Newburgh Pool (2017) - Healthy Condition

Dominant Macro Groups

Mussels 40.6%

Dreissena polymorpha

Midges 30.6%

Tribelos sp

Caddisflies 15.5%

Cyrnellus fraternus

Snails 3.5%

Hydrobiidae sp

Mayflies 3.4%

Stenacron sp

Boulder 5.5%

Cobble 10.6%

Gravel 23.9%

Sand 31.4%

Fines 16.4%

Hardpan 11.8%

Other 0.4%

Pool Substrate Composition

Dominant Fish Families

Minnows 44.9%

Channel Shiner

Shad 13.1%

Gizzard Shad

Drum 9.4%

Freshwater Drum

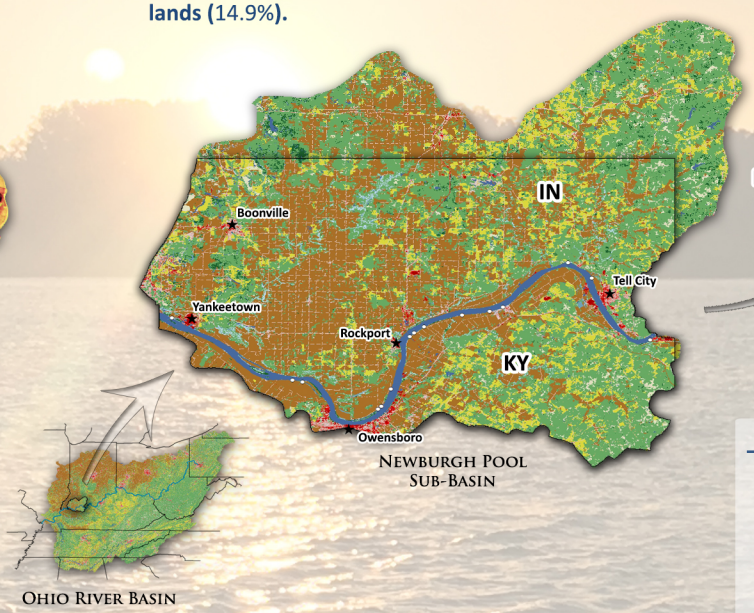
Sunfish & Bass 8.7%

Spotted Bass

Suckers 6.2%

River Carpsucker

This page summarizes the 2017 fish and macroinvertebrate (macro) surveys conducted by ORSANCO biologists in the Newburgh Pool of the Ohio River. Fish are collected via non-lethal electrofishing in the summer. Macros are collected in the fall from artificial substrate samplers placed in the water in late summer. Newburgh pool is 55.4 miles long, extending from Cannelton Locks and Dam (ORM 720.7) to Newburgh Locks and Dam (ORM 776.1). The pool has a gradient drop of 0.3 feet per mile and averages 2,477 feet wide and 28 feet deep. The pool flows adjacent to the states of Indiana and Kentucky. The Newburgh pool receives water from the following tributaries: Anderson River at mile point 731.5 with a drainage area of 276 square miles, Blackford Creek at mile point 742.2 with a drainage area of 124 square miles and Little Pigeon Creek with a drainage area of 415 square miles (ORSANCO 1994). The shorelines of this pool support a modicum of aquatic vegetation in the littoral zones. Newburgh Pool lies in a portion of the Ohio River where the land use consists primarily of deciduous forest (53.9%), but also has a considerable amount of row crops (13.1%) and pasture lands (14.9%).



Basin Level	Site Level	
Environmental Attributes	Biological Condition Ratings	
	Fish	Macros
Ohio River	Excellent	
Tributaries	Very Good	
Locks & Dam	Good	
Most Populous Cities	Fair	
Developed Areas	Poor	
Agricultural/Pastoral Lands	Very Poor	
Natural Forests		

Aquatic Invasives Watch

Survey Summary

Electrofishing sampling occurred unusually late in the season and over a longer period of time (from early August to mid September) due to extensive rain events. While average water clarity was lower than normal (24 inches) and water velocities were slightly elevated, neither negatively affected fish sampling. Notable catches include numerous Channel Shiners (*Notropis wickliffi*) and Freshwater Drum (*Aplodinotus grunniens*). Otherwise, no threatened, endangered, or species of special concern were observed. High flow events occurred prior to Hester-Dendy (HD) retrieval and likely disrupted macroinvertebrate colonization and contributed to low macroinvertebrate scores. All recovered samplers and secondary kick net samples yielded far fewer than expected numbers of individuals. Notable macroinvertebrate collections included a high percentage of invasive mussels (*Dreissena polymorpha*) and tolerant caddisflies (*Cyrnellus fraternus*). Non-native filter-feeding scuds (*Apocorophium lascustre*) were also observed. Newburgh Pool macroinvertebrate results will remain unassessed due to negative impacts of flow on HD collections . Results (see above map) show that, on average, fish in Newburgh Pool were in 'Good' condition. While these results indicate that Newburgh Pool harbored healthy fish communities, close attention will be paid to macroinvertebrates in the future for signs of chronic degradation.