

Multidisciplinary, Multicultural,
Urban Watershed Protection and
Environmental Education Project

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RADNOR LAKE

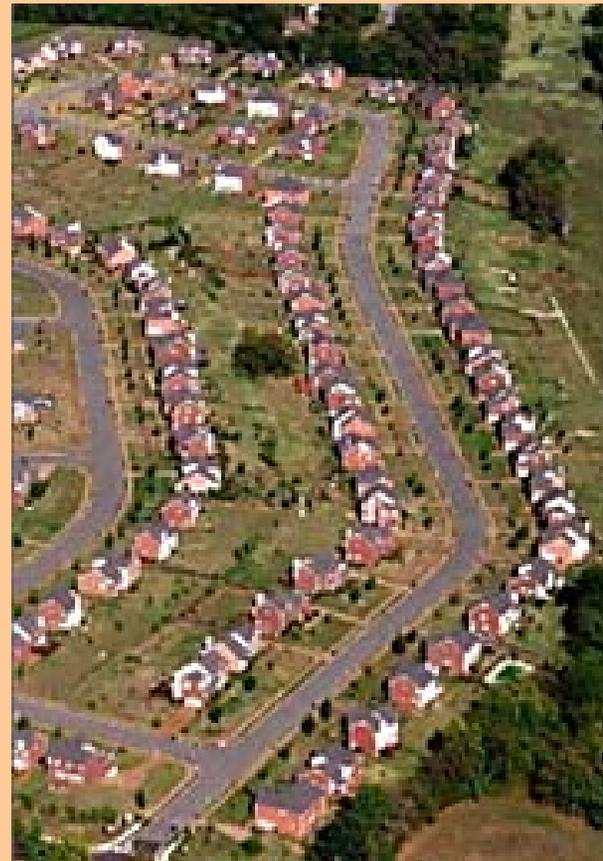


85 Acre Lake formed by
impoundment of Otter
Creek (1914)

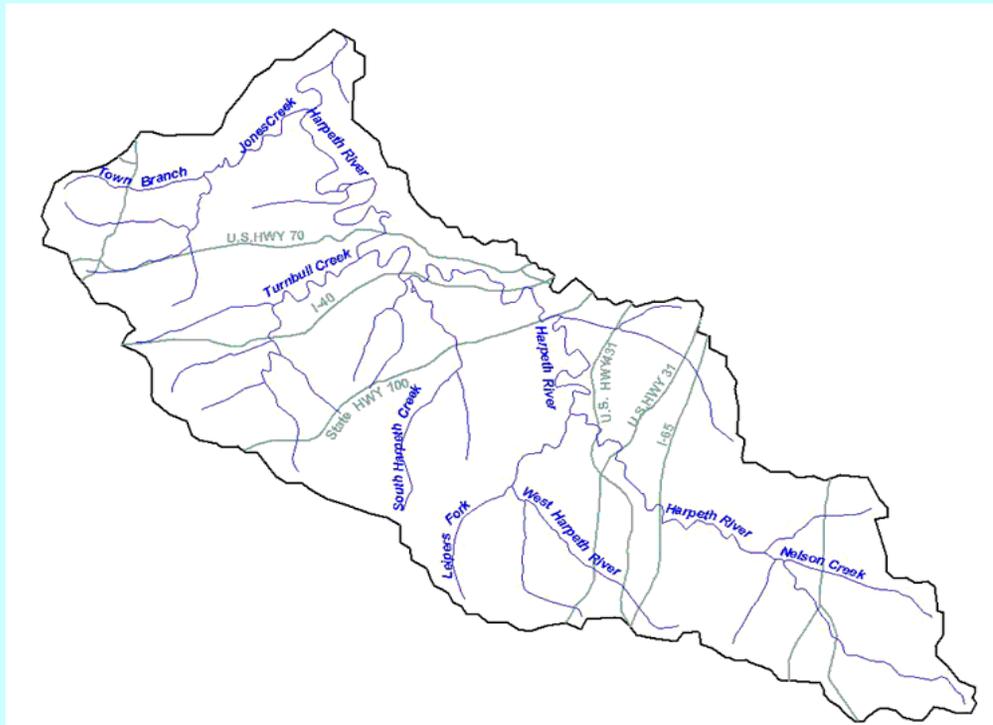
Tennessee's first State
Preserve (1973)

URBAN SPRAWL

- The land in and around the Radnor Lake Watershed is rapidly becoming covered by commercial and residential development.



HARPETH RIVER WATERSHED



Radnor Lake is
part of the
Harpeth River
Watershed,
Davidson
County, TN

Watershed Impacts?

- Runoff (P and N) from chemically treated lawns
- Runoff from roads, roofs, and other paved surfaces
- Sediment load from construction sites



Watershed Impact Assessment

- LANDSAT Imagery (Shapefiles)
- Digital Orthophoto Quadrangles (DOQs)
- Digital Elevation Models (DEMs)
- ArcView GIS
- IDRISI GIS

Remote Sensing Applications

- To the right is the Digital Orthophoto Quad for Nashville, Tennessee (1995). Radnor Lake is immediately south of this area.



Hydrologic Model

- Radnor Lake/Otter Creek has not been tested for water quality in over 10 years.
- We will test for P and N and turbidity – Sample points will be recorded using GPS unit.
- Differences between old and new results will be examined and compared using hydrological model of watershed runoff
- Potential sources of non-point source pollution will be located per results of the model.

Community Environmental Education

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<http://sites.netscape.net/radnorlaketsu>

