

June 2017

UPDATED: Invasive Species Management Strategy

(2017-2027)



Executive Summary

In 2010 Central Lake Ontario Conservation developed and began implementation of its Invasive Species Management Strategy. Skip ahead six years, the Province has an Invasive Species Act, an Ontario Invasive Species Strategy and the federal government instituted the Invasive Species Centre. In addition to several other changes, such as CLOCA's strategic plan, it is necessary for CLOCA's invasive species management strategy to be updated and reflect these accomplishments made in the progress of invasive species prevention, education, awareness and management.

This updated Invasive Species Management Strategy (2017 – 2027) outlines what CLOCA has accomplished in the past seven years, in addition to aligning CLOCA's focus with federal, provincial and municipal initiatives.

CLOCA's objectives are to:

- Work with partners to communicate the threats of invasive species and educate the public on how to prevent, detect, respond and manage invaders.
- Implement best practices to prevent, detect and manage invasive species in CLOCA's jurisdiction.
- Work with all levels of government to address new and existing invasive species.
- Strengthen existing partnerships and build new alliances and create connections.
- Use and enhance existing monitoring programs to detect new invaders and track the spread of existing invasive species.



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Introduction and Background

Invasive species are a major concern worldwide and continue to plague land and water managers at a national, provincial and local level. The threat of invasive species, be they aquatic or terrestrial plants, insects, fish, and those not yet introduced to our local ecology, will continue to impact our economy and environment as international trade, climate change, habitat loss and fragmentation increases over time. CLOCA, like other Conservation Authorities across the province, has put in place an invasive species management strategy to help us protect our biodiversity, reduce impacts on our communities and the local economy.

CLOCA's Invasive Species Management Strategy (November 2010) was completed and endorsed by the CLOCA Board of Directors in November, 2010. At the time, CLOCA used existing invasive species management plans to contribute to its development. The goal of the 2010 Strategy was "to employ a hands-on strategy with respect to the management of invasive species that aims to maintain and increase overall biodiversity within the CLOCA jurisdiction and Conservation Areas by means of management, communication, outreach and prevention". The strategy focused on 8 key areas: Prevention, Communication, Best Management Practices, Prioritization, Implementation, Collaboration, Policy, and Research & Monitoring. Within each of these key focus areas, specific actions were identified for CLOCA's Conservation Areas and CLOCA's jurisdiction as a whole. The section *A Framework for Adaptive Management* highlights CLOCA's achievements over the past seven years.

In light of our accomplishments and gained experience, new and emerging advances in research, science, policy and CLOCA's Strategic Plan 2016-2020, an update to the strategy was necessary. Advancements have been made in invasive species science, with progress being made on Early Detection Rapid Response (EDRR) programs, and updated technology, such as the Early Detection & Distribution Mapping System (EDDMapS), as well as continuous research being executed on the impacts of invasive species, management options and biological controls.

Recently, there has been significant progress within the private and public sectors; municipalities are starting to get on board with addressing invasive species, creating species specific management plans and allocating funding for management of some high priority invasive species, such as Emerald Ash Borer and Giant Hogweed. As these problems persist and continue to impact residents, businesses, and municipal green infrastructure like parks and valley lands, municipalities will likely increase their partnership efforts with CLOCA in addressing invasive species.

In addition to Municipalities coming to the table, the Province has taken a major step in addressing invasive species by introducing the Ontario Invasive Species Act, 2015. This act is expected to support the prevention, early detection, rapid response and eradication of invasive species in Ontario.

PREVENTION, DETECTION, RAPID RESPONSE AND MANAGEMENT AT WORK

CLOCA's Natural Heritage staff are trained in taxonomic identification, which is vital to prevent the introduction of new invasive species. In 2011, Natural Heritage staff *detected* Water Hyacinth and Water Lettuce at a coastal wetland in Oshawa; both of these species are not reported as established in Ontario. Staff confirmed identification of the species, and reported it to the Ministry of Natural Resources and Forestry and the Invading Species Hotline. The *response* was to remove the plants immediately and monitor for any overwintering populations. The site is continuously monitored through CLOCA's Durham Region Coastal Wetland Monitoring Program (DRCWMP) and no other plants have since been detected.

The CLOCA Invasive Species Management Strategy (2017-2027) is meant to provide direction for CLOCA's Natural Heritage, Land Management, Planning and Regulations, and Community Engagement departments over the next ten years. This updated document will act as a tool to promote discussion amongst our watershed management partners and assist us in acquiring sustainable resources to fulfill the objectives set out within the strategy.

A Regional and Provincial Context

Within the last six years a lot has changed in the conservation sector, and CLOCA's strategy needs to adapt to reflect the progress organizations are making within the Province. A brief summary of four key documents recently developed which have an influence on CLOCA's Invasive Species Management Strategy are provided below.

[CLOCA Strategic Plan 2016 – 2020](#)

CLOCA Strategic Plan 2016-2020 sets out CLOCA's priorities over the next five years with a focus on advancing watershed health through engagement, science and conservation. The plan outlines five goals:

- Communicate, Educate & Inspire
- Leaders in Integrated Watershed Management
- Operate Responsibly & Sustainably
- Collaborate & Partner, and
- Advance Watershed Science and Knowledge

As leaders in integrated watershed management, CLOCA will continue to support partnerships and education programs in an effort to advance overall knowledge, understanding and management of invasive species in our watersheds.

[Ontario's Biodiversity Strategy: Protecting What Sustains Us, 2011](#)

The Ontario Biodiversity Strategy was updated in 2011 to be the guiding framework for coordinating the conservation of Ontario's biodiversity and the ecosystems that sustain it. The document has four strategic directions that are critical in conserving Ontario's biodiversity:

- engage people
- reduce threats
- enhance resilience, and
- improve knowledge

It sets out specific actions within each category and identifies 15 targets to be achieved by 2020, including having a strategic plan in place to reduce threats posed to biodiversity by invasive species.

[Ontario Invasive Species Strategic Plan, 2012](#)

The Ontario Invasive Species Strategic Plan, 2012 was created as the Province saw a need to strategically address the threat of invasive species. As many organizations work to manage invasive species, this strategy is meant to help coordinate the process and identify key gaps that still need to be addressed. The overarching goals of the strategy are to:

- prevent harmful introductions before they occur
- respond rapidly to invasive species before they become established or spread
- detect and identify invasive species before or immediately after they become established, and
- to manage and adapt, implementing innovative management actions and taking practical steps to protect against impacts of invasive species.

Key categories have been identified with specific actions and tactics developed to fulfill the Province’s objective to prevent new invaders from arriving and surviving in Ontario, to slow and where possible reverse the spread of existing invasive species, and to reduce the harmful impacts of existing invasive species. There are several areas where conservation authorities will provide support to the Province, and CLOCA will continue to be a key player in the provinces invasive species initiatives.

Invasive Species Act, 2015

The Ontario Invasive Species Act, 2015 was enacted on November 3rd, 2016. This legislation serves as a significant step to prevent the introduction and spread of invasive species. Education remains a key tool to stop the spread of invasive species, but introducing regulations will help further support this endeavor.

The Act identifies prohibited and restricted species; prohibited species have a high threat of introduction, while restricted species are already established in the province. Through the adoption and implementation of legislation and regulations, the impact of prohibited and restricted species can be reduced.

CLOCA’s Invasive Species Management Strategy (2017 – 2027) will continue to enhance measures for prevention of, early detection of, rapid response to and effective management of invasive species through actions that support our Strategic Plan, Ontario’s Biodiversity Strategy, Ontario Invasive Species Strategic Plan and the Invasive Species Act.

A Framework for Adaptive Management

CLOCA’s past accomplishments have been reviewed to inform the update to the Invasive Species Management Strategy. This will ensure we are setting out the appropriate steps to achieve our goals and objectives, and identifying any gaps that need addressing. The following section highlights CLOCA’s achievements in invasive species education, awareness and management.

Evaluating Success

Over the past 6 years, we have achieved the following deliverables which we have aligned with the headings of CLOCA’s Strategic Plan 2016-2020.

Communicate, Educate & Inspire

CLOCA’s strongest asset thus far has been our ability to provide low cost education and communication products and programs to reach a variety of audiences in our Conservation Areas and in our watersheds.

- We have delivered upwards of 50 workshop presentations and reached over 500 individuals with messages about invasive species. Our groups of interest have included local garden clubs, private landowners, angler groups, service clubs and the general public.
- We have delivered close to 20 hands-on management programs at our Conservation Areas and in our watersheds to manage and map invasive species.
- We have independently and collaboratively produced a variety of communication products which include video, fact sheets, information brochures, signage, reference documents, best management practice manuals,



post cards, public service campaigns, radio commercials, news releases, a children’s activity workbook and awareness campaigns.

- We have reached out specifically to the golf course and nursery industries in our watershed, contacting over 45 organizations and providing 4 follow-up consultations.
- We have installed 7 permanent boot scrubber stations and provided 3 temporary bike washing stations for events hosted at our Conservation Areas.
- We have hosted over 10 workshops for municipal partners, watershed residents and contractors on a variety of invasive species topics.

Leaders in Integrated Watershed Management

CLOCA’s ability to conduct strategic large scale invasive species management has been limited due to resources and staffing limitations, however we have seen successes in many of our small scale management programs. At the onset of the 2010 Invasive Species Management Strategy, CLOCA established a number of pilot invasive species management projects. These pilot projects were generally selected based on: the size of the population, ease of the species to be controlled, sensitivity of the area, visibility to the public and the sites ability to be used for demonstrations.

Some of these pilot projects include:

| Conservation Area | Invasive Species | Control Method | Area being managed (ha) | Duration of management (years) |
|--------------------------|-------------------------|-----------------------|--------------------------------|---------------------------------------|
| Long Sault CA | Russian & autumn olive | Mechanical & chemical | 13.34 | 2 |
| Lynde Shores CA | Black locust | Mechanical & chemical | 3.25 | 2 |
| Lynde Shores CA | Common buckthorn | Mechanical & chemical | 3 | 4 (ongoing) |
| Purple Woods CA | Garlic mustard | Manual | 9 | 5 (ongoing) |
| Lynde Shores CA | Yellow iris | Manual | 1.1 | 4 (ongoing) |
| Enniskillen CA | European frog-bit | Manual | 0.23 | 5 (ongoing) |
| Enniskillen CA | Goldfish | Electrofishing | 0.22 | 4 |
| Heber Down CA | Phragmites | Chemical | 0.77 | 1 (ongoing) |

Frog-bit removal at Enniskillen CA Pond



In addition to the above mentioned pilot management projects, staff have also been involved in preparing for the impacts of potential invaders. Seasonal staff have mapped invasive species in several of CLOCA's CAs and inventoried ash trees to better manage the threats and impacts of Emerald Ash Borer. We are also continuously learning what other organizations are doing in respect to invasive species management by attending regional and provincial working groups, tours and conferences.

[Collaborate & Partner](#)

CLOCA actively partners with non-profit groups, government and other like-minded stakeholders to address the issue of invasive species.

- We have been an active member of the Horticultural Outreach Collaborative since 2009, providing tours for industry professionals; information packets for horticultural university and college programs; and engaging nursery retailers to promote non-invasive and native alternatives as part of the Grow Me Instead campaign.
- We have been an active member of the Ontario Invasive Plant Council's Communication Committee since 2010
- We work with our member municipalities and adjacent Conservation Authorities to partner in projects and best management practices. CLOCA has developed a best management practice for construction, as well as hosted workshops for municipalities to encourage the use of clean equipment protocols during operations and road

works. Most recently, CLOCA has been working with our adjacent CAs to engage all member municipalities within Durham Region to start the conversation around invasive species management strategies.

With the enactment of the Invasive Species Act in November 2016, CLOCA will continue to play an integral role in engaging its stakeholders in invasive species prevention and management and in providing technical advice to our partners and residents.

Advance Watershed Science and Knowledge

CLOCA's long-term monitoring programs are vital in the detection of new and early invaders, in addition to identifying and monitoring established populations where future restoration and management can occur. CLOCA's monitoring programs have successfully detected invaders that had not been observed within the Region prior: Water Lettuce and Water Hyacinth were detected at Pump House Marsh in August of 2012, and Chain Pickerel was observed in August of 2016 in Port Newcastle. The latter was the first juvenile of its kind to be recorded in Ontario waters.

These are significant outcomes that highlight the importance of long-term monitoring programs in their ability to capture anomalies, detect new invasions, and monitor impacts of invasive species.

In addition to CLOCA's regular long-term monitoring programs, CLOCA has also undertaken a number of additional monitoring projects with specific objectives and outcomes, such as Storm Water Management Pond surveys to identify invasive fish and plant species and invasive species mapping at many of CLOCA's CAs.

Recommendations

In 2010, the Invasive Species Management Strategy set out two major goals, one focused on CLOCA's jurisdiction, while the second was more specific to CLOCA's conservation areas. These goals and subsequent objectives set out the major structure of the 2010 strategy and at the time served CLOCA well. In preparation for this review, CLOCA staff analysed our strengths, weakness, opportunities, and threats, and have the following recommendations to take forward in the updated Invasive Species Management Strategy (2017-2027).



Garlic Mustard removal at Purple Woods CA with 4H club

CLOCA's strengths are in our natural heritage expertise and our ability to translate this into meaningful community engagement programs. Our longstanding partnerships and ability to collaborate with new stakeholders and the Authority's long term monitoring programs were identified as strengths to build upon. As CLOCA continues to grow, so will our ability to perform even more meaningful management, monitoring and engagement. As with all organizations, there are factors that can limit our ability to accomplish all we set out to do, such as funding and adequate resources; however there are opportunities for us to seize and advance on.

The following is a list of recommendations for CLOCA to improve on and incorporate into the Invasive Species Management Strategy (2017-2027).

- Formally track and report annually on community engagement activities;
- Utilize monitoring results to identify areas for restoration and management;
- Focus on large scale multiple species management projects, versus species specific management (if appropriate for area);

- Have CLOCA staff (1 or 2 employees) become Ontario certified pesticide applicators, allowing for faster implementation and cost effective management;
- Seek a more sustainable source of funding for community engagement and management programs;
- Staying up to date on non-profit, municipal, provincial and federal initiatives to ensure we are working together to make an impact;
- Review other engagement opportunities to attract a wider more diverse audience
- Continue to evaluate our existing programs; and
- Incorporate provisions into the plan review process to deal with invasive species, e.g. including invasive species management as an integral component of development mitigation and habitat restoration measures



Yellow Iris management, Lynde Shores CA

Moving Forward: CLOCA’s Invasive Species Management Strategy (2017 to 2027)

Guiding principles, Goal and Objectives

The following guiding principles will be used to identify CLOCA’s objectives and actions moving forward to:



Support the **prevention** of the introduction of new invasive species in CLOCA’s jurisdiction.



Detect invasive species before they become established.



Work with agencies to **respond** rapidly to a newly detected invasive species to prevent establishment.



Work with partnering organizations and stakeholders to take **management** actions and practical steps to protect against impacts of invasive species.

Within each of the four guiding principles CLOCA will have different roles, depending on available resources and leadership from higher levels of government. **Prevention** will relate specifically to invasive species that have not been identified or established within CLOCA’s Conservation Areas or broader jurisdiction, as well as ones not currently found within Ontario. CLOCA’s role in prevention will be focused primarily on local, regional and provincial community and industry engagement. **Detection** will be through CLOCA’s existing monitoring programs, provincial Early Detection Rapid Response (EDRR) and citizen science. If CLOCA staff detect any new invasive species within the CLOCA watersheds, staff will immediately alert appropriate authorities and the invading species hotline. CLOCA will primarily play a supportive role in **response** measures, working with all levels of government and relevant agencies, as resources allow. **Management** will involve implementing practical steps to protect against the impacts of invasive species, through community engagement, collaboration, active prevention and prioritized management actions of established species on a local scale.

Goal: To protect the native biodiversity of CLOCA’s watersheds from the threat of invasive species

Objectives:












The objectives of this strategy support the goals of the CLOCA Strategic Plan 2016-2020, and are presented in the table below. Key actions have been identified for each objective and will aid us in achieving the goal and objectives set out in this Invasive Species Management Strategy (2017-2027). Some of the actions identified in the tables below are currently being implemented, but continued effort is needed to fulfill the objectives of this management strategy

| Aligned CLOCA Strategic Plan Goal | Objective |
|--|--|
| Communicate, Educate & Inspire | Work with partners to communicate the threats of invasive species and educate the public on how to prevent, detect, respond and manage invaders. |
| Leaders in Integrated Watershed Management | Implement best practices to prevent, detect and manage invasive species in CLOCA’s jurisdiction. |
| Operate Responsibly & Sustainably | Work with all levels of government to address new and existing invasive species. |
| Collaborate & Partner | Strengthen existing partnerships and build new alliances and create connections. |

| | |
|---------------------------------------|--|
| Advance Watershed Science & Knowledge | Use and enhance existing monitoring programs to detect new invaders and track the spread of existing invasive species. |
|---------------------------------------|--|









Communicate, Educate & Inspire

Objective: work with partners to communicate the threats of invasive species and educate the public on how to prevent, detect, respond and manage invaders.

| Action | Guiding Principle |
|--|---|
| Offer innovative education programs to inform and raise awareness of the value of a healthy watershed, including invasive species EDRR |    |
| Provide training for public, staff, industry, partner organizations, on invasive species identification, best practices, etc. |    |
| Provide technical expertise to landowners, land managers, municipal staff, etc. to support management of invasive species |  |
| Deliver technical workshops to municipal staff on a range of watershed specific issues |     |





Leaders in Integrated Watershed Management








Objective: implement best practices to prevent, detect and manage invasive species in CLOCA’s jurisdiction.

| Action | Guiding Principle |
|---|---|
| Continue to develop and implement invasive species management plans for CLOCA properties |     |
| Manage key pathways to prevent the introduction and spread of invasive species |  |
| Ensure that BMPs and management plans for key invasive species are in place and encourage industry and public partners to utilize and incorporate in regular business |  |
| Support and enhance biodiversity stewardship activities and partnerships with local communities and landowners |   |

Operate Responsibly & Sustainably


























Objective: work with all levels of government to address new and existing invasive species.

| Action | Guiding Principle |
|--|---|
| Support existing legislation, and provide guidance and advice when necessary (e.g. Cosmetic pesticide ban, Invasive Species Act, etc.) |     |

| | |
|---|--|
| Review and identify gaps in CLOCA policies and municipal operations/by-laws associated with the management of invasive species |     |
| Utilize existing policies (eg. Conservation Authorities Act, Natural Heritage System, Watershed Plans) to enhance and preserve the resiliency of natural features within CLOCA's watersheds to reduce the threat of invasive species, and ultimately the loss of biodiversity |   |
| Have CLOCA response plans in place for detections of new invasive species, and identify CLOCAs level of commitment for the EDRR process |  |

















Collaborate & Partner

Objective: strengthen existing partnerships and build new alliances and create connections.

| Action | Guiding Principle |
|---|--|
| Work with partner organizations to educate industry partners about the sale or use of potentially invasive species |  |
| Liaise with all levels of government and relevant organizations to support prevention programs |  |
| Partner with local agencies to identify new invasions |  |
| Support stakeholders, where feasible, in responding to new invasions within CLOCA's watersheds |  |
| Engage local government on response and reporting measures |   |
| Support and encourage municipalities to address invasive species by developing invasive species management strategies, including adoption of preventative measures within municipal policies and official plans |     |
| Collaborate with partners to monitor and find solutions to current and future issues affecting our watershed |    |
| Continue to identify additional opportunities to share resources and services with watershed municipal partners and adjacent Conservation Authorities |     |
| Identify and share knowledge, data, science and practices for community partners to use in their efforts to protect and enhance the watershed |     |
| Continue to partner with community-based and government organizations to enhance watershed health and function through research and support for restoration and stewardship initiatives |     |

Advance Watershed Science & Knowledge

Objective: use and enhance existing monitoring programs to detect new invaders and track the spread of existing invasive species.

| Action | Guiding Principle |
|--|---|
| Stay up to date on all new potential invaders to Ontario and CLOCA's jurisdiction, and ensure essential staff are trained on identification |   |
| Utilize the Integrated Watershed Monitoring program to identify new invasions, monitor existing invasions, and look to fill spatial gaps when possible |   |
| Improve existing invasive species monitoring programs and develop a network of experts to identify priority species |     |
| Strengthen CLOCA's data management and reporting for invasive species in collaboration with the Province |     |
| Monitor, manage and evaluate the health of our natural resources and implement management actions where and when necessary |  |
| Explore opportunities to advance citizen science to undertake monitoring |    |

Implementation

CLOCA's internal invasive species working group will continue to meet regularly to assess what accomplishments were achieved in the year, identify priority actions and recognise existing resource gaps and put forth recommendations for the following year. Evaluation of the individual actions undertaken will be conducted annually and revisions and/or changes will be considered if needed. The table below identifies the departmental responsibilities for leading and supporting the actions within the strategy; an annual work plan will be developed with all relevant departments to carry out components of the strategy.

Evaluating for Success

Tracking CLOCA's progress will be essential in determining our accomplishments as we implement this Invasive Species Management Strategy (2017-2027). A high level of evaluation will be performed on an annual basis, incorporating quantifiable measures that can be compared over the years; such measures may include, but not limited to:

- Number of programs implemented
- Number of unit area (ha/m²) of invasive species removed
- Number of unit area (ha/m²) of invasive species mapped
- Number of unit area (ha/ m²) restored
- Number of property owners engaged
- Number of presentations given, and total audience size
- Number of events/festivals attended

More formal evaluations will be identified for specific projects, depending on the scope, duration and other factors of the program.

Departmental responsibilities in implementation

| Strategy/Task | CLOCA Department lead | CLOCA Supporting department |
|---|---------------------------------------|---------------------------------------|
| <i>Communicate, Educate & Inspire</i> | | |
| Offer innovative education programs to inform and raise awareness of the value of a healthy watershed, including invasive species EDRR | Community Engagement | Natural Heritage |
| Provide training for public, staff, industry, partner organizations, on invasive species identification, best practices, etc. | Natural Heritage/Community Engagement | |
| Provide technical expertise to landowners, land managers, municipal staff, etc. to support management of invasive species | Natural Heritage | Community Engagement |
| Deliver technical workshops to municipal staff on a range of watershed specific issues | Natural Heritage/Community Engagement | Engineering, Planning & Regulation |
| <i>Leaders in Integrated Watershed Management</i> | | |
| Continue to develop and implement invasive species management plans for CLOCA properties | Natural Heritage | Field Operations |
| Manage key pathways to prevent the introduction and spread of invasive species | Natural Heritage | Field Operations |
| Ensure that BMPs and management plans for key invasive species are in place and encourage industry and public partners to utilize and incorporate in regular business | Natural Heritage | Community Engagement/Field Operations |
| Support and enhance biodiversity stewardship activities and partnerships with local communities and landowners | Community Engagement | Natural Heritage |
| <i>Operate Responsibly & Sustainably</i> | | |
| Support existing legislation, and provide guidance and advice when necessary (e.g. Cosmetic pesticide ban, Invasive Species Act, etc.) | Natural Heritage | Planning & Regulation |
| Review and identify gaps in CLOCA policies and municipal operations/by-laws associated with the management of invasive species | Natural Heritage | Planning & Regulation |

| Strategy/Task | CLOCA Department lead | CLOCA Supporting department |
|---|----------------------------------|---|
| Utilize existing policies (eg. Conservation Authorities Act, Natural Heritage System, Watershed Plans) to enhance and preserve the resiliency of natural features within CLOCA’s watersheds to reduce the threat of invasive species, and ultimately the loss of biodiversity | Natural Heritage | Planning & Regulation |
| Have CLOCA response plans in place for detections of new invasive species, and identify CLOCAs level of commitment for the EDRR process | Natural Heritage | Community Engagement |
| <i>Collaborate & Partner</i> | | |
| Work with partner organizations to educate industry partners about the sale or use of potentially invasive species | Natural Heritage | Community Engagement |
| Liaise with all levels of government and relevant organizations to support prevention programs | Natural Heritage | Community Engagement |
| Partner with local agencies to identify new invasions | Natural Heritage | Community Engagement |
| Support stakeholders, where feasible, in responding to new invasions within CLOCA’s watersheds | Natural Heritage | Community Engagement, Planning & Regulation, Field Operations |
| Engage local government on response and reporting measures | Natural Heritage | Community Engagement |
| Support and encourage municipalities to address invasive species by developing invasive species management strategies, including adoption of preventative measures within municipal policies and official plans | Natural Heritage | Planning & Regulation |
| Collaborate with partners to monitor and find solutions to current and future issues affecting our watershed | Community Engagement | Natural Heritage |

| Strategy/Task | CLOCA Department lead | CLOCA Supporting department |
|---|--------------------------|---|
| Continue to identify additional opportunities to share resources and services with watershed municipal partners and adjacent Conservation Authorities | Natural Heritage | Community Engagement, Planning & Regulation, Field Operations |
| Identify and share knowledge, data, science and practices for community partners to use in their efforts to protect and enhance the watershed | Natural Heritage | Community Engagement |
| Continue to partner with community-based and government organizations to enhance watershed health and function through research and support for restoration and stewardship initiatives | Community Engagement | Natural Heritage |
| <i>Advance Watershed Science & Knowledge</i> | | |
| Stay up to date on all new potential invaders to Ontario and CLOCA's jurisdiction, and ensure essential staff are trained on identification | Natural Heritage | |
| Utilize the Integrated Watershed Monitoring program to identify new invasions, monitor existing invasions, and look to fill spatial gaps when possible | Natural Heritage | |
| Improve existing invasive species monitoring programs and develop a network of experts to identify priority species | Natural Heritage | Community Engagement |
| Strengthen CLOCA's data management and reporting for invasive species in collaboration with the Province | GIS&IT | Natural Heritage |
| Monitor, manage and evaluate the health of our natural resources and implement management actions where and when necessary | Natural Heritage | Field Operations |
| Explore opportunities to advance citizen science to undertake monitoring | Natural Heritage | Community Engagement/GIS&IT |