

DRAFT RRT 3 ESA - Oil Spill Response Matrix Screening Tool (2018)

RRT 3 Fall Meeting

November 27 & 29, 2018

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Department of the Interior, Office of Env. Policy and Compliance

What is it?

- An Excel Spreadsheet
- Serves as a planning tool to help initiate and encourage conversations between National Marine Fisheries Service (NMFS) & US Fish and Wildlife Service (FWS) (the Services) and the USCG and EPA (the action agencies) on how oil spill response activities may impact protected species.
- Internal planning document as the Services continue to work with the oil spill response community on oil spill response planning.
- May be used during all stages of a spill as a reference and guide for the decision making process.

Why was it developed?

- Sector LA/LB – FWS, et al.
- NRT Workgroup
- Informal consultation with US Fish and Wildlife Service and NOAA National Marine Fisheries Service

Who has participated?

- Coast Guard
- Environmental Protection Agency
- NOAA
- US Fish and Wildlife Service
- Department of the Interior
- Tri-State Bird Rescue and Research

How was it developed?

- Federally listed threatened and endangered species
- Response Actions
- Special considerations (seasonality, species range)
- Keep it simple
- 2017 habitat zones:
 - Open water
 - Shoreline
 - Wetlands
 - Uplands
 - Wildlife Operations
- 2018 NO habitat zones Inland (& Coastal?)

0	Species does not inhabit area where action would take place; very unlikely to be affected by actions
1	No impact expected; unlikely overlap between species and action
2	Low probability of impact with implementation of BMPs
3	Medium/High probability of impact, implementation of BMPs required to minimize impact
4	High level of concern; high uncertainty

TURTLES



Hawksbill Sea Turtle



Leatherback Sea Turtle



Bog Turtle



Kemp's Ridley Sea Turtle



Loggerhead Sea Turtle



Green Sea Turtle

OTHER REPTILES



Eastern Massasagua (Rattlesnake)

BIRDS



Piping Plover



Roseate Tern



Red Knot

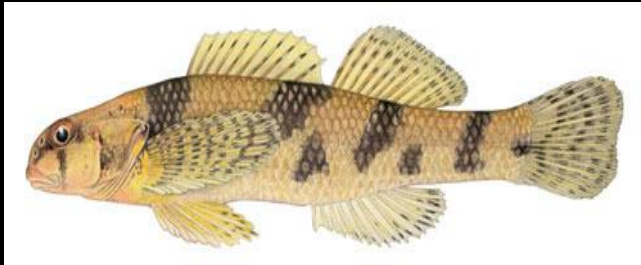


Red-Cockaded Woodpecker

FISH



Diamond Darter



Maryland Darter



Slender Chub



Blackside Dace



Spotfin Chub



Roanoke Logperch



Candy Darter



Duskytail Darter



Yellowfin Madtom

CLAMS



Dwarf Wedgemussel



Yellow Lance



Birdwing Pearlymussel



Cumberland Bean



Appalachian Monkeyface



Clubshell



Cracking Pearlymussel



Cumberland Monkeyface

CLAMS



Cumberlandian Combshell



Fanshell



Finerayed Pigtoe



Dromedary Pearlymussel



Green Blossom



James Spiny mussel



Littlewing Pearlymussel



Fluted Kidneyshell

CLAMS



Northern Riffleshell



Purple Bean



Rough Rabbitsfoot



Rough Pigtoe



Oyster Mussel



Pink Mucket



Rabbitsfoot



Sheepnose Mussel

CLAMS



Shiny Pigtoe



Snuffbox Mussel



Spectaclecase Mussel



Rayed Bean



Slabside Pearlymussel



Tan Riffleshell



Tuberclad Blossom

CRUSTASEANS



Hay's Spring Amphipod



Big Sandy Crayfish



Guyandotte River Crayfish



Lee County Cave Isopod



Madison Cave Isopod

INSECTS/ARACHNIDS



Northeastern Beach Tiger Beetle



Rusty Patched Bumble Bee



Spruce-fir Moss Spider



Puritan Tiger Beetle



Mitchell's Satyr Butterfly

MAMMALS



Indiana Bat



Gray Bat



Virginia Big-eared Bat



Northern Long-eared Bat



Carolina Northern Flying Squirrel

FLOWERING PLANTS



American Chaffseed



Harperella



Seabeach Amaranth



Sensitive Joint-Vetch



Northeastern Bulrush



Small Whorled Pogonia



Knieskern's Beaked-rush



Swamp Pink



Sandplain Gerardia

FLOWERING PLANTS



Peter's Mountain Mallow



Running Buffalo Clover



Shale Barren Rock Cress



Small-Anthered Bittercress



Michaux's Sumac



Eastern Prairie Fringed Orchid



Roan Mountain Bluet



Smooth Coneflower

FLOWERING PLANTS



Virginia Round-leaf Birch



Virginia Sneezeweed



Virginia Spiraea

Amphibians and Other Species



Cheat Mountain Salamander



Shenandoah Salamander



Flat-spined Three-toothed Snail



Virginia Fringed Mountain Snail



Rock Gnome Lichen

FWS IPAC: Starting Point

https://ecos.fws.gov/ipac/location/index

Apps Google Maps OEPC links Admin NPS FWS USGS BIA/Tribes NHPA ESA NEPA NRF/NDRF Oil Spills Great Lakes Oil/Gas/Frac Topics

IPaC Information for Planning and Consultation U.S. Fish & Wildlife Service LOG IN

- 1 Find location
- 2 Define area
- 3 Confirm

Verify the area where project activities will occur

Modify the shape by clicking and dragging the vertices or clicking on a solid vertex to remove it

AREA: 204.81 mi²

[CONTINUE](#)

[START OVER](#)

https://ecos.fws.gov/ipac/location/5MAVU7S36BADHJQTU7PQMXSKDA/resources

Apps Google Maps OEPC links Admin NPS FWS USGS BIA/Tribes NHPA ESA NEPA NRF/NDRF Oil Spills Great Lakes Oil/Gas/Frac Topics

IPaC Information for Planning and Consultation U.S. Fish & Wildlife Service LOG IN

Resources

- ENDANGERED SPECIES 5
- MIGRATORY BIRDS 17
- FACILITIES
- WETLANDS ✓

[PRINT RESOURCE LIST](#)

What's next?
Define a project at this location to evaluate potential impacts, get an official species list, and make species determinations.

[DEFINE PROJECT](#)

Mammals

NAME	STATUS
Indiana Bat <input checked="" type="checkbox"/> Myotis sodalis	Endangered
Northern Long-eared Bat Myotis septentrionalis	Threatened

Fishes

NAME	STATUS
Roanoke Logperch Percina rex	Endangered

Flowering Plants

NAME	STATUS
Northeastern Bulrush Scirpus ancistrochaetus	Endangered

FWS ECOS Species Profile

← → ↻ 🏠 🔒 https://ecos.fws.gov/ecp0/profile/speciesProfile?sid=1134

Apps Google Maps OEPC links Admin NPS FWS USGS BIA/Tribes NHPA ESA NEPA NRF/NDRF Oil Spills Great Lakes Oil/Gas/Frac Topics >>

Roanoke logperch (*Percina rex*)

[Range Information](#) | [Federal Register](#) | [Recovery](#) | [Critical Habitat](#) | [Conservation Plans](#) | [Petitions](#) | [Biological Opinions](#)
[Life History](#)

Taxonomy: [View taxonomy in ITIS](#)

Listing Status: **Endangered**

Where Listed: **WHEREVER FOUND**

General Information

The Roanoke logperch is a large darter, growing to about 6 inches long. It has a bulbous snout, lateral blotches, back is scrawled, and most fins are strongly patterned. First dorsal fin has an orange band, particularly vivid in mature males. It can be found in larger streams in the upper Roanoke, Smith, Pigg, Otter, Nottoway river systems, and Goose Creek in Virginia and in the Dan, Mayo, Smith river systems and Big Beaver Island Creek in North Carolina. They prefer large sized warm clear streams and riffles, runs and pools with sand, gravel or boulder.

The species historical range included Virginia. See below for information about where the species is known or believed to occur.

Current Listing Status Summary

Status	Date Listed	Lead Region	Where Listed
Endangered	08/18/1989	Northeast Region (Region 5)	Wherever found

Search for images on digitalmedia.fws.gov

Final Draft Product: Matrix

(Pre-decisional) DRAFT RRT 3 ESA Oil Spill Response Matrix Screening Tool.xlsx

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	
1	Draft EPA Inland ESA-Oil Spill Response Matrix Screening Tool					Solidifiers	Surface Washing Agents	Elasticity Modifiers	Bioremediation Agents	Emulsion Treating Agents	Booming and Sorbents	Barriers/Berms	In-situ burring	Manual Oil Removal	Mechanical Oil Removal	Vacuuming and Skimming	Debris Removal - Pre or Post Oiling	Sediment Reworking/Tilling	Flushing - Low Pressure, Ambient Temp	Flushing High Pressure, Ambient Temp	Flushing Low Pressure, Hot Temp	Flushing High Pressure, Hot/Steam & Sand Blasting	Vessel Traffic to Access Areas	Vegetation Cutting and Removal	Staging	Deterrence/Hazing	Relocation	Aerial Survey	Boat survey	Shoreline surveys	NOTES	
2	COLOR CODING KEY																															
3	0	Species does not inhabit area where action would take place; very unlikely to be affected by actions																														
4	1	No impact expected; unlikely overlap between species and action																														
5	2	Low probability of impact with implementation of BMPs																														
6	3	Medium/High probability of impact, implementation of BMPs required to minimize impact																														
7	4	High level of concern; high uncertainty																														
8	Common Name	Taxonomic Group	ESA Federal Status (Endangered, Threatened or Proposed)	Months in which consideration is necessary	Species Range (nearshore, offshore, etc)																											
18	Maryland Darter	Fish	E - Critical Habitat	Year Round	inland/fresh water	3	4	4	4	4	2	2	3	3	3	3	2	3	3	3	3	3	1	2	1	1	1	1	3	3		
19	Roanoke Logperch	Fish	E	Year Round (Special consideration, spawning in April-May)	inland/fresh water	3	4	4	4	4	2	2	3	3	3	3	2	3	3	3	3	3	1	2	1	1	1	1	3	3		

Intro EPA Inland ESA Species v Responses Matrix Coast Guard Coastal ESA Species v Responses Matrix 2017 Original CG ESA Species Explore

Matrix Intro and How-to



Search the menus (Alt+/) 100% \$ % .0 .00 123 Times New... 12 B I S A



fx High level of concern; high uncertainty

	A	B	C	D
1	DRAFT RRT 3 ESA - Oil Spill Response Matrix Screening Tool (2018)			
2	Introduction:			
3	Purpose of the Matrix: The purpose of this Matrix is to assist the US Coast Guard (USCG) and Environmental Protection Agency (EPA) in consulting with US Fish and Wildlife Service (FWS) regarding potential impacts of oil spill response actions on threatened and endangered (T&E) species located in the states of Regional Response Team (RRT) Region 3. The document may also serve as a decision-support tool for planning, exercise design and selecting response options. It is not meant to replace a trained T&E species expert or the Endangered Species Act (ESA) Section 7 Consultation process agreed to in the Memorandum of Understanding between Coast USCG, EPA, FWS and NOAA NMFS. A T&E expert should still be the first point of contact in the event of a spill involving ESA concerns.			
4	Layout: 1) Introduction: This tab provides details on purpose and layout of the document, and lists the names of all working group members. 2) ESA Species v Response Matrix (EPA Inland and Coast Guard Coastal): These tabs include FWS ESA listed species. Species common names are found in Column A. Columns B through E provide additional information on the species, such as their status and distribution. Row 1, Columns F through AD show a broad variety of response options. The response options include most of the tools available to the USCG, EPA and oil spill responders to clean up oil and effectively conduct a response. The colored boxes (the block of cells from Rows 8-54 to Columns M-BE) indicate the level of impact we might expect each particular response option to have on each particular species. There are 5 "impact colors" represented on the spreadsheet. See the color explanations below.			
5	Matrix Color Coding Key Definitions:			
6	0	Species does not inhabit area where action would take place; very unlikely to be affected by actions		
7	1	No impact expected; unlikely overlap between species and action		
8	2	Low probability of impact with implementation of BMPs		
9	3	Medium/High probability of impact, implementation of BMPs required to minimize impact		
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+ Intro EPA Inland ESA Species v Responses Matrix Coast Guard Coastal ESA Species v Responses Matrix 2017 Original CG ESA

Final Draft Product: Species Data Sheets

Common Name	Roanoke Logperch	Conservation Status	Endangered (1989)
Scientific Name	<i>Percina rex</i>	Critical Habitat	None currently designated
		<p><small>Photo credit: U.S. Fish & Wildlife Service</small></p> <p><small>Photo credit: NatureServe</small></p>	
<p>Physical Description: The Roanoke logperch is a large darter, growing to about 6 inches long. It has a bulbous snout, lateral blotches, back is scrawled, and most fins are strongly patterned. First dorsal fin has an orange band, particularly vivid in mature males. Spawns from mid April to early May.</p>	<p>Spatial Distribution: Gravel and boulder runs of small to medium rivers. Typically this species occurs in warm, usually clear, small to medium rivers of moderate or somewhat low gradient; in riffles, runs, and pools with sandy to boulder-strewn bottoms. It inhabits streams that are mainly sandy or silty, and may occur only in gravelly or rocky areas</p> <p>VA (Bedford, Botetourt, Brunswick, Campbell, Carroll, Danville, Dinwiddie, Floyd, Franklin, Franklin, Greenville, Henry, Lunenburg, Lynchburg, Martinsville, Montgomery, Nottoway, Patrick, Pittsylvania, Prince Edward, Prince George, Roanoke, Roanoke, Salem, Southampton & Sussex Counties)</p>	<p>Factors of Decline: Decline over the long term likely resulted from reservoir creation and widespread siltation caused by land development and agricultural activities. The upper Roanoke River population is threatened by ongoing urbanization, industrial development, water supply and flood control projects, and agricultural runoff in the upper basin.</p>	
<p>Best Management Practices: Roanoke Logperch Management Approach via U.S. Fish & Wildlife Service, Virginia Field Office</p>		<p>References: U.S. Fish & Wildlife Services. (n.d.). Species profile for Roanoke logperch (<i>Percina rex</i>). Environmental Conservation Online System USFWS. Retrieved from: https://ecos.fws.gov/ecol/profile/speciesProfile?sl=1134</p> <p>NatureServe. 2018. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Retrieved from: http://explorer.natureserve.org</p>	

Common Name	James Spiny mussel	Conservation Status	Endangered (1988)
Scientific Name	<i>Pleurobema collina</i>	Critical Habitat	None currently designated
		<p><small>Photo credit: U.S. Fish & Wildlife Services</small></p> <p><small>Photo credit: U.S. Fish & Wildlife Services</small></p>	
<p>Physical Description: One of three freshwater mussels where prominent spines can be found on juvenile shells. Adults have a dark brown shell and the spines are typically absent or reduced.</p>	<p>Spatial Distribution: This species is found in waters with slow to moderate current and relatively hard water on sand and mixed sand and gravel substrates.</p> <p>VA (Albemarle, Alleghany, Amherst, Appomattox, Augusta, Bath, Bedford, Botetourt, Buckingham, Buena Vista, Campbell, Carroll, Charlottesville, Chesterfield, Covington, Craig, Cumberland, Danville, Floyd, Fluvanna, Franklin, Giles, Goochland, Greene, Hanover, Henrico, Henry, Highland, Lexington, Louisa, Lynchburg, Martinsville, Montgomery, Nelson, Orange, Patrick, Pittsylvania, Powhatan, Richmond, Roanoke, Rockbridge & Rockingham Counties) & WV (Monroe)</p>	<p>Factors of Decline: Rapid decline in the past few decades is due to siltation, generated by agricultural and forestry activities such as road construction and gravel dredging; invasion of the Asiatic clam as a potential competitor; impoundments on rivers and subsequent flood control and sedimentation and change in flow regime; pollution of inland waters.</p>	
<p>Best Management Practices: James Spiny mussel BMP's via U.S. Fish & Wildlife Services</p>		<p>References: U.S. Fish & Wildlife Services. (n.d.). Species profile for James spiny mussel (<i>Pleurobema collina</i>). Environmental Conservation Online System USFWS. Retrieved from: https://ecos.fws.gov/ecol/profile/speciesProfile?sl=2212</p> <p>NatureServe. 2018. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Retrieved from: http://explorer.natureserve.org</p>	

Next Steps

- **RRT Review, Refine?, Approve!**
- **Post to RCP Website/Append to RCP?**
 - FWS Species: Inland and Coastal Matrix
 - Species Data Sheets
 - IPAC instructions in appropriate plan section
- **Start using:** exercises, spills, planning
- **FYI awareness:** cultural resources matrix?

Other Options

- **For Inland ACP and GRPs:**
 - Use IPAC to create a species list for each GRP and sub-table
 - Include species data sheets
- **For Coastal ACPs:**
 - Use IPAC to create a species list for each ACP
 - Include species data sheets
- **For States:**
 - Matrices for state listed species