Texas Water Explorer

Methodology

Category: Ecosystem Health

Indicator: Priority Conservation Areas

<u>Methodology</u>

Priority Conservation Areas is an indicator of the aquatic ecosystems in Texas that represent important areas for protection of the state's freshwater biodiversity. To map this indicator, we include The Nature Conservancy's (TNC) freshwater biodiversity conservation blueprint. Other conservation areas may be included in this indicator in the future. It is important to note that while this indicator presents important areas for biodiversity conservation, prioritizing specific areas for initiation of conservation action must also include other factors pertinent to each organization's focal areas and mission.

The freshwater biodiversity conservation blueprint was compiled from ecoregional portfolios delineated during TNC's ecoregional planning from 2000 to 2007. We compiled the freshwater conservation areas for the Texas portions of all ecoregional portfolios and developed a unified and consistently mapped blueprint for all of Texas. In 2011 we reviewed the entire blueprint and revised and mapped it in one polygon GIS layer where all areas are buffered by 1km to show up on a statewide map.

This blueprint represents the rivers, streams, springs and lakes of Texas that constitute the best areas for protection of the state's rich freshwater biodiversity. Each conservation area reflects one or both of two things: 1) areas where freshwater species of conservation concern persist, and 2) examples of all river and stream ecosystem types that remain in the highest condition. Over 200 species are included in this analysis, including fishes, aquatic invertebrates (insects, crustaceans, mussels and snails), aquatic reptiles and amphibians and aquatic plants.

The map includes the blueprint itself along with names of each conservation area. Additional information on species occurring in each site is available on request.

Data Sources

The Nature Conservancy. Freshwater Biodiversity Conservation Blueprint. Viewable online at: http://databasin.org/datasets/725e527aace64ea19a84a01dd4049ece http://www.arcgis.com/home/item.html?id=7f316cb0c4f242f9ba711e53a12f616d.

