Wetland Area at Dunbarton Bay
Supports the Steel Creek Integrator Operable Unit

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Presentation to the Facilities Disposition & Site Remediation Committee
October 21, 2014
Purpose

• To provide a status update on the Wetland Area at Dunbarton Bay (WADB) in support of the Steel Creek Integrator Operable Unit to Facilities Disposition and Site Remediation (FD&SR) Committee.

• This subject is on the FD&SR Committee’s 2014 Work Plan
<table>
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<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>IOU</td>
<td>Integrator Operable Unit</td>
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<tr>
<td>m³</td>
<td>Cubic meters</td>
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<tr>
<td>yd³</td>
<td>Cubic yards</td>
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<td>RA</td>
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<td>ROD</td>
<td>Record of Decision</td>
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<td>WADB</td>
<td>Wetland Area at Dunbarton Bay</td>
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Location of Wetland Area at Dunbarton Bay (WADB)
Background

- Historical Overflow of ash from the P-Area Ash Basin
- Dominant feature of the WADB is the Carolina Bay
- Newly discovered ash overflow area was assigned as a subunit of Steel Creek Integrator Operable Unit (IOU)
- Ash plume covers approximately 38 acres, 1-3 feet in depth
Remedial Action Objective: Prevent IOU Onsite Worker from exposure to contaminants in surface ash/soil at concentrations exceeding $1.0 \times 10^{-6}$ risk

- “IOU Onsite Worker” is an environmental sampler/researcher
- Exposure assumptions:

Note: DOE has no plans for, or anticipation of, industrial reuse of P-Area

Selected Remedy

- Excavate 16,7820 m$^3$ (cubic meters) (22,000 yd$^3$) of ash and contaminated soil media from the P-Area Ash Basin Boundary to the end of the 30-m (100-ft) buffer around Dunbarton Bay. (13 acres to be excavated)

- Waste will be transported off-site to an approved containment facility

- Land Use Controls will be implemented around the Wetland Area at Dunbarton Bay
  - Signs
  - Site Use permit requirements
  - Work Control (training)
Selected Remedy for WADB

Proposed excavation area
(22,000 yd³ across 13 acres)

28 acres (68,220 yd³) to remain in place

United States Department of Energy

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Current Condition of WADB

Cypress/Tupelo Section of WADB – July 2012
Current Condition of WADB

- Savannah River Ecology Laboratory studied the WADB
- Amphibians can be sensitive to elevated metals in coal combustion ash
- Reference site nearby (Bay 100) was sampled primarily for ecological comparisons
- The number of species living in WADB was comparable to the reference bay, indicating that the ash is not adversely impacting biodiversity of the reptiles and amphibians
- No ecological risk is driving the cleanup
• Statement of Basis/Proposed Plan was submitted in May 2013

• Issuance of Record of Decision (ROD) for WADB - August 2015

• Remedial Action (RA) Start - November 2016

• ROD Issuance (August 2015) and RA Start (November 2016) for WADB have been delayed to allow DOE to commit resources to more environmentally significant D-Area ash project
QUESTIONS?