadromous fish studies for 20 subbasins. Focus for FY 2006 was on resident species (bulltrout and cutthroat).

- Assess strengths and weakness of studies to answer key monitoring questions.

- Develop Web database to store inventory metadata in readily accessible format.

STATUS AND TRENDS

- Identified monitoring design elements necessary to determine whether sufficient improvement in status for Snake River S/S Chinook for delisting.

- Developed simulation model to evaluate alternative designs for modeling abundance, productivity, spatial structure and diversity to answer TRT questions. (H,M,L precision)

HYDROSYSTEM

- Develop LMH designs that integrates major hydrosystem questions for previously developed DQO document for hydrosystem.

- Developed estimate of cost of PIT-tagging hatchery and wild chinook for Snake Basin for HML scenarios.

- Developed revised statistical models to evaluate statistical reliability of alternative M&E designs to answer key assessment questions.

HARVEST

- Assess value of monitoring alternatives using TAC models.

- Focus for FY 2006 has been Snake Spring/Summer Chinook recovery monitoring.

- Described problems encountered in ensuring that fishery mortalities do not exceed prescribed levels for conservation of weak stocks.

Habitat

- Found variation in conditions, scale and status of fish populations presents serious challenge to development of consistent or uniform habitat effectiveness monitoring.

- Because of the above have focused on use of a consistent process (rather than a template) for development of individual monitoring designs. Piloted this approach in Lemhi Subbasin.

HATCHERY

- Identified uncertainties associated with operation of hatcheries as a "class" of actions.

- Developed strategy that allows employment of EMAP style approach to selection of hatcheries for study.

- Assessed distribution of sampling effort, evaluated data gaps, and identified appropriate design strata for overall Basin-wide monitoring.

DESIGN INTEGRATION

- Began to apply the PrOACT approach (a simplified multi-objective decision analysis) for generation and filtering of alternative M&E designs across CSMEP subgroups base on 1) inferential ability, 2) statistical performance, 3) cost, 4) practicality and 5) environmental impact.