

**Comments on NOAA Fisheries Technical Memorandum: Role of the estuary in the recovery of Columbia River Basin salmon and steelhead: An evaluation of limiting factors by K.L. Fresh, E. Casillas, L. Johnson and D.L. Bottom**

The approach taken in this technical memorandum (Memo) is to characterize Columbia Basin populations by life history types and use of habitats, and qualitatively evaluate the estuary limiting factors according to VSP parameters. We agree that this approach seems generally appropriate given the information available. Missing from this approach is a description of when major estuary changes occurred (e.g., hydrograph changes, lower estuary development, tern colony expansion) to help put the potential limiting factors illustrated in the Memo in perspective with observed spatial and temporal patterns of population performance.