

KINGSTON ASH RECOVERY PROJECT MONTHLY REPORT March 2012

Aerial Image of Kingston Ash Slide (03/01/2012)



0 1,000 2,000 3,000 4,000
Feet

Date of imagery: 02/01/2012

Filename: ImageOnly_20120301_8x11

Tennessee Valley Authority
Geographic Information & Engineering

Prepared by:
Vickie Haynes

Issue (Date/Time)
04/17/2012 2:05:42 PM

KINGSTON ASH RECOVERY PROJECT

MONTHLY REPORT

March 2012

SAFETY
<ul style="list-style-type: none"> • Thirty-three (33) individuals attended site-specific health, safety and environment (HSE) orientations during March – 2,121 year to date. Zero (0) site-specific refresher courses were conducted during the month of March - 356 year to date. • Forty-four (44) safety observation reports (SORs) were submitted during March – 2,741 year to date; 2,740 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 128.5 mg/L, the main ash pond effluent TSS averaged 255.5 and the stilling pond effluent averaged 10.2 for March. • The sluice trench effluent and ash pond effluent polymer addition rates were adjusted based on TSS levels during March. • The high TSS for the ash pond effluent water is the result of scouring during lowering of the operating pond elevation, which was completed during the month. The last stop log was removed on March 12, 2012 and the polymer and acid addition station work was completed by month's end.
PLANT ASH STORAGE / INTERIM ASH STORAGE AREA (BALLFIELD)
<ul style="list-style-type: none"> • Trans Ash performed area maintenance and installed erosion control features. Geosyntec provided quality control and assurance during March. • The Kingston Fossil Plant (KIF) plant was offline for March. • Ballfield photos from the silo cameras were provided to Geosyntec for their construction record.
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 on Mondays, Thursdays, and Fridays. Booms were adjusted for operation of the new ash pond outlet. • Collection of cenospheres by hydro-vacuum truck was carried out during March.
ROUTINE MONITORING
<p>Surface Water Sampling</p> <ul style="list-style-type: none"> • There were rainfall events greater than 0.5-inches that triggered storm flow sampling in Swan Pond embayment for March 1, 15, 17, 24 and 31, 2012. • Continued routine weekly surface water sampling at the stilling pond and Swan Pond embayment. All monthly stilling pond results received to date have shown compliance with the outfall National Pollutant Discharge Elimination System (NPDES) permit. • Submitted revised Surface Water Monitoring Plan to regulators proposing a reduction in monitoring frequency from weekly to monthly. • 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, and stilling pond.

Air Sampling

- All air monitoring results for March from the PM2.5 and PM10 TVA air samplers were below the current ambient air monitoring plan (AAMP) action levels.

Data Management

- The bulk sediment and pore water technical memorandum is undergoing internal review and is expected to be ready regulatory submittal by April 13, 2012.

Biota Sampling

- Completed preparation and readiness review for Virginia Tech tree swallow and turtle sampling scheduled to begin in April 2012.

Non-Routine Sampling

- Continued sample collection and on-site moisture testing in support of dredge cell and ballfield operations.
- Completed disposal effort of approximately 30 pallets of surface water and groundwater samples returned from the analytical subcontractors.
- Collected waste profile samples from used oil drums.
- Continued sampling support and onsite PLM analysis for middle embayment ash removal.

DREDGE CELL

- Geo-Con continued construction of PWS wall in Segment 7 and began construction of the PWS wall in Segment 8.
- Geo-Con began production jet grouting for cold joint repairs in Segment 1.
- Griffin Dewatering extended the dewatering system across the Segment 8 platform and continued to operate the system during PWS construction.
- CP completed excavation of the toe road and began construction of the rock buttress outboard of the PWS wall in Segment 1a.
- Ash stacking continued in the north dredge cell as conditions became favorable.
- Stantec submitted the 100% IFC design for Closure of the North and Central Dredge Cell (RDP-0113-G).
- Stantec submitted the 90% design for the Lateral Expansion (Segment 2) Perimeter Containment (RDP-0114-B),
- Stantec submitted the Record Drawings & Construction Certification Report for the Ash Pond Outlet Structure (RDP-0114-G)
- Stantec held a value engineering workshop with TVA engineering in Lexington, Kentucky to evaluate cost-effective alternative for PWS wall analysis.

LATERAL EXPANSION

- Wet weather restrictions remain that limit stacking to a maximum of 1 foot per day.
- Stacking continued in the lateral expansion using a mixture of lime-treated and untreated ash.
- Wet ash and spoils were placed in the ash pond in preparation of the subgrade prior to stacking. Ash pond water levels were pumped down to facilitate material placement.

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

- Jacobs continued preparation of the EE/CA alternatives development.
- Jacobs completed the draft BHHRA and TVA completed their review.
- Arcadis completed the draft BERA and TVA began their review.

EMBAYMENT RESTORATION AND RECREATION AREA DEVELOPMENT

- Jacobs began design of the embayment restoration and Lakeshore area park development.

MIDDLE EMBAYMENT

- Bulk excavation work from west to east was postponed until completion of Segment 8 of PWS. Spoils removal from slurry wall construction was carried out in the west end of the middle embayment.
- Completion concurrence samples were taken as native sediments were exposed during construction of the PWS buttress toe road.

TVA PROPERTY DEMOLITION

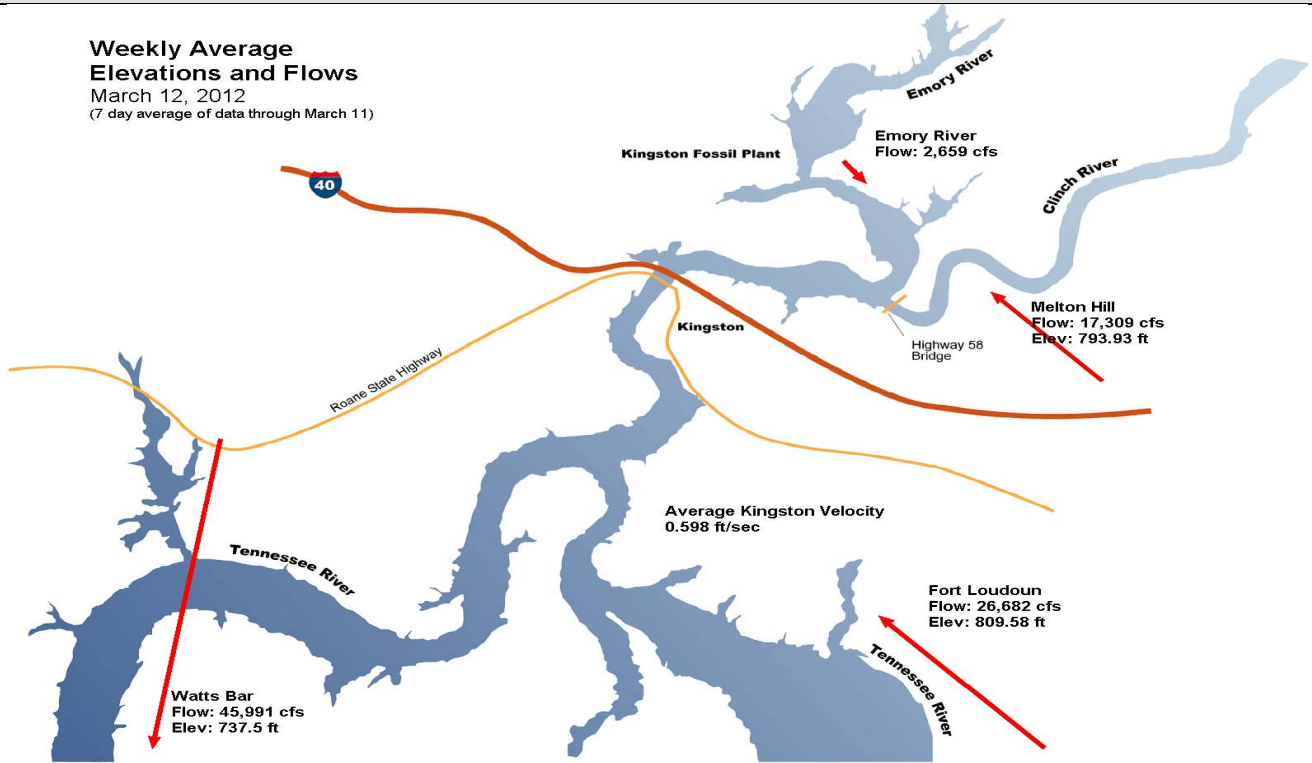
- Continued restoration activities Swan Pond Circle.

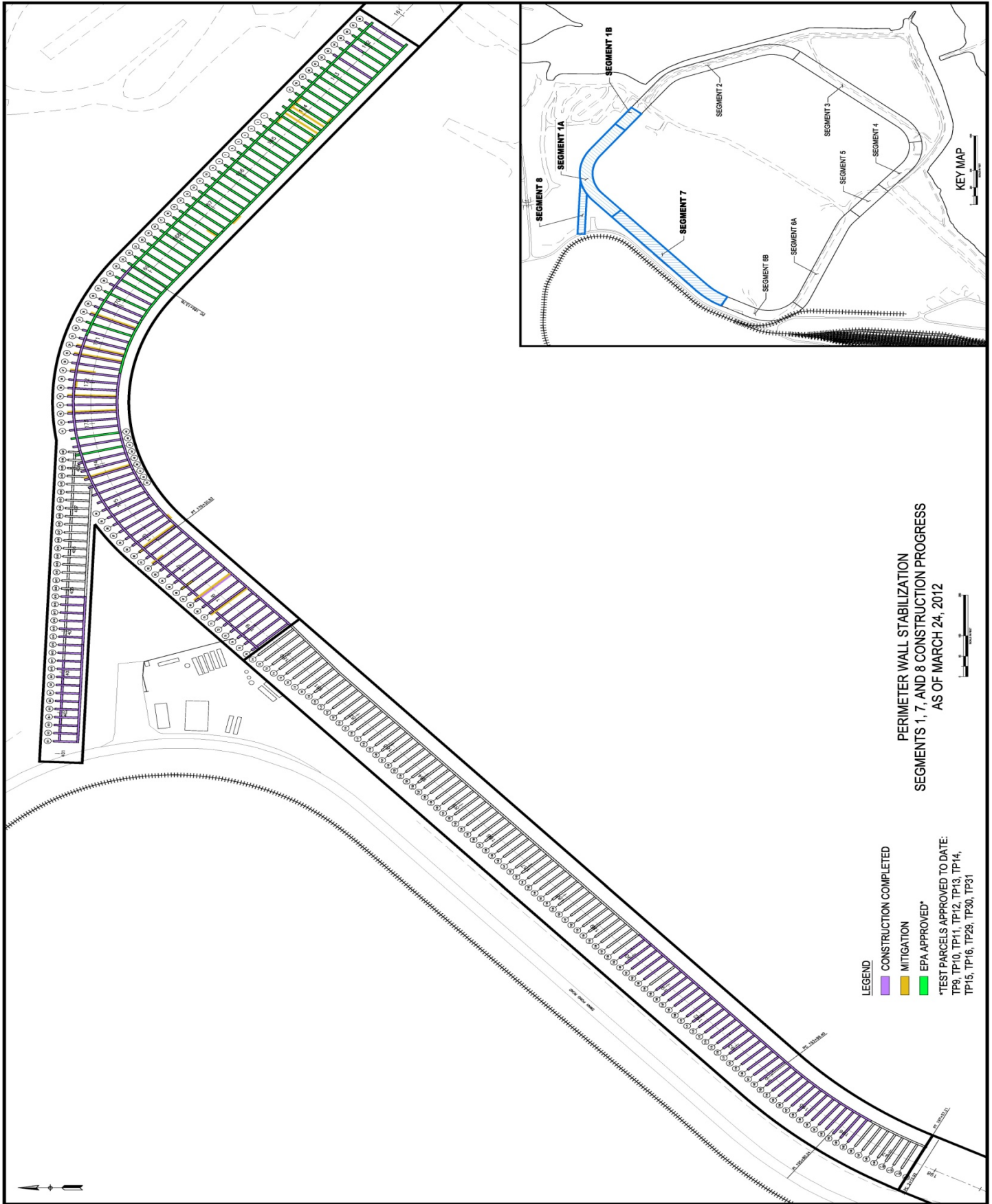
COMMUNICATIONS

- 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 and visits from residents.
- Updated site bulletin boards.
- Met with the Community Advisory Group March 8, 2012 to discuss the progress of the cleanup project.
- Developed 1/2 page ad for the Roane County News showing updated aerial photo with descriptions of the work being accomplished at the Kingston Ash Recovery Project.
- The first of six public workshops to discuss the upcoming Engineering Evaluation/Cost Analysis (EE/CA) was held March 15, 2012, at Roane State Community College. The workshop was well attended.

RIVER OPERATIONS

Weekly Average Elevations and Flows
March 12, 2012
(7 day average of data through March 11)



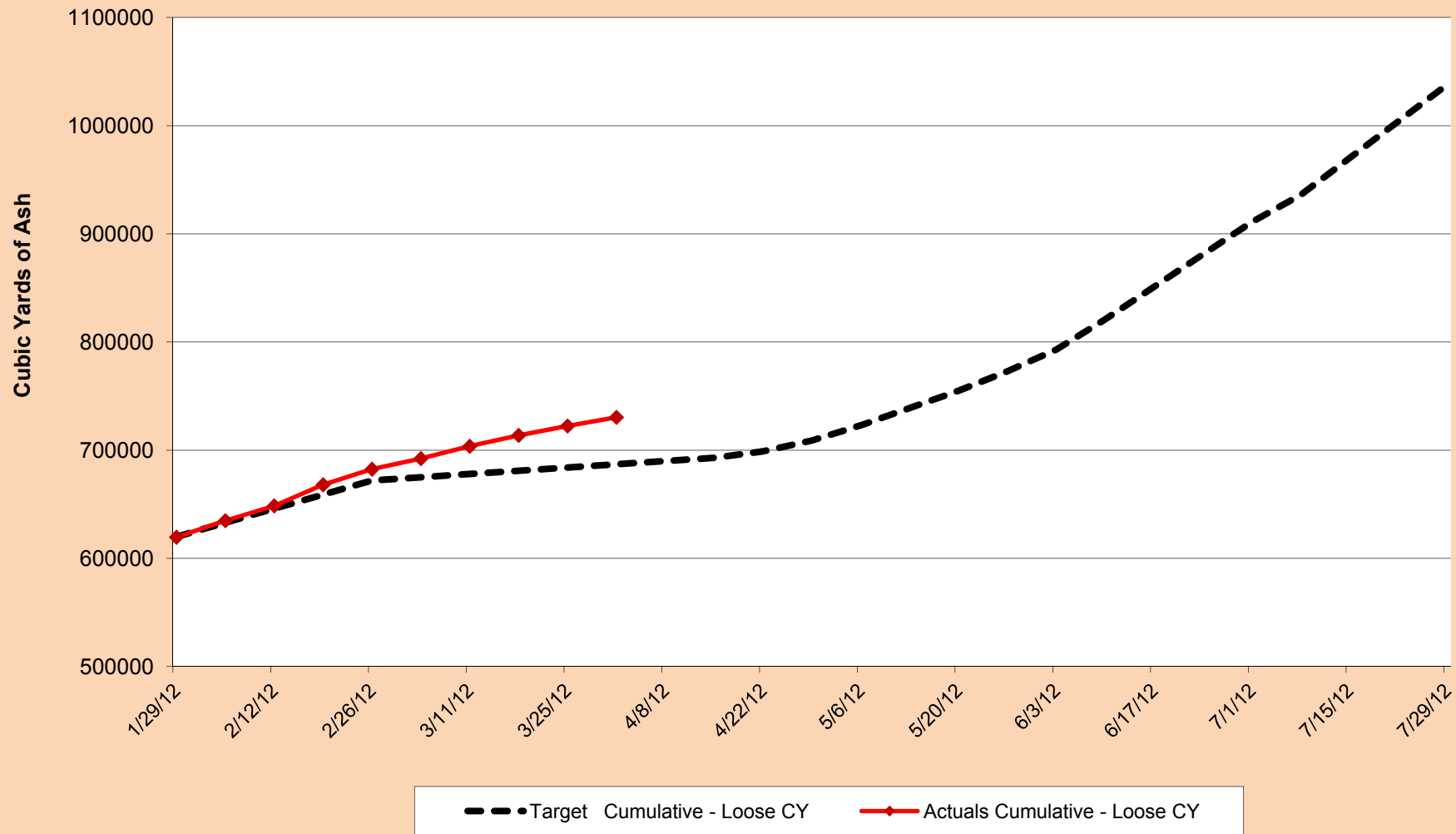


Kingston Ash Recovery Project		March 2012		Field Report
Safety		Monthly Total	FY – Cumulative Total	
Near Misses		0	0	
First Aid Incidents		1	8	
Recordable Incidents		0	1	
Recordable Lost Time Incidents		0	0	
Environmental	Matrix	Samples	Analyses	Results
Organization - TVA	Surface / Utility Water	5,589	47,662	258,091
Organization - TVA	Groundwater (spring & well)	244	2,518	14,796
Organization - TVA	Ash	756	1,333	9,973
Organization - TVA	Soil / Sediment	1,168	2,261	16,902
Organization - TVA	Biota	4,666	10,777	123,538

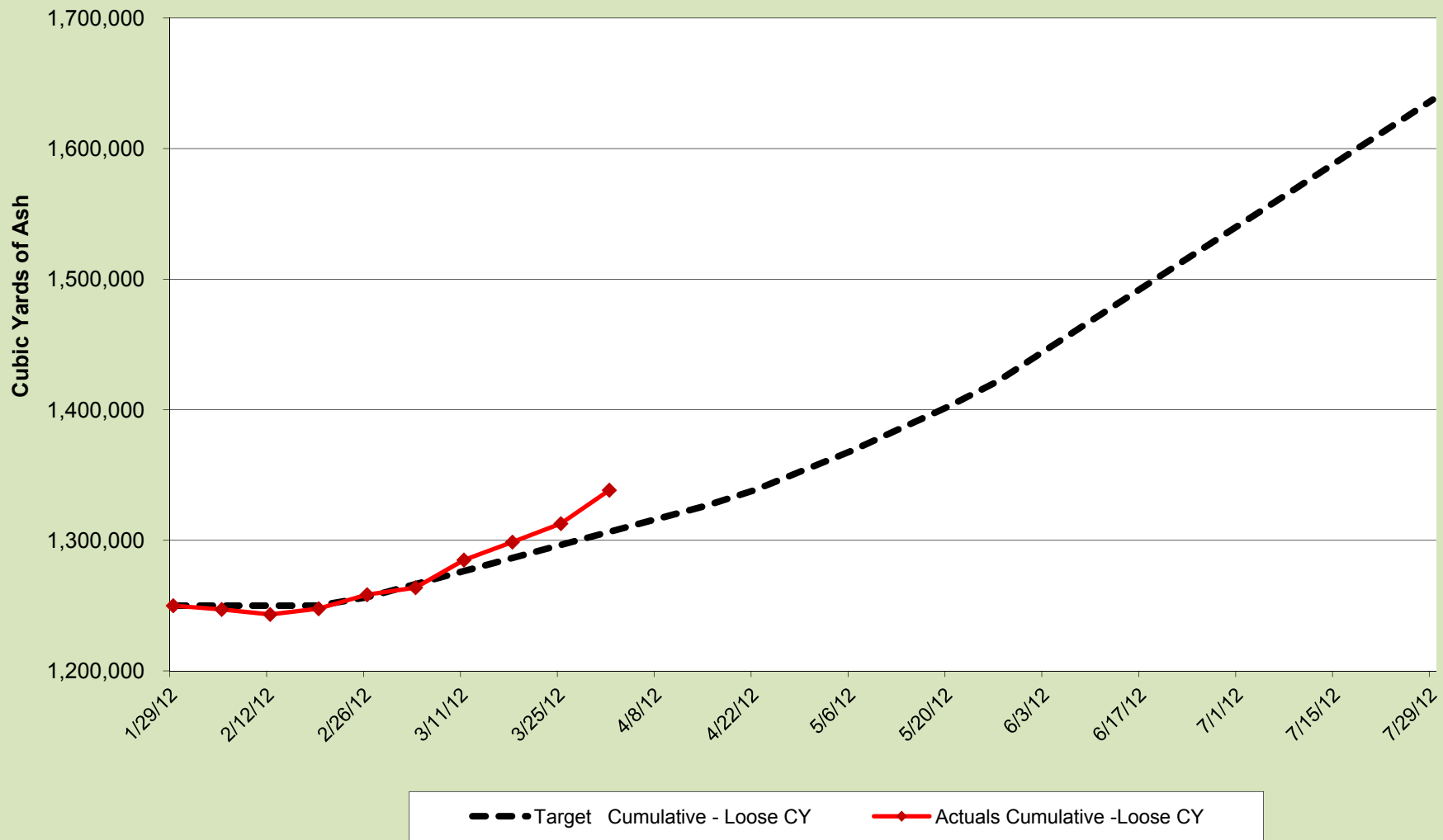
Work Description	Period Work Performed (CYIP)	PTD Work Performed (CYIP)
Ash Removal / Excavation		
Total Removed from Middle Embayment	30,291	528,731
Total Removed from North Embayment	-	1,010,322
Total Removed from Settling Basins / Dike 2	1,860	21,429
Excavated Total	32,152	1,560,482
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Placement		
Total Placed in Dredge Cell	42,809	820,533
Total Placed in Lateral Expansion	8,267	524,585
Total Placed in Ash Pond	46,836	246,585
Placed Total	97,912	1,591,665
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Storage Handling		
Total Removed from Lateral Expansion	2,184	7,362
Total Removed from Dredge Cell	37,741	264,753
Total Removed from Ballfield	35,563	394,757
Removed from Storage Total	75,489	666,873
Net Removed to(from) Ballfield Storage	(16,986)	(127,651)

For period ending March 31, 2012.

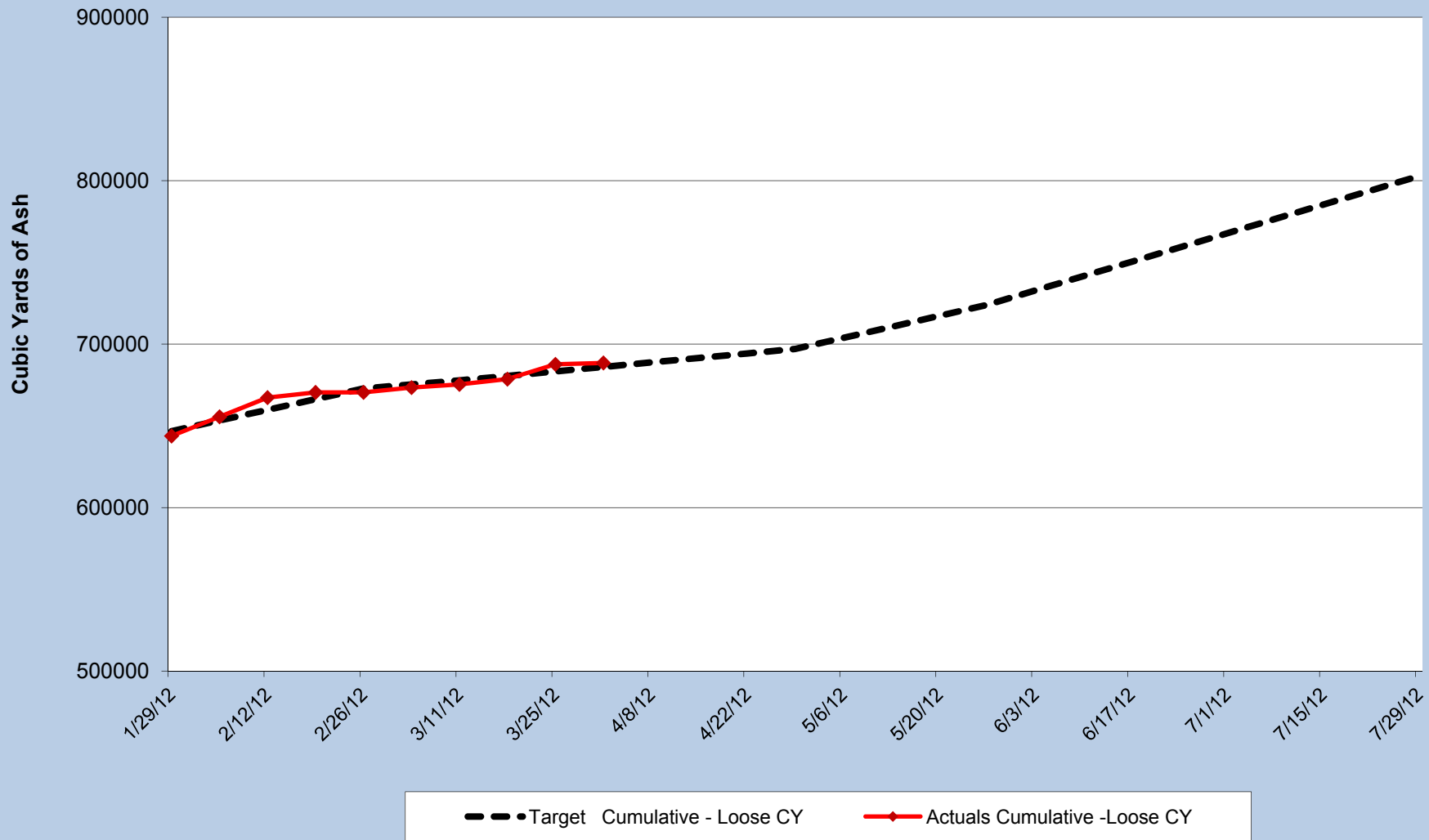
Ash Excavation from Middle Embayment Weekly as of March 31, 2012



Ash Stacking in Dredge Cell Weekly as of March 31, 2012



Ash Stacking in Lateral Expansion Weekly as of March 31, 2012



**Perimeter Wall Stabilization Segment 1A, 1B, 8 & 7
Weekly as of March 31, 2012**

