

Water Quality Assessment Program

Biocriteria Peer Review Panel Dec. 6, 2017

Panel members

- Ben Jessup - Tetra Tech
- Camille Flinders – NCASI
- Chuck Hawkins – Utah State University
- Ian Waite – USGS
- Jan Stevenson – Michigan State University
- Mike Paul – Tetra Tech
- John Van Sickle - Consultant

Thresholds

PREDATOR Model Region	Assessment Category		
	Category 5: Water Quality Limited	Category 3B: Insufficient Data/Potential Concern	Category 2: Attaining
Marine Western Coastal Forest	$\geq 15\%$ taxa loss	9% - 14% taxa loss or > 24% taxa gain	0% - 8% taxa loss or 0% - 24% taxa gain
	PREDATOR score ≤ 0.85	PREDATOR score 0.86 to 0.91 or > 1.24	PREDATOR score 0.92 to 1.24
Western Cordillera and Columbia Plateau	$\geq 22\%$ taxa loss	8% - 21% taxa loss or > 23% taxa gain	0% - 7% taxa loss or 0% - 23% taxa gain
	PREDATOR score ≤ 0.78	PREDATOR score 0.79 to 0.92 or > 1.23	PREDATOR score 0.93 to 1.23
Northern Basin and Range	$\geq 50\%$ taxa loss	25% - 49% taxa loss	< 25% taxa loss
	PREDATOR score ≤ 0.50	PREDATOR score 0.49 to 0.75	PREDATOR score > 0.75

Questions to panel members

- 1. Are Oregon's biocriteria thresholds valid and do they adequately represent the cutoff where aquatic life use is considered to be impaired?
 - If they don't adequately represent the aquatic life use attainment cutoff, what are the limitations of the thresholds and how might they be improved?
- 2. Oregon currently has two thresholds, one for designated use support (e.g., good biological condition, equivalent to reference) and another for designated use impairment (e.g., poor biological condition, dissimilar from reference). This approach of two thresholds creates a third category of potential concern (uncertain biological condition). DEQ has received input from EPA favoring a single threshold approach, resulting in only two categories of beneficial use support (attaining or impaired). Please provide input on which approach is ultimately more technically defensible in your professional opinion.
- 3. Are Type I and Type II errors sufficiently balanced by the regional biocriteria thresholds?
 - If not, suggest alternatives for balancing Type I and Type II errors.
- 4. Are there other methods for determining biological thresholds that DEQ should consider?

Timeframe

- Comments from reviewers due back by December 29, 2017
- DEQ will review comments and address at January 31, 2018 work group meeting