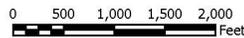


KINGSTON ASH RECOVERY PROJECT WEEKLY REPORT

November 30 – December 6, 2009

Aerial Image of Kingston Ash Slide August 14, 2009



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

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KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

November 30 – December 6, 2009

HIGHLIGHTS

- Cumulatively, almost 2,093,000 cubic yards of ash have been removed from the river and east of Dike 2.
- Have loaded and transported 110 unit trains to date for a total of just over 1,003,000 tons – a project milestone.
- No recordable injuries or incidents reported for the week.
- EPA approved the Work Plan for Dike C reinforcement.
- Met with the CAG on Thursday night to update them on Site activities.

SAFETY

Program Summary

- 27 site specific HSE orientations conducted for the week, 890 to date.
- 5 Safety Observation Reports submitted for the week; 515 to date; 448 of which have been closed.

Incidents

- No recordable injuries reported for the week.
- Non Recordable Incidents:
 - Crews applying polymer were throwing bags from the pallet down into the car. One bag landed on the lanyard of a worker that was in the car, jerking him backwards. No injury resulted, although the employee stated his back felt a little tight. MACTEC is considering disciplinary action for failure to follow prescribed procedures.
 - A lining crew was working in a car when one individual slipped on ice in the car. The worker was standing on the liner attempting to position it over the edge of the car when he fell. Salt had been applied to the ice. However, it was not enough to eliminate the slick conditions. Ice build-up was the result of water accumulation caused by failure to remove the stoppers from the bottom of the rail car after unloading.

INFRASTRUCTURE/ASH MANAGEMENT

- Ash drying efforts continued east of Dike 2. No ash was removed from the area.
- The water in the east embayment was pumped to the settling basins and work began on moving ash to the side to allow draining. The haul road in the area was completed.
- Received nine bid proposals from contractors for the Offsite Utilities Project to repair and install over 59,000 linear feet of utility pipe lines along Swan Pond, Swan Pond Circle, and Hassler Mill Roads. The bids were evaluated on Tuesday, November 24th, with planned contract award by December 14th.

ASH DREDGING & PROCESSING

- The area for the filter presses and Genesis unit was cleared of ash. The engineering for the site preparation was completed and a work plan written to construct and operate the units.
- Through December 6th, the Severson dredged volume is estimated at 1,059,192 cubic yards and the total dredged from the river is estimated at 1,534,879 cubic yards.
- Dredging from the river was performed Monday through Saturday on a two-shift basis. Equipment maintenance was performed on Sunday.
- The McKenzie 14" dredge operated 46.5 hours during the period. The Kylee 16" dredge operated 102.8 hours during the period. The Sandpiper 20" dredge operated 75.0 hours.
- Severson collected turbidity and TSS samples on weekdays from the sluice trench discharge. Daily TSS samples of the rim ditch effluent. Sluice trench effluent, ash pond effluent and stilling pond were also collected by Jacobs and Hard Hat personnel and processed on site during the week.
- The main ash pond bathymetric surveys were completed on Monday, November 30th, by Hard Hat Services and on Thursdays, December 3rd, by TVA. Free water volume in the ash pond (main and stilling ponds combined) continues to decline and is now 84,258,772 gallons or 82.6% of the NPDES permit required volume.
- Civil Projects continued construction of the Peninsula Ash Temporary Storage Area with installation of the liner in the settlement pond, roadway and drainage, and fencing. Construction completion has been extended to the week

of December 7th.

- Continued to work with Stantec to get an analysis and work plan to support placement of dredged material from the ash pond cleanout into the lateral expansion as a temporary storage area option. Conducted joint meeting with Stantec on November 25th to resolve issues for starting Phase 1 of the work. Stantec completed the analysis and issued interim instructions on Friday, December 4th, so that initial construction activities can proceed on Monday, December 7th.
- Modifications were made to the TVA HED work plan for removal of the track hoe from the Emory River. The work plan was approved by TVA, TDEC, and EPA. Transportation of the salvage equipment from Muscle Shoals to over the track hoe area on the Emory River was completed on Thursday, December 3rd. TVA HED will perform salvage operations the week of December 7th.

ASH DISPOSITION

- Achieved a project milestone this week – have shipped over 1 million tons of ash!
- Loaded and transported 4 unit trains this week.
- Have loaded and transported 110 unit trains to date for a total of approximately 1,003,100 tons.
- Continued putting polymers in rail cars prior to shipping to Alabama.
- Continuing work on the overall operations of the ball field/processing area.
- Queen City Railroad Construction completed the development of the three options for the KIF rail yard modifications and improvements to improve the efficiency of loading operations and minimization of the Swan Pond Road crossings and presented their designs on November 24th. The preferred option was selected and plans submitted to Norfolk Southern, MACTEC, and TVA management for approval prior to giving final design and construction directions to Queen City Railroad Construction. Finalization of plans will be the week of December 7th,

CENOSPHERE RECOVERY

- Outreach calls remain minimal.
- The three barge-mounted vacuum units worked in the Emory and Clinch Rivers.
- Lake levels have dropped to about 736.5 feet MSL.
- Crews looked for ash and have not identified any large deposits of visible ash along the exposed river banks.
- Large amounts of cenospheres continue to collect in the ash pond and the Dike 2 sediment basins. Crews worked on keeping the weir areas clean.

SKIMMER WALL

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

DIKE REINFORCEMENT

- EPA approved the work plan.
- A pre-construction meeting was held.
- Civil Projects began material delivery.
- Civil Projects will start to order all their equipment next week and actual physical construction should now begin December 7th.
- 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, November 30 and Friday, December 4. Surface water analytical results are compared to the Tennessee Ambient Water Quality Criteria for Recreation, Domestic Water Supply, and Fish and Aquatic Life use classifications ONLY as a reference for the potential significance of the data. The Emory, Clinch, and Tennessee Rivers are classified for those stream uses. 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 11/13/09. Comparisons to the Fish and Aquatic Life Criteria (F&AL) are performed for dissolved concentrations only.
 - On the Tennessee River, the detectable arsenic concentrations were well below all relevant water quality criteria. Selenium was not detected in any samples.
 - On the Clinch River, all detected concentrations of arsenic and selenium were less than the relevant water quality criteria.

- On the Emory River, all arsenic and selenium detects in surface water samples were less than the relevant water quality criteria.
- Daily monitoring of dredge plumes continued. Dredging was suspended for the holiday early Wednesday, November 25. On Monday, November 23, 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. The following bullets describe the noteworthy plume results for the period 10/1/09 to 11/18/09.
 - Arsenic was detected in all samples, with 24 of 37 greater than the relevant water quality criteria.
 - Selenium was detected in 29 samples, with one result greater than the relevant water quality criteria.
 - Swan Pond Embayment surface water sampling continues routinely twice per week at two locations along the Swan Pond Embayment drainage ditches. Additional samples are collected whenever the 24-hour rainfall exceeds 0.5" measured at the on-site meteorological station.
- Embayment sampling trends for samples collected between 10/01/09 and 11/10/09 are reported below. As above, references to the Tennessee water quality criteria are for comparisons only.
 - Arsenic was detected in 46 samples, with 36 greater than the relevant water quality criteria.
 - Antimony was detected in 41 samples, with 9 greater than the relevant water quality criteria.
 - Selenium was detected in 42 samples, with 7 greater than the relevant water quality criteria.

Sediment Sampling

- Vibecore sampling continues from ERM 0.0 to ERM 1.0 to characterize ash and potential legacy sediments.

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 11/20-12/2 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).

Biota Sampling

- Mammal trapping has been initiated in collaboration with the University of Tennessee.

FINAL REMEDIATION

- Internal data quality objective workshops were held to finalize the initial version of the sampling plan for the river. Sampling strategies for the abiotic media were developed.

DREDGE CELL

- Approximately 12,300 cy of ash from the ballfield and from the relic area was placed in the test embankment.

COMMUNICATIONS

Communications

- Communicated extraction of the excavator from the Little Emory to local residents/media.
- Posted to website: Air Quality Information Updated, Weekly Report Added, Environmental Studies Presentations.
- Processed ad for Roane County News on public comment period for various time critical work plans.
- Continued to handle daily calls from the news media.

Outreach

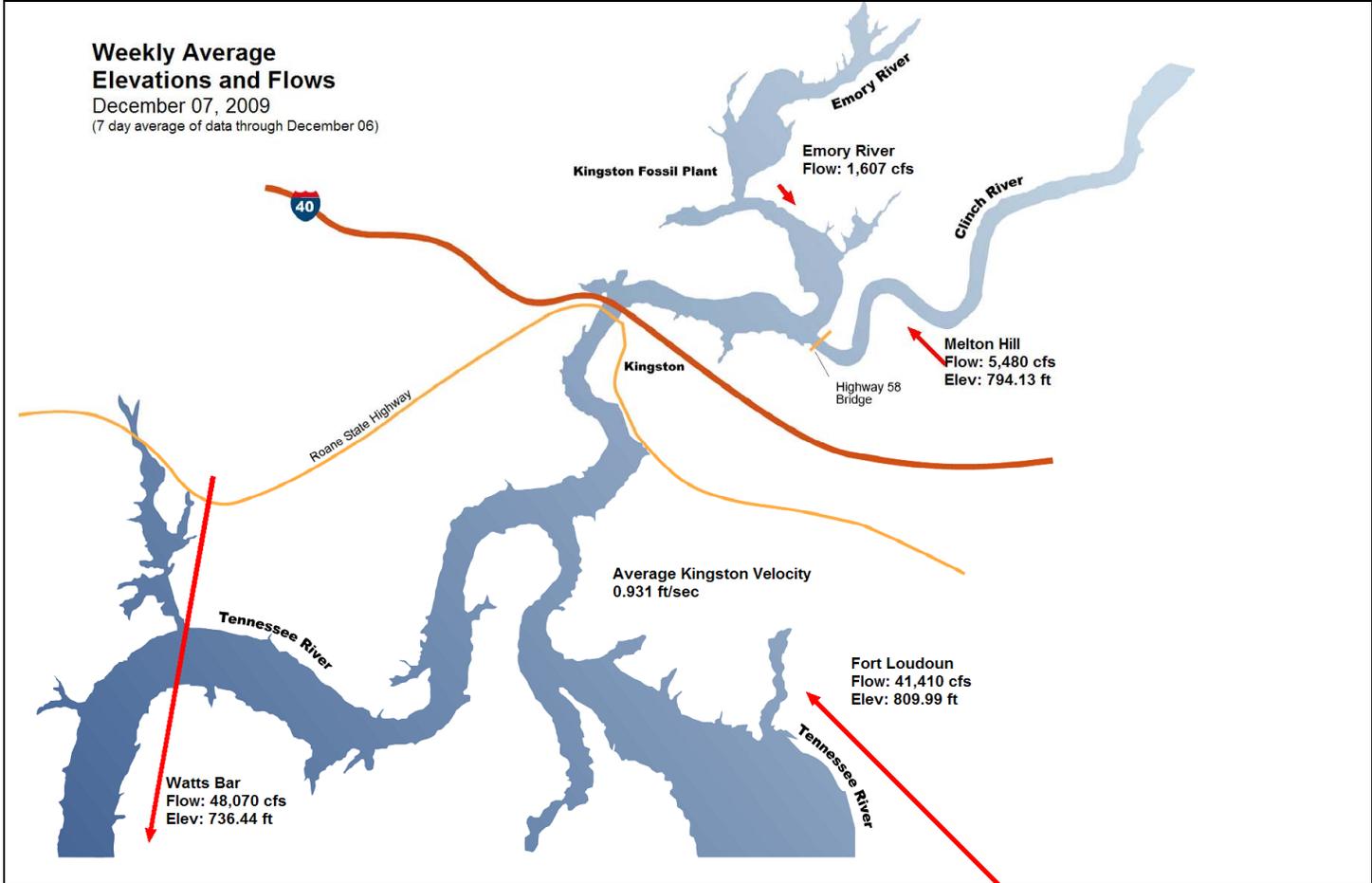
- Met with Roane County CAG to present updates/progress.

- Finalized plans for TVA Availability Session with local residents December 8th.
- Maintained Administrative Record.
- Continued to handle calls and visits from residents.

Government/Valley Relations

- Met with local officials regarding purchased properties.

RIVER OPERATIONS

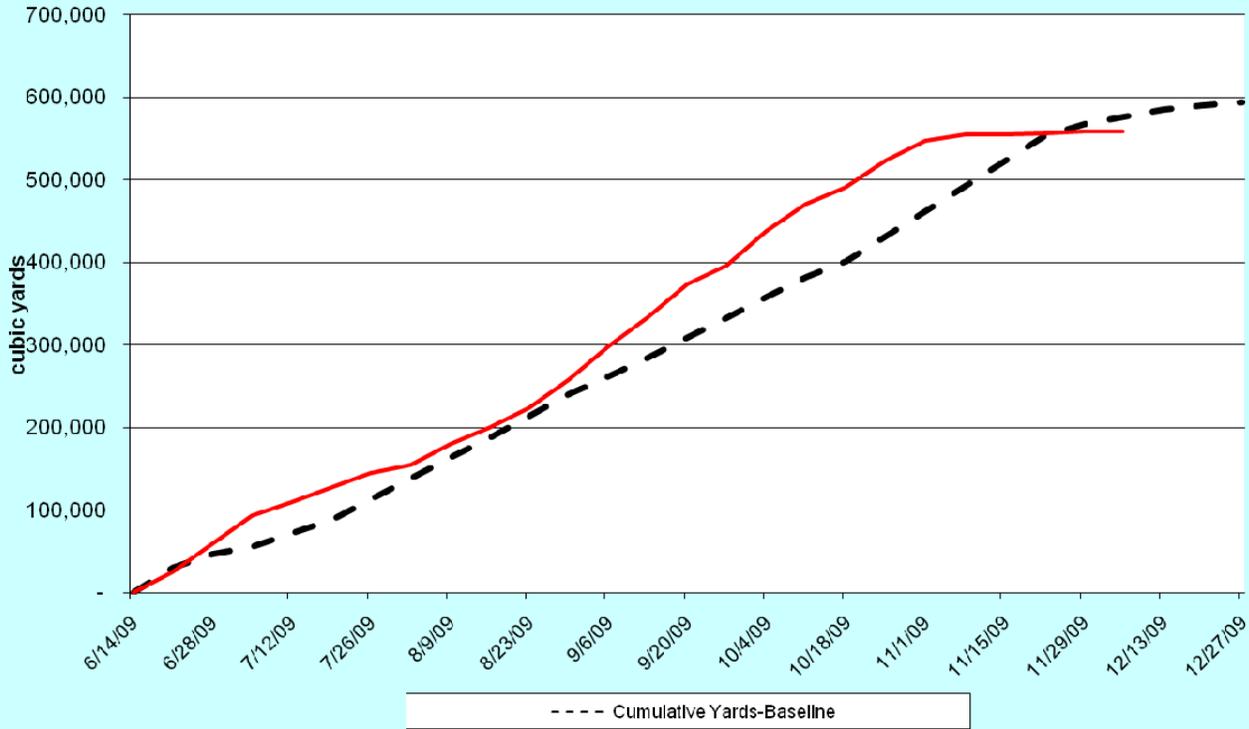


MEETINGS/CONFERENCE CALLS		
Date	Time	Subject
12/07	0730	Environmental Meeting (ICP Conference Room)
12/07	0900	Dike C Buttress Intake Channel (ICP Conference Room)
12/07	1000	Aquatic Resources Studies (Team Room)
12/07	1100	TDEC Meeting (Team Room)
12/07	1230	DQO Abiotic Media (ICP Conference Room)
12/07	1500	Genesis Meeting (Team Room)
12/08	0815	Dredge Cell Test Meeting (ICP Conference Room)
12/08	0900	BCP Meeting (ICP Conference Room)
12/08	1300	Dredge Team Meeting (Team Room)
12/09	0800	Time Critical Weekly Meeting (ICP Conference Room)
12/09	0930	Data Management Meeting (ICP Conference Room)
12/09	1030	KIF Rail Yard Modification Operational Challenges (ICP Conference Room)
12/09	1100	MRC Environmental & Safety Meeting (ICP Conference Room)
12/09	1330	Test America Weekly Call (Conference Call)
12/09	1500	Moisture Planning Content Session (ICP Conference Room)
12/09	1700	CPR/AED Training (ICP Conference Room)
12/10	0730	Environmental Meeting (ICP Conference Room)
12/10	0900	KIF SOP Meeting (Team Room)
12/10	1000	Pace Telecon (Conference Call)
12/10	1130	HSE Staff Meeting (ICP Conference Room)
12/11	0830	Jacobs Senior Managers Meeting (ICP Conference Room)
12/11	0930	Non Time-Critical Strategy (ICP Conference Room)
Daily	0730	Site Safety Orientation (Team Room)
Daily	1600	Planning Meeting (ICP Conference Room)
Daily	1630	Ash Disposal Daily Recap (Team Room)

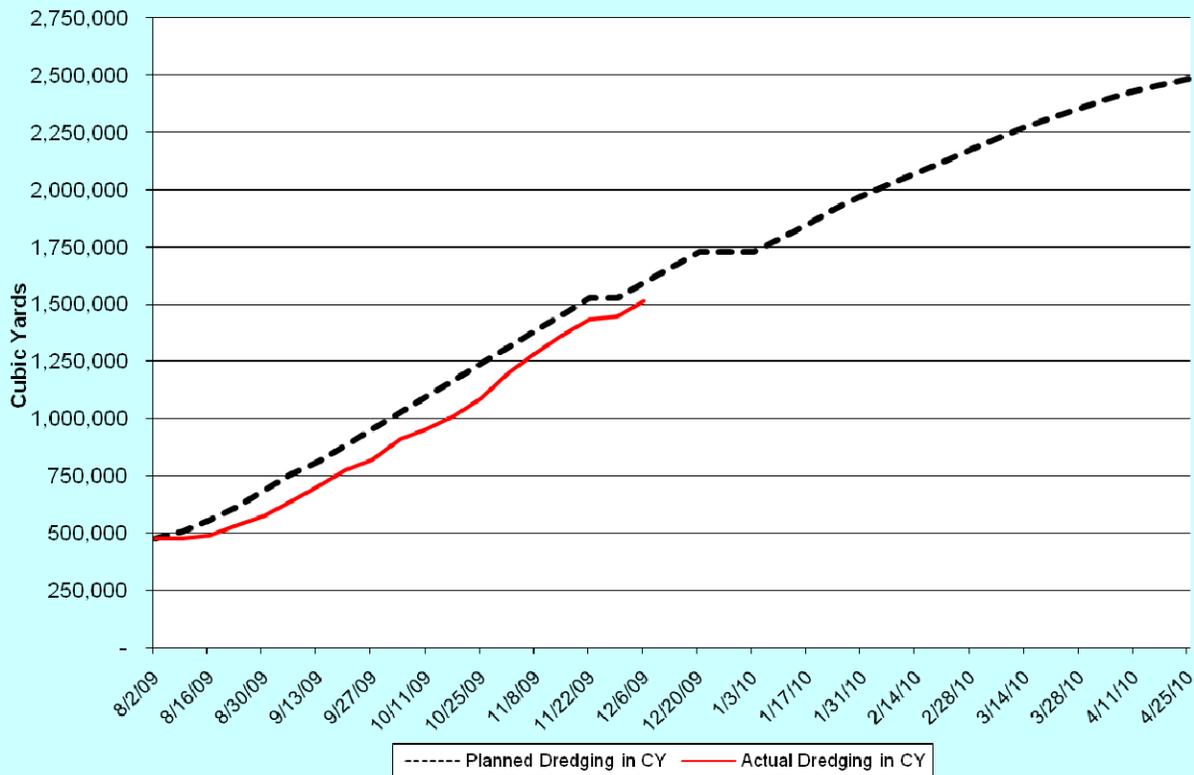
Kingston Recovery Project		Date:	November 30 – December 6, 2009		Field Report
Safety			Weekly Total	Cumulative Total	
First Aid Incidents			0	25	
Recordable Incidents			0	8	
Lost Time Incidents			0	2	
Cenosphere/Debris Removal			Weekly Total	Cumulative Total	
Outreach	Light Debris Removal – Land (bags)		0	18,867	
Divisions A, B,C,D Cleanup	Division Shoreline Cleanup (bags)		221	87,060	
Total	Tons of Light Debris		0	959.57	
Cenosphere Slurry	Gallons		138,000	10,208,500	
Environmental					
Org	Matrix			Total # Lab Results Reported Thru 12/02/09	
TVA	Air - Real-Time			140,785	
TVA	Air – Fixed			1,382	
TVA	Surface/Utility Water			110,496	
TVA	Ground Water (spring and well)			1,791	
TVA	Ash			1,617	
TVA	Soil/Sediment			1,423	
TVA	Biota			14,702	
Ash Dredging & Excavation			Weekly Total	Cumulative Total	
River	Estimated Cubic Yards thru December 6, 2009 (see Note)			84,657	1,534,879
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			0	558,079**
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			42,100	1,003,100

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.

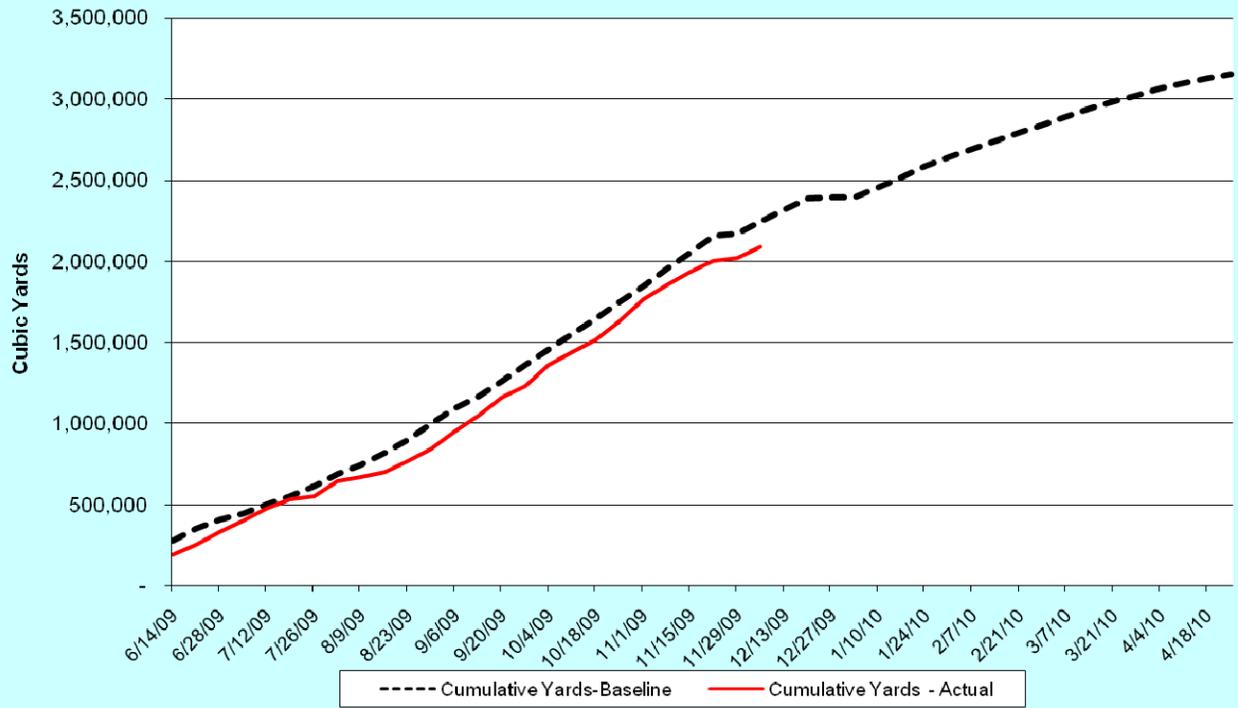
Ash Removal East of Dike 2 - Weekly as of December 6th



River Dredging - Weekly as of December 6th



Time Critical Ash Removal - Weekly
as of December 6th



Ash Loading to Trains - Weekly
as of December 6th

