Ocean and Plume Science and Management Forum

Management Questions related to the Ocean, Plume, Nearshore

1. What ecosystem functions need *protection, restoration, enhancement or reconnection* within the estuary and ocean plume due to impacts from actions within the Columbia River mainstem?

*Protect* *and enhance ecosystem functions in the Columbia River estuary and near-shore ocean discharge plume to mitigate for hydrosystem impacts*. *(F&W Program, p 13)*

1. What is the relationship between estuary ecology and near-shore plume characteristics and how are these impacted by hydrosystem flow regulation?

*Increase the understanding of the relationship between estuary ecology and near-shore plume characteristics and the productivity, abundance, and diversity of salmon and steelhead populations as impacted by hydrosystem flow regulation*. *(F&W Program, p 38, 32, 13)*

1. What are the near ocean/ plume effects on population status towards improving, protecting, and mitigating anadromous focal species?

 (*Fish Tagging Forum management question, modified slightly to better fit F&W Program mandate)*

1. What is the impact of in-river and ocean harvest on stock composition, stock-specific abundance, escapement, catch, and age distribution?

*The Council recommends the following practices in harvest management and encourages the region's fish and wildlife managers to adopt them: (i) Monitor in-river and ocean fisheries and routinely estimate stock composition and stock-specific abundance, escapement, catch, and age distribution.* *(F&W Program, page 20)*

1. What is the survival rate of salmon and steelhead in the lower Columbia River, estuary, and marine environment?

*“The Council supports strategies that protect, enhance, and restore critical habitat and spawning and rearing grounds in the estuary and lower Columbia River. Such strategies*

*include continued evaluation of salmon and steelhead migration and survival rates in the lower Columbia River, the estuary, and the marine environment.”* (F&W Program, p 32)

F. How can the Council distinguish ocean effects on salmonids from other effects in freshwater?

“*The Council supports M&E actions which recognize and take into account the effects of ocean-related mortality from that caused in the freshwater part of the salmonid life cycle*.” (F&WProgram, p 31.)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

w:\po\ww\2013\ocean workshop\management questions 5-sep-13.docx