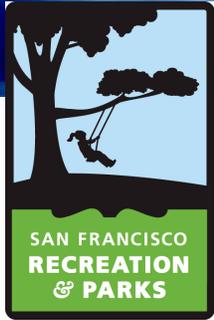




900 Innes Avenue Parcels 3A & 3B

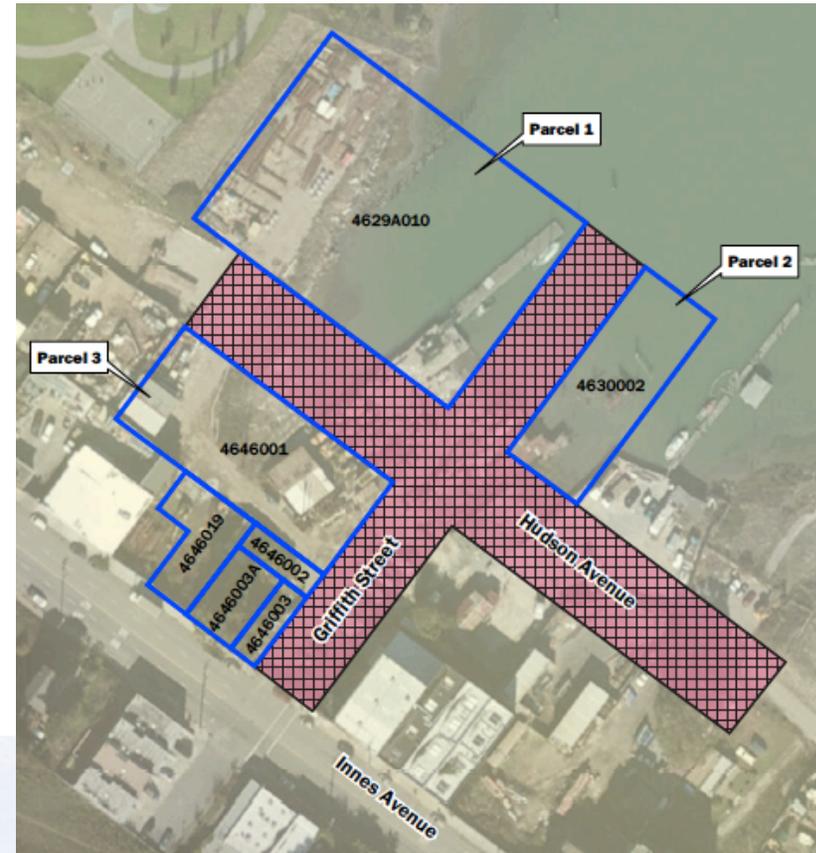
EPA Brownfields Clean-up Grant Presentation

December 3, 2015



Grants Overview

- Applied for 3 EPA Brownfield grants in 2014 (Parcels 1, 2, and 3)
- Awarded funding for Parcels 1 and 2.
- \$400k total





Grants Overview

- Now seeking grants for Parcel 3, which has subsequently been broken down into two sub-parcels (Parcel 3A, which includes the Shipwrights Cottage and Parcel 3B).
- \$400,000 total

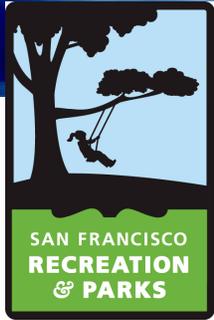




Grants Overview

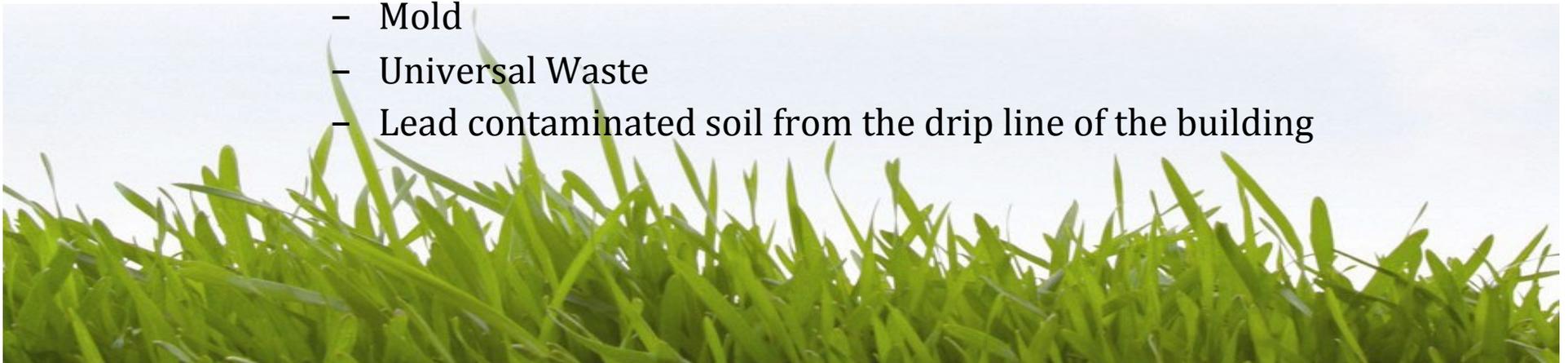
- Grant Application and Analysis of Brownfields Cleanup Alternatives available for viewing
 - online at sfrecpark.org/destination/india-basin-capital-improvements
 - In person at Bayview Library Reference Desk.
- Grant copies also available via email.
- Public comments accepted thru December 17th.
- Recipients will be notified in July, 2016.
- Grants will be awarded in October, 2016.





Site Conditions – Parcel 3A (Shipwrights Cottage)

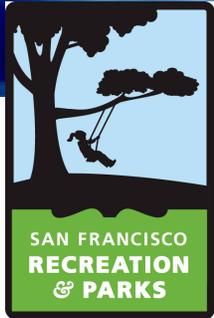
- In 2015, URS Corporation (now AECOM) prepared an Analysis of Brownfield Clean-up Alternatives (ABCA) Report with Funding from SF Environment.
- ABCA based on information from Page & Turbull’s Historic Resource Evaluation and Feasibility Study for 900 Innes.
- The following contaminants were addressed in the ABCA:
 - Asbestos containing building materials (acoustical ceiling tiles, flooring, wall board, and mastics)
 - Lead-based paint
 - Mold
 - Universal Waste
 - Lead contaminated soil from the drip line of the building





Conceptual Clean-up Approach – Parcel 3A Shipwrights Cottage

- Based on the ABCA prepared for the Shipwrights Cottage, URS created a conceptual clean-up approach.
- Key provisions of this approach include:
 - Abatement and disposal of asbestos containing building materials (acoustical ceiling tiles, flooring, wall board, and mastics)
 - Abatement of lead-based paint
 - Abatement of mold
 - Abatement of Universal Waste
 - Excavation and disposal of lead contaminated soil from the drip line of the building



Site Conditions – Parcel 3B

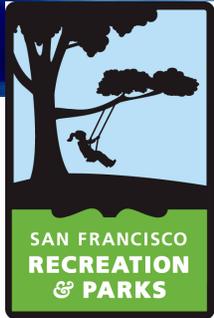
- In 2013, Weston Solutions, Inc., working with The US EPA Region 9 and the US Army Corps of Engineers, conducted a Target Brownfields Assessment (TBA) to assess site conditions.
- The following contaminants were found at the site at levels above commonly accepted cleanup screening criteria:
 - Metals including Lead, Cobalt, Mercury, Arsenic, Chromium, Nickel
 - Polycyclic Aromatic Hydrocarbons (PAHs)
 - Petroleum Hydrocarbons (Diesel and Motor Oil)
 - Polychlorinated Biphenyls (PCBs)
- Based on this testing, Weston Solutions prepared an Analysis of Brownsfield Clean-up Alternatives (ABCA) Report.
- In 2015, URS (now AECOM) conducted additional sediment testing along the foreshore of 900 Innes as part of an EPA grant awarded to SF DoE to assess site conditions along the Blue Greenway alignment.



Conceptual Clean-up Approach – PARCEL 3B

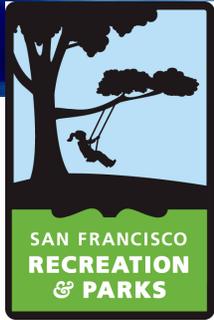
- Based on the ABCA Report, URS (now AECOM), with funding from SF Environment, has created a conceptual clean-up approach.
- Key provisions of this approach include:
 - Excavation of top 2-4 ft. of soil
 - Capping and management of soil under pavement in some areas of the site
 - Excavation and off site disposal of some soils
 - Import and placement of clean backfill soil





Site Contamination

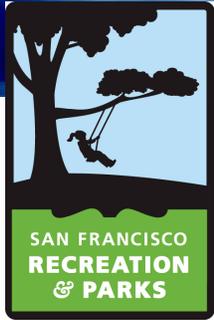
- Metals including Lead, Cobalt, Mercury, Arsenic, Chromium, Copper, and Nickel – Main exposure pathway is ingestion and inhalation.
- Polycyclic Aromatic Hydrocarbons (PAHs) – Main exposure pathway is ingestion and inhalation. Some PAHs are carcinogenic.
- Petroleum Hydrocarbons (Diesel and Motor Oil) – Main exposure pathway is ingestion and inhalation.
- Polychlorinated Biphenyls (PCBs) – Main exposure pathway is ingestion and inhalation. PCBs are carcinogenic.
- Hazardous building materials - Asbestos containing material, lead-based paint, and Universal Wastes (Fluorescent light bulbs and ballasts, mercury containing switches, etc.)



Toxic Material Management

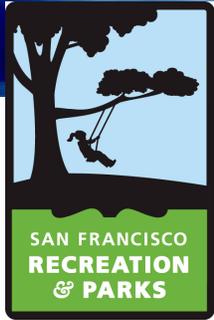
- To mitigate exposure to toxic substances:
 - Disturbed soil will be excavated and managed using engineering controls such as dust suppression by wetting of soil and use of a soil binding agent
 - In areas of the site that are planned for redevelopment with a hardscape cover soils will be capped by concrete or asphalt or other hardscape type surface.
 - To mitigate migration of contaminated materials due to sea level rise, the Remedial Action Plan will include design elements that will mitigate erosion or transport of materials from the foreshore area of the site.
 - Appropriate engineering controls will be used during abatement of hazardous building materials.





Agency Approval/Participation

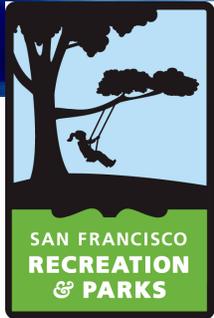
- Clean-up approach is *conceptual*. A final Feasibility Study and Remedial Action Plan will be created with funding from the grant, and site conceptual design input from the 900 Innes park planning process.
- Regulatory agency oversight will ensure that the Plan is protective of human health.
- BCDC will evaluate for shoreline and proximity engineering considerations
- DTSC will perform lead agency oversight role with input from DPH and RWQCB as needed.



Green Remediation/ Sustainability Opportunities

- Green remediation -
 - Management of contaminants onsite (capping and land use restrictions) to reduce green house gas emissions from heavy equipment use and trucking to a landfill.
 - Repurposing of Shipwrights Cottage to incorporate into site redevelopment
- Sustainability Practices -
 - Integration of storm water runoff and control through the use of vegetative swales and pervious concrete and hard covers in certain areas of site development.
 - Low impact development considerations





Economic Opportunities

- Workforce Development through Hunters Point Family will prepare community members for brownfields clean-up jobs.
- The Hunters Point Family has trained students and aims to place at graduates in environmental jobs.
- The training program includes 224 hours of combined classroom and hands-on instruction in 40-hour HAZWOPER, UST leak prevention, solid waste management and recycling, wastewater management, habitat restoration, construction health and safety, and asbestos and lead working.
- The Clean-up Grant will fund LBEs, and a preference given to local businesses in the local area code.



Tentative Schedule

Grant Due	December 18, 2015
Award Notification	July, 2016
Grant Funding	Sept, 2016
Concept Design Complete	Sept, 2016
Remedial Action Plan Creation	Oct/Nov, 2016
RAP Community Presentation	Dec, 2016
Clean-up begins	TBD
Clean-up Complete	TBD



Clean-up Team

- URS (now AECOM)
- Department of Public Health
- Hunters Point Family
- Recreation and Parks Department
- San Francisco Port Authority
- San Francisco Parks Alliance
- SF Environment
- Trust for Public Land

