



Bolling Branch Restoration Factsheet

Property Owners: Dennis and Tracey Liberson

Partners: The Nature Conservancy, Fauquier County, Williamsburg Environmental Group, Environmental Quality Resources

Bolling Branch Restoration Work:

- Restoration work began January 2009;
- More than 1 mile of Bolling Branch and 2,300 additional feet of other tributaries have been restored;
- 6 acres of wetlands and open water have been created or enhanced;
- A 100-400 foot stream buffer has been created, with 14,500 native plants (70 different species);
- 42 total acre restoration area;
- Replaced a triple culvert with bridge;
- Restoration will be monitored by The Nature Conservancy.

Outcomes:

- Increased water quality;
- Increased oxygen in the water;
- Lower water temperatures;
- Increased water invertebrates;
- Increased capacity to absorb flood events;
- Improved habitat for fish, wildlife, plants;
- Before this project was undertaken, close to 1,000 tons of sediment were annually eroding from the onsite portion of Bolling Branch and being conveyed into Goose Creek.

Bolling Branch watershed:

- 7 square miles;
- 28 species of fish—bass, bluegill, sunfish, daces, chubs, and minnows;
- Within a 5 mile radius of Dennis and Tracey's property are 19,000 acres of protected lands, through 82 Fauquier County Open Space and Virginia Outdoor Fund easements;
- George Washington and Supreme Court Chief Justice John Marshall owned property along Bolling Branch.

Goose Creek Watershed:

- 350 square mile watershed with 835 stream miles;
- Fauquier and Loudoun Counties;
- Virginia Scenic River;
- Drinking water for Fairfax and parts of Leesburg;
- 9 federal and state endangered/threatened species: bald eagle, loggerhead shrike, cerulean warbler, upland sandpiper, Henslow's sparrow, Appalachia darter yellow lance, regal fritillary, dwarf wedgemussel.

Potomac watershed:

- 14,670 square mile watershed in 4 states plus District;
- 383 river miles;
- 6 million people in watershed;
- 90% of DC metro area's drinking water.

Chesapeake Bay watershed:

- 64,000 square mile watershed in 6 states plus District;
- Largest estuary in the US;
- Longer coastline than California, Oregon, and Washington states combined;
- 16 million people;
- 3,600 species of animals, fish, and plants;
- 29 species waterfowl, with 1 million individuals wintering in the Bay region;
- 500 million pounds of seafood a year, \$50 billion in commercial sales.

Bad News:

- 291 million pounds of nitrogen, 13.8 millions pounds of phosphorous, 3.3 million tons of sediment reached the Bay in 2008;
- 100 acres of forest are lost every day in the watershed;
- 41% increase in impervious surfaces during the 1990s, with 8% population increase;
- Up to 40% of the Bay's mainstem has been a low-oxygen "dead zone" in summer (2003);
- Native oysters down to 2% historic range;
- Blue crab population has fallen 70% since 1990.

Good News:

- Nitrogen and phosphorous reaching the Bay has been going down from 20-year average;
- Native oyster aquaculture is showing promise in Lynnhaven and Rappahannock Rivers;
- Thanks to Governor Kaine's commitment, we are well on pace to meet his goal of preserving 400,000 acres of forestland within his term, with 335,000 now under protection;
- The work of committed Virginians like Dennis and Tracey Liberson.

The Nature Conservancy is a leading conservation organization working around the world to protect ecologically important lands and waters for nature and people. To date, the Conservancy and its more than one million members have been responsible for the protection of more than 18 million acres in the United States and have helped preserve more than 117 million acres in Latin America, the Caribbean, Asia and the Pacific. Visit The Nature Conservancy on the Web at www.nature.org.