## **Aquatic Ecological Focus Areas**

**Species of Greatest Conservation Need** 

**(SGCN)** are a subset of all Kansas wildlife that include species with low or declining populations as well as species that are indicative of the diversity and health of Kansas' wildlife. Below are a few of the SGCN that can be found in these EFAs.

Eastern Newt Green Frog Arkansas Darter Bluntnose Darter Chestnut Lamprey Golden Redhorse Lake Sturgeon Neosho Madtom Orangethroat Darter Plains Minnow **Ouillback River Shiner** Shovelnose Sturgeon Stonecat White Sucker Delta Hydrobe Slender Walker Snail Ellipse Mussel Flutedshell Mussel Pondhorn Mussel Wabash Pigtoe Mussel Yellow Sandshell Alligator Snapping Turtle



Collection of various SGCN mussel species found in the Verdigris River during a KDWPT survey



Ecological Focus Areas (EFA) represent landscapes identified within the Kansas' Wildlife Action Plan where conservation actions can be applied for maximum benefit to all Kansas wildlife. Each EFA includes a suite of Species of Greatest Conservation Need (SGCN), priority habitats and a set of conservation actions designed to address the specific resource concerns facing these species and habitats. The design of EFAs was based primarily on priority native habitats and refined using SGCN locations, and was built upon other planning efforts that address conservation priorities in the state. The aquatic EFA's are as diverse as their associated watersheds. Dryland and irrigated agricultural dominate many western and central watersheds with native rangelands as the primary land cover in others. In eastern Kansas watersheds, oak-hickory forests mix with tallgrass prairies. The presence of large reservoirs, impoundments created for flood control and channelization can effect watershed function and stream flows. Stream substrates can range from sandy bottoms, silt-sand, limestone and gravel. Conservation of these Ecological Focus Areas often necessitates restoration and management of the uplands in conjunction with in-stream activities.

Kansas Priority Aquatic Habitats were prioritized based on their dominance and importance to the conservation of SGCN. Priority aquatic habitats are Herbaceous Wetlands, Western Lotic, Riparian Corridor Complex (composed of Deciduous Floodplains, lotic and lentic surface water and Riparian Shrubland habitat), Seeps and Springs, Eastern Large Rivers and Eastern Streams/Small Rivers. Priority aquatic habitats include rivers and streams and their associated chutes, sloughs, and oxbows.







Riparian Corridor Complex



Eastern Large Rivers

USDA conservation programs have the potential to address conservation needs of priority species and habitats identified in the State Wildlife Action Plan. The table below illustrates the connection between conservation issues identified in the Kansas State Wildlife Action Plan with Kansas' NRCS EQIP Priority Resource Concerns. Examples of NRCS Conservation Practices which can be applied to address these conservation issues are also provided. The full lists of conservation issues for the all Aquatic EFAs can be found in the SWAP at: <a href="http://ksoutdoors.com/Services/Kansas-SWAP">http://ksoutdoors.com/Services/Kansas-SWAP</a> Additional information on technical and financial assistance available to benefit wildlife can be found at: <a href="http://ksoutdoors.com/Services/Private-Landowner-Assistance">http://ksoutdoors.com/Services/Private-Landowner-Assistance</a>

## **Conservation Issues and Actions to Address Resource Concerns.**

NRCS Resource Concerns	SWAP Conservation Issues	Potential NRCS Conservation Practices*
Inadequate Habitat for Fish and Wildlife—Habitat Degradation	Fragmentation from low-head dams, impoundments, perched culverts, and low water crossings impedes aquatic organism movement and reproduction	Stream Hab. Improvement & Mgmt (395), Aquatic Organism Passage (396), Obstruction Removal (500), Stream Crossing (578)
	Structures that alter the water from its natural drainage are impacting natural hydrology of streams	Stream Hab. Improvement & Mgmt (395), Aquatic Organism Passage (396), Obstruction Removal (500)
	Bank destabilization and inappropriate stabilization methods can cause stream incision and loss of riparian habitat	Stream Hab. Improvement & Mgmt (395), Access Control (472), Fence (382), Watering Facility (614), Livestock Pipeline (516), Range Planting (550), Forest Stand Improvement (666), Riparian Herb. Cover (390), Riparian Forest Buffer (391)
	Channelization reduces stream habitat, and causes stream incision which reduces floodplain connectivity	
	Livestock access to streams can lower water quality	Prescribed Grazing (528), Access Control (472), Fence (382), Watering Facility (614), Livestock Pipeline (516)
Degraded Plant Condition—Inadequate Structure and Composition	Improper grazing regimes that can degrade riparian habitats	Prescribed Grazing (528), Access Control (472), Fence (382), Watering Facility (614), Livestock Pipeline (516)
	Farming near stream channels impacts riparian habitats, resulting in erosion, sedimentation, and excessive nutrient levels which lower water quality	Wetland or Upland Wildlife Habitat Management (644 or 645), Access Control (472), Range Planting (550), Critical Area Planting (342), Tree/Shrub Establishment (612), Riparian Herbaceous Cover (390)
Degraded Plant Condition—Excessive Plant Pest Pressure	Invasive plants (i.e. Eastern Red Cedar and Salt Cedar) impact riparian areas and reduce streamflows	Brush Mgmt (314), Herbaceous Weed Control (315), Prescribed Burning (338), Forest Stand Improvement (666)

<sup>\*</sup>Conservation practices are not all-inclusive, other eligible practices may apply.