

Proposed Focal Species for Colorado/Lavaca River Basins

The following species or groups are proposed for consideration by the Colorado/Lavaca BBEST to address specific ecological needs. This list is based on species' historic and current abundance, habitat use, life history, sensitivity to change (hydrologic and water quality), and/or sport fish value. At this time, the proposed list should be considered preliminary; species may be added or dropped depending on the level of information currently available or that can be developed on these species within the BBEST's working timeframe. Some species may be combined with others to form mesohabitat guilds.

Colorado River Focal Species

- Guadalupe roundnose minnow *Dionda nigrotaeniata* - endemic to the Edwards Plateau, including the Colorado River Basin; locally abundant and limited to spring-influenced headwaters and clear streams that have slight temperature variation; riffle / shallow run habitats; species of concern (Texas Wildlife Action Plan); omnivore.
- Burrhead chub and shoal chub *Macrhybopsis spp.* – riffle / shallow run habitats over sand and gravel substrates; declining abundance; broadcast spawners whose reproduction is tied to flow events; invertivore
- Mimic shiner *Notropis volucellus* – utilize shallow run habitat; commonly collected in schools near the surface or midwater over sand and gravel substrates; invertivore/herbivore; open water spawner.
- River carpsucker *Carpionodes carpio* - common in medium to large rivers over sand and silt bottoms in slow current; spawning occurs from May to August; adhesive eggs are broadcast over substrate; abundant throughout the Colorado River, especially where sand is the predominant substrate; omnivore.
- Blue sucker *Cycleptus elongatus* – state threatened; large river fish; long-lived; adults utilize deep swift water habitat over hard substrates found in certain sections of the lower Colorado River; reproduction occurs in early to late spring at temperatures of 12-20°C when blue suckers migrate to spawning riffles and lay adhesive eggs onto substrate; invertivore.
- Smallmouth buffalo *Ictiobus bubalus* – long-lived sucker species; eggs are adhesive and broadcast over various substrate types; non-guarders; omnivore; use deep slow runs and pools.
- Gray redhorse *Moxostoma congestum* – utilize pool or deep run habitats with rock or gravel substrates and limited vegetation; spawn in small groups during late March and early April over shallow gravel runs; invertivore; abundant in the Colorado River from Austin downstream to Columbus but abundance declines downstream from Columbus where sand substrates are more common and river carpsuckers become more abundant.

- Channel catfish *Ictalurus punctatus* – sport fish; nest builder; omnivore; juveniles use riffle habitat, whereas adults prefer run or pool habitat.
- Flathead catfish *Pylodictis olivaris* – large long-lived catfish; utilize deeper areas of rivers with slow to moderate velocity and heavy cover such as rocks or submerged wood; builds nests in natural cavities; young utilize riffle habitat; piscivorous.
- Bluegill *Lepomis macrochirus* – utilize pool habitat, feeding mainly on invertebrates; nest builder that spawns in spring and summer.
- Largemouth bass *Micropterus salmoides* – sport fish; found in low velocity mesohabitats such as pools and backwaters; piscivorous; nest builder.
- Guadalupe bass *Micropterus treculii* - endemic to the Edwards Plateau region of central Texas; habitat utilization changes with life stage; juveniles occupy shallow runs over various substrate types; adults utilize swift deep runs and pools downstream of riffles where they prey on insects, crayfish, and small fish; spawning occurs in the spring; nests constructed by the male in shallow water; present throughout the Colorado River Basin but most abundant in clear water reaches throughout the middle sub-basin watersheds including the Pedernales, Llano, and San Saba drainages; species of concern (Texas Wildlife Action Plan).
- Texas logperch *Percina carbonaria* – endemic to the Edwards Plateau region of central Texas; inhabit rocky riffles and runs with relatively fast current; feed on a variety of aquatic insect larvae; spawn from January to June in the Colorado River; eggs and larvae can tolerate temperatures between 22 to 26°C; pollution intolerant species.
- Dusky darter *Percina sciera* – prefers riffle/run habitat, often associated with other cover such as boulders or logs; spawn over gravelly substrates from February through June in the Colorado River; brood hider; invertivore.
- *Macrobrachium spp.* – migratory species; special concern species (Texas Wildlife Action Plan).

Lavaca River Focal Species

- American eel *Anguilla rostrata* – catadromous; piscivore; different life stages may use varying habitats; selected for longitudinal connectivity given free run of Lavaca River; special concern (Texas Wildlife Action Plan).
- Ribbon shiner *Lythrurus fumeus* – broadcast spawner; invertivore; representative of pools or backwaters with weak current;
- Channel catfish *Ictalurus punctatus* – sport fish; nest builder; omnivore; juveniles use riffle habitat, whereas adults prefer run or pool habitat.

- Bluegill *Lepomis macrochirus* – utilize pool habitat, invertivore; nest builder that spawns in spring and summer.
- White crappie *Pomoxis annularis* – nest builder; piscivore; prefers backwater habitats.
- Slough darter *Etheostoma gracile* – lay adhesive eggs that are attached to plant material; invertebrate feeder; prefers backwater or low current habitats.
- Dusky darter *Percina sciera* – prefers riffle/run habitat, often associated with other cover; brood hider; invertivore.
- Pugnose minnow *Opsopoedus emiliae* – nest spawner; detritivore; edge habitat usually associated with plants.
- Blue sucker *Cycleptus elongatus* – state threatened; large river fish; long-lived; adults utilize deep swift water habitat over hard substrates; reproduction occurs in early to late spring at temperatures of 12-20°C when blue suckers migrate to spawning riffles and lay adhesive eggs onto substrate; invertivore. Though listed for the Lavaca basin in several sources, additional distributional information should be investigated since occurrences are not documented in available collection records.
- Smallmouth buffalo *Ictiobus bubalus* – long-lived sucker species; rock and gravel spawners; omnivore; use deep slow runs and pools.
- *Macrobrachium spp.* – migratory species; special concern species (Texas Wildlife Action Plan).