



TOWN OF NORWICH
DEPARTMENT OF PUBLIC WORKS
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Integrated Vegetation And Invasive Species Management Plan

Management of roadside vegetation is critical to visibility and safety, proper drainage, snow storage and removal, and erosion control.

The recent focus on and awareness of invasive species issues has also contributed to, and been included in the development of this plan. All vegetation within the Town's ROW (Right-of-Way) will fall under this plan. The Town discourages the planting of trees and shrubs in the Town's ROW. By statute, the Town can assume a 3 rod ROW (49 ½'). Some Town roads have a surveyed ROW which could be more. As safety is paramount, clear zones will be designed and maintained as is practicable according to standards and regulation.

The control of noxious weeds and brush, fast and tall growing plants will be a priority. Low growing grasses and legumes will be the preferred ground cover. Selection of trees and plants to be left will be determined as the conditions of each site dictate. The more desirable tree and shrub species will be left if other considerations allow.

Highway ROW maintenance operations are ongoing and will include the following methods and considerations:

- Roadside mowing will continue to be the first line of management. The operation and regular upgrading of mowing equipment is considered critical to effective mowing operations.
- The timing of mowing operations can have a significant impact on growth, promoting or containment of different species. Every attempt will be made for mowing operations to be timed to maximize the effect on noxious weeds and invasive species and prevent their further spread.

- Trees, brush, and limbs not controlled by mowing operations will typically be cut by hand held equipment. The removal of trees in the ROW is to be done under provisions in state statute:

The Vermont Statutes Online

Title 19: Highways

Chapter 9: REPAIRS, MAINTENANCE, AND IMPROVEMENTS

19 V.S.A. § 904. Brush removal

§ 904. Brush removal

The selectmen of a town, if necessary, shall cause to be cut and burned, or removed from within the limits of the highways under their care, trees and bushes which obstruct the view of the highway ahead or that cause damage to the highway or that are objectionable from a material or scenic standpoint. Shade and fruit trees that have been set out or marked by the abutting landowners shall be preserved if the usefulness or safety of the highway is not impaired. Young trees standing at a proper distance from the roadbed and from each other, and banks and hedges of bushes that serve as a protection to the highway or add beauty to the roadside, shall be preserved. On state highways, the secretary shall have the same authority as the selectmen. (Added 1985, No. 269 (Adj. Sess.), § 1.)

- Ditching operations that involve the removal of material that does, or may contain invasive species will be managed in a way to control the spread of the plant. Reseeding will be done as soon as practicable using appropriate species and methods to minimize erosion and long-term maintenance.
- At this time, we do not have an herbicide spraying program.
- Routine observation of road and ROW conditions will identify immediate issues. Long-range maintenance concerns will be identified and remediation planned as part of a periodically required road inventory and management plan.
- Consideration will be given to wildlife habitat and food sources; however, encouraging wildlife to frequent the ROW is a safety concern.
- Consideration will be given to preserving wildflowers where practical.
- Routine recordkeeping by the Department of Public Works will provide records of routine ROW maintenance operations. Other records will be kept in accordance with state regulations.
- All routine maintenance activities are reviewed continually and revised as is required.

General Best Management Practices

Soil Disturbance and Stabilization

1. Whenever possible, excavation should be avoided in areas containing invasive plants.
2. Plant species on the prohibited invasive plant list should never be planted.
3. Materials such as fill, loam, gravel, mulch or hay should not be brought into project areas from sites where invasive plants are known to exist or have existed.

Movement and Maintenance of Equipment

1. Locate and use a staging area that is free of invasive plants.
2. If equipment must be used or staged in areas where invasive plants occur, all equipment, machinery, and hand tools should be cleaned of all viable soil and plant material before leaving the project. Acceptable methods of cleaning include but are not limited to:
 - High pressure air
 - Brush, broom or other tool (used without water)

Mowing Invasive Plants

1. Whenever possible and to the extent practicable, mowing should be avoided in areas containing invasive plants.
2. To avoid spreading invasive plants when mowing, invasive plant seeds and other plant material must be removed from mowing equipment. Equipment must be cleaned at least daily, as well as prior to transport. This can be done with a brush or broom at the mowing site. Water should not be used unless a portable wash station is utilized. Maintenance personnel should avoid coming in direct contact with poisonous invasive plants and wear appropriate clothing (i.e. long-sleeve shirt and gloves).

Excavated Material (includes ditching)

1. Excavated material from the areas containing invasive plants may be reused within the limits of the infestation. Excavated material taken from the sites that contain invasive plant materials cannot be used away from the site of infestation until all viable plant material is destroyed.

2. Any excavated material that contains viable plant material and is not reused within the limits of the infestation must be stockpiled on an impervious surface until viable plant material is destroyed or the material must be disposed. Material must be disposed of by burying a minimum of three feet below grade. Japanese knotweed must be buried at least five feet below grade.
3. Whenever possible, excavation should be avoided in areas containing Japanese knotweed, Purple loosestrife and Phragmites.
4. Excavated materials including soil and other materials containing invasive plants must be covered during transport.

The following is a list of designated noxious weeds in Vermont:

A. Class A Noxious Weeds

1. *Cabomba caroliniana* (fanwort)
2. *Egeria densa* (Brazilian elodea)
3. *Hydrilla verticillata* (hydrilla)
4. *Hygrophila polysperma* (east Indian hygrophila)
5. *Myriophyllum aquaticum* (parrot feather)
6. *Myriophyllum heterophyllum* (variable-leaved milfoil)
7. *Salvinia auriculata* (giant salvinia)
8. *Salvinia biloba* (giant salvinia)
9. *Salvinia molesta* (giant salvinia)
10. *Vincetoxicum hirundinaria* (pale swallow-wort)

B. Class B Noxious Weeds

1. *Aegopodium podagraria* (goutweed/bishopsweed/snow-on-the-mountain)
2. *Ailanthus altissima* (tree-of-heaven)
3. *Alliaria petiolata* (*A. officinalis*) (garlic mustard)
4. *Butomus umbellatus* (flowering rush)
5. *Celastrus orbiculatus* (oriental bittersweet)
6. *Fallopia japonica* (*Polygonum cuspidatum*) (Japanese knotweed)
7. *Hydrocharis morsus-ranae* (frogbit)
8. *Lonicera x bella* (bell honeysuckle)
9. *Lonicera japonica* (Japanese honeysuckle)
10. *Lonicera maackii* (amur honeysuckle)
11. *Lonicera morrowii* (Morrow honeysuckle)
12. *Lonicera tatarica* (Tatarian honeysuckle)
13. *Lythrum salicaria* (Purple loosestrife)

14. *Myriophyllum spicatum* (Eurasian watermilfoil)
15. *Nymphoides peltata* (yellow floating heart)
16. *Phragmites australis* (common reed)
17. *Potamogeton crispus* (curly leaf pondweed)
18. *Rhamnus cathartica* (common buckthorn)
19. *Rhamnus frangula* (glossy buckthorn)
20. *Trapa natans* (water chestnut)
21. *Vincetoxicum nigrum* (black swallow-wort)
22. *Acer platanoides* (Norway maple)*
23. *Berberis vulgaris* (common barberry)*
24. *Berberis japonicas* (Japanese barberry)*
25. *Euonymus elata* (burningbush)*
26. *Iris pseudocorus* (yellow flag iris)*
27. *Acer ginnala* (Amur maple)*
28. *Najas minor* (European naiad)*

The following is a list of other “nuisance” weeds that are not included on the noxious weeds list for Vermont. These plants can cause skin irritation (rash, burns, cuts, etc.) and should be handled with caution.

1. *Pastinaca sativa* (wild parsnip)
2. *Toxicodendron radicans* (poison ivy)
3. *Urtica dioica* (nettles)
4. *Cirsium vulgare* (bull thistle)

April 10, 2013