

Weight of Evidence for Determining Use Attainment

(Handout #6 for September 13)

Change the assignment of points to allow zero points to be assigned to the BPJ Line of Evidence (LOE) when judgment does not indicate either toxic or not toxic conditions.	In some instances available information may not be strong enough to indicate if conditions are either toxic or not toxic.
Consider all data and information for the AU for each line of evidence, rather than evaluating LOEs for each individual station. Determine points for each LOE for the AU. Sum the points to determine use support for the AU. For example the AU can be an arm of a lake. This LOE approach would not require consideration of a percentage for exceedances or the use of a statistical method.	Considering each site individually and requiring several coincidental or simultaneous lines of evidence is more restrictive than necessary for sediment and available data may not meet this requirement.

Each line of evidence used in the ecological risk assessment leading to decisions on impairment of the water body has strengths and limitations in data collection and interpretation. These factors for each parameter must be considered and weighted accordingly in the assessment of each ~~sediment sample or for sediment in an~~ area where data for lines of evidence pertaining to that area are available. ~~The water body is impaired for toxic sediment if more than 10 percent of the samples evaluated are toxic.~~

As with any assessment determination for a water body or assessment area, the support status is ultimately made with professional judgment of the assessor.

Table C-1: Relative Weights of Lines of Evidence for Sediment Toxicity

Whole Sediment Tests indicate toxicity	Elutriate Tests indicate toxicity	Biological Community Indicates Effects of Toxicity		Level of Contaminants Indicates Potential for Toxicity	BPJ
		established IBI or method	observations, but no established IBI or method		
50	10	25	10	10	10 or -10 10, 0, or - 10
<p>Toxic if > 50</p> <p>Concern if >15 to 50</p> <p>No Concern, or Unassessed if <= 15</p> <p>No concern requires two of the following:</p> <ol style="list-style-type: none"> 1). Whole sediment or elutriate tests 2). Sediment contaminants 3). Biological community data <p>Otherwise, not assessed.</p>					
<p>If both whole sediment and elutriate tests are available, use only the whole sediment tests results.</p> <p>BPJ cannot equal 0</p> <p>If BPJ indicates toxicity then value will be 10</p> <p>If BPJ indicates a lack of toxicity or problems with a specific line of evidence then value will be -10</p> <p>If BPJ does not indicate either toxic or not toxic conditions then the value will be 0</p>					