

RIPARIAN RESTORATION PROJECT

POPHANDUSING CREEK- WHITE TOWNSHIP

PHASE 1 of 3

Riparian Forest Buffers

Communities of trees, shrubs and other plants growing along streams and lakes.

Buffer Benefits

Protect and enhance the water quality of streams and their aquatic environments by filtering non-point source pollutants such as sediment and nutrients from storm water runoff. Buffers also reduce streambank erosion and provide improved wildlife and fisheries habitat.

Additional Buffer Information:
www.northjerseyrcd.org

Objectives of the Riparian Forest Buffer Projects were to demonstrate:

1. Effective site design utilizing naturally-occurring plant communities
2. Design flexibility that can incorporate such things as aesthetics & environmental benefit to a waterway in a residential setting
3. The use of native plants

Waterway Buffered: Pophandusing Creek tributary to Pequest River

Location: Brookfield Condominium, White Township, Warren County

Description: A freshwater trout maintenance creek flows around half the perimeter of the Brookfield Condominium complex. This complex of 274 single family homes is off CR 519. The completed buffer (3 phases) consists of 497 native trees representing 17 different species & 317 native shrubs of 13 different species.

Size: Phase I, 530 feet long, 0.6 acres

Planting Date: May 2002 (Phase I of 3)

Phase I Cost: \$8,000.00

Total Cost: \$20,621.00



Site prior to planting January 2003



North Jersey
Resource
Conservation
and
Development

54 Old Highway 22
Suite 201
Clinton, NJ 08809-1389

Phone: 908-735-0733

RIPARIAN RESTORATION PROJECT

POPHANDUSING CREEK- WHITE TOWNSHIP

PHASE 1 of 3

Dominant Trees & Shrubs Planted

Trees:

- Sycamore
- Tuliptree
- River Birch
- Green Ash
- Swamp White Oak
- Pin Oak
- Flowering Dogwood
- Silver Maple

Shrubs:

- Red Twig Dogwood
- Smooth & Speckled Alder
- Chokeberry
- Arrowwood
- Winterberry
- Highbush Blueberry

Additional Buffer Information:

www.northjerseyrcd.org
or
www.rce.rutgers.edu/njriparianforestbuffers

Project Partners & Volunteers: The riparian forest buffer demonstration is part of a larger regional project, it was coordinated and implemented by North Jersey RC&D and Natural Resources Conservation Service (NRCS). The design was created by a Belvidere High School Advanced Landscape Design student. The Belvidere High School Advanced Landscape Design class and Future Farmers of America and Condominium association residents were invaluable participants in the planting and establishment of the demonstration site.

Project Funding: Originated from U.S. Environmental Protection Agency Nonpoint Source Pollution 319h grant program administered by the NJ Department of Environmental Protection through a grant awarded to the North Jersey RC&D.

Design Components

1. Buffer Installation: deer resistant species
2. Aesthetics: herbaceous beds of native flowering species are incorporated along the outer edge of the buffer
3. Inundation-Tolerance: species tolerant to periods of standing water planted in low-lying areas



Phase I: After planting May 2003



Phase I: One year after planting August 2004

RIPARIAN RESTORATION PROJECT

POPHANDUSING CREEK- WHITE TOWNSHIP

PHASE 2 of 3

Riparian Forest Buffers

Communities of trees, shrubs and other plants growing along streams and lakes.

Buffer Benefits

Protect and enhance the water quality of streams and their aquatic environments by filtering non-point source pollutants such as sediment and nutrients from storm water runoff. Buffers also reduce streambank erosion and provide improved wildlife and fisheries habitat.

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Waterway Buffered: Pophandusing Creek tributary to Pequest River

Location: Brookfield Condominium, White Township, Warren County

Description: A freshwater trout maintenance creek flows around half the perimeter of the Brookfield Condominium complex. This complex of 274 single family homes is off CR 519. The completed buffer (3 phases) consists of 497 native trees representing 17 different species & 317 native shrubs of 13 different species.

Size: Phase 2, 1020 feet long, 1.1 acres

Planting Date: May 2004 (Phase 2 of 3)

Phase 2 Cost: \$6,973.00

Total Cost: \$20,621.00



Phase 2 prior to planting January 2003



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RIPARIAN RESTORATION PROJECT

POPHANDUSING CREEK- WHITE TOWNSHIP

PHASE 2 of 3

Dominant Trees & Shrubs Planted

Trees:

- Red Maple
- River Birch
- Flowering Dogwood
- Tulip Poplar
- Sycamore
- Pin Oak
- Boxelder Maple

Shrubs:

- Red Twig Dogwood
- Speckled Alder
- Smooth Alder
- Chokeberry
- Arrowwood
- Winterberry
- Highbush Blueberry

Herbaceous:

- Goldenrod
- Black-eyed Susan
- Purple Cone Flower
- New York Aster

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Project Funding: Originated from U.S. Environmental Protection Agency Nonpoint Source Pollution 319h grant program administered by the NJ Department of Environmental Protection through a grant awarded to the North Jersey RC&D.

Design Components

1. Buffer Installation: deer resistant species
2. Aesthetics: herbaceous beds of native flowering species are incorporated along the outer edge of the buffer
3. Inundation-Tolerance: species tolerant to periods of standing water planted in low-lying areas



Phase 2: After planting August 2004

Additional Buffer
Information:
www.northjerseyrcd.org
or
[www.rce.rutgers.edu/
njriparianforestbuffers](http://www.rce.rutgers.edu/njriparianforestbuffers)

RIPARIAN RESTORATION PROJECT

POPHANDUSING CREEK- WHITE TOWNSHIP

PHASE 3 of 3

Riparian Forest Buffers

Communities of trees, shrubs and other plants growing along streams and lakes.

Buffer Benefits

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Waterway Buffered: Pophandusing Creek tributary to Pequest River

Location: Brookfield Condominium, White Township, Warren County

Project Description: A freshwater trout maintenance creek flows around half the perimeter of the Brookfield Condominium complex. This complex of 274 single family homes is off CR 519. The completed buffer (3 phases) consists of 497 native trees representing 17 different species & 317 native shrubs of 13 different species.

Buffer Size: Phase 3, 1140 feet long, 3.3 acres

Buffer Planting Date: May 2005 (Phase 3 of 3)

Phase 3 Buffer Planting Cost: \$5,648.00

Total Buffer Planting Cost: \$20,621.00



Phase 3: Prior to planting January 2003



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PHASE 3 of 3

Dominant Trees & Shrubs Planted

Trees:

- Swamp White Oak
- Silver Maple
- Black Birch
- Gray Birch
- Green Ash
- Tulip Poplar
- American Elm
- Sweetbay
- Magnolia

Shrubs:

- Red Osier Dogwood
- Grey Dogwood
- American Cranberry
- Elderberry
- Black Chokeberry

Project Partners & Volunteers: The riparian forest buffer demonstration is part of a larger regional project, it was coordinated and implemented by North Jersey RC&D and Natural Resources Conservation Service (NRCS). The design was created and installed by Eco-Bound, Inc.

Project Funding: Originated from U.S. Environmental Protection Agency Nonpoint Source Pollution 319h grant program administered by the NJ Department of Environmental Protection through a grant awarded to the North Jersey RC&D.

Design Components

1. Buffer Installation: deer resistant species, tree tube protection of seedlings to promote plant growth and protect from deer browse
2. Smaller, less expensive plant material was used in Phase 3 s the planting area is further from the residential units



Phase 3: After planting September 2005

Additional Buffer Information:

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[www.rce.rutgers.edu/
njriparianforestbuffers](http://www.rce.rutgers.edu/njriparianforestbuffers)