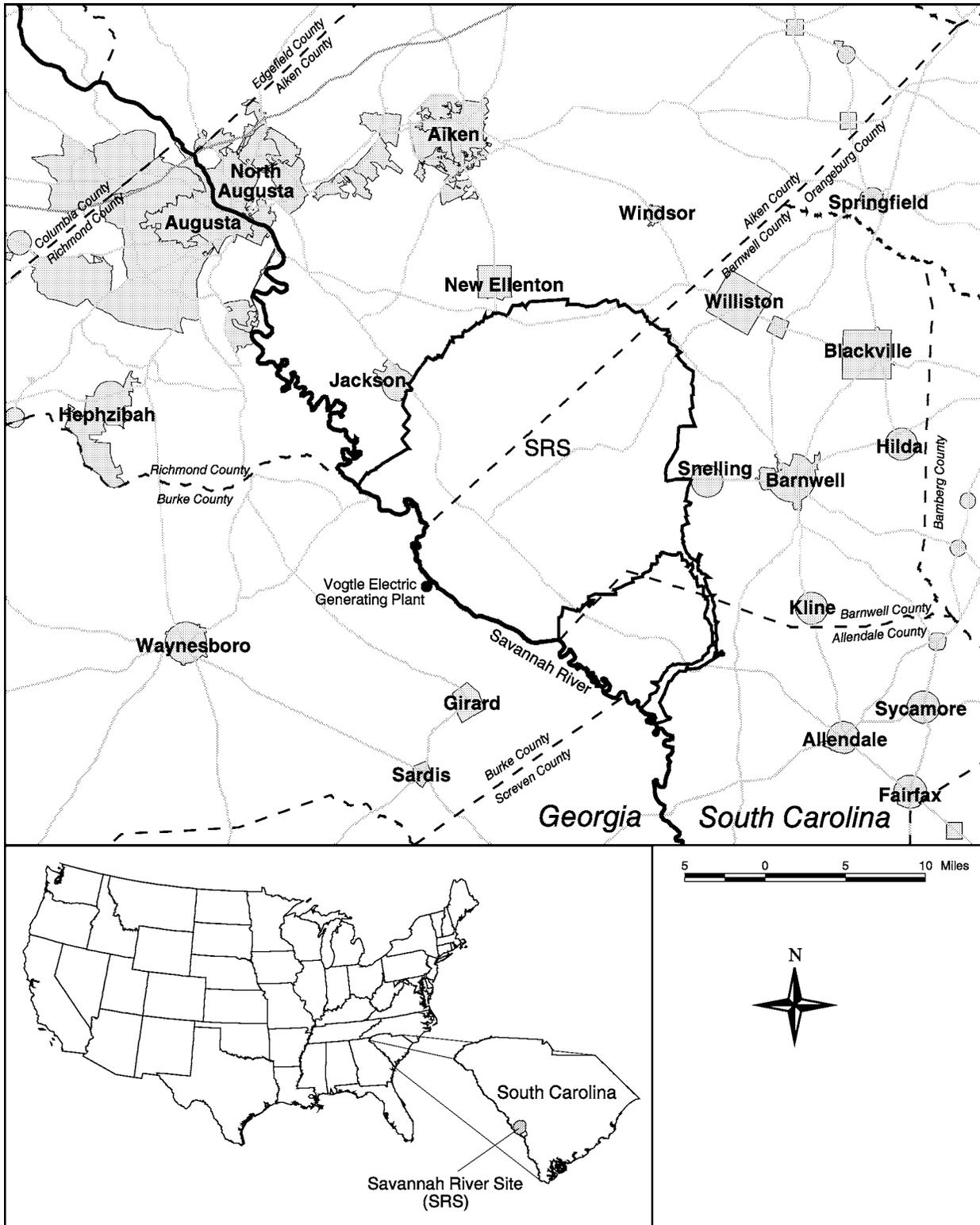


SRS Maps

- **Site**
- **Sampling Locations**
- **Doses**
- **Groundwater**

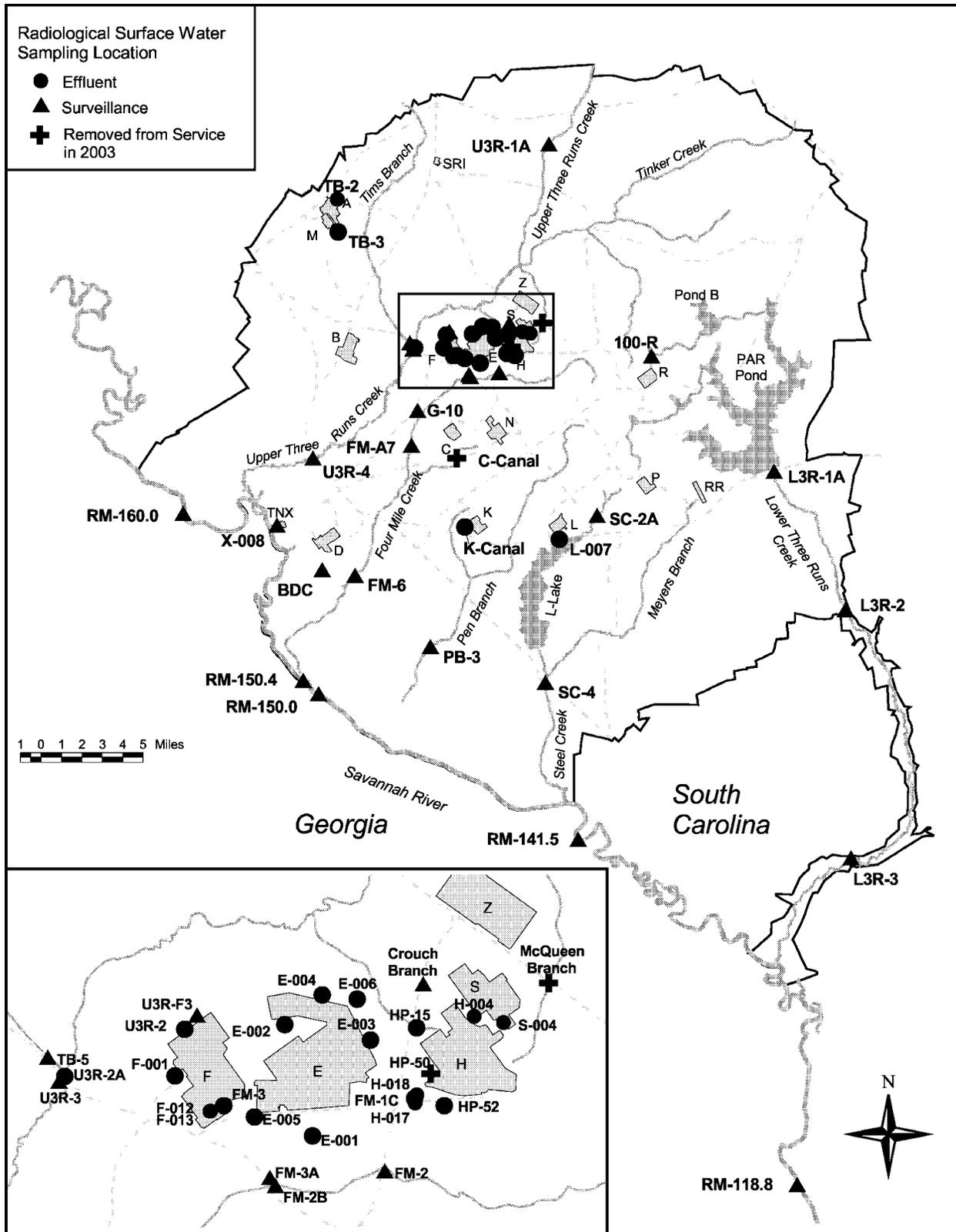
Savannah River Site Environmental Report for 2003



SRTC Map

Figure 1 The Savannah River Site

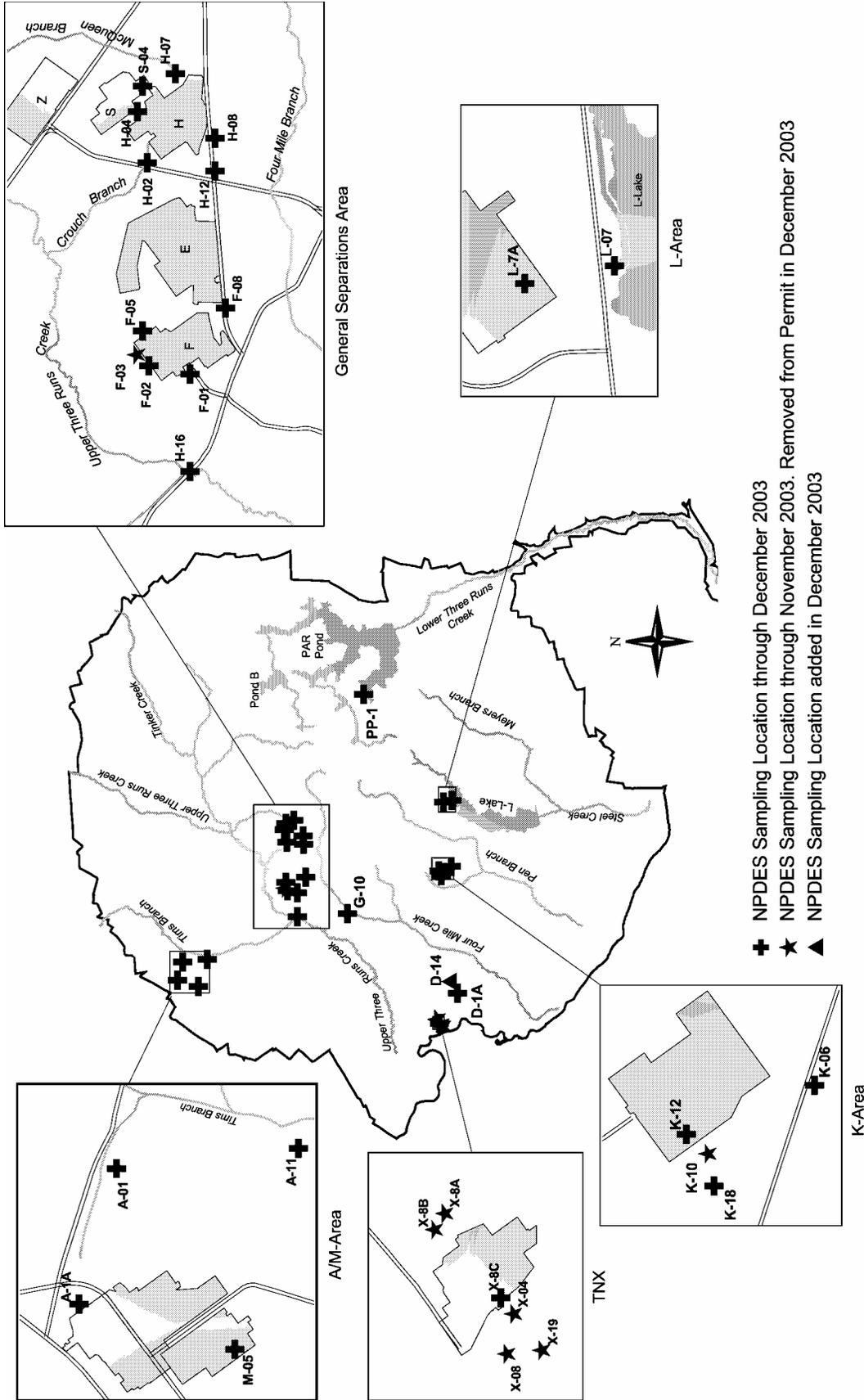
SRS is located in South Carolina, about 12 miles south of Aiken, South Carolina, and about 15 miles southeast of Augusta, Georgia. The Savannah River flows along a portion of its southwestern border.



ESS/SRTC Map

Figure 2 Radiological Surface Water Sampling Locations

Surveillance and effluent sampling points are near SRS facilities, on site streams and on the Savannah River.

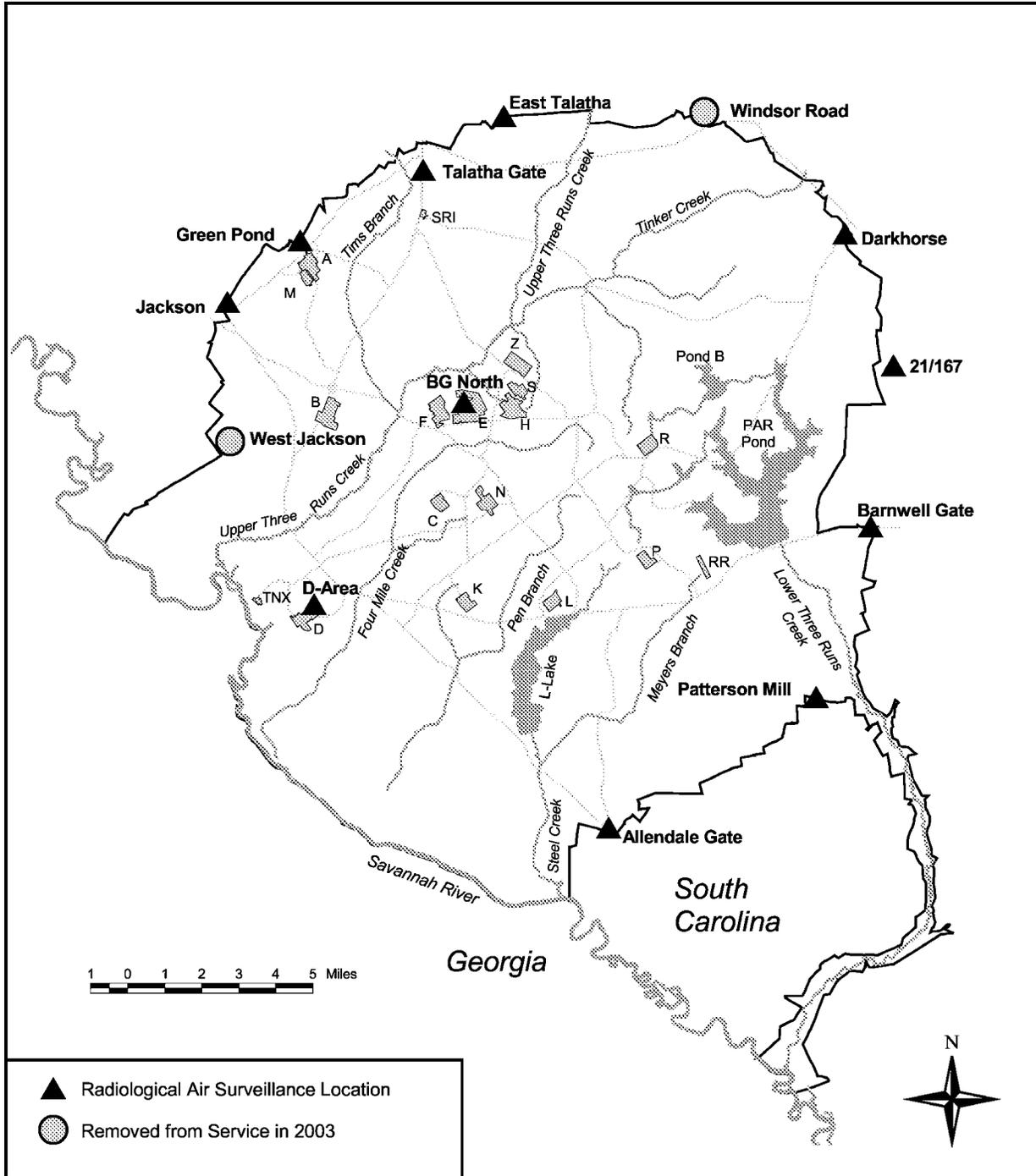


ESS/SRTC Map

- ⊕ NPDES Sampling Location through December 2003
- ★ NPDES Sampling Location through November 2003. Removed from Permit in December 2003
- ▲ NPDES Sampling Location added in December 2003

Figure 3 NPDES Sampling Locations

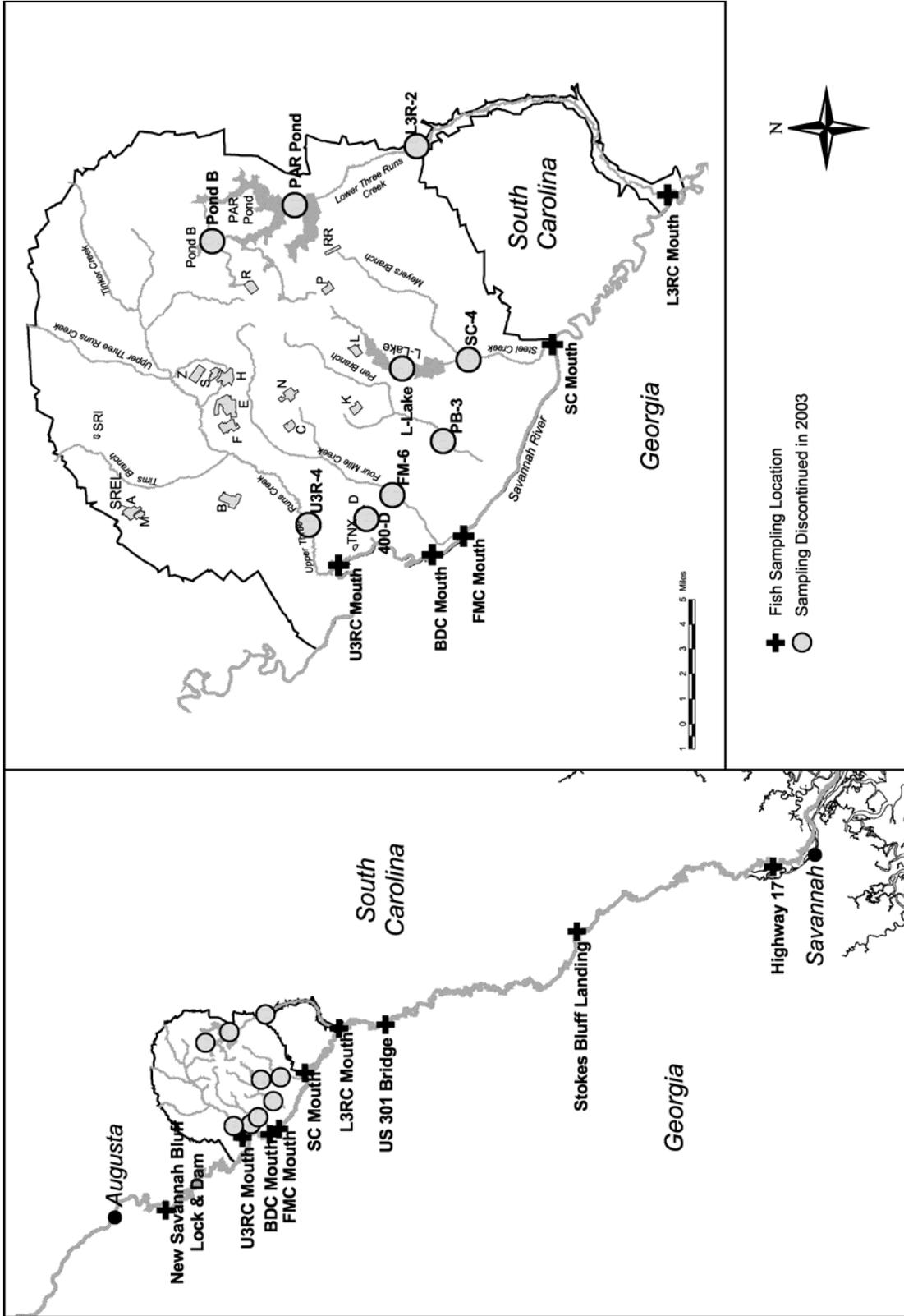
Thirty-one industrial wastewater outfalls were regulated at SRS under NPDES Permit SC0000175 through November 2003. Twenty-five such outfalls were regulated under the renewed permit in December.



ESS/SRTC Map

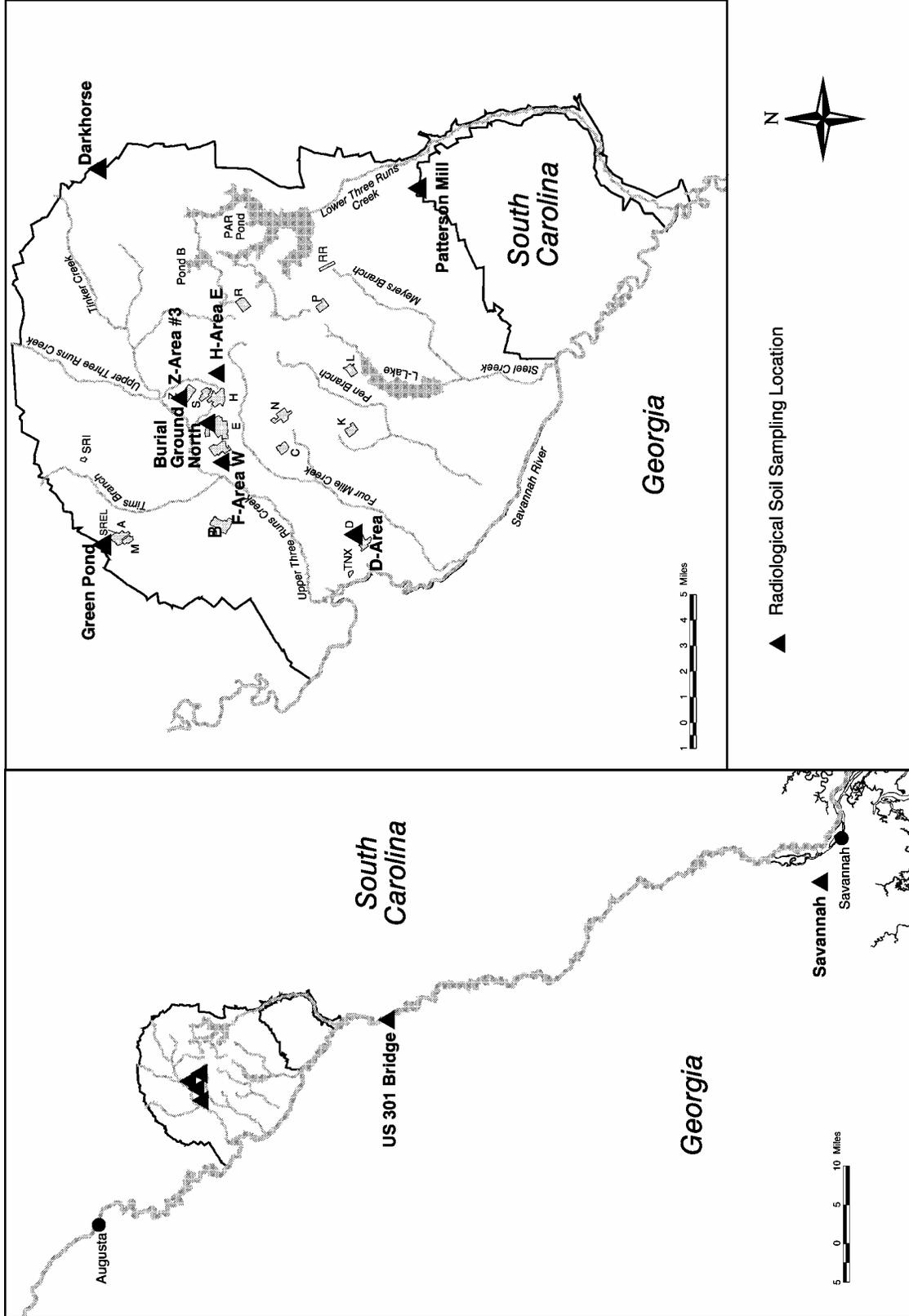
Figure 4 Radiological Air Surveillance Sampling Locations

The SRS air surveillance program consists of 11 stations (reduced in 2003 from 13) located on site or along the site perimeter, as well as (not shown) three stations approximately 25 miles from the site perimeter (located near the U.S. Highway 301 Bridge over the Savannah River; the New Savannah Bluff Lock and Dam, also known as the Augusta Lock and Dam; and the Aiken airport) and one about 100 miles from the site perimeter (near Savannah Georgia)



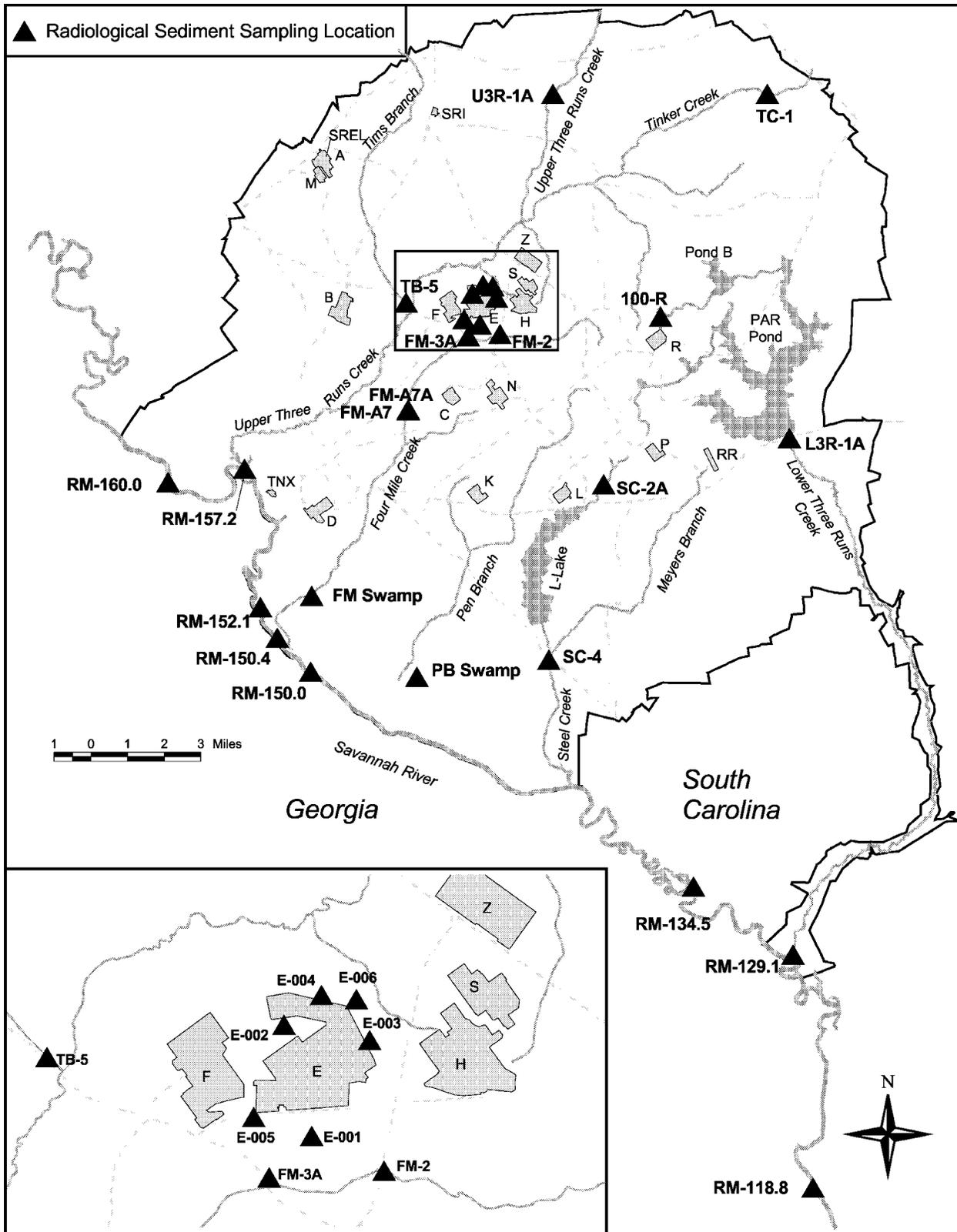
ESS/SRTC Map

Figure 5 SRS Fish Sampling Locations
 SRS collects fish (for both radiological and nonradiological analyses) from the Savannah River above, adjacent to, and below the site, as well as at Stokes Bluff Landing and near Savannah, Georgia.



ESS/SRTC Map

Figure 6 Radiological Soil Sampling Locations
 SRS collected soil samples in 2003 from four onsite locations, four site perimeter locations, and two offsite locations—one near the U.S. Highway 301 Bridge over the Savannah River and one near Savannah, Georgia.



ESS/SRTC Map

Figure 7 Radiological Sediment Sampling Locations

Sediment samples were collected in 2003 at eight Savannah River locations—upriver of, adjacent to, and downriver of the site—and 19 onsite locations.

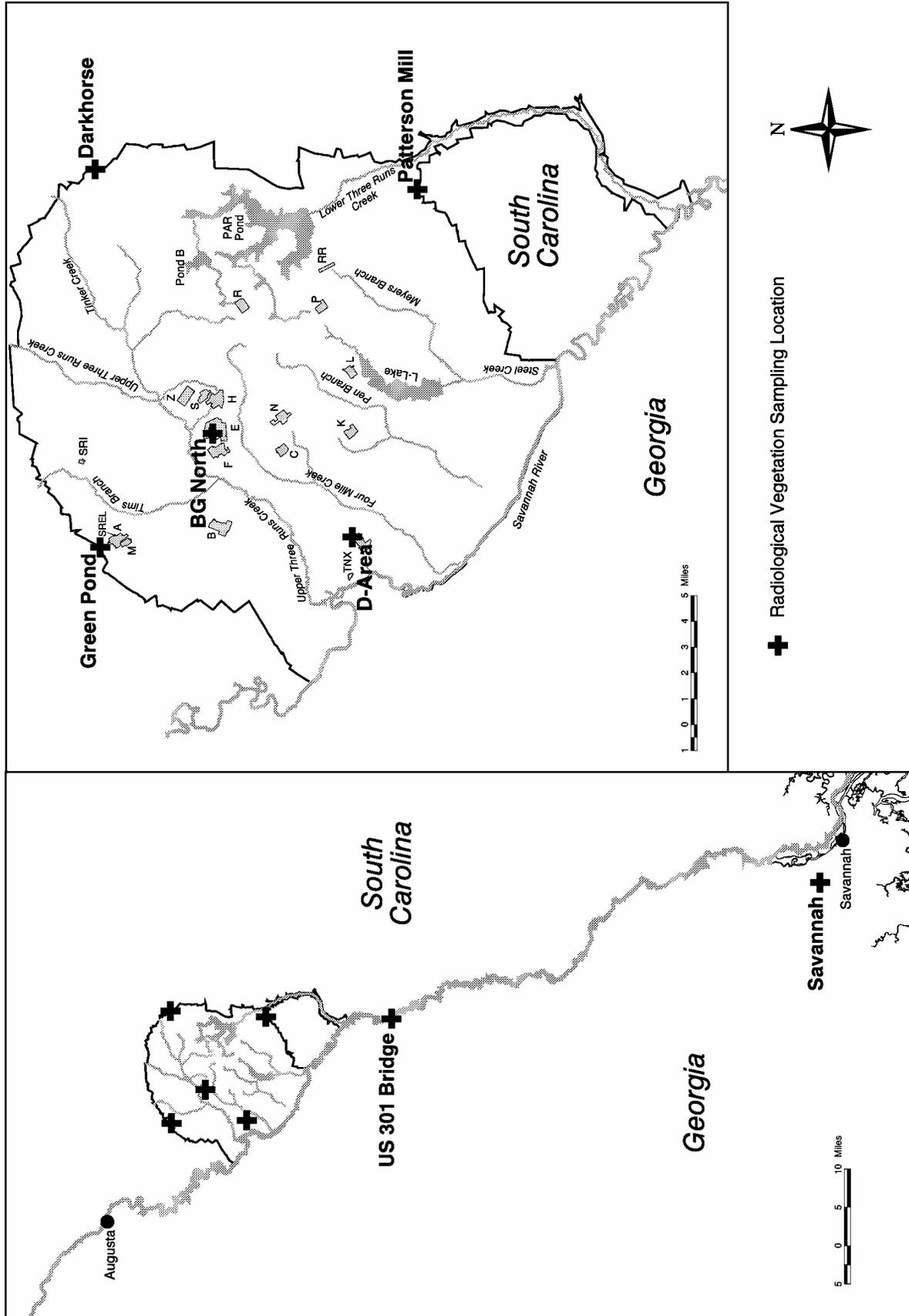
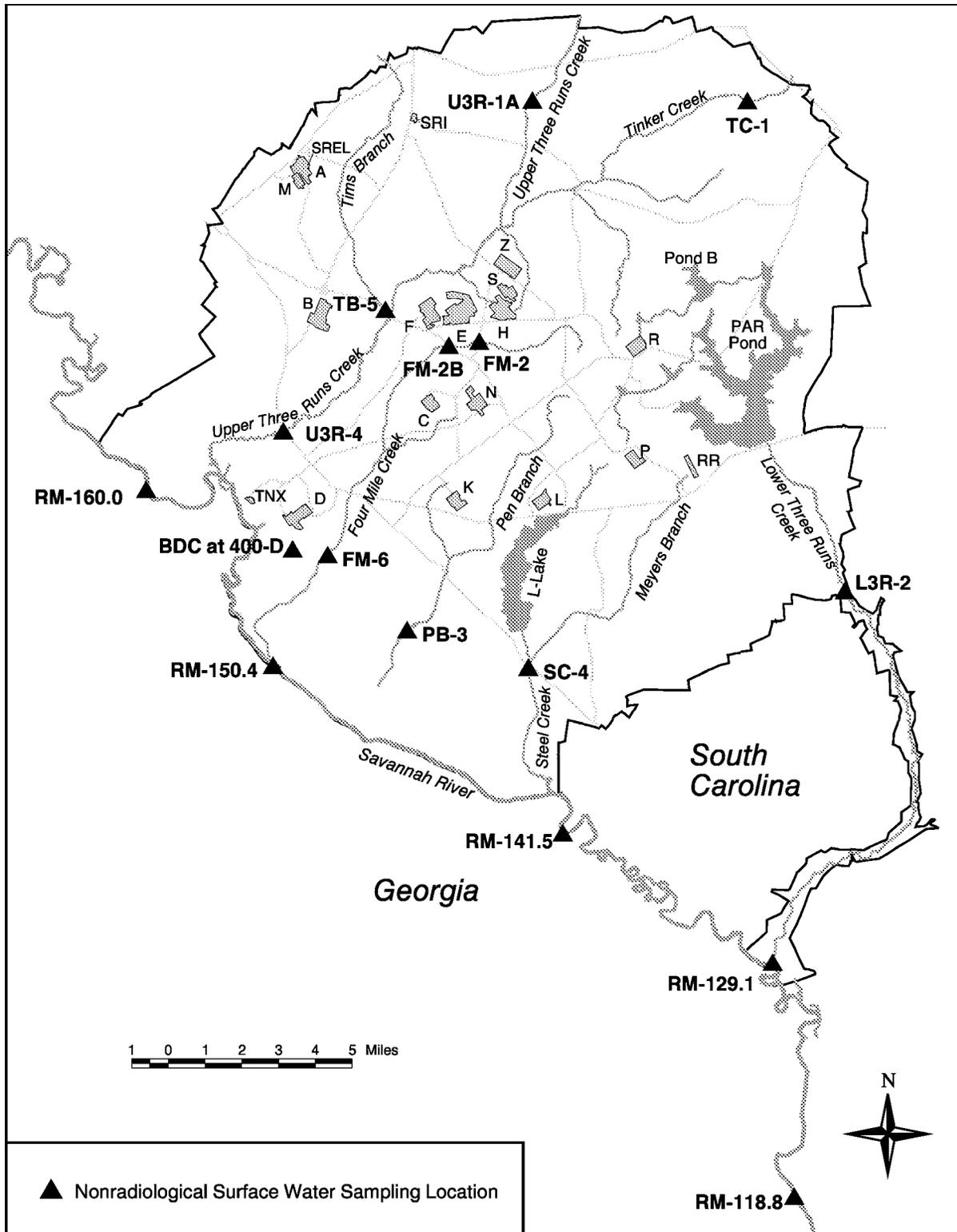


Figure 8 SRS Vegetation Sampling Locations
 Vegetation samples were collected for radiological analysis in 2003 from five locations on site and two off site (near Savannah, Georgia, and at the U.S. Highway 301 Bridge over the Savannah River).

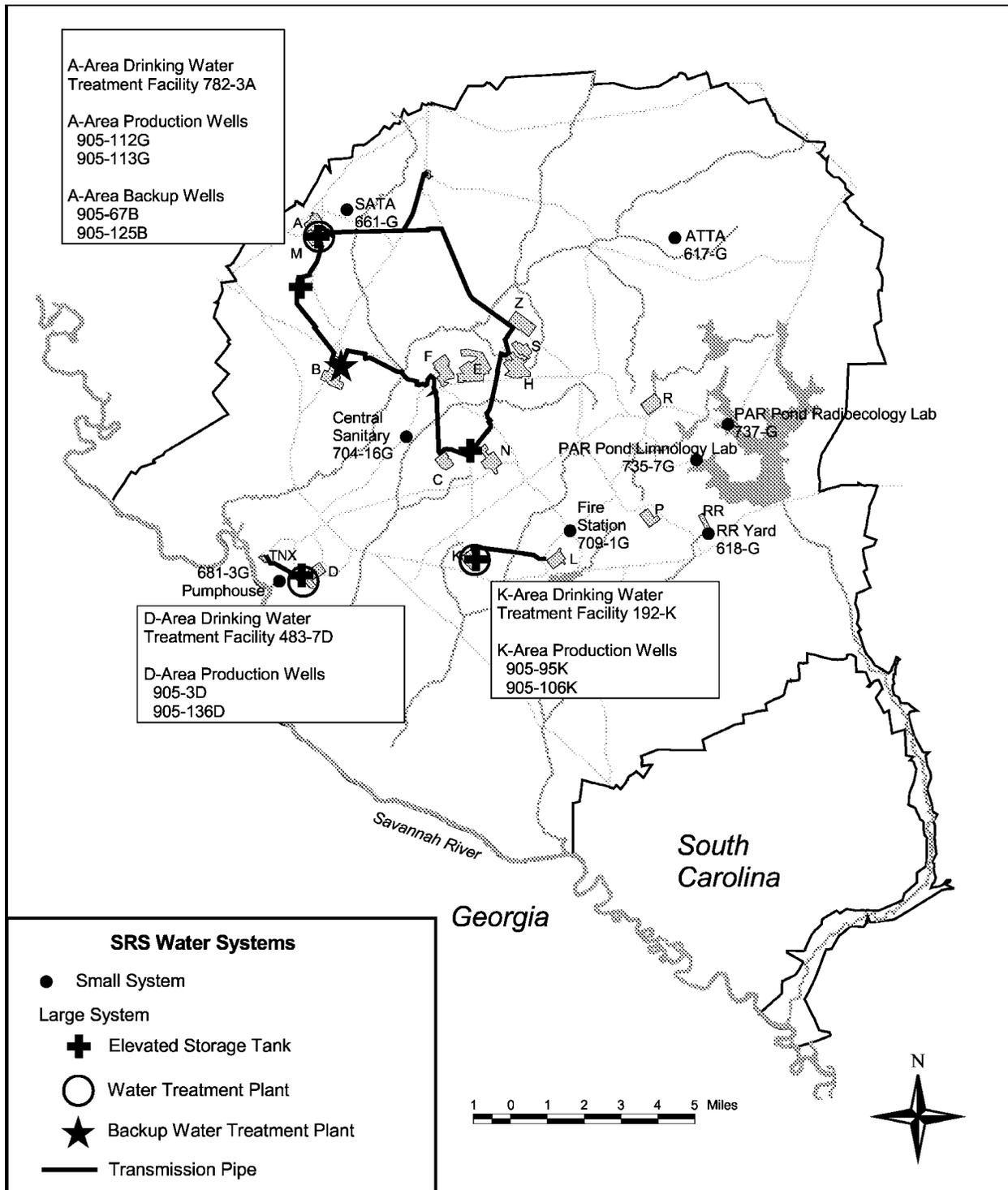
ESS/SRTC Map



ESS/SRTC Map

Figure 9 Nonradiological Surface Water Sampling Locations

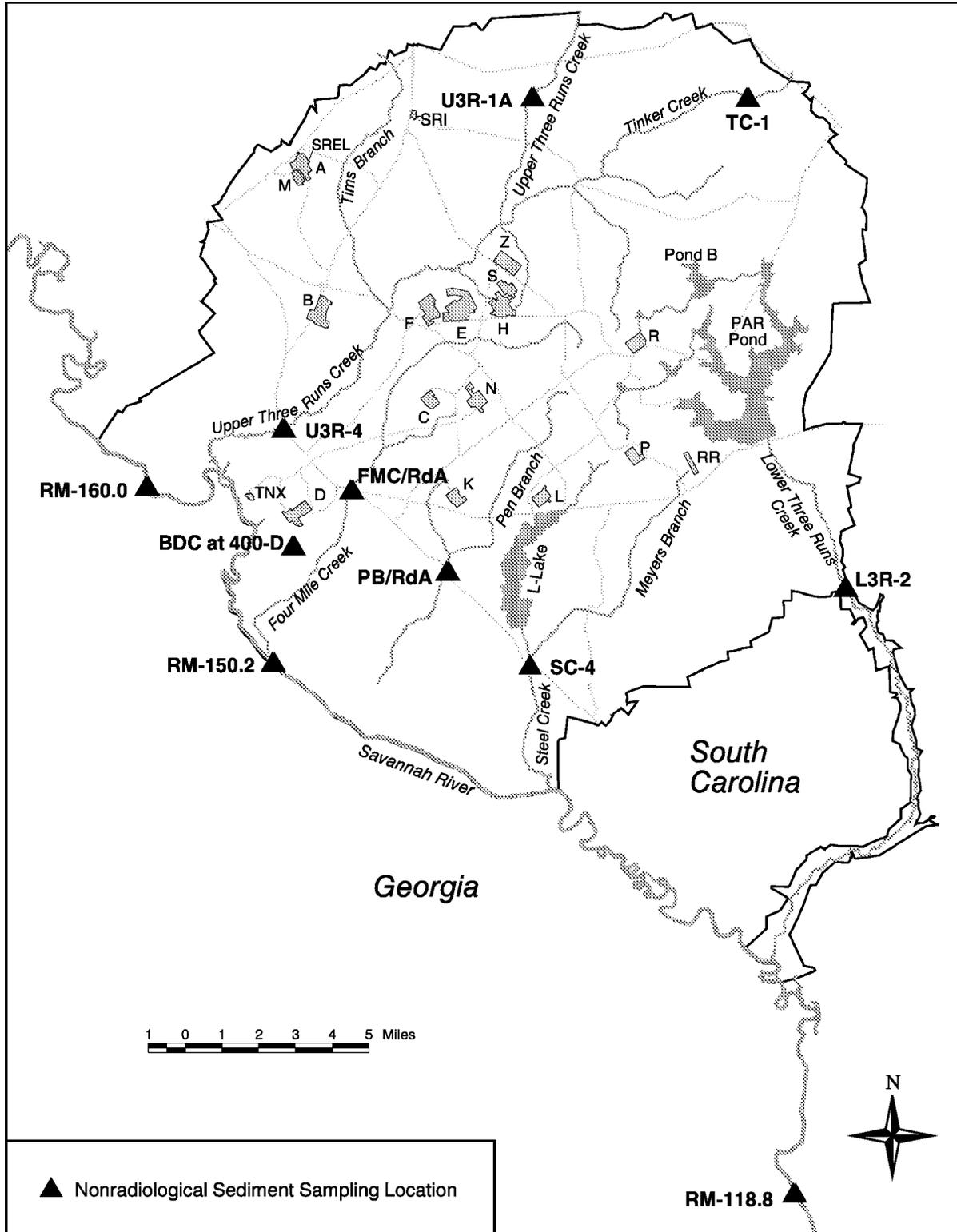
Surface water samples are collected from five Savannah River and 11 SRS stream locations and are analyzed for various chemical and physical properties.



ESS/SRTC Map

Figure 10 Drinking Water Systems

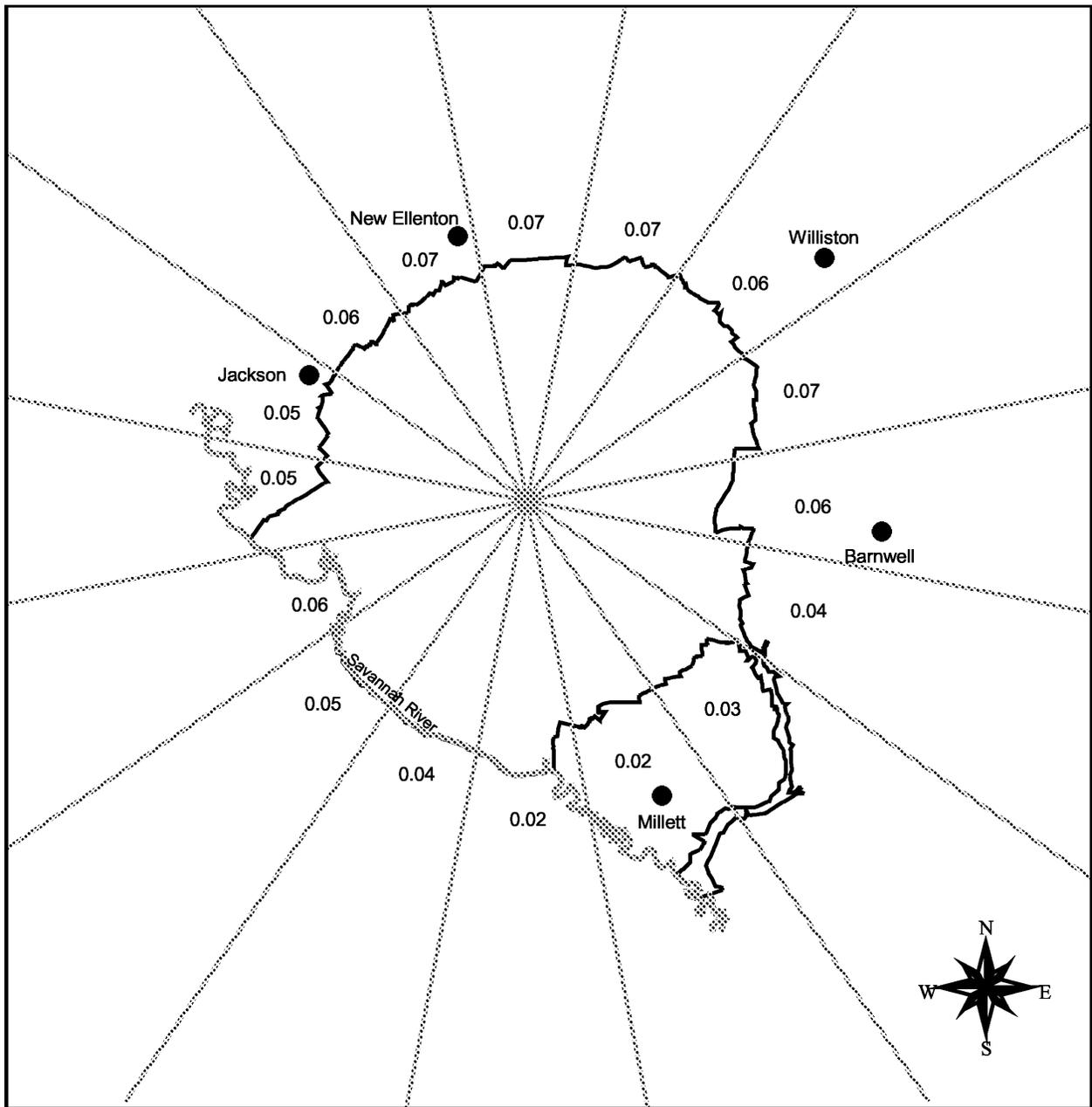
Most of the drinking water at SRS is supplied by three systems. The site also has eight small drinking water facilities that serve populations of fewer than 25 persons. The three larger systems have transmission pipes, elevated storage tanks, water treatment plants, and a backup water treatment plant.



ESS/SRTC Map

Figure 11 Nonradiological Sediment Sampling Locations

Sediment samples are collected at eight onsite stream locations and three Savannah River locations. The samples are analyzed for various inorganic contaminants (metals) and pesticides/herbicides.

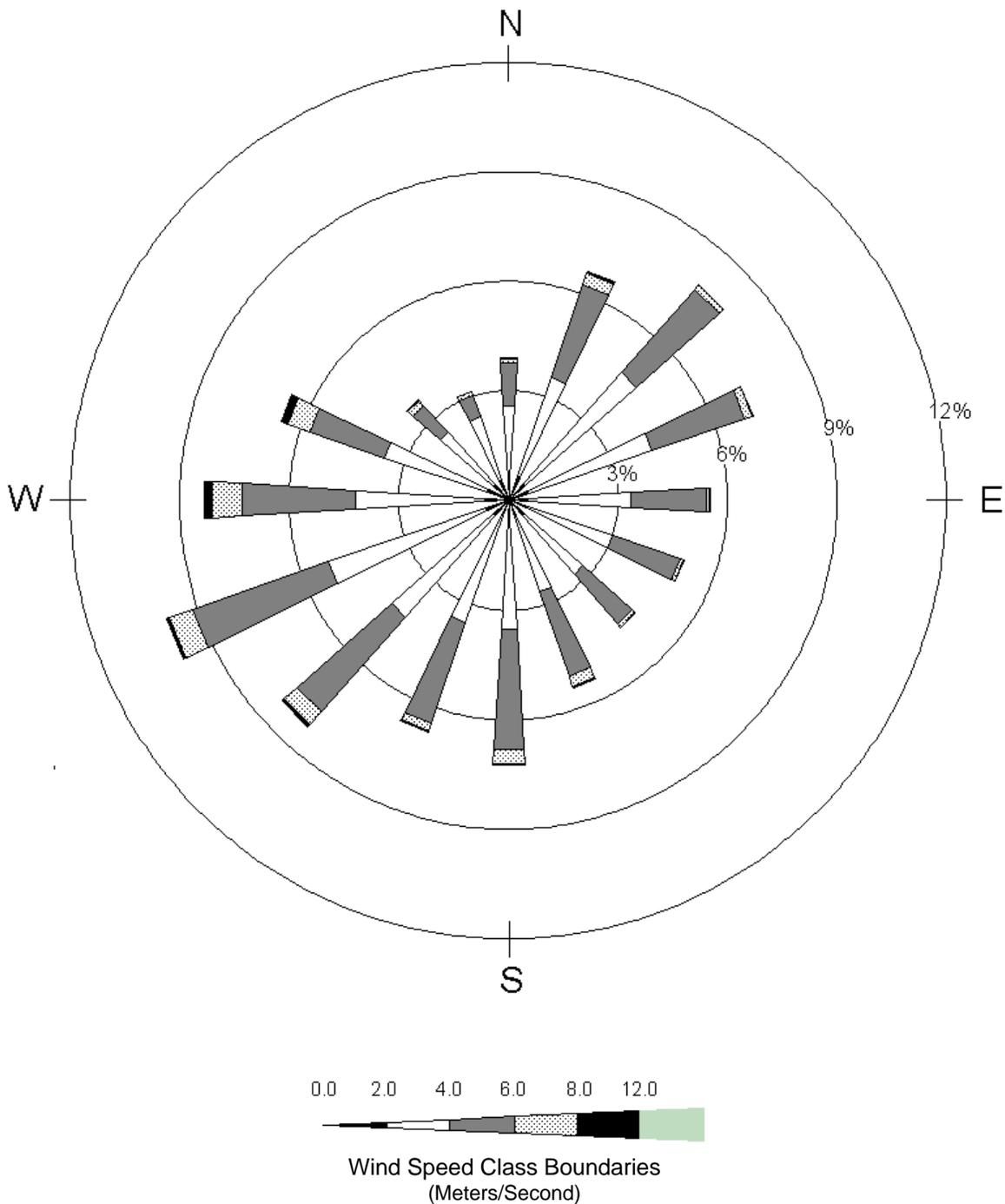


SRTC Map

Figure 12 Sector-Specific Adult Maximally Exposed Individual Air Pathway Doses (in mrem) for 2003

Maximally exposed individual site boundary doses from airborne releases are shown for each of the 16 major compass point directions surrounding SRS. For 2003, four sectors (NNW, N, NNE, ENE) had essentially the same maximally exposed individual dose of 0.07 mrem. However, when the third decimal point was considered, the due-north sector was slightly higher than the other three sectors.

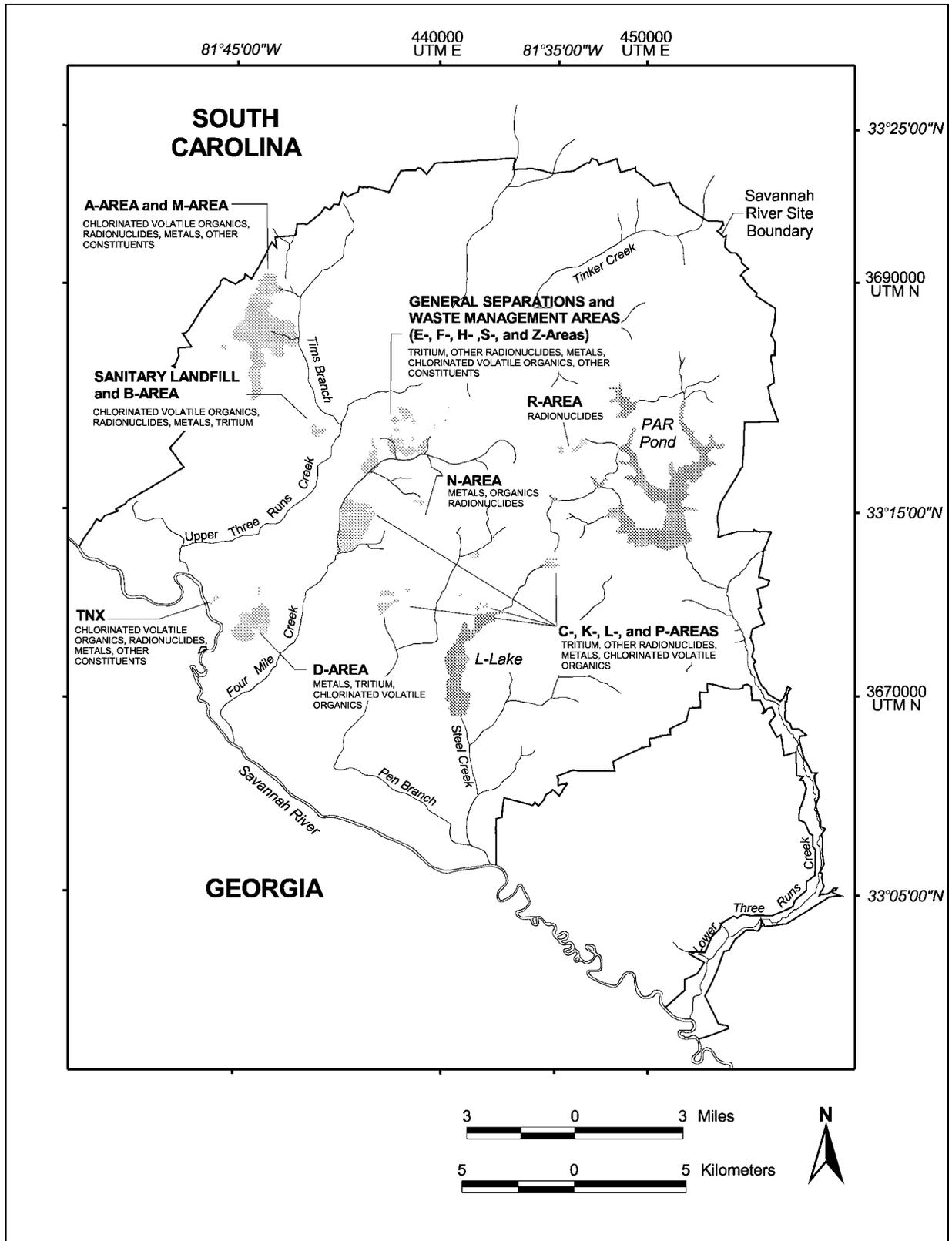
**Wind Rose for the H-Area Composite Data Set
Five-Year Period 1997–2001**



SRS Atmospheric Technologies Graphic

Figure 13 Wind Rose for SRS, 1997–2001

This wind rose graphically depicts the percent of occurrence frequencies of six wind speed categories by 16 cardinal wind direction sectors at SRS. The wind speed categories are defined on the plot; direction is defined as the sector from which the wind blows. The data used to generate the wind rose consist of hourly averages of wind speed and direction at the H-Area meteorological tower for the 5-year period 1997–2001; measurements were taken 200 feet above the ground.



SRTC/SGCP Map

Figure 14 Facilities Monitored by the SRS Monitoring Well Network; Shaded Areas Indicate Extent of Groundwater Contamination.

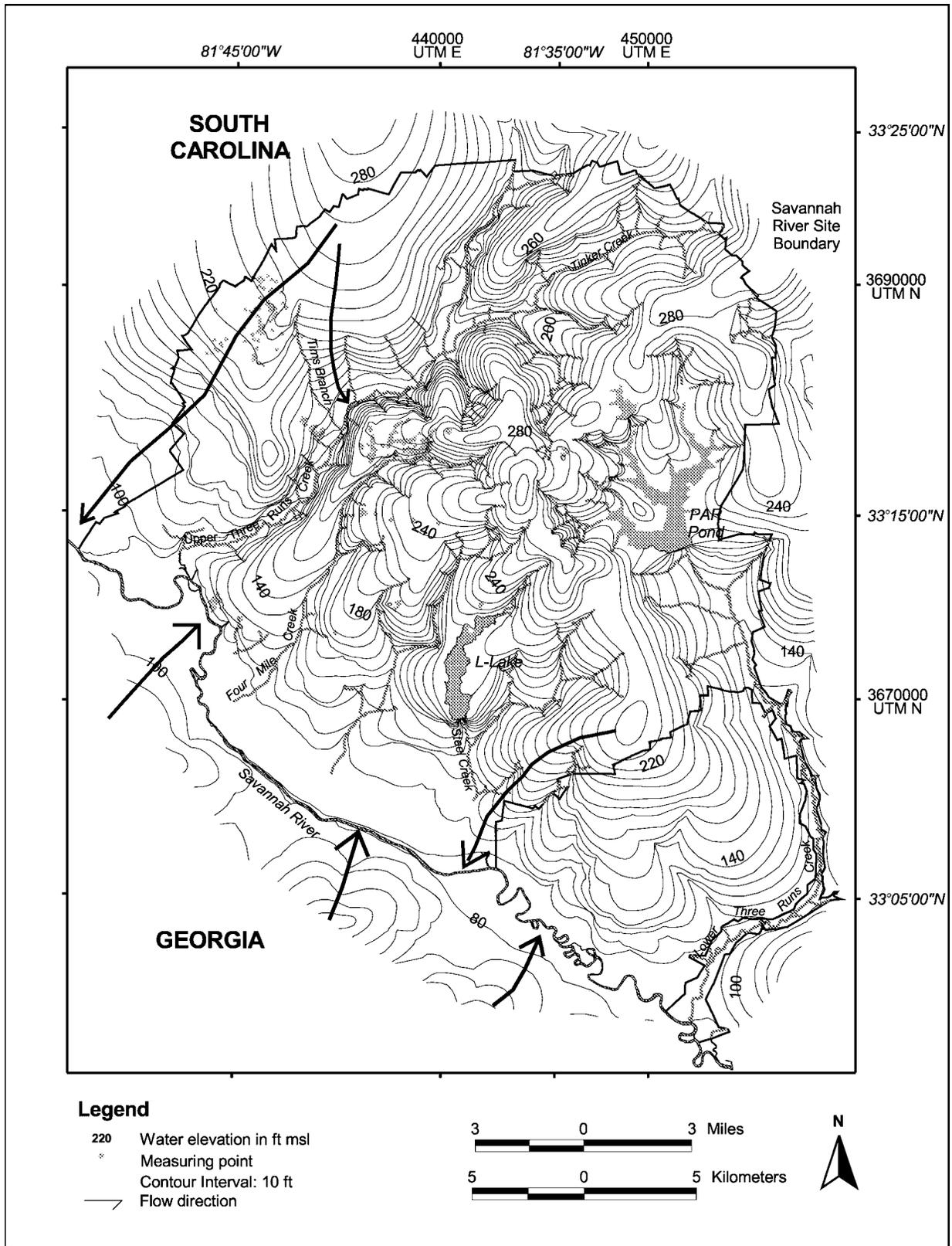
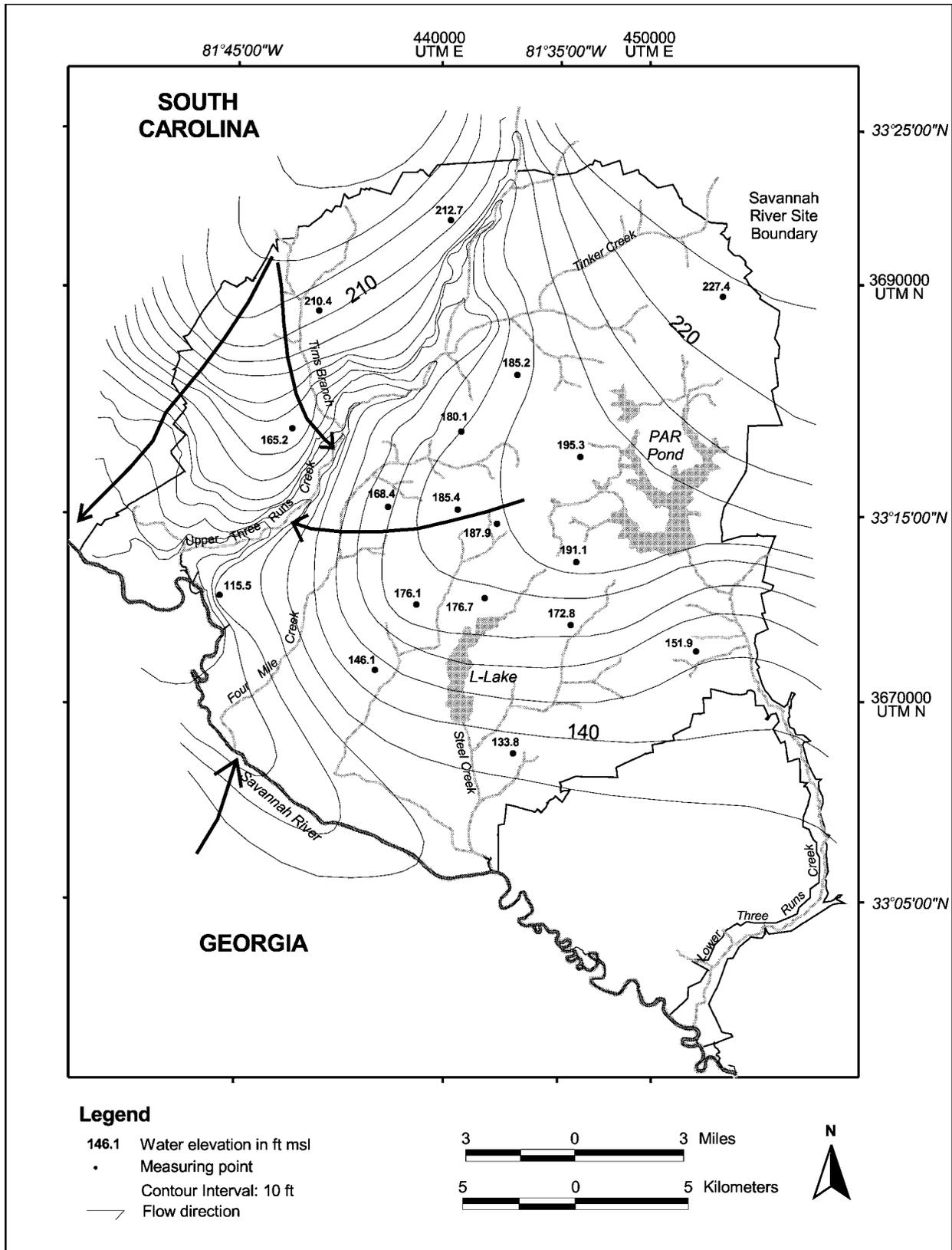


Figure 15 Water Table Contours at SRS

SRTC Map



SRTC Map

Figure 16 Potentiometric Surface of the Gordon Aquifer at SRS

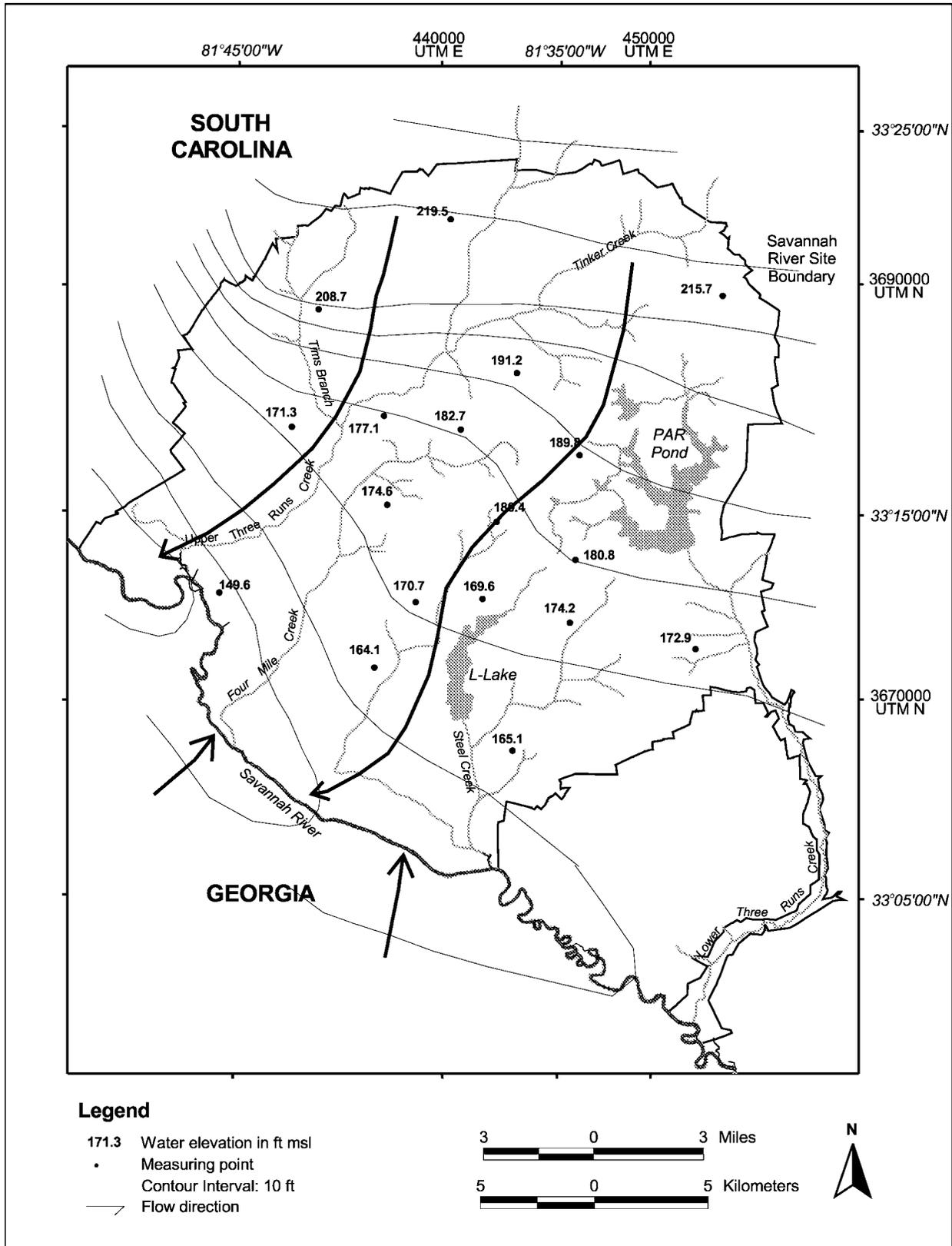
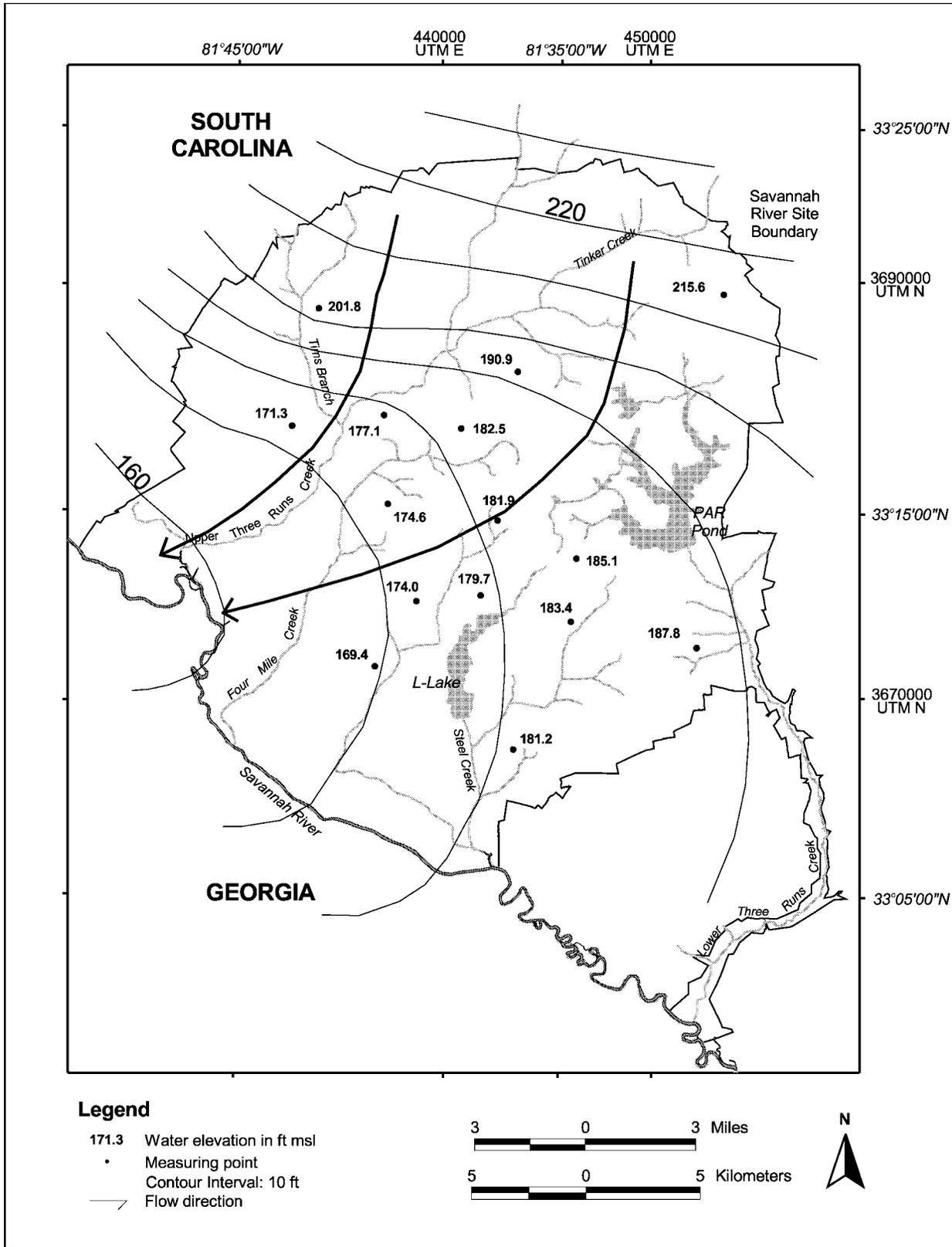


Figure 17 Potentiometric Surface of the Crouch Branch Aquifer at SRS

SRTC Map



SRTC Map

Figure 18 Potentiometric Surface of the McQueen Branch Aquifer at SRS

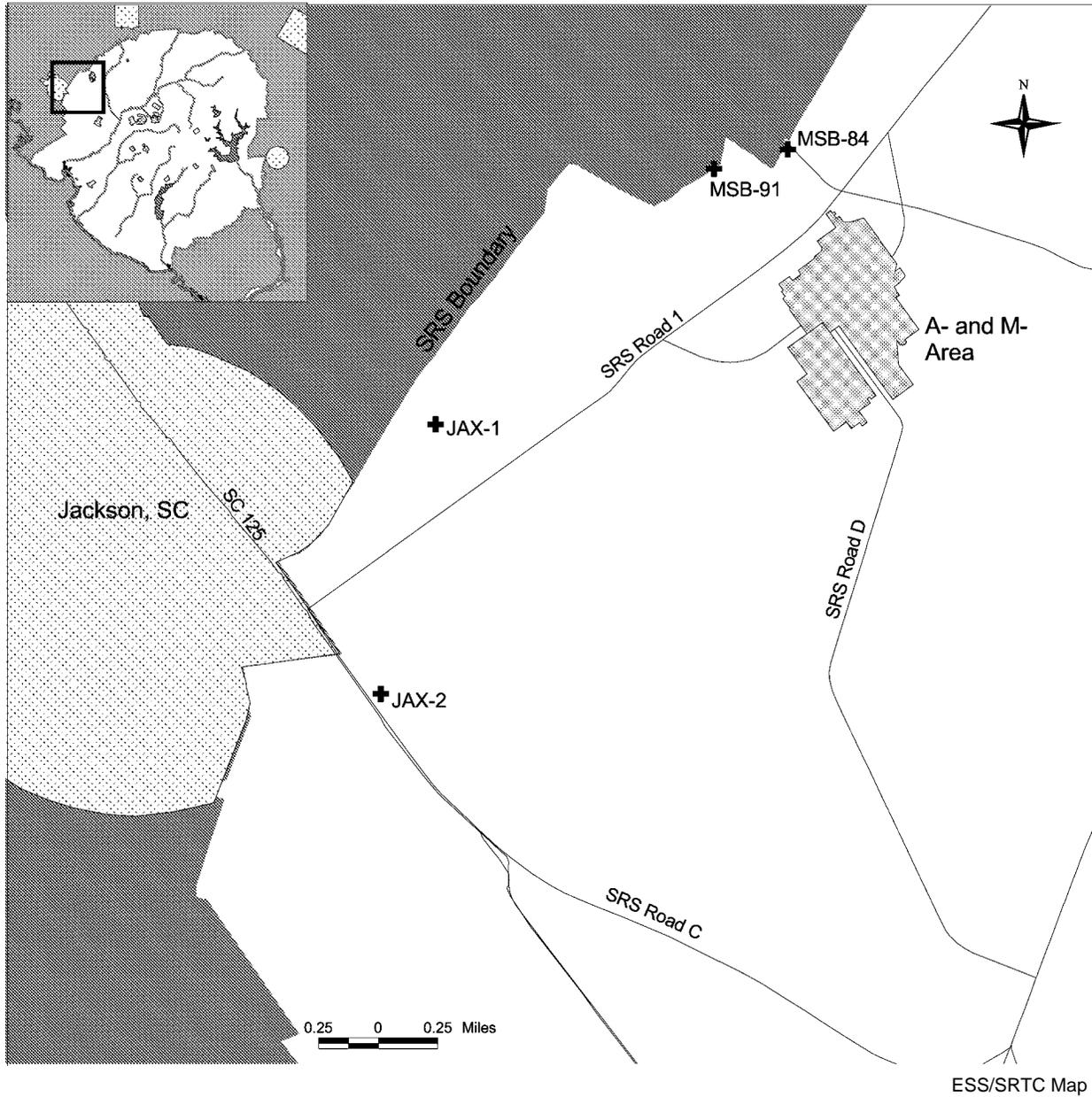


Figure 19 Wells Along Site Boundary Between A-Area/M-Area and Jackson, South Carolina (Nearest Population Center)

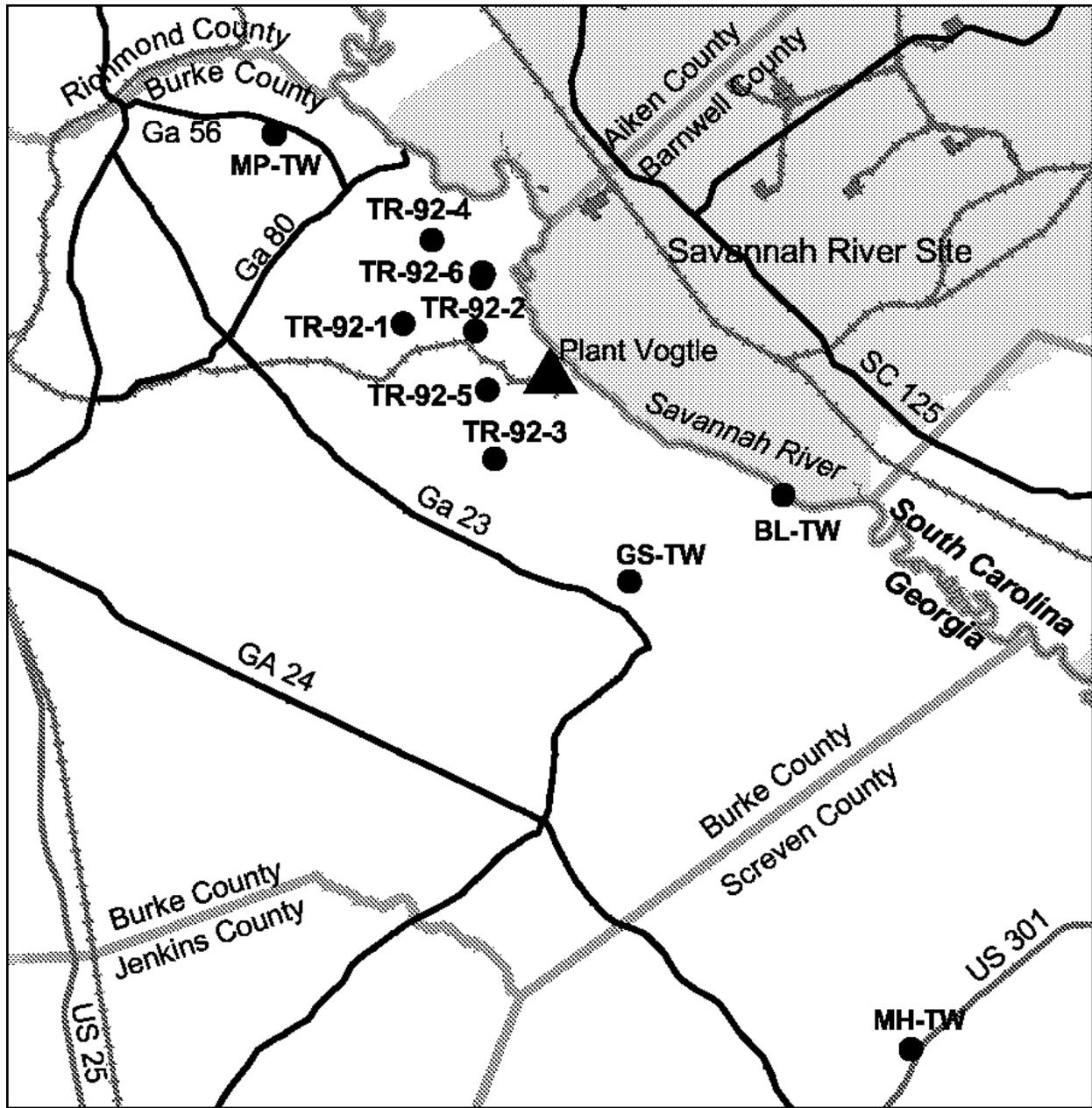


Figure 20 Burke/Screven County, Georgia, Well Locations

ESS/SRTC Map