

# LOCAL GOVERNMENT ASSISTANCE GUIDE

## Invasive Species Management in the Buffer

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Critical Area Commission  
Chesapeake and Atlantic Coastal Bays  
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### Overview:

"Invasive species" are defined in the Critical Area regulations as a type of plant that is non-native to the ecosystem under consideration and whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health. Typically invasive species adapt well to disturbance, tolerate a broad range of environmental conditions, and spread rapidly and easily. Many invasive species are originally planted for ornamental or landscaping purposes, but their rapid growth, aggressive spread, and lack of natural controls create ecological problems. In general, the prudent removal of invasive species within the Critical Area Buffer is encouraged in order to improve habitat and reduce the threat of further spreading via waterways.

### General Guidelines:

In general, removal of invasive species in the Buffer can be accomplished by a property owner with approval by the local government of a Simplified Buffer Management Plan.

For removal of an invasive tree or trees, such as Tree of Heaven (*Ailanthus altissima*), mitigation shall be one tree of at least ¾-inch caliper for each tree removed, or the affected area shall be stabilized in native woody vegetation, if a tree cannot be replanted due to space or other site constraints.

For the removal of invasive shrubs, herbaceous vegetation, or vines, mitigation shall involve coverage of the area with mulch or native groundcover or both until other Buffer plantings are established or natural regeneration is initiated.

Areas where invasive species are removed from the Buffer cannot be converted to turf grass. Native tree, shrub, or herbaceous species must be planted in the area.

### Simplified Buffer Management Plan:

A Simplified Buffer Management Plan can be used to obtain permission to remove invasive species. It can be prepared by a landowner. No seal from an engineer, forester, or landscape professional is required; however, for large areas and pervasive infestations, it is recommended that landowners consult with professionals with experience in invasive species management.

A Simplified Buffer Management Plan for Invasive Species Removal and Management shall include:

1. **A brief narrative describing the proposed activity, including the anticipated start date and method to be used.** The narrative shall include the method of removal, such as spraying herbicide, or manually cutting vines out of trees. It should also include the size of the area to be treated. Areas that exceed 5,000 square feet may require additional details and one-on-one consultation with local government staff. Providing the start date of the removal will ensure that local government staff is aware of the activity in the Buffer.
2. **The proposed mitigation, revegetation method, or stabilization technique.** For the removal of invasive trees, replacement at one-to-one is generally required. If the invasive trees are clustered together, alternative plant types can be used. If the invasive species are primarily vines growing on tree trunks and spreading into the lower branches, it is permissible to remove the vines and mulch around the base of the affected trees.
3. **The proposed planting date.** Providing a planting date is an indication to the local government that the property owner will complete the project, and the site stabilized in a timely manner.

4. **The signature of the party responsible for the proposed activity and for ensuring survival of the planting.** The signature of the property owner indicates to the local government that the property owner understands the nature of the work to be done and is aware of the need to use appropriate techniques near tidal waters, tidal wetlands, and tributary streams. Water quality and sensitive aquatic species can be adversely affected by sedimentation from run-off over bare soil or the use of herbicides that are not designed for use near waterways.

## **Removal Techniques:**

Removal of invasive species involves controlling and eradicating (or at least reducing) existing populations, as well as managing the spread of the species to other areas of the property. Sometimes, a combination of removal techniques will be required. In most cases, time and persistence will be necessary to fully eradicate a species from a site.

### **Cutting**

This is the simplest form of invasive species removal and works best for small areas and low levels of infestation. Follow up work, and in some cases supplemental spraying or grubbing, may be necessary to ensure that the plants do not return. This method can work well for removing vines from trees by severing the vines at the base of the tree and removing a three foot section of the vine.

### **Mowing**

Mowing using a regular lawnmower, not a bush-hog (a powerful rotary mower attached to a tractor that is capable of cutting and shredding small trees and shrubs), may be used on some sites where the invasive plant cover is primarily at ground level. Mowing can be used prior to spraying or grubbing to minimize leaf and stem cover and make it easier to remove stems and roots by hand or apply herbicide.

### **Spraying**

Appropriate herbicides can be used to control and eradicate invasive species; however, it is important that the herbicide used be designed for residential application and is not required to be applied by a licensed applicator. Homeowners should make sure that they are purchasing the correct product for the species, should carefully read the warning label, and should follow the mixing, spraying, cleaning, and disposal directions. If the species to be eradicated are at, or in close proximity to, tidal waters, tidal wetlands, or streams, the herbicide should be formulated for use in these areas.

### **Grubbing**

Grubbing involves the manual removal of plants, roots, and stems. This method is often necessary when species spread by vegetative means including runners, shoots, and rhizomes. Depending on the species, even small fragments of root material left in the soil can quickly grow and proliferate. In some cases, subsequent spraying may be necessary.

### **Targeted Grazing**

This technique involves the use of goats to remove invasive species. Goats can be particularly effective for removing certain species, but the site must have the right characteristics and the technique must be properly managed to be effective. Planting following targeted grazing is not always necessary if desirable species have been protected, and natural regeneration will take place. Areas of exposed soil should be carefully monitored and stabilized if necessary. A landowner that desires to use targeted grazing should work with a professional goatherd with experience in targeted grazing. The narrative included in the Simplified Buffer Management Plan should include the following information:

- A description of the area including the species to be removed
- A sketch, site plan, or aerial imagery showing the area to be treated with an indication of the area that will be fenced
- A description of the method that includes the number of goats, the length of time that they will be grazing, and how they will be confined, watered, cared for, and monitored during the grazing period
- A description of how desirable species, such as native tree saplings, will be protected, such as tree tubes or internal fencing
- Information regarding follow up after the invasive species have been removed through the initial grazing, which could include a second grazing period in three to six months, followed by supplemental planting and manual removal of subsequent re-growth