

LEGEND

- Oak Ridge Reservation
- Counties most affected by the ORR
- Additional affected Counties
- + County Seat
- National Park Boundary

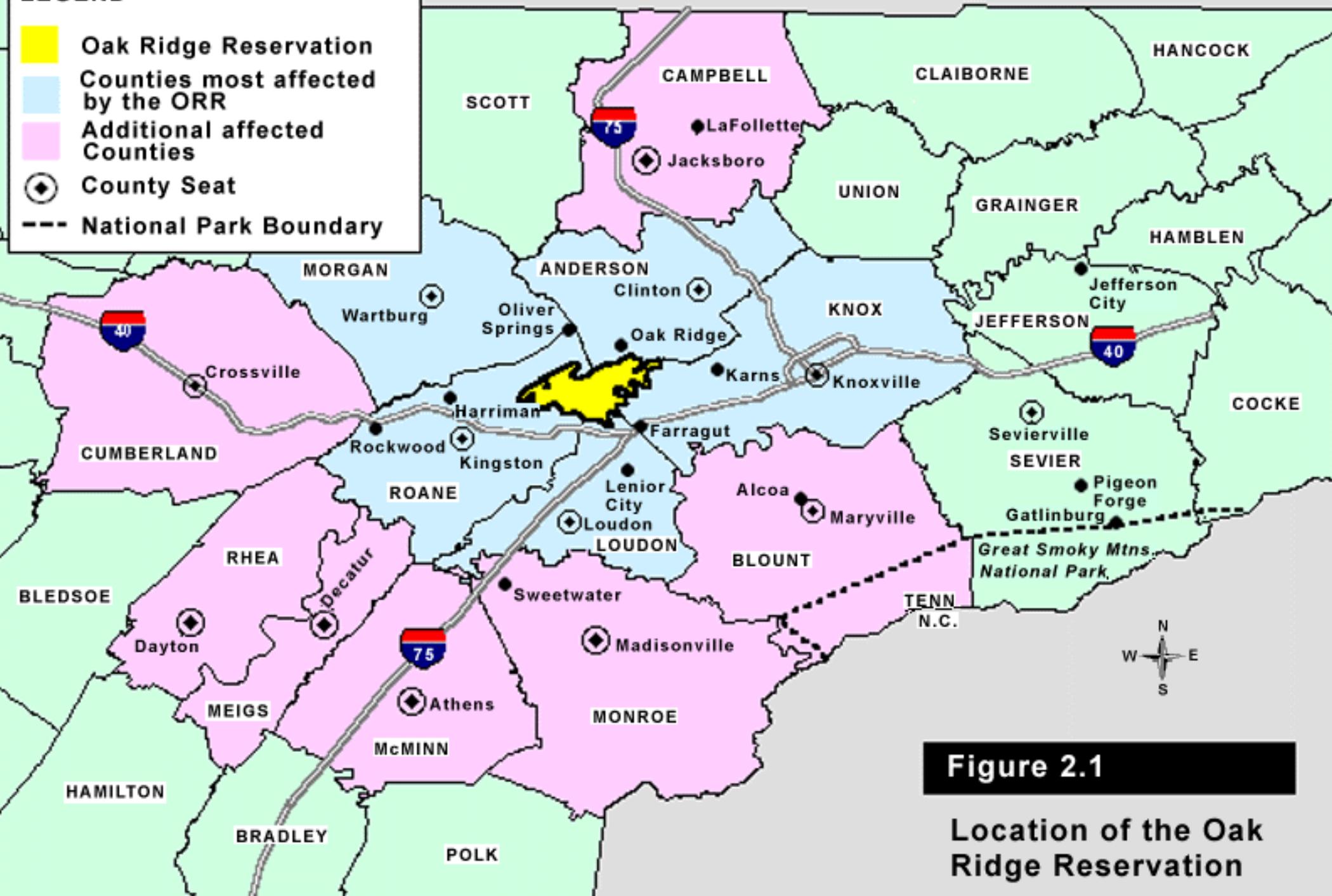


Figure 2.1

Location of the Oak Ridge Reservation

LEGEND

Slope Aspect by Percent Slope

-  No Slope
-  Class 2: 0-5%
-  Class 3: 5-10%
-  Class 4: 10-15%
-  Class 5: >15%

jkh, LP Topography, 8/19/98

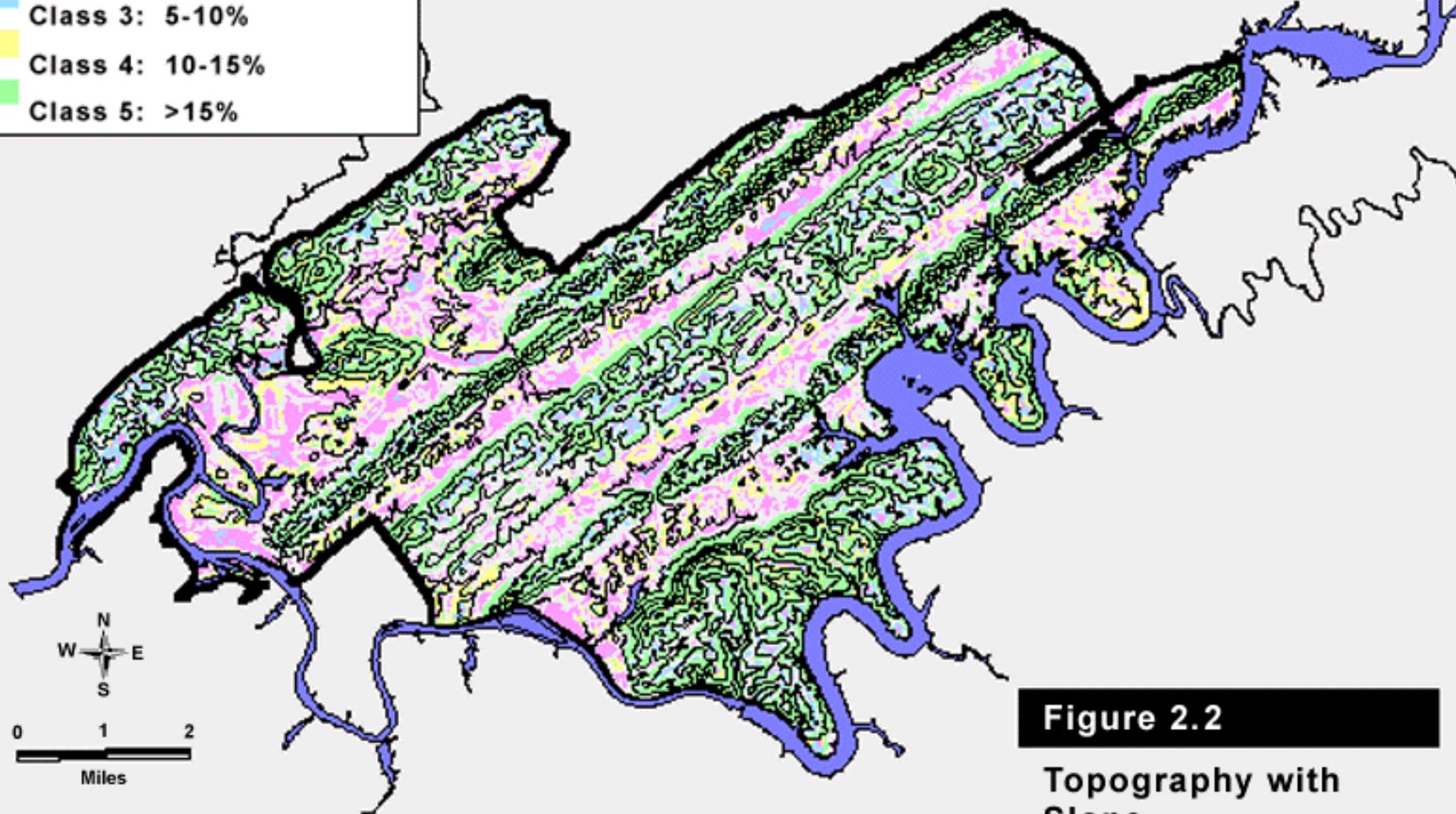


Figure 2.2

Topography with Slope

- LEGEND**
- ◆ Caves
 - ✕ Quarry
 - △ Spring
 - Sinkhole
 - TSF Sinkhole
 - ▭ DOE Boundary
 - Infiltration

- Rome Formation and Conasauga Group
- Post Chickamauga Rocks (Upper Ordovician to Lower Mississippian)
- Chickamauga Group
- Knox Group

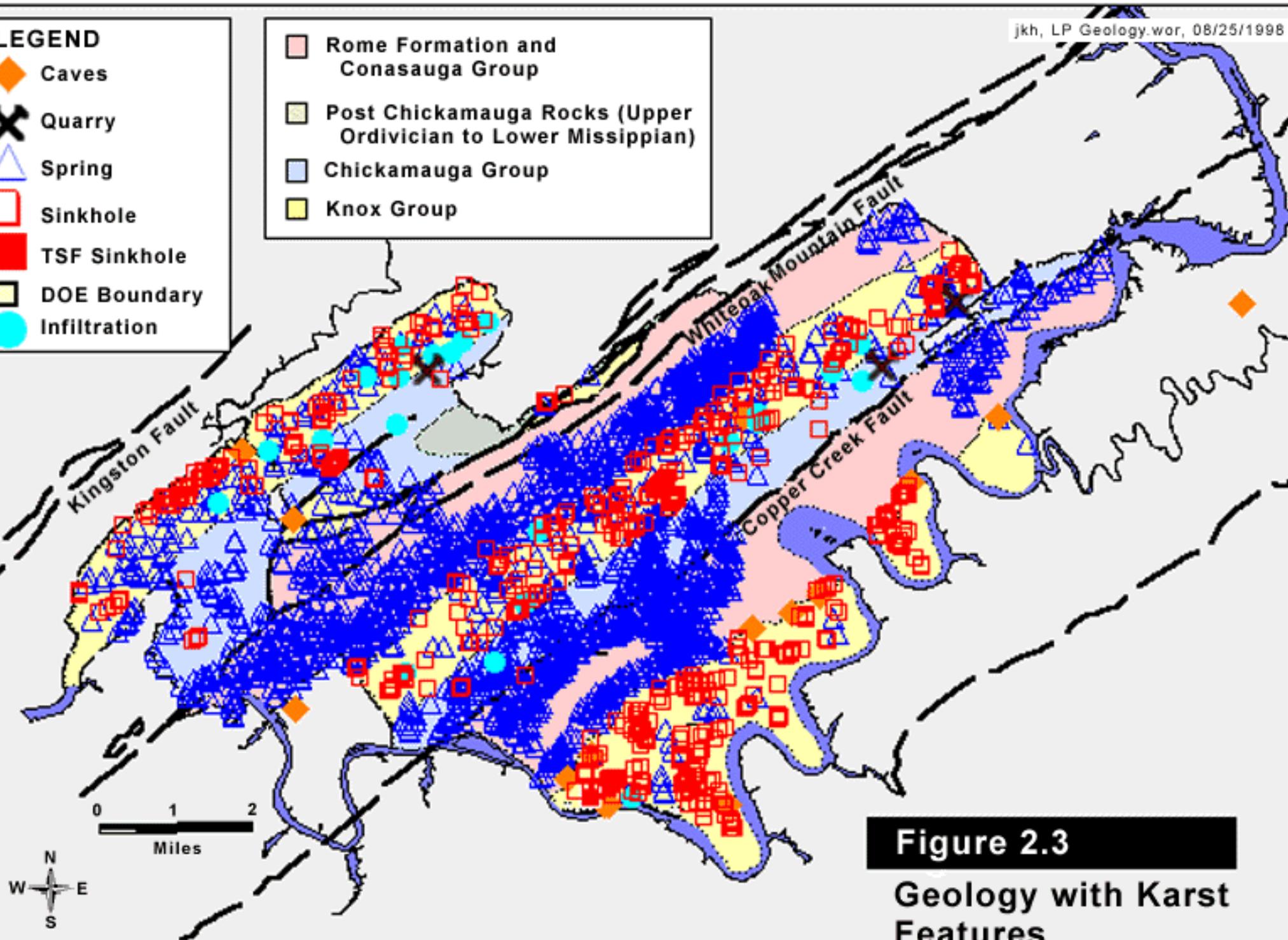


Figure 2.3

Geology with Karst Features

LEGEND

- Surveyed Wetlands
- Floodplains
- Scarboro Watershed
- Bear Creek Watershed
- Grassy Creek Watershed
- East Fork Poplar Creek Watershed
- White Oak Creek Wetlands
- Bearden Creek Watershed
- Walker Branch Watershed
- McCoy Branch Watershed
- Streams

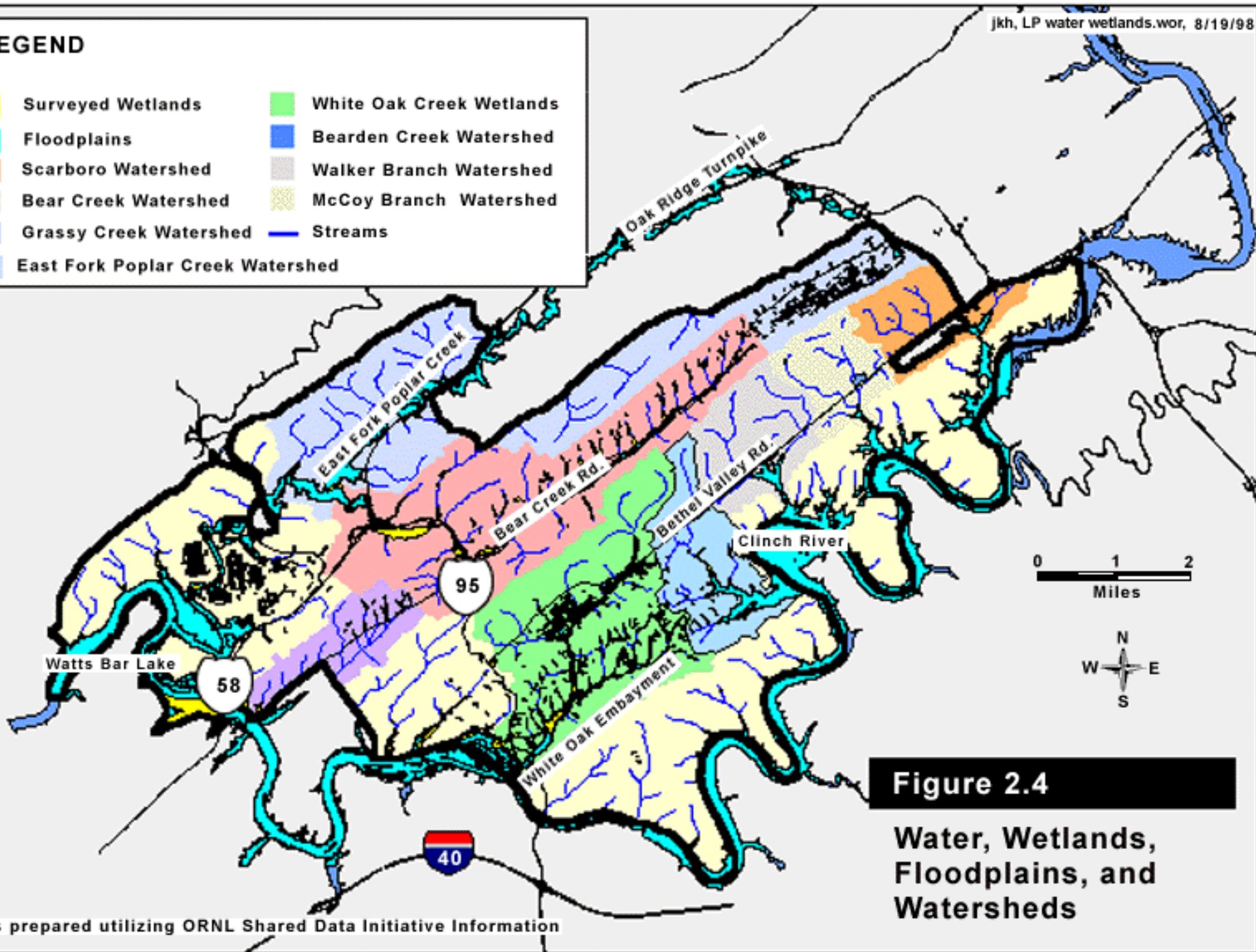


Figure 2.4

Water, Wetlands, Floodplains, and Watersheds

LEGEND

-  National Environmental Research Park
-  Forested Areas
-  State Natural Areas
-  Research Areas
-  Research Monitoring Routes

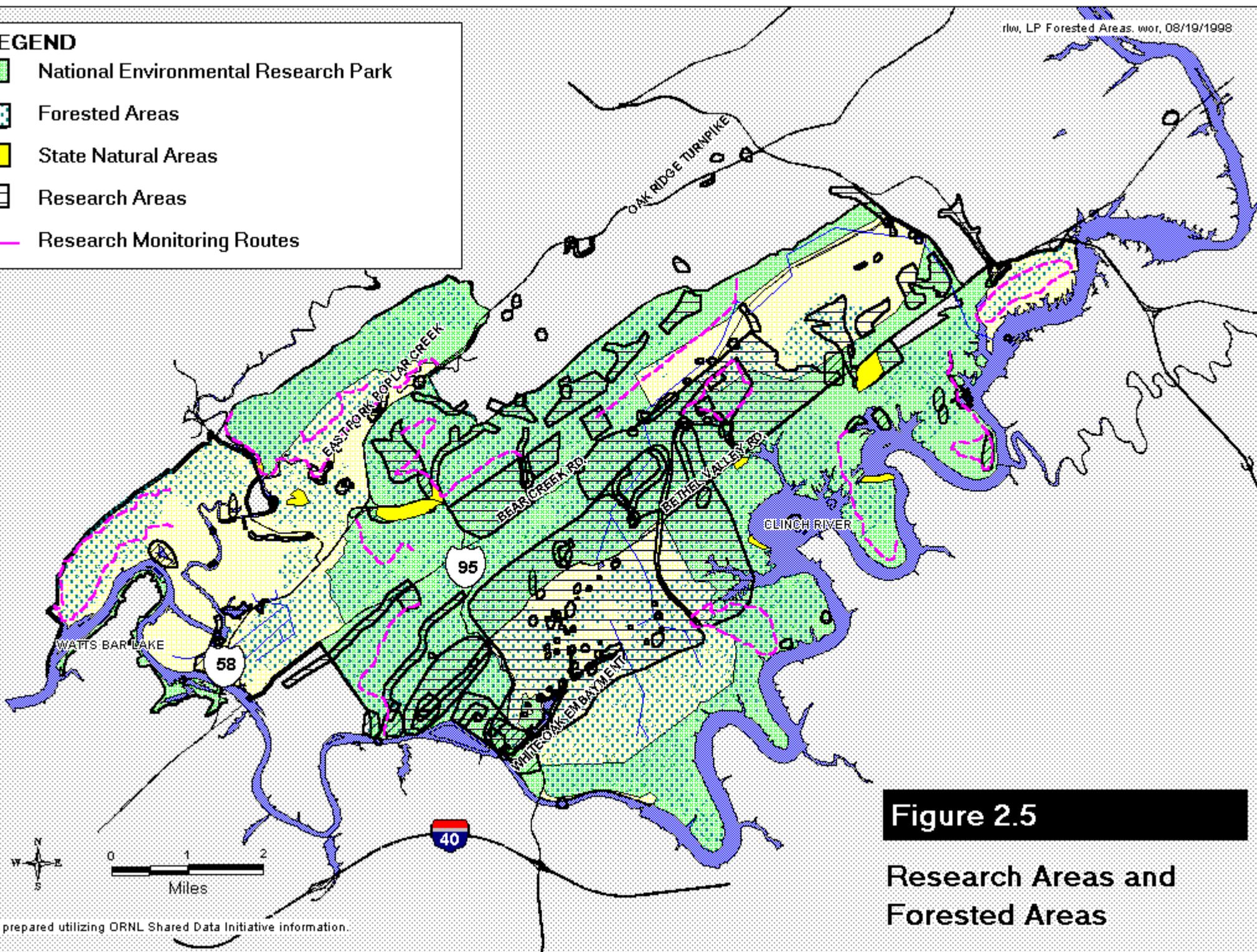


Figure 2.5

Research Areas and Forested Areas

Maps prepared utilizing ORNL Shared Data Initiative information.

LEGEND

- ① Ecological and Physical Sciences Study Center
- ② New Bethel Church Interpretive Center
- ③ ORNL Graphite Reactor
- ④ Gallaher Bend Greenway
- ⑤ Clark Center Recreation Area
- ⑥ TWRA Wildlife Checking Station
- ▨ Historic Districts
- ▣ TWRA Wildlife Management Area
- Cemeteries
- Historic Homesites

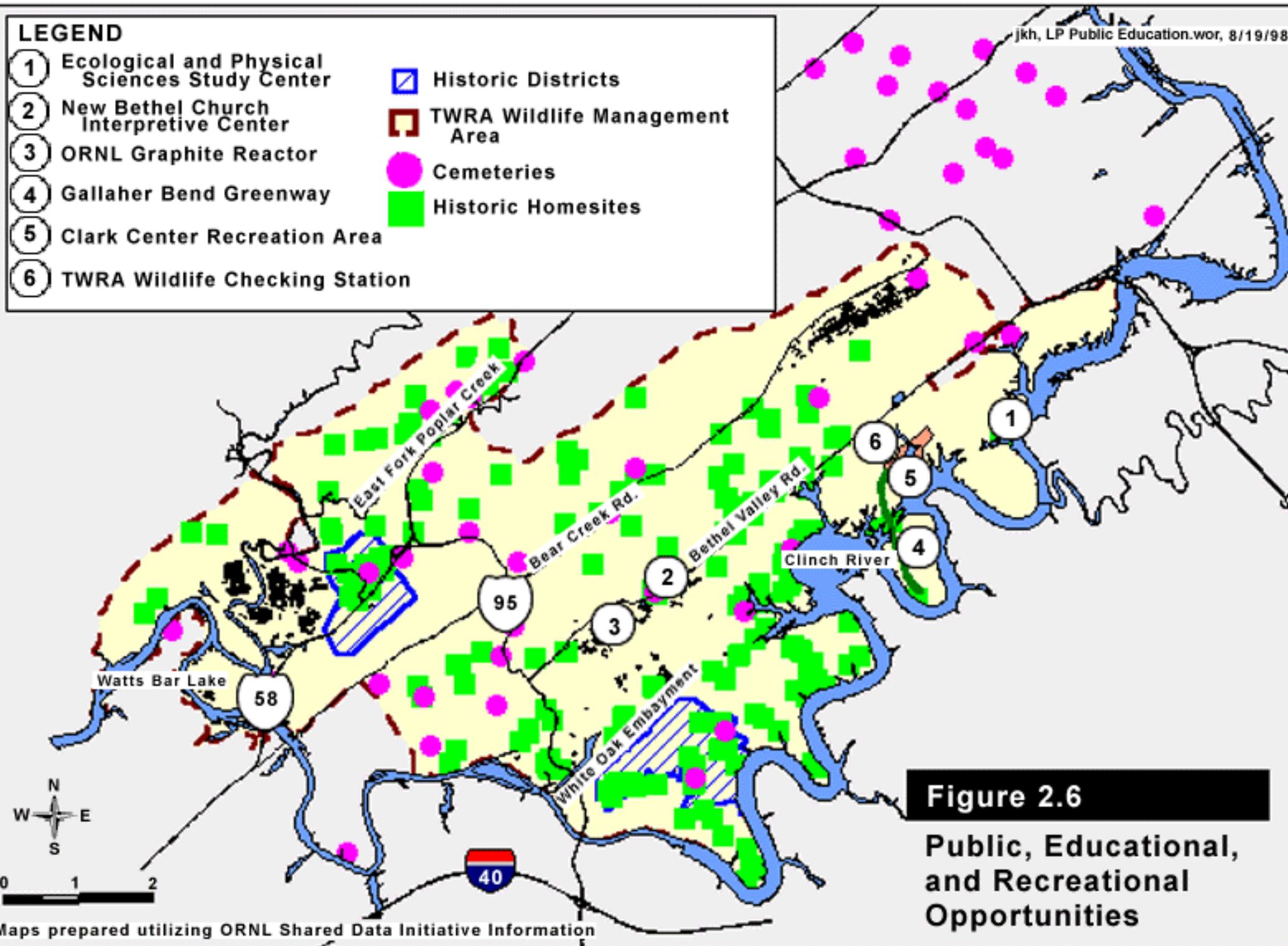


Figure 2.6

Public, Educational, and Recreational Opportunities

LEGEND

- Sludge Landfarming Sites
- State Natural Areas
- TWRA Wildlife Management Area
- Oak Ridge Biosphere Reserve
- Gallaher Bend Greenway
- Wetlands

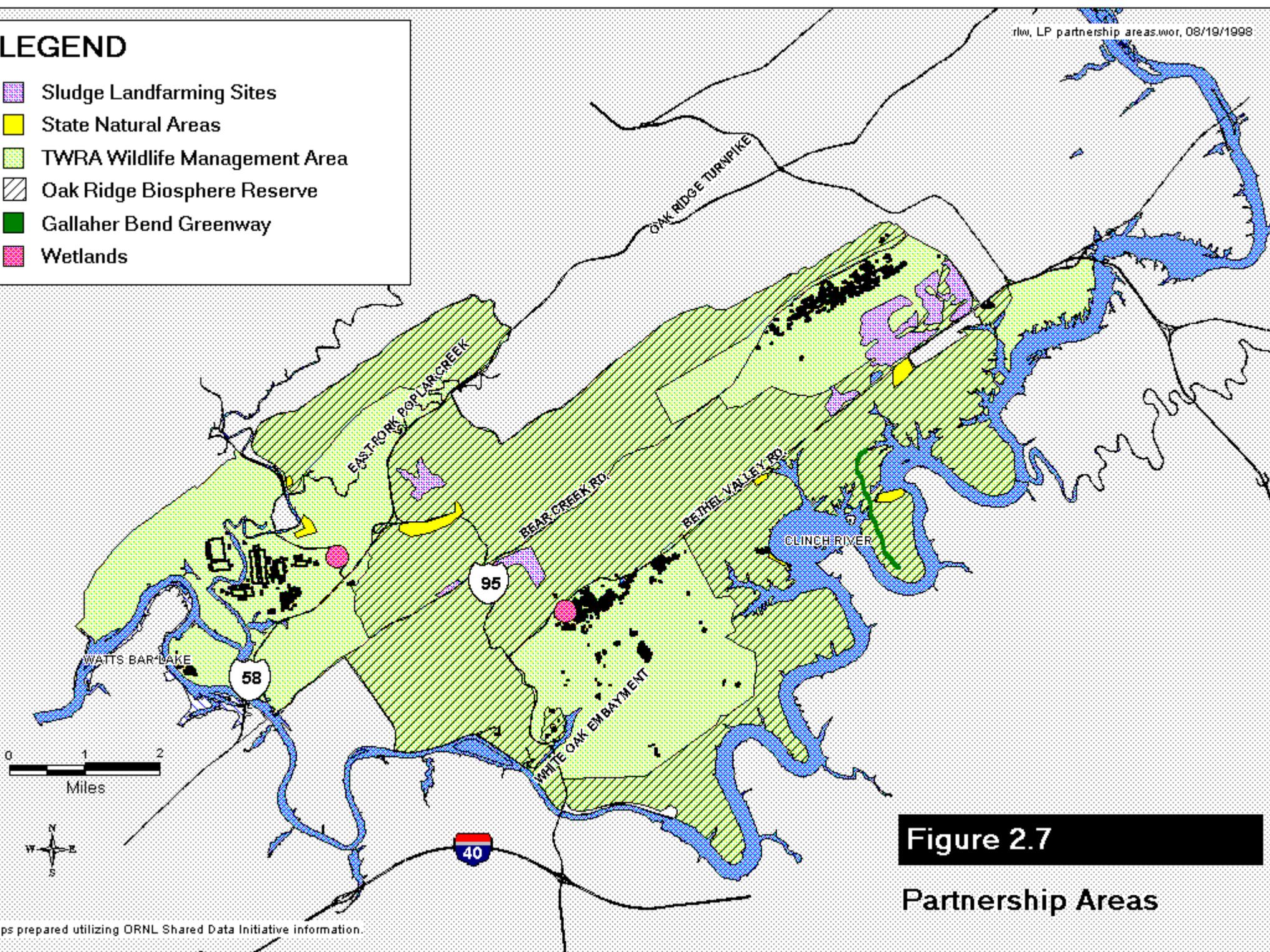


Figure 2.7

Partnership Areas

Maps prepared utilizing DRNL Shared Data Initiative information.

LEGEND

- Biodiversity Significance Rank 2
"Very High Significance"
- Biodiversity Significance Rank 3
"High Significance"
- Biodiversity Significance Rank 4
"Moderate Significance"
- Biodiversity Significance Rank 5
"Of General Biodiversity Interest"
- Landscape Designations
- DOE Boundary

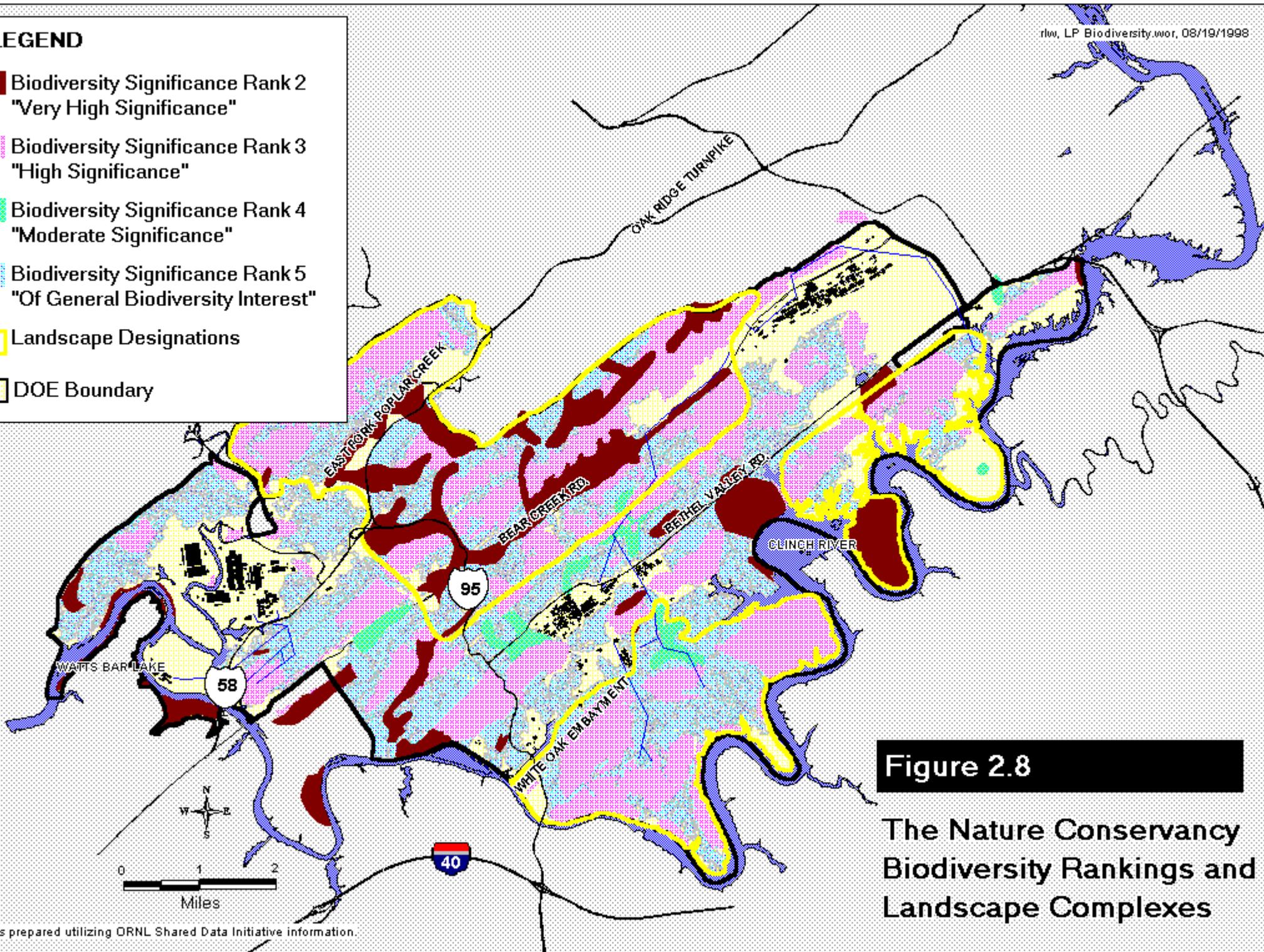


Figure 2.8

The Nature Conservancy Biodiversity Rankings and Landscape Complexes

LEGEND

-  Confirmed Habitats for Rare Species
-  Potential Habitats for Rare Species
-  Terrestrially Sensitive Habitats
-  Aquatically Sensitive Habitats
-  Surveyed Wetlands
-  DOE Boundary

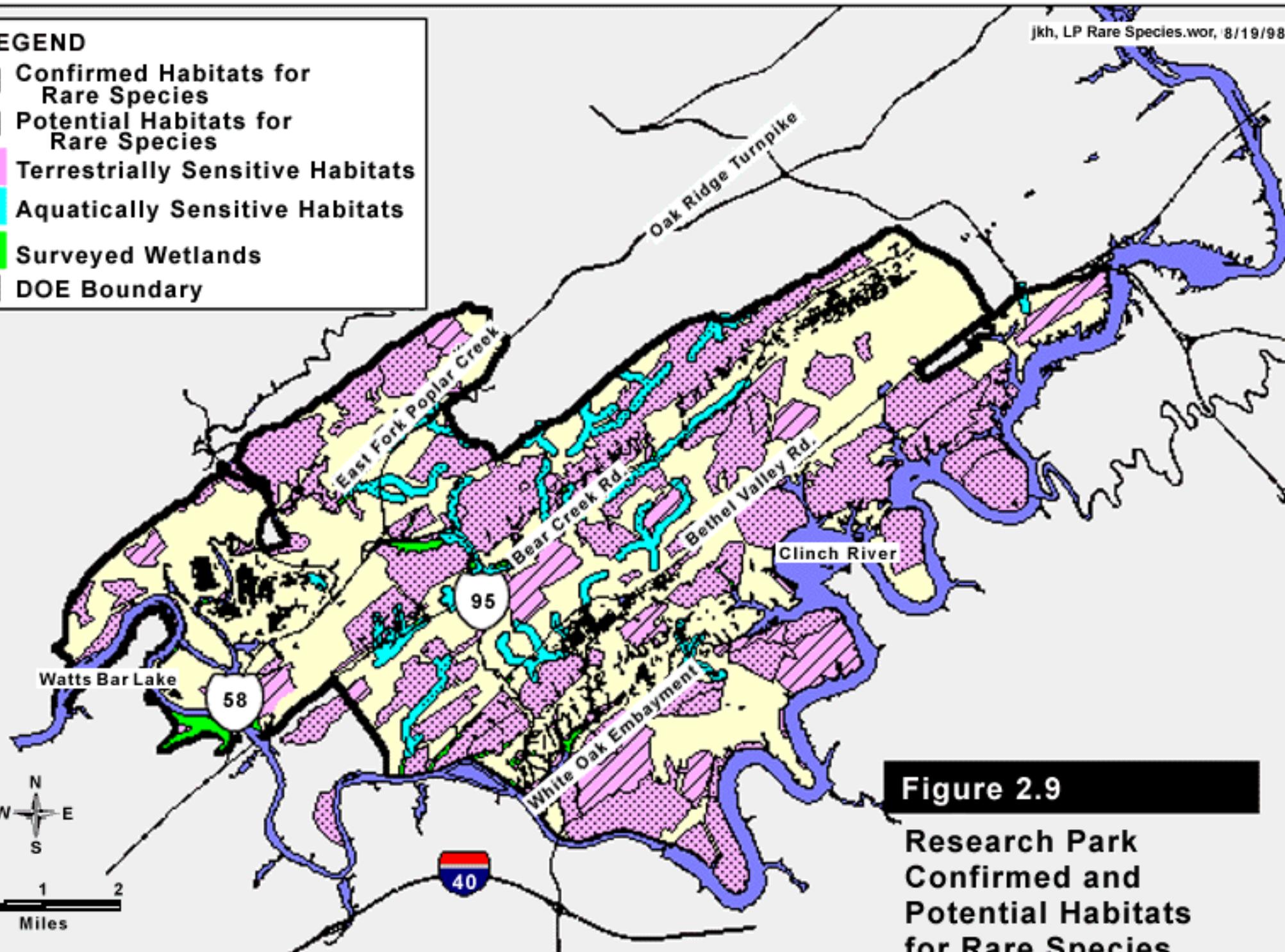


Figure 2.9

**Research Park
Confirmed and
Potential Habitats
for Rare Species**

LEGEND

-  Surface Danger Zone
Transportation & Safeguards Div.
-  Surface Danger Zone
Central Training Facility
-  Y-12 Emergency Planning Zone
-  ORNL Emergency Planning Zone
-  ETPP Emergency Planning Zone
-  DOE Boundary

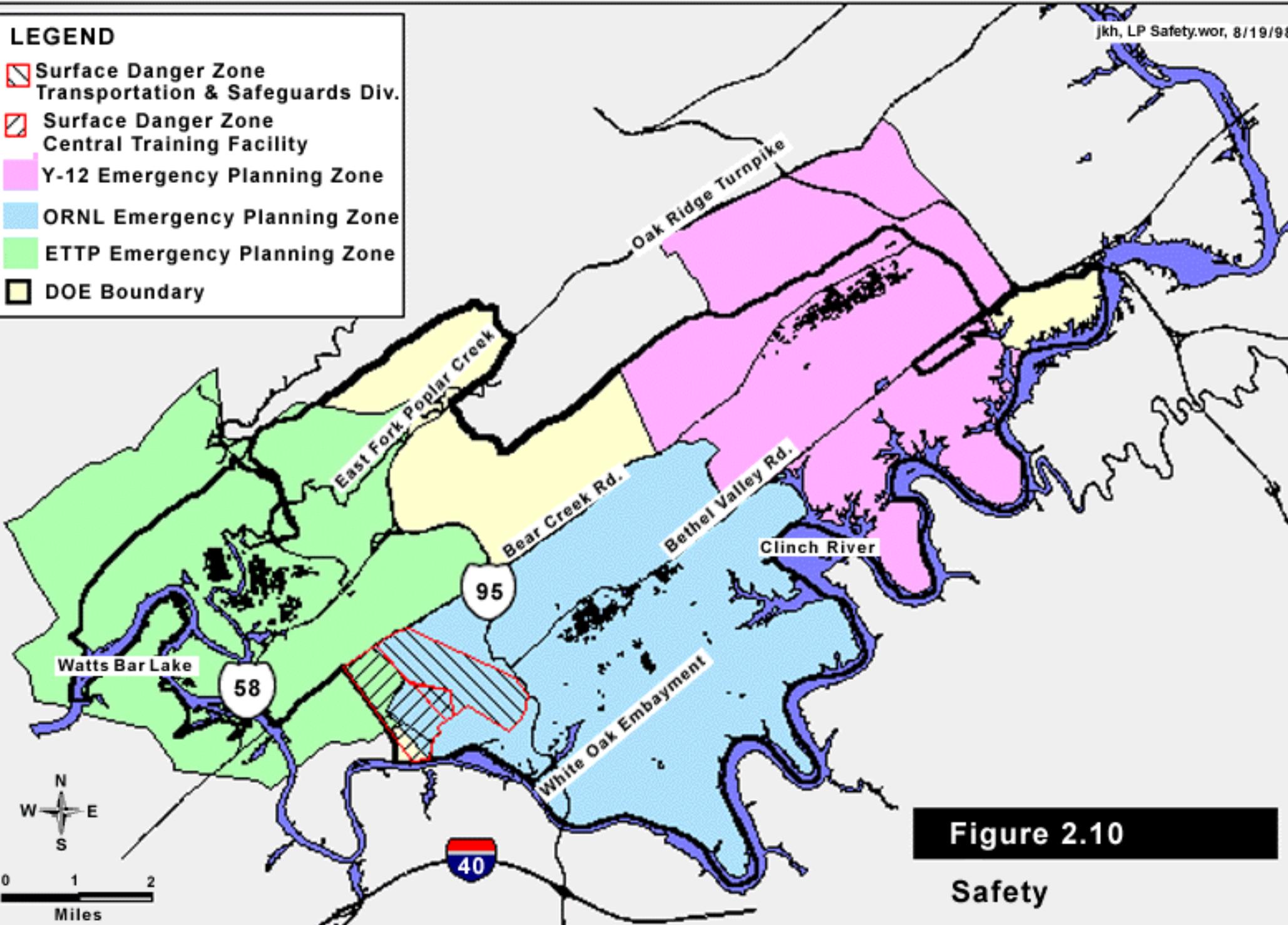


Figure 2.10

Safety

LEGEND

- Hay Fields
- Meteorological Towers
- Air and Honey Sites
- Groundwater Wells
- Surface Water Monitoring
- BMAP Sites
- DOE Boundary

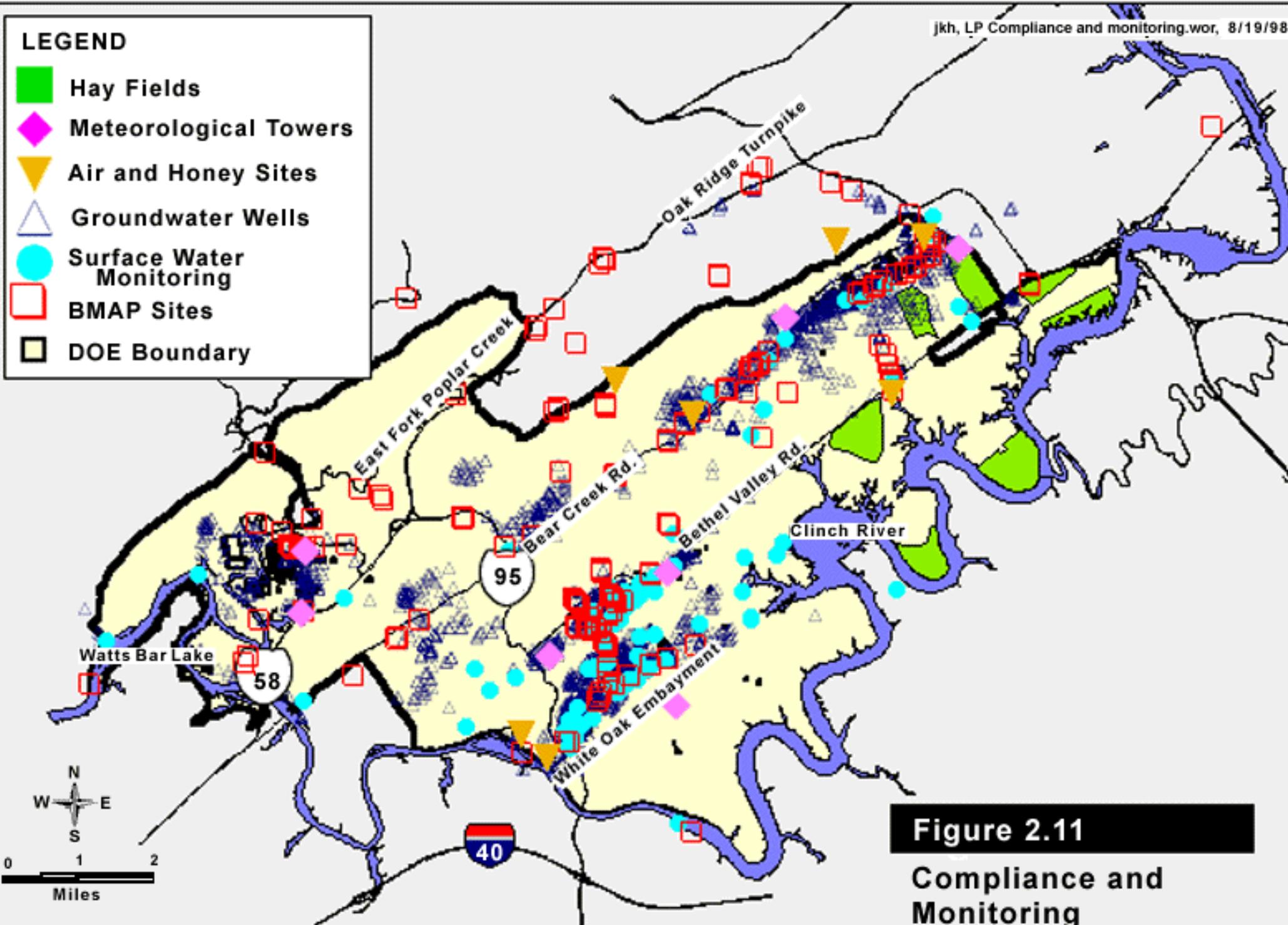


Figure 2.11
Compliance and Monitoring

- KEY**
- 1 - ETTP Watershed
 - 2 - Bear Creek Watershed and Project
 - 3 - Bethel Valley Watershed
 - 4 - White Oak Creek Watershed
 - 5 - UEFPC Watershed
 - 6 - Union Valley Watershed

- LEGEND**
- Contaminated Areas
 - Watershed Projects

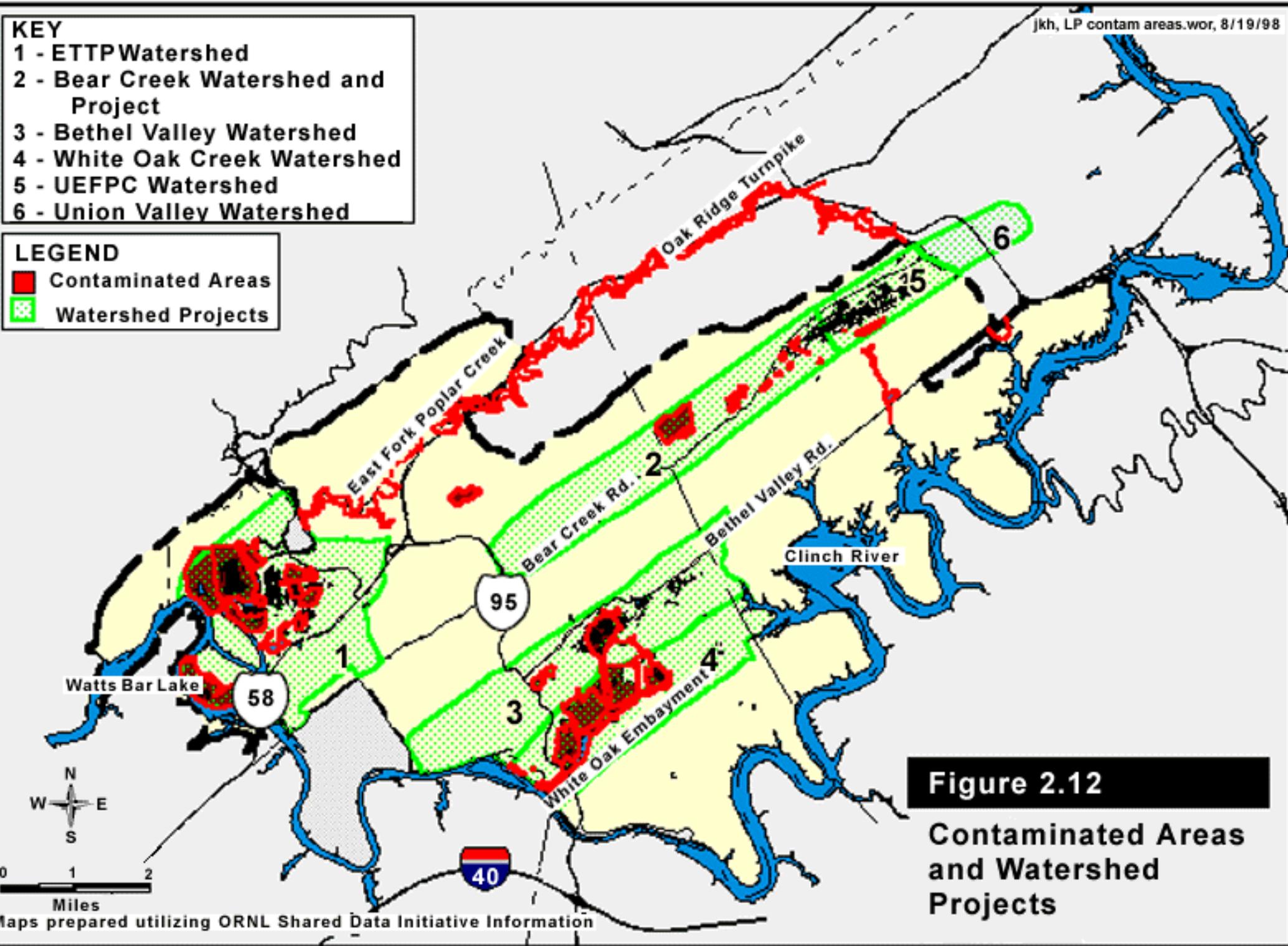


Figure 2.12
Contaminated Areas and Watershed Projects

LEGEND

- Water Mains
- Natural Gas Line
- Natural Gas Line - OR Utility District
- Natural Gas Line - Rockwood
- Electrical Lines
- Telecommunications Lines
- Fiber Optic Line
- Sanitary Sewer Line
- Water Treatment Plant
- ▲ River Pumping Station
- Water Reservoir
- Electrical Substation
- Natural Gas Station

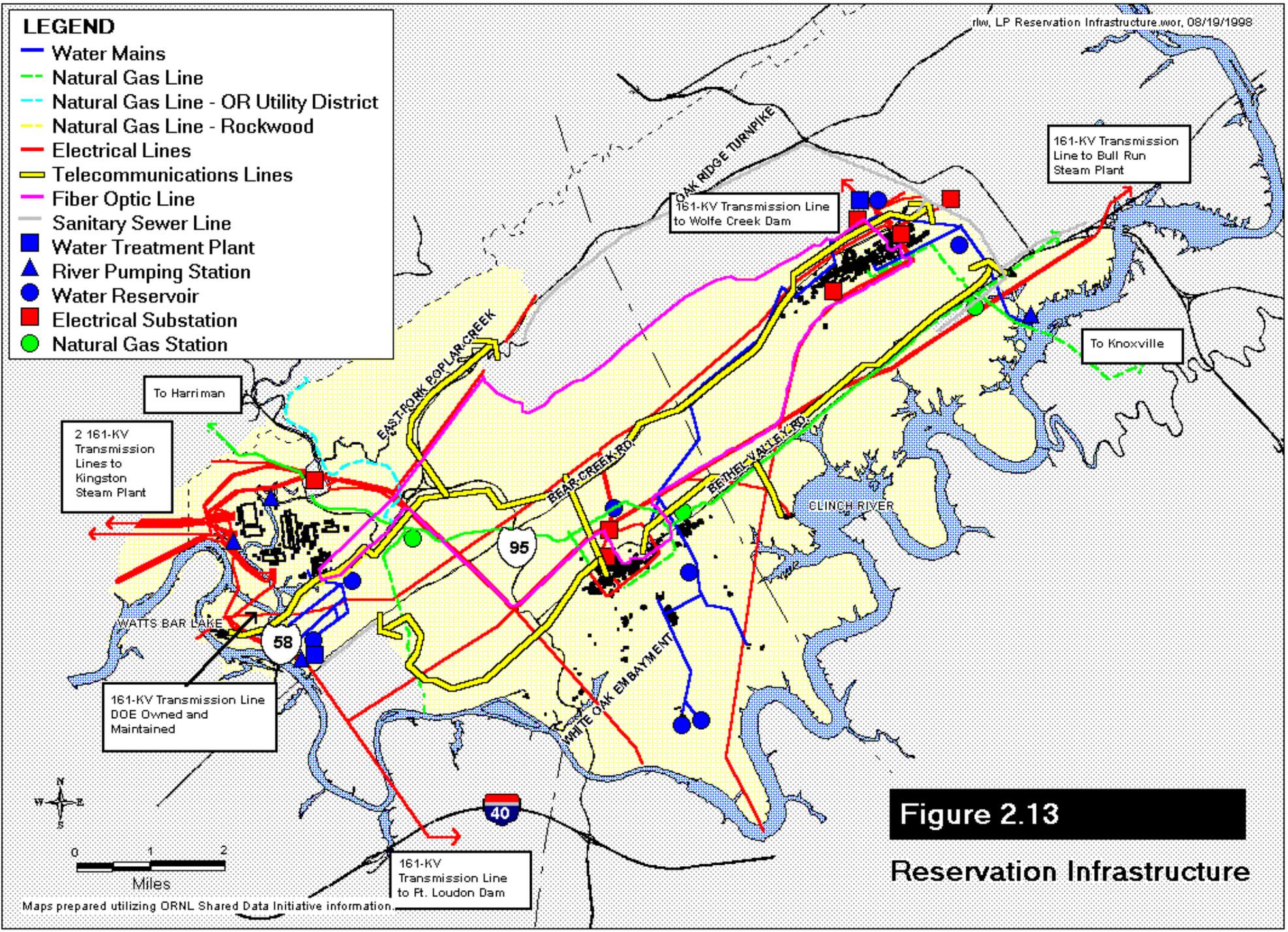


Figure 2.13

Reservation Infrastructure

Maps prepared utilizing ORNL Shared Data Initiative information.

LEGEND

Land Transfers/Lease Areas

- 1 Commercial Antenna Sites
- 2 Tower Shielding Facility
- 3 Parcel ED-1

New Research Areas

- ① Bull Bluff Watersheds
- ② Copper Ridge Research Area
- ③ Freels Bend Research Area
- ④ Raccoon Creek Research Area
- ⑤ White Wing Research Area
- ⑥ Pine Ridge Experimental Catchments

New Research Facilities

- 1 Spallation Neutron Source (preferred)
- 2 ORNL Expansion
- 3 Laboratory for Comparative & Functional Genomics
- 4 Spallation Neutron Source (alternate)
- 5 Joint Institute for Neutron Sciences
- 6 Engineering Technology
- 7 Fusion Materials & Irradiation Facility

Transportation Improvement

- ◇ Interstate Connector (proposed)
- ◇ Highway 58 Widening
- ◇ Bethel Valley/Illinois Avenue Interchange

Waste Management Areas

- △ White Wing (proposed)
- △ West Bear Creek (proposed)
- △ East Bear Creek (proposed)
- △ Transuranic Waste Packaging Facility

Environmental Partnership Areas

- ▽ Bearden Creek Wetland Banking
- ▽ Bull Bluff Wetland Banking
- ▽ Freels Bend Wetland Banking

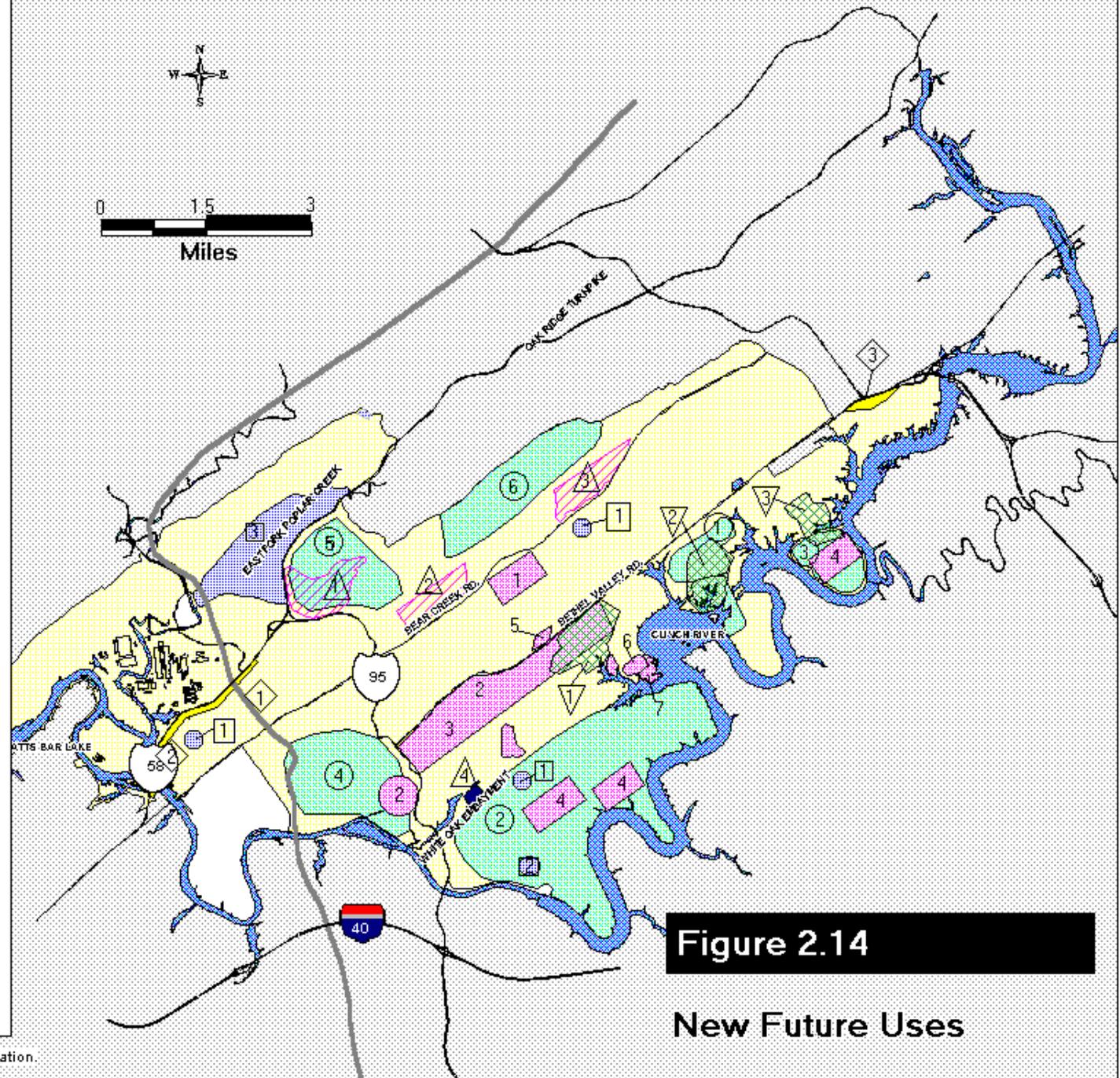


Figure 2.14

New Future Uses