

# ORANGE WATER AND SEWER AUTHORITY

## LAND AND EASEMENT PURCHASES FOR WATER SUPPLY PROTECTION

July 2019

**PURPOSE:** To provide information about OWASA's efforts to protect drinking water quality by selectively purchasing land and conservation easements in the Cane Creek Reservoir and University Lake watersheds.

**BACKGROUND:** OWASA's policy is "to provide high quality drinking water through a combination of source protection and water treatment technology." Source protection efforts to date have included limits on the extension of water/sewer service into the Cane Creek Reservoir and University Lake watersheds; support for stringent zoning and land use controls; restrictions on in-lake recreational activities; financial support for agricultural Best Management Practices; special technical studies and educational activities; and the strategic purchase of property or conservation easements in areas determined to be critical for water quality protection – which is the focus of this information brief. OWASA spent \$7.8 million on land acquisition between 1991 and 2006 (purchase and conservation easements) and grant funds covered \$3.0 million of these land costs. (Note: these costs have not been adjusted for inflation and do not reflect ancillary expenses for legal, survey, appraisals, other site work, or administrative costs of OWASA staff time).

**University Lake:** Land acquisition was among the options evaluated in the University Lake watershed management plan commissioned in the late 1980s (*University Lake Watershed Study, CDM, 1989*). Water quality modeling indicated that permanently protecting 2,900 acres (approximately 15%) of the watershed would have only slight water quality benefits and not justify the multi-million dollar cost, but that "selected land acquisition in critical areas of the watershed may be appropriate." This recommendation was later confirmed in a follow-up analysis (*A Planning and Land Acquisition Model for University Lake Watershed – Scoping Analysis, Revised Draft, Tetra Tech, May 12, 2002*), which found that land acquisition would probably not be effective, but "a possible exception may apply to undeveloped land very near the lake," and that conservation easements along stream buffers "would be particularly valuable near the downstream ends of tributaries as they approach University Lake."

Based on these technical recommendations, OWASA elected not to pursue a program of land or easement acquisition in the University Lake watershed, but in 2006 purchased (with the help of a \$1.2 million NC Clean Water Management Trust Fund grant) the 73-acre Ray Heirs property along Morgan Creek immediately upstream of University Lake. This property was placed under a perpetual restrictive conservation easement that protects all riparian areas and severely restricts future development; subdivided into two large tracts; and re-sold on the open market in 2011 – with all restrictions in place.

**Cane Creek Reservoir:** The primary recommendations of a 1996 study (*Cane Creek Reservoir Watershed Study, the Cadmus Group, August 1996*) included large lot (5 acres or greater) residential re-zoning and the permanent protection of 1,265 additional acres of watershed land either through fee simple purchase or conservation easements. OWASA adopted that goal and subsequently protected an estimated 1,075 acres of additional Cane Creek Reservoir watershed land based on land records data through purchase or through conservation easements. Since 1997, Orange County's Land Legacy Program and other groups also acquired protective conservation easements on approximately 370 acres in the Cane Creek watershed. Together, OWASA, Orange County, and other group's land protection efforts have exceeded OWASA's original goal. OWASA and Orange County staff continue to work closely in coordinating the needs of our respective programs as the County protects additional land in the watershed and elsewhere.

OWASA's Watershed Land Acquisition Program  
July 2019

**STATUS:** Because the land acquisition recommendations of OWASA's previous technical studies have been achieved, no further investments are budgeted for future years for additional land acquisition.

**FOR MORE INFORMATION:**

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