The Upper Hudson River Dredging Project: 2011 Season



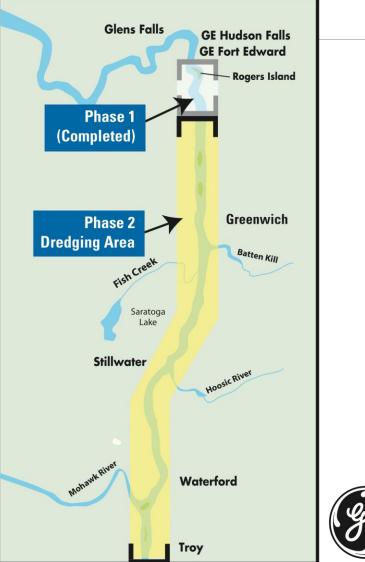
CAG Meeting, Saratoga Springs February 17, 2011



Hudson River Dredging Project: Phase 2

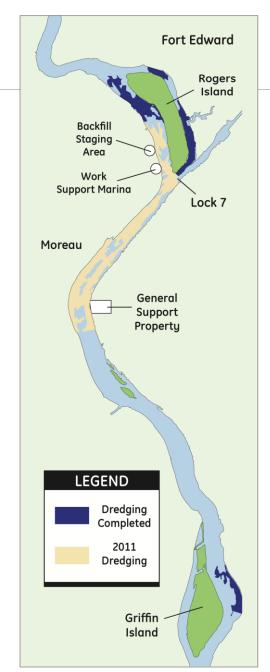
- > 5 7 years
- > Approx. 2.4 million cubic yards
- > 40-mile stretch of river
- > 350,000 500,000 cubic yards each year

Dredging scheduled to begin in May



2011 Dredging

- > Target: 350,000 cubic yards
- > May-November
- > 24/6 work schedule
- > Dredging south of Rt. 197 bridge to Rt. 4 general support property
 - Generally north to south
 - No dredging in eastern channel of Rogers Island
- > Dredge process and disposal approach similar to 2009





Changes from Phase 1 to Improve Production and Efficiency

- > Reduce dredge passes; faster close-out of dredge areas
- > Improvements at processing facility to increase productivity
- > Stop dredging when rock or clay is encountered
- > Improved understanding of depth of PCB contamination
- > Increase PCB monitoring near dredges to better understand PCB redeposition
- > Capping limits



Contracting

- > Dredge operations, backfilling, capping
- > Operation of processing facilities
- > Operation of rail yard
- > Rail transportation and railcars
- > Disposal facility(ies) to accept waste
- > Shoreline survey
- > Monitoring
- > Improvements to processing facility
- > Habitat reconstruction



Processing Facility Improvements

> For 2011: Goal 3,500 cy/day

- Modify trommel equipment
- Replace fenders
 at wharf
- Upgrade pumps
- New sediment unloader to unload barges

> For 2012: Goal 5,000 cy/day





2011 Work Plans and Design

- > In March, GE to submit final design for 2011 dredge season
 - Describes work that will be done
 - Includes results of fall sediment sampling data collection
- > Implementation work plans under development
 - Community Health and Safety Plan
 - Monitoring Quality Assurance Project Plan
 - Transportation and Disposal Plan
 - Performance Standard Compliance Plan



Mobilization to Begin in April

- > Equipment staging at Route 4 general support property (east shore) and work wharf at processing facility
- > Work support marina (west shore) to handle river workers
- > Backfill staging/loading area in Moreau

Route 4 general support property







Work support marina

Pre-dredging Activities

- > Tree removal and trimming
- > Debris removal
- > Shoreline surveys
- > Docks installed at support marina
- > Vessels placed in river
- > Vessels transported from Troy after locks open
- > Test and calibrate equipment on land and in river





Dredging Equipment

- > 4-6 dredges operating
- > Same type of equipment used in 2009
- > Excavators mounted on flexifloats
- > Dredges anchored in place with spuds



> Equipment guided by global positioning systems (GPS)



Sediment Loaded to Barges

- > Hopper barges
 - 195-feet-long, 35-feet-wide, 12-feet-deep hoppers
 - 2- to 8-foot draft
- > Shallow draft barges of varying sizes
- > Moored alongside dredge to receive sediments





Tugboats

> Two sizes

- > Wheel house can be raised so front of barge is visible to captain and lowered to clear bridges
- > Operated by qualified, experienced captains



> Used to push sediment barges into Lock 7 and to processing facility wharf



2011 Habitat Planting

- > Inspections concluded replanting necessary in some Phase 1 dredge areas
- > Three weeks of work likely
- > Placed by divers and waders using dive platform with support vessels





Community Outreach

- > Door-to-door visits
- > Community meeting in April
- > GE project web site: www.hudsondredging.com
- > Newsletters and web videos
- > NYS Canal Corp. Notices to Mariners
- > Informational telephone lines: 518-792-4087 and 1-888-596-3655
- > Hudsonworks.net
 - More than 200 local businesses have worked on the project to date

