

# Appendix A

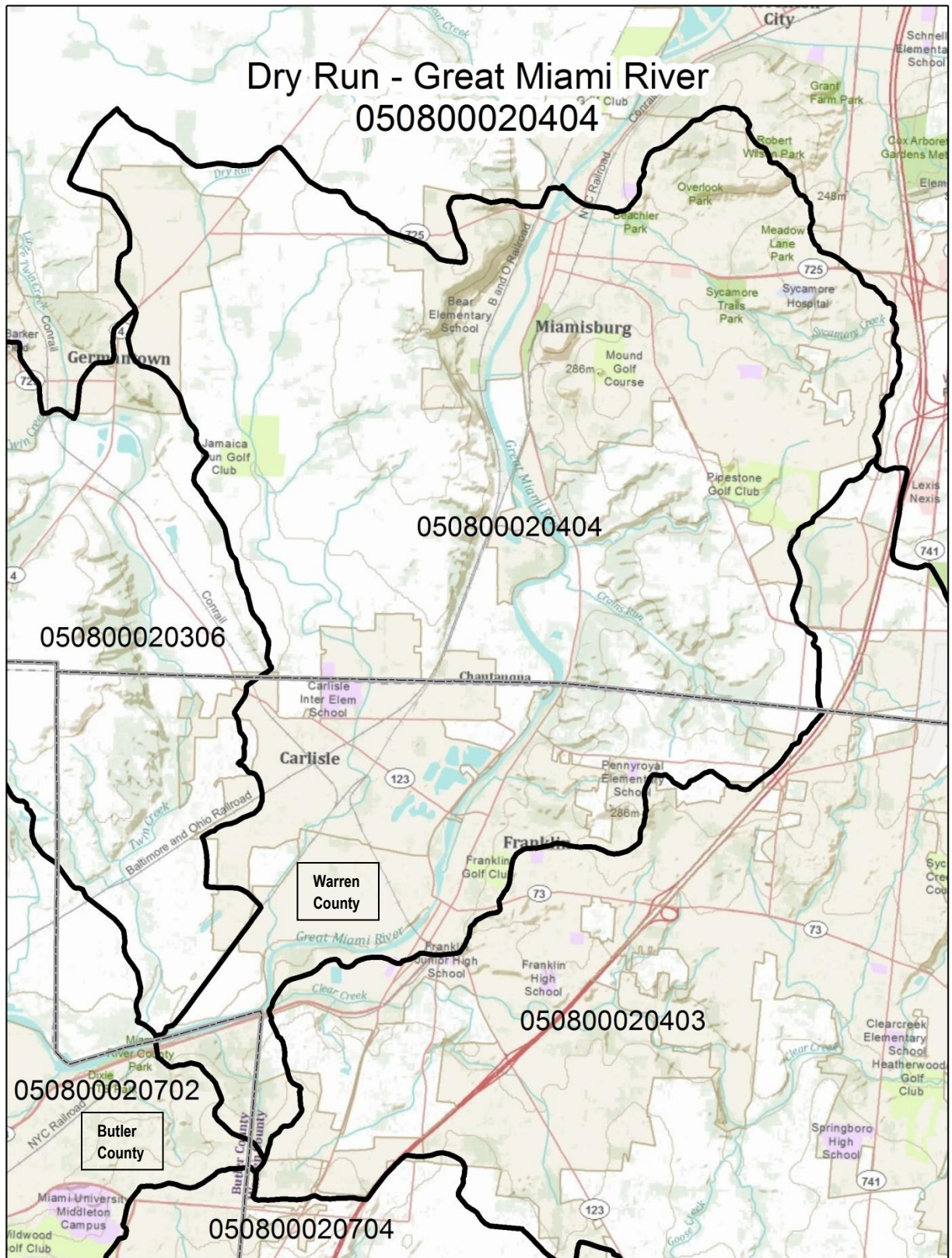
## ***Watershed and Large River Assessments***



*This product was financed through a grant from the Ohio Environmental Protection Agency and the United States Environmental Protection Agency with funds from Section 604B of the Clean Water Act.*

*Watershed  
Assessment  
Units*

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 32.5 square miles

**Priority Points:** 3

## Land Use Statistics

**Developed:** 40.1%   **Forest:** 18.1%   **Grass/Pasture:** 23.3%   **Row Crops:** 18.1%   **Other:** 0.4%

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, MWH-C (warmwater habitat, modified warmwater habitat-channelization)

**Sampling Year or Years:** 1995

**Watershed Score:** 46.0 (out of a possible 100 points)

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- organic enrichment/dissolved oxygen

**Sources of Impairment:**

- channelization – agriculture
- channelization – development
- municipal point source
- removal of riparian vegetation – agriculture
- urban runoff/storm sewers (nonpoint source pollution)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age. Assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

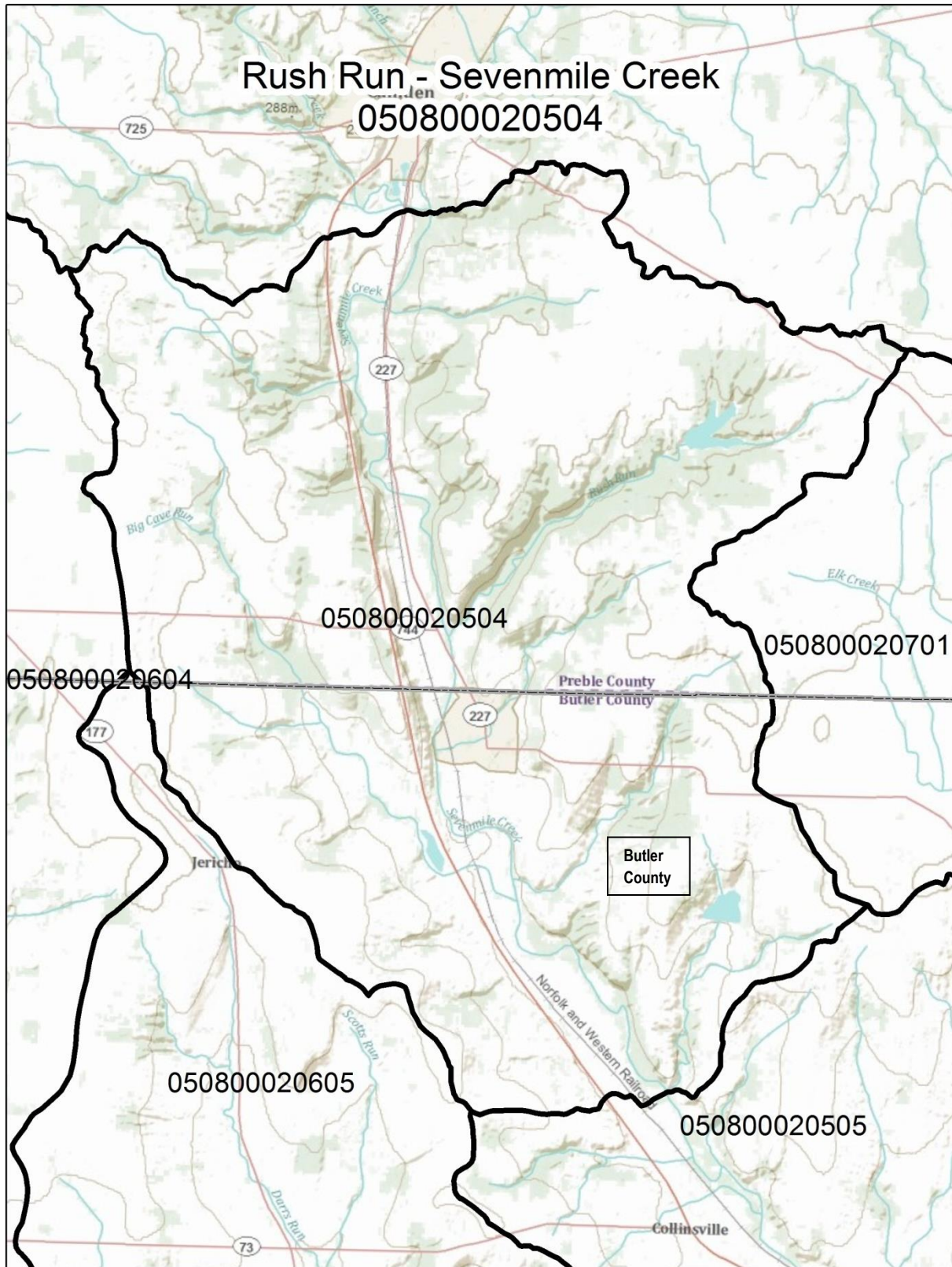
### **Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region in the Watershed:** Butler, Warren

**Municipalities in the OKI Region:** City of Franklin, Village of Carlisle

**Facility Planning Area (FPA) or Areas:** Franklin FPA

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 27.3 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2020

**TMDL Scheduled:** 2011

## Land Use Statistics

**Developed:** 6.9% **Forest:** 27.6% **Grass/Pasture:** 37.3% **Row Crops:** 27.1% **Other:** 1.1%

### **Aquatic Life Assessment**

**Reporting Category:** 1x (use attaining; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 2002

**Watershed Score:** 100.0 (out of a possible 100 points)

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1 (use attaining)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

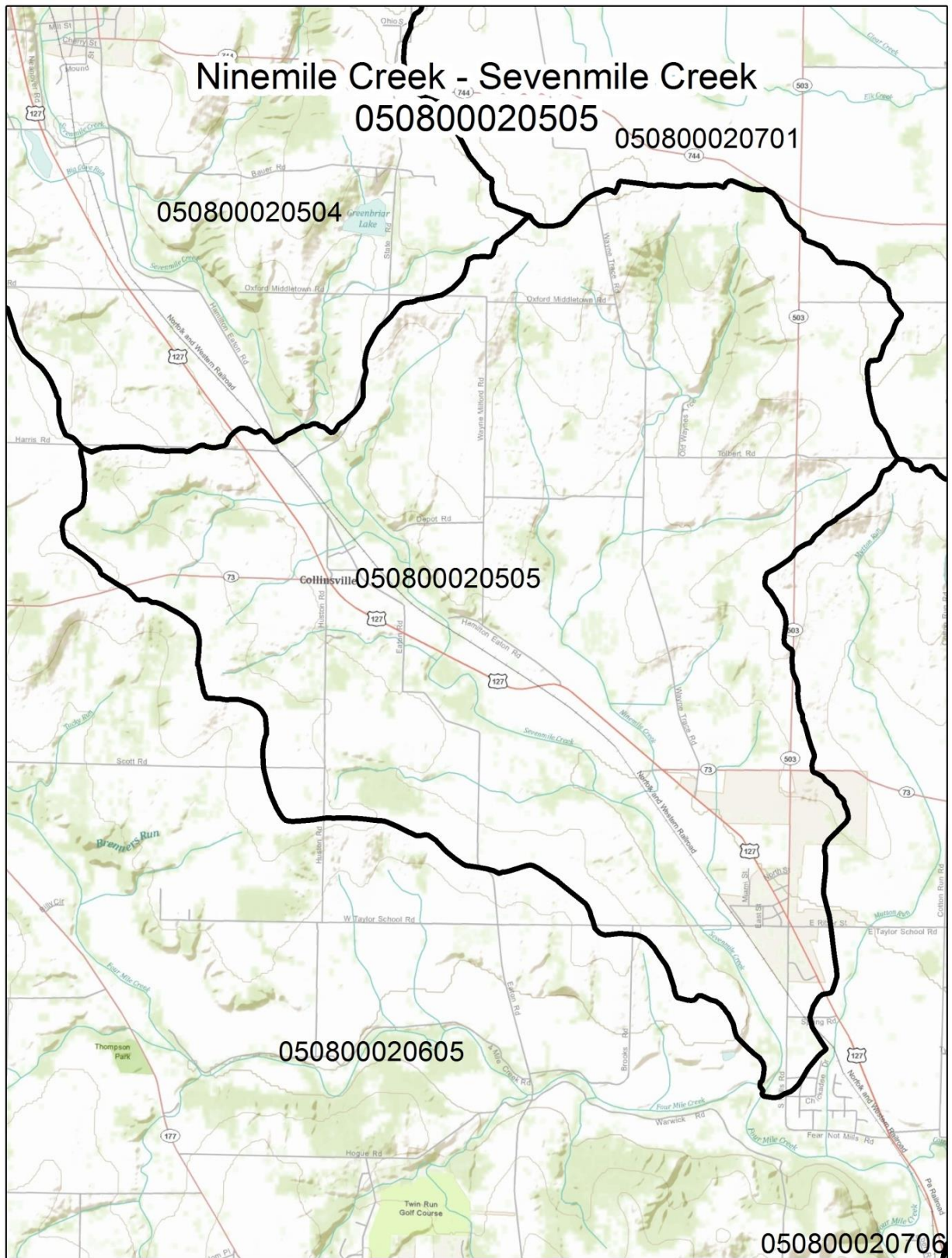
**County or Counties in the OKI Region:** Butler

**Municipalities in the OKI Region:** Village of Somerville

**Facility Planning Area (FPA) or Areas:** Seven Mile Creek FPA

**Onsite Wastewater Treatment System Concentration(s):** Somerville

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 17 square miles

**Priority Points:** 0

## Land Use Statistics

**Developed:** 8.2%   **Forest:** 16.8%   **Grass/Pasture:** 51.9%   **Row Crops:** 21.3%   **Other:** 1.9%

**Monitoring Scheduled:** 2020

**TMDL Scheduled:** 2011

### **Aquatic Life Assessment**

**Reporting Category:** 1x (use attaining; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH, MWH-C (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 2002

**Watershed Score:** 100.0 (out of a possible 100 points)

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1 (use attaining)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

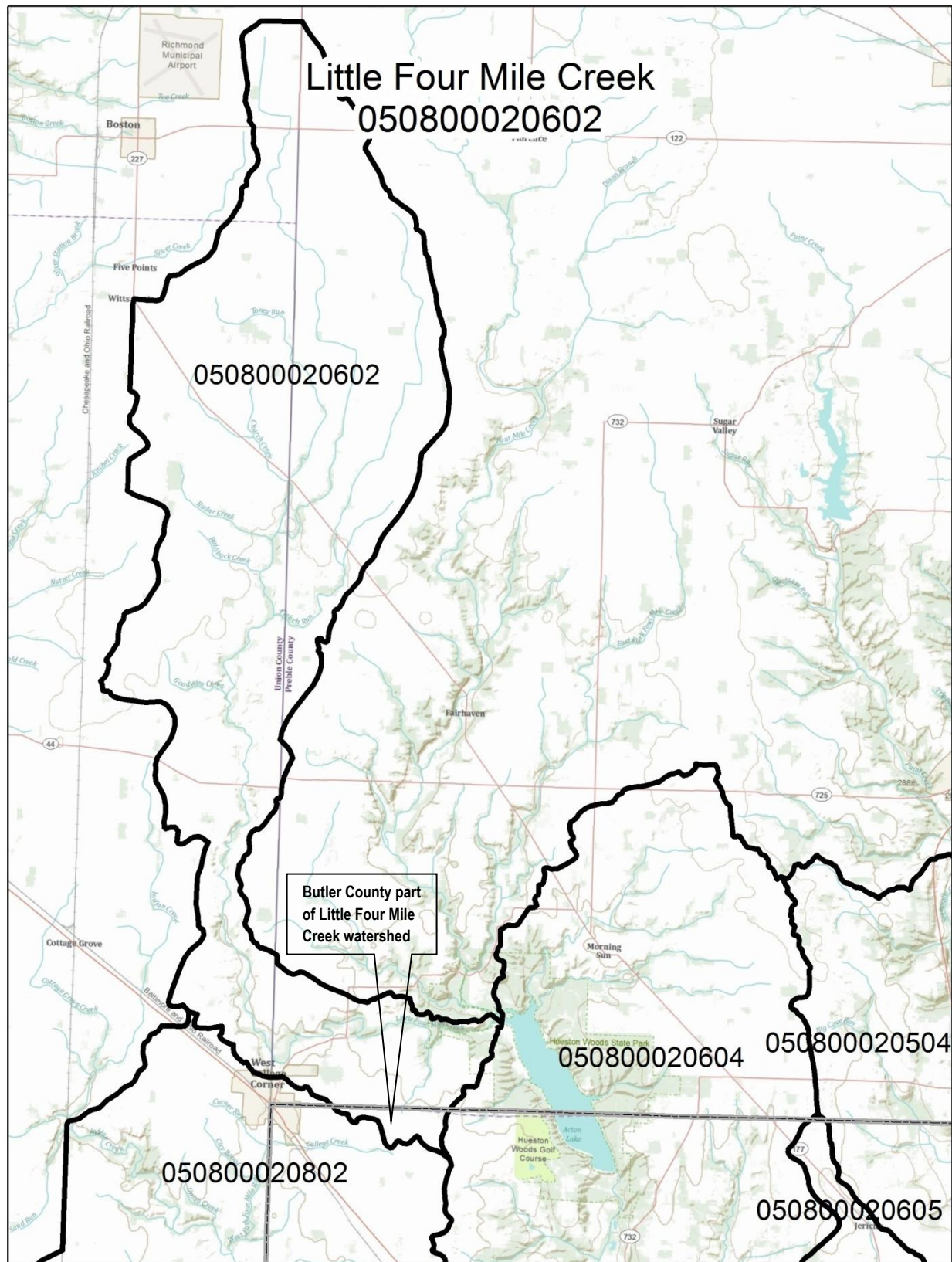
**County or Counties of the OKI Region in the Watershed:**Butler

**Municipalities in the OKI Region:** Seven Mile Village

**Facility Planning Area (FPA) or Areas:** Seven Mile Creek FPA, Hamilton Suburban FPA

**Onsite Wastewater Treatment System Concentration(s):** Seven Mile Village & Vicinity

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 17 square miles

**Priority Points:** 7

**Monitoring Scheduled:** 2020

**TMDL Scheduled:** 2011

## Land Use Statistics

**Developed:** 5.5%    **Forest:** 7.3%    **Grass/Pasture:** 6.1%    **Row Crops:** 80.8%    **Other:** 0.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired: TMDL needed)

**Aquatic Life Uses:** WWH, MWH-C (warmwater habitat)

**Sampling Year or Years:** 2005

**Watershed Score:** 75.0 (out of a possible 100 points)

**Causes of Impairment:**

- ammonia (total)
- direct habitat alterations
- oxygen, dissolved
- sedimentation/siltation

**Sources of Impairment:**

- channelization
- loss of riparian habitat
- unrestricted cattle access

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Assessment Unit Score:** 50

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

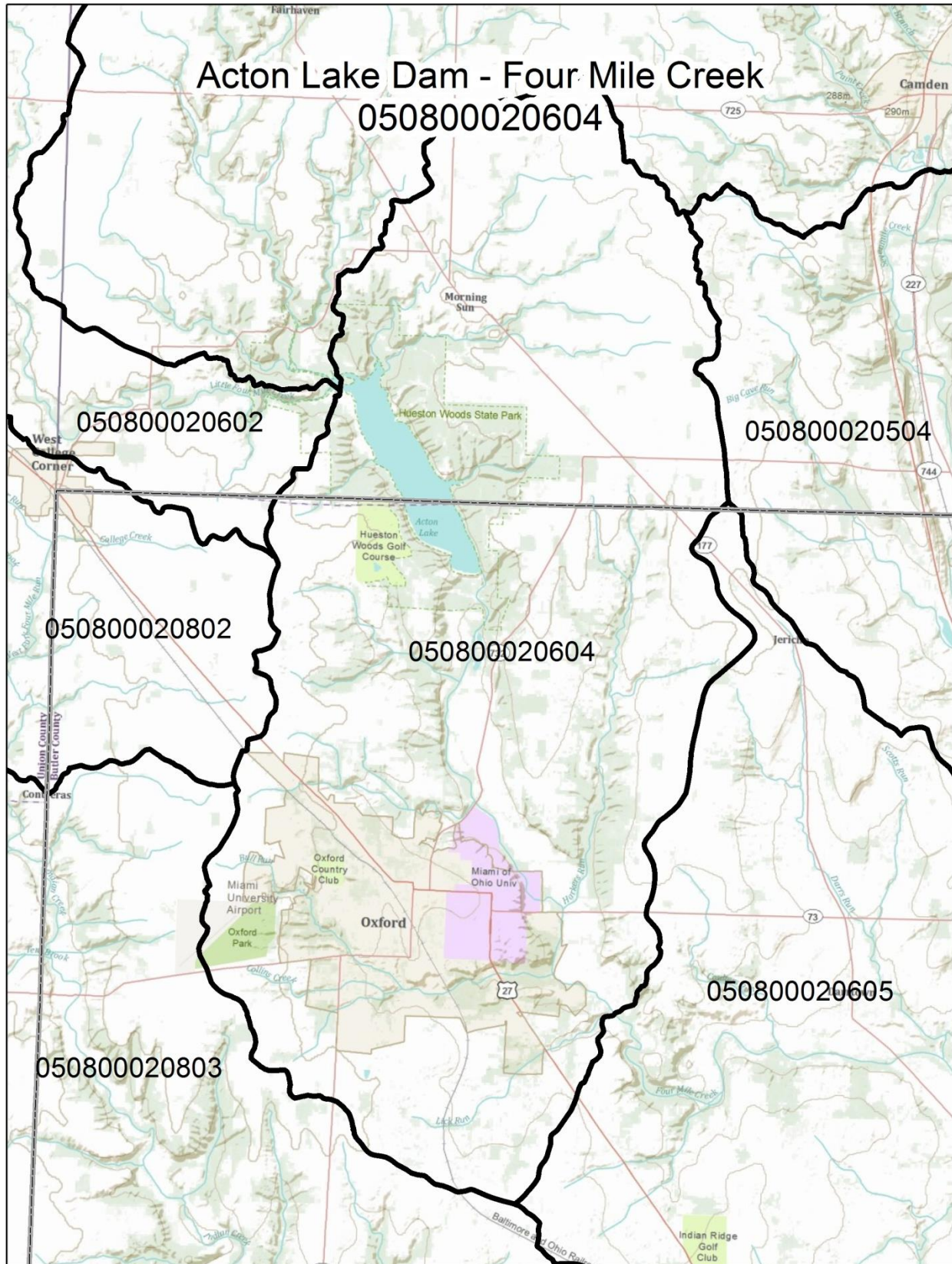
**County or Counties of the OKI Region in the Watershed:** Butler

**Municipalities in the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Indian Creek FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 41.4 square miles

**Priority Points:** 8

**Monitoring Scheduled:** 2020

**TMDL Scheduled:** 2011

## Land Use Statistics

**Developed:** 17.4%   **Forest:** 27.1%   **Grass/Pasture:** 12.3%   **Row Crops:** 42.6%   **Other:** 0.6%

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2005

**Watershed Score:** 70.0 (out of a possible 100 points)

**Causes of Impairment:**

- barium
- copper
- iron
- natural conditions (flow or habitat)
- other flow regime alterations

**Sources of Impairment:**

- municipal (urbanized high density area)
- natural sources
- urban runoff/storm sewers

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Assessment Unit Score:** 92

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1 (use attaining)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

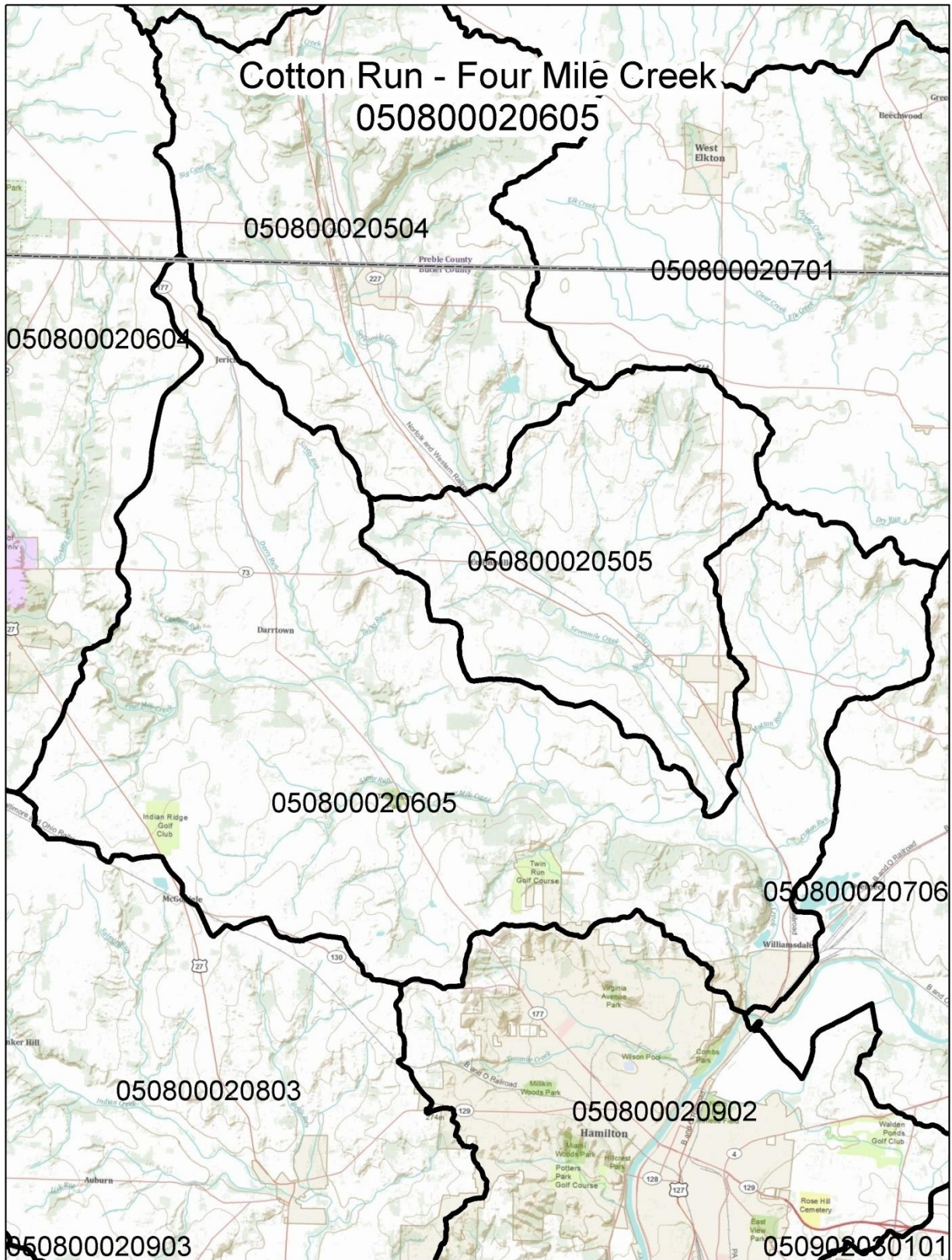
**County or Counties of the OKI Region in the Watershed:** Butler

**Municipalities in the OKI Region:** City of Oxford

**Facility Planning Area (FPA) or Areas:** Four Mile Creek FPA, Oxford FPA, Indian Creek FPA

**Onsite Wastewater Treatment System Concentration(s):** Seven Mile Village & Vicinity

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 51.3 square miles

**Priority Points:** 3

## Land Use Statistics

**Developed:** 12.1%

**Forest:** 17.5%

**Grass/Pasture:** 40.9%

**Row Crops:** 28.9%

**Other:** 0.6%

**Monitoring Scheduled:** 2020

**TMDL Scheduled:** 2011

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 2005

**Watershed Score:** 37.5 (out of a possible 100 points)

**Causes of Impairment:**

- natural conditions (flow or habitat)
- phosphorus (total)

**Sources of Impairment:**

- municipal point source discharges
- natural sources

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 1 (use attaining)

**Assessment Unit Score:** 100

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1 (use attaining)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

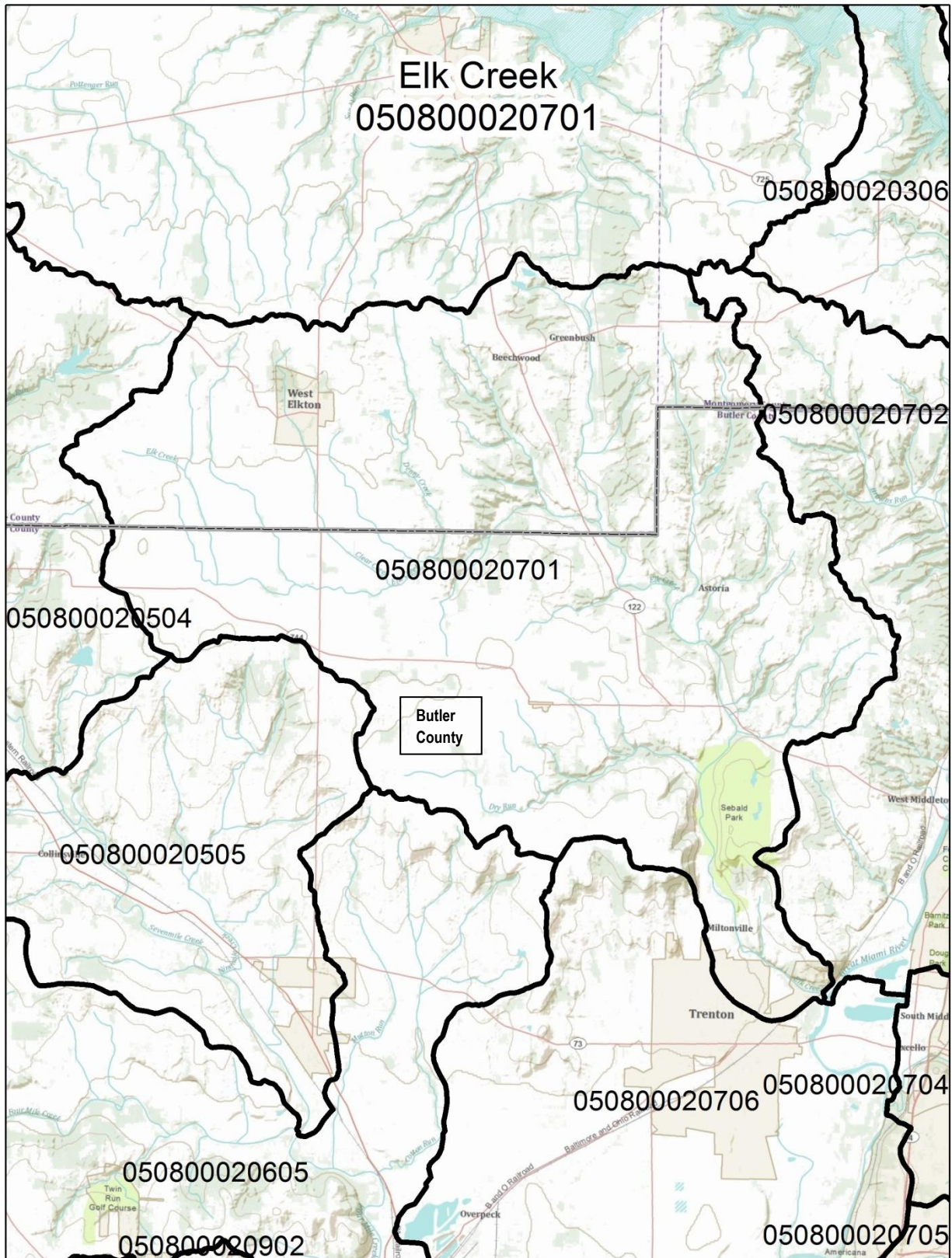
**County or Counties of the OKI Region in the Watershed:** Butler

**Municipalities in the OKI Region:** City of Hamilton, Village of New Miami, Seven Mile Village (small part)

**Facility Planning Area (FPA) or Areas:** Seven Mile Creek FPA, Hamilton Suburban FPA, Four Mile Creek FPA

**Onsite Wastewater Treatment System Concentration(s):** Williamsdale, Darrtown

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 47.6 square miles

**Priority Points:** 5

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 7.1%   **Forest:** 22.0%   **Grass/Pasture:** 37.3%   **Row Crops:** 33.3%   **Other:** 0.4%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH, MWH-C (exceptional warmwater habitat, warmwater habitat, modified warmwater habitat - channelized)

**Sampling Year or Years:** 2000

**Watershed Score:** 43.0 (out of a possible 100 points)

**Causes of Impairment:**

- flow alteration
- nutrients
- priority organics
- salinity/total dissolved solids/chlorides

**Sources of Impairment:**

- contaminated sediments
- industrial point source
- landfills
- natural
- nonirrigated crop production

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region in the Watershed:** Butler

**Municipalities of the OKI Region:** Village of Jacksonburg

**Facility Planning Area (FPA) or Areas:** Elk Creek FPA, LeSourdsville FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** Village of Jacksonburg at State Route 744 and Jacksonburg Road; Madison Township, between West Alexandria Road and State Route 122; Madison Township, at Kalbfleisch Road and Dickey Road; Madison Township, Miltonville community at Elk Creek Road and Howe Road

**Browns Run - Great Miami River**  
050800020702

050800020404

050800020306

Butler County

Warren County

050800020701

050800020702

050800020403

050800020704

050800020706

050800020703

**Monitoring Scheduled: 2010**  
**TMDL Scheduled: 2013**

**Developed:** 36.0%    **Forest:** 27.3%    **Grass/Pasture:** 20.2%    **Row Crops:** 16.0%    **Other:** 0.6%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH, MWH-C (exceptional warmwater habitat, warmwater habitat, modified warmwater habitat - channelized)

**Sampling Year or Years:** 2000

**Watershed Score:** 43.0 (out of a possible 100 points)

**Causes of Impairment:**

- flow alteration
- nutrients
- priority organics
- salinity/total dissolved solids/chlorides

**Sources of Impairment:**

- contaminated sediments
- industrial point source
- landfills
- natural
- nonirrigated crop production

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

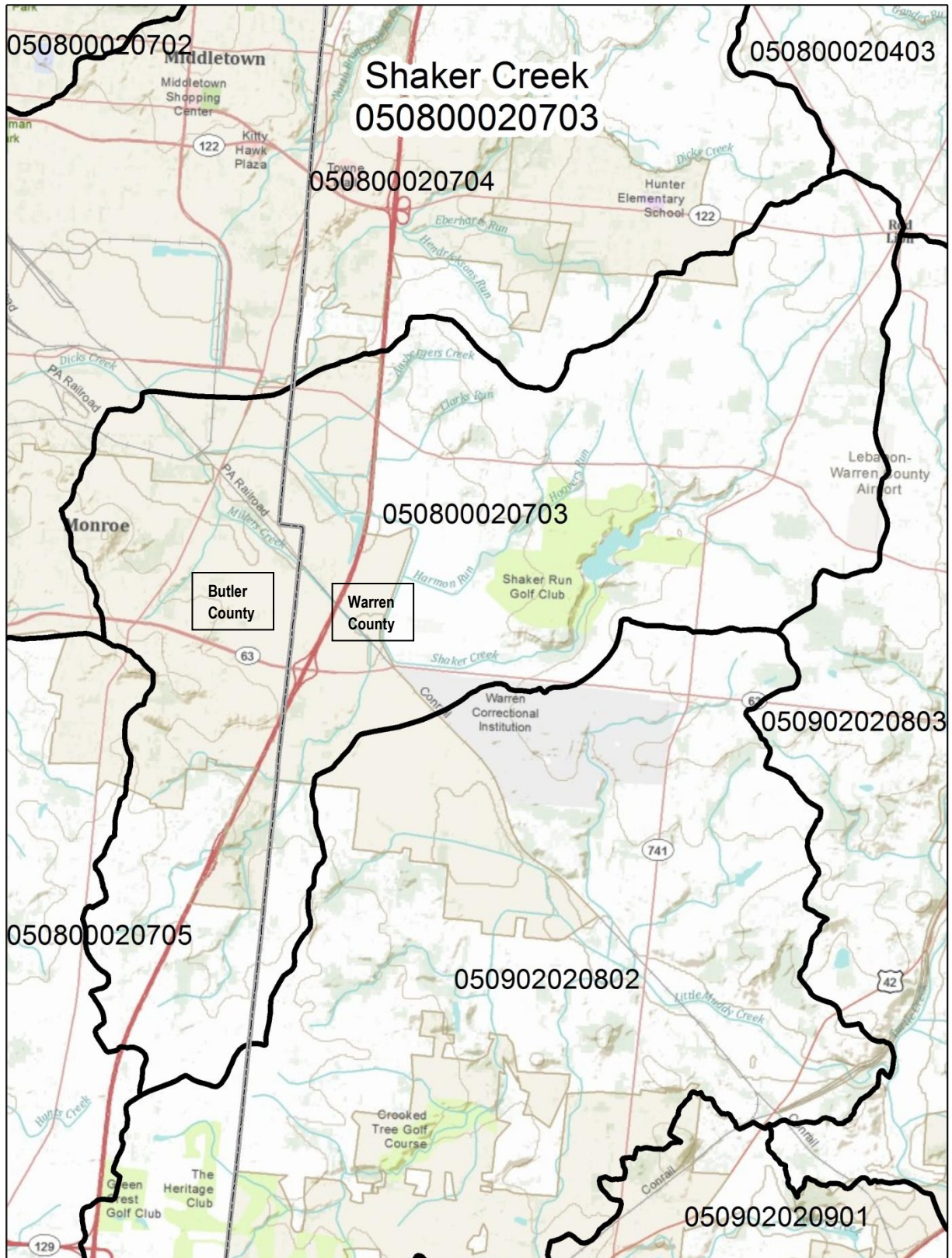
**County or Counties of the OKI Region in the Watershed:** Butler, Warren

**Municipalities of the OKI Region:** City of Middletown

**Facility Planning Area (FPA) or Areas:** Middletown FPA, Franklin FPA (small parts)

**Onsite Wastewater Treatment System Concentration(s):** Madison Township, between West Alexandria Road and State Route 122; Madison Township, at Kalbfleisch Road and Dickey Road; Madison Township, east of Weatherwax Golf Course; Madison Township, in the West Middletown community along Ohio Route 122 (Middletown-Eaton Road); Madison Township, in the Poast Town community area at Trenton-Franklin Road and Browns Run Road; Madison Township, on both sides of Middletown-Germantown Road, north of Poast Town

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 21.4 square miles  
**Priority Points:** 5

**Monitoring Scheduled:** 2010  
**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 30.5%    **Forest:** 14.7%    **Grass/Pasture:** 27.2%    **Row Crops:** 27.3%    **Other:** 0.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH, MWH-C (exceptional warmwater habitat, warmwater habitat, modified warmwater habitat - channelized)

**Sampling Year or Years:** 2000

**Watershed Score:** 43.0 (out of a possible 100 points)

**Causes of Impairment:**

- flow alteration
- nutrients
- priority organics
- salinity/total dissolved solids/chlorides

**Sources of Impairment:**

- contaminated sediments
- industrial point source
- landfills
- natural
- nonirrigated crop production

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region in the Watershed:** Butler, Warren

**Municipalities of the OKI Region:** City of Monroe, City of Middletown (edges)

**Facility Planning Area (FPA) or Areas:** Monroe FPA, Southwest Warren County FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

This map illustrates the Dicks Creek area, primarily within Warren County, North Carolina. The map is overlaid with a grid of ZIP codes, with several specific codes highlighted in black text: 050800020701, 050800020702, 050800020704, 050800020403, 050800020706, 050800020705, 050800020703, 050902020803, 050902020802, and 050902020901. The map also shows the locations of several towns and cities, including Carlisle, Franklin, Middletown, and Monroe. Key geographical features include the Great Miami River, Dicks Creek, and various parks and golf courses such as Hook Field Municipal Airport, Ratham Park, and Shaker Run Golf Club. The map is a detailed topographical representation of the region, showing roads, water bodies, and land use.

### Monitoring Scheduled: 2010

**TMDL Scheduled: 2013**

**Developed:** 63.4%    **Forest:** 10.5%    **Grass/Pasture:** 11.2%    **Row Crops:** 14.2%    **Other:** 0.7%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH, MWH-C (exceptional warmwater habitat, warmwater habitat, modified warmwater habitat - channelized)

**Sampling Year or Years:** 2000

**Watershed Score:** 43.0 (out of a possible 100 points)

**Causes of Impairment:**

- flow alteration
- nutrients
- priority organics
- salinity/total dissolved solids/chlorides

**Sources of Impairment:**

- contaminated sediments
- industrial point source
- landfills
- natural
- nonirrigated crop production

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** polychlorinated biphenyls (PCBs at 2,347 parts per billion)

### **Basic Geography (as defined by OKI)**

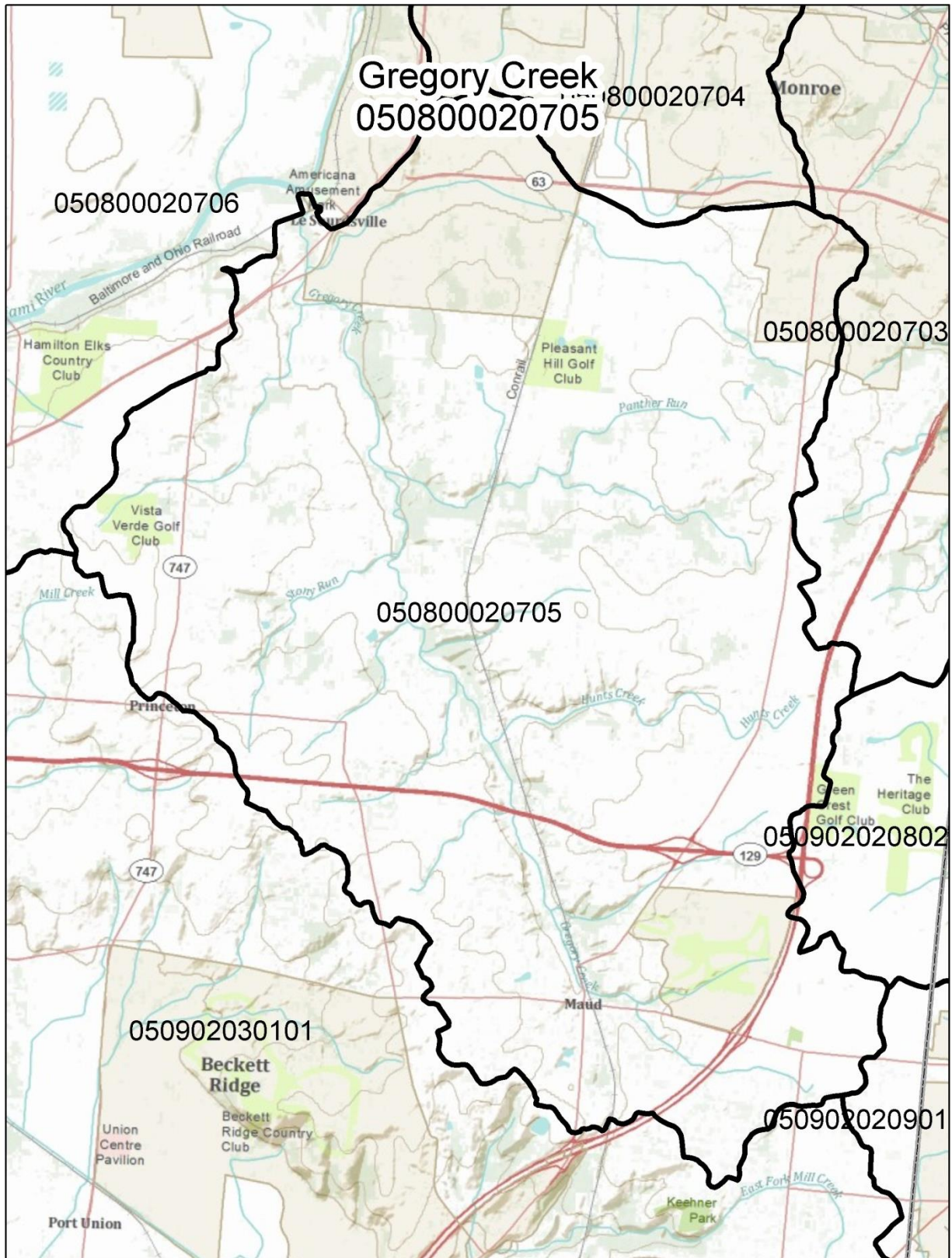
**County or Counties of the OKI Region in the Watershed:** Butler, Warren

**Municipalities of the OKI Region:** City of Middletown, City of Monroe

**Facility Planning Area (FPA) or Areas:** Middletown FPA, Franklin FPA, Monroe FPA

**Onsite Wastewater Treatment System Concentration(s):** Excello area, at State Route 4 and Todhunter Road

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 29.7 square miles  
**Priority Points:** 5

**Monitoring Scheduled:** 2010  
**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 51.0%    **Forest:** 11.1%    **Grass/Pasture:** 21.3%    **Row Crops:** 16.3%    **Other:** 0.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH, MWH-C (exceptional warmwater habitat, warmwater habitat, modified warmwater habitat - channelized)

**Sampling Year or Years:** 2000

**Watershed Score:** 43.0 (out of a possible 100 points)

**Causes of Impairment:**

- flow alteration
- nutrients
- priority organics
- salinity/total dissolved solids/chlorides

**Sources of Impairment:**

- contaminated sediments
- industrial point source
- landfills
- natural
- nonirrigated crop production

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

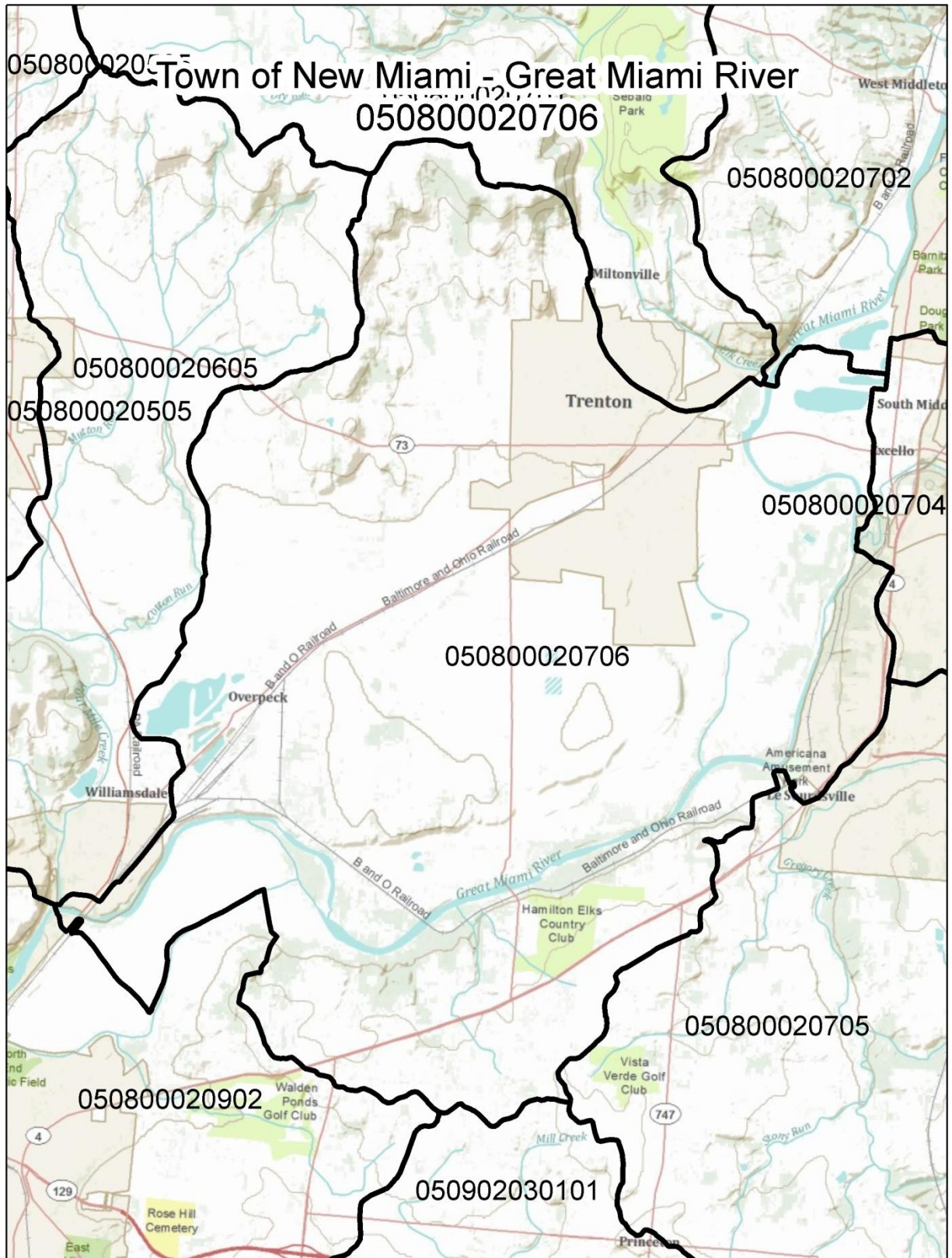
**County or Counties of the OKI Region in the Watershed:** Butler

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** LeSourdsville FPA, Monroe FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 30.7 square miles  
**Priority Points:** 5

**Monitoring Scheduled:** 2010  
**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 39.0%    **Forest:** 12.2%    **Grass/Pasture:** 16.3%    **Row Crops:** 31.8%    **Other:** 0.7%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH, MWH-C (exceptional warmwater habitat, warmwater habitat, modified warmwater habitat - channelized)

**Sampling Year or Years:** 2000

**Watershed Score:** 43.0 (out of a possible 100 points)

**Causes of Impairment:**

- flow alteration
- nutrients
- priority organics
- salinity/total dissolved solids/chlorides

**Sources of Impairment:**

- contaminated sediments
- industrial point source
- landfills
- natural
- nonirrigated crop production

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** polychlorinated biphenyls (PCBs at 402 parts per billion)

### **Basic Geography (as defined by OKI)**

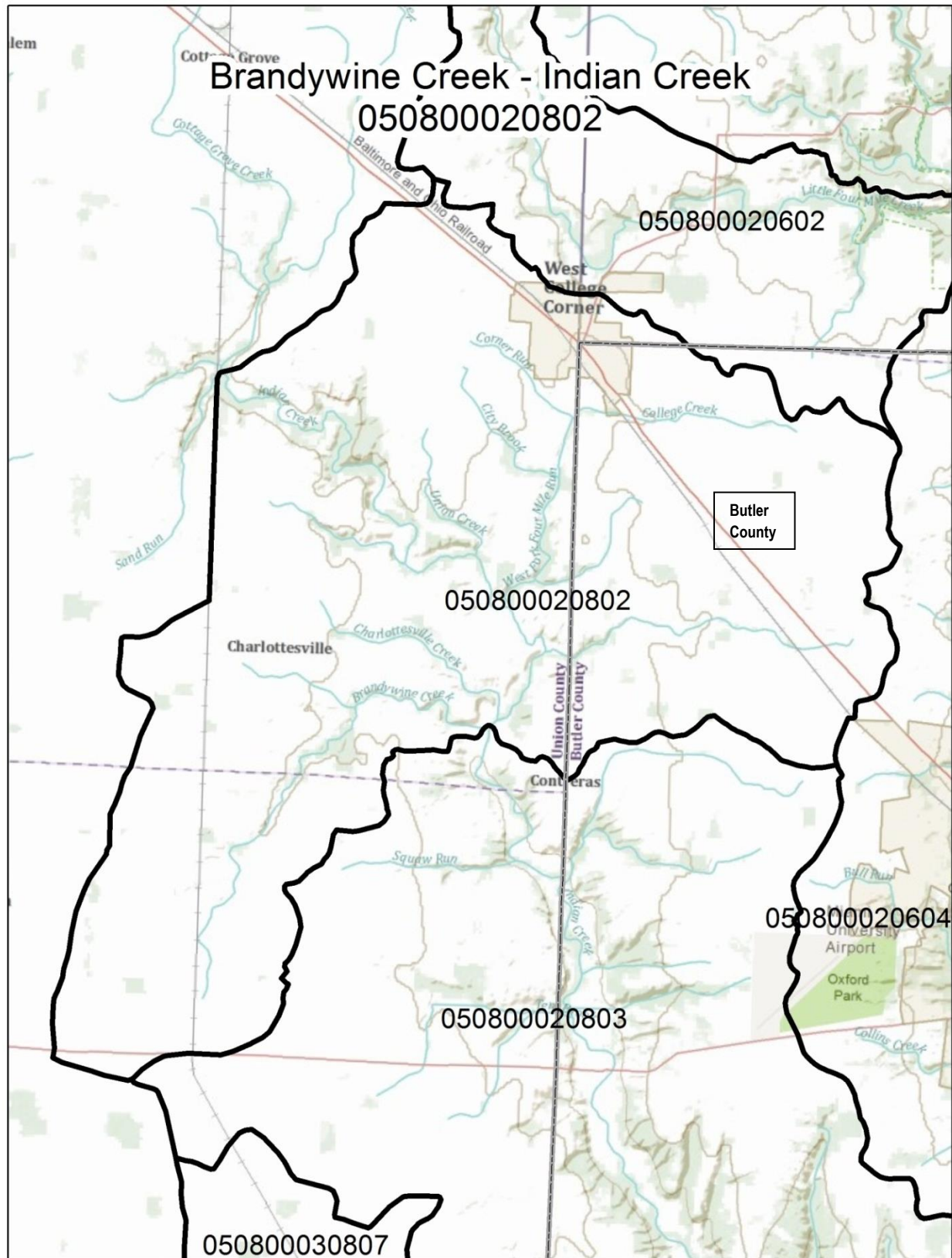
**County or Counties of the OKI Region in the Watershed:** Butler

**Municipalities of the OKI Region:** City of Trenton, City of Monroe, Village of New Miami

**Facility Planning Area (FPA) or Areas:** LeSourdsville FPA, Hamilton Suburban FPA, Monroe FPA (small part), Middletown FPA (small part)

**Onsite Wastewater Treatment System Concentration(s):** St. Clair Township, in the Woodsdale community at Wayne-Madison Road and Augspurger Road

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 18.3 square miles

**Priority Points:** 0

## Land Use Statistics

**Developed:** 8.7%    **Forest:** 3.0%    **Grass/Pasture:** 1.2%    **Row Crops:** 87.1%    **Other:** 0.0%

**Monitoring Scheduled:** 2019

**TMDL Scheduled:** 2011

### **Aquatic Life Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Aquatic Life Uses:** not designated

**Sampling Year or Years:** none

**Watershed Score:** not calculated

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

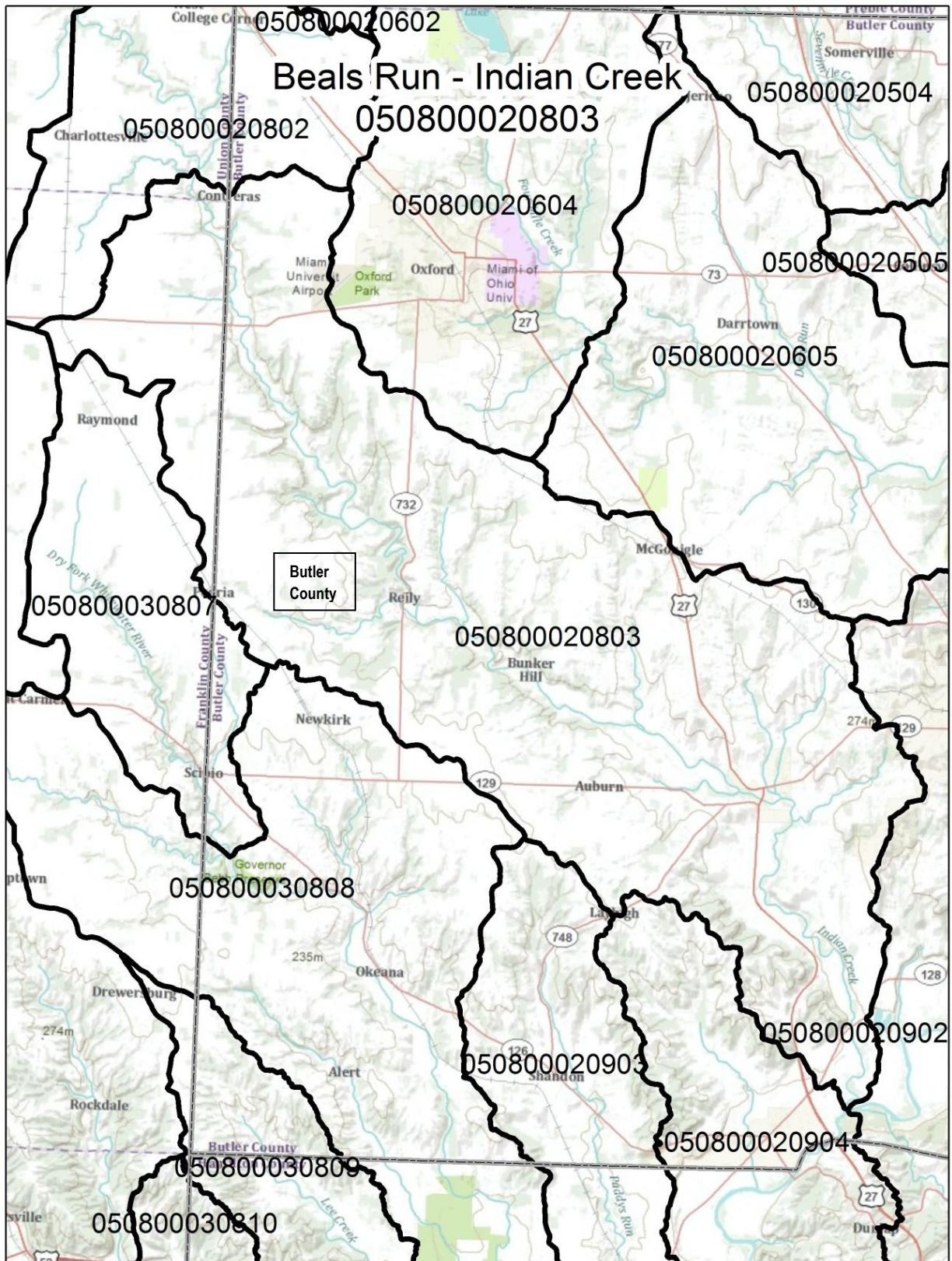
**County or Counties of the OKI Region in the Watershed:** Butler

**Municipalities of the OKI Region:** Village of College Corner

**Facility Planning Area (FPA) or Areas:** Indian Creek FPA, Four Mile Creek FPA (small part), Oxford FPA (edge)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 74 square miles

**Priority Points:** 4

**Monitoring Scheduled:** 2019

**TMDL Scheduled:** 2011

## Land Use Statistics

**Developed:** 9.9%    **Forest:** 24.2%    **Grass/Pasture:** 38.6%    **Row Crops:** 26.5%    **Other:** 0.7%

### **Aquatic Life Assessment**

**Reporting Category:** 4n (impaired; TMDL not needed; natural causes and sources)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2005

**Watershed Score:** 81.3

**Causes of Impairment:**

- natural conditions (flow or habitat)

**Sources of Impairment:**

- natural sources

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Assessment Unit Score:** 80

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** polychlorinated biphenyls (PCBs at 93 parts per billion)

### **Basic Geography (as defined by OKI)**

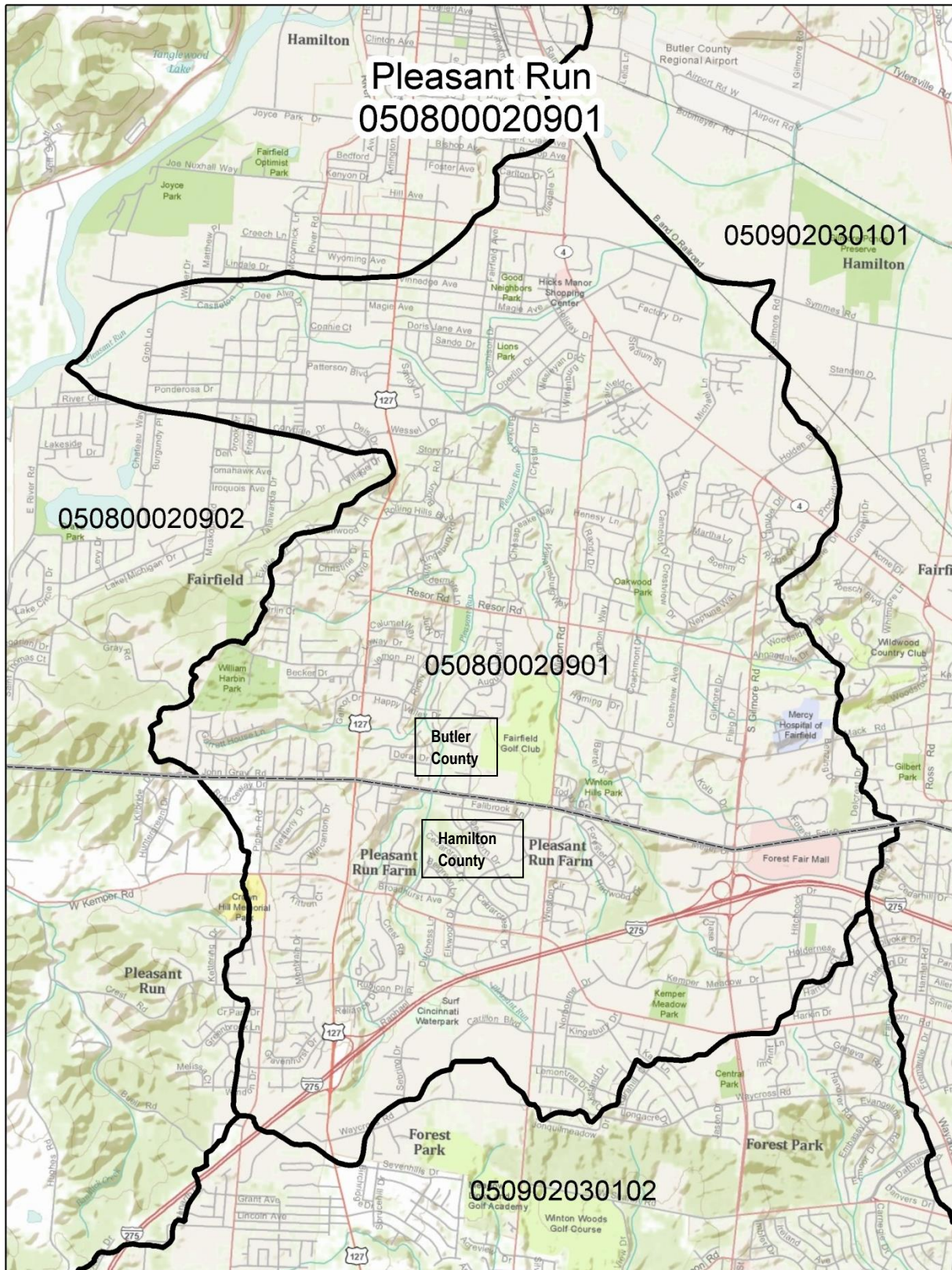
**County or Counties of the OKI Region in the Watershed:** Butler

**Municipalities of the OKI Region:** Village of Millville

**Facility Planning Area (FPA) or Areas:** Indian Creek FPA, Hamilton Suburban FPA

**Onsite Wastewater Treatment System Concentration(s):** Hanover and Ross townships, three concentrations in the Millville area along U.S. 27, Millville Road, Boyle Road and Stahlheber Road; Ross and Morgan townships, at Layhigh Road and Millville-Shandon Road

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 15.1 square miles  
**Priority Points:** 3

**Monitoring Scheduled:** 2010  
**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 91.4%    **Forest:** 6.0%    **Grass/Pasture:** 1.6%    **Row Crops:** 0.9%    **Other:** 0.1%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1995, 1996, 1997, 2000

**Watershed Score:** 25.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration

**Sources of Impairment:**

- land development/suburbanization
- natural
- removal of riparian vegetation – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

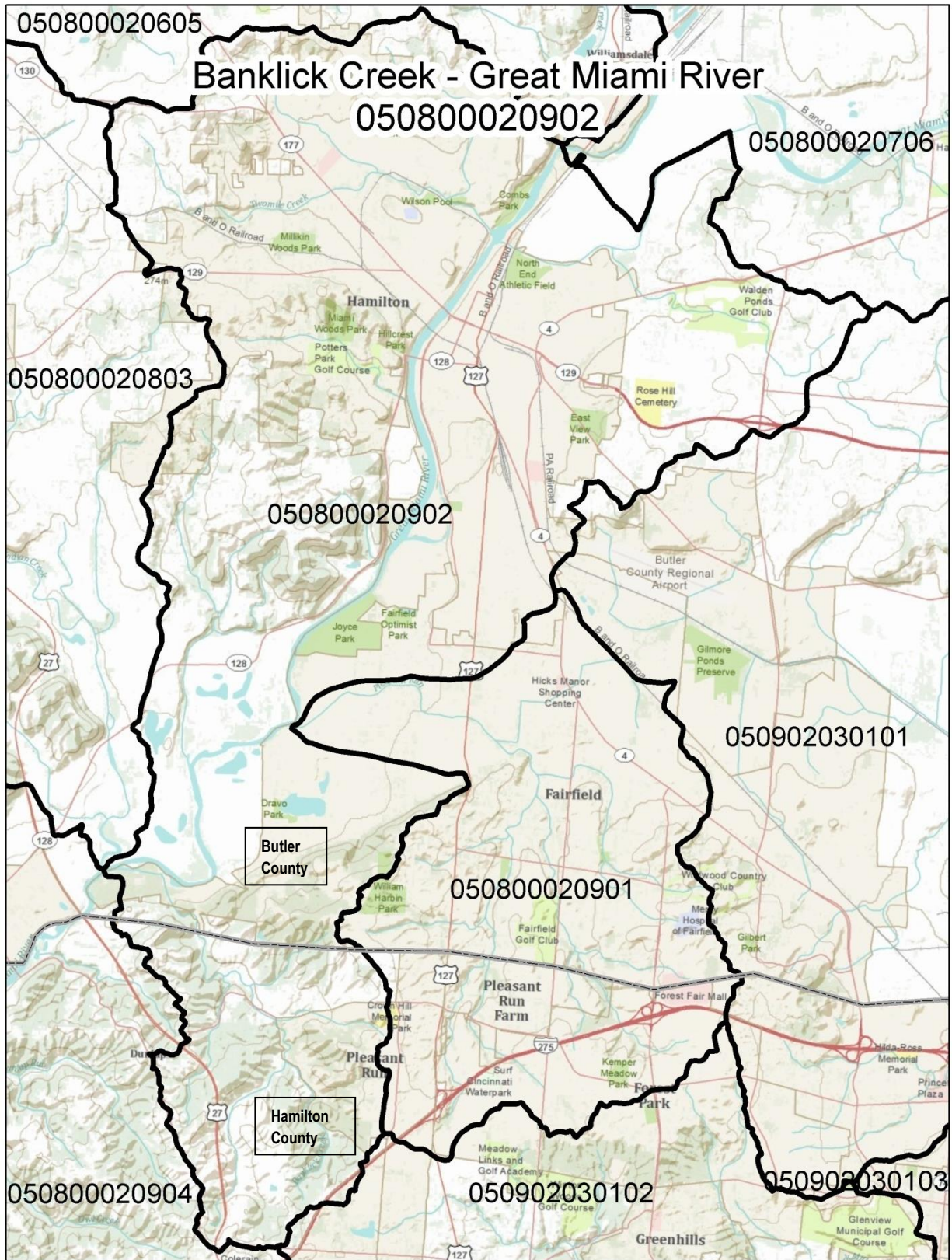
**County or Counties of the OKI Region in the Watershed:** Butler, Hamilton

**Municipalities of the OKI Region:** City of Fairfield, City of Forest Park, City of Hamilton (small part), City of Springdale (small part)

**Facility Planning Area (FPA) or Areas:** Fairfield FPA, Mill Creek FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 44.1 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 56.1%    **Forest:** 22.3%    **Grass/Pasture:** 14.2%    **Row Crops:** 6.7%    **Other:** 0.7%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1995, 1996, 1997, 2000

**Watershed Score:** 25.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration

**Sources of Impairment:**

- land development/suburbanization
- natural
- removal of riparian vegetation – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

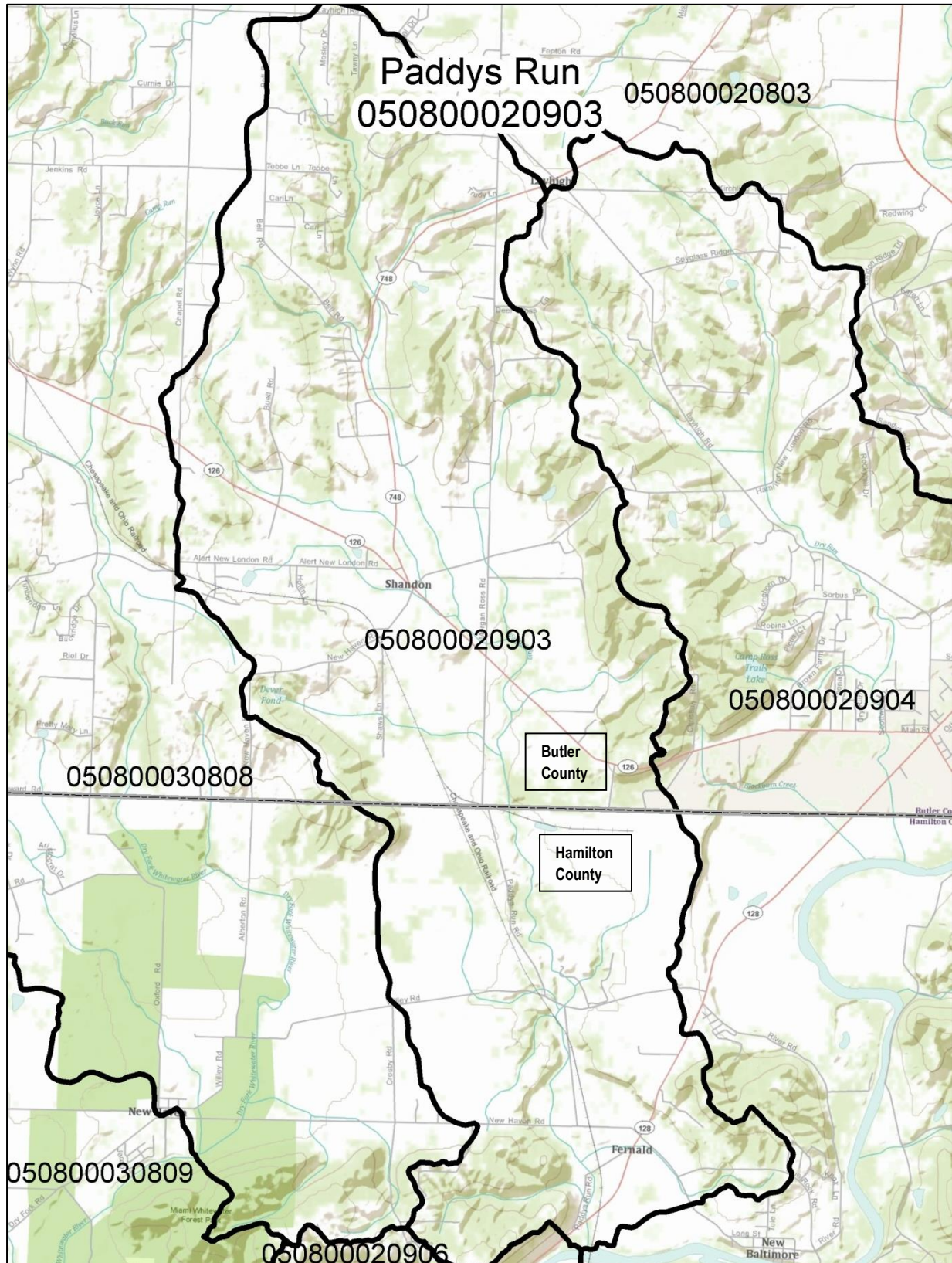
**County or Counties of the OKI Region in the Watershed:** Butler, Hamilton

**Municipalities of the OKI Region:** City of Fairfield, City of Hamilton

**Facility Planning Area (FPA) or Areas:** Fairfield FPA, Hamilton Suburban FPA, Hamilton FPA, Four Mile Creek FPA, Mill Creek FPA (edge), Western Hamilton FPA (edge), Taylor Creek FPA (tip)

**Onsite Wastewater Treatment System Concentration(s):** Dunlap/Colerain Township; Bevis

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 16.3 square miles

**Priority Points:** 3

## Land Use Statistics

**Developed:** 13.7%

**Forest:** 31.6%

**Grass/Pasture:** 28.6%

**Row Crops:** 25.5%

**Other:** 0.6%

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1995, 1996, 1997, 2000

**Watershed Score:** 25.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration

**Sources of Impairment:**

- land development/suburbanization
- natural
- removal of riparian vegetation – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

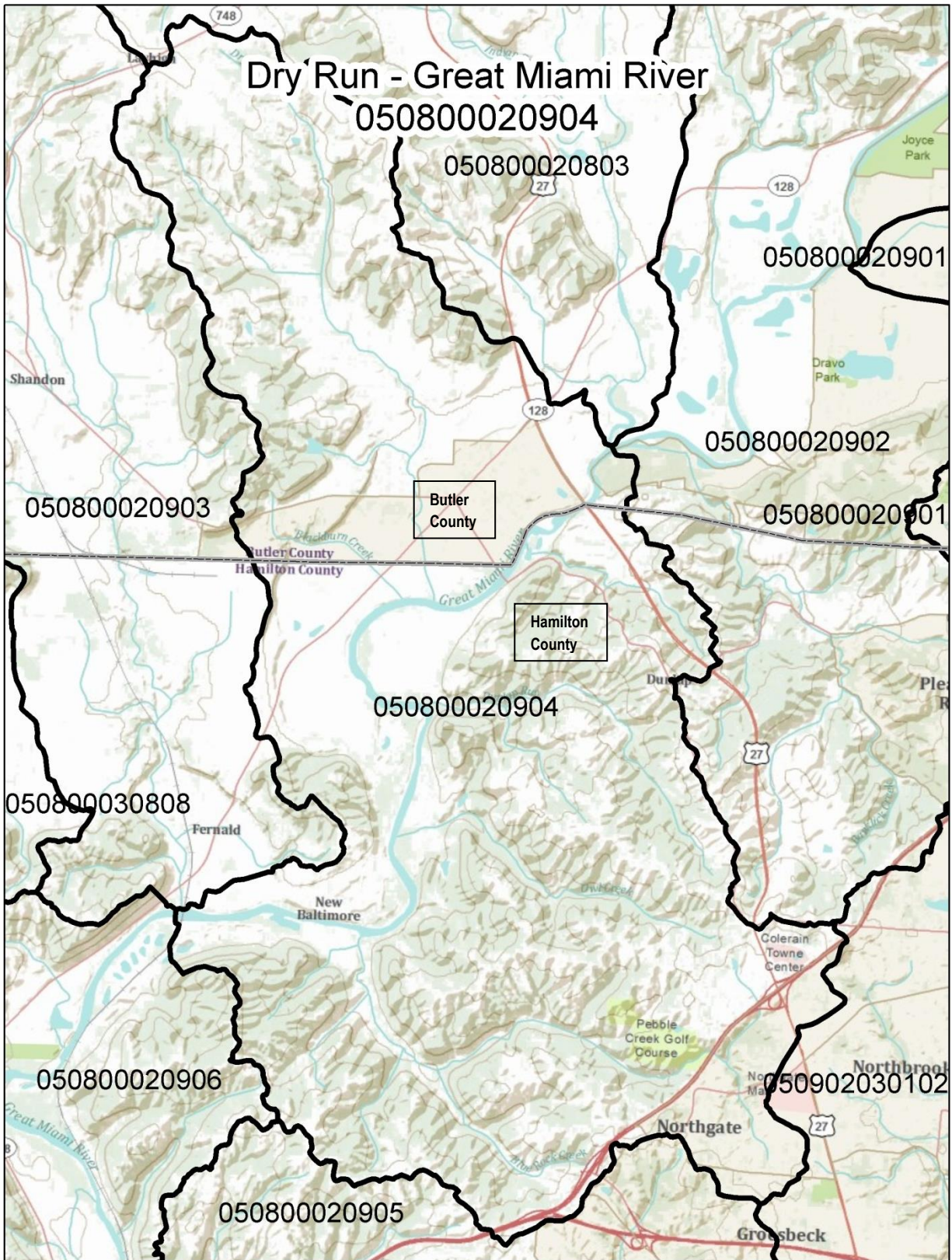
**County or Counties of the OKI Region in the Watershed:** Butler, Hamilton

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Western Hamilton FPA, Shandon FPA, Indian Creek FPA

**Onsite Wastewater Treatment System Concentration(s):** Morgan Township, at State Route 126 and State Route 748; Morgan Township, both sides of Bell Road, south of Jenkins Road; Morgan and Ross townships, at Layhigh Road, Morgan Ross Road and State Route 748

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 28.8 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 22.1%   **Forest:** 49.0%   **Grass/Pasture:** 17.9%   **Row Crops:** 10.2%   **Other:** 0.8%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1995, 1996, 1997, 2000

**Watershed Score:** 25.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration

**Sources of Impairment:**

- land development/suburbanization
- natural
- removal of riparian vegetation – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

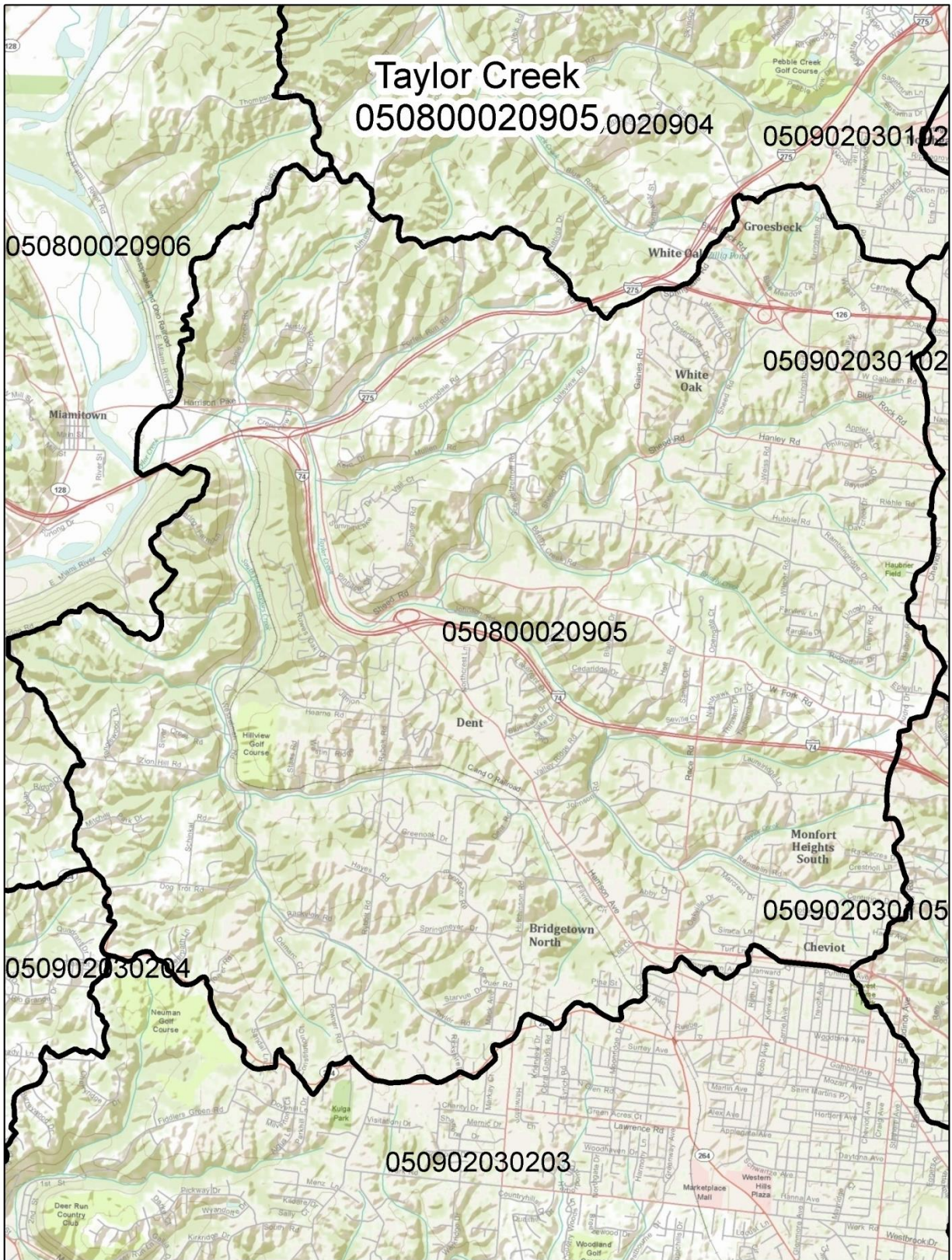
**County or Counties of the OKI Region in the Watershed:** Butler, Hamilton

**Municipalities of the OKI Region:** City of Fairfield (tip)

**Facility Planning Area (FPA) or Areas:** Western Hamilton FPA, Shandon FPA, Hamilton Suburban FPA, Indian Creek FPA (edge), Taylor Creek FPA (edge)

**Onsite Wastewater Treatment System Concentration(s):** Groesbeck; New Baltimore; Bevis; Dunlap/Colerain Township; Ross/Venice

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 26.7 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 52.0%

**Forest:** 41.8%

**Grass/Pasture:** 5.1%

**Row Crops:** 0.4%

**Other:** 0.7%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1995, 1996, 1997, 2000

**Watershed Score:** 25.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration

**Sources of Impairment:**

- land development/suburbanization
- natural
- removal of riparian vegetation – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

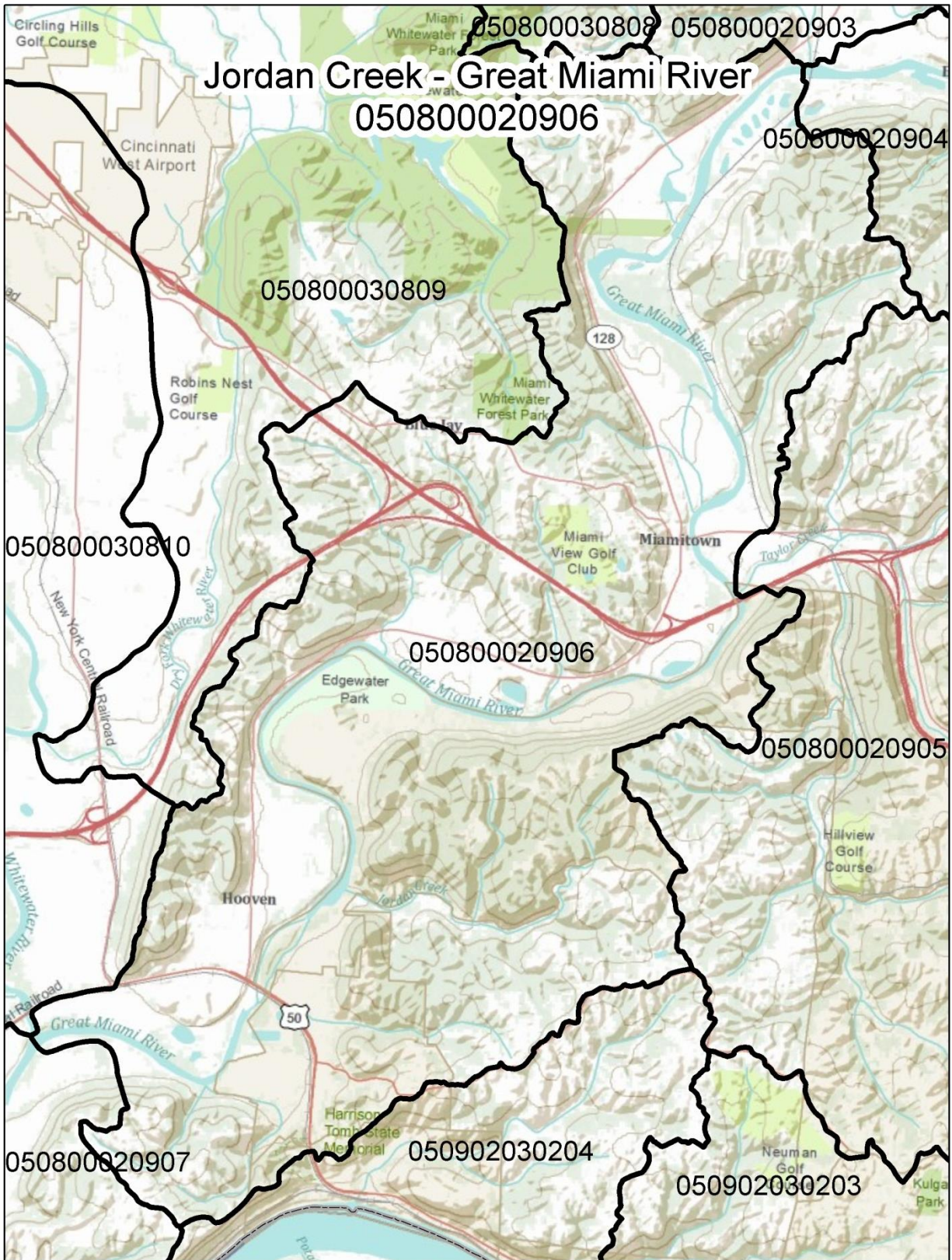
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Taylor Creek FPA, Western Hamilton FPA (edges), Muddy Creek FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** Groesbeck; Jessup Road; Springdale Road; Bridgetown to Mack Area

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 22.7 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 20.5%    **Forest:** 57.3%    **Grass/Pasture:** 13.2%    **Row Crops:** 7.7%    **Other:** 1.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1995, 1996, 1997, 2000

**Watershed Score:** 25.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration

**Sources of Impairment:**

- land development/suburbanization
- natural
- removal of riparian vegetation – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

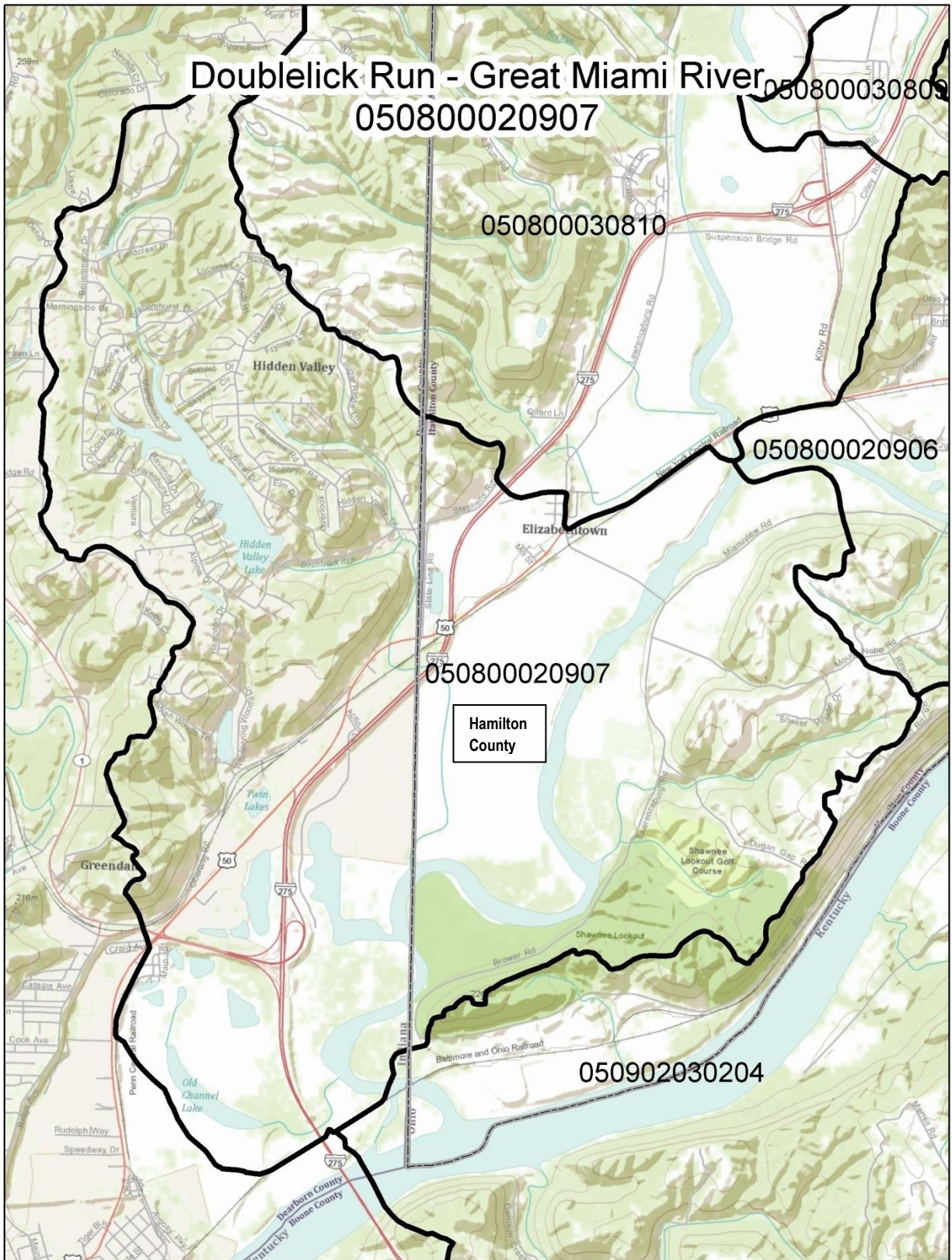
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Western Hamilton FPA; Taylor Creek FPA; Cleves North Bend FPA

**Onsite Wastewater Treatment System Concentration(s):** Hooven; Bridgetown to Mack Area; Miami Township, west of North Bend, along Brower, Cliff, Rittenhouse and Mt. Nebo roads; Miami and Whitewater townships, on both sides of the Great Miami River, in the Gieringer community and subdivisions north of State Route 128

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 15.7 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 8.9%    **Forest:** 40.4%    **Grass/Pasture:** 16.0%    **Row Crops:** 32.8%    **Other:** 1.9%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1995, 1996, 1997, 2000

**Watershed Score:** 25.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration

**Sources of Impairment:**

- land development/suburbanization
- natural
- removal of riparian vegetation – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

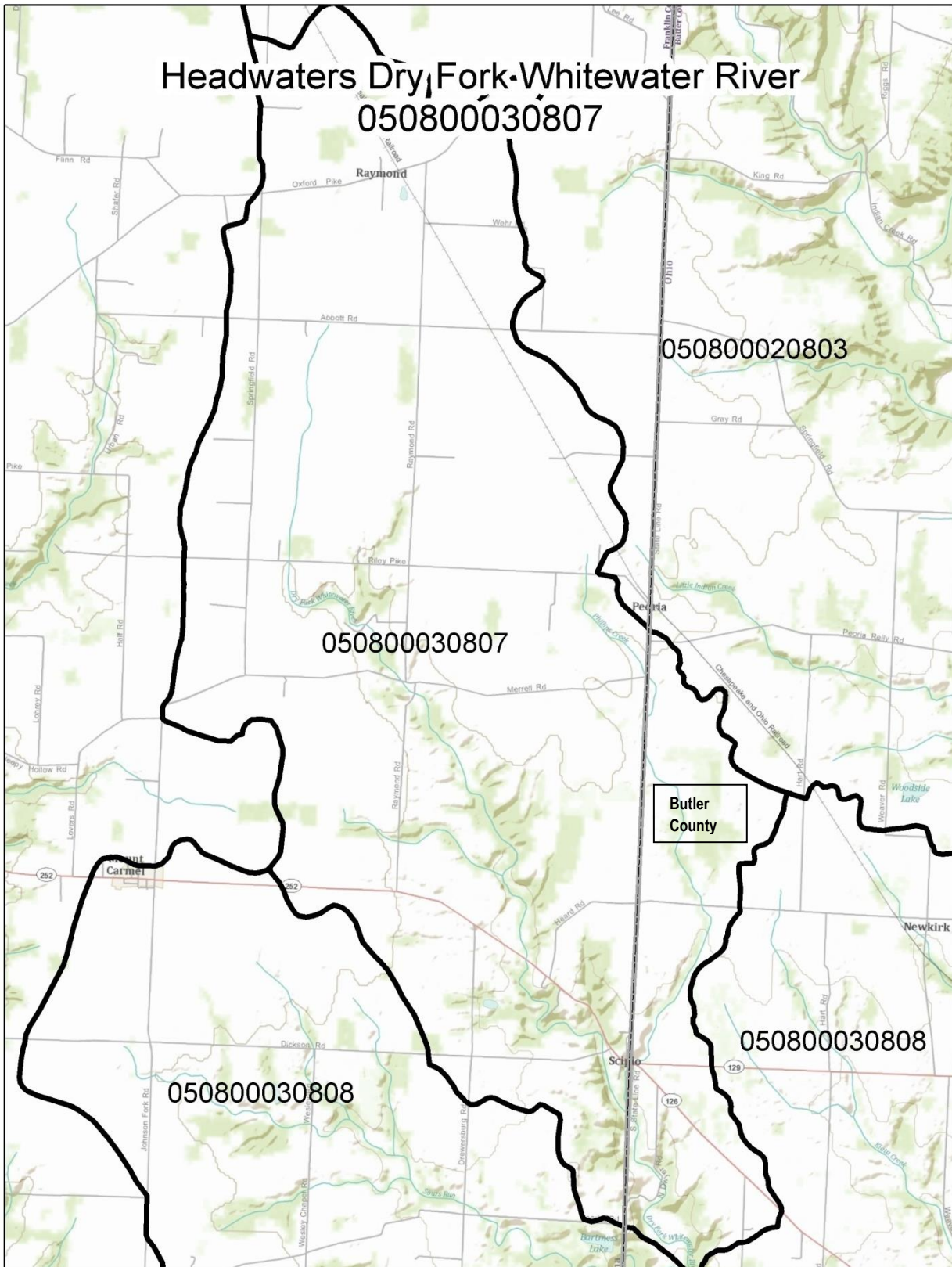
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Western Hamilton FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 16.3 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 7.9%    **Forest:** 18.5%    **Grass/Pasture:** 42.5%    **Row Crops:** 30.7%    **Other:** 0.4%

### **Aquatic Life Assessment**

**Reporting Category:** 1hx (use attaining; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1995, 1996

**Watershed Score:** 100.0

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 1 with historical status until new data become available from the next scheduled watershed survey.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

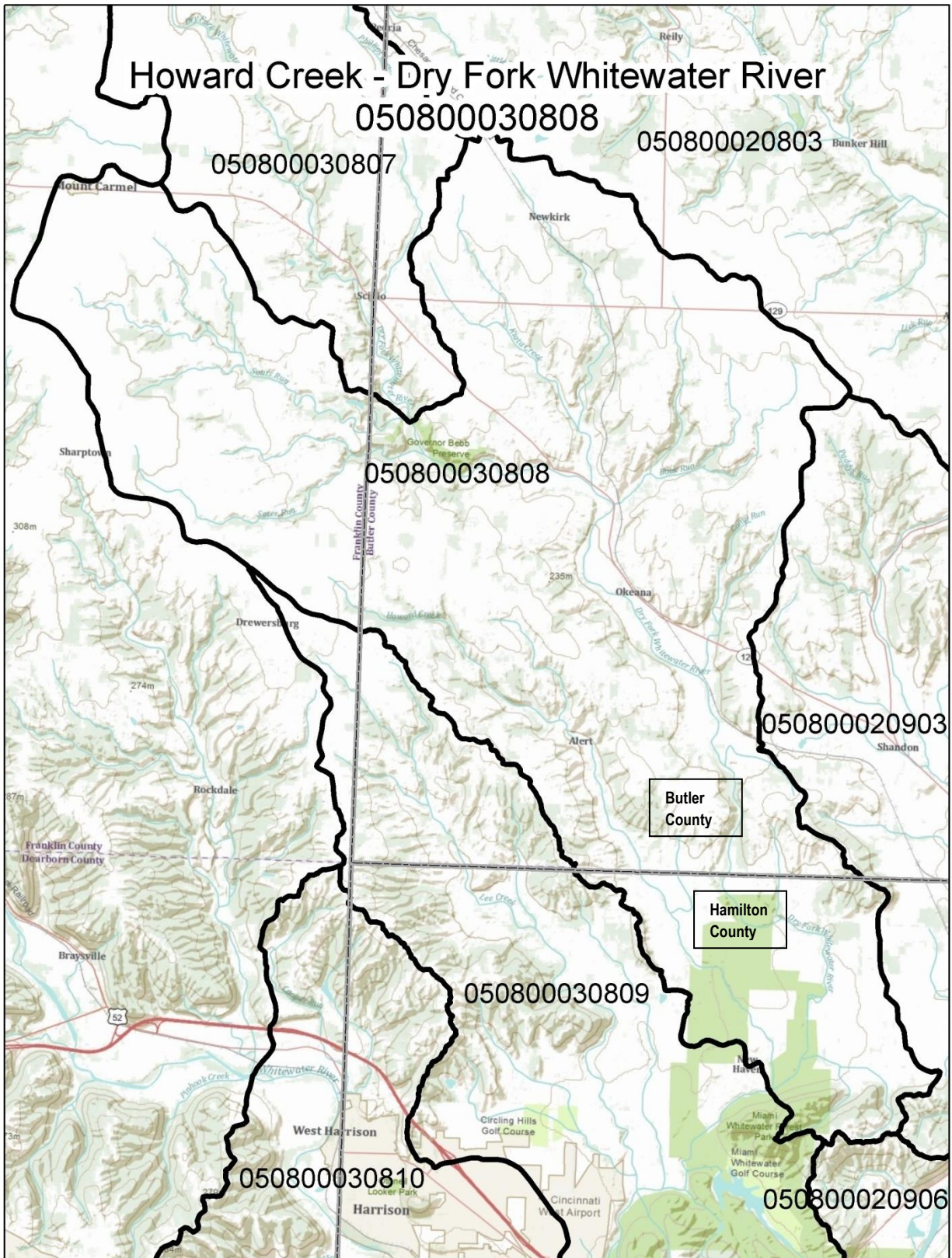
**County or Counties of the OKI Region in the Watershed:** Butler

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Dry Fork Whitewater FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 42.6 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 5.8%    **Forest:** 23.2%    **Grass/Pasture:** 42.0%    **Row Crops:** 28.1%    **Other:** 0.9%

### **Aquatic Life Assessment**

**Reporting Category:** 4n (impaired; TMDL not needed; natural causes and sources)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 2005

**Watershed Score:** 33.3

**Causes of Impairment:**

- natural conditions (flow or habitat)

**Sources of Impairment:**

- natural sources

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

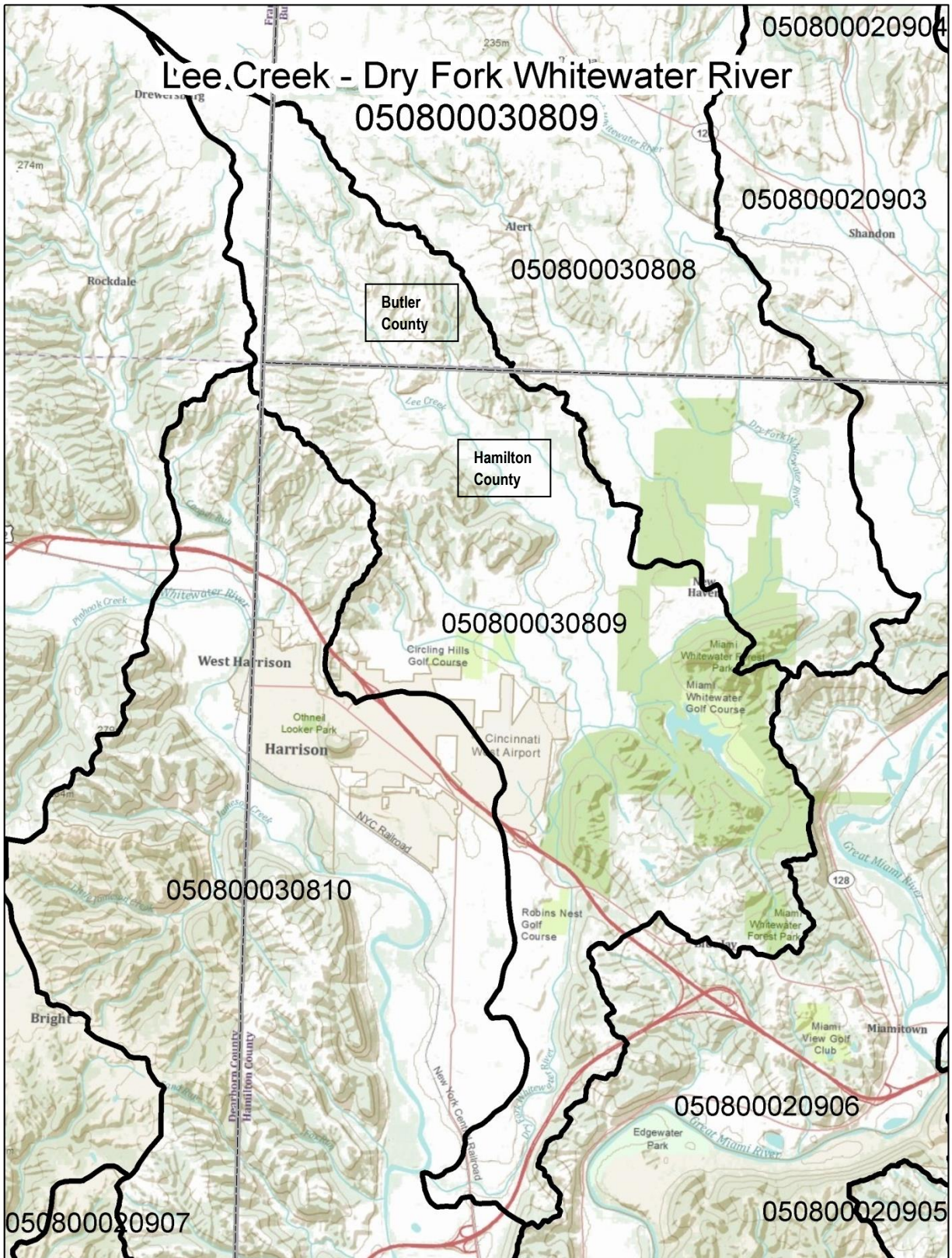
**County or Counties of the OKI Region in the Watershed:** Butler, Hamilton

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Dry Fork Whitewater FPA, Western Hamilton FPA, Harrison FPA (corner), Indian Creek FPA (edges), Shandon FPA (slim edges),

**Onsite Wastewater Treatment System Concentration(s):** Lee's Creek/Dick Roads; Baughman/New Haven/Edgewood Roads

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 22.7 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 14.1%    **Forest:** 45.4%    **Grass/Pasture:** 23.3%    **Row Crops:** 16.4%    **Other:** 0.8%

### **Aquatic Life Assessment**

**Reporting Category:** 1hx (use attaining; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1995, 1996

**Watershed Score:** 100.0

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 1 with historical status until new data become available from the next scheduled watershed survey.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

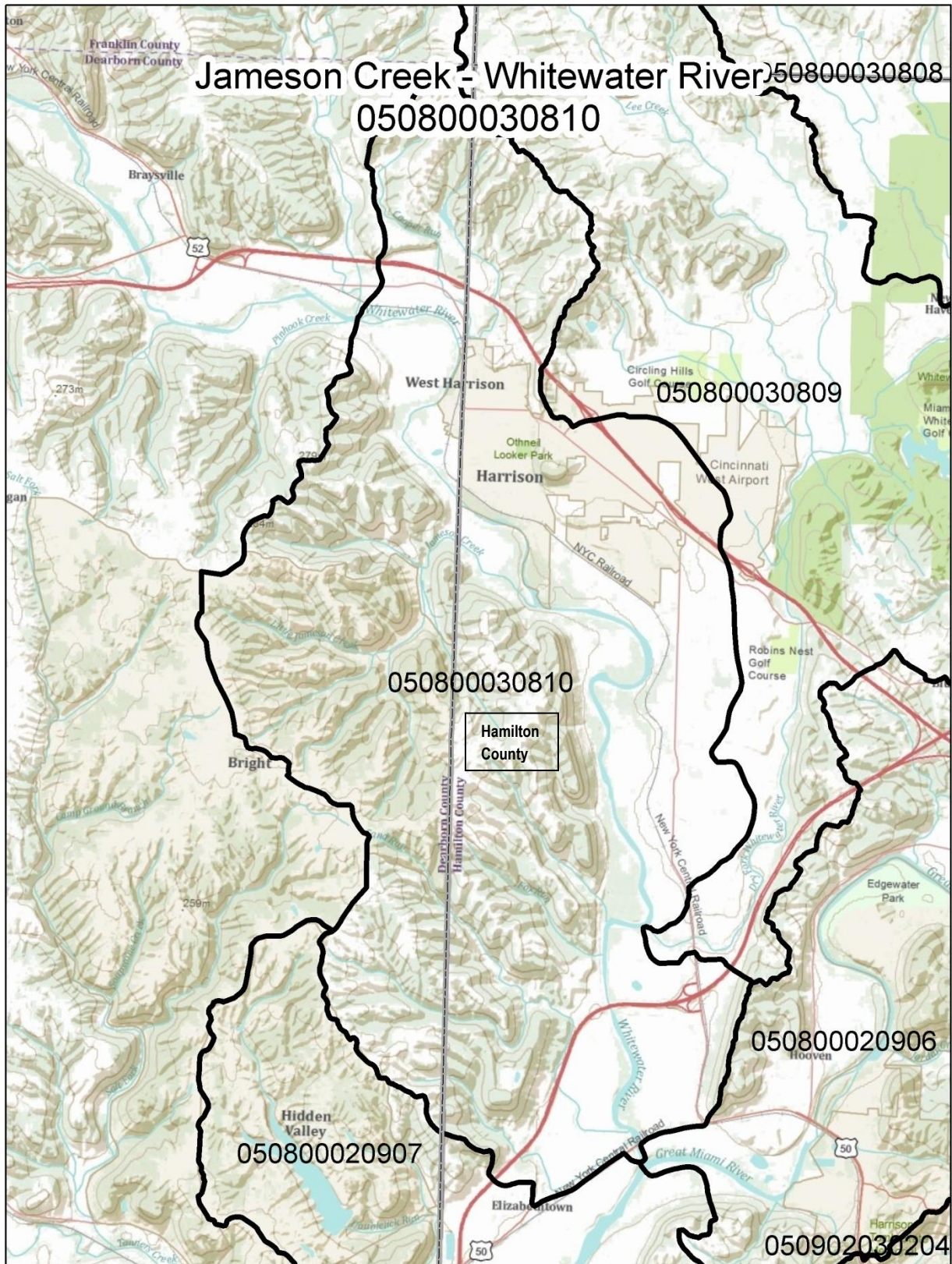
**County or Counties of the OKI Region in the Watershed:** Butler, Hamilton

**Municipalities of the OKI Region:** City of Harrison

**Facility Planning Area (FPA) or Areas:** Dry Fork Whitewater FPA, Harrison FPA, Western Hamilton FPA

**Onsite Wastewater Treatment System Concentration(s):** Lee's Creek/Dick Roads; Carolina Trace/New Biddinger Roads; Blue Jay; Harrison and Morgan townships, at Lees Creek, Howard and New Biddinger roads

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 29.1 square miles

**Priority Points:** 2

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

## Land Use Statistics

**Developed:** 24.7%    **Forest:** 40.9%    **Grass/Pasture:** 10.8%    **Row Crops:** 21.7%    **Other:** 1.9%

### **Aquatic Life Assessment**

**Reporting Category:** 1hx (use attaining; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1995, 1996

**Watershed Score:** 100.0

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 1 with historical status until new data become available from the next scheduled watershed survey.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** polychlorinated biphenyls (PCBs at 95 parts per billion)

### **Basic Geography (as defined by OKI)**

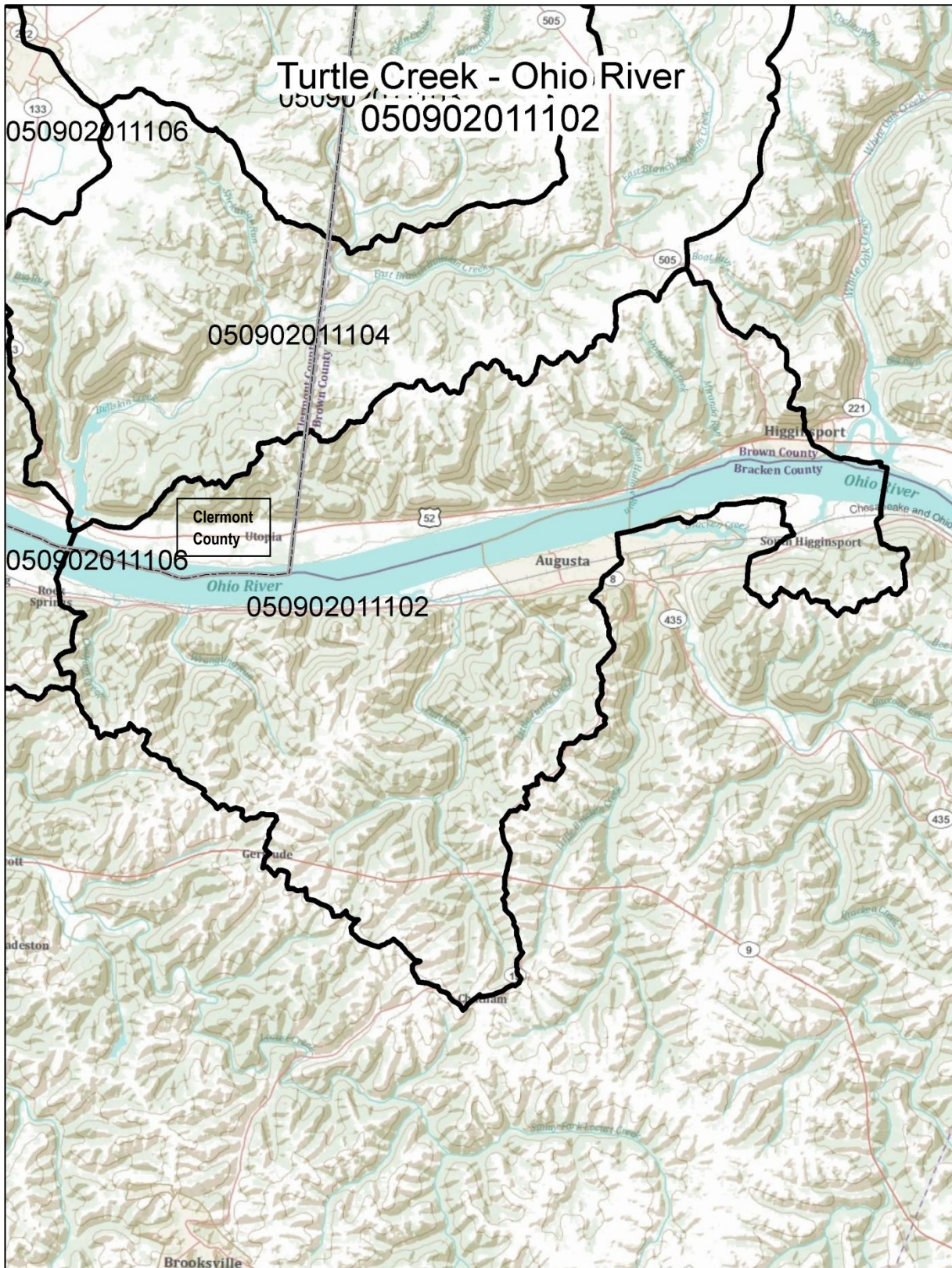
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of Harrison

**Facility Planning Area (FPA) or Areas:** Harrison FPA, Western Hamilton FPA

**Onsite Wastewater Treatment System Concentration(s):** Carolina Trace/New Biddinger Roads

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 23.2 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 4.5%    **Forest:** 70.1%    **Grass/Pasture:** 17.7%    **Row Crops:** 7.1%    **Other:** 0.6%

### **Aquatic Life Assessment**

**Reporting Category:** 3x (use attainment unknown; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** none listed

**Watershed Score:** not calculated

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

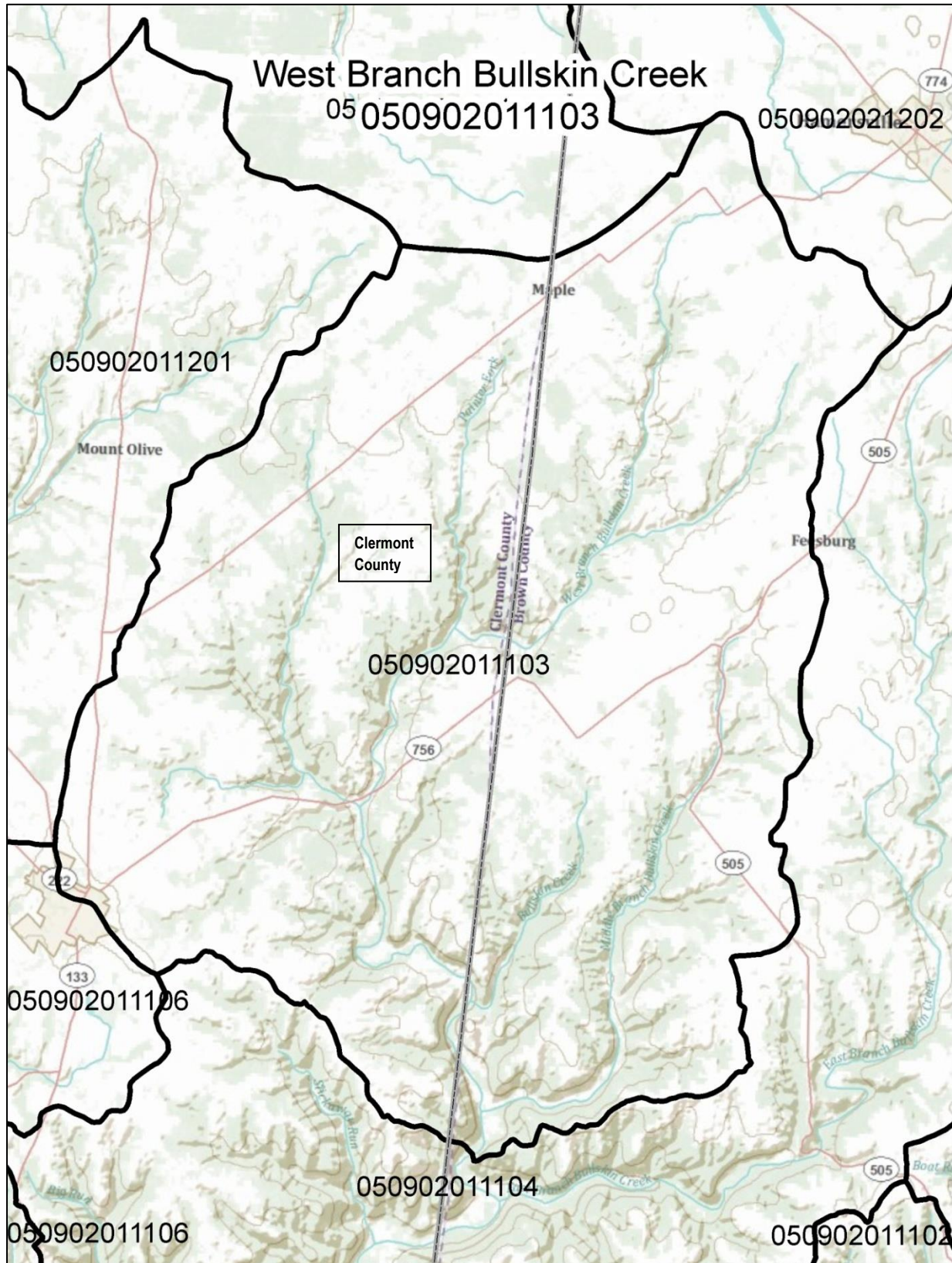
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Felicity FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 27.6 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 4.6%    **Forest:** 42.3%    **Grass/Pasture:** 24.0%    **Row Crops:** 28.7%    **Other:** 0.4%

### **Aquatic Life Assessment**

**Reporting Category:** 3x (use attainment unknown; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** none listed

**Watershed Score:** not calculated

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

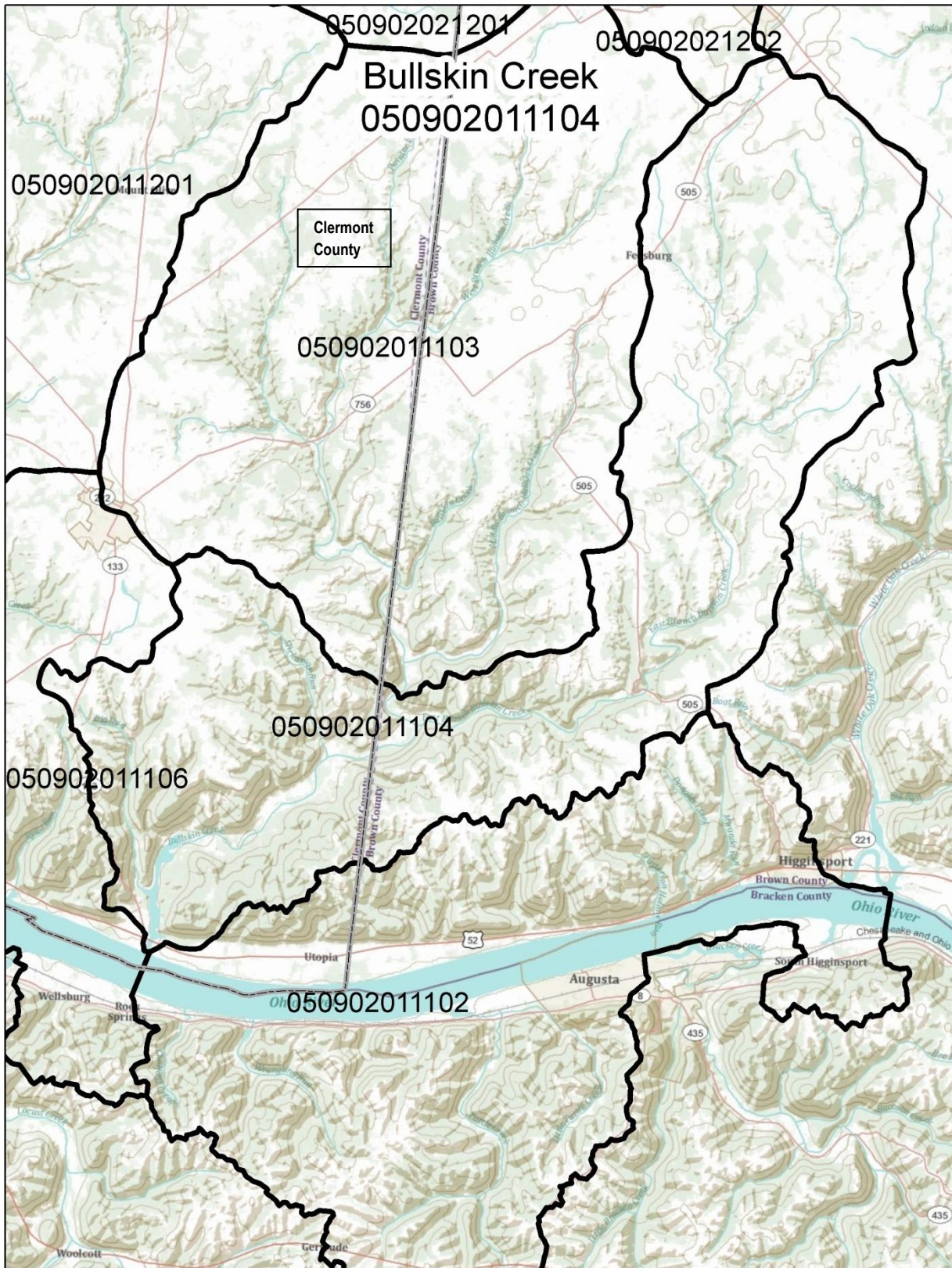
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Felicity (northeast edge)

**Facility Planning Area (FPA) or Areas:** Felicity FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 25.5 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 3.6%   **Forest:** 51.8%   **Grass/Pasture:** 17.6%   **Row Crops:** 26.7%   **Other:** 0.2%

### **Aquatic Life Assessment**

**Reporting Category:** 3x (use attainment unknown; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** none listed

**Watershed Score:** not calculated

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

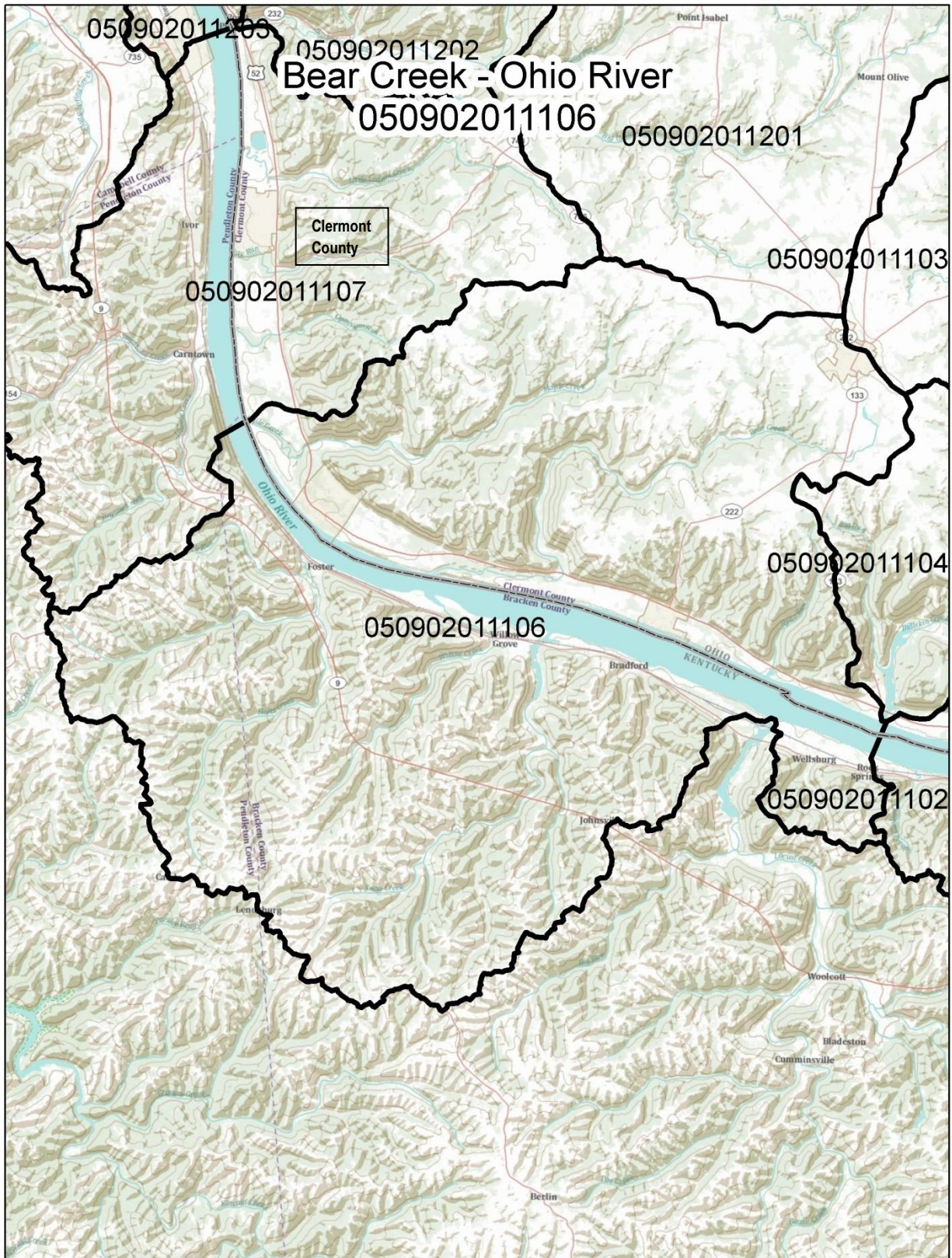
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Felicity FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 55.7 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 4.1%    **Forest:** 64.1%    **Grass/Pasture:** 20.7%    **Row Crops:** 10.6%    **Other:** 0.5%

### **Aquatic Life Assessment**

**Reporting Category:** 3x (use attainment unknown; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** none listed

**Watershed Score:** not calculated

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

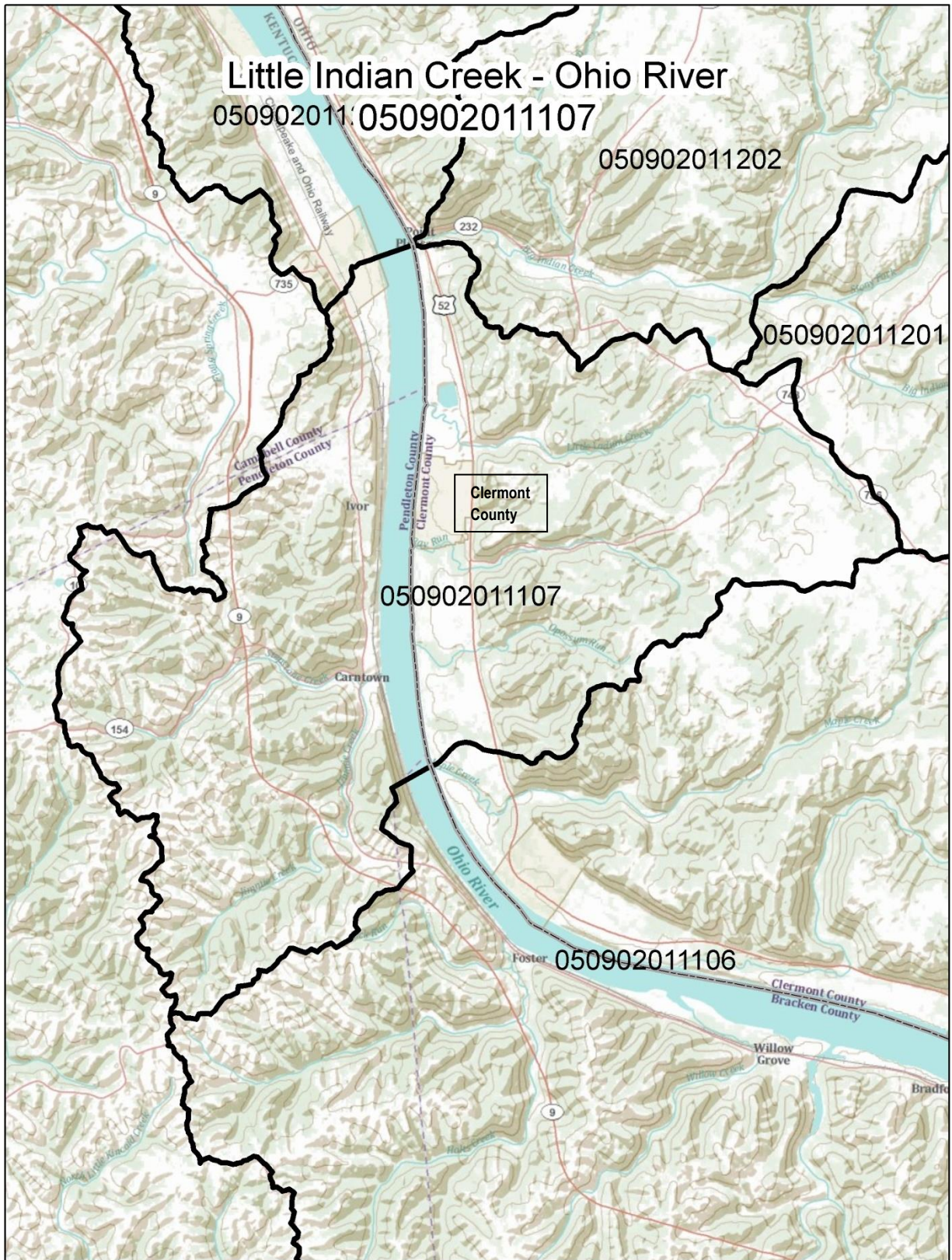
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Felicity, Village of Neville, Village of Chilo

**Facility Planning Area (FPA) or Areas:** Felicity FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 24.4 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 5.3%    **Forest:** 68.1%    **Grass/Pasture:** 16.5%    **Row Crops:** 7.8%    **Other:** 2.3%

### **Aquatic Life Assessment**

**Reporting Category:** 3x (use attainment unknown; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** none listed

**Watershed Score:** not calculated

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

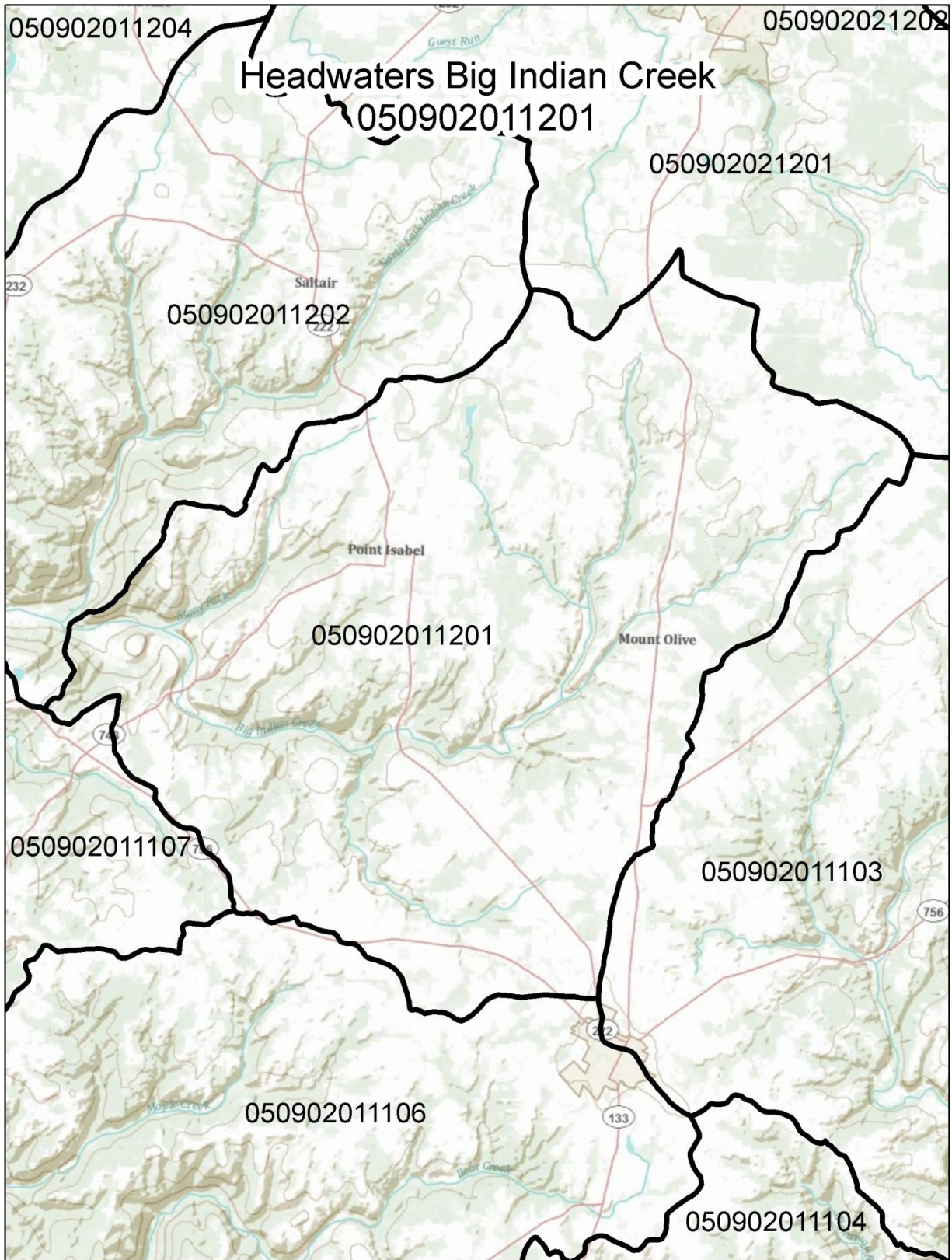
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Moscow

**Facility Planning Area (FPA) or Areas:** Felicity FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 21.5 square miles

**Priority Points:** 4

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 4.4%    **Forest:** 44.0%    **Grass/Pasture:** 26.4%    **Row Crops:** 24.8%    **Other:** 0.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1997

**Watershed Score:** 75.0

**Causes of Impairment:**

- cause unknown

**Sources of Impairment:**

- cause unknown

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

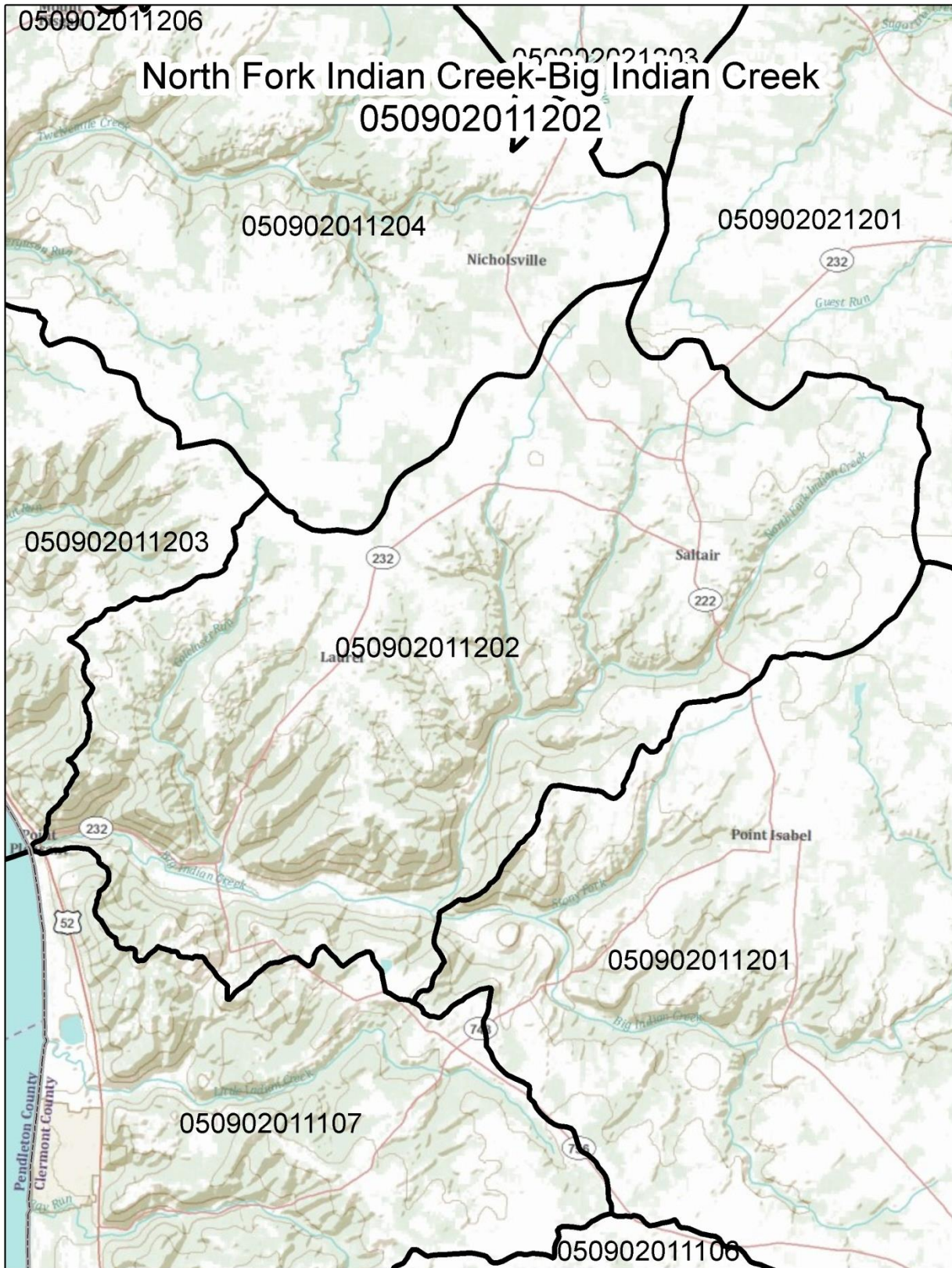
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Felicity FPA, Middle East Fork FPA (edge)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 18.4 square miles

**Priority Points:** 4

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 5.1%    **Forest:** 59.6%    **Grass/Pasture:** 22.6%    **Row Crops:** 11.7%    **Other:** 1.1%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1997

**Watershed Score:** 75.0

**Causes of Impairment:**

- cause unknown

**Sources of Impairment:**

- cause unknown

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

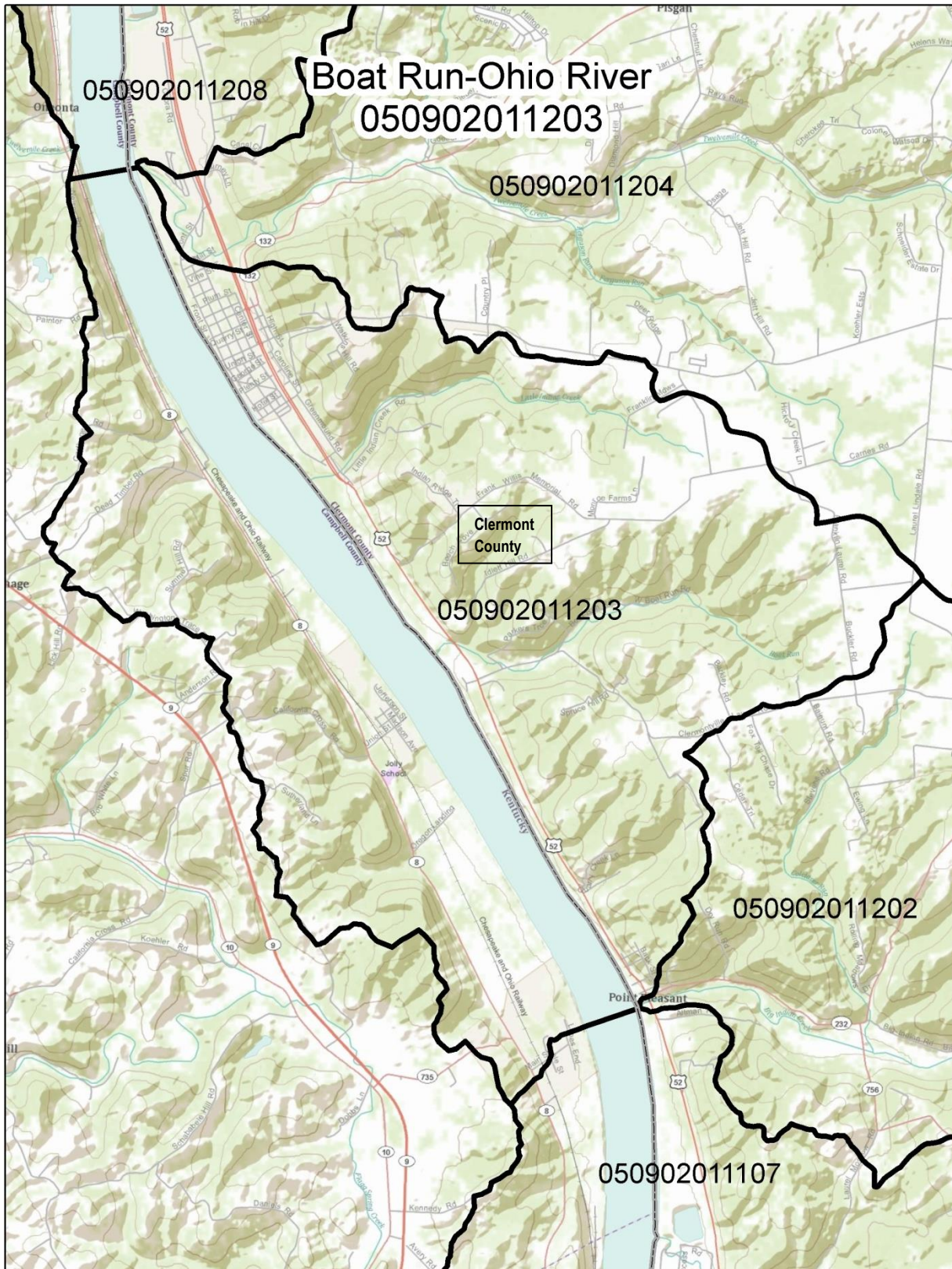
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Felicity FPA, New Richmond FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 15.9 square miles

**Priority Points:** 4

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 10.4%

**Forest:** 66.4%

**Grass/Pasture:** 17.0%

**Row Crops:** 4.1%

**Other:** 2.1%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1997

**Watershed Score:** 75.0

**Causes of Impairment:**

- cause unknown

**Sources of Impairment:**

- cause unknown

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

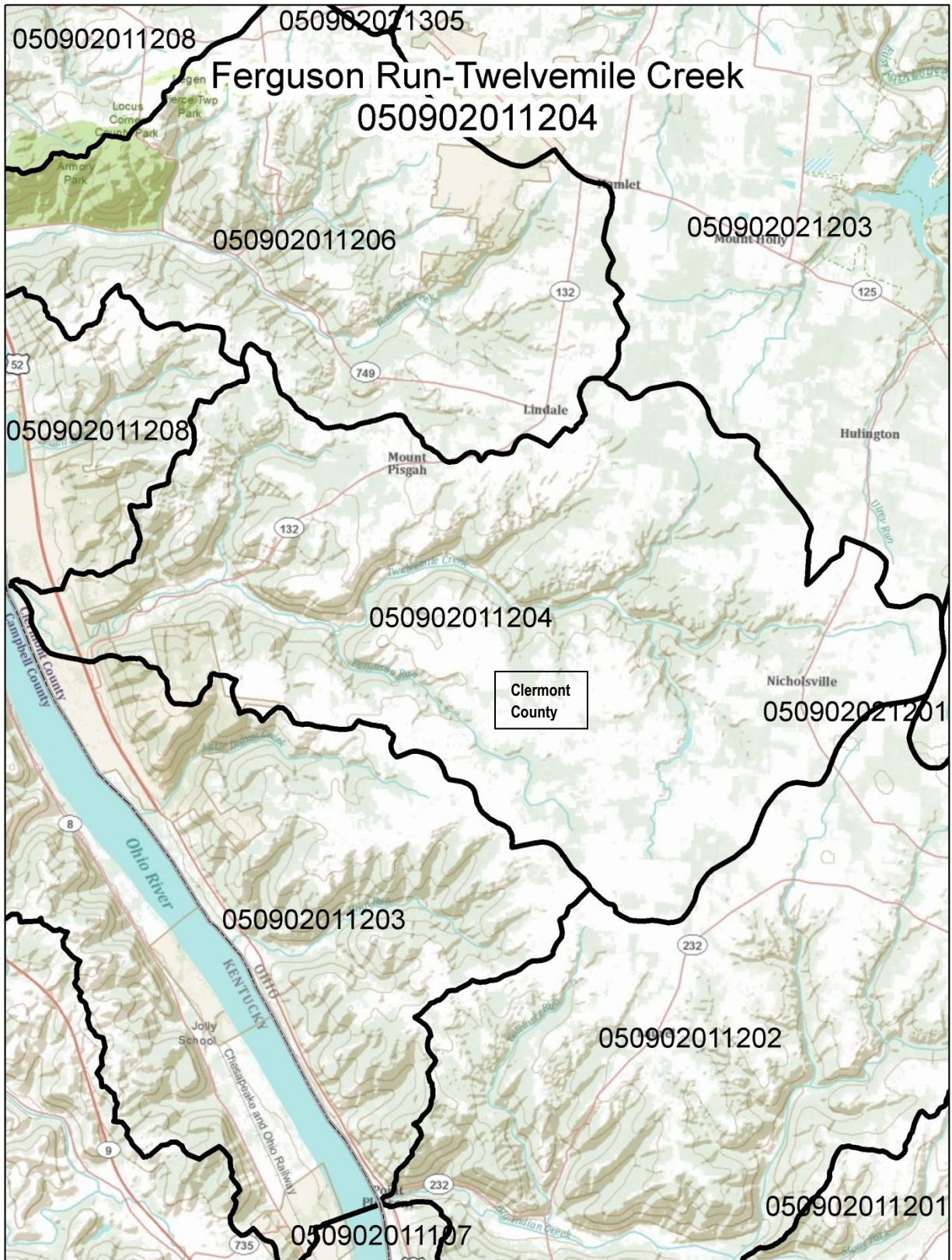
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of New Richmond

**Facility Planning Area (FPA) or Areas:** New Richmond FPA, Felicity FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 19.5 square miles

**Priority Points:** 4

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 7.1%   **Forest:** 54.3%   **Grass/Pasture:** 23.4%   **Row Crops:** 13.6%   **Other:** 1.6%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1997

**Watershed Score:** 75.0

**Causes of Impairment:**

- cause unknown

**Sources of Impairment:**

- cause unknown

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

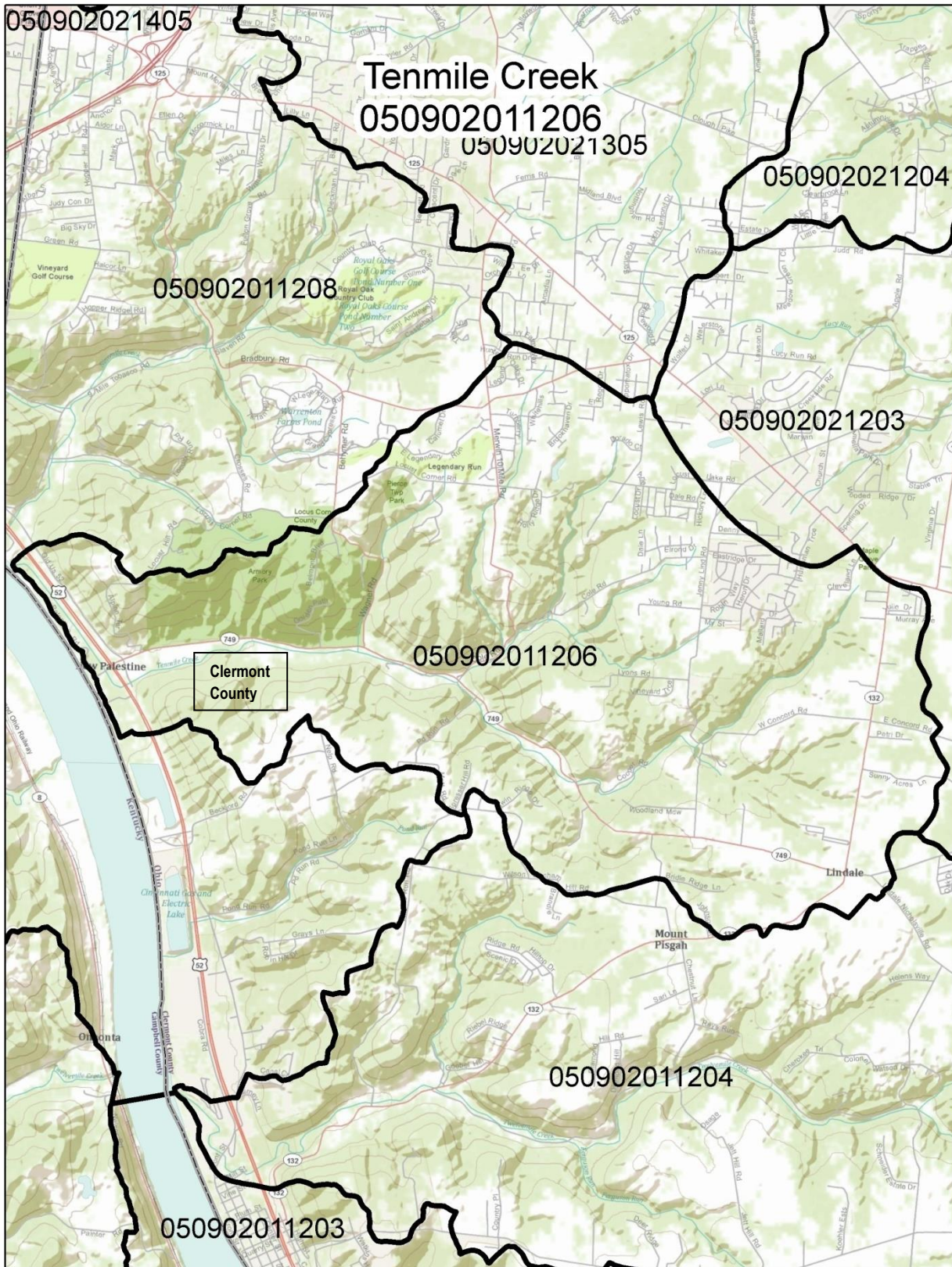
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of New Richmond (north end)

**Facility Planning Area (FPA) or Areas:** New Richmond FPA, Felicity FPA (edges), Nine Ten Mile FPA (tips)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 13 square miles

**Priority Points:** 4

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 18.1%    **Forest:** 61.7%    **Grass/Pasture:** 17.4%    **Row Crops:** 1.0%    **Other:** 1.8%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1997

**Watershed Score:** 75.0

**Causes of Impairment:**

- cause unknown

**Sources of Impairment:**

- cause unknown

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

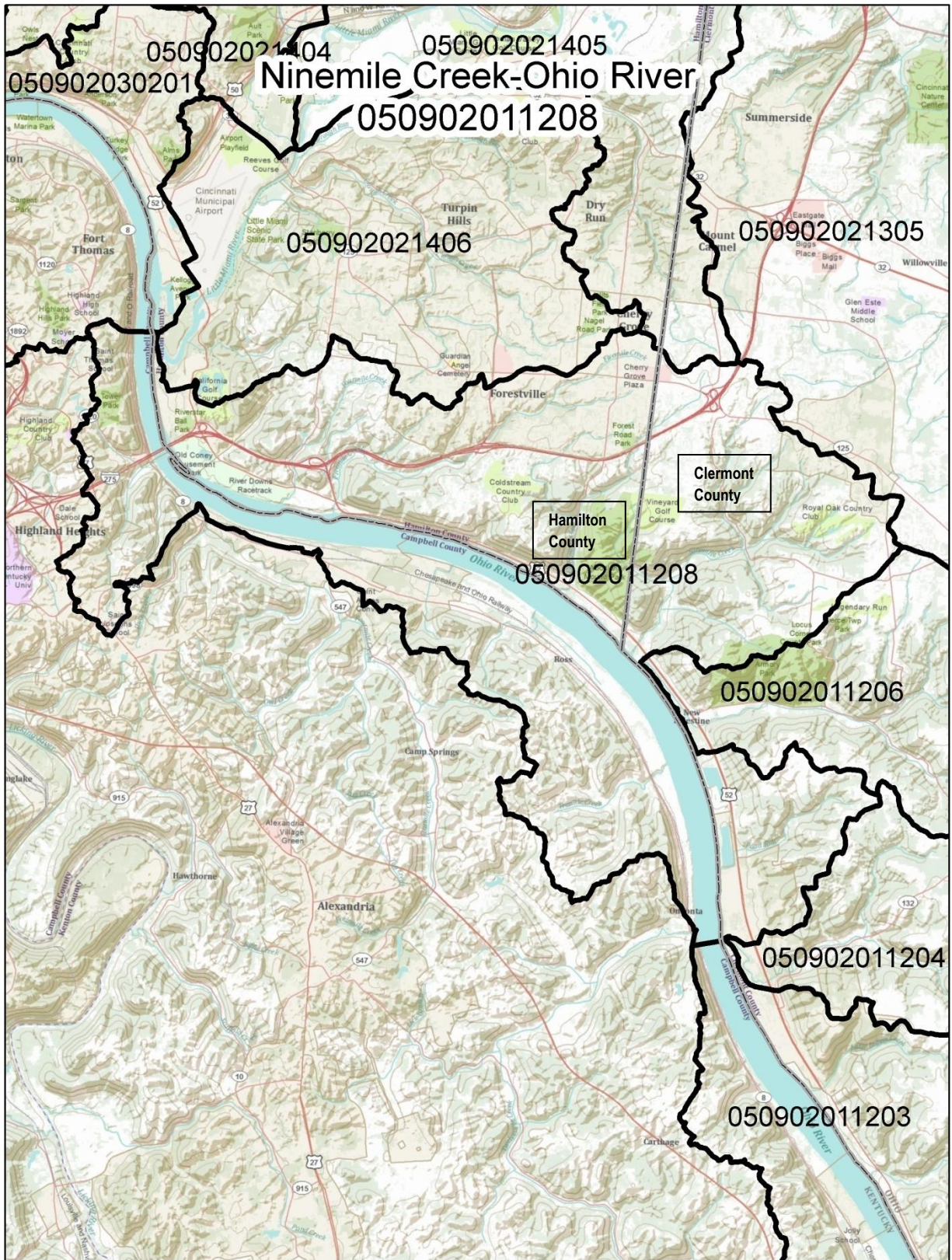
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Amelia

**Facility Planning Area (FPA) or Areas:** Nine Ten Mile FPA, New Richmond FPA (edges), Middle East Fork (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 41.6 square miles  
**Priority Points:** 4

**Monitoring Scheduled:** 2016  
**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 37.2%    **Forest:** 52.1%    **Grass/Pasture:** 8.4%    **Row Crops:** 1.5%    **Other:** 0.8%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1997

**Watershed Score:** 75.0

**Causes of Impairment:**

- cause unknown

**Sources of Impairment:**

- cause unknown

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

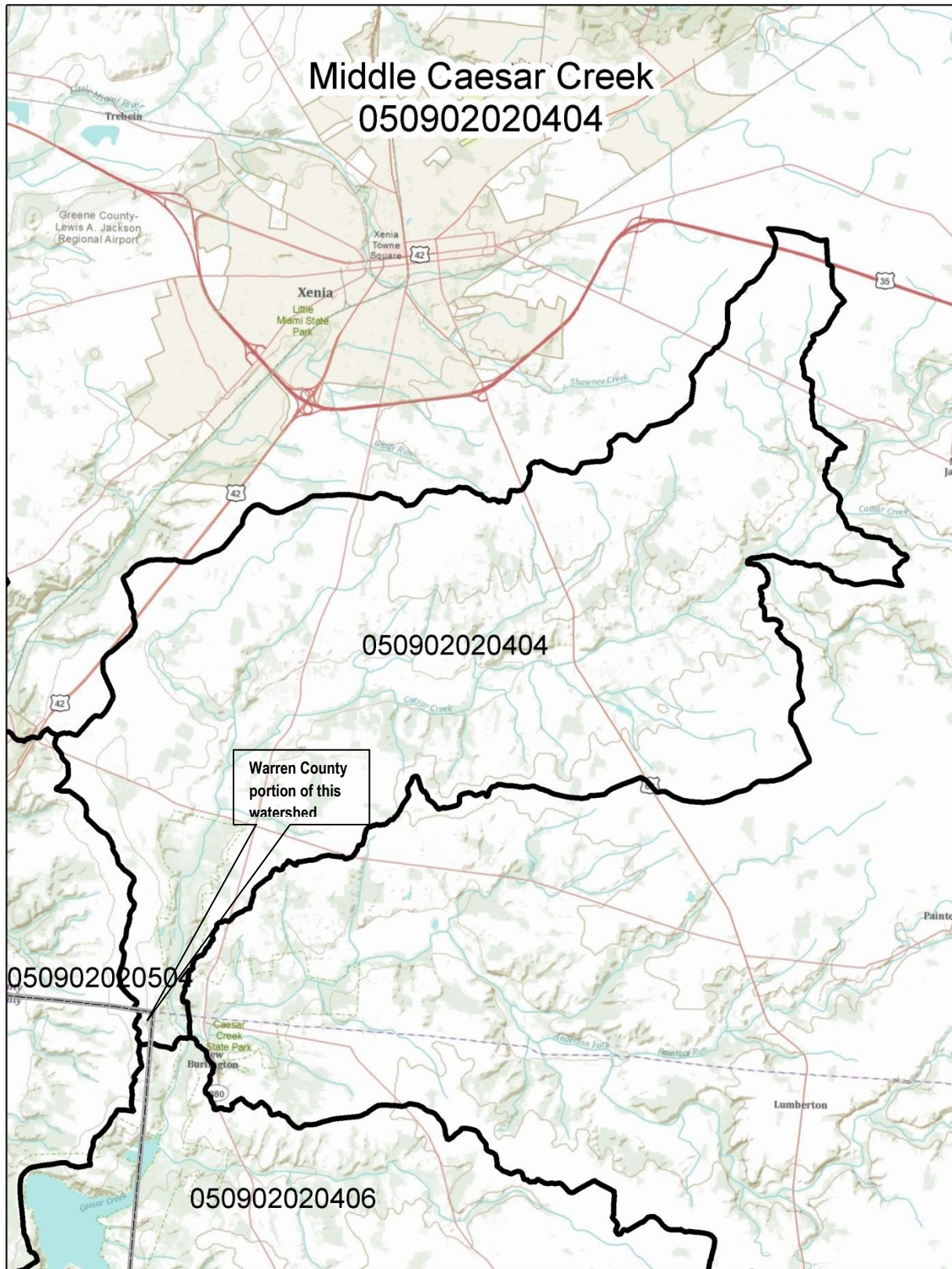
**County or Counties of the OKI Region in the Watershed:** Clermont, Hamilton

**Municipalities of the OKI Region:** City of Cincinnati (California neighborhood)

**Facility Planning Area (FPA) or Areas:** Nine Ten Mile FPA, Little Miami FPA, Middle East Fork (tip), Lower East Fork FPA (small tip)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 30.1 square miles

**Priority Points:** 2

**Monitoring Scheduled:** 2011

**TMDL Scheduled:** 2014

## Land Use Statistics

**Developed:** 4.9%    **Forest:** 15.6%    **Grass/Pasture:** 13.6%    **Row Crops:** 65.7%    **Other:** 0.2%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1998

**Watershed Score:** 77.0

**Causes of Impairment:**

- cause unknown
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- feedlots (confined animal feeding operations)
- land development/suburbanization
- nonirrigated crop production
- onsite wastewater systems (septic tanks)
- source unknown

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

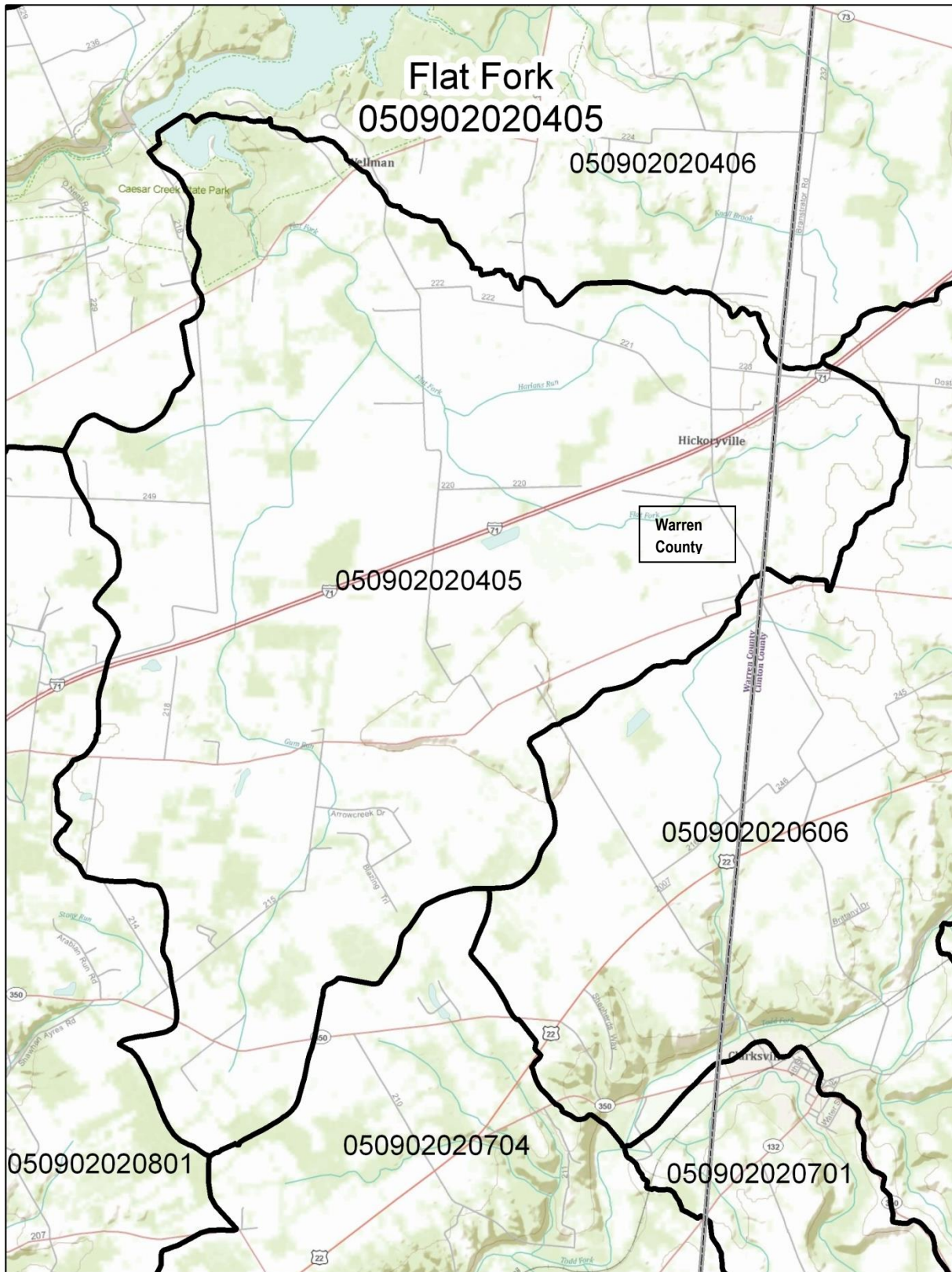
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Caesar Creek FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 16.8 square miles

**Priority Points:** 2

**Monitoring Scheduled:** 2011

**TMDL Scheduled:** 2014

## Land Use Statistics

**Developed:** 5.7%    **Forest:** 18.1%    **Grass/Pasture:** 9.9%    **Row Crops:** 65.9%    **Other:** 0.4%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1998

**Watershed Score:** 77.0

**Causes of Impairment:**

- cause unknown
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- feedlots (confined animal feeding operations)
- land development/suburbanization
- nonirrigated crop production
- onsite wastewater systems (septic tanks)
- source unknown

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

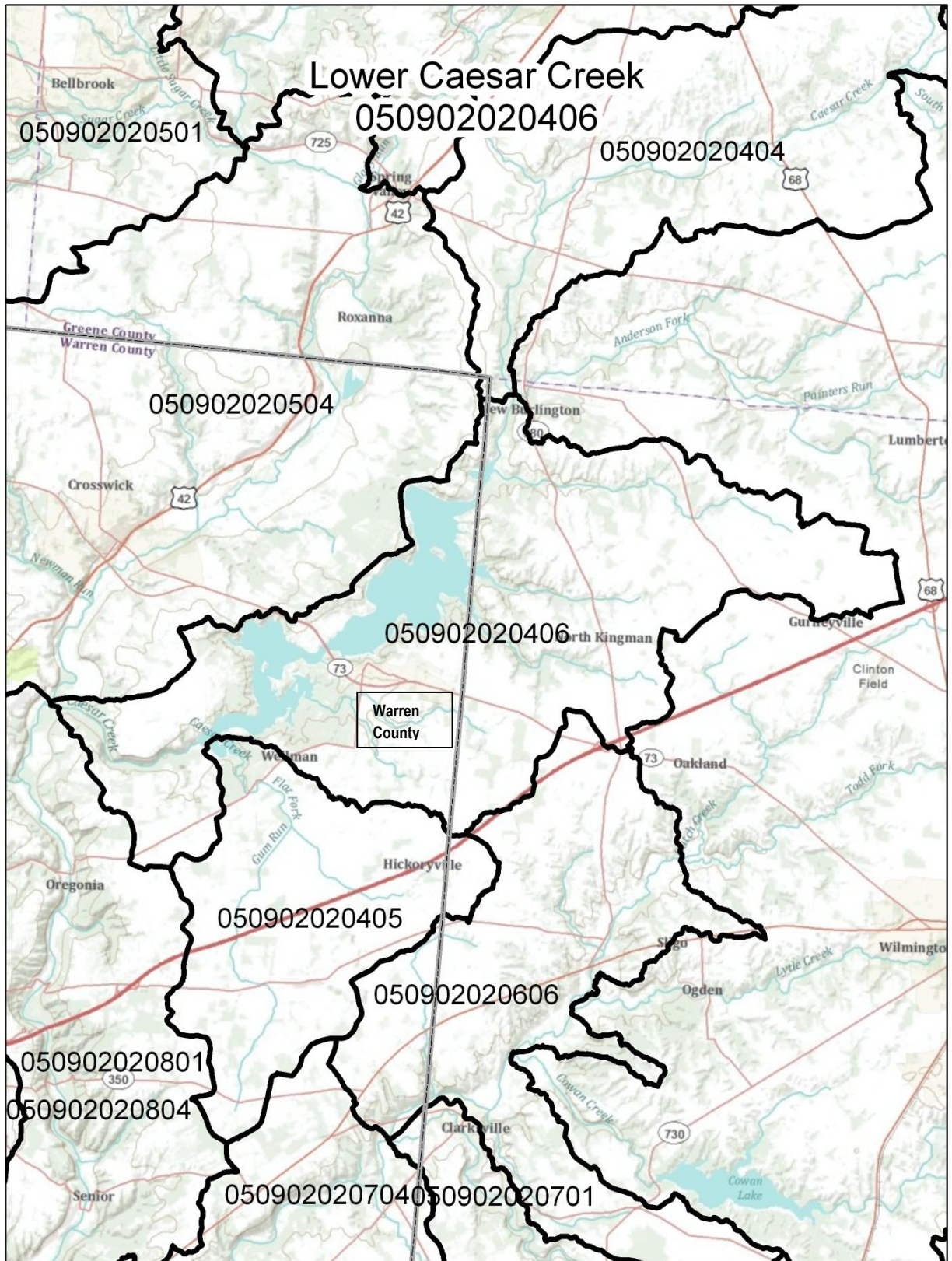
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Caesar Creek FPA, Butlerville FPA (edges), Fort Ancient FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 41.2 square miles

**Priority Points:** 2

**Monitoring Scheduled:** 2011

**TMDL Scheduled:** 2014

## Land Use Statistics

**Developed:** 6.5%   **Forest:** 32.5%   **Grass/Pasture:** 14.1%   **Row Crops:** 45.9%   **Other:** 1.0%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1998

**Watershed Score:** 77.0

**Causes of Impairment:**

- cause unknown
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- feedlots (confined animal feeding operations)
- land development/suburbanization
- nonirrigated crop production
- onsite wastewater systems (septic tanks)
- source unknown

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** 3i (use attainment unknown; insufficient data)

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1 (use attaining)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

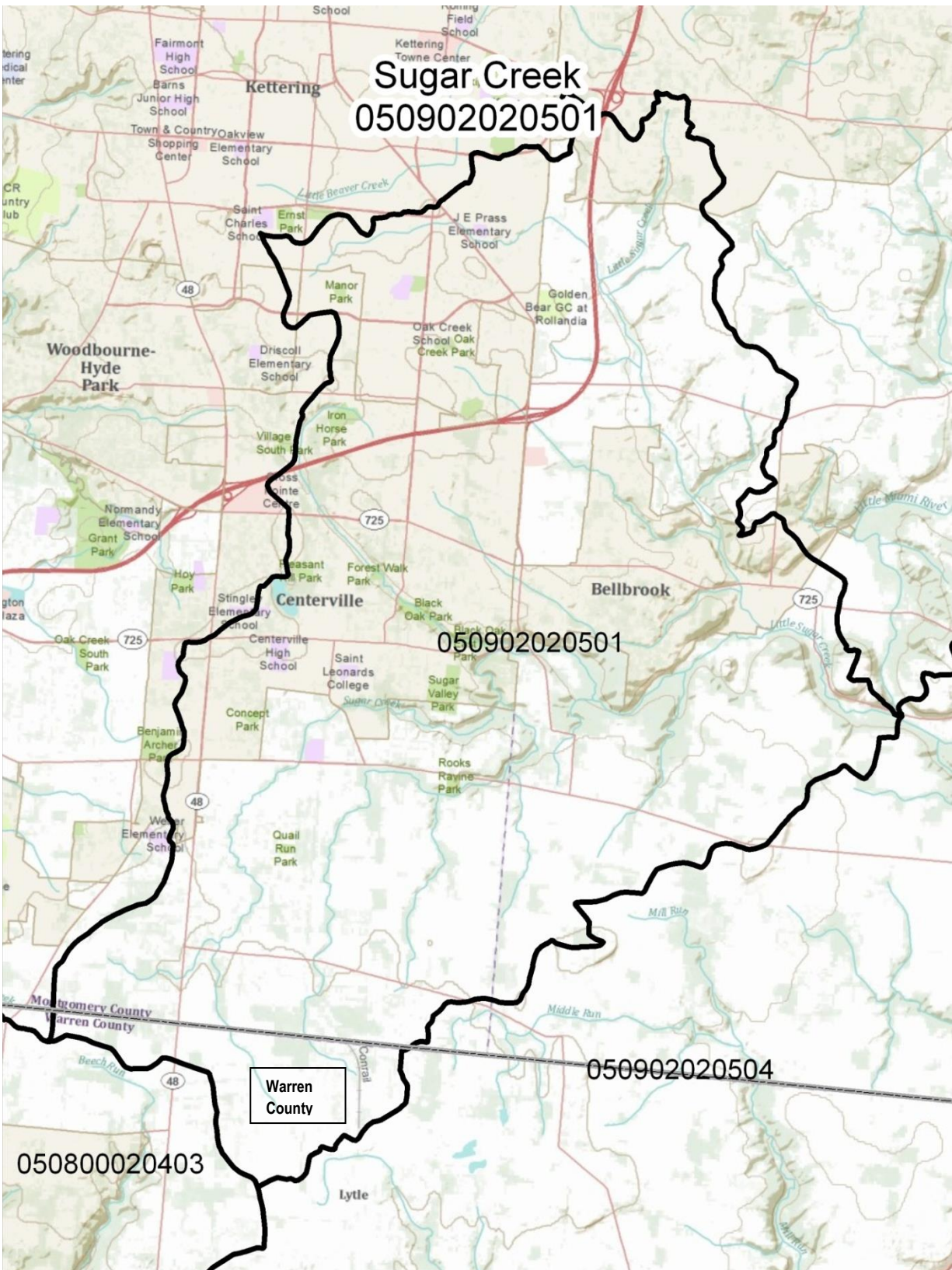
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** Village of Harveysburg

**Facility Planning Area (FPA) or Areas:** Caesar Creek FPA, Fort Ancient FPA (small tip)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 33.8 square miles

**Priority Points:** 2

**Monitoring Scheduled:** 2011

**TMDL Scheduled:** 2014

## Land Use Statistics

**Developed:** 62.0%    **Forest:** 16.4%    **Grass/Pasture:** 9.3%    **Row Crops:** 12.2%    **Other:** 0.1%

### **Aquatic Life Assessment**

**Reporting Category:** 4Ax (impaired; TMDL not needed; TMDL complete; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1998

**Watershed Score:** 63.0

**Causes of Impairment:**

- chlorine
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- suspended solids
- unionized ammonia

**Sources of Impairment:**

- major municipal point source
- minor municipal point source
- natural

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Montgomery FPA, Caesar Creek FPA (small edges), Springboro FPA (small edges)

**Onsite Wastewater Treatment System Concentration(s):** none

[illegible]

## Monitoring Scheduled: 2011

**TMDL Scheduled: 2014**

**Developed: 9.5%**    **Forest: 29.1%**    **Grass/Pasture: 24.0%**    **Row Crops: 36.5%**    **Other: 0.8%**

### **Aquatic Life Assessment**

**Reporting Category:** 1 (use attaining)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 100.0

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 1 (use attaining)

**Assessment Unit Score:** 100

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** PCBs (polychlorinated biphenyls measured at 64 parts per billion)

### **Basic Geography (as defined by OKI)**

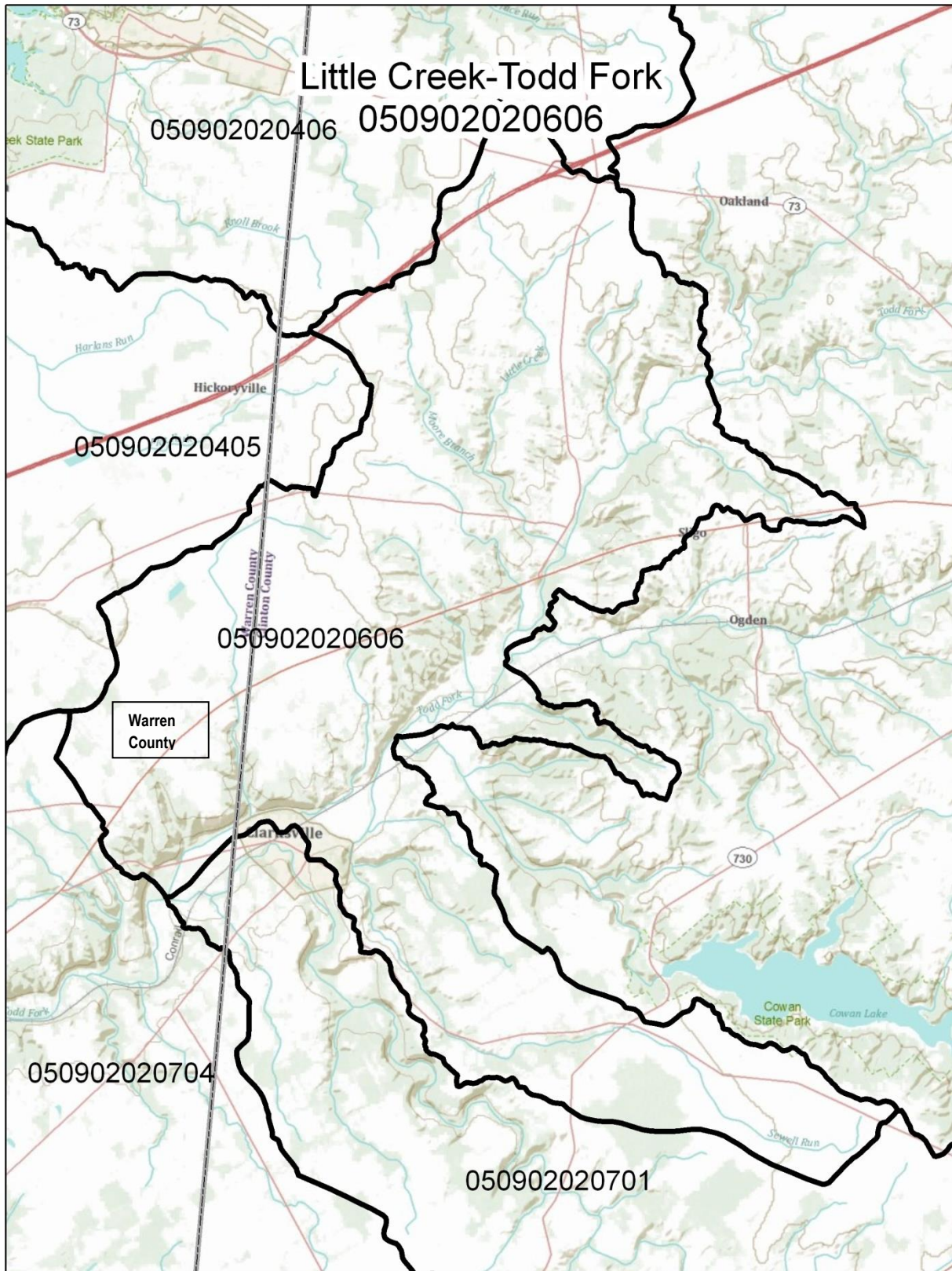
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** Village of Waynesville, Village of Corwin

**Facility Planning Area (FPA) or Areas:** Caesar Creek FPA, Fort Ancient FPA (top), Springboro FPA (edges), Montgomery FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 24.4 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 6.3%   **Forest:** 33.5%   **Grass/Pasture:** 11.1%   **Row Crops:** 48.9%   **Other:** 0.2%

### **Aquatic Life Assessment**

**Reporting Category:** 1 (use attaining)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 100.0

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 1 (use attaining)

**Assessment Unit Score:** 100

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

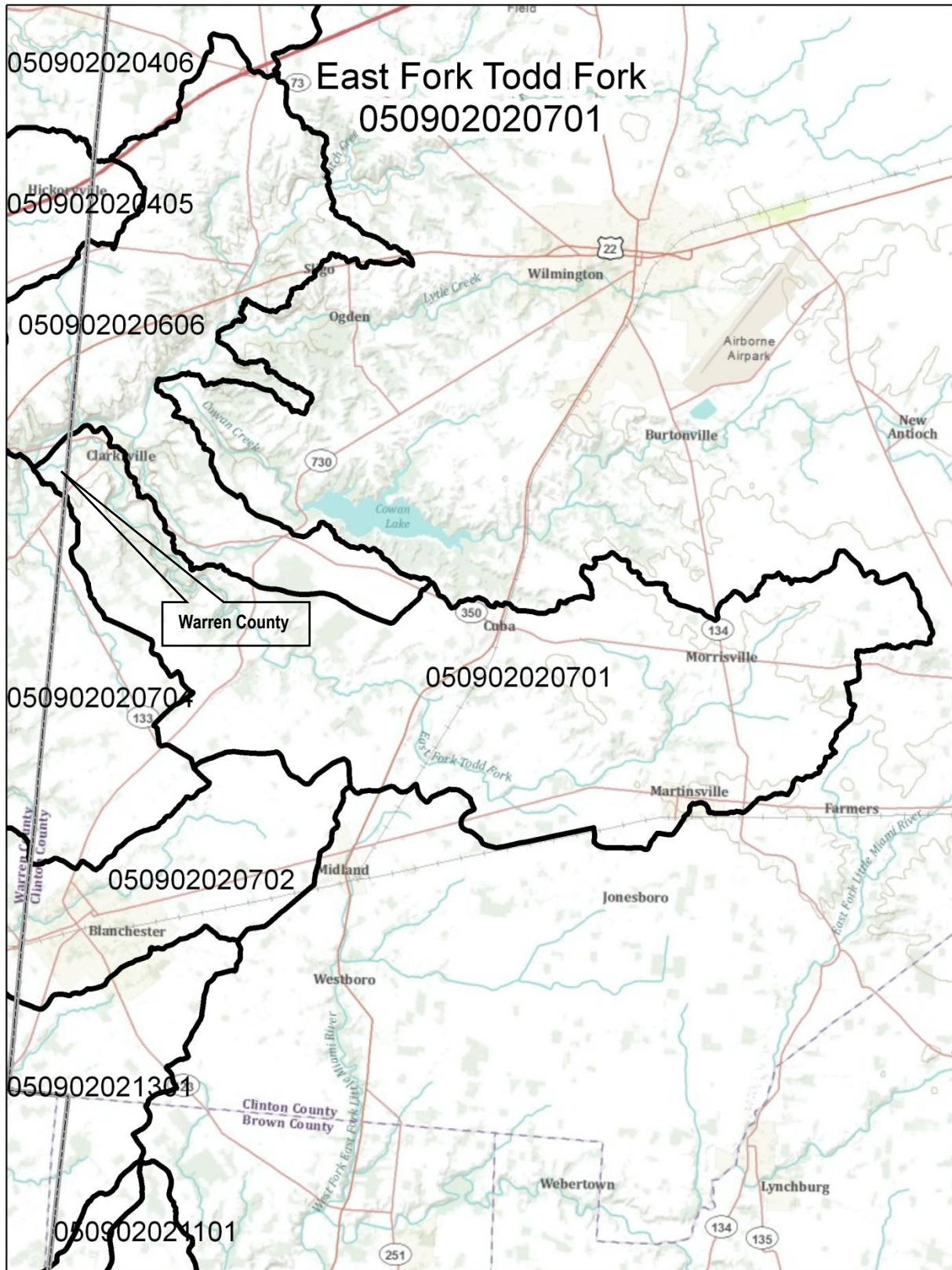
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Butlerville FPA, Caesar Creek FPA (small tip)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 39.6 square miles

**Priority Points:** 2

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 5.4%    **Forest:** 20.2%    **Grass/Pasture:** 7.1%    **Row Crops:** 67.4%    **Other:** 0.0%

### **Aquatic Life Assessment**

**Reporting Category:** 4n (impaired; TMDL not needed; natural causes and sources)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 50.0

**Causes of Impairment:**

- natural conditions (flow or habitat)

**Sources of Impairment:**

- natural sources

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Assessment Unit Score:** 92

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

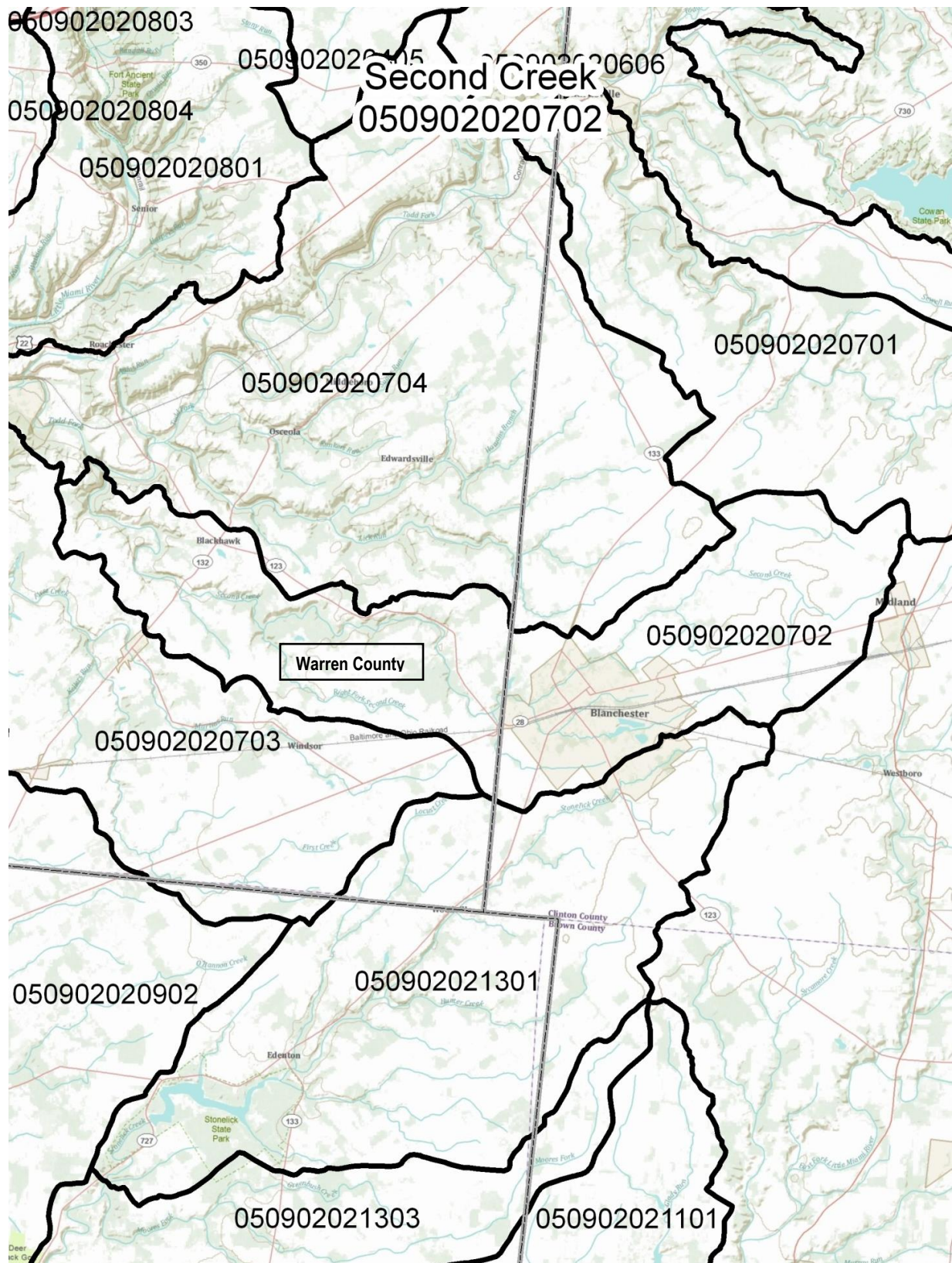
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Butlerville FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 20 square miles

**Priority Points:** 10

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 9.4%    **Forest:** 24.3%    **Grass/Pasture:** 14.6%    **Row Crops:** 51.3%    **Other:** 0.4%

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 50.0

**Causes of Impairment:**

- nutrient/eutrophication biological indicators
- organic enrichment (sewage) biological indicators
- sedimentation/siltation

**Sources of Impairment:**

- agriculture
- municipal point source discharges
- sanitary sewer overflows (collection system failures)
- unpermitted discharge (domestic wastes)

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Assessment Unit Score:** 88

### **Public Drinking Water Supply Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Cause of Impairment:** pesticides (atrazine)

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Butlerville FPA, Morrow FPA

**Onsite Wastewater Treatment System Concentration(s):** none

A topographic map of Warren County, Ohio, with precinct boundaries outlined in thick black lines. The map includes various geographical features such as roads, rivers, and creeks. Precinct names and their corresponding numbers are labeled within the map area. The precincts shown are:

- 050902020804
- 050902020803
- 050902020703
- 050902020704
- 050902020903
- 050902020702
- 050902020703
- 050902020902
- 050902021301

The map also shows the locations of several towns and cities, including: Senior, Roadster, Middleboro, Osceola, Edwardsville, Blackhawk, Windsor, and Edenton. The map is titled "Warren County" in the center, and "Clermont County" is labeled in the bottom right corner. The map is oriented with North at the top.

**Monitoring Scheduled: 2022**

**TMDL Scheduled: 2010**

**Developed: 6.8%**    **Forest: 26.8%**    **Grass/Pasture: 22.6%**    **Row Crops: 41.7%**    **Other: 2.0%**

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 0.0

**Causes of Impairment:**

- impairment unknown

**Sources of Impairment:**

- source unknown

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

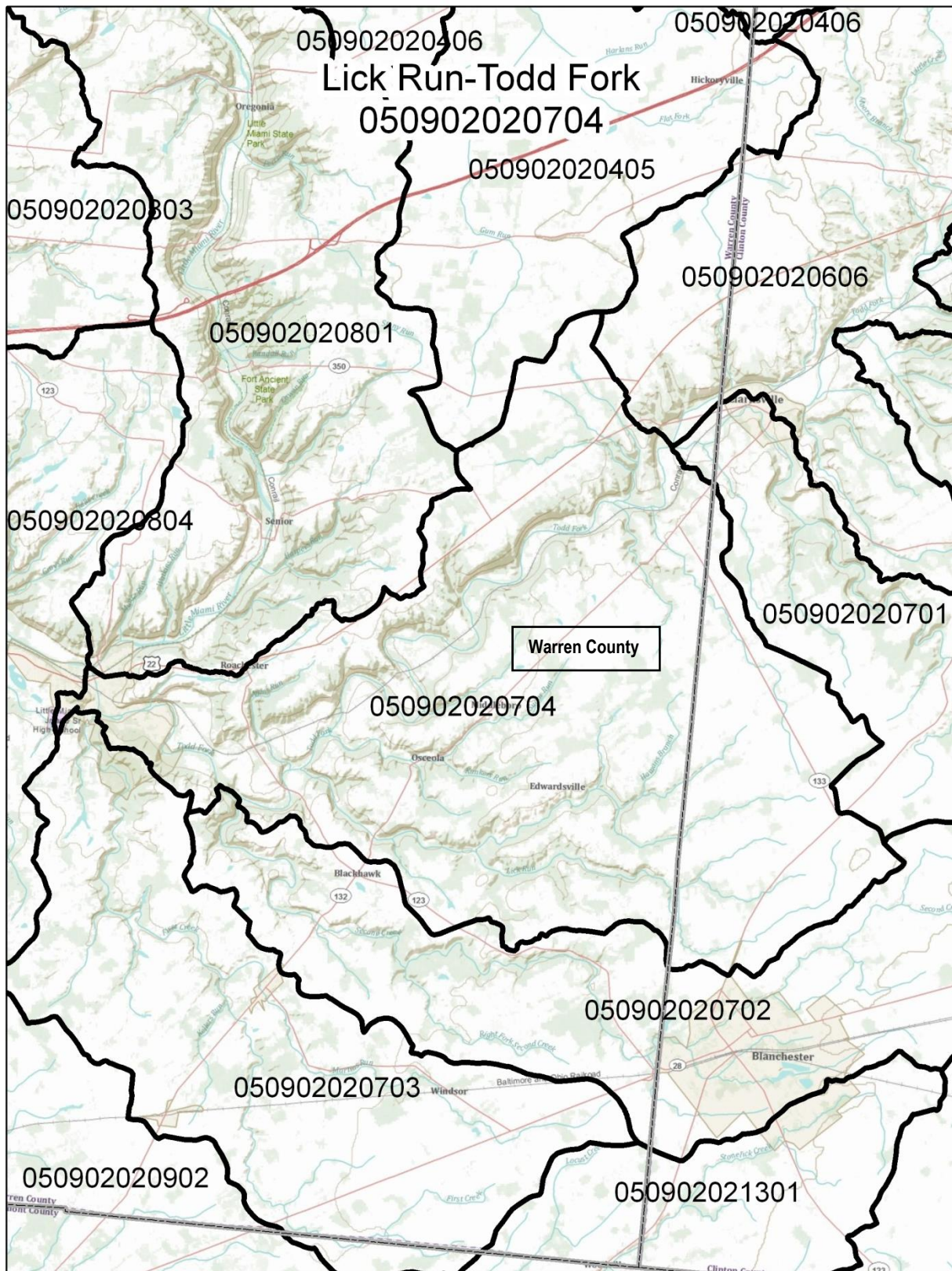
**County or Counties of the OKI Region in the Watershed:** Warren, Clermont

**Municipalities of the OKI Region:** Village of Morrow, Village of Butlerville, Village of Pleasant Plain

**Facility Planning Area (FPA) or Areas:** Butlerville FPA, Morrow FPA, Upper East Fork FPA, North O'Bannon Creek FPA (edges), Lower Little Miami FPA (small tip)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 35.7 square miles

**Priority Points:** 2

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 5.8%   **Forest:** 41.1%   **Grass/Pasture:** 17.0%   **Row Crops:** 35.4%   **Other:** 0.8%

### **Aquatic Life Assessment**

**Reporting Category:** 1 (use attaining)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 100.0

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

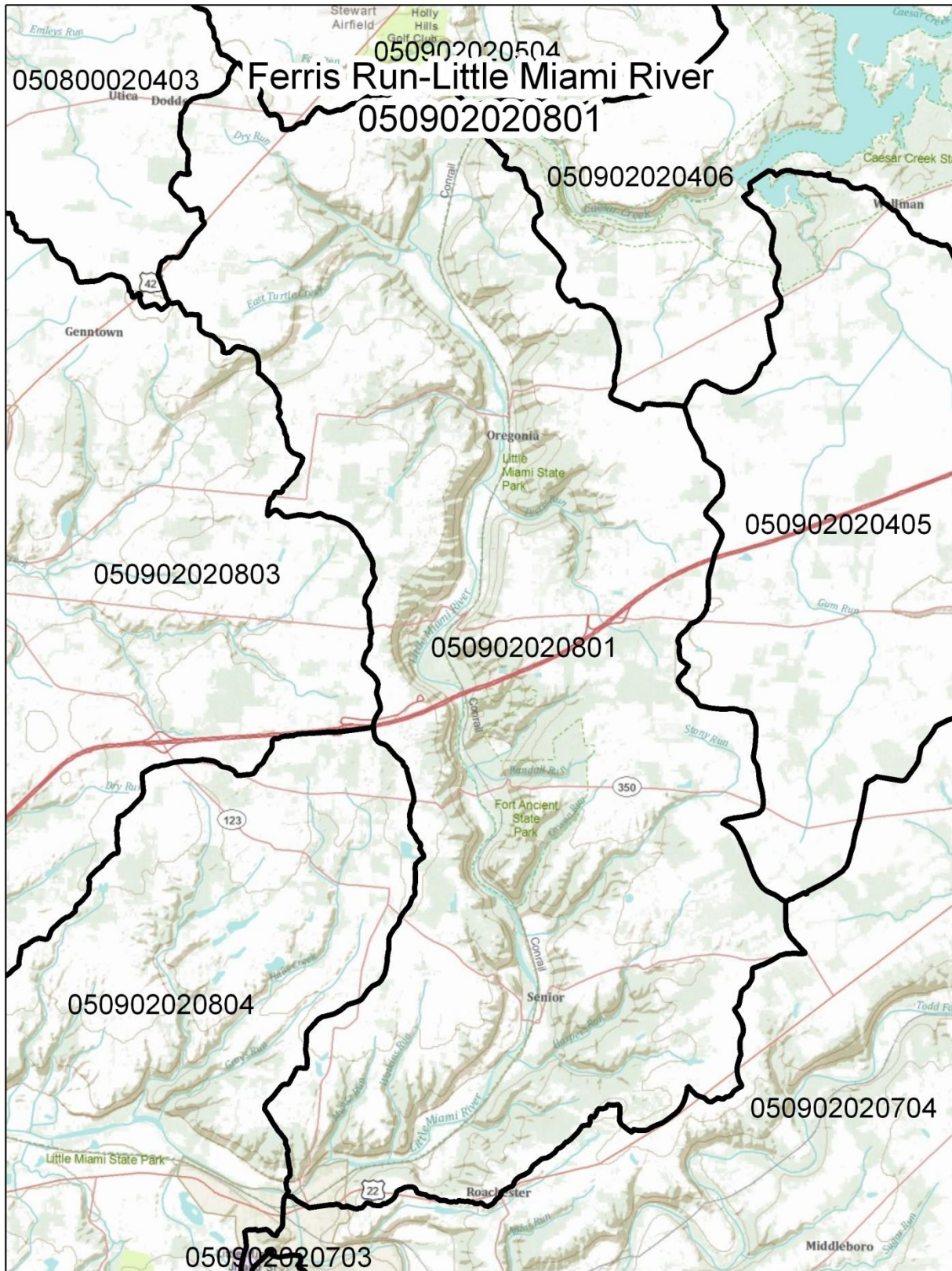
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** Village of Morrow

**Facility Planning Area (FPA) or Areas:** Butlerville FPA, Morrow FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 30.2 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 7.6%    **Forest:** 49.9%    **Grass/Pasture:** 22.1%    **Row Crops:** 18.9%    **Other:** 1.6%

### **Aquatic Life Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Aquatic Life Uses:** not designated

**Sampling Year or Years:** none listed

**Watershed Score:** not calculated

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

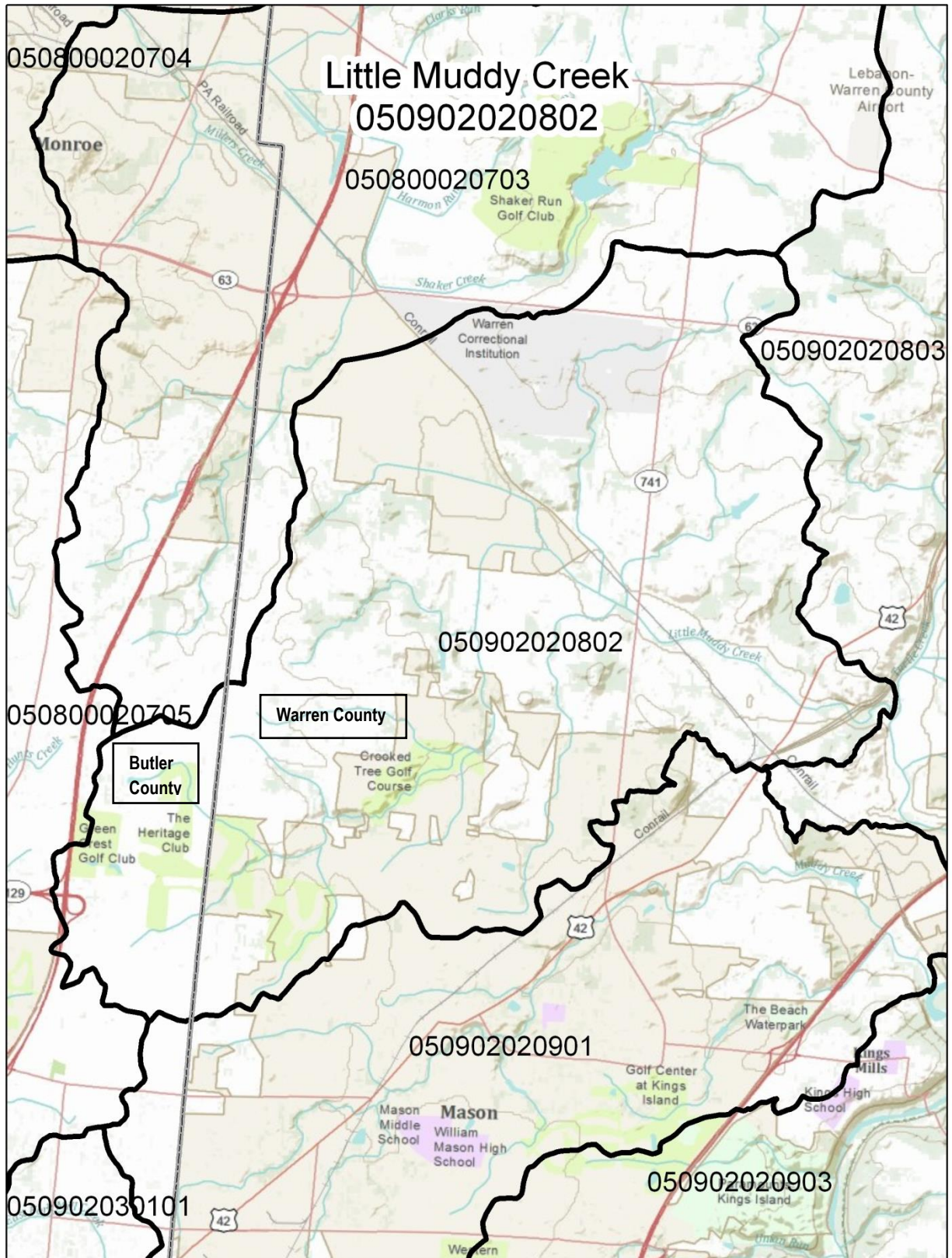
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** Village of Morrow (north edge)

**Facility Planning Area (FPA) or Areas:** Fort Ancient FPA, Butlerville FPA (edges), Morrow FPA (edges), Southwest Warren County FPA (edges), Springboro FPA (edges), Caesar Creek FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 20.6 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 29.3%    **Forest:** 14.8%    **Grass/Pasture:** 22.4%    **Row Crops:** 33.2%    **Other:** 0.4%

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 50.0

**Causes of Impairment:**

- sedimentation/siltation

**Sources of Impairment:**

- channelization

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

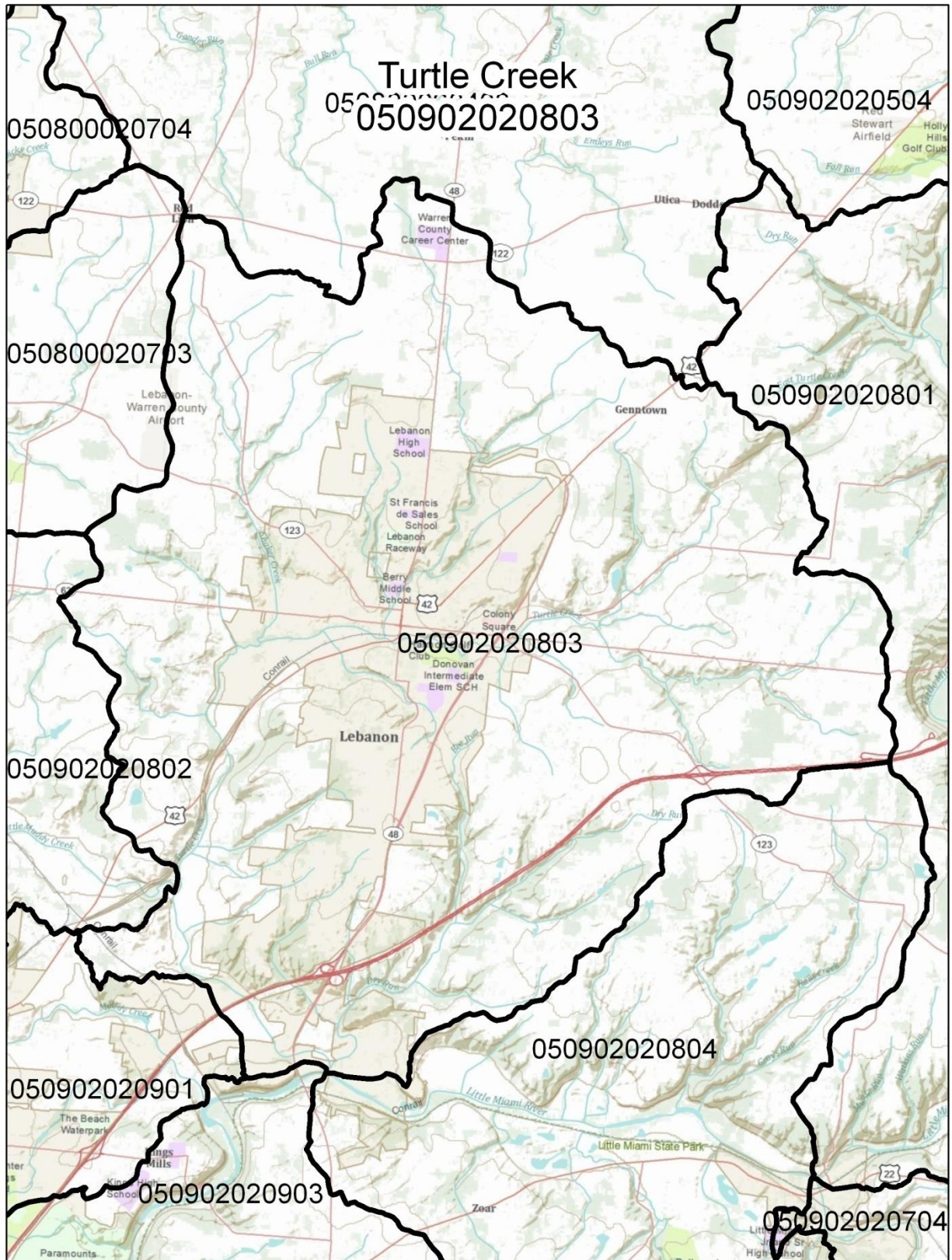
**County or Counties of the OKI Region in the Watershed:** Warren, Butler

**Municipalities of the OKI Region:** City of Mason, City of Monroe, City of Lebanon (southern tip)

**Facility Planning Area (FPA) or Areas:** Southwest Warren County FPA, Monroe FPA (edges), LeSourdsville FPA (small tips)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 44.9 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 28.9%    **Forest:** 23.7%    **Grass/Pasture:** 31.6%    **Row Crops:** 15.1%    **Other:** 0.7%

### **Aquatic Life Assessment**

**Reporting Category:** 4n (impaired; TMDL not needed; natural causes and sources)

**Aquatic Life Uses:** CWH, WWH (coldwater habitat, warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 83.3

**Causes of Impairment:**

- natural conditions (flow or habitat)

**Sources of Impairment:**

- natural sources

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 1 (use attaining)

**Assessment Unit Score:** 100

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

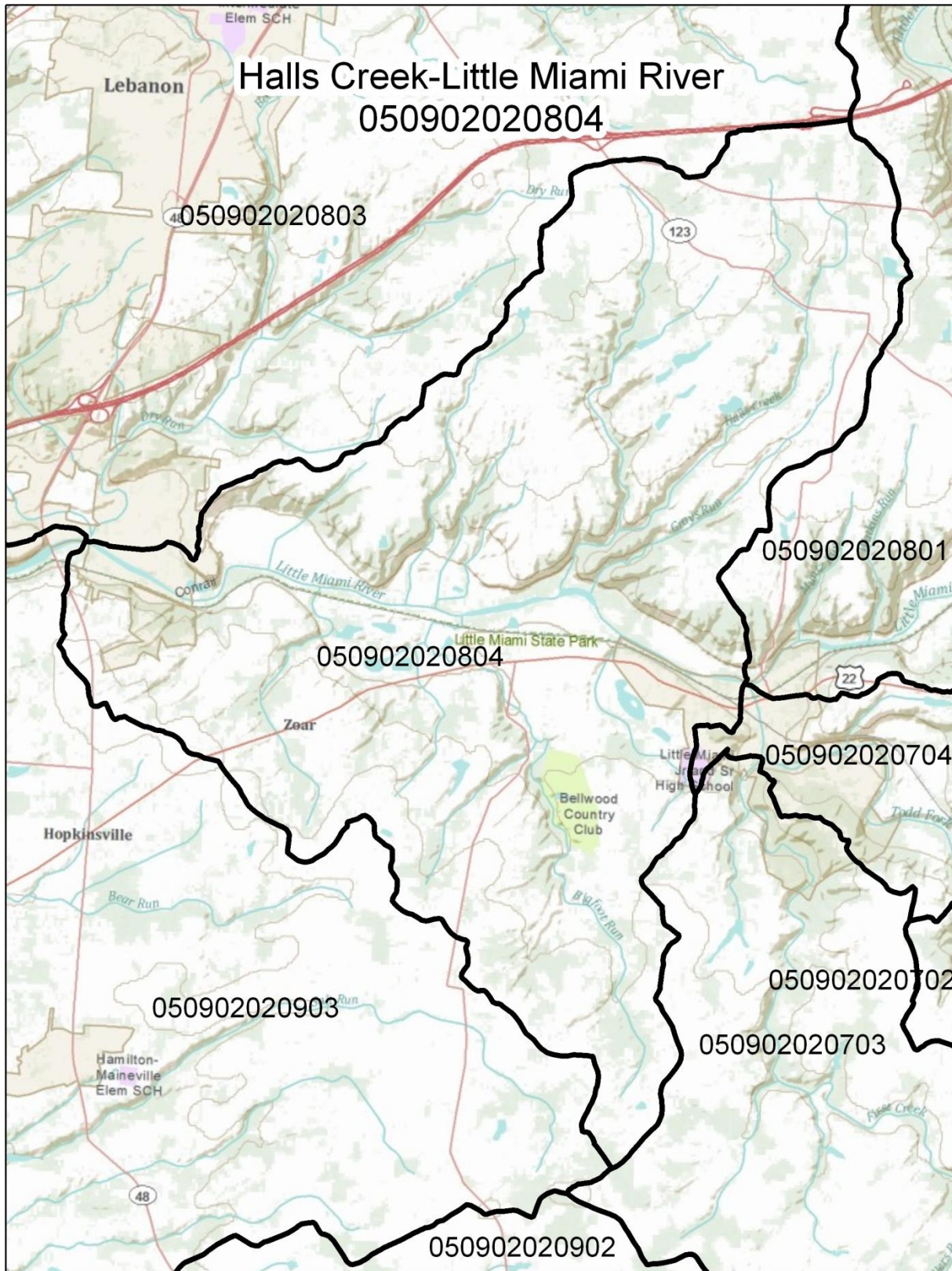
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** City of Lebanon, Village of South Lebanon

**Facility Planning Area (FPA) or Areas:** Southwest Warren County FPA, Monroe FPA (edges), Fort Ancient FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** Turtlecreek Township, at U.S. 42 and Hatfield Road in the Genntown community

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 20.5 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 16.9%    **Forest:** 35.4%    **Grass/Pasture:** 32.8%    **Row Crops:** 12.9%    **Other:** 2.0%

### **Aquatic Life Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Aquatic Life Uses:** not designated

**Sampling Year or Years:** none listed

**Watershed Score:** not calculated

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

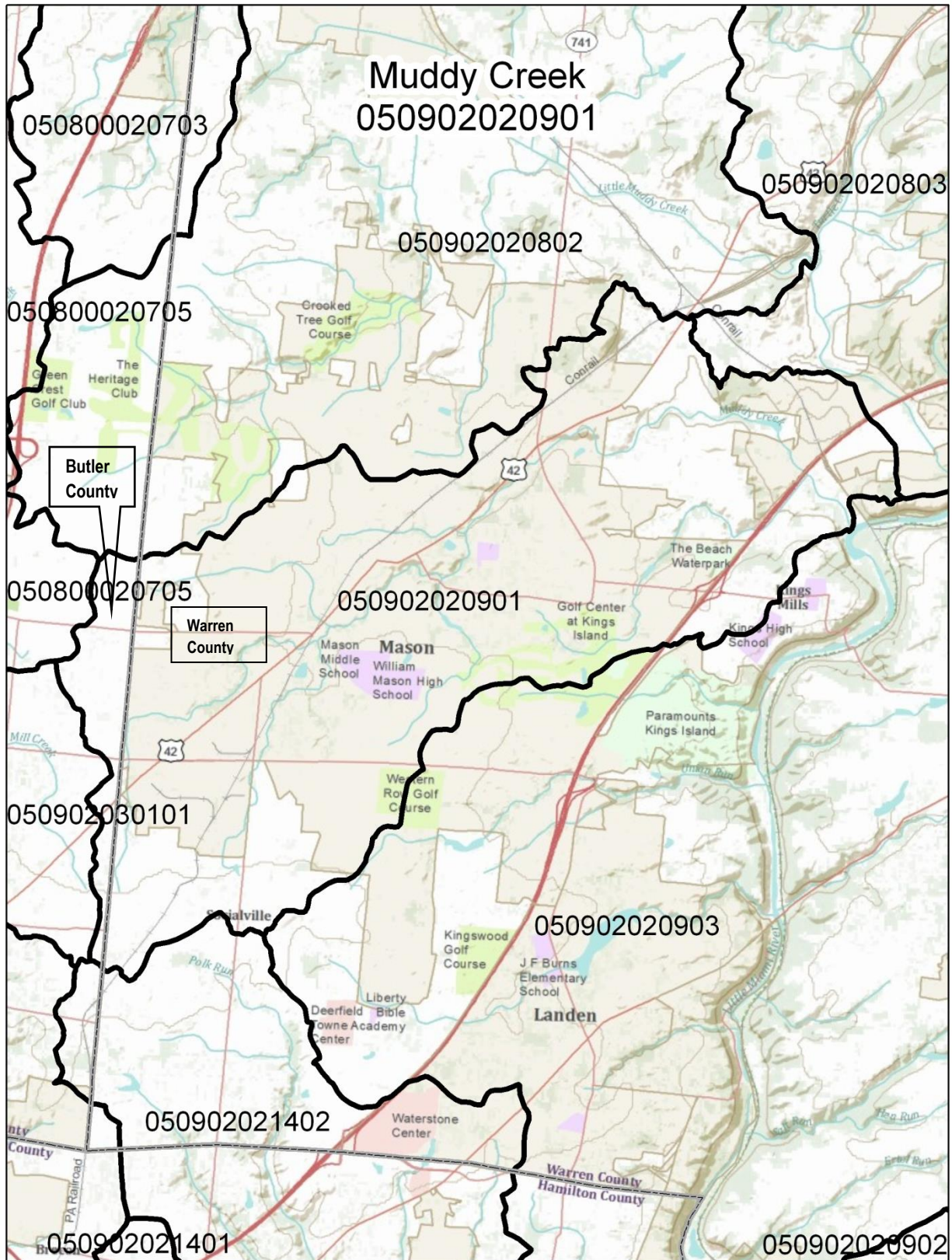
**County or Counties of the OKI Region in the Watershed:** Warren

**Municipalities of the OKI Region:** Village of Morrow, Village of South Lebanon

**Facility Planning Area (FPA) or Areas:** Fort Ancient FPA, Lower Little Miami FPA, Southwest Warren County FPA, Butlerville FPA (edge), Morrow FPA (tip)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 15.9 square miles

**Priority Points:** 5

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 69.3%    **Forest:** 7.9%    **Grass/Pasture:** 12.6%    **Row Crops:** 10.0%    **Other:** 0.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 0.0

**Causes of Impairment:**

- natural conditions (flow or habitat)
- nutrient/eutrophication biological indicators
- organic enrichment (sewage) biological indicators
- sedimentation/siltation

**Sources of Impairment:**

- municipal point source discharges
- natural sources

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Assessment Unit Score:** 75

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

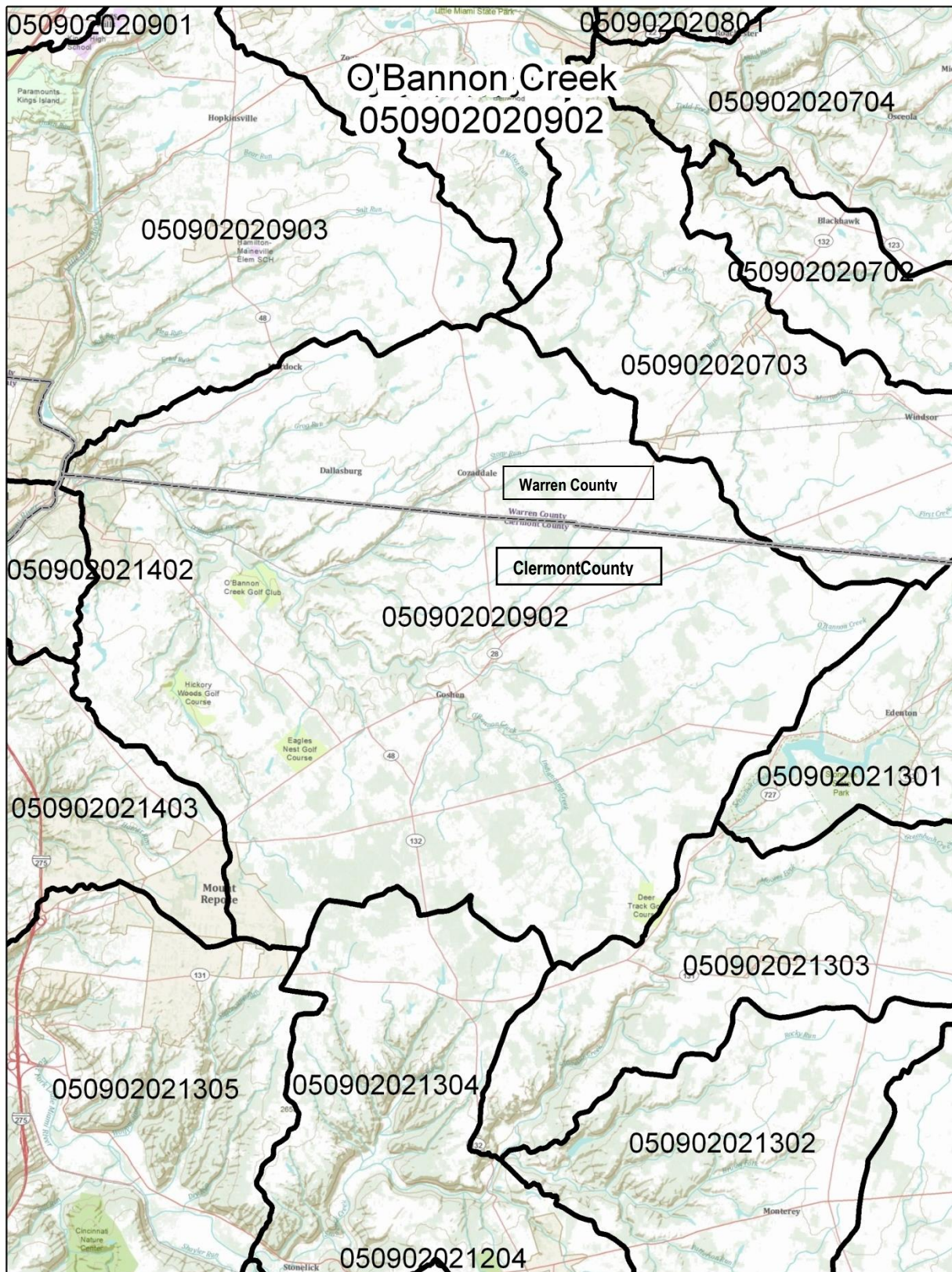
**County or Counties of the OKI Region in the Watershed:** Warren, Butler

**Municipalities of the OKI Region:** City of Mason, City of Lebanon, Village of South Lebanon (tip)

**Facility Planning Area (FPA) or Areas:** Southwest Warren County FPA, Upper Mill Creek FPA (edges), Lower Little Miami FPA (edges), Polk Run Sycamore Creek FPA (tips), LeSourdsville FPA (tip)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 59.3 square miles

**Priority Points:** 0

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 17.1%   **Forest:** 37.3%   **Grass/Pasture:** 21.7%   **Row Crops:** 22.6%   **Other:** 1.3%

### **Aquatic Life Assessment**

**Reporting Category:** 4 (impaired; TMDL not needed; natural causes and sources)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 50.0

**Causes of Impairment:**

- natural conditions (flow or habitat)

**Sources of Impairment:**

- natural sources

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 1 (use attaining)

**Assessment Unit Score:** 100

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3i (use attainment unknown; insufficient data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

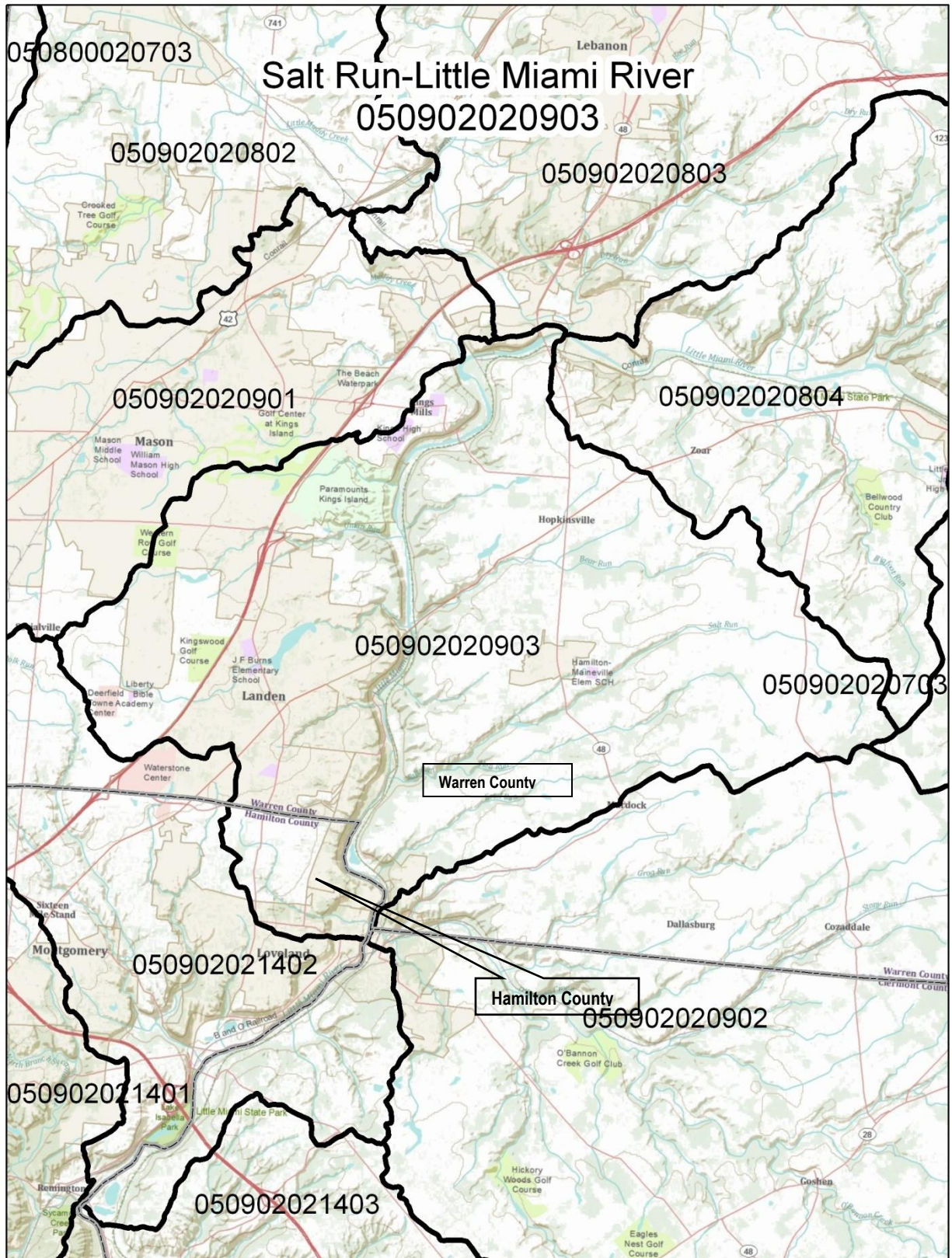
**County or Counties of the OKI Region in the Watershed:** Warren, Clermont

**Municipalities of the OKI Region:** City of Loveland

**Facility Planning Area (FPA) or Areas:** O'Bannon Creek FPA, North O'Bannon Creek FPA, Loveland FPA, Lower Little Miami FPA (edges), Horner Run Branch Hill FPA (small edge), Lower East Fork FPA (tip), Stonelick FPA (small edges), Butlerville FPA (small edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 35.3 square miles

**Priority Points:** 2

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 40.4%    **Forest:** 27.9%    **Grass/Pasture:** 17.0%    **Row Crops:** 13.8%    **Other:** 0.8%

### **Aquatic Life Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Aquatic Life Uses:** not designated

**Sampling Year or Years:** none listed

**Watershed Score:** not calculated

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** polychlorinated biphenyls (PCBs at 95 parts per billion)

### **Basic Geography (as defined by OKI)**

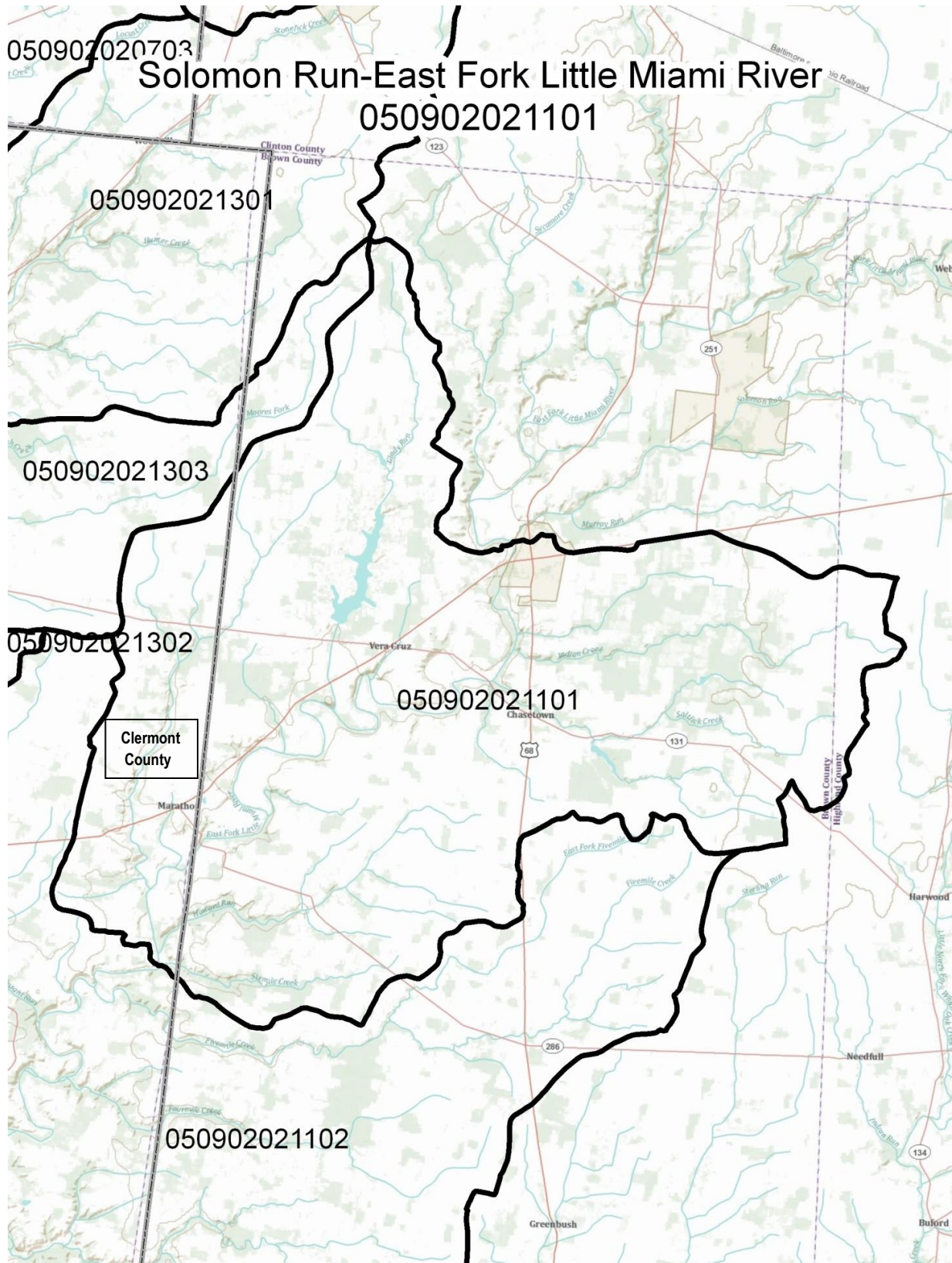
**County or Counties of the OKI Region in the Watershed:** Warren, Hamilton

**Municipalities of the OKI Region:** City of Mason, City of Loveland (small parts)

**Facility Planning Area (FPA) or Areas:** Lower Little Miami FPA, Southwest Warren County FPA, Loveland FPA, North O'Bannon Creek FPA (edges), Loveland FPA, (edges), Polk Run Sycamore Creek FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 43 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 7.0%    **Forest:** 27.7%    **Grass/Pasture:** 11.4%    **Row Crops:** 53.5%    **Other:** 0.4%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1996, 1997, 1998

**Watershed Score:** 2.0

**Causes of Impairment:**

- cause unknown
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- nonirrigated crop production
- onsite wastewater systems (septic tanks)
- source unknown

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

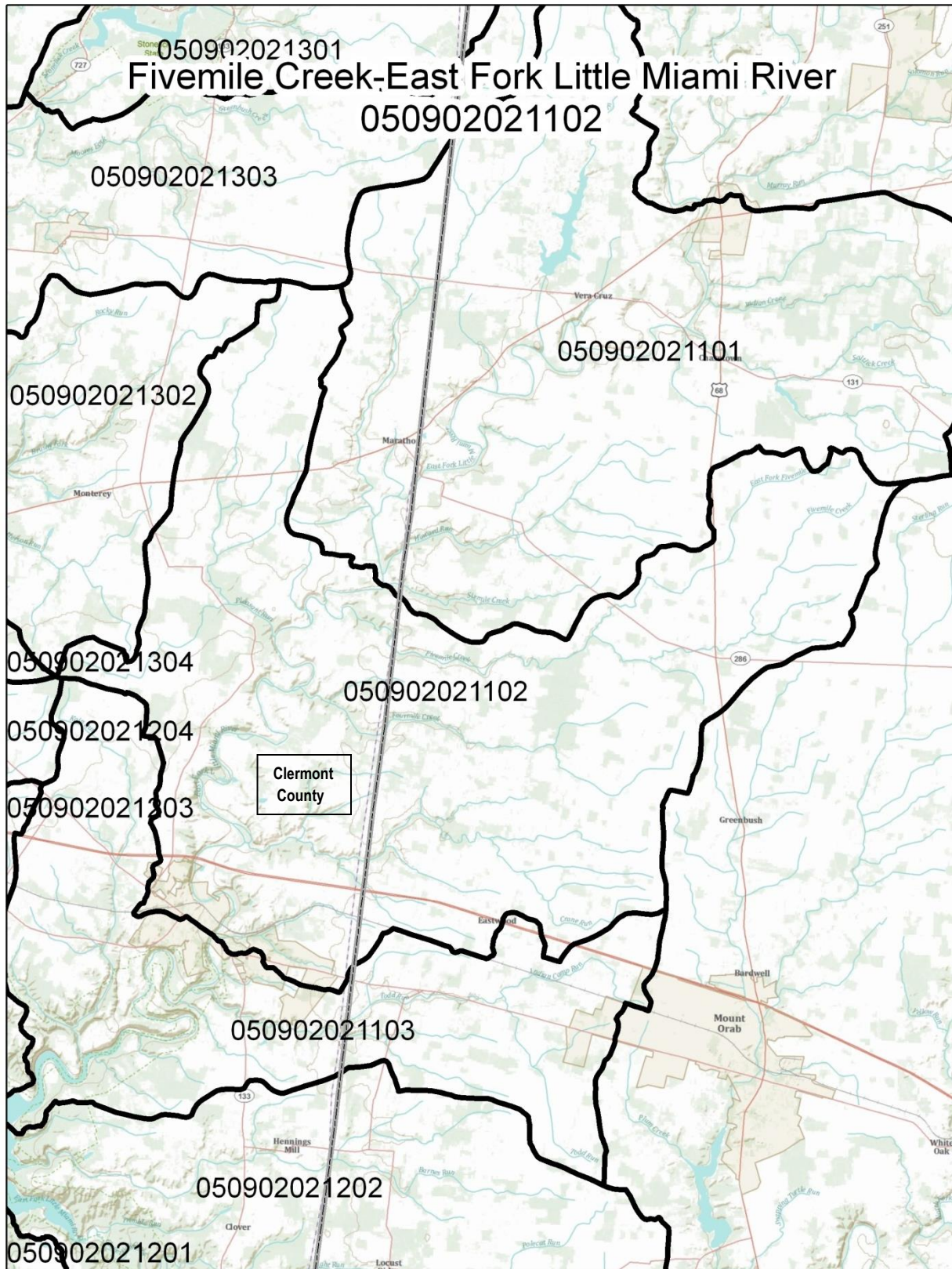
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Upper East Fork FPA

**Onsite Wastewater Treatment System Concentration(s):** none

## Watershed Assessment Unit Summary



**Assessment Unit Size:** 42.6 square miles

### Priority Points: 1

### Monitoring Scheduled: 2012

**TMDL Scheduled: 2015**

## Land Use Statistics

**Developed: 7.0%**   **Forest: 26.5%**   **Grass/Pasture: 9.9%**   **Row Crops: 56.2%**   **Other: 0.4%**

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1996, 1997, 1998

**Watershed Score:** 2.0

**Causes of Impairment:**

- cause unknown
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- nonirrigated crop production
- onsite wastewater systems (septic tanks)
- source unknown

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

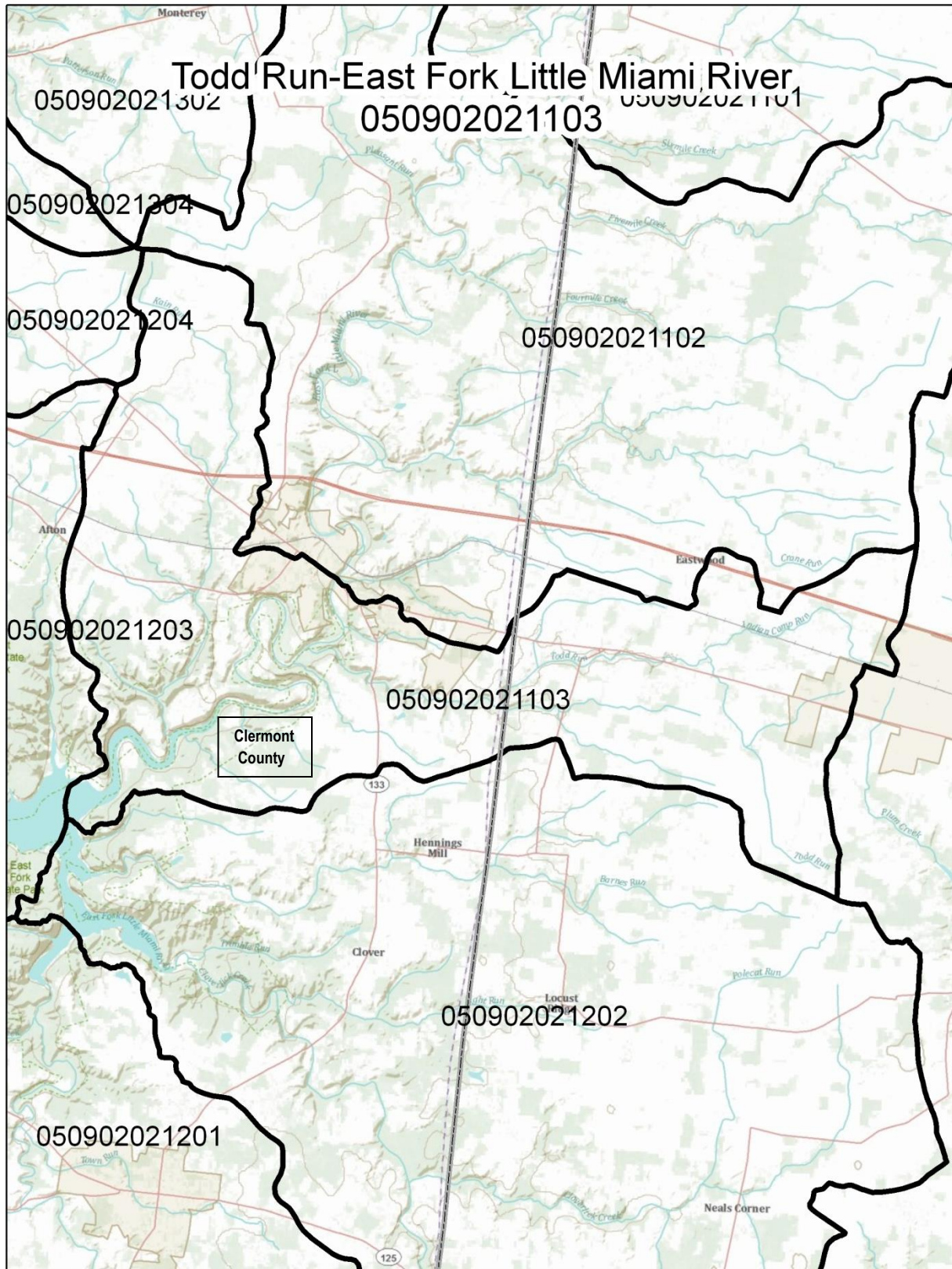
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Williamsburg

**Facility Planning Area (FPA) or Areas:** Upper East Fork FPA, Williamsburg FPA, Middle East Fork FPA (edges), Stonelick FPA (tips)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 21 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 10.0%    **Forest:** 36.7%    **Grass/Pasture:** 11.4%    **Row Crops:** 41.1%    **Other:** 0.8%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1996, 1997, 1998

**Watershed Score:** 2.0

**Causes of Impairment:**

- cause unknown
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- nonirrigated crop production
- onsite wastewater systems (septic tanks)
- source unknown

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1 (use attaining)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

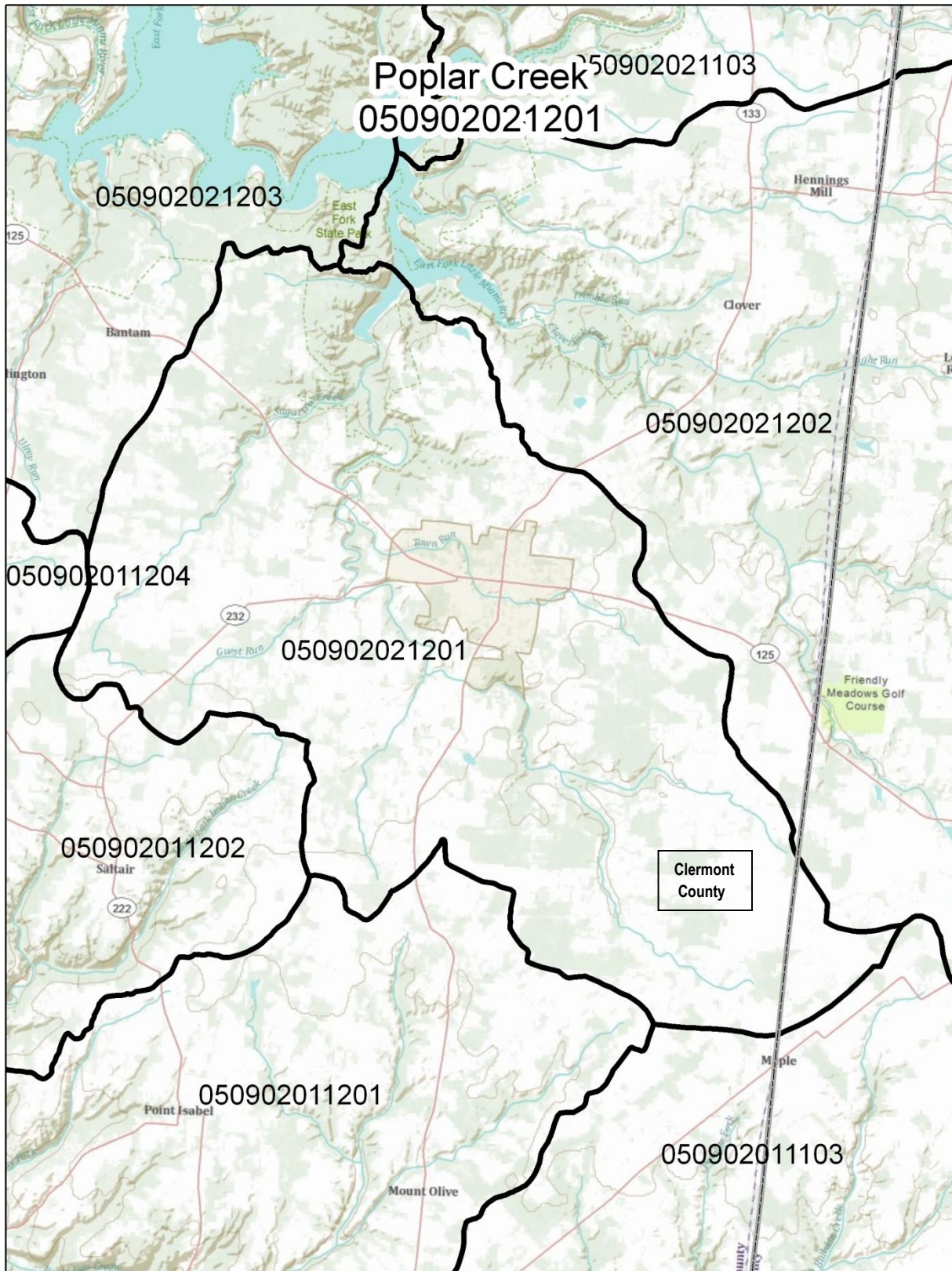
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Williamsburg

**Facility Planning Area (FPA) or Areas:** Middle East Fork FPA, Williamsburg FPA, , Upper East Fork FPA (edges), Stonelick FPA (small tip)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 24.7 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 8.7%    **Forest:** 46.0%    **Grass/Pasture:** 20.9%    **Row Crops:** 23.7%    **Other:** 0.6%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1997, 1998

**Watershed Score:** 12.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- channelization – development
- flow regulation/modification – development
- land development/suburbanization
- municipal point source
- onsite wastewater systems (septic tanks)
- urban runoff/storm sewers (NPS)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Bethel

**Facility Planning Area (FPA) or Areas:** Felicity FPA, Middle East Fork FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

050902021102  
Cloverlick Creek  
050902021202

050902021203

050902021103

Clermont County

050902021202

050902021201

050902011202

050902011201

050902011103

050902011104

## Monitoring Scheduled: 2012

**TMDL Scheduled: 2015**

**Developed: 5.5%**    **Forest: 36.7%**    **Grass/Pasture: 15.1%**    **Row Crops: 42.1%**    **Other: 0.5%**

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1997, 1998

**Watershed Score:** 12.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- channelization – development
- flow regulation/modification – development
- land development/suburbanization
- municipal point source
- onsite wastewater systems (septic tanks)
- urban runoff/storm sewers (NPS)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

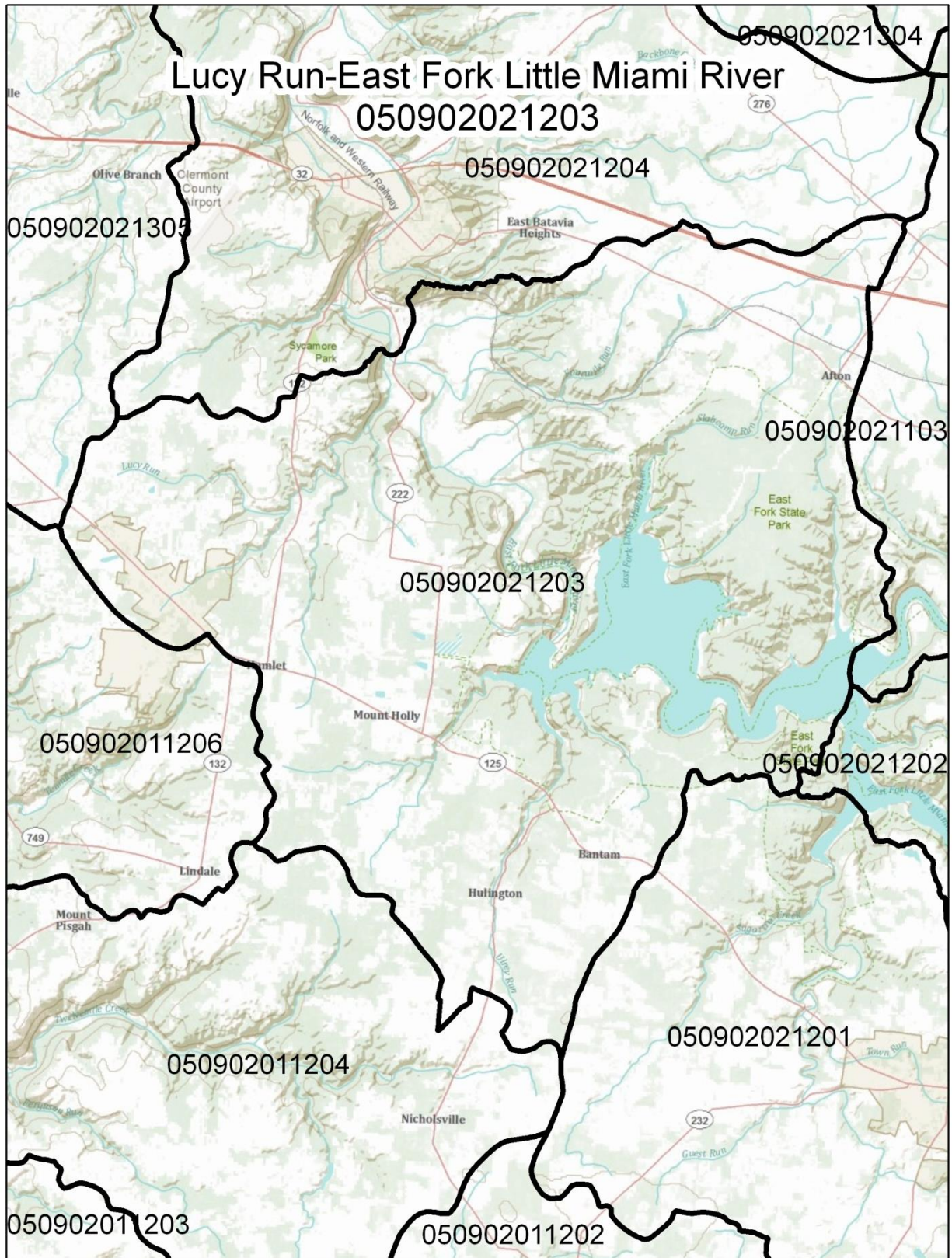
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Middle East Fork FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 34.7 square miles

**Priority Points:** 2

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 16.6%    **Forest:** 61.6%    **Grass/Pasture:** 13.0%    **Row Crops:** 7.6%    **Other:** 1.2%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1997, 1998

**Watershed Score:** 12.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- channelization – development
- flow regulation/modification – development
- land development/suburbanization
- municipal point source
- onsite wastewater systems (septic tanks)
- urban runoff/storm sewers (NPS)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** 1 (use attaining)

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** yes

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

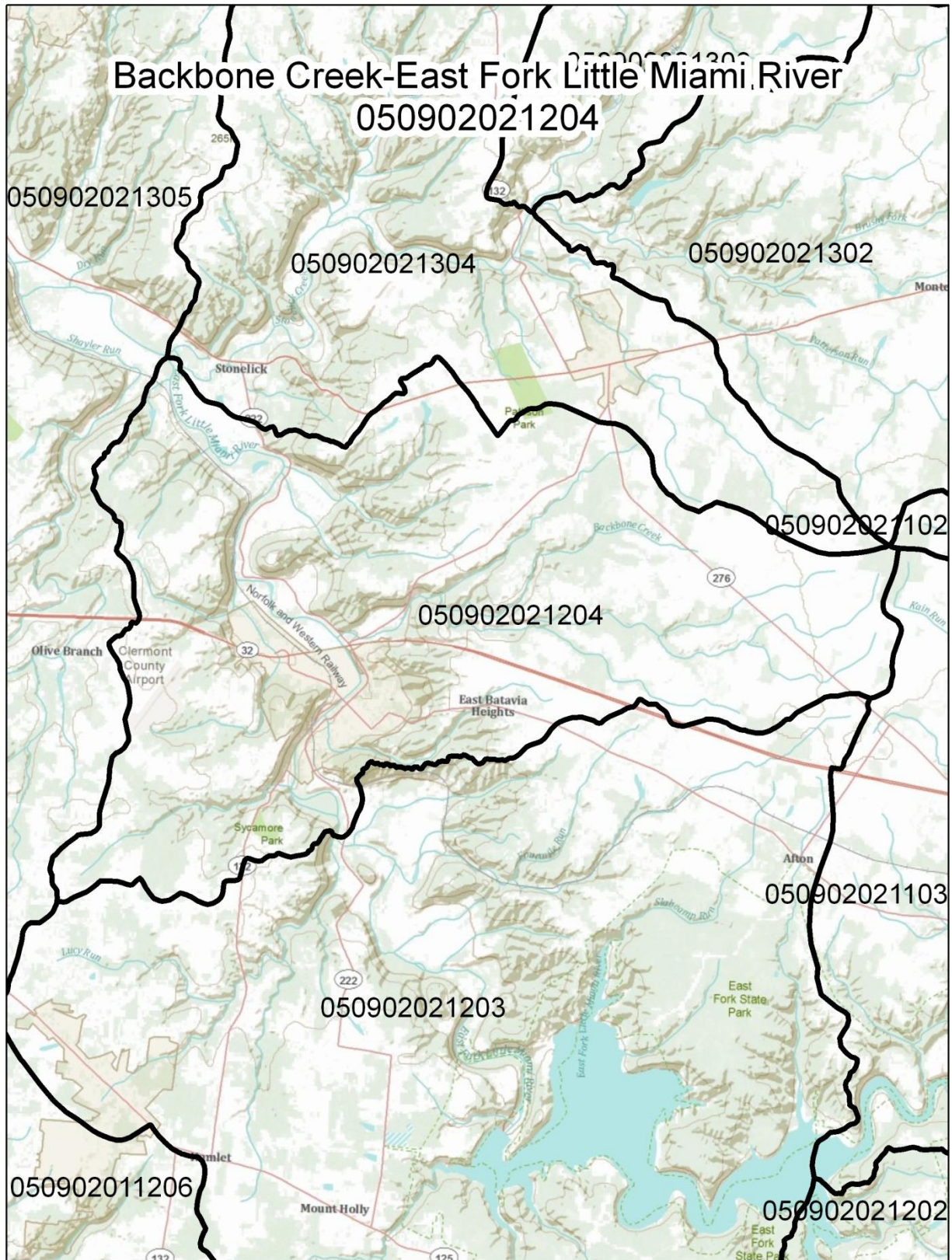
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Batavia (edge)

**Facility Planning Area (FPA) or Areas:** Middle East Fork FPA, New Richmond FPA (large edges), Nine Ten Mile FPA (small edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 20.8 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 17.4%    **Forest:** 50.0%    **Grass/Pasture:** 14.0%    **Row Crops:** 17.1%    **Other:** 1.4%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1997, 1998

**Watershed Score:** 12.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- channelization – development
- flow regulation/modification – development
- land development/suburbanization
- municipal point source
- onsite wastewater systems (septic tanks)
- urban runoff/storm sewers (NPS)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

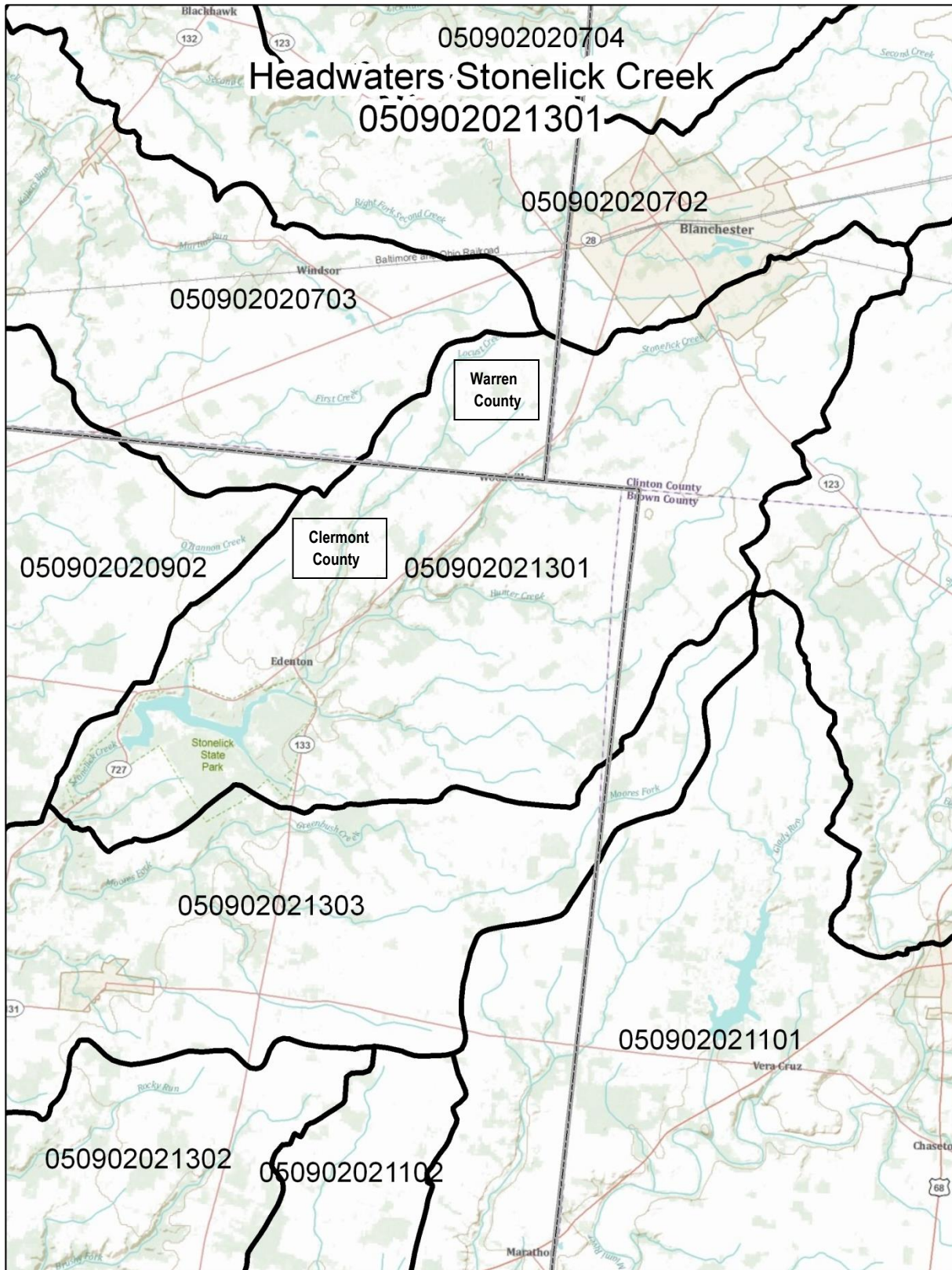
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Batavia

**Facility Planning Area (FPA) or Areas:** Middle East Fork FPA, Lower East Fork FPA (tip), Stonelick FPA (tip)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 24.3 square miles

**Priority Points:** 6

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 5.5%    **Forest:** 27.0%    **Grass/Pasture:** 12.7%    **Row Crops:** 54.4%    **Other:** 0.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1997, 1998

**Watershed Score:** 15.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- combined sewer overflows
- dam construction – agriculture
- dredging – development
- major municipal point source
- nonirrigated crop production
- sanitary sewer overflows
- sewer line construction
- source unknown
- stream bank modification/destabilization – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Cause of Impairment:** pesticides (atrazine)

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

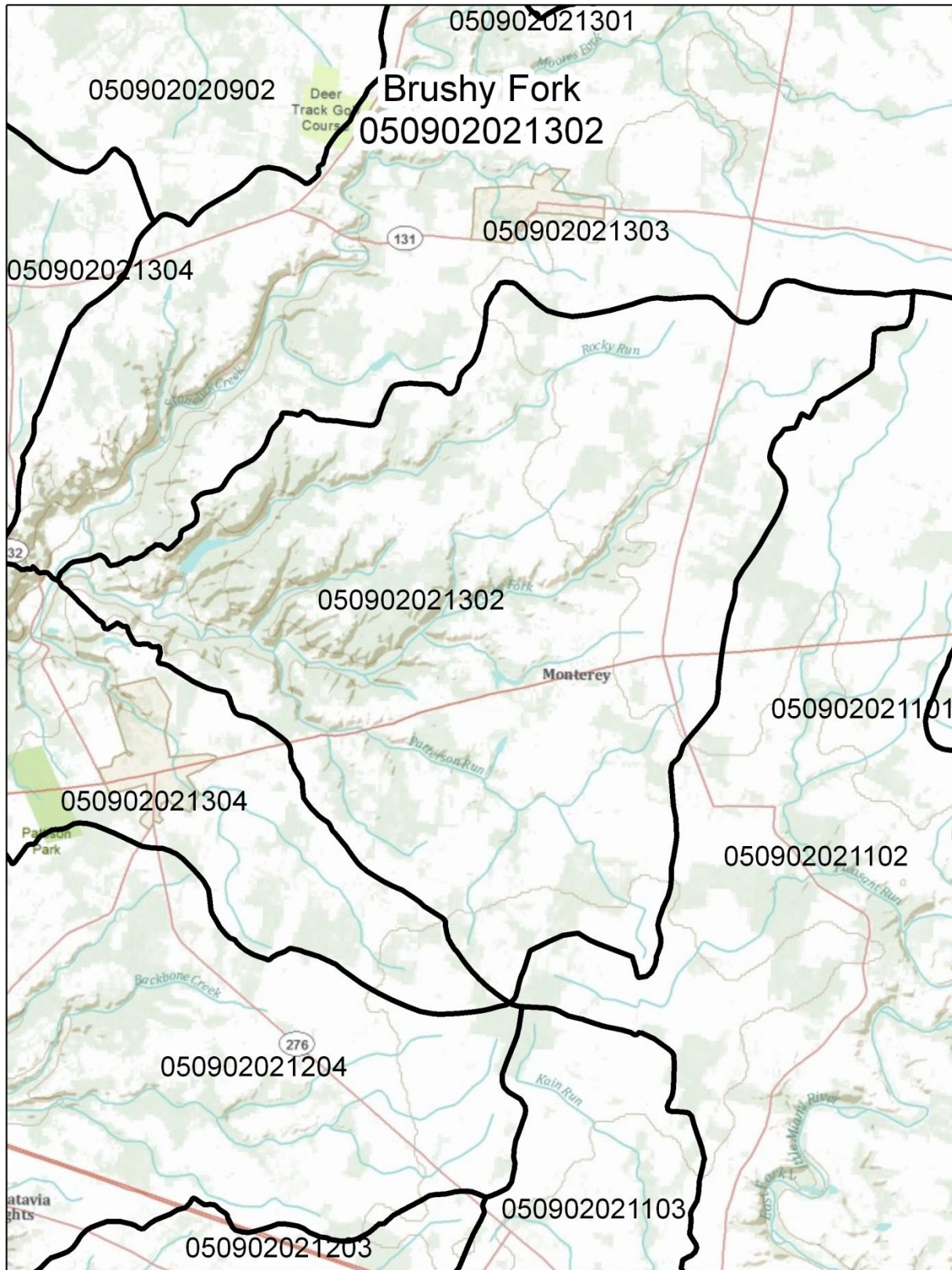
**County or Counties of the OKI Region in the Watershed:** Clermont, Warren

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Stonelick FPA, Butlerville FPA, O'Bannon Creek FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 14.9 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 5.3%   **Forest:** 43.6%   **Grass/Pasture:** 10.3%   **Row Crops:** 40.4%   **Other:** 0.5%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1997, 1998

**Watershed Score:** 15.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- combined sewer overflows
- dam construction – agriculture
- dredging – development
- major municipal point source
- nonirrigated crop production
- sanitary sewer overflows
- sewer line construction
- source unknown
- stream bank modification/destabilization – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

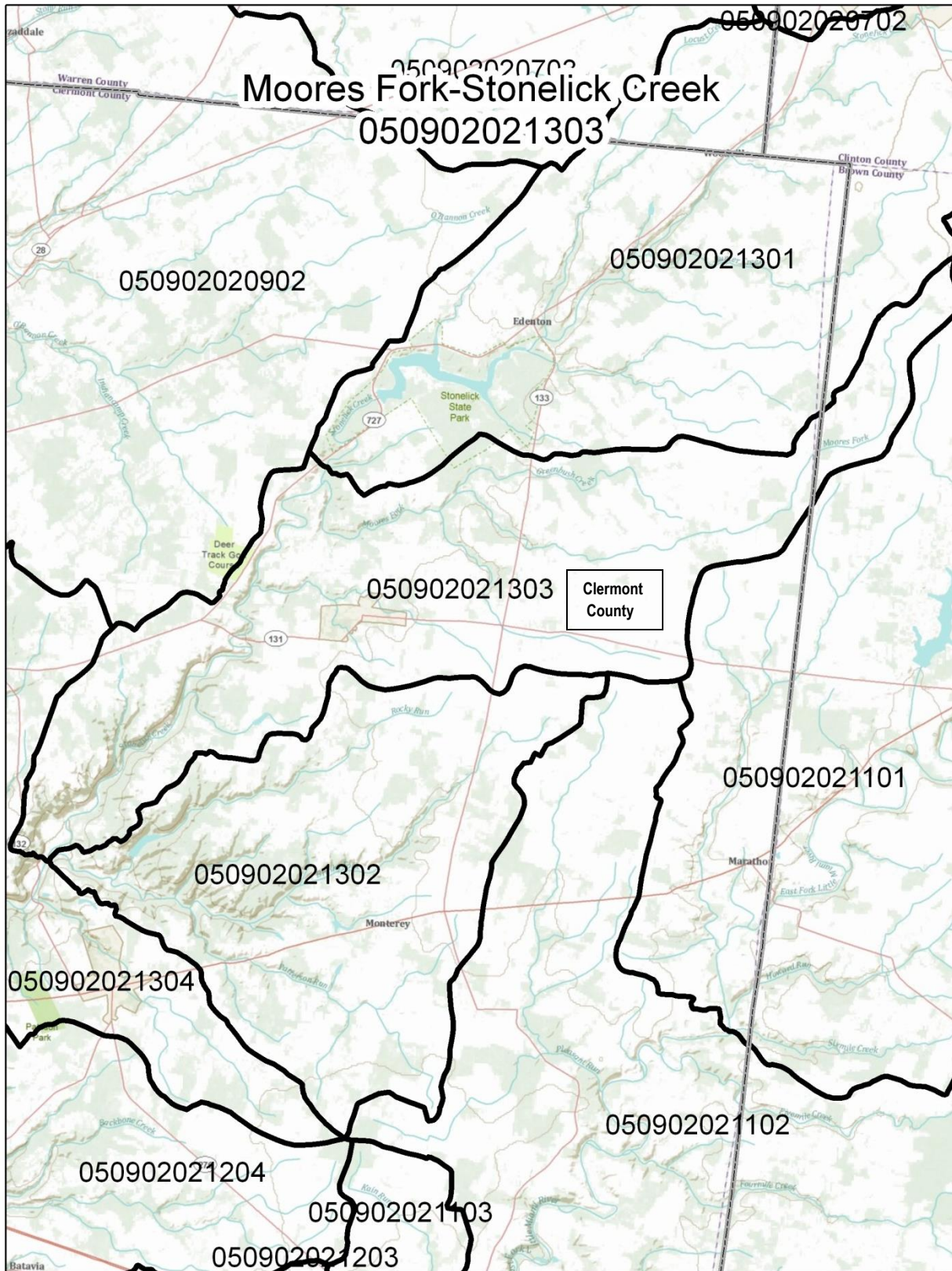
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** none

**Facility Planning Area (FPA) or Areas:** Stonelick FPA, Upper East Fork FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 19.4 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 5.9%   **Forest:** 35.8%   **Grass/Pasture:** 11.8%   **Row Crops:** 45.8%   **Other:** 0.7%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1997, 1998

**Watershed Score:** 15.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- combined sewer overflows
- dam construction – agriculture
- dredging – development
- major municipal point source
- nonirrigated crop production
- sanitary sewer overflows
- sewer line construction
- source unknown
- stream bank modification/destabilization – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

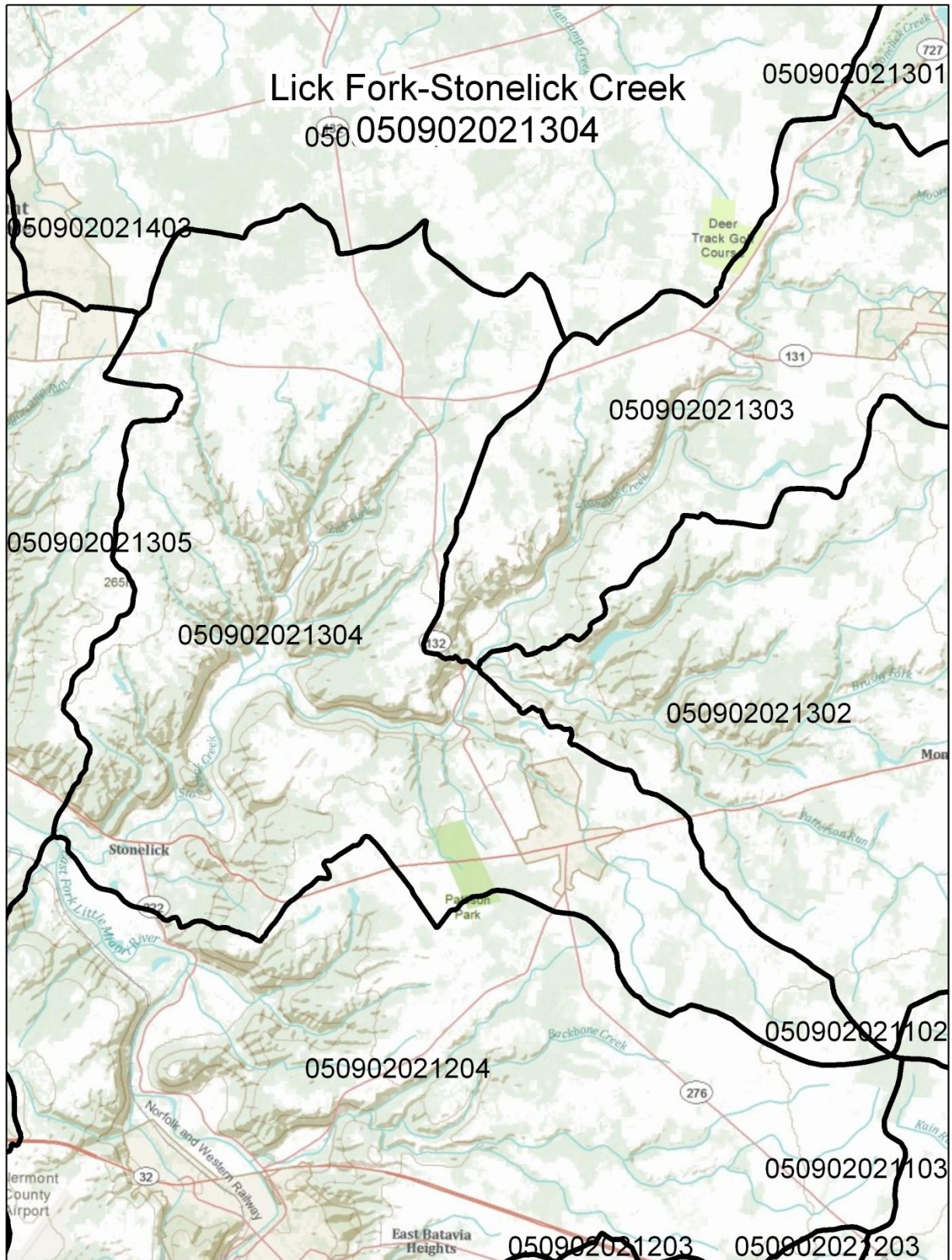
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Newtonsville

**Facility Planning Area (FPA) or Areas:** Stonelick FPA, Upper East Fork FPA (edges), O'Bannon Creek FPA (small edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 18.3 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 11.0%    **Forest:** 55.9%    **Grass/Pasture:** 17.5%    **Row Crops:** 14.6%    **Other:** 1.1%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1997, 1998

**Watershed Score:** 15.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- combined sewer overflows
- dam construction – agriculture
- dredging – development
- major municipal point source
- nonirrigated crop production
- sanitary sewer overflows
- sewer line construction
- source unknown
- stream bank modification/destabilization – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

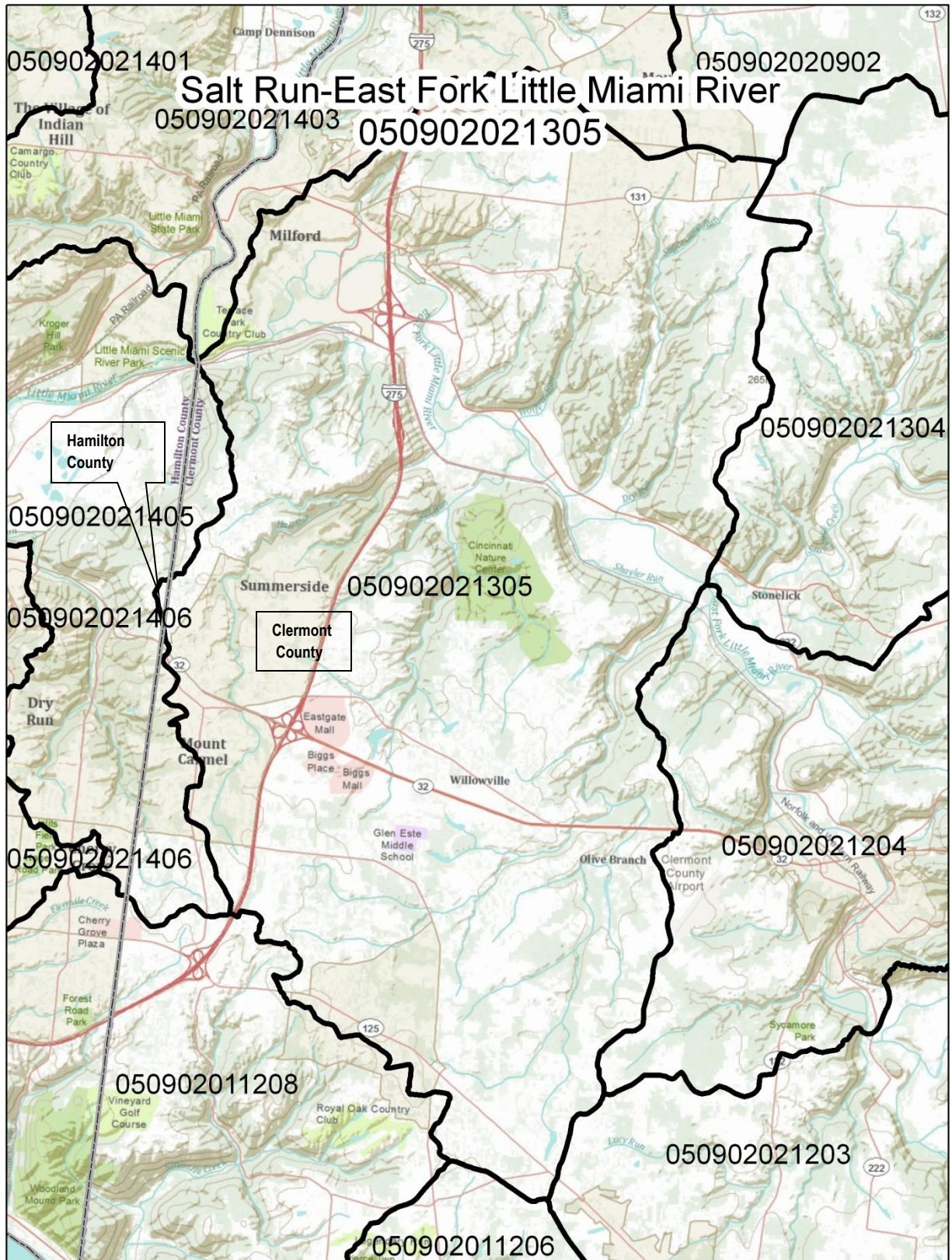
**County or Counties of the OKI Region in the Watershed:** Clermont

**Municipalities of the OKI Region:** Village of Owensville

**Facility Planning Area (FPA) or Areas:** Stonelick FPA, Middle East Fork FPA (edges), O'Bannon Creek FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 42.5 square miles

**Priority Points:** 5

**Monitoring Scheduled:** 2012

**TMDL Scheduled:** 2015

## Land Use Statistics

**Developed:** 42.2%    **Forest:** 45.6%    **Grass/Pasture:** 7.0%    **Row Crops:** 4.0%    **Other:** 1.1%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 1997, 1998

**Watershed Score:** 15.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- siltation

**Sources of Impairment:**

- combined sewer overflows
- dam construction – agriculture
- dredging – development
- major municipal point source
- nonirrigated crop production
- sanitary sewer overflows
- sewer line construction
- source unknown
- stream bank modification/destabilization – development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Assessment Unit Score:** 88

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 1h (use attaining; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

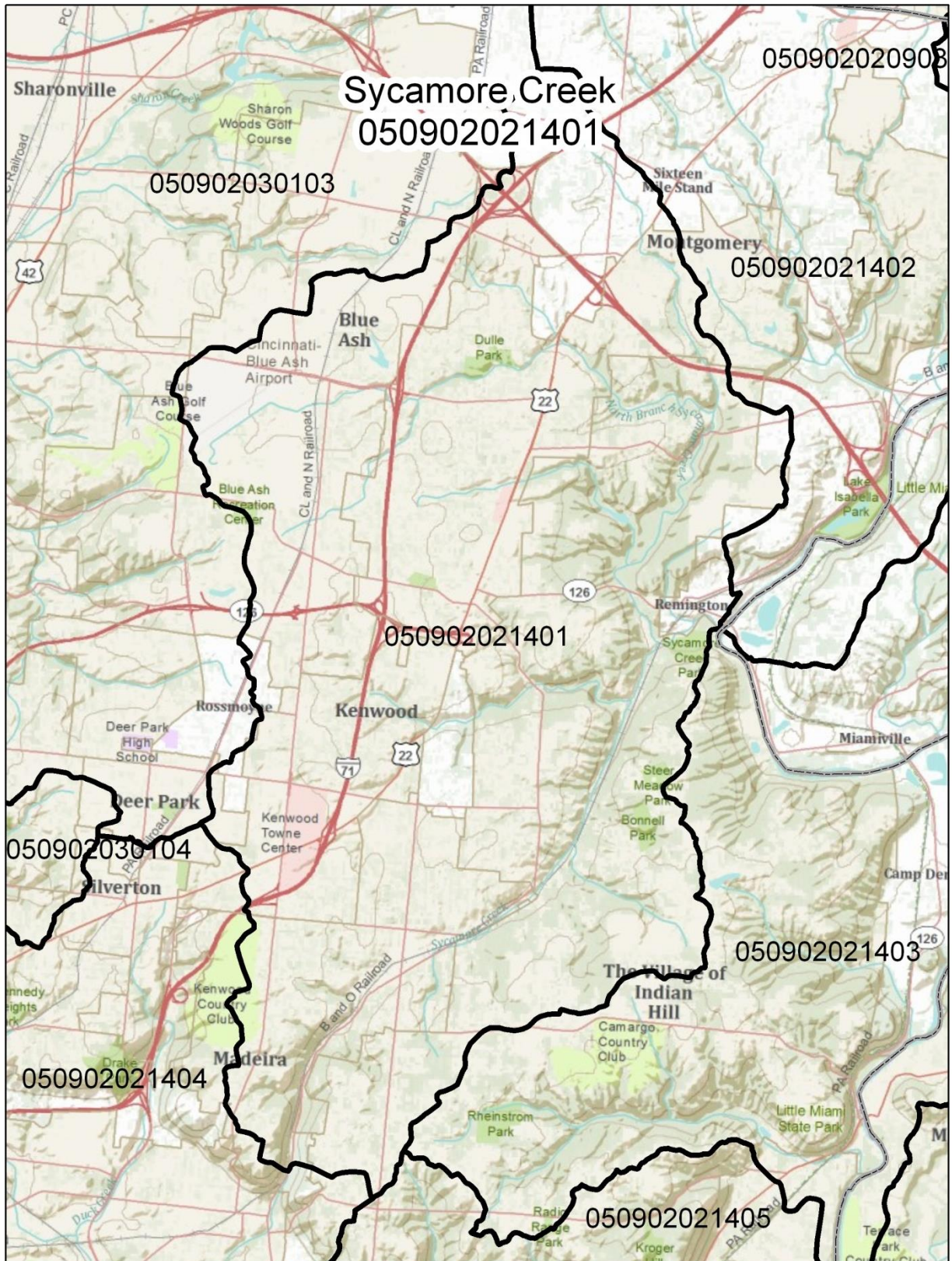
**County or Counties of the OKI Region in the Watershed:** Clermont, Hamilton (tip)

**Municipalities of the OKI Region:** City of Milford

**Facility Planning Area (FPA) or Areas:** Lower East Fork FPA, Milford FPA, Stonelick FPA, Middle East Fork FPA, Nine Ten Mile FPA, Horner Run Branch Hill FPA (small edges) Little Miami FPA (small tip)

**Onsite Wastewater Treatment System Concentration(s):** Pepperidge Subdivision

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 23.4 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 65.6%    **Forest:** 29.5%    **Grass/Pasture:** 3.9%    **Row Crops:** 0.8%    **Other:** 0.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 50.0

**Causes of Impairment:**

- organic enrichment (sewage) biological indicators

**Sources of Impairment:**

- urban runoff/storm sewers

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 1 (use attaining)

**Assessment Unit Score:** 100

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

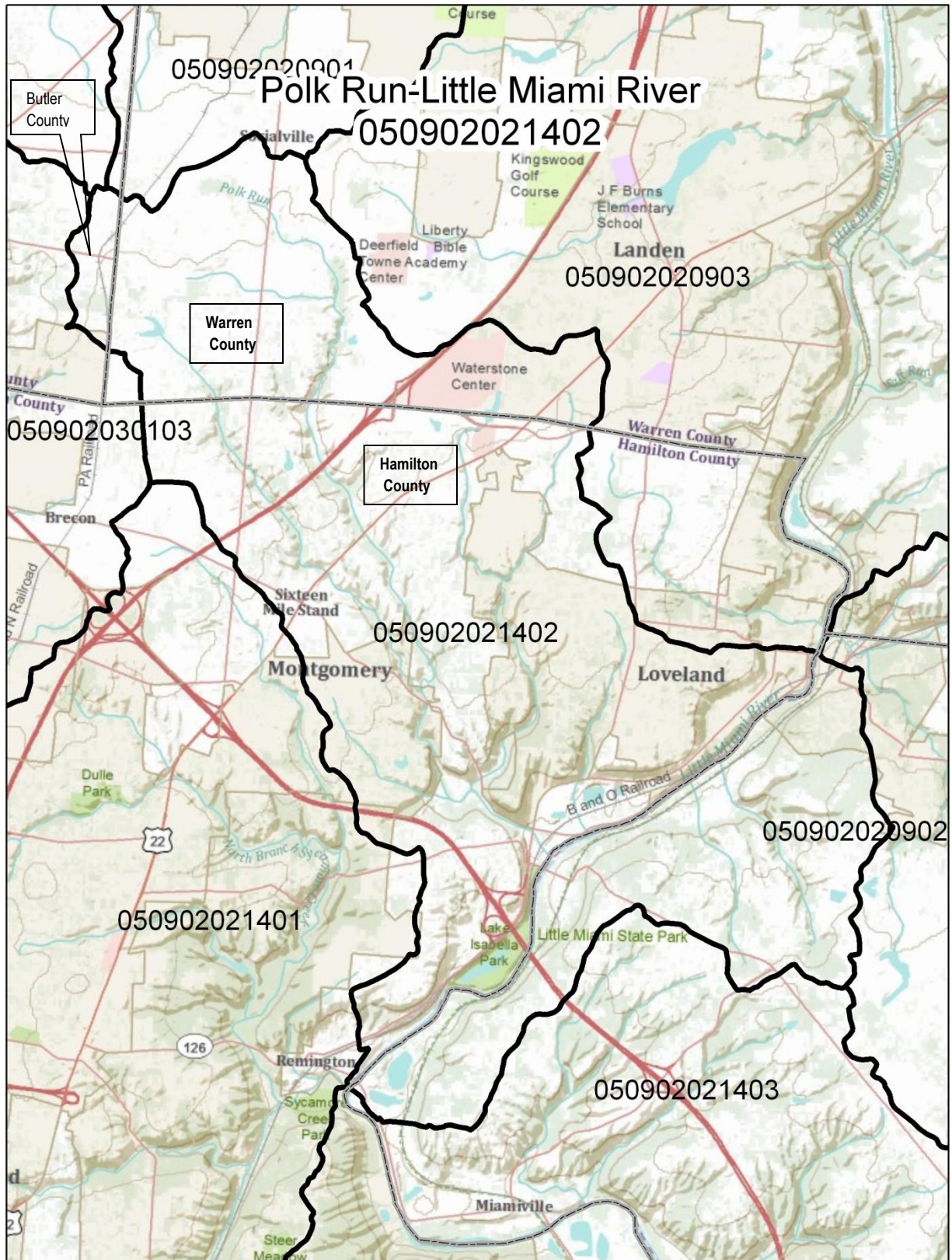
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of Montgomery, City of the Village of Indian Hill, City of Blue Ash, City of Madeira, City of Deer Park,

**Facility Planning Area (FPA) or Areas:** Polk Run Sycamore Creek FPA, Horner Run Branch Hill FPA, Little Miami FPA, Mill Creek FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 17 square miles

**Priority Points:** 1

## Land Use Statistics

**Developed:** 65.4%    **Forest:** 26.4%    **Grass/Pasture:** 6.4%    **Row Crops:** 1.2%    **Other:** 0.7%

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, LRW (warmwater habitat, limited resource water)

**Sampling Year or Years:** 1994, 1998, 2002

**Watershed Score:** 0.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- organic enrichment/dissolved oxygen
- siltation
- unknown toxicity

**Sources of Impairment:**

- combined sewer overflows
- dredging – development
- major municipal point source
- minor industrial point source
- other urban runoff
- sewer line construction
- streambank modification/destabilization - development

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

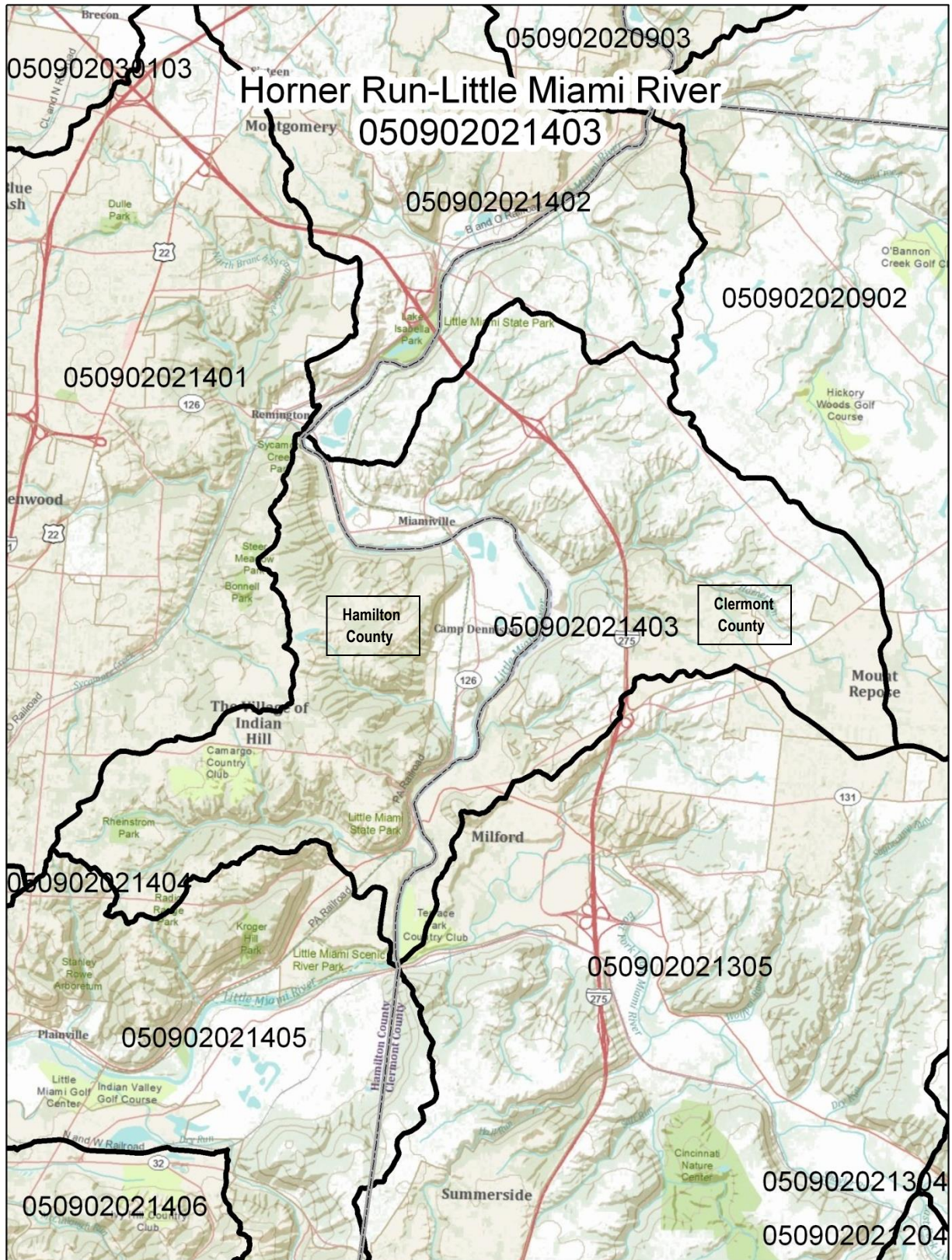
**County or Counties of the OKI Region in the Watershed:** Hamilton, Warren

**Municipalities of the OKI Region:** City of Montgomery, City of Loveland, City of the Village of Indian Hill (edges)

**Facility Planning Area (FPA) or Areas:** Polk Run Sycamore Creek FPA, Loveland FPA, Horner Run Branch Hill FPA, Upper Mill Creek FPA (corner)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 21.5 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 37.3%    **Forest:** 51.6%    **Grass/Pasture:** 8.8%    **Row Crops:** 0.8%    **Other:** 1.4%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, LRW (warmwater habitat, limited resource water)

**Sampling Year or Years:** 1994, 1998, 2002

**Watershed Score:** 0.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- organic enrichment/dissolved oxygen
- siltation
- unknown toxicity

**Sources of Impairment:**

- combined sewer overflows
- dredging – development
- major municipal point source
- minor industrial point source
- other urban runoff
- sewer line construction
- streambank modification/destabilization - development

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3i (insufficient data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

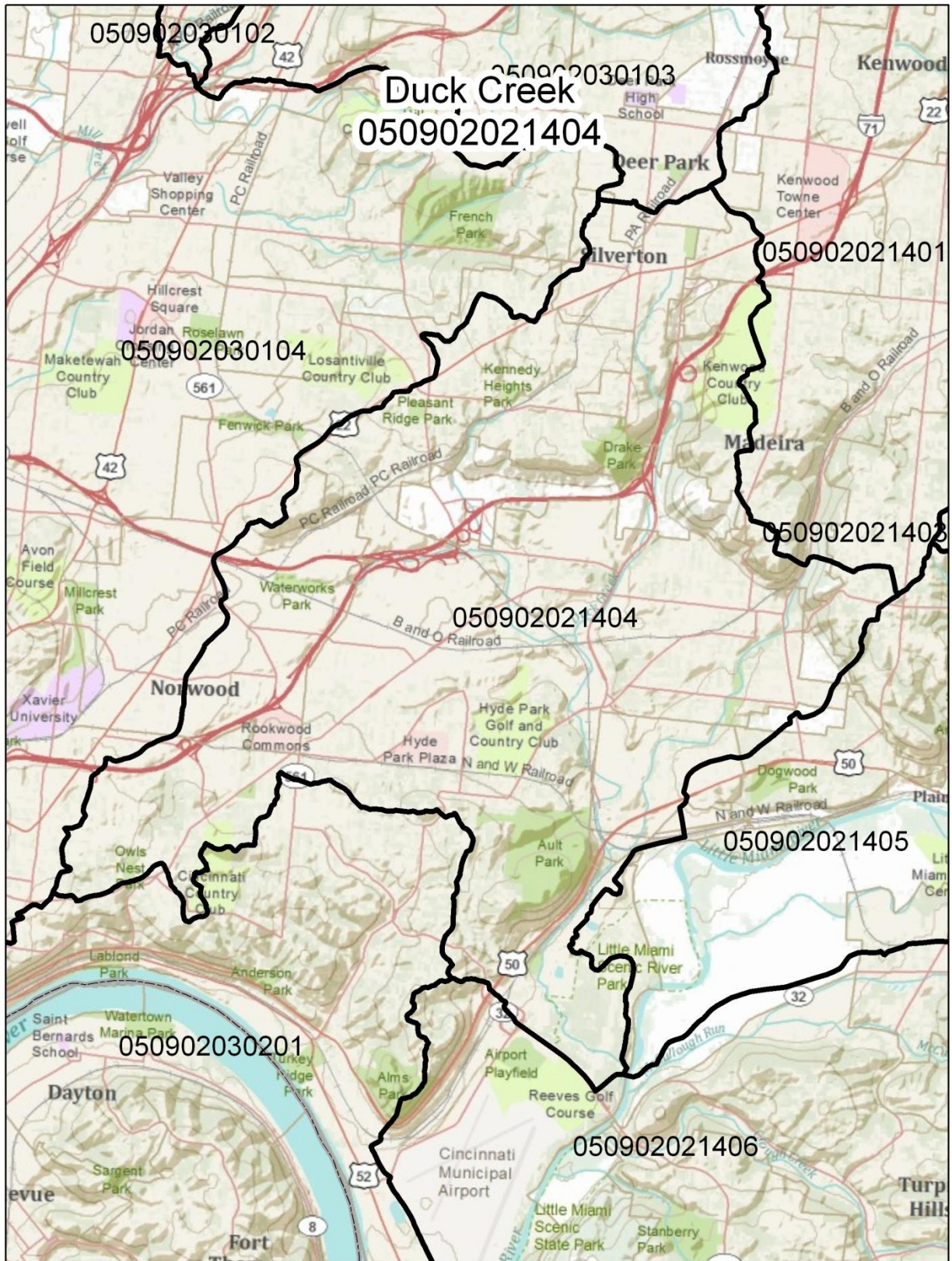
**County or Counties of the OKI Region in the Watershed:** Hamilton, Clermont

**Municipalities of the OKI Region:** City of the Village of Indian Hill, Village of Terrace Park, City of Milford

**Facility Planning Area (FPA) or Areas:** Little Miami FPA, Horner Run Branch Hill FPA, Milford FPA, O'Bannon Creek FPA (edge), Lower East Fork FPA (edge), Polk Run Sycamore Creek FPA (small edges), Loveland FPA (small tip)

**Onsite Wastewater Treatment System Concentration(s):** Camp Dennison, Terrace Park

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 15.5 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 79.8%    **Forest:** 17.3%    **Grass/Pasture:** 1.2%    **Row Crops:** 0.4%    **Other:** 1.4%

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** WWH, LRW (warmwater habitat, limited resource water)

**Sampling Year or Years:** 2007

**Watershed Score:** 0.0

**Causes of Impairment:**

- direct habitat alterations
- organic enrichment (sewage) biological indicators
- sedimentation/siltation

**Sources of Impairment:**

- channelization
- combined sewer overflows
- urban runoff/storm sewers

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

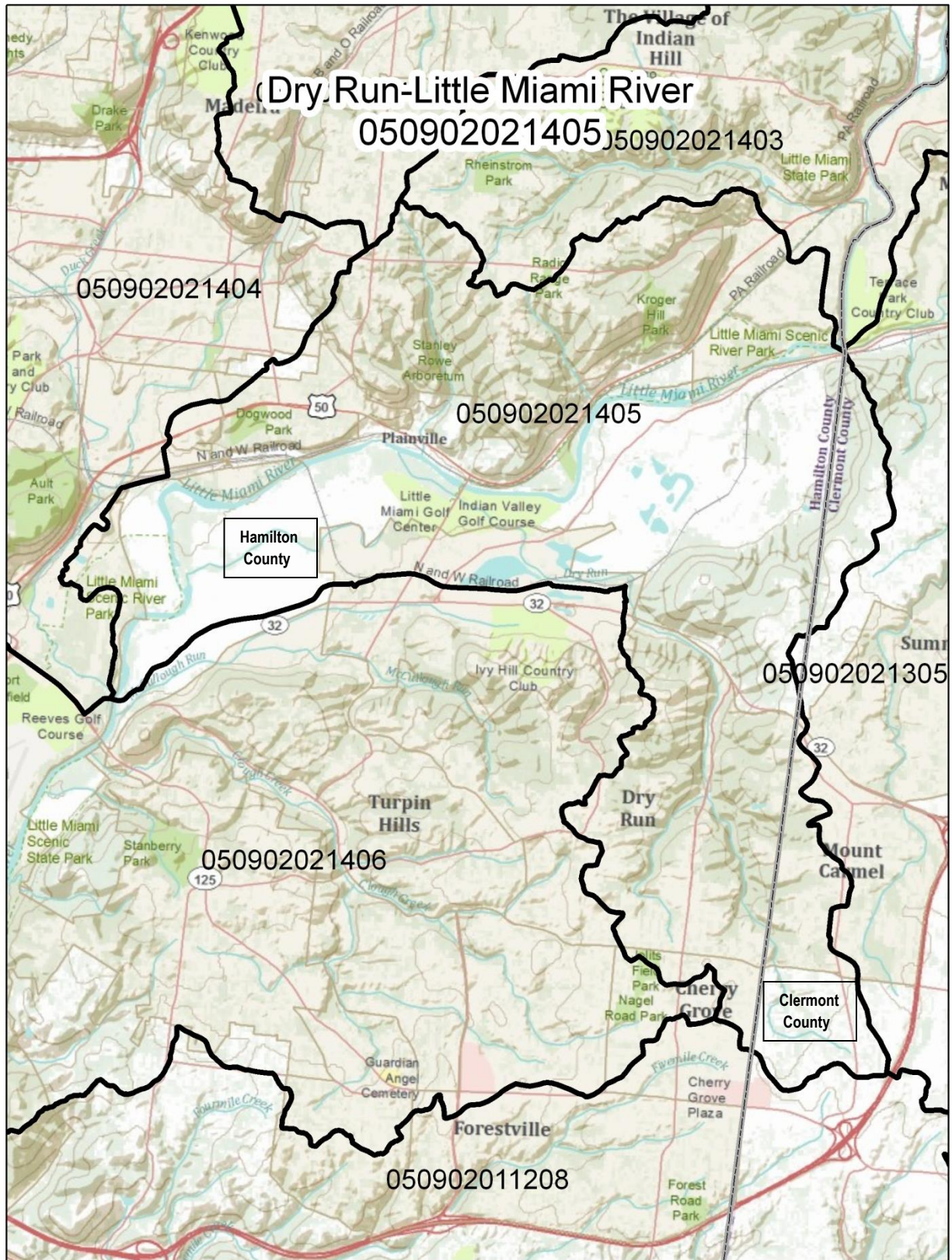
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of Cincinnati, City of Norwood, City of Madeira, City of Silverton, Village of Fairfax, Village of Mariemont, City of Deer Park (edge)

**Facility Planning Area (FPA) or Areas:** Little Miami FPA, Mill Creek FPA (small edges), Polk Run Sycamore Creek FPA (small tips)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 17.8 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 35.1%    **Forest:** 48.4%    **Grass/Pasture:** 9.9%    **Row Crops:** 5.5%    **Other:** 1.2%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, LRW (warmwater habitat, limited resource water)

**Sampling Year or Years:** 1994, 1998, 2002

**Watershed Score:** 0.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- organic enrichment/dissolved oxygen
- siltation
- unknown toxicity

**Sources of Impairment:**

- combined sewer overflows
- dredging – development
- major municipal point source
- minor industrial point source
- other urban runoff
- sewer line construction
- streambank modification/destabilization - development

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3i (insufficient data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

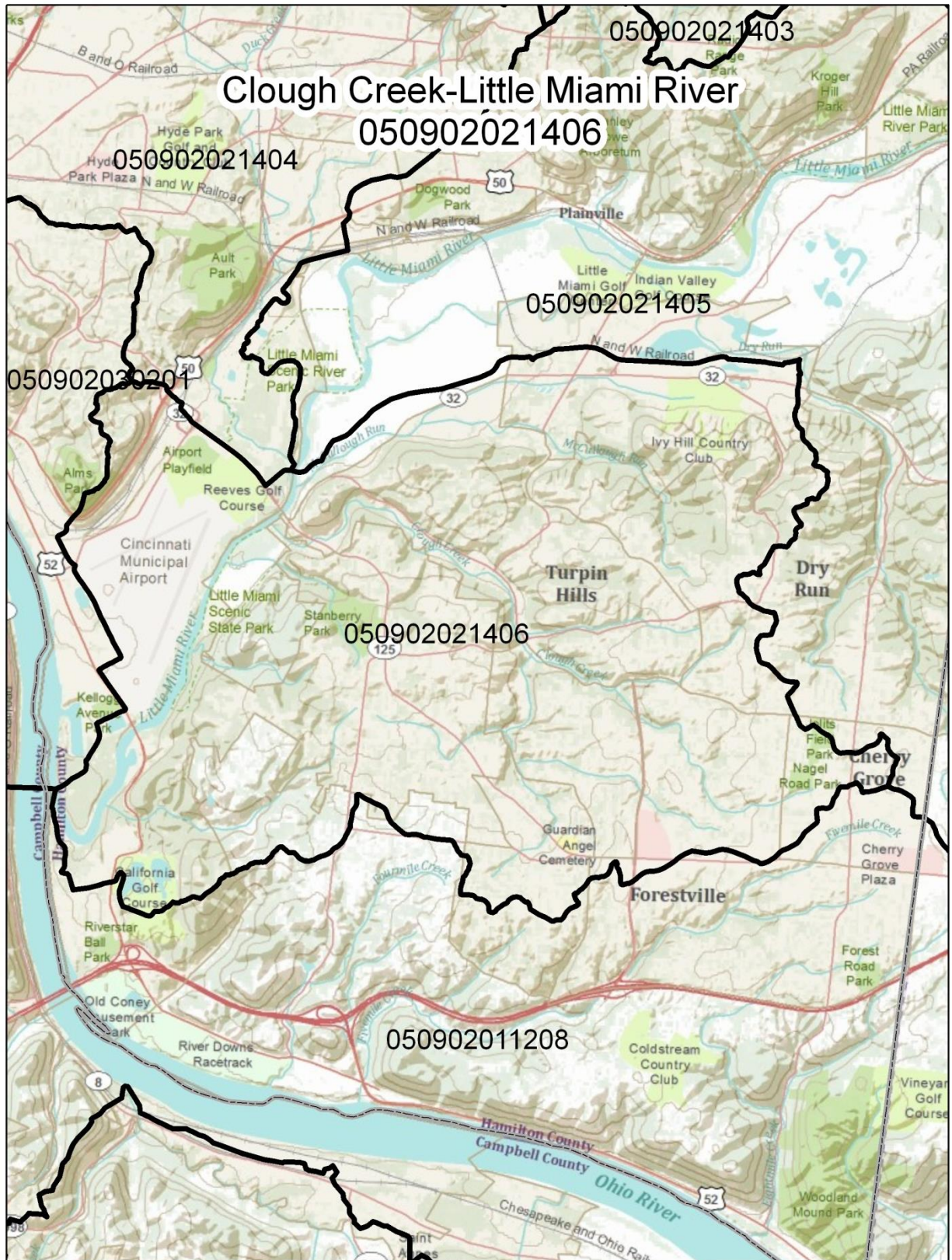
**County or Counties of the OKI Region in the Watershed:** Hamilton, Clermont

**Municipalities of the OKI Region:** City of the Village of Indian Hill, Village of Terrace Park, Village of Mariemont, Village of Fairfax, Village of Newtown, City of Cincinnati (edge)

**Facility Planning Area (FPA) or Areas:** Little Miami FPA, Lower East Fork FPA, Nine Ten Mile FPA

**Onsite Wastewater Treatment System Concentration(s):** Pepperidge Subdivision

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 18.7 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

## Land Use Statistics

**Developed:** 54.5%    **Forest:** 37.9%    **Grass/Pasture:** 4.9%    **Row Crops:** 2.1%    **Other:** 0.6%

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 2007

**Watershed Score:** 0.0

**Causes of Impairment:**

- Sedimentation/siltation

**Sources of Impairment:**

- combined sewer overflows
- urban runoff/storm sewers

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3i (insufficient data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

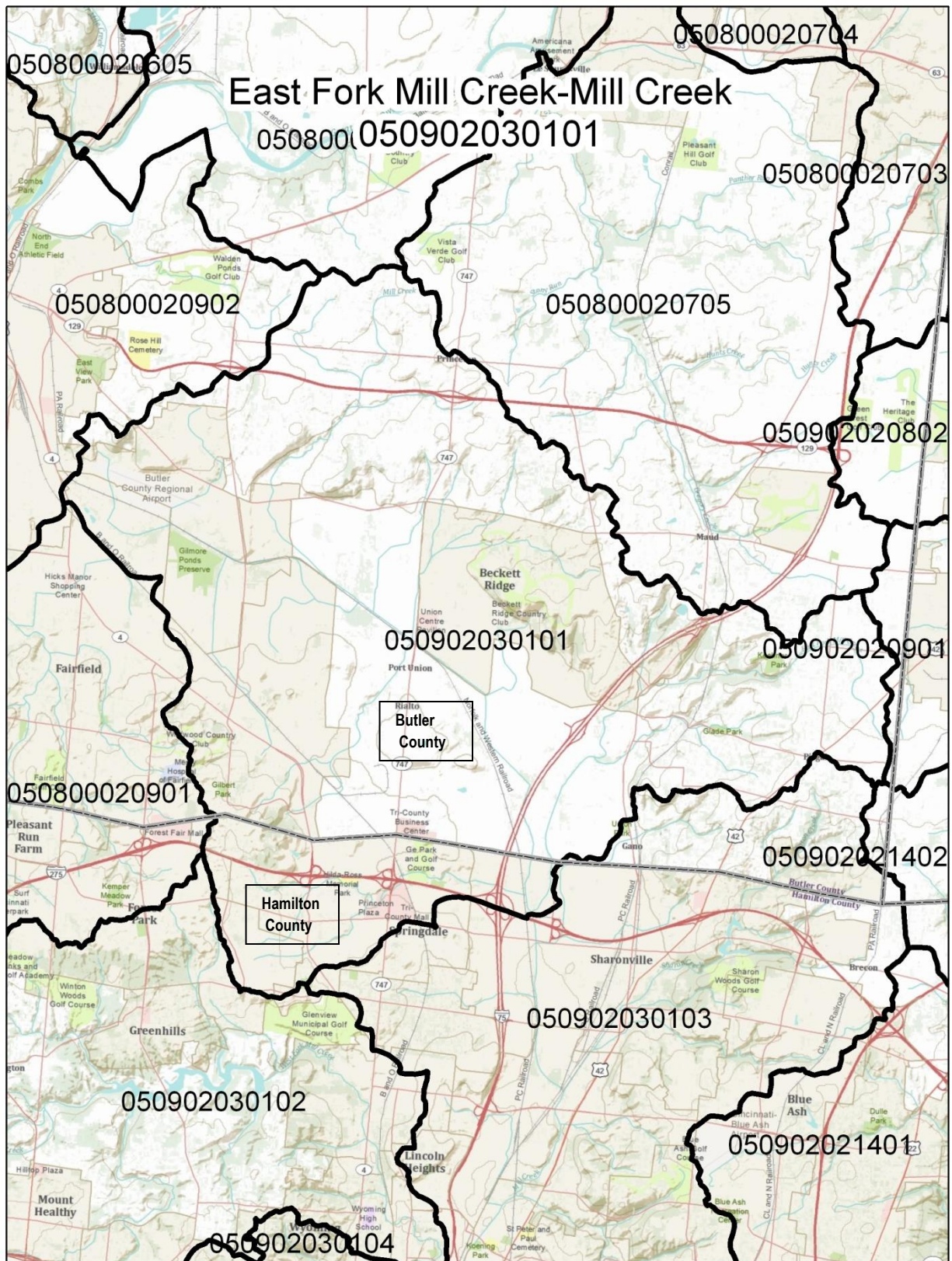
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of the Village of Indian Hill, Village of Terrace Park, Village of Mariemont, Village of Fairfax, City of Cincinnati (edge)

**Facility Planning Area (FPA) or Areas:** Little Miami FPA, Lower East Fork FPA, Nine Ten Mile FPA

**Onsite Wastewater Treatment System Concentration(s):** Pepperidge Subdivision

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 47.3 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2014

**TMDL Scheduled:** 2017

## Land Use Statistics

**Developed:** 75.1%    **Forest:** 8.2%    **Grass/Pasture:** 5.1%    **Row Crops:** 11.4%    **Other:** 0.2%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, MWH-C, LRW (warmwater habitat, modified warmwater habitat – channelization, limited resource water)

**Sampling Year or Years:** 1997, 2002, 2003

**Watershed Score:** 11.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- oil and grease
- organic enrichment/dissolved oxygen
- taste and odor
- unionized ammonia
- unknown toxicity

**Sources of Impairment:**

- channelization – development
- combined sewer overflows
- industrial point source
- major municipal point source
- streambank modification/destabilization - development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

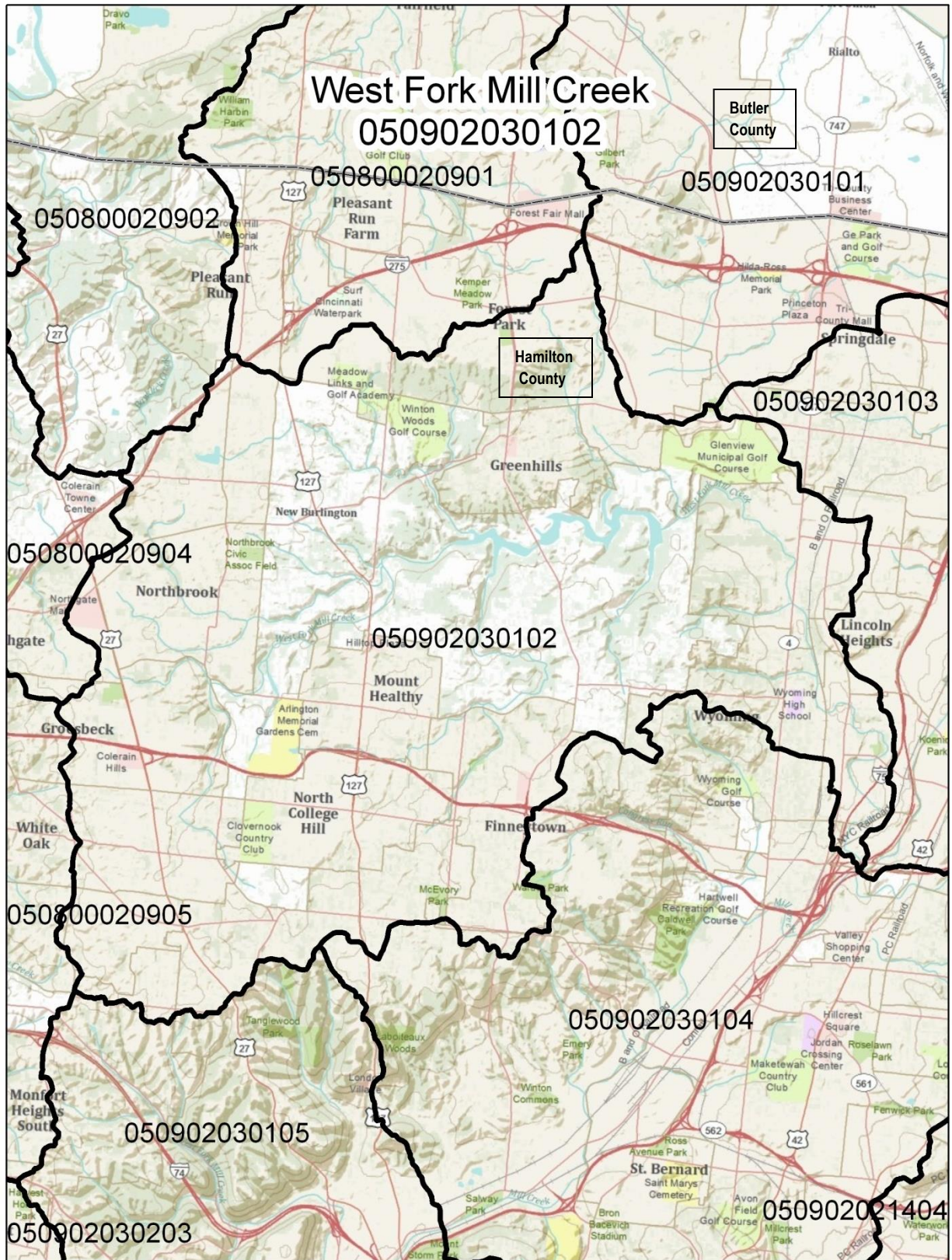
**County or Counties of the OKI Region in the Watershed:** Butler, Hamilton

**Municipalities of the OKI Region:** City of Hamilton, City of Fairfield, City of Sharonville, City of Forest Park, Village of Glendale (corner)

**Facility Planning Area (FPA) or Areas:** Mill Creek FPA, Glendale FPA (corner)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 36.2 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2014

**TMDL Scheduled:** 2017

## Land Use Statistics

**Developed:** 74.5%    **Forest:** 22.4%    **Grass/Pasture:** 2.8%    **Row Crops:** 0.1%    **Other:** 0.2%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, MWH-C, LRW (warmwater habitat, modified warmwater habitat – channelization, limited resource water)

**Sampling Year or Years:** 1997, 2002, 2003

**Watershed Score:** 11.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- oil and grease
- organic enrichment/dissolved oxygen
- taste and odor
- unionized ammonia
- unknown toxicity

**Sources of Impairment:**

- channelization – development
- combined sewer overflows
- industrial point source
- major municipal point source
- streambank modification/destabilization - development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

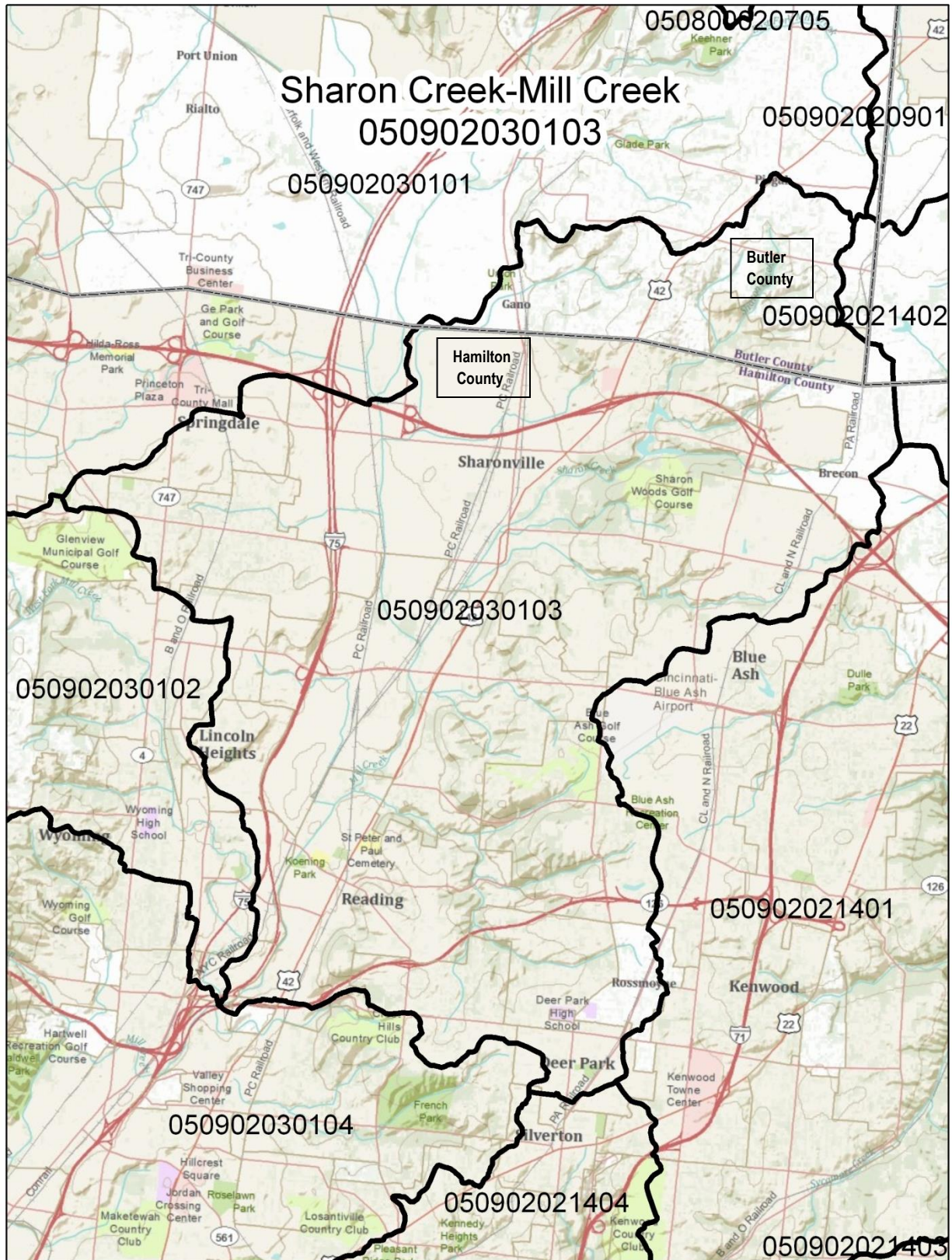
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of Mount Healthy, City of North College Hill, City of Forest Park, City of Wyoming, City of Cincinnati, City of Springdale (edge), Village of Greenhills, Village of Woodlawn, Village of Lockland, Village of Arlington Heights, Village of Lincoln Heights

**Facility Planning Area (FPA) or Areas:** Mill Creek FPA, Glendale FPA (edge), Taylor Creek FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** Springfield Township at Winton Road and Lakeridge Drive; Springfield Township at North Bend Road and Viewplace Drive

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 31.8 square miles

**Priority Points:** 3

**Monitoring Scheduled:** 2014

**TMDL Scheduled:** 2017

## Land Use Statistics

**Developed:** 84.5%    **Forest:** 14.0%    **Grass/Pasture:** 0.7%    **Row Crops:** 0.6%    **Other:** 0.2%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, MWH-C, LRW (warmwater habitat, modified warmwater habitat – channelization, limited resource water)

**Sampling Year or Years:** 1997, 2002, 2003

**Watershed Score:** 11.0

**Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- oil and grease
- organic enrichment/dissolved oxygen
- taste and odor
- unionized ammonia
- unknown toxicity

**Sources of Impairment:**

- channelization – development
- combined sewer overflows
- industrial point source
- major municipal point source
- streambank modification/destabilization - development
- urban runoff/storm sewers (nonpoint source)

**Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

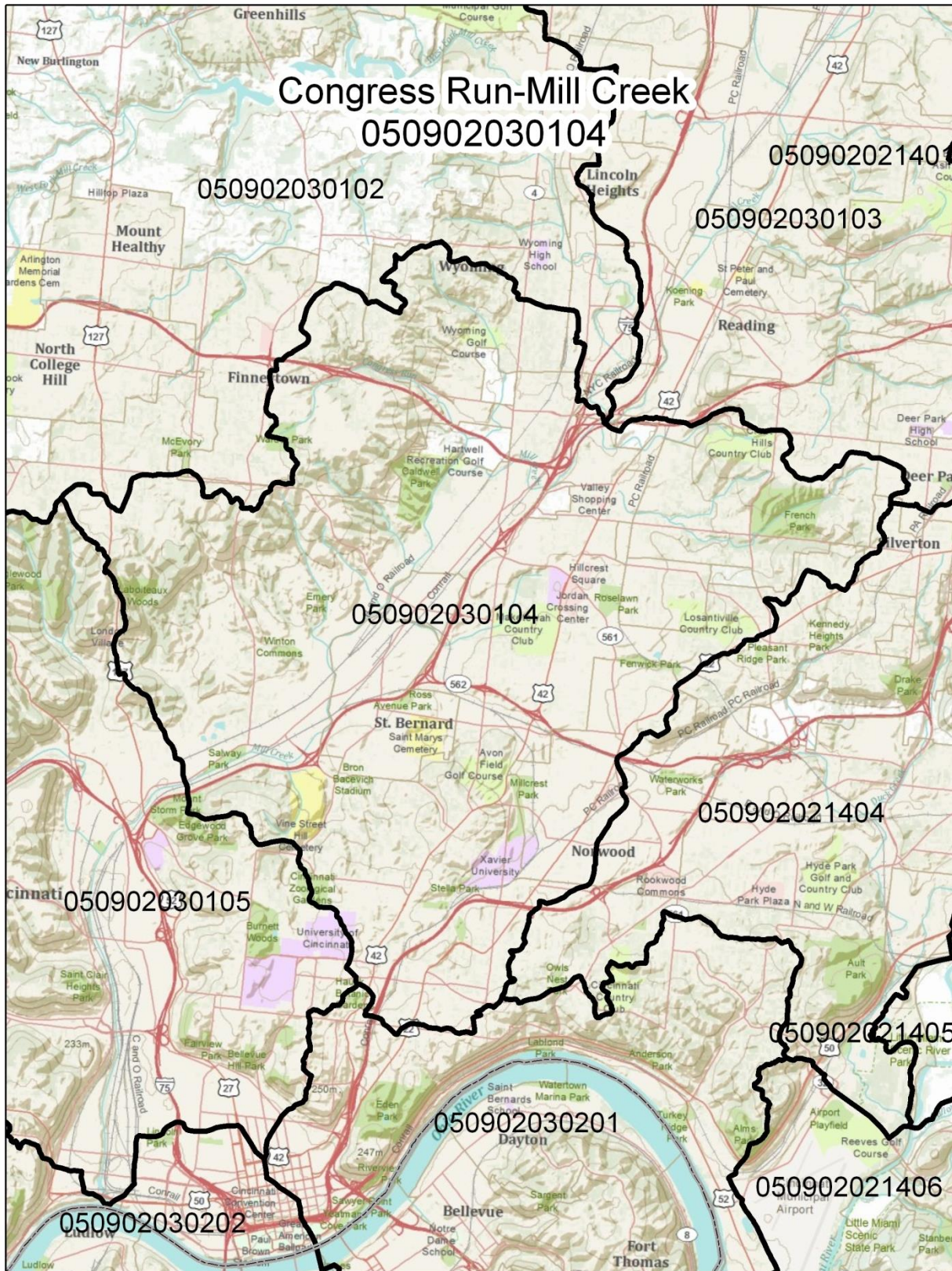
**County or Counties of the OKI Region in the Watershed:** Hamilton, Butler, Warren

**Municipalities of the OKI Region:** City of Sharonville, City of Springdale, City of Reading, City of Deer Park, City of Blue Ash, City of Cincinnati, City of Forest Park, Village of Evendale, Village of Lincoln Heights, Amberley Village, Village of Glendale, Village of Woodlawn, Village of Lockland, Village of Arlington Heights

**Facility Planning Area (FPA) or Areas:** Mill Creek FPA, Glendale FPA, Upper Mill Creek FPA, Polk Run Sycamore Creek FPA, Little Miami FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 30 square miles  
**Priority Points:** 3

**Monitoring Scheduled:** 2014  
**TMDL Scheduled:** 2017

## Land Use Statistics

**Developed:** 79.4%    **Forest:** 17.8%    **Grass/Pasture:** 2.3%    **Row Crops:** 0.1%    **Other:** 0.4%

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, MWH-C, LRW (warmwater habitat, modified warmwater habitat – channelization, limited resource water)

**Sampling Year or Years:** 1997, 2002, 2003

**Watershed Score:** 11.0

#### **Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- oil and grease
- organic enrichment/dissolved oxygen
- taste and odor
- unionized ammonia
- unknown toxicity

#### **Sources of Impairment:**

- channelization – development
- combined sewer overflows
- industrial point source
- major municipal point source
- streambank modification/destabilization - development
- urban runoff/storm sewers (nonpoint source)

#### **Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

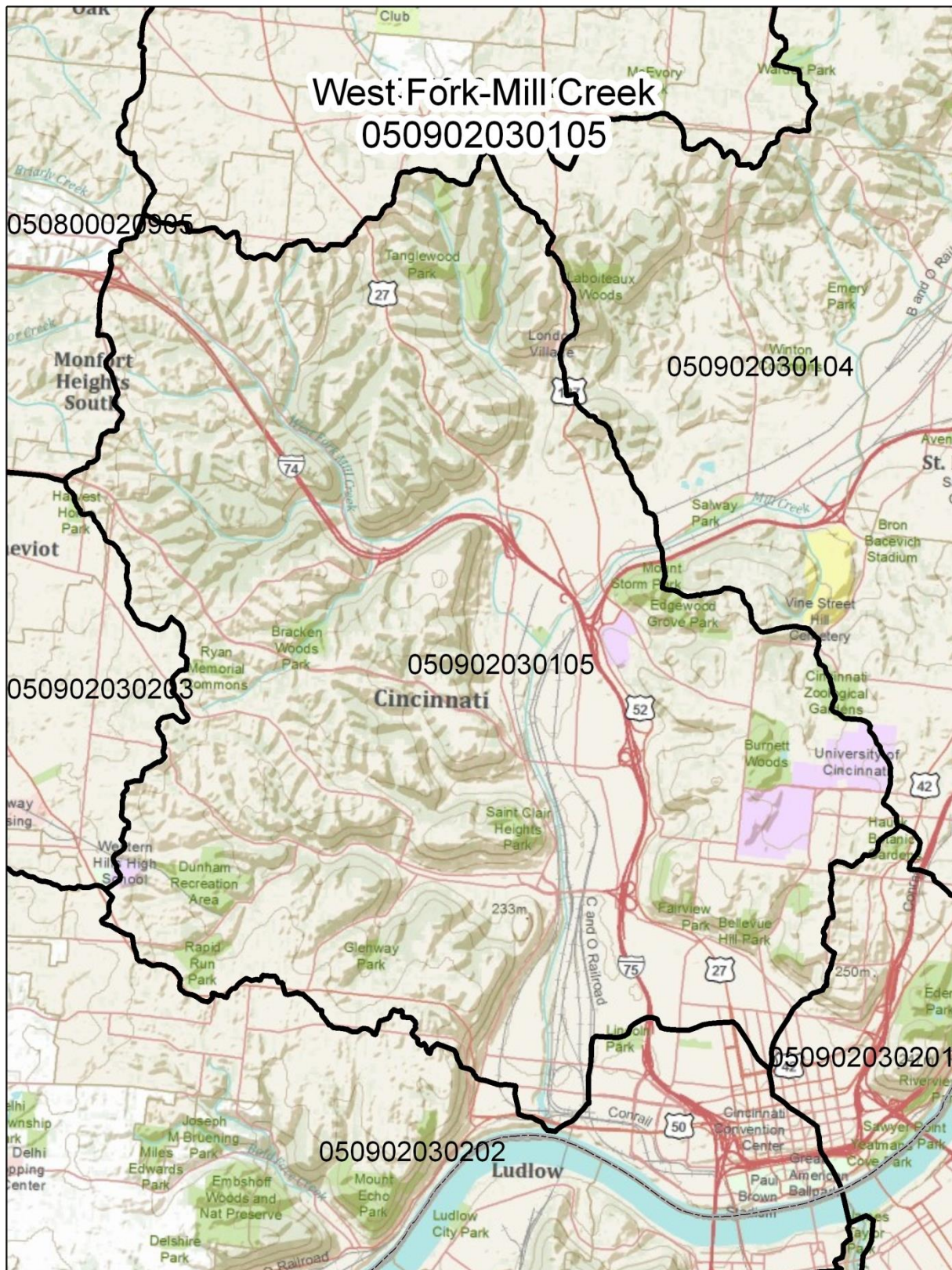
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of Cincinnati, City of St. Bernard, City of Wyoming, City of Norwood, City of Deer Park, City of Silverton, City of Reading, Village of Elmwood Place, Village of Golf Manor, Amberley Village, Village of Arlington Heights

**Facility Planning Area (FPA) or Areas:** Mill Creek FPA, Little Miami FPA (edges)

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 23.6 square miles

### Priority Points: 3

### Monitoring Scheduled: 2014

**TMDL Scheduled: 2017**

## Land Use Statistics

**Developed: 66.8%**    **Forest: 31.0%**    **Grass/Pasture: 1.2%**    **Row Crops: 0.3%**    **Other: 0.6%**

### **Aquatic Life Assessment**

**Reporting Category:** 5x (impaired; TMDL needed; retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, MWH – C, LRW (warmwater habitat, modified warmwater habitat – channelization, limited resource water)

**Sampling Year or Years:** 1997, 2002, 2203

**Watershed Score:** 11.0

#### **Causes of Impairment:**

- cause unknown
- direct habitat alterations
- flow alteration
- nutrients
- oil and grease
- organic enrichment/dissolved oxygen
- taste and odor
- unionized ammonia
- unknown toxicity

#### **Sources of Impairment:**

- channelization – development
- combined sewer overflows
- industrial point source
- major municipal point source
- streambank modification/destabilization - development
- urban runoff/storm sewers (nonpoint source)

#### **Ohio EPA's Comments:**

none

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

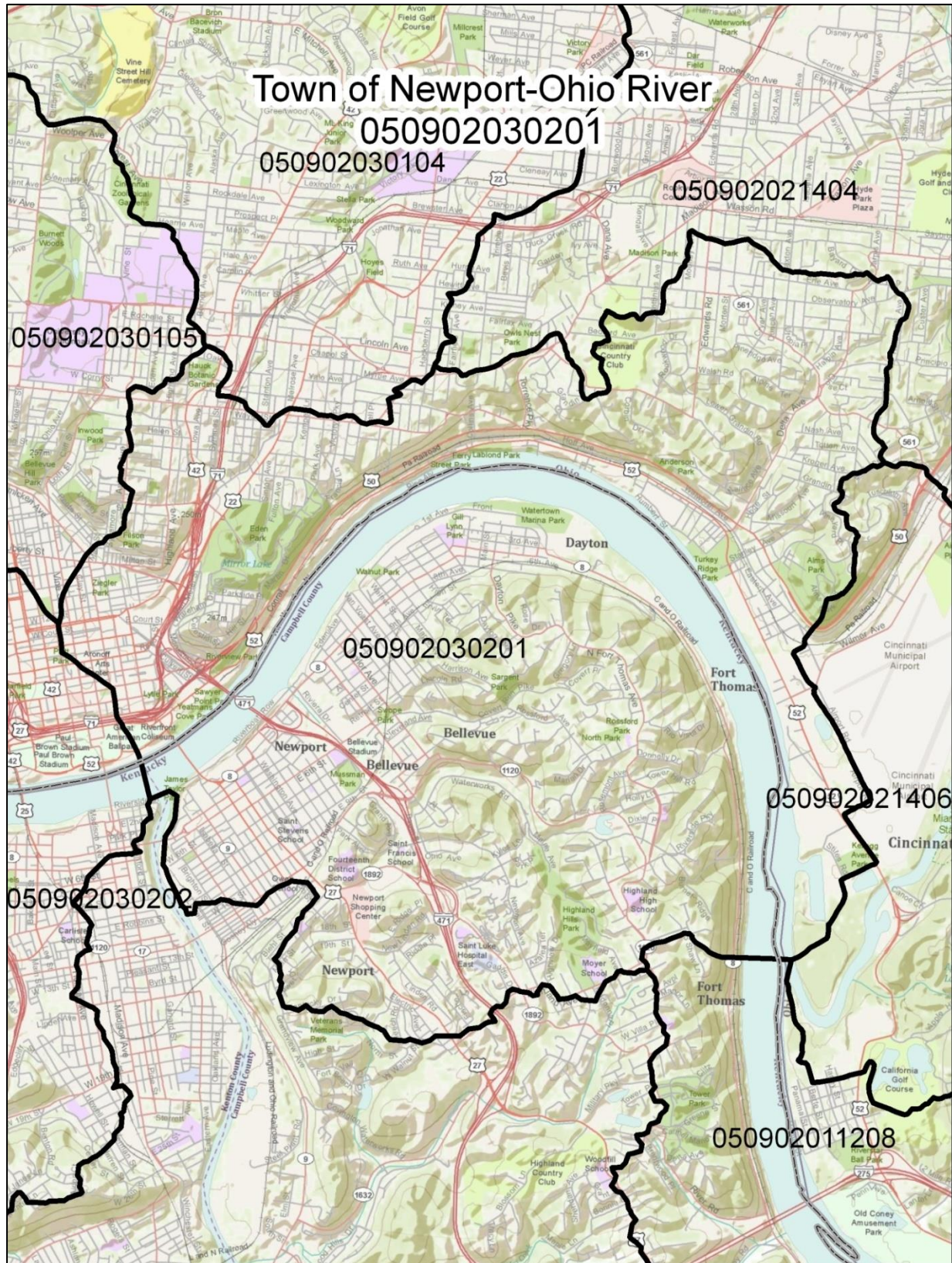
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of Cincinnati, City of Cheviot

**Facility Planning Area (FPA) or Areas:** Mill Creek FPA, Muddy Creek FPA (edges), Taylor Creek FPA (small edges)

**Onsite Wastewater Treatment System Concentration(s):** Green Township in parts of the I-74 corridor between West Fork Road and Diehl Road

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 16.8 square miles  
**Priority Points:** 1

**Monitoring Scheduled:** 2016  
**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 77.1%    **Forest:** 16.8%    **Grass/Pasture:** 2.0%    **Row Crops:** 0.1%    **Other:** 4.0%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data, retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, LRW (warmwater habitat, limited resource water)

**Sampling Year or Years:** 1991, 1994

**Watershed Score:** 17.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- organic enrichment/dissolved oxygen
- unionized ammonia

**Sources of Impairment:**

- combined sewer overflows
- dredging – development
- natural
- streambank destabilization - development

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

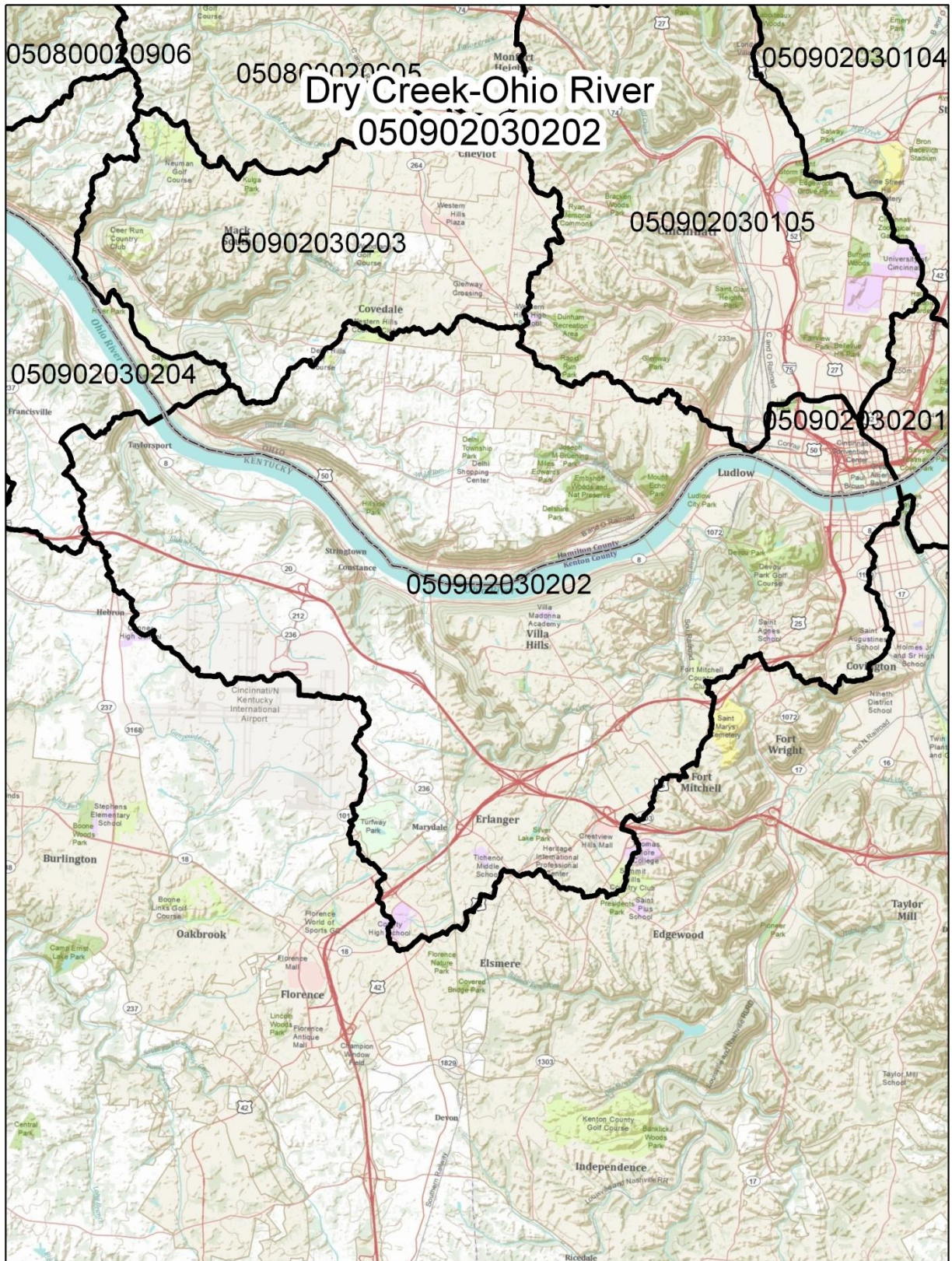
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of Cincinnati

**Facility Planning Area (FPA) or Areas:** Mill Creek FPA, Little Miami FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 54.4 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 74.4%    **Forest:** 24.5%    **Grass/Pasture:** 0.8%    **Row Crops:** 0.0%    **Other:** 0.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data, retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, LRW (warmwater habitat, limited resource water)

**Sampling Year or Years:** 1991, 1994

**Watershed Score:** 17.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- organic enrichment/dissolved oxygen
- unionized ammonia

**Sources of Impairment:**

- combined sewer overflows
- dredging – development
- natural
- streambank destabilization - development

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of Cincinnati

**Facility Planning Area (FPA) or Areas:** Mill Creek FPA, Muddy Creek FPA

**Onsite Wastewater Treatment System Concentration(s):** none

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 16.6 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 68.3%    **Forest:** 27.8%    **Grass/Pasture:** 3.5%    **Row Crops:** 0.1%    **Other:** 0.3%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data, retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, LRW (warmwater habitat, limited resource water)

**Sampling Year or Years:** 1991, 1994

**Watershed Score:** 17.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- organic enrichment/dissolved oxygen
- unionized ammonia

**Sources of Impairment:**

- combined sewer overflows
- dredging – development
- natural
- streambank destabilization - development

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

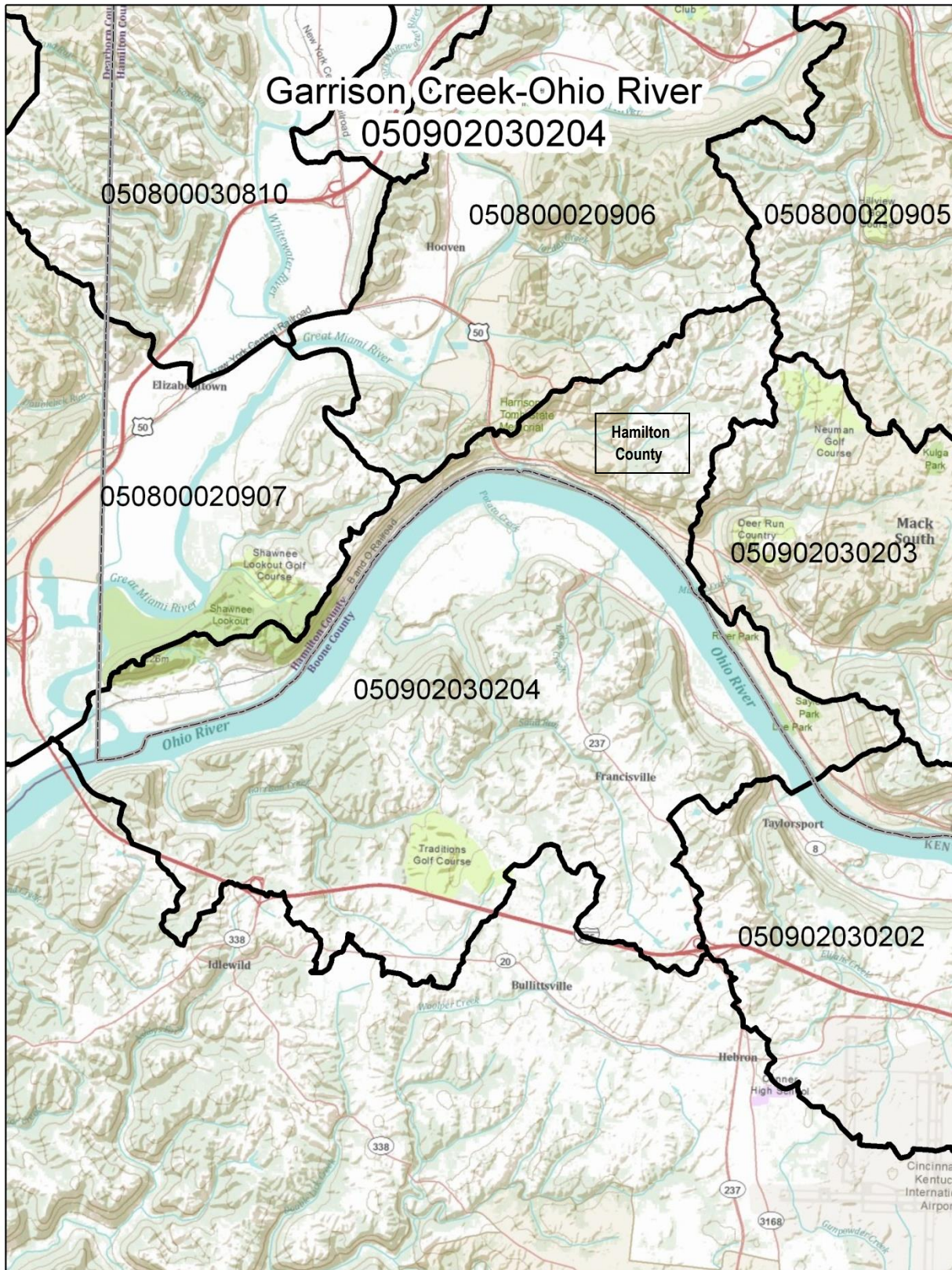
**County or Counties of the OKI Region in the Watershed:** Hamilton

**Municipalities of the OKI Region:** City of Cincinnati, City of Cheviot, Village of Addyston

**Facility Planning Area (FPA) or Areas:** Muddy Creek FPA, Mill Creek FPA (edges), Taylor Creek FPA (small edges), Cleves North Bend FPA (tip)

**Onsite Wastewater Treatment System Concentration(s):** Cherry View/Cherry Ridge/Shady Lane; Blaricum/Werk/Devil's Backbone Roads

# Watershed Assessment Unit Summary



**Assessment Unit Size:** 25.9 square miles

**Priority Points:** 1

**Monitoring Scheduled:** 2016

**TMDL Scheduled:** 2019

## Land Use Statistics

**Developed:** 35.1%    **Forest:** 43.0%    **Grass/Pasture:** 14.6%    **Row Crops:** 4.6%    **Other:** 2.7%

### **Aquatic Life Assessment**

**Reporting Category:** 5hx (impaired; TMDL needed; historical data, retained from 2008 Integrated Report)

**Aquatic Life Uses:** WWH, LRW (warmwater habitat, limited resource water)

**Sampling Year or Years:** 1991, 1994

**Watershed Score:** 17.0

**Causes of Impairment:**

- direct habitat alterations
- flow alteration
- organic enrichment/dissolved oxygen
- unionized ammonia

**Sources of Impairment:**

- combined sewer overflows
- dredging – development
- natural
- streambank destabilization - development

**Ohio EPA's Comments:**

Available assessment data exceed 10 years in age; assessment unit will remain Category 5 until TMDLs are developed for all pollutants impairing all beneficial uses.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** not applicable

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Causes of Impairment:** none

### **Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region in the Watershed:** Hamilton

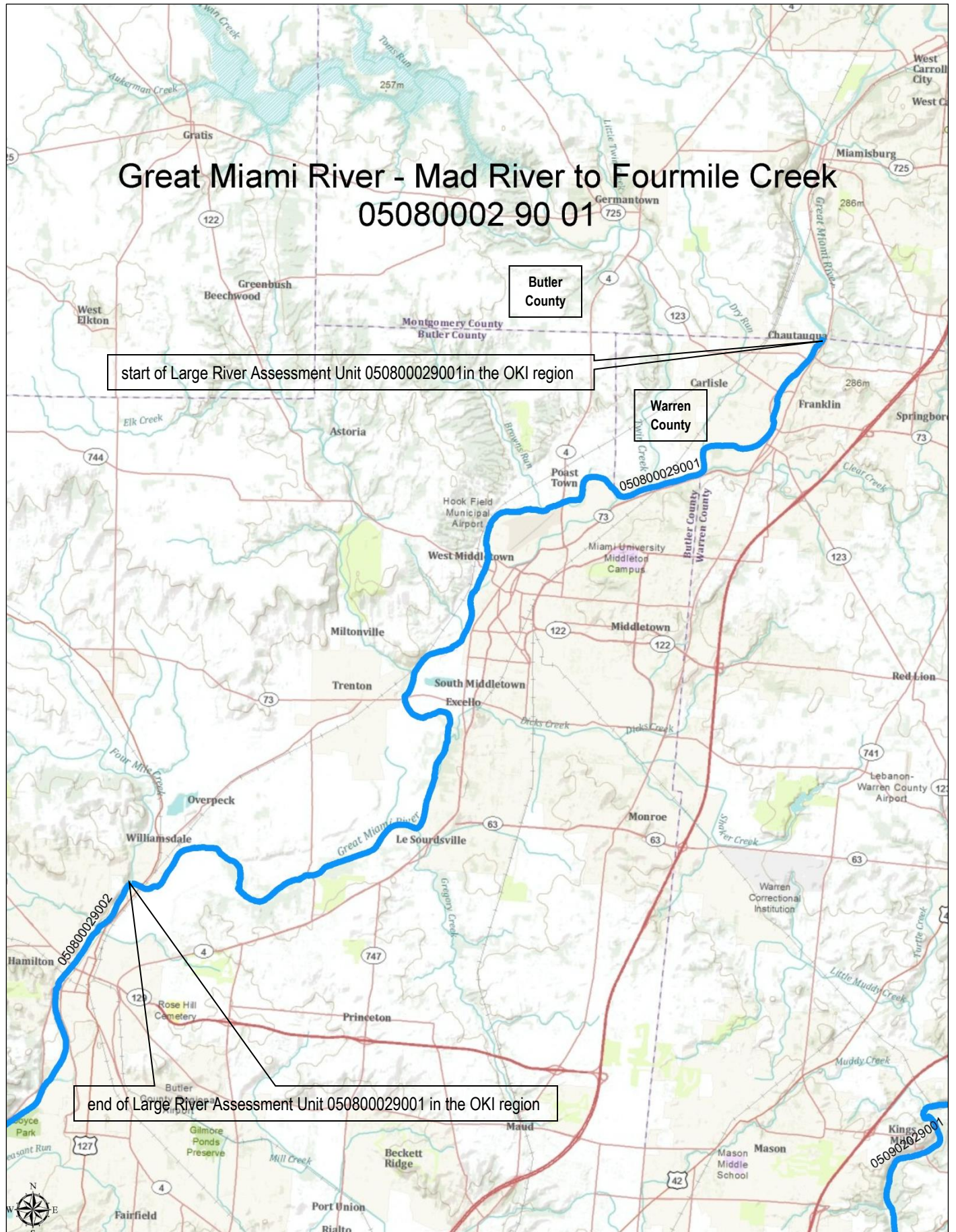
**Municipalities of the OKI Region:** Village of Addyston, Village of North Bend, Village of Cleves (corner)

**Facility Planning Area (FPA) or Areas:** Cleves North Bend FPA, Muddy Creek FPA, Western Hamilton County FPA

**Onsite Wastewater Treatment System Concentration(s):** Miami Township in the Ohio River corridor southwest of North Bend between Cliff Road and Brower Road; most of Cherry View/Cherry Ridge/Shady Lane; part of the Bridgetown to Mack Area

*Large River  
Assessment Units*

# Large River Assessment Unit Summary



**Length:** 43.1 miles

**Priority Points:** 7

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

### **Aquatic Life Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1995, 2000

**Sites Monitored:** 34

**Total Miles Monitored:** 43.10

**Assessment Unit Score:** 65.8

**Miles in Full Attainment:** 28.35 (65.8%)

**Miles in Partial Attainment:** 11.20 (26.0%)

**Miles in Non Attainment:** 3.55 (8.2%)

#### **Causes of Impairment:**

- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- priority organics

#### **Sources of Impairment:**

- combined sewer overflows
- dam construction – development
- flow regulation/modification – development
- major industrial point source
- major municipal point source
- removal of riparian vegetation – development
- upstream impoundment

#### **Ohio EPA's Comments:**

Comprehensive biological and water quality data collected in 1995 were used in prior Integrated Reports which resulted in a Category 5 (impaired) listing for the aquatic life beneficial use of this mainstem assessment unit. These data have since exceeded the ten-year threshold and are now considered historical. Limited data were collected in 2000 but were not considered adequate to update the assessment unit. While reflecting the current status that insufficient data are available to assess aquatic life use attainment, this Great Miami River assessment unit will remain Category 5 until TMDLs for all beneficial use impairments are completed and approved by the U.S. EPA.

### **Recreation Use Assessment**

**Reporting Category:** 3i (use attainment unknown; insufficient data)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** 0 (no waters currently utilized for water supply)

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

**Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** polychlorinated biphenyls (PCBs)

**PCB Concentration:** 593 parts per billion

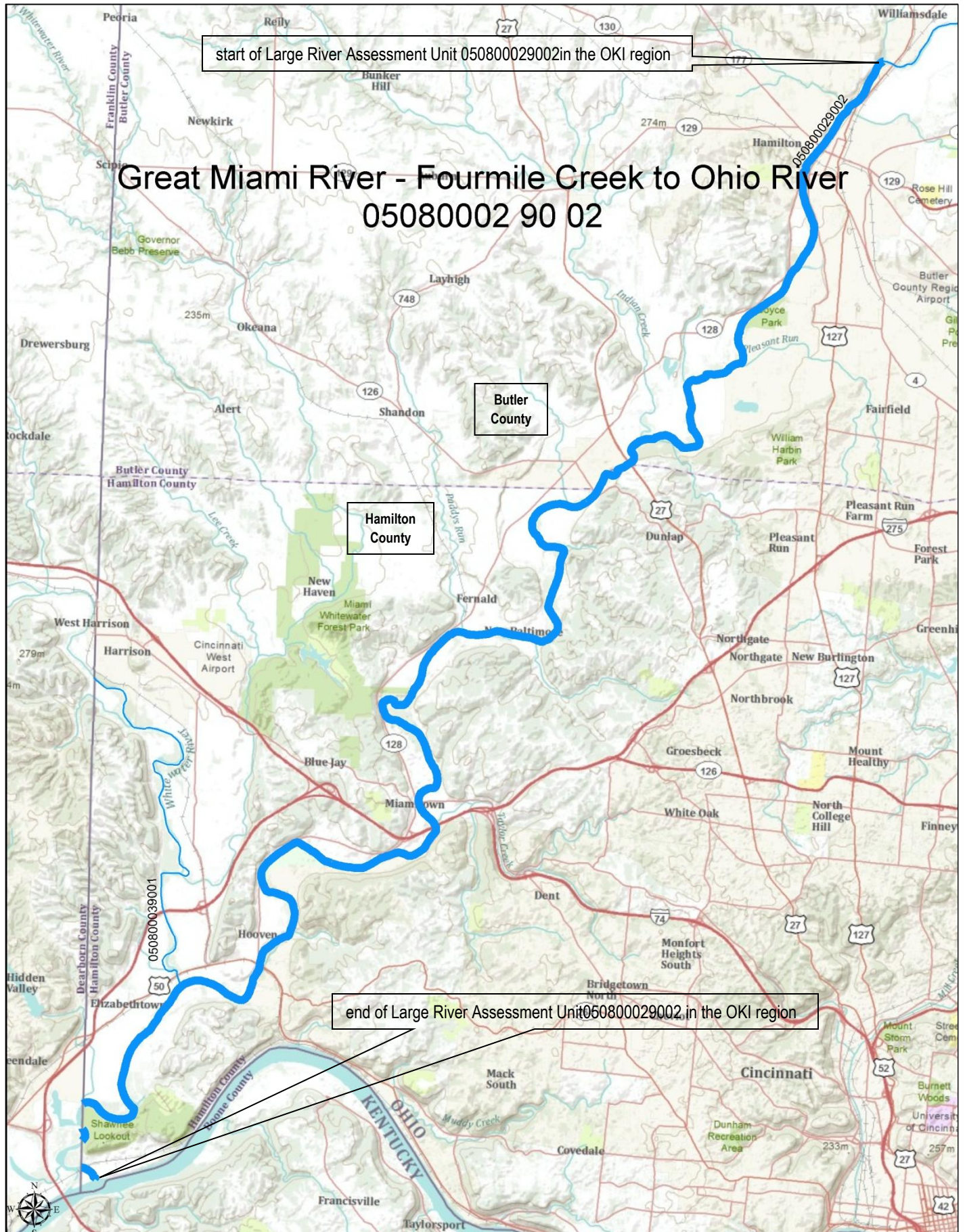
**Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region in which the river segment is found:** Warren, Butler

**Municipalities of the OKI Region:** City of Franklin, City of Middletown, City of Monroe, City of Hamilton (tip), Village of New Miami

**Facility Planning Area (FPA) or Areas:** Franklin FPA, Middletown FPA, Elk Creek FPA, Monroe FPA, LeSourdsville FPA, Hamilton Suburban FPA

# Large River Assessment Unit Summary



**Length:** 38.38 miles

**Priority Points:** 5

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

### **Aquatic Life Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Aquatic Life Uses:** WWH (warmwater habitat)

**Sampling Year or Years:** 1995, 2000

**Sites Monitored:** 19

**Total Miles Monitored:** 43.10

**Assessment Unit Score:** 34.5

**Miles in Full Attainment:** 13.23 (34.5%)

**Miles in Partial Attainment:** 23.25 (60.6%)

**Miles in Non Attainment:** 1.90 (4.9%)

#### **Causes of Impairment:**

- direct habitat alterations
- flow alteration
- nutrients
- organic enrichment/dissolved oxygen
- priority organics

#### **Sources of Impairment:**

- combined sewer overflows
- dam construction – development
- flow regulation/modification – development
- major industrial point source
- major municipal point source
- removal of riparian vegetation – development
- upstream impoundment

#### **Ohio EPA's Comments:**

Comprehensive biological and water quality data collected in 1995 were used in prior Integrated Reports which resulted in a Category 5 (impaired) listing for the aquatic life beneficial use of this mainstem assessment unit. These data have since exceeded the ten-year threshold and are now considered historical. Limited data were collected in 2007 but were not considered adequate to update the assessment unit. While reflecting the current status that insufficient data are available to assess aquatic life use attainment, this Great Miami River assessment unit will remain Category 5 until TMDLs for all beneficial use impairments are completed and approved by the U.S. EPA.

### **Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

### **Public Drinking Water Supply Assessment**

**Reporting Category:** 0 (no waters currently used for water supply)

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

**Fish Tissue Assessment**

**Reporting Category:** 5h (impaired; TMDL needed; historical data)

**Causes of Impairment:** none

**Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region through which the river mainstem segment flows:** Butler, Hamilton

**Municipalities of the OKI Region:** City of Hamilton, City of Fairfield

**Facility Planning Area (FPA) or Areas:** Hamilton Suburban FPA, Hamilton FPA, Fairfield FPA, Western Hamilton FPA, Taylor Creek FPA

# Large River Assessment Unit Summary



**Length:** 8.26 miles

**Priority Points:** 2

**Monitoring Scheduled:** 2010

**TMDL Scheduled:** 2013

**Aquatic Life Assessment**

**Reporting Category:** 1 (use attaining)

**Aquatic Life Uses:** EWH (exceptional warmwater habitat)

**Sampling Year or Years:** 2008

**Sites Monitored:** 2

**Total Miles Monitored:** 8.26

**Assessment Unit Score:** 100

**Miles in Full Attainment:** 8.26 (100%)

**Miles in Partial Attainment:** 0 (0%)

**Miles in Non Attainment:** 0 (0%)

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

**Ohio EPA's Comments:**

Biological monitoring and habitat assessments were conducted in the Whitewater River in 2008. More intensive monitoring will be conducted in this mainstem assessment unit in 2010, which will be reported in the 2012 Integrated Report. No aquatic life use impairment was documented at sites in this mainstem assessment unit in 2008.

**Recreation Use Assessment**

**Reporting Category:** 3 (use attainment unknown)

**Assessment Unit Score:** not calculated

**Public Drinking Water Supply Assessment**

**Reporting Category:** 0 (no waters currently used for water supply)

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

**Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** polychlorinated biphenyls (PCBs)

**PCB Concentration:** 95 parts per billion

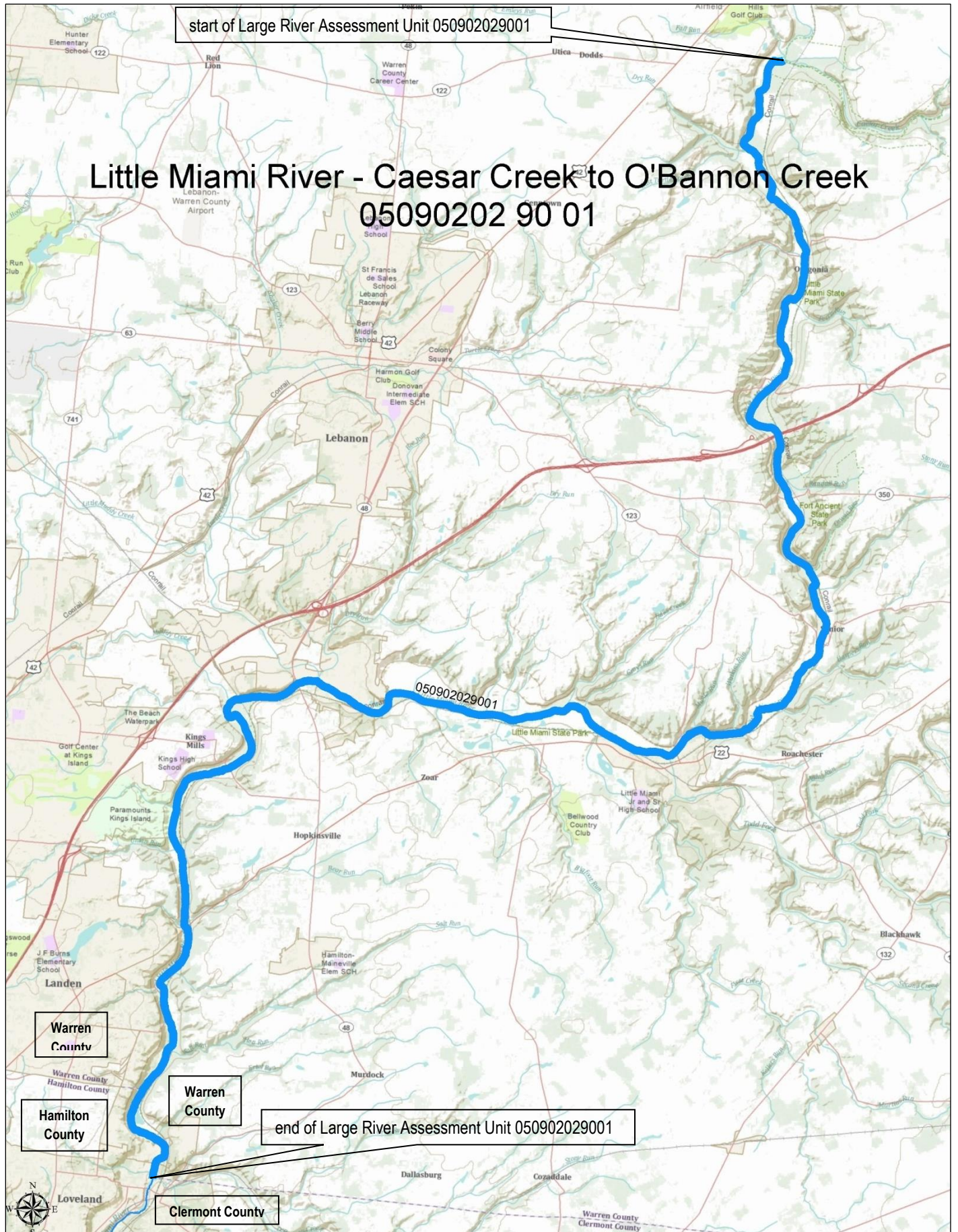
**Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region through which the river mainstem segment flows:** Hamilton

**Municipalities of the OKI Region:** City of Harrison

**Facility Planning Area (FPA) or Areas:** Harrison FPA, Western Hamilton FPA

# Large River Assessment Unit Summary



**Length:** 26.92 miles

**Priority Points:** 6

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

### **Aquatic Life Assessment**

**Reporting Category:** 1 (use attaining)

**Aquatic Life Uses:** EWH (exceptional warmwater habitat)

**Sampling Year or Years:** 2007

**Sites Monitored:** 13

**Total Miles Monitored:** 26.92

**Assessment Unit Score:** 100

**Miles in Full Attainment:** 26.92 (100%)

**Miles in Partial Attainment:** 0 (0%)

**Miles in Non Attainment:** 0 (0%)

**Causes of Impairment:**

- none listed

**Sources of Impairment:**

- none listed

### **Ohio EPA's Comments:**

Comprehensive chemical, physical and biological monitoring was conducted in the lower Little Miami River in 2007 to identify pollutants impairing beneficial uses and to support the development of TMDLs for those pollutants. A report on the findings of the biological and water quality survey can be found at:

[http://www.epa.ohio.gov/dsw/document\\_index/psdindx.aspx](http://www.epa.ohio.gov/dsw/document_index/psdindx.aspx) (see report EAS/2009-10-06). Status of TMDL development is available at <http://www.epa.ohio.gov/dsw/tmdl/LittleMiamiRiverLowerTMDL.aspx>. No aquatic life use impairment was documented in this assessment unit in 2007.

### **Recreation Use Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Assessment Unit Score:** 97

### **Public Drinking Water Supply Assessment**

**Reporting Category:** 0 (no waters currently used for water supply)

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** polychlorinated biphenyls (PCBs)

**PCB Concentration:** 95 parts per billion

### **Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region through which the river mainstem segment flows:** Warren, Hamilton

**Municipalities of the OKI Region:** City of Loveland, City of Lebanon (tip), Village of South Lebanon, Village of Morrow

**Facility Planning Area (FPA) or Areas:** Fort Ancient FPA, Morrow FPA, Lower Little Miami FPA, Southwest Warren County FPA, Lower Little Miami FPA, Loveland FPA

# Large River Assessment Unit Summary



**Length:** 24.00 miles

**Priority Points:** 8

**Monitoring Scheduled:** 2022

**TMDL Scheduled:** 2010

### **Aquatic Life Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Aquatic Life Uses:** EWH, WWH (exceptional warmwater habitat, warmwater habitat)

**Sampling Year or Years:** 2007

**Sites Monitored:** 7

**Total Miles Monitored:** 24.00

**Assessment Unit Score:** 88.3

**Miles in Full Attainment:** 21.20 (88.3%)

**Miles in Partial Attainment:** 2.80 (11.7%)

**Miles in Non Attainment:** 0 (0%)

#### **Causes of Impairment:**

- organic enrichment
- sedimentation/siltation

#### **Sources of Impairment:**

- combined sewer overflows
- municipal point source discharges

#### **Ohio EPA's Comments:**

Comprehensive chemical, physical and biological monitoring was conducted in the lower Little Miami River in 2007 to identify pollutants impairing beneficial uses and to support the development of TMDLs for those pollutants. A report on the findings of the biological and water quality survey can be found at:

[http://www.epa.ohio.gov/dsw/document\\_index/psdindx.aspx](http://www.epa.ohio.gov/dsw/document_index/psdindx.aspx) (see report EAS/2009-10-06). Status of TMDL development is available at <http://www.epa.ohio.gov/dsw/tmdl/LittleMiamiRiverLowerTMDL.aspx>. Aquatic life use impairment of this assessment unit was restricted to a short urbanized reach of the lower Little Miami River near the confluence with the Ohio River backwaters.

### **Recreation Use Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Assessment Unit Score:** 96

### **Public Drinking Water Supply Assessment**

**Reporting Category:** 0 (no waters currently used for water supply)

**Cause of Impairment:** none

**Nitrate Watch List:** no

**Pesticide Watch List:** no

### **Fish Tissue Assessment**

**Reporting Category:** 5 (impaired; TMDL needed)

**Causes of Impairment:** polychlorinated biphenyls (PCBs)

**PCB Concentration:** 229 parts per billion

**Basic Geography (as defined by OKI)**

**County or Counties of the OKI Region through which the river mainstem segment flows:** Hamilton, Clermont

**Municipalities of the OKI Region:** City of Loveland, City of Milford, City of Cincinnati, Village of Terrace Park, Village of Mariemont, Village of Fairfax

**Facility Planning Area (FPA) or Areas:** Loveland FPA, Horner Run Branch Hill FPA, Polk Run Sycamore Creek FPA, Little Miami FPA