

The tree conservation and buffer ordinances are based upon public benefit and welfare considerations for the community of Alpine and the region. In addition, the resulting buffer areas established also provide significant benefits to the property owners where they reside. These benefits include, but are not limited to, increased value of improved land, aesthetic enhancements to property, a decrease in visual, noise and air pollution and the microclimatic benefits from shade and wind protection. The proper maintenance of a buffer area enhances and fosters these benefits.

The make up of a natural buffer



In general, natural buffer areas are comprised of several zones or tiers. These include:

- THE UPPER STORY OR UPPER CANOPY OF SHADE TREES.
- THE UNDER STORY OR LOWER CANOPY OF SMALL TREES AND LARGE SHRUBS.
- THE FOREST FLOOR OR GROUND COVER.

These zones are interrelated in a system within stands of vegetation that grow and adapt over time in an evolving community of vegetation; when development changes occur, it often results in significant impacts to this plant community.

These zones or tiers are affected by changes related to man-made disturbances as well as natural changes. These changes include sun exposure, soil level, soil composition, wind exposure, water supply and runoff. This change or impact needs to be recognized and managed appropriately for a buffer area to achieve the intended benefits for the property owner as well as the surrounding community.

Buffer Maintenance Guidelines

DO:

Periodic tree inspection and maintenance: The upper-story and under-story trees should be periodically inspected by a certified arborist or other qualified trained professional to assess the appropriate maintenance considerations of pruning, pest and disease control and provide recommendations for their treatment.

Removal of hazardous, dead or diseased material: Sometimes due to changes associated with development or other environmental stresses, the removal of plant material that has become diseased, hazardous or dead may be required. These conditions should be addressed immediately but with consideration given to the remainder of the buffer. Should a tree or trees be required to be removed, the property owner should first contact the borough to see if a permit is required to perform such an action. Tree maintenance vehicles should not be permitted to enter into the buffer and should access the work area from the perimeter of the buffer area. Contractors should not be permitted to add soil or other construction material within the buffer. The removal or felling of a tree should be done in such a manner to minimize the disturbance to the remainder of the buffer. The tree stump should be flush cut with the ground or ground up with a stump grinder and should only be mechanically removed with an excavator if there is a hazardous condition that may result.

Removal of invasive exotic species: Invasive plants can be a concern for the successful maintenance of a buffer area. For a list of what are classified as an invasive exotic species refer to the National Resource Conservation Service office or information that is available on line at www.invasivespecies.gov. Noxious plants should also be controlled within a buffer area. These include but are not limited to Poison Ivy or Poison Sumac.

Lawn edging: Due to current lawn maintenance practices, including the use of weed trimmers, the edges of lawns adjacent to buffer areas should be kept back at least 5 to 10 feet from the base of a tree. This practice is required since weed trimmers and lawn mowers can cause significant damage to the tree trunk and basal root crown.

DO: continued

Replanting of buffer areas: Should it be necessary to replant within the buffer area, species that already exist in the buffer or are native to this area should be used. Many of these species are better adapted to the existing conditions and will require less watering and provide greater disease resistance. The following is offered as a guide for installation as replacement of plant material:

Shade Trees

- Sugar Maple (varieties)
- White & Seedless Green
- Ash *
- Honey Locust
- Red Oak
- American Sweetgum
- Black Gum
- Pin Oak
- Red Maple (varieties)
- White Oak



Evergreen Trees

- American Holly
- White or Norway Spruce
- White Pine
- Eastern Red Cedar



Ornamental Trees

- Eastern Redbud
- Flowering Dogwood
- Shadblow or Allegheny Serviceberry
- Washington Hawthorne
- River Birch
- Sweetbay Magnolia
- Witch hazel




Shrubs


- Blackhaw Viburnum
- Fothergilla
- Mountain Laurel
- Northern Bayberry
- Oakleaf Hydrangea
- Rosebay Rhododendron
- Virginia Sweetspine
- Arrowwood Viburnum
- Blueberry
- Grey or Yellow Dogwood
- Inkberry Holly
- Red or Black Chokeberry
- Winterberry Holly





- * Emerald ash borer advisory; consult with a tree expert regarding planting & protection.
- Wet site tolerant plant.

DON'T:

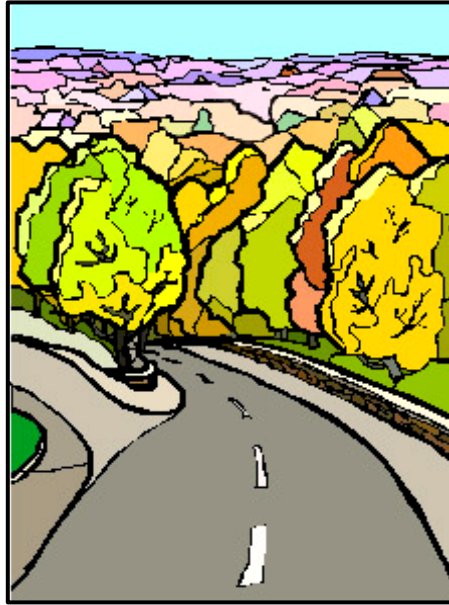
 Do not cut or fill soil within buffer area: Trees and other vegetation are very sensitive to changes in soil level in the canopy or "drip line" of the tree. A change of as little as 6 inches can significantly affect soil conditions and the corresponding health of the adjacent tree. The same goes when vehicles or storage of materials compact the root zone of plants. Excavations through or within buffer areas should be avoided unless absolutely necessary. If a trench is required to cross a buffer then the least destructive route should be chosen as well as the trench should be properly root-pruned prior to or during excavation.

 Do not remove vegetation indiscriminately: The indiscriminate removal of vegetation is specifically prohibited. Vegetation should only be removed to improve the health or condition of the buffer and to encourage re-establishment. The grubbing or removal of the under-story *should not* be performed since this vegetation provides a beneficial habitat for wildlife, and this vegetative cover reduces the space available for invasive species to become established.

 Do not "top" trees: Proper tree pruning should not include topping a tree to control the tree's height. This practice creates re-growth which will become hazardous and unhealthy for the tree.

 Do not use pesticides, fertilizers and weed-control chemicals: The excessive use of pesticides, fertilizers or weed control can have obvious effects on the vegetation in a buffer and some not so obvious. Excessive use of pesticides can affect the natural balance of the microenvironment within the buffer zone by reducing or eliminating beneficial microbes and insects that the vegetation is co-dependent upon for their existence. The use of excessive amounts of fertilizers can cause abnormal growth rates of vegetation that is weaker than the plant material which has grown under normal conditions. In addition, fertilizers can encourage invasive exotic species to overtake and shade out native vegetation within a buffer area. Excessive use of weed control chemicals within lawn areas that are adjacent to trees has been proven to negatively affect the trees' condition.

Enrich your community !



Preserve and manage
the buffer zone !

For the Borough of Alpine
Environmental Commission

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Borough of Alpine



Route 9W
Buffer Zone

Maintenance Guidelines

Alpine Environmental Commission