Mid-Atlantic Panel on Aquatic Invasive Species

Annual Report for USFWS Grant F18AP00243

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Fiscal Agent: Maryland Sea Grant College

Annual Report to the Aquatic Nuisance Species Task Force for 2019

The mission of the Mid-Atlantic Panel is to assist state and federal agencies and other stakeholders in developing and implementing strategic, coordinated, and action-oriented approaches for the prevention and control of aquatic invasive species in the mid-Atlantic region, and to coordinate and communicate these activities with the other Regional Panels, the ANSTF, and other partners.

Funding from USFWS is used to support MAPAIS business, including coordination and logistics for MAPAIS meetings, travel for MAPAIS participants at ANSTF meetings and regional panel meetings, the MAPAIS website, the MAPAIS small grants competition, and indirect recovery for the fiscal agent (Maryland Sea Grant).

Panel Coordination

Jay Kilian of the Maryland Department of Natural Resources and Edna Stetzar of the Delaware Department of Natural Resources and Environmental Conservation were elected to the chair and vice-chair positions in Fall 2018 and began serving at the fall meeting's conclusion. During that period, Jay Kilian represented the Mid-Atlantic Panel at the December 2018 ANSTF, May 2019 ANSTF and November 2019 ANSTF meetings. As the panel representative, Jay Kilian participated in the Task Force's Strategic Plan (2020-2025) development – serving as a member of the Research sub-committee. Jay Kilian also participated in a panel session on the ANSTF and regional panels at the 2019 NAISMA conference in Saratoga Springs, New York in October 2019. Maryland Sea Grant has continued to serve as fiscal agent during this time.

The spring 2019 MAPAIS meeting was held on 11 April 2019 following the Mid-Atlantic Lake Forum (an event sponsored by MAPAIS under award F12AP01037). The Panel meeting focused on routine business items including budget and funded project updates, a report out from the ANSTF on its strategic plan, membership requests and updates, and recommendations that should be brought forth to the ANSTF. Additionally, we received informational briefings on the New York Invasive Species Program, eDNA surveillance of invasive fishes in the Susquehanna River Basin, and new sighting alerts on the NAS

database. The afternoon session was dedicated to review of grant proposals submitted to the 2019 RFP.

The fall 2019 meeting will be held in Delmar, New York in conjunction with the Northeast Aquatic Nuisance Species panel December 10-11.

Small Grants Competition

The Panel conducted its annual grants competition to fund activities addressing MAPAIS's mission and regional priorities between January and April 2019. Between 2007 and 2019, the Panel awarded $455,238 in project funding. At the spring meeting, grantees were selected for 2019. Several continuing and these new projects are outlined below. Annual reports for projects are attached.

Maryland Sea Grant administers the subawards for all projects, including the projects in the chart below. As of November 2019, the panel awarded $63,943 in MAPAIS funds for small grants projects across the first two years of the award. A total of $19,527 has been spent (year 1 projects only).

Current Small Grants Portfolio

Impacts of two functionally distinct invaders on facilitation and community succession	George Mason University (PI: Amy Fowler)	This project will assess the co-distributions of Didymo and New Zealand mud snail (and its parasite loads) in a freshwater system in Baltimore County Maryland.	Funded through September 2020
Quantifying multiple ecosystem-level threats to the upper Juniata River system from the invasion and occupation of rusty crayfish	Juniata College (PI: George Merovich)	This project will integrate undergraduate class students into a study of hybridization of rusty crayfish.	Funded through August 2020
Early detection of invasive *Phragmites australis* at the tidal marsh-forest ecotone with airborne LiDAR	George Washington University (PI: Keryn Gedan)	This project will validate the use of LiDAR data to assess canopy understory for early *Phragmites* invasion	September 2019 to August 2020
Promoting tidal and marine invasive species awareness and response in DE among diverse stakeholders	University of Delaware (PI: Kate Fleming)	This project will increase recreational anglers' awareness of and ability to identify, handle, and respond to encounters with three priority invasive fishes in	September 2019 to February 2021

		Delaware (i.e. Blue Catfish (*Ictalurus furcatus*), Flathead Catfish (*Pylodictis olivaris*), and Northern Snakehead (*Channa argus*)).	
Assessing the potential impact of Dominion Cove Point LNG export facility on ballast mediated invasions in Chesapeake Bay	Smithsonian Environmental Research Center (PI: Jenny Carney)	This project will assess potential introductions following a new source of ballast water discharge coming online in Chesapeake Bay.	September 2019 to May 2021

APPENDICES

I. Progress Report: *Impacts of two functionally distinct invaders on facilitation and community succession*

II. Progress Report: *Quantifying multiple ecosystem-level threats to the upper Juniata River system from the invasion and occupation of rusty crayfish*