

KINGSTON ASH RECOVERY PROJECT WEEKLY REPORT

December 28 – January 3, 2010

Aerial Image of Kingston Ash Slide August 14, 2009



0 500 1,000 1,500 2,000
Feet

Tennessee Valley Authority
OE&R - ER&S
Geographic Information & Engineering

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Issue (Date/Time)
01/05/2010 10:27:50 AM

KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

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HIGHLIGHTS
<ul style="list-style-type: none">• Cumulatively, just over 2,247,923 cubic yards of ash have been removed from the river and east of Dike 2.• To date, 128 unit trains have been loaded and transported for a total of 1,192,500 tons.• Start up of units 6 and 9 occurred at the Kingston Fossil Plant this past weekend.
SAFETY
<p><u>Program Summary</u></p> <ul style="list-style-type: none">• 20 site specific HSE orientations conducted for the week, 1137 to date.• 11 Safety Observation Reports submitted for the week: 550 to date; 430 of which have been closed. <p><u>Incidents</u></p> <p>Recordable Incidents:</p> <ul style="list-style-type: none">• None <p>Non-Recordable Incidents:</p> <ul style="list-style-type: none">• December 29, 2009 – A spud cable broke on a TVA-owned barge being operated by Severson Environmental. Both TVA barges have been tagged out of service until a cause and correction can be determined. No injuries and no property damage reported.
INFRASTRUCTURE/ASH MANAGEMENT
<ul style="list-style-type: none">• Ash continues to be piled on higher ground east of Dike 2 but virtually none is removed from the area because it is too wet. Approval to release a request for proposal for some type of drying of that material was obtained.• Received and began erection of the tent structure for wheel wash and decontamination system in South Access Portal (SAP).• Continued with dust suppression activities, road maintenance, and HAZWOPER controls.
ASH DREDGING & PROCESSING
<ul style="list-style-type: none">• The dredges in the river operated on Monday through Wednesday, shutting down at the end of night shift on Wednesday for the holiday. Two dredges were operation with a total recovery of 31,638 cy this week.• Both clamshells worked on removing material from the sluice trench and excavators worked at removing material from the rim ditch.• The ash pond free water volume has stabilized and may be slightly increasing now that the lateral expansion area is receiving effluent from the 10-inch dredge in the pond. The 14-in dredge continues to output to the rim ditch/sluice trench. Both pond dredges operated over the holiday.• The filter presses are nearing completion of construction. They will be tested this week. The gravel pad for the Genesis or other dewatering unit has been completed.• Approval has been granted for the dredging contractor to locate and bring on two smaller dredges, a 14" and a 16", to replace the large 20-inch dredge.
ASH DISPOSITION
<ul style="list-style-type: none">• Loaded 3 unit trains and transported 4 unit trains this week. Shipped one train that had been loaded the previous week. The site was shut down for 3 days for the holiday break.• 128 unit trains have been loaded and transported for a total of approximately 1,192,500 tons.• Continued inspection and maintenance of the rail in the rail yard.• Continued putting polymers in rail cars prior to shipping to Alabama.• Continuing work on the overall operations of the ball field/processing area. Implementing plan to provide better

drainage in the ball field.

- Queen City Railroad Construction resumed rail yard modifications by installing two switches in south yard and construction of Track #15A.
- Continued evaluating additional options to rail yard modifications to improve operations and minimize impacts to Swan Pond Road.

CENOSPHERE RECOVERY

- Debris and cenospheres remained light to moderate in the Emory River. The Clinch and Tennessee Rivers remained in good shape. A small amount of cenospheres was collected in a boom across from the Kingston Park area and removed.
- Operations were shut down on Thursday for the Holiday break. The booms were inspected over the weekend for debris build up.
- The investigation into the injury with the Barge mounted excavator continued. The barge has not returned to operation.
- Large amounts of cenospheres continued to collect in the Ash Pond and the Dike 2 Sediment Basins as a result of dredging activities. Crews worked to keep the weir areas clean.

SKIMMER WALL

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

DIKE REINFORCEMENT

- Dike C buttress work continued. The work focused on construction of the "haul road" along the riprap bottom of the buttress and construction of the slope.
- Approximately 600 feet of haul road and 60 feet of slope have been completed.
- Construction operations shut down on Thursday for the holiday break.
- Continued to monitor the dikes at Kingston on a daily basis. The dikes were monitored through the holiday break.

ROUTINE MONITORING

Surface Water Sampling

- Routine surface water fixed station monitoring occurred on Monday, December 28th. Samples were not collected on Friday, January 1st, due to the holiday.
- Surface water analytical results are compared to the Tennessee Drinking Water Standards (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 10/02/09 and 11/30/2009. 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.

Sediment Sampling

- Vibecore sampling continues from ERM 0.0 to ERM 1.0 to characterize ash and potential legacy sediments. As of December 28th, 17 of 24 locations have been sampled. Analytical results are pending.

Air Sampling

- The majority of air monitoring results, including fixed-station and real-time monitoring results continue to be better than ambient air quality criteria. Several real-time readings were above the 150 ug/m³ PM₁₀ level, but all were associated with local active fires and smoke.
- TVA's real-time tapered element oscillating microbalance (TEOM) PM_{2.5} instrument is operating at the Lakeshore Drive (PS07) air monitoring location. Data for this instrument are available on the regulator website. Daily results for 12/3-12/31 were well below the action limit of 26 ug/m³.

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. Efforts continue regarding the migration of TVA air data into EPA's (AQS).
- EPA approved the revised Quality Assurance Project Plan (QAPP).

Biota Sampling

- Nothing to report this period.

Non-Routine Sampling

- Nothing to report this period.

FINAL REMEDIATION

- Public Comments on the EE/CA work plan were received on December 22nd; EPA will meet with TVA on January 7th to draft responses.
- Revisions to the EE/CA in response to regulatory comments were begun, including text and figure changes.
- Work continued on preparation of the initial sampling and analysis plan for the river.

DREDGE CELL

- Approximately 13,500 cy of ash were brought to the test embankment, mostly from the relic area.

COMMUNICATIONS

Outreach

- Notified members of Roane County CAG about holiday closures of the site.
- Notified members of Roane County CAG as well as Swan Pond Road residents of start of units 6 and 9 at the Kingston Fossil Plant over the weekend.
- Maintained Administrative Record.
- Continued to handle calls and visits from residents.
- Continued to gather comments on various administrative records.

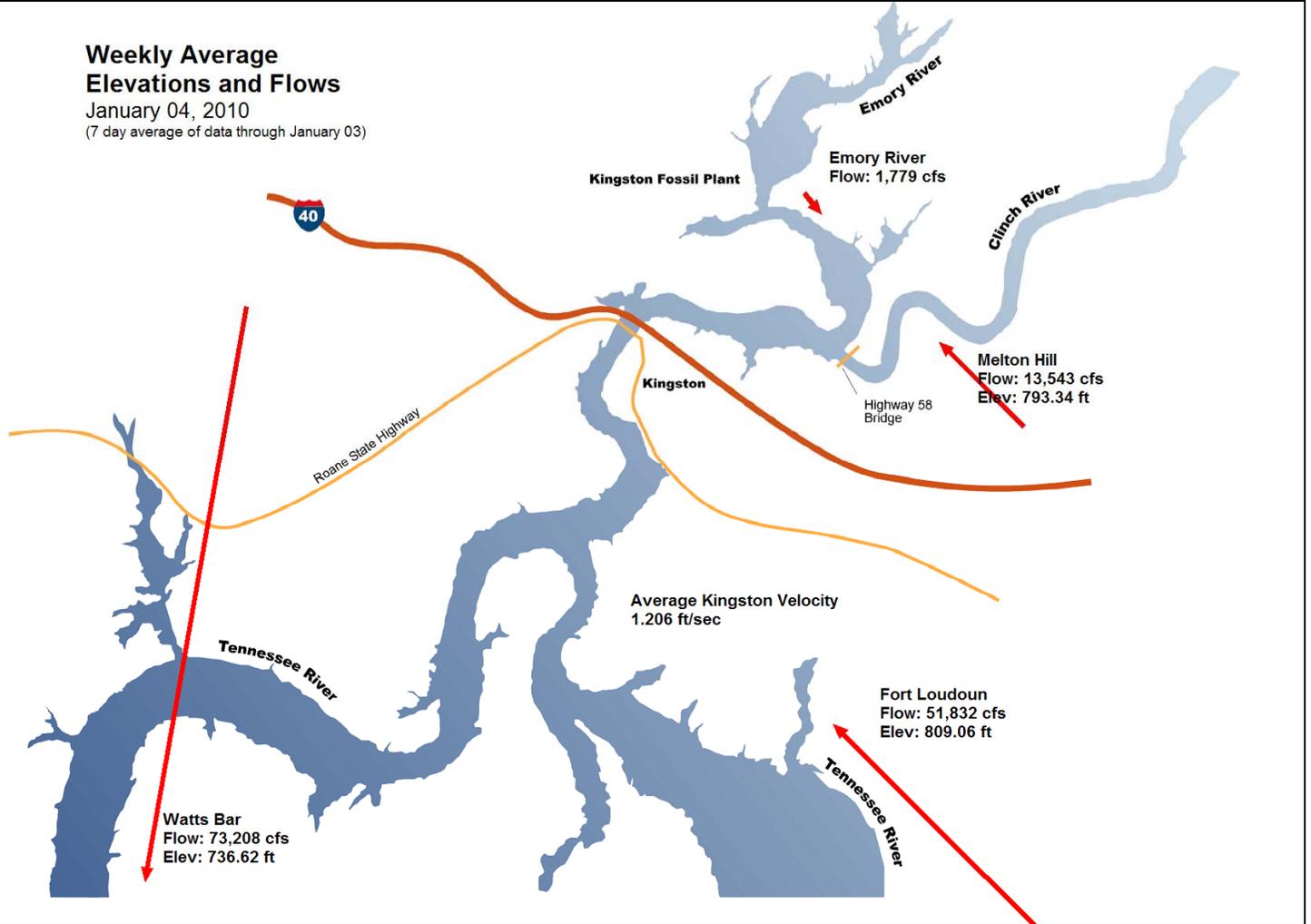
Government/Valley Relations

- Notified public officials about holiday closures of the site.
- Notified public officials of the start of units 6 and 9 at the Kingston Fossil Plant over the weekend.

RIVER OPERATIONS

Weekly Average Elevations and Flows

January 04, 2010
(7 day average of data through January 03)

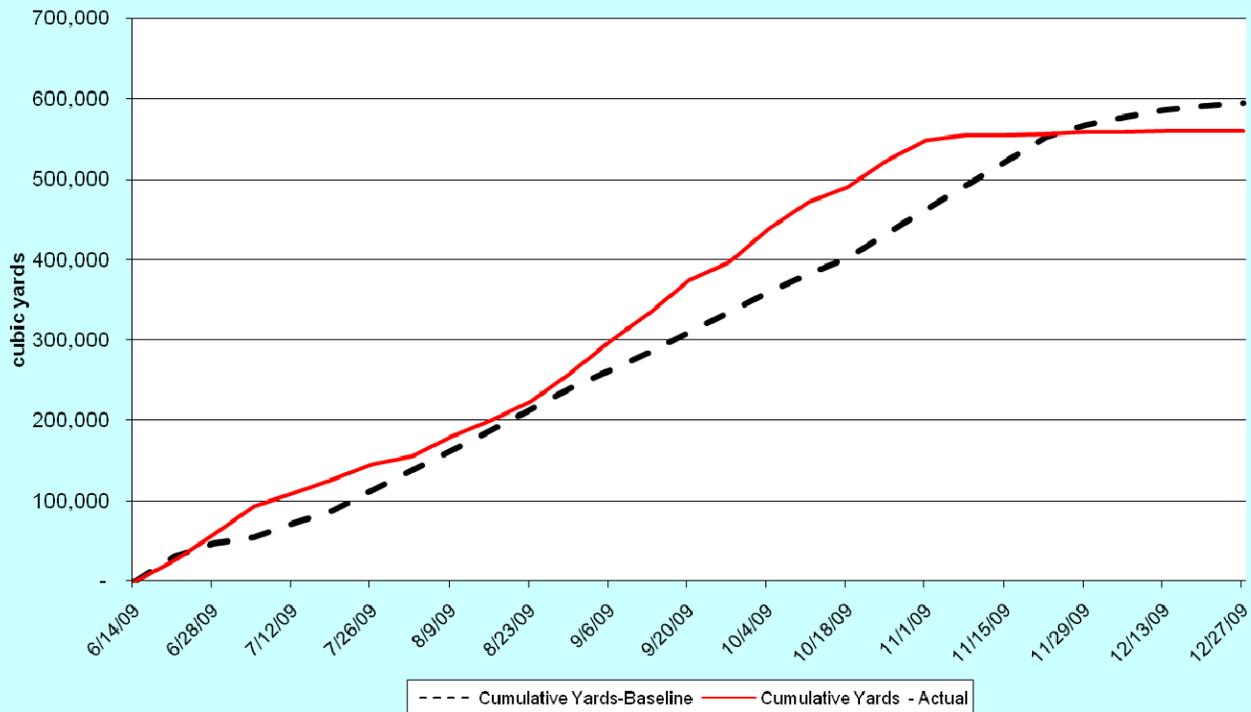


MEETINGS/CONFERENCE CALLS		
Date	Time	Subject
01/04	0730	Environmental Meeting (ICP Conference Room)
01/04	0900	Dike C Buttress Intake Channel (ICP Conference Room)
01/04	1000	Assessment Meeting (ICP Conference Room)
01/04	1000	Aquatic Resources Studies (Team Room)
01/04	1300	Planning Meeting (ICP Conference Room)
01/04	1500	Jacobs Incident Investigation Team (Team Room)
01/05	0900	BCP Meeting (ICP Conference Room)
01/05	1000	Project Review Weekly Meeting (ICP Conference Room)
01/05	1330	Dredge Team Meeting (ICP Conference Room)
01/06	0800	Time Critical Weekly Meeting (ICP Conference Room)
01/06	0930	Data Management Meeting (ICP Conference Room)
01/06	1100	MRC Environmental & Safety Meeting (ICP Conference Room)
01/06	1330	Test America Weekly Call (Conference Call)
01/07	0730	Environmental Meeting (ICP Conference Room)
01/07	0800	Dredge Planning Meeting (ICP Annex Conference Room)
01/07	0830	Pre-Meeting with Profile (ICP Conference Room)
01/07	0900	KIF SOP Meeting (Team Room)
01/07	0915	EE/CA Meeting (ICP Conference Room)
01/07	1000	Pace Telecon (Conference Call)
01/07	1030	MACTEC Contract Meeting (Team Room)
01/07	1130	HSE Staff Meeting (ICP Conference Room)
01/07	1300	Profile/TVA Joint Projects (ICP Conference Room)
01/08	0900	Jacobs Senior Managers Meeting (ICP Conference Room)
01/08	1030	MACTEC Contract Meeting (Team Room)
Daily	0730	Site Safety Orientation (Team Room)
Daily	1600	Planning Meeting (ICP Conference Room)
Daily	1630	Ash Disposal Daily Recap (Team Room)

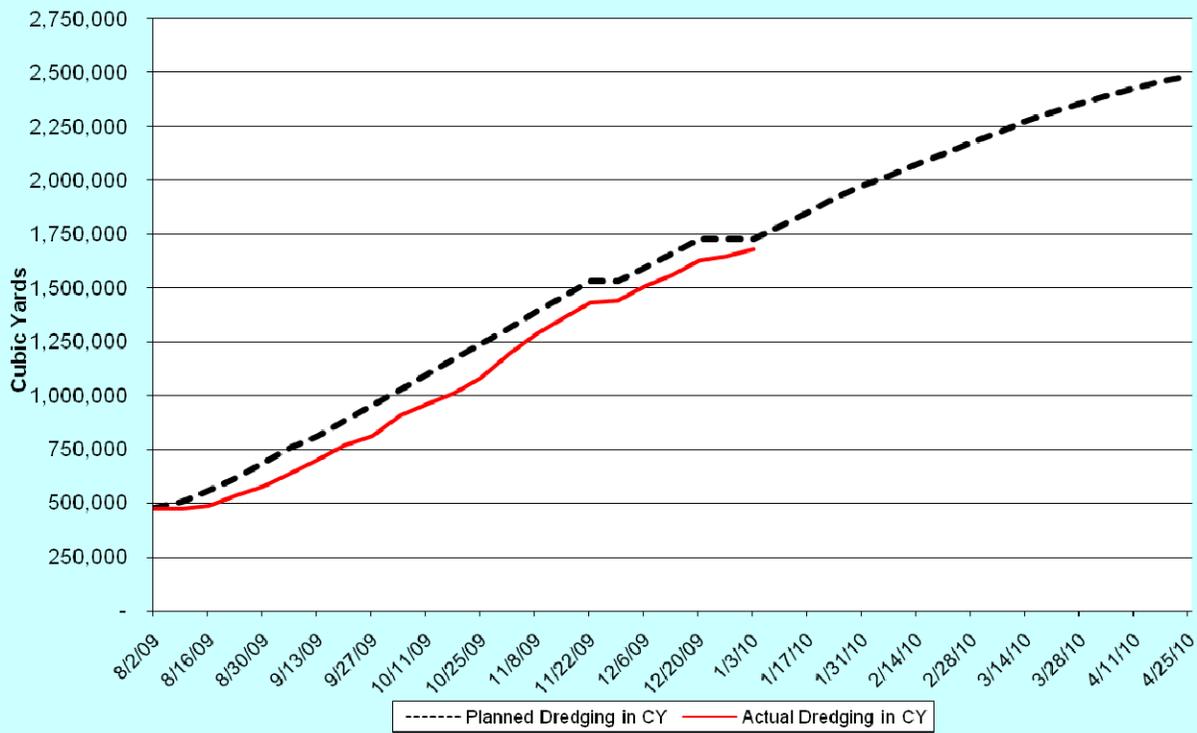
Kingston Recovery Project		Date:	December 28 – January 3, 2010		Field Report
Safety			Weekly Total	Cumulative Total	
First Aid Incidents			0	27	
Recordable Incidents			0	10	
Lost Time Incidents			0	3	
Cenosphere/Debris Removal			Weekly Total	Cumulative Total	
Outreach		Light Debris Removal – Land (bags)	0	18,867	
Divisions A, B,C,D Cleanup		Division Shoreline Cleanup (bags)	410	89,134	
Total		Tons of Light Debris	0	959.57	
Cenosphere Slurry		Gallons	89,000	10,776,000	
Environmental					
Org	Matrix	Samples*	Analyses*	Results*	
TVA	Air - Real-Time	156,060	--	156,060	
TVA	Air – Fixed	1,328	--	1,552	
TVA	Surface/Utility Water	2,832	23,626	117,331	
TVA	Ground Water (spring and well)	46	531	1,957	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	57	109	959	
TVA	Biota	597	1,508	14,756	
*Week ending 01/01/2010					
Ash Dredging & Excavation				Weekly Total	Cumulative Total
River	Estimated Cubic Yards thru January 3, 2010 (see Note)			31,638	1,689,494
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			0	558,429**
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			46,900	1,192,500

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.

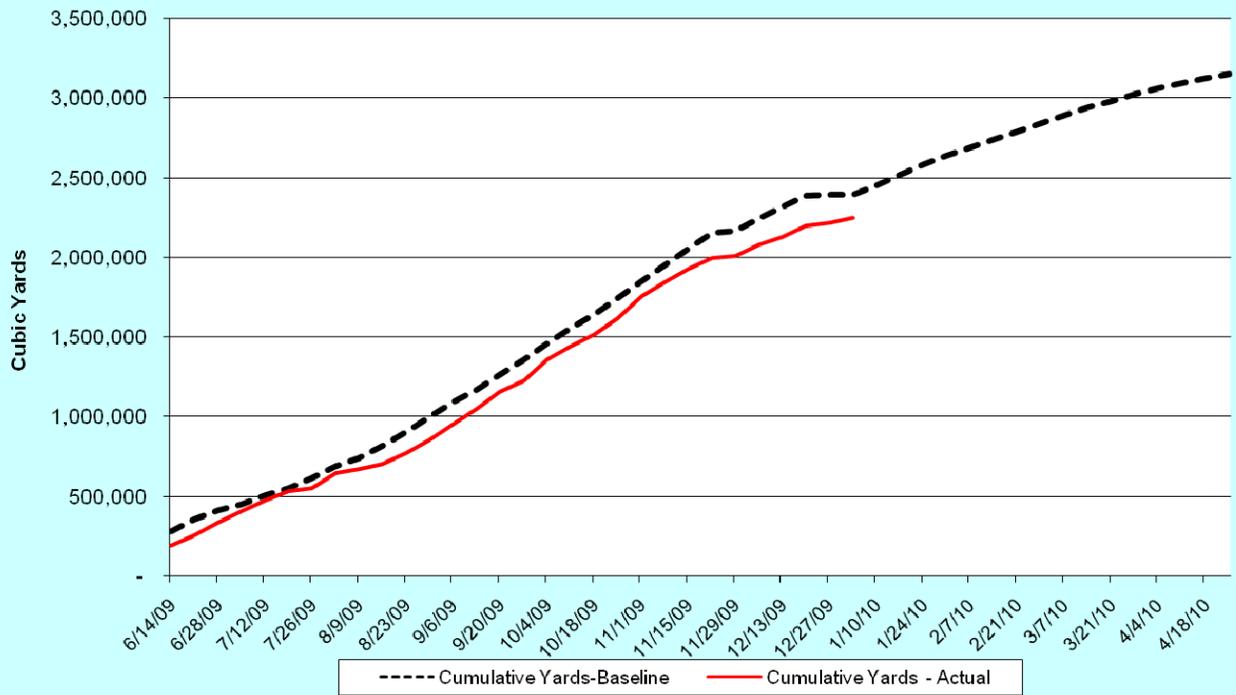
Ash Removal East of Dike 2 - Weekly
as of December 27th



River Dredging - Weekly
as of January 3rd



Time Critical Ash Removal - Weekly
as of January 3rd



Ash Loading to Trains - Weekly
as of January 3rd

