

Orange County North Basin

Site Listing and Status

United States Environmental Protection Agency

Presentation for the Orange County Water District
Board of Directors Meeting

November 4, 2020



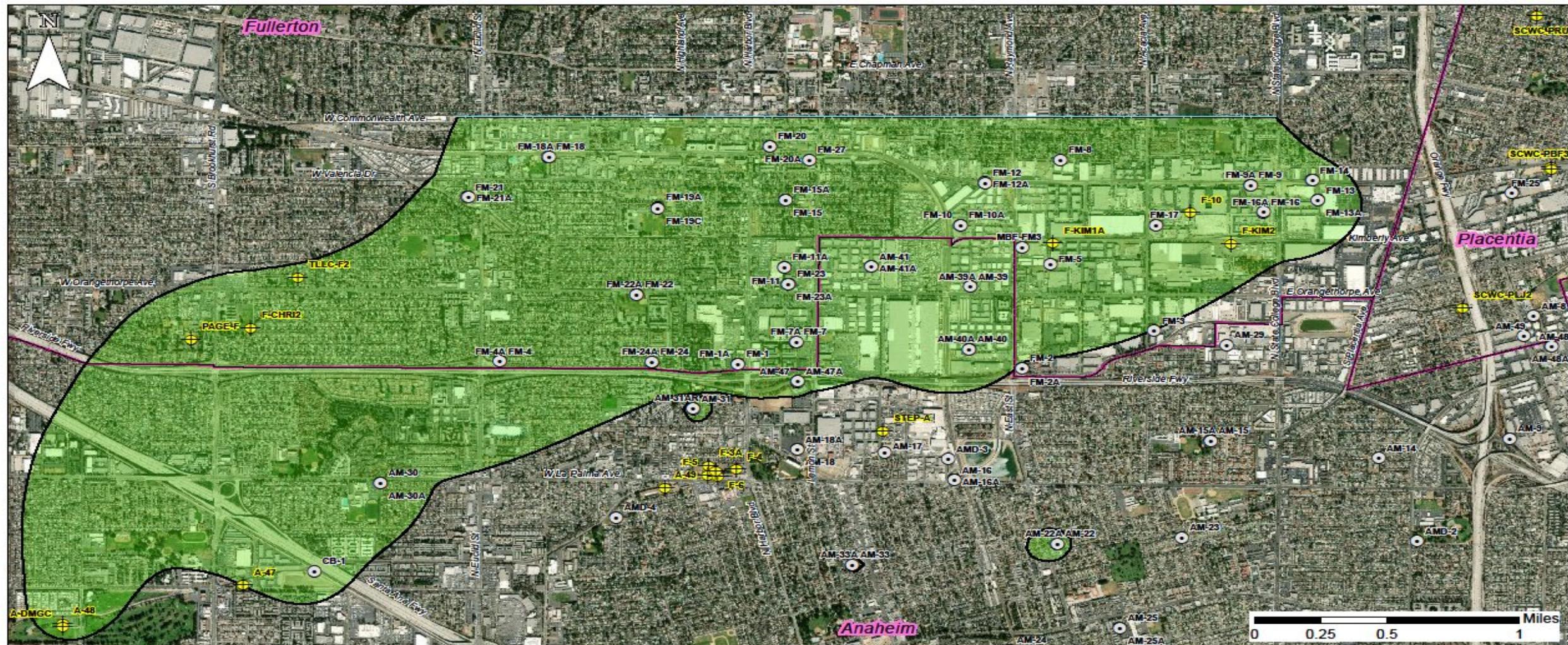
Purpose of this Briefing

The Orange County Water District requested that EPA discuss the Superfund process and the implications of the finalization of the Orange County North Basin Site on the National Priorities List.



Orange County North Basin Site - Background

- The Orange County Basin supplies water to 22 cities serving 2.4 million residents.
- Statewide sampling in the 1980s showed contamination of the aquifer with chlorinated solvents and other contaminants
- Since 1999, Orange County closed four municipal drinking water wells and one private water bottling company also closed a well.
- State and local agencies, including the OCWD asked EPA to assist with investigation and cleanup of the Basin through the Superfund process in the area where drinking water wells are threatened.



Legend

Wells	Plume
Orange County Water District Groundwater Monitoring	Current Defined Plume Boundary
Production	Plume Boundary Undefined
Government	Extent of Plume Greater Than MCL/NL
City Boundary	MCL = Maximum Contaminant Level NL = Notification Level

Orange County North Basin Approximate Location of Contaminant Plume

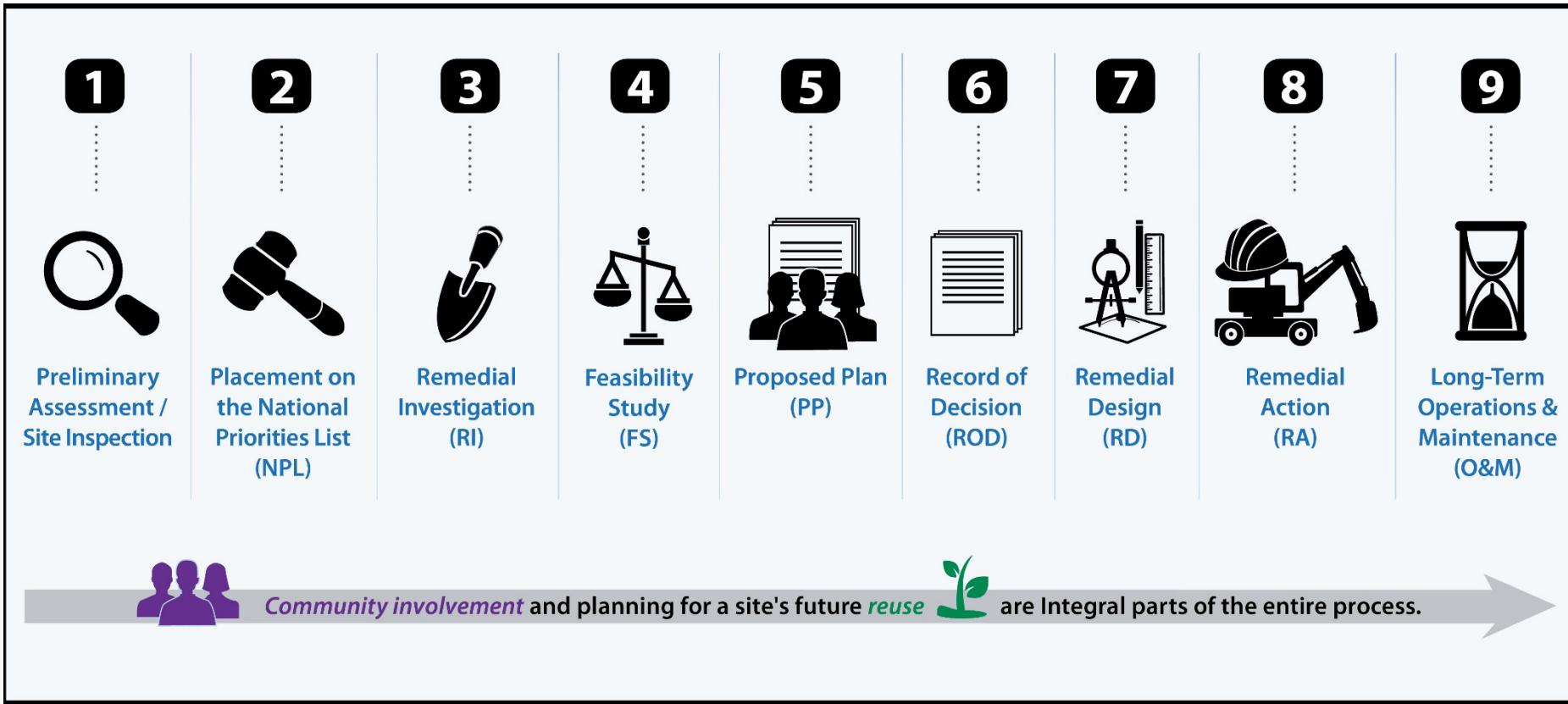
Prepared by EPA for
November 2018 Public Meeting

Map Notes

- Plume represents the area where one or more contaminants are above the MCL and/or NL in either the shallow and/or principal zones.
 - Contaminants represented in the map:
Perchloroethylene (PCE) MCL = 5.0 ppb
Trichloroethylene (TCE) MCL = 5.0 ppb
1,1-Dichloroethene (1,1-DCE) CA MCL = 6.0 ppb
1,4-Dioxane CA NL = 1.0 ppb.
 - Plume based on maximum contaminant concentrations from most recent year data (January 2017 to May 2018).
- MCL = Federal Maximum Contaminant Level
CA MCL = California Maximum Contaminant Level
CA NL = California Notification Level



The Superfund Process





Site Technical Aspects

- **Interim** Remedial Investigation/Feasibility Study (RI/FS) - Investigation of the most contaminated part of the drinking water aquifer (eastern one third of plume) and evaluation of remedial options for an interim remedy to contain the contamination as quickly as possible.
- **Comprehensive** RI/FS - Investigation of the total footprint of the Site and evaluation of remedial options for the entire site. The comprehensive remedy will augment the interim remedy to address the full extent of the contamination.



Orange County North Basin Superfund Site - OCWD Actions

- To accelerate the process at the Site, in 2015, the OCWD volunteered to characterize the most contaminated part of the drinking water aquifer and to evaluate remedial options for an interim remedy through a legal agreement with EPA.
- The OCWD is currently conducting this Interim RI/FS under EPA oversight, pursuant to a 2016 Administrative Consent Order with EPA.

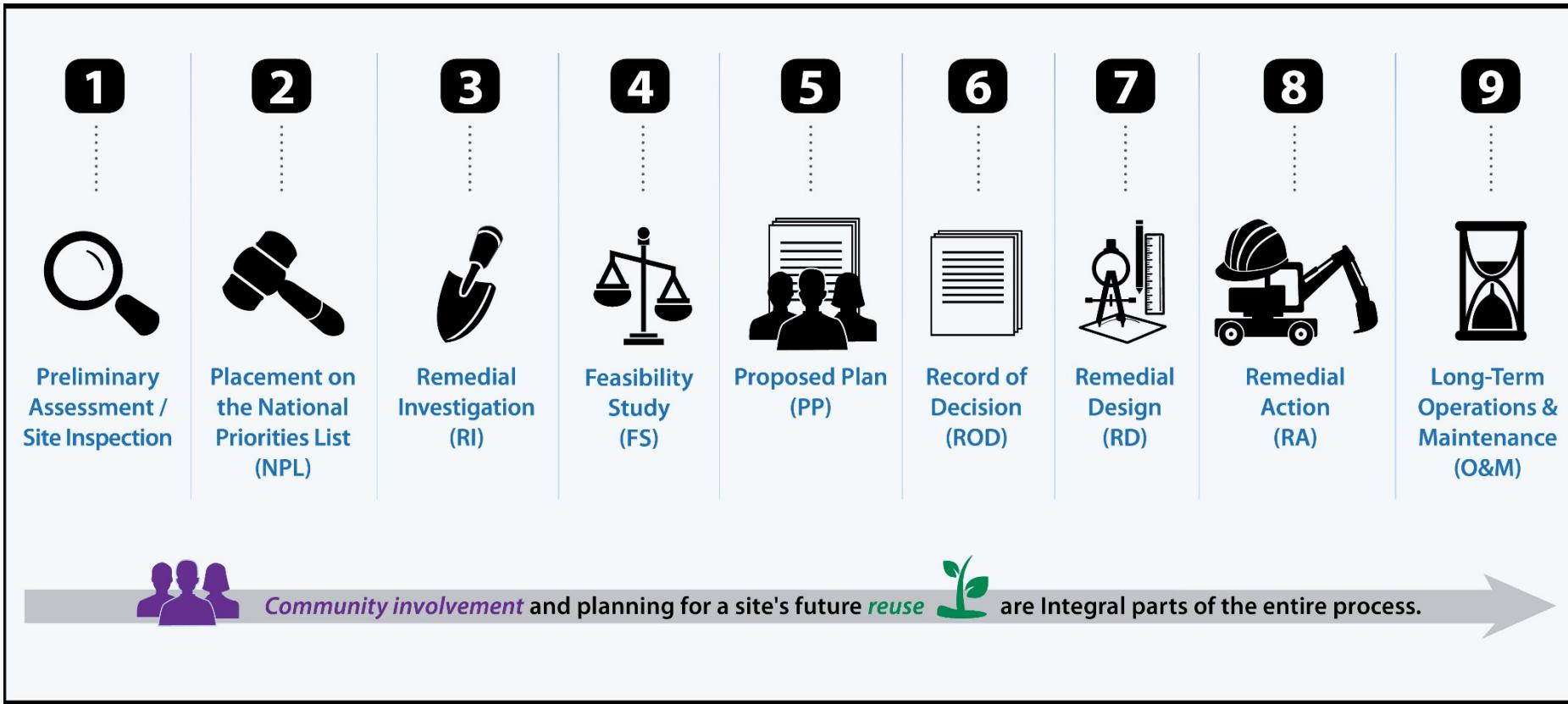


Additional Response Activities to Date

- The State, through the California EPA Department of Toxic Substances Control and the Santa Ana Regional Water Quality Control Board, is currently overseeing the investigation and remediation of the soil and shallow groundwater at approximately fourteen source facilities.
- EPA has started Phase I of the Comprehensive RI/FS, to characterize the full extent of contamination at the Site, which includes the installation of six monitoring wells in the western part of the site.



The Superfund Process





Orange County North Basin Listing Process

- The National Priorities List (NPL) is EPA's priority list of hazardous waste sites eligible for long-term remedial investigation and remedial action (cleanup) financed under the federal Superfund program.
- The NPL is intended primarily to guide EPA in determining which sites are so contaminated as to warrant further investigation and significant cleanup by the federal government.
- EPA proposed the OCNB Site to the National Priorities List in January 2018 and received numerous comments in support and opposition during the public comment period.
- EPA also placed the OCNB Site on the Administrator's Emphasis List in 2018.

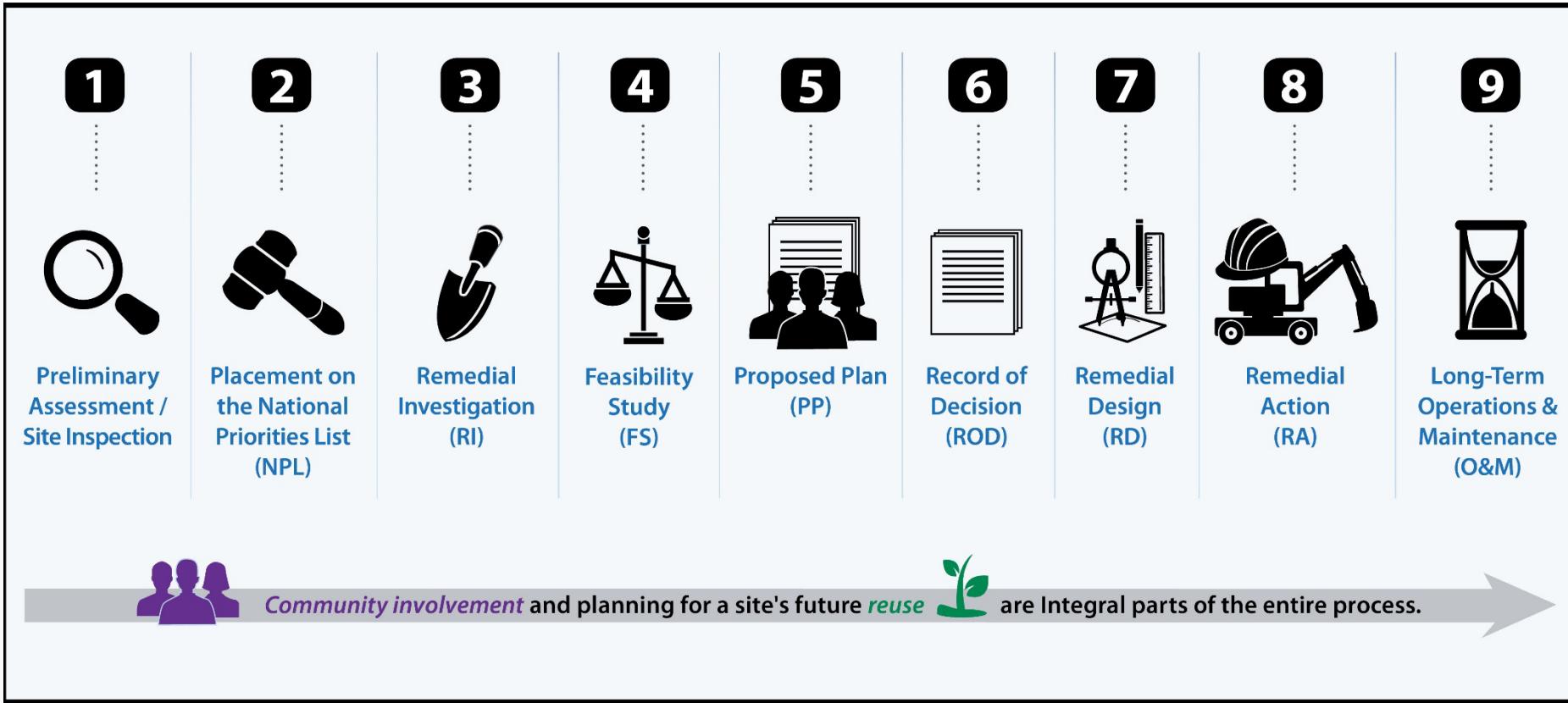


OCNB Listing Process, Con't

- Several Potentially Responsible Parties (PRPs) requested EPA delay final Site listing. EPA offered to enter into a Superfund Alternative Approach agreement under which listing could be delayed while the PRPs performed a comprehensive RI/FS for the Site. Negotiations concluded in the fall of 2019 with no agreement.
- EPA proceeded toward final NPL listing of the OCNB Site, including responding to comments on the January 2018 proposal.
- The OCNB Site finalized on the NPL on September 3, 2020.
- Following the remedial investigation and feasibility study process, EPA can now propose a preferred remedial alternative and select a remedy for the OCNB Superfund Site. (Proposed Plan and Record of Decision)



The Superfund Process





Parallel Enforcement Process

- The OCNB Superfund Site is eligible for funding from the federal Superfund for Site work. There are about 1,600 sites on the NPL, and EPA looks first to PRPs to address sites where there are viable parties.
- While EPA continues Site investigation, EPA is conducting a search for PRPs, including issuance of Information Request Letters.
- With NPL listing for the OCNB Superfund Site, EPA plans to work with the PRPs to implement the Site remedy, once it is selected.
- EPA will issue General Notice letters to identified PRPs.
- PRPs will have opportunity to negotiate settlement with EPA to conduct selected remedy. EPA may also issue unilateral orders where no agreement reached.



Project Timeline

Milestone	Target Date
Final NPL Listing	September 3, 2020
Interim Remedial Investigation/Feasibility Study Report (OCWD)	2021
Comprehensive Remedial Investigation Field Work Start (EPA)	2021
Interim Remedy Proposed Plan and Public Comment Period (EPA)	2022



Community Relations

- The EPA, State agencies, and the OCWD have worked cooperatively on community outreach.
- As part of the Superfund process, EPA is writing a Community Involvement Plan (CIP).
 - EPA conducted in-person interviews with 25 interested individuals for the CIP in January-February 2020.
 - The CIP will be released in early 2021.
- EPA will form a Community Advisory Group (CAG) made up of representatives of diverse community interests, after the release of the CIP.



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Thank You!

