

KINGSTON ASH RECOVERY PROJECT MONTHLY REPORT

May 2012

Aerial Image of Kingston Ash Slide (05/02/2012)



Date of imagery: 05/02/2012

Tennessee Valley Authority
Realty, GIS & Land Records

Filename: ImageOnly_20120502_011

KINGSTON ASH RECOVERY PROJECT

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SAFETY
<ul style="list-style-type: none"> • Twenty-nine (29) individuals attended site-specific health, safety and environment (HSE) orientations during May – 2,183 year to date. Twenty-six (26) site-specific refresher courses were conducted during the month of May - 382 year to date. • Twenty-nine (29) safety observation reports (SORs) were submitted during May – 2,857 year to date; 2,856 are closed. • The last recordable incident occurred on February 13, 2012 and became a recordable on February 23, 2012.
INFRASTRUCTURE / ASH MANAGEMENT
<ul style="list-style-type: none"> • Efforts for site maintenance, dust control, and HAZWOPER control continued. • Continued recovering cenospheres from the onsite ponds.
ASH SLURRY AND POND TOTAL SUSPENDED SOLIDS (TSS) CONTROL
<ul style="list-style-type: none"> • Daily total suspended solids (TSS) sampling and pH monitoring were performed throughout the ash slurry system. The TSS of the sluice trench discharge averaged 33.5 mg/L, the main ash pond effluent TSS averaged 41.4 and the stilling pond effluent averaged 12.8 for May. • The sluice trench effluent and ash pond effluent polymer addition rates were adjusted based on TSS levels during May. • KIF plant test operated each unit during the month. At the end of May, the plant was operating 8 units and no water issues were encountered.
PLANT ASH STORAGE / INTERIM ASH STORAGE AREA (BALLFIELD)
<ul style="list-style-type: none"> • Trans Ash placed and compacted dry fly ash during the month. Geosyntec provided quality control and assurance during May. • The Kingston Fossil Plant (KIF) plant operated from 7 to 9 units during the month, average of 7.8. The ash produced has not been received from the plant yet, but it is estimated that 24,000 tons of ash were produced in May.
CENOSPHERE CONTROL ACTIVITIES
<ul style="list-style-type: none"> • Daily pond inspections were performed for all ponds. Skimmer pumping from near outlet to cenosphere collection zones was carried out on all three ponds. • Collection of cenospheres by hydro-vacuum truck was carried out during May with a total of seventeen (17) loads captured.
ROUTINE MONITORING
<p>Surface Water Sampling</p> <ul style="list-style-type: none"> • Began reduced scope surface water sampling per revised surface water monitoring plan the week of May 13, 2012. All monthly stilling pond results received to date have shown compliance with the outfall National Pollutant Discharge Elimination System (NPDES) permit. • There were rainfall events on May 14 & 29, 2012 that triggered storm flow sampling in Swan Pond embayment. • Automated monitoring stations (Hydrolabs) are online continuously monitoring pH at three locations in the settling ditch system. The real-time pH results from the settling ditch system are monitored daily and used to make acid-dosing decisions to control the pH of the outflow. • Continued daily TSS monitoring at the sluice trench, ash pond, Agri-Drains and stilling pond.

Air Sampling

- All air monitoring results for May from the PM2.5 and TVA air samplers were below the current ambient air monitoring plan (AAMP) action levels.

Data Management

- Provided May surface water and air monitoring results to the EPA.

Biota Sampling

- Virginia Tech continued tree swallow and turtle sampling and processing and are expected to continue into summer 2012.
- Continued benthic invertebrate and fish health studies.

Non-Routine Sampling

- Continued sample collection and on-site moisture testing in support of dredge cell and ballfield operations.
- Continued sampling support for middle embayment ash removal.
- Collected sediment surface water samples in support of Duke University Bioassay Research.
- Retrieved drums of soil from ORNL for disposal.

DREDGE CELL

- Geo-Con continued construction of PWS wall in Segment 7 and completed repair of wall inclusions in Segment 1.
- Geo-Con completed coring holes and jet grouting in Segment 1 for repairs of cold joints.
- Ash stacking continued in the north dredge cell as conditions became favorable.
- Civil Projects completed panel construction of the rock buttress outboard of the PWS wall through Segment 1B.
- S&ME began pumping from well points in PWS Segment 7, installed well points in PWS Segment 2 working platform, and drilled test holes in Segment 4. Stantec installed vibrating wire piezometers in Segments 7 and 2 for monitoring water pressures during PWS construction.
- Civil Projects placed rock to reinforce the working platform for Segment 2 and began excavation of the spoils trench.
- Civil Projects continued drying materials in the relic area of the southern dredge cell.

LATERAL EXPANSION

- Restrictions remain that limit stacking to a maximum of 1 foot per day.
- Stacking continued in the lateral expansion.
- Small quantities of ash and spoils were placed in the ash pond in preparation of the subgrade prior to stacking.
- Stantec submitted a revised 90% design of the PWS for Segment 2, which was sent on to the regulators for approval.
- Stantec submitted inserts for a revised 90% design of the lateral expansion closure; the revised 90% design package was sent on to the regulators for approval.
- Stantec submitted the 60% design of the ash stacking for the Ash Pond.
- Stantec submitted a 90% design for the Sluice Trench Outlet Piping, which was sent on to the regulators for approval.

RIVER ENGINEERING EVALUATION / COST ANALYSIS (EE/CA) AND BASELINE ECOLOGICAL RISK ASSESSMENT (BERA)

- Jacobs submitted the EE/CA for TVA review.
- USACE WES submitted a draft evaluation report for 30-year sediment transport analysis.
- TVA submitted the draft final BERA to the regulators for review.

EMBAYMENT RESTORATION AND RECREATION AREA DEVELOPMENT

- Jacobs continued preparation of the 90% design package.
- Jacobs finalized the master plan for printing.

MIDDLE EMBAYMENT

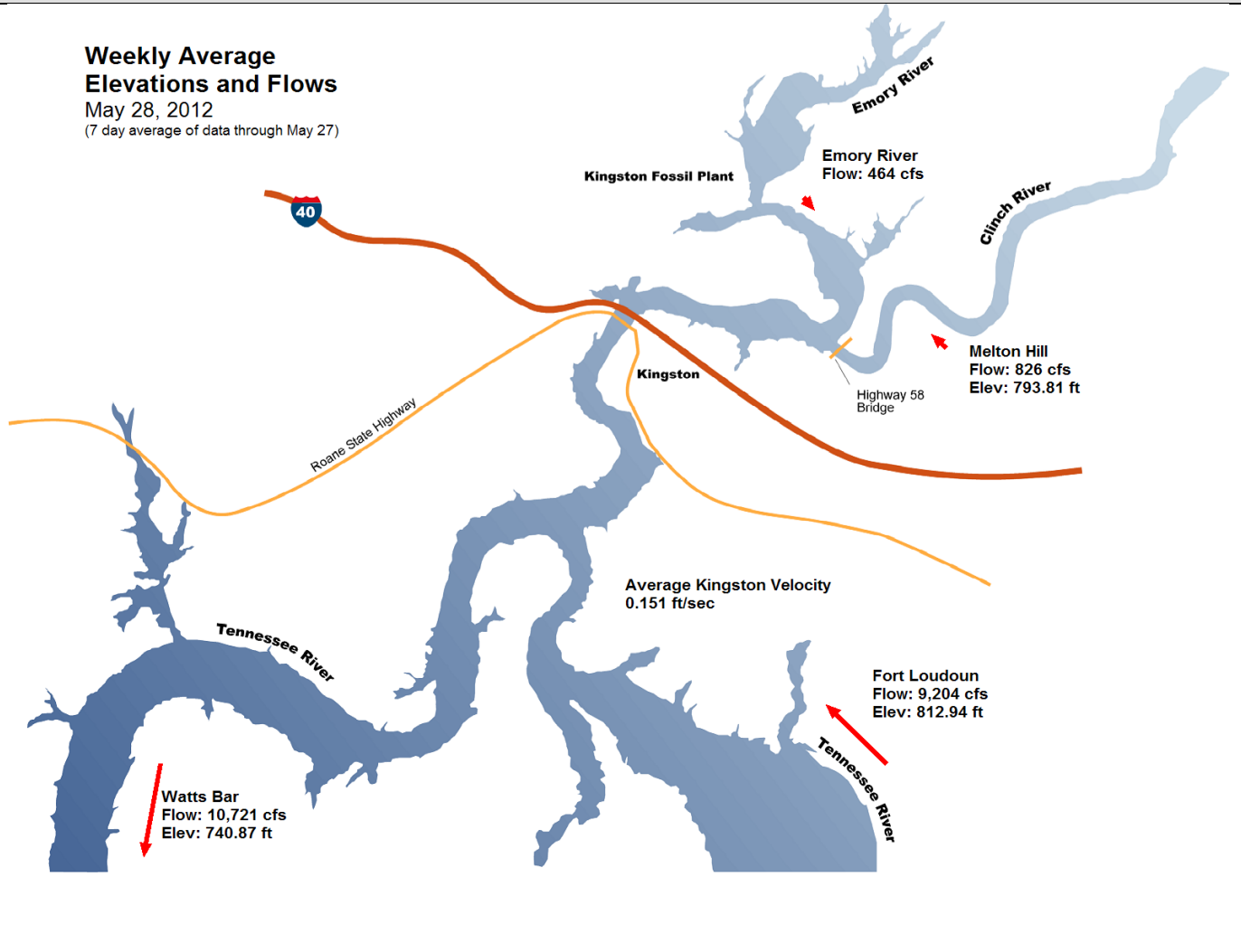
- Ash removal from the middle embayment was performed during the month and the excavation target was exceeded.
- Weekly middle embayment sampling status report was submitted. Final sampling and photo recording was performed as clay placement advanced.

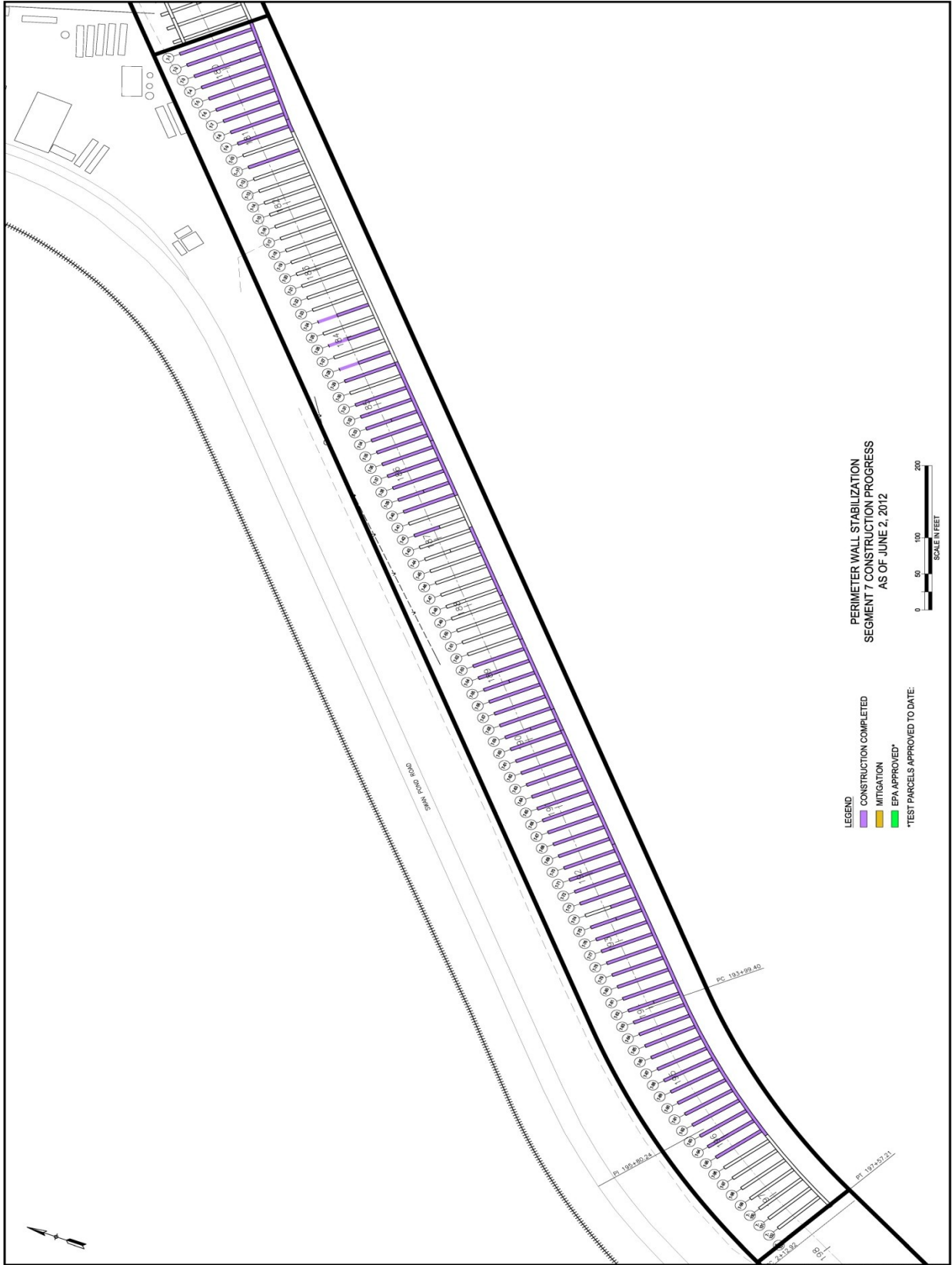
COMMUNICATIONS

- Added weekly area resident updates to Kingston Ash Recovery website.
- Sent weekly updates to the Community Advisory Group (CAG), public officials and members of the public who have signed up to receive weekly emails.
- Updated administrative record with work plans and relevant documents.
- Continued to respond to calls from residents.
- Updated site bulletin boards.
- The fourth and fifth of six public workshops to discuss the upcoming Engineering Evaluation/Cost Analysis (EE/CA) were held May 3, and 17, 2012, at Roane State Community College. The workshops were well attended.
- The information kiosk at the Swan Pond Road overlook for the general public to view the site and keep up with the progress was updated with more current information.

RIVER OPERATIONS

**Weekly Average
Elevations and Flows**
May 28, 2012
(7 day average of data through May 27)



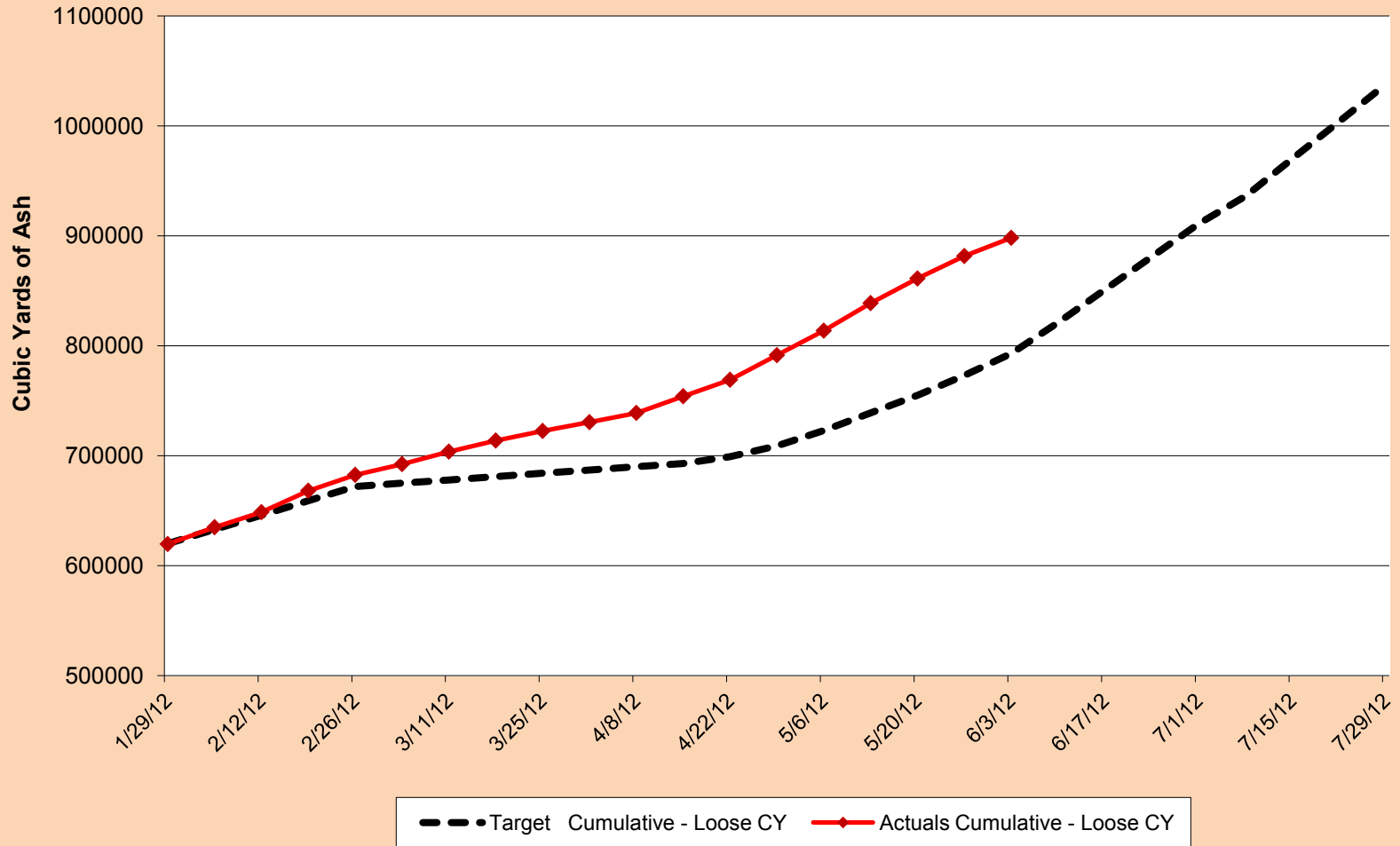


Kingston Ash Recovery Project		May 2012		Field Report
Safety		Monthly Total	FY – Cumulative Total	
Near Misses		0	0	
First Aid Incidents		2	13	
Recordable Incidents		0	1	
Recordable Lost Time Incidents		0	0	
Environmental	Matrix	Samples	Analyses	Results
Organization - TVA	Surface / Utility Water	5,655	48,048	260,568
Organization - TVA	Groundwater (spring & well)	248	2,570	15,101
Organization - TVA	Ash	756	1,333	9,973
Organization - TVA	Soil / Sediment	1,190	2,305	17,427
Organization - TVA	Biota	4,795	11,055	124,141

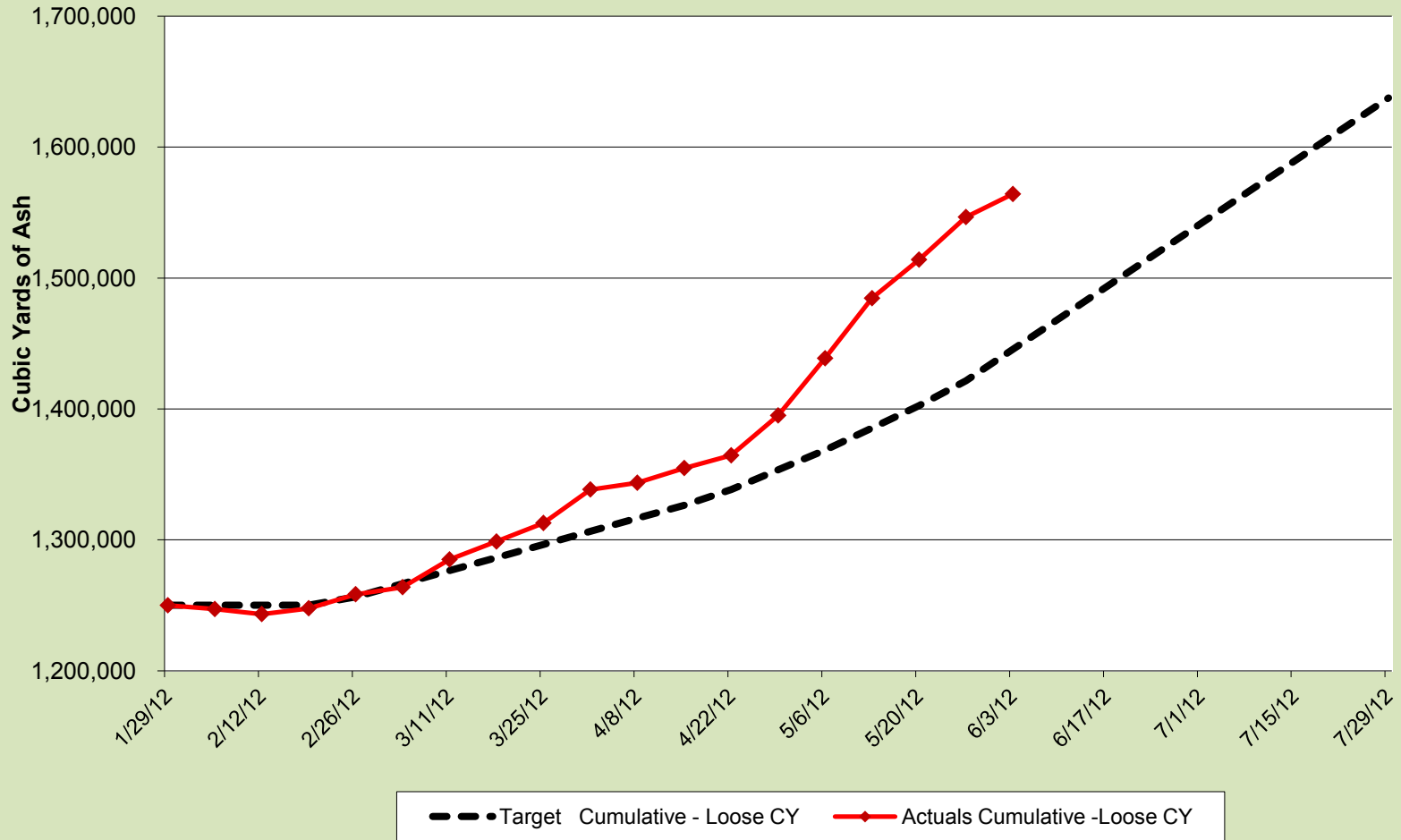
Work Description	Period Work Performed (CYIP)	PTD Work Performed (CYIP)
Ash Removal / Excavation		
Total Removed from Middle Embayment	72,222	646,093
Total Removed from North Embayment	-	1,010,322
Total Removed from Settling Basins / Dike 2	-	24,140
Excavated Total	72,222	1,680,556
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Placement		
Total Placed in Dredge Cell	116,890	989,421
Total Placed in Lateral Expansion	3,773	550,572
Total Placed in Ash Pond	4,790	283,425
Placed Total	125,453	1,828,418
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Storage Handling		
Total Removed from Lateral Expansion	16,347	25,331
Total Removed from Dredge Cell	65,195	399,531
Total Removed from Ballfield	5,537	416,220
Removed from Storage Total	87,079	841,083
Net Removed to(from) Ballfield Storage	(406)	(132,457)

For period ending May 31, 2012.

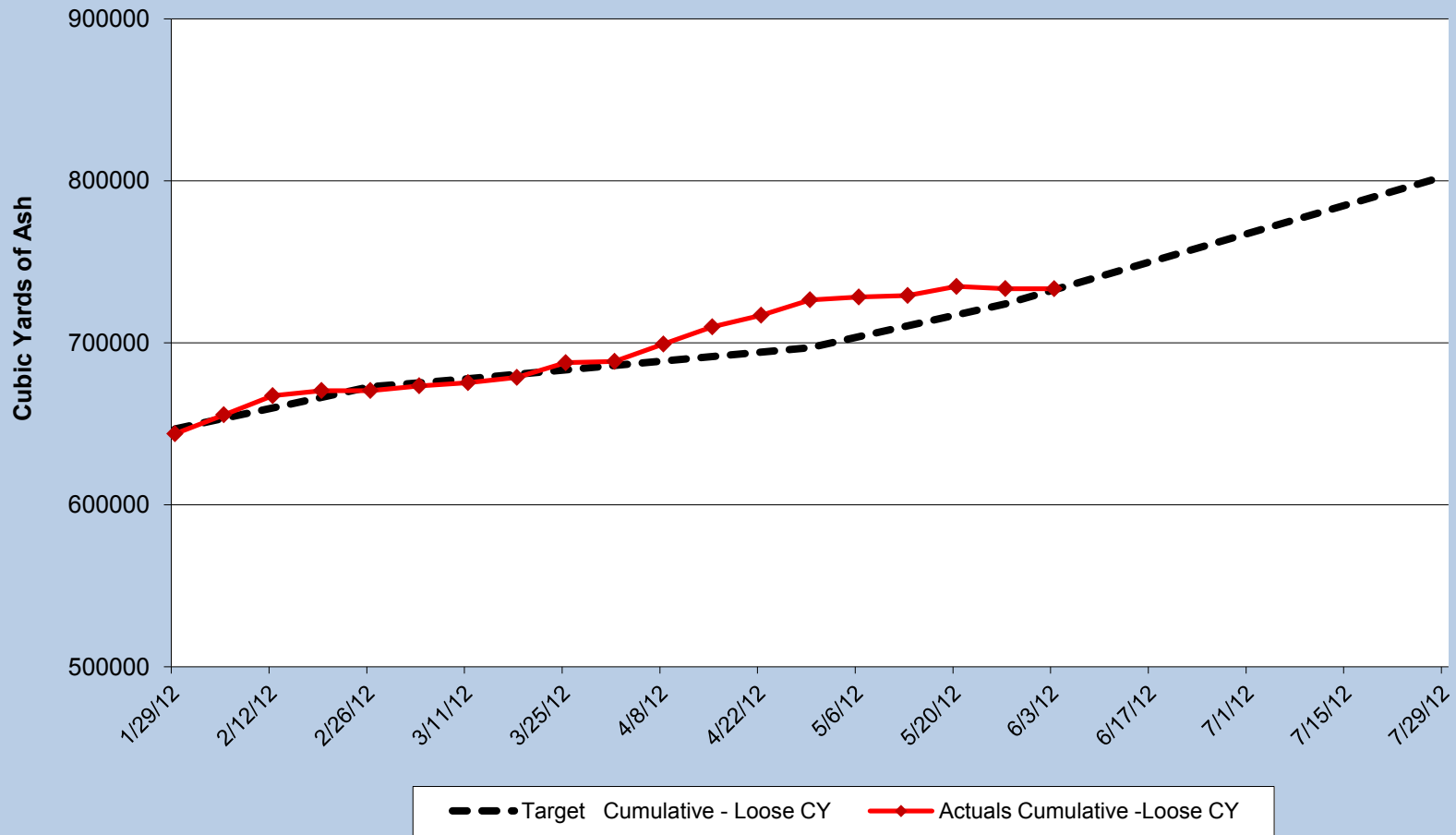
Ash Excavation from Middle Embayment Weekly as of June 3, 2012



Ash Stacking in Dredge Cell Weekly as of June 3, 2012



Ash Stacking in Lateral Expansion Weekly as of June 3, 2012



**Perimeter Wall Stabilization Segment 1A,1B,8 & 7
Weekly as of June 3, 2012**

