DRAFT RSET ISSUE PAPER #9 - SQG Cost Effectiveness / Reliability

SEDIMENT QUALITY GUIDELINES SUBCOMMITTEE, B.Betts , Chair (bbet461@ecy.wa.gov); August 2, 2004

QUESTION/ISSUE: How has cost-effectiveness and environmental reliability been evaluated in the development of sediment quality guidelines and a recommended routine analytes list? Has the most cost-effective and reliable set of guidelines been recommended?

DISCUSSION: Currently, the RSET Analyte Subcommittee is developing recommendations for key chemical analytes/groups for routine analysis. These recommendations will not encompass all chemicals of concern, but rather specific chemicals or groups of particular concern, e.g., PCBs, PAHs and pesticides.

Regionally, Ecology completed development of freshwater sediment quality guidelines in September 2003. Ecology's report identifies recommended routine analytes for freshwater sediment analysis/evaluation based on thorough reliability analyses, i.e., ability of specific chemical guidelines to accurately predict regional biological effects.

REFERENCES: Phase II Report: Development and Recommendation of SQVs for Freshwater Sediments in Washington State, September 2003, Publication No. 03-09-088.

RECOMMENDATION: The two RSET development efforts will be combined in the short-term future to evaluate cost-effectiveness and reliability. Cost-effectiveness may be evaluated using primary and alternative lists of recommended chemicals of concern for routine analyses. Cost-effectiveness recommendations may be based in-part on consideration of chemical detection frequency, chemical relationship to regional/national bio-effects, persistence, bioaccumulation and other considerations.

Regionally, reliability analyses have been completed for regionally available, synoptic sediment chemical and bioassay data. The reliability analyte lists may be independently evaluated for cost-effectiveness.

Since two lists may soon be available, i.e., recommended analytes and recommended guidelines, evaluation of cost-effectiveness should address the relationship between these two lists.

PROPOSED LANGUAGE: None yet available.

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