

Planting Trees in Vacant Lots

Description Many older urban areas have numerous vacant lots that cumulatively can increase watershed forest cover through reforestation. Planting trees in vacant lots can also provide much needed community green space for local residents. Other benefits of planting trees in vacant lots include wildlife habitat, shading, soil stabilization, improved air quality, and reduced stormwater runoff.

- Pre-Planting Considerations**
- Do I have landowner permission to plant trees?
 - How do I address concerns about vandalism, crime, vagrants, visibility, and safety?
 - Is there an opportunity to create wildlife habitat?
 - How do I address illegal dumping?
 - How do I manage invasive plants?
 - How do I address potential damage to trees from deer?
 - How do I address potential conflicts between trees and street lights, utilities, and pavement?
 - How do I address soil conditions such as severe compaction, building rubble, and potential contamination?
 - Is there an opportunity to provide a visual identity for the community?
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Species Selection Selecting appropriate tree species is key because it can address most site conditions and is often more efficient than trying to change the site characteristics. Select a diverse mix of hardy, native species that are adapted to soils and site conditions.

Other desirable species characteristics include the following:

- Tolerates drought
 - Tolerates urban pollutants (lead)
 - Tolerates poorly drained, compacted soils
 - Tolerates alkaline soils
 - Tolerates inundation (if used for stormwater treatment)
 - Fast-growing
 - Not an ornamental
 - Provides food, cover, or nesting sites for birds, squirrels and other wildlife.
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| Site Preparation | <input type="checkbox"/> | Clean up trash, rubble, or other illegally dumped material |
| | <input type="checkbox"/> | Remove invasive plants such as multiflora rose (may include mowing, cutting, or stump treatment) |
| | <input type="checkbox"/> | Bring in new soils or improve existing soil drainage (e.g., amend with compost, mix soils to a depth of 6 to 18 inches). |
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| General Planting Guidance | <input type="checkbox"/> | A defined edge shows the lot is being cared for. Install a border of street trees, fencing, or bollards around the perimeter to create this defined edge (Figure 35). Plant street trees or specimen trees around the perimeter of the site at spacing of 30-45 feet on center to allow mowing in between for invasive control. |
| | <input type="checkbox"/> | Provide clear sight lines around the site perimeter for pedestrian safety. This may involve mowing, limbing trees up to 6 feet, or planting only very low growing vegetation. |
| | <input type="checkbox"/> | Post signs, incorporate design elements into the site, and consider curb appeal to provide a visual identity for the community. |
| | <input type="checkbox"/> | Use trees to provide shade or screens where appropriate. |
| | <input type="checkbox"/> | Cluster trees in center of lot to provide shared rooting space and an even canopy, using species that grow at about the same rate so they do not shade each other out. Do not include turf in tree clusters. Instead, use mulch rings and mow around the clusters. |
| | <input type="checkbox"/> | Use small plant materials (e.g., seedlings, whips) where foot traffic is not an issue and larger stock elsewhere. Mix stock where both understory and canopy trees will be planted (e.g., use small understory stock and large canopy stock), or in tree clusters to protect seedlings (e.g., plant large stock around perimeter and seedlings in center). |
| | <input type="checkbox"/> | Install lighting and post signs to prevent illegal dumping and vandalism (Figure 36). |
| <input type="checkbox"/> | Use tree cages or benches to protect trees from vandalism. Or plant species with inconspicuous bark or thorns to discourage vandalism (Palone and Todd, 1998). | |
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| Maintenance | <input type="checkbox"/> | Plan for low maintenance of trees (frequent watering may not be feasible) |
| | <input type="checkbox"/> | Use mulch to retain moisture and protect trees from mowers and foot traffic. Do not mulch deeper than 3 inches or build up mulch around trunks. |
| | <input type="checkbox"/> | Mow around tree clusters, in setback areas, and other areas to maintain access, safety, and visibility |
| | <input type="checkbox"/> | Monitor and control invasive plants |
| | <input type="checkbox"/> | Prune trees where necessary to maintain visibility and safety. |
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Potential for Stormwater Treatment

Trees planted in vacant lots may be used to provide treatment of stormwater runoff if soils and the water table allow. Vacant lots may have significant area available for stormwater treatment practices, but if soils are highly disturbed and poorly drained, or water table is close to surface, treatment may be limited (or underdrain may be needed) to prevent soggy basements next door or standing water. Depending on available space, site conditions and runoff volume, the following types of practices may be used: stormwater wetlands, bioretention and bioinfiltration, swales, and filter strips. Trees can be incorporated into all of these treatment practices.

Further Resources

Palone, R. and A. Todd. 1998. *Chesapeake Bay Riparian Handbook: A Guide for Establishing and Maintaining Riparian Forest Buffers*. USDA Forest Service, Northeastern Area State and Private Forestry.

www.chesapeakebay.net/pubs/subcommittee/nsc/forest/handbook.htm

Pennsylvania Horticultural Society. 2002. *Reclaiming Vacant Lots*. Philadelphia, PA.

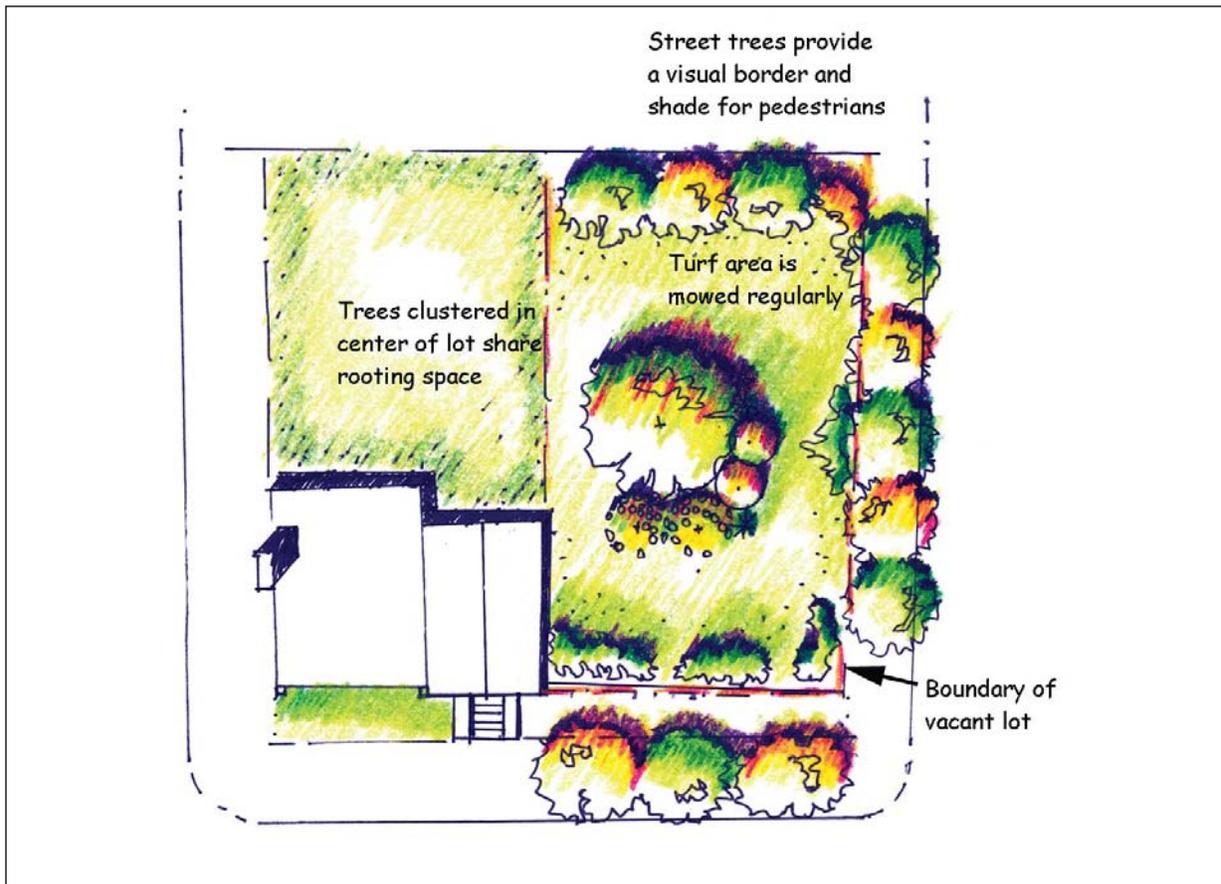


Figure 1. Planting trees in vacant lots—plan view

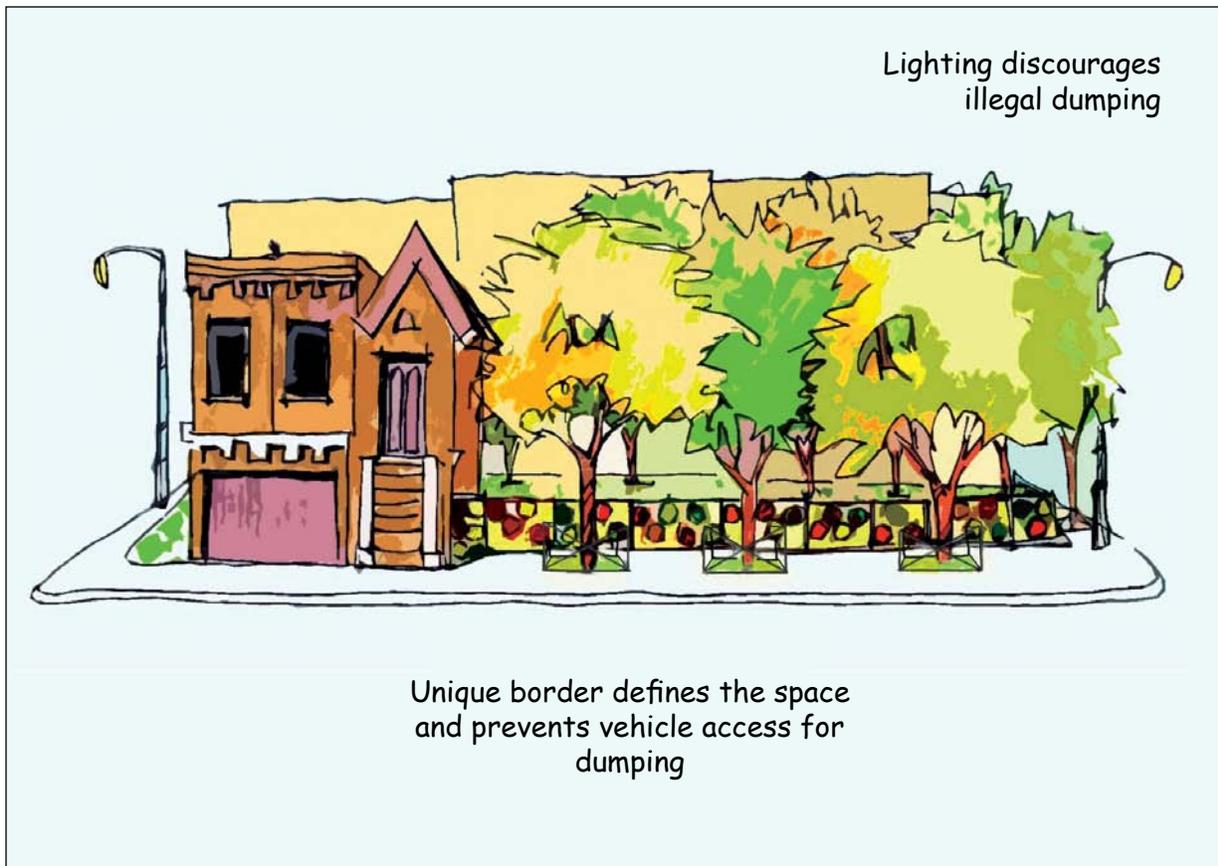


Figure 2. Planting trees in vacant lots--profile

This fact sheet was excerpted from:

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This information was developed by:

Center for Watershed Protection
8390 Main Street, 2nd Floor
Ellicott City, MD 21043
www.cwp.org

and

USDA Forest Service
Northeastern Area State and Private Forestry
11 Campus Boulevard, Suite 200
Newtown Square, PA 19073
www.na.fs.fed.us