



Invasive Species Mitigation

September 25, 2020



Urban Stream Syndrome

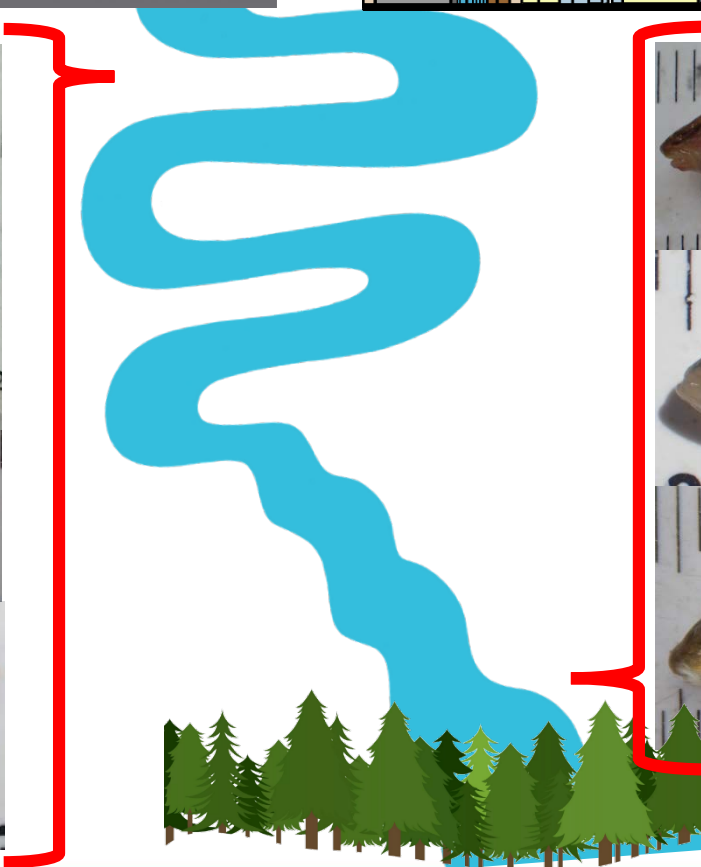
- General ecological degradation
 - Water quality impairments
 - Habitat degradation
 - Decrease in intolerant taxa



Urban
Tolerant



Rural
Intolerant



Committed to Safe, Clean, Enjoyable Creeks and Rivers.

Active Removal

- Tilapia and Armored Catfish are two of our most threatening invaders
- These species are actively removed



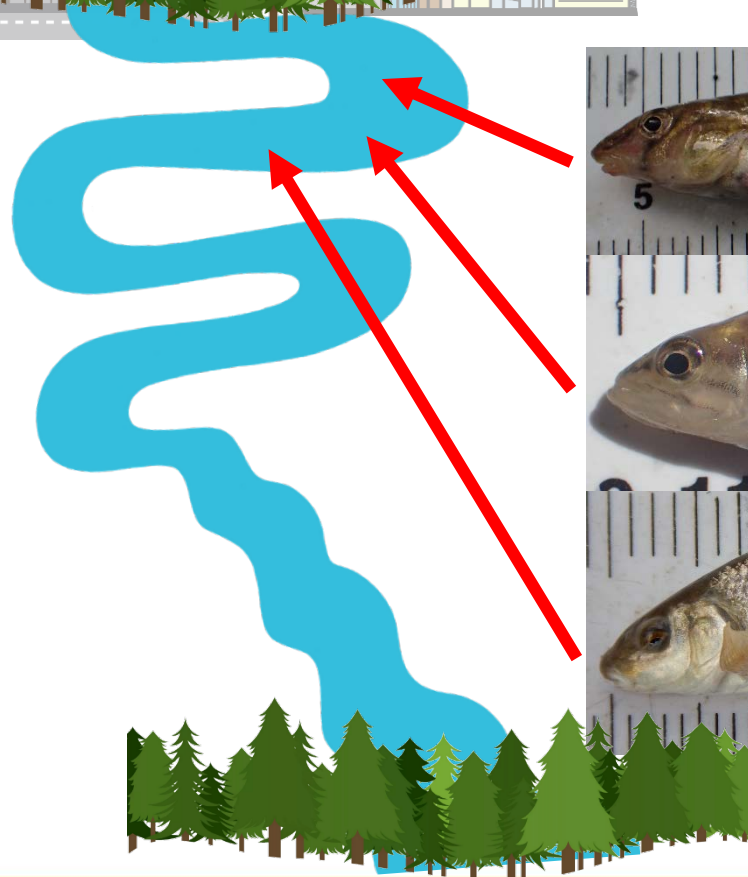
Evolution of the Mission Reach -Passive Removal-



Urban Tolerant



Rural Intolerant



Committed to Safe, Clean, Enjoyable Creeks and Rivers.

Giant Apple Snail

- Began seeing them around October 2019
- Permit obtained December 2019
- Upper San Antonio River draining 2020



Giant Apple Snail

- Voracious eaters of plant material
- Especially damaging in areas such as the Museum Reach



Giant Apple Snail

- Vegetation plays a very important role in aquatic ecosystems
 - Food source for lower trophic levels
 - Nursery habitat for fish
 - Habitat for bugs and other critters



Giant Apple Snail

- Clutch size up to 2,000 eggs
- Females can each lay up to 20 clutches per year
- Effluent heavy water warmer for longer



Giant Apple Snail

- SARA and its contractor have removed 2,732 egg cases and 106 adults as of 9/19/2020
- Video for Watershed Warriors
- Proposed change to rule that would ease restrictions on handling these animals



Questions?

