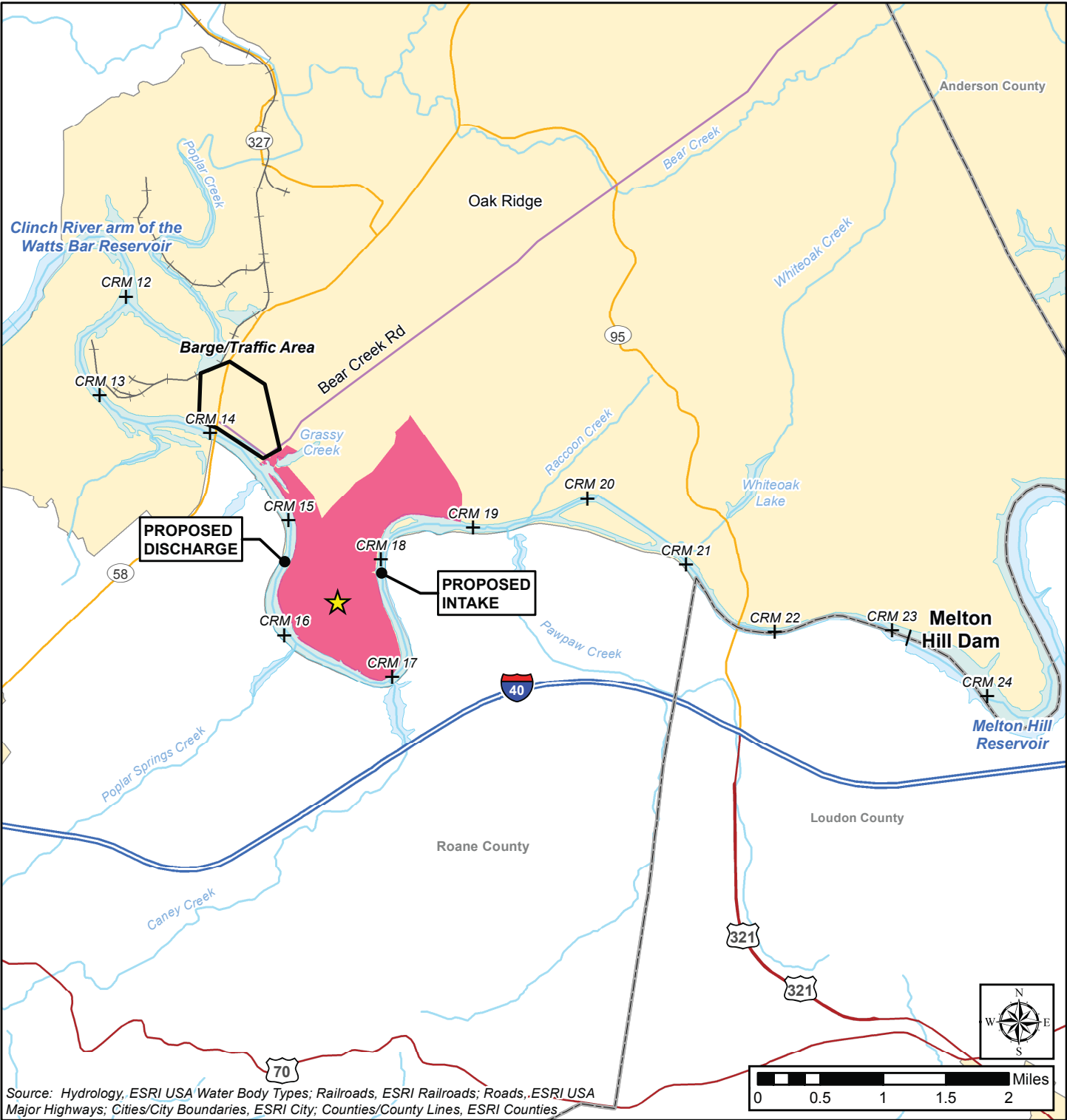


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Legend

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|----------------------------------|-----------------------------------|------------------------|-----------------------------|
| ★ CRN Site Center Point | Light Blue Box Rivers and Lakes | Blue Line Interstate | Purple Line Bear Creek Road |
| + Clinch River Mile | Yellow Box Town/City Boundaries | Red Line Highway | |
| Pink Box CRN Site | Grey Box Counties | Orange Line Major Road | |
| Black Outline Barge/Traffic Area | Black Line with Crosses Railroads | | |

Figure 2.3.1-1. CRN Site Vicinity Water Resources

This map illustrates the Watts Bar Reservoir system in Tennessee, highlighting the Clinch River arm and Melton Hill Reservoir. Key features include:

- Dams:** Watts Bar Dam, Melton Hill Dam, Fort Loudoun Dam, and Tellico Dam are marked with orange triangles.
- Reservoirs:** Watts Bar Reservoir, Melton Hill Reservoir, and the Clinch River arm of the Watts Bar Reservoir are shown in blue.
- Cities and Towns:** Numerous locations are labeled, including Sunbright, Lancing, Wartburg, Petros, Fork Mountain, Rosedale, Briceville, Lake City, Norris, Oakdale, Harriman, Midtown, Kingston, Ozone, Westel, Farragut, Concord, Louisville, Lenoir City, Loudon, Philadelphia, Sweetwater, Greenback, and Friendsville.
- Counties:** The map shows the boundaries of Scott, Campbell, Anderson, Morgan, Cumberland, Roane, Rhea, Meigs, McMinn, Monroe, Blount, and Knox counties.
- Highways:** Major roads are depicted, including US Routes 27, 62, 298, 299, 29, 327, 61, 95, 70, 326, 72, 322, 68, 323, 72, 411, 11, 162, 332, 321, and 441. Interstates 40, 75, and 75 are also shown.
- Waterways:** The Clinch River, Poplar Creek, Bear Creek, Raccoon Creek, Whiteoak Creek, and the Little Tennessee River are labeled.
- Legend:** A scale bar (0 to 10 miles) and a compass rose are located in the bottom right corner.
- Source:** The map is sourced from Hydrology, ESRI USA Water Body Types; Counties/County Lines, ESRI Counties; Railroads, ESRI Railroads; Roads, ESRI USA Major Highways; Cities/City Boundaries, ESRI City.

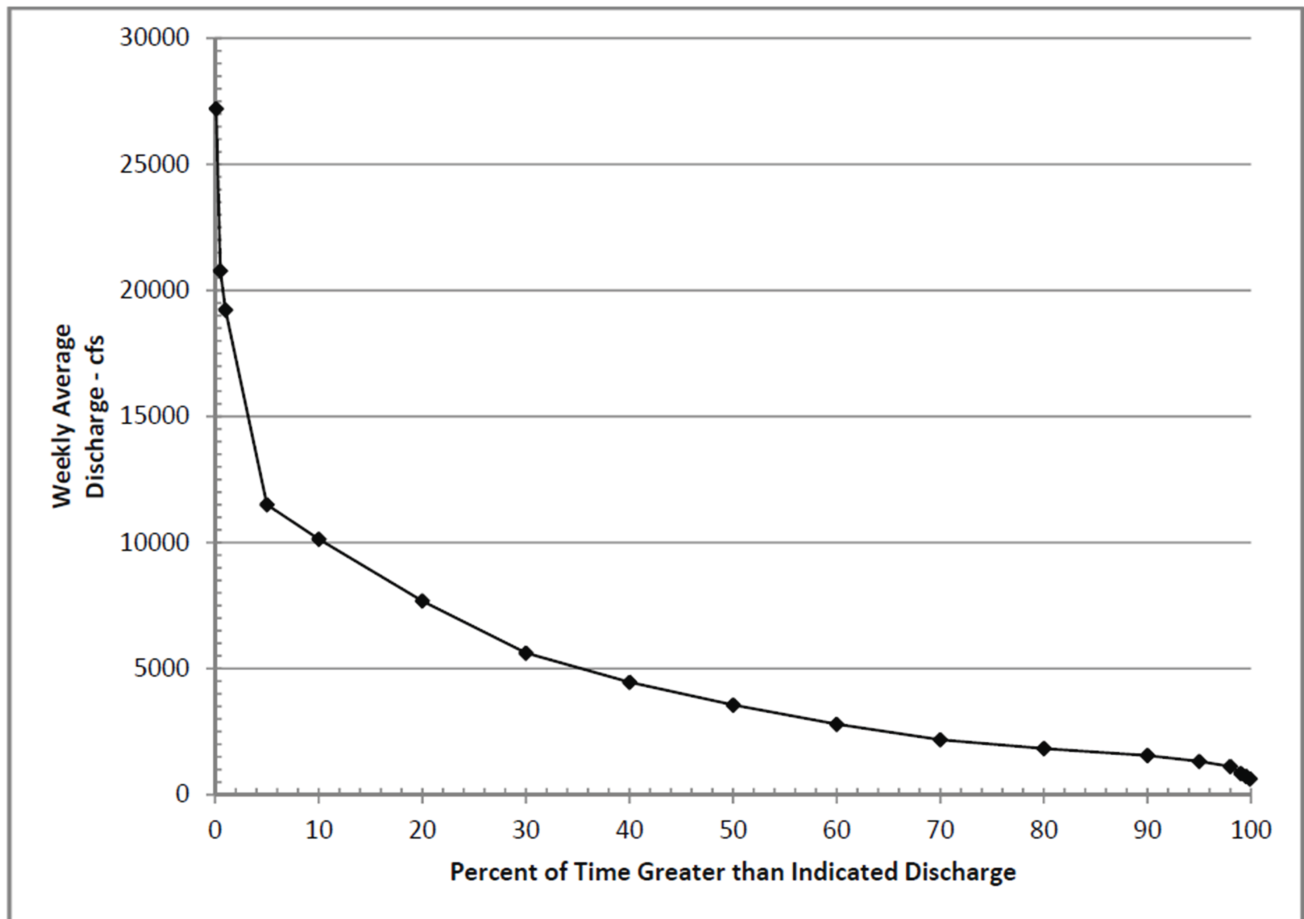


Figure 2.3.1-3. Melton Hill Dam Weekly Discharge Frequency

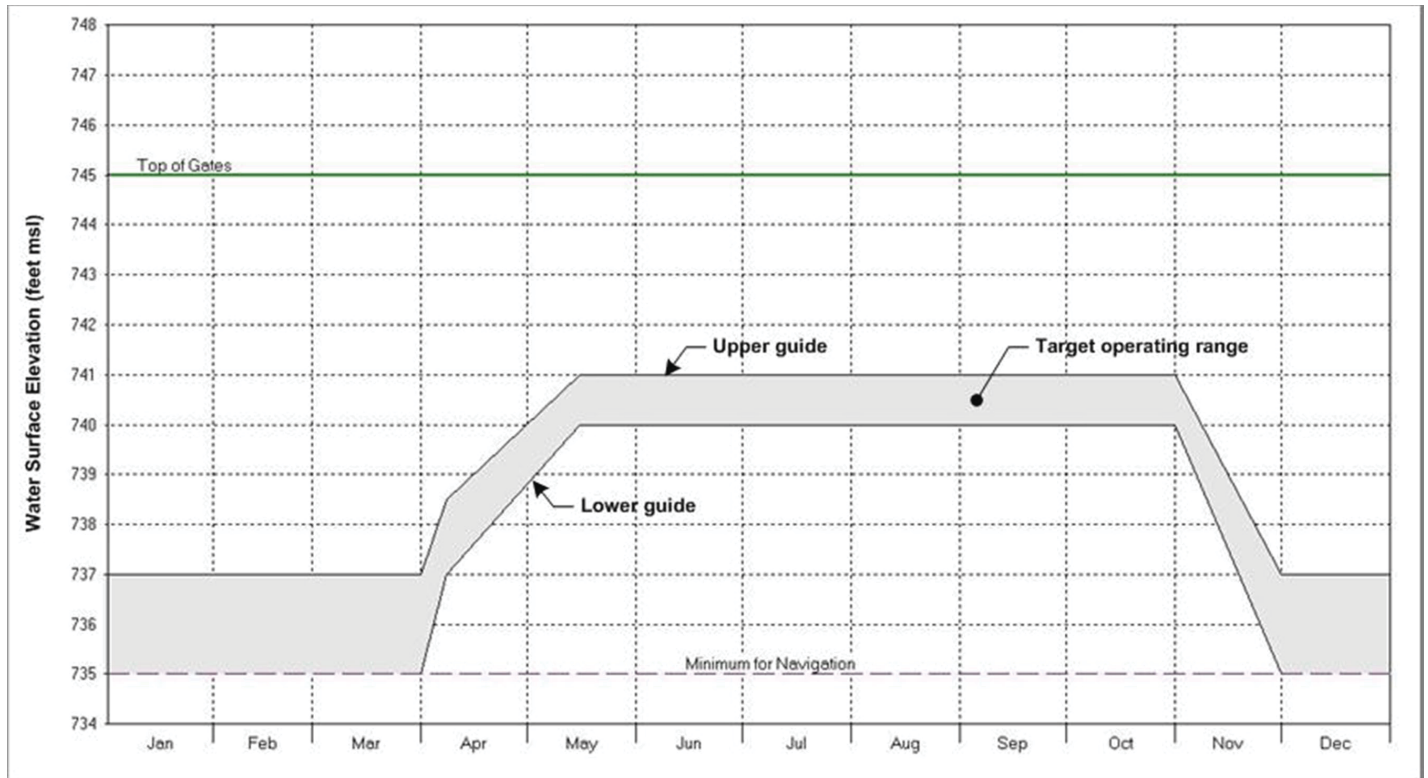


Figure 2.3.1-4. Operating Guide for Headwater Elevation at Watts Bar Dam

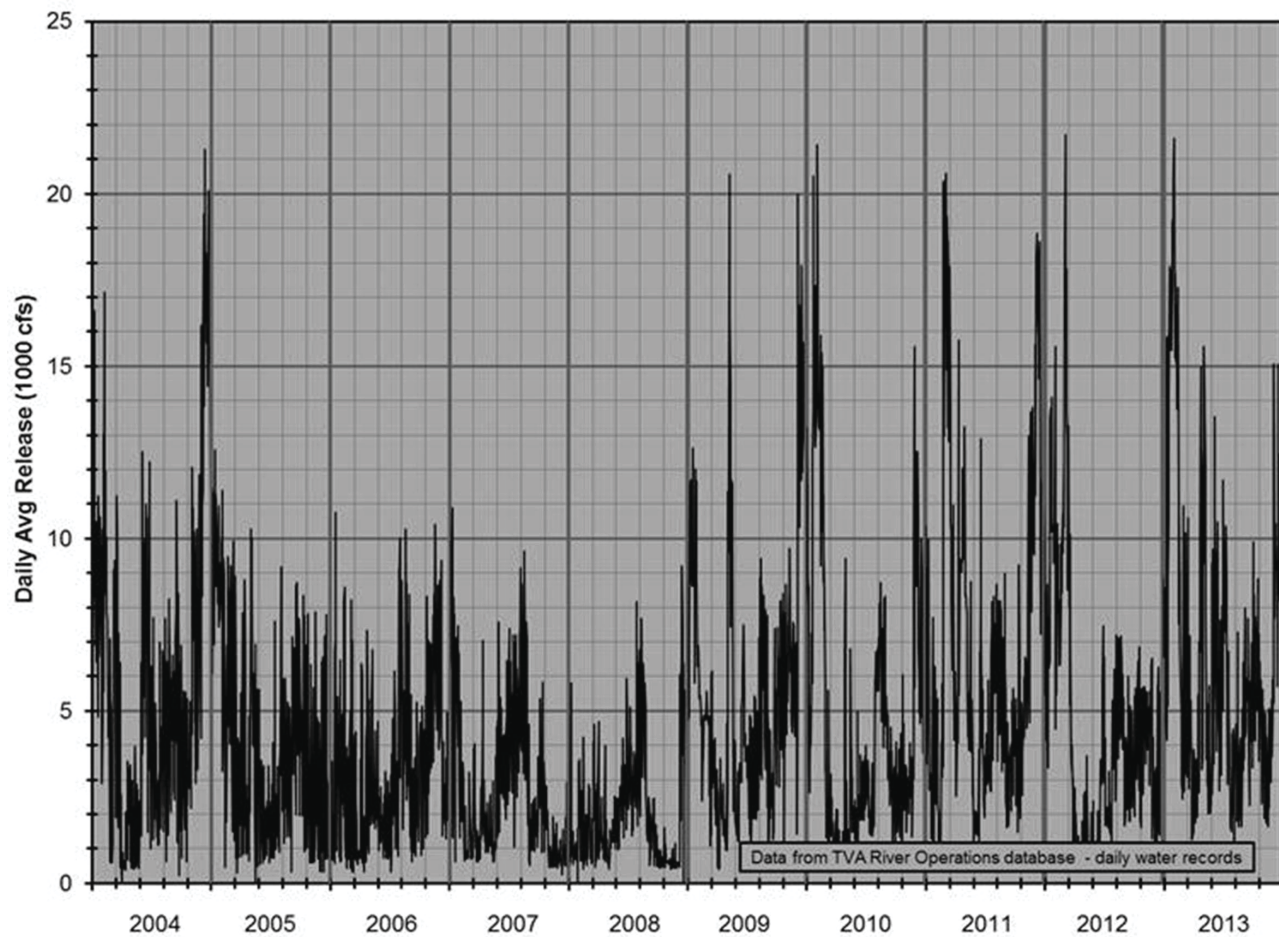


Figure 2.3.1-5. Daily Average Release from Melton Hill Dam

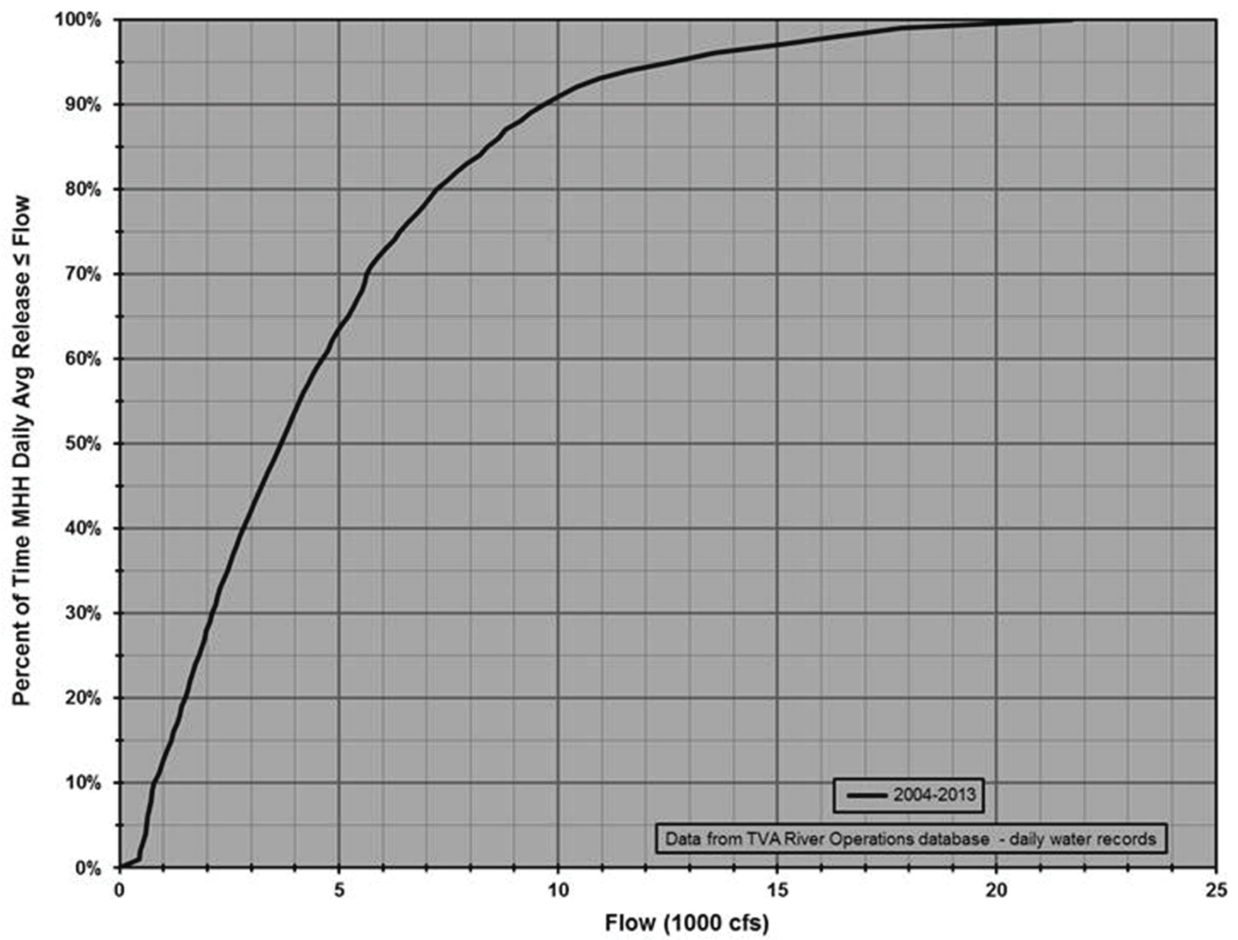


Figure 2.3.1-6. Percentile for Daily Average Release from Melton Hill Dam

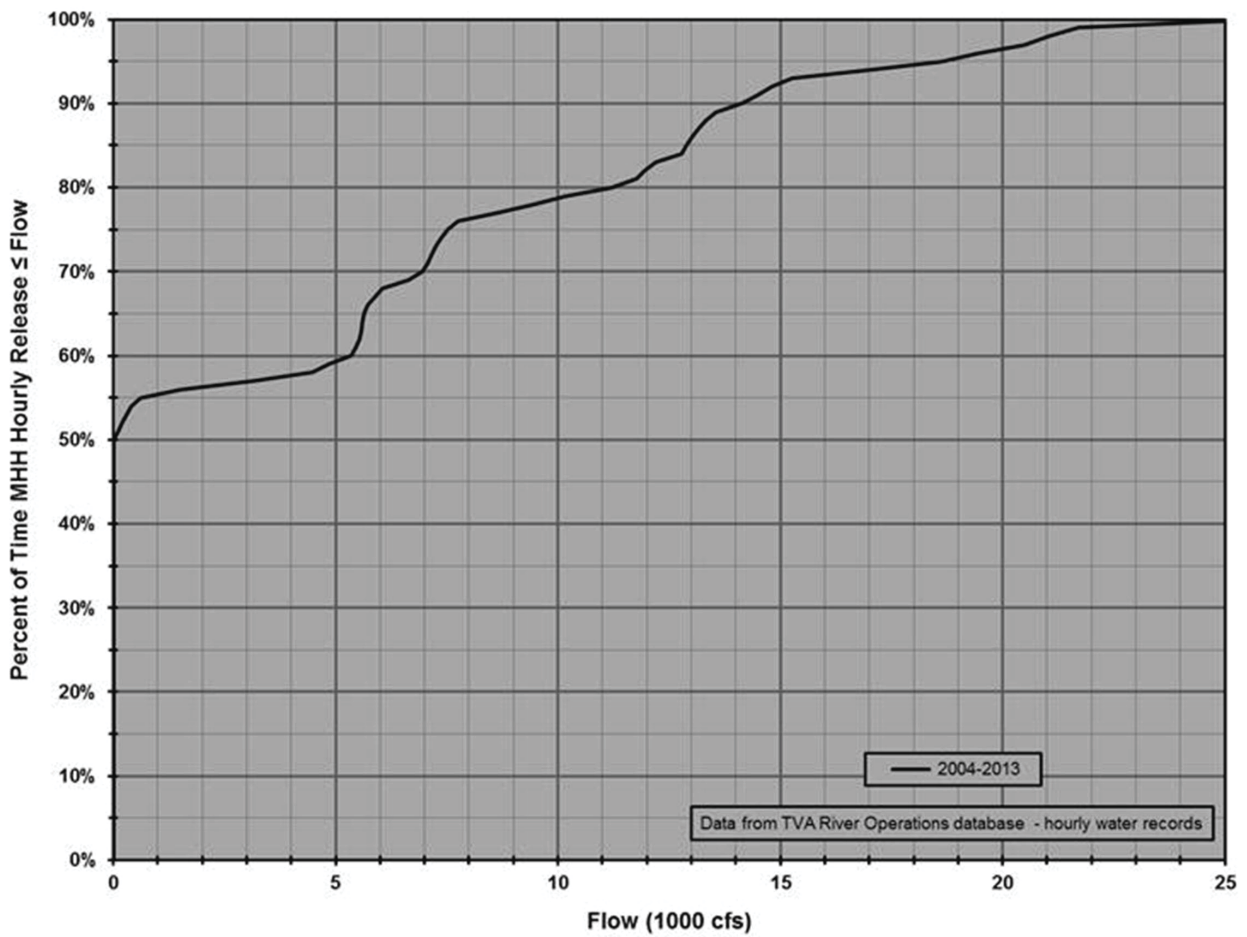


Figure 2.3.1-7. Percentile for Hourly Average Release from Melton Hill Dam

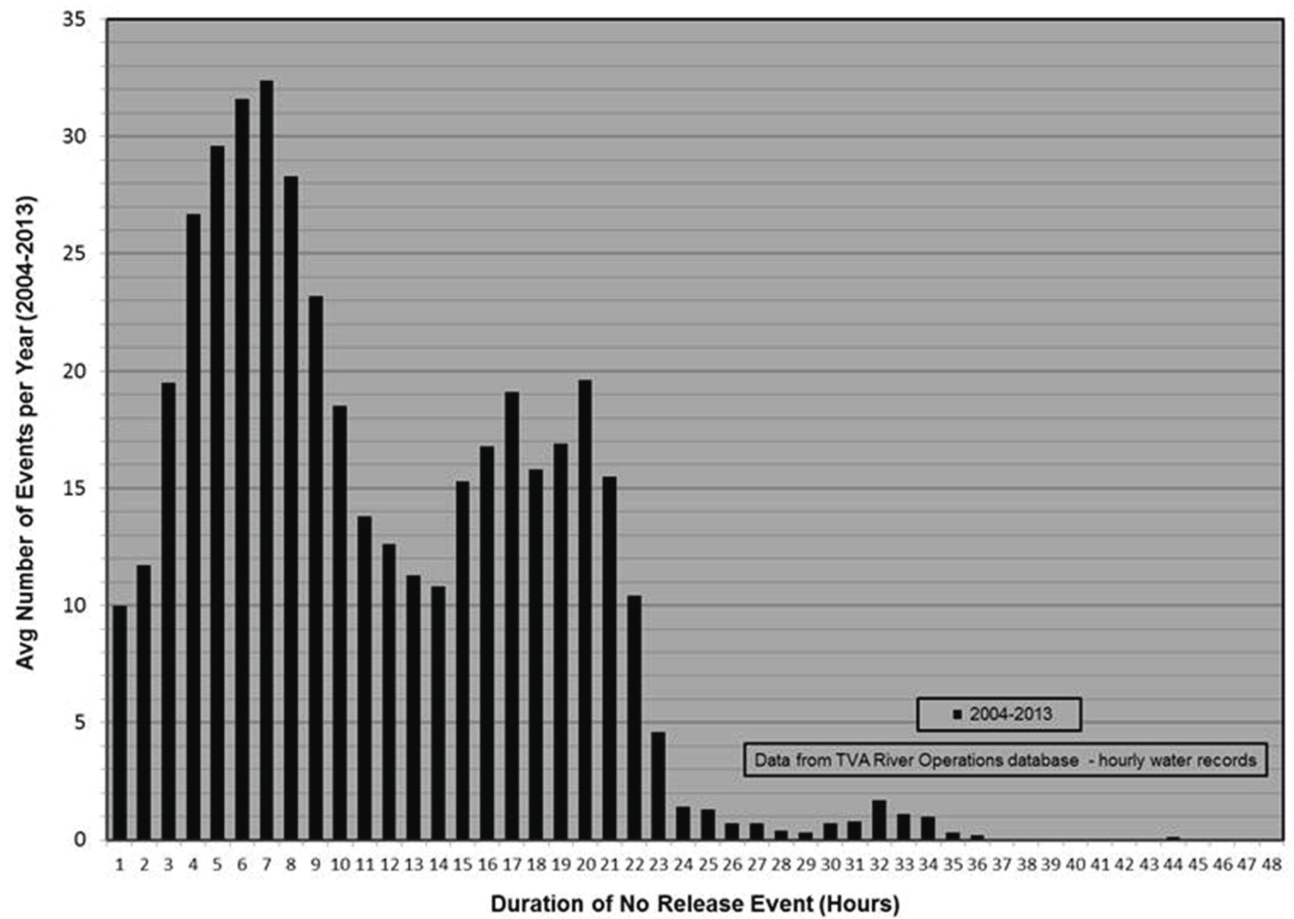


Figure 2.3.1-8. Average Annual Frequency of No Release Events from Melton Hill Dam

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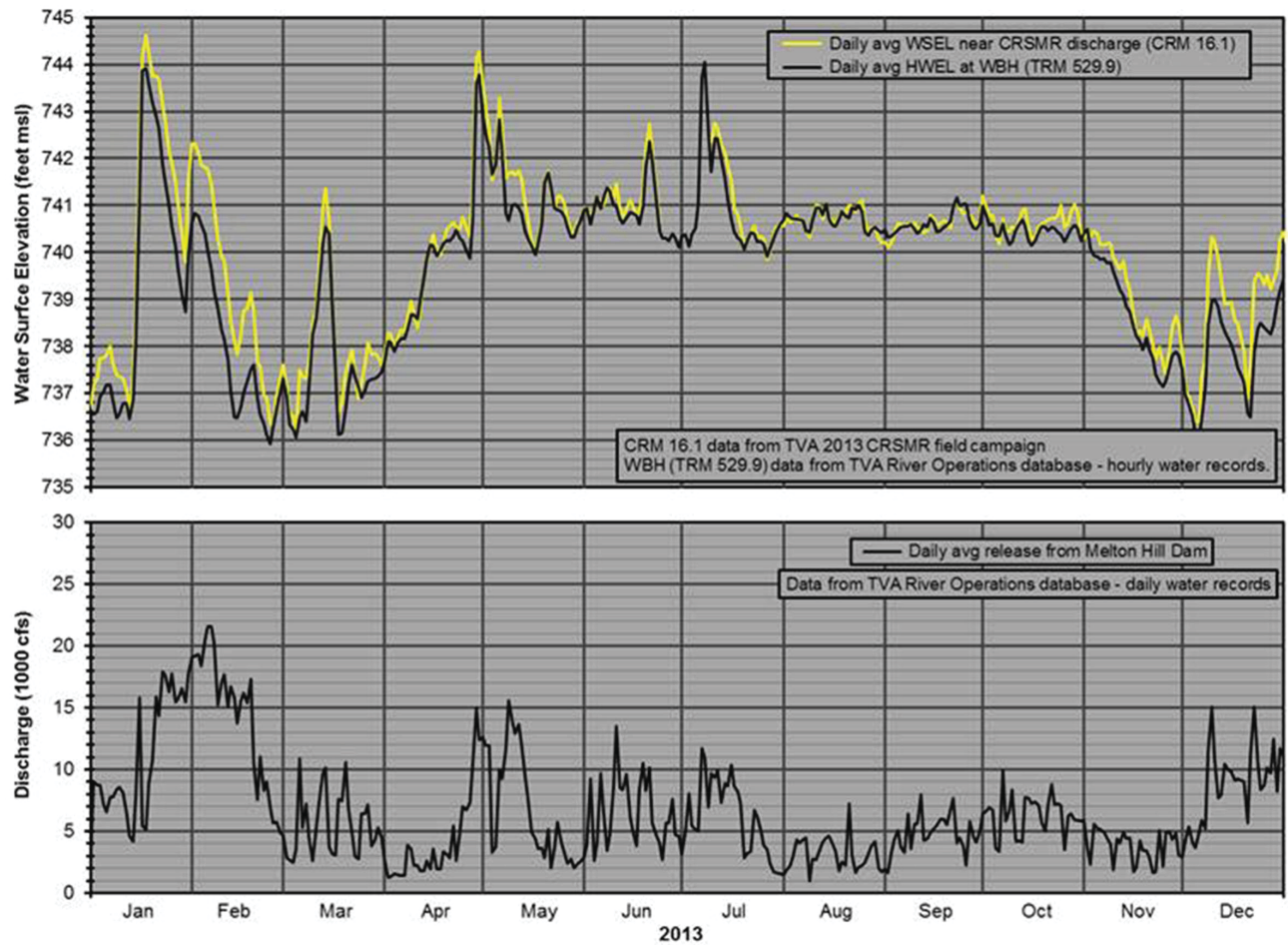


Figure 2.3.1-9. WSEL Measurements at CR SMR and WBH,
and Discharge Measurements at Melton Hill Dam

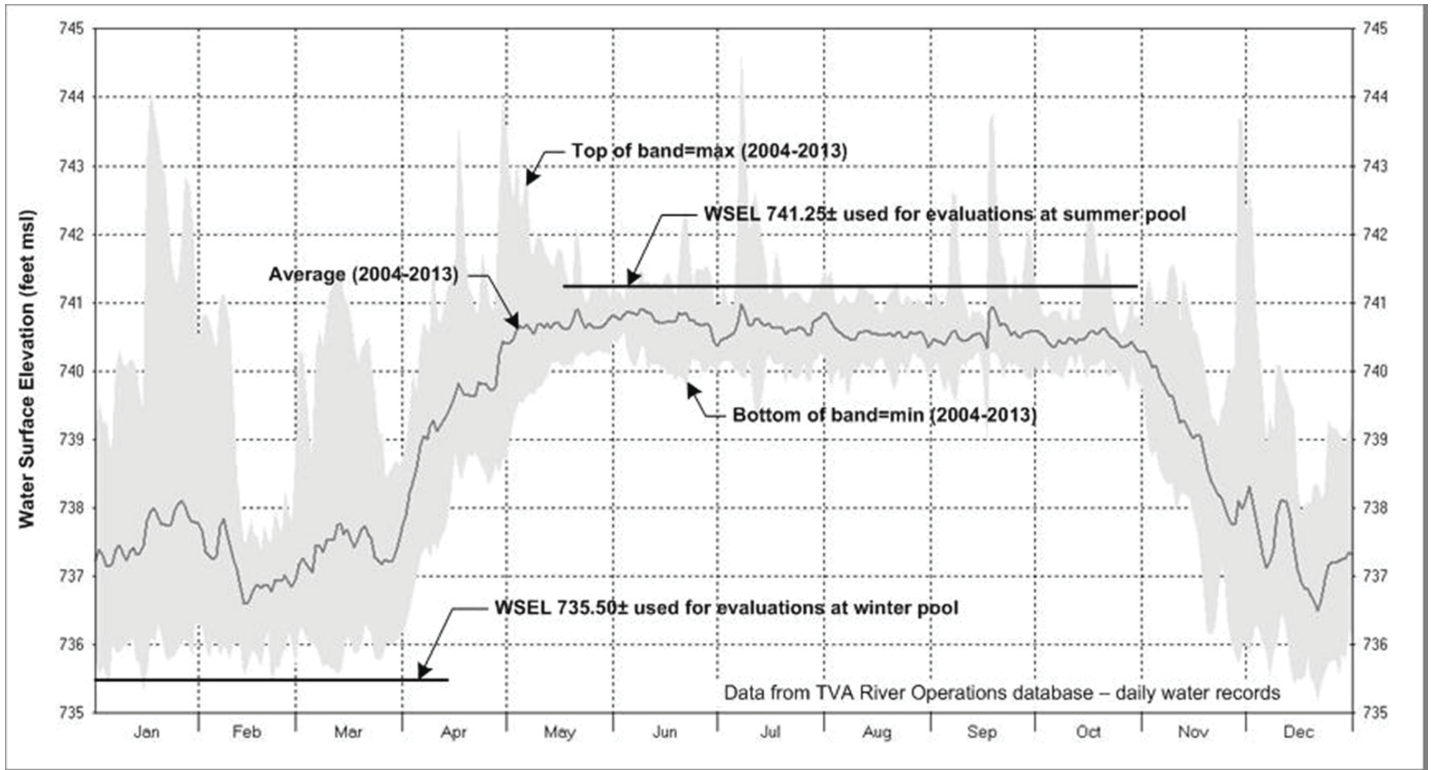


Figure 2.3.1-10. Headwater Elevation at Watts Bar Dam, Showing Max, Min, and Average Values of Daily Midnight Readings, 2004-2013

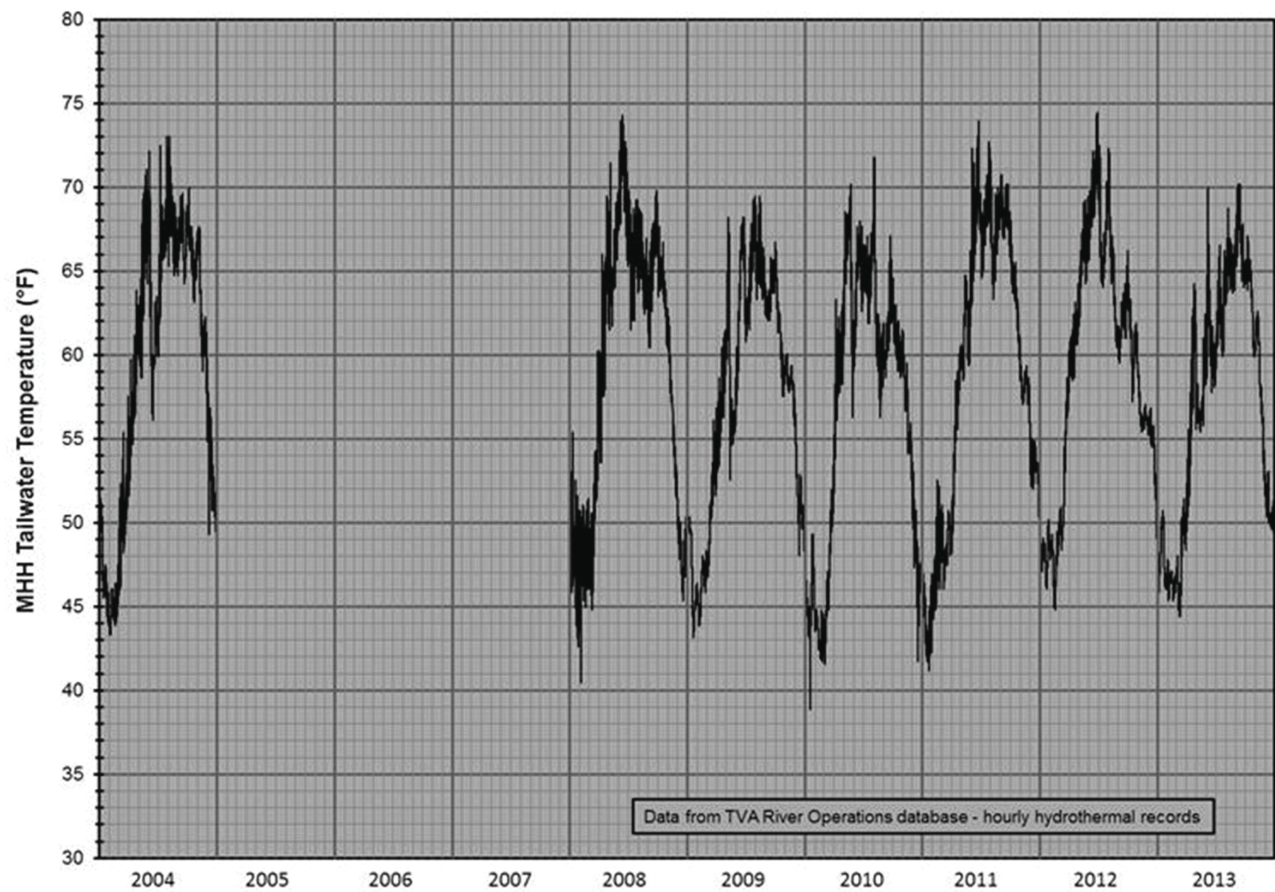


Figure 2.3.1-11. Hourly Water Temperature for Tailwater Below Melton Hill Dam

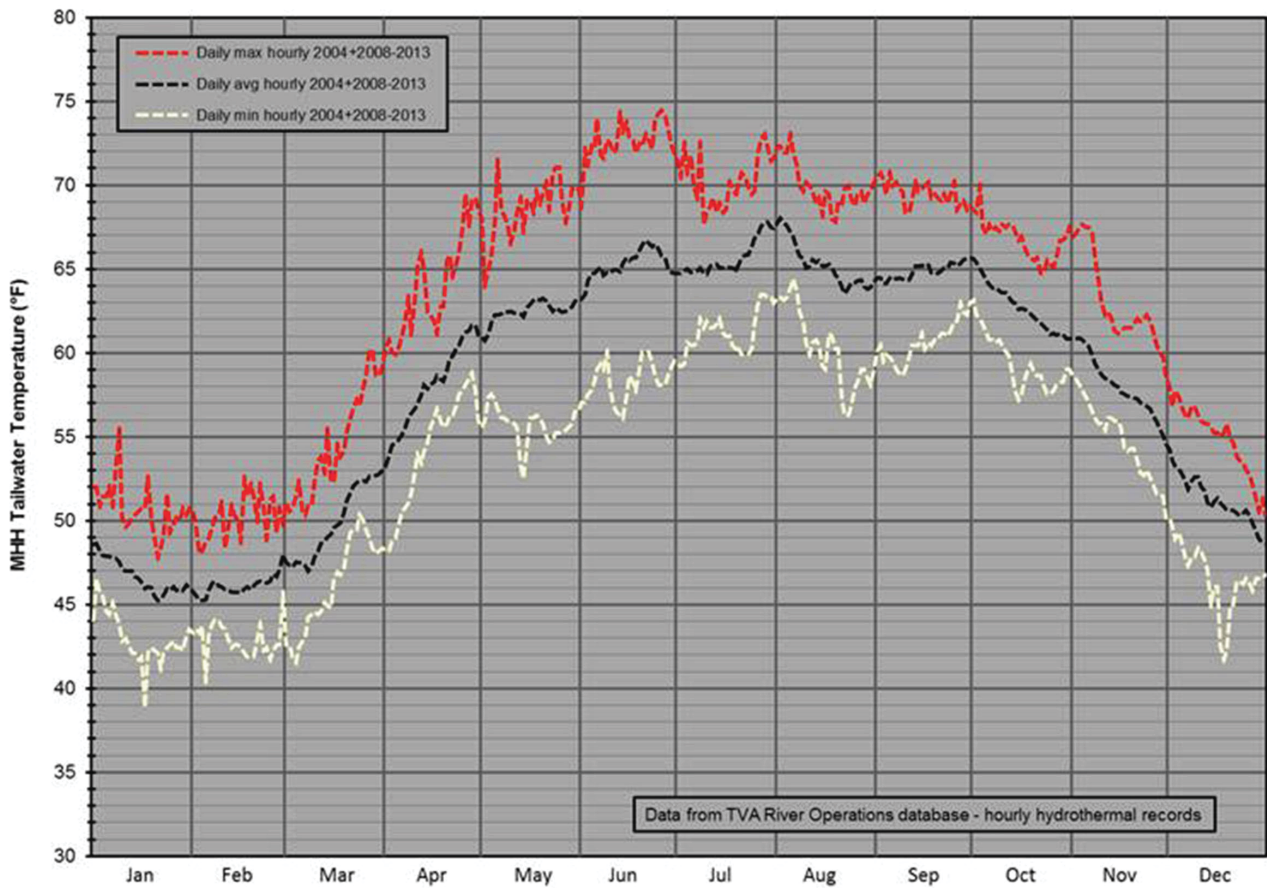


Figure 2.3.1-12. Daily Maximum, Minimum, and Average Hourly Water Temperature for Tailwater Below Melton Hill Dam

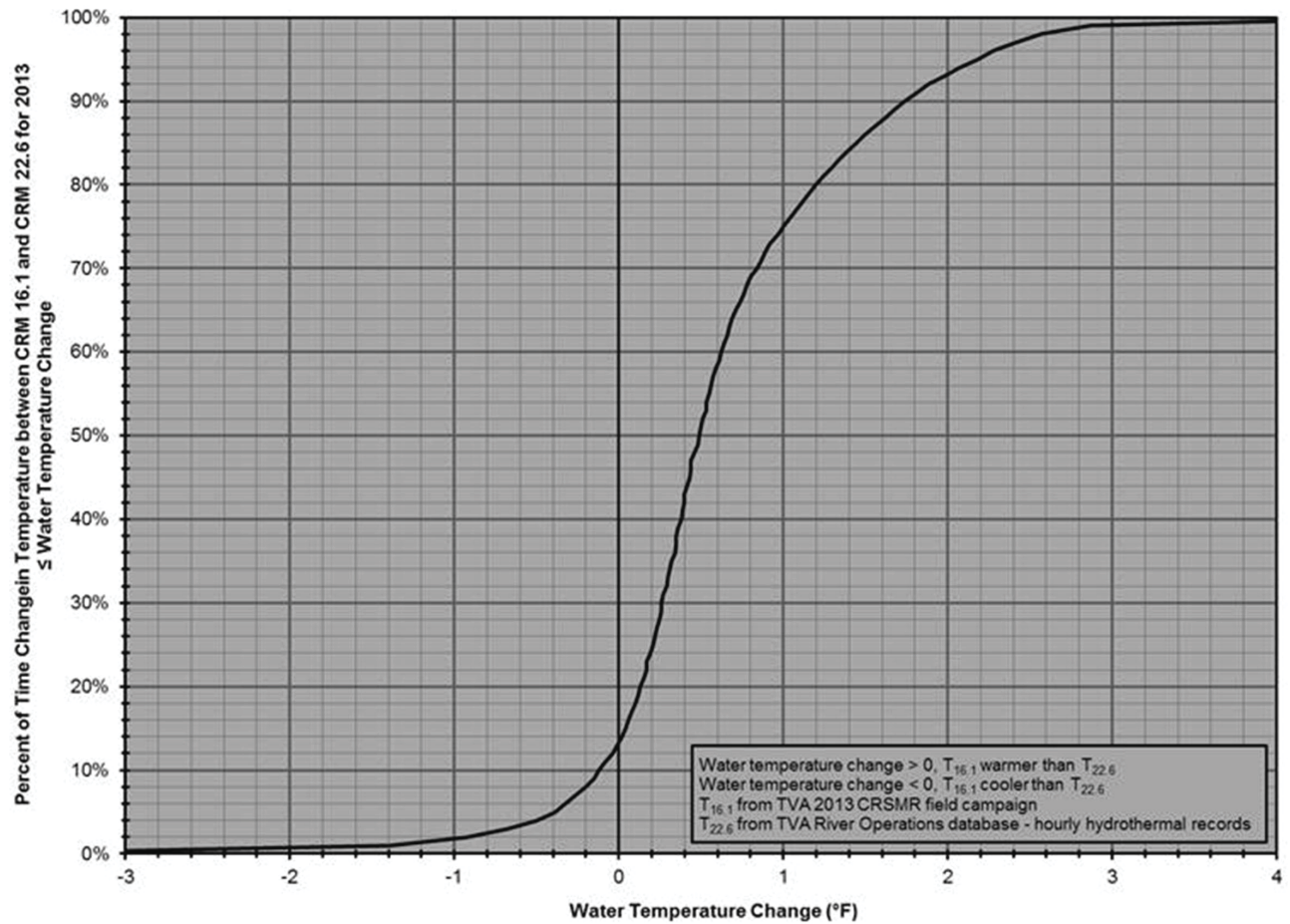
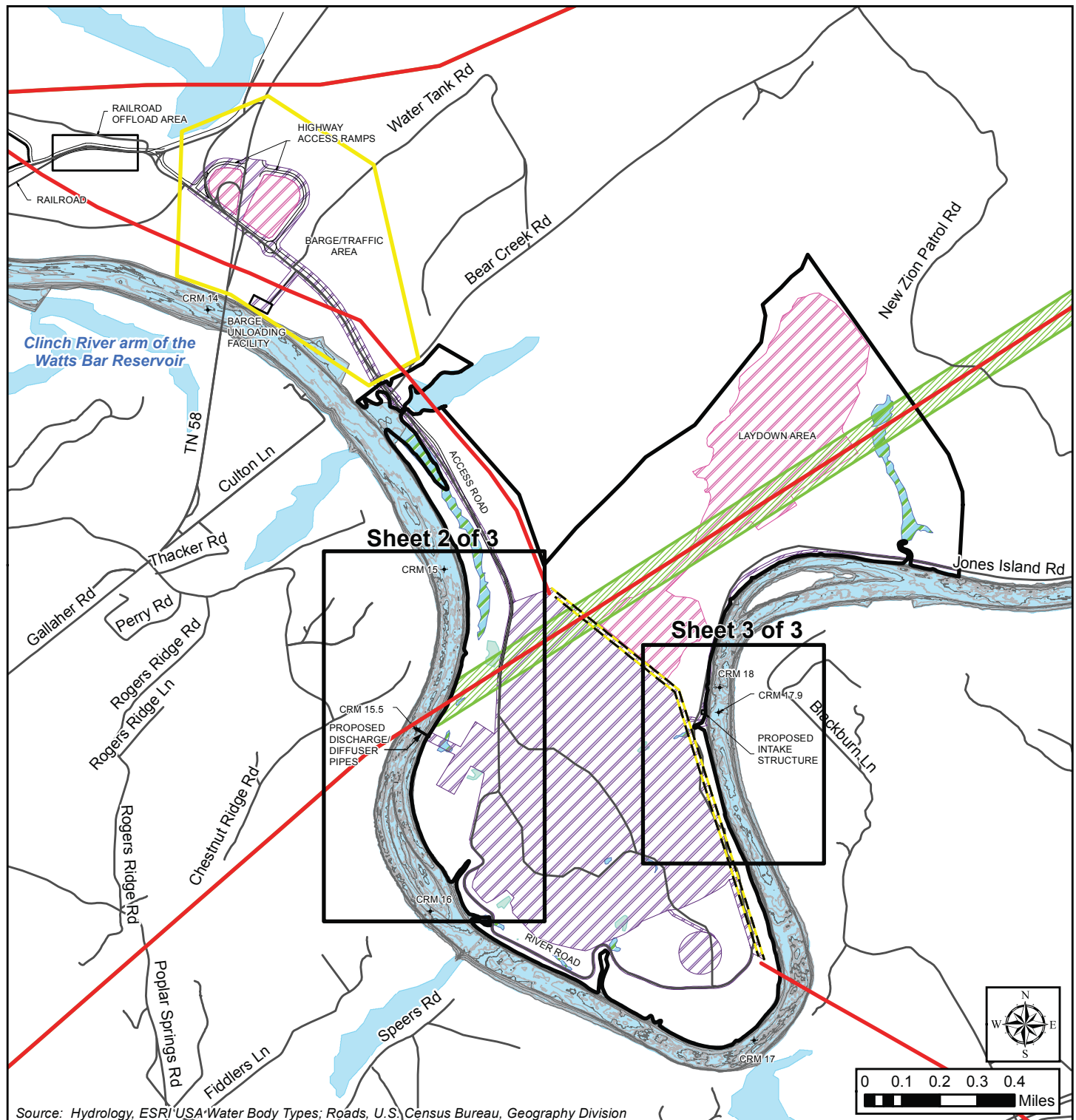


Figure 2.3.1-13. Percentile for Change in Hourly Water Temperature between CRM 16.1 and CRM 22.6/MHH Tailwater

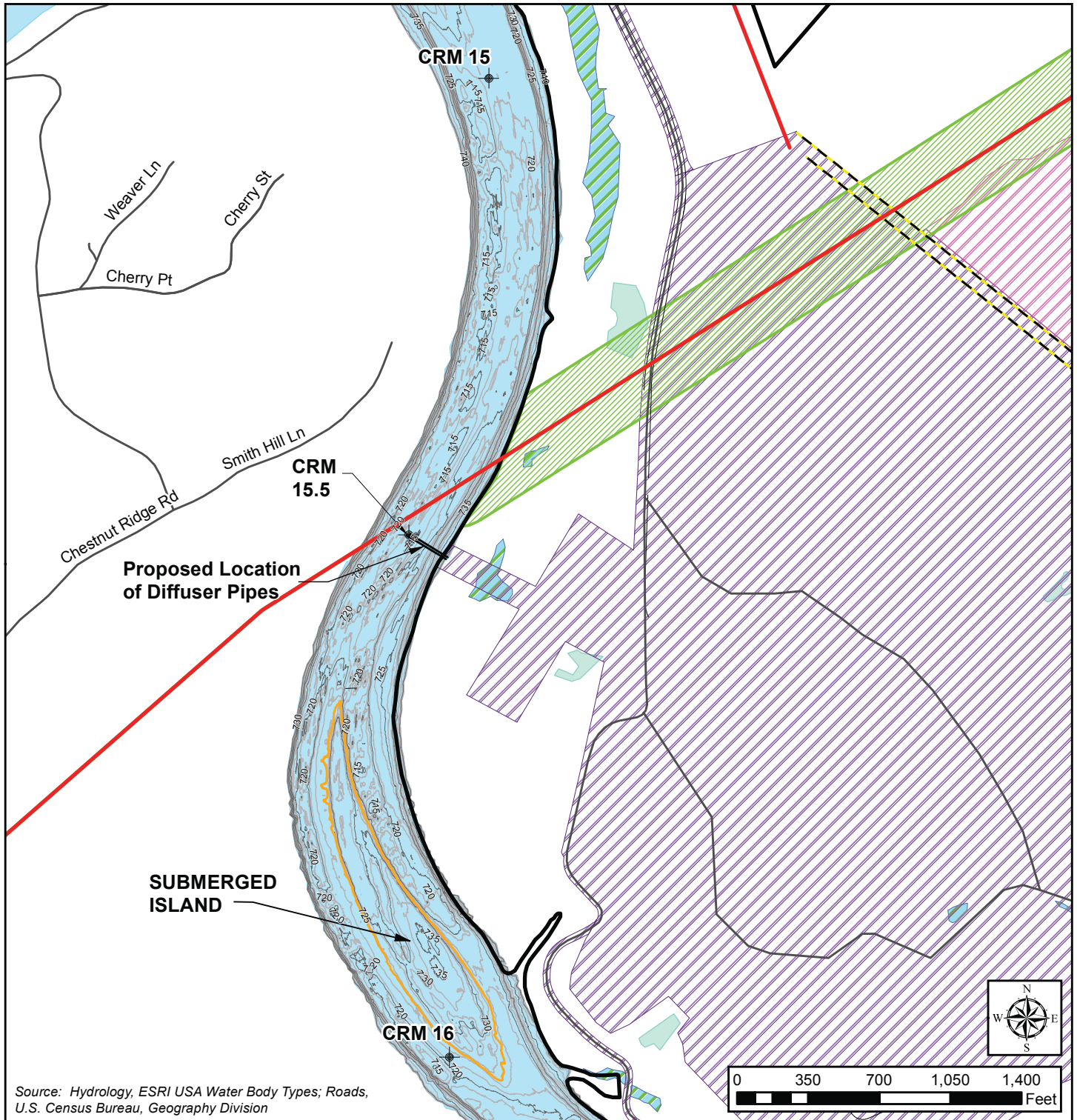
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Legend

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|---------------------------|---------------------------------------|--|------------------|
| CRN Site | Wetland | Barge/Traffic Area | Rivers and Lakes |
| Permanently Cleared Areas | Transmission Line | Bathymetry Contours (Range: 709-743 feet) | Local Roads |
| Temporary Cleared Areas | 500 kV Transmission Line Right-of-Way | Approximate Proposed 161 kV Transmission Line Relocation | |
| Ponds | | | |

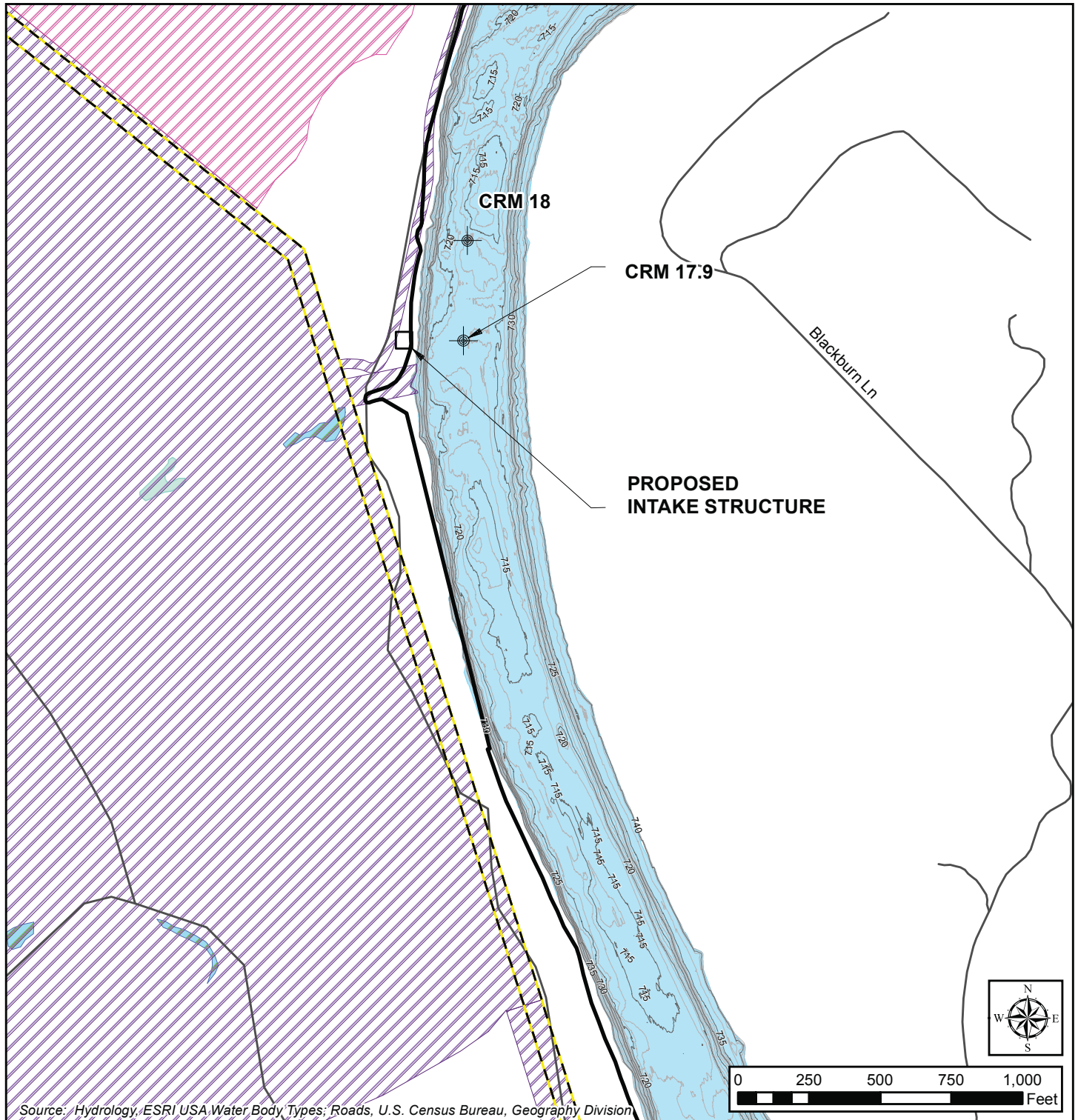
Figure 2.3.1-14. CRN Site Bathymetry (Sheet 1 of 3)



Legend

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|---------------------------|---------------------------------------|--|-------------|
| CRN Site | Wetland | Bathymetry Contours (Range: 709-743 feet) | Local Roads |
| Permanently Cleared Areas | Transmission Line | Approximate Proposed 161 kV Transmission Line Relocation | |
| Temporary Cleared Areas | 500 kV Transmission Line Right-of-Way | Submerged Island | |
| Ponds | | Rivers and Lakes | |

Figure 2.3.1-14. CRN Site Bathymetry (Sheet 2 of 3)



Legend

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|---------------------------|--|------------------|
| CRN Site | Bathymetry Contours (Range: 709-743 feet) | Rivers and Lakes |
| Permanently Cleared Areas | Approximate Proposed 161 kV Transmission Line Relocation | Local Roads |
| Temporary Cleared Areas | | |

Figure 2.3.1-14. CRN Site Bathymetry (Sheet 3 of 3)