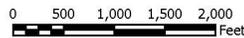


KINGSTON ASH RECOVERY PROJECT WEEKLY REPORT October 12-18, 2009

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

October 12-18, 2009

HIGHLIGHTS

- One first aid incident occurred when a laborer scraped his arm while working on the new trailer complex.
- A Reportable Environmental Event (REE) occurred at the south dock when an estimated one quart of petroleum was released from the TVA 14" dredge during its transfer from the river to the ash pond.
- Total removal of time-critical ash from east of Dike 2 is approximately 1,505,000 cy.
- Total ash shipped to off-site disposal remained at 687,766 tons.
- Continuous rain throughout the week significantly impacted all recovery operations.
- River dredging operations resumed on Monday following suspension of operations on October 8th due to Free Water Volume concerns in the ash pond.

SAFETY

Program Summary

- 19 site specific HSE (Health, Safety & Environmental) orientations conducted for the week; 821 to date.
- 20 Safety Observation Reports submitted for the week; 417 to date; 356 of which have been closed.

Incidents

- October 13 – An REE occurred at the south dock area when the CP 14" dredge released an estimated one quart of petroleum. The petroleum was mixed with bilge water and was released when the bilge pump was inadvertently activated when the dredge was repositioned onto the bank. The resulting incline of the dredge caused residual fluids to accumulate in an area around the bilge pump float, activating the pump and discharging the liquid.
- October 16 – A first aid incident occurred when a laborer working on the new trailer complex scraped his arm on a 2" x 4". The individual was treated at the first aid station and instructed on how to properly care for the injury.

INFRASTRUCTURE/ASH MANAGEMENT

- Due to wet weather, ash removal volumes were down to 10,379 cy. Most of this material was sent to wet storage areas.
- Work continued on opening dirty water ditches and keeping the settling basins free of ash.
- Ash from the sluice trench operation was transported to the temporary wet processing areas.
- Issued the design drawings for the revised main HAZWOPER entrance and exit station on the south portal of the project. TVA CP is making preparations to construct the area. The Work Plan was issued to EPA and TDEC for approval.
- Construction was suspended on the Peninsula Ash Temporary Storage Area due to the wet weather conditions. Work will resume as soon as material is dry enough, and should take approximately two weeks to complete the project.
- Continued to work with Stantec to get an analysis and work plan developed to support placement of dredged material from the sediment basins cleanout and east embayment dredging operation into the lateral expansion as a temporary storage area option. Stantec expects to complete the analysis and issue the report on Thursday, October 22nd.

ASH DREDGING & PROCESSING

- Through October 18th, the Severson hydraulic dredged volume is estimated at 546,339 cubic yards and the total dredged from the river is approximately 1,022,026 cubic yards. Note: Total dredged from the river has been adjusted to include all of Trans Ash and TVA reported hydraulic and mechanical dredging to date.
- The Severson "Recovery" plan is nearly complete with the Kylee in operation; all additional pipelines are completed; and the 20" Sandpiper dredge is due to arrive this coming week. The mechanical dredging component is still under development.
- Dredging from the river was performed Monday through Saturday on a two shift basis.
- The McKenzie 14" dredge operated 95 hours during the period.
- The Kylee 16" dredge operated 124 hours during the period

- The Little Rock 20" dredge operated 19.5 hours during the week. The Little Rock was brought back on line on Thursday, after TVA release.
- Truck haulage estimate of Rim Ditch processed cubic yards is 39,933 for the week. Truck haulage estimate of Sluice Ditch captured ash was 19,898 cubic yards for the week. Weekly total includes both Severson and Civil Project haulage.
- Severson collected NTU and TSS samples on weekdays from the Sluice Trench discharge. Daily TSS samples of the Rim Ditch effluent and the Sluice Trench Effluent were also collected and processed on site during the week.
- Ash pond Free Water Volume survey was completed Thursday with 109 million gallons of free water versus 102 million gallons requirement.

ASH DISPOSITION

- Did not load or move any unit trains this week due to rain and unseasonably cold weather.
- Have loaded and transported 77 unit trains to date.
- Performed an inspection in the rail yard and continued maintenance work. This included maintenance of switches and replacing regular rail ties on the loop track.
- Received approval from the state of Alabama to place additives to reduce any free liquid in the rail cars before shipping. Worked with vendors on establishing a protocol to apply polymers to the ash before the burrito bag is closed.
- Working with the dredging team on overall operations of the ballfield/processing area.

CENOSPHERE RECOVERY

- Outreach calls focused on the Clinch River area across from the south staging area. This has been an active area in past due to the confluence of the Emory River. The calls reflected more debris being moved downriver as a result of the heavier rains. There were light amounts of cenospheres associated with this debris.
- River flows increase to above 12,000 CFS in the Emory River this week. Crews inspected booms for debris and cenospheres, but conditions remained light. With high flow rates, it will not be known for a couple of days whether cenospheres were pushed downriver.
- One of the three barge-mounted vacuum units was sent downriver to resume cenosphere recovery around the Tennessee River Mike Marker 542. The remaining two units worked the areas in the Emory and Clinch Rivers.
- Large amounts of cenospheres continue to collect in the Ash Pond. Crews worked on getting the weir area clean and preventing cenospheres from moving into the Stilling Pond.

SKIMMER WALL

- Work on the Skimmer Wall has been suspended until early next year.

DIKE REINFORCEMENT

- Received comments from various sources on the design drawings and specifications for Dike C buttress. Issued construction drawings should be available early next week.
- Decision made by site management that Section D material (sand, rock, and riprap) will be brought in by truck. However, a review of the material delivery method will be done prior to full engagement in additional buttress sections.
- Meeting scheduled next week to discuss the stability analysis conclusion on Dike C, the decision to construct the buttress system, and independent Geotech analysis.
- A proposed work plan for installing a siphon in the ash pond as an emergency control measure which was developed by onsite engineering team was provided to management for review.
- Daily monitoring of the dikes at Kingston continues.

ROUTINE MONITORING

Surface Water Sampling

- Routine surface water fixed station monitoring occurred on Monday, October 12th, and Friday, October 16th. Samples for nutrient analyses were also collected on Monday, October 12th. Through September 10th, there have been no ash-related constituents detected above any criteria (i.e., ambient water quality, domestic water supply) for the three constituents of primary interest (arsenic, selenium, mercury). Data deliverables for surface water samples collected by TVA since September 10th have been delayed due to analytical laboratory software modifications associated with the switch from a reporting limit (RL) to a method detection limit (MDL). Please see the Data Management section below for an update on resolution of data reporting. This switch from RL to MDL is associated with data use for Engineering Evaluation/Cost Analysis (EE/CA) purposes. However, TDEC surface water data for

arsenic, selenium, and mercury from September 15th through October 1st reported one exceedence for arsenic (11 ppb at ERM 2.1 on September 15) above the Tennessee Drinking Water Standard (TDWS). Since the May 4, 2009 Emory River high flow event, the total suspended solids (TSS) concentrations have consistently averaged less than 20 mg/L.

- Triggered by >1.0" rainfall at the KIF rain gauge and Emory River flow >5,000 cubic feet per second at the Oakdale station, additional surface water sampling at the Emory, Clinch, and Tennessee fixed station locations occurred on Thursday October 15th. Additional Swan Pond Embayment sampling also was performed on that date. EPA collected split samples with TVA for both of these events.
- Daily monitoring of dredge plumes continued. On Monday, October 12th, and Wednesday, October 14th. 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. Since aggressive dredging began, arsenic has been detected in seven plume samples (data through September 10th) above the Tennessee Drinking Water Standard (TDWS), with a maximum in one sample of 0.024 mg/L. Selenium was also detected in two plume samples (September 9th and September 10th), but at values less than the TDWS and the Aquatic Water Quality Standard (AQWS).
- Swan Pond Embayment surface water sampling continues routinely twice per week at two locations along the Swan Pond Embayment drainage ditches. Since the tie-in off the Embayment settling basins, TSS results from samples collected at the settling basin effluent and from the clean water ditch average below 20 mg/L, except during elevated rainfall events. Total and dissolved arsenic and selenium concentrations have declined as the settling basins and clean water ditch have come on line. The arsenic concentrations sporadically exceed the TDWS, but are below the AWQS. Selenium concentrations are well below the TDWS, but continue to be, on average, above the AWQS.

Sediment Sampling

- On Thursday October 15th, five ash samples were collected from the KIF ash settling pond for geotechnical analyses (particle size, moisture content, specific gravity). The results from analysis of these samples will assist in evaluating operational adjustments to improve the effectiveness of the ash recovery system.
- Sub-bottom data continue to be reduced and interpreted and the sub-bottom crew continues profile work along the Emory, Clinch, and Tennessee Rivers.
- Several sampling plans are being finalized for further sediment evaluation, including a plan to confirm sub-bottom profiling data from the mouth of the Emory River to Clinch River Mile 2.5 and a plan to collect bed sediment samples from the Emory, Clinch, and Tennessee Rivers for grain size analysis and use by a Corps of Engineers team evaluating sediment transport.

Air Sampling

- The majority of air monitoring results, including fixed-station and real-time monitoring results continue below ambient air quality criteria. The only exceptions have been a few elevated mobile PM10 results that were noted to have been associated with brush fires.
- TVA's real-time TEOM PM2.5 instrument is operating at the Lakeshore Drive (PS07) air monitoring location. Data for this instrument are available on the regulator website.

Data Management

- Software issues associated with the switch from RL to MDL reporting have been resolved and electronic data deliverables are flowing into the Equis database. Updates to the TVA public web page for surface water data should be completed by October 23rd.
- TVA participated in a conference call with EPA Region 4 quality assurance personnel. The purpose of the call was to update EPA on the status of revisions to the TVA Quality Assurance Project Plan (QAPP) and to discuss how TVA is incorporating EPA comments, as well as updating the document to reflect current practices since the original draft QAPP was issued in April 2009. The schedule for re-issuance to EPA is November 2nd.
- Data validation continues for electronic data packages received from the laboratories. As verified packages are received, they are being posted to the password protected website for regulator review.
- Migration of data from the TVA Equis to the EPA SCRIBE database is ongoing. Discussions continue regarding the migration of TVA air data into EPA's Air Quality System (AQS).

Biota Sampling

- Turtle trapping and collection of blood samples continue.
- Mammal trapping has been initiated.
- ORNL and TVA have initiated fall fish collection as part of the overall ongoing fish health study.

FINAL REMEDIATION

- Work continued on finishing the first draft of the EE/CA for the dredge cell and embayment.
- The work plan was submitted for internal review and submittal to EPA and TDEC for final review/authorization.

DREDGE CELL

- No activity occurred on the test embankment due to the wet weather.

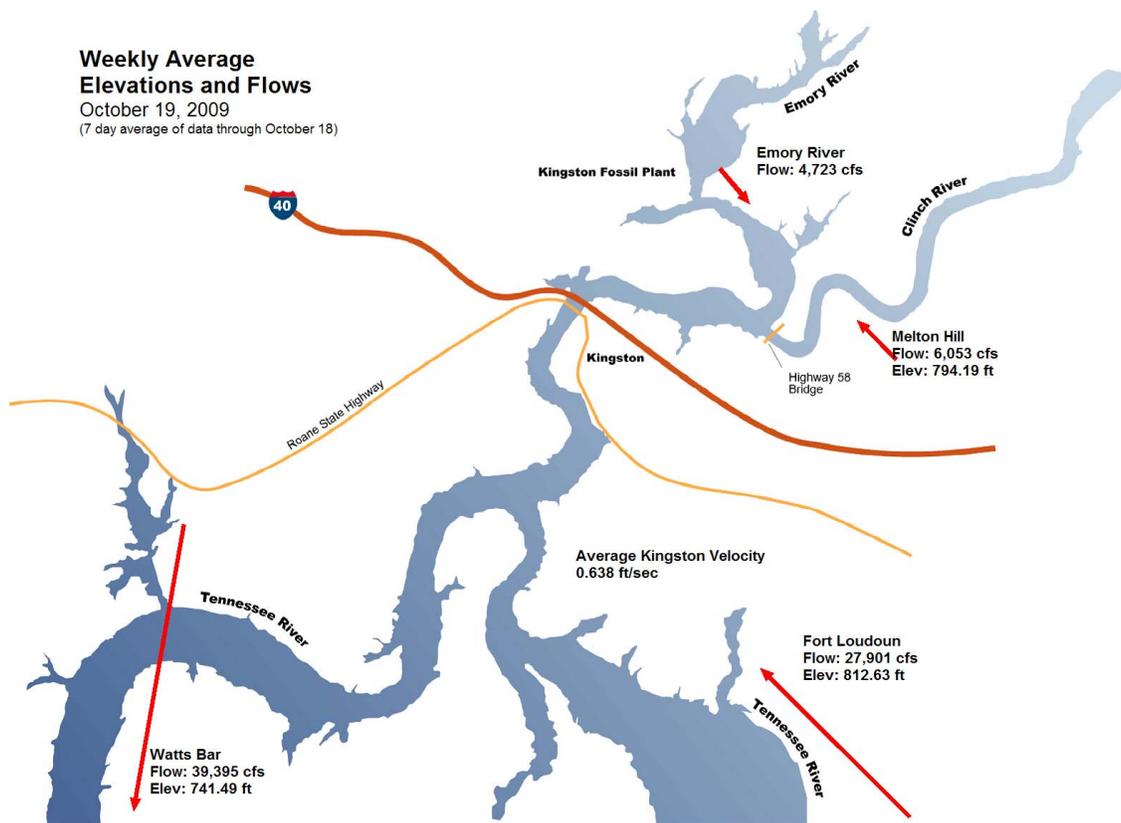
Communications

- Issued Dredge Report
- Posted to TVA's Kingston Webpage: Weekly Report Added, Air Quality Information Updated, October 15th Rainfall Update, Sediment Sampling Update, List of Acronyms Used on This Site.
- Continued to handle daily calls from the news media.

Outreach

- Meet and greet with Community Advisory Group and Steve McCracken.
- Met with individual residents about property and operations issues.
- Continued to handle calls and visits from residents.
- Responded to Congressional Inquiries and TVAINFO letters about residents.

RIVER OPERATIONS

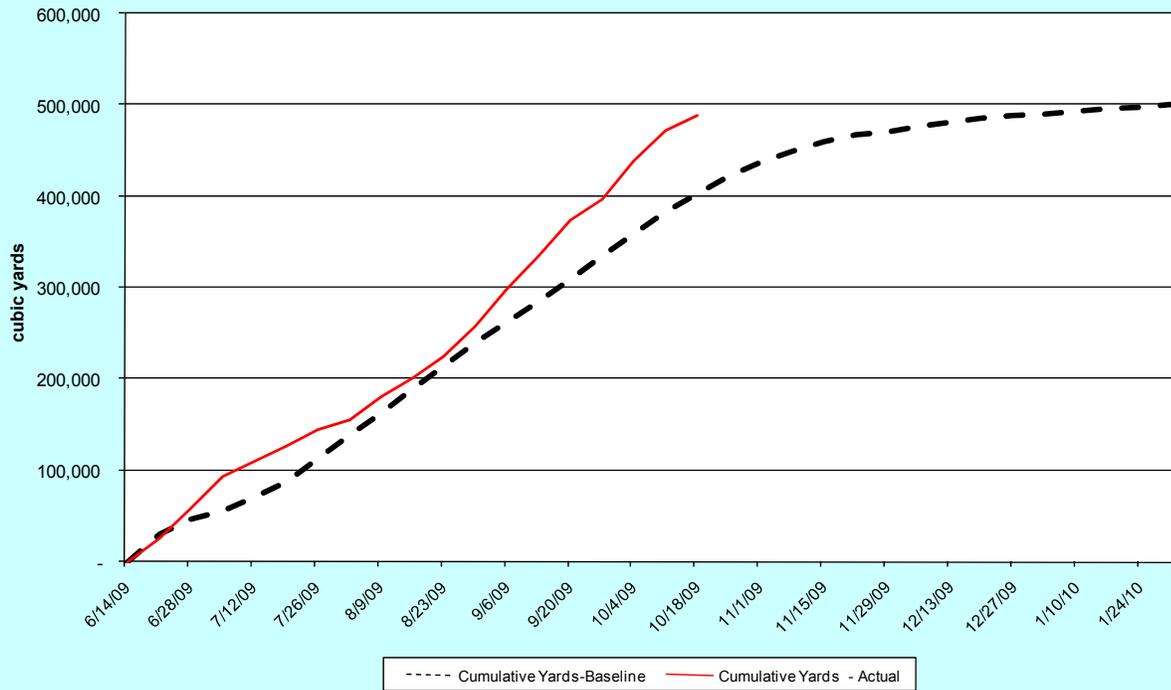


MEETINGS/CONFERENCE CALLS		
Date	Time	Subject
10/19	0730	Environmental Meeting (ICP Conference Room)
10/19	0900	Dike C Buttress Intake Channel (ICP Conference Room)
10/19	1000	Aquatic Resources Studies (Team Room)
10/19	1500	Jacobs OPR (Team Room)
10/20	1000	Project Review Weekly Meeting (ICP Conference Room)
10/20	1300	Dredge Team Meeting (Team Room)
10/20	1400	Invoice Reviews (Team Review)
10/20	1700	Sevenson Dredge Recovery Meeting (Team Room)
10/21	0800	Time Critical Weekly Meeting (ICP Conference Room)
10/21	0900	Data Management Meeting (ICP Conference Room)
10/21	1100	MRC Environmental & Safety (ICP Conference Room)
10/21	1200	Management Review Dry Run (ICP Conference Room)
10/21	1330	Test America Weekly Call (Conference Call)
10/22	0730	Environmental Meeting (ICP Conference Room)
10/22	0900	KIF SOP Meeting (Team Room)
10/22	1000	Pace Telecon (Conference Call)
10/22	1130	HSE Staff Meeting (ICP Conference Room)
10/22	1300	Dike C Stability Review (ICP Conference Room)
10/22	1430	Meeting with Coast Guard HSE Rep (Team Room)
10/22	1700	Sevenson Dredge Recovery Meeting (Team Room)
10/23	0900	Jacobs Senior Managers Meeting (ICP Conference Room)
10/23	1000	Pre-Bid Meeting Utilities RFP (ICP Conference Room)
Daily	0730	Site Safety Orientation (Team Room)
Daily	1600	Planning Meeting (ICP Conference Room)

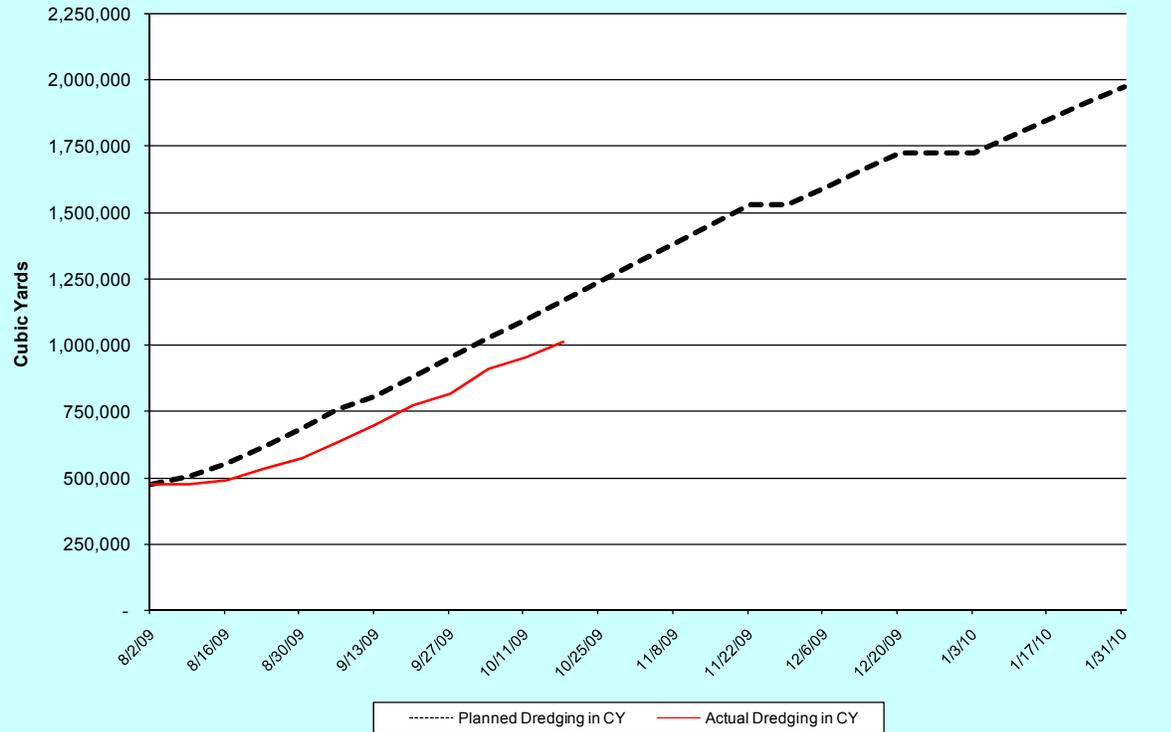
Kingston Recovery Project		Date: October 12-18, 2009	Field Report	
Safety			Weekly Total	Cumulative Total
First Aid Incidents			0	23
Recordable Incidents			0	7
Lost Time Incidents			0	2
Cenosphere/Debris Removal			Weekly Total	Cumulative Total
Outreach		Light Debris Removal – Land (bags)	0	18,867
Divisions A, B,C,D Cleanup		Division Shoreline Cleanup (bags)	584	82,509
Total		Tons of Light Debris	0	959.57
Cenosphere Slurry		Gallons	196,500	8,443,000
Environmental				
Org	Matrix		Total # Analysis Performed Through 10/14/09	
TVA	Air - Real-Time (thru 10/4/09)		116,058	
TVA	Air – Fixed (thru 9/28/09)		867	
TVA	Surface/Utility Water		16,405	
TVA	Ground Water (spring and well)		269	
TVA	Ash		104	
TVA	Soil/Sediment		91	
TVA	Biota		831	
Ash Dredging & Excavation			Weekly Total	Cumulative Total
River	Estimated Cubic Yards thru October 18, 2009 (see Note)		58,228	1,022,026
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume		10,379	482,807
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume		0	73,000**
Ash Disposal	Estimated Tons		0	687,766

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.

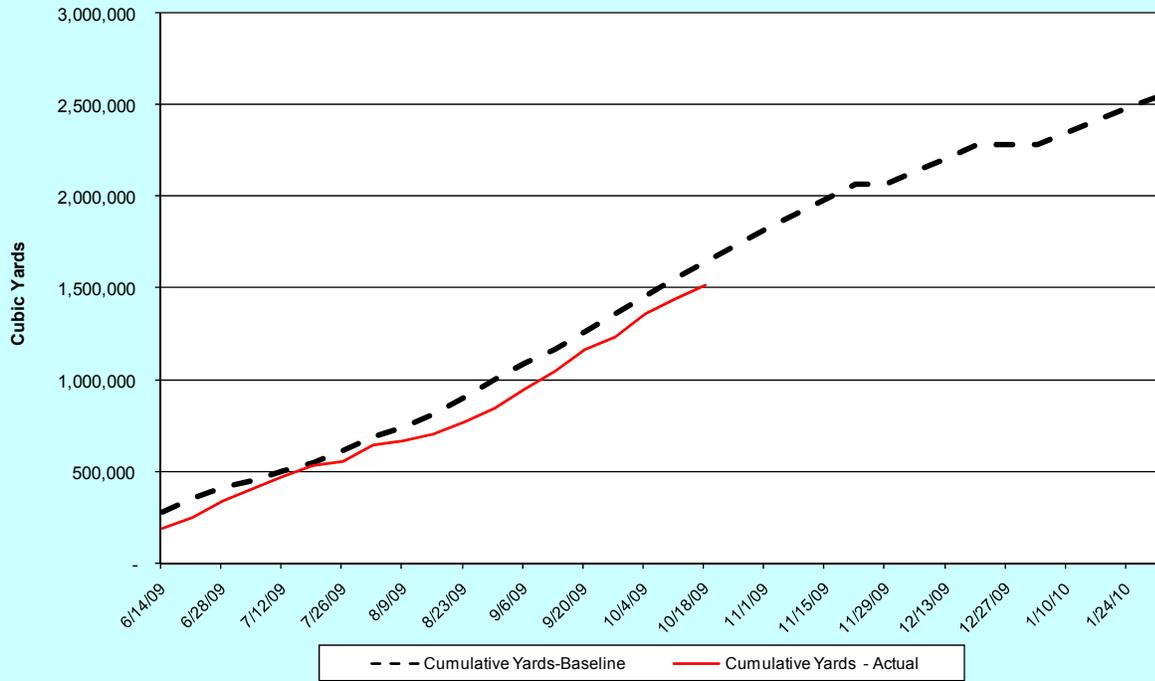
**Ash Removal East of Dike 2 - Weekly
as of October 18th**



**River Dredging - Weekly
as of October 18th**



**Time Critical Ash Removal - Weekly
as of October 18th**



**Rail Car Loading - Weekly
as of October 18th**

