



Hunters Point Naval Shipyard Environmental Program Update

**Hunters Point Shipyard Citizens Advisory Committee
Environmental & Reuse Subcommittee Meeting**

March 25, 2024

Michael Pound - BRAC Environmental Coordinator

Daniel Dutra – Lead Remedial Project Manager (Radiological)

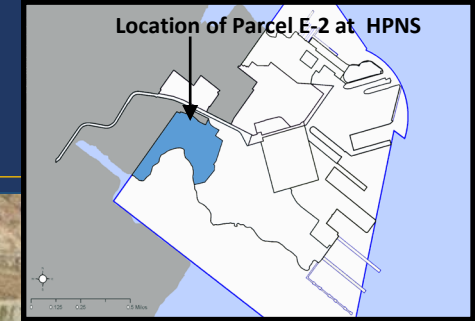
Brooks Pauly – Lead Remedial Project Manager (Non-radiological)

Wilson Doctor – Remedial Project Manager

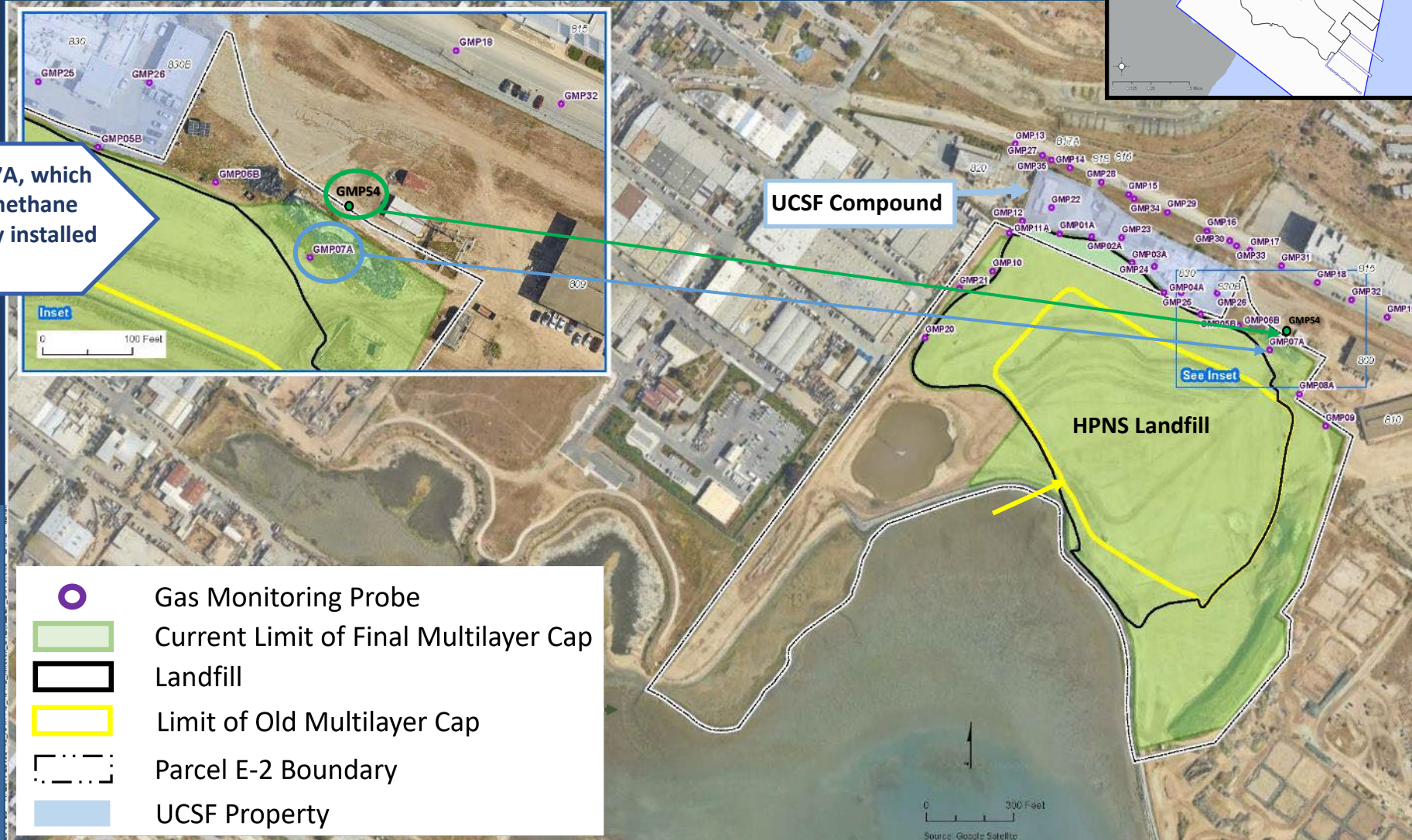
Agenda

| Topic | Team Member |
|--|---|
| <ul style="list-style-type: none">• Introductions | Michael Pound |
| <ul style="list-style-type: none">• Ongoing Activities – Updates<ul style="list-style-type: none">• Elevated Landfill Gas Reading in Parcel E-2• Parcel B Building Demolition (Non-radiological)• Radiological Retesting• Radiological Object Reports• Strontium-90 Verification Study Timeline• Parcel G Building Demolition (Radiological)• General Building Demolition Effort• Community Involvement Plan (CIP) Update | Brooks Pauly Brooks Pauly Daniel Dutra Daniel Dutra Daniel Dutra Michael Pound Michael Pound Michael Pound |
| <ul style="list-style-type: none">• Climate Resilience Assessment | Wilson Doctor |
| <ul style="list-style-type: none">• Next Navy HPS CAC E&R Meeting | Michael Pound |
| <ul style="list-style-type: none">• Contacts | Michael Pound |
| <ul style="list-style-type: none">• Questions | Navy Team |

Elevated Landfill Gas Reading



Location of GMP07A, which had the elevated methane reading, and newly installed GMP54



Map of Parcel E-2, including the landfill, the multilayer cap, the final landfill cap boundary, and GMP locations across the landfill.

Elevated Landfill Gas Reading

This slide provides an update to the Navy's response to elevated landfill gas levels (LFG) readings at one gas monitoring probe (GMP). For more details, please see Navy presentations to the HPS CAC on September 25, 2023, December 4, 2023 and January 22, 2024.

Navy Response Actions (Updated)

- Monitoring continues after installation of GMP54
- Collaboration with regulatory agencies
 - installation of an extraction well to reduce methane levels at GMP07A
- future changes to monitoring network

January 2023

- Elevated landfill gas reading at GMP07A
- No methane detected outside of the immediate area
- Notifications to regulatory agencies, UCSF, CalRecycle, HPNS Base Closure Team (BCT)

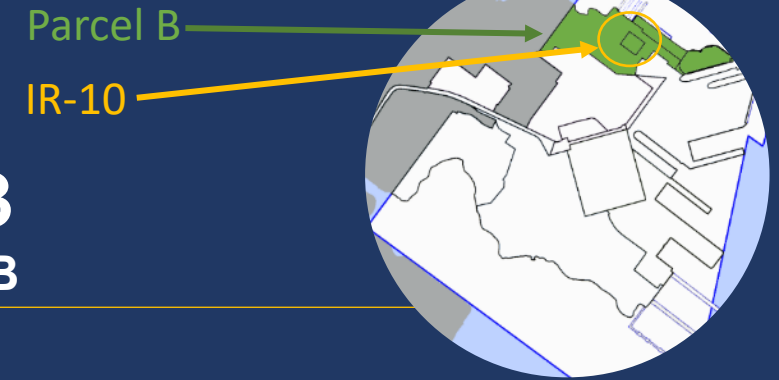


March 2024

- GMP54 installed at new (extended) landfill perimeter
- Multiple readings taken to date
- GMP54 methane readings approximately 0% parts per million volume (ppmv) = below action level 5% ppmv
- Installed extraction well February 23, 2024 near GMP07A
- Multiple GMP07A readings below action level of 5%

Non-radiological Building Demolition: Installation Restoration (IR)-10 Building 123

Building demolition supports remediation of soil at IR-10 at Parcel B



March - May 2024
Building Demolition



May - Aug 2024
Characterize Soil
Excavate / Monitor
for VOC's



Aug 2024
Backfill clean imported soil



Sep 2024 – July 2025
Installation of durable
cover, quarterly soil gas
monitoring

Preparatory Fieldwork Began Feb 5, 2024
Building Demolition Begins March 25, 2024

Schedule Date: March 2024

Non-radiological Building Demolition: Building 123

Air Monitoring

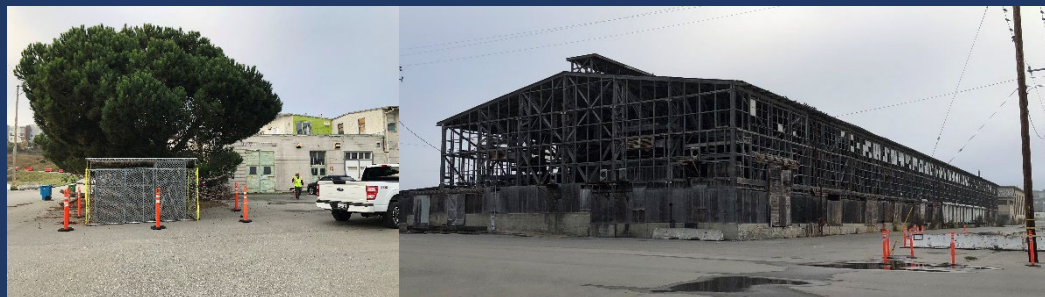
- Three real-time air monitoring stations have been mobilized to the site:
 - One upwind of Building 123
 - One downwind of Building 123
 - One near Building 116
- Air samples monitored for:
 - Asbestos
 - lead
 - manganese
 - particulate matter smaller than 10 microns in diameter (PM₁₀)
 - total suspended particulates



Location of air monitoring stations during Building 123 demolition, approximately 10 feet from each respective building

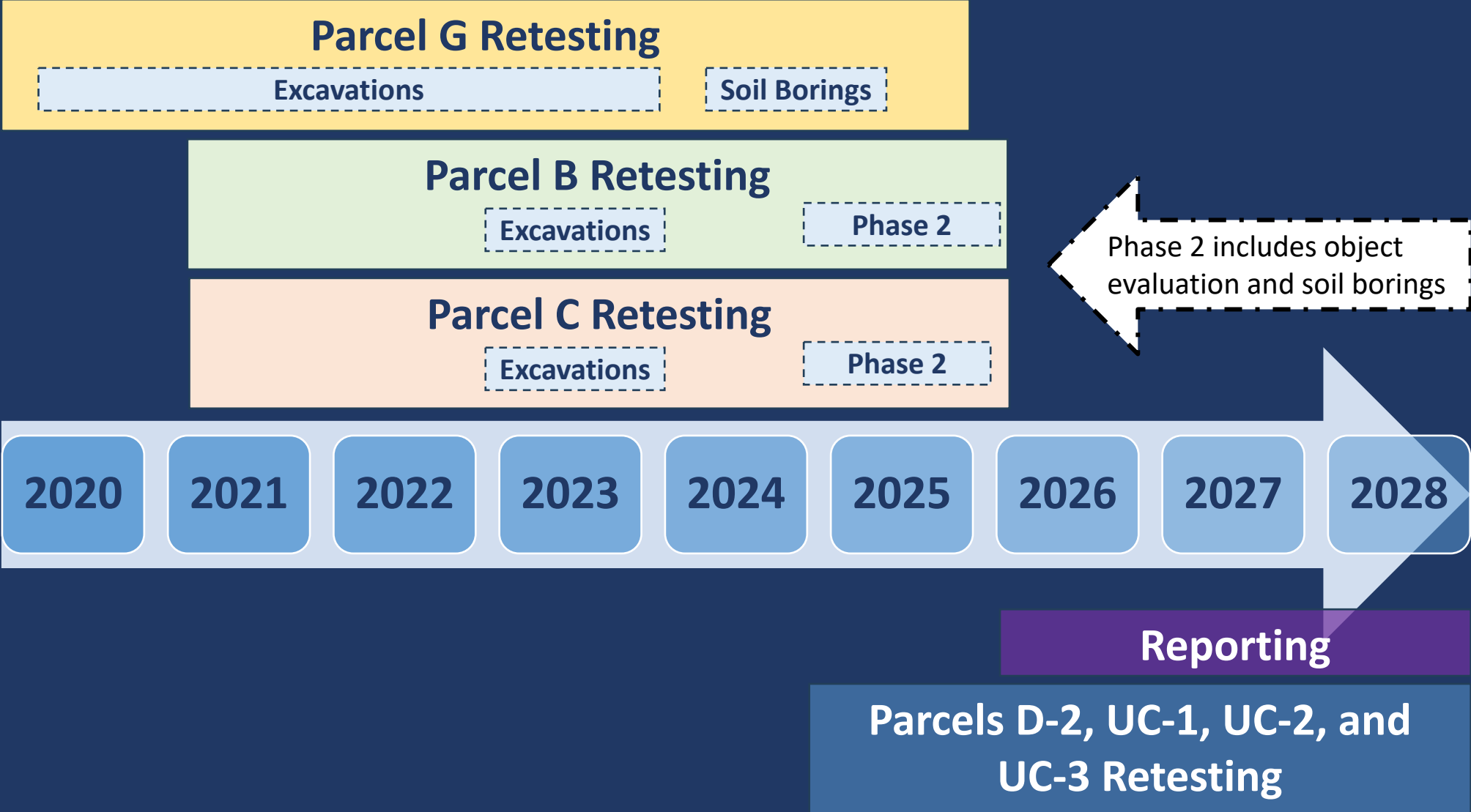
Site practices to ensure site and community safety:

- Traffic Plan to minimize impact to community
- Wetting of building materials, roadways, soil and excavations
- Use of soil stabilizers
- Measures to prevent tracking out soil
- Tarp covers for truck loads exiting site
- Project control boundaries established for work areas to restrict access



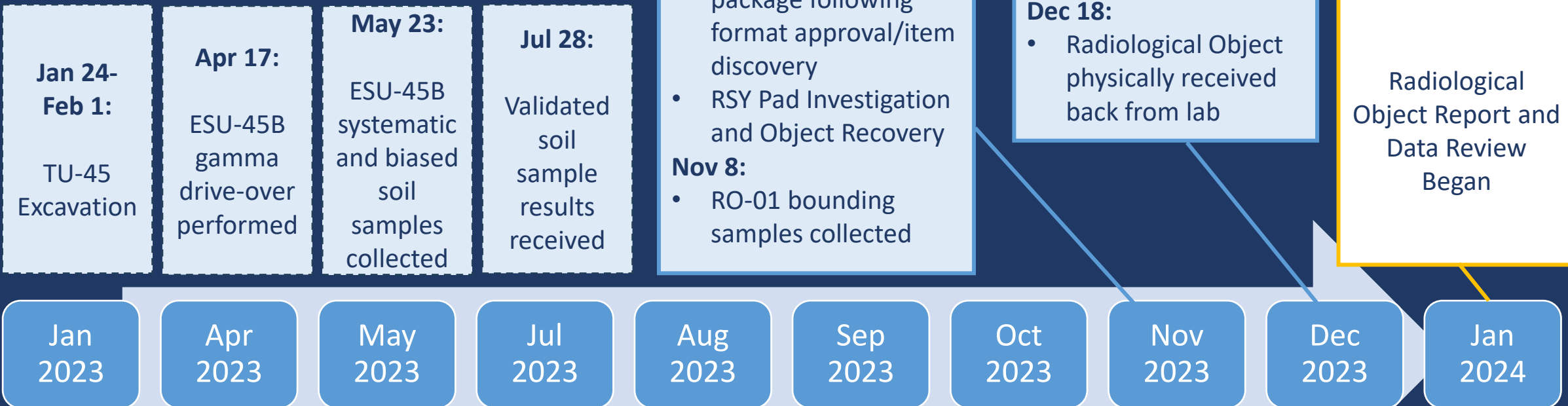
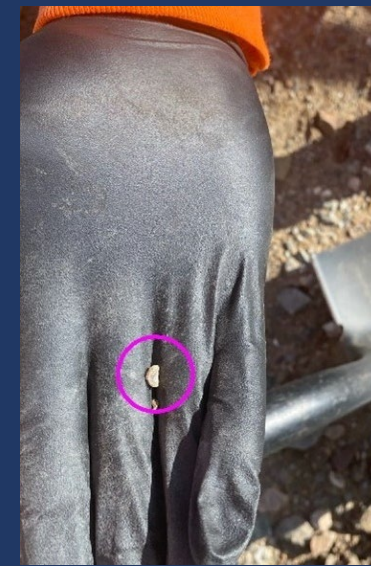
Air Monitoring Station at B116 and Building 123

Radiological Retesting Update



Radiological Object Report: Parcel B

Object identified as radium-226



Timeline date: March 25, 2024

Radiological Object Report: Parcel C

Object identified as radium-226

Apr 12 – May 9:

TU-315 Excavation

Aug 24:

- ESU-315A gamma drive-over performed
- RSY Pad Investigation and Object Recovery

Sep 6:

RO-01 bounding samples and ESU-315A systematic / biased soil samples collected

Oct 3:

- Validated RO-01 bounding sample results received

Oct 18:

- Validated ESU-315A systematic / biased soil sample results received



Radiological Object Report and Data Review Began

Apr 2023

May 2023

Aug 2023

Sep 2023

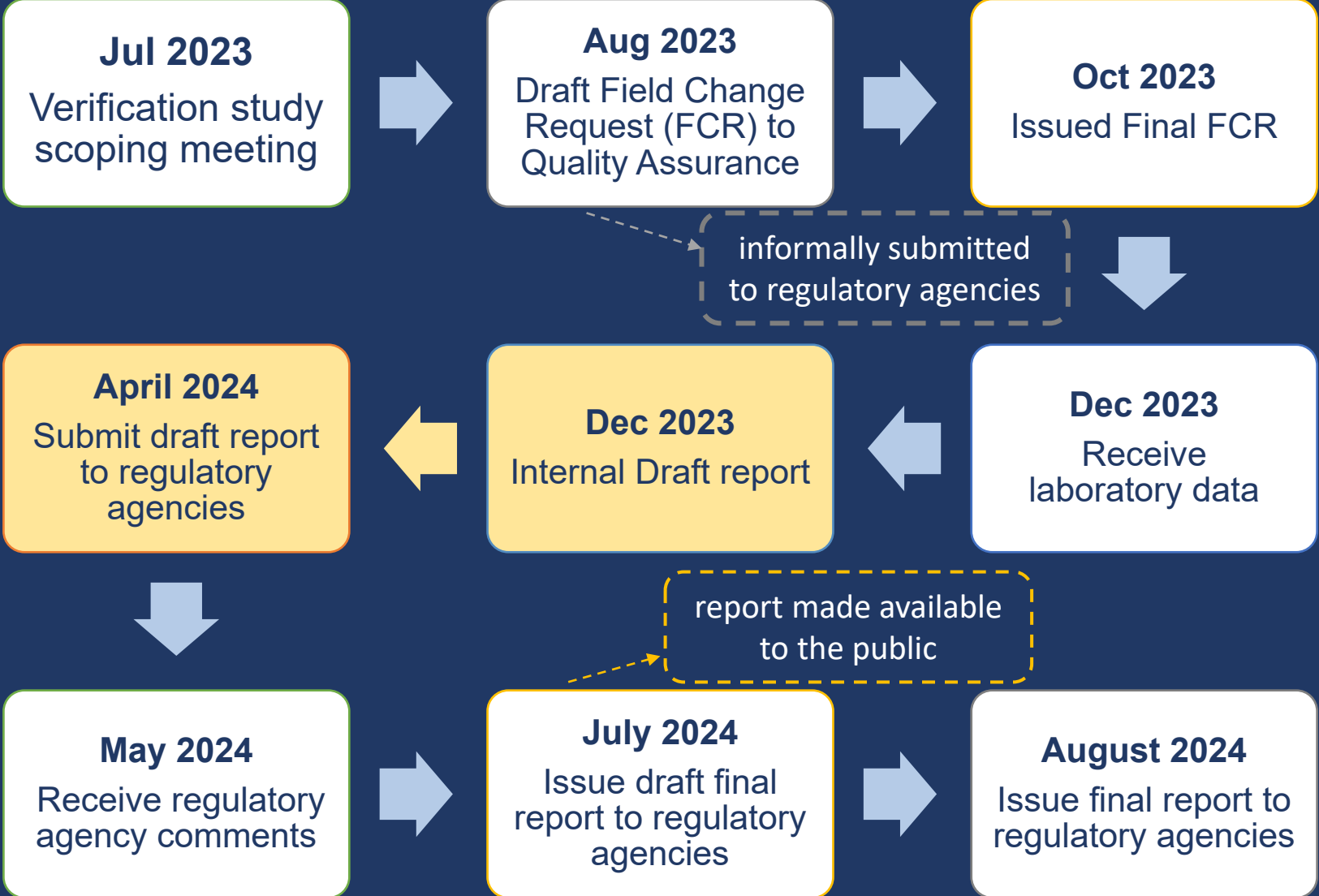
Oct 2023

Dec 2023

Jan 2024

Timeline date: March 25, 2024

Strontium-90 Verification Study Timeline



What is a Field Change Request (FCR)?

The Field Change Request (FCR) is used to document and track a field change before implementation.

In this case, the Navy issued the FCR to change the strontium data analysis to a more accurate method.

Parcel G Radiological Building Demolition Effort

- **Demolition of Parcel G buildings with radiological history**
 - Contract task order award using existing Multiple Award Contract in late 2024 for Parcel G buildings
 - Demolition planned to begin 2025
 - New Multiple Award Basic Contract for other buildings
 - Planned for award in early 2025 (date TBD)



General Building Demolition Effort

- **Industry Day on April 24, 2024**
 - Navy Contracts working on developing scope language to promote the use of local small businesses and hiring of local labor and increasing their weight in contractor proposal evaluation
 - Navy working the City to increase awareness of potential small business subcontracting opportunities for upcoming building demolition projects via the Industry Day



Hunters Point Naval Shipyard
INDUSTRY DAY

Wednesday, April 24, 2024
8:00 a.m. - 5:00 p.m.
South San Francisco Conference Center



NAVFAC
Naval Facilities Engineering Systems Command

The graphic features a photograph of the Hunters Point Naval Shipyard at sunset, with the text 'Hunters Point Naval Shipyard' and 'INDUSTRY DAY' overlaid. Below the photo, the event details are listed: 'Wednesday, April 24, 2024', '8:00 a.m. - 5:00 p.m.', and 'South San Francisco Conference Center'. At the bottom is the NAVFAC logo, which includes a stylized globe icon and the text 'NAVFAC Naval Facilities Engineering Systems Command'.

HPNS Community Involvement Plan (CIP) Update

- **The Navy updates the HPNS CIP every 2 years**
 - Last CIP Update: November 2022
 - Available on Navy's website
 - 2024 CIP Update underway
- **Navy Survey Open Through March 31, 2024**
 - Gathers community preferences & feedback
 - Provides data for Navy to evaluate effectiveness of outreach
 - Available in English, Spanish, Chinese
 - Email info@sfhpn.com for an option to take the survey another way



Scan to Take Survey

or visit

<https://www.research.net/r/HPNS2024-0>

2024 CIP Update Schedule





Hunters Point Naval Shipyard Climate Resilience Assessment

**Hunters Point Shipyard Citizens Advisory Committee
Environmental & Reuse Subcommittee Meeting**

March 25, 2024

Wilson Doctor – Remedial Project Manager

Climate Resilience Assessment

Topics for Discussion

- **Why is the Navy assessing climate resilience?**
- **Which climate hazards did the Navy assess?**
- **How was best available science used during the assessment?**
- **How did the Navy conduct the assessment?**
- **What are HPNS sea level rise projections and which parcels may be affected?**
- **What vulnerabilities were identified and what are the next steps?**

Why is the Navy assessing climate resilience?

- To support the Navy's action plan in the *Department of the Navy Climate Action 2030* to:
 - Pro-actively address the impacts of climate change
 - Build solutions that are more meaningful
 - Strengthen national security
- To support the **Five-Year Review of environmental cleanup remedies at HPNS**
 - Evaluate short- and long-term protectiveness of Navy remedies
 - Plan for and improve remedies based on new information and technologies

Which climate hazards did the Navy assess?

1. Coastal flooding

- Seawater flooding
- Groundwater table rise

2. Extreme weather conditions

3. Riverine (riverbank) flooding

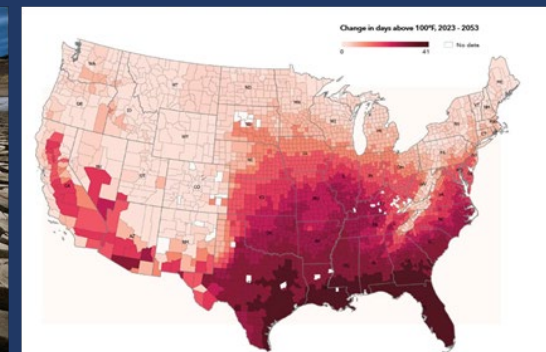
4. Drought

5. Heat

6. Wildfires

7. Energy Demand

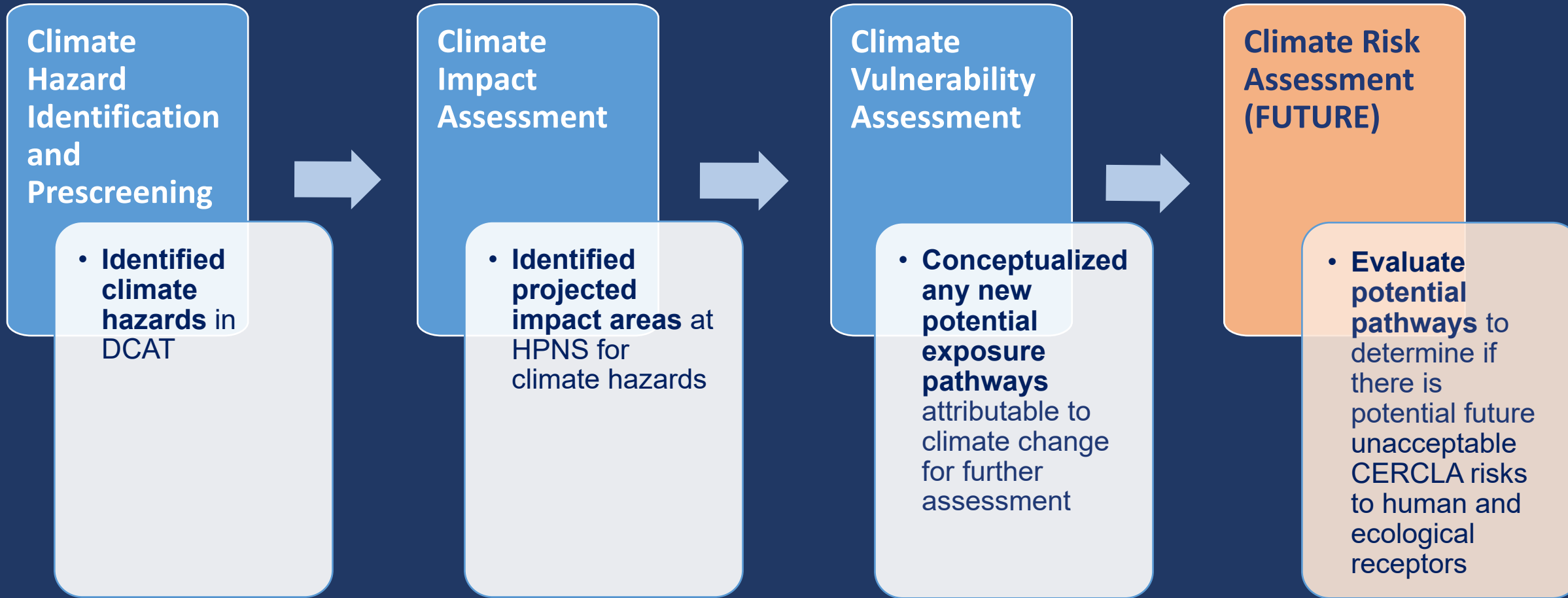
8. Land Degradation



Application of science in the HPNS assessment: Document Review

- **Implemented federal and state methodologies**
 - California Department of Toxic Substances Control (DTSC): *Draft Sea Level Rise Guidance to DTSC Project Managers for Cleanup Activities* (2023)
 - USEPA: *Guidance on Climate Resilience in Superfund Planning* (2021)
 - US Department of Defense (DoD): *Climate Assessment Tool* (DCAT) (2021)
- **Consulted climate projection reports and other resources**
 - DoD Regional Sea Level Rise (DRSL) database (compiled 2015-2016)
 - DoD Strategic Environmental Research and Development Program
 - California Ocean Protection Council (2018)
 - Others: City of Alameda (2022), FEMA, NOAA, Cal-Adapt, CA Department of Forestry and Fire Protection, BPTCP, Journal of Hydrology

What scientific methods were used in HPNS assessment methodology?



Note: Not all impacts lead to environmental cleanup program vulnerabilities

What are the sea level rise projections at HPNS?

- Department of Defense Regional Sea Level (DRSL) database projections at HPNS
 - Consistent with California Ocean Protection Council (2018) projections
 - Accounts for multiple global greenhouse gas (GHG) emissions scenarios
 - Simulated highest and lowest GHG scenarios

| Global Greenhouse Gas (GHG) Emissions Scenario | Site-Specific Sea Level Rise Projection (including vertical land movement) | |
|--|--|-----------------|
| | 2035 | 2065 |
| Lowest | 0.3 feet | 0.6 feet |
| Low | 0.3 feet | 1.0 feet |
| Medium | 0.7 feet | 1.6 feet |
| High | 0.7 feet | 2.3 feet |
| Highest | 1.0 feet | 3.2 feet |

highest scenario used for conservative vulnerability / resilience assessment

What methods were used to identify impacted areas?

Sea Level Rise Assessment

- Digital elevation model (DEM) used to represent topography
- Geographical information system (GIS) used to compare sea level rise projections with topography

Groundwater Table Rise

- Highest historical groundwater table level in past 20 years identified
- Assumption applied: water table rise in future years at a 1:1 ratio with sea level rise at all locations

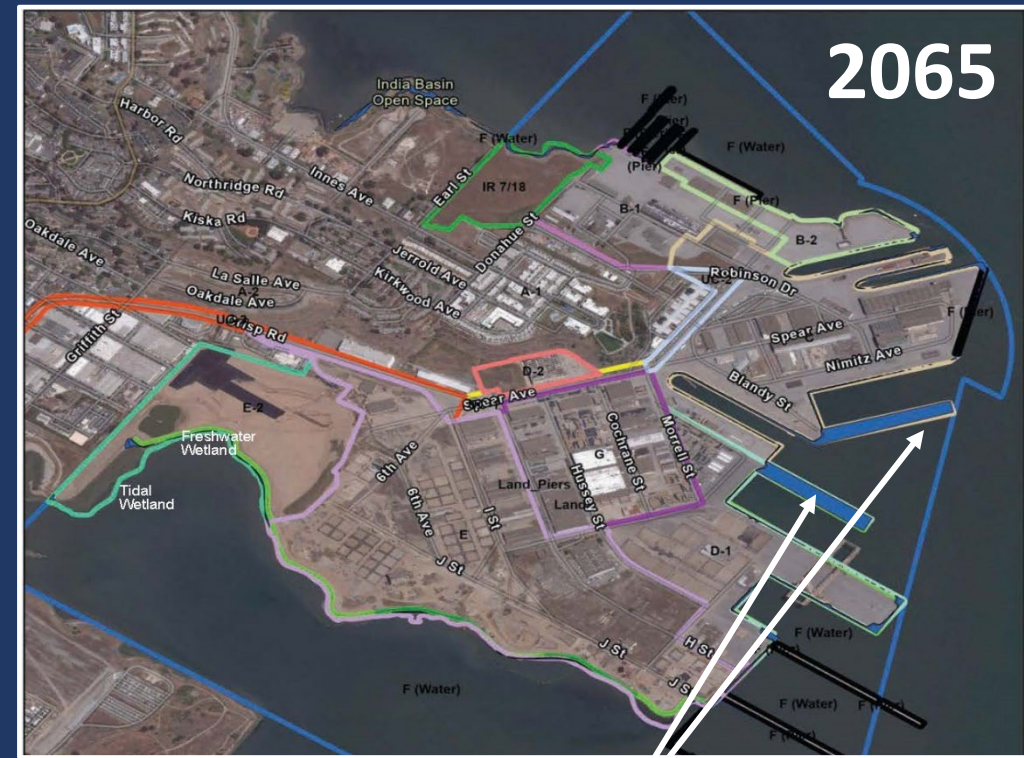
Same method used by the City of Alameda in 2022

Summary of Impacts

| | |
|-----------------------|---|
| 1. Coastal flooding? | <ul style="list-style-type: none">• No permanent seawater inundation• Some groundwater table emergence |
| 2. Extreme weather? | Yes: storm surges, rainfall |
| 3. Riverine flooding? | No |
| 4. Drought? | Yes |
| 5. Wildfires? | Yes |
| 6. Energy demand? | Yes: power supply interruptions possible |
| 7. Heat? | No |
| 8. Land degradation? | No |

Coastal Flooding Impacts: Permanent Seawater Flooding

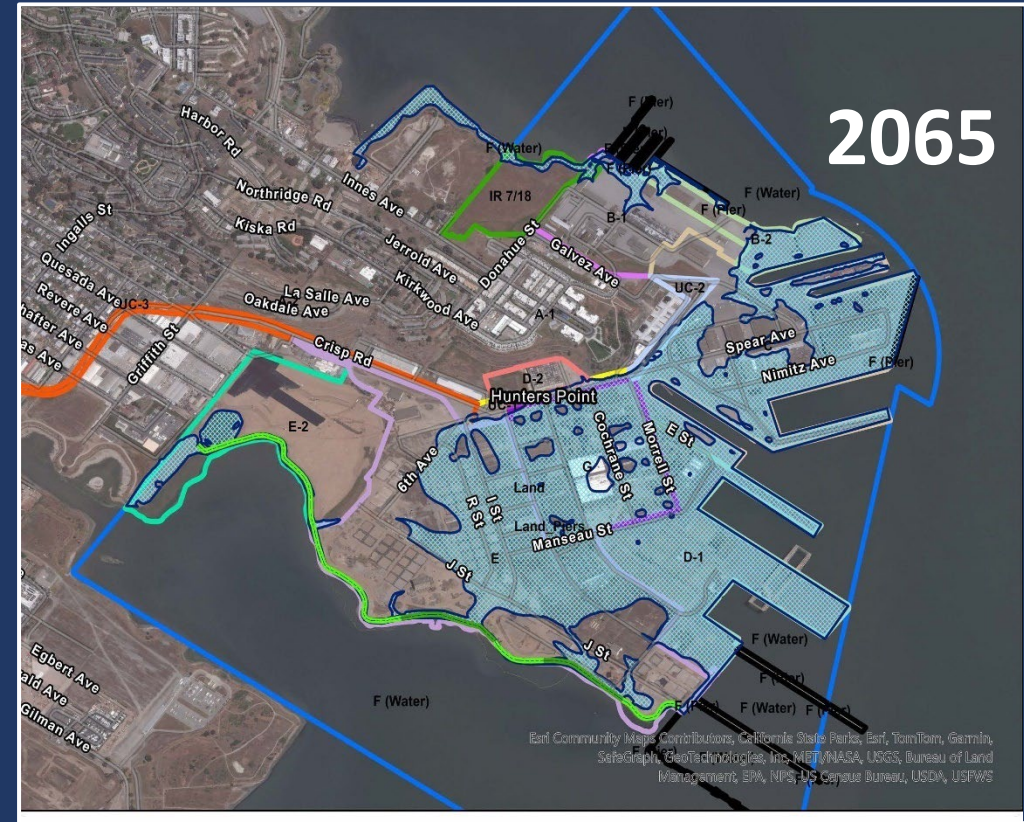
- 2035: no permanent flooding (except for Parcel F pier structures)
- 2065: no permanent flooding (except for Parcel F pier structures)



Permanent seawater inundation

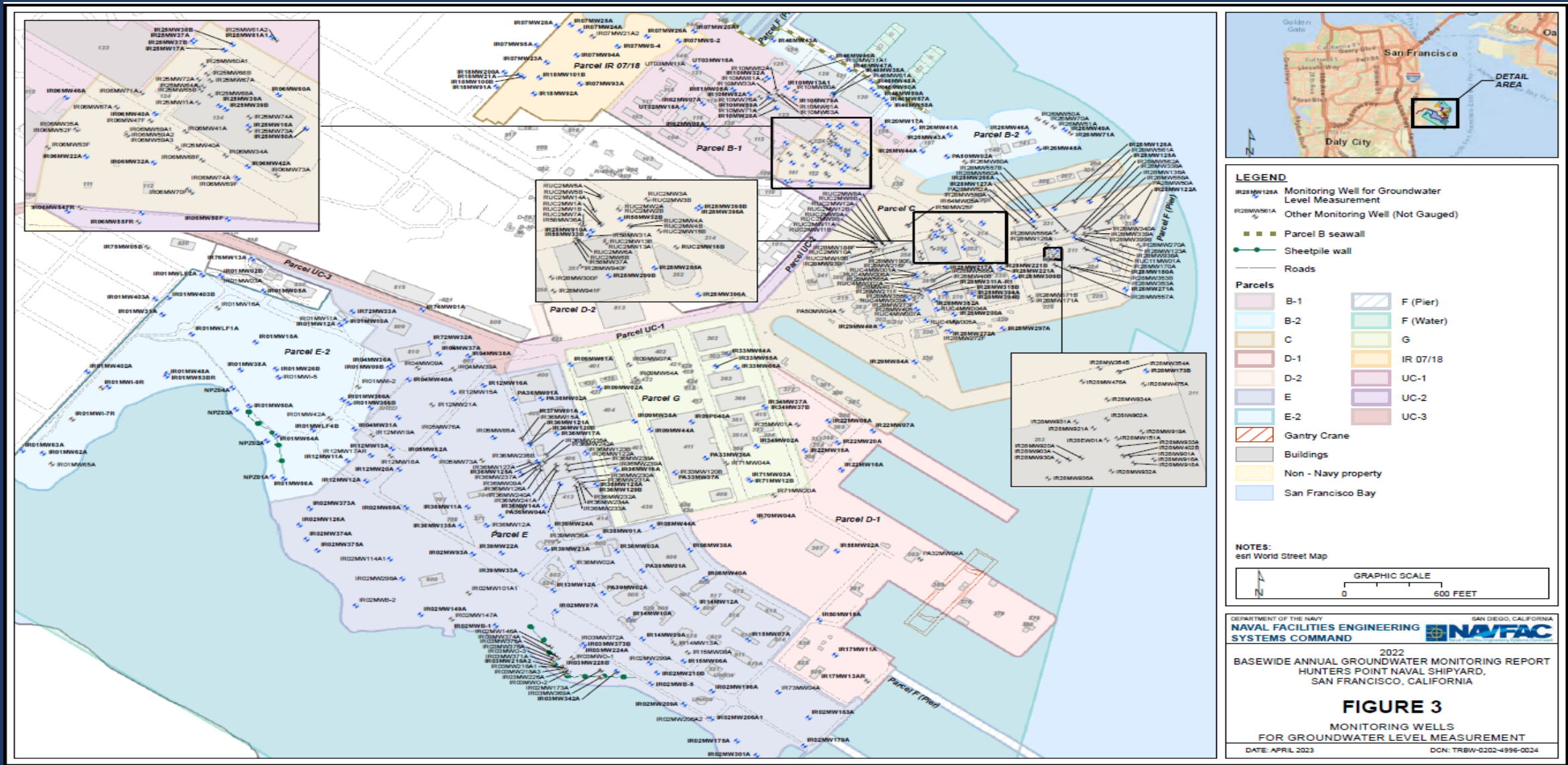
Coastal Flooding Impacts: Temporary Flooding (100-Year Storm)

- 2035: limited areas in Parcels B, C, E, E-2, IR 07/18, and F
- 2065: temporary flooding in larger areas and more parcels



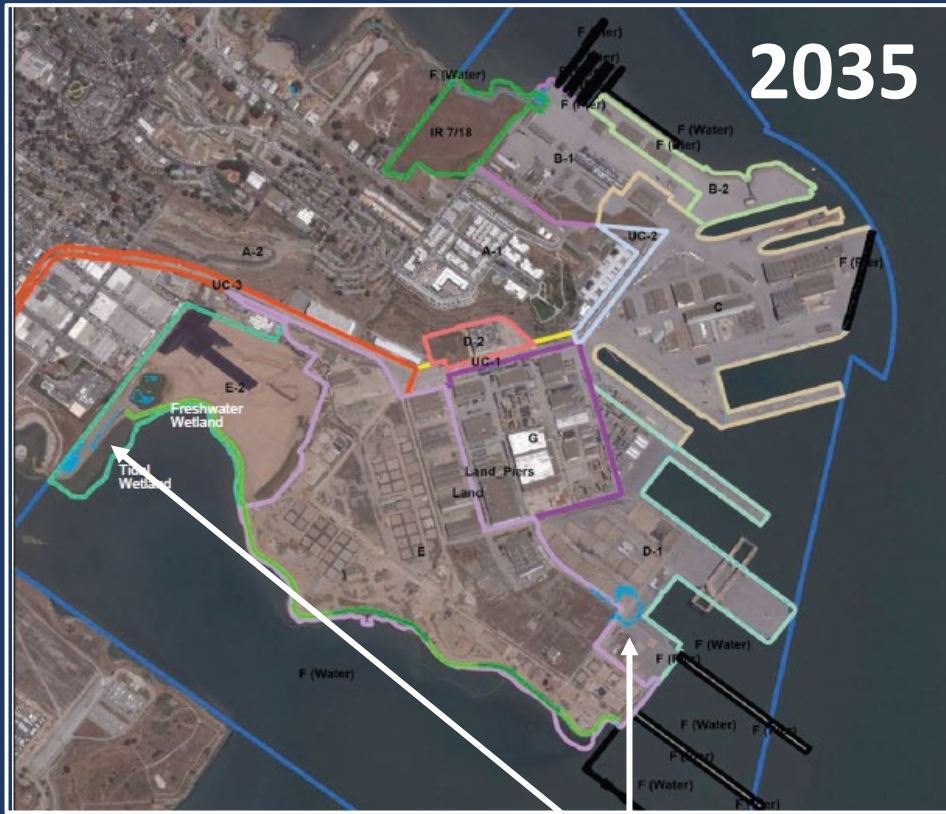
Temporary seawater flooding

Basewide Groundwater Monitoring: 195 A-Aquifer Monitoring Wells



Coastal Flooding Impacts: Groundwater Rising to Ground Surface

- 2035: worst case scenario – small areas in Parcel D-1 and wetland areas in Parcel E-2
- 2065: worst case scenario – some areas in several parcels, wetlands



Projected groundwater emergence

Coastal Flooding Impacts: Groundwater Table Rising to 3 Feet Below Ground Surface

- Rising groundwater may submerge underground utilities

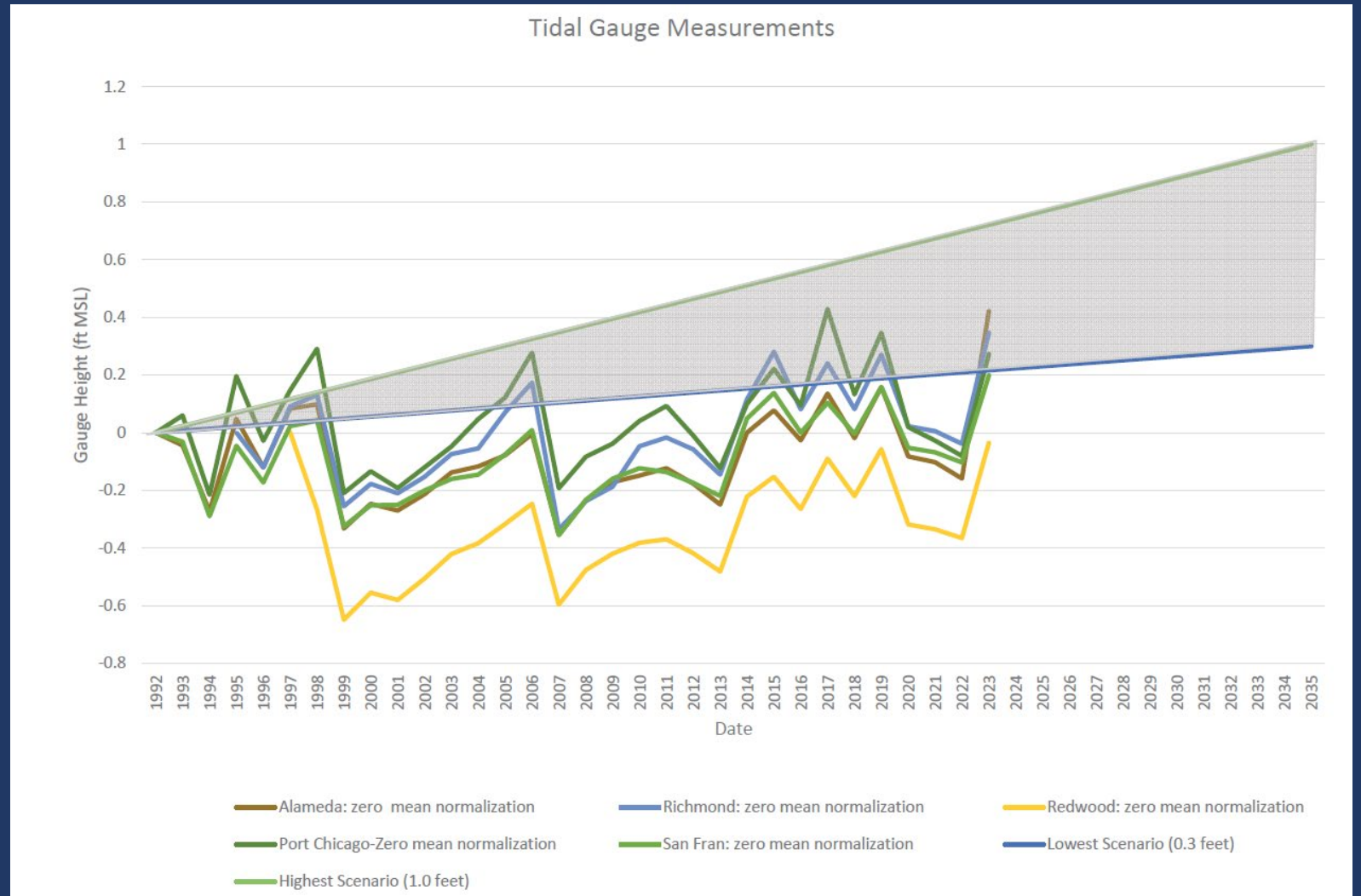


- Wells where groundwater rise projected to 3 feet below ground surface
- Wells where groundwater rise not projected to impact underground utilities

Actual Sea Level Rise Measured in Nearby Tidal Gauges in San Francisco Bay, over the last 30 years

Compared to DRSL range of sea level rise projections (gray area), baseline year 1992

Note: Actual sea level rise in the last 30 years has been trending near the lower part of the projected range



Source of tidal gauge data: <https://tidesandcurrents.noaa.gov>

What vulnerabilities were identified?

- **2035: permanent groundwater rise to the surface in limited areas**
 - Small portions of Parcel D-1
 - Small portions of E-2 wetland areas
 - Groundwater emergence in D-1 and B-1 not in the same area as the IR sites in these parcels
- **2065: permanent groundwater rise to the surface in additional areas**
 - Parcels IR 07/18, B-1, B-2, C, D-1, E, and E-2 wetlands
 - Potential above-ground human receptors and San Francisco Bay



Rock *revetments* and sea walls are important parts of the Navy's proactive efforts to plan for the impacts of climate change

What are the next steps?

- **Conduct site-specific studies to evaluate climate vulnerabilities**
 - Parcel D-1 and wetland areas of E-2 remedies per 2035 projections
 - IR 7/18, Parcels B-1, B-2, C, D-1, E, and wetland areas of E-2 per 2065 projections
- **Verify HPNS sea level rise projections**
- **Evaluate annual groundwater elevation data to determine how site-specific measurements compare to projections**

- **Receive regulatory agency comments (due April 30, 2024)**
- **Finalize Five-Year Review by July 31, 2024**
- **Discuss site prioritization and schedule for conducting site-specific climate impact assessments upon resolution of regulatory agency comments**

How can you learn more?

- **Review the HPNS Draft Five-Year Review Report**
 - On the Documents page of the Navy's website: www.bracpmo.navy.mil/hpns
 - At the San Francisco Public Library, Main Branch, 100 Larkin Street, 5th Floor
- **In response to multiple requests, the Navy is extending the public review period to May 7, 2024**



Scan to go to the Documents page on the Navy's website

Email comments to: HPNS_FYR_Comments@us.navy.mil

Attend the Navy's Climate Resilience Workshop on April 22, 2024 at 6:00 p.m.

HPS CAC E&R Subcommittee Meeting

- Presentation and open house format during HPS CAC Environmental & Reuse Subcommittee Meeting

Attend the Navy's Presentation on May 20, 2024* at 6:00 p.m.

HPS CAC E&R Subcommittee Meeting

- Presentation topic includes discussion of public comments received and the Navy's response

**meeting date & time pending HPS CAC final schedule*

Next Navy HPS CAC E&R Subcommittee Meeting

SAVE THE DATE!

The Navy will present an update on the ongoing environmental cleanup at HPNS to the

HPS CAC E&R Subcommittee

on

Monday, May 20, 2024*

*date/time pending final HPS CAC schedule

| May '24 | | | | | | |
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| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

Resources for More Information



HPNS Program Management



Michael Pound
(619) 524-6026
michael.j.pound.civ@us.navy.mil

Navy BRAC PMO West
33000 Nixie Way, Bldg 50, Suite 207
San Diego, CA 92147
www.bracpmo.navy.mil/hpns

Other Resources



Community Technical Advisor
Dr. Kathryn Higley
(541) 737-7036
kathryn.higley@oregonstate.edu
www.ne.oregonstate.edu



HPNS Information Repository
San Francisco Public Library (Main Branch)
100 Larkin Street, 5th Floor, Gov't Information Center

Regulatory Agencies

Andrew Bain, US Environmental Protection Agency
bain.andrew@epa.gov

Michael Howley, CA Dept. of Toxic Substances Control
michael.howley@dtsc.ca.gov

Mary Snow, San Francisco Reg'l Water Quality Control Board
mary.snow@waterboards.ca.gov

Visit www.bracpmo.navy.mil/HPNS to link to the online HPNS Administrative Record (on the home page and documents page)

HPNS Community Outreach

Send an email or leave a message

- For program information
- To join the HPNS Mailing List
- To request language assistance



info@sfhpns.com



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