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STATE OF NEW YORK
OFFICE OF THE STATE COMPTROLLER

November 19, 2021

Basil B. Seggos
Commissioner
Department of Environmental Conservation
625 Broadway, 14th floor
Albany, NY 12233-1010

Re: Management of Invasive Species
Report 2021-F-16

Dear Commissioner Seggos:

Pursuant to the State Comptroller's authority as set forth in Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law, we have followed up on the actions taken by officials of the Department of Environmental Conservation to implement the recommendations contained in our audit report *Management of Invasive Species* (Report [2019-S-26](#)).

Background, Scope, and Objective

Many species of plants and animals currently found in New York are not indigenous, but rather have been introduced, intentionally or unintentionally, by humans. While some are harmless or even beneficial, others are menacing. Subsets of these species are deemed "invasive." Invasive species aggressively outcompete native species, adversely affecting the ecological integrity of the State's natural communities and systems. Invasive species are generally classified as aquatic invasive species (AIS) or terrestrial invasive species (TIS) and can be plants or animals (including insects). In New York State, invasive species management is a collaborative effort among the Department of Environmental Conservation (Department); Department of Agriculture and Markets (Ag and Markets); Office of Parks, Recreation and Historic Preservation (Parks); and various other agencies and entities. However, as the State's environmental regulatory agency, oversight responsibilities to protect, improve, and conserve New York's natural resources generally rest with the Department. To meet its responsibilities, the Department has implemented a range of programs and processes to help control the spread of both AIS and TIS.

AIS are commonly spread via shipping activities and on fishing and boating gear and equipment, and are especially rampant in the Great Lakes, Lake Champlain, and Hudson River regions. The Department is responsible for overseeing preventive measures to protect against AIS, including creating and posting educational signage at public boat launches, and for implementing and maintaining a statewide, coordinated AIS management program.

In July 2015, the Department released the updated New York State AIS Management Plan, which includes an expansion of boat launch steward programs for public and private boat launch sites and promotes consistency among them. Boat stewards are volunteers or paid

members of the community who provide the public with important information about precautions, such as cleaning, drying, and draining watercraft, to reduce the spread of AIS. Stewards also perform inspections of watercraft exiting and entering State waterbodies to detect whether they are carrying AIS, and are required to follow the New York State Watercraft Inspection Steward Program Handbook (Handbook). Stewards work under various Watercraft Inspection Steward Programs (WISP Programs) located around the State.

The Department uses the Watercraft Inspection Steward Program Application (WISPA) to standardize data collection during boat steward interactions, including inspections, with boaters and anglers statewide. According to Department officials, WISPA allows them to analyze trends in boater preventive measures and AIS awareness; track movement of boats that could transport AIS; assess AIS risk for particular waterbodies; and expand knowledge regarding the locations of particular species.

According to the New York State AIS Management Plan, fishing is severely impacted by invasive species, particularly in the State canal, Mohawk River, and Hudson River systems, where at least 154 non-native species cause an estimated \$500 million in economic losses each year, 80% of which affects commercial and sport fishing. Controlling the spread of an established invasive species can be costly. For example, between April 2017 and September 2019, the Department spent nearly \$1.8 million trying to control and stop the spread of Hydrilla from the Croton River (Westchester County) to the Hudson River and its many tributaries. The Department has earmarked \$6.8 million for 2017–2022 to combat the spread of Hydrilla, which can block intakes at water treatment, power generating, and industrial facilities.

As a pre-emptive management measure, the Department administers a permit system to control activities, such as dredging, mining, and construction, that have the potential to impact New York's biological resources by spreading AIS and TIS. However, not all such permits require measures for preventing the spread of invasive species. The Department uses its Department Application Review Tracking system to log and track the majority of, but not all, permits. The Department also utilizes assessment tools to help categorize non-native species with sufficient invasive characteristics into one of the following groups:

- Prohibited Species: Unlawful to possess, import, purchase, transport, or introduce except under a permit for research or education.
- Regulated Species: Legal to possess, sell, buy, and transport, but should not be introduced into areas connected to public lands and waters.

The main purpose of these assessments and groupings is to control the spread of non-native species in the State through the regulatory process. Between February 2008 and November 2019, 566 non-native species have been assessed by the Department, contractors, and Ag and Markets. The Department also uses iMapInvasives (iMap), an online invasive species database and mapping tool, to document and share invasive species observation, survey, assessment, and treatment data. According to Department officials, iMap includes data on regulated invasive species as well as other non-native species that are not yet regulated.

Our initial audit report, covering the period April 1, 2017 through November 22, 2019, was issued on July 23, 2020. The audit objective was to determine whether the Department was effectively managing invasive species to prevent and mitigate the harmful effects of invasive species populations in New York State. The audit found that while the Department had been active in establishing programs to address invasive species, improvements in its oversight,

monitoring, and communication relating to boat inspections, permits, and early detection and assessment of invasive species could strengthen its ability to mitigate the spread of invasive species. For example, the Department did not consistently apply or monitor its permit system to control activities, such as mining, dredging, and construction, that can trigger invasive species spread and further impact the State's biological resources. Of the 150 permits sampled during the audit, 84% did not include provisions to mitigate the spread of invasive species even though the type of work being performed could be a source of spread. The Department also did not provide guidance on how to monitor provisions of permits that included invasive species management. Additionally, the audit found that assessments of non-native species were not always completed or were missing information, and educational signage intended to educate the boating public about AIS was not always posted or posted conspicuously, limiting its usefulness. Because of these and other weaknesses, we concluded that the Department needed to improve its oversight by developing a process to ensure consistency and compliance with signage and other requirements, as well as policies, procedures, or guidance on issuing permits and monitoring compliance relating to invasive species.

The objective of our follow-up was to assess the extent of implementation, as of November 3, 2021, of the four recommendations included in our initial audit report.

Summary Conclusions and Status of Audit Recommendations

The Department has made progress in addressing the problems we identified in the initial audit report. However, additional improvements are still needed. Of the initial report's four audit recommendations, two were implemented and two were partially implemented.

Follow-Up Observations

Recommendation 1

Develop a process to:

- *Communicate duties and responsibilities to boat stewards;*
- *Monitor steward performance and compliance against standards outlined in the Handbook; and*
- *Coordinate with other oversight entities to improve preventive efforts across public boat launches statewide, ensuring consistency and compliance with signage and other requirements.*

Status – Implemented

Agency Action – The Department has contracted with different partner organizations to recruit and train boat stewards in accordance with Handbook requirements; coordinate with stakeholder agencies, including Parks, to share information and discuss responsibilities; distribute program information; and report on program successes or areas in need of improvement. In addition, the Department is in the process of revising the Handbook, including more thorough expectations and direction for boat stewards, and has initiated monthly check-in calls with its various WISP Programs. Further, the Department receives reports from the WISP Programs detailing steward performance and invasive species management at their respective locations. The Department has also begun to compile its own steward performance statistics to track the work that stewards complete.

Recommendation 2

Develop and implement policies, procedures, or guidance on:

- *Issuing permits and monitoring compliance relating to invasive species;*
- *Circumstances that warrant adding specific invasive species management mitigation provisions to permits;*
- *Identifying non-native species and conditions that should trigger assessments for non-native species; and*
- *Periodic complete testing of trap samples for potentially invasive species.*

Status – Partially Implemented

Agency Action – The Department experienced legal pushback on the inclusion of permit requirements for invasive species mitigation with construction projects in freshwater wetland areas. As a result, the Department has initiated internal discussions on how to proceed for future permits. The Department is in the process of developing guidance related to identifying non-native species and conditions that should trigger assessments for these non-native species but has yet to release the guidance; no issue date has been set. The Department's New York Natural Heritage Program staff also provide identification and clarification for unknown suspicious species reported via emails and conversations. Additionally, in June 2021, the Department was approved for a \$40,000 grant to enhance monitoring of emerging pest species through existing trapping surveys, genomics, and bycatch identification.

Recommendation 3

Communicate the existence of and potential uses of iMap to regional staff.

Status – Implemented

Agency Action – The Department has developed a series of iMap trainings and shared additional resources with regional staff. According to the Department, 23 iMap webinars were offered and over 300 staff received training between April 2021 and June 2021. Moreover, an iMap webinar training series is currently planned to be included in the Department's lunchtime webinars that run from November 2021 through April 2022. The Department also holds monthly conference calls with regional staff and discusses any changes and updates to iMap software.

Recommendation 4

As soon as practicable, finish all incomplete assessments.

Status – Partially Implemented

Agency Action – The Department has contracted with Ag and Markets to complete the assessments. Of the 100 incomplete assessments identified during the original audit, two have been completed as of September 2021. While there is no written schedule in place, Ag and Markets currently anticipates completing at least six assessments per year and is trying to increase that capacity.

Major contributors to this report were Brandon Ogden, Stephon Pereyra, Chelsey Fiorini, and Jacqueline Keeys-Holston.

We would appreciate your response to this report within 30 days, indicating any actions planned to address the unresolved issues discussed in this report. We thank the management and staff of the Department for the courtesies and cooperation extended to our auditors during this review.

Very truly yours,

Heather Pratt, CFE
Audit Manager

cc: Andrew Fischler, Director of Internal Audit