

## Planting Trees in Utility Corridors

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### *Description*

Utility corridors are linear features that contain power and gas transmission lines. These corridors can be up to 150 feet wide and contain above- and below-ground utility lines. Most utility corridors are privately owned; therefore, their reforestation potential will depend on the vegetation management policy of the utility company. Planting trees in utility corridors can create wildlife habitat corridors, and improves air quality, stabilizes soil, reduces runoff, and reduces air temperature.

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### *Pre-Planting Considerations*

- Do I have permission of utility company to plant trees?
  - How do I address potential conflicts between trees and utilities?
  - How do I manage invasive plants?
  - Is there an opportunity to create habitat for wildlife?
  - How do I address potential damage to trees from deer?
  - How do I provide maintenance access to utility structures and visibility for fly-over inspections?
  - How do I address security concerns?
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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:

- Is a shrub or small tree less than 10 feet high when mature
  - Provides food, cover, or nesting sites for desired wildlife
  - Tolerates drought (rainfall may be the only source of water)
  - Tolerates inundation (if used for stormwater treatment)
  - Tolerates urban pollutants and poor soils.
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### *Site Preparation*

- Clean up trash and other illegally dumped material
- Remove invasive or unwanted plants such as multiflora rose (may include mowing, cutting, or spraying with herbicide approved for aquatic use)
- Improve soil drainage if needed (e.g., amend with compost, mix soils to a depth of 6 to 18 inches).

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**General  
Planting  
Guidance**

- Do not plant trees or shrubs along gas transmission lines since canopy limits ability to inspect lines for leaks. Establish meadow vegetation instead.
- Promote the growth of low-growing, shrub or scrub plant communities within electric transmission corridors. Do not plant trees greater than 10 feet mature height within 75 feet of electric transmission lines (Head and others, 2001). Instead, plant small trees, shrubs, or meadow vegetation (Figure 34).
- Create soft edges between the utility corridor and adjacent vegetation by providing a gradual transition from herbaceous vegetation to shrubs to trees as you move away from the power lines. These edges provide a diversity of habitat for wildlife.
- Provide setbacks from utility structures to provide maintenance access.

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**Maintenance**

- Plan for minimal maintenance of trees and shrubs (watering may not be feasible)
- Use mulch to retain moisture. Do not mulch deeper than 3 inches or build up mulch around trunks.
- Monitor and control invasive plants
- Use Integrated Vegetation Management (IVM) to maintain low-growing vegetative community (less than 10 feet in height). This includes mowing, hand removal of vegetation, and selective spraying of individual trees in early growing stage (Genua, 2000).
- Where utility corridor crosses the stream, do not mow within 50 feet and use only herbicides approved for aquatic use.

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**Potential for  
Stormwater  
Treatment**

Trees and shrubs planted in utility corridors may be used to provide treatment of stormwater runoff from nearby impervious surfaces. Linear stormwater treatment practices such as swales, bioretention, and filter strips are most applicable in a utility corridor. Perhaps the most appropriate use of trees for stormwater treatment in a utility corridor is a filter strip incorporating multiple vegetative zones to provide a gradual transition from herbaceous vegetation to trees. Design guidance for these practices is provide in Part 2 of this manual series.

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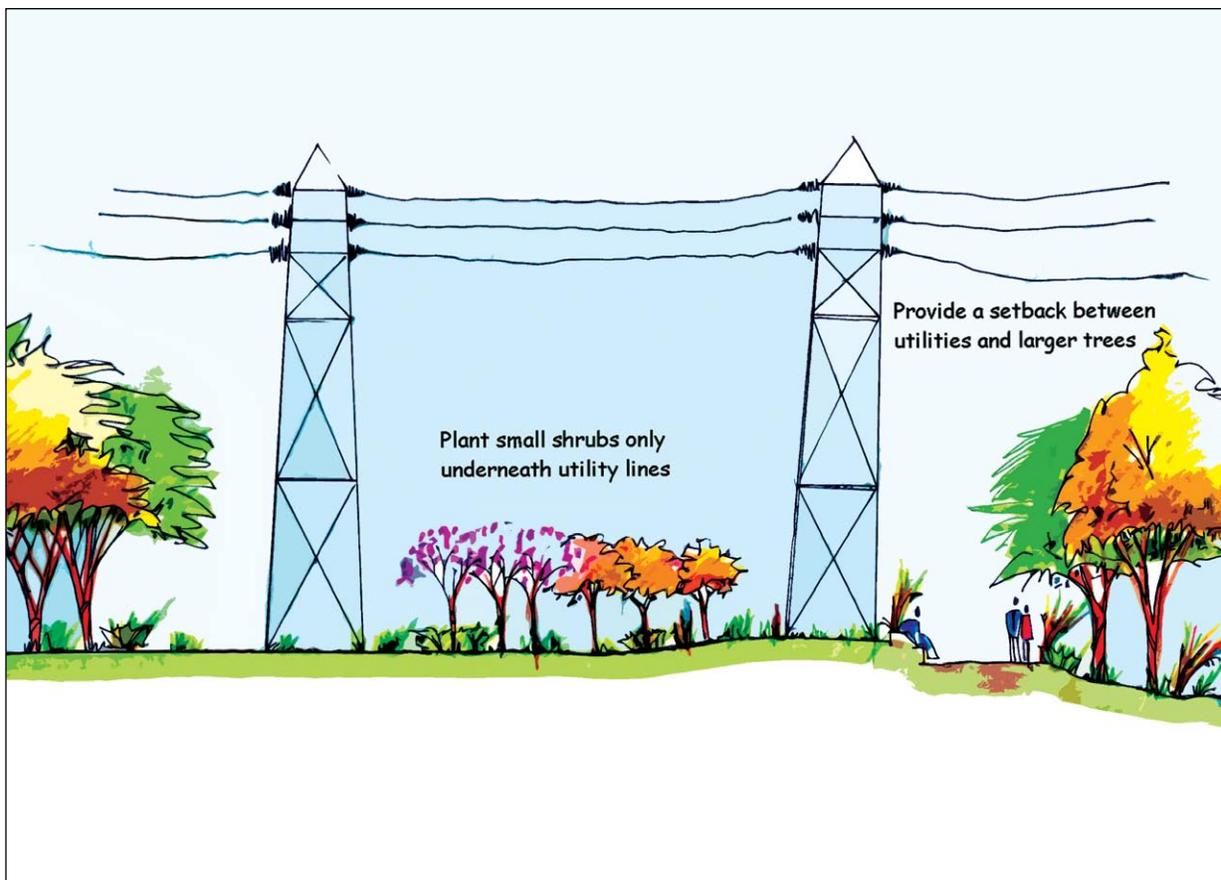
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**Further  
Resources**

Genua, S. M. 2000. *Converting Power Easements into Butterfly Habitats*.  
Potomac Electric Power Company (PEPCO).  
Online: [www.butterflybreeders.org/pages/powerease\\_sg.html](http://www.butterflybreeders.org/pages/powerease_sg.html)

Wildlife Habitat Council. Online: [www.wildlifehc.org/spotlight/index.cfm](http://www.wildlifehc.org/spotlight/index.cfm)

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