

Modeling Guidance 8 Final	Information about the Ohio River	
	Rule reference: OAC 3745-2-05 (A)(2)(f) [flow]; OAC 3745-2-04 (E)(1)(a) [hardness]	Revision 0 January 30, 1998 Revision 1 August 23, 2006 Revision 2 October 22, 2019

Much of the information about the mainstem of the Ohio River is obtained from the Ohio River Valley Water Sanitation Commission (ORSANCO).

The information listed in the table below has been compiled from ORSANCO information and the STORET data base. This information will be updated periodically during revisions of this guidance. If appropriate, the flows and hardness values would be adjusted per the methods contained in Ohio EPA rules. Suitable site-specific information may be used in lieu of this general guidance.

Flows and Hardness Values for the Ohio River Mainstem

Segment	Mile point	Q _{7,10} (cfs)	Harmonic mean flow (cfs)	Median Hardness (mg/l)	n=
Ohio State Line to Willow Island Dam	40 - 161.7	5880	20500	111 ⁽¹⁾	428 ⁽¹⁾
Willow Island Dam to Racine Dam	161.7 - 237.5	6560	24500	120 ⁽²⁾	210 ⁽²⁾
Racine Dam to R.C. Byrd Dam	237.5 - 279.2	6700	26000	107 ⁽³⁾	107 ⁽³⁾
R.C. Byrd Dam to Guyandotte River	279.2 - 305.2	9120	34500	112 ⁽⁴⁾	227 ⁽⁴⁾
Guyandotte River to Big Sandy River	305.2 - 317.1	9300	35900	112 ⁽⁴⁾	227 ⁽⁴⁾
Big Sandy River to Greenup Dam	317.1 - 341.0	10000	38400	112 ⁽⁴⁾	227 ⁽⁴⁾
Greenup Dam to Meldahl Dam	341.0 - 436.2	10600	42100	121 ⁽⁵⁾	228 ⁽⁵⁾
Meldahl Dam to Ohio State Line*	436.2 - 490.1	10600	42100	128 ⁽⁶⁾	177 ⁽⁶⁾

*Note: The flow values for the Meldahl Dam to the Ohio State Line are taken from the closest upstream river segment data source (Greenup Dam to Meldahl Dam) since that source is significantly closer than the next downstream river segment data source (McAlpine Dam).

Sources:

Hardness values are from [ORSANCO bi-monthly water quality data](#) (Jan. 2000 – Nov. 2017) for the following stations:

- (1) Miles 54.4 (New Cumberland), 84.2 (Pike Island), 126.4 (Hannibal) and 161.8 (Willow Island Dam).
- (2) Miles 161.8 (Willow Island Dam) and 203.9 (Belleville).
- (3) Mile 279.2 (R.C. Byrd)..
- (4) Miles 279.2 (R.C. Byrd) and 341 (Greenup).
- (5) Miles 341 (Greenup) and 436.2 (Meldahl).
- (6) Miles 436.2 (Meldahl) and 477.5 (Anderson Ferry).

Flow values are based on [Pollution Control Standards for Discharges to the Ohio River, Appendix C](#), Ohio River Valley Water Sanitation Commission, 2019.

For more information contact:

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