

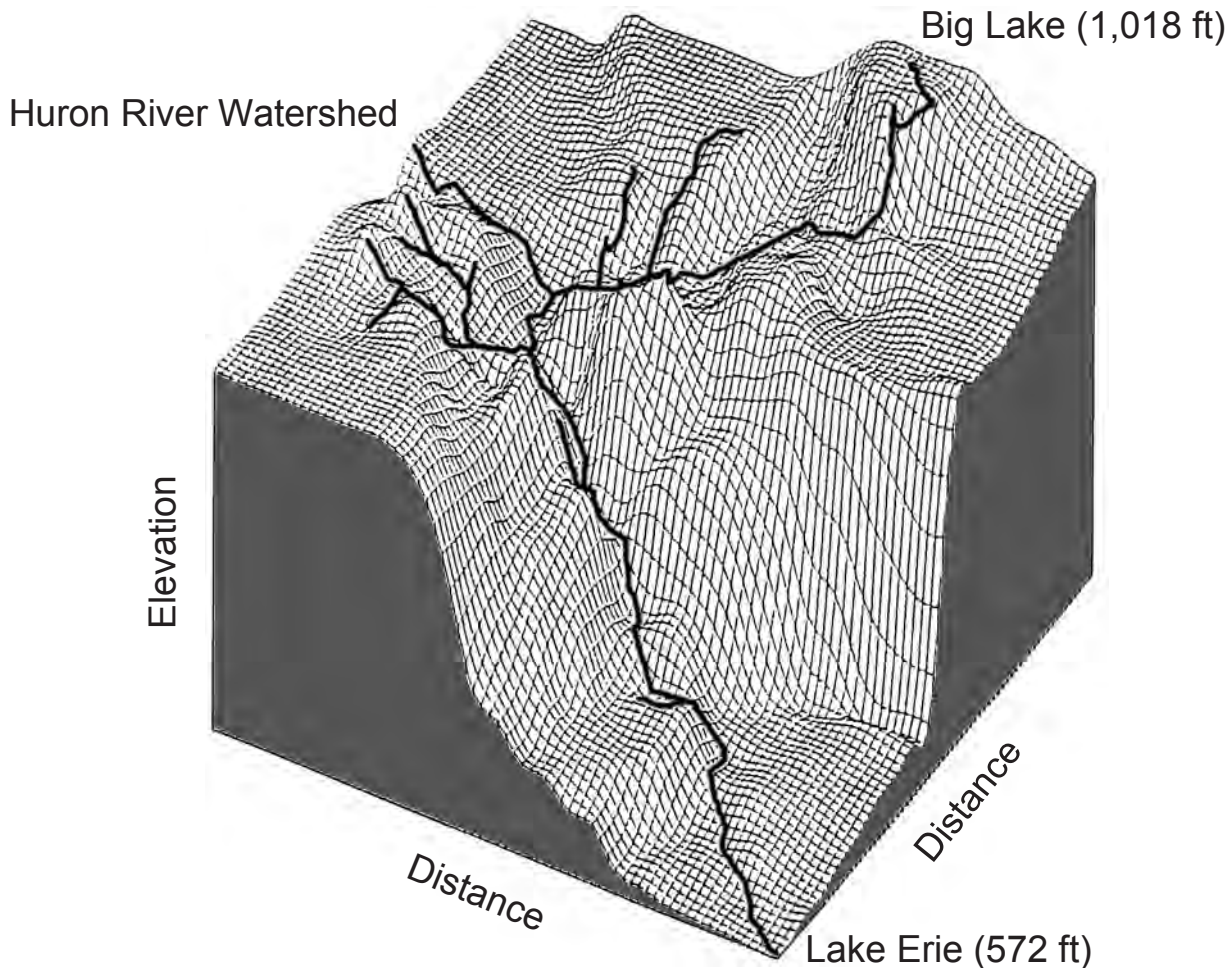
# FISHERIES DIVISION SPECIAL REPORT

Number 16

April, 1995

## Huron River Assessment Appendix

E. M. Hay-Chmielewski  
Paul W. Seelbach  
Gary E. Whelan  
Douglas B. Jester Jr.



STATE OF MICHIGAN  
DEPARTMENT OF NATURAL RESOURCES

**MICHIGAN DEPARTMENT OF NATURAL RESOURCES  
FISHERIES DIVISION**

**Fisheries Special Report No. 16  
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**HURON RIVER ASSESSMENT  
APPENDIX**

**E. M. Hay-Chmielewski  
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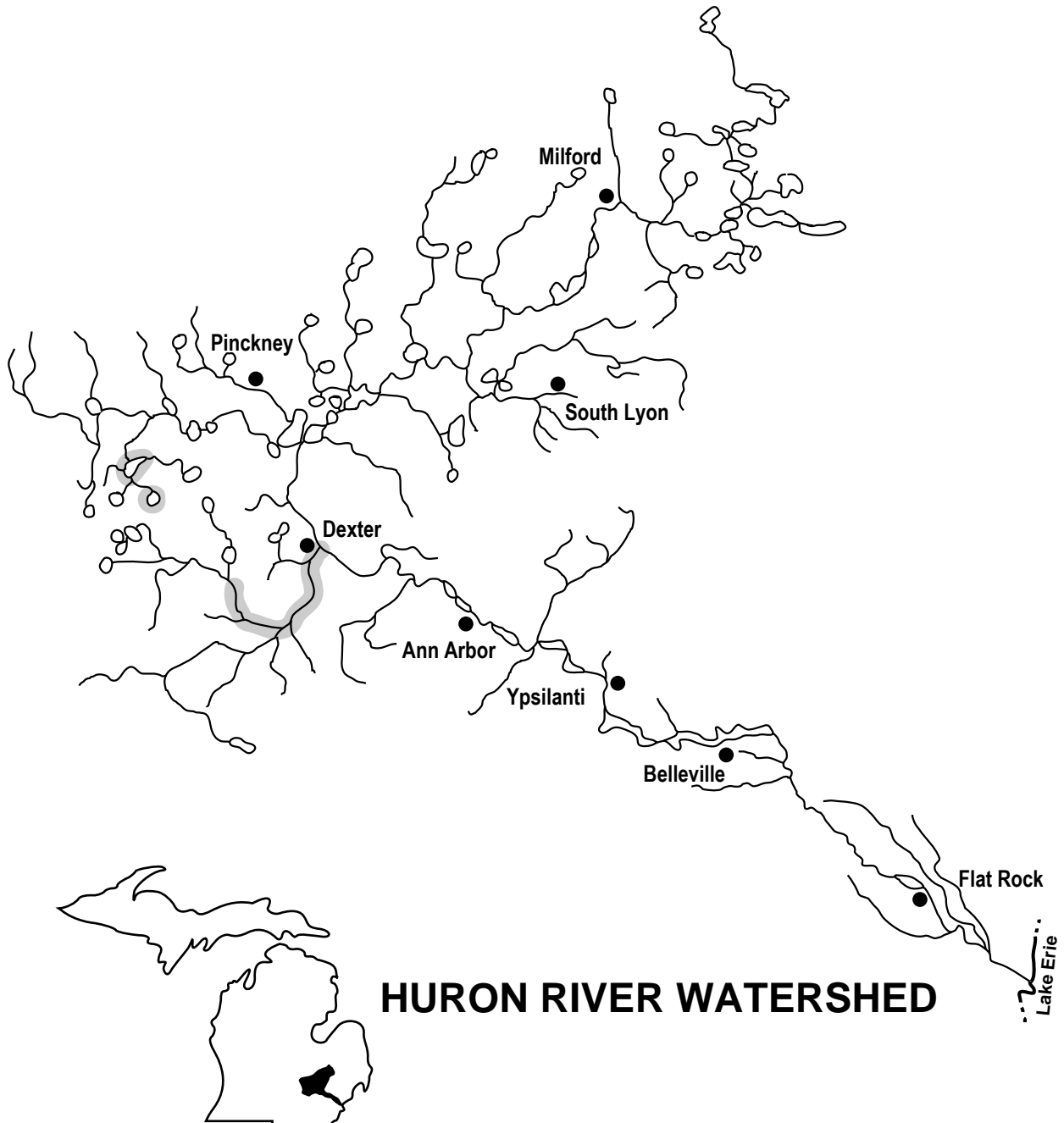
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**COVER:** A three dimensional drawing of the area containing the Huron River watershed. It shows how the water flows from the headwaters down the landscape, gathering the contributions from the tributaries, to Lake Erie. The figure is an adaptation of a drawing provided by the Huron River Watershed Council, Ann Arbor.

**Northern brook lamprey (*Ichthyomyzon fossor*) - rare**

**Habitat:**

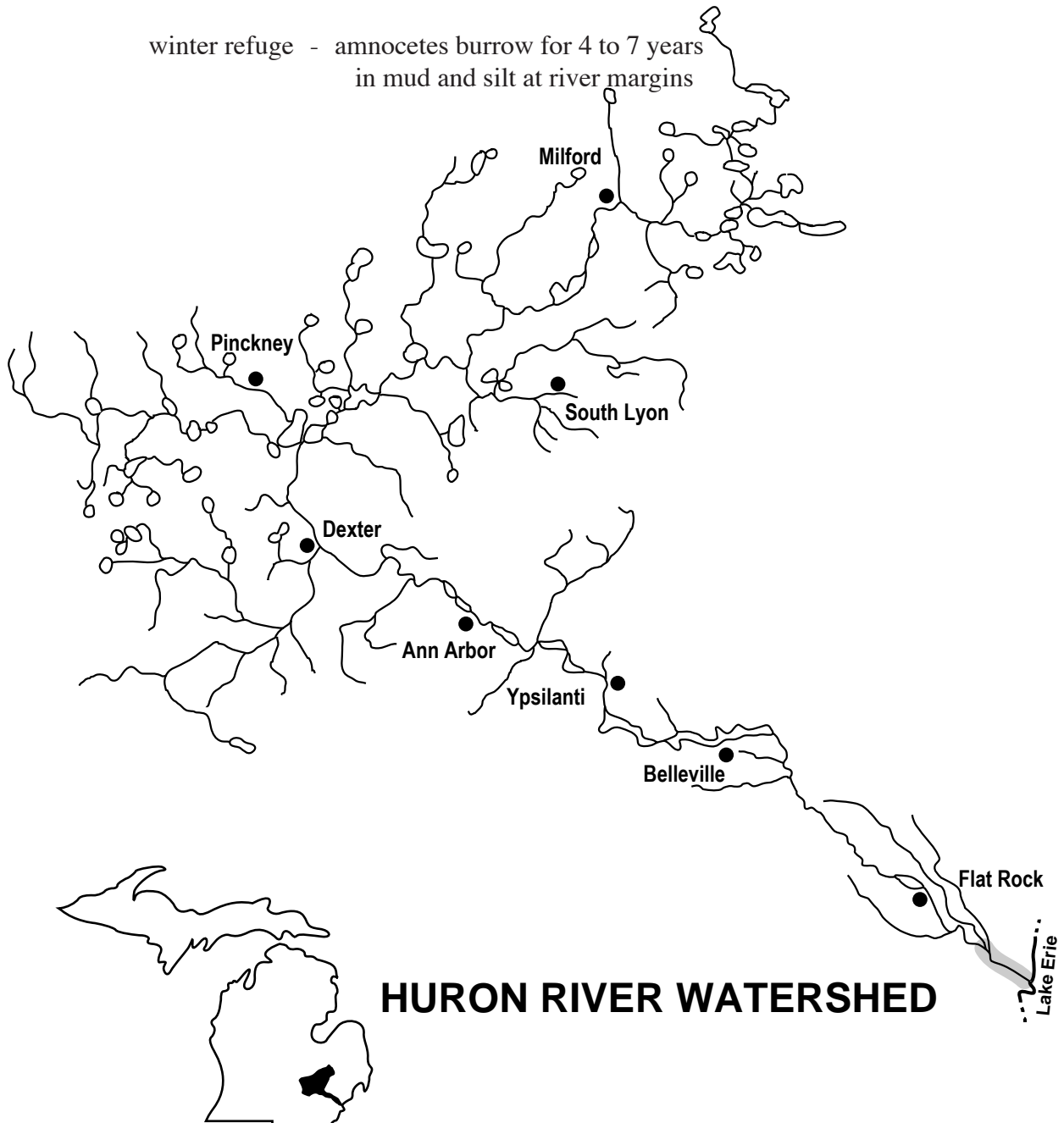
- feeding - young: low gradient, substrate with bars and beds of mixed sand and organic debris
- moderately warm water
  
- spawning - clear, high gradient streams (<15 feet wide)
- riffles with sand or gravel substrate



**Silver lamprey (*Ichthyomyzon unicuspis*) - rare**

**Habitat:**

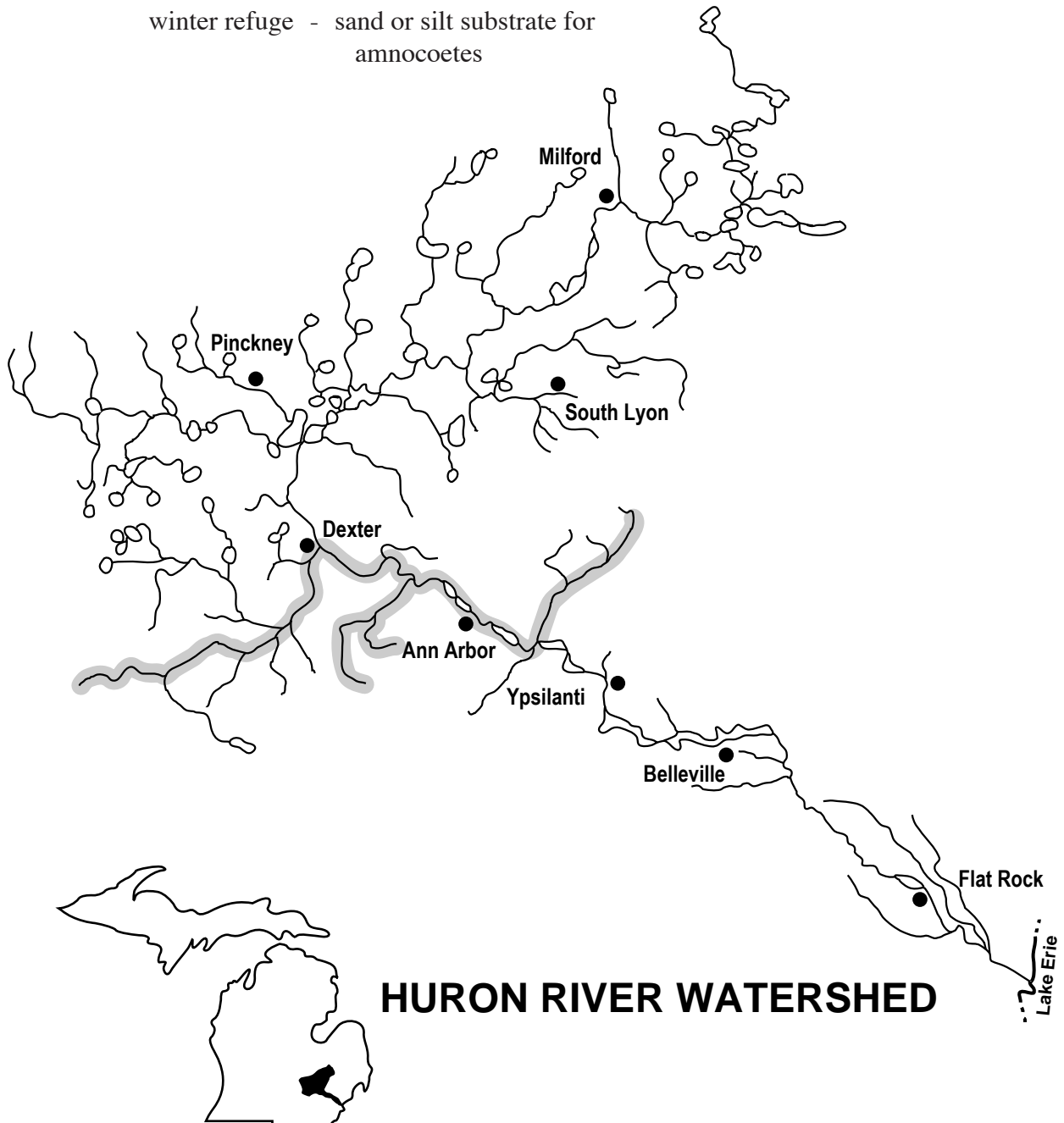
- feeding - young: sand, muck, or organic debris substrate
- adults: clear river water with prey species
  
- spawning - gravel and sand substrate
- moderate gradient
- moderate size stream
- cannot tolerate silt
- no dams
  
- winter refuge - ammocetes burrow for 4 to 7 years  
in mud and silt at river margins



**American brook lamprey (*Lampetra appendix*)**

**Habitat:**

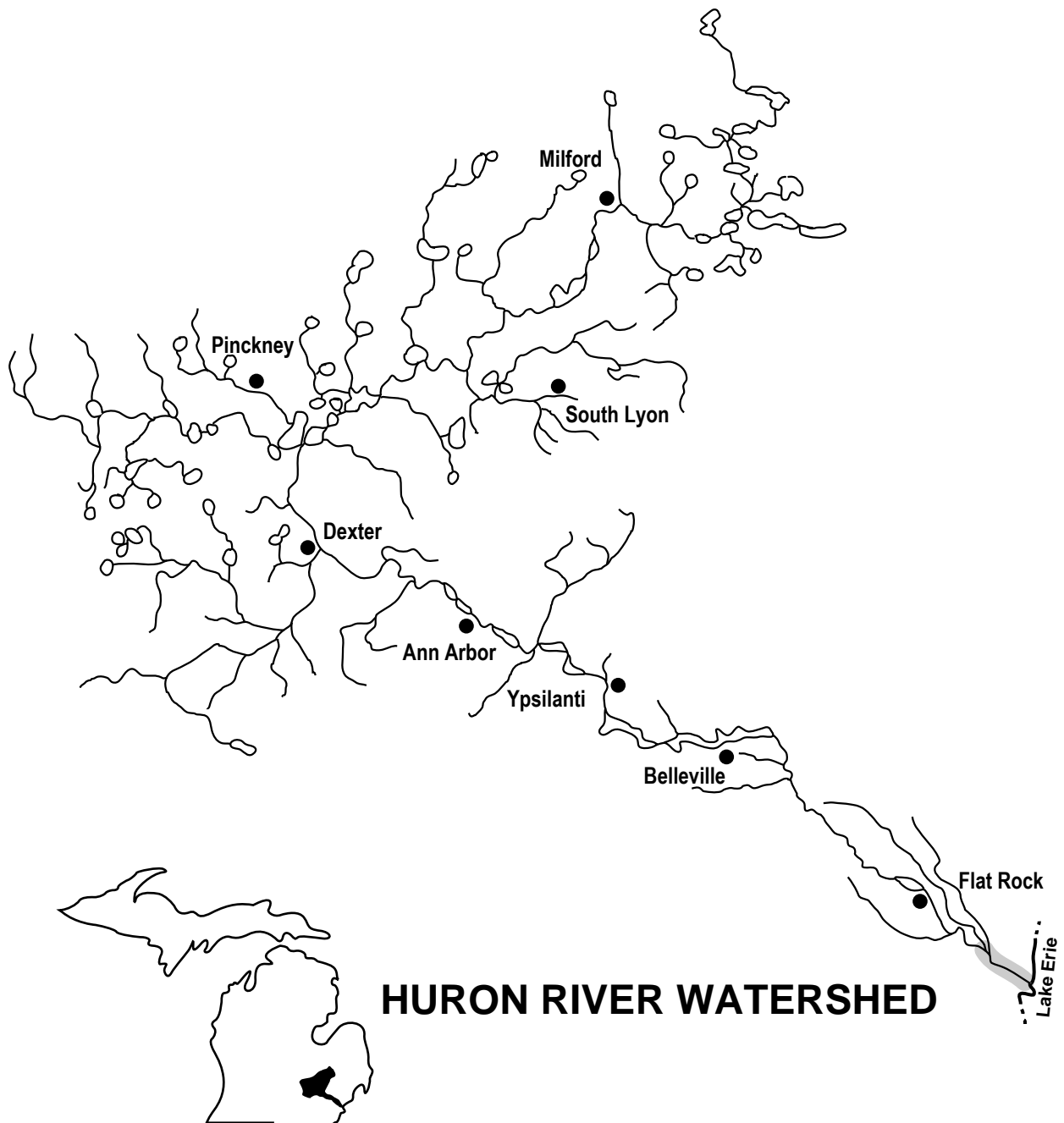
- feeding - young: low gradient, substrate with bars and beds of mixed sand and organic debris
- clear cool stream water, sensitive to turbidity
  
- spawning - clear, high gradient streams (>15 feet wide)
- cold water
- gravel substrate
  
- winter refuge - sand or silt substrate for ammocoetes



**Sea lamprey (*Petromyzon marinus*)**

**Habitat:**

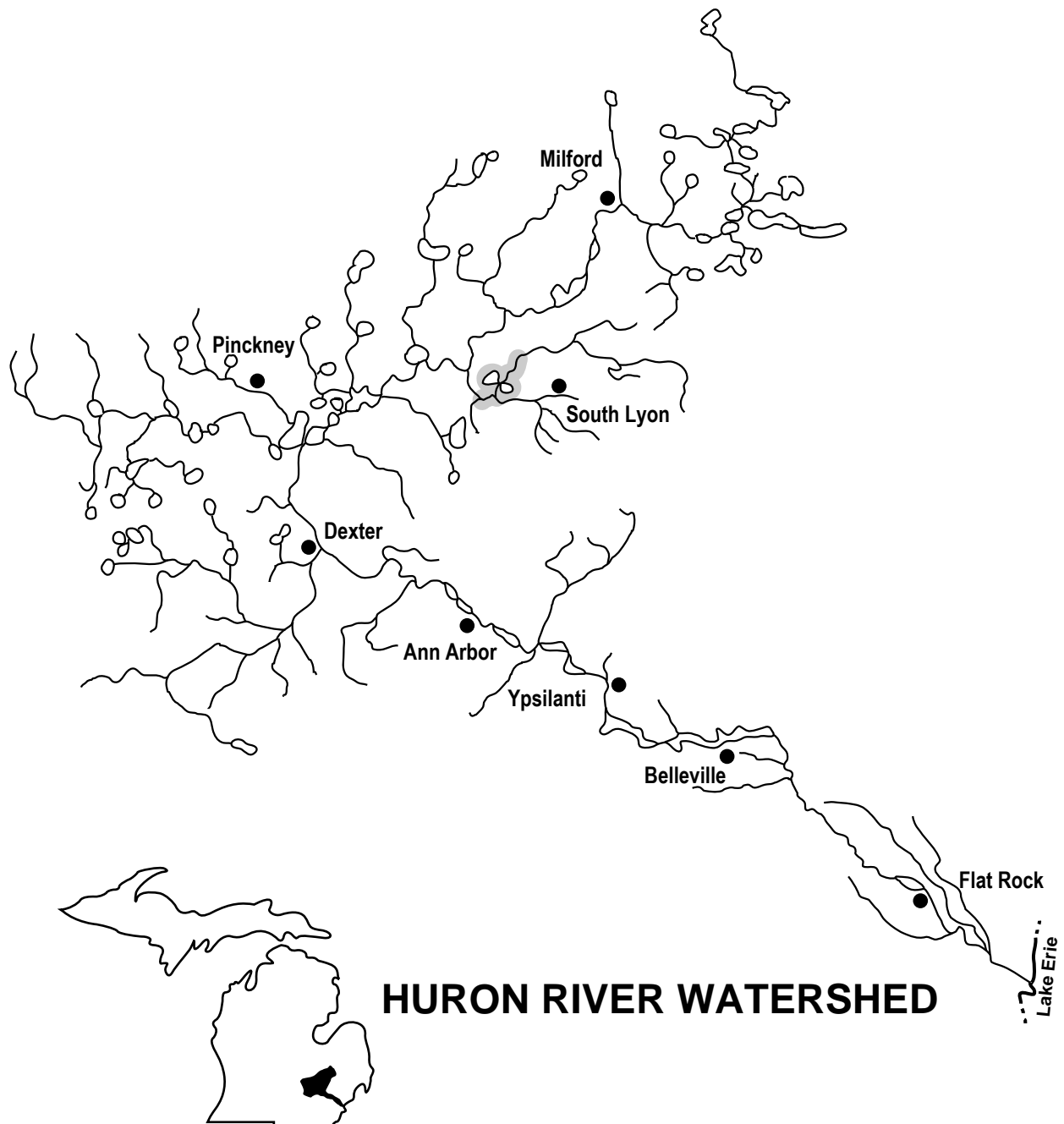
- feeding - young: substrate with beds of sand mixed with organic debris
- cannot tolerate silt
- adults: clear cool water of Lake Erie
  
- spawning - no dams
- riffles with sand and gravel substrates



**Spotted gar (*Lepisosteus oculatus*) - rare**

**Habitat:**

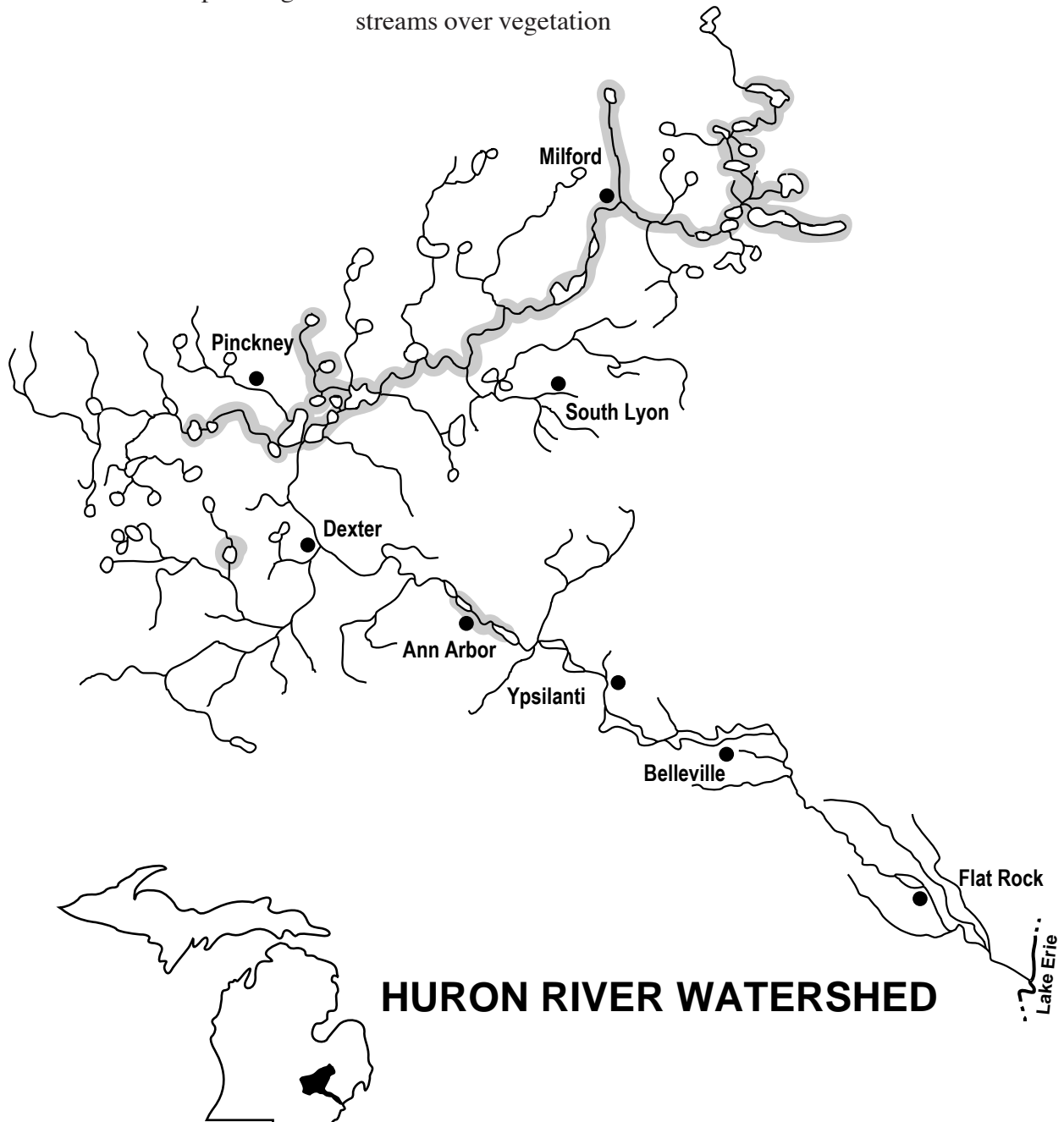
- feeding - quiet clear water in lakes, impoundments, or streams
- aquatic vegetation
  
- spawning - warm shallow water with abundant aquatic vegetation



**Longnose gar (*Lepisosteus osseus*)**

**Habitat:**

- feeding - adults: in deeper water
  - young: in shallows
  - clear water, low-gradient streams, lakes, and impoundments
  - will feed in moderate current
  - aquatic vegetation preferred, but not necessary
  - open water fish
- spawning - warm shallow water of lakes or streams over vegetation

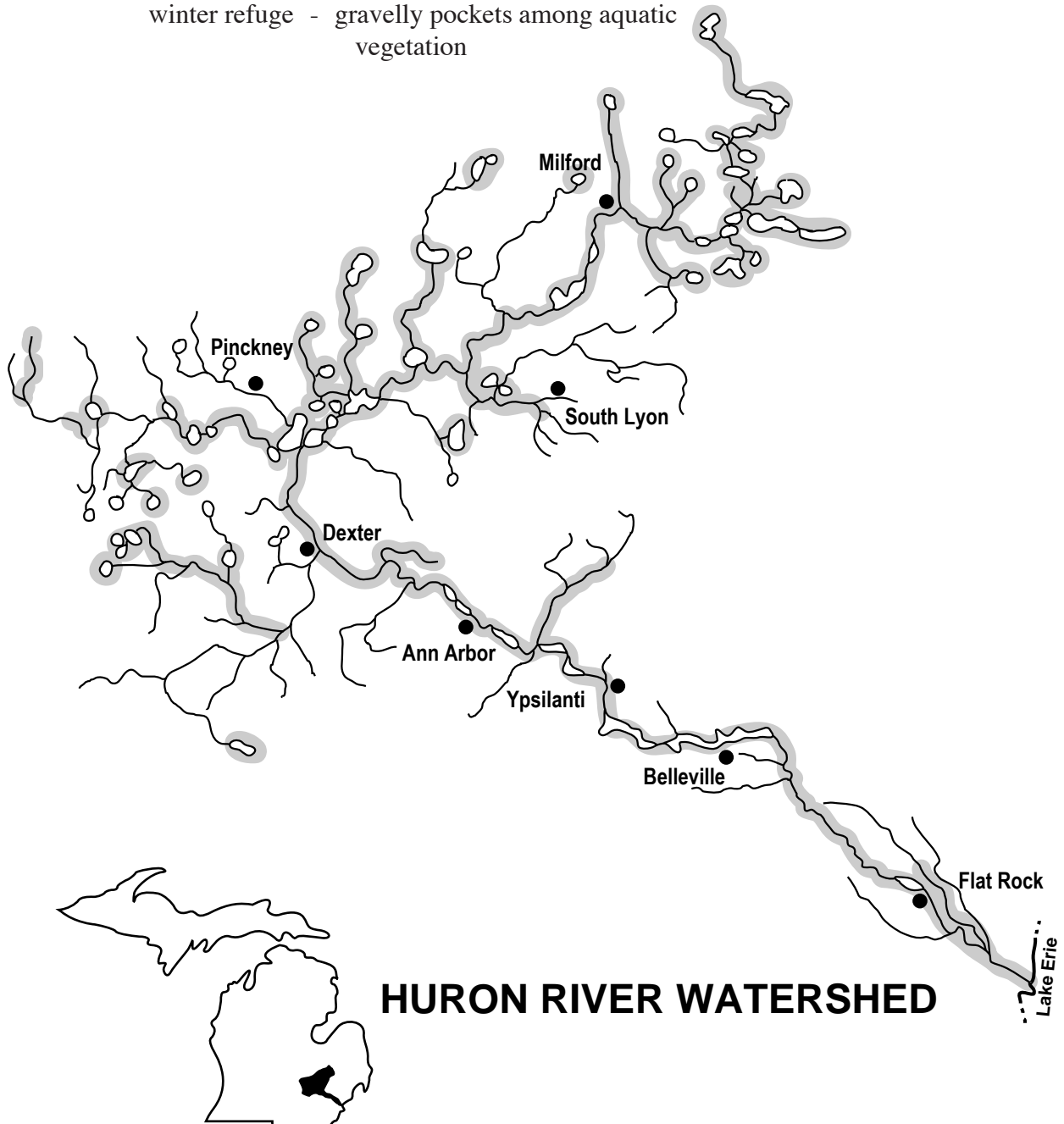




**Bowfin** (*Amia calva*)

**Habitat:**

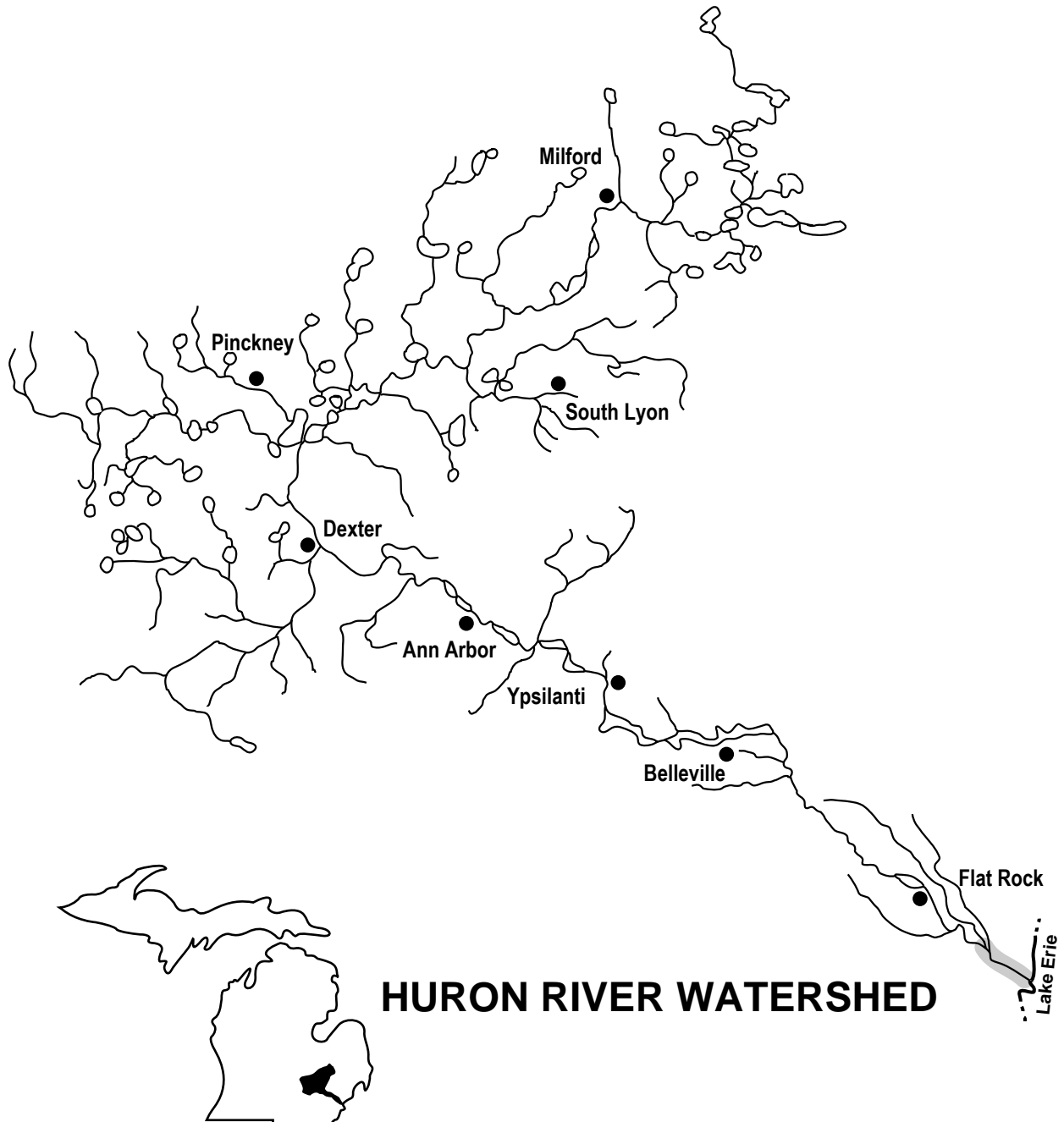
- feeding
  - clear water
  - abundant rooted aquatic vegetation
  - low gradient streams, lakes, and impoundments
  - tolerate only small amount of silt
  
- spawning
  - need vegetated water, 1 to 2 feet deep
  - can spawn under logs, stumps, or bushes
  
- winter refuge
  - gravelly pockets among aquatic vegetation



**Mooneye (*Hiodon tergisus*) - endangered**

**Habitat:**

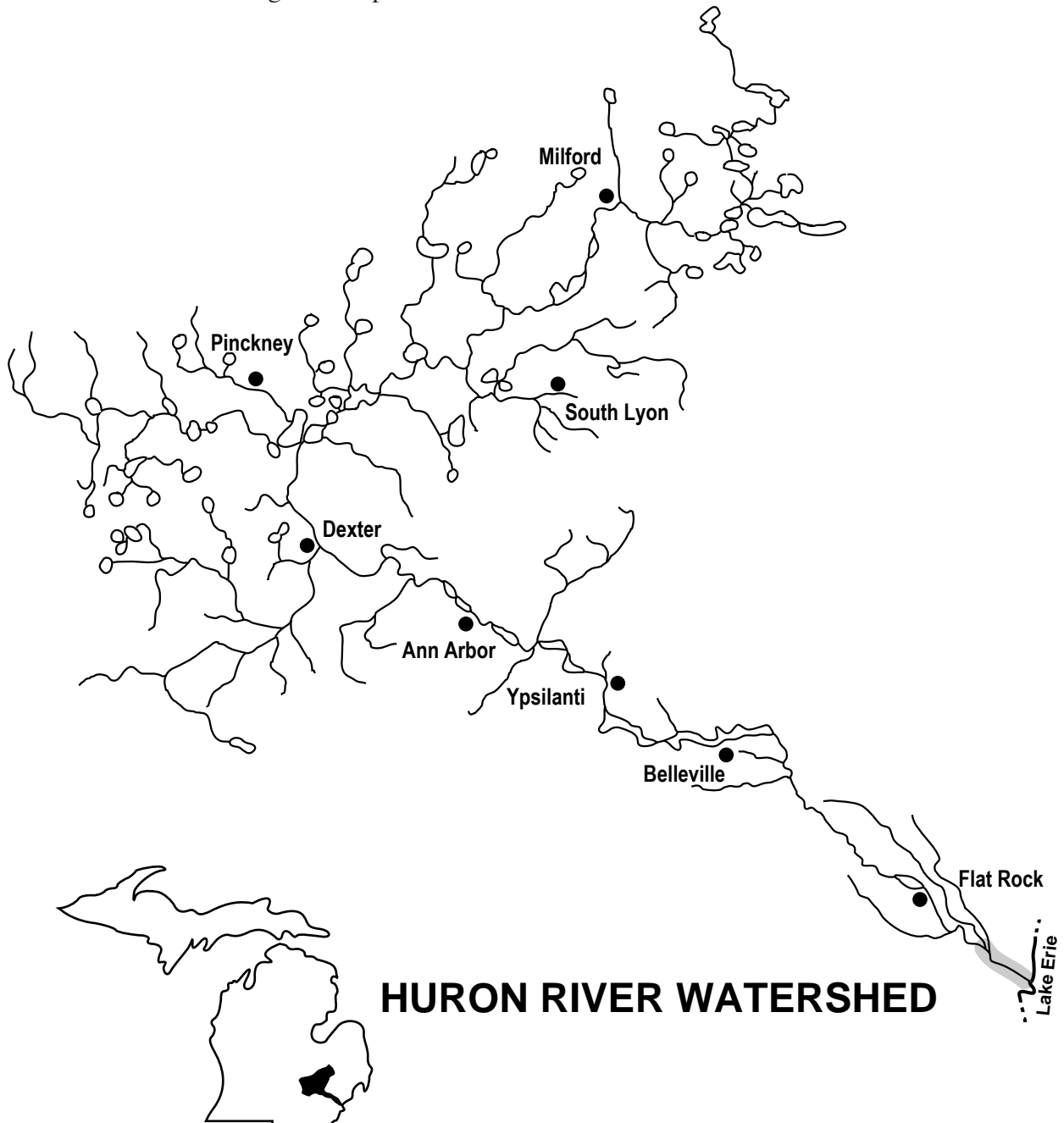
- feeding - clear large rivers and Lake Erie
- feeds in swift water
- grows in non-flowing water



**Alewife** (*Alosa pseudoharengus*)

**Habitat:**

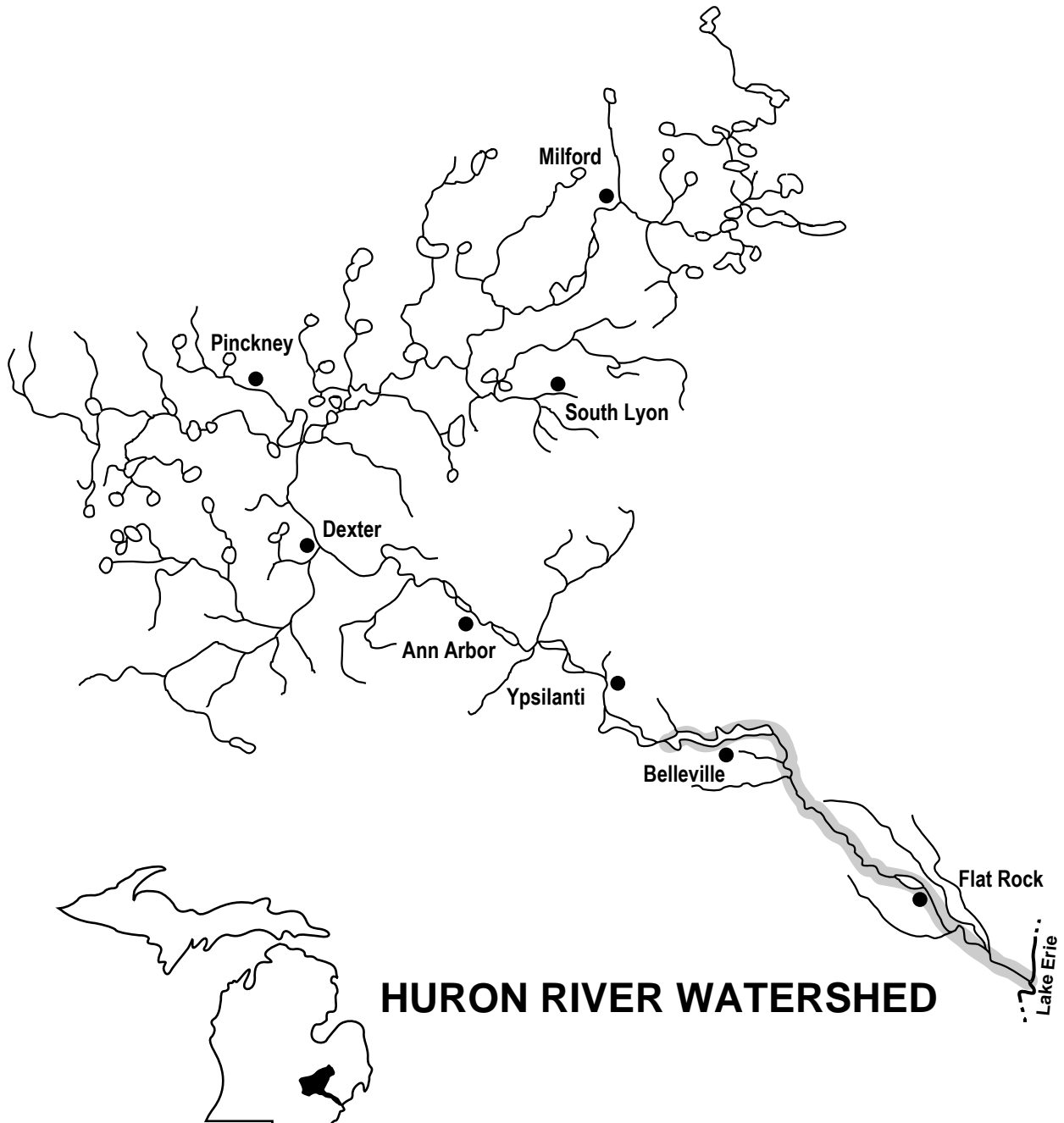
- feeding - adults: deep water of Lake Erie
- young: shallow water of Lake Erie
- prefers warmer waters
  
- spawning - streams or shallow beaches of lake
- sand or gravelly substrate
  
- winter refuge - deep water



**Gizzard shad (*Dorosoma cepedianum*)**

**Habitat:**

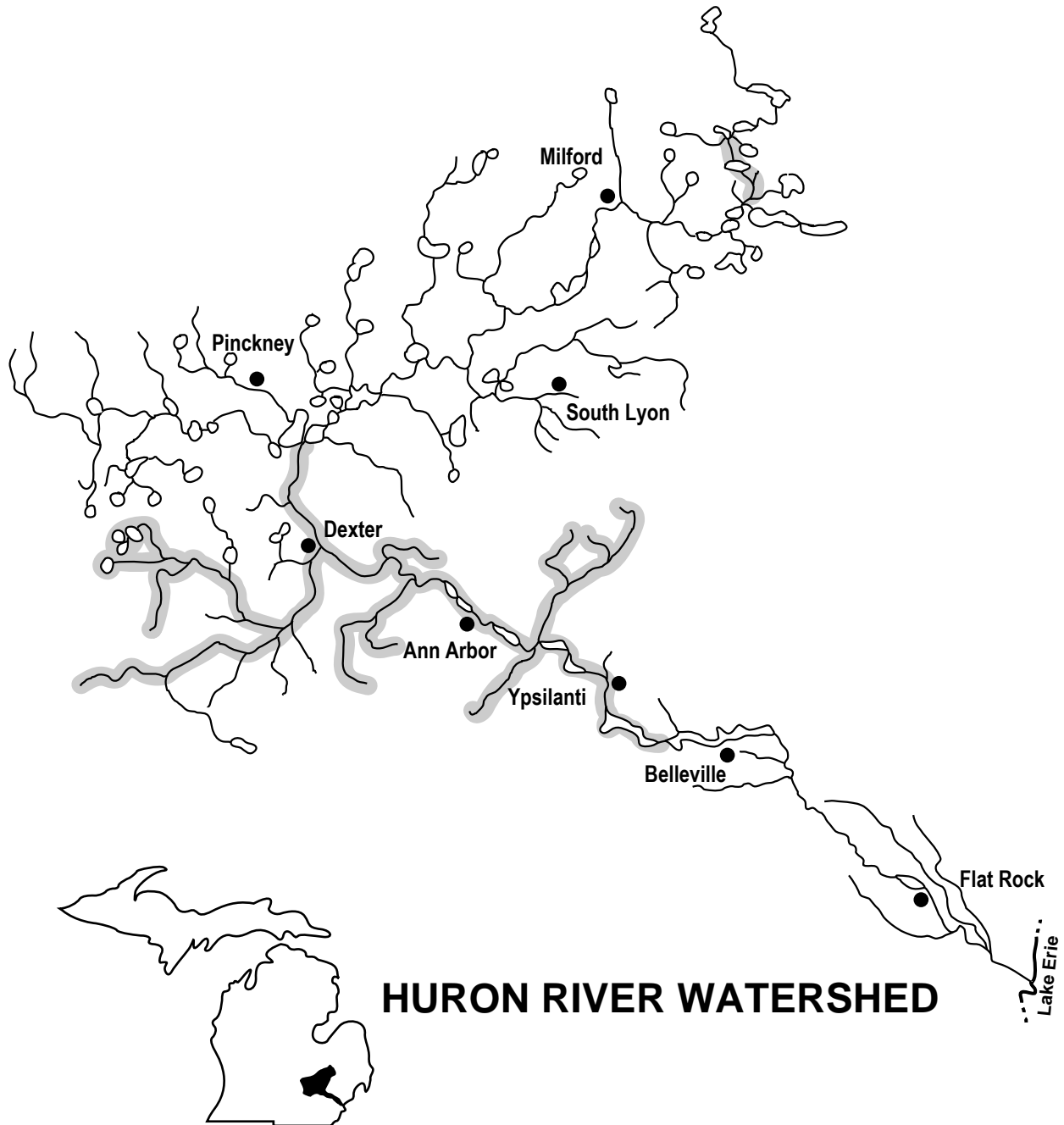
- feeding - large streams with low gradient, impoundments, and Lake Erie
- tolerant of clear and turbid water
  
- spawning - shallow areas of ponds, lakes, and large rivers
- low gradient



**Central stoneroller** (*Campostoma anomalum*)

**Habitat:**

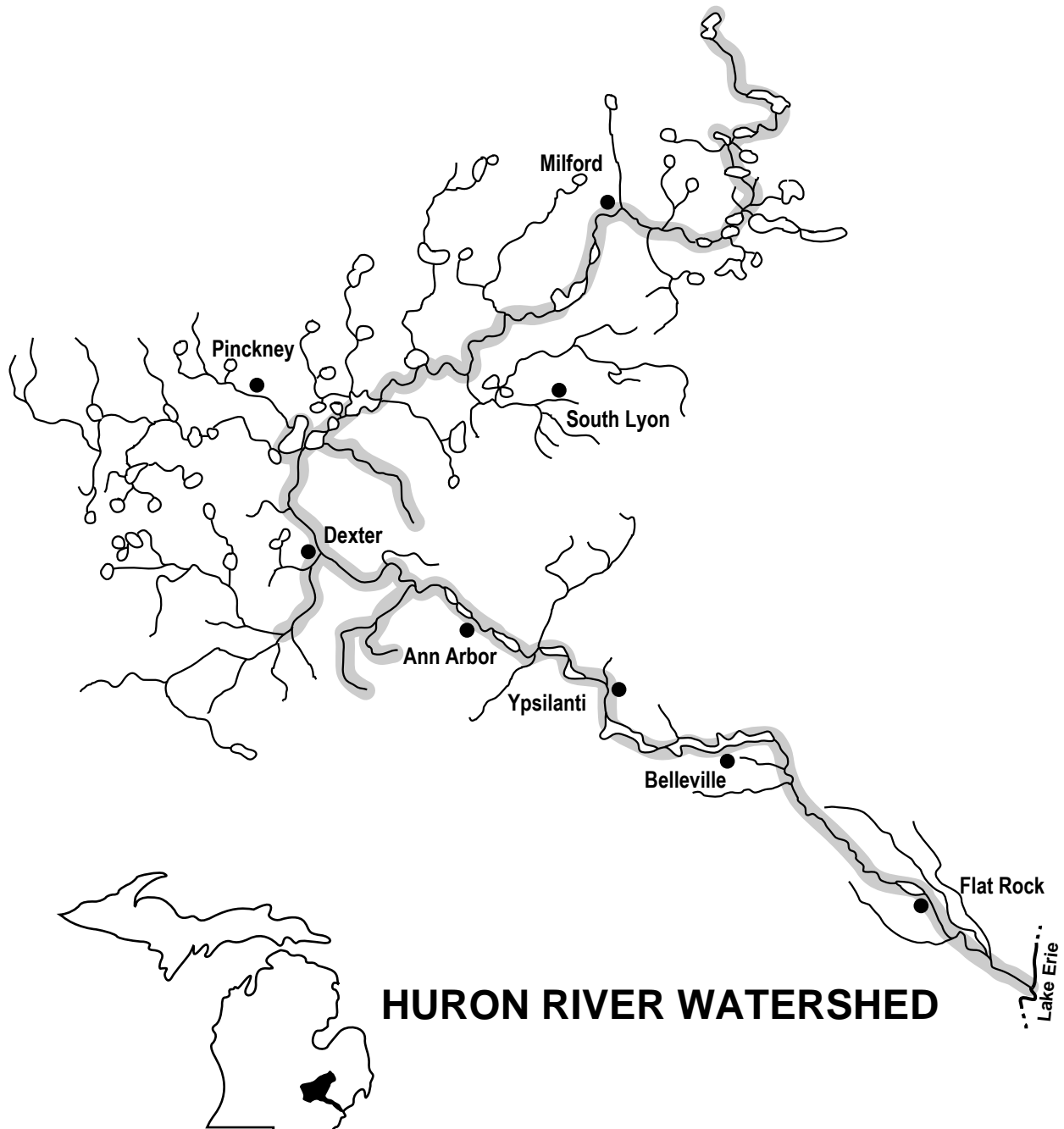
- feeding - moderate to high gradients
  - rocky riffles
  - somewhat tolerant of turbidity
  - riffles and adjacent pools of warm, clear, shallow streams
  - gravel or cobble substrate
- spawning - riffles



**Goldfish** (*Carassius auratus*)

**Habitat:**

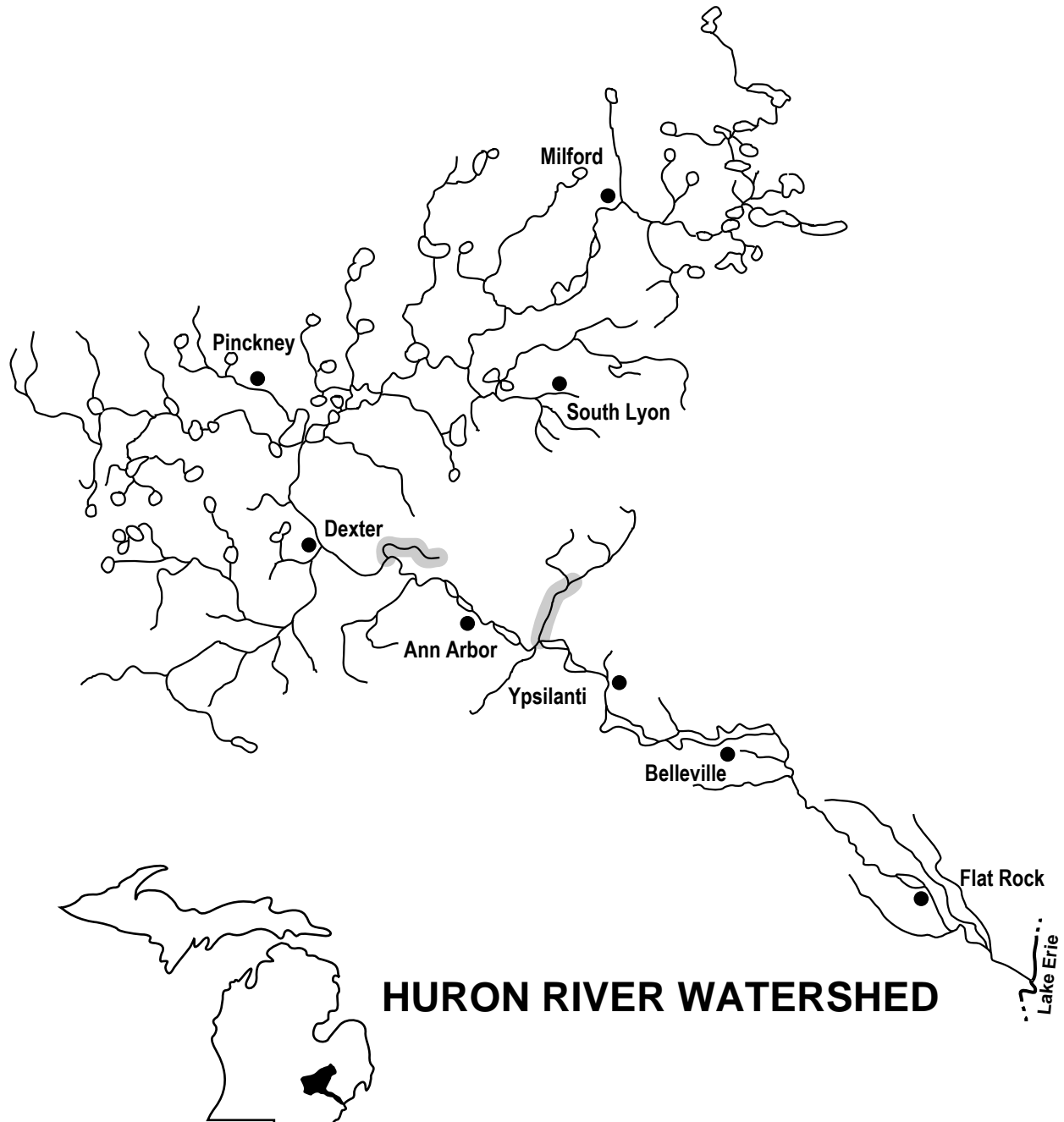
- feeding - vegetation
  - low gradient, shallow, warm water streams, rivers, lakes, and impoundments
  - tolerates some turbidity and siltation
- spawning - warm, weedy shallows



**Redside dace (*Clinostomus elongatus*) - rare**

**Habitat:**

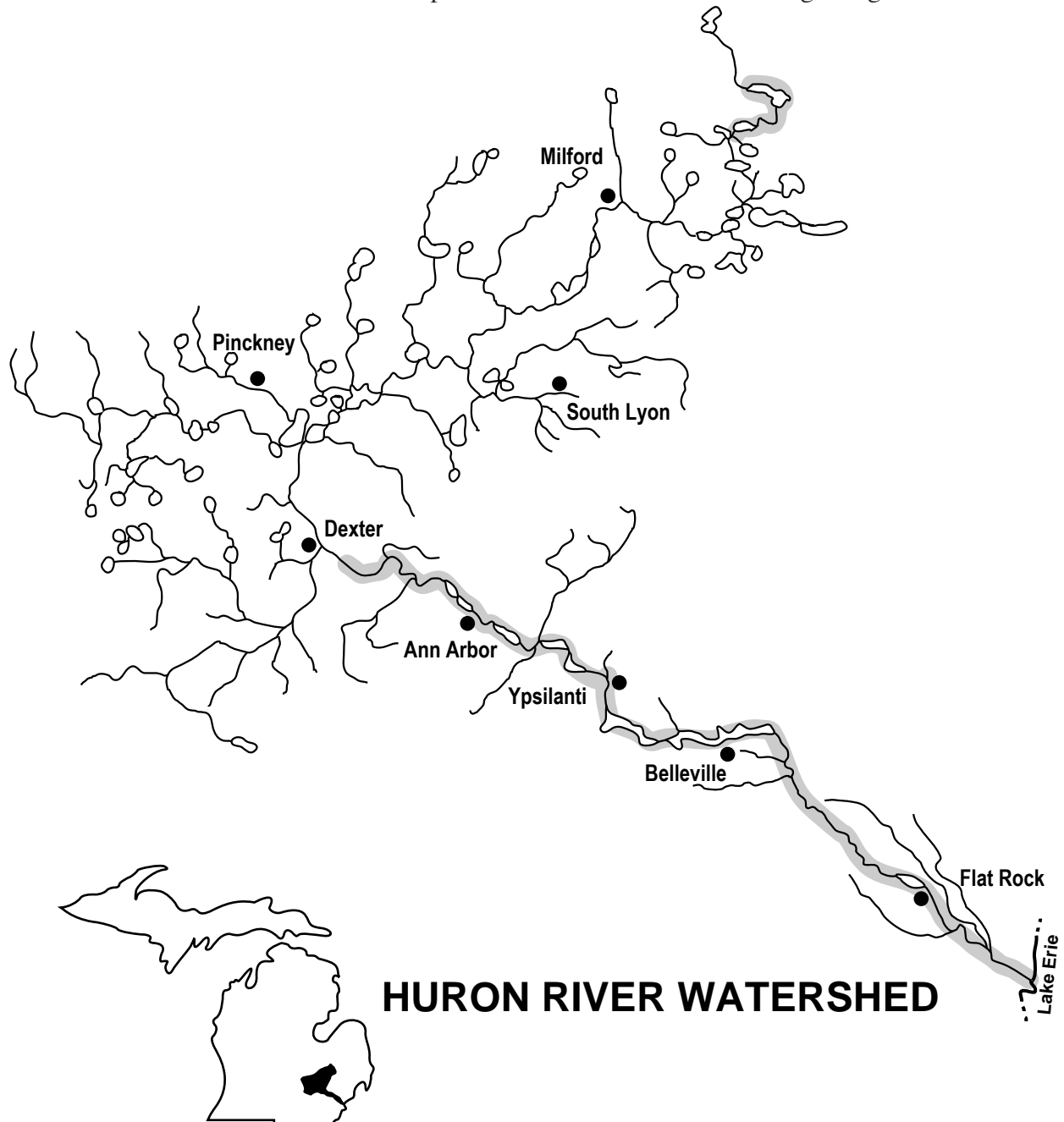
- feeding - small clear, cooler headwater streams with moderate to high gradient
  - overhanging grassy vegetation
  - clean sand, gravel, or bedrock substrate
  - does not tolerate clayey silt
  
- spawning - uses gravelly nests of creek chub



**Spotfin shiner** (*Cyprinella spiloptera*)

**Habitat:**

- feeding
  - clear water tolerant of turbidity and siltation
  - some current
  - shallow depths
  - medium sized streams, lakes, and impoundments
  - clear sand or gravel substrate
  
- spawning
  - swift current
  - crevice spawner or on underside of submerged logs and roots

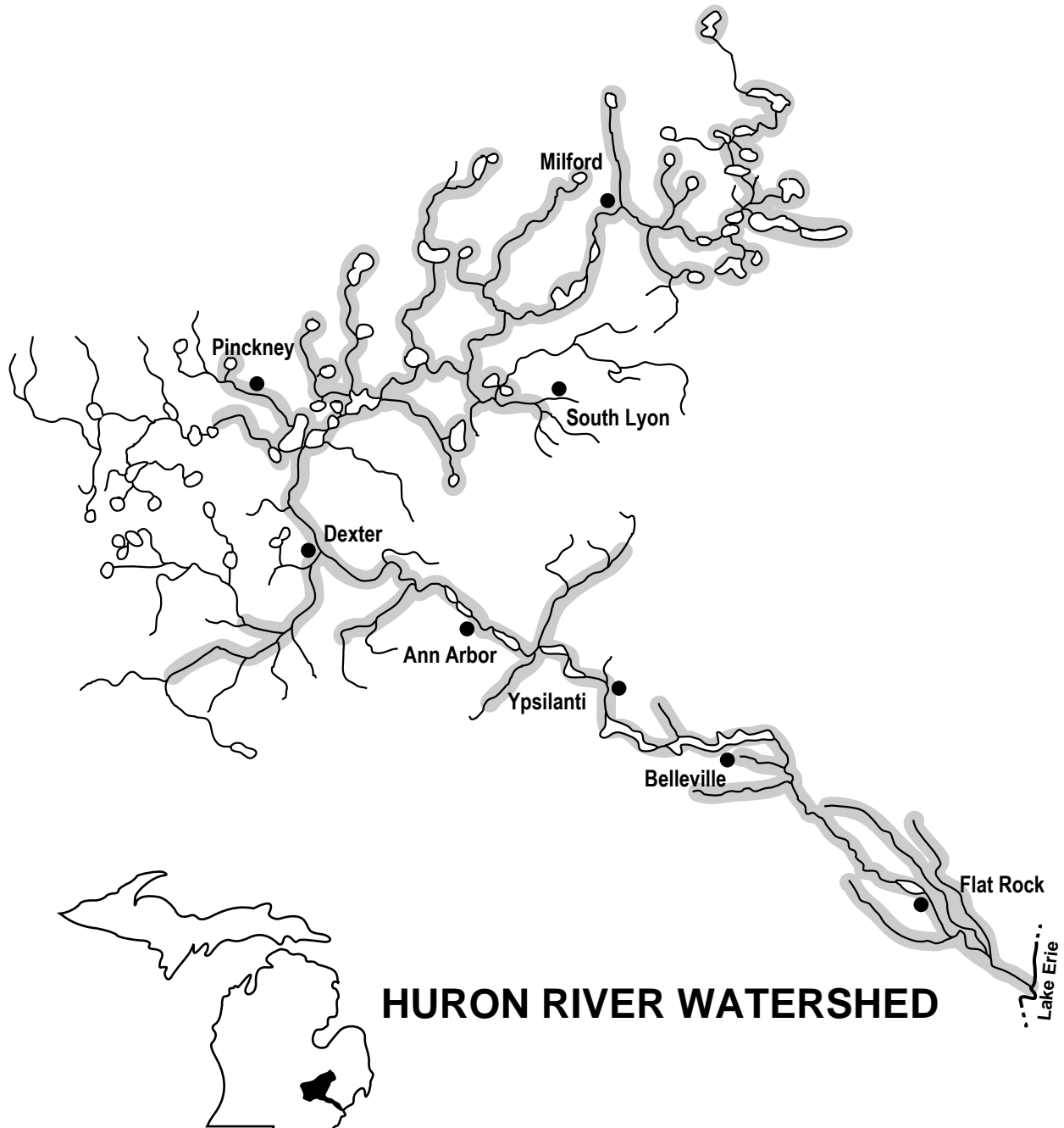




**Common carp** (*Cyprinus carpio*)

**Habitat:**

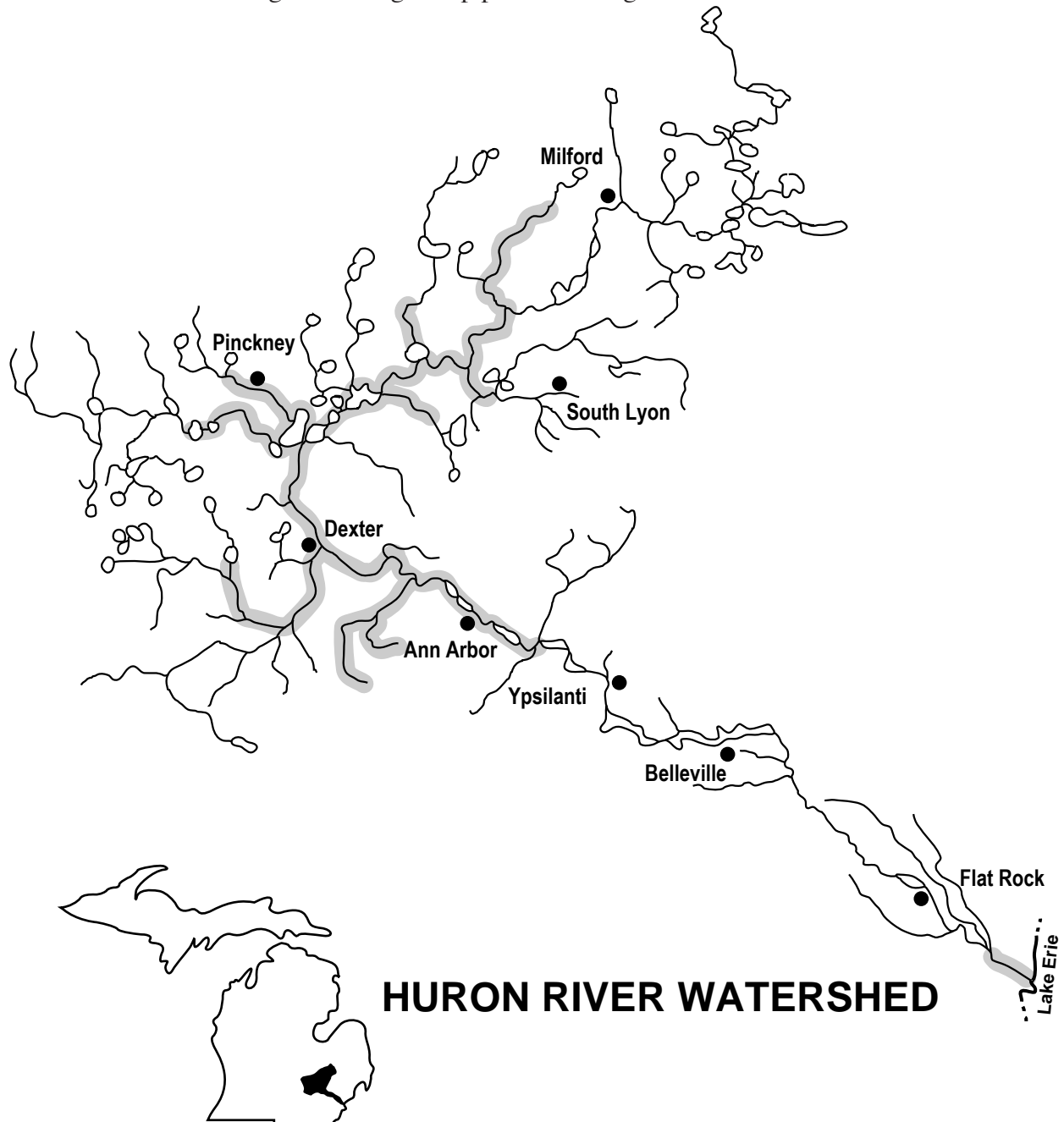
- feeding - low gradient fertile streams, rivers, lakes, and impoundments
  - abundance of aquatic vegetation or organic matter
  - tolerant of all substrates and clear to turbid water
- spawning - weedy or grassy shallows



**Striped shiner** (*Luxilus chrysocephalus*)

**Habitat:**

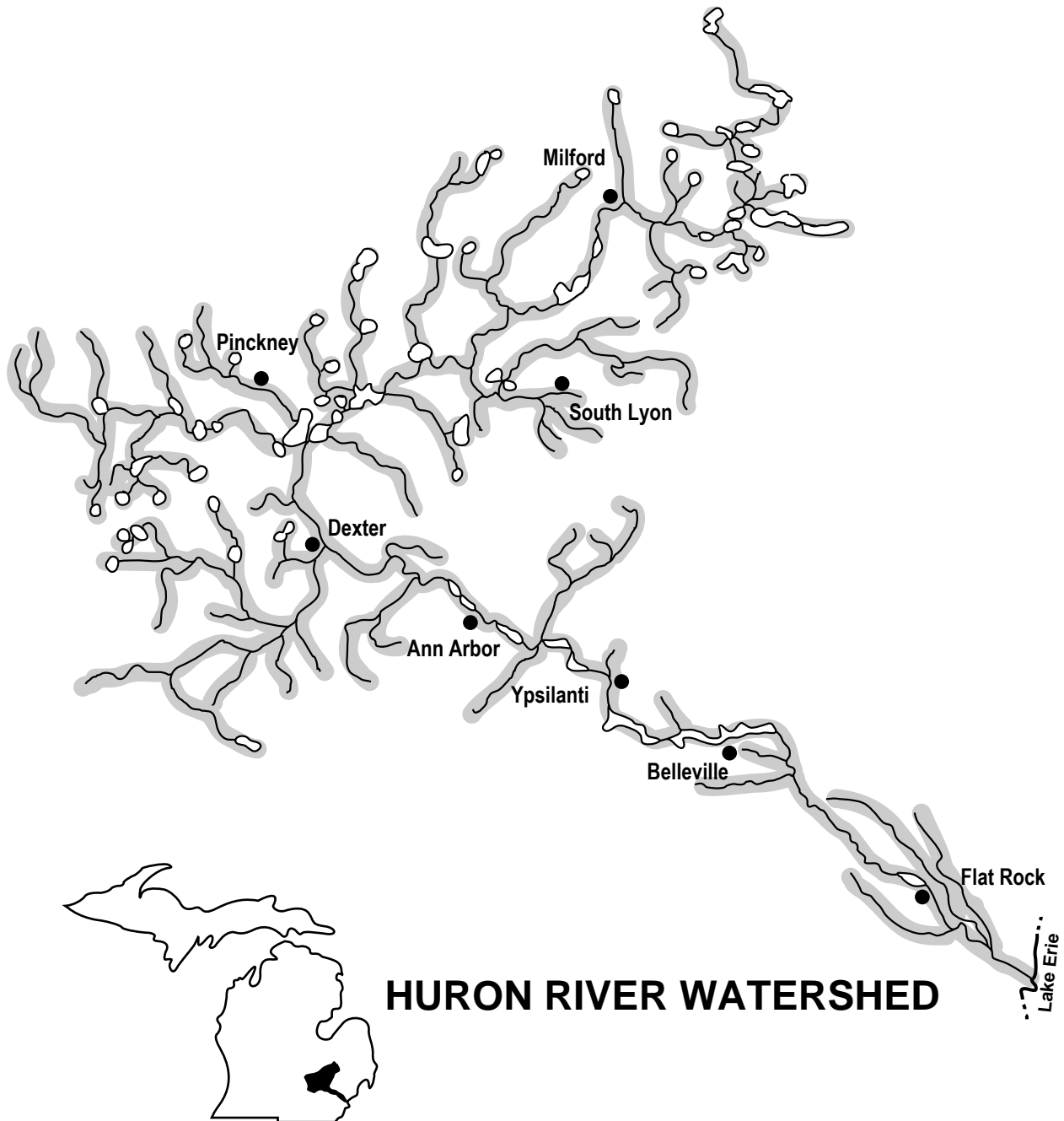
- feeding - clear to slightly turbid streams and rivers
  - gravel substrate
  - low gradient
  
- spawning - gravel, boulder, bedrock, or sand substrate
  - clear water in small streams with moderate to high gradient
  
- winter refuge - in large deep pools of low gradient rivers



**Common shiner** (*Luxilus cornutus*)

**Habitat:**

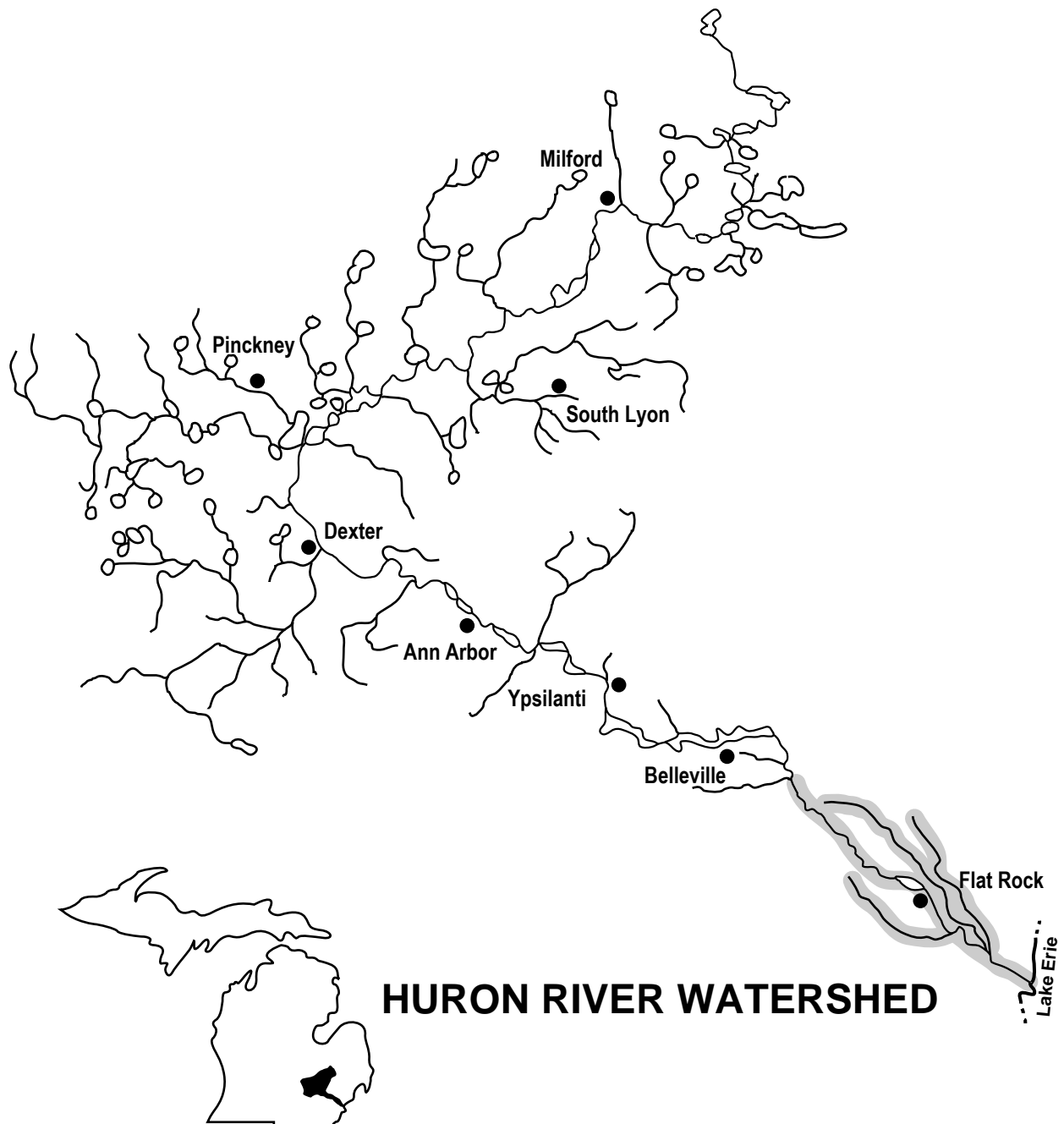
- feeding - small, clear, high-gradient streams and rivers, or shores of clear water lakes and impoundments
  - gravel substrate
  - can tolerate some submerged aquatic vegetation
  - not very tolerant of turbidity or silted waters
  
- spawning - gravel nests of other fish, especially those at the head of a riffle



**Redfin shiner** (*Lythrurus umbratilis*) - rare

**Habitat:**

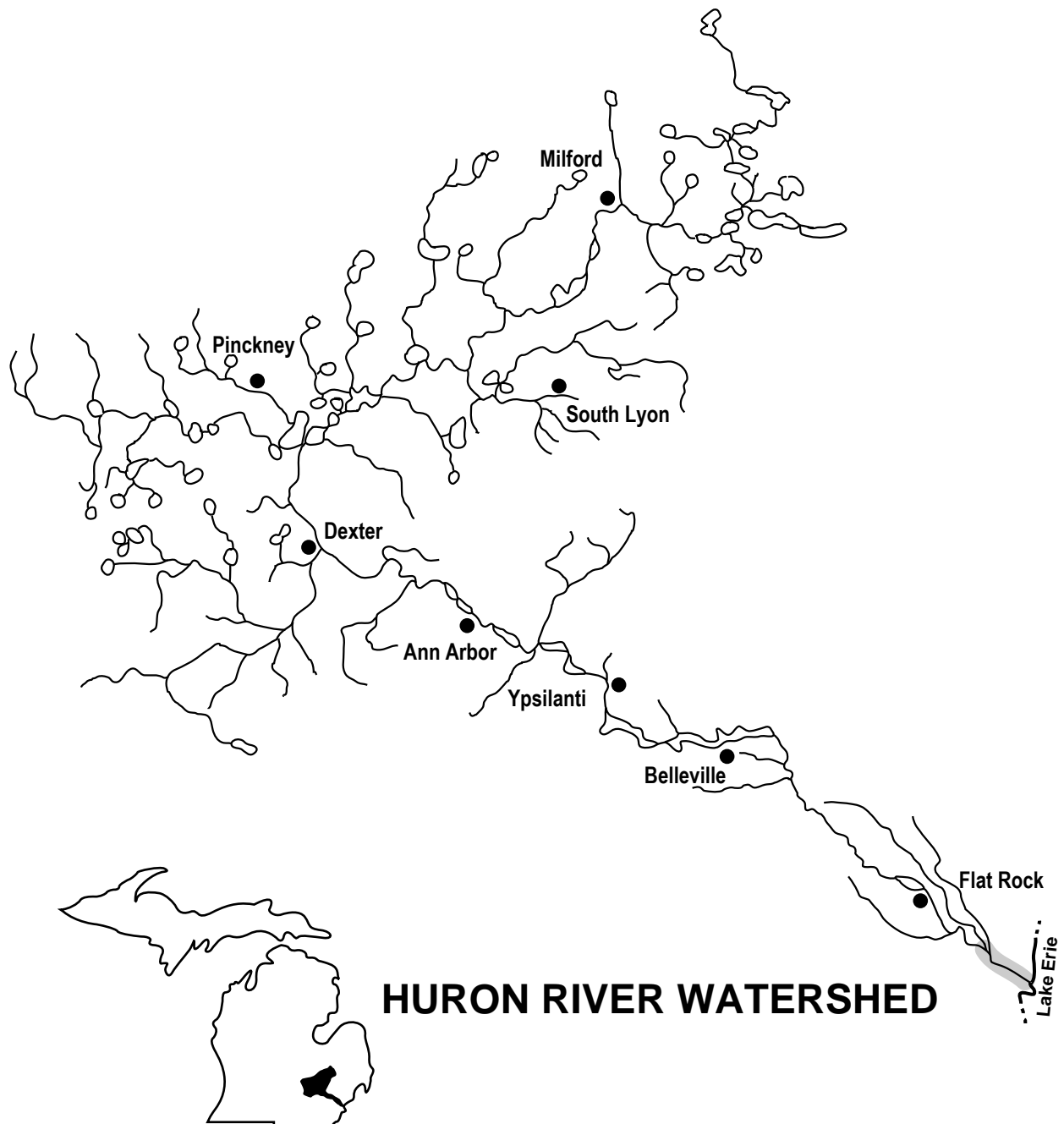
- feeding - clear, quiet warm rivers in weedy pools
  - little to no current
  - abundant submerged and emergent vegetation
- spawning - over sand and gravel substrate in slow moving sections of streams



**Silver chub** (*Macrhybopsis storeriana*) - rare

**Habitat:**

- feeding - large deep rivers with low gradient
  - clean gravel or sand substrate
  - cannot tolerate turbidity or silt
  
- spawning - thought to occur in open water



## Hornyhead chub (*Nocomis biguttatus*)

### Habitat:

- feeding
  - adults: near riffles
  - young: near vegetation
  - clear water, does not tolerate turbidity
  - gravel substrate
  - low gradient streams that are tributaries to large streams
- spawning
  - large stones and pebbles present
  - often below a riffle in shallow water
  - gravel substrate

