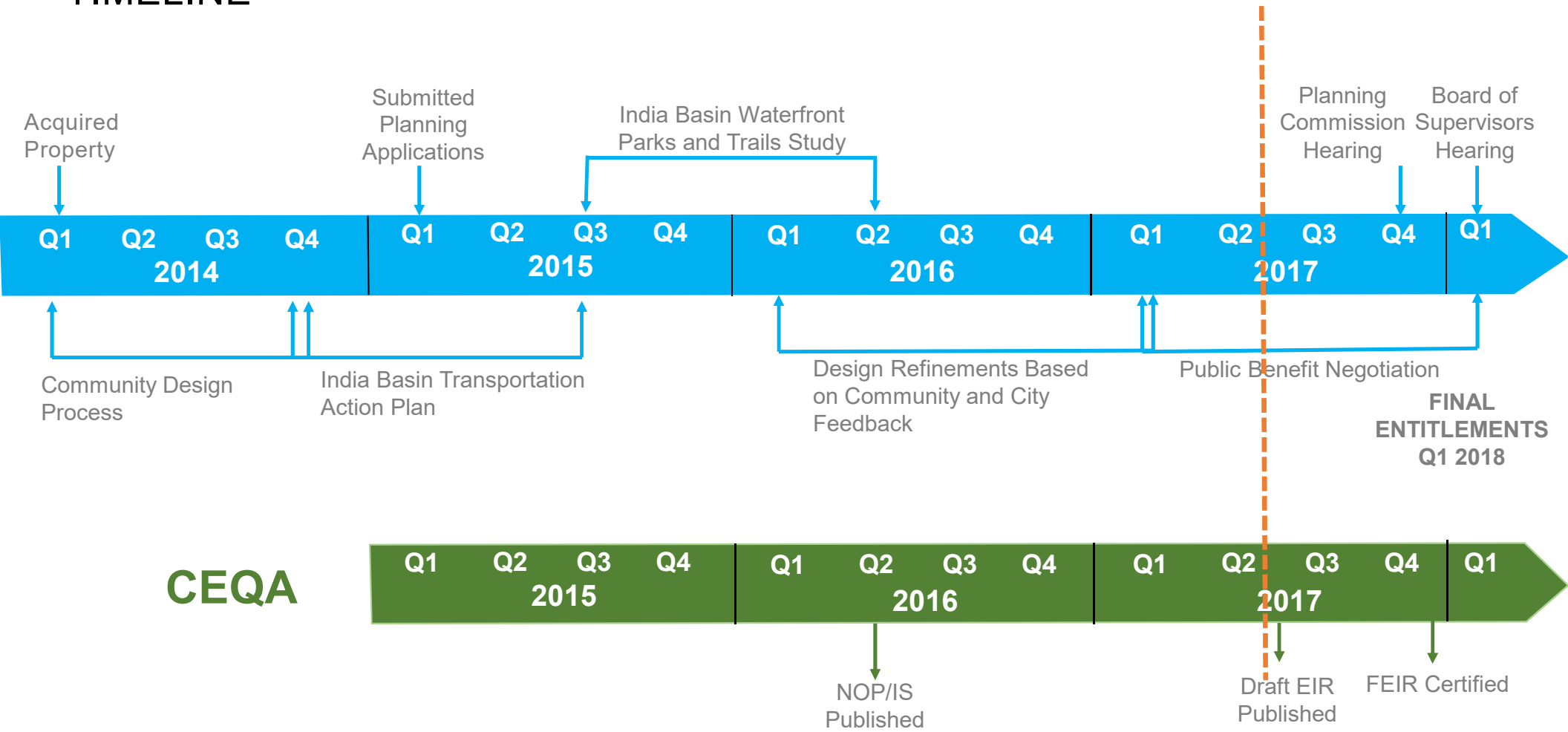


TIMELINE



ENVIRONMENTAL CLEANUP GOALS

- Safe, clean, accessible public park for children, teens, adults and seniors.
- Achieve all local, state and federal standards.
- Social Equity: Give the Southeast/Bayview a park to rival Crissy Field.

ENVIRONMENTAL CLEAN-UP & REGULATION

- All parcels subject to City of San Francisco's Maher Ordinance.
- Maher Ordinance requires investigation and remediation of hazardous materials.
- Mitigation plan uses standards set by California Department of Toxic Substance Control (DTSC) and Regional Water Quality Control Board (RWQCB).

SFDPH
Environmental HEALTH



Step 1: Phase 1 Environmental Assessments (2013 - 2017)

- Review Site History
- Review Regulatory Files for Site and Surrounding Sites
- Review Available Environmental Data
- Identification of Potential Concerns/Conditions

Step 2: Develop Plans for Testing (2013 - 2017)

- Additional Research
- Determine Data Needs/Gaps
- Prepare Investigation Work Plans
- Review preliminary findings of site conditions

Step 3: Determine Environmental Standards for Future Uses (2016-2017)

- Recreational Park Standards (Parks and Open Space)
- Commercial Standards (Mixed-Use Development)
- Ecological Standards (Habitat Restoration)
- Standards apply to:
 - Soil
 - Sediment
 - Groundwater
 - Surface water

Step 4: Phase II Investigations (2013-2017)

- Comprehensive Testing:
 - Metals, Fuels, Pesticides, Industrial Chemicals (PCBs, Creosote/Tars, Solvents)

Step 5: Design Mitigation and Remediation Measures (2017-2018)

- Remove environmental risks through
 - Remediation Plans
 - Site Mitigation Plans
 - Regulatory Agency Reviews/Approvals

Step 6: Implement Mitigation and Remediation Programs (2018-2022)

- Remove industrial contamination
- Place clean cover/barrier over old fill
- Manage construction safely – BMPs
- Test materials during development
- Meet standards for Recreational Parks
- Meet standards for Mixed-Uses
- Meet standards for ecological habitats

Step 7: Build Parks, Streets and Structures

STUDIES: ENVIRONMENTAL SITE ASSESSMENTS (ESAs)

Six Studies, 2013-2017



- 700 Innes: Phase 1 ESA prepared by AEI (2013-2014)
- IBOS: Phase 1 ESA prepared by Northgate (2017)
- 900 Innes: Phase I/II ESA prepared by Weston (2013)
- 900 Innes: Data Gaps Analysis prepared by AECOM, 2016
- IBSP: Phase 1 ESA prepared by Langan (2015)
- IBSP: Data Gaps Analysis prepared by AECOM (2016)

ENVIRONMENTAL INVESTIGATION PROGRAM

700 Innes



700 Innes: Phase II Testing

- 32 Test Locations
- 122 Soil Samples
- 1 Groundwater Sample
- 4 Vapor Samples

Testing for metals, fuels, pesticides, industrial chemicals, solvents, Maher constituents, asbestos

ENVIRONMENTAL INVESTIGATION PROGRAM

IBOS



IBOS: Phase II Testing

- 26 Test Locations
- 40 Soil and Sediment Samples

Testing for metals, fuels, pesticides, industrial chemicals, solvents

ENVIRONMENTAL INVESTIGATION PROGRAM

IBSP



IBSP: Phase II Testing

- 43 Test Locations
- 91 Soil Samples
- 8 Sediment Samples
- 2 Groundwater Samples
- 8 Surface Water Samples

Testing for metals, fuels, pesticides, industrial chemicals, solvents, Maher constituents, asbestos

ENVIRONMENTAL FINDINGS

700 INNES, IBOS, IBSP

Findings from testing consistent with Site histories:

- ✓ Metals in soil and ground water in some areas
- ✓ Consistent with urban and shoreline fill sites in SF
- ✓ Pockets of residual oils along the shoreline where there is buried debris
- ✓ Naturally occurring asbestos in some portions of fill materials

ENVIRONMENTAL FINDINGS

700 INNES, IBOS, IBSP

Recommendations:

- ✓ Clean soil cover to provide barrier to historic fill materials
- ✓ Clean sediment cover to create healthy tidal habitat
- ✓ Site mitigation plans (SMP) and health and safety plans (HASP) to guide construction activities
- ✓ Soil quality will meet or exceed regulatory standards for recreational and mixed-use development

SITE MITIGATION PLANS

All Properties

1. Health and safety protocols will minimize worker and public exposure to contaminants during construction.
2. Public will be protected through Best Management Practices:
 - Site security and access controls
 - Dust control
 - Odor control
 - Soil management
 - Groundwater management
 - Truck management, including covering, wheel cleaning and route maintenance
 - Public street cleaning
 - Public notification
3. Regulated by SF Dept of Public Health under Maher Ordinance Program
4. Compliance with asbestos regulations
5. Construction monitoring testing for unforeseen conditions

ENVIRONMENTAL FINDINGS

900 Innes



Results of testing:

- ✓ Consistent with history of boat building and marine transportation
- ✓ Chemicals found:
 - Metals: arsenic, cobalt, chromium, lead, mercury, and nickel (from paints, machinery, industrial processes)
 - PAHs (residue from treated/preserved wood; component of asphalt; burn by-products from fires and BBQs)
 - PCBs (from lubricating/electrical/transformer oils; building materials)
 - Fuel oils – motor oil and diesels
- ✓ Chemicals are stable – attached to soil/sediment with low solubility, mobility and volatility.
- ✓ Groundwater has only modest impacts from industrial past – cleanup unnecessary.
- ✓ Cleanup of soil and sediment needed to make conditions safe for recreation and habitat

SITE REMEDIATION PLAN MAP

900 Innes



REMEDIAL ACTION PLAN

900 Innes

- Upland fill soil cleaned up to levels safe for recreational users
- Off-shore sediment cleaned up to levels safe for recreational users and sensitive ecology
- Primary targets are:
 - ✓ Contaminated fill soils inland of the water line – depths of 2 to 5 feet
 - ✓ Contaminated sediment bayward of the water line – upper 2 feet
- Removed materials replaced with clean soil or sediment
- Imported clean soil will provide barrier to eliminate potential pathways of exposure
- Site conditions will be restored to quality of adjacent properties
- Park construction to follow same Site Mitigation procedures to protect public safety

CONCLUSIONS

Redevelopment Team is Committed to:

- **Restoring Environmental Quality**
- **Making Property Clean and Safe for:**
 - ✓ Shoreline Park Recreation
 - ✓ Trails, gardens, biking, boating, beach access
 - ✓ Commercial enterprises
 - ✓ Mixed-use development
 - ✓ Ecological habitat restoration
- **Fully compliant with Local, State and Federal Regulations**