

## Native Trees for Riparian Buffers in Northern New Jersey Watersheds

| NAME  | DECID/<br>EVERGR | MATURE<br>HEIGHT | GROWTH<br>RATE | ROOTING              | LIGHT<br>PREFERENCE    |             | SOIL PREFERENCE |       |                   | WILDLIFE HABITAT<br>& FOOD VALUE  | ORNAMENTAL VALUE   | BANK<br>STABILIZATING<br>VALUE     |
|---|------------------|------------------|----------------|----------------------|------------------------|-------------|-----------------|-------|-------------------|---|--|------------------------------------|
|   |                  |                  |                |                      | full/<br>part<br>shade | full<br>sun | dry             | moist | flood<br>tolerant |   |  |                                    |
| Box Elder<br><i>Acer negundo</i>                      | d                | 40-70'           | very fast      | deep lateral         |                        | x           | x               | x     | x                 | low - seeds eaten; provides cover   | low  | very good,<br>esp. for flood chute |
| Red Maple<br><i>Acer rubrum</i>                       | d                | 40-75'           | mod-fast       | very shallow         | x                      | x           | x               | x     | x                 | high - seeds, buds eaten by birds & mammals   | early red flowers, bright fall color   | very good                          |
| Silver Maple<br><i>Acer saccharinum</i>               | d                | 60'              | moderate       | shallow              | x                      | x           |                 | x     | x                 | low - moderate; provides cover  | silvery foliage  | very good, esp.<br>for flood chute |
| Shadbush, Serviceberry<br><i>Amelanchier arborea</i>  | d                | 15-25'           | slow           | shallow              | x                      | x           | x               | x     | x                 | high - berries eaten by many songbirds; bluebirds, cardinals, orioles, thrushes   | masses of early white flowers, berries, bright fall color; effective screening | fair                               |
| Yellow Birch<br><i>Betula allegheniensis</i>          | d                | 60-90'           | slow           | shallow/<br>moderate | x                      |             | x               | x     |                   | high - seeds favorite winter food of pine siskins and redpolls; used by hawks for nesting   | shining golden bark  | fair                               |
| Black Birch<br><i>Betula lenta</i>                    | d                | 50-75'           | moderate       | shallow              | x                      |             |                 | x     |                   | moderate - catkins, seeds   | reddish brown bark   | fair                               |
| River Birch<br><i>Betula nigra</i>                    | d                | 70-80'           | rapid          | moderate             |                        | x           | x               | x     | x                 | medium - seeds eaten by grouse, turkey, small birds and rodents   | balanced, well framed growth habit & interesting features all season           | good erosion<br>control            |
| Grey Birch<br><i>Betula populifolia</i>               | d                | 20-35'           | fast           | shallow              | x                      |             | x               | x     |                   | moderate - seeds, buds  | gray bark  | fair                               |
| American Hornbeam<br><i>Carpinus caroliniana</i>      | d                | 20-30'           | slow           | moderate             | x                      | x           | x               | x     | x                 | moderate - seeds eaten by birds, squirrels  | gray bark, fall color  | fair                               |
| Pignut Hickory<br><i>Carya glabra</i>                 | d                | 60'              |                | deep                 | x                      | x           |                 | x     | x                 | high - nuts used by some mammals  | shade tree   | good                               |
| Atlantic White Cedar<br><i>Chamaecyparis thyoides</i> | e                | 80-85'           | moderate       | shallow              | x                      |             |                 | x     | x                 | low - preferred food of deer in winter  | dark green evergreen foliage   | excellent<br>rot resistance        |
| American Beech<br><i>Fagus grandifolius</i>           | d                | 70-90'           | slow           | shallow              | x                      | x           | x               | x     |                   | high - nuts valued by large and small mammals, turkey; favorite tree for black bears  | smooth gray bark in winter, copper fall color                                  | fair                               |
| White Ash<br><i>Fraxinus americana</i>                | d                | 70-100'          | moderate       | shallow              | x                      | x           |                 | x     | x                 | moderate  | purple fall color  | good                               |
| Green Ash<br><i>Fraxinus pennsylvanica</i>            | d                | 60-80'           | fast           | shallow              | x                      | x           |                 | x     | x                 | low   | purple fall color  | very good                          |
| American Holly<br><i>Ilex opaca</i>                   | e                | 40-50'           | slow           | shallow              | x                      | x           | x               | x     |                   | moderate - berries into late winter   | evergreen foliage, red berries   | fair                               |
| Black Walnut<br><i>Juglans nigra</i>                  | d                | 50-75'           | moderate       | very deep            | x                      |             |                 | x     |                   | high - nuts eaten by mammals; plant away from edge of water & from gardens: a chemical in the roots & husks of nuts affects fish & many garden plants | edible nuts, attractive shape  | fair                               |
| Eastern Red Cedar<br><i>Juniperus virginiana</i>      | e                | 40-50'           | slow           | shallow              |                        | x           | x               |       |                   | high - twigs and foliage eaten by deer; provide protective cover and nesting for songbirds; dense protective cover good for winter                    | evergreen foliage used for holiday decorations                                 | fair                               |

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|---|------------------|------------------|----------------|-----------------|------------------------|-------------|-----------------|-------|-------------------|--|--|--|
|   |                  |                  |                |                 | full/<br>part<br>shade | full<br>sun | dry             | moist | flood<br>tolerant |  |  |  |
| Tulip Poplar<br><i>Liriodendron tulipifera</i>    | d                | 100-120'         |                | deep            | x                      | x           | x               | x     |                   | low - some seeds utilized by birds and small mammals   | shade tree with showy flowers in uppermost branches  | good   |
| Black Gum<br><i>Nyssa sylvatica</i>               | d                | 50-60'           | moderate       | shallow         | x                      | x           |                 |       | x                 | high - various animals and birds feed off twigs and foliage; provides nesting for variety of birds                                       | attractive autumn foliage  | good in slower streams                           |
| Hophornbeam<br><i>Ostrya virginiana</i>           | d                | 25-50'           | slow           | shallow         | x                      | x           | x               | x     |                   | moderate - seeds   | yellow fall color; red bark  | fair   |
| White Pine<br><i>Pinus strobus</i>                | e                | 70-100'          | moderate       | shallow         |                        | x           | x               | x     |                   | high - food & cover for birds & mammals, inc. crossbills and cardinals   | feathery foliage; fair good year-round screen  |  |
| American Sycamore<br><i>Platanus occidentalis</i> | d                | 80-100'          | rapid          | moderate        |                        | x           |                 | X     | X                 | high - seeds provide food for birds and small mammals  | unique, colorful bark on upper branches  | useful in early establishment in disturbed sites |
| Quaking Aspen<br><i>Populus tremuloides</i>       | d                | 40-60'           | fast           | shallow         |                        | x           | x               | x     |                   | moderate - beaver, porcupine, deer; favorite food of beaver; buds important to grouse  | can be brittle and also drop branches; fluttering gray-green leaves                        | fair   |
| Black Cherry<br><i>Prunus serotina</i>            | d                | 40-60'           | moderate       | deep taproot    | x                      | x           | x               |       |                   | high - berries eaten by many songbirds, mammals, including thrushes, foxes, bears, raccoons; avoid planting near areas used by livestock | flowers, attractive reddish brown bark; however, prone to tent caterpillar and fire blight | fair   |
| Swamp White Oak<br><i>Quercus bicolor</i>         | d                | 60-70'           | rapid          | lateral         | x                      | x           |                 | x     | x                 | high - provide cover for birds and mammals, acorns important for wildlife  | shade tree for large lawns, attractive fall foliage  | good in slower streams                           |
| Pin Oak<br><i>Quercus palustris</i>               | d                | 70-80'           | rapid          | moderate        | x                      | x           | x               | x     |                   | high- abundant small acorns  | good growth rate, longevity, fall foliage attractive                                       | good   |
| Willow Oak<br><i>Quereus phellos</i>              | d                | 80-100'          | rapid          | lateral         | x                      | x           |                 | x     |                   | high - acorns relished by game animals and birds   | shade tree   | good at fluctuating level reservoirs             |
| Northern Red Oak<br><i>Quercus rubra</i>          | d                | 60-80'           | moderate       | deep lateral    | x                      | x           | x               | x     |                   | high - acorns for bear, raccoon, turkey, grouse; favored by hawks for nesting  | attractive shape, fine fall color  | good   |
| Black Willow<br><i>Salix nigra</i>                | d                | 50'              | very fast      | very shallow    |                        | x           |                 | x     | x                 | high - cover for nesting   | new foliage is attractively colored  | excellent, esp. for flood chute                  |
| Willows (tree-like).<br><i>Salix sp.</i>          | d                | 30-60'           | rapid          | shallow         |                        | x           | x               | x     | x                 | low - buds can provide winter food   | early spring green foliage   | excellent  |
| Basswood<br><i>Tilia americana</i>                | d                | 70-80'           | moderate       | deep            | x                      | x           |                 | x     |                   | moderate   | attractive foliage and shape   | fair   |
| Hemlock<br><i>Tsuga canadensis</i>                | e                | 40-70'           | moderate       | shallow lateral | x                      |             | x               | x     |                   | moderate - winter deer cover, seeds eaten by small mammals, chickadees, siskins, crossbills, grouse; nesting cover for warblers          | attractive foliage, land screen; subject to insect pest - woolly adelgid damage            | good   |

adapted from *Riparian Buffers in Northern New Jersey Watersheds*