**DRAFT Programmatic Issue:**

**Ocean Research**

**Issue:**

Staff has concern that coordination is lacking among the proposals, that it is unclear how the projects are addressing the ocean strategies described in the 2009 Fish and Wildlife Program and how the information gained through these projects will result in salmon management changes within the Columbia River Basin.

**Budget History and proposed funding for the three proposed ocean research projects**

**Background and staff comments:**

The 2009 Fish and Wildlife Program describes the ocean environment an integral component of the Columbia River ecosystem. The primary strategy called for in the Fish and Wildlife Program is to identify the effects of ocean conditions on anadromous fish survival and use this information to evaluate and adjust inland actions. The Council adopted the following strategies for the freshwater plume, the near-shore ocean, and the high seas:

1. Manage for Variability

Management actions should strive to help anadromous fish and other species accommodate a variety of ocean conditions by providing a wide range of life history strategies. Continue monitoring and evaluation of the Columbia River plume and ocean conditions for impacts on salmonid survival. Monitor salmon returns and climate-change impacts on ocean conditions in order to identify factors affecting survival in the ocean and plume.

2. Distinguish Ocean Effects from Other Effects

Monitoring and evaluation actions should recognize and take into account the effect of varying ocean conditions and, to the extent feasible, separate the effects of ocean related mortality from that caused in the freshwater part of the life cycle.

**ISRP Comments:**

There is a lack of strong evidence of collaboration of some of the ocean and estuary projects attempting to estimate mortality of juvenile salmon in the estuary (NOAA, COAST, LCREP and Avian Predation).

**ISRP suggestions:**

ISRP programmatic suggestions (related to Ocean but may overlap into the estuary):

* BPA-sponsored basinwide forum on the effects of climate and ocean conditions on Columbia River Basin fish and wildlife potentially led by NOAA Fisheries.

Specific possible topics could include Life Histories and Density dependence.

* Development and improvement of simulation and predictive models to modify harvest or hatchery releases.
* Better understand *how* ocean conditions affect growth, survival, and ocean distribution of anadromous fish.

**Relationship to Council Questions:**

The ocean research projects are found to address the broadly stated critical uncertainties that pertain to the ocean in the research plan. The data derived from these projects needs to be synthesized and focused on addressing the priorities described for the 2009 Program and the FCRPS Biological Opinion. These research projects are related to at least one high level indicator “Are ocean conditions affecting Columbia River Basin anadromous fish.” The ISRP indicated that this body of research needs to consider more effective approaches for communicating project results and forecasting ocean survival. The ISRP also noted a need for integration of data and analyses.

**Possible Options**

Options to consider include noting that projects 1998-014-00, 2003-009-00, 2003-114-00 should collaborate to complete a comprehensive strategic plan that prioritizes project and management objectives for the Program. Also, address the ISRP comment that ocean and estuary projects attempting to estimate mortality of juvenile salmon in the estuary could exhibit stronger collaboration.

* Clarify how the synthesis report will be completed (responsibilities).
* Identify program priorities, other management questions to be addressed.

Consider basinwide forum on the effects of climate and ocean conditions on Columbia River Basin fish and wildlife potentially led by NOAA Fisheries.

**Preliminary Staff Recommendation:**

We recommend that project sponsors jointly complete a comprehensive synthesis report per the ISRP comments.  Recommend funding for through 2012 to complete the coordinated synthesis report.  Funding beyond 2012 will be based on ISRP and Council review of the report and recommendations for future work. An important element to this synthesis report will be the inclusion of potential salmon management implications and recommendations based on the information collected and evaluated.  The sponsors should address where appropriate, the qualifications raised by the ISRP in their final review (ISRP 2010-44B). Also we recommend that the proponents ensure data collected is standardized and accessible.

**Proposals addressing the ocean, plume and nearshore environments:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Project #** | **Project Title** | **Sponsors** | **Purpose/**  **Emphasis** | **BiOp/Accord** | **FY 2010 Funding** | **Funding requested (2012-2014 average)** |
| 1998-014-00 | Ocean Survival of Salmonids | NOAA | Habitat, RM&E | RPA: 61.1, 61.2, 61.4 | $2,122,893 | $2,720,691 |
| 2003-009-00 | Canada-USA Shelf Survival Study | Canada Department of Fisheries and Oceans | Programmatic RM&E | RPA: 61.1 | $455,971 | $511,800 |
| 2003-114-00 | Coastal Ocean Acoustic Salmon Tracking (COAST) | Kintama Research | Programmatic RM&E | RPA: 55.1, 55.2, 55.8, 61.2 | $2,143,816 | $2,100,000 |
|  |  |  | Total: |  | $4,722,680 | $5,332,491 |

**Related projects that could be integrated in the discussion:**

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| --- | --- | --- | --- | --- | --- | --- |
| **Project #** | **Project Title** | **Sponsors** | **Purpose/**  **Emphasis** | **BiOp/Accord** | **FY 2010 Funding** | **Funding**  **requested (2012-2014 average)** |
| 2003-007-00 | Lower Columbia River Estuary Ecosystem Monitoring | Lower Columbia River Estuary Partnership (LCREP) | Habitat RM&E | RPA: 58.1, 58.3, 58.4, 59.1, 59.2, 59.4, 59.5, 60.1, 61.1, 61.3 | $1,024,359 | $1,777,277 |
| 1997-024-00 | Avian Predation on Juvenile Salmonids | Oregon State University, Real Time Research | Predation, RM&E | 66, 67, 68 | $530,566 | $773,583 |
|  |  |  | Total: |  | $1,554,925 | $2,550,860 |

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