This project will develop invasive species management activities to control and/or eradicate the invasive Amazonian Apple Snail in the lower Pascagoula estuary. The Amazonian Apple Snail (Pomacea maculata) feeds on submerged aquatic vegetation and emergent marsh plants, potentially causing catastrophic changes to natural ecosystems. Since 2014, the species has spread and significantly increased in abundance. The productiveness of the apple snail allows for quick establishment in new aquatic habitats and acceleration of harmful ecological impacts including the reduction in vegetative biomass and growth. Of particular concern to resource managers in the state is the potential for the apple snail to invade brackish marshes in the lower Pascagoula River system. Coastal wetland ecosystems in the Lower Pascagoula River Basin include some of the most significant coastal swamps and marshes in Mississippi. Distribution and level of infestation will be monitored to better assess the threat.

Eradication efforts would include removing egg masses from structures and removing live snails opportunistically or through trapping. The project would increase Mississippi Department of Marine Resources’ (MDMR) level of effort utilizing staff and volunteers to control and/or eradicate the species. Public outreach and engagement campaigns focused on area recreational boaters would increase awareness of the threats and facilitate public actions to contribute to control efforts. This project may reduce the risk of future harm to coastal wetland habitats in the lower Pascagoula River system. With any newly introduced invasive species, controlling the infestation before the problem becomes more widespread is often the most cost-effective way to address the issue. Progress in controlling the non-native snail will be assessed after two years to determine if the control strategy is having a positive impact.

Above, a picture of eggs laid by the invasive Amazonian Apple Snail, which causes harm to native wetland vegetation.