

Site Overview
Baseline Ecological Risk Assessment
 TENNESSEE VALLEY AUTHORITY
 KINGSTON, TENNESSEE

Aerial Image of Kingston Ash Slide (12/23/2008)



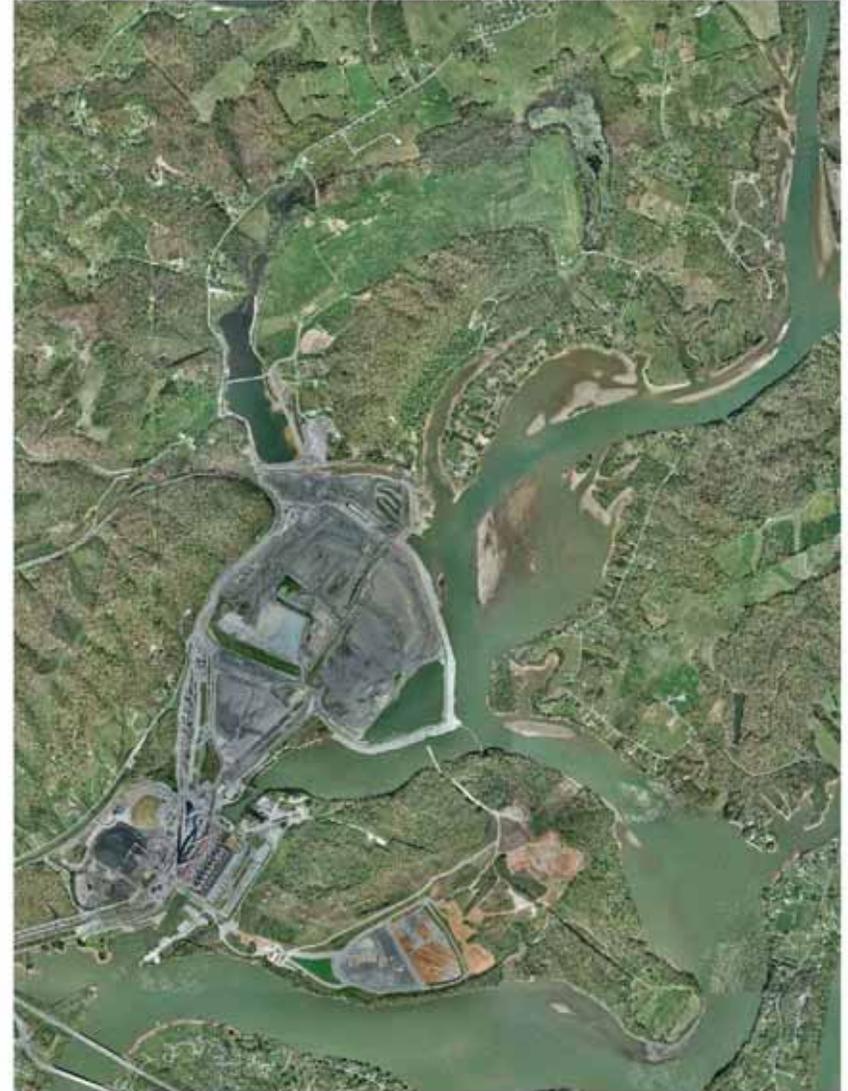
0 625 1,250 1,875 2,500 Feet

Date of map imagery: 12/23/2008

Tennessee Valley Authority
Geographic Information & Engineering

Filename: ImageOnly_20081223_0111.pdf

Aerial Image of Kingston Ash Slide (03/26/2012)



0 1,000 2,000 3,000 4,000 Feet

Date of imagery: 03/26/2012

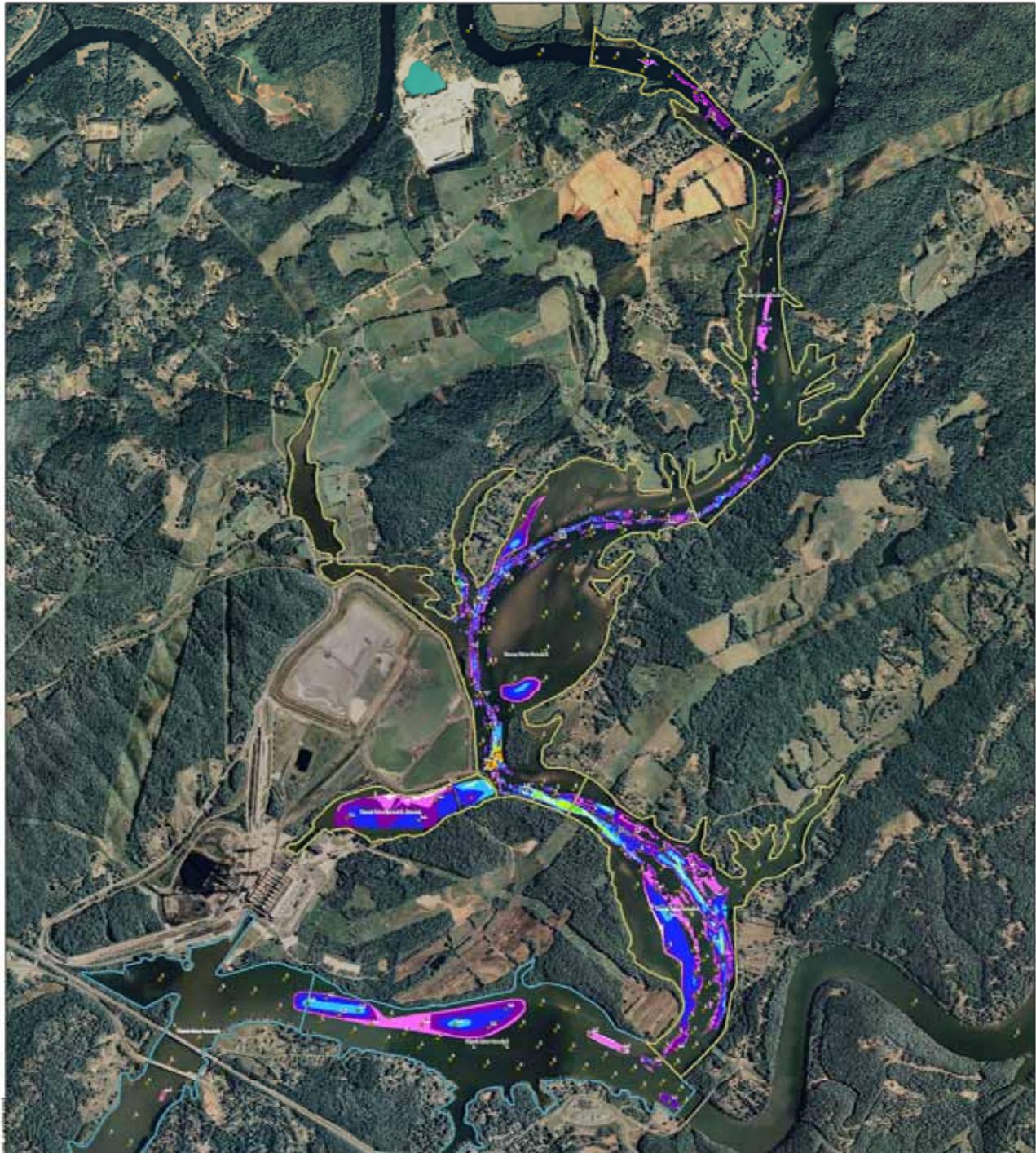
Tennessee Valley Authority
Geographic Information & Engineering

Filename: ImageOnly_20120326_0111



Aerial Overview of the Ash Release vs. Conditions after Time-Critical Ash Removal Efforts
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FIGURE
2-2



Legend

- Vibrocore Location
Labeled with Ash Thickness (ft)
(If = 50% Ash, Ash Thickness = 0)
- Emory River Reaches A, B, & C
- Clutch River Reaches A & B

Thickness of Ash in Vibrocores > 50% Ash

| | | | |
|--|--------------------|--|---------------|
| | No Ash | | 6 ft - 8 ft |
| | Less Than 0.5 Feet | | 8 ft - 10 ft |
| | 0.5 ft - 1.0 ft | | 10 ft - 15 ft |
| | 1 ft - 2 ft | | 15 ft - 20 ft |
| | 2 ft - 4 ft | | 20 ft - 25 ft |
| | 4 ft - 6 ft | | |

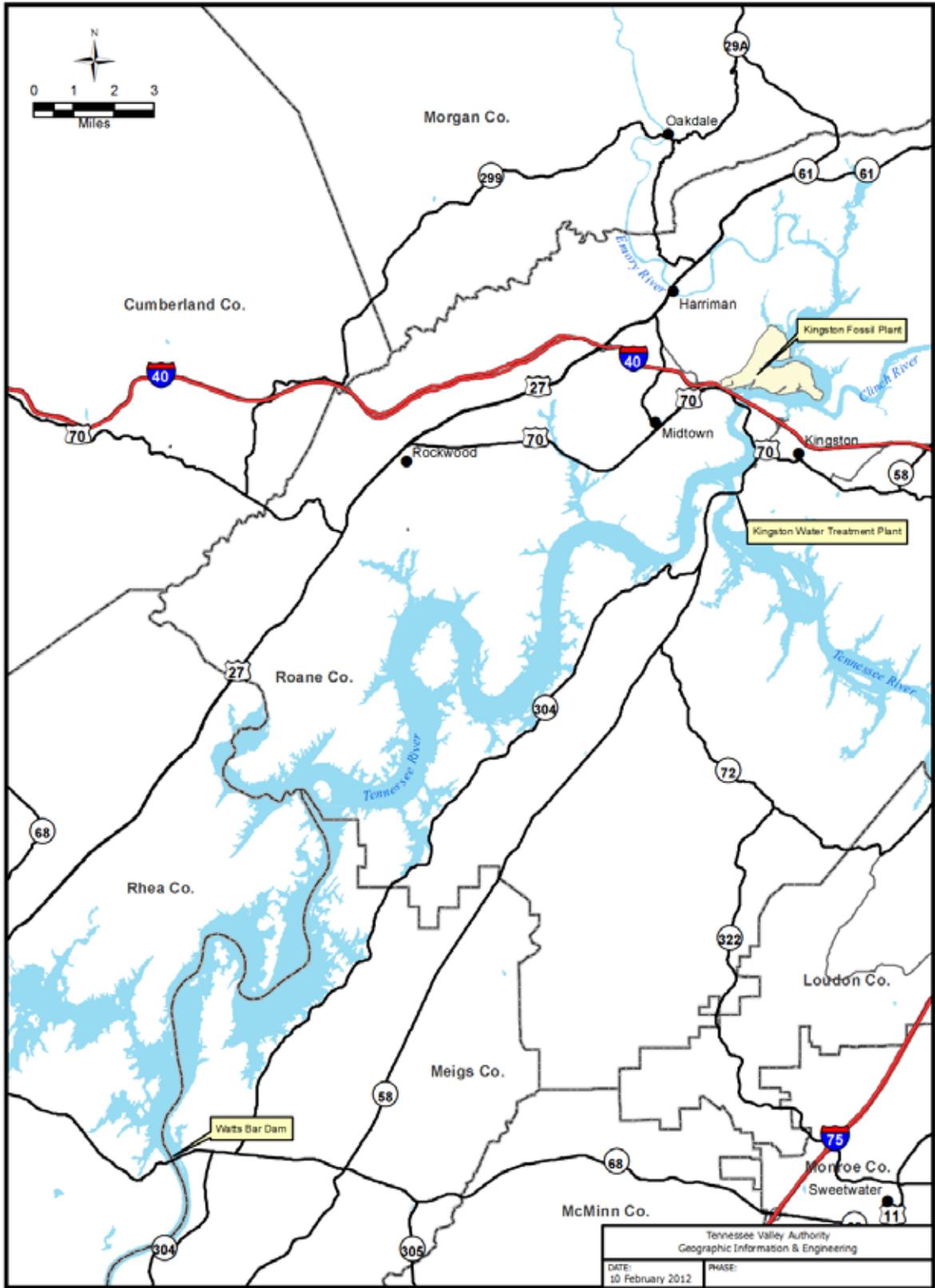
0 1,300 2,600
 Feet 1:7,800



JACOBS

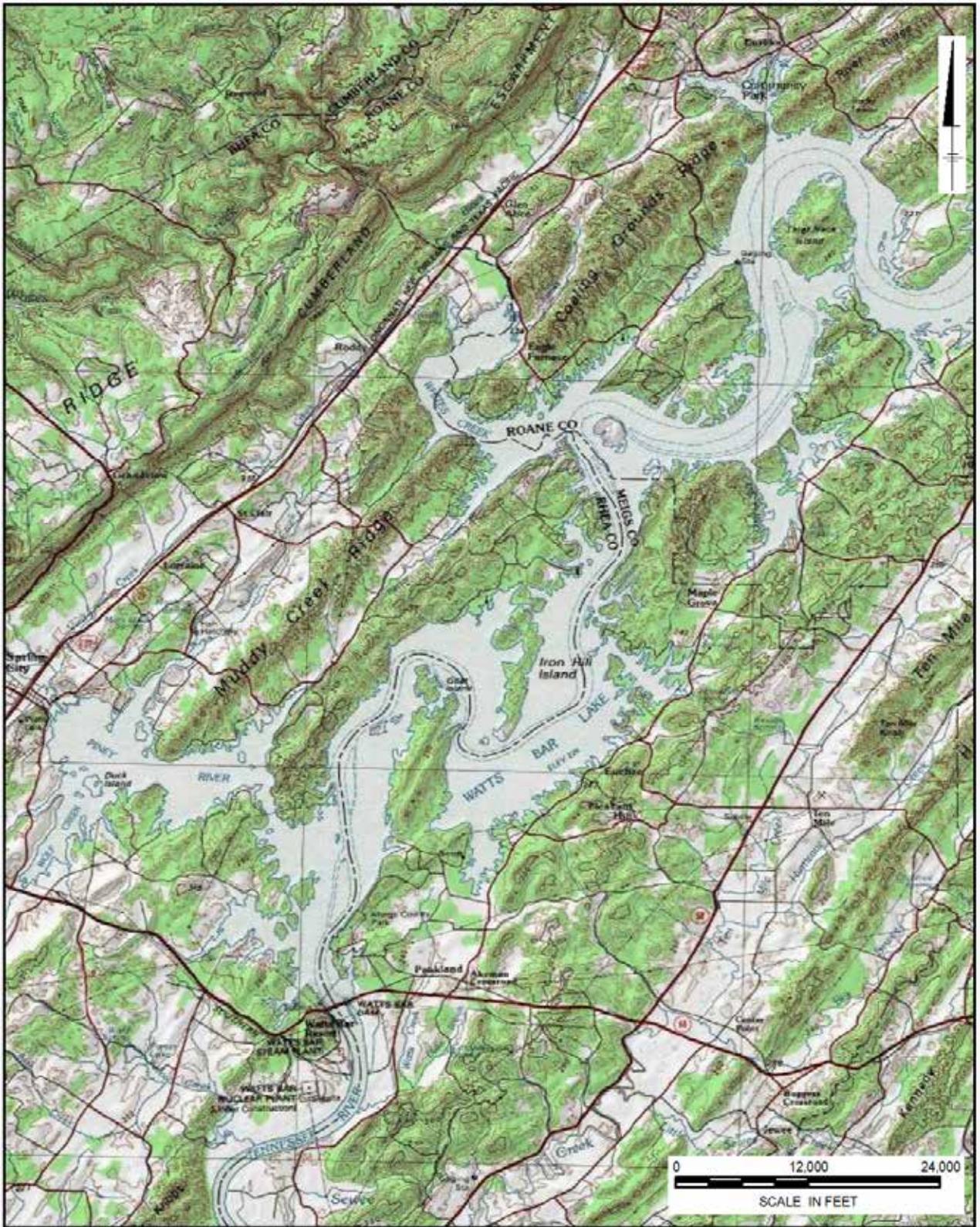
Ash Recovered in Vibrocores
 with Ash Content > 50% Ash
 October 2011

NAME: vjw/brk DATE: 01/09/2012



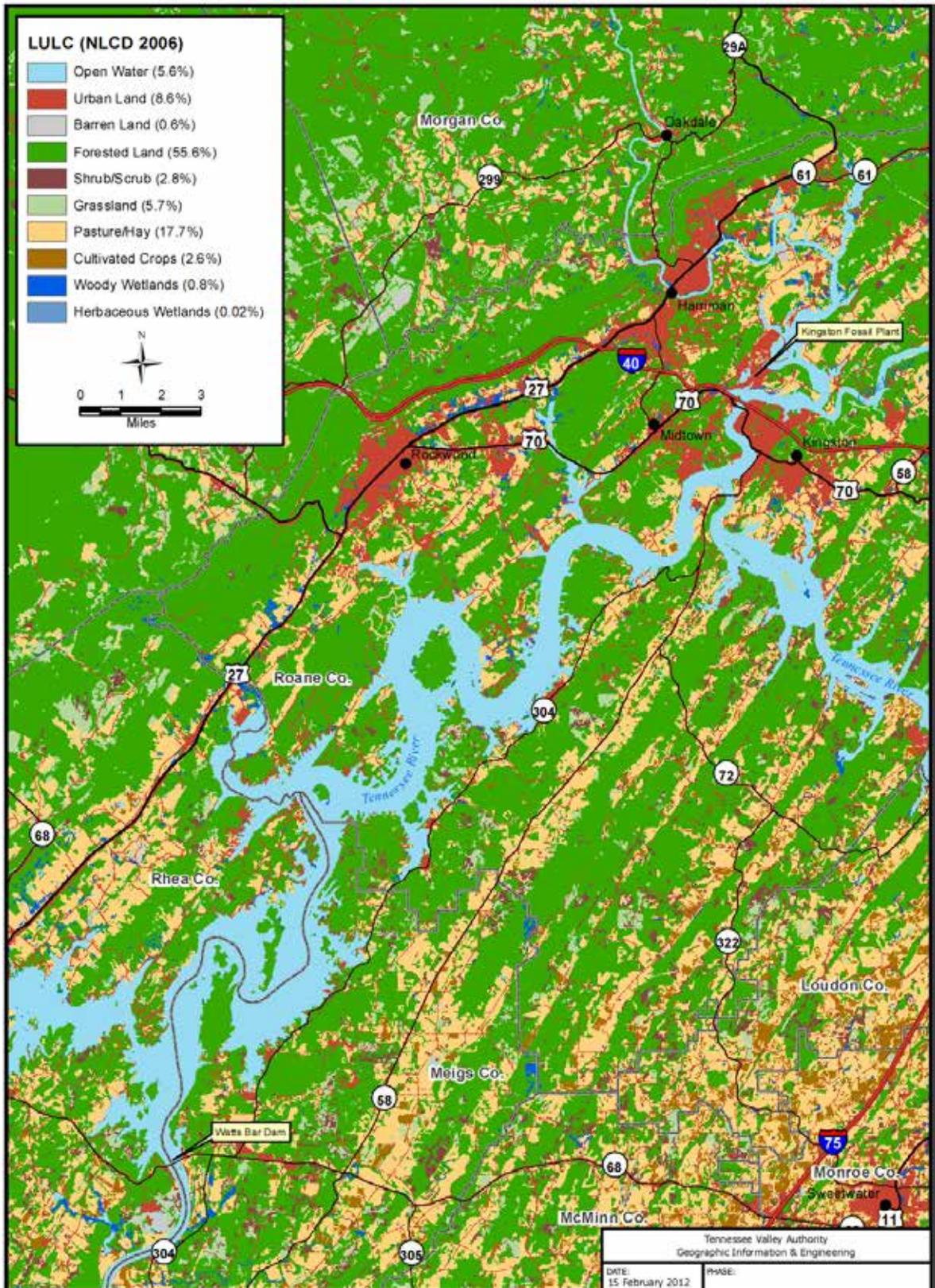
Watts Bar Reservoir Area Overview
 Baseline Ecological Risk Assessment
 TENNESSEE VALLEY AUTHORITY
 KINGSTON, TENNESSEE

FIGURE
 2-4



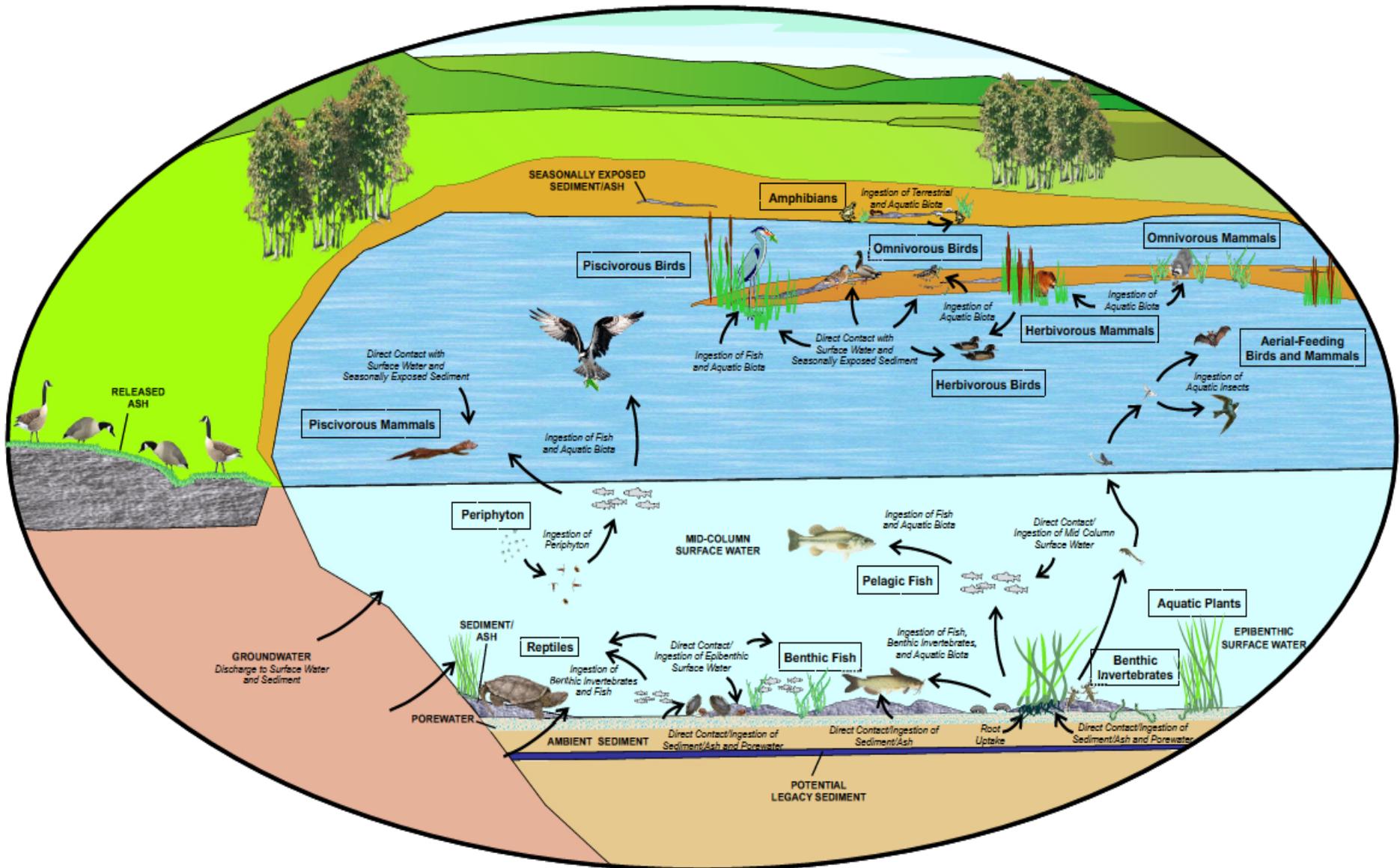
Watts Bar Reservoir Area Topography
 Baseline Ecological Risk Assessment
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FIGURE
 2-5



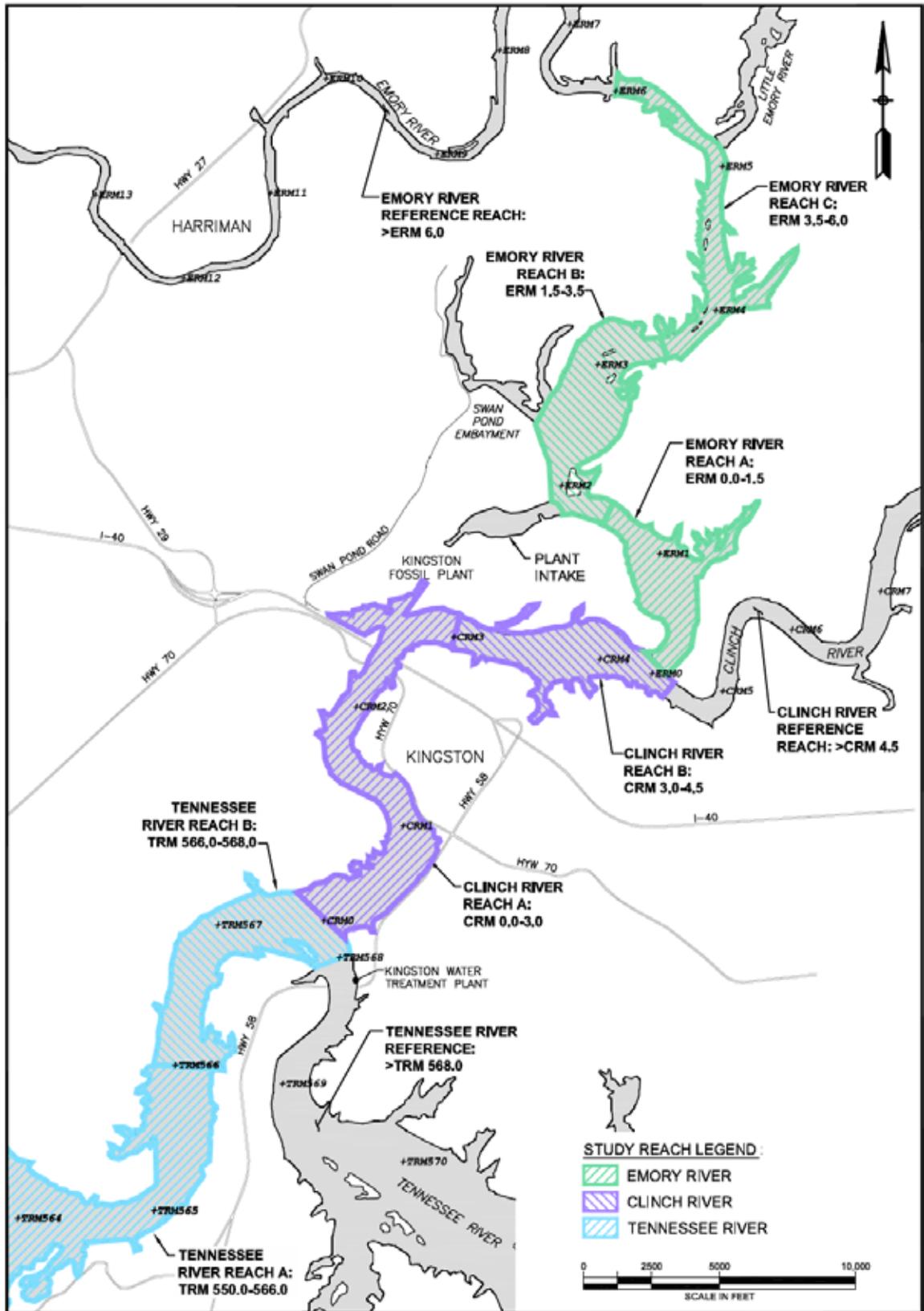
Watts Bar Reservoir Area Land Use
Baseline Ecological Risk Assessment
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FIGURE
 2-6



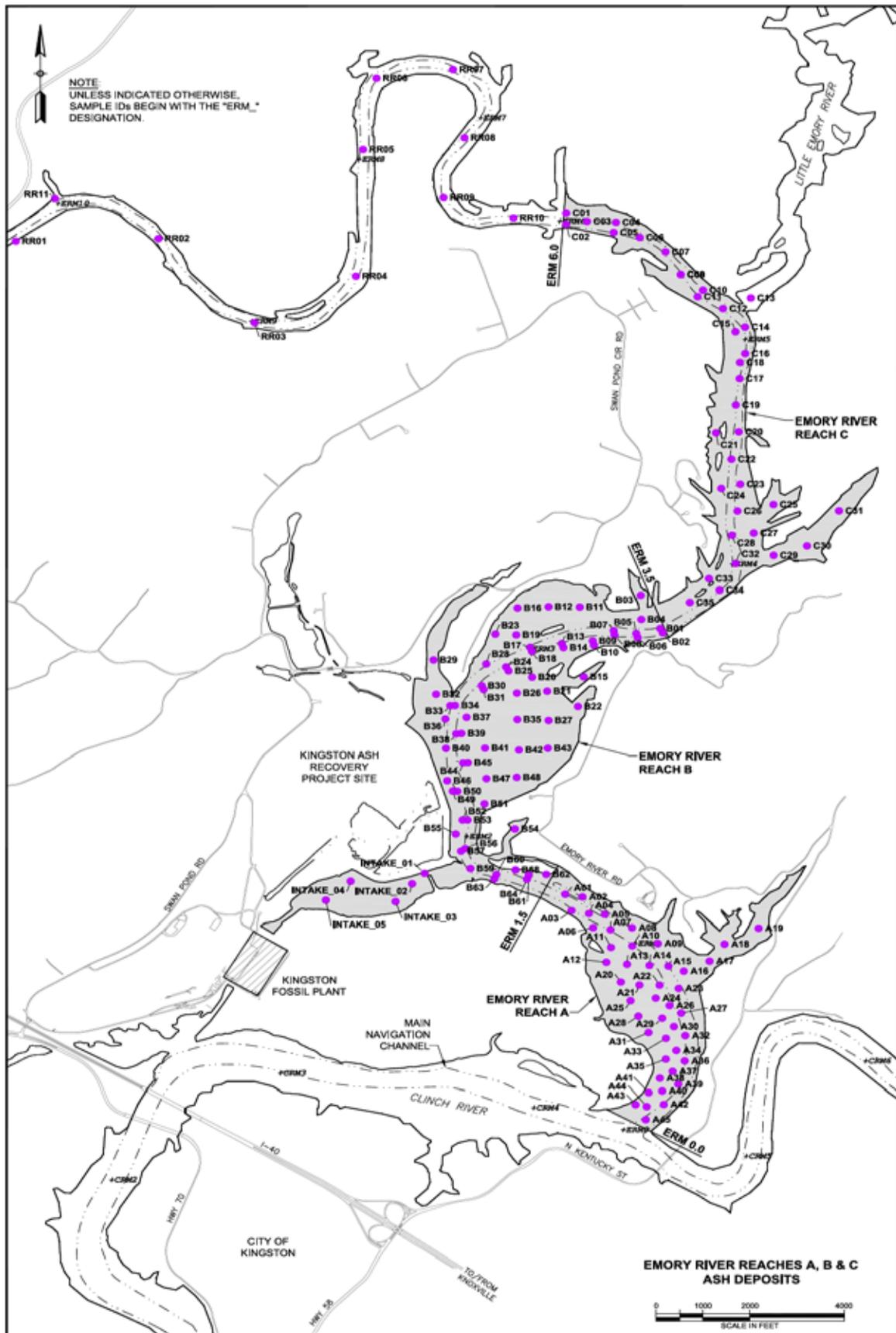
Conceptual Site Model
Baseline Ecological Risk Assessment
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FIGURE
 2-7



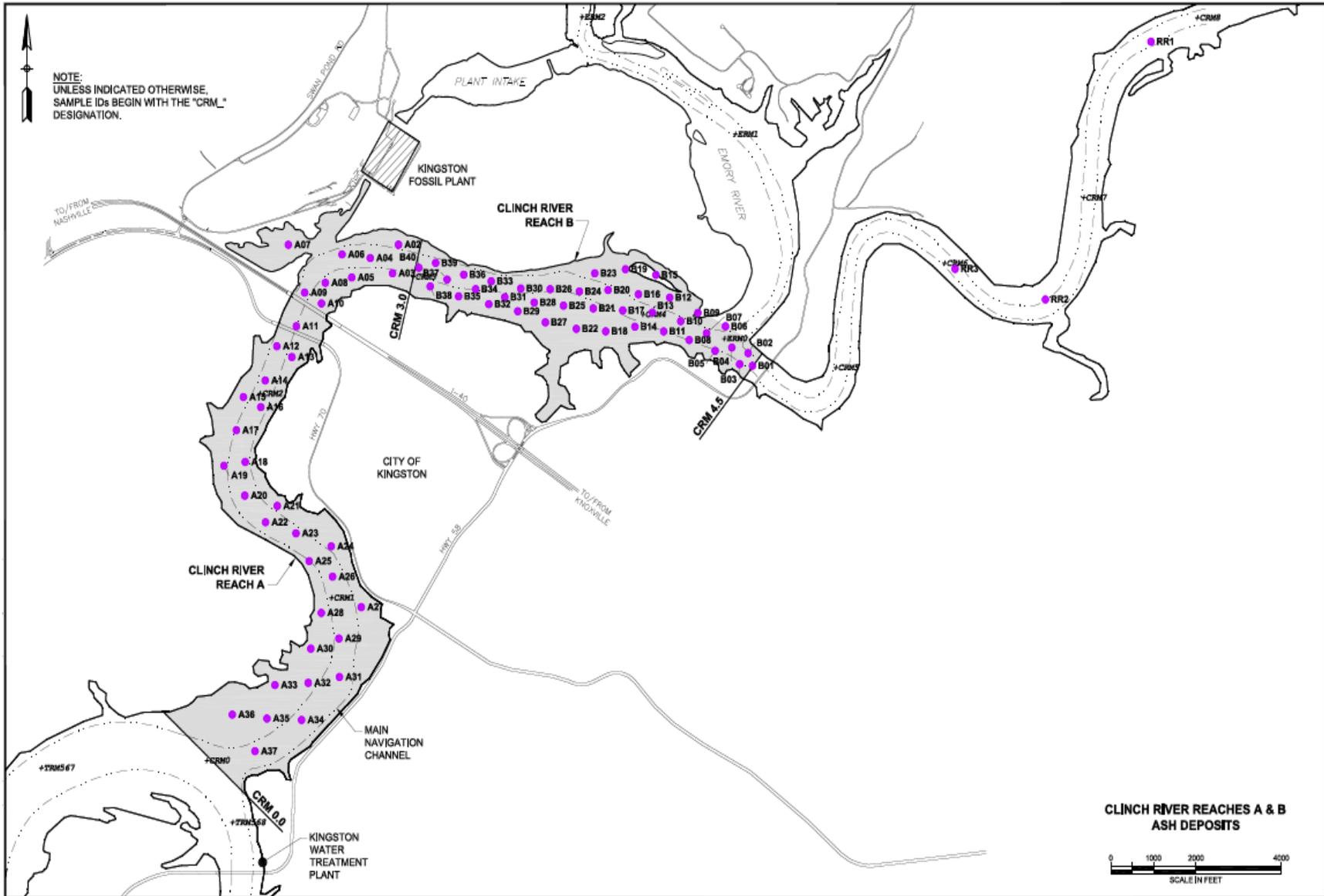
River Reaches
 Baseline Ecological Risk Assessment
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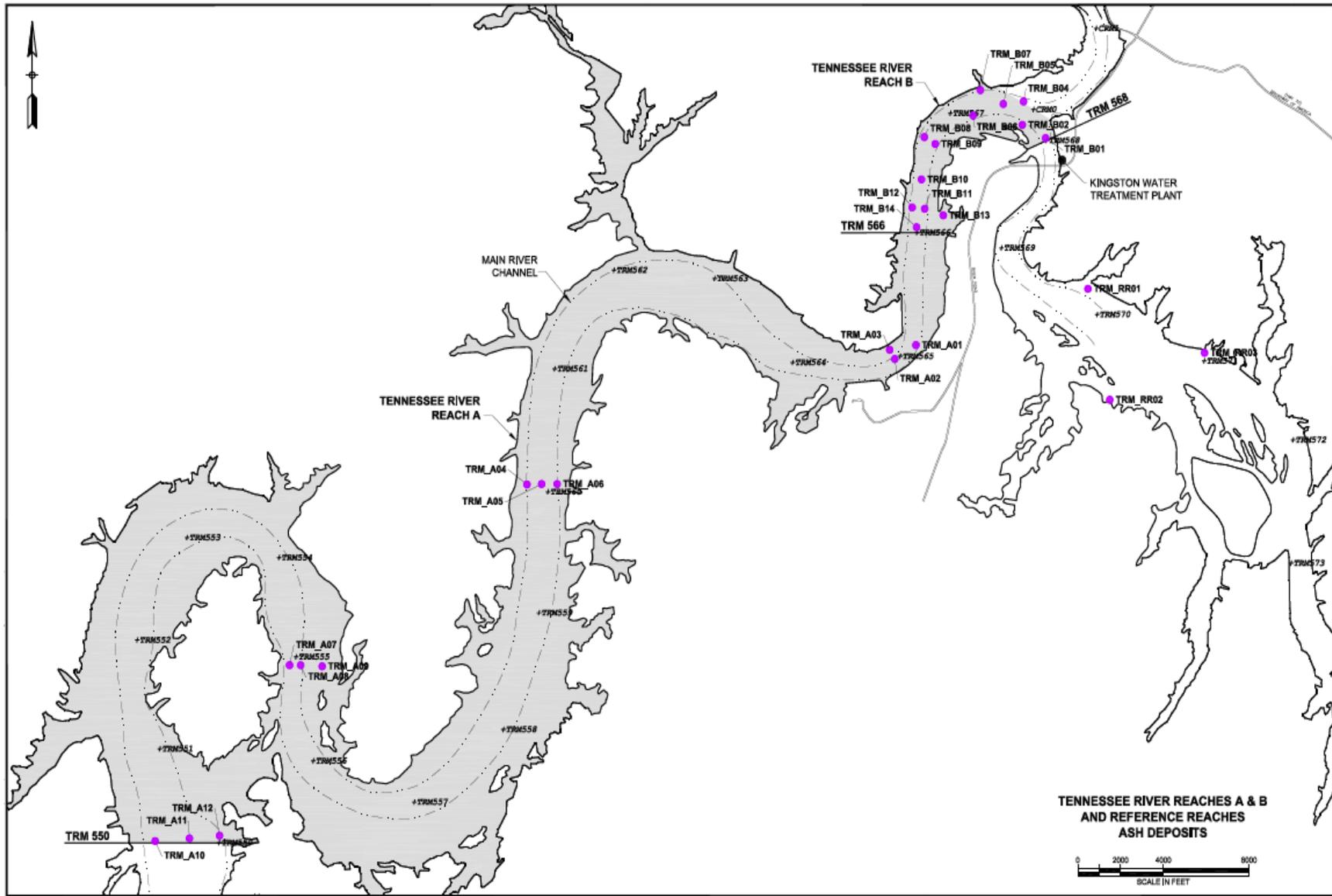
FIGURE
 2-8



Ash Deposit Sampling Locations – Emory River
 Baseline Ecological Risk Assessment
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FIGURE
 2-9

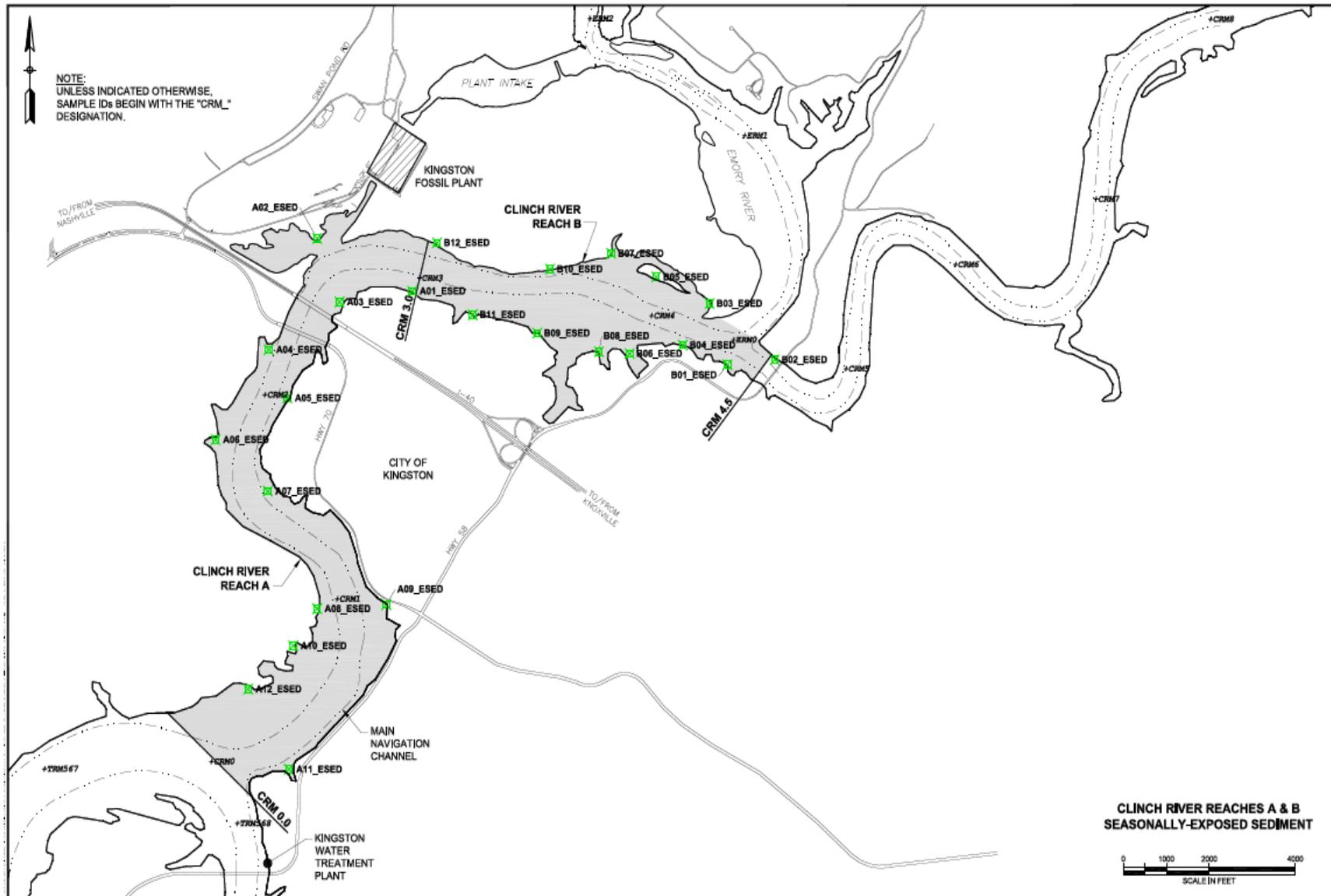




TENNESSEE RIVER REACHES A & B
AND REFERENCE REACHES
ASH DEPOSITS

0 2000 4000 8000
SCALE IN FEET

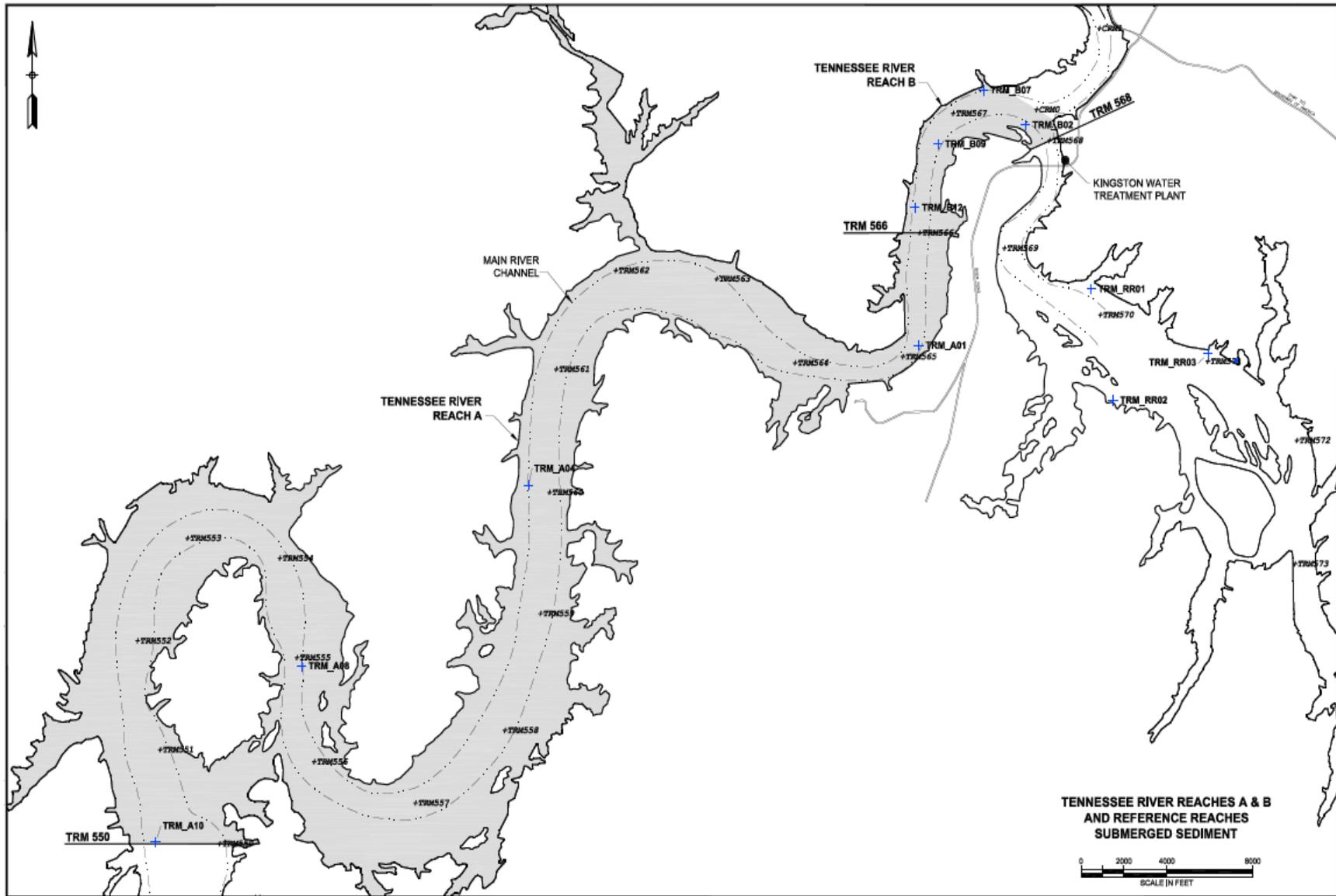
Ash Deposit Sampling Locations – Tennessee River
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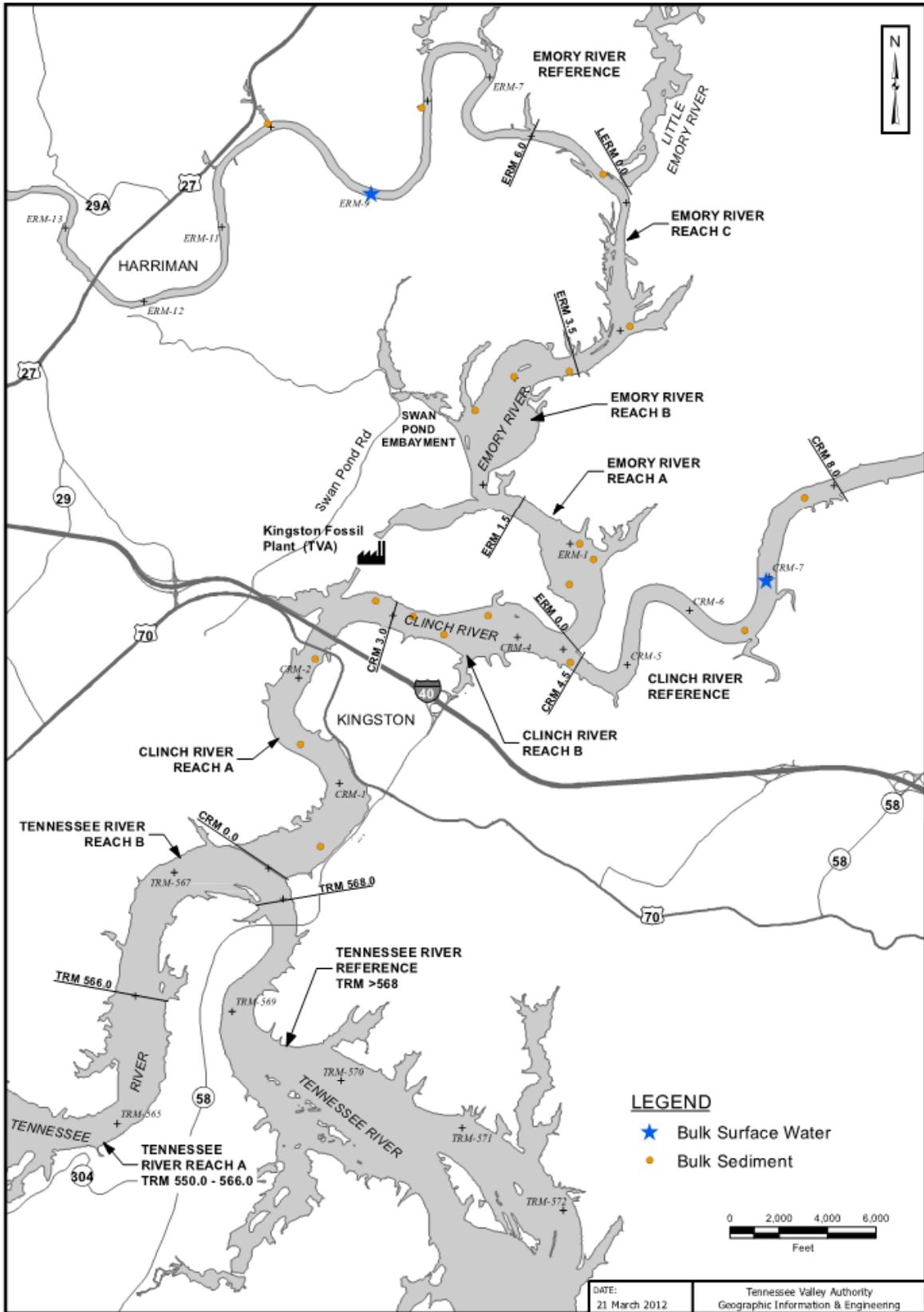
Seasonally-Exposed Sediment Sampling Locations – Clinch River
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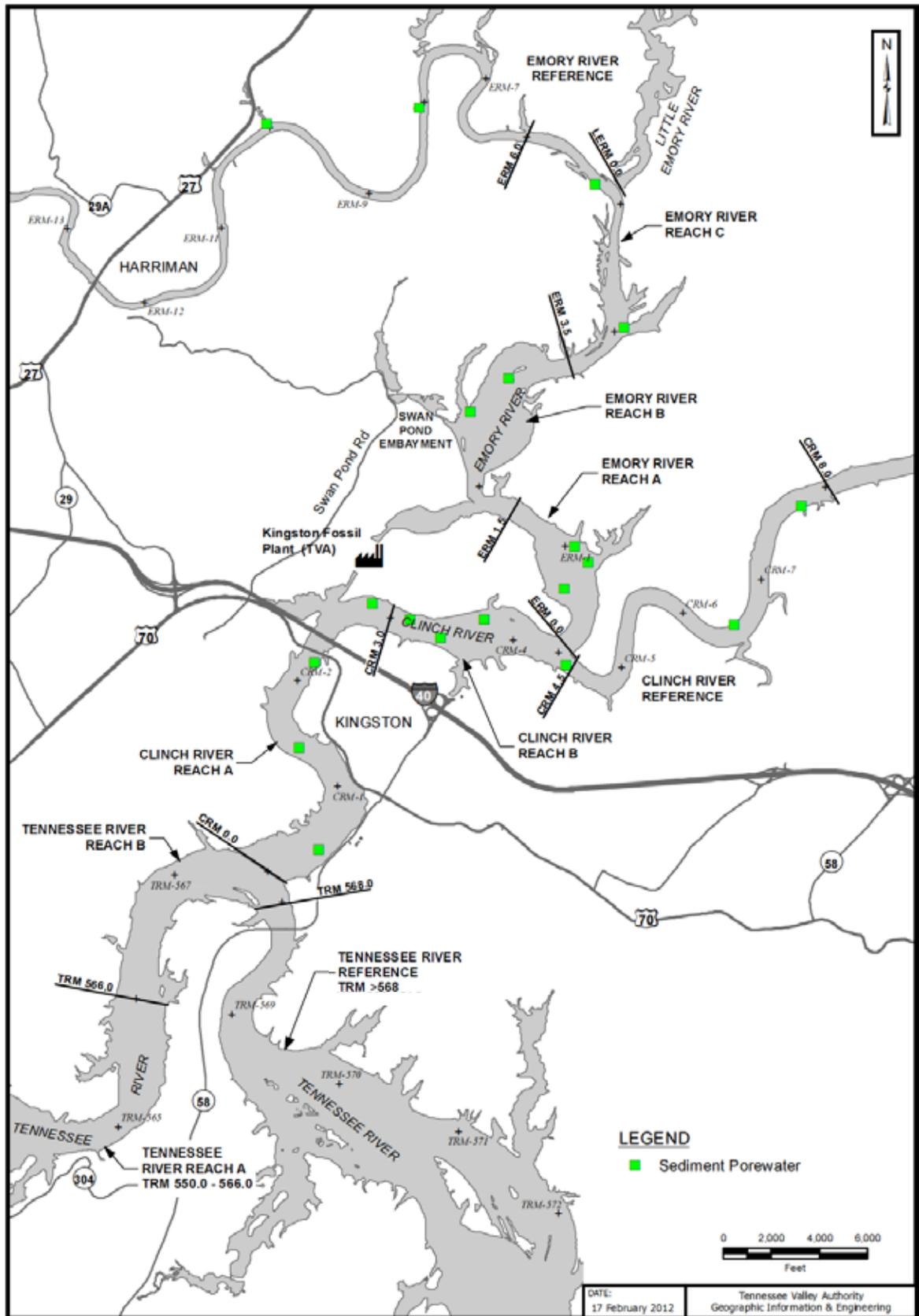
CLINCH RIVER REACHES A & B
 SEASONALLY-EXPOSED SEDIMENT





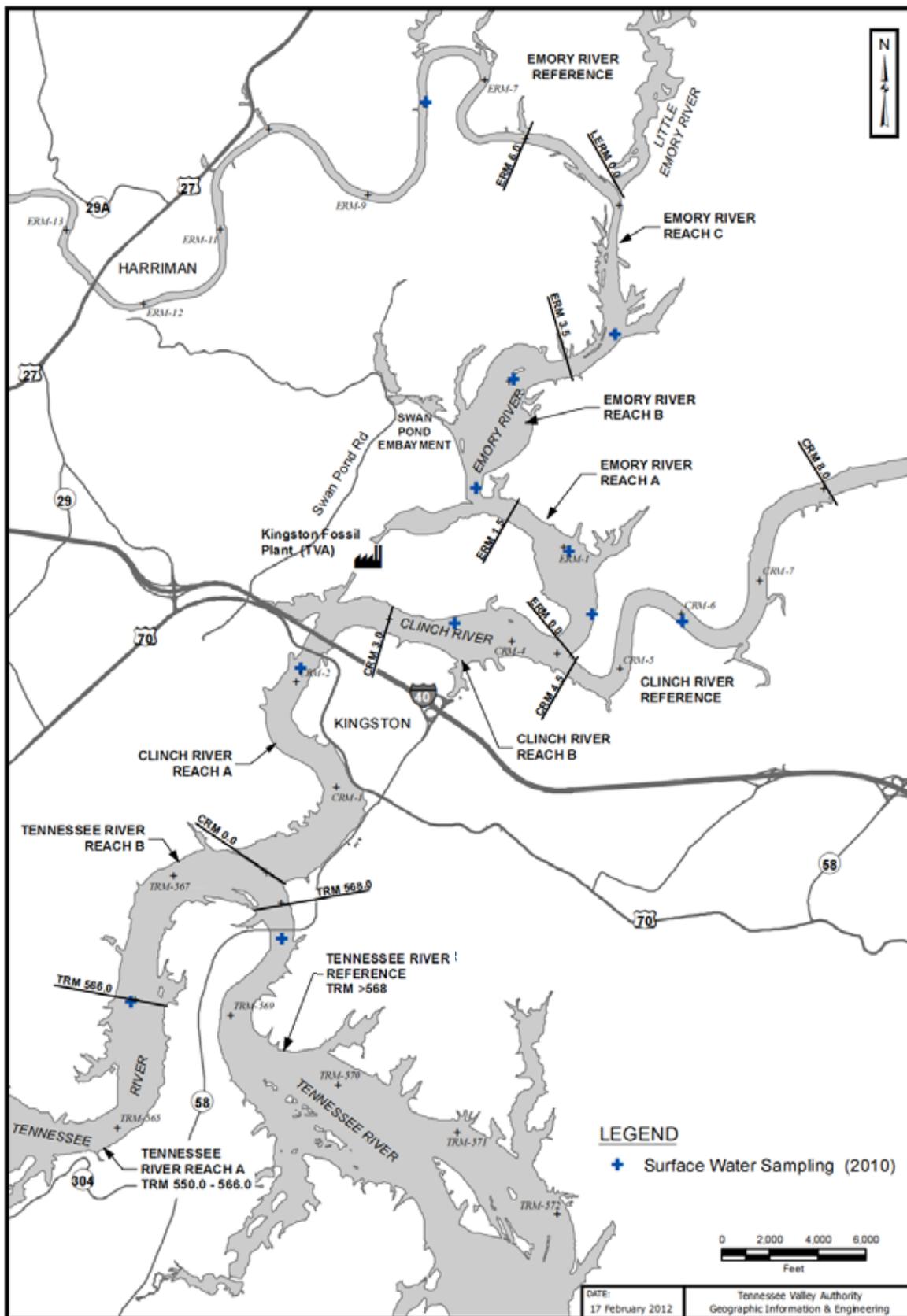
Submerged Sediment Sampling Locations – Tennessee River
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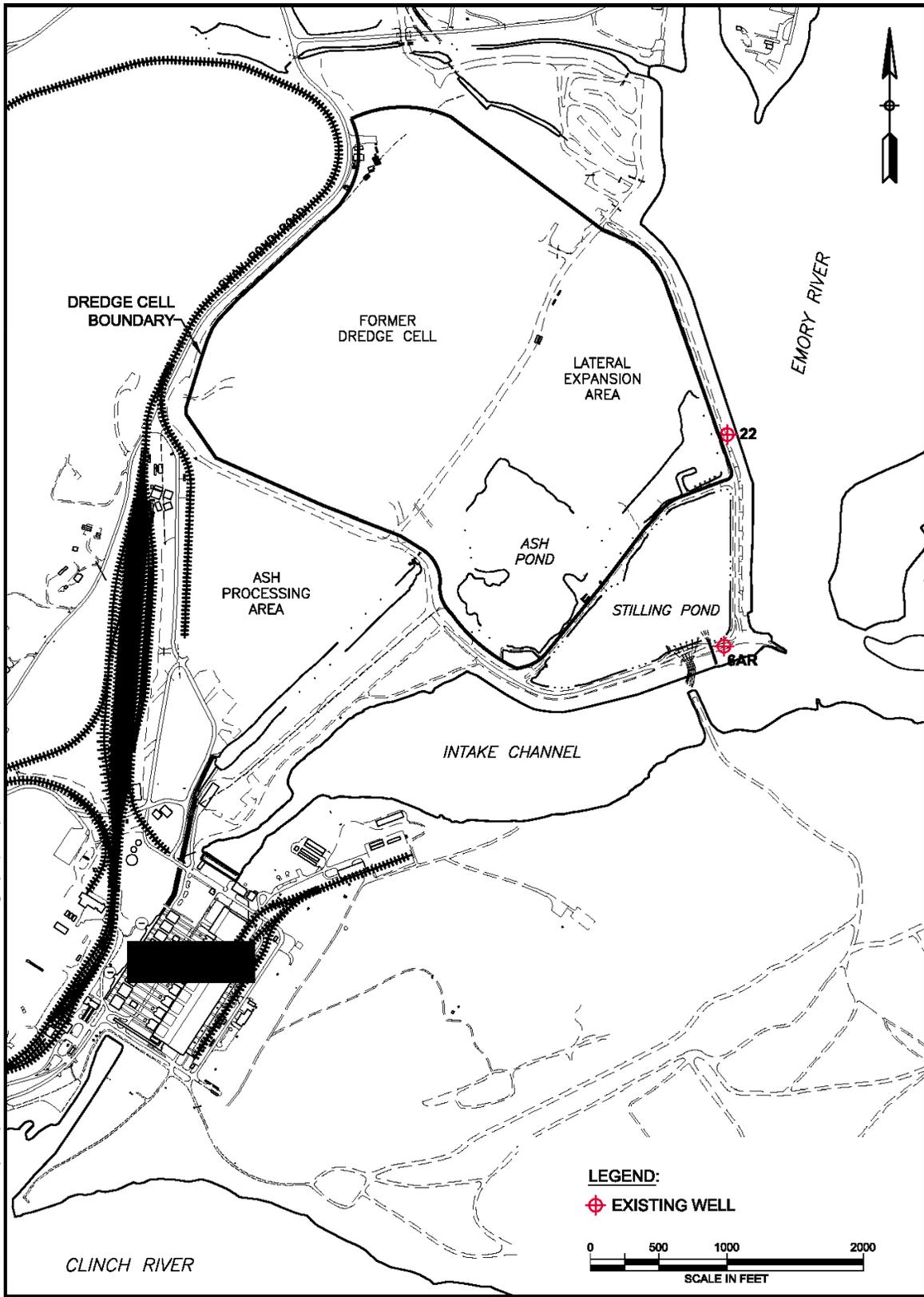


Note: Reference samples were combined at a 1:1 ratio post-porewater extractions.

Sediment Porewater Sampling Locations
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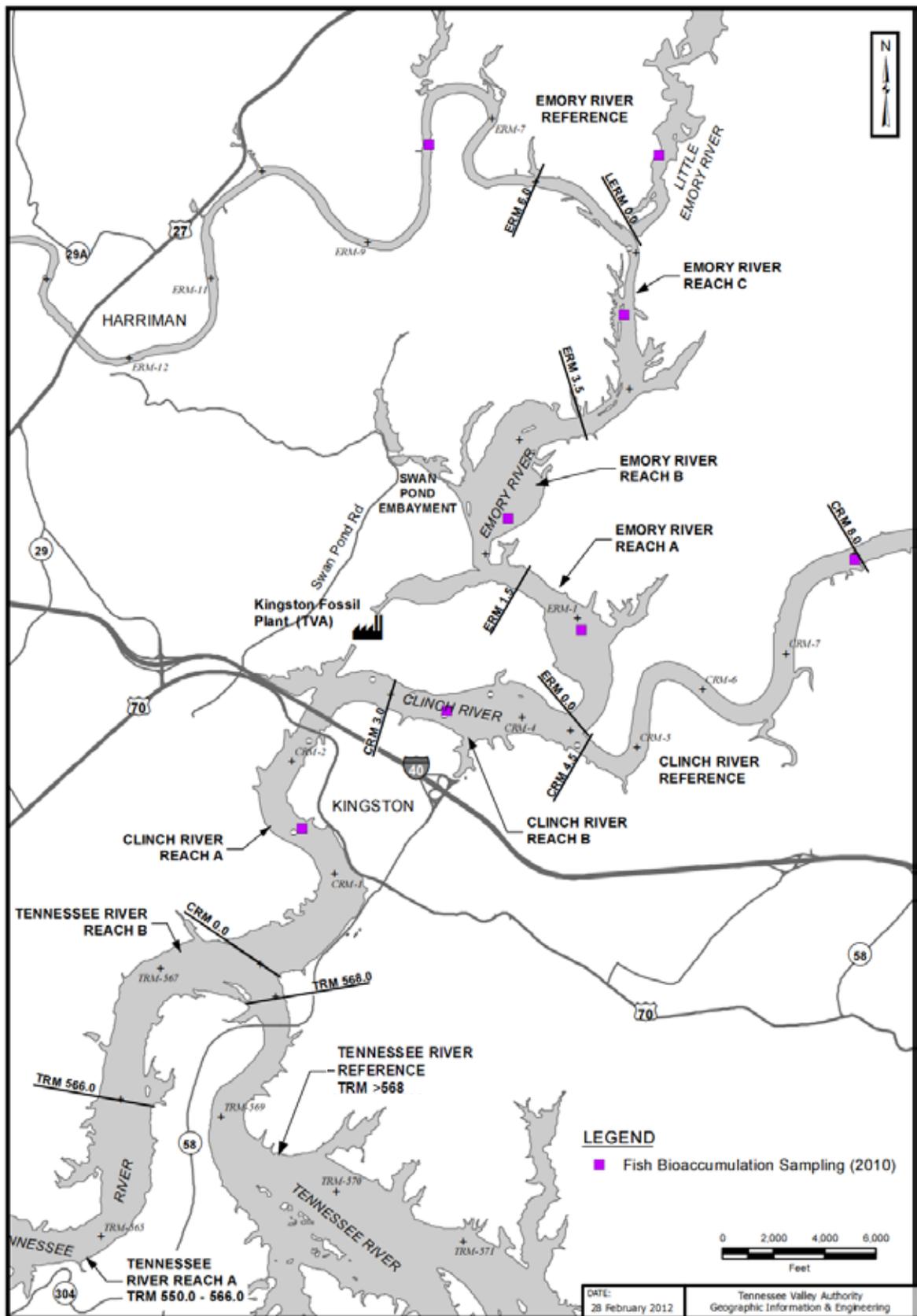


Surface Water Sampling Locations
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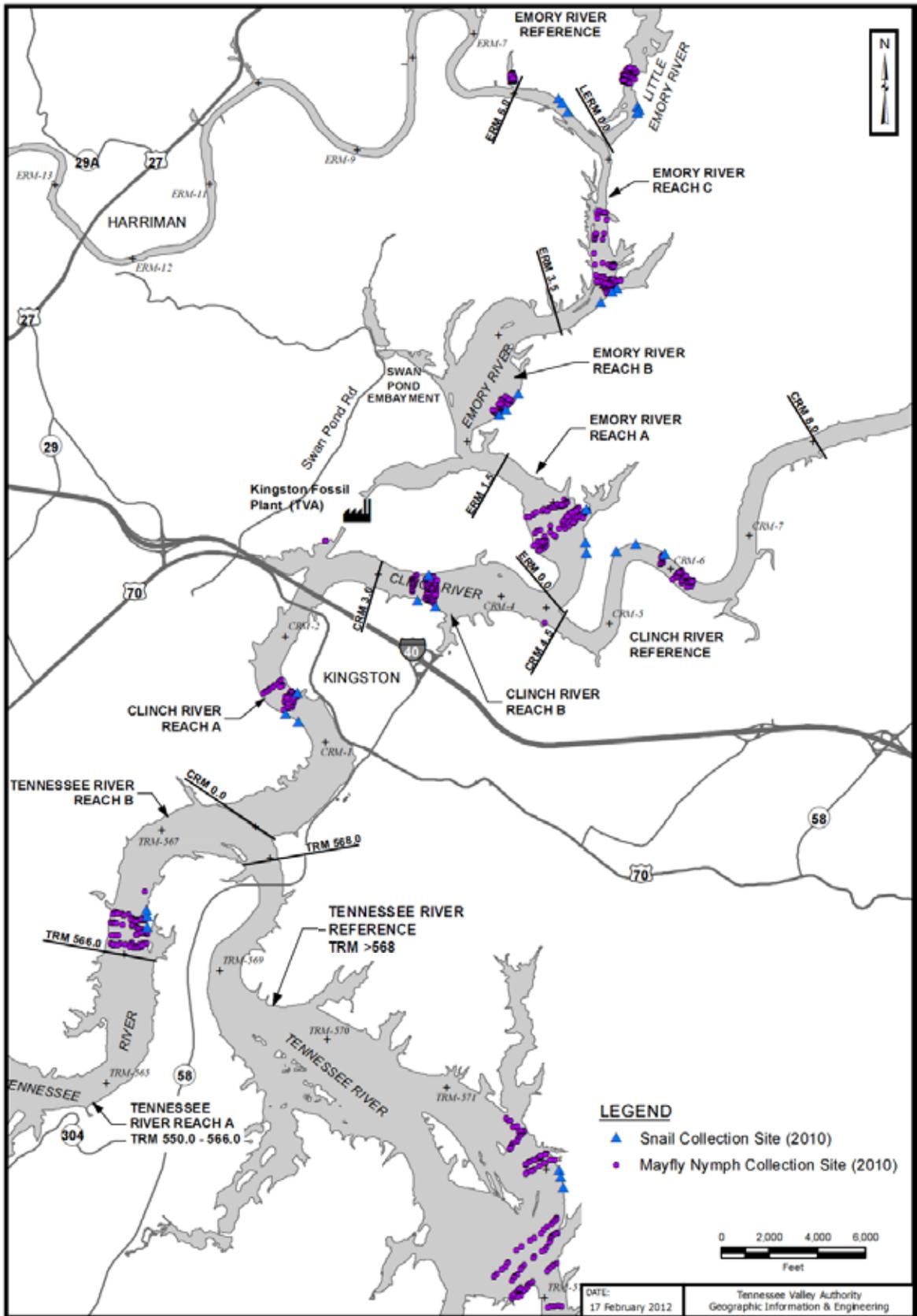


Permanent Groundwater Well Locations: 6AR and 22
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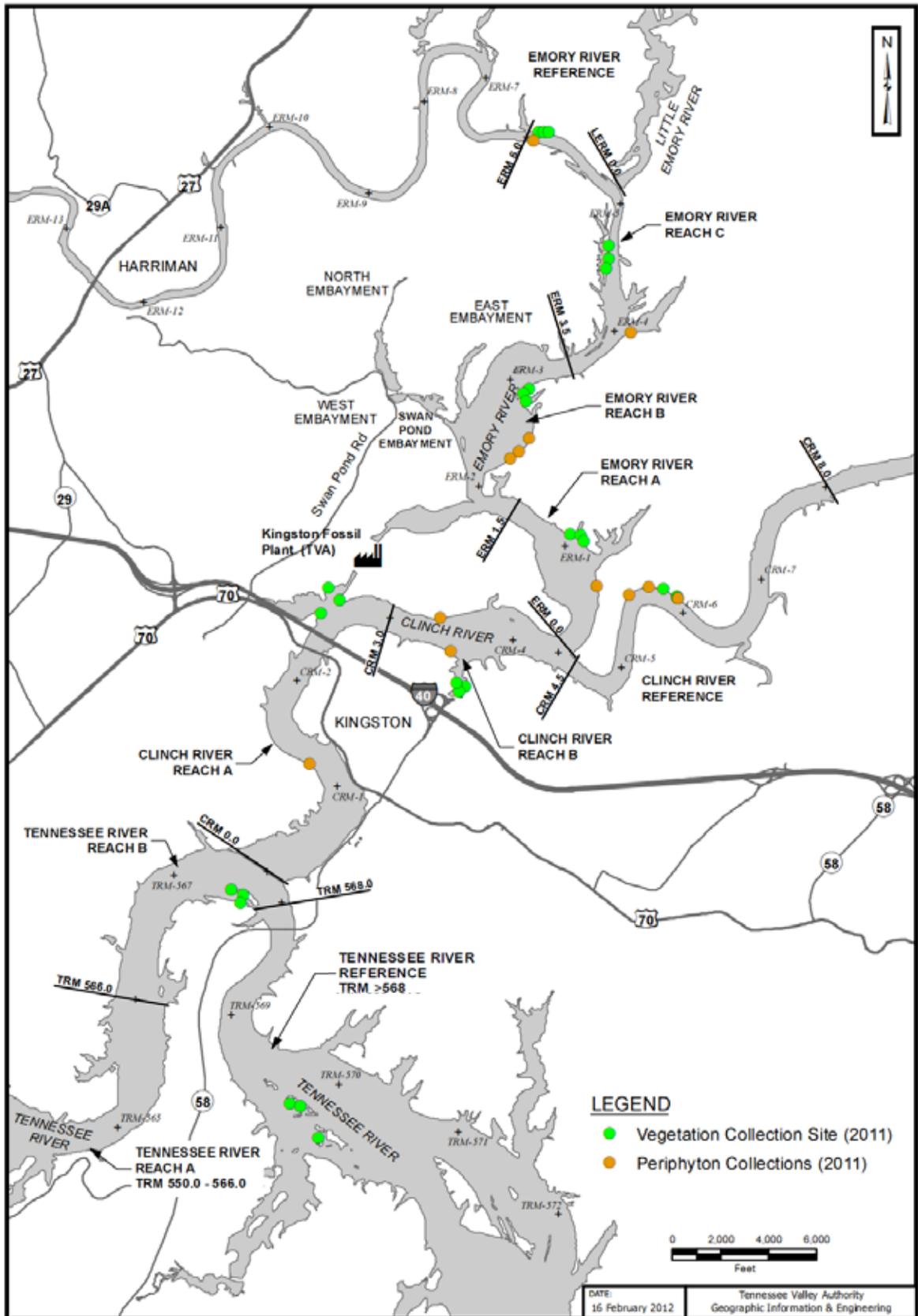
FIGURE
2-20



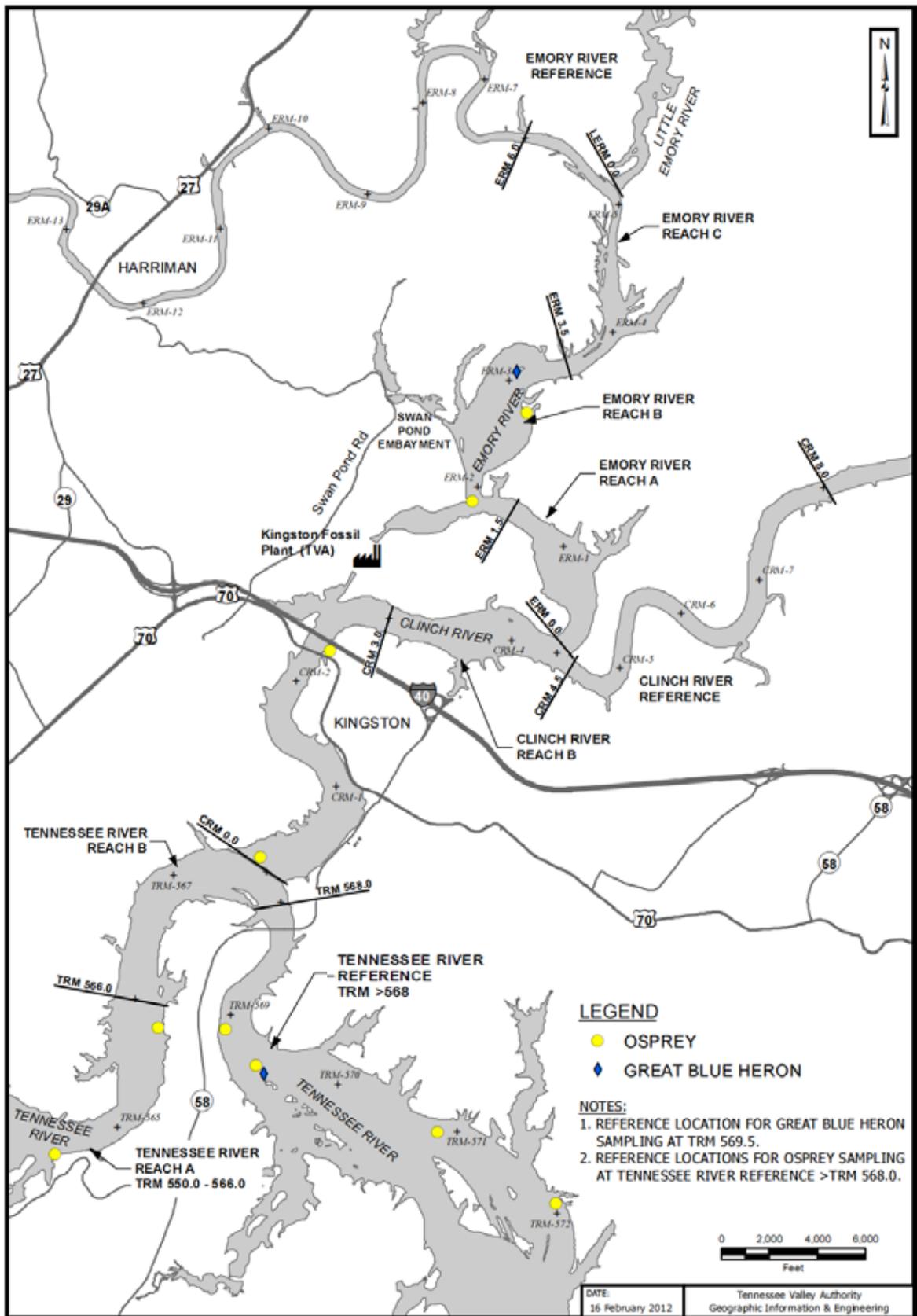
Fish Sampling Locations
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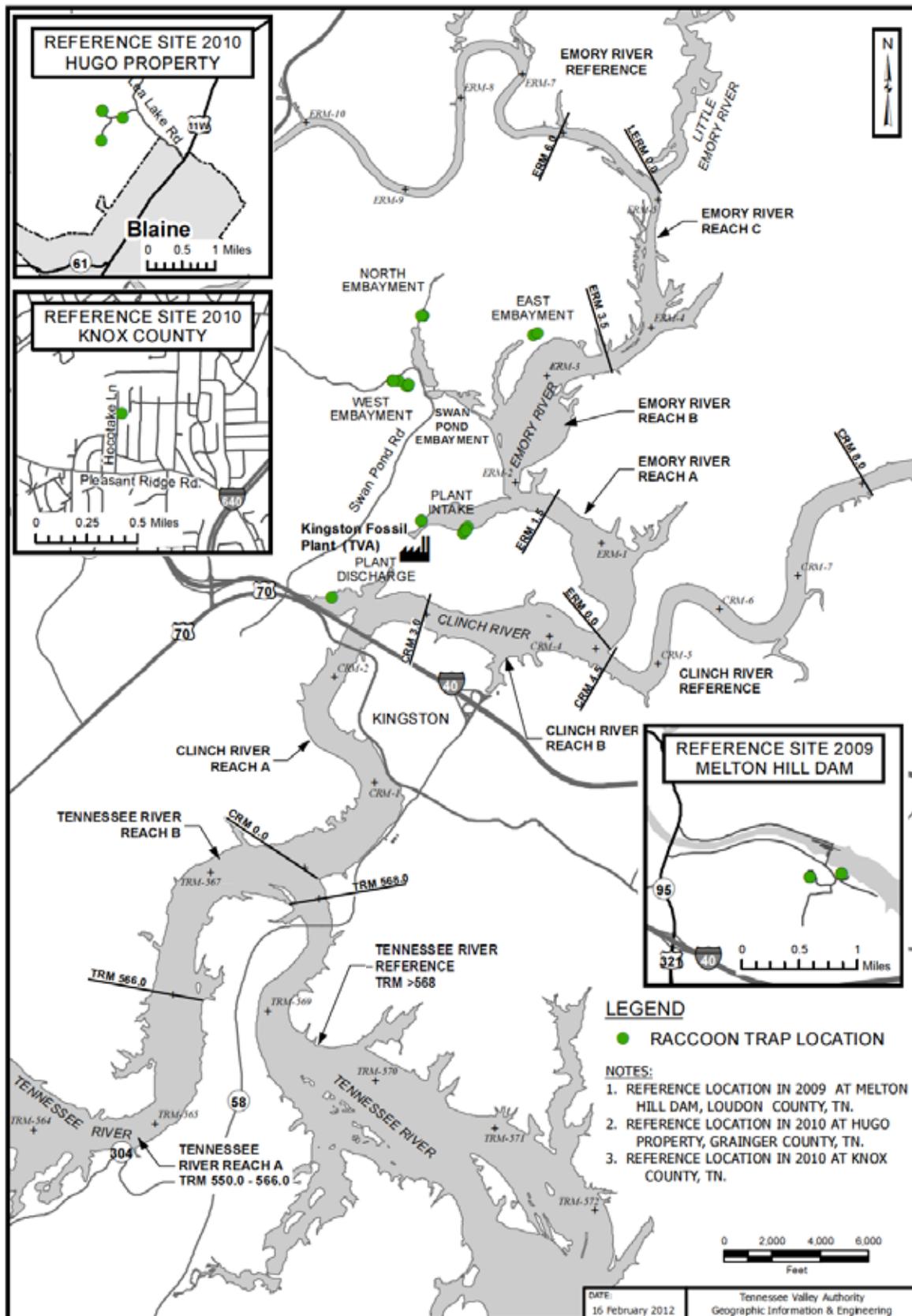
Benthic Invertebrate Sampling Locations
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Aquatic Vegetation and Periphyton Sampling Locations
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Heron and Osprey Sampling Locations
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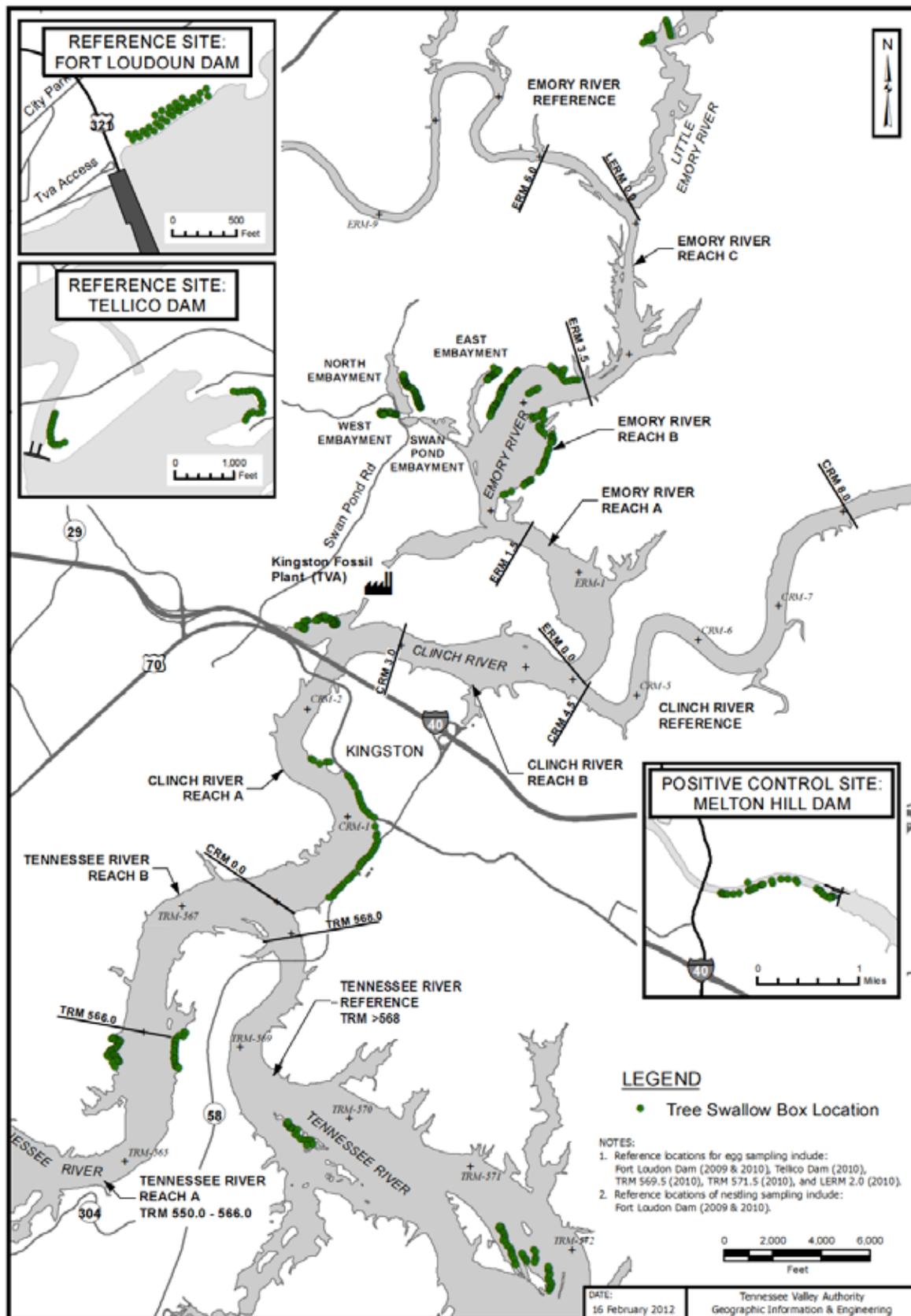
LEGEND

● RACCOON TRAP LOCATION

NOTES:

1. REFERENCE LOCATION IN 2009 AT MELTON HILL DAM, LOUDON COUNTY, TN.
2. REFERENCE LOCATION IN 2010 AT HUGO PROPERTY, GRAINGER COUNTY, TN.
3. REFERENCE LOCATION IN 2010 AT KNOX COUNTY, TN.

DATE: 16 February 2012
 Tennessee Valley Authority
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Tree Swallow Sampling Locations
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