



Aquatic Life Use – Biological Criteria

Index scores and narrative ranges for evaluation of biological criteria (biocriteria) as outlined in OAC 3745-1-07. The Index of Biotic Integrity (IBI), Modified Index of well-being (MIwb), and Invertebrate Community Index (ICI) are used to evaluate performance of the biotic community in flowing waters.

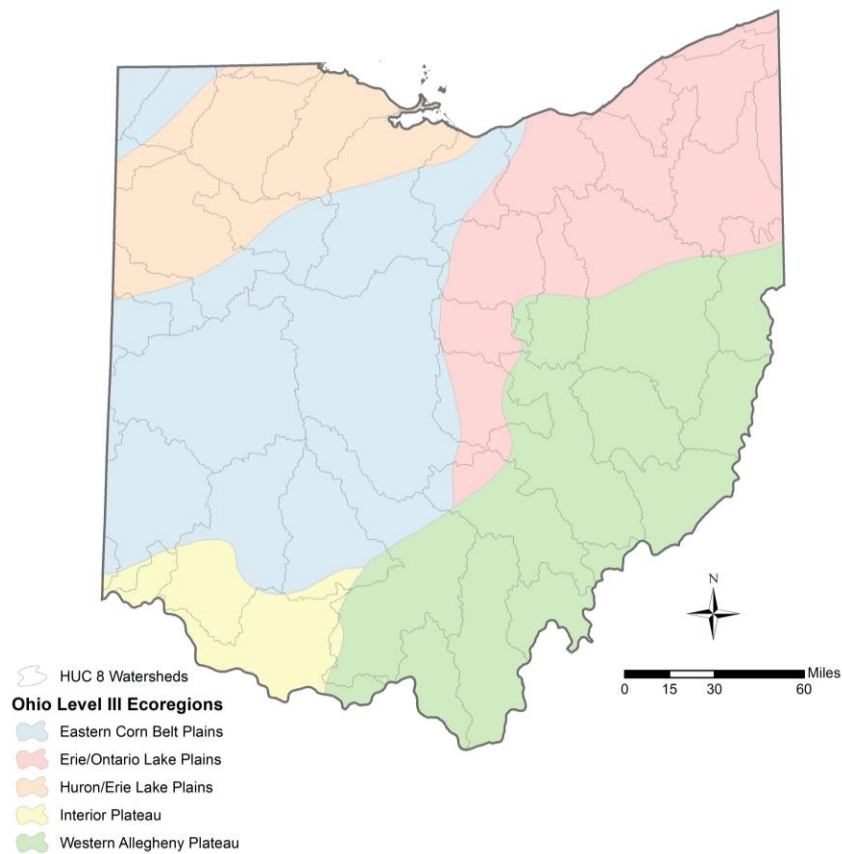
Narrative ranges and WWH biocriteria (bold) for Ohio ecoregions. Exceptional (EWH biocriteria), very good (EWH nonsignificant departure), poor and very poor evaluations are common statewide. For WWH, the ranges of marginally good and nonsignificant departure are equivalent (except in HELP).

IBI			MIwb		ICI	Narrative Evaluation
Headwater	Wading	Boat	Wading	Boat	All	
50-60	50-60	48-60	≥9.4	≥9.6	46-60	Exceptional
46-49	46-49	44-47	8.9-9.3	9.1-9.5	42-44	Very Good
Eastern Corn Belt Plains						
40-45	40-45	42-43	8.3-8.8	8.5-9.0	36-40	Good
36-39	36-39	38-41	7.8-8.2	8.0-8.4	32-34	Marginally Good
28-35	28-35	26-37	5.9-7.7	6.4-7.9	14-30	Fair
Erie Ontario Lake Plain						
40-45	38-45	40-43	7.9-8.8	8.7-9.0	34-40	Good
36-39	34-37	36-39	7.4-7.8	8.2-8.6	30-32	Marginally Good
28-35	28-33	26-35	5.9-7.3	6.4-8.1	14-28	Fair
Western Allegheny Plateau						
44-45	44-45	40-43	8.4-8.8	8.6-9.0	36-40	Good
40-43	40-43	36-39	7.9-8.3	8.1-8.5	32-34	Marginally Good
28-39	28-39	26-35	5.9-7.8	6.4-8.0	14-30	Fair
Interior Plateau						
40-45	40-45	38-43	8.1-8.8	8.7-9.0	30-40	Good
36-39	36-39	34-37	7.6-8.0	8.2-8.6	26-28	Marginally Good
28-35	28-35	26-33	5.9-7.5	6.4-8.1	14-24	Fair
Huron Erie Lake Plain						
40-45	38-45	38-43	7.9-8.8	8.6-9.0	34-40	Good
36-39	34-37	34-37	7.4-7.8	8.1-8.5	30-32	Marginally Good
28-35	28-(32) 33	26-33	5.9- 7.3	6.4-8.0	14-28	Fair
24-27	28-31	30-33	6.8-7.2	8.1-8.5	30-32	Nonsignificant Departure
18-27	18-27	16-25	4.5-5.8	5.0-6.3	8-12	Poor
12-17	12-17	12-15	0-4.4	0-4.9	≤6	Very Poor

*Aquatic life use (ALU) designations: exceptional warmwater habitat (EWH), warmwater habitat (WWH), modified warmwater habitat (MWH)

Biocriteria for MWH (channel modified, impounded, and mine affected).

IBI			Mlwb		ICI	Type
Headwater	Wading	Boat	Wading	Boat	All	
All ecoregions except HELP						
24	24	24	6.2	5.8	22	Channel Modified
--	--	30	--	6.6	--	Impounded
Huron Erie Lake Plain						
20	22	20	5.6	5.7	22	Channel Modified
--	--	22	--	5.7	--	Impounded
Western Allegheny Plateau						
24	24	24	5.5	5.4	30	Mine Affected



Additional Information

- Biological sampling manuals and references: epa.ohio.gov/dsw/bioassess/BioCriteriaProtAqLife
- Ohio water quality standards: epa.ohio.gov/dsw/wqs/index

Contact Information

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