



200-SW-2 Burial Grounds

2011 Lifecycle Report Alternative Analysis

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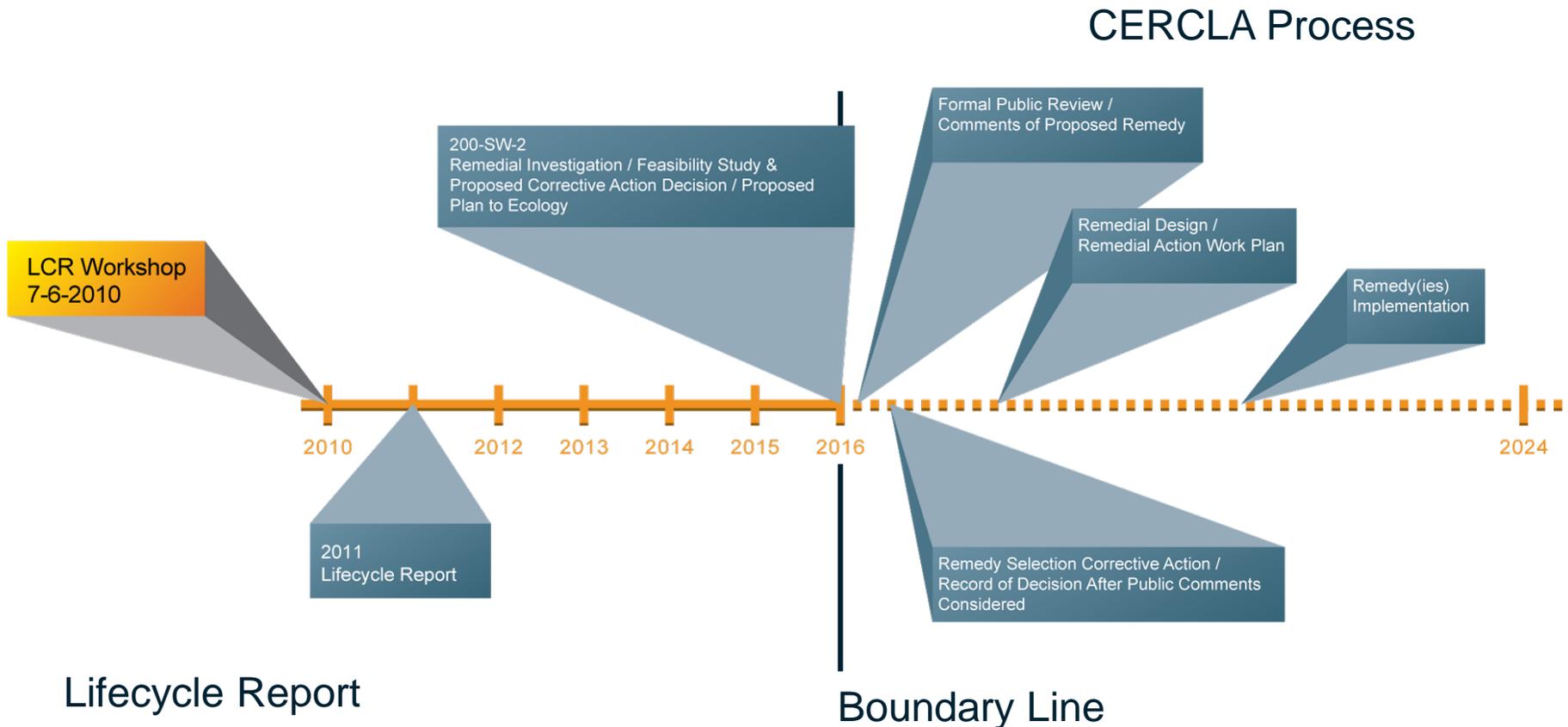
2011 Lifecycle Report Alternative Analysis 200-SW-2 Burial Grounds

Purpose:
Review background
and assumptions
used to create SW-2
alternative analysis
upper.



2011 Lifecycle Report Alternative Analysis 200-SW-2 Burial Grounds

Timeline for 200-SW-2 Lifecycle Report Alternative Analysis relative to the CERCLA Process



Lifecycle Report

Boundary Line



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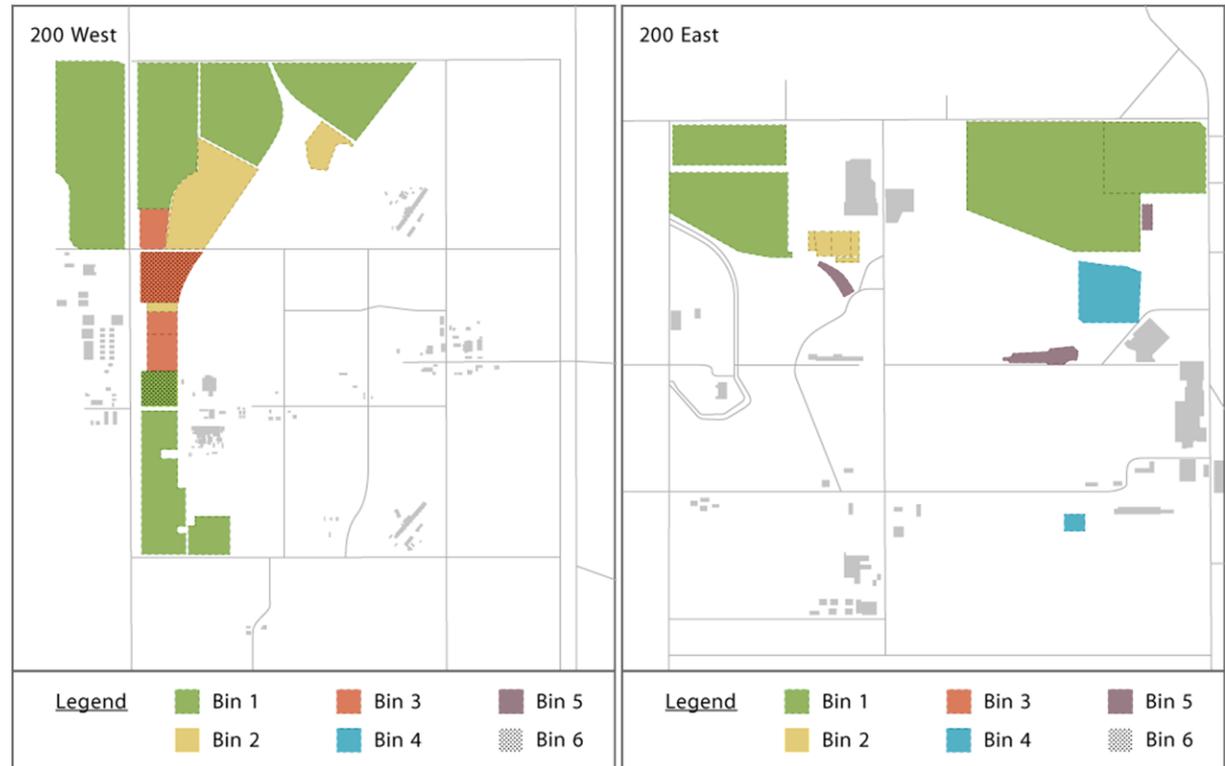
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200-SW-2 Burial Grounds

200-SW-2 Burial Ground Bins 1-6

Introduction:

- 25 solid waste landfills (or burial grounds) are located within the 200-SW-2 Operable Unit on the Central Plateau.
- The 200-SW-2 burial grounds cover a cumulative area of nearly 680 acres.
- Bin categories and graphics adapted after DOE/RL-2004-60 Rev. 0



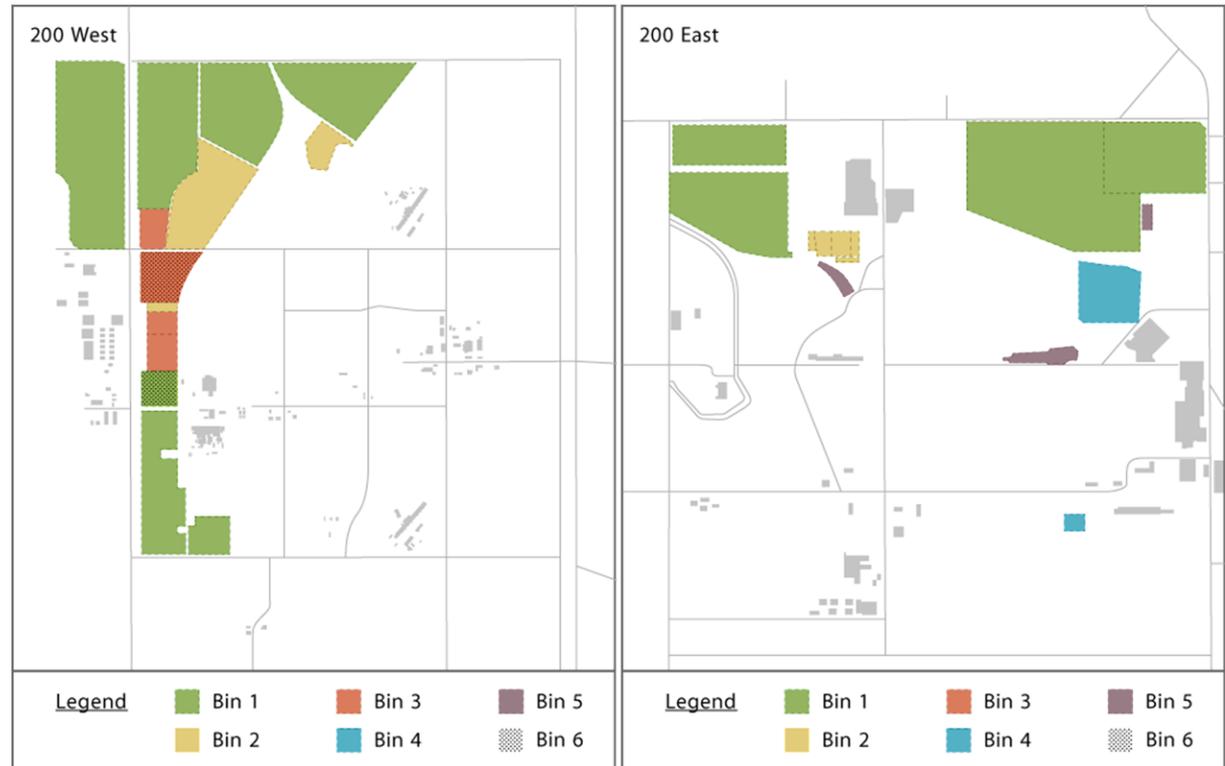
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200-SW-2 Burial Grounds

The 200-SW-2 burial grounds were sorted into six main categories, or bins, based on similar waste characteristics.

- Bin 1-TSD Unit Landfills
- Bin 2-Industrial Landfills
- Bin 3-Dry Waste Alpha Landfills
- Bin 4-Dry Waste Landfills
- Bin 5-Construction Landfills
- Bin 6-Alpha Caissons (these are discrete items contained within other locations, marked with grey hatching)

200-SW-2 Burial Ground Bins 1-6



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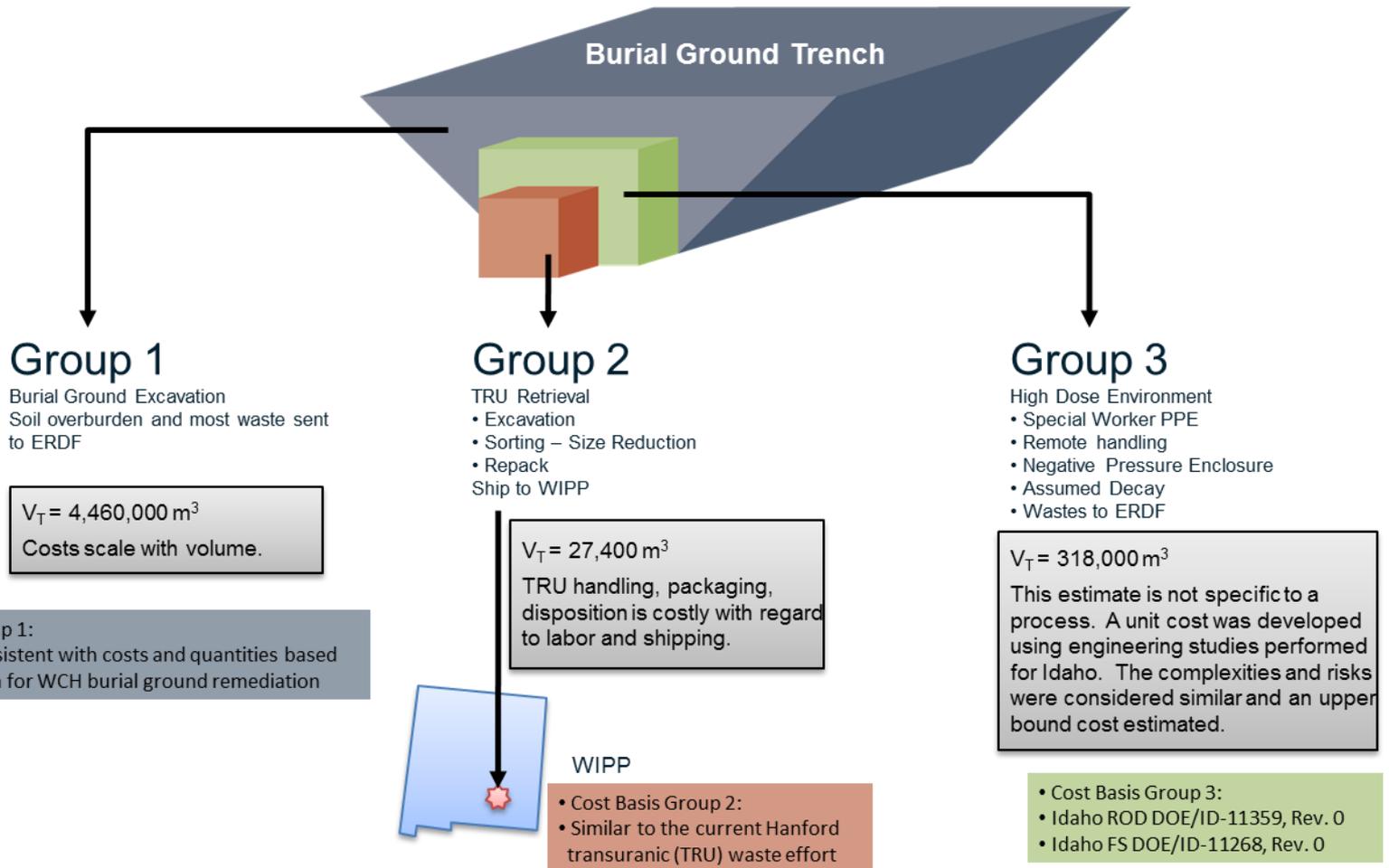
200-SW-2 Estimate Development Method

- Divide the burial ground contents into waste groups for which there is historic basis for waste handling/processing
- Estimate those waste groups using historic costs or current estimates
- Identify waste group that has no easily identifiable handling or processing methods and develop an upper-bound estimate
- No specific process designation
- Six Bins were simplified to 3 groups.



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200-SW-2 Burial Grounds



• Cost Basis Group 1:
 • Treatment consistent with costs and quantities based on historic data for WCH burial ground remediation

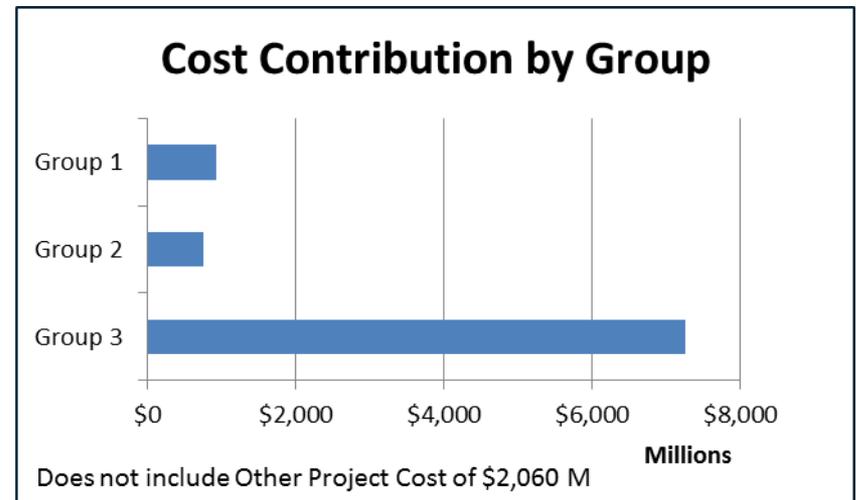
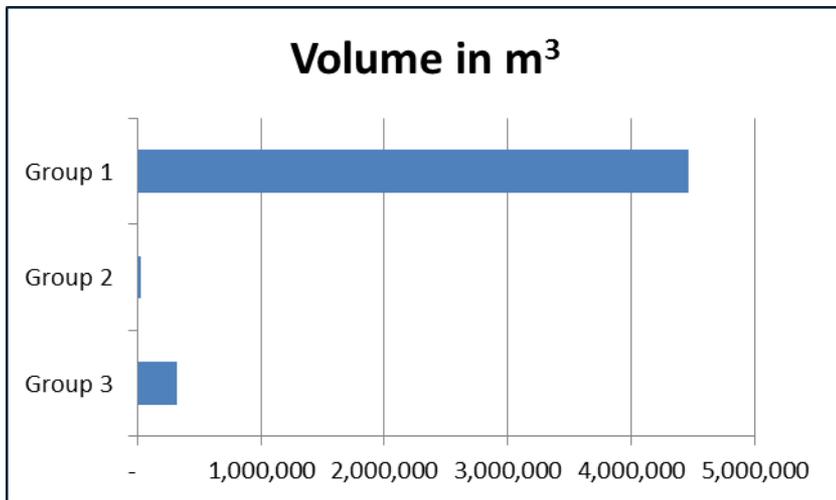
• Cost Basis Group 2:
 • Similar to the current Hanford transuranic (TRU) waste effort

• Cost Basis Group 3:
 • Idaho ROD DOE/ID-11359, Rev. 0
 • Idaho FS DOE/ID-11268, Rev. 0



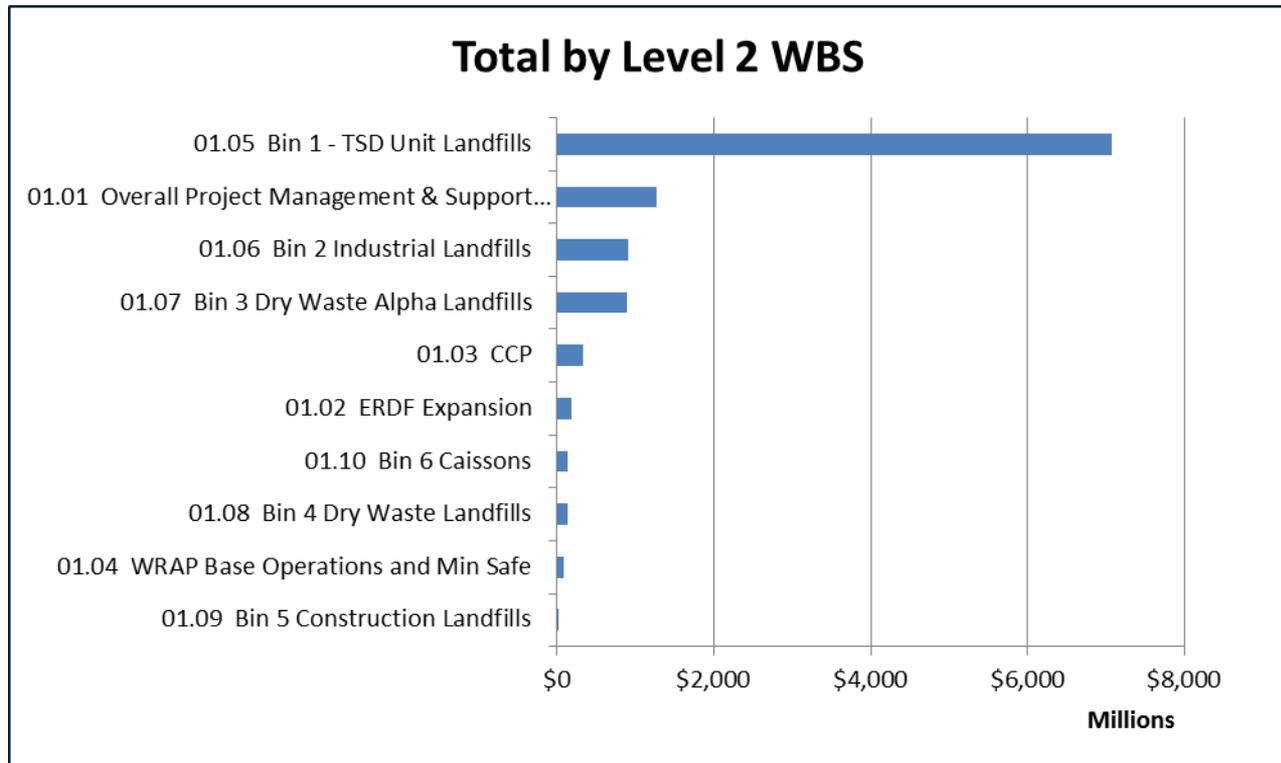
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200-SW-2 Waste Volume vs. Cost by Group



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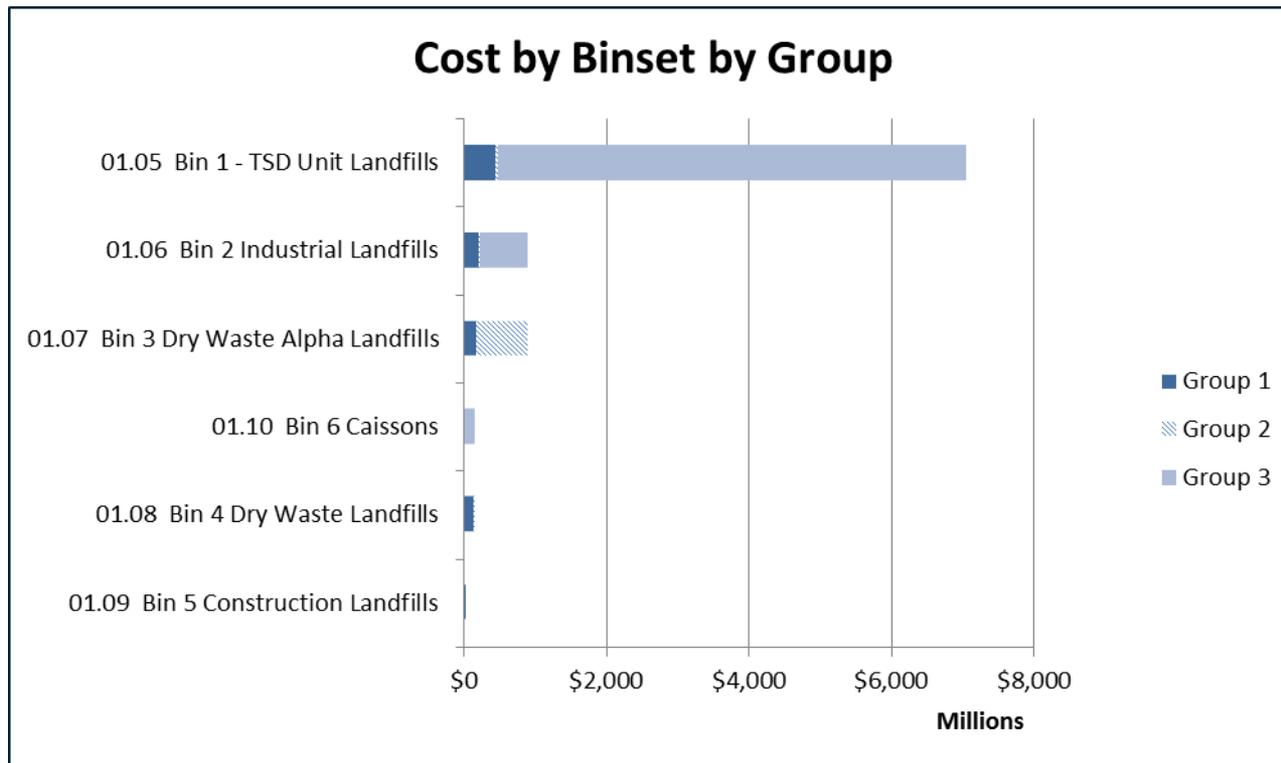
200-SW-2 Burial Grounds



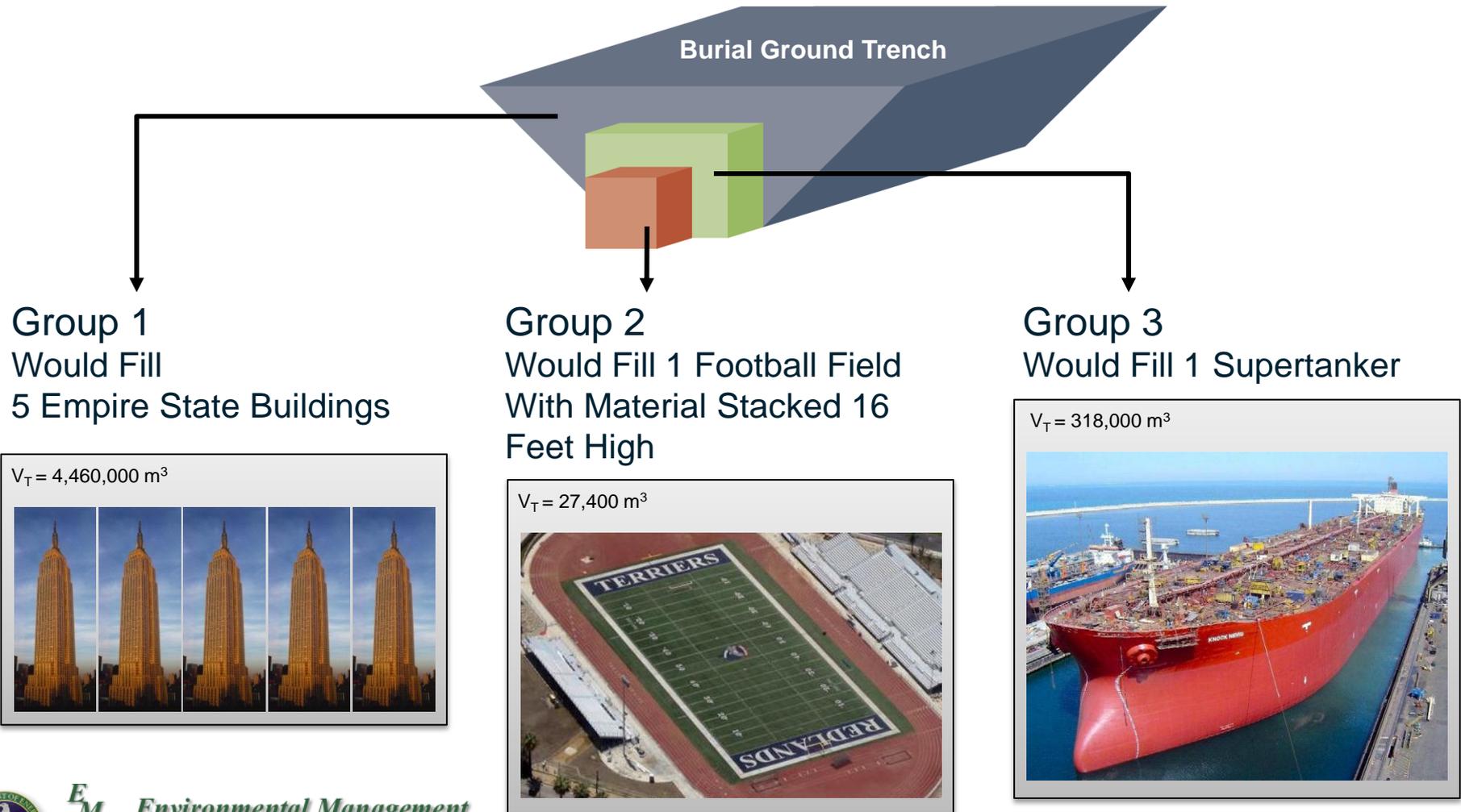
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200-SW-2 Burial Grounds

200-SW-2 Project Cost as a Function of Group

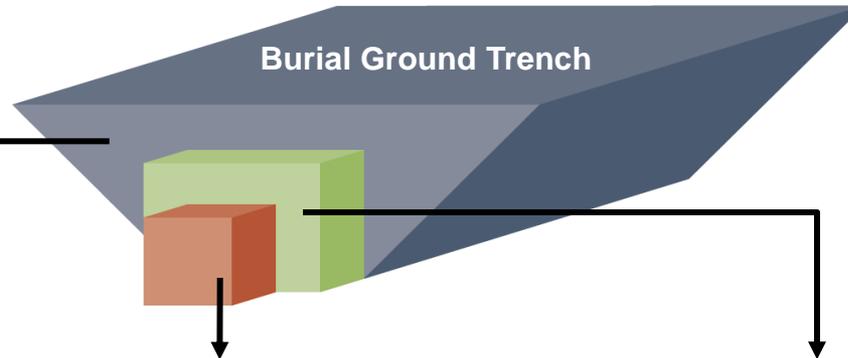


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Comparative Volumes



Group 1
Would Fill
5 ERDF Super-Cells

Group 2
Would Fill 2 Waste Isolation
Pilot Plant Panels

Group 3
Would Occupy
~2 Canyon Buildings

$V_T = 4,460,000 \text{ m}^3$



$V_T = 27,400 \text{ m}^3$



$V_T = 318,000 \text{ m}^3$



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2011 Lifecycle Report Alternative Analysis

200-SW-2 Operable Unit

Project Magnitude

Lifecycle Alternative Estimate:
10 years; \$11.1 to 16.6 Billion



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