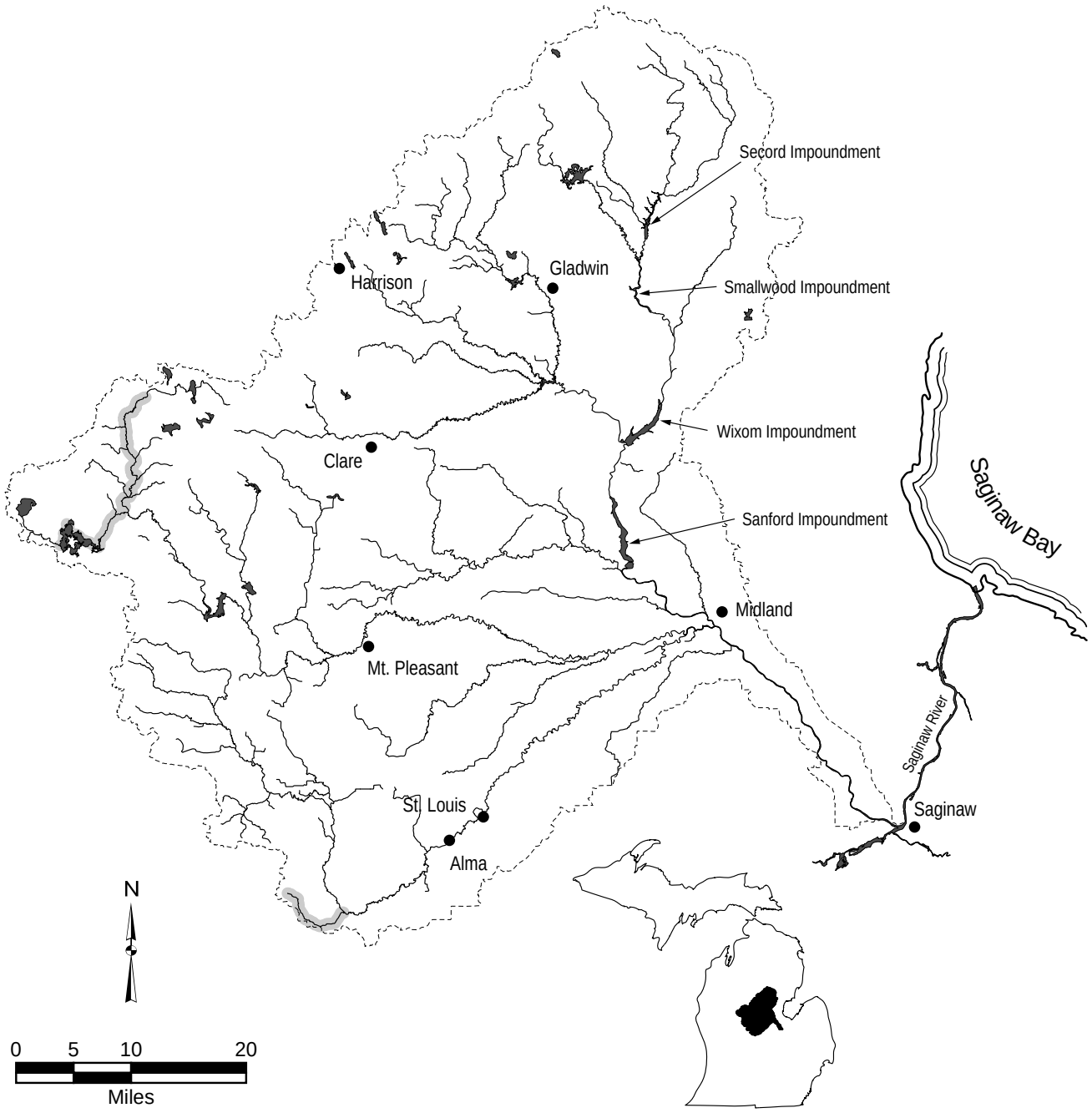
Lake chubsucker *Erimyzon sucetta*

Habitat**:**

feeding
- larger clear streams, rivers, lakes, and impoundments
- cannot tolerate turbid water
- low gradient
- prefers dense vegetation over substrate of sand or silt mixed with organic debris

spawning
- small clear streams with moderate to high gradient
- sand or gravel substrate; no clayey silt



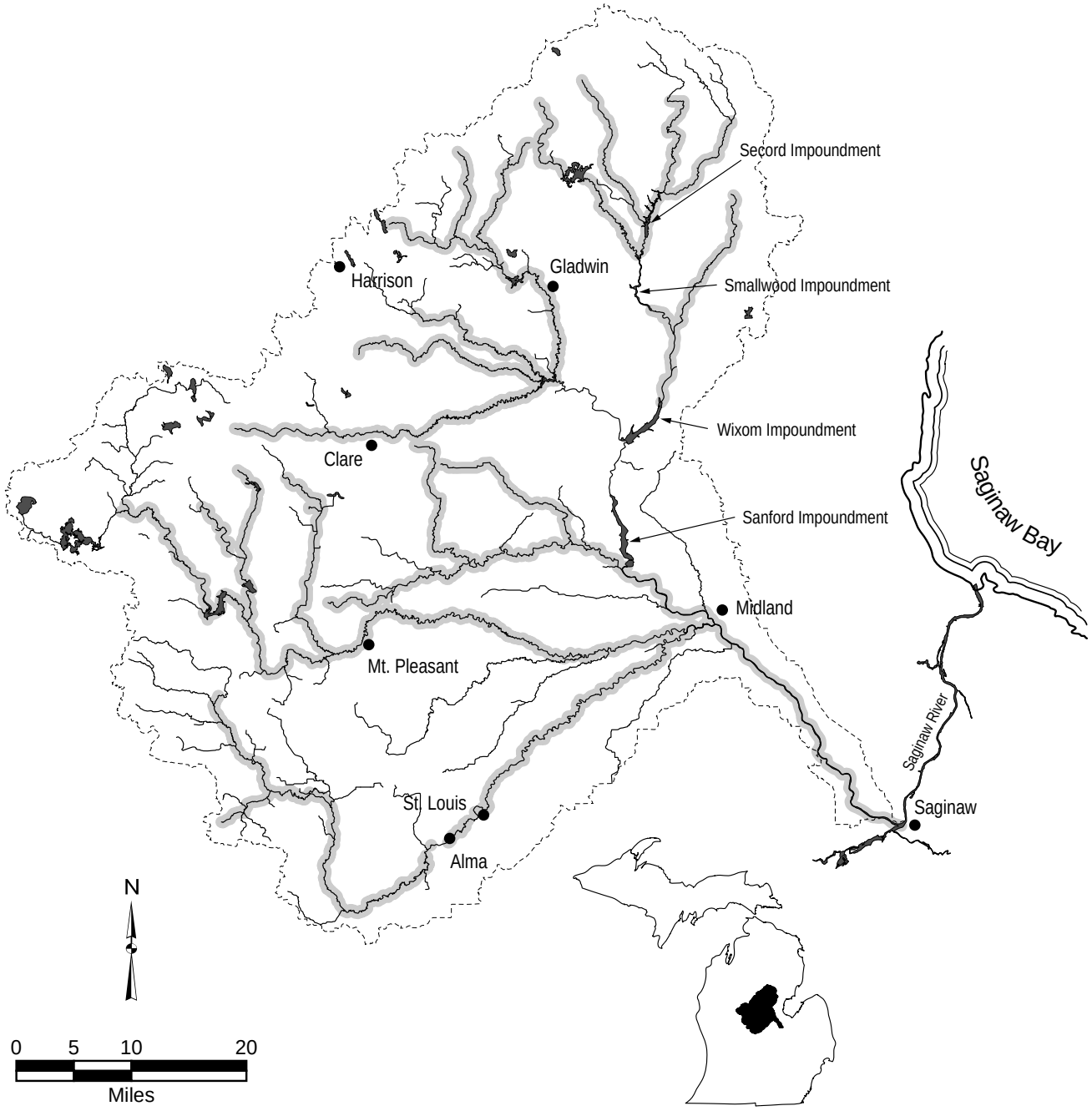
Northern hog sucker *Hypentelium nigricans*

Habitat**:**

feeding - gravel or rubble substrate
- riffles and adjacent pools of warm shallow streams
- clear water
- doesn't like turbidity or siltation
- avoids profuse amounts of aquatic vegetation

spawning - riffles
- shallow gravel substrate
- high gradient

winter refuge - deeper quieter pools

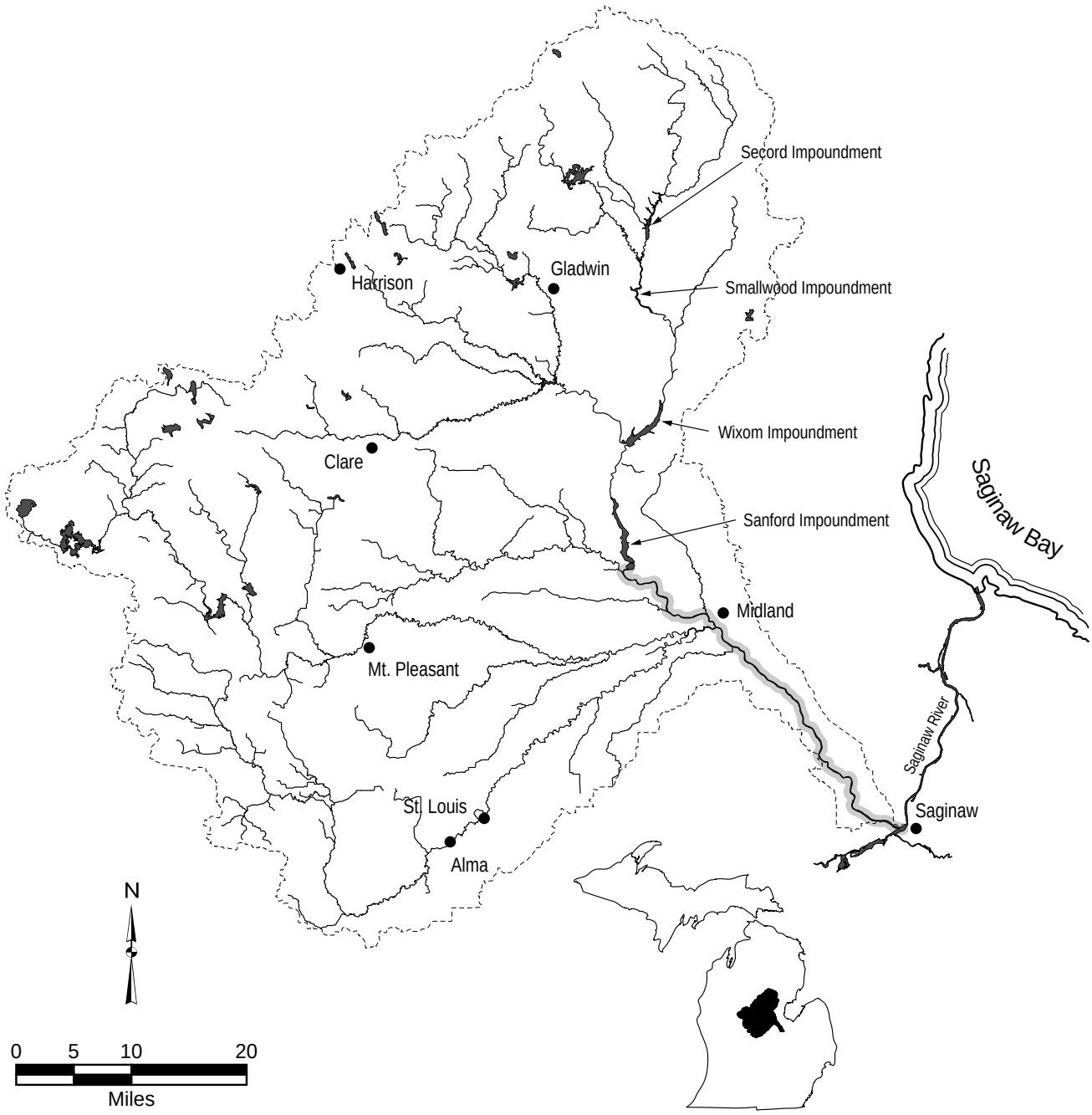


Silver redhorse *Moxostoma anisurum*

Habitat:

feeding - streams, rivers, lakes, and impoundments
- low current
- pollution and turbidity intolerant

spawning - swift current in rivers, do not spawn in tributaries
- males territorial
- gravel to rubble substrate

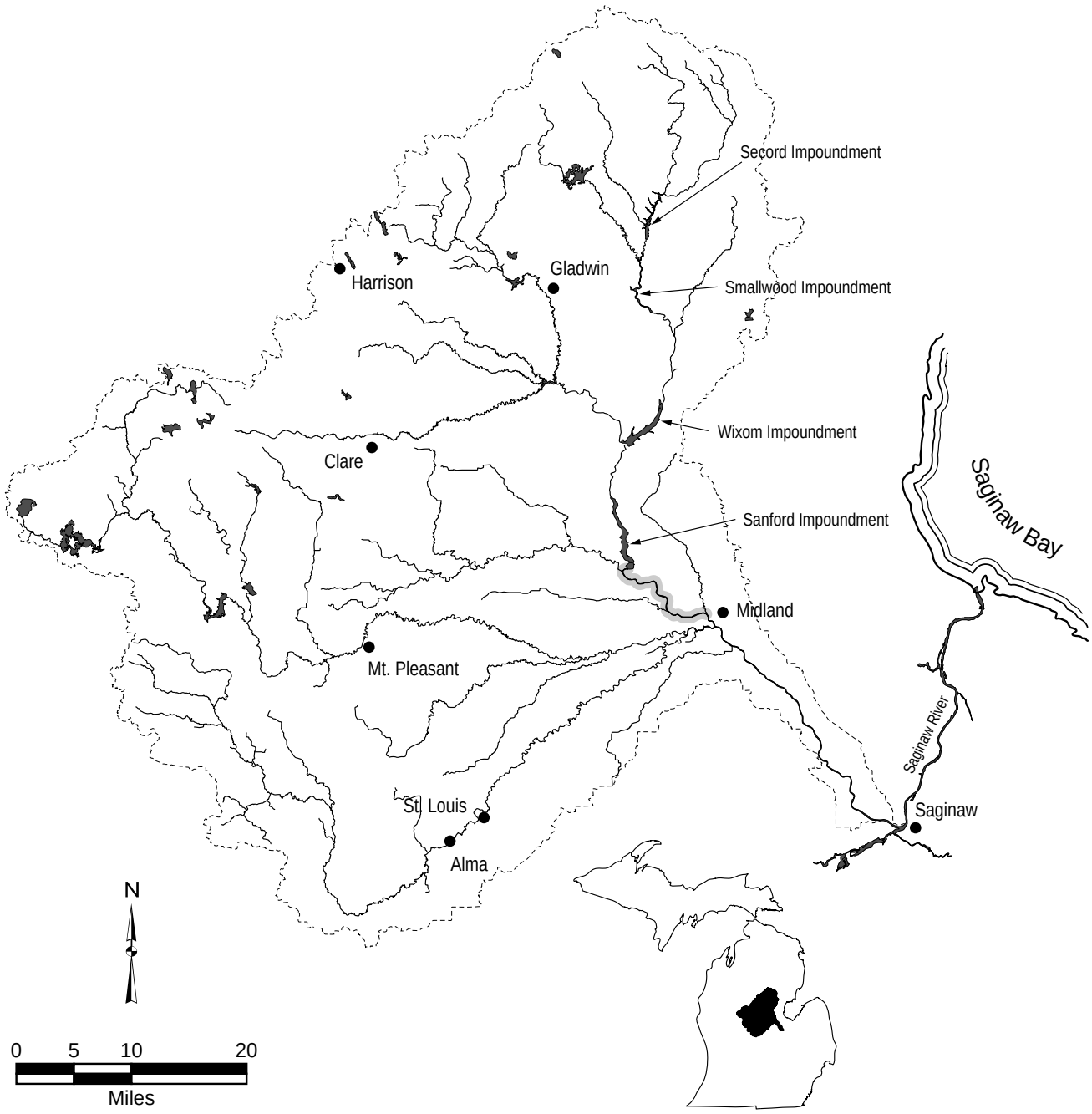


Bigmouth buffalo *Ictiobus cyprinellus*

Habitat:

feeding - deeper pools or oxbows of large streams, shallow and floodplain lakes
- slow, sluggish, or still water
- tolerates turbidity

spawning - small tributaries, marshes, or shallow-flooded lake margins
- over sand or gravel with rapid flow; also in places with a lot of aquatic vegetation



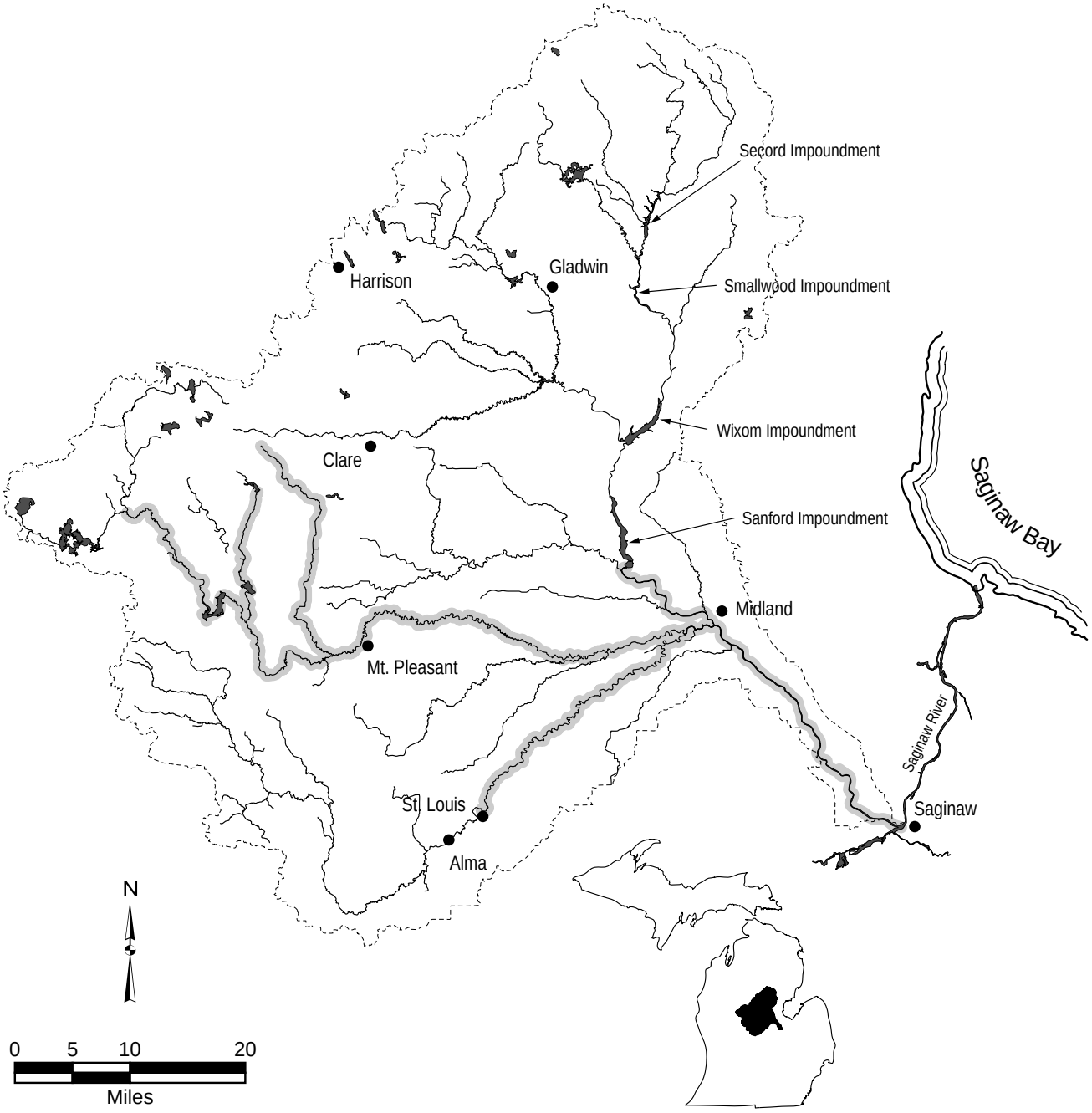
Black redhorse *Moxostoma duquesnei*

Habitat:

feeding - gravel substrate
- clear water, intolerant of siltation, turbidity, and low gradients
- medium size streams
- cooler swifter streams and short rocky pools with current

spawning - gravelly riffles

winter refuge - deeper holes



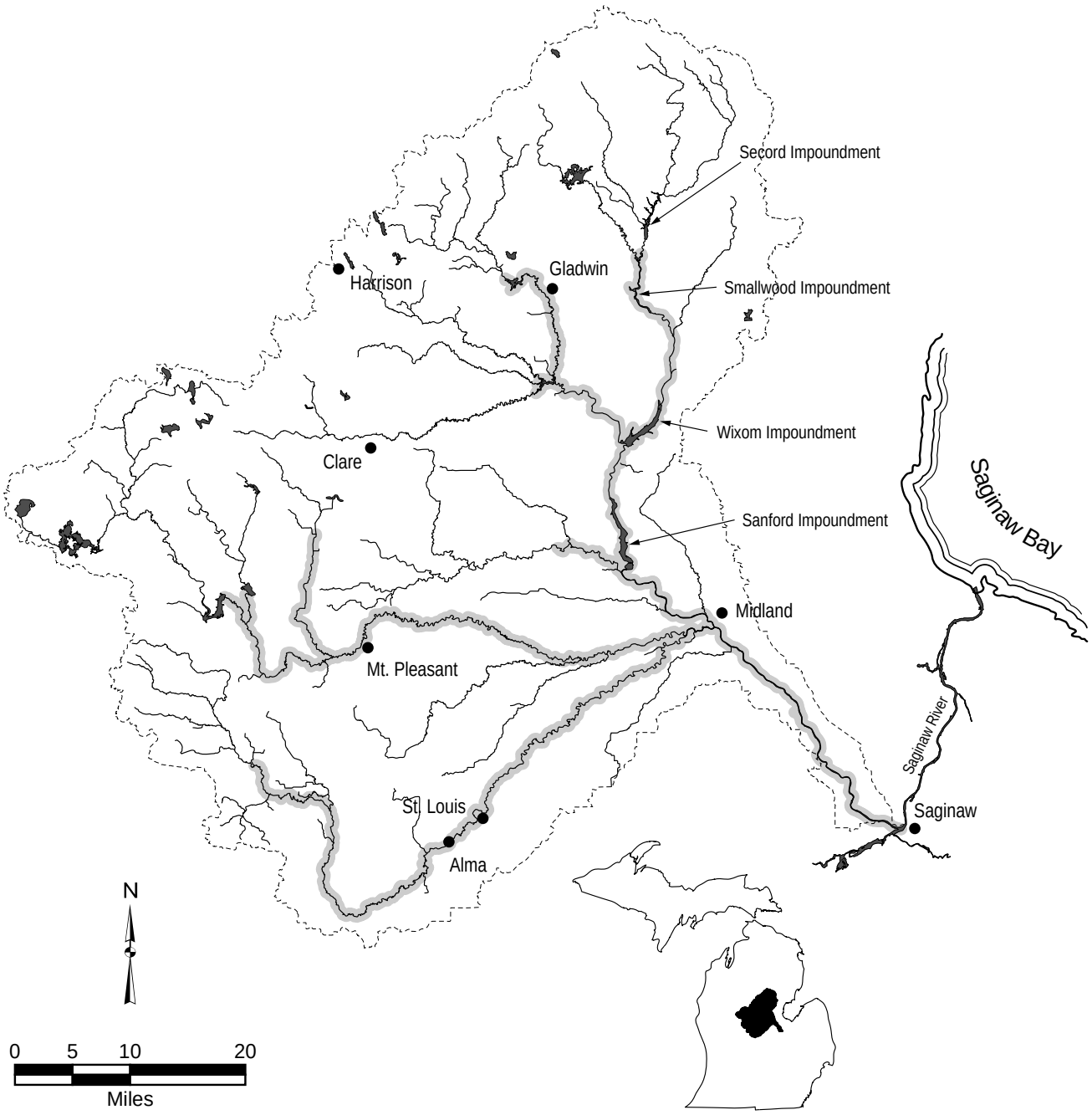
Golden redhorse *Moxostoma erythrurum*

Habitat**:**

feeding - warm medium gradient streams and rivers
- clear riffly streams
- medium size streams and rivers
- tolerates some turbidity and silt

spawning - shallow gravelly riffles

winter refuge - larger streams

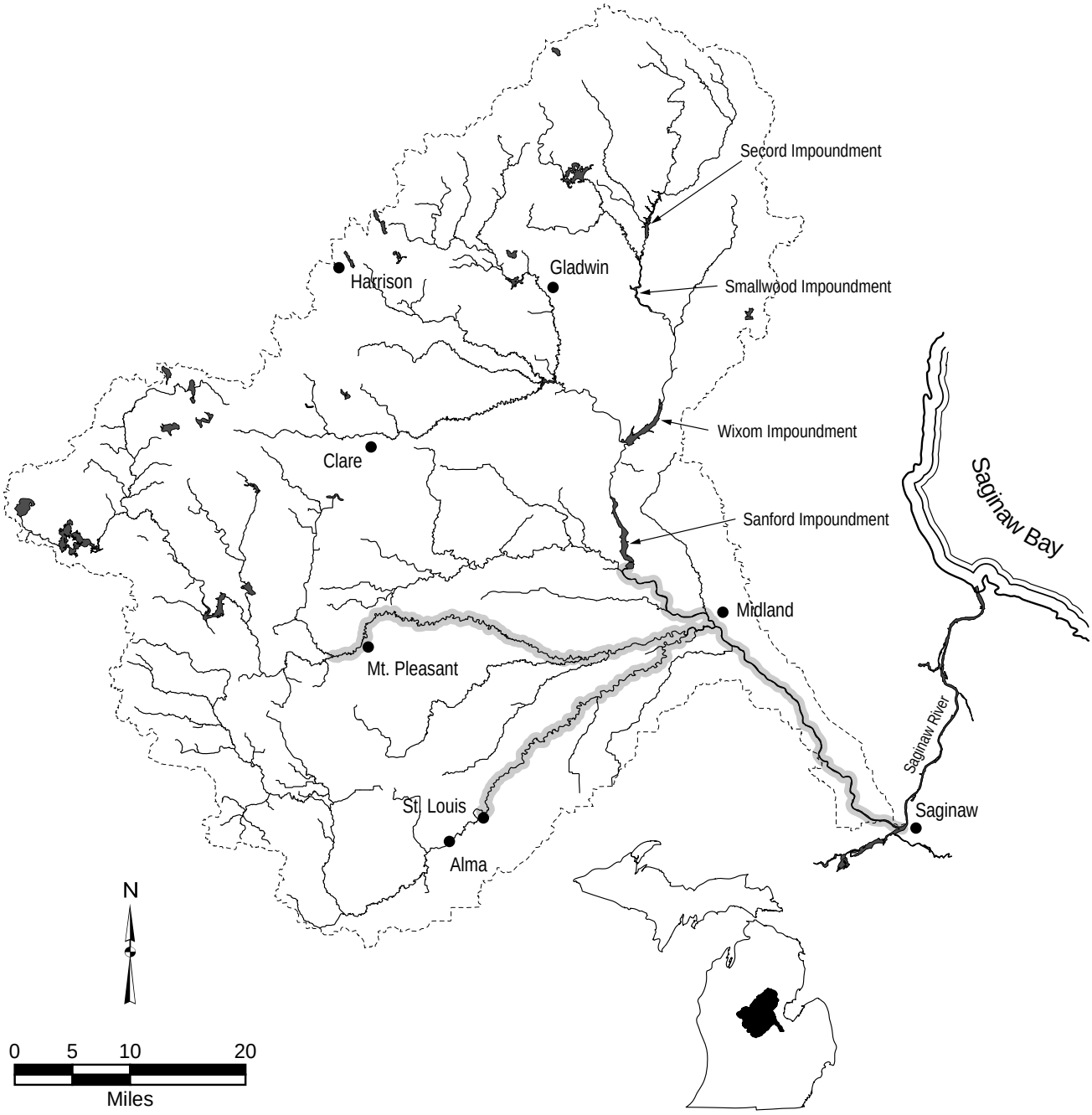


Shorthead redhorse *Moxostoma macrolepidotum*

Habitat**:**

feeding - downstream sections of large rivers, lakes, and impoundments
- rocky substrates
- swift water near riffles
- clear to slightly turbid water

spawning - gravelly riffles in smaller feeder streams

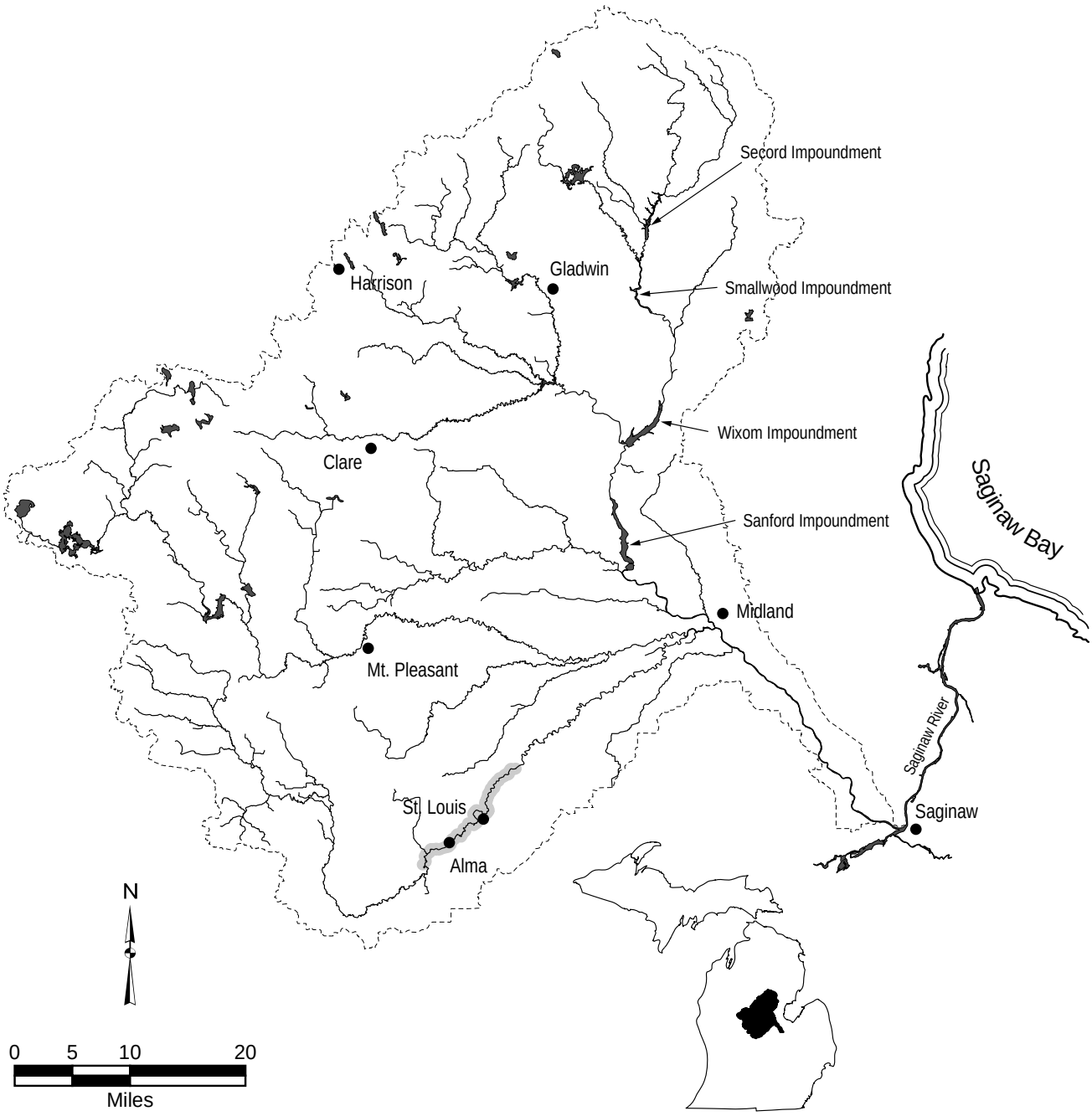


Greater redhorse *Moxostoma valenciennesi*

Habitat**:**

feeding - large clear streams
- clean sand, gravel, or boulder substrate
- intolerant of excessive turbidity and chemical pollutants

spawning - moderately rapid current

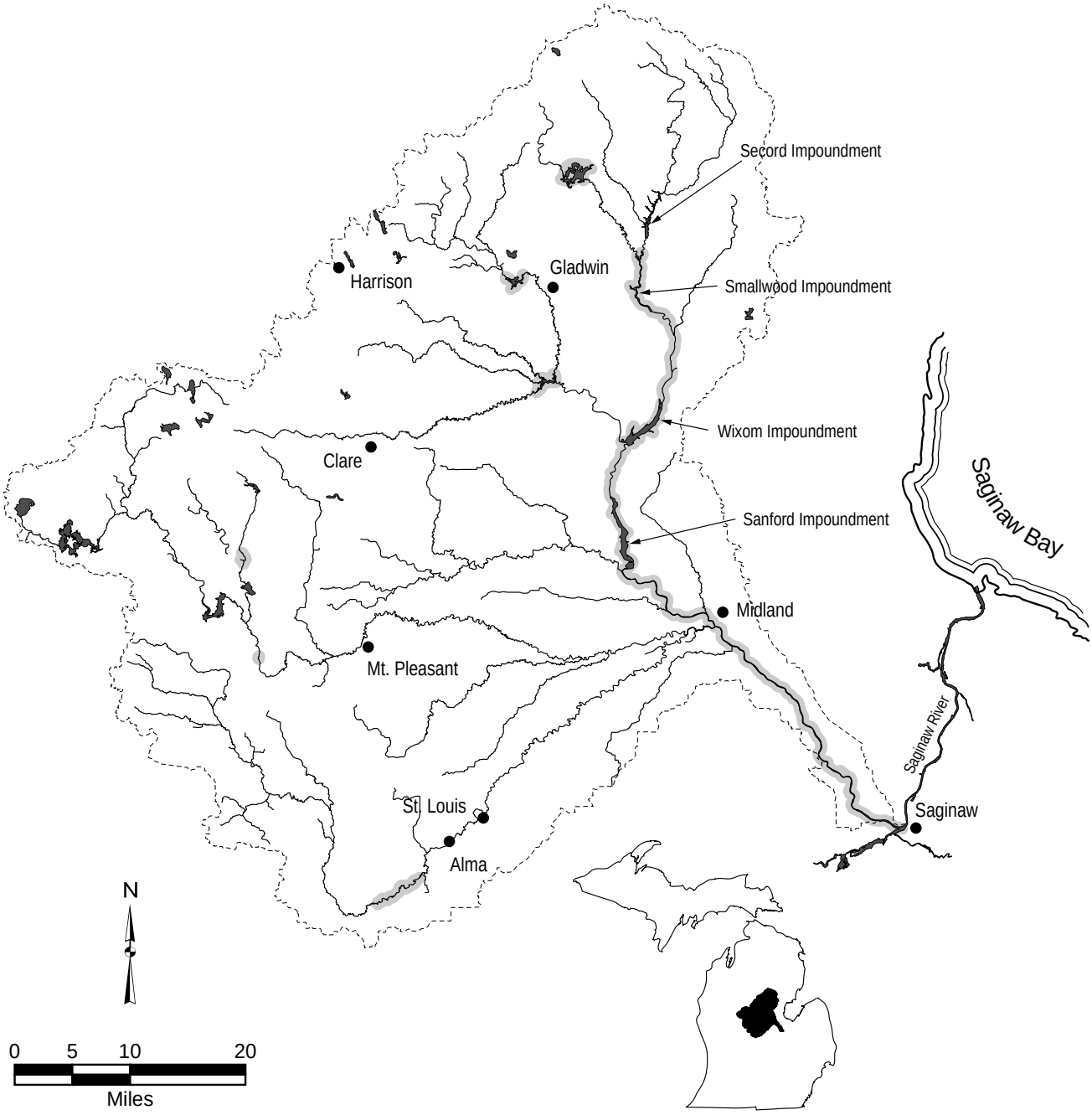


Black bullhead *Ameiurus melas*

Habitat:

feeding
- turbid water
- silt bottom
- low gradient small to medium streams, pools, and headwaters of large rivers; also in lakes and impoundments
- can tolerate very warm water and very low dissolved oxygen

spawning
- nest in moderate to heavy vegetation or woody debris and under overhanging banks

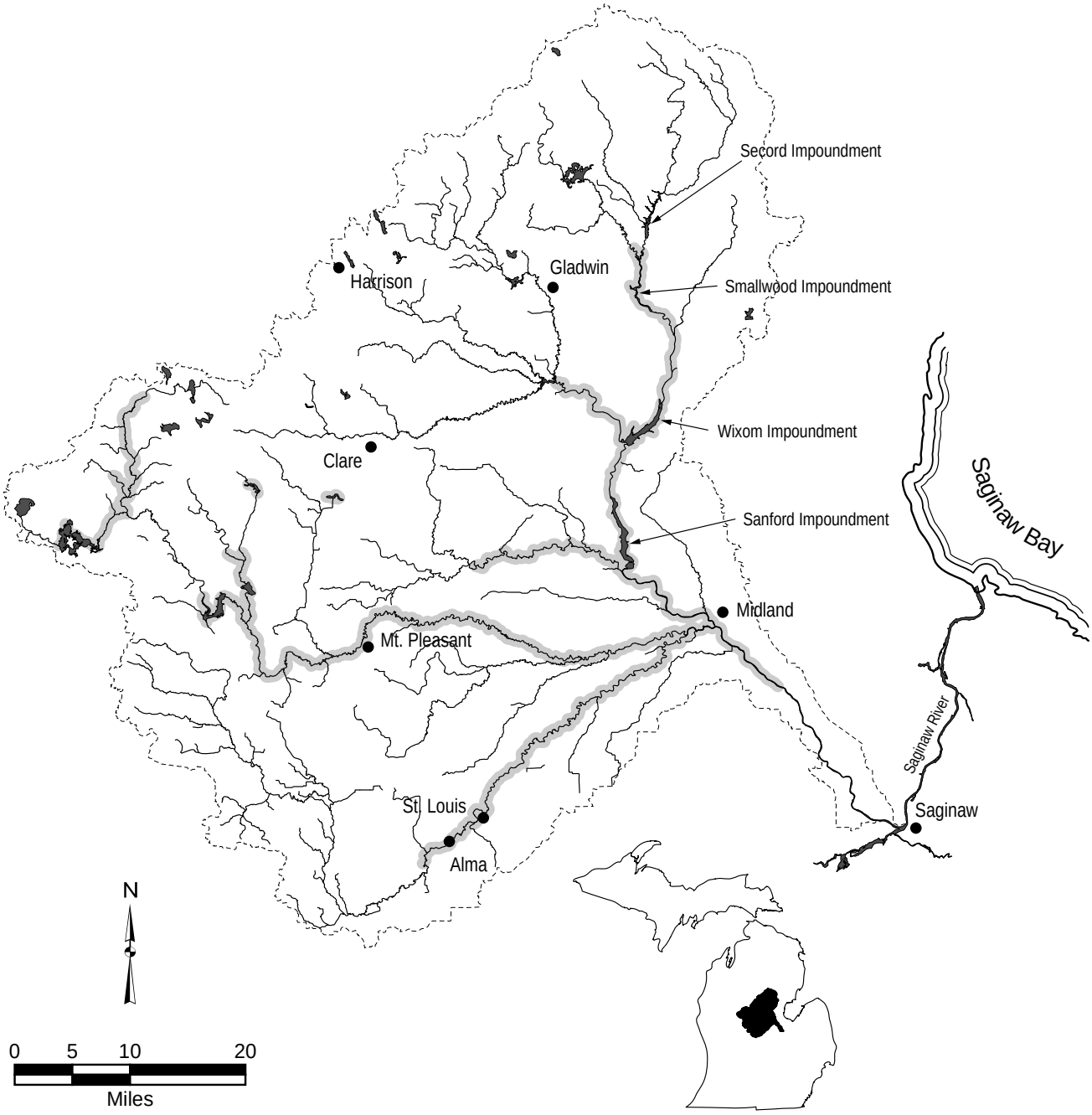


Yellow bullhead *Ameiurus natalis*

Habitat**:**

feeding - clear flowing water
- heavy vegetation
- low gradient streams, lakes, and impoundments
- tolerant of low oxygen

spawning - nest under a stream bank or near stones or stumps



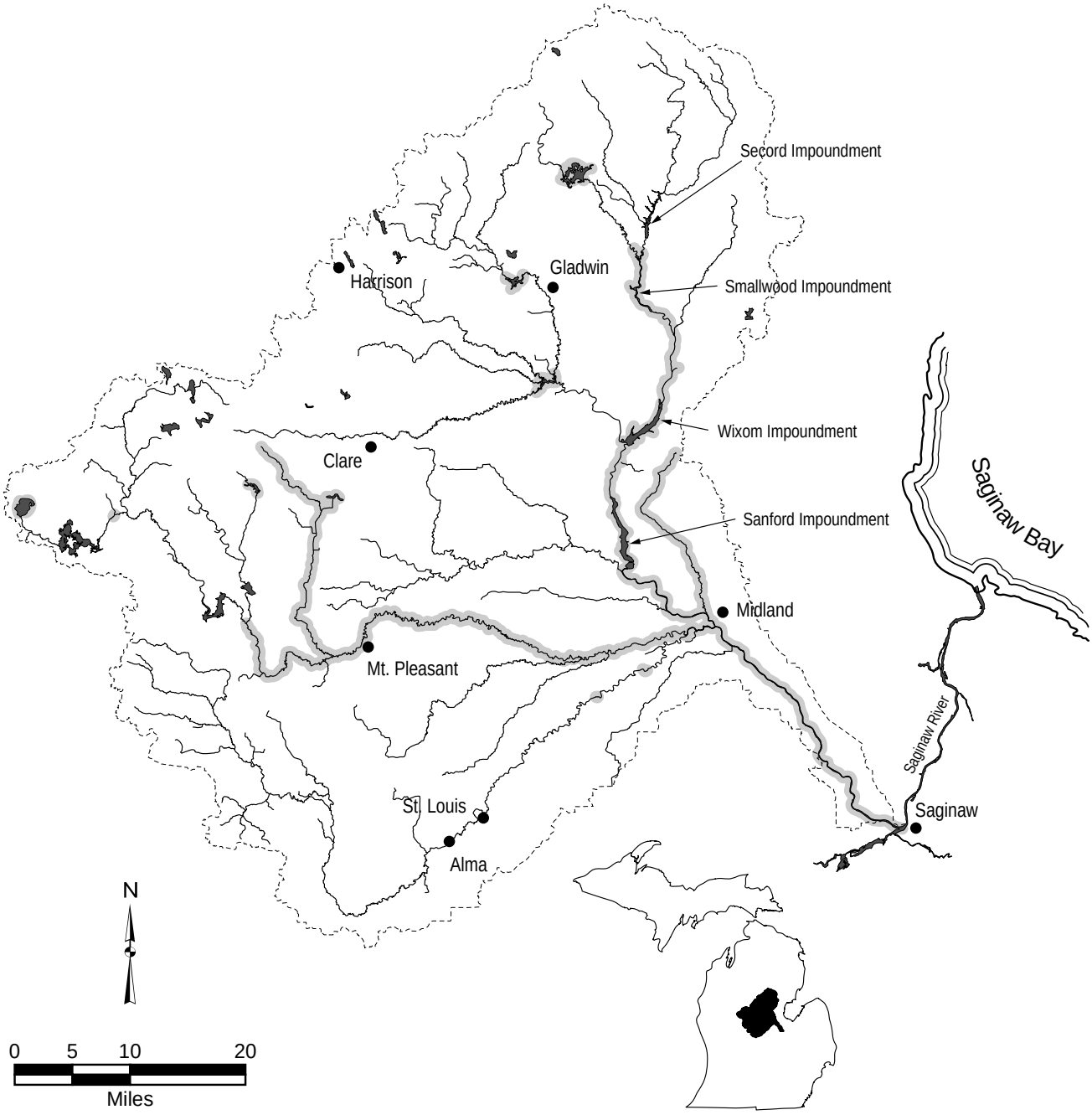
Brown bullhead *Ameiurus nebulosus*

Habitat**:**

feeding - larger streams and rivers, lakes and impoundments
- clear cool water with little clayey silt
- moderate amounts of aquatic vegetation
- sand, gravel, or muck substrate
- not tolerant of turbid water
- tolerant of warm water and low oxygen

spawning - nest in mud or sand substrate among rooted aquatic vegetation usually near a stump, tree, or rock

winter refuge - in muddy bottoms

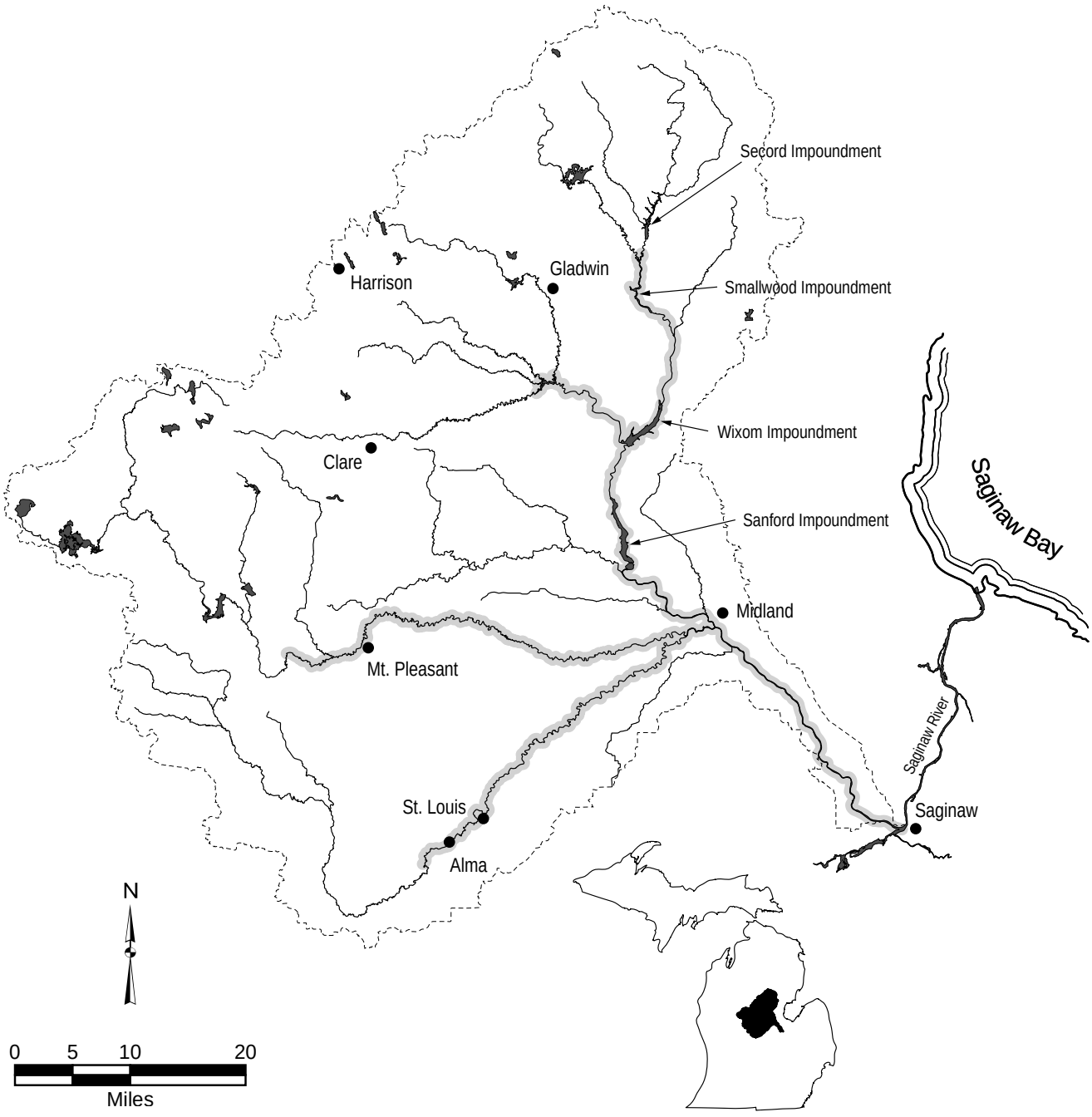


Channel catfish *Ictalurus punctatus*

Habitat**:**

feeding - moderately-clear, deeper waters of rivers, lakes, and impoundments
- sand, gravel, or rubble substrate
- low to moderate gradient

spawning - secluded semi-dark areas such as holes, under banks, log jams, or rocks

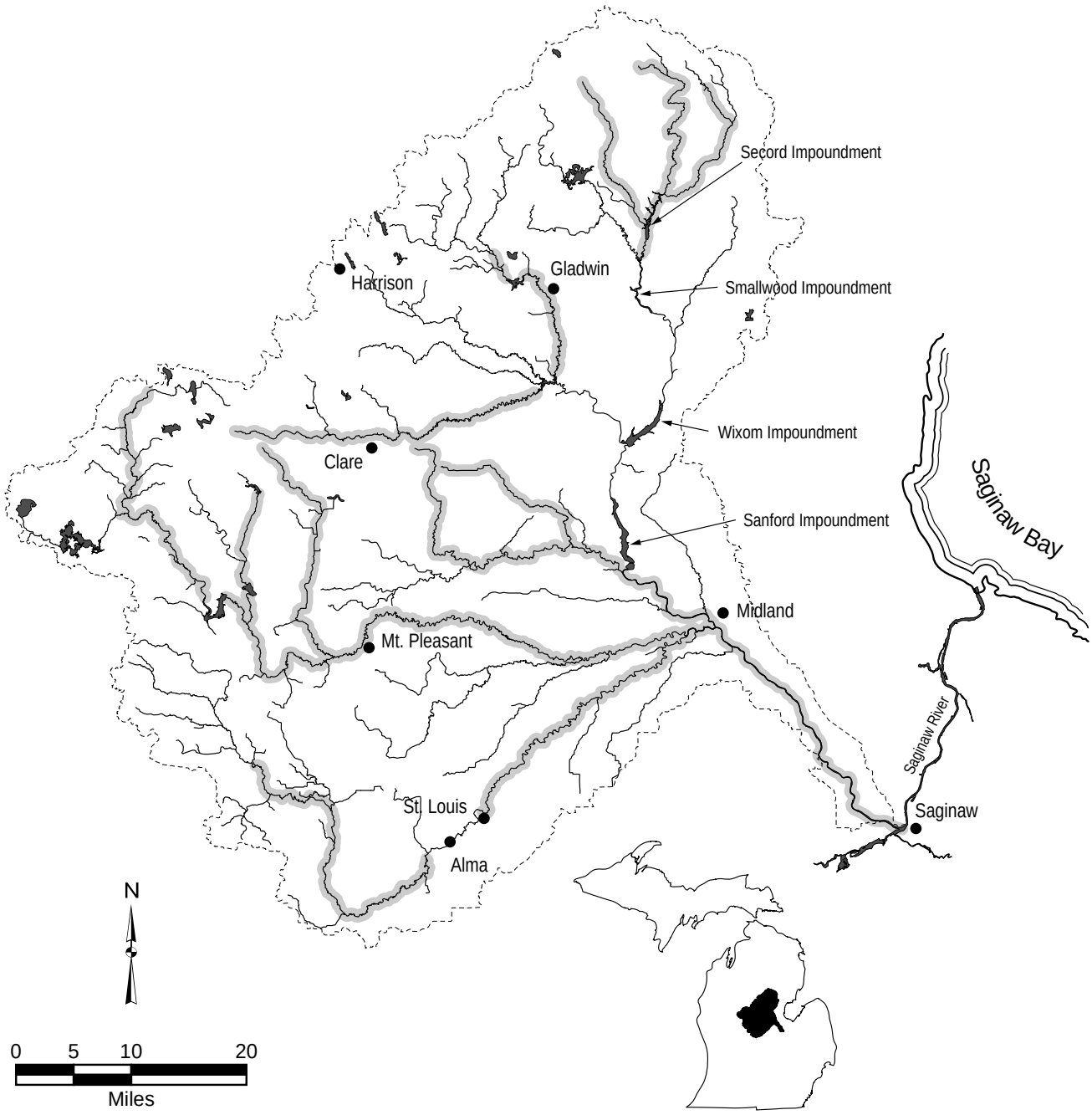


Stonecat *Noturus flavus*

Habitat**:**

feeding - consistent low to moderate gradient flowing water
- rocky riffles of larger streams and smaller rivers
- not tolerant of silt
- tolerant of low oxygen and pollution

spawning - eggs deposited beneath stones
- shallow rocky areas of streams or lakes

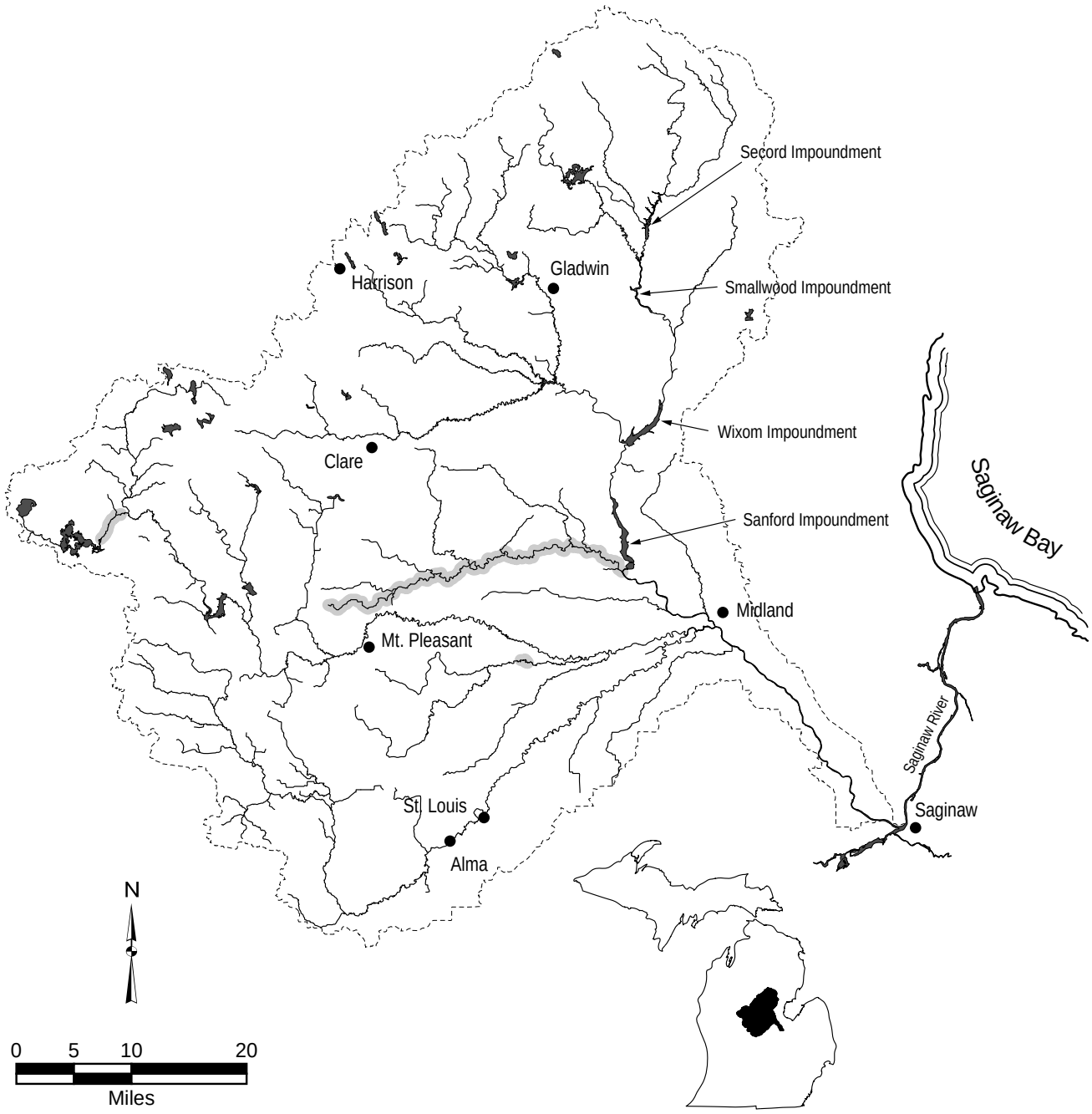


Tadpole madtom *Noturus gyrinus*

Habitat**:**

feeding - vegetative cover in low-moderate current waters
- muddy substrate with extensive vegetation
- clear waters of streams, rivers, and lakes

spawning - mostly in rivers, sometimes shallows of lakes
- nests in dark cavities (ex: beneath boards, logs, crayfish burrows)



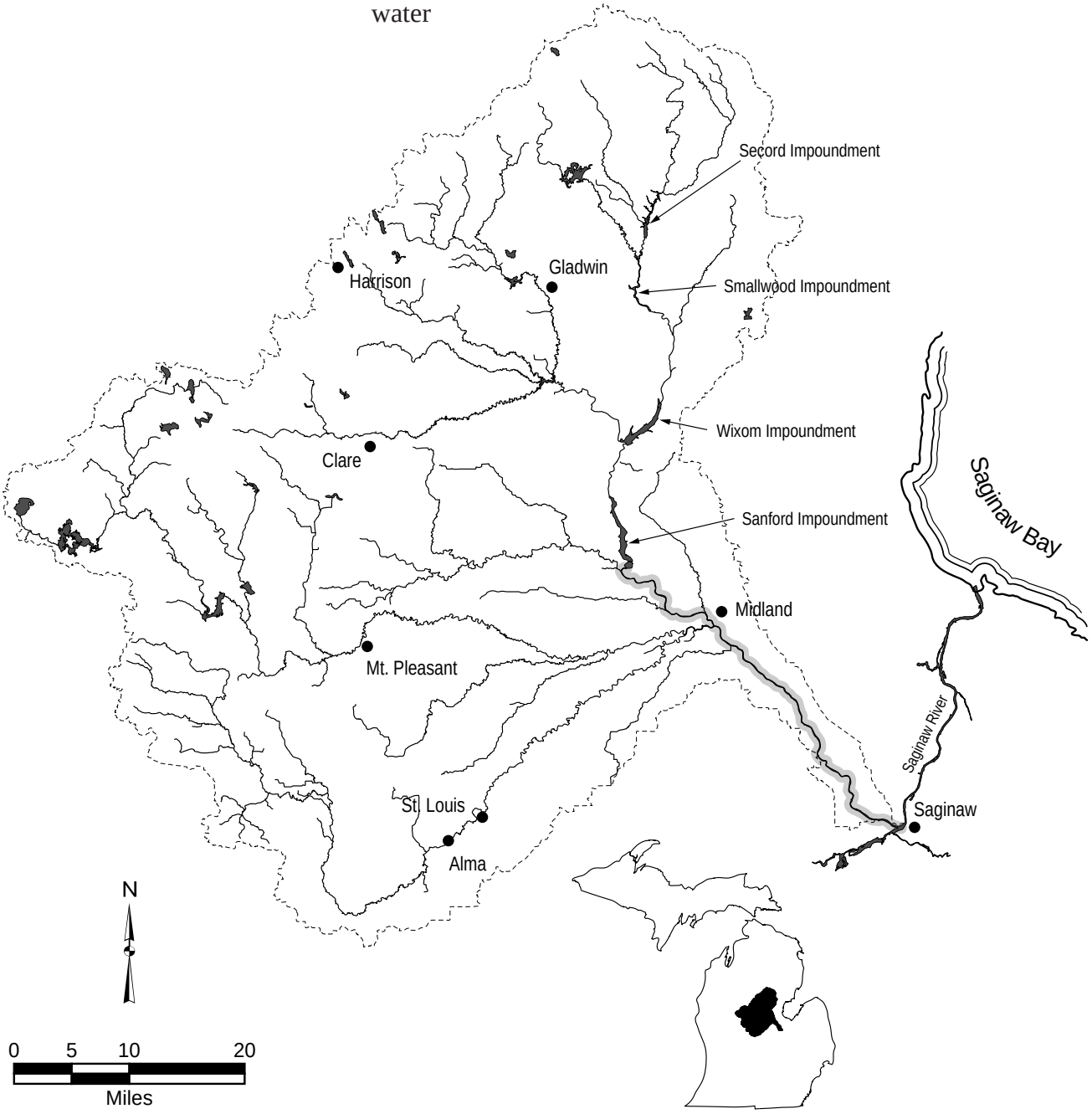
Flathead catfish *Pylodictis olivaris*

Habitat:

feeding - (young) shallow riffles in fast current
- deep pools with a lot of woody cover
- deep riffles
- low gradient and current
- prefer silt-free substrate
- sometimes feed on shallow riffles

spawning - secluded shelters or dark places
- gravel or silt-free substrate

winter refuge - muddy holes in deep water

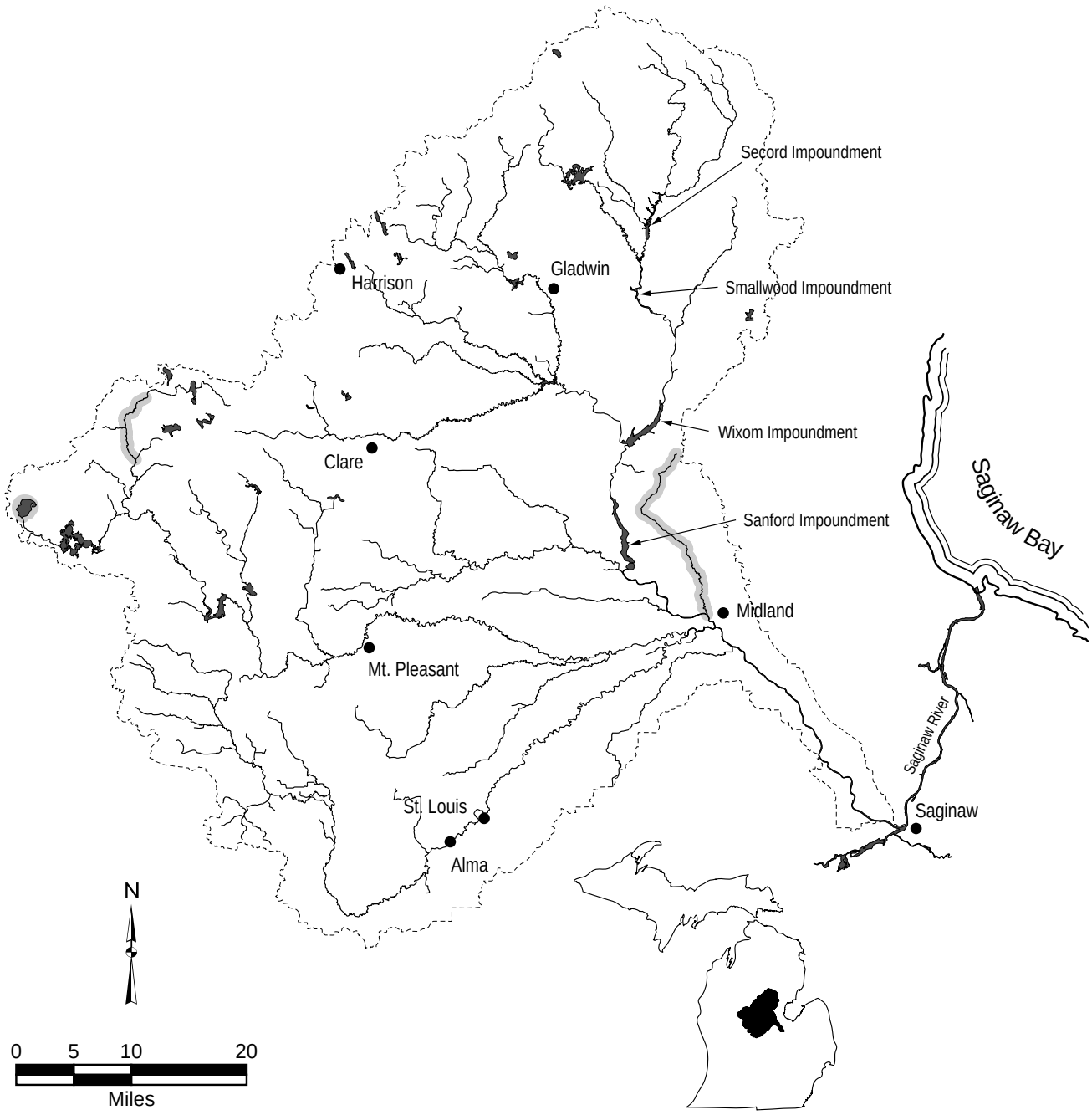


Grass pickerel *Esox americanus vermiculatus*

Habitat**:**

feeding - juveniles: along shore
- adults: in deeper portions of streams, rivers, lakes, and impoundments
- clear water, little current, dense vegetation
- tolerates low oxygen concentrations

spawning - broadcast spawner over submerged vegetation

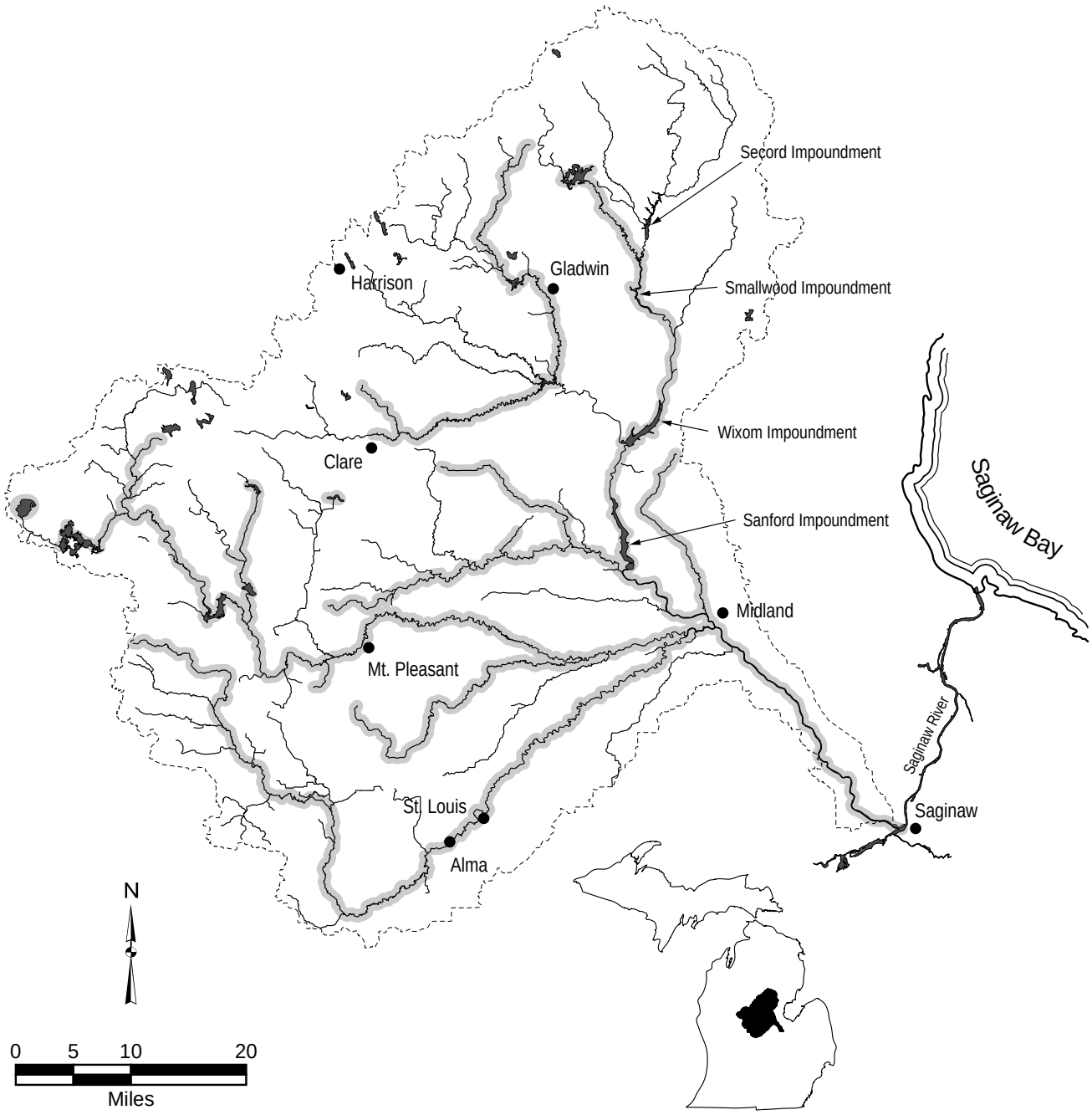


Northern pike *Esox lucius*

Habitat**:**

feeding - cool to moderately warm streams, rivers, lakes, and impoundments
- vegetation in slow to moderate current

spawning - submerged vegetation with slow current in shallow water

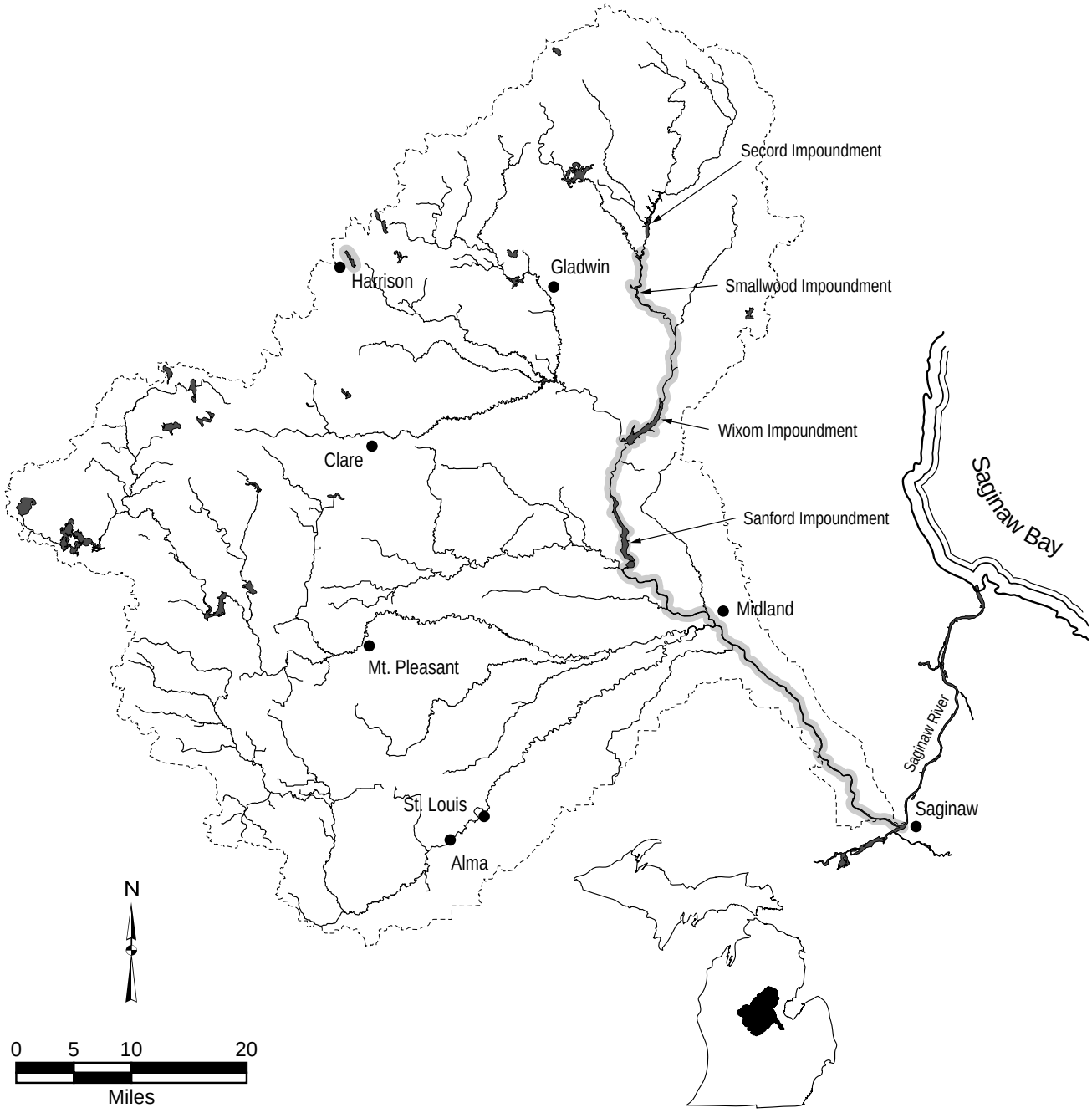


Muskellunge *Esox masquinongy*

Habitat:

feeding - warm, heavily vegetated lakes, stumpy weedy bays, and slow heavily vegetated medium to large rivers
- shallow cool water
- tolerant of low oxygen

spawning - clear shallow waters (15-20”) in heavily vegetated areas

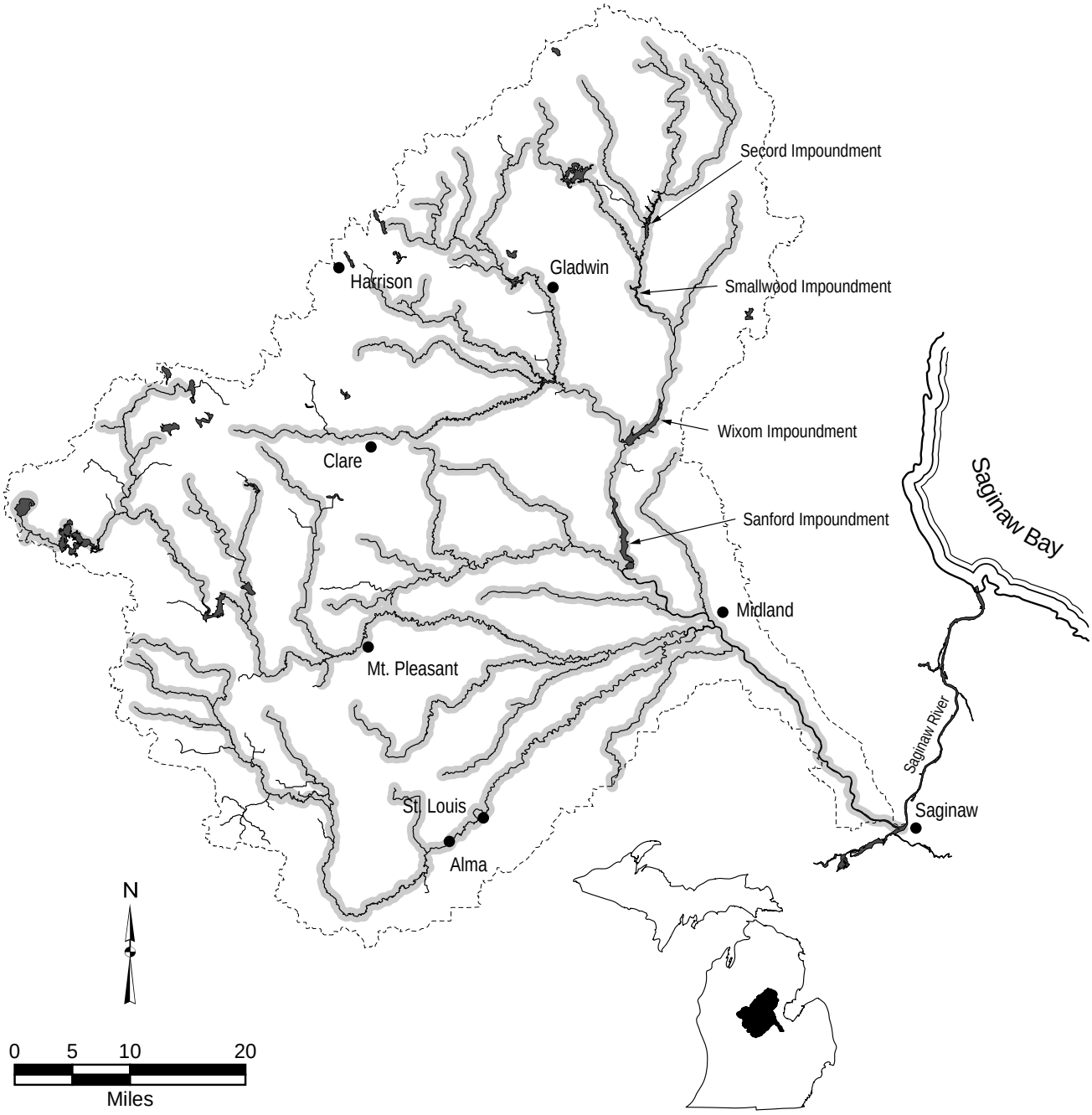


Central mudminnow *Umbra limi*

Habitat**:**

feeding - undisturbed clear, low-gradient streams or rivers and lakes and impoundments
- organic debris, muck, or peat substrates
- aquatic vegetation

spawning - floodplain areas, on vegetation



Rainbow smelt *Osmerus mordax*

Habitat:

feeding	-	young: close inshore lake habitat along sand and gravel beaches
	-	cold water
spawning	-	clear high-gradient streams or wave swept shoreline
	-	riffles with coarse sand or gravel substrate
winter refuge	-	midwaters of lakes or inshore coastal waters