

To: Gabe Gries, Grants Specialist
From: Joseph W. Love, Program Manager
Date: September 28, 2023
RE: Interim Report for Grant Agreement Award F21AP03479

Dear Mr. Gries:

Thank you for assisting us with achieving objectives for our funded proposal submitted in response to Funding Opportunity Number F21AP03479 to the U.S. Fish and Wildlife Service CFDA Program 15.608. Please find below: 1) our interim comparison of actual accomplishments with proposed goals and objectives of the award, and 2) a description of reasons why some objectives have not yet been met. The Grant Agreement Award number was F21AP03479.

Title: MD Aquatic Invasive Species Management Plan Implementation
Project Dates: 07/01/2022 - 12/31/2024 (grant extension approved)

Accomplishments

Project 1. Objective 1. Collaborate on the development of a plan with biologists from Virginia Polytechnic Institute and State University (i.e., Virginia Tech) to eradicate nutria in Virginia's Chesapeake Bay watershed, thereby preventing re-introduction of the species into Maryland wetlands.

Status: The Conservation Management Institute (CMI) at Virginia Tech has made significant progress toward the objectives of this project. Our activities have centered around supporting the Nutria Eradication Action Committee in Virginia. At our October 2022 meeting this group, along with others from Maryland, met to discuss the steps necessary to develop and promote a comprehensive nutria eradication strategy for Virginia. At that meeting, it was determined that the best course of action would be to build directly on the successes of the extant Chesapeake Bay Nutria Eradication Program (CBNEP) and, moving forward, consider the Virginia effort and extension of this successful venture.

Since that time, we have focused on outreach to key partners working towards wetland and waterway conservation in eastern Virginia. We have established a coalition of these groups to improve information dissemination and build broader support for an eradication plan. This group will also provide support for legislation when the time for public comment is active.

As part of this project, the CBNEP has launched a new website as well as a quarterly newsletter in an attempt to increase public information contact and partner communication. We have organized a workshop for partners to meet (November 1, 2023) and move forward with finalizing the updated Virginia Nutria Eradication Plan, and will hold additional meetings in the nutria endemic region in the coming months. Specifically, we have completed the following tasks toward achieving project objectives:

Objective a) to create an interstate prevention and eradication plan for nutria in the Chesapeake Bay watershed.

The existing Mid-Atlantic Nutria Eradication Plan was drafted over 10 years ago. Since that time, we have documented a clear advance of nutria throughout southeastern Virginia and, in 2019, into the middle peninsula north of the James River. That plan was effective in outlining the management response to these range increases; however, the plan required updating including a revision of its stated management objectives and approach.

We completed a draft of the new Eradication Plan and have circulated that to project partners for their initial review and comment. This plan draws heavily from the plan utilized by the CBNEP in Maryland and builds upon those successes by including new information, techniques, and logistical knowledge gained since implementation.

Objective b) to facilitate coordination and development of meetings and workshops across the state to generate a plan.

We held a workshop in October 2022 to launch these discussions and gather information on necessary plan updates, and to identify organizations that would be critical to engage in our broader nutria coalition. The result was the draft plan and the establishment of the coalition (with 10 key groups currently engaged). We continue to identify and communicate with stakeholder groups whose geographic region and conservation interests intersect with nutria eradication and the benefits therein.

We are planning to meet with some additional stakeholder groups in the fall of 2023. These include groups with a local presence in Virginia Beach. These include the Virginia Aquarium (opportunities to collaborate on public education efforts) and the Virginia Beach schools system (opportunities for education as well as active conservation). In addition, we have secured permissions to conduct field monitoring on municipal park properties in both Virginia Beach and Chesapeake (cities in Virginia) which we view as an entrée into the deeper collaborations necessary when eradication efforts are underway.

Objective c) support additional funding opportunities to help implement the plan.

The CBNEP partner organizations have been leading the efforts to secure dedicated funding for nutria eradication efforts. The Virginia Office of the USDA Wildlife Services has taken the lead in immediate eradication efforts on populations North of the James River. In addition, the USDA is working within the agency to secure funding for nutria eradication through internal budget allocations and the Farm Bill.

The Virginia Department of Wildlife Resources is working through the Office of the Governor to address a comprehensive invasive species management effort, and nutria is the top priority species for that agency.

We anticipate these, and other potential funding vehicles currently under discussion at the Federal level, may result in dedicated funding for nutria eradication in Virginia. Our efforts have been focused on supporting these agencies with information upon request.

We are prepared to work with other groups and colleagues to secure additional funding for research needs when/if the opportunity presents itself.

Summary













Overall, this project has successfully solidified agencies and organization relationships and collaboration towards eradicating nutria in Virginia. The issue has been elevated to the highest levels of state and federal government, and the outlook for continued financial and logistical support is very good. We will continue to work towards finalizing and implementing the CBNEP's plan for eradicating nutria in Virginia by whatever means are available, and will continue to seek the resources necessary to eliminate nutria from the Chesapeake Bay and other watersheds in Virginia.

Project 2. Objective 2. Reinforce harvest initiatives aimed at lowering abundance of invasive fishes by supporting expanded biocontamination testing of blue catfish and flathead catfish.

Status: The contract between Maryland Department of Environment and Maryland Department of Natural Resources has been finalized. Biologists secured materials to properly prepare and label tissues for this work. Twenty samples of Blue Catfish tissues have been collected for PCB and Mercury testing from: Nanticoke River and Patuxent River. The department will fulfill their obligation by collecting samples from Susquehanna River in September/October 2023 and Chester River in April 2024. Twenty samples of Flathead Catfish tissue will be collected from the non-tidal Potomac River in September/October 2023. As the Maryland Department of Environment has already tested Flathead Catfish from the Susquehanna River, none were collected for additional testing. Twenty samples of tissue for Northern Snakehead have been collected from Little Seneca Lake. Half of the samples needed have also been collected from Gunpowder River, Susquehanna River, and Patuxent River. Samples for Northern Snakehead will be collected from Chester River in April 2024. A Chain of Custody form has been completed with all labeled tissues, to date. All samples have been frozen at -20°C using a freezer stored at the department's southern region office in Cedarville State Forest. Sample collection should be completed by April 2024. The majority of samples will be delivered to Maryland Department of Environment by November 2023 for contaminant testing.

Project 3. Objective 3. Develop outreach material for Maryland Department of Natural Resources' Natural Resources Police to relay details on ANS identification and regulations or laws.

Status: This project has been completed. The principal investigator worked with the regulatory division to create a design that illustrated various regulations for invasive species in Maryland. This design was printed as a sticker that fits on the back of the Fishing and Boating Service's Fishing and Crabbing Guide. We paid Maryland Department of Corrections Enterprises to print 350 of these stickers. The majority of stickers have been delivered to Natural Resources Police Area Managers. The department will deliver the remaining stickers to Natural Resources Police candidates in November 2023 during a scheduled training day wherein staff will communicate issues regarding freshwater and commercial fisheries, as well as invasive species.

WATCH OUT!	Regulations	Notes
 <p>Blue Catfish</p>  <p>Flathead Catfish</p>	<p>Live possession legal, but organism cannot be transported for the intent of introduction to new waters.</p>	<p>No creel, no size limit, open all seasons</p>
 <p>Northern Snakehead</p>	<p>Live possession illegal, includes sale, transportation, and personal.</p>	<p>No creel, no size limit, open all seasons</p>
 <p>Rusty Crayfish</p>	<p>Live possession illegal, includes sale, transportation, and personal.</p>	<p>May be used as bait if head is removed.</p>
 <p>Red Swamp Crayfish</p>  <p>Virile Catfish</p>	<p>Live possession legal, but organism cannot be transported for the intent of introduction to new waters.</p>	<p>If used as bait in upper or middle Potomac River or lower Susquehanna River, heads must be removed prior to baiting line.</p>
 <p>Water Chestnut</p>	<p>Live possession legal, but organism cannot be transported for the intent of introduction to new waters.</p>	<p>Removed annually from waterways in Sassafraz River and Potomac River as part of control efforts Seeds have pointed spines.</p>
 <p>Zebra Mussel</p>  <p>Quagga Mussel</p>	<p>Illegal to import, sell or buy, transport, or release to state waters.</p>	<p>Currently restricted to upper Chesapeake Bay in a few locations; boaters can easily spread when boats not properly cleaned</p>
 <p>Mystery Snail</p>	<p>Live possession illegal, includes sale, transportation, and personal.</p>	<p>Public often report large numbers dying each year in Potomac River and floating at surface.</p>
 <p>Dirty Boat Launched to State Waters</p>	<p>Illegal for a person to place a boat vessel into state lakes unless it has been cleaned, with visible organic material (plants, animals, mud) removed and the vessel completely drained.</p>	<p>Dirty boats can transport and introduce invasive plants, like Hydrilla or mollusks like zebra mussel.</p>
 <p>Felt Sole Wading Boots</p>	<p>Illegal to use footgear with external felt soles in State waters or within five feet of State waters.</p>	<p>Felt soles can transport and introduce invasive Didymo, also known as rock snot</p>

Status Update

Task 1. Work is on-going for this task, with a final CBNEP plan reported and implemented by the end of the grant period.

Task 2. More than half of this work has been completed and will be finished during the spring of 2024.

Task 3. This project has been completed.