

Module 2.0 Non-Regulatory Invasive Species Management Options

Integrated invasive species management involves more than a regulatory approach to the control of invasive species on private land. Other steps include public outreach, preventing infestations, engaging landowners, detecting new invaders, conducting inventories to determine which species and sites are of concern, prioritizing sites, species and activities, treating high priority infestations using a combination of control methods, and monitoring success (see Table 2). These elements can be combined to form a unique, relevant and effective program for your area depending on the challenges you face, the goals of your program, availability of resources, and focus of your activities (private or local government lands).

Table 1: Steps in invasive species management

* P – private landowners; LG – local government staff and lands

| Steps in Invasive Plant Management | Goal | Potential Elements | Primary Target Audience* |
|---------------------------------------|---|---|--|
| Public Outreach | To raise awareness about invasive species and their impacts To involve public in other steps (below) | <ul style="list-style-type: none"> Develop and distribute public outreach materials and/or services Support volunteer stewardship activities Educate the public about new invasive species to watch for and where to report sightings Provide information on best management practices for prevention, control and disposal | <p>P</p> <p>P</p> <p>P</p> <p>P</p> |
| Prevention | To prevent new infestations and the spread of existing infestations | <p><i>Address vectors of spread including:</i></p> <p>Poor land practices (e.g. bare soil)</p> <ul style="list-style-type: none"> Promote and practice good land management practices Reseed bare soil <p>Contaminated soil, fill, hay, topsoil, mulch or composted materials from landfills, gravel pits admixing sites</p> <ul style="list-style-type: none"> Separate invasive plants from other garden waste Remove or control invasive species at gravel pits, landfills and other high priority sites before soil is moved Prevent (through education or regulation) the deposit or movement of contaminated soil (with invasive plant seeds, parts or invasive animals) Educate public and regulate “no garden dumping” areas Prevent (through education or regulation) the introduction of invasive horticultural species in nurseries, garden centres, and gardens Ensure maintenance staff identify invasive species and clean machinery, equipment and vehicles after visiting infested sites. | <p>P, LG</p> <p>LG</p> <p>LG</p> <p>LG</p> <p>LG</p> <p>P</p> <p>P</p> <p>LG</p> |
| Landowner and Land Manager Incentives | To provide incentives for landowners to encourage invasive plant management | <ul style="list-style-type: none"> Waive tipping fees Provide a cost-sharing rebate program Provide equipment loan Provide private property treatments Work with local nurseries to remove invasive plants from retail sales | <p>P</p> <p>P</p> <p>P</p> <p>P</p> <p>P</p> |

| Steps in Invasive Plant Management | Goal | Potential Elements | Primary Target Audience* |
|-------------------------------------|--|---|--|
| Early Detection, Rapid Response | To detect and eradicate species that are "Alert" species new to a region | <ul style="list-style-type: none"> Identify "Alert" species for your region Educate the public to identify and report "Alert" species Consider landowners incentives for private land invasive plant management Train local government staff to identify and control "Alert" species Have a plan for immediate response to new detections Create partnerships between local governments and other governments, agencies and NGOs for EDRR | LG P P LG LG LG |
| Inventory and Data Management | To identify invasive species and sites of concern | <ul style="list-style-type: none"> Track high priority species at specific sites, as a response to reports and in order to create a management plan Inventory of parks and other local government lands Coordinated effort with other agencies for a full inventory of region Use smart phone app "Report-A-Weed" to record and report invasive species Use data-sharing programs like IAPP | LG LG LG LG LG |
| Prioritizing and Planning | To assess which species to address, when, where and how | <ul style="list-style-type: none"> Identify a list of species/sites of concern Use existing decision-support tools Develop an invasive species priority list Develop invasive species management strategy Determine the most effective tool(s) to address concerns (e.g. regulation, education, best management practices, etc.) Determine budget (resources, partnerships) and work within it | LG LG LG LG LG LG |
| Treatment, Disposal, and Monitoring | <p>To contain or control existing infestations (using mechanical, biological, cultural, and/or chemical control methods)</p> <p>To evaluate the effectiveness of invasive species management activities. Adjust as necessary</p> | <ul style="list-style-type: none"> Control invasive species on local government lands (e.g. parks and landfills) based on priority sites and species Promote or enforce treatment of invasive species on private land Carefully dispose of invasive species waste – develop a regional approach Follow-up treatments with re-seeding, re-planting or other management practices that promote healthy land Monitor sites and treatment for success and follow-up Determine effectiveness of treatment methods Annual assessment of success of program | LG P LG, P LG LG LG LG |
| Regulation | To regulate and enforce activities to control the introduction and spread of invasive species | <ul style="list-style-type: none"> Enforce treatment of invasive species on private land Regulate the introduction of horticultural species Regulate invasive species through development application processes | P P |