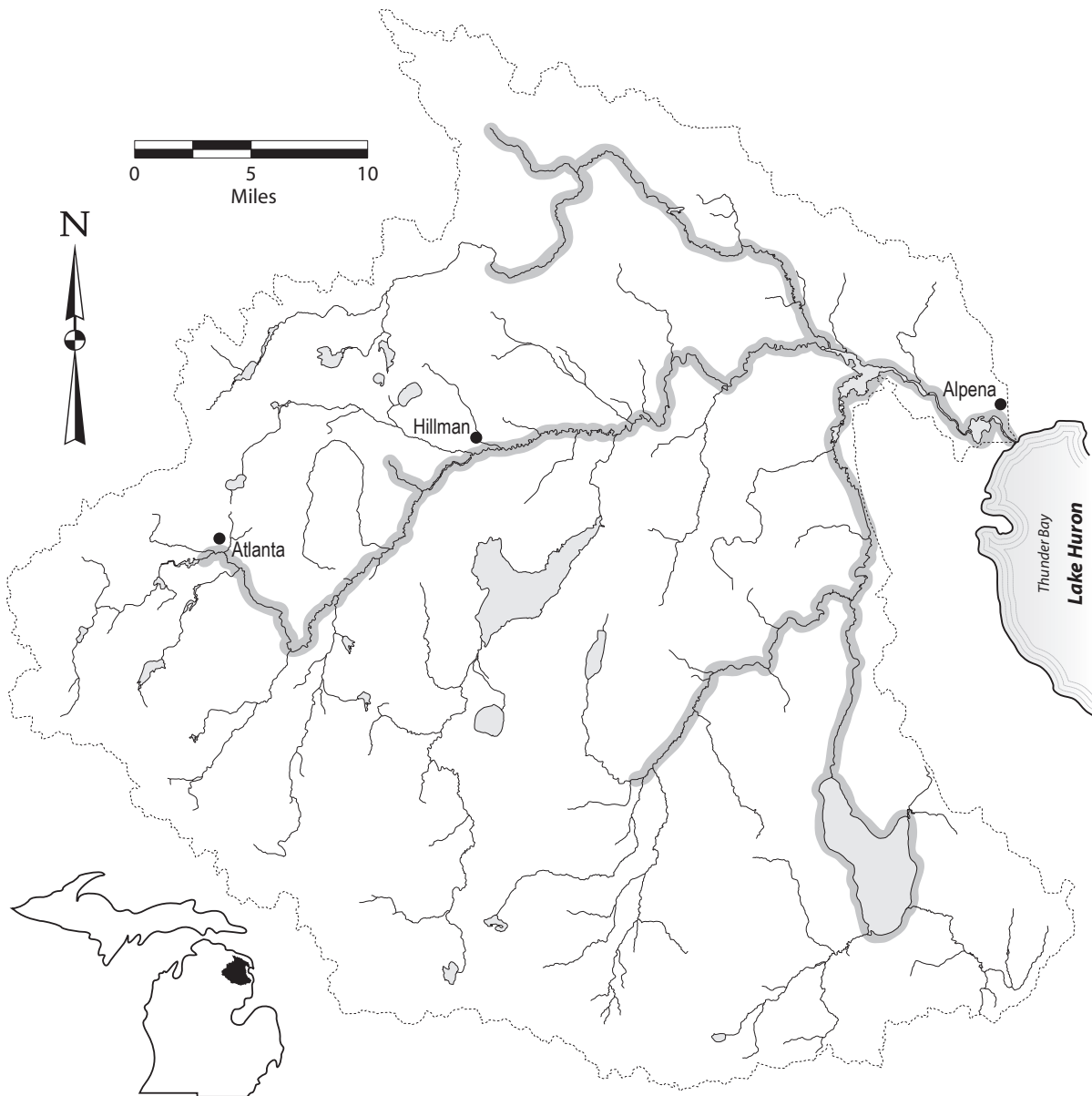


**Burbot (*Lota lota*)**

**Habitat:**

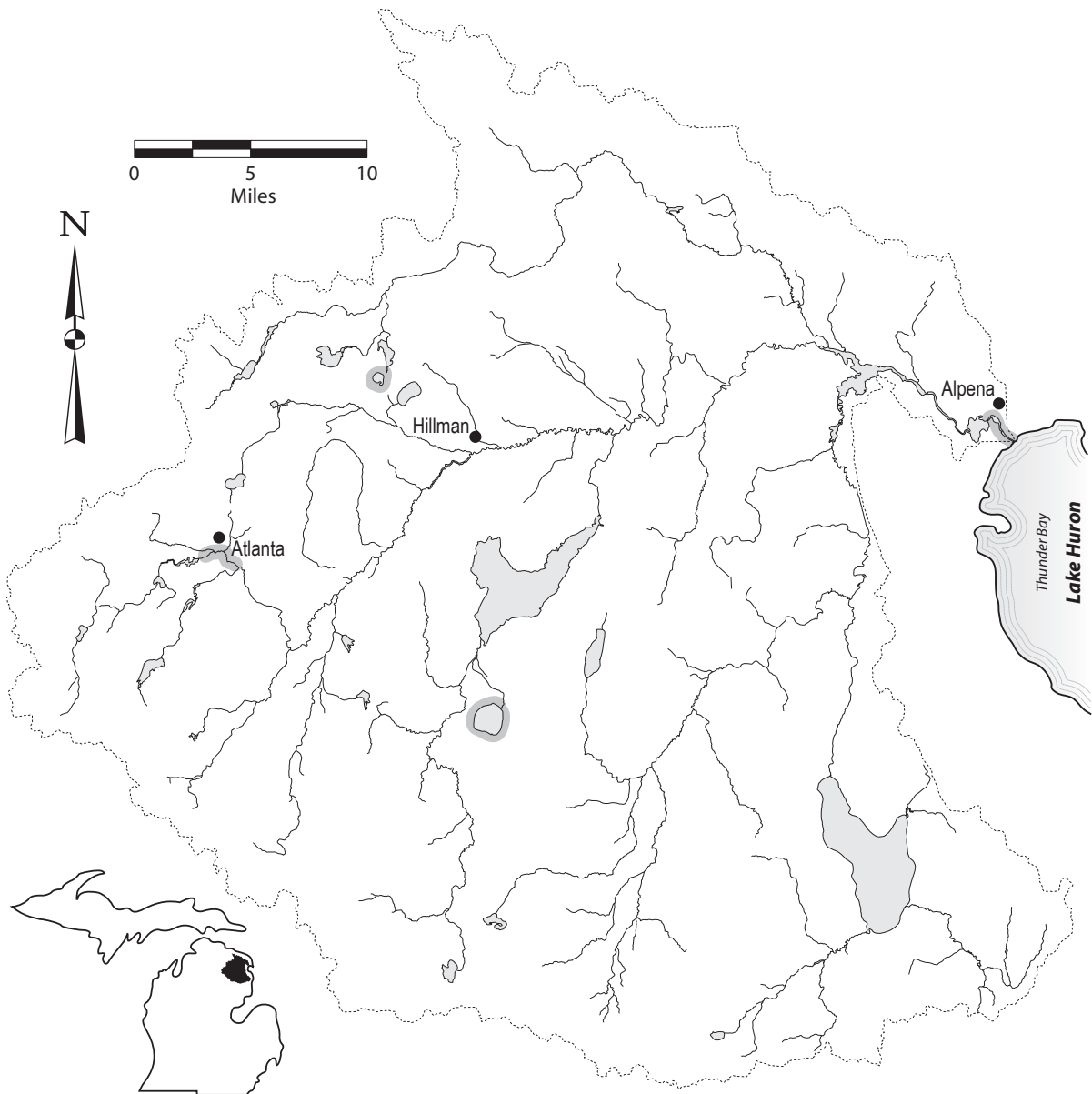
- feeding - deep cold lakes and large cool rivers
- mud, sand, rubble, boulder, silt, and gravel substrates
  
- spawning - in 1 to 4 feet of water in shallow bays or on shoals 5-10 feet deep usually in lakes, sometimes rivers
- over sand or gravel substrate
- under ice



**Western banded killifish (*Fundulus diaphanus*)**

**Habitat:**

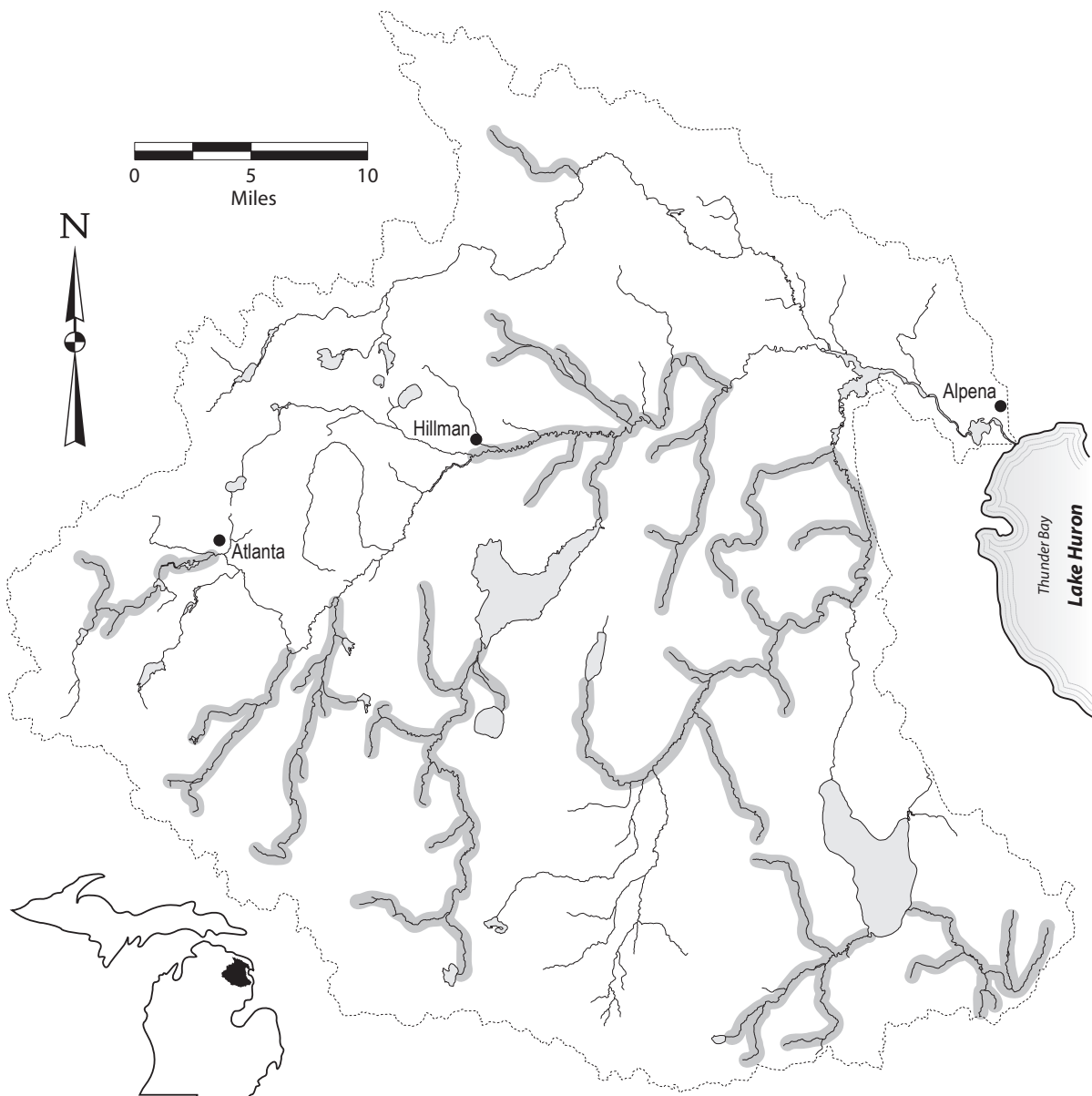
- feeding - quiet backwaters at the mouths of streams and lakes
  - substrate of sand, gravel, and a few boulders
  - also found over detritus substrate where patches of submerged aquatic vegetation are present
- spawning - quiet areas of weedy pools



**Brook stickleback (*Clupea inconstans*)**

**Habitat:**

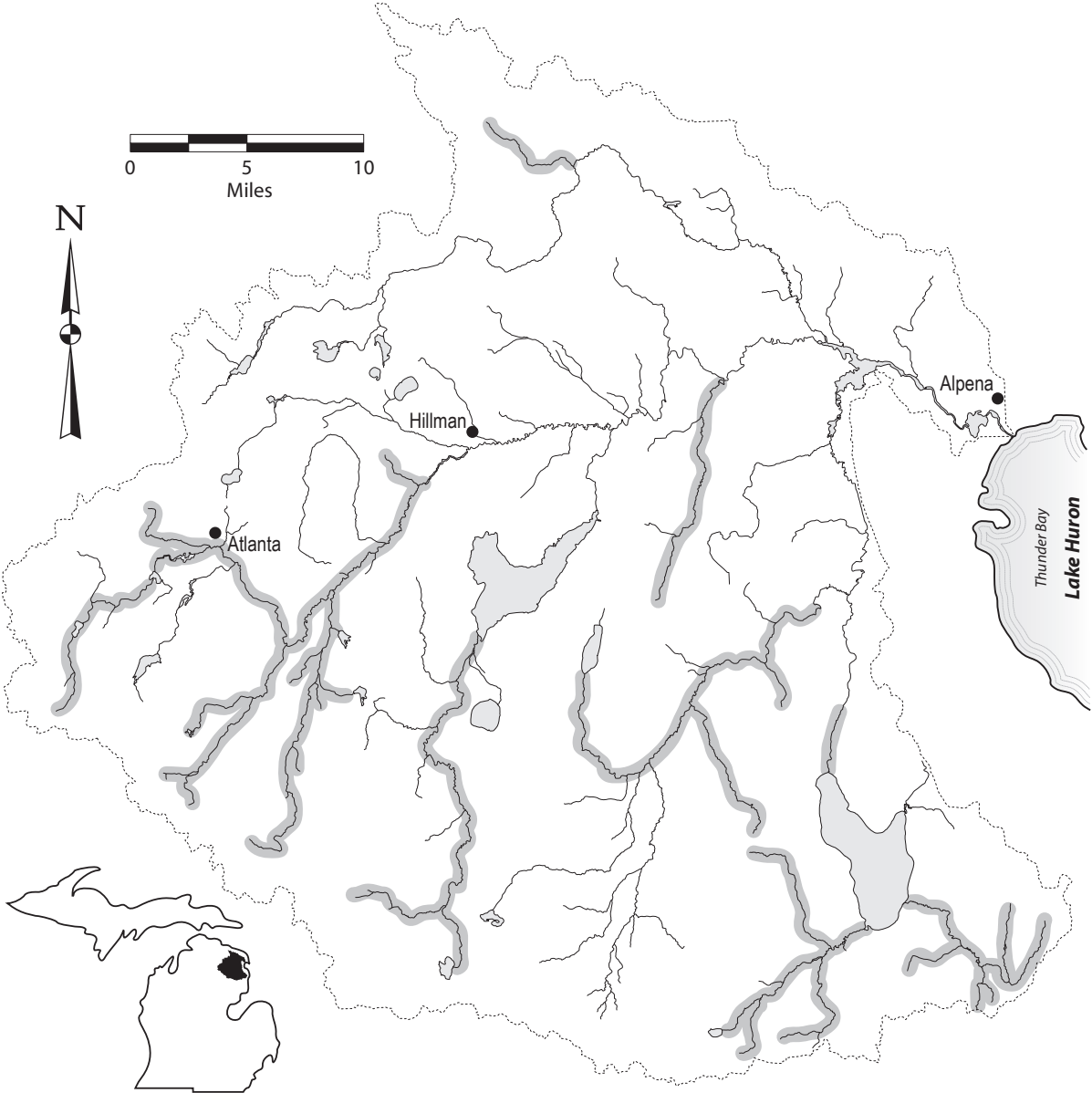
- feeding - clear, cold, densely vegetated streams, and swampy margins of lakes
- low gradient
- muck, peat, or marl substrate
- not tolerant of turbidity
  
- spawning - shallow cool (<66°F) water
- aquatic reeds or grasses necessary



**Mottled sculpin (*Cottus bairdi*)**

**Habitat:**

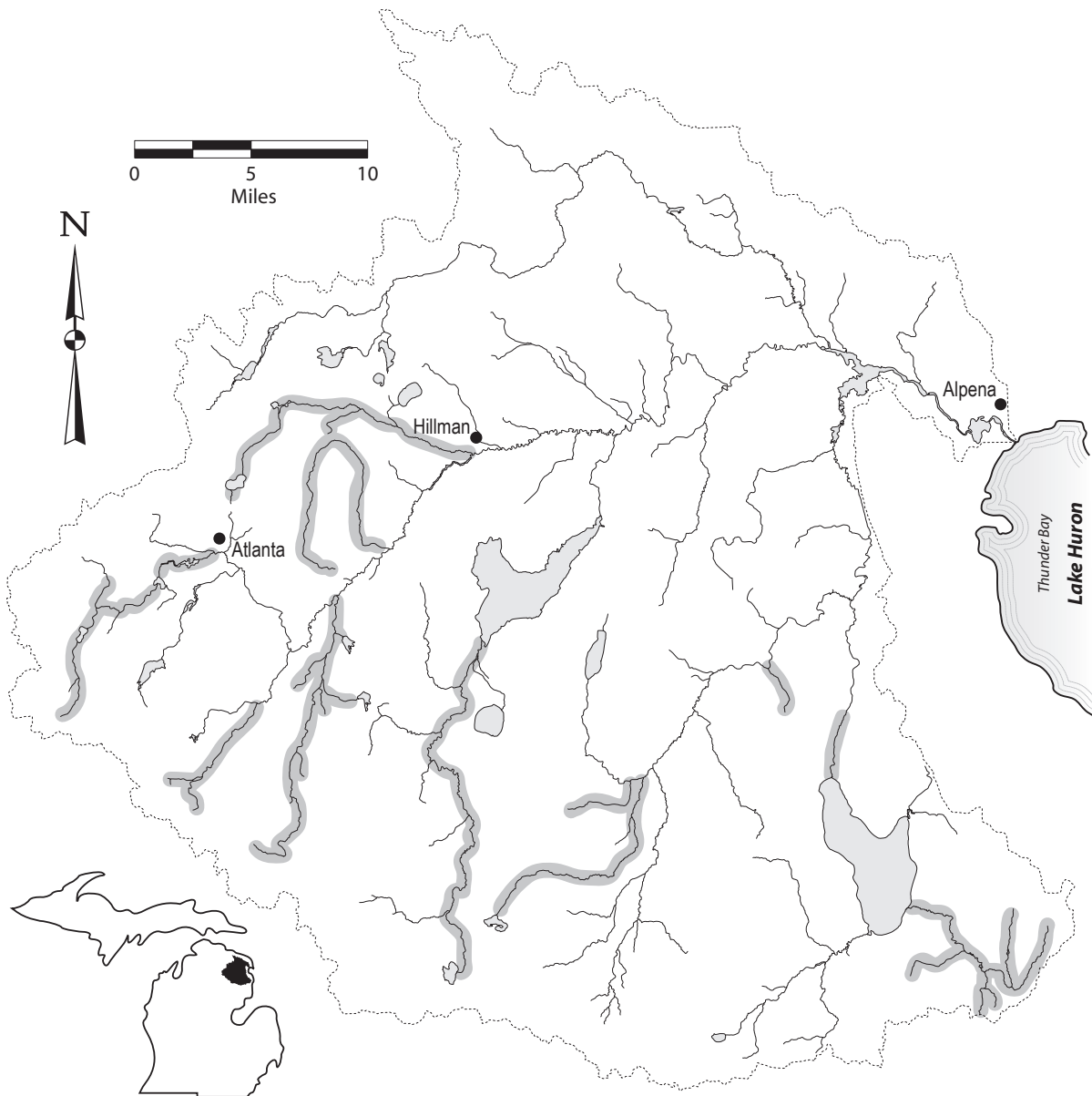
- feeding - cool to cold streams
- riffle and rock substrates preferred
- clear to slightly turbid shallow water
  
- spawning - nests under logs or rock



**Slimy sculpin (*Cottus cognatus*)**

**Habitat:**

- feeding - cool lakes, impoundments, rivers, and streams
- gravel or rock substrate
  
- spawning - nest in shallow areas of lakes
- gravel substrate or rock ledge
- male parental care



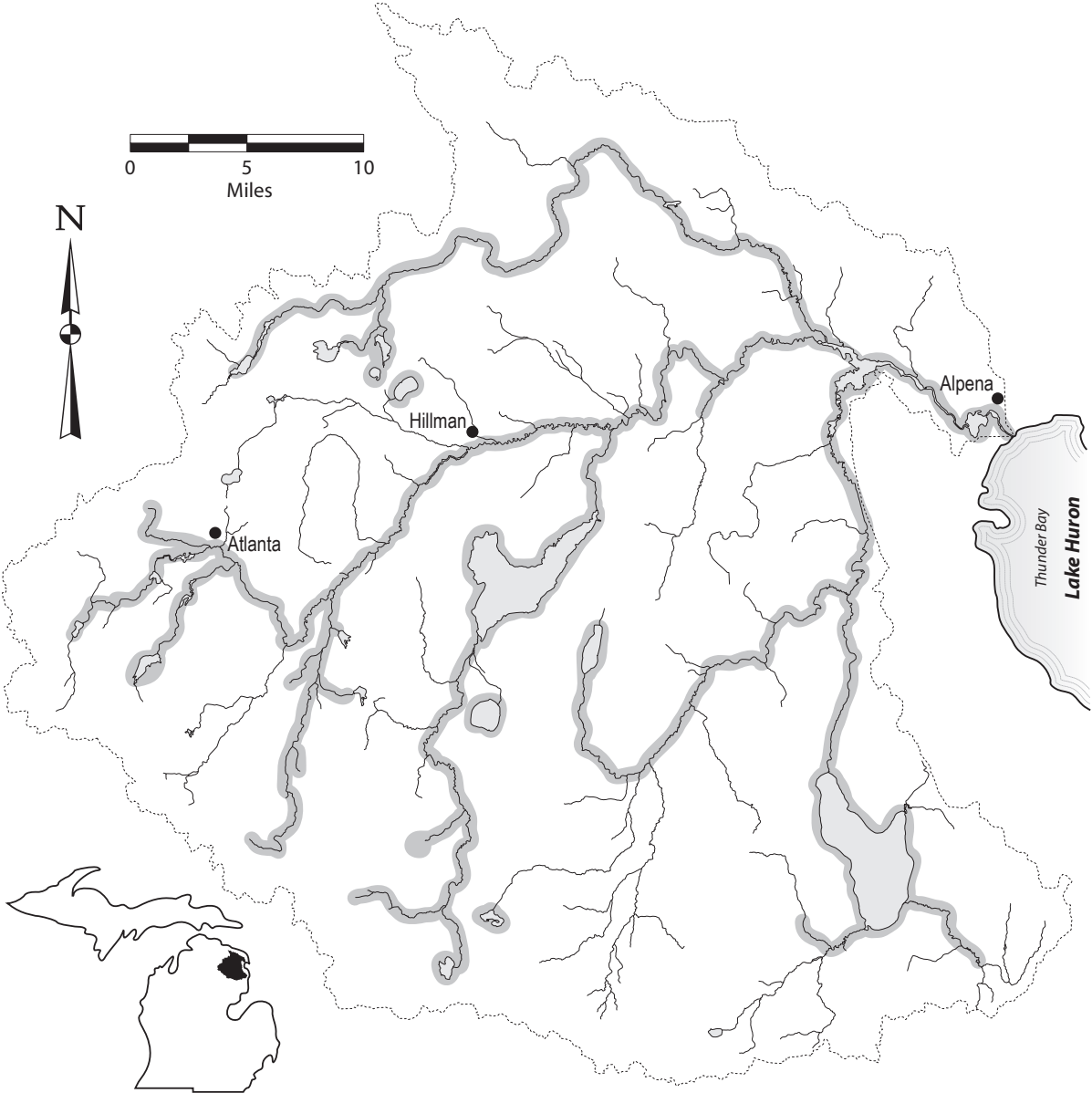
**Rock bass (*Ambloplites rupestris*)**

**Habitat:**

- feeding - clear, cool streams, rivers, and lakes
- rocky to sand substrate
- woody or vegetative cover

- spawning - sand or gravel nests
- shallow water

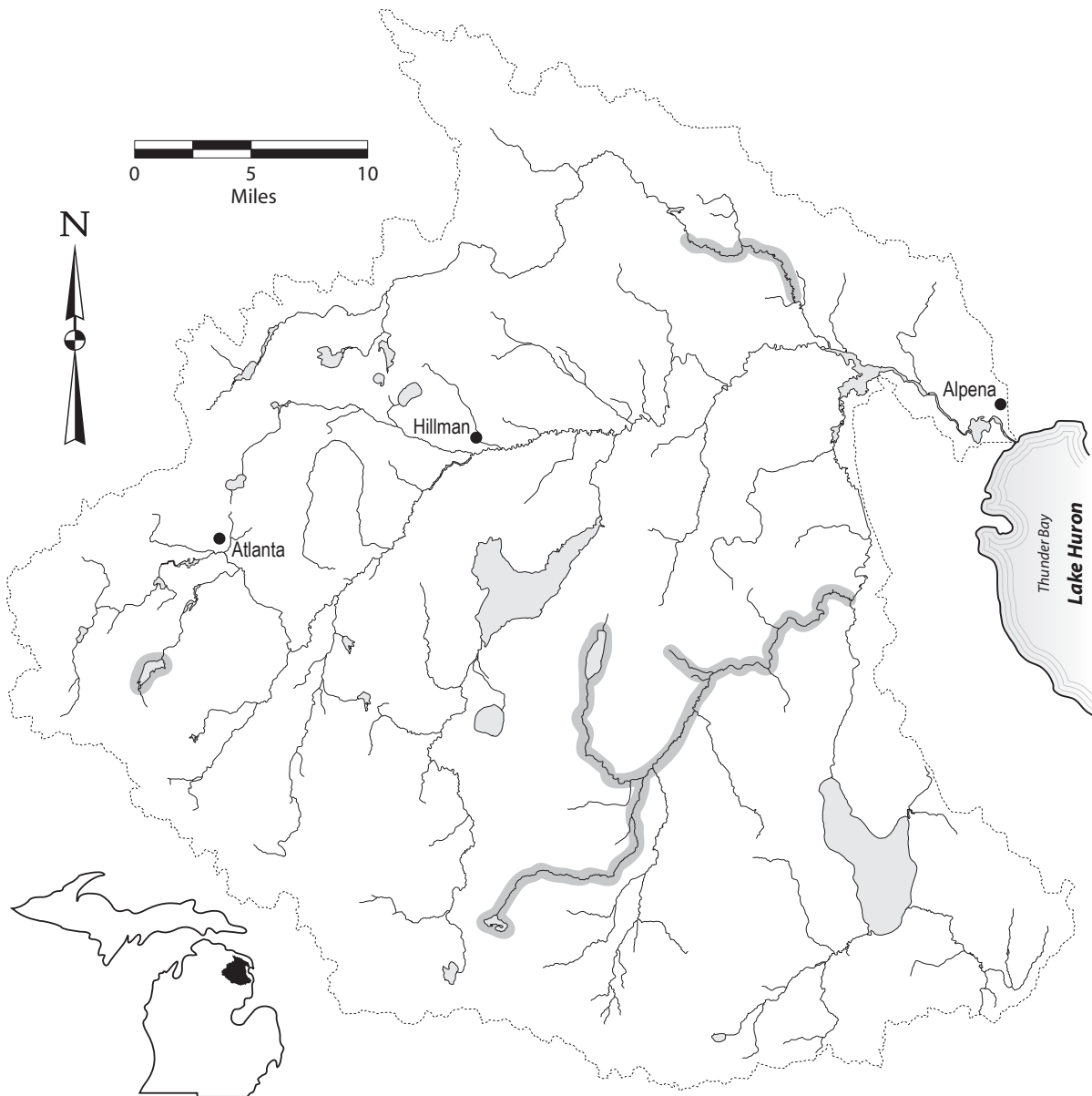
- winter refuge - deep water



**Green sunfish (*Lepomis cyanellus*)**

**Habitat:**

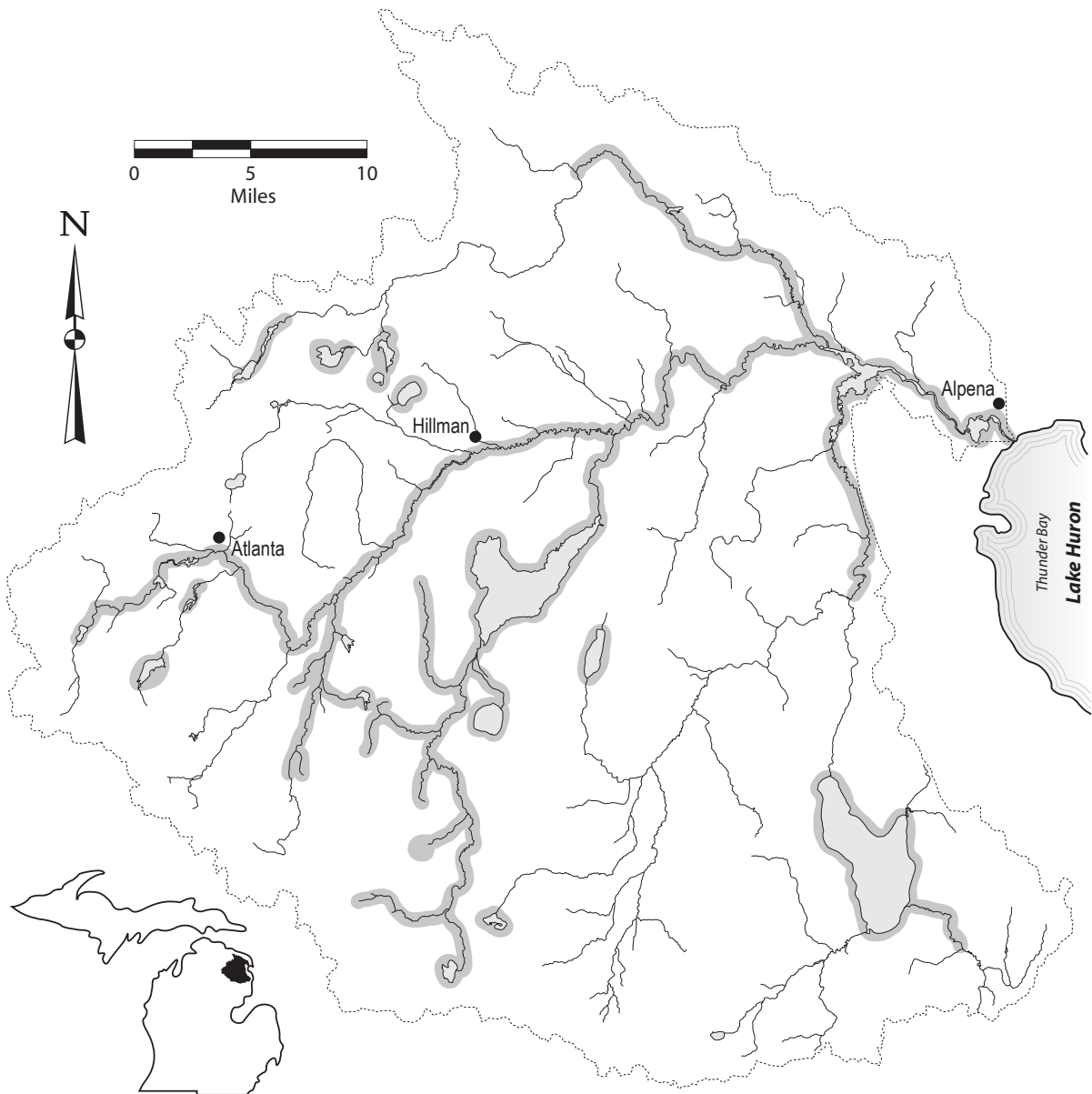
- feeding - impoundments and lakes, and low-current streams and rivers
- no substrate preference
  
- spawning - nests in shallow areas sheltered by rocks, logs, or aquatic vegetation



**Pumpkinseed sunfish (*Lepomis gibbosus*)**

**Habitat:**

- feeding - non-flowing clear water in streams and rivers; also lakes and impoundments
- muck or sand partly covered with organic debris substrate
- dense beds of submerged aquatic vegetation
  
- spawning - nest in sand, gravel, or rock substrate
- in shallow water near submerged vegetation

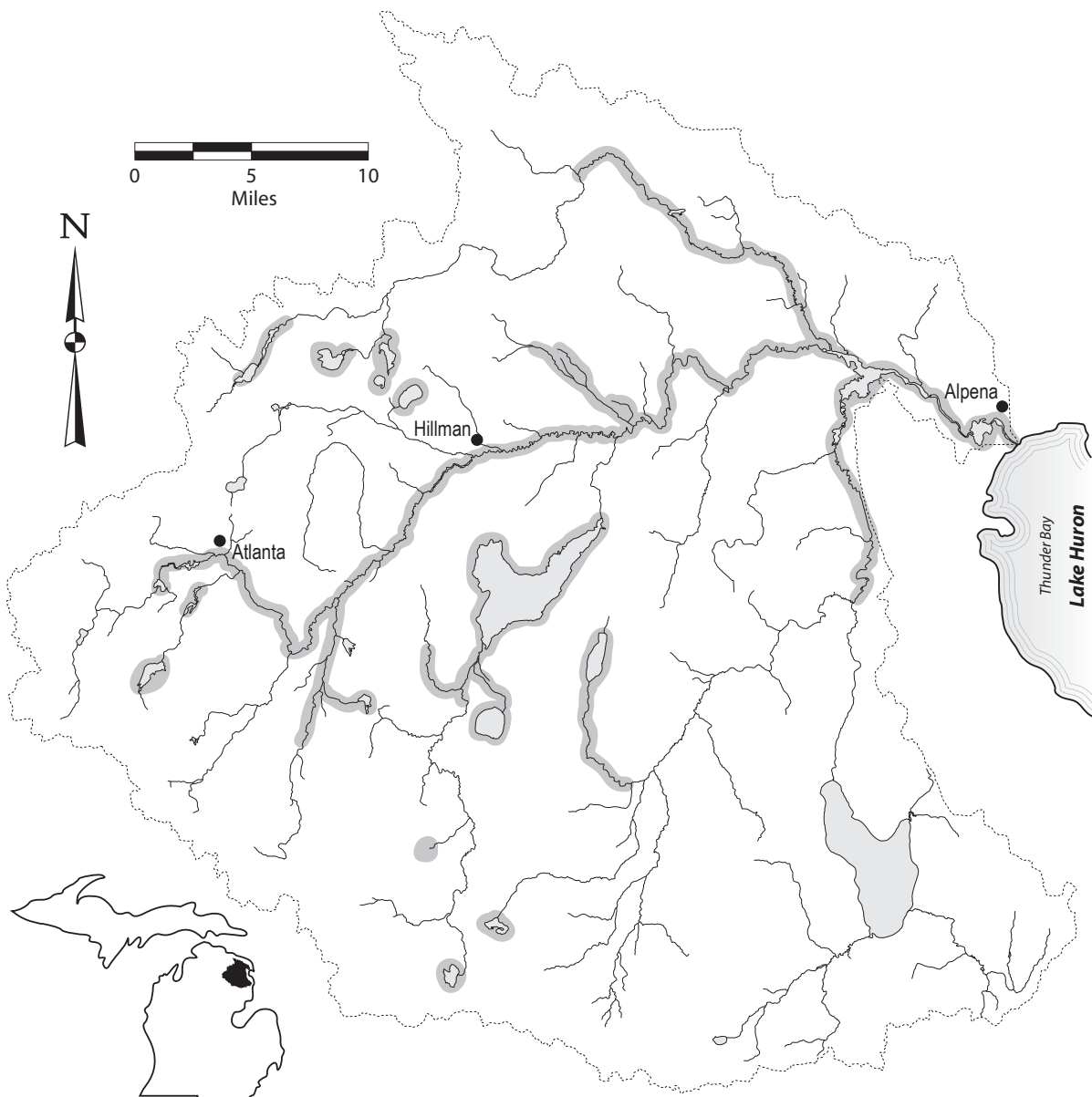




**Bluegill** (*Lepomis macrochirus*)

**Habitat:**

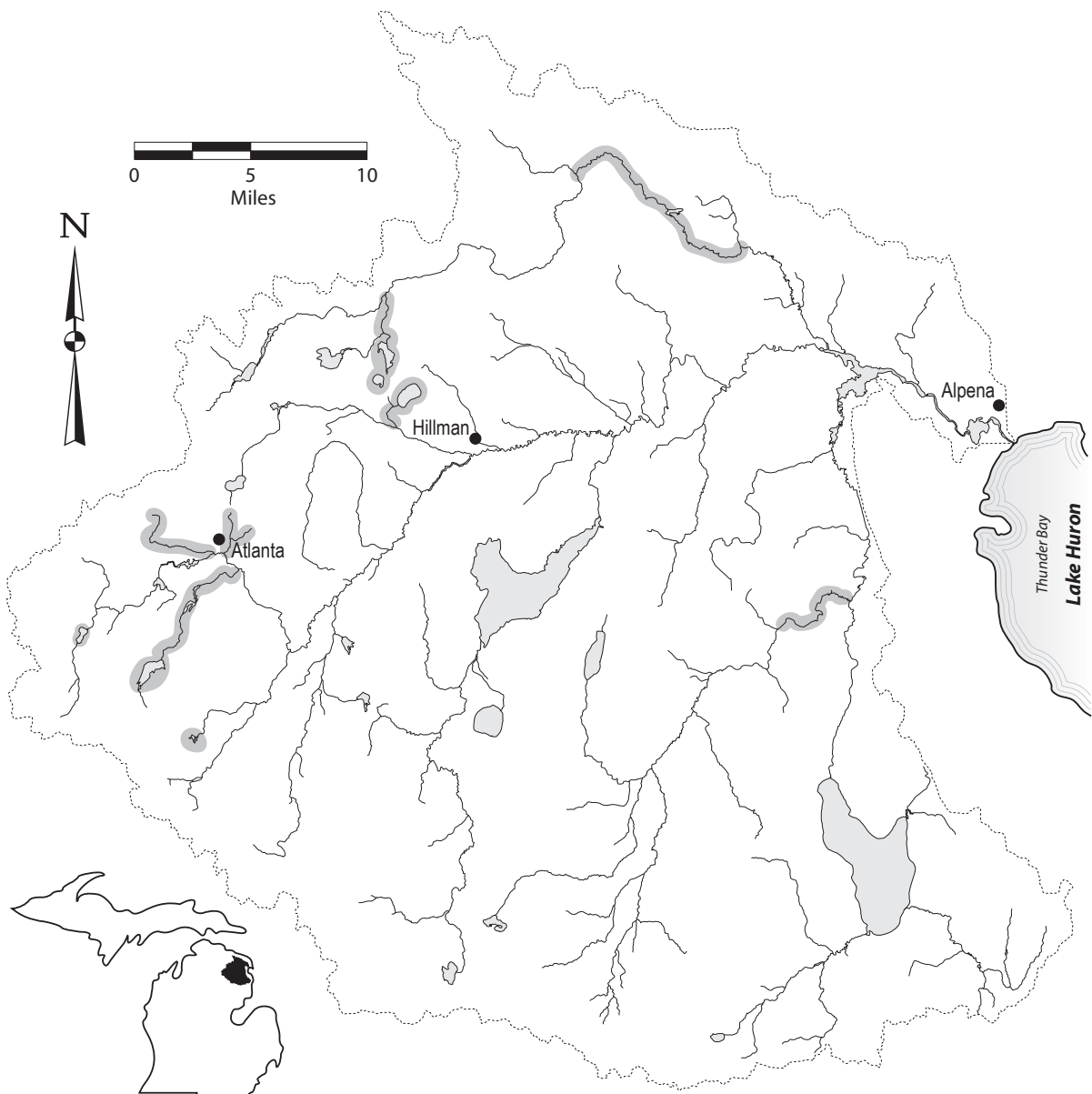
- feeding - non-flowing clear streams and rivers; also lakes and impoundments
  - sand, gravel, or muck containing organic debris substrate
  - scattered beds of aquatic vegetation
  - cannot tolerate low oxygen or continuous high turbidity and siltation
  
- spawning - nests in firm substrate of gravel, sand, or mud
  
- winter refuge - deep water



**Northern longear sunfish (*Lepomis peltastes*)**

**Habitat:**

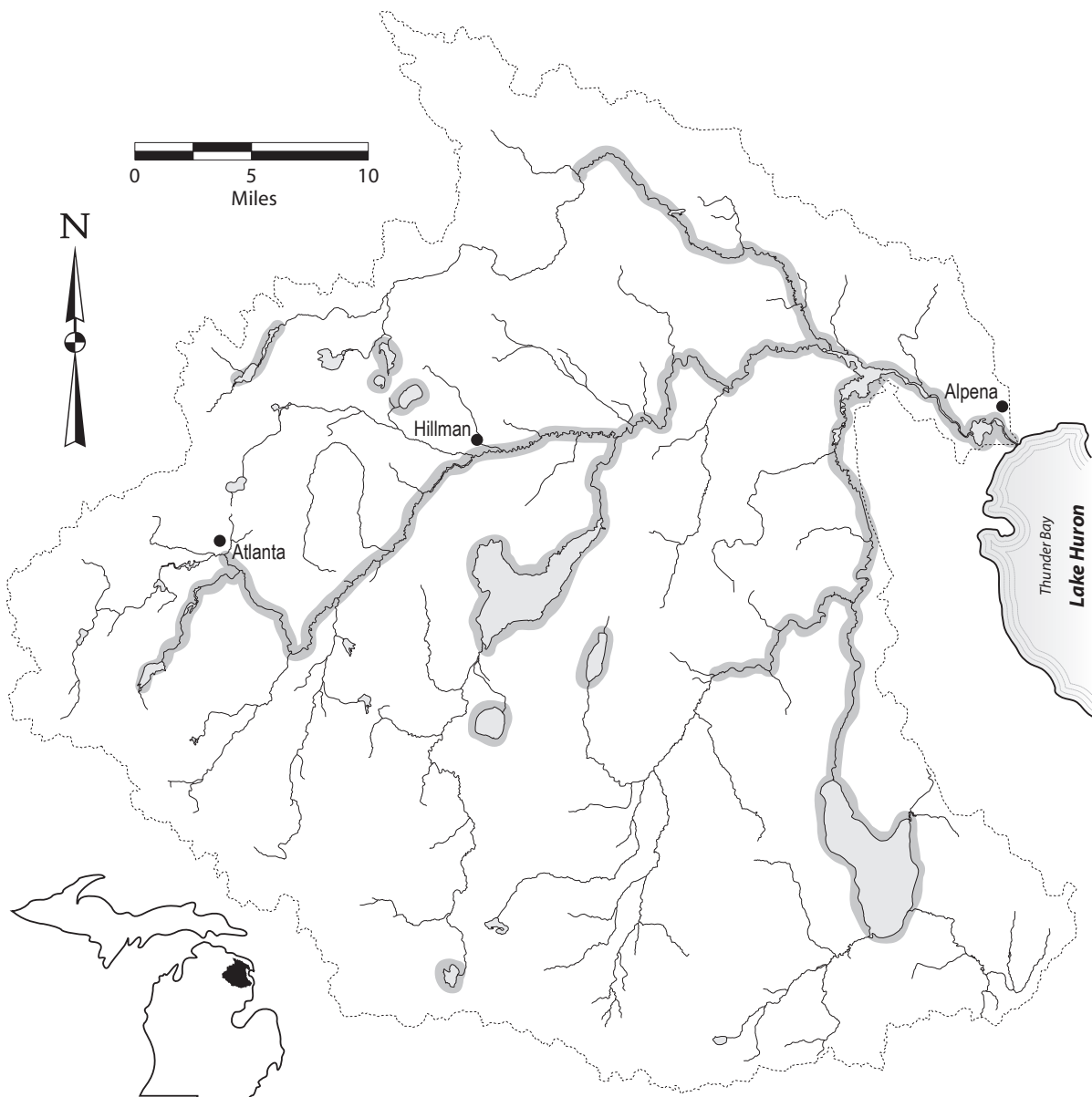
- feeding - clear moderate-sized shallow streams with moderate vegetation
- rocky substrates
- little to no current
  
- spawning - nests in gravel, sand, or hard rock substrate



**Smallmouth bass (*Micropterus dolomieu*)**

**Habitat:**

- feeding
  - clear, cool, deep lakes and rivers
  - streams where 40% consists of riffles over clean gravel, boulder, or bedrock substrate
  - in pools with a current and >4 feet of depth
  - gradients between 4 and 25 feet per mile
- spawning
  - nest in sandy, gravel, or rocky substrate
  - gradients 7 to 25 feet per mile
  - streams 20 to 100 feet wide
- winter refuge
  - larger deeper waters with gradients between 3 to 7 feet per mile



**Largemouth bass (*Micropterus salmoides*)**

**Habitat:**

- feeding - non-flowing clear waters - lakes, impoundments, and pools of streams
- abundant aquatic vegetation
- soft muck, organic debris, gravel, sand, and hard non-flocculent clay substrates
  
- spawning - nest in gravelly sand to marl and soft mud substrates
- emergent vegetation
- quiet shallow bays; no current

