Newtown Creek: A Superfund Discussion

May 21, 2012

Presentation Outline

- Newtown Creek Overview (N. Klaber)
- Relevant Government Laws, Oversight, and Jurisdiction (A.C.)
- The Superfund Process (A. Carpenter)
- Newtown Creek Remedial Investigation/Feasibility Study (RI/FS) process (C. Kwan)
- Current RI/FS status of Newtown Creek (C. Kwan)
- Community Involvement (W. Ayala)
- Questions

Newtown Creek Overview

- A Brief History
  - Industrial Waterway since the 1800s
  - By the 1900s – major industrial waterway:
    - Oil refineries
    - Metals and chemical plants
    - Coal handling/storage facilities
    - Municipal and industrial discharges
  - Today – dominated by commercial, industrial, transportation, and utilities facilities
- Over 300,000 New Yorkers live within a 1 mile
- Over 1,500 businesses are located within a ¼ mile

Newtown Creek

Newtown Creek Superfund Update

- EPA - Lead agency for the Newtown Creek Superfund Site
- 2009 - EPA conducted an Expanded Site Inspection (ESI)
- September 2010 - Newtown Creek placed on the National Priorities List (NPL) in 2010, making it a 'Superfund Site'
- July 2011 - Responsible Parties signed a consent order with EPA to perform an RI/FS (Remedial Investigation/Feasibility Study)
- November 2011 - RI/FS field activities began

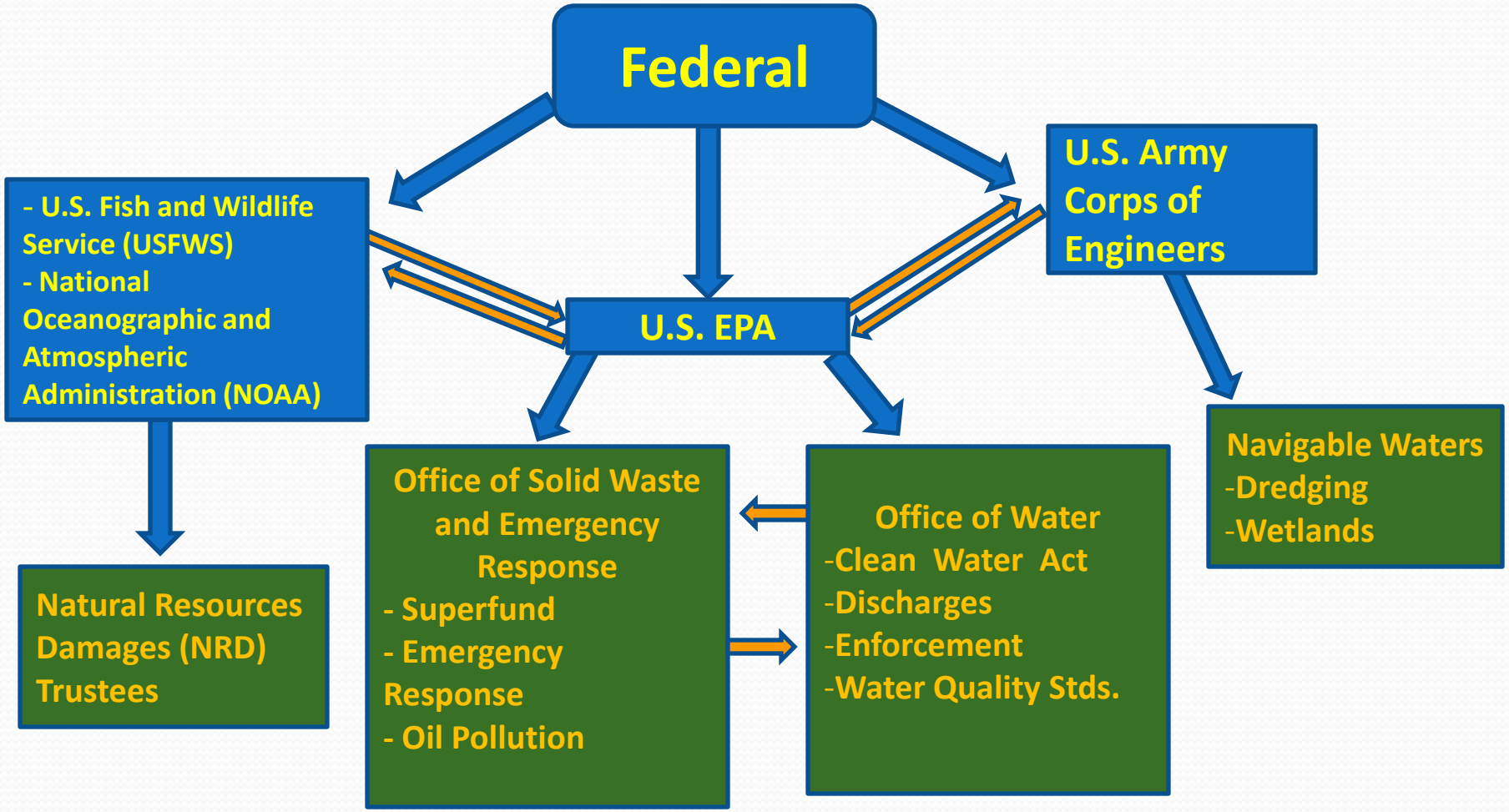
Federal laws, oversight, and jurisdiction

- EPA - Federal Superfund
  - Addresses cleanup of abandoned hazardous waste sites
  - Responds to releases of hazardous substances, pollutants and contaminants
  - Responds to environmental emergencies
  - EPA can compel responsible parties to cleanup or pay for cleanup of sites

Federal laws, oversight, and jurisdiction (cont'd)

- EPA - Federal Clean Water Act
  - Regulates pollutant discharges to U.S. waters
  - Sets water quality standards
  - States administer discharge permits (NPDES program)
- Navigable waters- Army Corps of Engineers (USACE)
  - USACE – Dredging, wetlands in navigable waters

Key Federal Agencies



Federal laws, oversight, and jurisdiction (Cont'd)

- As the lead agency for the Superfund site EPA coordinates with:
  - Other federal agencies (USACE, USFWS, NOAA)
  - Other EPA Offices/Programs (Office of Water)
  - State environmental and health agencies (NYSDEC, NYSDOH)
  - Municipalities
  - Communities

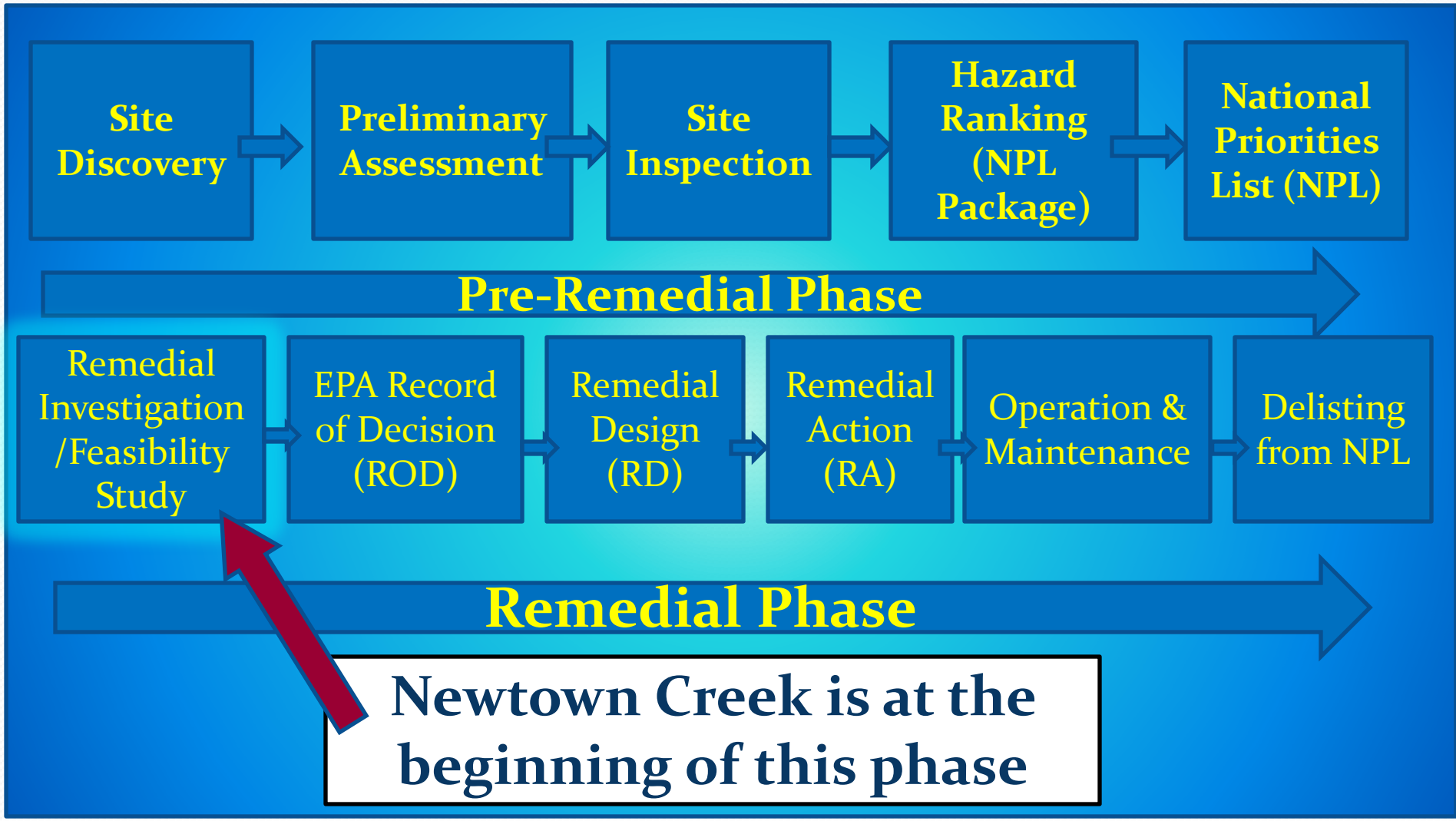
State and Local Agencies

- New York State Dept. of Environmental Conservation (NYSDEC)
  - Administers a wide range of state environmental regulations (water, air, groundwater, cleanup)
  - EPA works closely with NYSDEC on Federal Superfund Sites in New York State

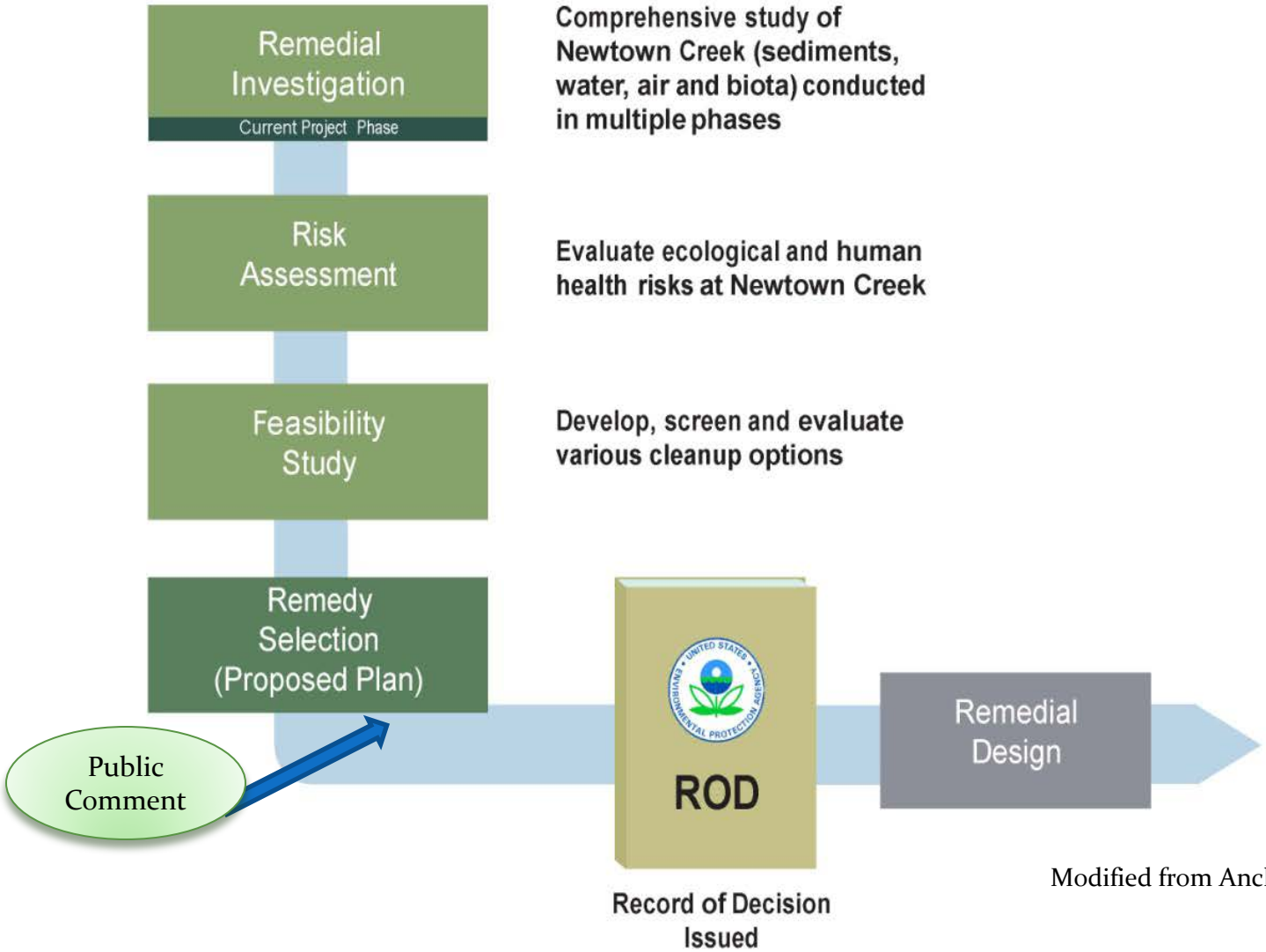
State and Local Agencies (Cont'd)

- NYSDOH
  - Prepares public health assessments for Superfund sites in conjunction with the federal Agency for Toxic Substances and Disease Registry (ATSDR)
  - Coordinates with EPA on public health aspects of Superfund sites in NY State
- NYCDEP – Responsible for implementing a range of NYC environmental laws and regulations (Air, water, groundwater, drinking water)

Superfund Process Overview

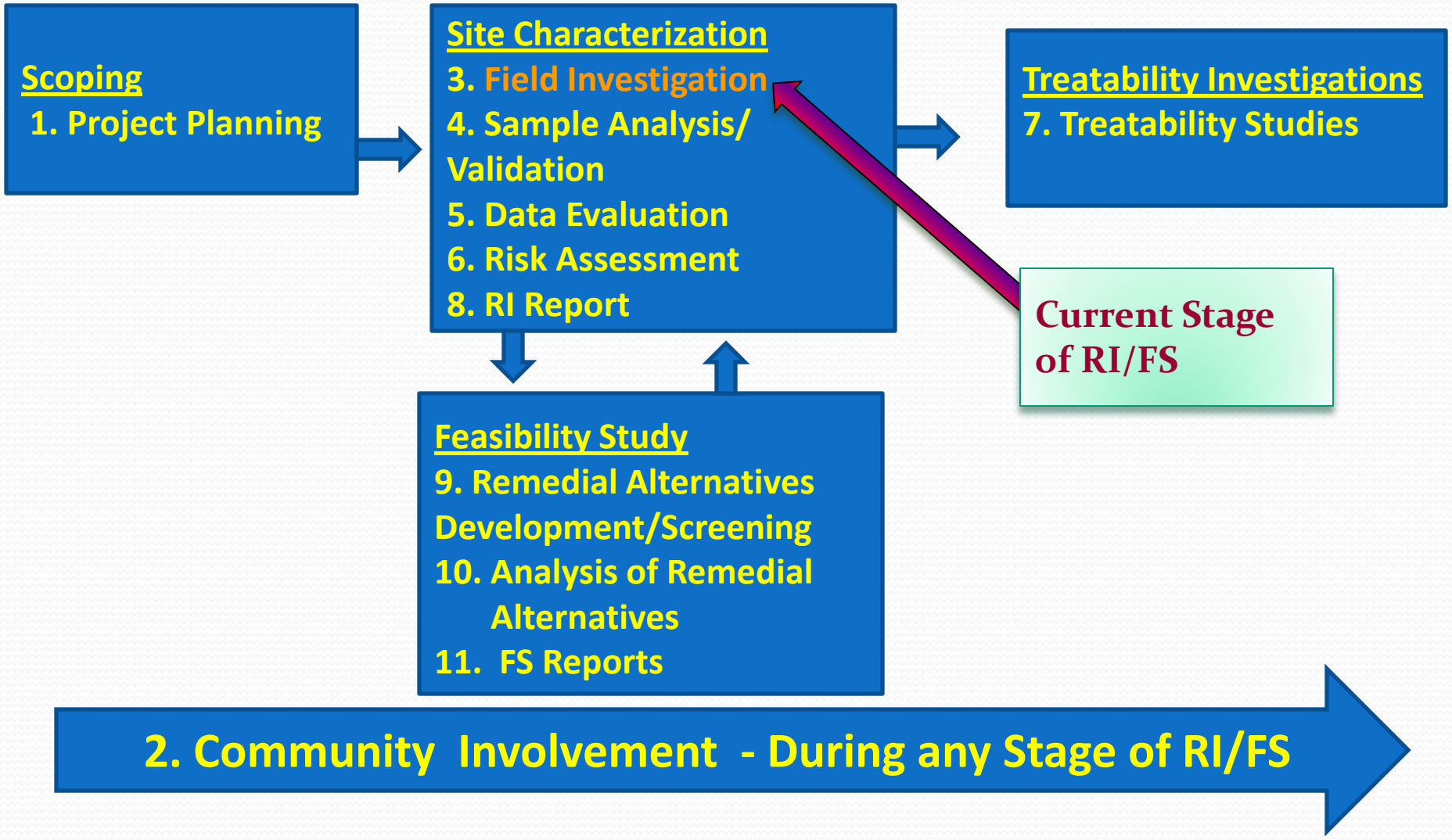


Remedial Investigation/Feasibility Study Process for Newtown Creek



Modified from Anchor QEA

Major RI/FS Tasks



Newtown Creek Remedial Investigation – Phase 1

- Phase I – November 2011 to January 2013
- Site Physical Characteristics
  - Completed bathymetric, side-scan sonar, magnetic, topographic, and shoreline surveys (Jan –March 2012)
  - Current and tidal surveys (March – April 2012)
- Water Sampling – Monthly (February 2012- January 2013)
- Surface/Subsurface Sediment Sampling (April - June 2012)
  - Chemical characteristics
  - Physical characteristics

Remedial Investigation – Phase 1

- Other Field Activities in 2012
  - Fish community survey (April & August 2012)
  - Benthic invertebrate community survey (April & August 2012)
  - Habitat survey (June 2012)
  - Air sampling (June 2012)

Newtown Creek Survey Details: Below the Water Surface

Bathymetric Survey Activities

- Measure water depths throughout the creek
- Document the geometry of the creek bottom

Bathymetry map example near mouth of Newtown Creek

Source: NCG Group

Side-Scan Sonar and Magnetic Survey Activities

Side-Scan Sonar Survey

- Document texture of creek sediments
- Document presence of debris and/or obstructions on the creek bottom

Magnetic Survey

- Document presence of metallic objects in the creek sediments

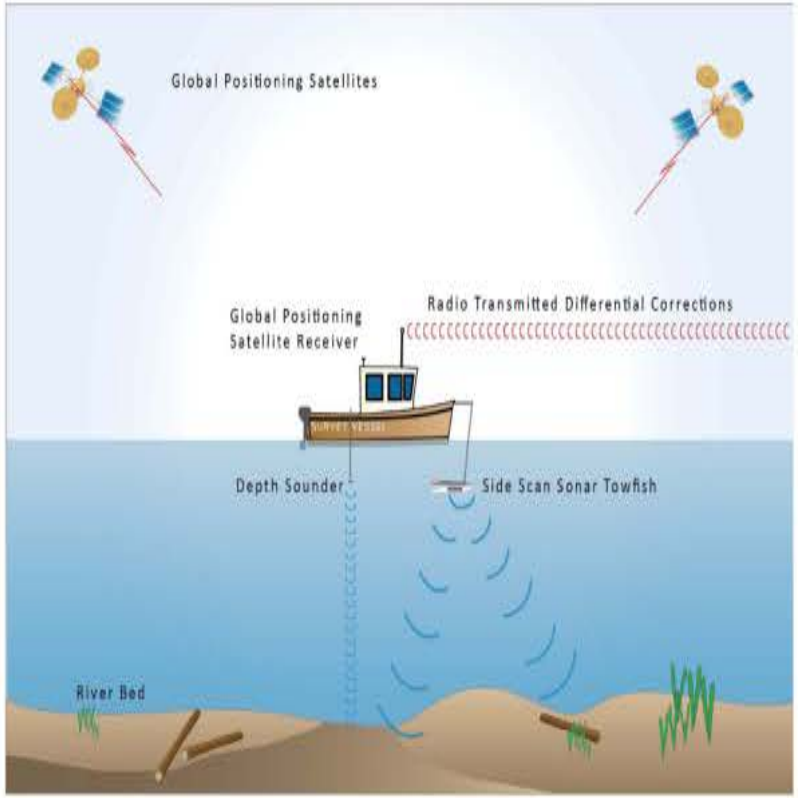


Illustration of how underwater survey data is collected

Remediation Investigation (Cont'd)

- Phase I data will be used define Phase II activities
- Phase II begins once all Phase I data have been analyzed, reviewed, and approved by EPA
- Phase II - Further investigation to support: human health risk assessment, ecological risk assessment, feasibility study
  - Phase II Field Investigation/ecological investigation – Fall 2013 – 2014
  - FS Field investigation (if needed) – 2016 completion

Phase II Remedial Investigation

Major elements of Phase II include:

- **Baseline Ecological Risk Assessment (BERA) – target 5/2015**
  - The BERA will assesses the potential risk to ecological resources in and around the creek.
- **Human Health Risk Assessment (HHRA) – target 5/2015**
  - The HHRA will assess potential risk to human receptors that use the site and that live and work in the site area from contaminated site media.

Phase II Remedial Investigation

- **RI Report** – Summer 2015
  - Defines the nature and extent of site contamination

- **FS Report**
  - Develops and screens remedial technologies and remedial alternatives for the site
  - Evaluates remedial alternatives and estimates costs

Community Resources

Community Advisory Groups at Superfund Sites

- Offers EPA a unique opportunity to hear and consider community preferences for site cleanup and remediation

- Having a CAG does not eliminate the need for EPA to keep the community informed about plans and decisions throughout the entire process

EPA's role in the CAG

- Attend meetings as needed
- Make site related documents available
- Provide CAG with information and technical expertise

What is a Technical Assistance Grant (TAG)?

- A TAG provides money ($50,000) to community groups so they can pay for technical advisors to interpret and explain:
  - technical reports
  - site conditions
  - EPA's proposed cleanup proposals and decisions at Superfund sites

Who can get a TAG?

- You are eligible if your group:
  - Has members that live near and may be affected by a superfund site
  - is representative of the affected community
  - is nonprofit and incorporated (made into a legal corporation in your state) or in the process of incorporating.

Who can not get a TAG?

- You are not eligible if your group:
  - is a potentially responsible party (PRP), represents a PRP, or receives money or services from a PRP
  - is not incorporated (or willing to incorporate – form own 501(c) (3) group for the specific purpose of representing affected people
  - is an academic institution

Who can not get a TAG? Cont'd

- You are not eligible if your group:
  - is a political subdivision (example: township or municipality)
  - is affiliated with a national organization that has direct or indirect control over your group.

What can TAG funds be used for?

- TAG funds can be used to :
  - hire an independent technical advisor
  - pay a grant administrator to help manage and administer the grant.
  - to purchase or rent office supplies
  - print newsletters or fact sheets to disseminate information about your site.

What Is TASC?

- Technical Assistance Services for Communities
- EPA-sponsored program
- Different than TAG program
- Services provided by SKEO Solutions

TASC Services

- Neutral Facilitation
- Information Assistance
- Community Education
- Technical Expertise
- Technical Assistance Needs

- Just naming a few…

Information Available Online

TAG Information:

www.epa.gov/superfund/community/tag

TASC Information:

www.epa.gov/superfund/community/tasc/index.htm

EPA Contact Information

- **Wanda Ayala**– Community Involvement Coordinator. 212-637-4275; ayala.wanda@epa.gov
- **Caroline Kwan** – Remedial Project Manager.

  212-637-4275; kwan.caroline@epa.gov
- **Nica Klaber** – Remedial Project Manager.

  212-637-4309; klaber.nica@epa.gov

- **EPA Website for Newtown Creek**:
  - **www.epa.gov/region02/superfund/npl/newtowncreek**