

KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

January 4 - 10, 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

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HIGHLIGHTS
<ul style="list-style-type: none">• Cumulatively, just over 2,323,600 cubic yards of ash have been removed from the river and east of Dike 2.• To date, 134 unit trains have been loaded and 133 transported for a total of approximately 1,240,500 tons.• Mayse Construction, the offsite utilities contractor, started mobilization activities for restoration of the utility lines.• Notified public officials, Roane County CAG, and Swan Pond Road residents of third unit being turned on and of iron oxide residue discharge from south stack at KIF.• EPA Region 4 will perform a field and data audit at the KIF site the week of January 11th. TVA sampling activities will be observed and data packages will be reviewed.
SAFETY
<u>Program Summary</u> <ul style="list-style-type: none">• 32 site specific HSE orientations conducted for the week, 1173 to date.• 10 Safety Observation Reports submitted for the week: 564 to date; 446 of which have been closed.
<u>Incidents</u> <ul style="list-style-type: none">• Recordable Incidents: On January 4th, a Mactec laborer twisted a knee while working resulting in work restrictions.• Non-Recordable Incidents: On January 6th, non-project sampling crews from area universities violated the Emory River closure.
INFRASTRUCTURE/ASH MANAGEMENT
<ul style="list-style-type: none">• Continued with dust suppression activities, road maintenance, and HAZWOPER controls.• Continued consolidating ash in the east embayment and east of Dike 2.• Submitted an RFP for lime treatment to potential vendors.• Continued erection of the tent structure for the wheel wash and decontamination system in South Access Portal (SAP).• The offsite utilities contractor, Mayse Construction, started mobilization activities for restoration of utility lines.
ASH DREDGING & PROCESSING
<ul style="list-style-type: none">• All three dredges were operational this week. A weekly total of 75,706 cy was removed from the river.• Ash removal from the sluice trench and rim ditch continued with two clamshells removing material from the sluice trench.• Two dredges operated in the ash pond with one sending effluent to the lateral expansion area which continues to effectively settle the fines, and the other dredge sending effluent to the rim ditch/sluice trench. This second pipeline was retrofitted to be able to discharge either to the rim ditch or to the filter presses.• Construction of the filter presses was completed this week. The presses should be producing filter cake next week.• Efforts continue to construct roads and drainageways in the ballfield to improve its performance.• Several dredging experts convened at KIF to discuss how to best plan out the second phase of dredging.
ASH DISPOSITION
<ul style="list-style-type: none">• Queen city Railroad Construction continued rail yard modifications by installing switches in the south yard and construction of Tracks 15A and 16.• Loaded 6 unit trains and transported 5 unit trains this week.• Cumulatively, we have loaded 134 and transported 133 unit trains for a total of approximately 1,240,500 tons.• Continued inspection and maintenance of the rail in the rail yard.• Continued putting polymers in rail cars prior to shipping to Alabama.• Unusually cold weather affected operations at the landfill in Alabama. The unloading process proceeded without impact, but the washing of the cars was impacted. They have to wait until the weather was above freezing to

proceed with the washing operation.

- Continuing to look at opportunities to optimize loading operations while minimizing train crossings across Swan Pond Road.

CENOSPHERE RECOVERY

- Cenospheres and debris levels were light in the rivers. The majority of the concentration was trapped in the booms along the Emory River.
- Provided boats and river escort service for Appalachian State University for sample collection.
- Crews continue to monitor the river for accumulations ash, debris and cenospheres.
- 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.
- Completed and presented to TVA on site management a draft Accident Analysis Report for the hand injury which occurred December 23, 2009.

SKIMMER WALL

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

DIKE REINFORCEMENT

- Dike C buttress work continued. Approximately 690 feet of haul road and 120 feet of slope have been completed.
- The placed sand tested out of specification for the last two cells installed. A Non-Conformance Report (NCR) was written and work stopped. It appears the extra handling that is required is increasing the amounts of fines in the sand. Another source of sand which has a lower original fines amount will be used. The two 20 foot cells will be reinstalled and tested.
- Continued to monitor the dikes at Kingston on a daily basis.

ROUTINE MONITORING

Surface Water Sampling

- Routine surface water fixed station monitoring occurred on Monday, January 4th. Samples were not collected on Friday, January 8th, due to safety concerns related to the extreme cold, slippery conditions created by the January 7 snowfall, and freezing over of portions of the Emory River.
- 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 11/02/09 and 12/10/2009. 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 for 22 of 24 planned locations from ERM 0.0 to ERM 1.0 to characterize ash and potential legacy sediments was completed on January 7th. Analytical results are pending. Once all data are received, a summary

report will be prepared.

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 local active fires and smoke.
- 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. Daily results for 12/3-12/31 were well below the action limit of 26 ug/m³.
- Cold weather power demands required activation of KIF units 6 and 9 early on January 3rd. For a brief period during the startup, material settled from the plume onto the south KIF parking lot and appeared to be contained solely on KIF property. The material appeared to be similar to the iron oxide which was discharged in November 2009 when boiler maintenance was taking place. A sample of the material was collected and sent for analysis. Analytical results are pending.

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 Region 4 will perform a field and data audit at the KIF site the week of January 11th. TVA sampling activities will be observed and data packages will be reviewed.

Biota Sampling

- Nothing to report this period.

Non-Routine Sampling

- Visual characterization was performed in the East Embayment to assist in determining the extent of ash that requires excavation. Following excavation, confirmatory sampling and analysis will be performed.

FINAL REMEDIATION

- Public comments on the EE/CA work plan were received on December 22nd. Met with EPA and TDEC on January 7th to discuss responses. A draft Responsiveness Summary was sent to TVA, EPA, and TDEC on January 11th.
- Revisions to the EE/CA in response to regulatory comments were completed, including text and figure changes. The revised EE/CA was transmitted to TVA for approval on January 8th.
- Work continued on preparation of the initial sampling and analysis plan for the river.

DREDGE CELL

- Just under 33,000 cy of ash were sent to the test embankment. Results are still positive indicating stable underlying ash.

COMMUNICATIONS

Communications

- Posted to website: Air Quality Information Updated, Weekly Report.
- Continued to handle daily calls from the news media.
- Corrected News Sentinel story about Ash Recovery Site contracts in place.

Outreach

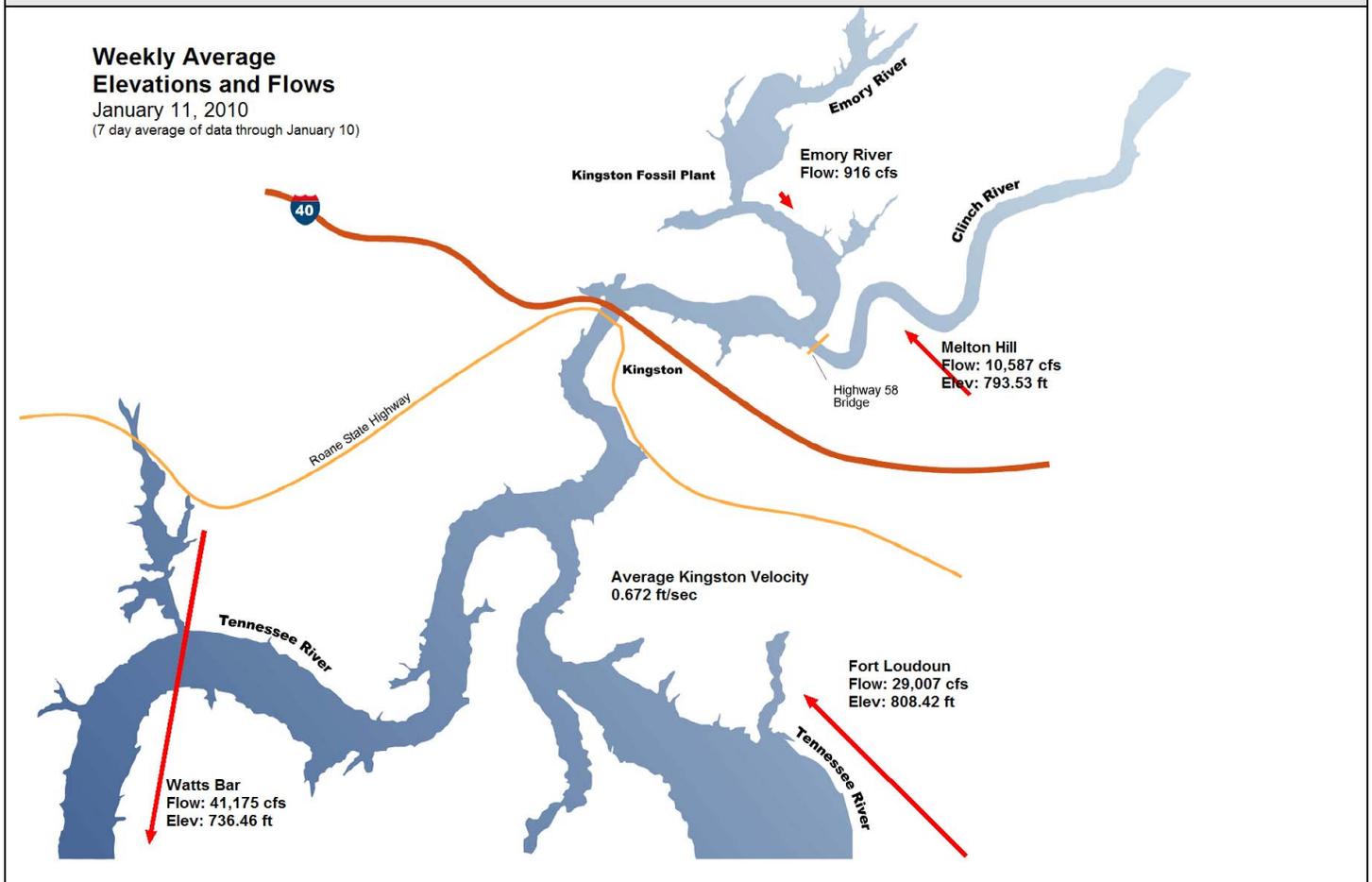
- Notified members of Roane County CAG as well as Swan Pond Road residents of start of units 6 and 9 at the Kingston Fossil Plant over the weekend, and the addition of a third unit on Monday.
- Notified members of Roane County CAG of iron oxide residue discharge from south stack at KIF.
- Sent overall Site update to Roane County CAG.
- 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 of the start of units 6 and 9 at the Kingston Fossil Plant over the weekend, and a third unit on Monday.

- Notified public officials of iron oxide residue discharge from south stack at KIF.
- Sent overall Site update to public officials.

RIVER OPERATIONS

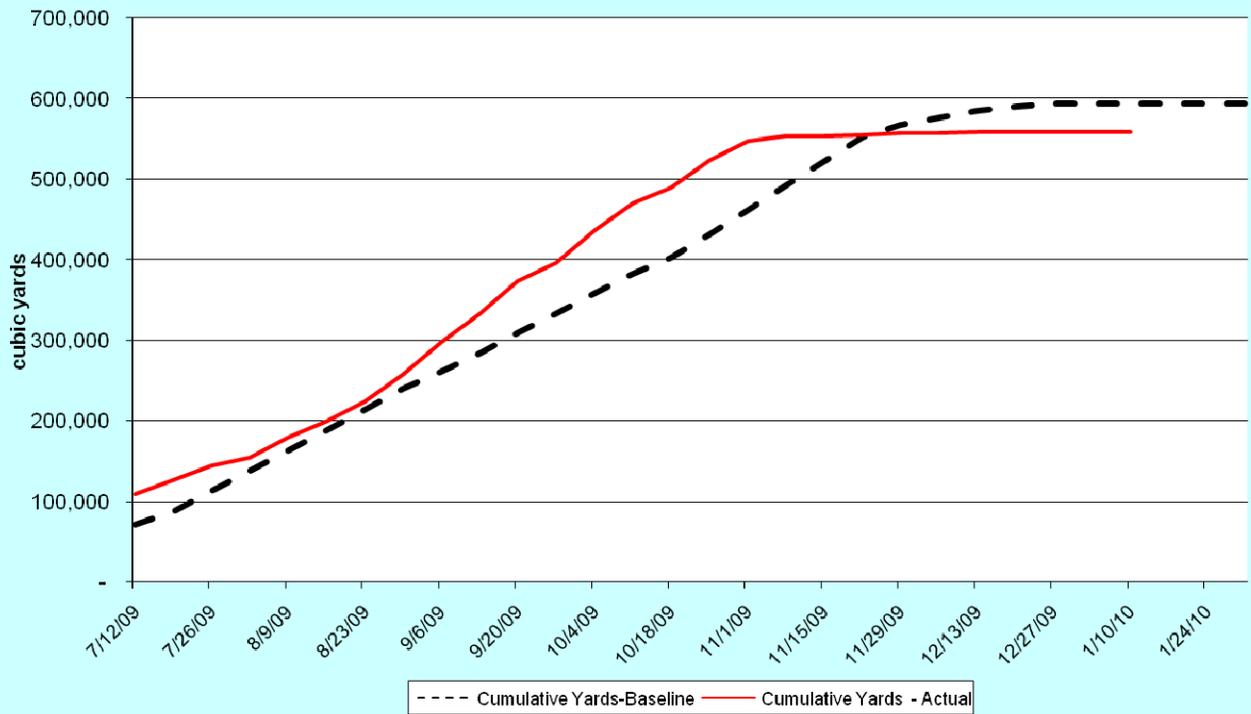


MEETINGS/CONFERENCE CALLS		
Date	Time	Subject
01/11	0730	Environmental Meeting (ICP Conference Room)
01/11	0900	Dike C Buttress Intake Channel (ICP Conference Room)
01/11	1000	Aquatic Resources Studies (Team Room)
01/11	1000	Environmental Meetings (Old Team Room)
01/11	1400	EPA Site Orientation (Team Room)
01/11	1200	EPA Auditors (Old ICP Conference Room)
01/12	0800	EPA Auditors (Old ICP Conference Room)
01/12	0800	Environmental Meetings (Old Team Room)
01/12	0900	BCP Meeting (ICP Conference Room)
01/12	1000	Project Review Weekly Meeting (ICP Conference Room)
01/12	1330	CIP Responsiveness Summary (Team Room)
01/12	1330	Dredge Team Meeting (ICP Conference Room)
01/13	0800	Time Critical Weekly Meeting (ICP Conference Room)
01/13	0800	EPA Auditors (Old ICP Conference Room)
01/13	0800	Environmental Meetings (Old Team Room)
01/13	0930	Data Management Meeting (ICP Conference Room)
01/13	1000	Waste Management Training (Team Room)
01/13	1100	MRC Environmental & Safety Meeting (ICP Conference Room)
01/13	1330	Test America Weekly Call (Conference Call)
01/14	0730	Environmental Meeting (ICP Conference Room)
01/14	0800	EPA Auditors (Old ICP Conference Room)
01/14	0900	KIF SOP Meeting (Team Room)
01/14	0930	Ammonia Training (Old Team Room)
01/14	1000	Pace Telecon (Conference Call)
01/14	1130	HSE Staff Meeting (ICP Conference Room)
01/14	1300	KIF EAP (Team Room)
01/14	1800	Waste Management Training (ICP Conference Room)
01/15	0800	EPA Auditors (Old ICP Conference Room)
01/15	0900	Jacobs Senior Managers Meeting (ICP Conference Room)
01/15	0930	Ammonia Training (Old Team Room)
Daily	0730	Site Safety Orientation (Team Room)
Daily	1600	Planning Meeting (ICP Conference Room)
Daily	1630	Ash Disposal Daily Recap (Team Room)

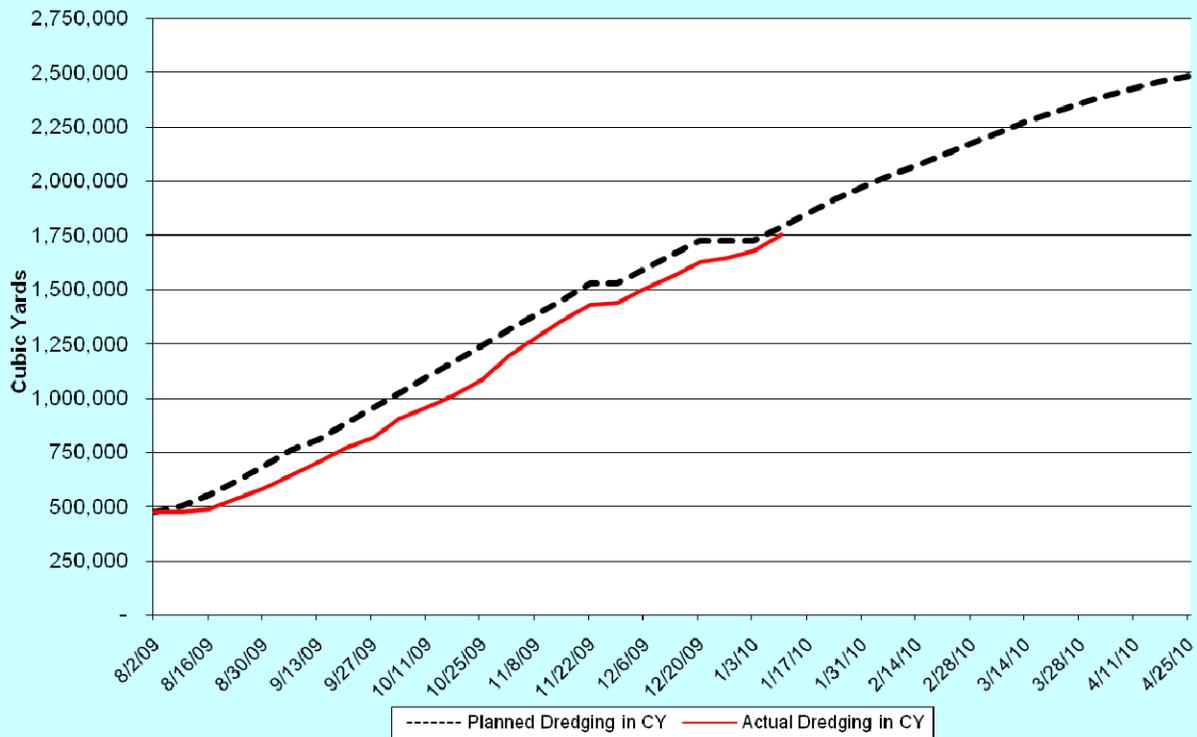
Kingston Recovery Project		Date: January 4 - 10, 2010		Field Report	
Safety				Weekly Total	Cumulative Total
First Aid Incidents				1	27
Recordable Incidents				1	10
Lost Time Incidents				0	3
Cenosphere/Debris Removal				Weekly Total	Cumulative Total
Outreach		Light Debris Removal – Land (bags)		0	18,867
Divisions A, B,C,D Cleanup		Division Shoreline Cleanup (bags)		592	89,726
Total		Tons of Light Debris		0	959.57
Cenosphere Slurry		Gallons		135,000	10,911,000
Environmental					
Org	Matrix	Samples*	Analyses*	Results*	
TVA	Air - Real-Time	--	--	156,060	
TVA	Air – Fixed	1,420	--	1,420	
TVA	Surface/Utility Water	2,863	23,887	118,504	
TVA	Ground Water (spring and well)	48	553	2,027	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	57	109	959	
TVA	Biota	598	1,508	14,731	
*Week ending 01/06/2010					
Ash Dredging & Excavation				Weekly Total	Cumulative Total
River	Estimated Cubic Yards thru January 10, 2010 (see Note)			75,706	1,765,230
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			48,000	1,240,500

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.

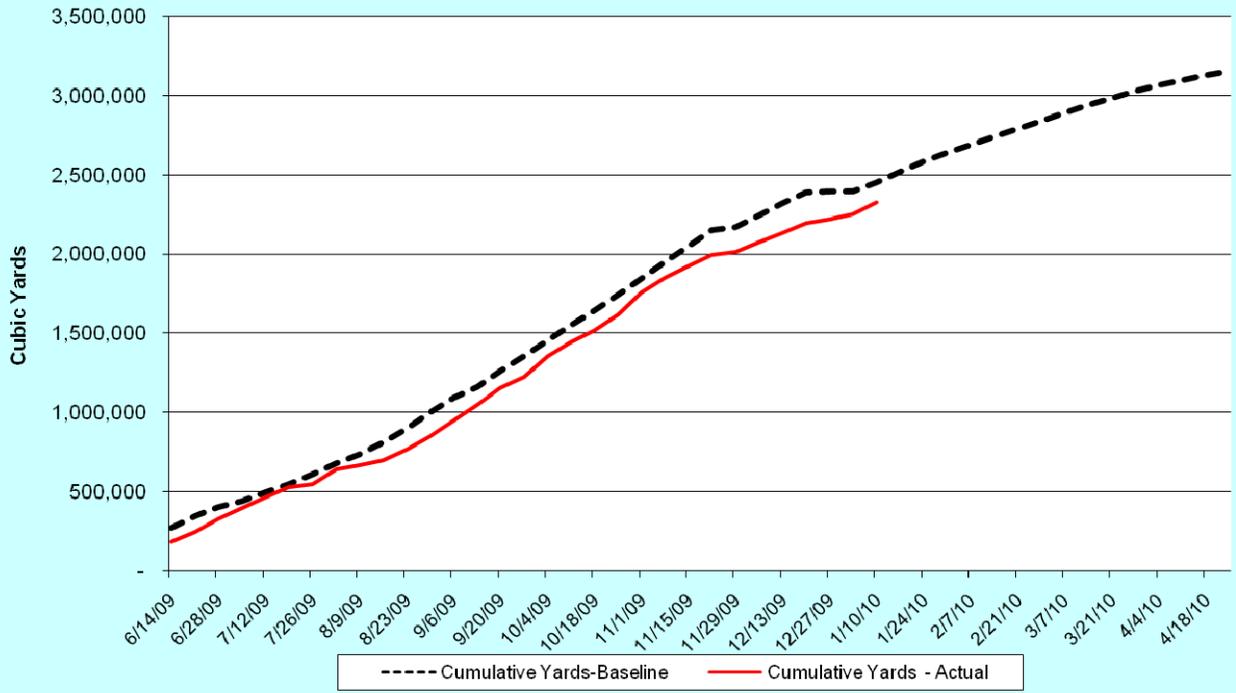
Ash Removal East of Dike 2 - Weekly
as of January 10th



River Dredging - Weekly
as of January 10th



Time Critical Ash Removal - Weekly
as of January 10th



Ash Loading to Trains - Weekly
as of January 10th

