## Reference Condition Approach for Numeric Nutrient Criteria for Oregon Estuaries

Cheryl A. Brown, Walter G. Nelson, and Pat Clinton

Development of nutrient criteria for all water body types of the US remains a top priority for EPA. Estuaries in the Pacific Northwest receive nutrients from both the watershed and the coastal ocean, and thus are particularly complex systems in which to establish water quality criteria. We will first summarize our knowledge on causal and response variables relevant to development of nutrient criteria for Oregon estuaries, and summarize some research approaches being used to clarify nutrient inputs and responses in these systems. Based on currently available data, a reference condition approach which incorporates both landscape and marine drivers appears most promising.