

Figure 4. Location of the ecologically significant Arroyo Colorado (TNRCC segment 2201) just upstream of Port of Harlingen to its confluence with Laguna Madre in Willacy/Cameron Counties (Scale 0.5": 1 mi.; Base map source: TxDOT county files).

Arroyo Colorado Tidal

This tidal stream segment of the Arroyo Colorado (TNRCC segment 2201) runs just upstream of Port of Harlingen to its confluence with Laguna Madre in Willacy/Cameron Counties (Fig. 3). The ecological significance of this segment is based upon the following criteria:

1. Biological function - Rare freshwater source to Laguna Madre estuarine habitats. Priority riparian habitats, extensive freshwater wetland habitats and extensive estuarine habitats are associated with this segment (Figs. 4 - 7).
2. Hydrologic functions - The riparian corridor on the floodplain performs a host of important hydrologic functions such as: downstream flood control and mitigation of storm damage; regulation of baseflows and protection of fisheries habitat; protection of public and private water supplies through pollution filtration; and regulation and protection of groundwater and baseflows in the river. Freshwater flow along this segment helps prevent saltwater intrusion upstream to Harlingen. The estuarine wetlands help filter nutrients and pollutants from the water before it enters Laguna Madre.
3. Riparian conservation areas - Laguna Atascosa National Wildlife Refuge (NWR) comprises nearly 50,000 acres of coastal Tamaulipan brush, grasslands, lomas, resacas, and tidal flats. Laguna Atascosa NWR also is site LTC024 on the Great Texas Coastal Birding Trail (GTCBT); Las Palomas Wildlife Management Area - Arroyo Colorado unit is one of the most diverse in the Valley. It is site LTC 021 on the GTCBT⁹.

4. High water quality/exceptional aquatic life/high aesthetic value - Common Valley species such as white-tipped dove, green jay, plain chachalaca, great kiskadee, and olive sparrow are often seen in Laguna Atascosa National Wildlife Refuge⁹. These sites are very popular with birdwatchers in the LRGV and contribute significantly to the local nature tourism industry.

5. Threatened (T) or endangered (E) species/unique communities - The following rare species associated with aquatic or riparian habitats occur in or along this segment: the black spotted newt (St. T), Mexican treefrog (St. T), sheep frog (St. T), South Texas siren (St. T) (large form), and white-lipped frog (St. T); the Audubon's oriole, brown pelican (Fed. E & St. E), Brownsville common yellowthroat, cactus ferruginous pygmy-owl (St. T), common black hawk (St. T), northern beardless-tyrannulet (St. T), piping plover (Fed. T & St. T), reddish egret (St. T), rose-throated becard (St. T), Sennett's hooded oriole, tropical parula (St. T), and wood stork (St. T); Coues' rice rat (St. T), ocelot (Fed. & St. E), jaguarundi (Fed. & St. E), southern yellow bat (St. T), and white-nosed coati (St. T); Texas hornshell; indigo snake (St. T), speckled racer (St. T), and Texas tortoise (St. T). and one plant the Texas ayenia (Fed. E & St. E).



Figure 5. Forested riparian habitat along Arroyo Colorado near the Port of Harlingen, Texas. Source: Rio Hondo DOQ; 1995; 1m, CIR.



Figure 6. Forested riparian habitat along Arroyo Colorado near Rio Hondo, Texas. Source: Paso Real DOQ, 1995; 1m, CIR.



Figure 7. Extensive freshwater and estuarine habitats along Arroyo Colorado on Laguna Atascosa NWR. Source: La Leona DOQ, 1995, 1m CIR.

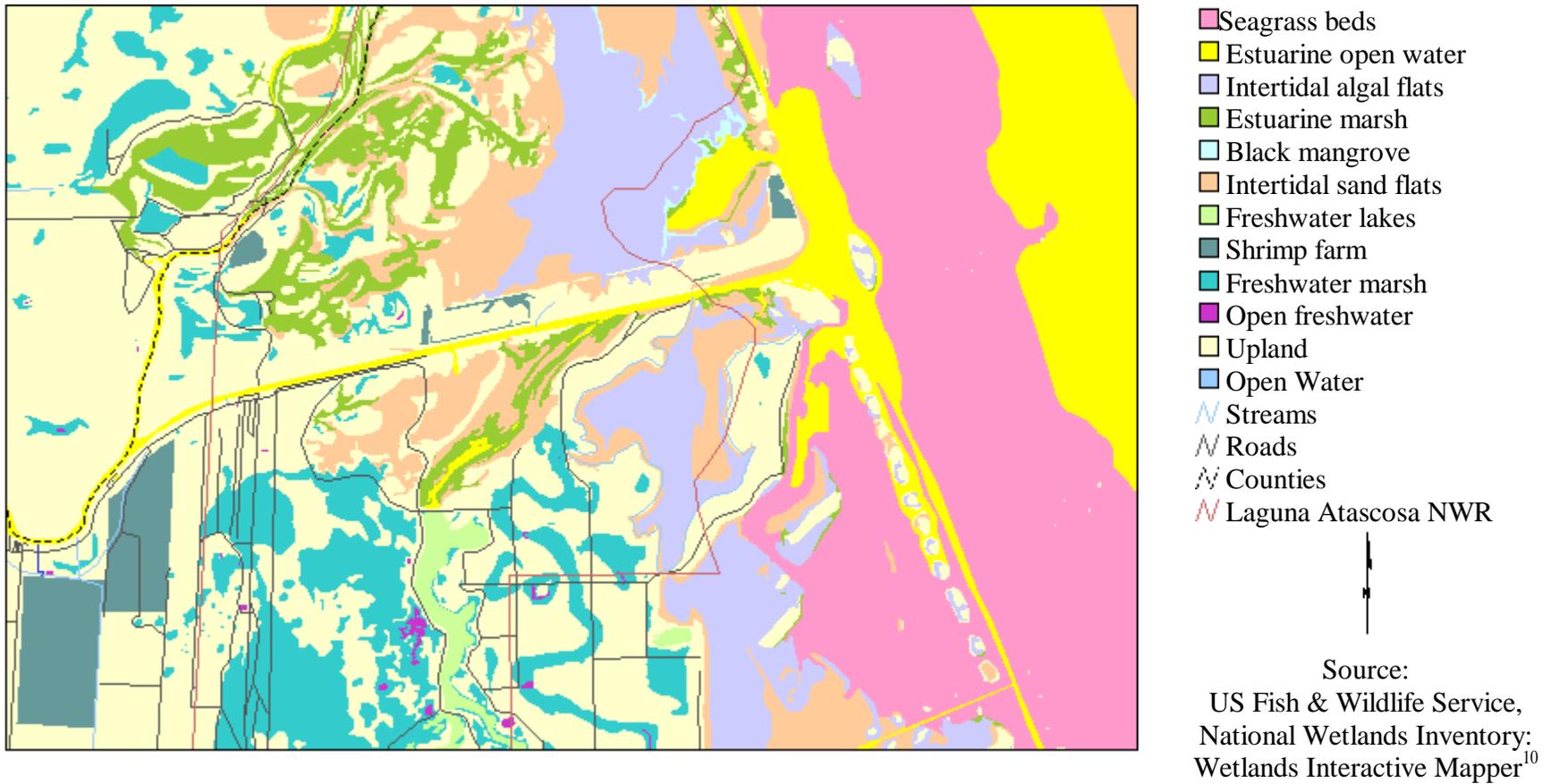


Figure 8. Mapped wetlands habitat along the Arroyo Colorado on Laguna Atascosa NWR.