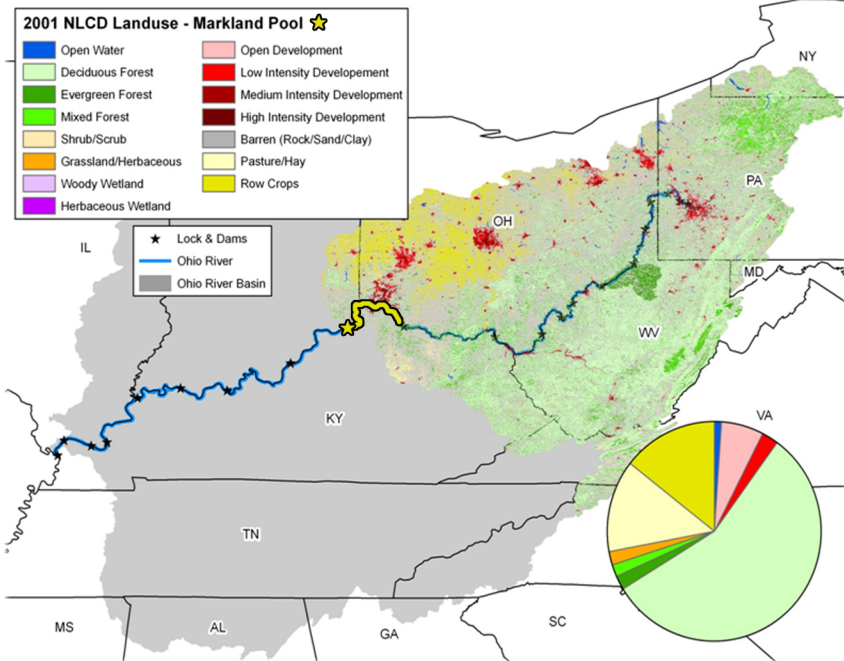
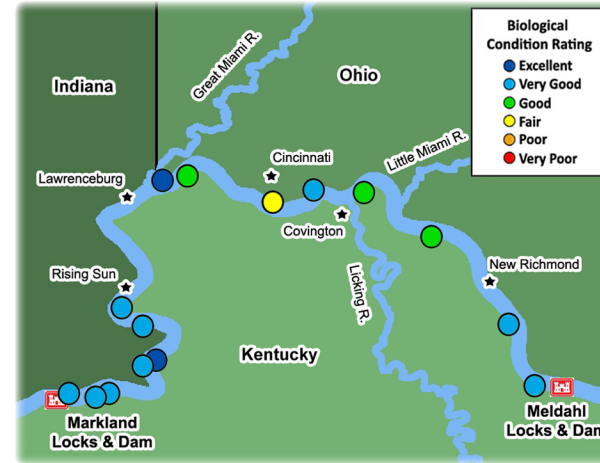
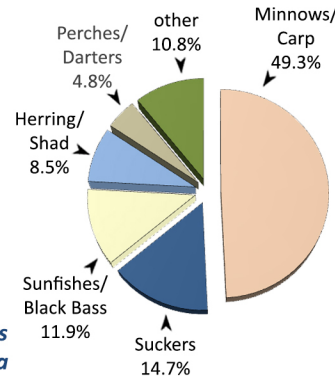


# Markland Pool - 2014

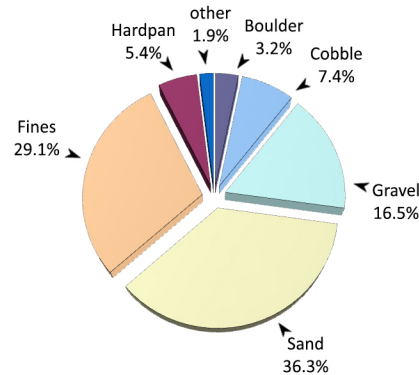
The Markland pool is 95.3 miles long, extending from Captain Anthony Meldahl Locks and Dam (ORM 436.2) to Markland Locks and Dam (ORM 531.5). The pool has a gradient drop of 0.4 feet per mile, averages 1,594 feet wide and 31 feet deep (ORSANCO 1994), and is bordered by the states of Kentucky, Ohio, and Indiana. The pool lies in a portion of the Ohio River heavily influenced by industry with a large amount of barge activity. Markland pool receives water from three major tributaries. The Little and Great Miami rivers drain 1,750 and 5,400 square miles, respectively. The Licking River drains 3,670 square miles and empties into the Ohio River downstream of the Little Miami River. Four smaller tributaries in the lower half of the pool also provide water, draining approximately 800 square miles collectively. The pool's watershed is primarily forested (54.7%) but also has a considerable amount of row crops (14.0%) and pasture lands (13.2%).



Land-use types within the Markland Pool watershed



Locations of the 15 randomly chosen electrofishing sites in Markland Pool



Black Crappie (*Pomoxis nigromaculatus*)

## Site Performance

Site No.	River Mile	Habitat Class	ORFIn Exp	ORFIn Obs	mORFIn Score
1	451.8	C	44.55	66.97	44.8
2	459.2	D	41.80	59.38	41.4
3	460.3	B	46.71	56.30	31.4
4	465.3	C	44.55	66.72	44.6
5	466.2	D	41.80	60.32	42.3
6	466.5	B	46.71	70.98	46.0
7	474.6	B	46.71	78.38	54.7
8	485.9	D	41.80	48.23	28.1
9	498.6	E	39.59	53.88	33.9
10	510.1	D	41.80	42.11	20.4
11	512.6	D	41.80	54.65	36.0
12	513.9	D	41.80	60.08	42.1
13	520.8	B	46.71	67.62	43.2
14	524.3	D	41.80	39.64	17.9
15	530.5	D	41.80	56.97	38.9
Average Pool mORFIn Score					37.7

## Markland Pool - Results Overview

### Sampling Results

#### Environmental Measures

Dominant Habitat Class: D - shallow sand/fines  
Notable Measures: some degree of woody cover was observed at each of the 15 sites

#### Biological Measures

Total No. of Fish Species: 47  
Average No. of Individuals: 214  
Dominant Family (*minus herring/shad*): Minnows/Carp  
Dominant Species (*minus shad/shiners*): River Carpsucker  
Species of Concern (KY): Black Buffalo  
Rare Ohio River Mainstem Species: Central Stoneroller  
Notable Catch: Fantail Darter & River Darter (threatened in OH)

### Assessment Results

Highest scoring ORFIn metric (*minus DELTs*): % Tolerants  
Lowest scoring ORFIn metric (*minus GR Species*): % Invertivore  
Sites Above 25<sup>th</sup> percentile (i.e. mORFIn Score = 20): 14  
Sites Below 25<sup>th</sup> percentile (i.e. mORFIn Score = 20): 1  
Aquatic Life-Use Designation: Met

**Overall Biological Condition Rating: Good**

