

KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

January 18-24, 2010

Aerial Image of Emory River Area - 12/01/2009



Date of Photography
12/01/2009
Water Surface Elevation
735.86
Water Surface Elevation is the
Watts Bar Headwater Elevation
Tennessee Valley Authority
E3T - Environmental Resources
Geographic Information & Engineering

Prepared by:
Mary McDermott

Issue (Date/Time)
01/25/2010 4:56:53 PM

KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

January 18-24, 2010

HIGHLIGHTS

- Cumulatively, just over 2,448,300 cubic yards of ash have been removed from the river and east of Dike 2.
- To date, 144 unit trains have been loaded and transported for a total of approximately 1,331,100 tons.
- Approval to reach a height of 30 feet in the ballfield was received from EPA.
- The EE/CA for the Embayment/Dredge Cell was posted for public review on Tuesday, January 19th. Requests for extension of the 30-day public comment period were received, and TVA and EPA agreed to extend the public comment period another 30 days (until March 20th, 2010).
- The Responsiveness Summary for the EE/CA Work Plan was finalized and posted to the TVA website on Friday, January 22nd, 2010.
- TVA, EPA, and TDEC met with the Roane County CAG at its rescheduled monthly meeting.

SAFETY

Program Summary

- 42 site specific HSE orientations conducted for the week, 1,253 to date.
- 30 Safety Observation Reports submitted for the week: 602 to date; 473 of which have been closed.

Incidents

- Recordable Incidents: None
- Non-Recordable Incidents: None.

INFRASTRUCTURE/ASH MANAGEMENT

- Continued with dust suppression activities, road maintenance, and HAZWOPER controls.
- Just over 600 cy of dry ash were hauled to the west storage area early in the week. This storage area became a source of dry ash for the trains later in the week with ash hauled out of the area on Friday and Saturday to the ballfield.
- A confirmation sampling plan was developed for TVA review for the northern portion of the east embayment.

ASH DREDGING & PROCESSING

- Approximately 69,000 cy of ash were removed from the river including considerable ash located in the ash berm near the area east of Dike 2.
- Efforts continued on removing settled ash from the rim ditch, sluice trench, and ash pond.
- Effluent from the ash pond dredges were sent to the lateral expansion area and the filter presses. Surveys in the ash pond were inconclusive this week although a more thorough survey was conducted Thursday, the 21st. The results should be available for the next week.
- Shake down continued on the filter presses with the number of drops a day increasing from 23 early in the week to 113 on Saturday. Eight presses are operational and repairs will begin on the remaining ones.
- Approval to reach a height of 30 feet was received from EPA Monday of this week.

ASH DISPOSITION

- Loaded and transported 5 unit trains this week.
- Loaded and transported 144 unit trains for a total of approximately 1,331,100 tons.
- Heavy rains on Sunday shut down the loading and unloading operations both in Kingston and Uniontown.
- Continued inspection and maintenance of the rail in the rail yard.
- Continued putting polymer in rail cars prior to shipping to Alabama.
- Continued work on the improvements to the ballfield processing area.

CENOSPHERE RECOVERY

- Cenospheres and debris levels were moderate in the Emory River and light in the Clinch and Tennessee Rivers. The majority of the concentration of debris and cenospheres was trapped in the booms along the Emory River.
- Ice buildups last week in the Emory have thawed and there seems to be an associated increase in cenospheres. These cenospheres may have been trapped in the ice. All three barge-mounted vacuum units were used to in the Emory River.
- Crews continue to monitor the river for accumulations of ash, debris and cenospheres.
- The Dike 2 sediment basins are being reconfigured to accommodate the new small dredge. Cenosphere collection was limited because of this activity.
- Large amounts of cenospheres continued to collect in the ash pond as a result of dredging activities. Crews worked to keep the weir areas clean.
- Crews worked over the weekend.

SKIMMER WALL

- Work on the skimmer wall has been suspended until early next year.

DIKE REINFORCEMENT

- Dike C buttress work continued. Approximately 760 feet of haul road and 260 feet of slope have been completed.
- Sand and stone materials which were out of specification have been re-tested and approved for use by the engineer of record. A recommendation to increase the size range for the material has been sent from Stantec, the engineer of record, to the Bureau of Reclamation for review.
- The sand acceptance will have a rolling average over 10 test of 5% or less with none of the test showing fines greater than 7%.
- Continued to monitor the dikes at Kingston on a daily basis.

ROUTINE MONITORING

Surface Water Sampling

- Surface water fixed station monitoring occurred on Monday, January 18th, and Friday, January 22nd. Due to a > 1.0" local rainfall on January 21st and >5,000 cubic feet per second (cfs) flow in the Emory River on January 22nd, the automated sampler at ERM 0.5 was activated on January 21 to collect samples over the 24-hour period. The regularly scheduled sampling on January 22nd included all ten fixed stations, coinciding with the elevated Emory River flow.
- Surface water analytical results are compared to the Tennessee Drinking Water Standard (TDWS) and the Ambient Water Quality Criteria for Fish and Aquatic Life (F&AL) to establish a reference point for evaluating the potential significance of the data. Although the most impacted section of the Emory River has been closed to public use, the Emory, Clinch, and Tennessee Rivers are classified for use for Recreation and as a source for Domestic Water Supplies. However, closure of the most impacted reach of the Emory River during the ash recovery operation must be considered in these comparisons.
- Noteworthy results are reported below for Fixed River Location samples collected between 11/02/09 and 12/26/2009. Comparisons to the F&AL are performed for dissolved concentrations only.
 - On the Tennessee River, the detectable arsenic concentrations were well below the TDWS. Selenium was not detected in any samples.
 - On the Clinch River, all detected concentrations of arsenic and selenium were less than the TDWS and F&AL.
 - On the Emory River, all arsenic and selenium detects in surface water samples were less than the TDWS and F&AL.
- Daily monitoring of dredge plumes continued. TVA and EPA continued the compilation of turbidity measurement data from the mouth of the Emory River to ERM 4.0. The data are being compiled and plotted on Mondays and Wednesdays to determine that turbidity curtain placement is effective to prevent any adverse trends as the dredging operation continues. Plumes in the vicinity of dredging operations contain large amounts of suspended ash that settle out quickly and are not representative of overall water quality in the Emory River. Comparing Plume results to those from Fixed Station Locations provides an indication of the effectiveness of silt curtains and other Best Management Practices (BMPs) employed by the project
- Swan Pond Embayment surface water sampling continues routinely twice per week at two locations along the Swan Pond Embayment drainage ditches. The Thursday January 21 scheduled sampling coincided with the >0.5" local rainfall on that date.

Sediment Sampling

- Two TVA environmental vibecore sampling crews have joined the dredging project crew to expedite characterization of remaining ash in the river to optimize dredging.

Air Sampling

- The majority of air monitoring results, including fixed-station and real-time monitoring results continue below ambient air quality criteria. Several real-time readings were above the 150 ug/m³ PM10 level, but all were associated with a local house fire. A few higher than normal readings were recorded near the quarry and is believed to be associated with the out-of-service quarry wheel washer that could not function under the freezing conditions.
- TVA's real-time tapered element oscillating microbalance (TEOM) PM2.5 instrument is operating at the Lakeshore Drive (PS07) air monitoring location. Data for this instrument are available on the regulator website. Cold and dry weather resulted in higher than normal measurements (but still not exceeding the action level) were recorded on January 15th and 16th, but quickly dropped to lower than normal with rainfall. The higher readings were consistent with the TDEC regional instrument at Harriman High School.

Data Management

- Electronic data deliverables are flowing into the Equis database.
- Data validation continues for electronic data packages received from the laboratories.
- Migration of data from the TVA Equis to the EPA SCRIBE database is ongoing.

Biota Sampling

- Nothing to report this period.

Non-Routine Sampling

- TVA field crews supported sediment and surface water sample collection by Duke University on January 18th – 21st.

FINAL REMEDIATION

- The EE/CA for the Embayment/Dredge Cell was posted for public review on Tuesday, January 19th. Requests for extension of the 30-day public comment period were received, and TVA and EPA agreed to extend the public comment period another 30 days (until March 20th, 2010).
- The Responsiveness Summary for the EE/CA Work Plan was finalized and posted to the TVA website on Friday, January 22nd, 2010.
- A meeting was held with TVA-CP to discuss the infrastructure design and construction steps recommended for smooth transition from time-critical to non-time-critical removal action.

DREDGE CELL

- No ash was placed in the test embankment this week due to excessive rains and wet storage.
- A meeting was held with Stantec and included representatives from TVA and Jacobs, to discuss the geotechnical engineering design steps required for smooth transition from time-critical to non-time-critical removal action.

COMMUNICATIONS

Communications

- Posted to website: Weekly Report added, EE/CA documents added.
- Set up interview with Channel 12 in Oak Ridge for Craig Zeller, EPA Project Lead for non time-critical ash remediation.
- Prepared newspaper advertisements to publicize the public comment period for EE/CA.
- Distributed Dredge Report to site and plant employees.
- Continued work on EE/CA Work Plan and Community Involvement Plan Responsiveness Summaries.
- Continued to handle daily calls from the news media.

Outreach

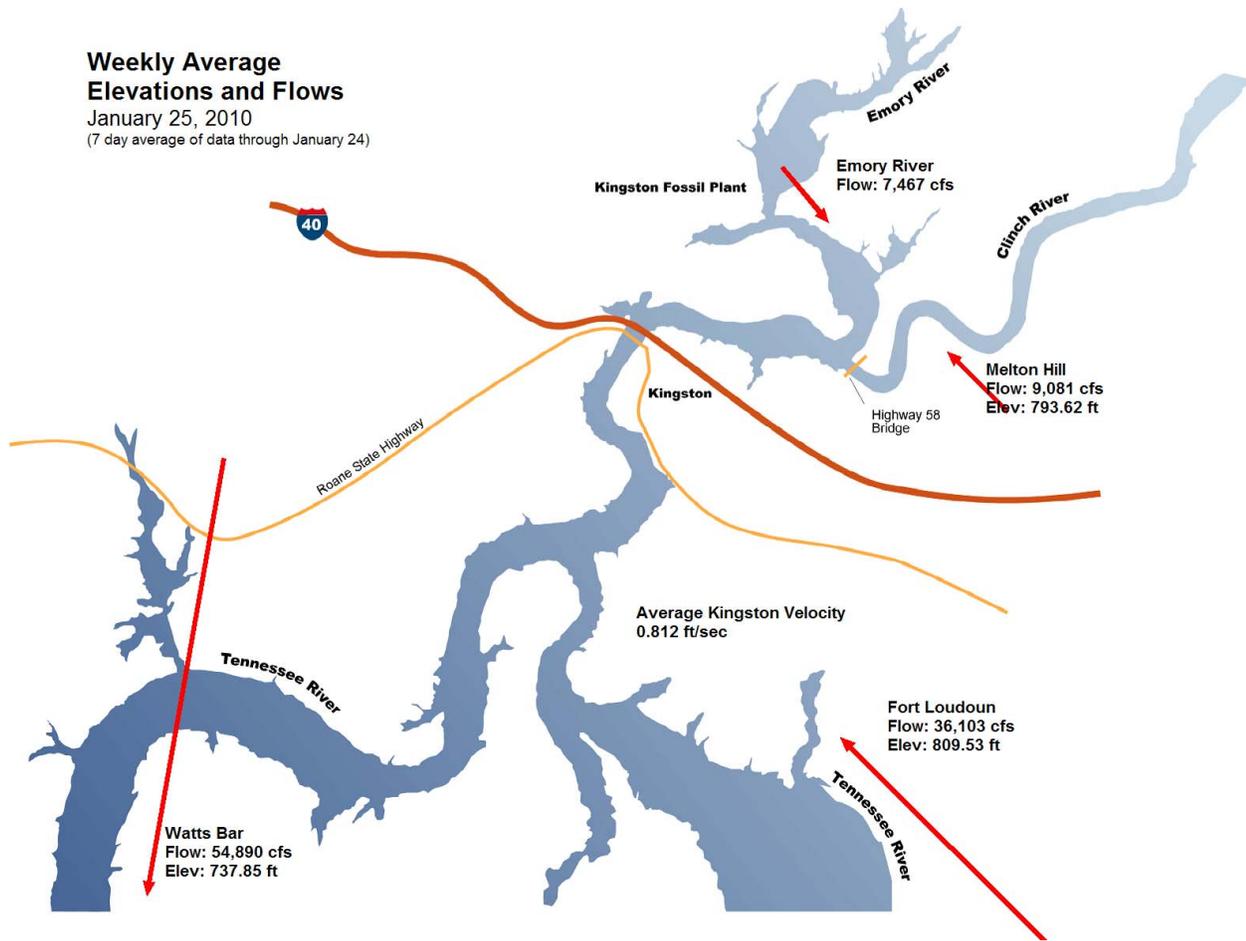
- Worked on setup for public meeting being held January 26th at the Roane County High School auditorium.
- Maintained Administrative Record.
- Continued to handle calls and visits from residents.
- Responded to requests for extension on EE/CA document issued February 19th for public comment.

RIVER OPERATIONS

Weekly Average Elevations and Flows

January 25, 2010

(7 day average of data through January 24)



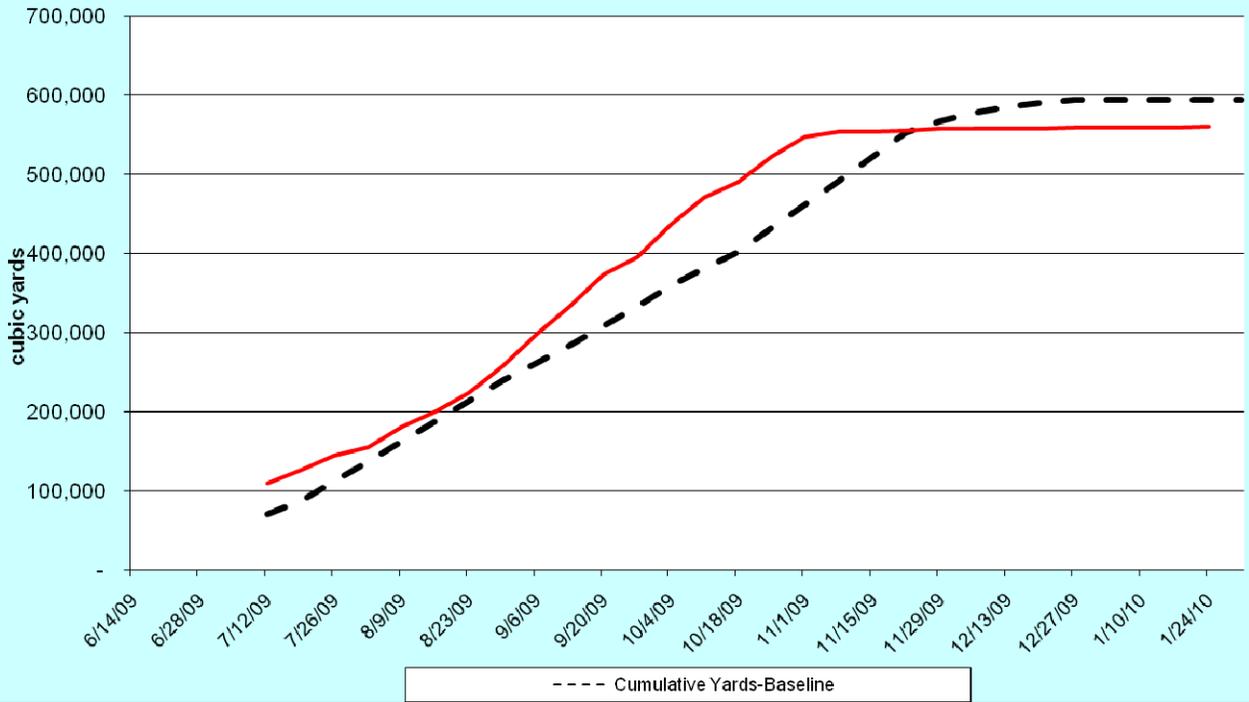
MEETINGS/CONFERENCE CALLS		
Date	Time	Subject
01/25	0730	Environmental Meeting (ICP Conference Room)
01/25	0900	Dike C Buttress Intake Channel (ICP Conference Room)
01/25	1000	Aquatic Resources Studies (Team Room)
01/25	1200	MACTEC Safety Meeting (Trailer 1 Meeting Room)
01/25	1300	CP Orientation (Old ICP Conference Room)
01/26	0915	BCP Meeting (ICP Conference Room)
01/26	1000	Project Review Weekly Meeting (ICP Conference Room)
01/26	1100	Jacobs All Hands Meeting (ICP Conference Room)
01/26	1330	Dredge Team Meeting (ICP Conference Room)
01/26	1430	Dredge Plan Discussion with TDEC (ICP Conference Room)
01/27	0800	Time Critical Weekly Meeting (ICP Conference Room)
01/27	0900	Data Management Meeting (ICP Conference Room)
01/27	1000	Management Assessment Meeting (Trailer 1 Meeting Room)
01/27	1100	MRC Environmental & Safety Meeting (ICP Conference Room)
01/27	1230	Jacobs OPR (ICP Conference Room)
01/27	1300	Sevenson Meeting (Team Room)
01/27	1330	Test America Weekly Call (Conference Call)
01/28	0730	Environmental Meeting (ICP Conference Room)
01/28	1000	Weekly Communication Meeting (Team Room)
01/28	1000	Management Assessment Meeting (Trailer 1 Meeting Room)
01/28	1000	Pace Telecon (Conference Call)
01/28	1130	HSE Staff Meeting (ICP Conference Room)
01/28	0200	SOP Meeting (Old Team Room)
01/29	0900	Jacobs Senior Managers Meeting (ICP Conference Room)
01/29	1000	Management Assessment Meeting (Trailer 1 Meeting Room)
Daily	0730	Site Safety Orientation (Old ICP Conference Room)
Daily	1600	Planning Meeting (ICP Conference Room)
Daily	1630	Ash Disposal Daily Recap (Team Room)

\

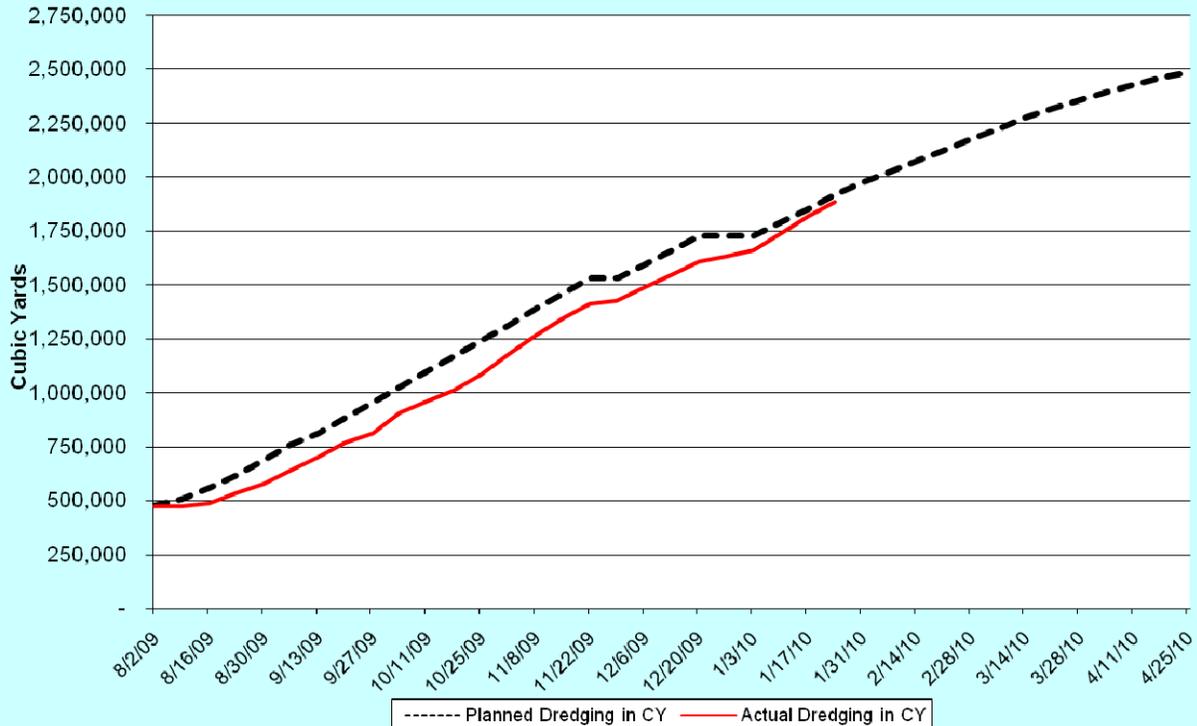
Kingston Recovery Project		Date: January 18-24, 2010	Field Report		
Safety			Weekly Total	Cumulative Total	
First Aid Incidents			0	28	
Recordable Incidents			0	11	
Lost Time Incidents			0	3	
Cenosphere/Debris Removal			Weekly Total	Cumulative Total	
Outreach	Light Debris Removal – Land (bags)		0	18,867	
Divisions A, B,C,D Cleanup	Division Shoreline Cleanup (bags)		438	90,559	
Total	Tons of Light Debris		0	959.57	
Cenosphere Slurry	Gallons		213,000	11,310,000	
Environmental					
Org	Matrix	Samples*	Analyses*	Results*	
TVA	Air - Real-Time	--	--	162,954	
TVA	Air – Fixed	1,434	--	1,434	
TVA	Surface/Utility Water	2,674	23,657	118,586	
TVA	Ground Water (spring and well)	59	706	2,621	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	64	137	1,029	
TVA	Biota	629	1,570	15,537	
*Week ending 1/22/10					
Ash Dredging & Excavation				Weekly Total	Cumulative Total
River	Estimated Cubic Yards thru January 24, 2010 (see Note)			69,073	1,888,276
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			600	560,029**
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			45,500	1,331,100

NOTE: Total dredged from the river has been adjusted to include ongoing survey adjustments and all of TransAsh and TVA reported hydraulic and mechanical dredging to date.

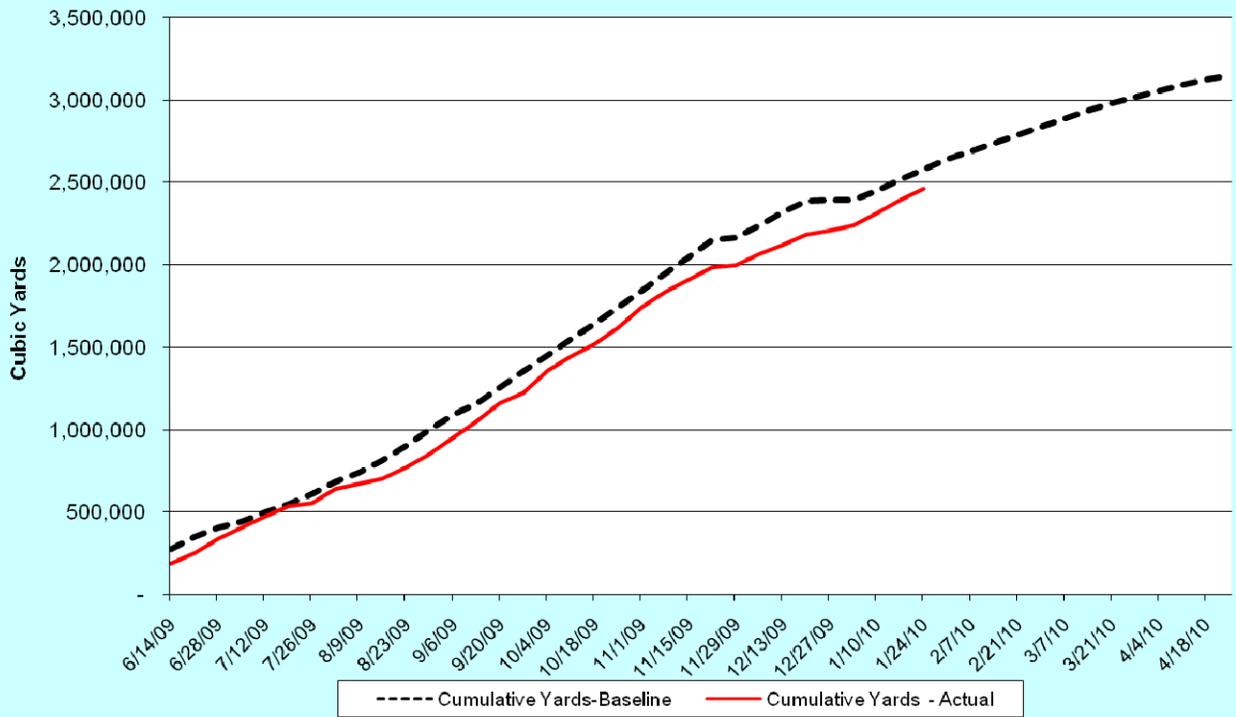
Ash Removal East of Dike 2 - Weekly
as of January 24th



River Dredging - Weekly
as of January 24th



Time Critical Ash Removal - Weekly
as of January 24th



Ash Loading to Trains - Weekly
as of January 24th

