### Lauprete Property Phase 2 Invasive Removal and Vegetation Restoration Strategy

Large portions of the property are covered with dense thickets of invasive plants. We propose removing these thickets as outlined in the Phase 2 sequencing plan. Native plant communities will be enhanced immediately following invasive removal. Afterwards, any resprouting or new invasives will be managed on an ongoing basis following adaptive land management guidelines.

The strategies and techniques described below will be applied during initial invasive removal and vegetation enhancement per sequencing plan.

#### Careful mechanical removal of invasive plants

- Manual cut back, pulling, or smothering of invasive plants to limit disturbance, prevent soil erosion, and protect existing native species and their sensitive root systems.
- Use hand tools and light, walk-behind brush cutters to avoid compaction and disturbance.



Left: Mechanical invasive shrub removal with weed wrench. Right: Cutback of annual invasives to prevent reseeding.

- Invasive species to be removed include but are not limited to the following:

Ampelopsis brevipedunculata Berberis vulgaris Celastrus orbiculatus Eleagnus umbellata Ligustrum vulgare Lonicera japonica Lonicera maackii Rosa multiflora Rubus phoenicolasius Toxitoxicodendron radicans Porcelain-berry Common barberry Oriental bittersweet Autumn olive Privet Common honeysuckle Bush honeysuckle Multiflora rose Wineberry Poison ivy

- No use of herbicides in wetland and buffer areas.
- Use pathways created in Phase 1 for access and to remove excess debris. Stay on pathways as much as possible to reduce impact on surrounding vegetation and soils.
- Manual cutting and careful removal of fallen or damaged trees. Debris will either be removed from site, stacked for wildlife, or chipped on site. Wood chips may be used on site.
- Carefully peal back invasives to protect and reveal existing native plants. Native species to remain include but are not limited to the following:

Acer rubrum	Red maple
Amelanchier ssp.	Serviceberry
llex opaca	American holly
Lindera benzoin	Northern spicebush
Morella pensylvanica	Northern bayberry
Onoclea sensibilis	Sensitive fern
Rhus aromatica	Fragrant sumac
Prunus spec.	Cherry
Sambuscus canadensis	Elderberry
Sassafras albidum	Sassafras
Vaccinium angustifolium	Lowbush blueberry
Vaccinium corymbosium	Highbush blueberry
Viburnum dentatum	Arrowwood viburnum

#### Site-sensitive vegetation restoration

- The removal of invasives will immediately be followed by enhancement planting and seeding of native species to control erosion and fill gaps with desirable species.
- We propose using small container sizes to minimize disturbance during planting. Proposed plant sizes include but are not limited to the following:
  - o Seed
  - o Bare root plants
  - Landscape plugs, quarts, and one (1) to five (5) gallon size containers
  - Tree seedlings up to 6 feet tall



Left: Landscape plugs reduce soil disturbance. Right: Tree seedlings in two (2) gallon size containers.

Install stakes and deer protection as necessary



Temporary tree shelters protect from deer browsing and rubbing.

- Quantities cannot accurately be estimated at this time due to extremely thick invasive cover and little information on how many native plants are actually on site but currently covered or suppressed by invasives.
- Woodland plant community restoration may include but is not limited to the following native species:
  - o Tree and shrubs
    - Acer rubrum (red maple)
    - Alnus incana (gray alder)
    - Amelanchier ssp. (serviceberry)
    - Aronia melanocarpa (black chokeberry)

- *Comptonia peregrina* (sweet fern)
- Corylus americana (American hazelnut)
- Ilex verticillata (winterberry holly)
- Morella pensylvanica (northern bayberry)
- Prunus serotina (black cherry)
- Quercus ssp. (oak)
- Rhus ssp. (sumac)
- Salix ssp. (willow)
- Vaccinium ssp. (blueberry)
- Viburnum ssp. (arrowwood and other viburnum)
- o Container perennials
  - Carex ssp. (sedges)
  - Danthonia spicata (poverty oatgrass)
  - Deschampsia flexuosa (wavy hairgrass)
  - Elymus ssp. (wild rye)
  - Luzula ssp. (woodrush)
  - Onoclea sensibilis (sensitive fern)
- o Bare root
  - Claytonia virginica (spring beauty)
  - Erythronium americanum (trout lily)
  - Geranium maculatum (wild geranium)
  - Mertensia virginica (Virginia bluebells)
- Woodland seed mixes
  - Ageratina altissima (white snakeroot)
  - Carex ssp. (sedges)
  - Deschampsia flexuosa (wavy hairgrass)
  - *Festuca ssp.* (native fescue)
  - Lobelia cardinalis (cardinal flower)
  - Stylophorum diphyllum (celandine poppy)
- Meadow plant community restoration may include but is not limited to the following native species:
  - Container plants
    - Achillea millefolium (common yarrow)
    - Andropogon virginicus (broomsedge bluestem)
    - Baptisia tinctoria (yellow wild indigo)
    - Eragrostis spectabilis (purple lovegrass)
    - Euthamia graminifolia (flat-top goldenrod)
    - Eurybia spectabilis (showy aster)
    - Juncus effusus (soft rush)
    - *Liatris ssp.* (blazing star)
    - Pycnanthemum ssp. (mountain mint)
    - Schizachyrium scoparium (little bluestem)

- Soliago spp. (goldenrod)
- Symphyotrichum novi-belgii (New York aster)
- Meadow seed mixes
  - Achillea millefolium (common yarrow)
  - Ageratina altissima (white snakeroot)
  - Andropogon virginicus (broomsedge bluestem)
  - Dichanthelium clandestinum (deer-tongue grass)
  - Eragrostis spectabilis (purple lovegrass)
  - Eupatorium hyssopifolium (hyssopleaf thoroughwort)
  - Monarda ssp. (beebalm)
  - Panicum ssp. (switchgrass)
  - Potentialla ssp. (cinquefoil)
  - Rudbeckia ssp. (black-eyed Susan)
  - Schizachyrium scoparium (little bluestem)
  - Solidago ssp. (goldenrod)
  - Tridens flavus (purpletop)