

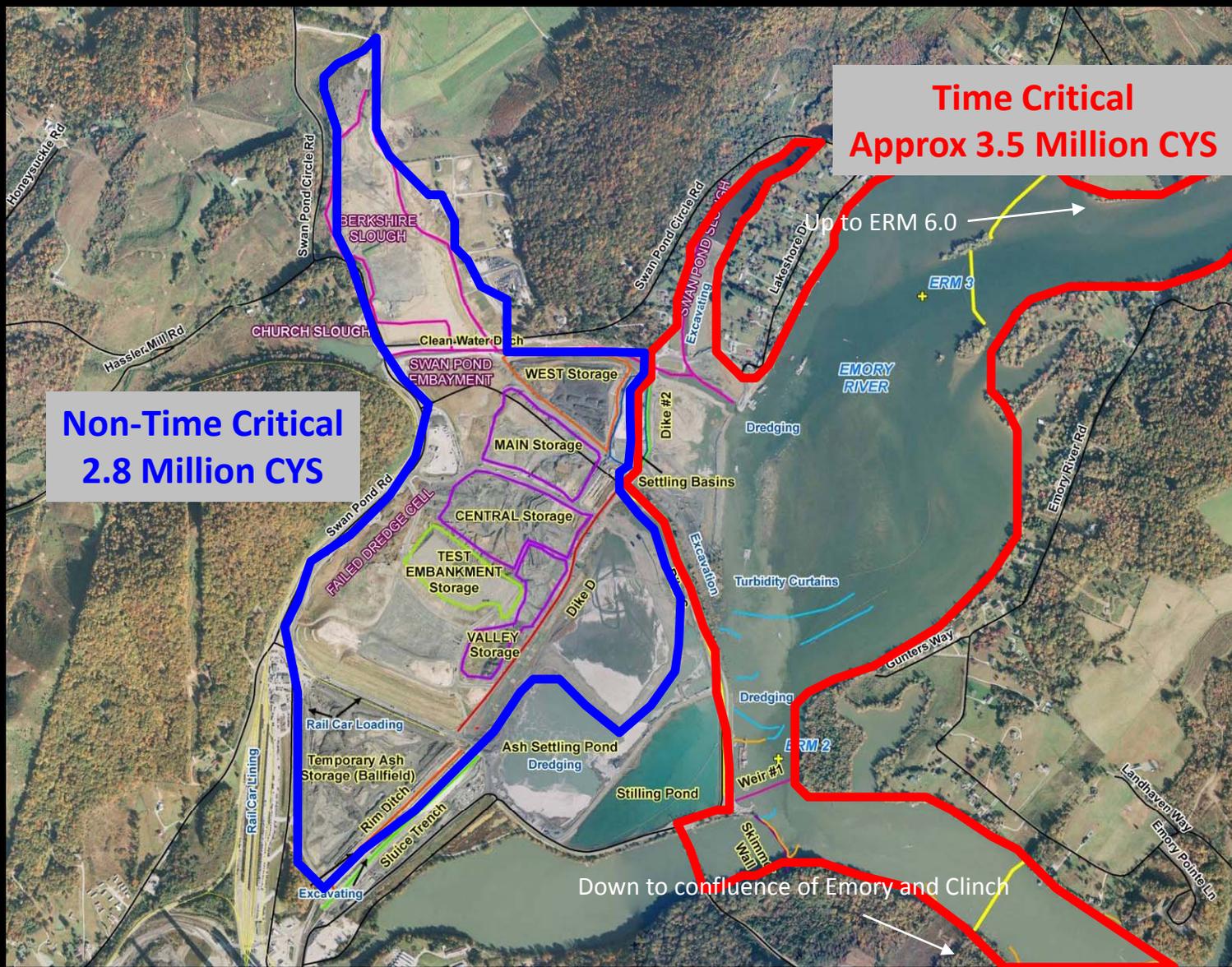


TVA Kingston Fossil Fuel Plant
Release Site
Non-Time Critical Removal Update

September 23, 2010



Removal Action Areas



Transition Activities

- North Embayment ash consolidation
- Swan Pond Cir. bridge, underpass, haul road
- Dredge cell contouring



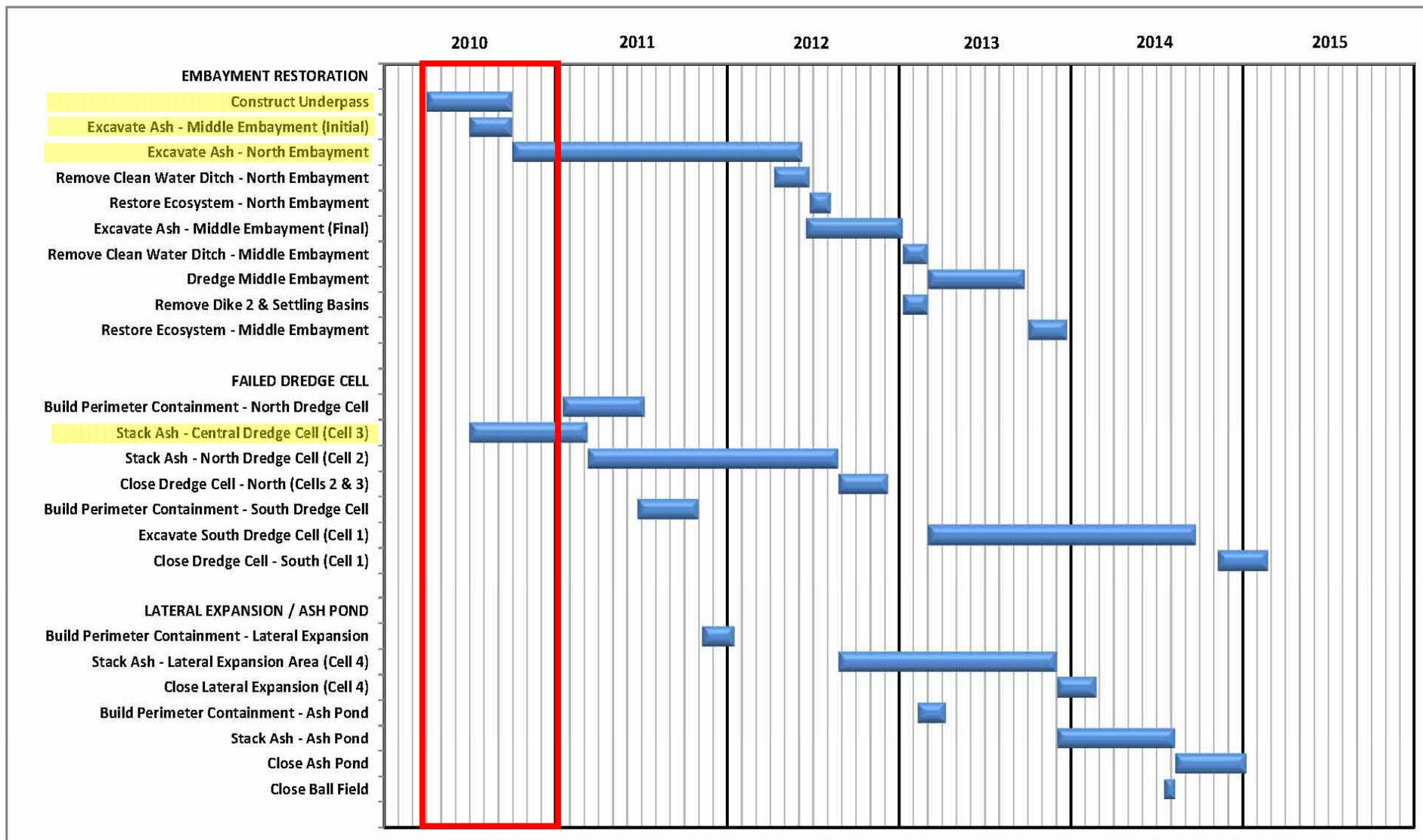
On-site Ash Numbers

- **2.8 million cys**
 - North Embayment
 - Middle Embayment
- **10.8 million cys**
 - Dredge Cell
- **4.0 million cys**
 - Ash Pond
 - Lateral Expansion
- **17.6 million cys total on-site disposal**





Current Activities





What's Happening Now?

- Continue to build **infrastructure**
 - 78% complete
 - Underpass and bridge construction on-going
 - Bridge scheduled to open Oct. 18
 - Haul road complete





What's Happening Now?

- **North Embayment** ash consolidation
 - 89% complete
 - Scraping ash away from natural water springs
 - Consolidating ash until underpass is complete





What's Happening Now?

- Perimeter **Containment**
 - Deep soil mixing pilot study **complete**
 - 11 columns constructed
 - Column borings collected for testing
 - Report is pending





What's Happening Now?

- Central Area **contouring**
 - 29% complete
 - Middle Embayment ash being removed and used to contour Central Area
 - Relic area and test embankment height removed down to final elevation



Contouring

- Central Area
 - Middle Embayment
- Reducing height
 - Test Embankment
 - Relic Area



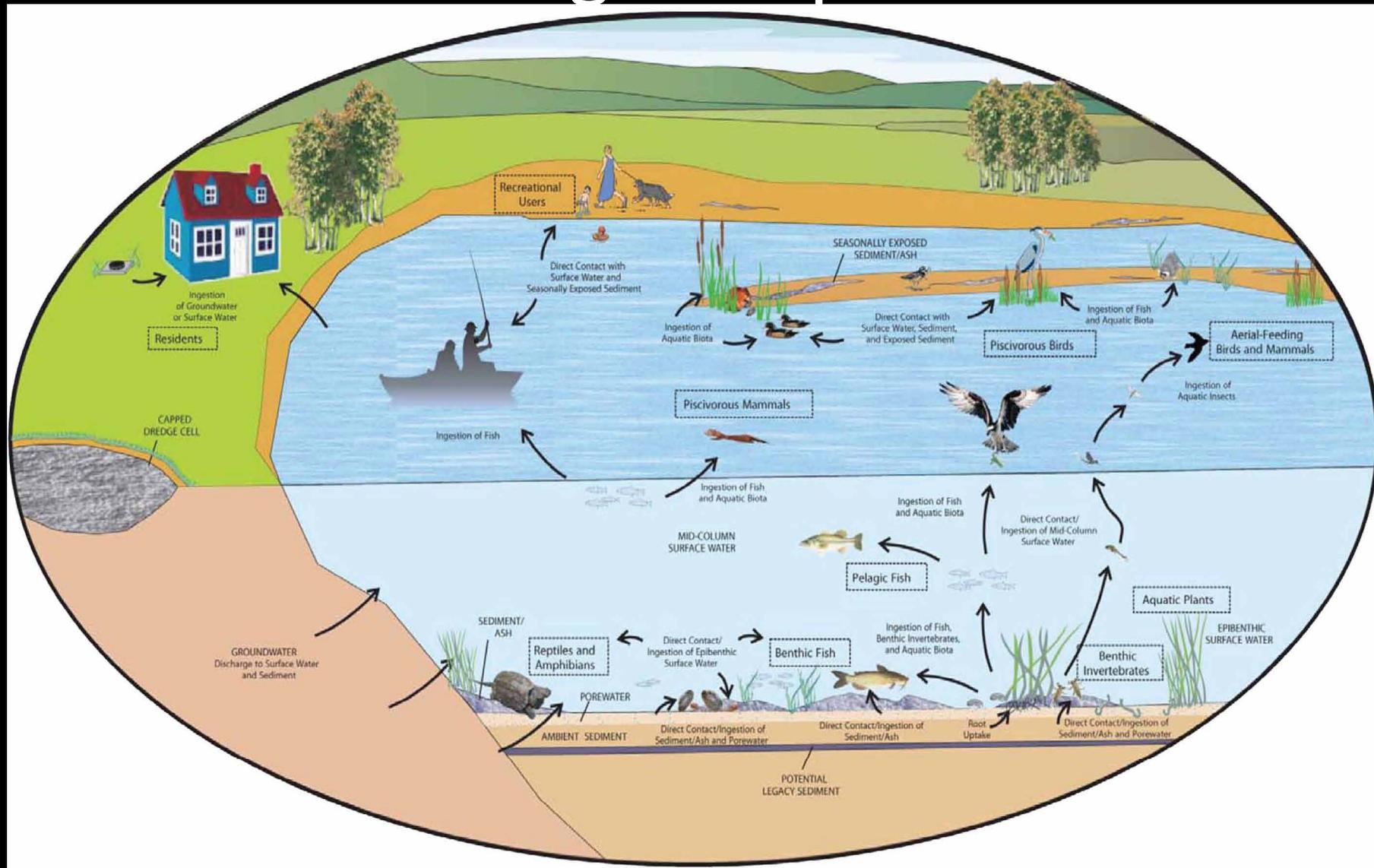


EE/CA Sampling

- **Sediment** Sampling
 - Embayments
 - River sediment
- **Water** Monitoring
 - 8 week SAP river sampling
 - Groundwater sampling
- **Biological** Sampling
 - Frogs, fish, birds, benthic bugs, turtles, raccoons



Biological Uptake





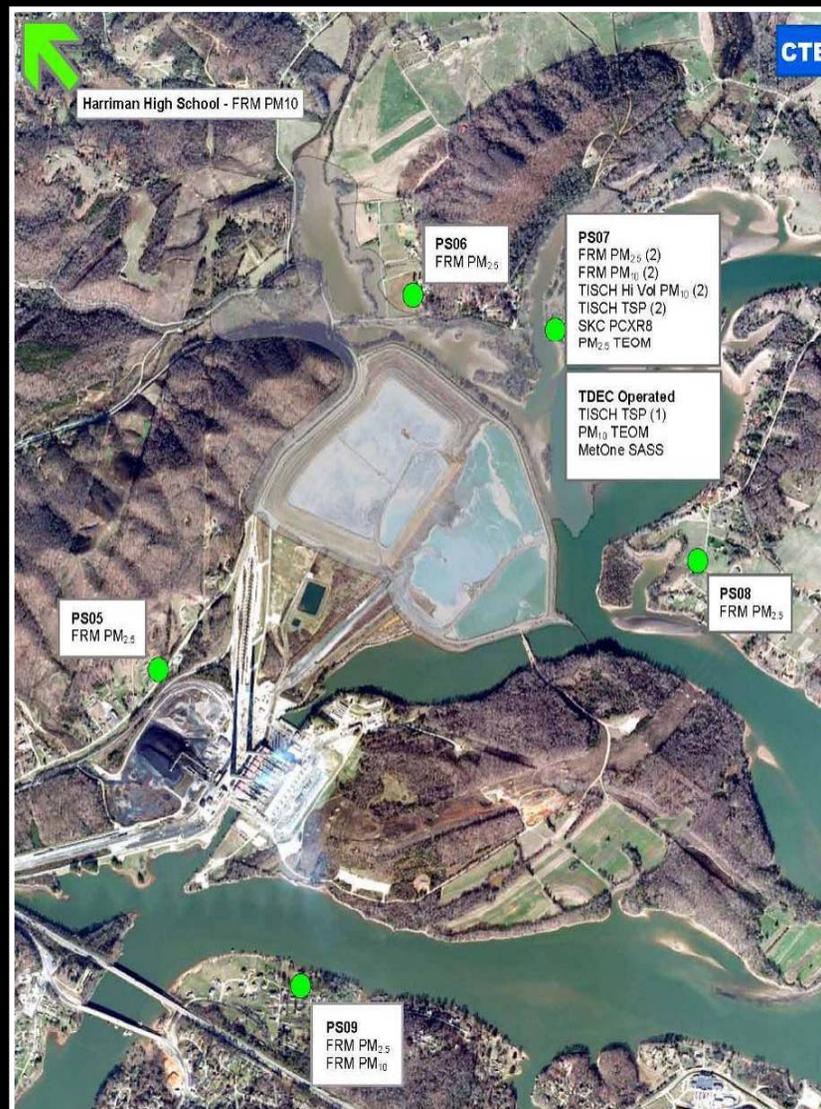
New Work Plans

- Non-Time Critical Removal Action Work Plan
- Revised Community Involvement Plan (final)
- Surface Water Monitoring Plan
- Air Monitoring Plan
 - Continuous air monitors (BAMs)



Air Monitoring

- Real-time air monitors (5 stations)
 - 2 TEOMs (PM 2.5 & 10)
 - 5 BAMs (PM 2.5)
 - 1 FRM (PM 2.5)





Surface Water Monitoring

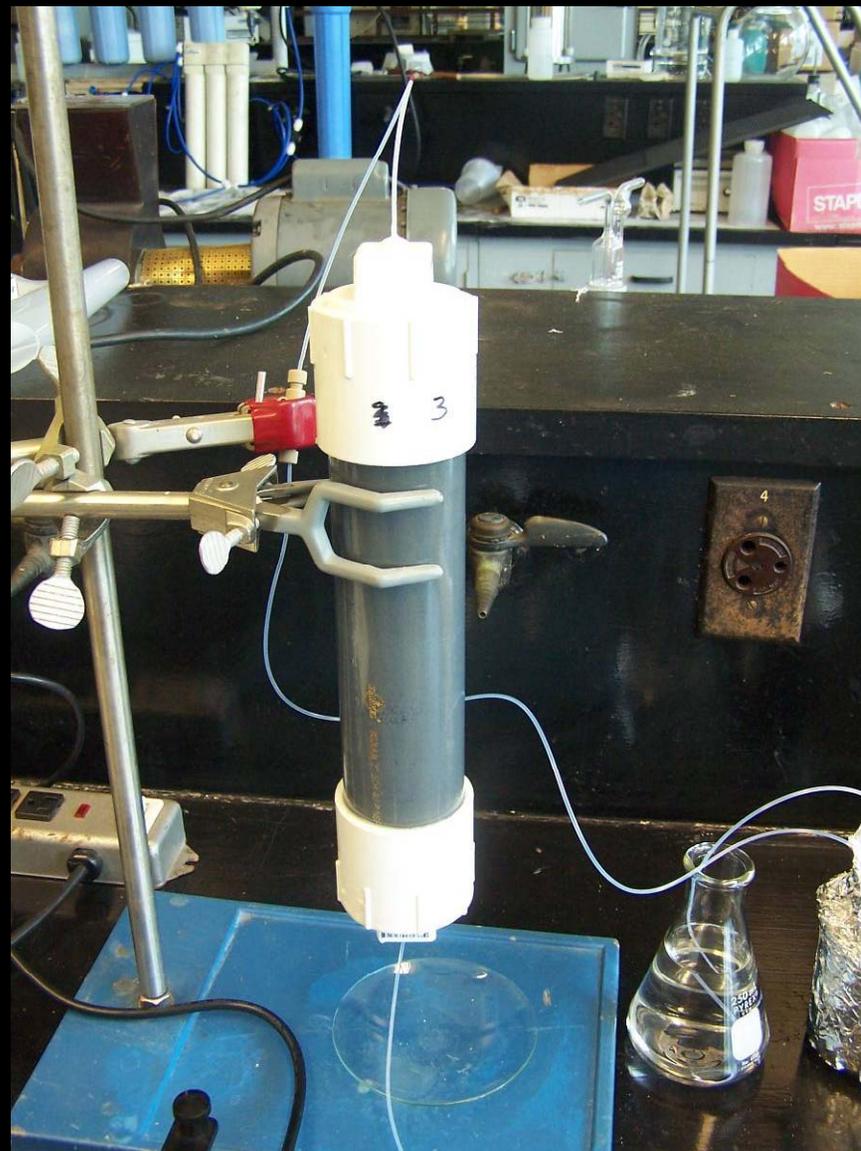
- 3 on-site locations sampled 1/week
- ISCO automated samplers (rain events)
 - 3 locations on Emory River
 - 2 locations on Clinch River
 - 1 location on-site (clean water ditch)





Leachability Testing

- 70% complete
- Evaluating **leaching behavior** of ash using site-specific conditions
- Using **ash, lime-treated ash, and cement-treated ash**
- Support **groundwater transport modeling**





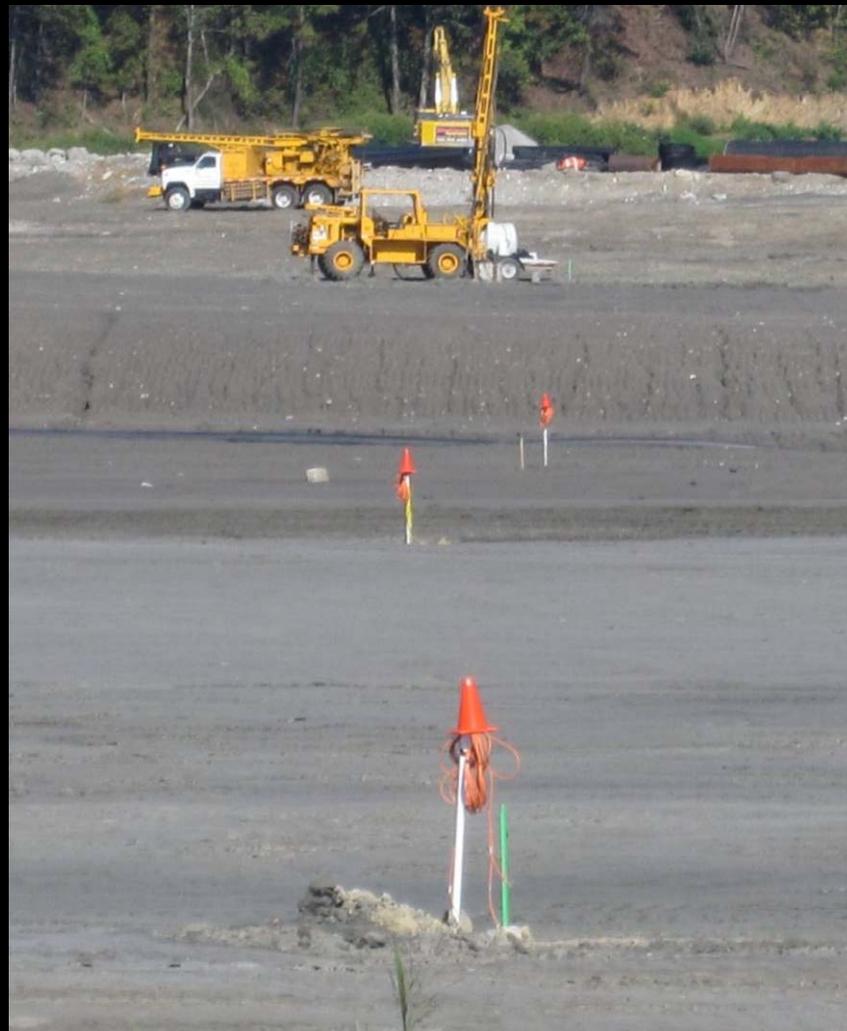
New Well Installations

- **Proposed** wells:
 - 6 existing
 - 3 permanent
 - 7 temporary
 - 16 boreholes
- **Installed** wells:
 - 3 permanent
 - 2 temporary
 - 0 boreholes



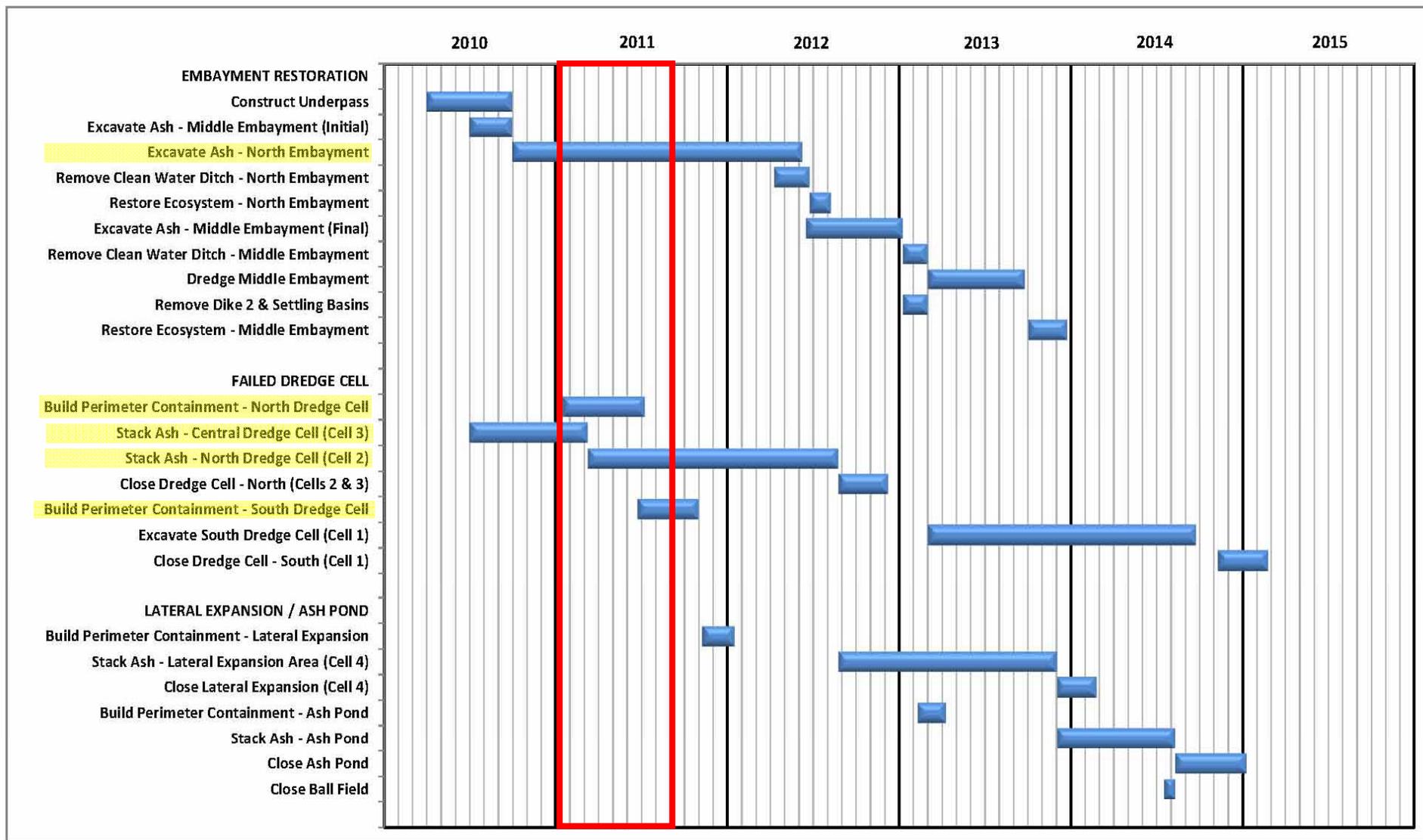
Instrumentation

- Installing in central and north dredge cell area
 - 50% complete
 - 18 piezometers (pore pressure)
 - 9 slope inclinometers (vertical movement)
 - 5 settlement plates (vertical movement)





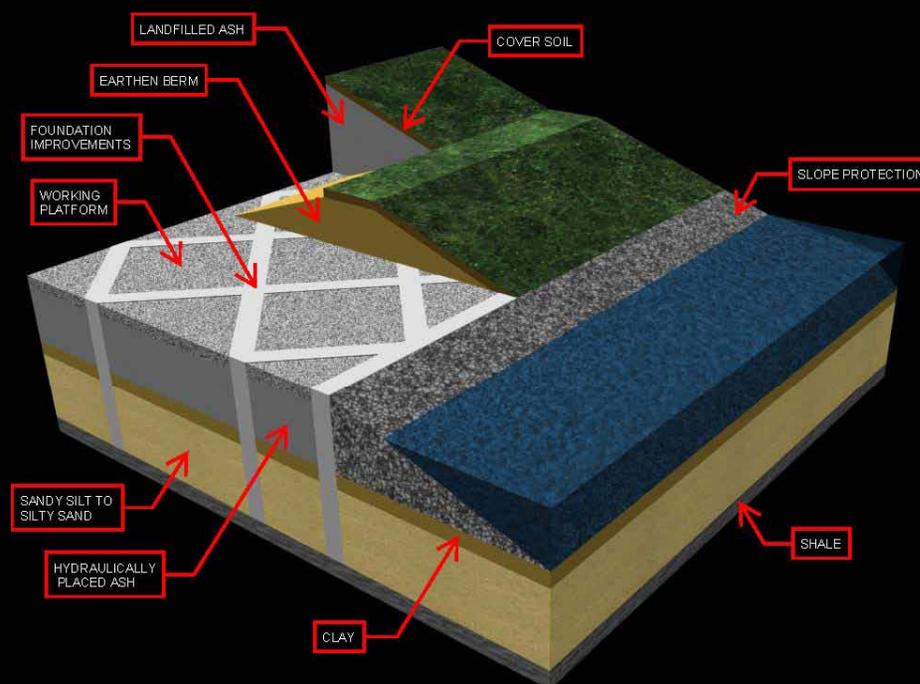
Upcoming Activities





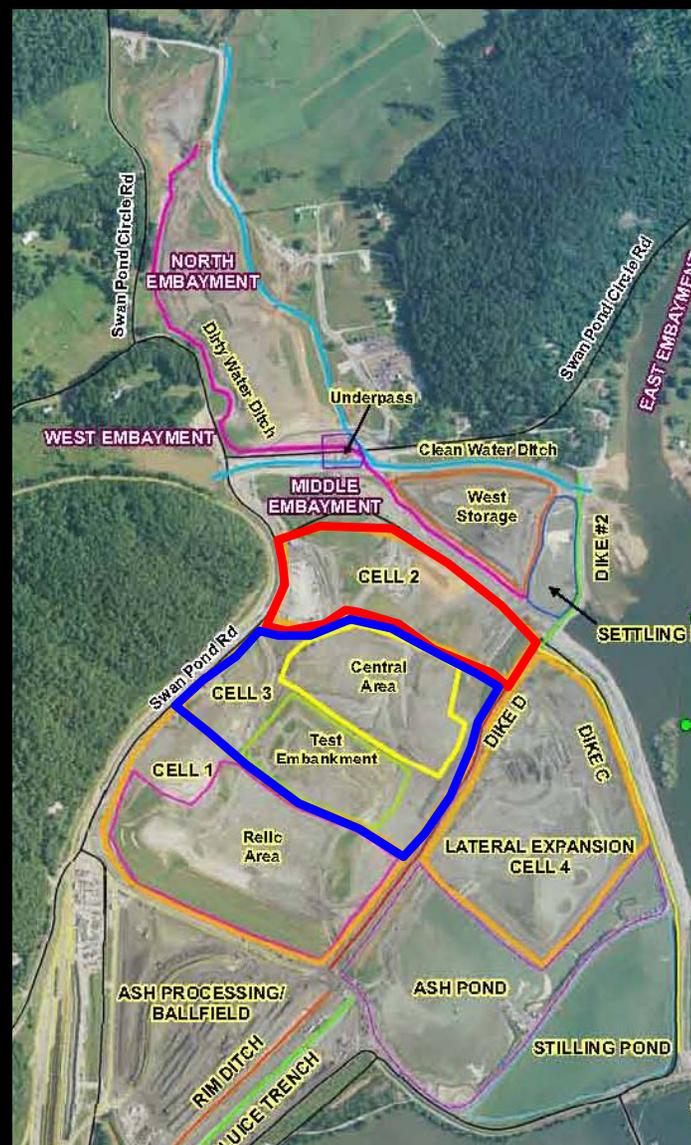
Next Steps

- **Construction** of perimeter containment
 - Working platform
 - Deep soil mixing columns



Next Steps

- **Stacking and compacting ash** in dredge cell
 - Preparation of subgrade to capillary break elevation
 - Start in central contoured area (**Cell 3**)
 - Next area is north near east-west haul road (**Cell 2**)





Next Steps

- **Hauling ash**
 - From North Embayment and Middle Embayment
 - Use underpass for North Embayment ash hauling

