

**Appendix A. Freshwater mussel and fish species documented in the French Creek Watershed**

**Table A.1.** Freshwater mussel species previously documented in French Creek Watershed (WPC and FCP 2002) with global and state ranks according to NatureServe (2008). Key to ranks global ranks; G5=Secure, G4=Apparently Secure, G3=Vulnerable, G2=Imperiled, G1=Critically Imperiled, T2=subspecies. Key to state ranks; S5=Secure, S4=Apparently Secure, S3=Vulnerable, S2=Imperiled, S1=Critically Imperiled, SNR= not ranked.

<b>Scientific Name</b>	<b>Common Name</b>	<b>Global Rank</b>	<b>State Rank</b>
<i>Actinonaias ligamentina</i> (Lamarck, 1819)	Mucket	G5	S4
<i>Alasmidonta marginata</i> (Say, 1818)	Elktoe	G4	S4
<i>Amblema plicata</i> (Say, 1817)	Threeridge	G5	S2S3
<i>Anodontooides ferussacianus</i> (I. Lea, 1834)	Cylindrical papershell	G5	S2S3
<i>Cyclonaias tuberculata</i> (Rafinesque, 1820)	Purple wartyback	G5	SX
<i>Elliptio dilatata</i> (Rafinesque, 1820)	Spike	G5	S4
<i>Epioblasma torulosa rangiana</i> (I. Lea, 1838)	Northern riffleshell	G2T2	S2
<i>Epioblasma triquetra</i> (Rafinesque, 1820)	Snuffbox	G3	S1
<i>Fusconaia subrotunda</i> (I. Lea, 1831)	Long-solid	G3	S1
<i>Lampsilis cardium</i> (Rafinesque, 1820)	Plain pocketbook	G5	S4
<i>Lampsilis fasciola</i> (Rafinesque, 1820)	Wavy-rayed lampmussel	G4	S4
<i>Lampsilis ovata</i> (Say, 1817)	Pocketbook	G5	S3S4
<i>Lampsilis siliquoidea</i> (Barnes, 1823)	Fatmucket	G5	S4
<i>Lasmigona complanata</i> (Barnes, 1823)	White heelsplitter	G5	S1
<i>Lasmigona compressa</i> (I. Lea, 1829)	Creek heelsplitter	G5	S2S3
<i>Lasmigona costata</i> (Rafinesque, 1820)	Fluted-shell	G5	S4
<i>Ligumia nasuta</i> (Say, 1817)	Eastern pondmussel	G4	S1S3
<i>Ligumia recta</i> (Lamarck, 1819)	Black sandshell	G5	S3S4
<i>Pleurobema clava</i> (Lamarck, 1819)	Clubshell	G2	S1S2
<i>Pleurobema sintoxia</i> (Rafinesque, 1820)	Round pigtoe	G4	S2
<i>Ptychobranhus fasciolaris</i> (Rafinesque, 1820)	Kidneyshell	G4G5	S4
<i>Pyganodon grandis</i> (Say, 1829)	Giant floater	G5	S4
<i>Quadrula cylindrica</i> (Say, 1817)	Rabbitsfoot	G3	S1
<i>Simpsonaias ambigua</i> (Say, 1825)	Salamander mussel	G3	S1?
<i>Strophitus undulatus</i> (Say, 1817)	Creeper	G5	S4S5
<i>Toxolasma parvus</i> (Barnes, 1823)	Lilliput	G5	S1S3
<i>Utterbackia imbecillis</i> (Say, 1829)	Paper pondshell	G5	S3S4
<i>Villosa fabalis</i> (I. Lea, 1831)	Rayed bean mussel	G1G2	S1S2
<i>Villosa iris</i> (I. Lea, 1829)	Rainbow mussel	G5Q	S1

**Table A. 2.** Fish documented in the French Creek watershed (WPC and FCP 2002) with global and state ranks according to NatureServe (2008). Key to ranks global ranks; G5=Secure, G4=Apparently Secure, G3=Vulnerable, G2=Imperiled, G1=Critically Imperiled, T2=subspecies. Key to state ranks; S5=Secure, S4=Apparently Secure, S3=Vulnerable, S2=Imperiled, S1=Critically Imperiled, SNR= not ranked.

Scientific Name	Common Name	Global Rank	State Rank
<i>Ambloplites rupestris</i> (Rafinesque, 1817)	rock bass	G5	S5
<i>Ameiurus natalis</i> (Lesueur, 1819)	yellow bullhead	G5	S5
<i>Ameiurus nebulosus</i> (Lesueur, 1819)	brown bullhead	G5	S5
<i>Amia calva</i> (Linnaeus, 1766)	bowfin	G5	S2S3
<i>Ammocrypta pellucida</i> (Agassiz, 1863)	eastern sand darter	G3	S1
<i>Campostoma anomalum</i> (Rafinesque, 1820)	central stoneroller	G5	S5
<i>Carpiodes cyprinus</i> (Lesueur, 1817)	quillback	G5	S5
<i>Catostomus commersoni</i> (Lacepède, 1803)	white sucker	G5	S5
<i>Clinostomus elongatus</i> (Kirtland, 1841)	redside dace	G3G4	S4
<i>Cottus bairdi</i> (Girard, 1850)	mottled sculpin	G5	S5
<i>Culaea inconstans</i> (Kirtland, 1840)	brook stickleback	G5	S3
<i>Cyprinella spiloptera</i> (Cope, 1867)	spotfin shiner	G5	S5
<i>Cyprinus carpio</i> (Linnaeus, 1758)	common carp	G5	SNA-Exotic
<i>Erimystax dissimilis</i> (Kirtland, 1841)	streamline chub	G4	S3
<i>Erimystax x-punctatus</i> (Hubbs and Crowe, 1956)	gravel chub	G4	S1
<i>Esox americanus vermiculatus</i> (Lesueur, 1846)	grass pickerel	G5T5	?
<i>Esox lucius</i> (Linnaeus, 1758)	northern pike	G5	S3S4
<i>Esox masquinongy</i> (Mitchill, 1824)	muskellunge	G5	S3S4
<i>Etheostoma blennioides</i> (Rafinesque, 1819)	greenside darter	G5	S5
<i>Etheostoma caeruleum</i> (Storer, 1845)	rainbow darter	G5	S5
<i>Etheostoma camurum</i> (Cope, 1870)	bluebreast darter	G4	S2
<i>Etheostoma exile</i> (Girard, 1859)	Iowa darter	G5	S1
<i>Etheostoma flabellare</i> (Rafinesque, 1819)	fantail darter	G5	S5
<i>Etheostoma maculatum</i> (Kirtland, 1840)	spotted darter	G2	S2
<i>Etheostoma nigrum</i> (Rafinesque, 1820)	Johnny darter	G5	S5
<i>Etheostoma tippecanoe</i> (Jordan and Evermann, 1890)	Tippecanoe darter	G3G4	S2
<i>Etheostoma variatum</i> (Kirtland, 1840)	variegated darter	G5	S4
<i>Etheostoma zonale</i> (Cope, 1868)	banded darter	G5	S4
<i>Exoglossum laurae</i> (Hubbs, 1931)	tonguetied minnow	G4	S3S4
<i>Fundulus diaphanus</i> (Lesueur, 1817)	banded killifish	G5	S5
<i>Hybognathus hankinsoni</i> (Hubbs, 1929)	brassy minnow	G5	SNA-Exotic
<i>Hybopsis amblops</i> (Rafinesque, 1820)	bigeye chub	G5	S3S4
<i>Hypentelium nigricans</i> (Lesueur, 1817)	northern hogsucker	G5	S5
<i>Ichthyomyzon bdellium</i> (Jordan, 1885)	Ohio lamprey	G3G4	S2S3
<i>Ichthyomyzon greeleyi</i> (Hubbs and Trautman, 1937)	mountain brook lamprey	G3G4	S2
<i>Labidesthes sicculus</i> (Cope, 1865)	brook silverside	G5	S4
<i>Lampetra appendix</i> (DeKay, 1842)	American brook lamprey	G4	S3
<i>Lepomis megalotis</i> (Rafinesque, 1820)	longear sunfish	G5	S1
<i>Lepomis cyanellus</i> (Rafinesque, 1819)	green sunfish	G5	S5
<i>Lepomis gibbosus</i> (Linnaeus, 1758)	pumpkinseed	G5	S5
<i>Lepomis gulosus</i> (Cuvier, 1829)	warmouth	G5	S2
<i>Lepomis macrochirus</i> (Rafinesque, 1819)	bluegill	G5	S5
<i>Lepisosteus osseus</i> (Linnaeus, 1758)	longnose gar	G5	S3

**Table A.2:** Continued.

<b>Scientific Name</b>	<b>Common Name</b>	<b>Global Rank</b>	<b>State Rank</b>
<i>Luxilus chrysocephalus</i> Rafinesque, 1820	striped shiner	G5	S5
<i>Luxilus cornutus</i> (Mitchill, 1817)	common shiner	G5	S5
<i>Lythrurus umbratilis</i> (Girard, 1856)	redfin shiner	G5	S1
<i>Margariscus margarita</i> (Cope, 1867)	pearl dace	G5	S4
<i>Micropterus dolomieu</i> (Lacepède, 1802)	smallmouth bass	G5	S5
<i>Micropterus salmoides</i> (Lacepède, 1802)	largemouth bass	G5	S5
<i>Moxostoma anisurum</i> (Rafinesque, 1820)	silver redhorse	G5	S4
<i>Moxostoma carinatum</i> (Cope, 1870)	river redhorse	G4	S3S4
<i>Moxostoma duquesnei</i> (Lesueur, 1817)	black redhorse	G5	S4
<i>Moxostoma erythrurum</i> (Rafinesque, 1818)	golden redhorse	G5	S4
<i>Moxostoma macrolepidotum</i> (Lesueur, 1817)	shorthead redhorse	G5	S4
<i>Nocomis biguttatus</i> (Kirtland, 1841)	hornyhead chub	G5	S1
<i>Nocomis micropogon</i> (Cope, 1865)	river chub	G5	S5
<i>Notemigonus crysoleucas</i> (Mitchill, 1814)	golden shiner	G5	S5
<i>Notropis atherinoides</i> (Rafinesque, 1818)	emerald shiner	G5	S5
<i>Notropis buccatus</i> (Cope, 1865)	silverjaw minnow	G5	S5
<i>Notropis heterodon</i> (Cope, 1865)	blackchin shiner	G5	S1
<i>Notropis heterolepis</i> (Eigenmann and Eigenmann, 1893)	blacknose shiner	G4	SX
<i>Notropis ludibundus</i> (Cope, 1865)	sand shiner	G5	S4
<i>Notropis photogenis</i> (Cope, 1865)	silver shiner	G5	S4
<i>Notropis rubellus</i> (Agassiz, 1850)	rosyface shiner	G5	S5
<i>Notropis volucellus</i> (Cope, 1865)	mimic shiner	G5	S4
<i>Noturus eleutherus</i> (Jordan, 1877)	mountain madtom	G4	S1
<i>Noturus flavus</i> (Rafinesque, 1818)	stonecat	G5	S4
<i>Noturus miurus</i> (Jordan, 1877)	brindled madtom	G5	S2
<i>Noturus stigmosus</i> (Taylor, 1969)	northern madtom	G3	S2
<i>Oncorhynchus mykiss</i> (Walbaum, 1792)	rainbow trout	G5	SNA- Exotic
<i>Opsopoeodus emiliae</i> (Hay, 1881)	pugnose minnow	G5	SNA- Exotic
<i>Perca flavescens</i> (Mitchill, 1814)	yellow perch	G5	S5
<i>Percina caprodes</i> (Rafinesque, 1818)	logperch	G5	S4
<i>Percina evides</i> (Jordan and Copeland, 1877)	gilt darter	G4	S1S2
<i>Percina macrocephala</i> (Cope, 1867)	longhead darter	G3	S2S3
<i>Percina maculata</i> (Girard, 1859)	blackside darter	G5	S5
<i>Percopsis omiscomaycus</i> (Walbaum, 1792)	trout-perch	G5	S4
<i>Phoxinus erythrogaster</i> (Rafinesque, 1820)	southern redbelly dace	G5	S1
<i>Pimephales notatus</i> (Rafinesque, 1820)	bluntnose minnow	G5	S5
<i>Pimephales promelas</i> (Rafinesque, 1820)	fathead minnow	G5	S4
<i>Pomoxis annularis</i> (Rafinesque, 1818)	white crappie	G5	SNA- Exotic
<i>Pomoxis nigromaculatus</i> (Lesueur, 1829)	black crappie	G5	S4
<i>Rhinichthys atratulus</i> (Hermann, 1804)	blacknose dace	G5	S5
<i>Rhinichthys cataractae</i> (Valenciennes, 1842)	longnose dace	G5	S5
<i>Salmo trutta</i> (Linnaeus, 17580)	brown trout	G5	SNA- Exotic
<i>Salvelinus fontinalis</i> (Mitchill, 1814)	brook trout	G5	S5
<i>Semotilus atromaculatus</i> (Mitchill, 1818)	creek chub	G5	S5
<i>Stizostedion vitreum</i> (Mitchill, 1818)	walleye	G5	S4
<i>Umbra limi</i> (Kirtland, 1840)	central mudminnow	G5	S3