

Client
Mobile Bay National
Estuary Program

ES Project No. 10578

Key Services Provided

- Project Management
- Literature Review
- Invasive Species Assessment/Delineation
- Data Analysis
- Species Control Prescriptions
- Mapping

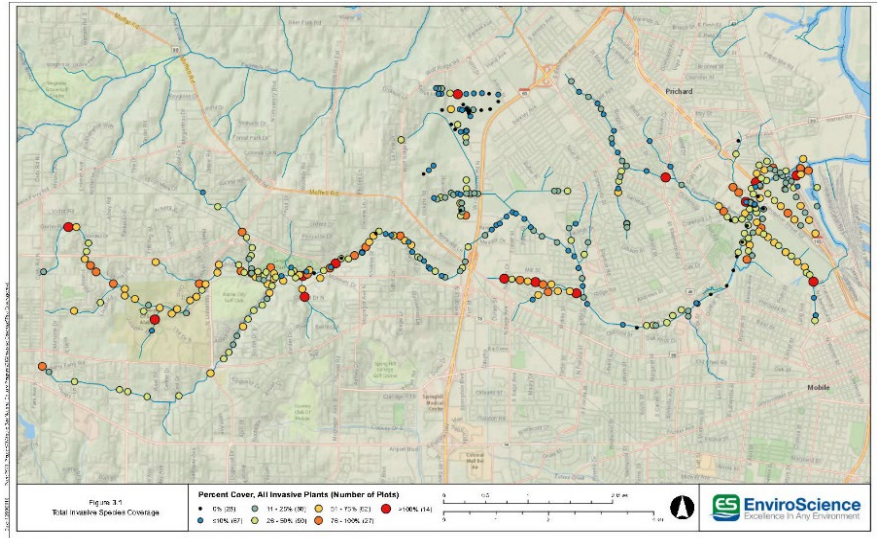
Project Duration
2018–2019

ES Project Cost
\$127,561

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THREE MILE CREEK INVASIVE SPECIES CONTROL PLAN

Mobile, Alabama



Total invasive species coverage at all plots in TMC Watershed.

The Mobile Bay National Estuary Program (MBNEP) promotes the wise stewardship of water quality and living resources in the Mobile Bay estuarine system. The Mobile Bay watershed drains two-thirds of Alabama and parts of Mississippi, Georgia, and Tennessee and is the most biodiverse drainage basin in North America. Three Mile Creek (TMC) supports a broad diversity of marine and freshwater species in a highly urbanized area.

EnviroScience, Inc. assisted MBNEP in developing a plan to control invasive species in the 30+ square mile TMC watershed by working closely with the client and local and regional subject area experts. Major challenges included abundant invasive species, particularly island apple snail, alligatorweed, Chinese tallow (popcorn tree), cogongrass, and Japanese climbing fern. These invasions often cause a loss of biological diversity within both the plant and animal communities.

To provide a quantitative evaluation of invasive species within the TMC watershed, EnviroScience used a plot-based sampling design to document invasive and native species and their locations. A total of 43 invasive plant species and two invasive animal species were quantified during spring and fall sampling events.

From this data, EnviroScience developed a watershed-wide and species-specific plan to control invasive species within the TMC watershed. The invasive species control plan (ISCP) contains prescriptive measures and associated costs and schedules to control invasive species. Included in the ISCP is an interactive electronic database that considers multiple factors, including the target species; their location; and labor, supplies, and equipment costs that are scalable and can be used by MBNEP to estimate the effort to control invasive species in other Mobile Bay watersheds.