

# Major Areas Program Management Field Activities Preliminary Design Schedule Budget Look ahead

### **Program Management**



- Health and Safety
  - No reportable incidents project to date.
- Weekly calls with the USACE (and periodic meetings) to coordinate and share information
  - Disciplines
  - Permitting
  - Schedules
  - 100 year solutions coordinated with USACE 500 year
  - Design submittal process
- Work Orders
  - Mod time on two existing
  - Begin developing scope and cost for WO #4

2

# Field activities (developing data for both evaluation and design)



	Wood River	MESD	PdP/FL
SPT (LF)	2320	4565	2925
CPT (LF)	9280	7650	6300
SONIC (LF)	1500	1875	N/A
% Complete (# of borings)	90% (144)	92% (254) (berms)	100% (155)
Geophysical	Complete	Complete	Complete
ROE	√	One property	<b>√</b>

### **Preliminary Design and Evaluation Activities**



	WR	MESD	PdP/FL
H&H (freeboard)	V	V	V
Geotechnical (including field)			
Under seepage Through seepage Stability	V •	√ ■	√ ■ ■
Civil			
Cultural Resources	•	•	•
Wetlands	•	•	•
Environmental – Haz Waste			<b>V</b>
Relief Wells	•	•	•
Evaluation Report	V	✓	V
		•	Started (0 - 20%)
		•	In process (20 - 80%)
		√	Nearly complete (80%+)

# Preliminary Design and Evaluation Activities – All Levees



- Water Resources H&H analysis is complete for all systems. Flank levee freeboard, develop break-point between where MS River backwater controls
- Geotechnical Engineering Under-seepage analysis nearly complete.
   Through seepage and stability analysis underway.
- Civil Engineering Locations for many of the specific remedial measures have been delivered to the civil team. Continue developing plans. Boundary Surveys substantially complete in WR.
- System-wide GIS plans that show interior flooding, potential cultural sites, wetland areas, boring and relief well locations
- Developed a combined list of 'deficiencies' that need to be addressed as part of the civil design or by O&M.
- Cultural strategy developed. Coordinated with USACE
- Wetlands impacts better understood. Initial permit discussions and mitigation options explored.

### Schedule



- Working to deliver 30% design in March for all levees.
- Select activities originally scheduled for completion by 30% will be extended beyond current WO date of March 1.





7

### **Budget**



- Fourth invoice prepared for Les
- Budget status
  - Program Management
     Preliminary Design
     Preliminary Construction
     \$197,000 spent, 13.4% of budget
     \$859,000 spent, 26.6% of budget
     \$1,708,000 spent, 30.0% of budget
- Wood River No issues have been identified that would cause an overrun.
- MESD Currently expected to be complete within or under budget. However, the cost for treating potentially contaminated water or disposal of environmentally contaminated soils is unknown.
- PdP/FL Currently expected to be complete within or under budget.

### **Issues & Concerns**



- Potential schedule impacts in MESD
- Cultural resources strategy, meet with SHPO
- Wetlands permits
- Coordination with the Corps maximize efforts
- Chain of Rocks and Mel Price schedule

9





### Wood River...

- 5000 LF of deep C/O wall replace with berms and RW
- Indian Creek in LWR RW to berms (engineering driven)
- Wanda Rd berms to C/O wall? RR embankment.





### MESD...

- •DC/W by tank farm ConocoPhillips

   replace with RW and berms
- •Elbow complex berms to walls or RW and berms or toe drain
- •Golf course area, Blue Water ditch DC/W to RW and berms or possibly eliminate (based on Corps PdP Creek borings)

11

### Look Ahead - Wood River



- Continue to coordinate with COE on work (improvements) that has been accomplished.
- Complete through seepage and stability analysis.
- Identify locations of cut-off wall.
- Identify additional exploration that is needed for Phase II work.
- Continue to refine solutions seepage berm locations, relief wells, etc.
- Continue relief well evaluation.
- Geotechnical data report for cut off walls.
- Continue development of civil sheets with improvements.
- Preliminary re-evaluation of cost estimate

### Look Ahead – MESD



- Complete Phase I borings one property.
- Identify Phase II borings.
- Civil Engineering: Continue to develop drawings/plans with improvements and incorporate utility knowledge.
- Refine seepage berm locations and evaluate hybrid solutions.
- Continue analysis of cut off walls.
- Complete pipe videos by the end of February.
- Structural review and direction.
- Continue relief well evaluation.
- Geotechnical data report for cut off walls.
- Preliminary re-evaluation of cost estimate.

12

### Look Ahead - PdP/FL



- Collaborate with USACE to stay abreast of potential overlapping/conflicting solutions footprints.
- Water Resources: No action planned.
- Civil Engineering: Continue to develop drawings/plans with improvements.
- Environmental Engineering: No action planned.
- Cultural Resources: Meeting with SHPO.
- Geotechnical Engineering: Continue to evaluate and refine solutions working closely with civil.
- Continue relief well evaluation.
- Preliminary re-evaluation of cost estimate.
- Identify Phase II exploration.



# QUESTIONS?

