



Hudson River PCB Superfund Site Project Update

Community Advisory Group Meeting

May 11, 2017



Project Update



- Five-Year Review
- In-River
 - Remedial Action Completion Report
 - Property Transfers
 - Data Collection 2016/2017
 - Anticipated Field activities 2017/OM&M
 - FOIA
- Floodplains
 - Reminder on overall process
 - Data gap sampling 2016
 - Anticipated Field activities 2017

Five – Year Review



- EPA continues internal reviews
- EPA continues development of the document
- No specific report release date set
- Some Appendices have been shared with FYR Team (others may be shared)
- Comprehensive report (~900 pages including 15 Appendices) that includes detailed analysis of water, PCB mass, fish, surface sediment, implementation etc.
- EPA will continue to update Federal trustees, NYS, FYR Team and CAG
- Public comment period and meetings planned
- Fact sheet to be released with report

Remedial Action Completion



- Consent decree defines the requirements
- Since last CAG meeting (Dec 2016):
 - Demobilization and restoration completed
 - Engineering documents complete
 - Early site inspections completed – additional inspections may be necessary
- Completion Report (received December 23, 2016)
 - Under review by EPA
 - Copies also provided to federal trustees and NYS

Property Transfer



- Facility road
- Wharf
- Work support marina
- Waterline (Troy to Waterford and Halfmoon)



Data Collection



Water:

- Routine water column sampling continues
- Data through December 2016 used for FYR
- Several recent rounds of high flow monitoring were conducted
- Adjustments to lab program underway
- OM&M scope of work not yet established – ongoing discussions with NYSDEC and GE

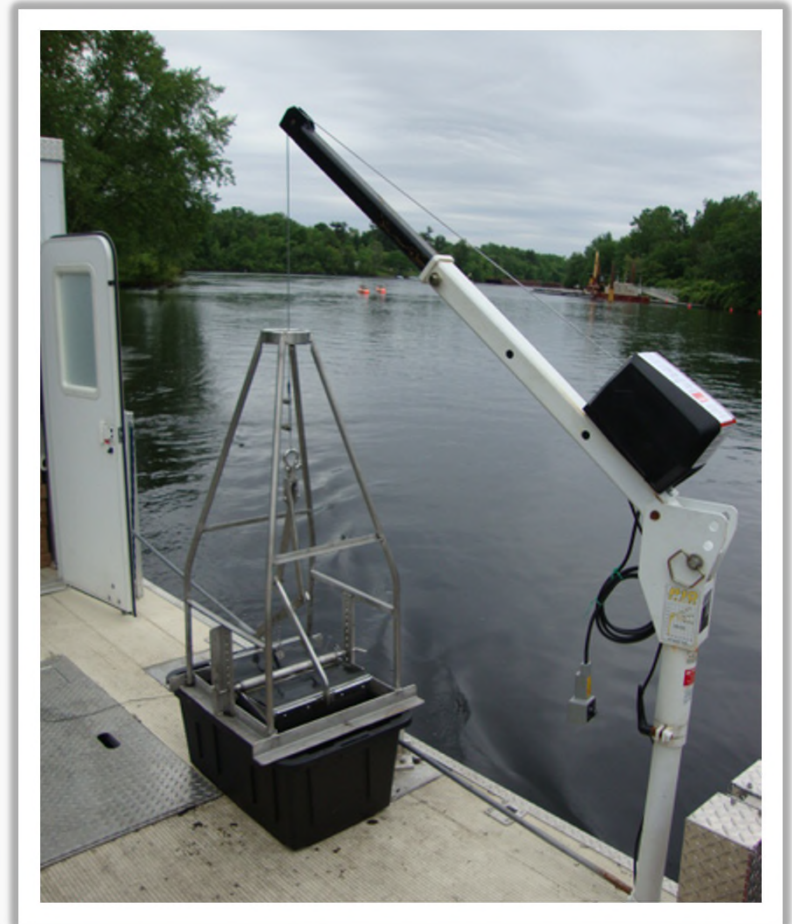


Data Collection



Sediment:

- OM&M scope of work established
- 2016 sampling outside dredged areas collected and used in FYR
 - Data provided to FYR team
- 2017 sampling
 - inside dredge areas
 - in Albany/Troy area
 - potential additional collection outside dredge areas
- Next data collection anticipated in 2021

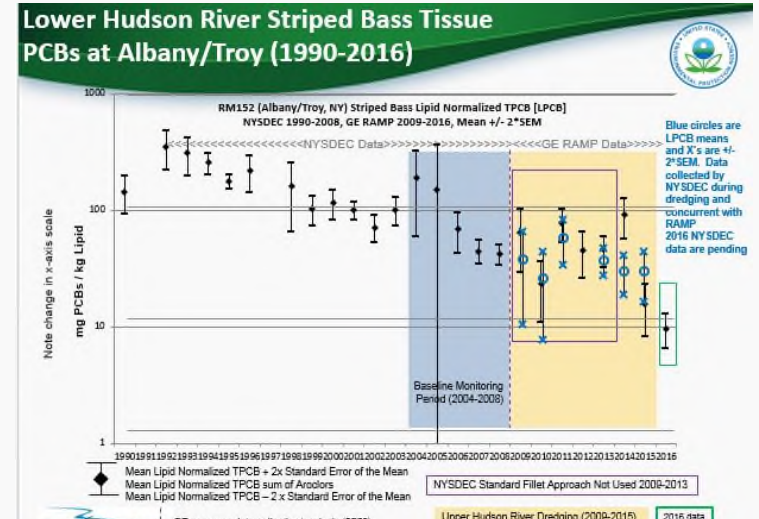


Data Collection



Fish:

- Routine spring and fall fish collection continues
- Spring fish collection began April 23 with striped bass collection
- Data through December 2016 used for FYR
- OM&M scope of work not yet established – ongoing discussions with NYSDEC and GE
- CAG was provided updated fish data presentation that included all 2016 fish data
- Finalizing the special study fish processing report



Species Weighted Average Fish Tissue PCBs (2004-2016)

UHR Largemouth Bass, Brown Bullhead, and Yellow Perch Expressed as Species Weighted Average (mg/kg-wet weight, TPCB-Aroclors) 2004-2016

Species	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
R51 Largemouth Bass	1.98	2.29	2.53	2.04	1.45	0.67	2.16	1.05	1.56	2.36	2.18	2.50	1.16
R51 Brown Bullhead	6.33	4.02	3.99	4.30	2.11	3.57	5.14	3.41	5.63	4.03	3.93	1.61	1.66
R51 Yellow Perch	2.39	0.66	1.61	0.84	0.61	0.64	0.84	1.12	2.00	1.11	1.37	1.07	0.51
R52 Largemouth Bass	2.72	1.94	2.33	1.64	0.87	0.77	1.63	1.43	2.02	1.84	2.05	2.05	0.71
R52 Brown Bullhead	5.83	5.80	4.14	3.15	5.19	3.96	2.70	3.98	5.65	4.69	5.00	1.98	2.02
R52 Yellow Perch	1.65	0.61	1.29	0.43	0.45	0.50	0.76	0.75	1.27	1.52	1.61	1.23	0.61
R53 Largemouth Bass	1.33	1.55	2.55	0.82	0.54	0.67	1.25	0.69	2.47	1.65	1.73	0.83	1.41
R53 Brown Bullhead	2.42	3.53	3.93	3.15	1.66	2.00	1.81	2.46	2.14	2.12	3.61	1.75	1.21
R53 Yellow Perch	1.31	0.37	0.66	0.42	0.28	0.20	0.26	0.36	0.55	0.44	2.53	0.62	0.34
RDD Species*Length UHR Weighted Average	2.53	2.56	3.01	2.08	1.93	1.44	1.78	1.67	2.52	2.10	2.67	1.42	1.25
R51 Species Weighted Average	4.81	2.91	3.09	2.93	1.66	1.94	3.35	2.10	3.39	2.98	2.85	1.98	1.32
R52 Species Weighted Average	3.90	3.52	3.03	2.20	2.74	2.15	2.02	2.49	3.55	3.07	3.70	1.94	1.28
R53 Species Weighted Average	1.81	2.31	2.98	1.81	1.01	1.21	1.41	1.44	2.15	1.75	2.72	1.21	1.23

Preliminary analyses 10

Data Collection



Habitat/Caps:

- Planting completed 2016
- Annual habitat monitoring and shoreline inspections were conducted in September 2016
- Annual habitat monitoring (OM&M) plan in review
- Habitat monitoring anticipated to be conducted in August-September 2017
- Cap surveys proposed for 2018 (5th year surveys)



OM&M (See Poster)



- Important to monitor fish, water and sediment
- PCBs in sediment are the primary source of PCBs in the river
- Water provides information related to
 - source control
 - release from sediments
 - load
- Fish are the primary indicator (compared to targets and goal)
- For all three media, time is a critical component to determine change
- Monitoring will be needed for the foreseeable future
- OM&M discussions are ongoing

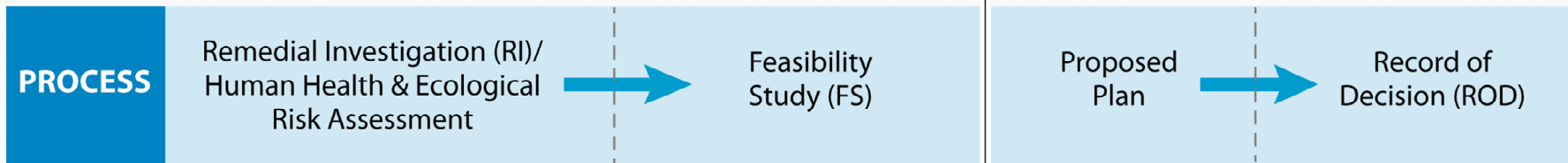
RI/FS Process



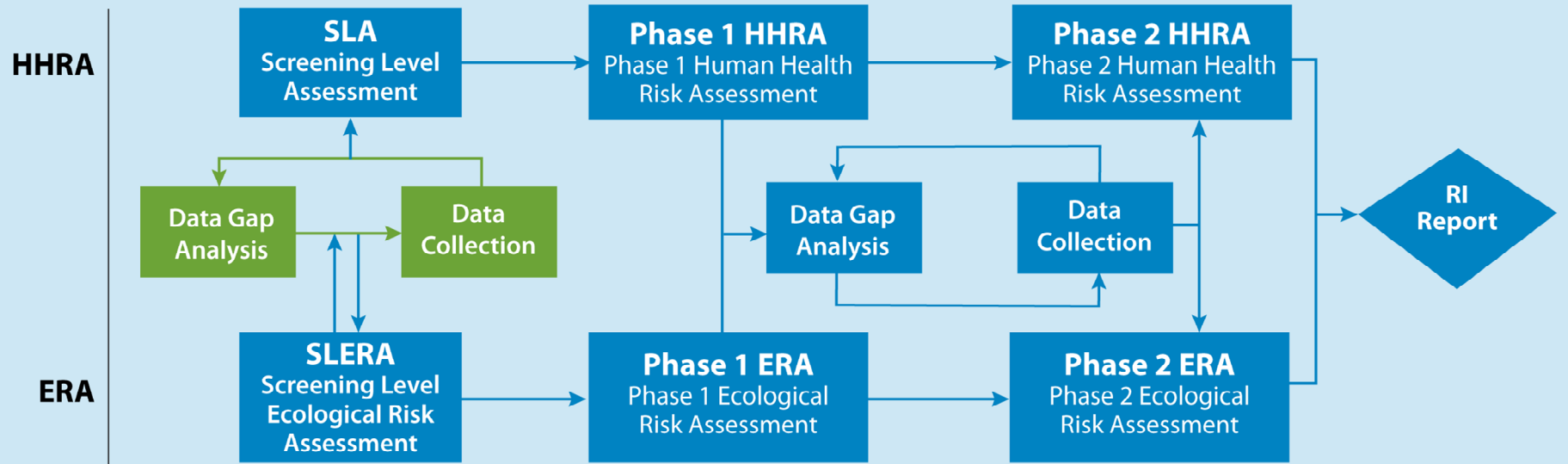
- Current sampling at the beginning of the RI/FS Process

Work to be completed under EPA's 2014 Administrative Order on Consent (AOC) with GE

Future Actions by EPA



Conceptual Hudson River Floodplain Risk Assessment Process



Note: Not all data collection, analyses, reports or RI processes are depicted.

2016 Data Gap Sampling



- Sample locations based on:
 - Statistical evaluation, likelihood of flooding, how the area floods, spatial distribution, land features, if a property has been sampled
- Conducted between October and December 2016
- 530 samples from 270 properties (~7,500 samples and ~670 properties sampled to date)
- Typically highest concentrations near the river and further upstream
- This round of sampling focused on backwaters and less frequently flooded areas
- Letters with results are being sent to property owners with 2016 Sampling Summary fact sheet
- Several areas have been identified for potential short term response actions

2017 Floodplain Field Activities



- Floodplain Soil Sampling
 - Based on data gap analysis
 - Approximately 400 locations
 - Includes locations not collected in 2016
 - Field work expected early summer
 - Additional rounds may be needed
- Floodplain Standing Water Sampling
 - Sampling approach being discussed with GE and NYSDEC
 - Includes consideration of the Old Champlain Canal
 - Field work likely later this year



2017 Floodplain Field Activities



- Backwater Flooding Elevations
 - Data collection started fall 2016 will continue this spring/summer
 - Data will be used to help refine understanding of backwaters
- Flood Mud Sampling
 - Samples collected in February and April 2017 following high water events
 - 18 samples collected so far this year
 - Results anticipated soon
- Short Term Removal Action Inspections
 - Planned for June 2017
 - Repairs as needed



Next Steps



- Continue Data Gap Analysis
 - Select additional locations as needed
- Finalize Floodplain Characterization Report
 - Will include all available data
- Begin Screening-Level Assessments
 - Human Health
 - Ecological





Questions?