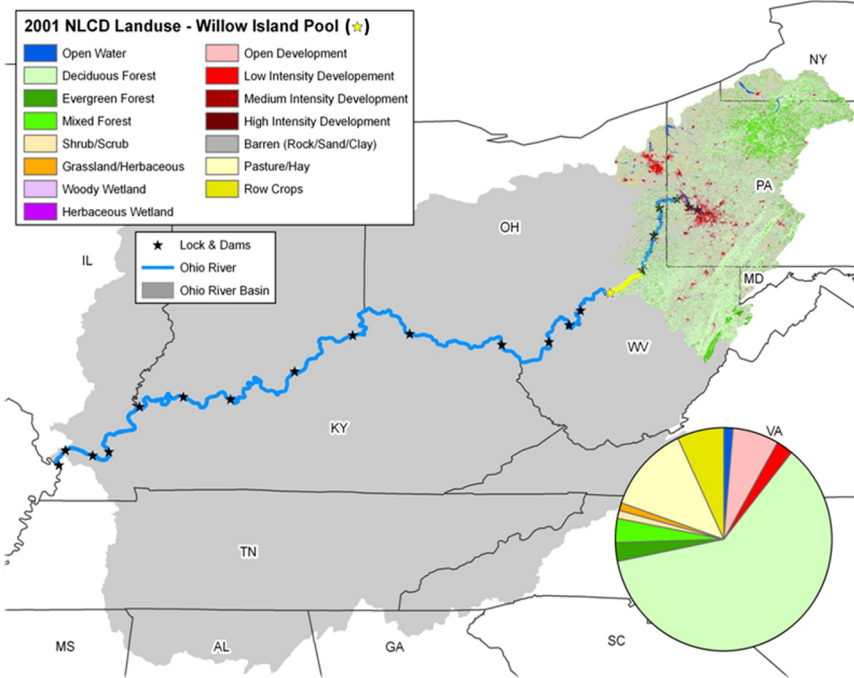


# Willow Island Pool - 2011

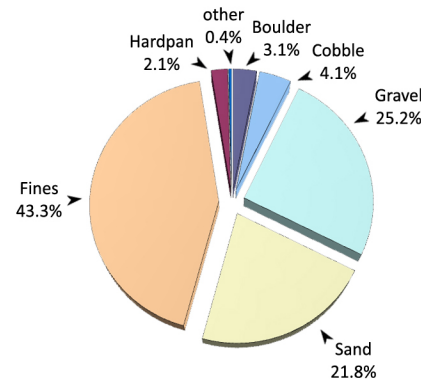
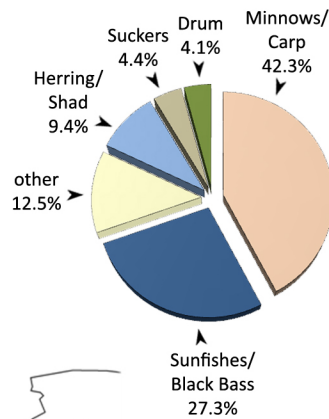
The Willow Island pool is 35.3 miles long, extending from Hannibal Locks and Dam (ORM 126.4) to Willow Island Locks and Dam (ORM 161.7). The pool has a gradient drop of 0.6 feet per mile, averages 1,194 feet wide and 21 feet deep. The pool flows adjacent to the states of Ohio and West Virginia. The Willow Island pool receives water from two sub-basins: the Fishing and Middle Island creeks, both draining parts of West Virginia. This pool lies in a portion of the Ohio River where the land use consists primarily of forested and cropland activities, but is also impacted by the presence of animal farming and urban influences. Almost the entire Ohio shoreline of Willow Island pool is a federally protected national forest (Wayne National Forest), and only a few smaller towns border the West Virginia shoreline (St. Marys, Sistersville, and New Martinsville).



Land-use types within the Willow Island Pool watershed



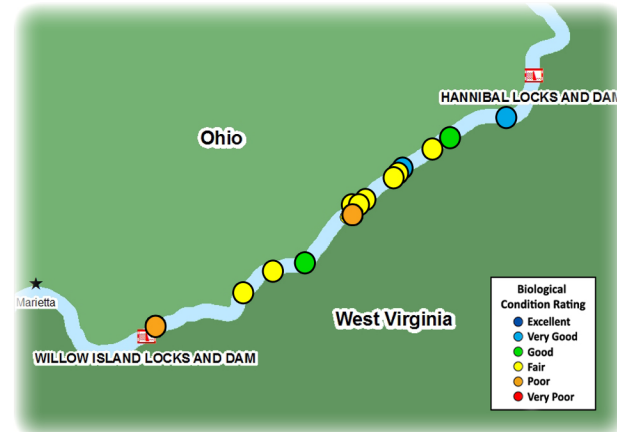
largemouth bass (*Micropterus salmoides*)



## Site Performance

Site No.	River Mile	Habitat Class	ORFin Exp	ORFin Obs	mORFin Score
1	130.7	D	41.80	65.76	47.36
2	134.9	C	44.55	52.88	30.73
3	136.4	C	44.55	50.34	27.54
4	139.1	D	41.80	60.31	42.26
5	139.4	D	41.80	43.92	22.68
6	139.8	D	41.80	42.50	20.89
7	142.6	D	41.80	48.85	28.90
8	142.9	D	41.80	48.72	28.74
9	143.0	B	46.71	52.41	26.83
10	143.8	C	44.55	32.73	11.80
11	144.1	D	41.80	44.04	22.83
12	148.7	D	41.80	54.95	36.40
13	150.9	C	44.55	45.99	21.87
14	153.8	D	41.80	48.22	28.11
15	160.8	B	46.71	45.88	19.06

Average Pool mORFin Score 27.7



Locations of the 15 randomly chosen electrofishing sites in Willow Island Pool



longear sunfish (*Lepomis megalotis*)

An abundance of wildlife was observed throughout Willow Island pool, including various species of waterfowl, raptors, and mammals



## Willow Island Pool - Results Overview

### Sampling Results

#### Environmental Measures

Dominant Habitat Class: D - shallow sand/fines

Notable Measures: abundant inshore structure and vegetation

#### Biological Measures

Total No. of Fish Species: 48

Average No. of Individuals: 182

Dominant Family (minus herring/shad): Minnows/Carp

Dominant Species (minus shad/shiners): bluegill

Endangered Species: banded killifish (OH)

Rare Ohio River Mainstem Species: yellow bullhead

Notable Catch: abundant game fishes (bass and bluegill)

### Assessment Results

Highest scoring ORFin metric (minus DELTs): Centrarchid score

Lowest scoring ORFin metric: % Lithophils

Sites Above 25<sup>th</sup> percentile (i.e. mORFin Score = 20): 13

Sites Below 25<sup>th</sup> percentile (i.e. mORFin Score = 20): 2

Aquatic Life-Use Designation: Met

Overall Biological Condition Rating: Fair