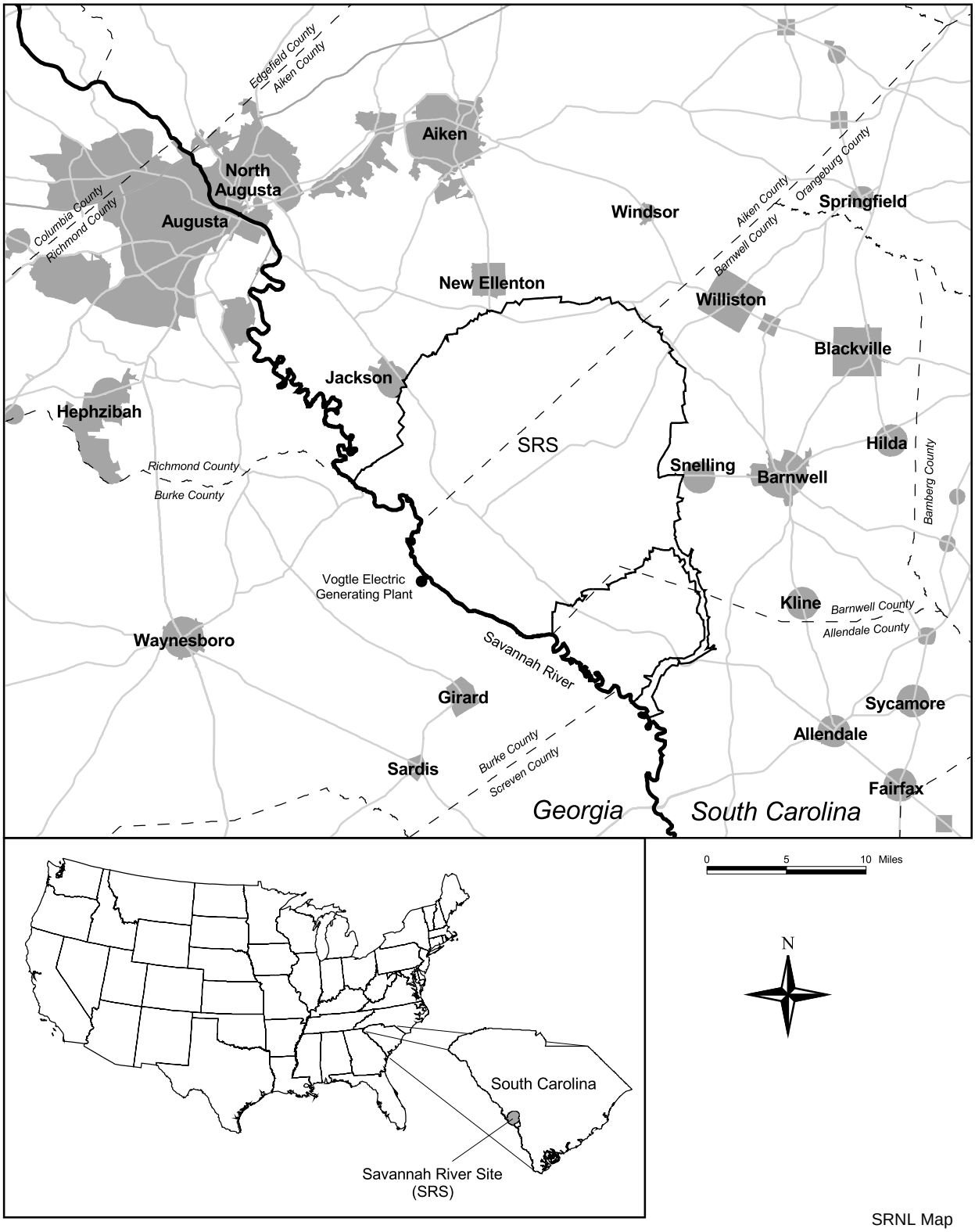
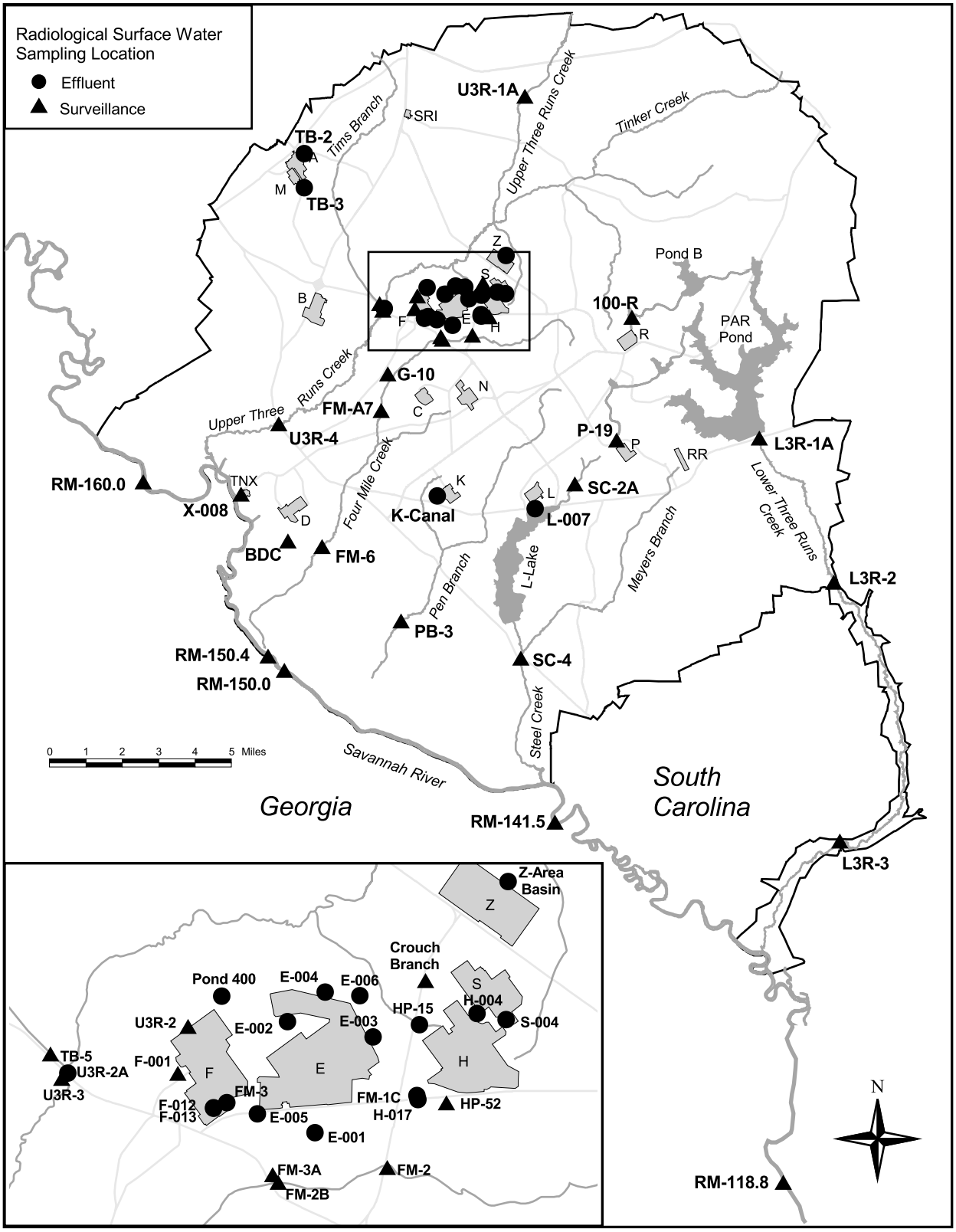
SRS Maps

- Site
- Sampling Locations
- Doses
- Groundwater



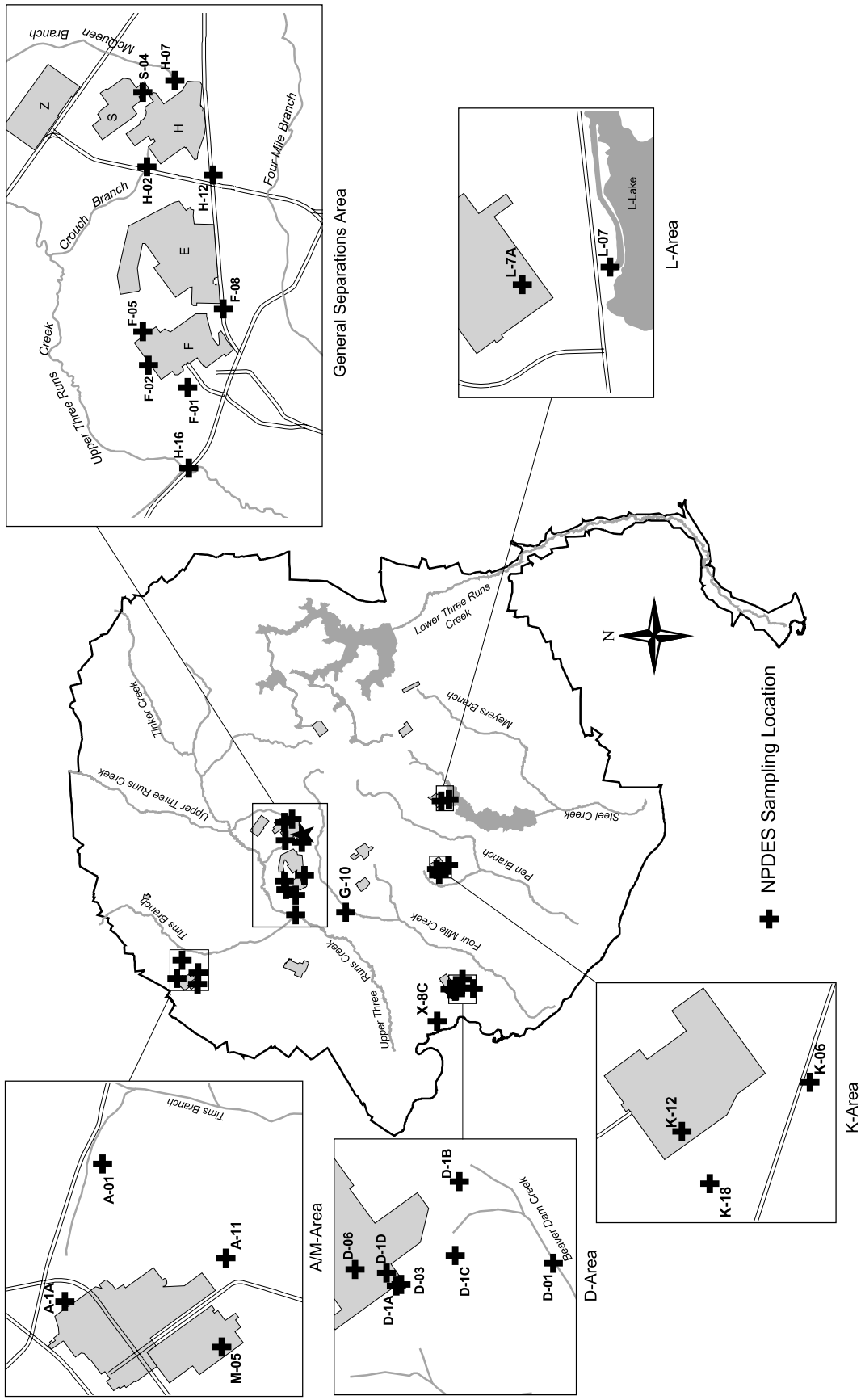
SRNL Map

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 the site's southwestern border.



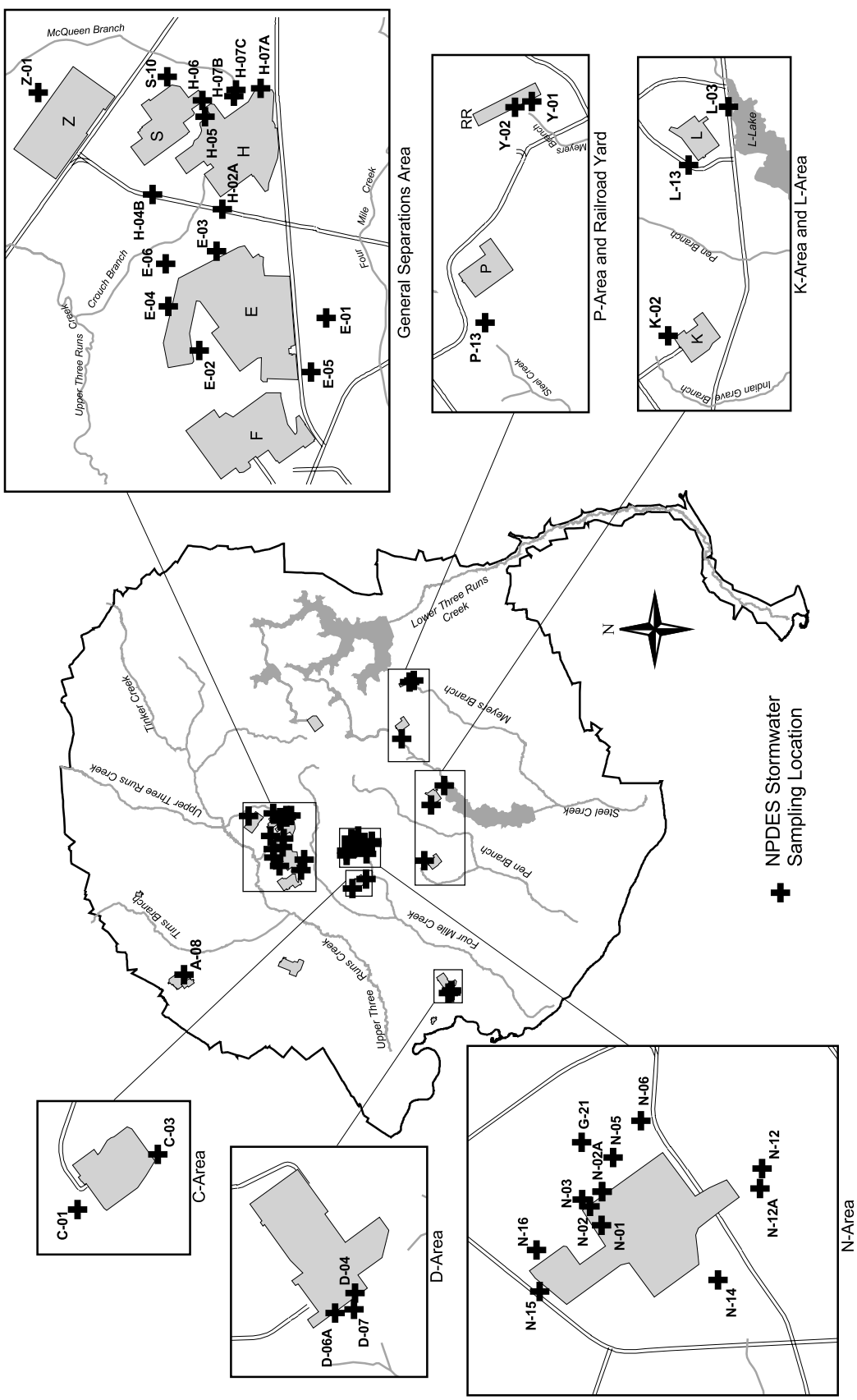
RI&ES/SRNL Map

Figure 2 Radiological Surface Water Sampling Locations
Surveillance and effluent sampling points are near SRS facilities, on site streams, and on the Savannah River.



RI&ES/SRNL Map

Figure 3 NPDES Sampling Locations
Twenty-eight industrial wastewater outfalls were regulated at SRS in 2008 under NPDES Permits SC0000175 and SC0047431. Of the 28 outfalls, one (002) appears in Permit SC0047431 but has never existed—and thus is not included on the map.



RI&ES/SRNL Map

Figure 4 NPDES Stormwater Outfall Locations
Forty industrial stormwater outfalls were regulated at SRS during 2008 under the Permit SCR000000, the NPDES General Permit for Stormwater Discharges Associated with Industrial Activity (except construction activity).

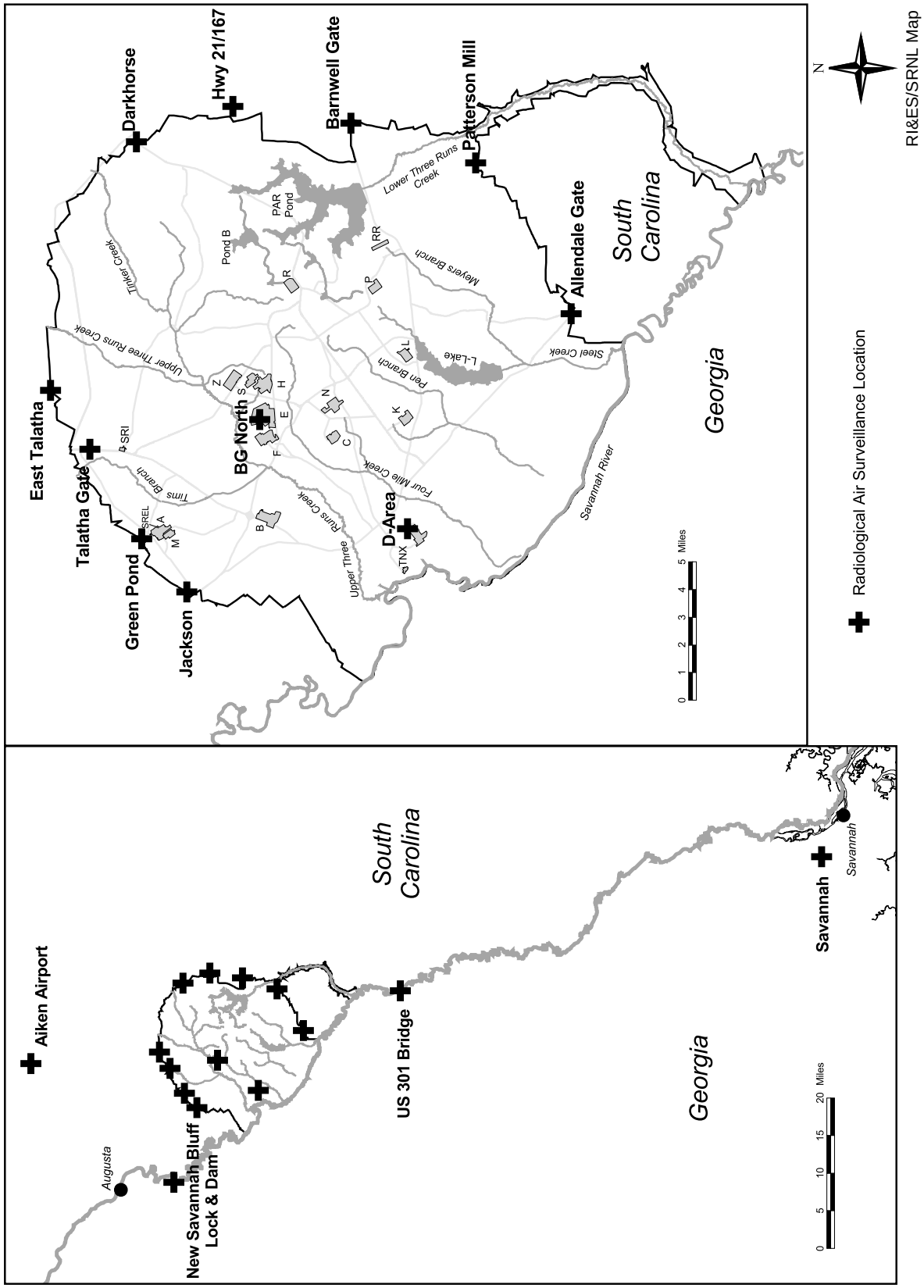


Figure 5 Radiological Air Surveillance Sampling Locations
The SRS air surveillance program consists of 11 stations located on site or along the site perimeter, as well as three stations approximately 25 miles from the site perimeter (located near the U.S. Highway 301 Bridge over the Savannah River; near the New Savannah Bluff Lock and Dam, also known as the Augusta Lock and Dam; and at the Aiken airport) and one about 100 miles from the site perimeter (near Savannah, Georgia).

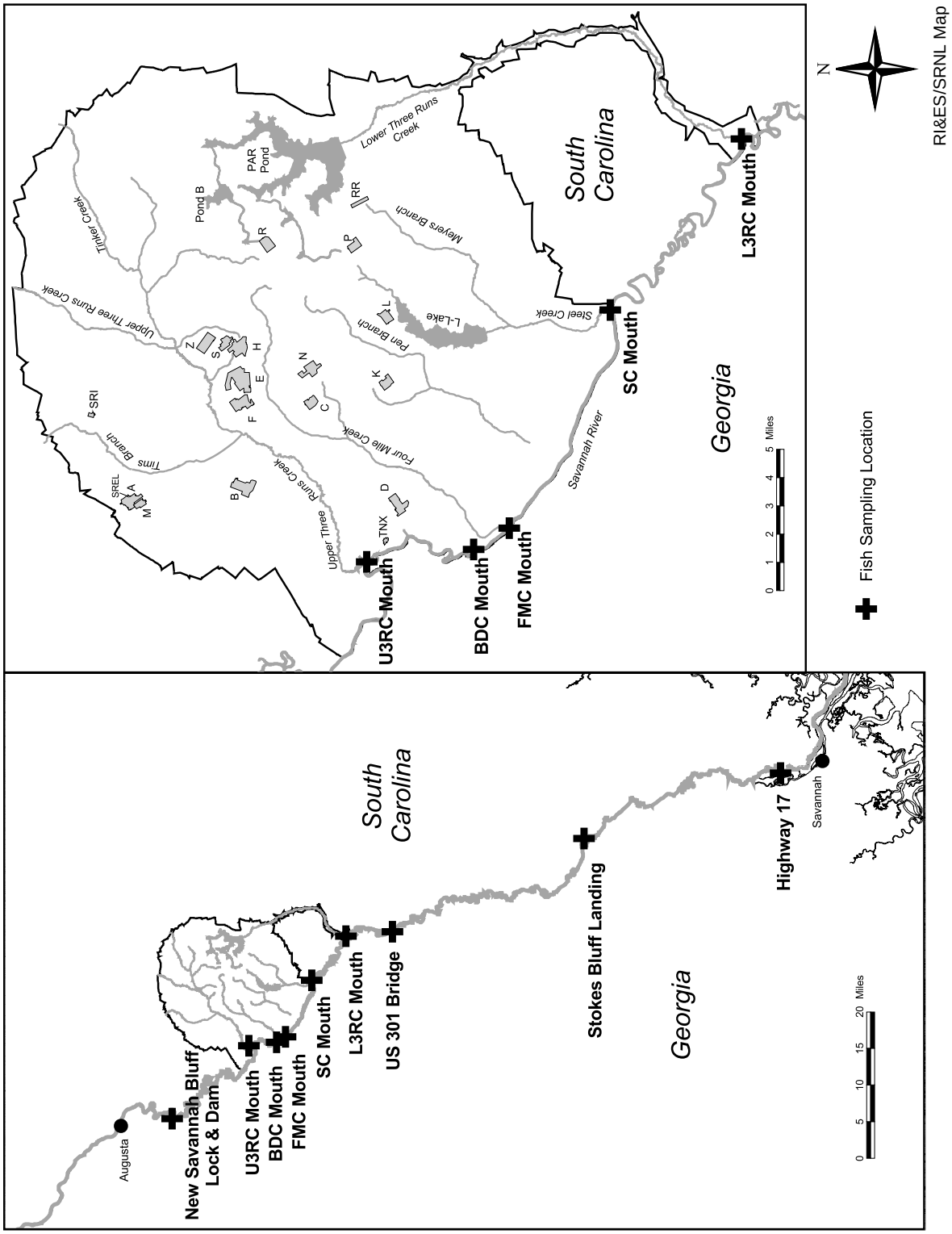


Figure 6 Fish Sampling Locations
SRS collects fish (for both radiological and nonradiological analyses) from the Savannah River above, adjacent to, and below the site, as well as at Stokes Bluff Landing and near Savannah, Georgia.

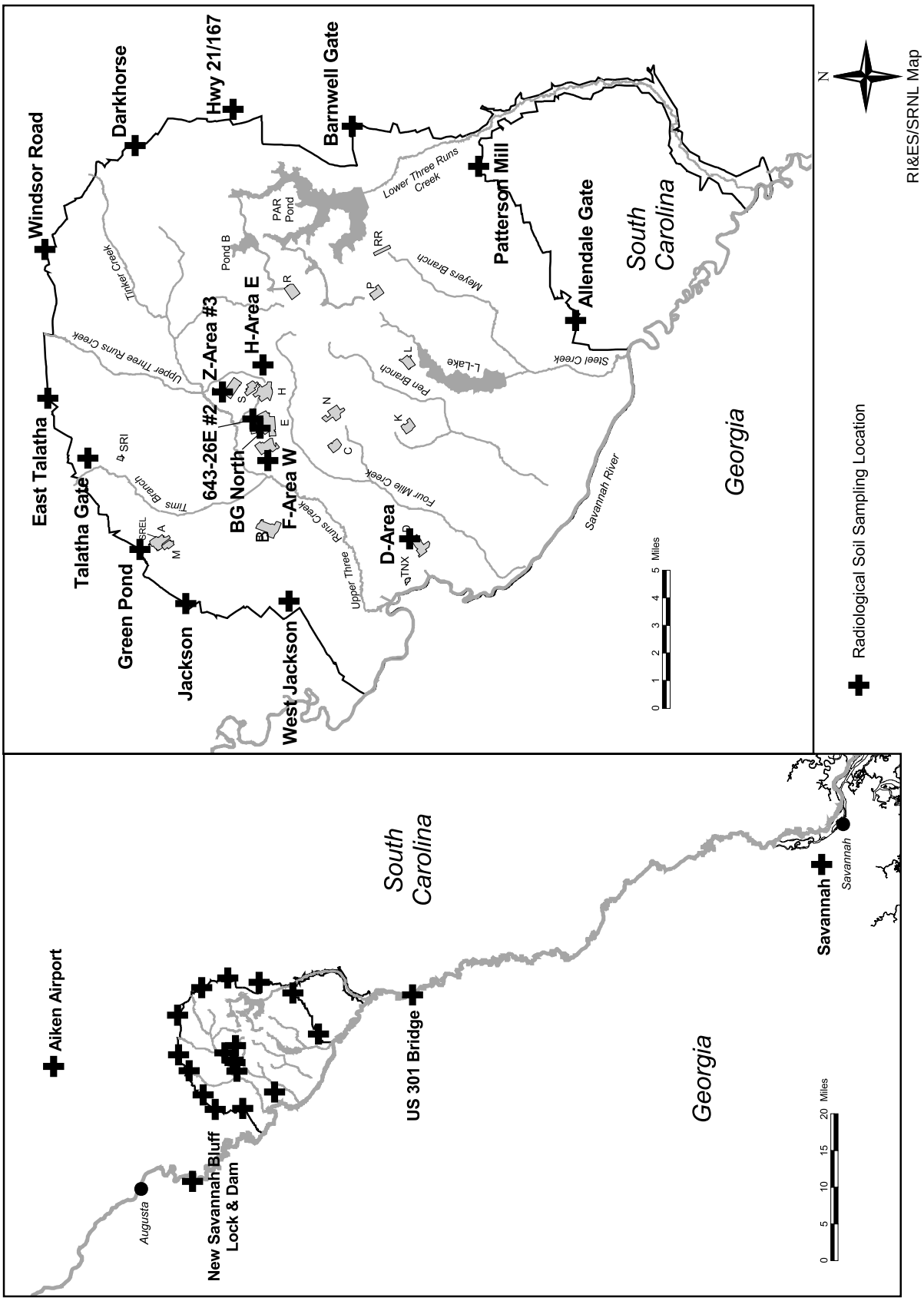
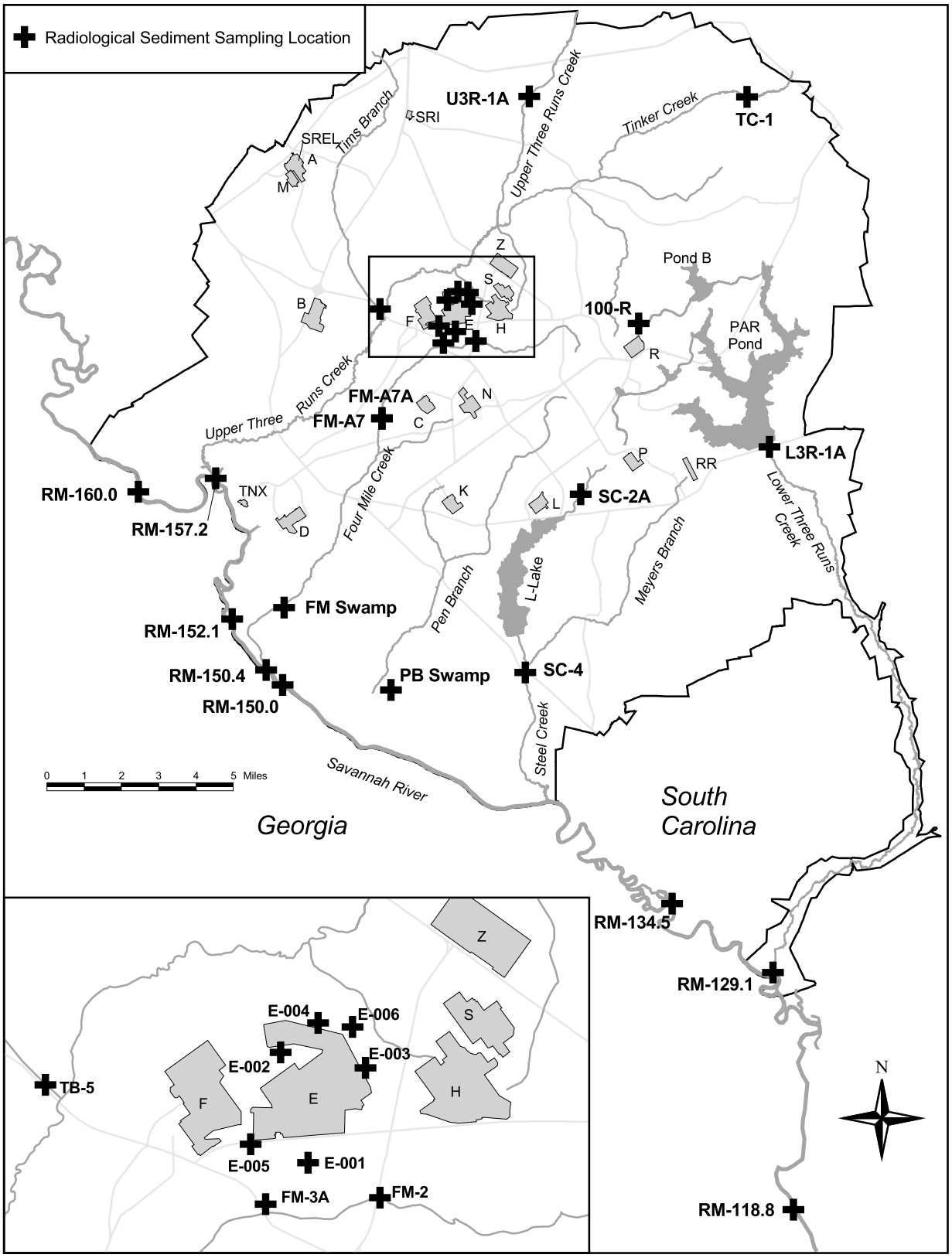


Figure 7 Radiological Soil Sampling Locations
SRS collected soil samples in 2008 from five onsite locations, 12 site perimeter locations, and four offsite locations.



RI&ES/SRNL Map

Figure 8 Radiological Sediment Sampling Locations
Sediment samples were collected in 2008 at eight Savannah River locations—upriver of, adjacent to, and downriver of the site—and 19 onsite locations.

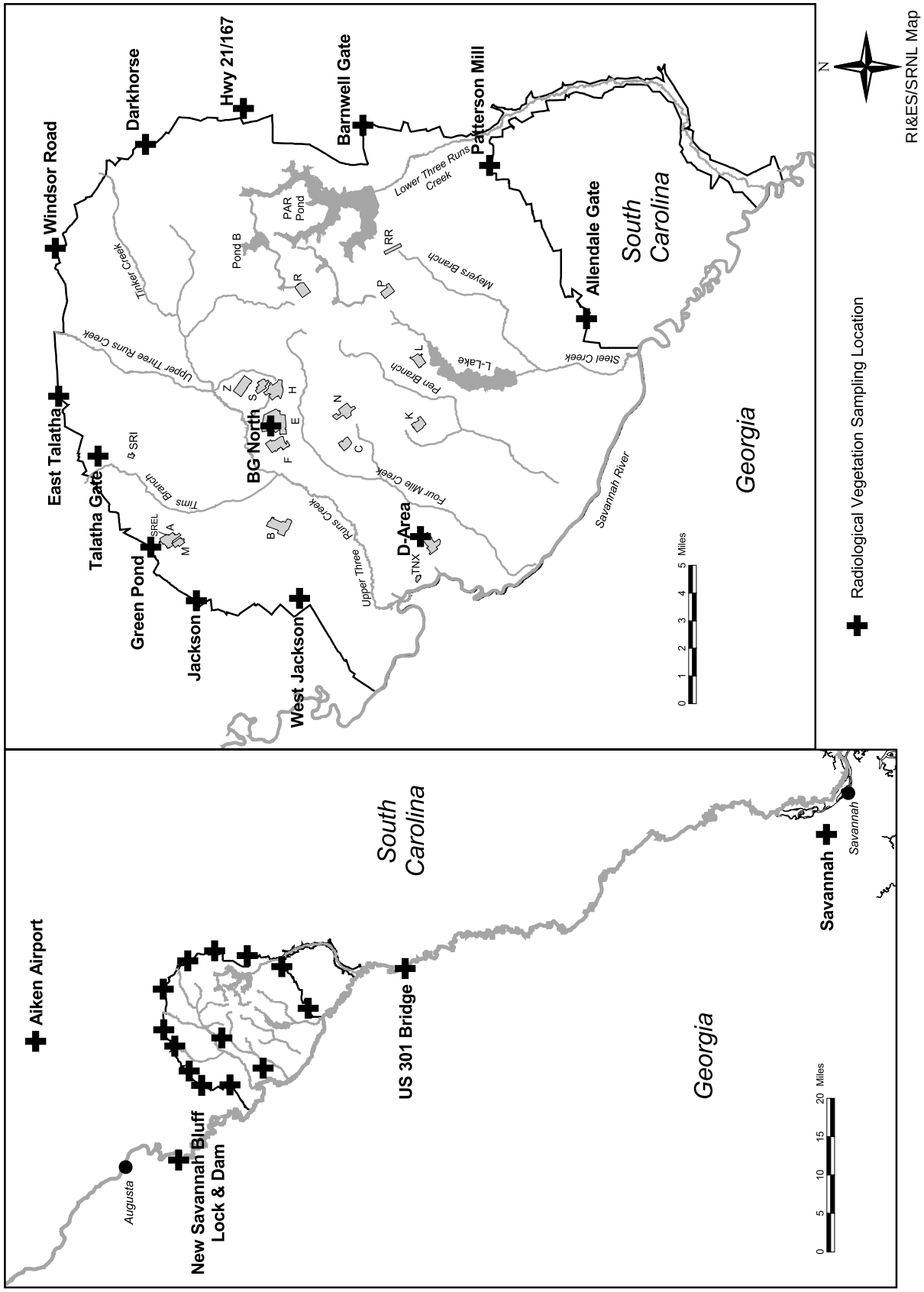
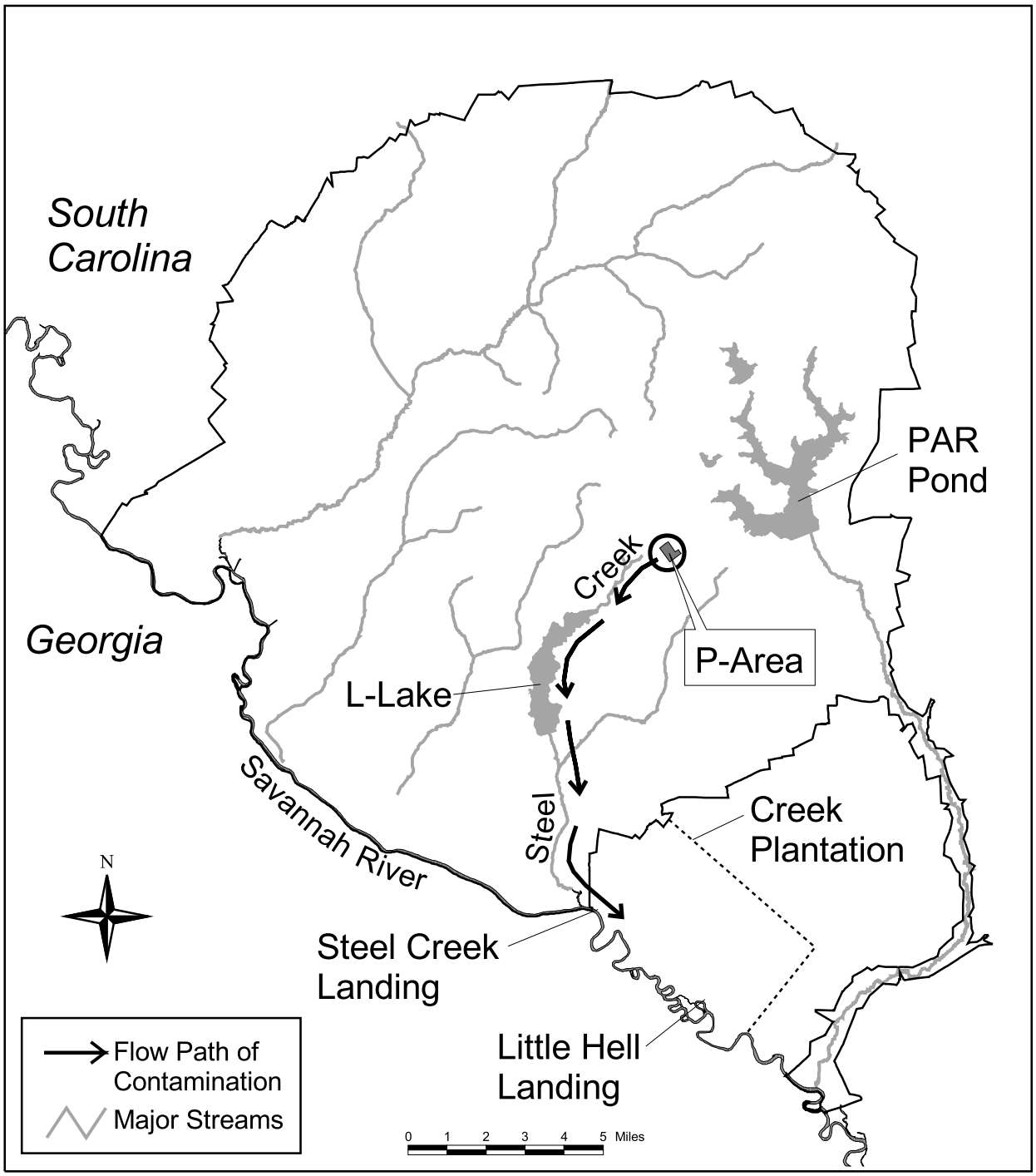
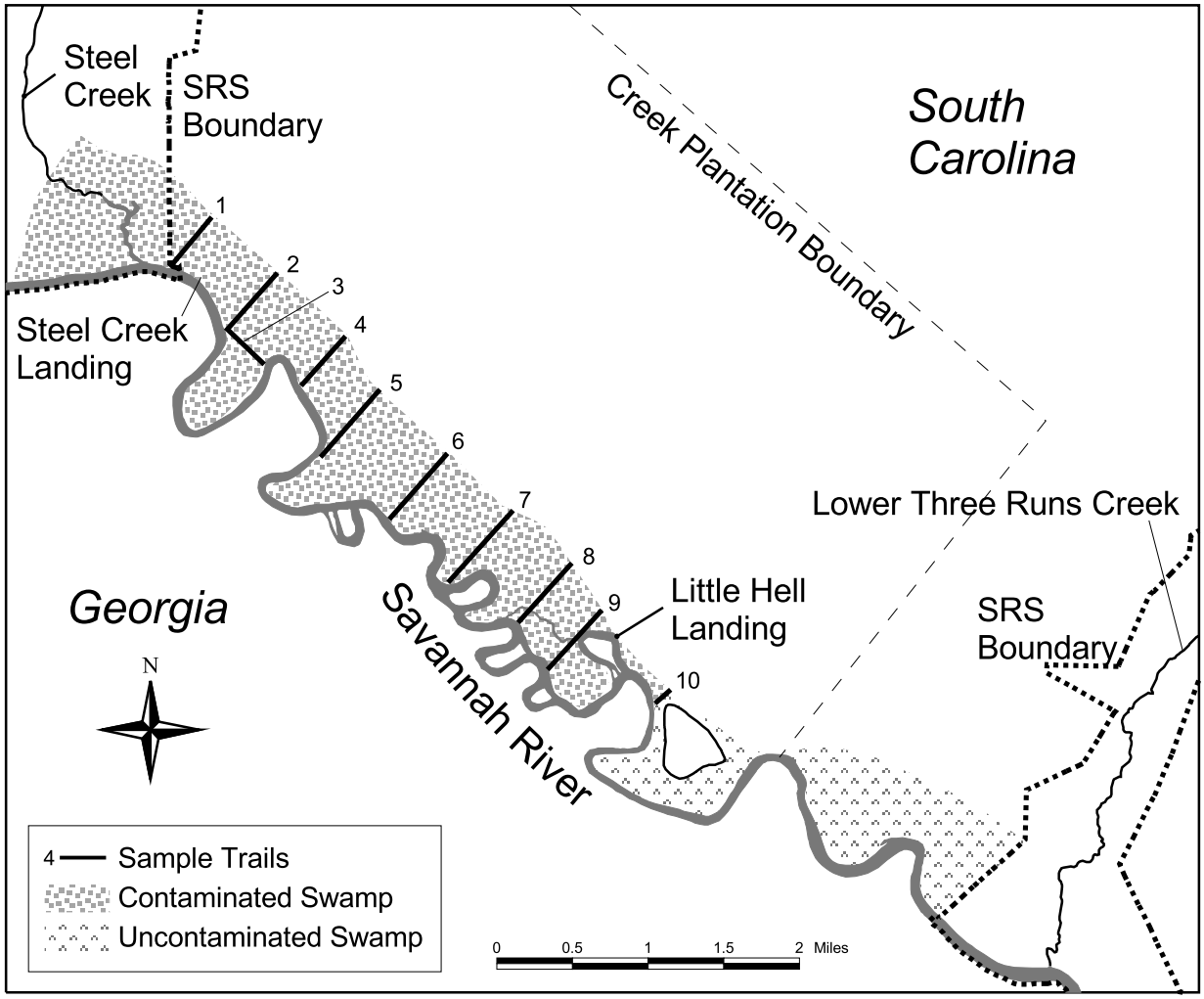


Figure 9 Radiological Vegetation Sampling Locations
Vegetation samples were collected for radiological analysis in 2008 from 13 locations on site or along the site perimeter, and from four offsite locations.



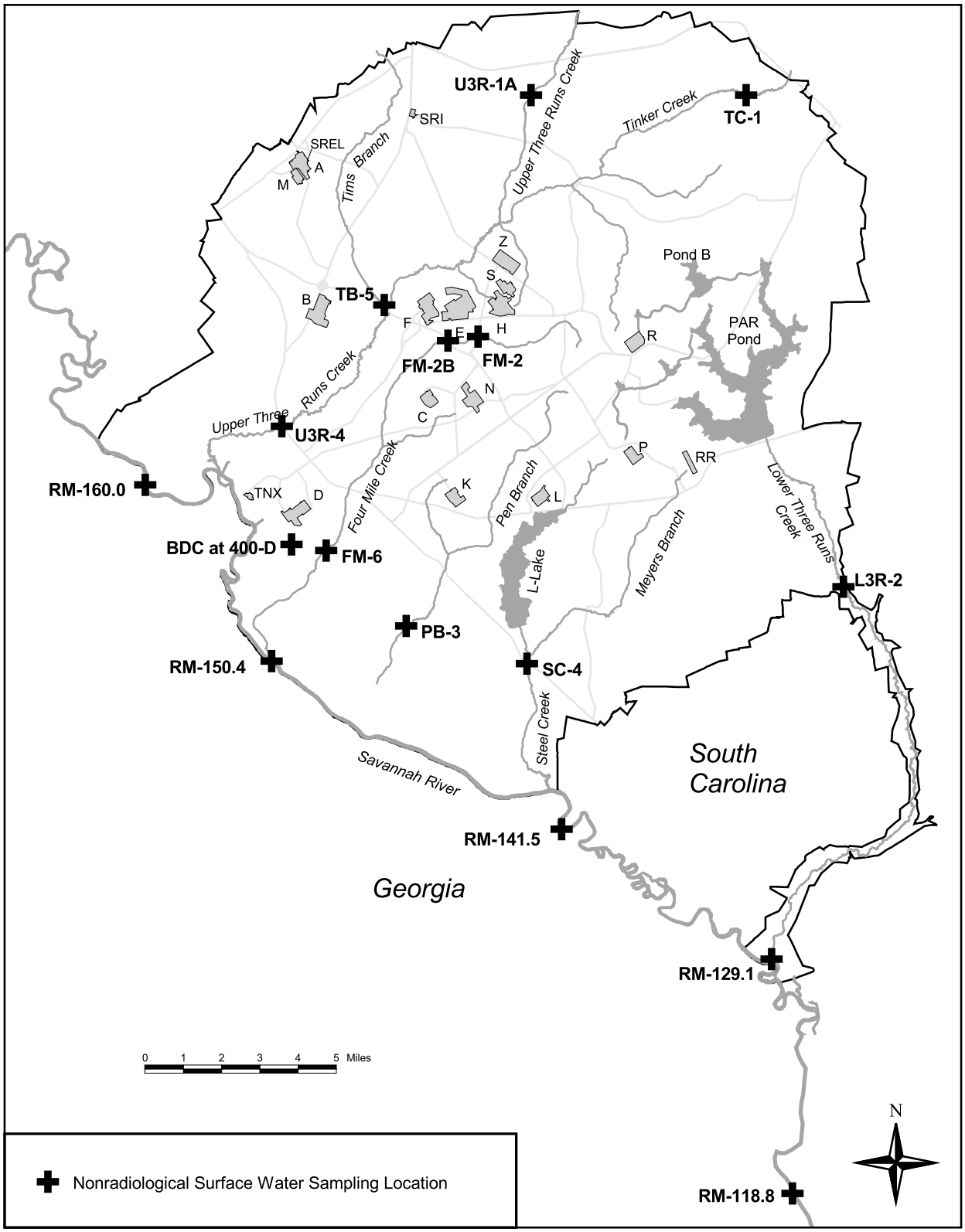
SRNL Map

Figure 10 Swamp Contamination
Radioactivity released from SRS operations contaminated the Savannah River Swamp between Steel Creek and Little Hell Landing—an area outside the SRS boundary—during the 1960s. Approximately 25 Ci of cesium-137 and 1 Ci of cobalt-60 were released from the P-Area storage basin to Steel Creek—L-Lake did not exist at the time of the release—and migrated downstream to a part of the swamp.



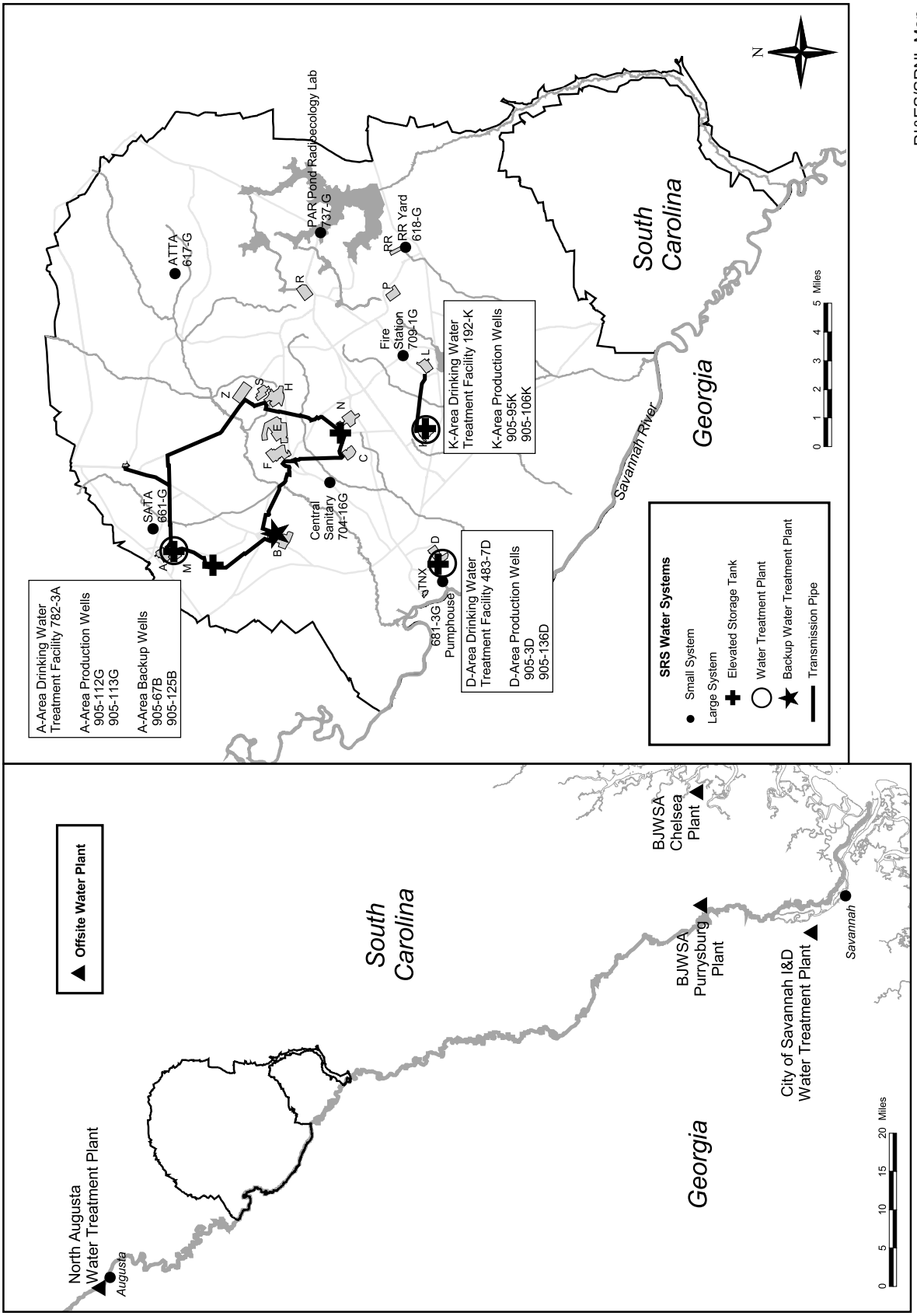
SRNL Map

Figure 11 Savannah River Swamp Sampling Trails
Ten sampling trails were established in the Savannah River Swamp in 1974 so that surveys could be conducted on the movement of contamination from SRS operations.



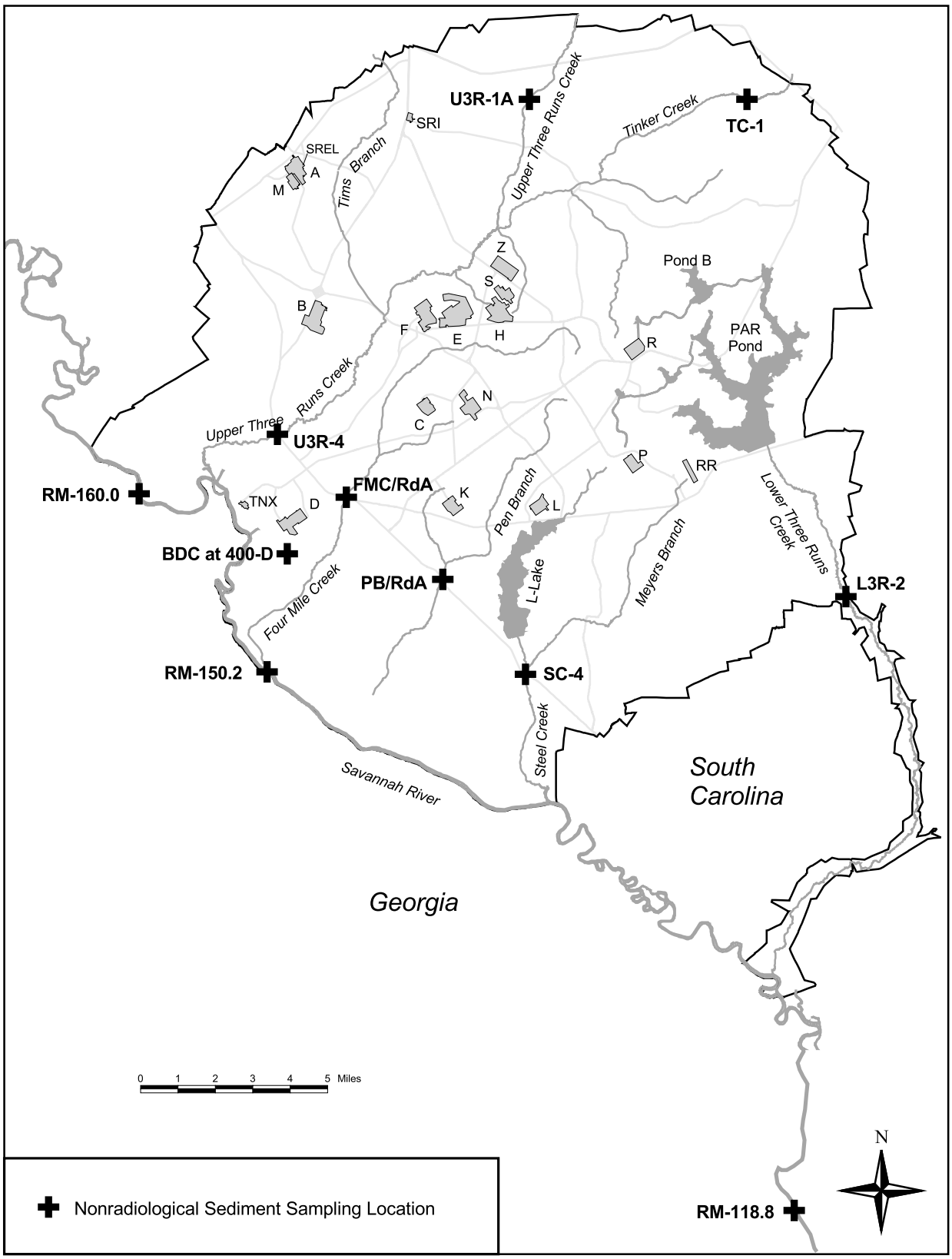
RI&ES/SRNL Map

Figure 12 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.



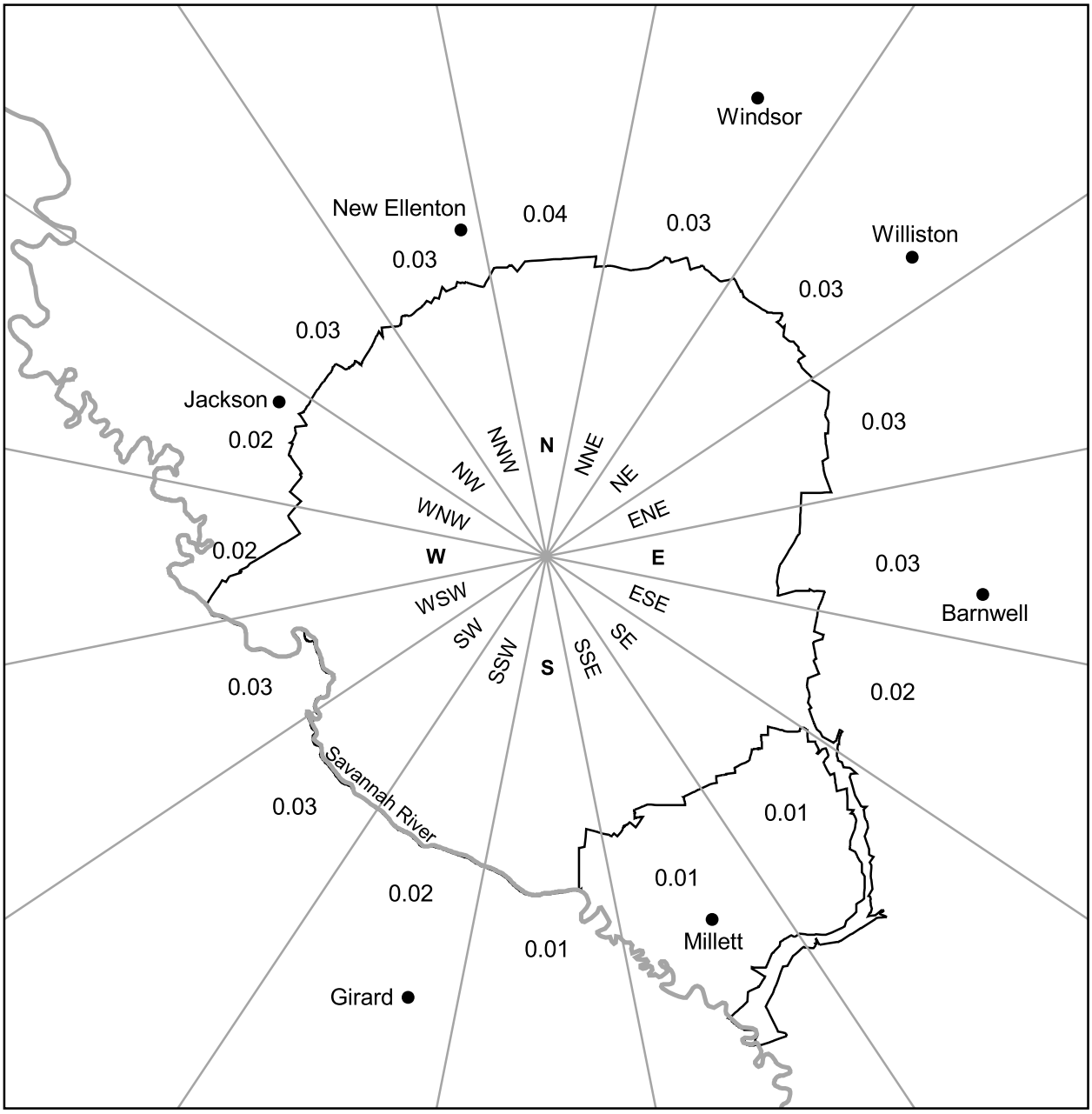
RI&ES/SRNL Map

Figure 13 Domestic Water Systems
Most of the drinking water at SRS is supplied by three "large" systems, which require regulatory oversight and thus are sampled on a regular basis. The site also has 14 "small" domestic water facilities, which serve populations of fewer than 25 persons, but only seven of the smaller systems (as shown on the map) require regulatory oversight and must be sampled. The three larger systems have transmission pipes, elevated storage tanks, water treatment plants, and a backup water treatment plant.



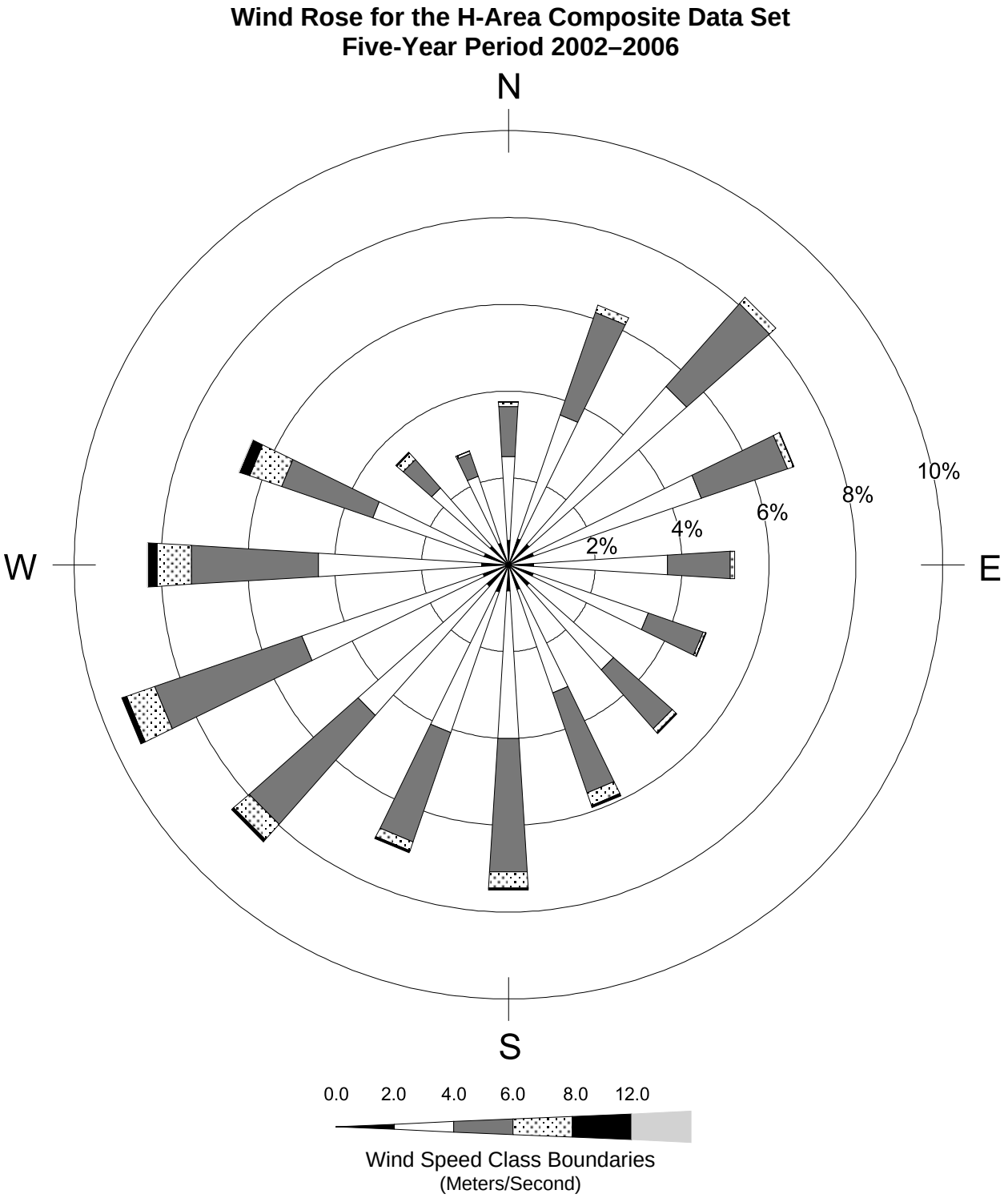
RI&ES/SRNL Map

Figure 14 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.



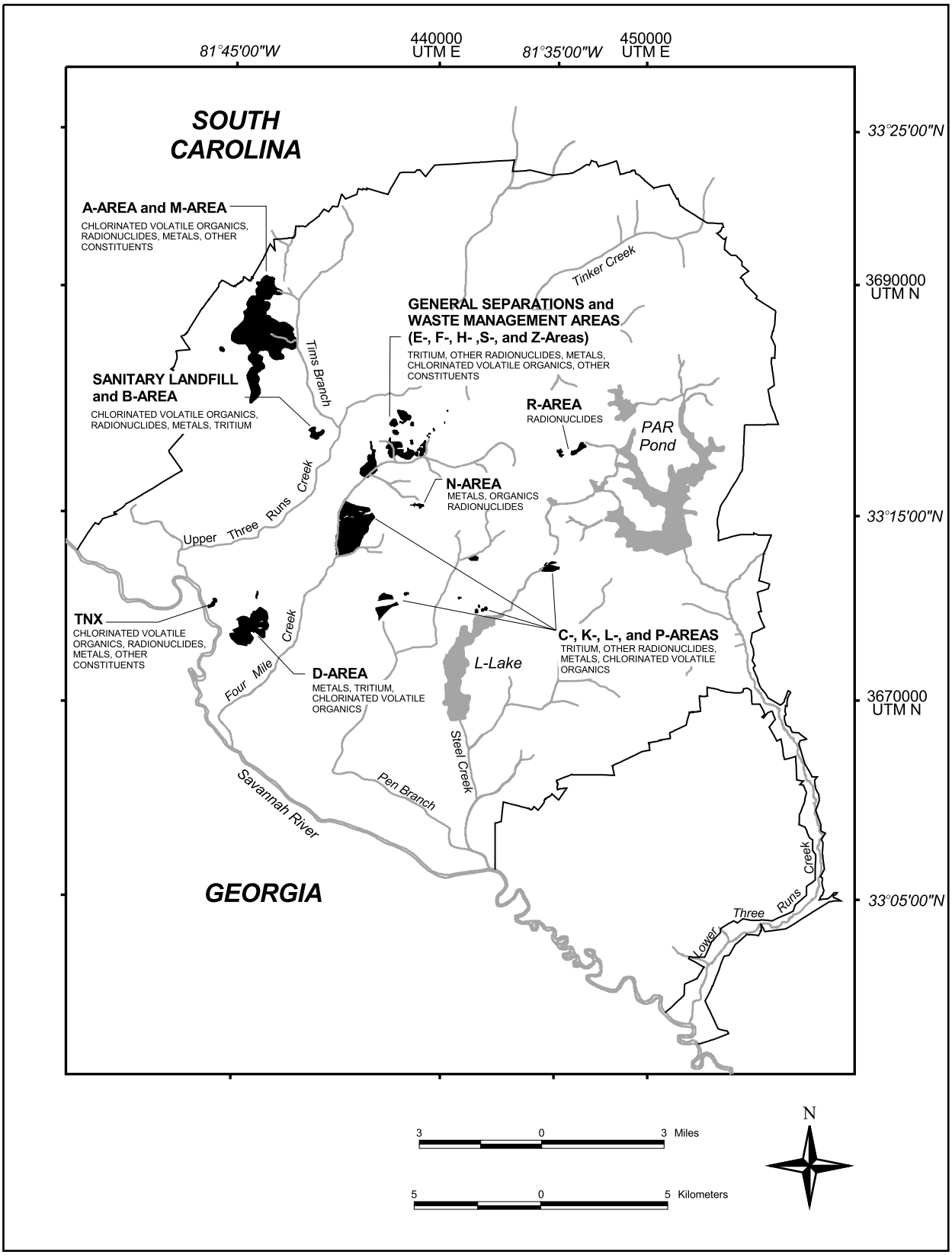
SRNL Map

Figure 15 Sector-Specific Adult Maximally Exposed Individual Air Pathway Doses (in mrem) for 2008
Maximally exposed individual (MEI) site boundary doses from airborne releases are shown for each of the 16 major compass point directions surrounding SRS. For 2008, the due north sector had the highest MEI dose (0.04 mrem).



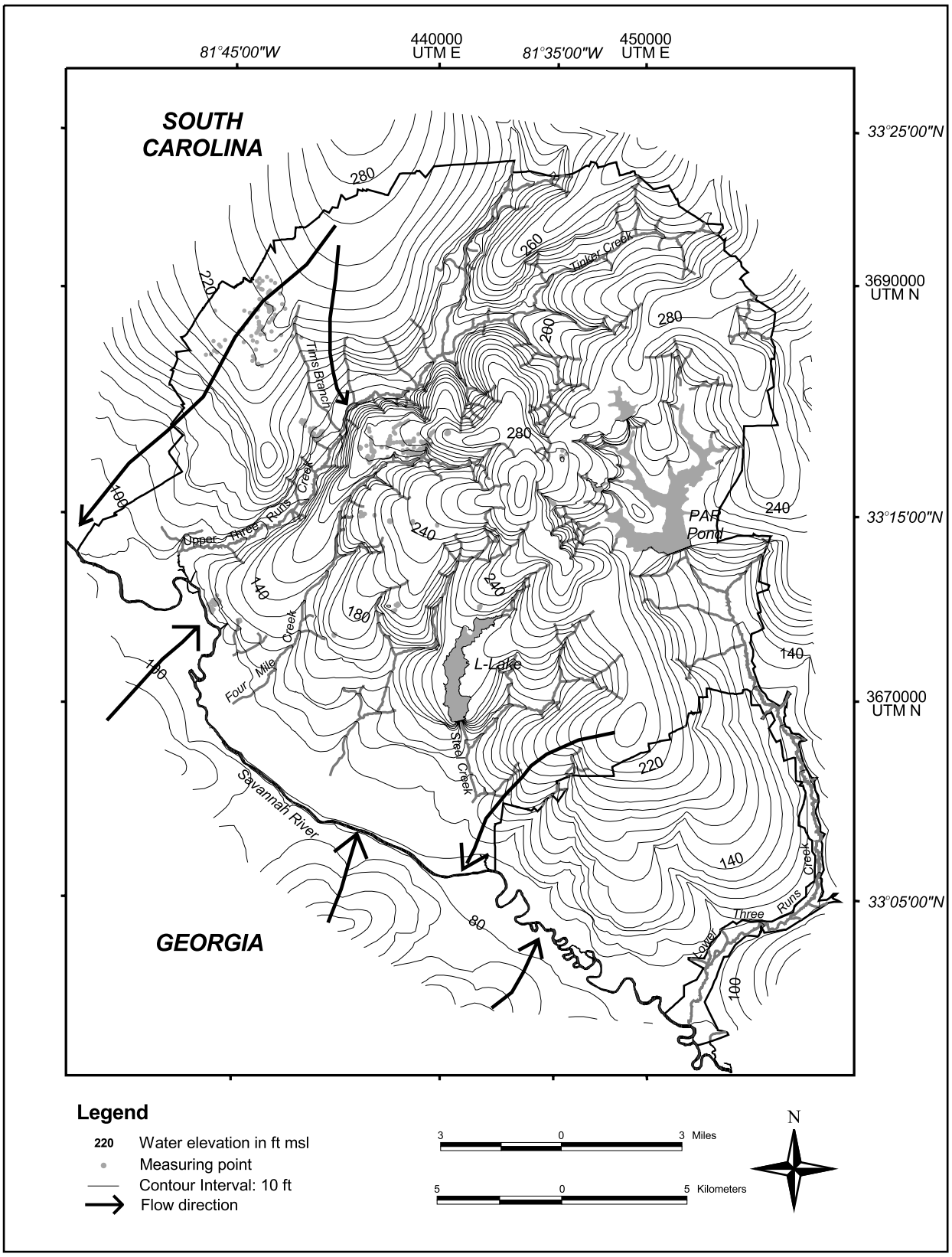
SRNL Graphic

Figure 16 Wind Rose for SRS, 2002–2006
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 2002–2006; measurements were taken 200 feet above the ground.



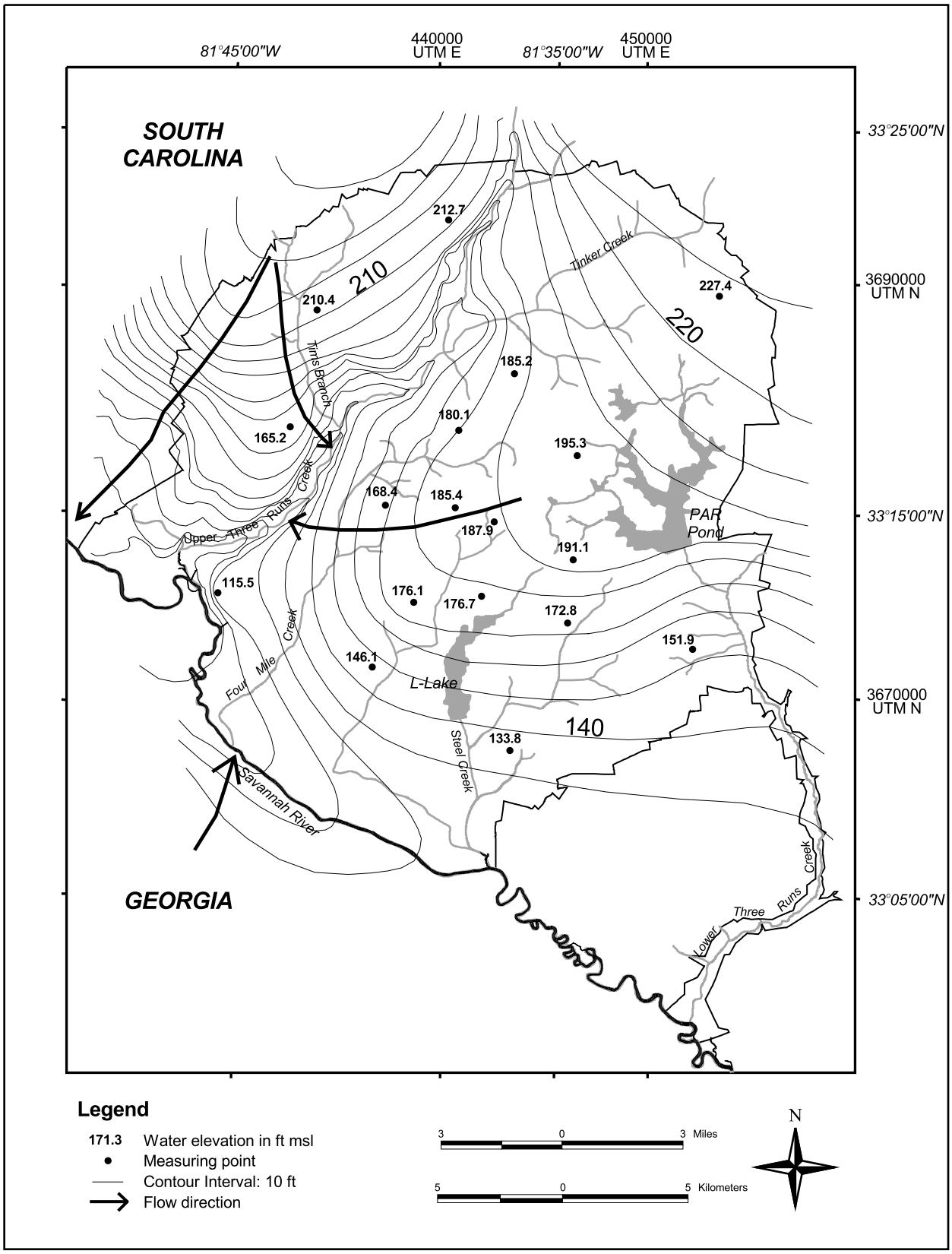
SRNL/ACP Map

Figure 17 Facilities Monitored by the SRS Monitoring Well Network; Shaded Areas Indicate Extent of Groundwater Contamination.



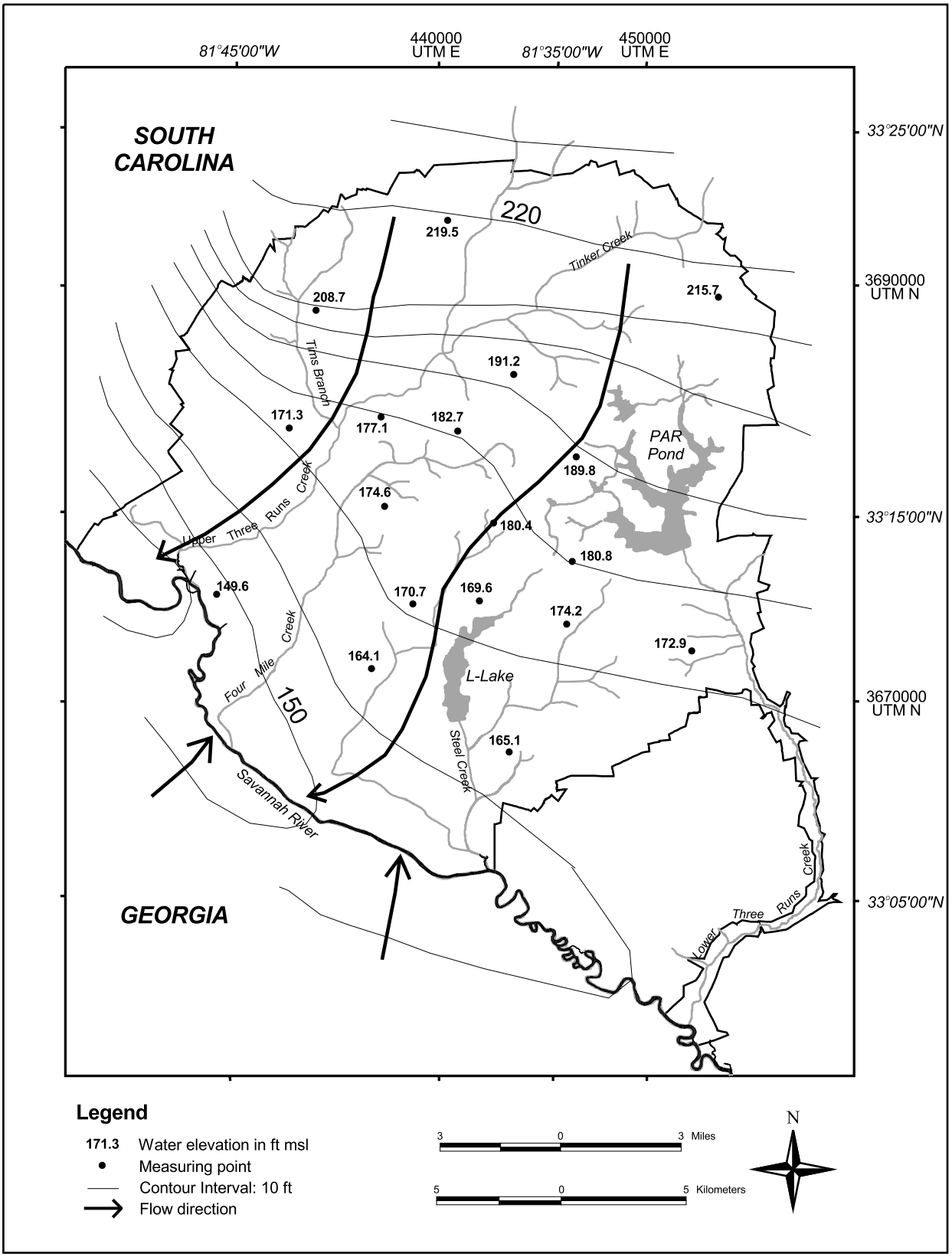
SRNL Map

Figure 18 Water Table Contours at SRS



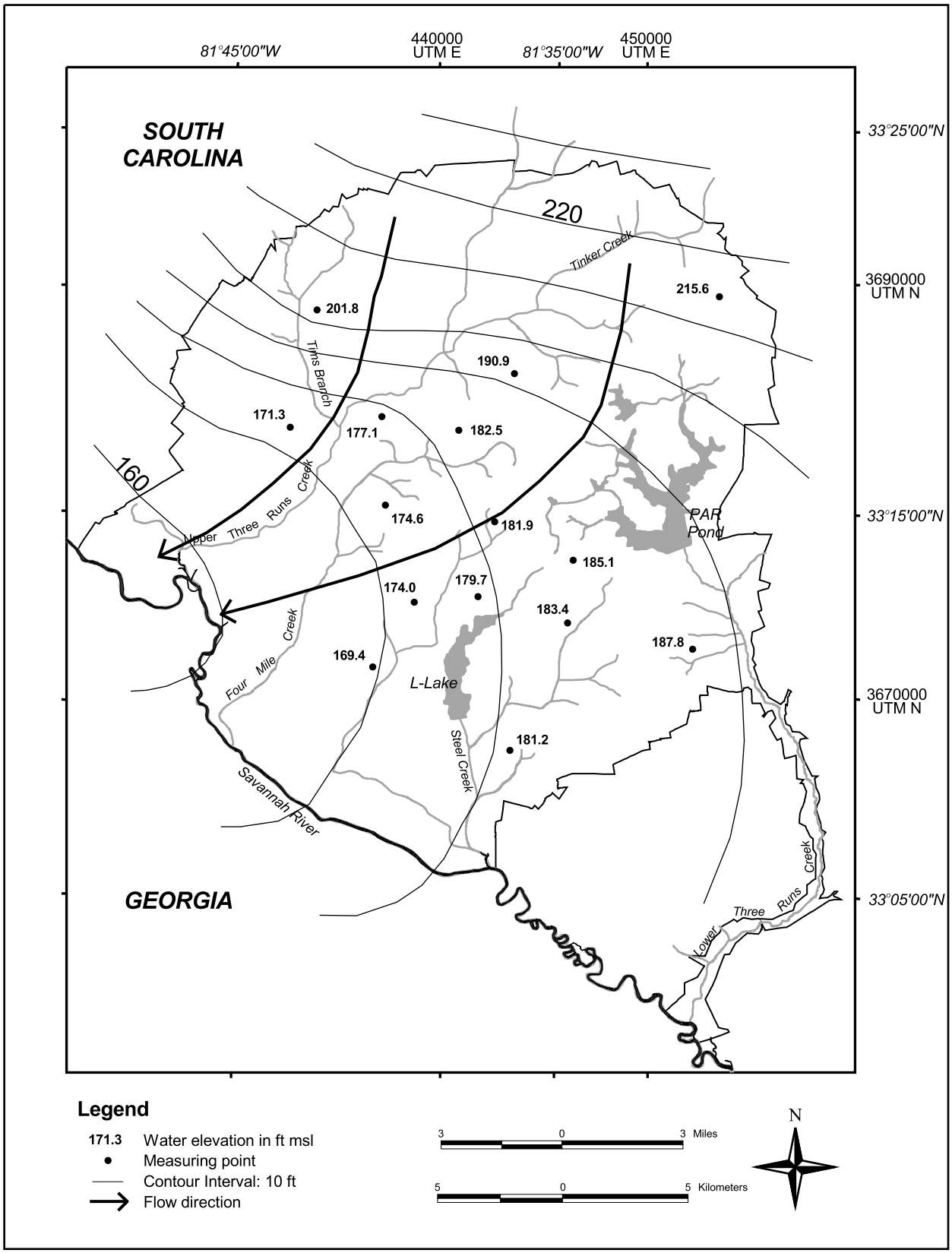
SRNL Map

Figure 19 Potentiometric Surface of the Gordon Aquifer at SRS



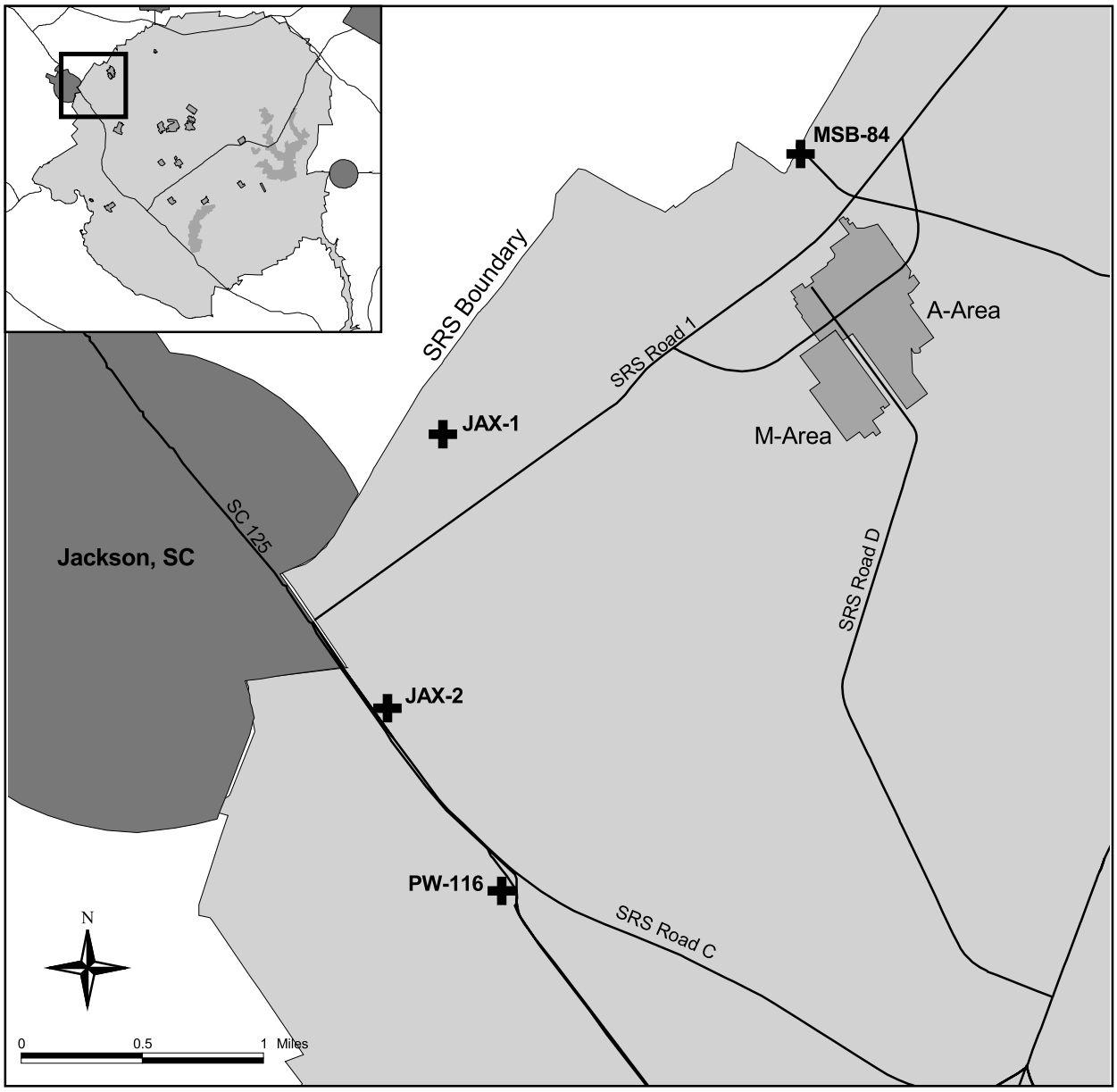
SRNL Map

Figure 20 Potentiometric Surface of the Crouch Branch Aquifer at SRS



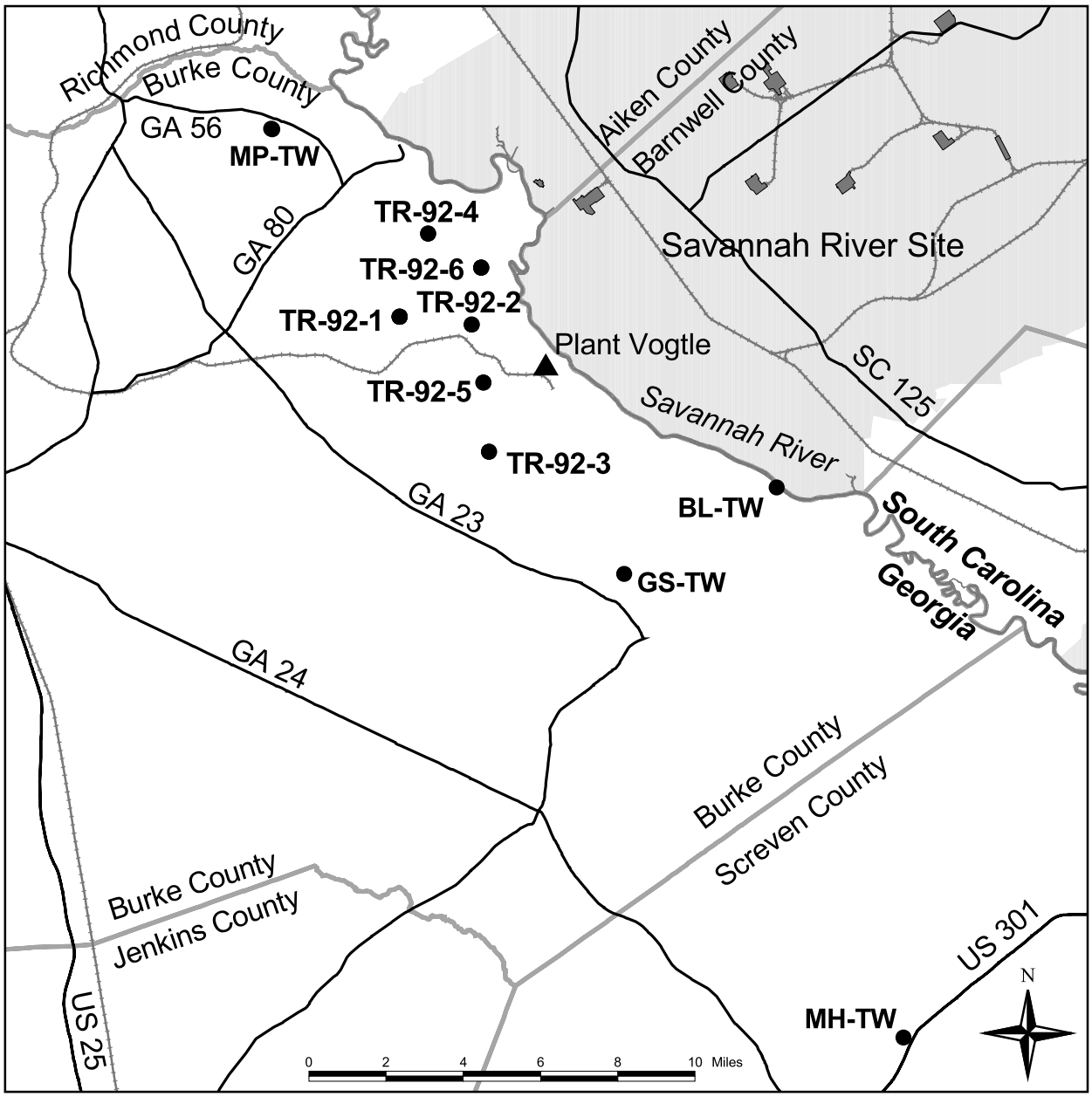
SRNL Map

Figure 21 Potentiometric Surface of the McQueen Branch Aquifer at SRS



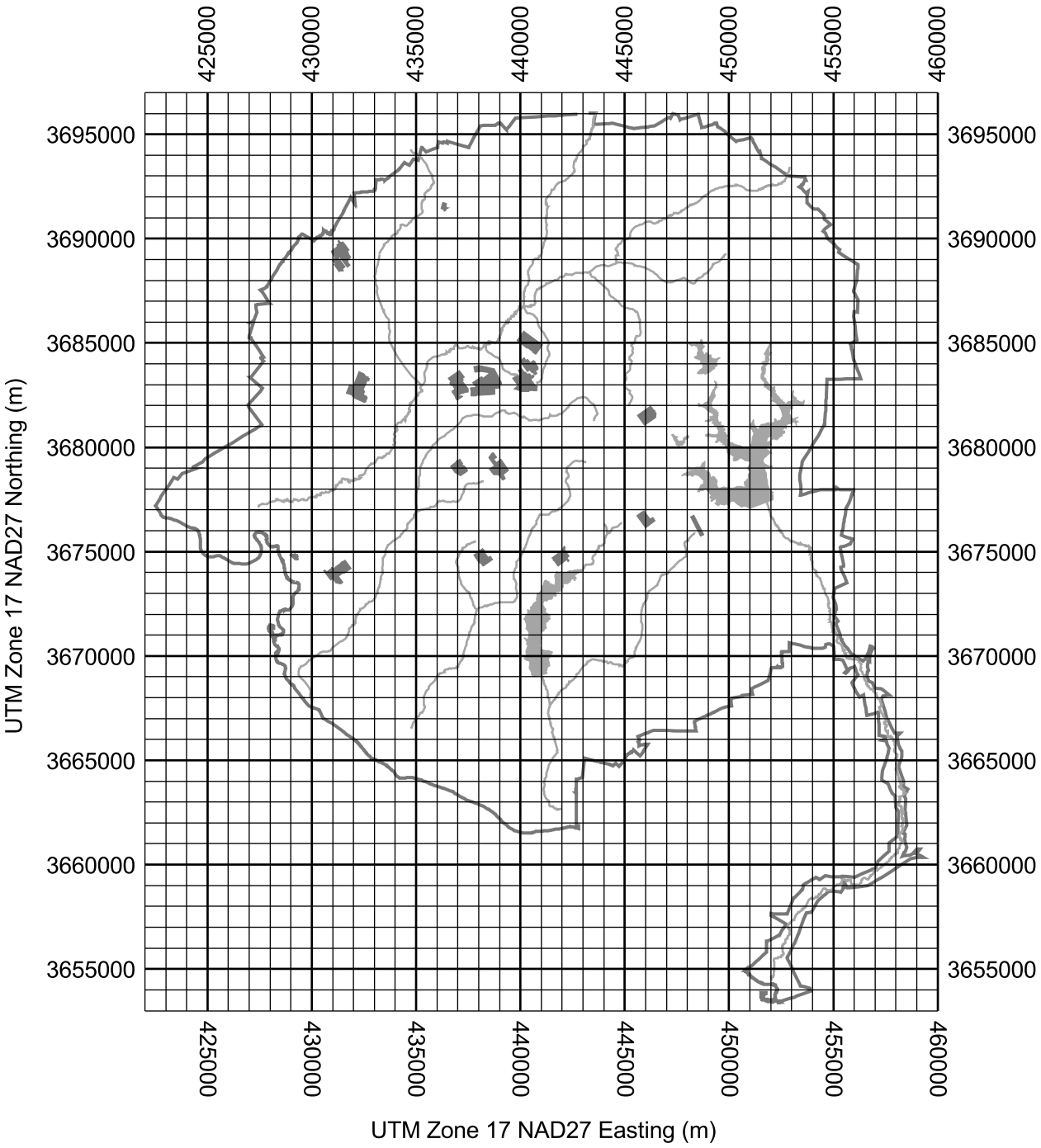
RI&ES/SRNL Map

Figure 22 Wells Along Site Boundary Between A-Area/M-Area and Jackson, South Carolina (Nearest Population Center)



RI&ES/SRNL Map

Figure 23 Burke/Screven County, Georgia, Well Locations



SRNL Map

Figure 24 Reference Map Showing Universal Transverse Mercator (UTM) Coordinates

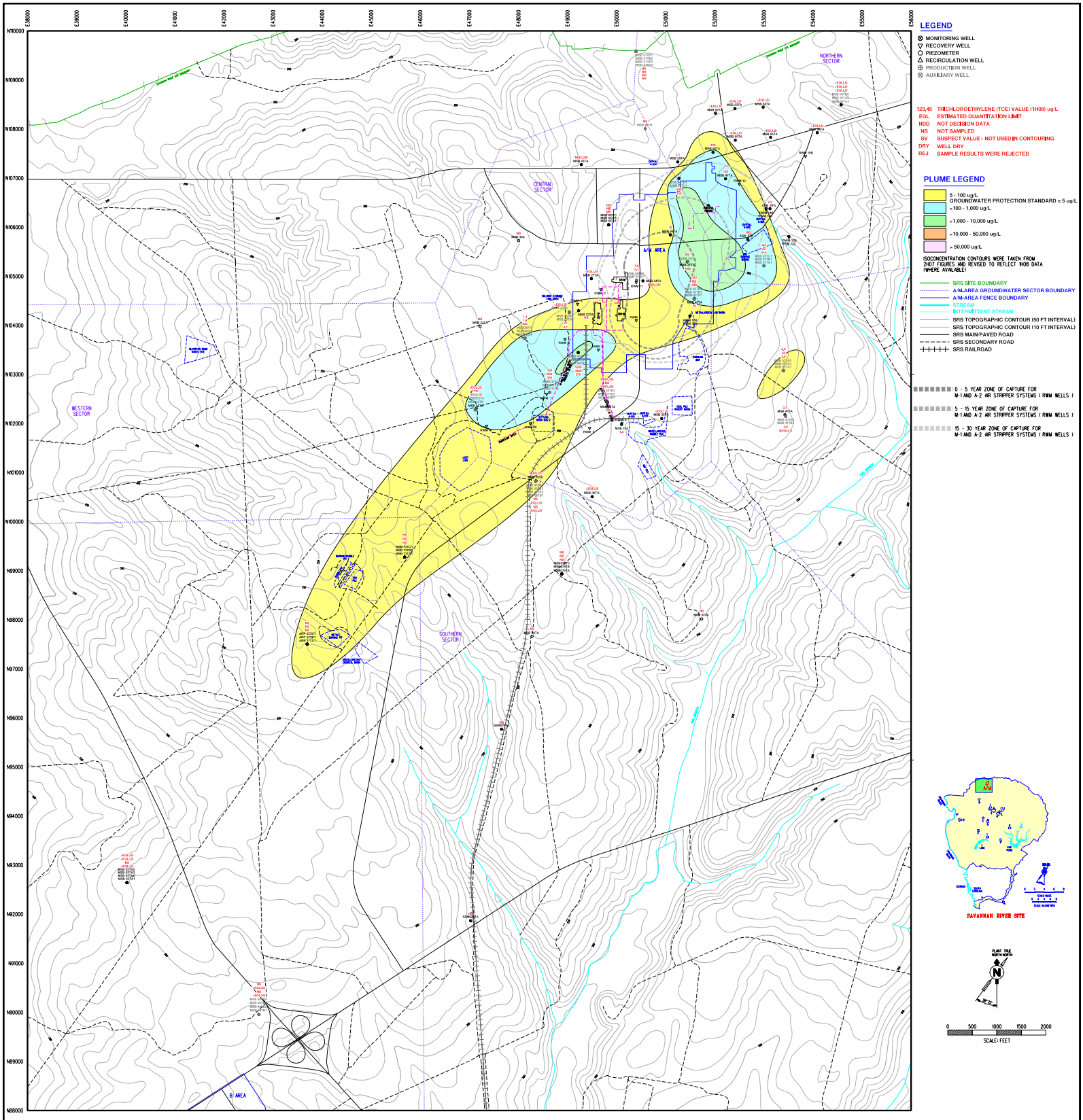


Figure 25 Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, First Half 2008

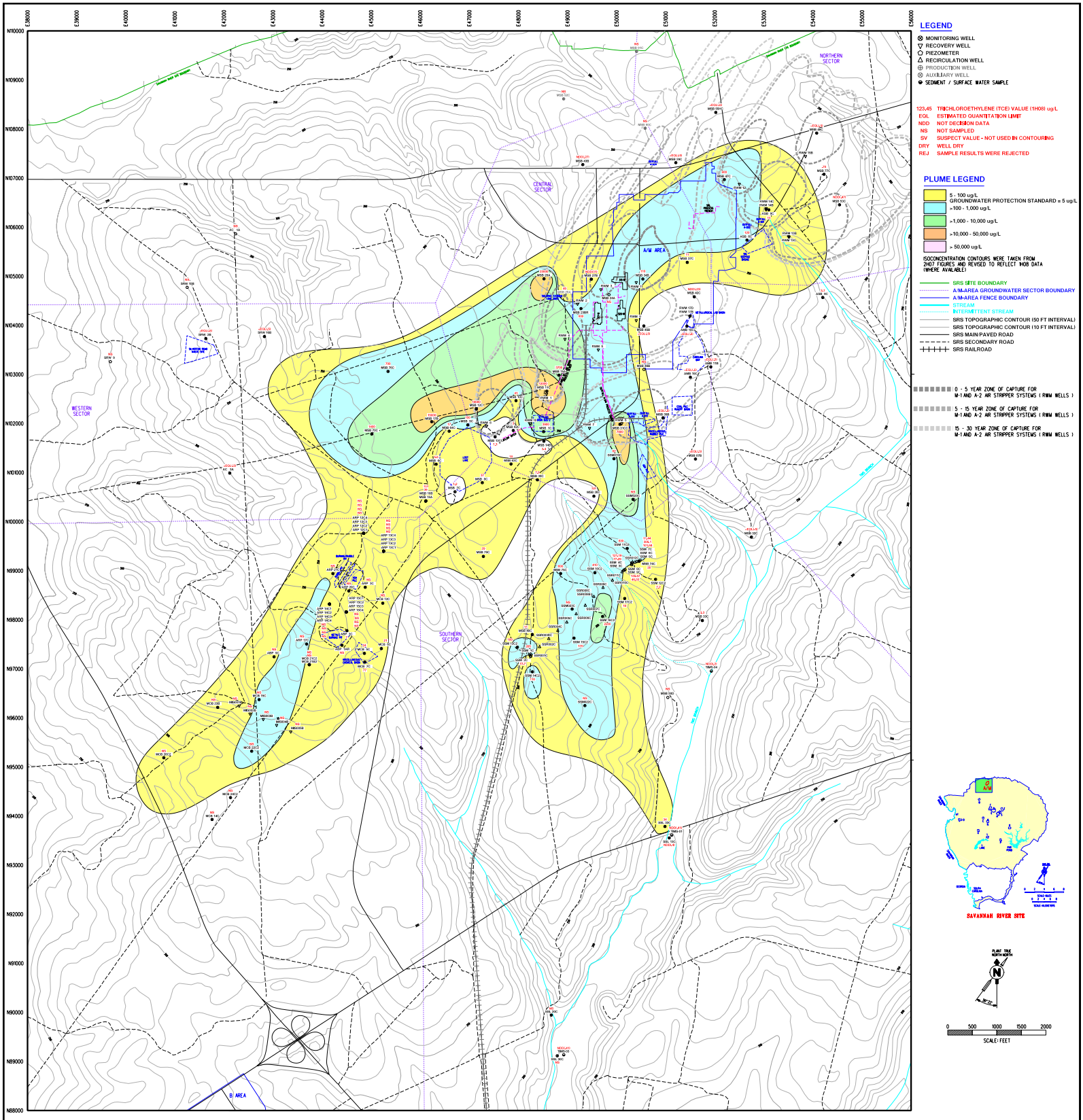


Figure 26 Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Upper Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, First Half 2008

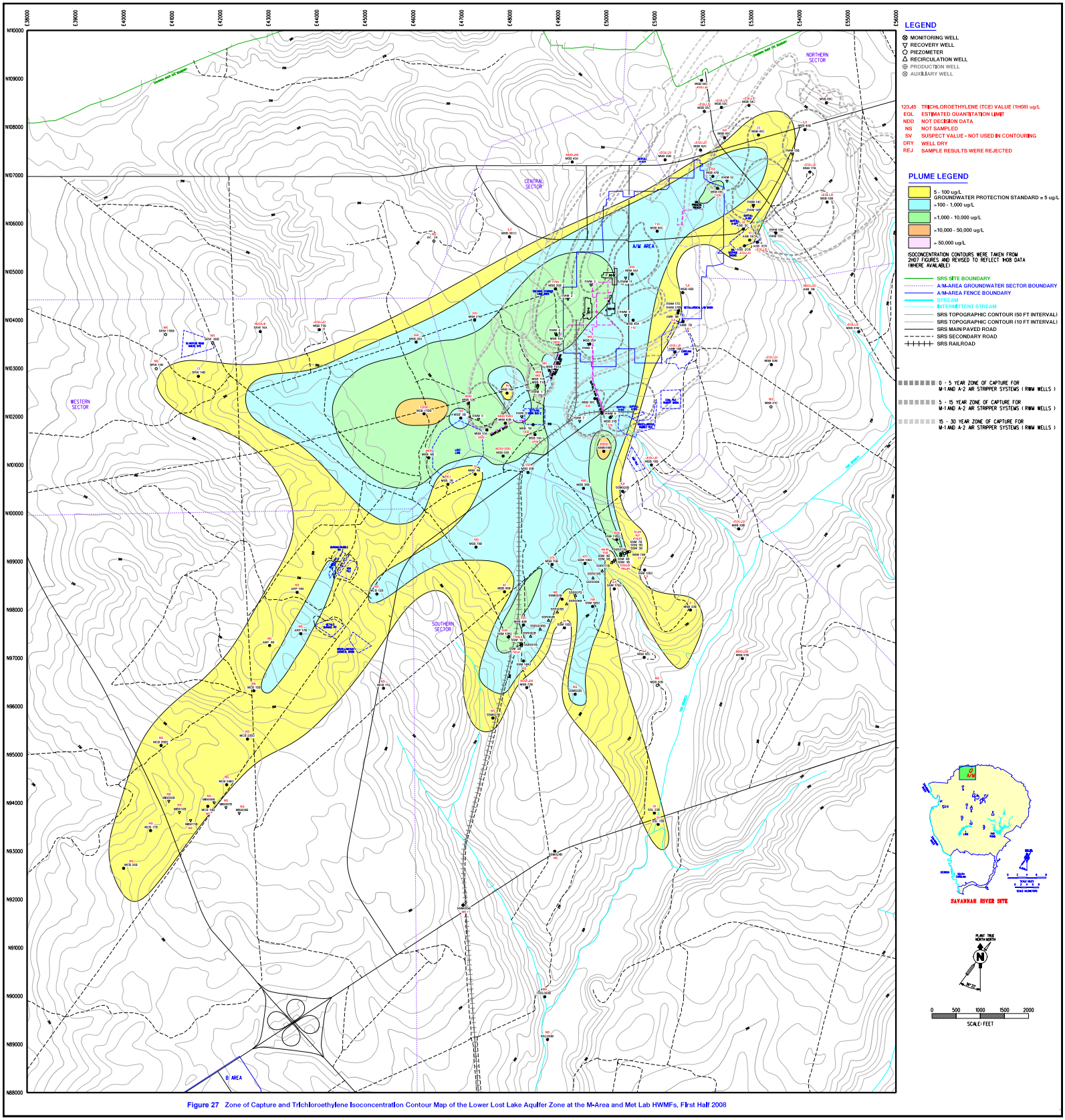


Figure 27 Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Lower Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, First Half 2008

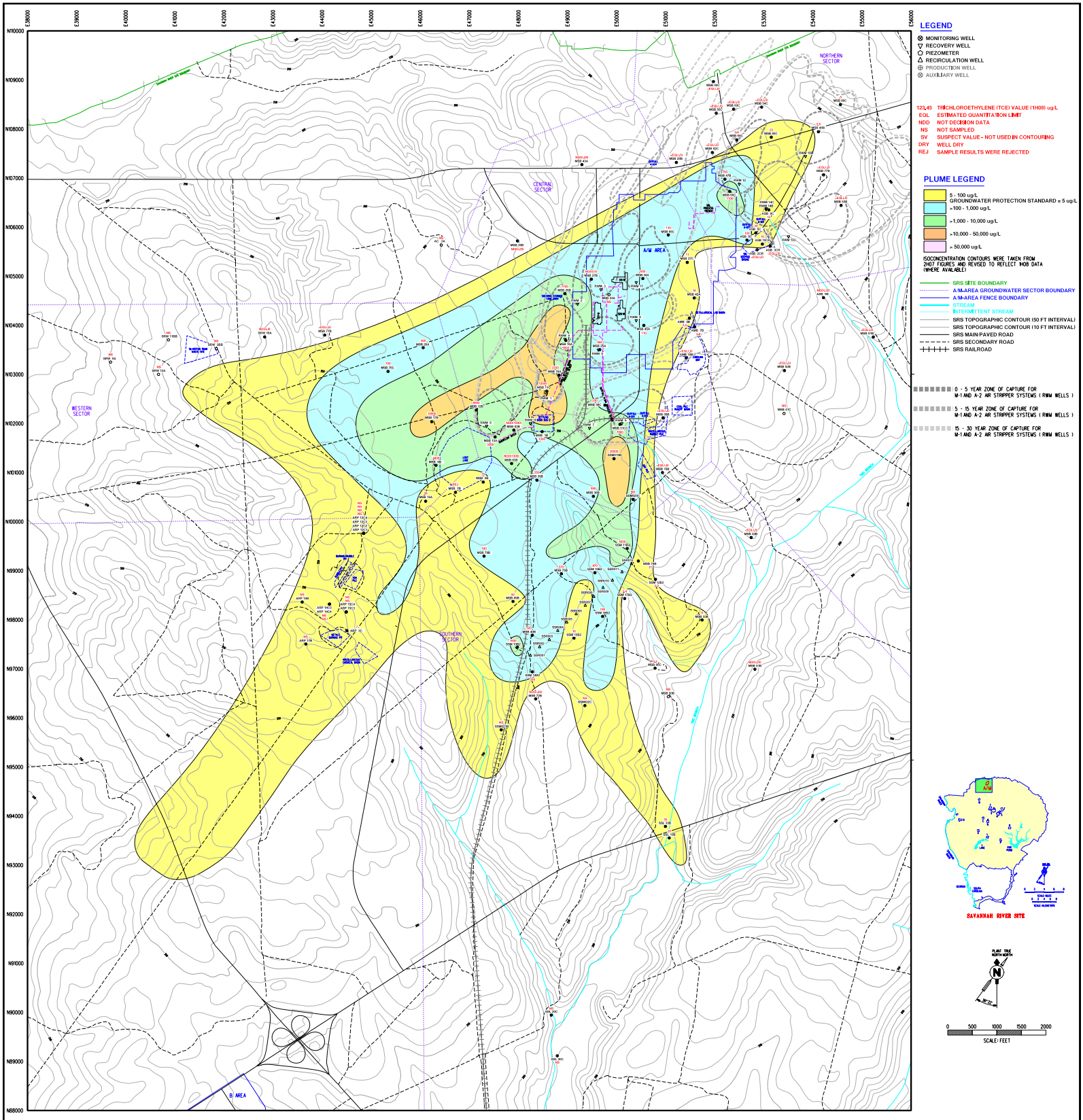


Figure 28 Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Composite Lost Lake Aquifer Zone at the M-Area and Met Lab HWMFs, First Half 2008

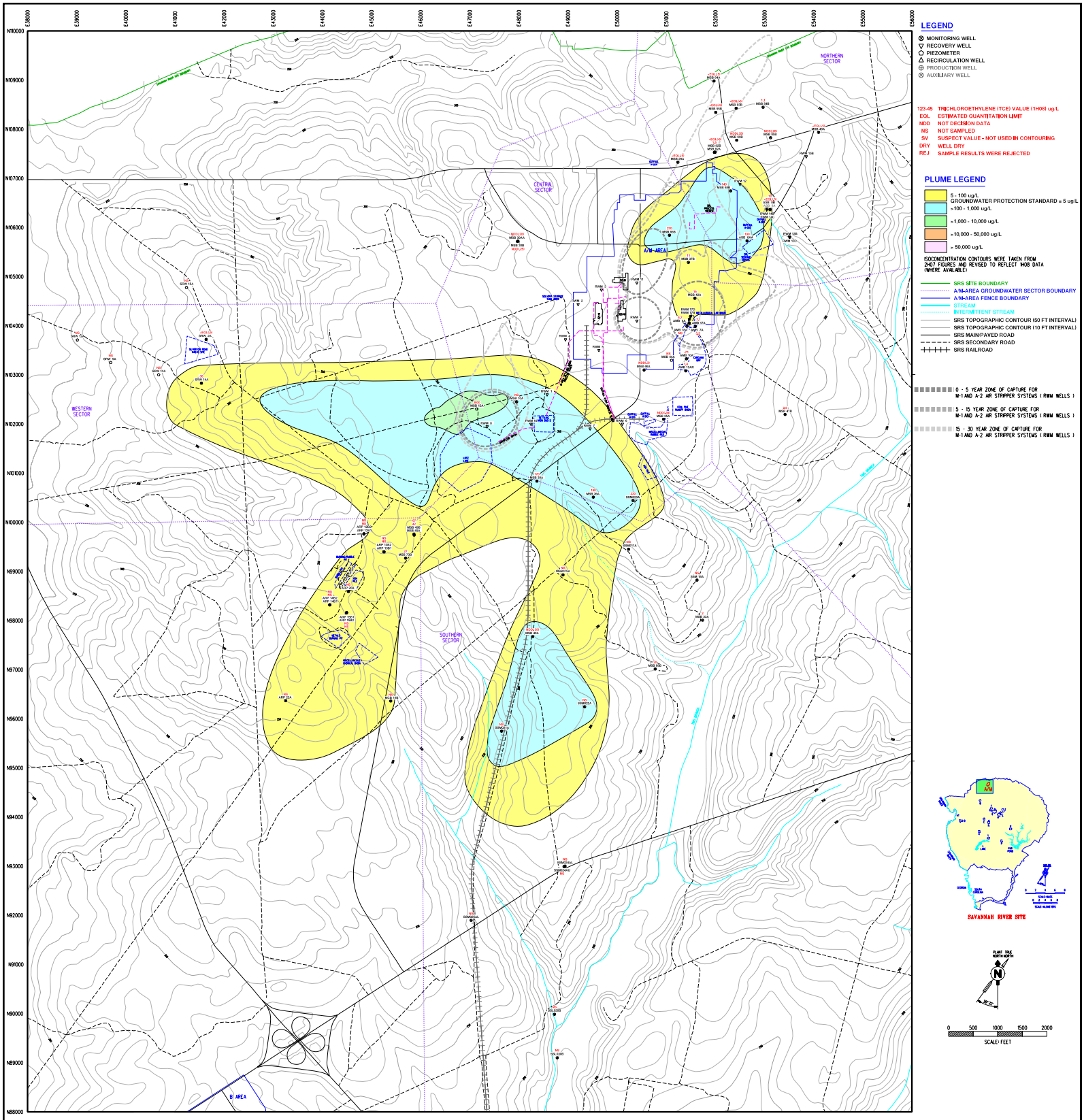


Figure 29 Zone of Capture and Trichloroethylene Isoconcentration Contour Map of the Middle Sand Aquifer Zone of the Crouch Branch Confining Unit at the M-Area and Met Lab HWMFs, First Half 2008

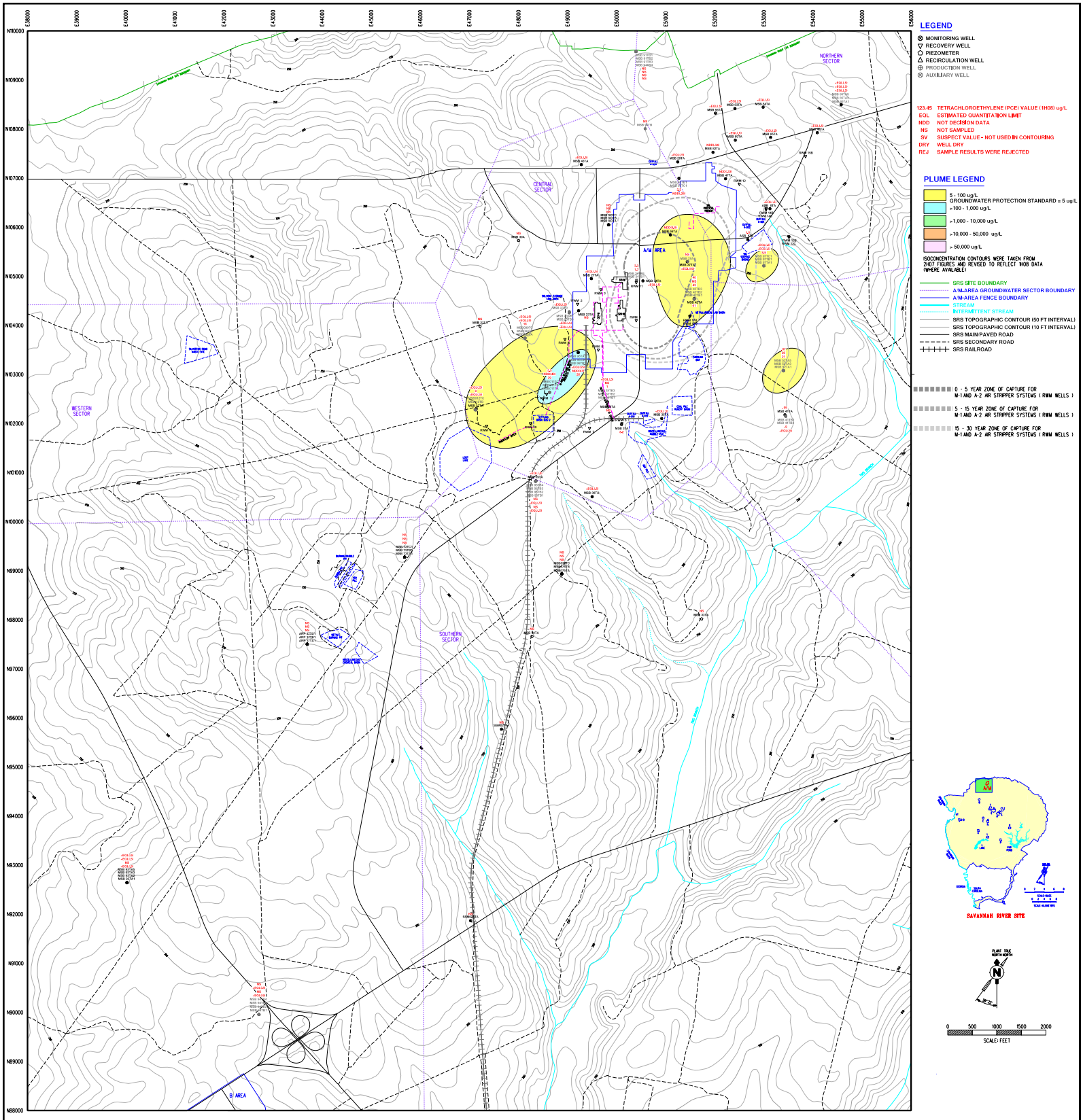


Figure 30 Zone of Capture and Tetrachloroethylene Isoconcentration Contour Map of the Crouch Branch Aquifer Unit at the M-Area and Met Lab HWMFs, First Half 2008

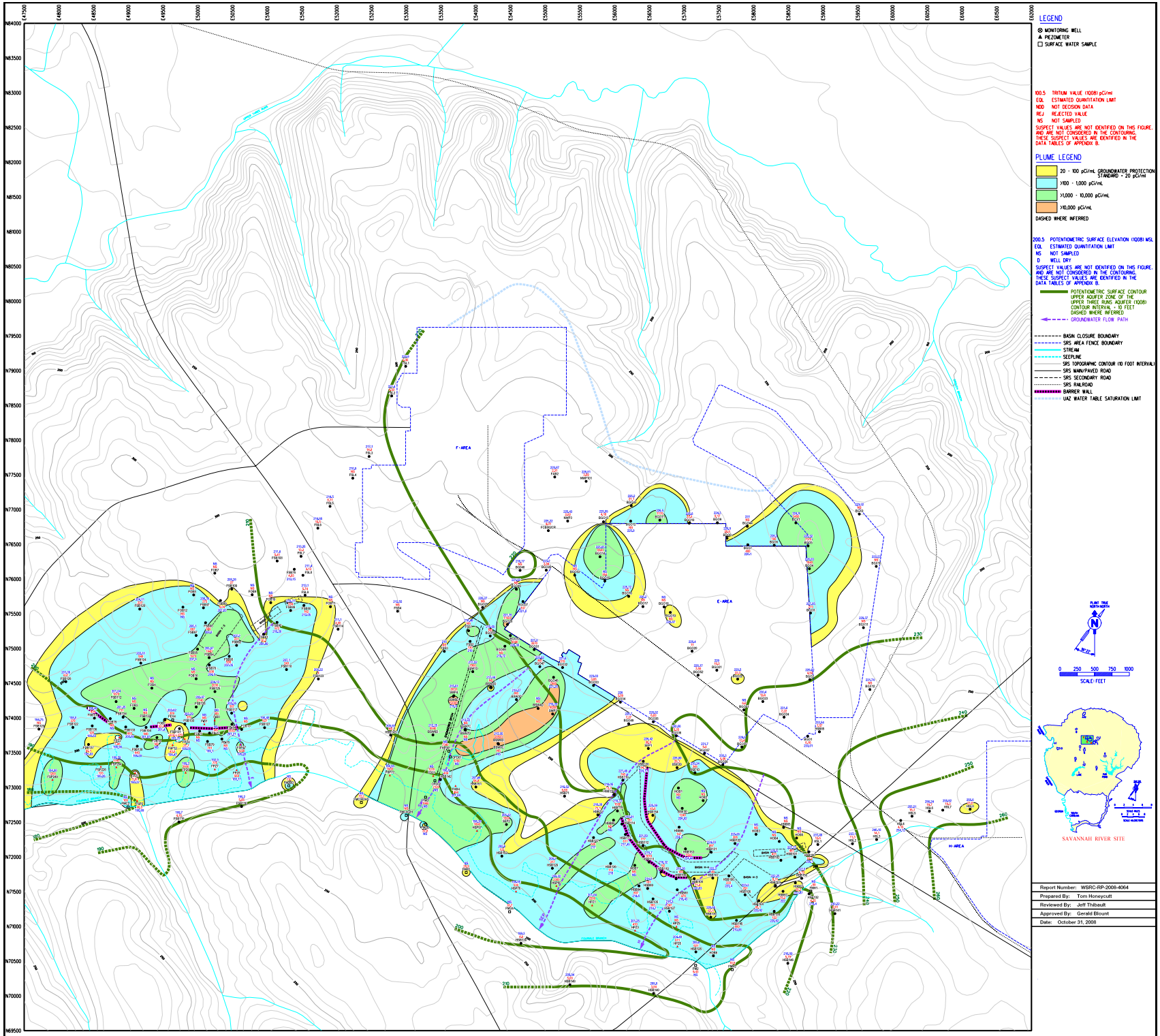


Figure 31 GSA Corrective Action Report. Tritium Concentrations and Potentiometric Surface in the Upper Aquifer Zone of the Upper Three Runs Aquifer at the GSA, First Quarter 2008

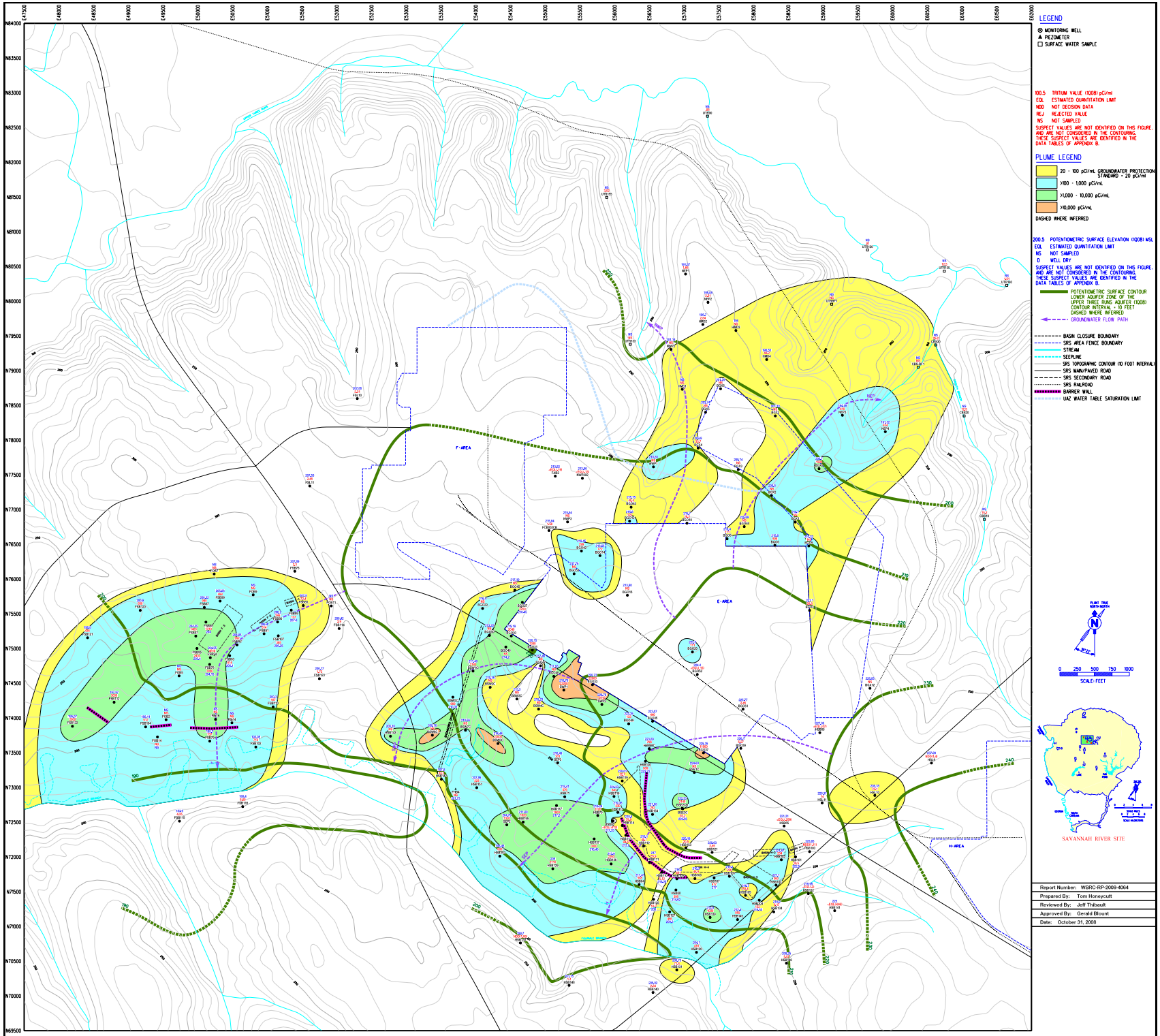


Figure 32 GSA Corrective Action Report. Tritium Concentrations and Potentiometric Surface in the Lower Aquifer Zone of the Upper Three Runs Aquifer at the GSA, First Quarter 2008

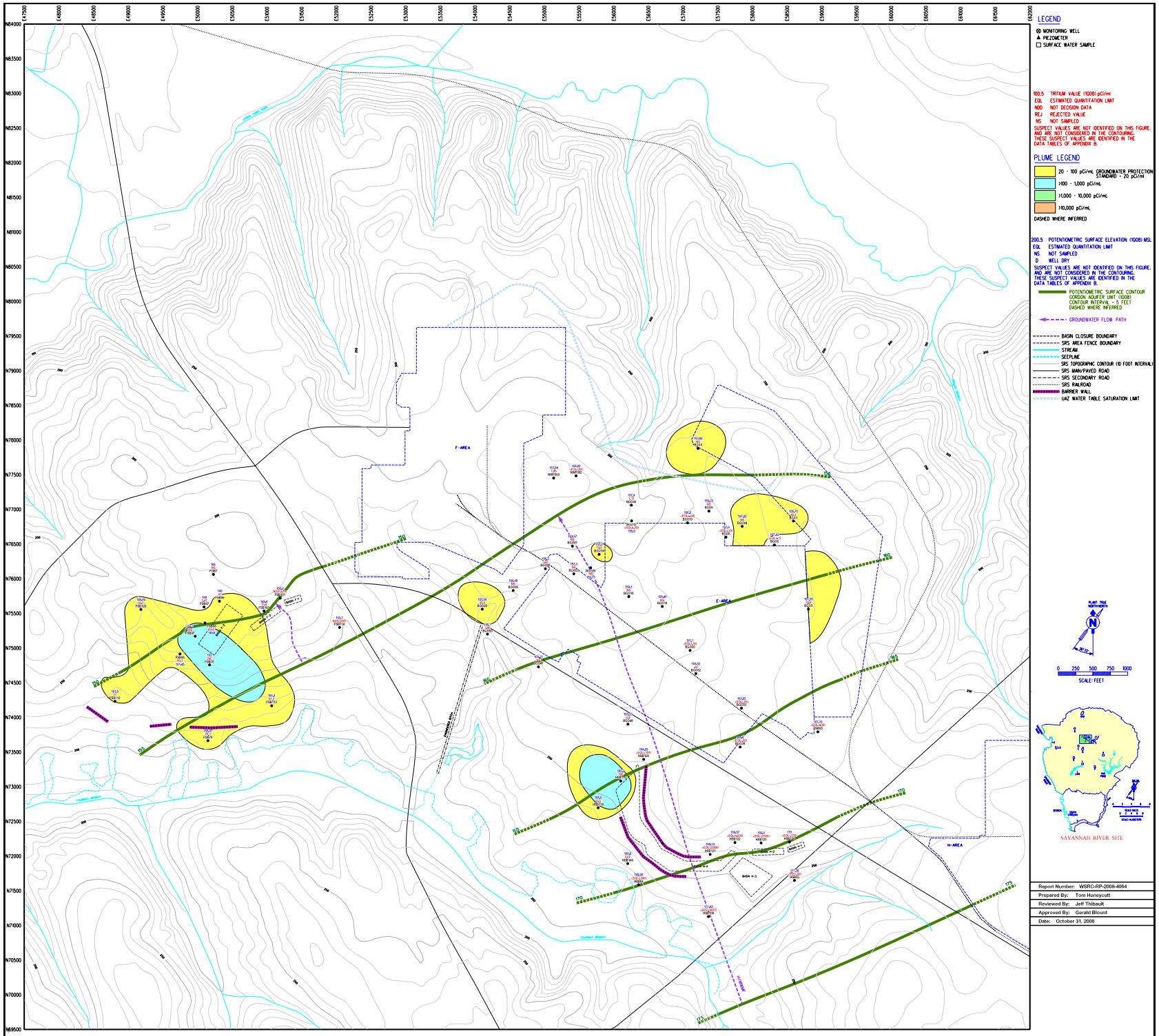


Figure 33 GSA Corrective Action Report. Tritium Concentrations and Potentiometric Surface in the Gordon Aquifer at the GSA, First Quarter 2008