NAME OF SPECIES: Tench (Tinca tinca)

A. CURRENT STATUS AND DISTRIBUTION	
1. In Wisconsin?	a. YES ☐ NO ☒
	b. Abundance: record of the fish in the state, though stocking attempts reported as failed
	c. Geographic Range:
	d. Type of Waters Invaded (rivers, ponds, lakes, etc): (in other states) vegetated areas of lakes and ponds, lower reaches of slow-moving rivers, backwaters, oxbow lakes
	e. Historical Status and Rate of Spread in Wisconsin: Reported in WI in 1895 - fish provided to various applicants. Attempts to stock failed.
2. Invasive in Similar Climate Zones	YES ☐ NO ☒ Where:
3. Similar Habitat Invaded Elsewhere	YES ☐ NO ☒ Where:
4. In Surrounding States	YES ☒ NO ☐ Where: Reports in 39 states, including IL, IN, OH, MI, though there appear to be very few reproducing populations. Most stocking attempts failed.
5. Competitive Ability	High: Can survive a range of temperatures and water quality conditions, is a generalist predator Low: Very few stocking attempts throughout the US have resulted in reproducing populations
B. ESTABLISHMENT POTENTIAL AND LIFE HISTORY TRAITS	
1. Temperature:	Range: reported to survive at temps. near freezing, but optimal temps. 13 - 30 deg. C
2. Spawning Temperature:	Range: eggs hatch in 3 - 8 days at 22 - 24 deg. C
3. Number of Eggs:	Range: huge variation found: 18,400 - 827,000 eggs per female
4. Preferred Spawning Substrate:	prefer vegetation
5. Hybridization Potential:	no known hybirdization with native fish; has been crossed with goldfish, common carp, bighead carp, and rudd
6. Salinity Tolerance	Fresh: ☒ Marine: ☐ Brackish: ☒
7. Oxygen Regime	Range: tolerant of low DO levels, shown to survive in oxygen concentrations less than 1 mg/L
8. Water Hardness Tolerance	Range:

9. Easily confused for Native Species?	List:
C. DAMAGE POTENTIAL	
1. Likelihood of Damage	a. Presence of Natural Enemies:
	b. How well introductory and expansion pathways can be described and quantified: Imported to the US in 1877 and widely distributed - intentional stocking for use as food and sportfish and accidental escapes contributed to presence in the wild
2. Environmental Impacts	a. Alteration of ecosystem composition, structure and function: Unselective generalist invertebrate predator (primarily eats benthic inverts), potential competitor for food with native sportfish and native cyprinids
	c. Damage to ecosystem resilience/sustainability:
	d. Loss of biological diversity:
	e. Abiotic modifications (affects on turbidity, H2O chemistry, etc.): known to stir up bottom sediments - could affect water quality
	f. Biotic effects on other species (loss of cover, nesting sites, forage, changing competitive relationships:
D. NET SOCIO/ECONOMIC IMPACT	
1. Positive aspects of the species to the economy/society:	Effect: popular orange-yellow variety used in ornamental ponds, originally imported to US for use as food and sportfish
2. Direct and indirect effects of the invasive species:	Effect:
3. Type of damage caused by organism:	Effect:
Industries affected by invasive:	Effect:
4. Loss of aesthetic value affecting recreation and tourism:	Effect:
5. Increased cost to a sector (monitoring, inspection, control, public education, modifying practices, damage repair, lower yield, loss of export markets due to quarantine:	Effect:
6. Cost of prevention or control relative to cost of allowing invasion to occur (cost of prevention is borne	Effect:

by different groups than cost of control):	
7. Cost at different levels of invasion:	Effect:
E. CONTROL AND PREVENTION POTENTIAL	
1. Costs of Prevention (including Education):	
2. Responsiveness to Prevention Efforts:	Unclear how much this species is still used in water gardening, however efforts targeting water gardeners may help to reduce future introductions.
3. Detection Capability:	
4. Control Tactics Effective:	Mechanical: ☐ Biological: ☐ Chemical: ☐
5. Efficacy/Feasibility of Control (effort, # of staff):	
6. Cost of Control:	High: ☐ Medium: ☐ Low: ☐
7. Non-Target Effects of Control:	
8. Threshold at which control would be attempted:	
9 Efficacy of Monitoring:	