



# CLARK FORK RIVER

## ESTIMATE OF CONTAMINATED SEDIMENT QUANTITIES

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### Prepared For

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## TABLE OF CONTENTS

1 Introduction .....	1
2 Background .....	1
3 Methods.....	1
4 Results.....	6
5 Discussion.....	24
6 References .....	24
Appendix 1. Phase 8/9 Pit Sampling Data.....	26
Appendix 2. Data Gaps Pit Sampling Data .....	50

## LIST OF TABLES

Table 1. Summary of estimated contaminated sediments quantities, Upper Clark Fork River , Reach A.... 7

## LIST OF FIGURES

Figure 1. Overview of sampling efforts by CFROU Phase. ....	3
Figure 2. Phase 4 sample pit locations symbolized by maximum depth of CoCs >1400 mg/kg. ....	8
Figure 3. Phase 4 contaminated sediment removal scenarios. ....	9
Figure 4. Phase 7 sample pit locations symbolized by maximum depth of CoCs >1400 mg/kg. ....	10
Figure 5. Phase 7 contaminated sediment removal scenarios. ....	11
Figure 6. Phase 8/9 sample pit locations symbolized by maximum depth of CoCs >1400 mg/kg. ....	12
Figure 7. Phase 8/9 contaminated sediment removal scenarios.....	13
Figure 8. Phase 12 sample pit locations symbolized by maximum depth of CoCs >1260 mg/kg. ....	14
Figure 9. Phase 10/11 sample pit locations symbolized by maximum depth of CoCs >1260 mg/kg. ....	15
Figure 10. Phase 10/11 contaminated sediment removal scenarios.....	16
Figure 11. Phase 12 contaminated sediment removal scenarios. ....	17
Figure 12. Phase 13/14 sample pit locations symbolized by maximum depth of CoCs >1400 mg/kg. ....	18
Figure 13. Phase 13/14 contaminated sediment removal scenarios.....	19
Figure 14. Phase 17 - 22 sample pit locations symbolized by maximum depth of CoCs >1400 mg/kg.....	20
Figure 15. Phases 17 and 18 contaminated sediment removal scenarios.....	21
Figure 16. Phases 19 and 20 contaminated sediment removal scenarios.....	22
Figure 17. Phases 21 and 22 contaminated sediment removal scenarios.....	23

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## 1 Introduction

The purpose of this analysis is to assist the State of Montana with filling data gaps related to understanding the quantity of contaminated sediments remaining in the Clark Fork River Operable Unit (CFROU) floodplain, and to develop volume estimates to support remedy and restoration planning. “Contaminated sediments” include slickens, impacted soils, tailings and slightly impacted soils as defined in the Record of Decision (ROD) (EPA 2004) and Preliminary Design Plans (PDPs) such as State of Montana (2011). Soils in the Clark fork river floodplain have been impacted from mine waste from historic mining, milling, and smelting processes linked primarily to the Anaconda Copper Company operations in Butte and Anaconda. A significant data gap is the unknown volume of contaminated sediments remaining in the floodplain. Prior to 2017, design level soil pit sampling was completed in several Phases as part of remedial designs. In 2020, the Montana Natural Resource Damage Program (NRDP) completed additional sampling and characterization in uncharacterized Phases of the CFROU within Reach A. The goal of this characterization was to collect sufficient data to estimate remaining volumes of contaminated sediments in Reach A. This document provides a summary of estimated contaminated sediments depths and volumes for each unremediated Phase in Reach A, using a range of scenarios. This sampling effort is referred to as “data gaps sampling.” Figure 1 provides an overview of completed sampling efforts within Reach A of the CFROU.

## 2 Background

Between 2011 and 2016, the State (DEQ and NRDP) completed cleanup of residential yards and the Trestle area, along with remediation and restoration work in Phases 1, 2, 5 and 6 of the CFROU. In addition, varying degrees of characterization and design work were either initiated or completed for Phases 3, 4, 7, 8, 9, 13 and 14. Phases 15 and 16 are recently completed. Little characterization has been performed in Phases 10, 11 and 12; or between Phases 17 and 22 (Deer Lodge to Garrison). There is a final Remedial Action Work Plan (RAWP) for Phase 3 and contaminated sediments removal volumes are known in that Phase; therefore, it is not included in this analysis.

## 3 Methods

As part of DEQ’s past remedial designs, soil test pits were sampled within Phases 4, 7, 8, 9, 13 and 14 using an approximate density grid of 1 test pit every 125 feet. Phases 10, 11, 12 and 17 – 22, which had not been sampled as part of remedial designs, presented data gaps. In these Phases, soils characterization needed to be quick and cost-effective to support volume estimates for these remaining Phases. Therefore, it was important to determine how much the design-level sampling density could be reduced and still produce a useful estimate of contaminated sediment depths, areas and volumes.

In November 2019, GIS analyses were completed to identify a reasonable level of effort for this data gaps characterization. Soil pit data sets from Phases 2, 5, 6, 15 and 16 were evaluated using different ways of reducing sample size. The analyses assessed the ability of a reduced sample size to predict the same removal volume as is predicted by the full data set in GIS.

### 3.1 Determining Data Gaps Sampling Pit Density

After testing different methods to reduce sample size either randomly or systematically (such as selecting every other pit), the most accurate results were achieved by forming transects and including

points at each edge of the removal surface, points near the river banks, and points that capture geomorphic surface transitions, such as swales and abandoned meander scrolls.

Using this method of manually selecting sample points along floodplain transects, it was possible to reduce the number of pits to 10 percent of the original sampling density and achieve predicted volumes within 10 percent of the full data set prediction. For example, the reduced sampling scenario applied to Phases 15 and 16 predicted a volume within 9.2 percent of the full data set prediction. Similar trials with Phase 2 and the Phases 5 and 6 data predicted volumes within 1.25 percent and 0.3 percent of the full data sets' predictions, respectively.

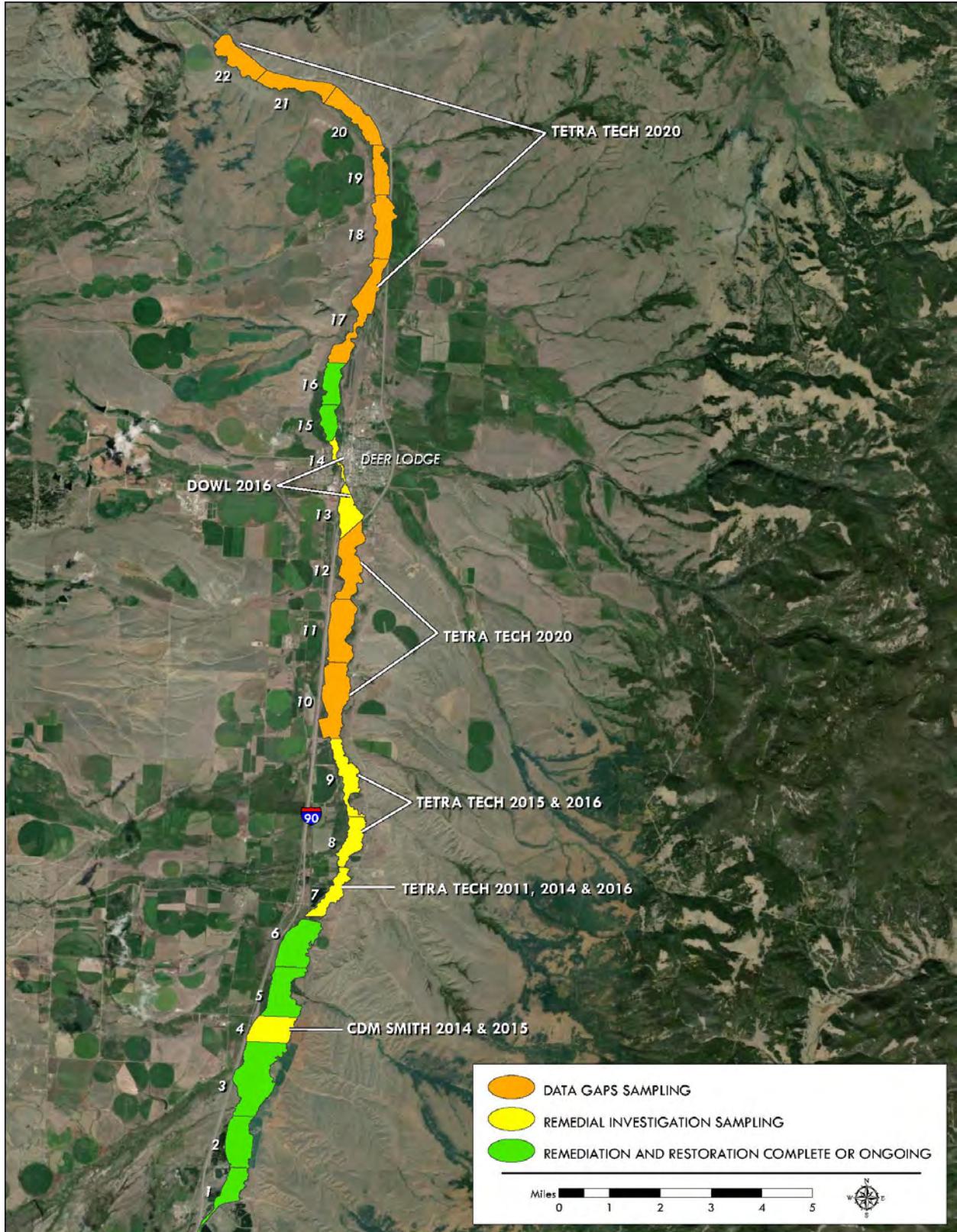
Similarly, a power analysis evaluating variability in contaminated sediment depths using the full data sets from Phases 5, 6, 8, 9, 15, and 16 showed that a 10 percent relative margin of error could be achieved, with an 80 percent confidence level, by sampling approximately 10 percent of the pits within these investigation areas. Based on these results, a sampling density of approximately 1 pit per 4 to 5 acres was selected for the data gaps sampling effort.

While this reduced sampling density can produce volume and average depth estimates within 10 percent of more intensive sampling estimates, it is important to note that it does not provide sufficient information about contaminated sediment depths at a resolution necessary to support remedial designs. Therefore, additional contaminated sediment characterization will be needed to support remedial design.

### 3.2 Estimating Contaminated Sediments Quantities by Phase

As part of past remedial designs, contaminated sediments data for Phases 4, 7, 8, 9, 13 and 14, were collected by contractors to Montana DEQ. These data were provided to Geum in both tabular and spatial formats. Data for Phases 17 to 22 were collected by Tetra Tech under contract to NRDp in 2020 and provided as tabular data and surveyed pit locations. These data were used to identify the deepest sampled six-inch interval of soil in each test pit that exceeded the removal criteria. The Remedial Design Assumption is that tailings/impacted soil materials at a site-specific location are contaminated if the sum of the total soil metal concentrations (As+Cd+Cu+Pb+Zn) is greater than 1,400 mg/kg. To determine whether a soil interval exceeded the threshold, 1400 mg/kg was used for lab results and 1260 mg/kg was used for X-ray fluorescence (XRF) results, allowing for a 10 percent measurement error in the XRF results. For example, if combined measured concentrations (in parts per million) of Contaminants of Concern (COC) copper, zinc, lead, cadmium, and arsenic exceeded the threshold in the 0- to 6-inch soil depth interval but not in the 6- to 12-inch depth interval, that sample location was identified as having a contaminated sediment depth of 0.5 ft (6 inches). In addition, data were analyzed to identify test pit locations where arsenic exceeded the 620 mg/kg threshold at the surface (0-2 inch and/or 0-6-inch depth).

A spatial data point layer representing test pit locations was created using test pit survey coordinates. Tabular data denoting the maximum contaminated depth interval at each location were joined to the spatial data point layer as an attribute to be used to estimate contaminated sediments quantities by Phase.



**Figure 1.** Overview of sampling efforts by CFROU Phase.

### 3.3 Preliminary Analysis Boundary Development

Analysis masks were created to define the boundary of the extent of completed test pit sampling for each Phase. Mask extents were defined by the lateral extents of pit sampling and the upstream and downstream Phase breaks for each Phase. An analysis mask defines the boundary of the area and data to be used in the analysis.

After the analysis mask was applied, the ESRI ArcGIS *Spline Interpolation with Barriers* geoprocessing tool was executed to create an interpolated surface representing the maximum depth of contaminated sediments for each phase. This interpolation method was chosen because it is well-suited for generating “gently varying surfaces such as...pollution concentrations,” (ESRI, 2021). The resulting surfaces were then clipped to exclude the Clark Fork River channel, and volume estimates were produced for each of the three scenarios described below using the *Zonal Statistics* tool, which summarizes removal depth pixel values within the extents of each analysis scenario.

#### Estimated Contaminated Sediment Removal Volume Scenarios

NRDP identified three estimated contaminated sediment removal volume scenarios to be evaluated:

- **Scenario 1** – Removal of all contaminated sediments within the sampling extent.
- **Scenario 2** – Current removal criteria: The sum of COCs (As, Cd, Cu, Pb, Zn) exceeds 1,400 mg/kg (parts per million) and any of the following: The lowest contaminated interval of metals is deeper than 24 inches, the contamination lies within the Channel Migration Zone (CMZ), arsenic exceeds the human health standard at the surface and the sum of COCs exceeds 1,400 mg/kg at an interval shallower than 24 inches.
- **Scenario 3** – Removal of contaminated sediments within the channel migration zone only (CMZ)

Scenario 1 volumes were estimated within a boundary defined by a 50 ft buffer beyond the lateral extents of pit sampling within each Phase.

Scenario 2 volumes were estimated within a boundary defined by criteria used in previously completed or designed CFROU Reach A phases (CDM et al., 2016). These criteria include: The sum of COCs (As, Cd, Cu, Pb, Zn) exceeds 1,400 mg/kg (parts per million) and any of the following: The lowest contaminated interval of metals is deeper than 24 inches, the contamination lies within the Channel Migration Zone (CMZ), arsenic exceeds the human health standard at the surface and the sum of COCs exceeds 1,400 mg/kg at an interval shallower than 24 inches.

Scenario 3 volumes were estimated within the boundary of the CMZ only. Small modifications to the CMZ were made to exclude recent infrastructure construction and to remove obvious GIS artifacts. These modifications are described in more detail in the descriptions of sampling and data sources by Phase below.

### 3.4 Phase-specific Sampling and Data Sources

Phases 8-9, 10-11, and 13-14 have been combined for the purposes of this summary because they were combined during remedial designs (Phases 8-9 and 13-14) or are in a contiguous State of Montana ownership (Phases 10-11). Details describing data collection, analysis, and removal estimates for each Phase are included below.

#### Phase 4

Pit sampling for Phase 4 was completed by CDM Smith under contract to DEQ in 2014 and 2015. Sampling density was approximately 125-foot grid spacing, for a total of 241 pits sampled. Contaminant concentrations were identified via lab analysis. CDM Smith created a spatial data file indicating test pit locations and depth of contaminants >1400 mg/kg that was used to generate Phase 4 contaminated sediment volume estimates provided in this report. Figure 2 shows the location of sampled pits and the maximum depth intervals with total COCs >1400 mg/kg.

A preliminary design for Phase 4 was completed in 2016 (Montana DEQ 2016). Remedial actions are included in Sections 3 and 4 of that document, including identification of a contaminated sediment removal boundary and contaminant removal volume estimates. However, in order to generate consistent estimates for the purposes of long-term remediation and restoration planning by NRDp and DEQ, this report evaluated Phase 4 contaminated sediments data using the same three scenarios and methods described above. Therefore, estimates of contaminated sediments volumes reported here are different than those reported by CDM.

#### Phase 7

Pit sampling for Phase 7 was completed by Tetra Tech in 2011, 2014 and 2016. Sampling density was approximately 125-foot grid spacing, for a total of 472 pits sampled. Contaminant concentrations were identified via XRF and lab analysis. Figure 4 shows the location of sampled pits and the maximum depth intervals with total COCs >1400 mg/kg.

A preliminary design for Phase 7 was completed in 2017 (Montana DEQ & Montana NRDp, 2017). Remedial actions are included in Sections 3 and 4 of that document, including identification of a contaminated sediment removal boundary and contaminant removal volume estimates. However, in order to generate consistent estimates for the purposes of long-term remediation and restoration planning by NRDp and DEQ, this report evaluated Phase 7 contaminant data using the same three scenarios and methods described above. The CMZ boundary used to generate these estimates was modified to exclude infrastructure.

#### Phase 8 and 9

Pit sampling for Phases 8 and 9 was completed by Tetra Tech in 2015 and 2016. Sampling density was approximately 125-foot grid spacing, for a total of 1,026 pits sampled. Contaminant concentrations were identified via lab analysis. Figure 6 shows the location of sampled pits and the maximum depth intervals with total COCs >1400 mg/kg.

#### Phase 10 and 11

Pit sampling for Phases 10 and 11 was completed by Tetra Tech in 2020. Data gaps sampling was performed at a density of approximately 1 pit/4 acres, with some additional pits included in environmentally sensitive areas, for a total of 183 pits sampled. Contaminant concentrations were identified via XRF. Figure 9 shows the location of sampled pits and the maximum depth intervals with total COCs >1260 mg/kg.

#### Phase 12

Pit sampling for Phase 12 was completed by Tetra Tech in 2020. Data gaps sampling was performed at a density of approximately 1 pit/4 acres, for a total of 68 pits sampled. Contaminant concentrations were

identified via XRF. Figure 8 shows the location of sampled pits and the maximum depth intervals with total COCs >1260 mg/kg.

#### **Phase 13 and 14**

Pit sampling for Phases 13 and 14 was completed by DOWL in 2016 (Montana DEQ 2017). Sampling density was approximately 125-foot grid spacing, for a total of 482 pits sampled. Contaminant concentrations were identified via XRF. DOWL created a spatial data file indicating test pit locations and the depth of contaminants >1400 mg/kg that was used to generate the Phase 13/14 estimates provided in this report. Figure 12 shows the location of sampled pits and the maximum depth intervals with total COCs >1400 mg/kg. The CMZ boundary used to generate these estimates was modified to exclude city infrastructure such as roads, bridges and railroad berms.

#### **Phases 17 – 22**

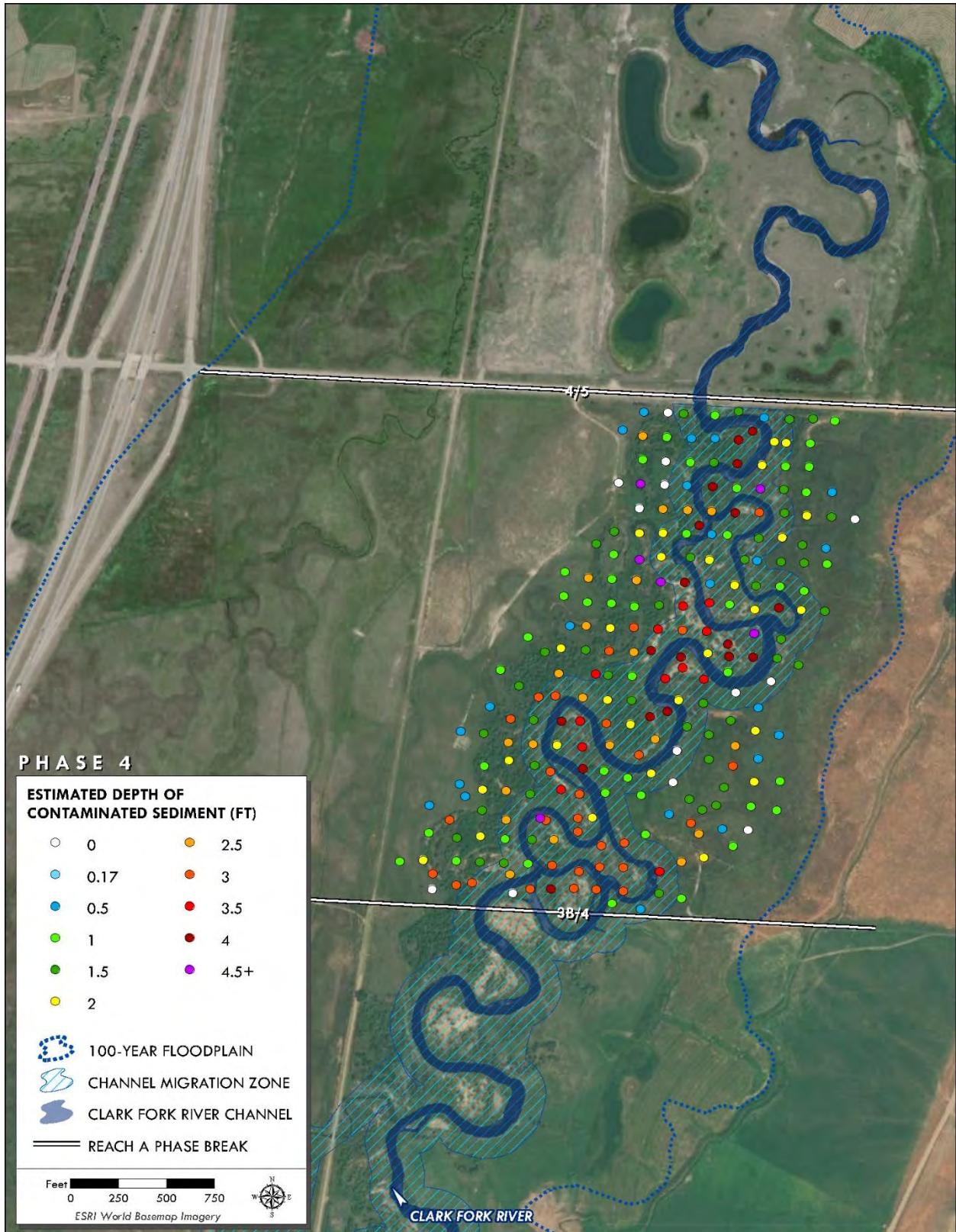
Pit sampling for Phases 17 - 22 was completed by Tetra Tech in 2020. Data gaps sampling was performed at a density of approximately 1 pit/4 acres, for a total of 297 pits sampled. Contaminant concentrations were identified via XRF. Portions of Reaches 17 and 22 were not sampled due to lack of access. The removal area within unsampled portions of the reach is based on the CMZ extents for all three scenarios, and volume estimates for these areas are based on the average removal depth calculated for the portions of the phase where pit data were collected. Figure 14 shows the location of sampled pits and the maximum depth intervals with total COCs >1260 mg/kg.

## **4 Results**

**Table 1** summarizes the estimated contaminated sediment volumes by Phase for each of the scenarios. Volume estimates are rounded to the nearest 10,000 cubic yards. Volumes and depths reported in this section are strictly estimates of contaminated sediment quantities and do not include any additional earthwork such as over-excavation. Actual volumes of earthwork within each of the three scenarios would vary from the volumes reported here depending on data collected during future remedial designs, and field conditions encountered during construction of remedial and restoration actions. Figures 2, 4, 6, 8, 9, 12 and 14 show the locations of sampled pits within each Phase, labeled by depth of contaminated sediments in each pit. Figures 3, 5, 7, 10, 11, 13, 15, 16 and 17 show the estimated contaminated sediments volume associated with each scenario for each Phase.

**Table 1.** Summary of estimated contaminated sediments quantities, Upper Clark Fork River, Reach A.

PHASE	SCENARIO	ESTIMATED AREA (acres)	ESTIMATED VOLUME (cy) +/- ~10%	AVERAGE DEPTH (ft)
Phase 4	1. Pit Extents	84	240,000	1.8
	2. Removal Criteria	48	180,000	2.3
	3. CMZ	38	140,000	2.2
Phase 7	1. Pit Extents	147	280,000	1.2
	2. Removal Criteria	86	220,000	1.6
	3. CMZ	59	150,000	1.6
Phase 8/9	1. Pit Extents	322	660,000	1.3
	2. Removal Criteria	193	530,000	1.6
	3. CMZ	149	360,000	1.5
Phase 10/11	1. Pit Extents	579	1,030,000	1.1
	2. Removal Criteria	220	620,000	1.8
	3. CMZ	183	490,000	1.6
Phase 12	1. Pit Extents	294	740,000	1.6
	2. Removal Criteria	148	500,000	2.1
	3. CMZ	110	360,000	2.0
Phase 13/14	1. Pit Extents	111	240,000	1.4
	2. Removal Criteria	50	170,000	2.1
	3. CMZ	39	120,000	1.9
Phase 17	1. Pit Extents	179	430,000	1.5
	2. Removal Criteria	125	380,000	1.9
	3. CMZ	101	260,000	1.6
Phase 18	1. Pit Extents	126	200,000	1.0
	2. Removal Criteria	75	160,000	1.3
	3. CMZ	71	140,000	1.2
Phase 19	1. Pit Extents	129	220,000	1.1
	2. Removal Criteria	79	180,000	1.4
	3. CMZ	79	180,000	1.4
Phase 20	1. Pit Extents	220	430,000	1.2
	2. Removal Criteria	108	270,000	1.5
	3. CMZ	96	220,000	1.4
Phase 21	1. Pit Extents	178	340,000	1.2
	2. Removal Criteria	77	200,000	1.6
	3. CMZ	72	170,000	1.5
Phase 22	1. Pit Extents	116	250,000	1.3
	2. Removal Criteria	77	190,000	1.6
	3. CMZ	67	160,000	1.4
All Phases Total	1. Pit Extents	2485	5,080,000	1.3
	2. Removal Criteria	1286	3,590,000	1.7
	3. CMZ	1063	2,740,000	1.6



**Figure 2.** Phase 4 sample pit locations symbolized by maximum depth of CoCs >1400 mg/kg.

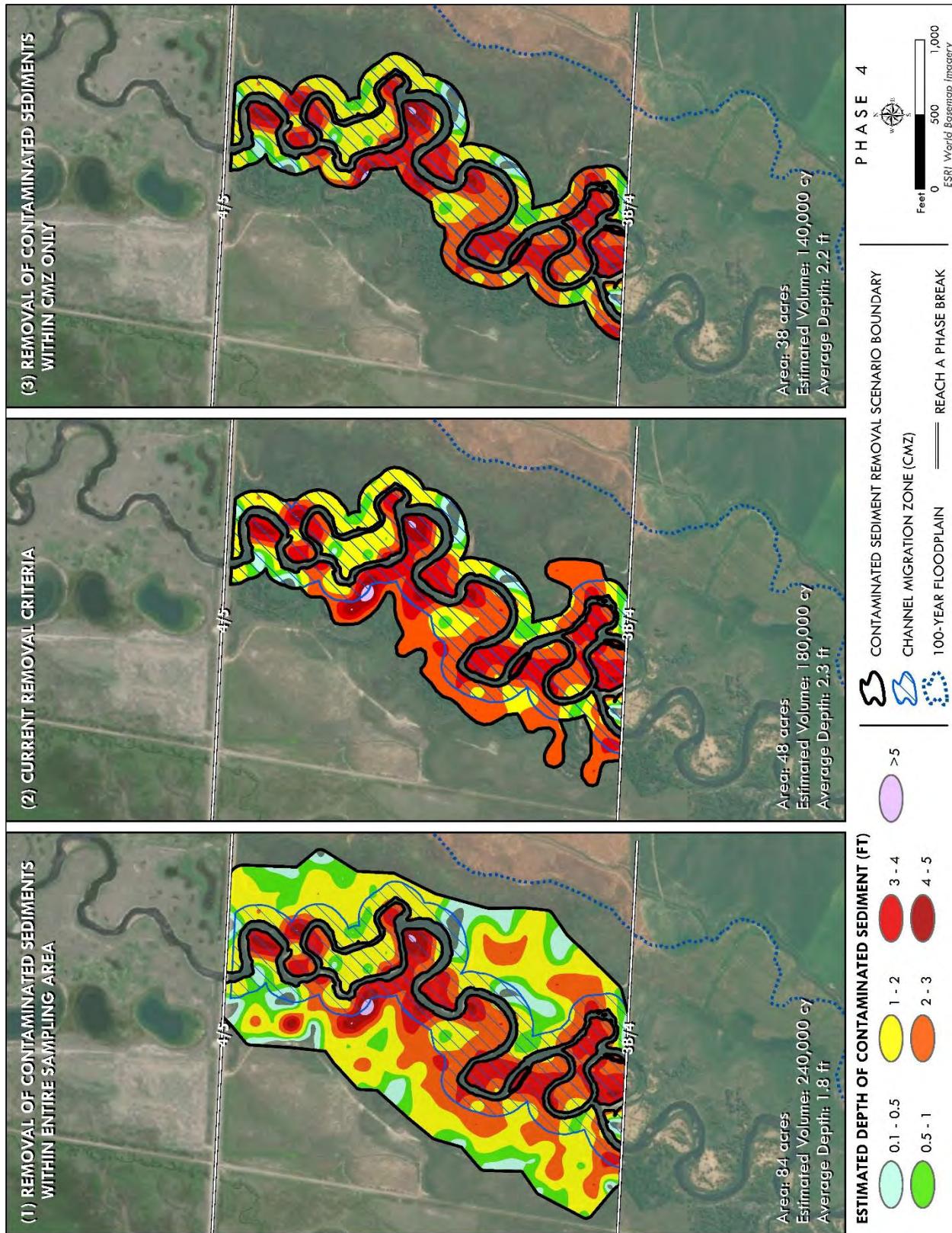
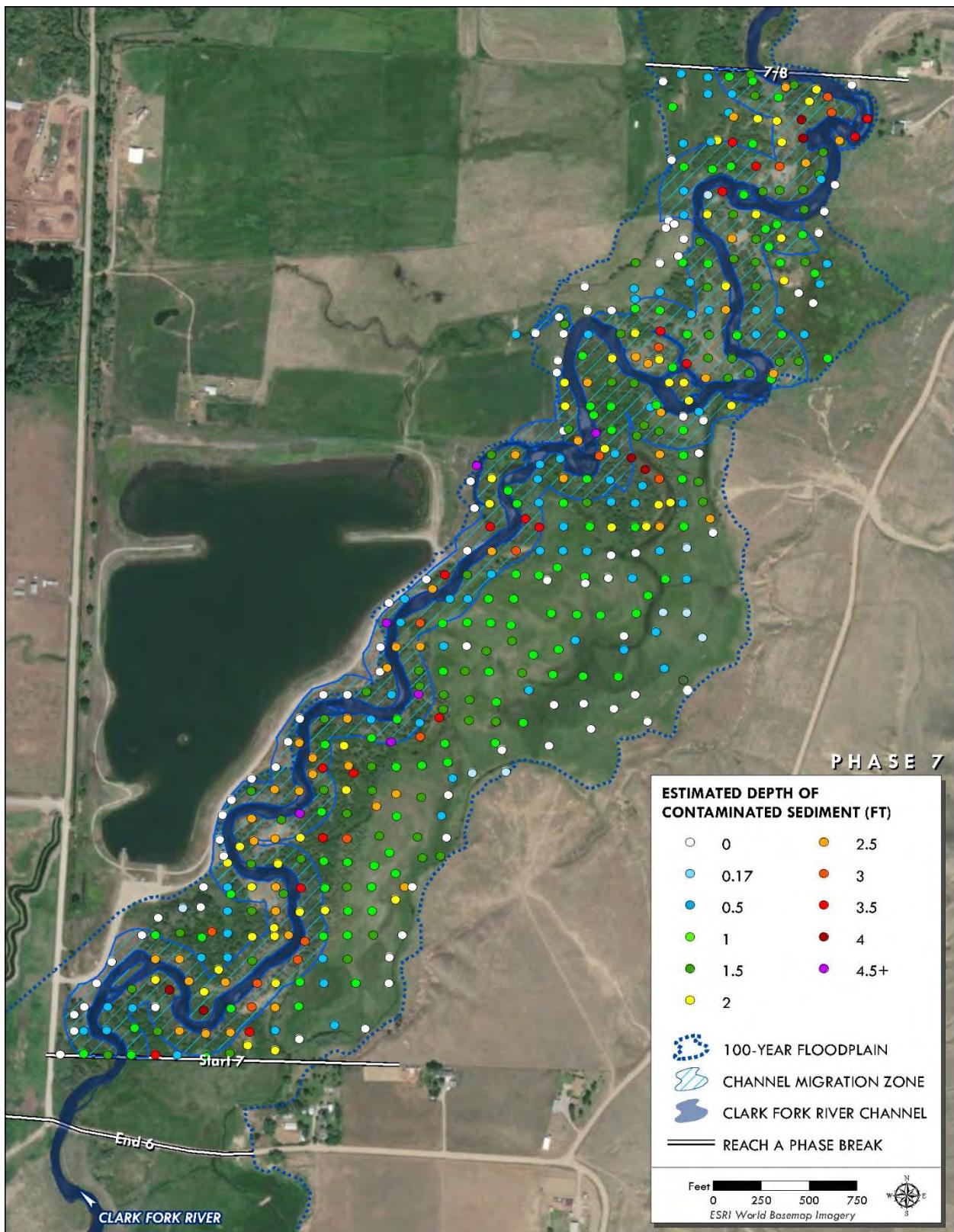


Figure 3. Phase 4 contaminated sediment removal scenarios.



**Figure 4.** Phase 7 sample pit locations symbolized by maximum depth of COC >1400 mg/kg.

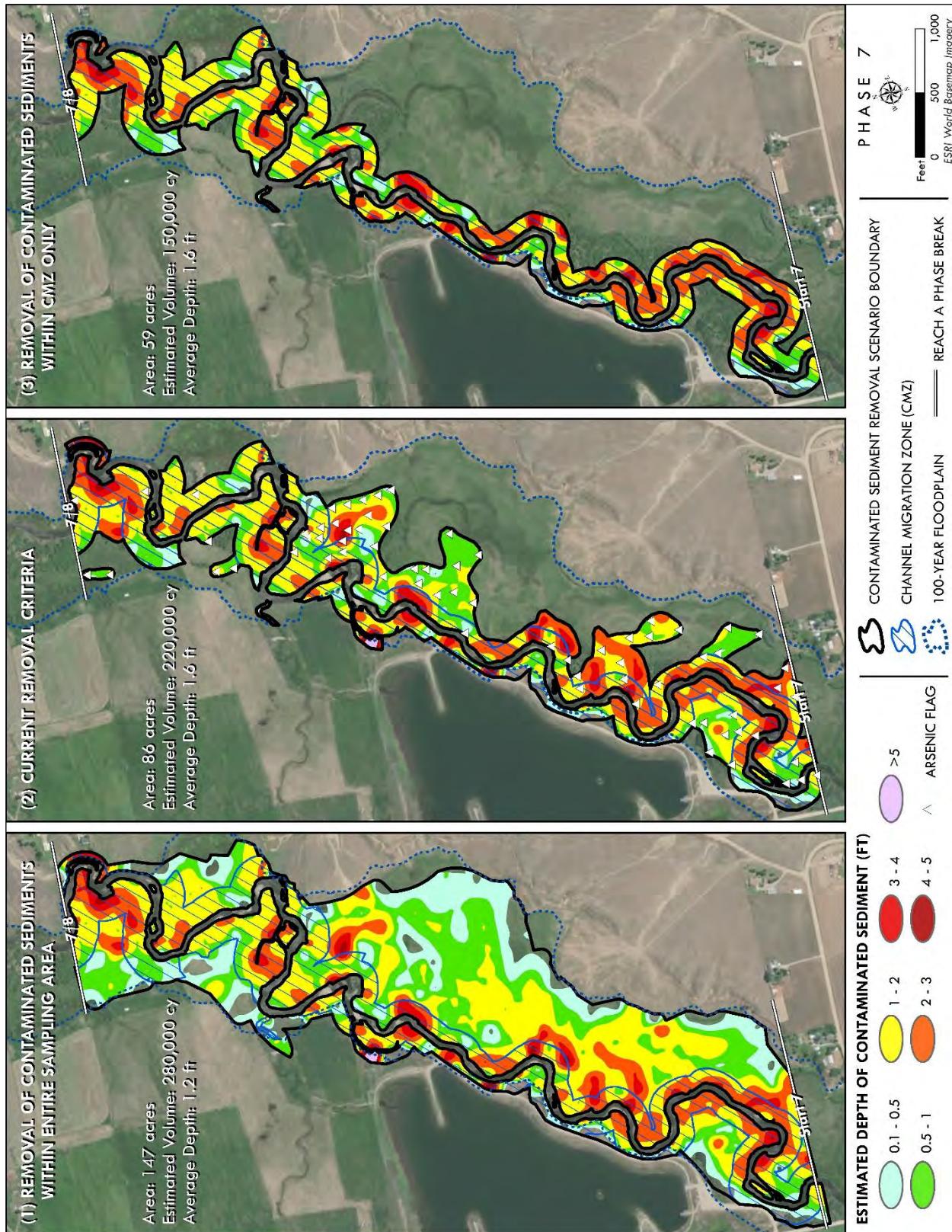
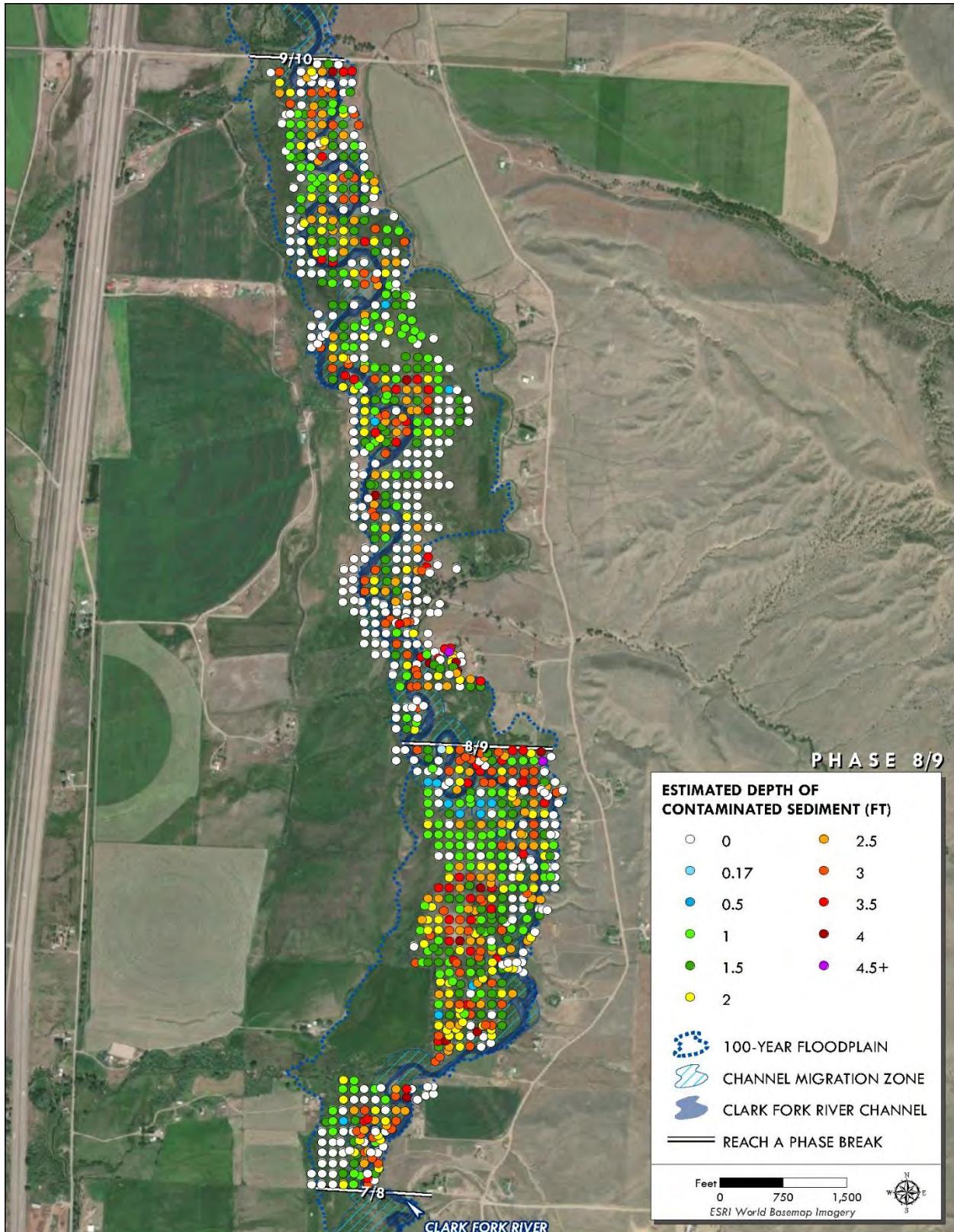


Figure 5. Phase 7 contaminated sediment removal scenarios.



**Figure 6.** Phase 8/9 sample pit locations symbolized by maximum depth of COC >1400 mg/kg.

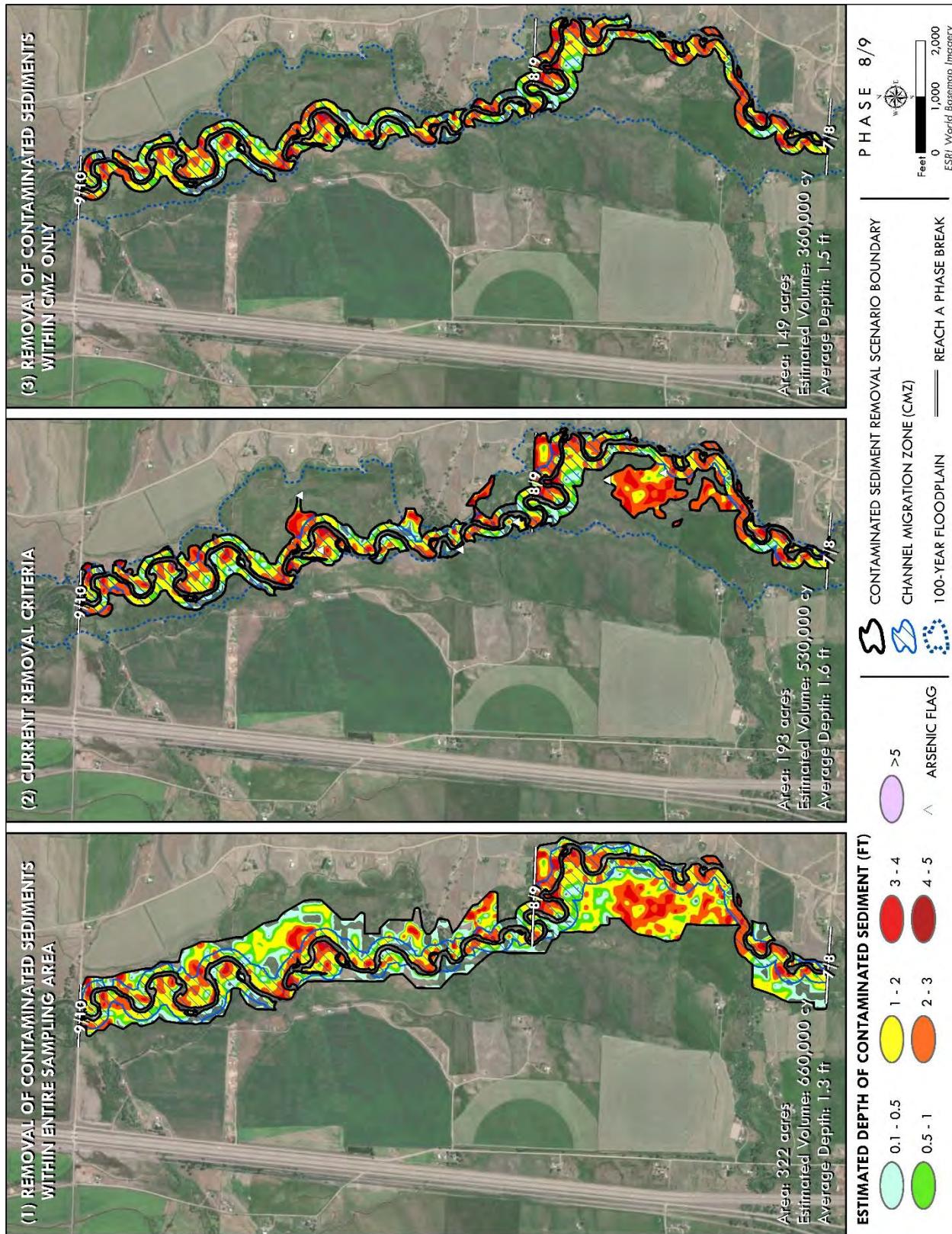
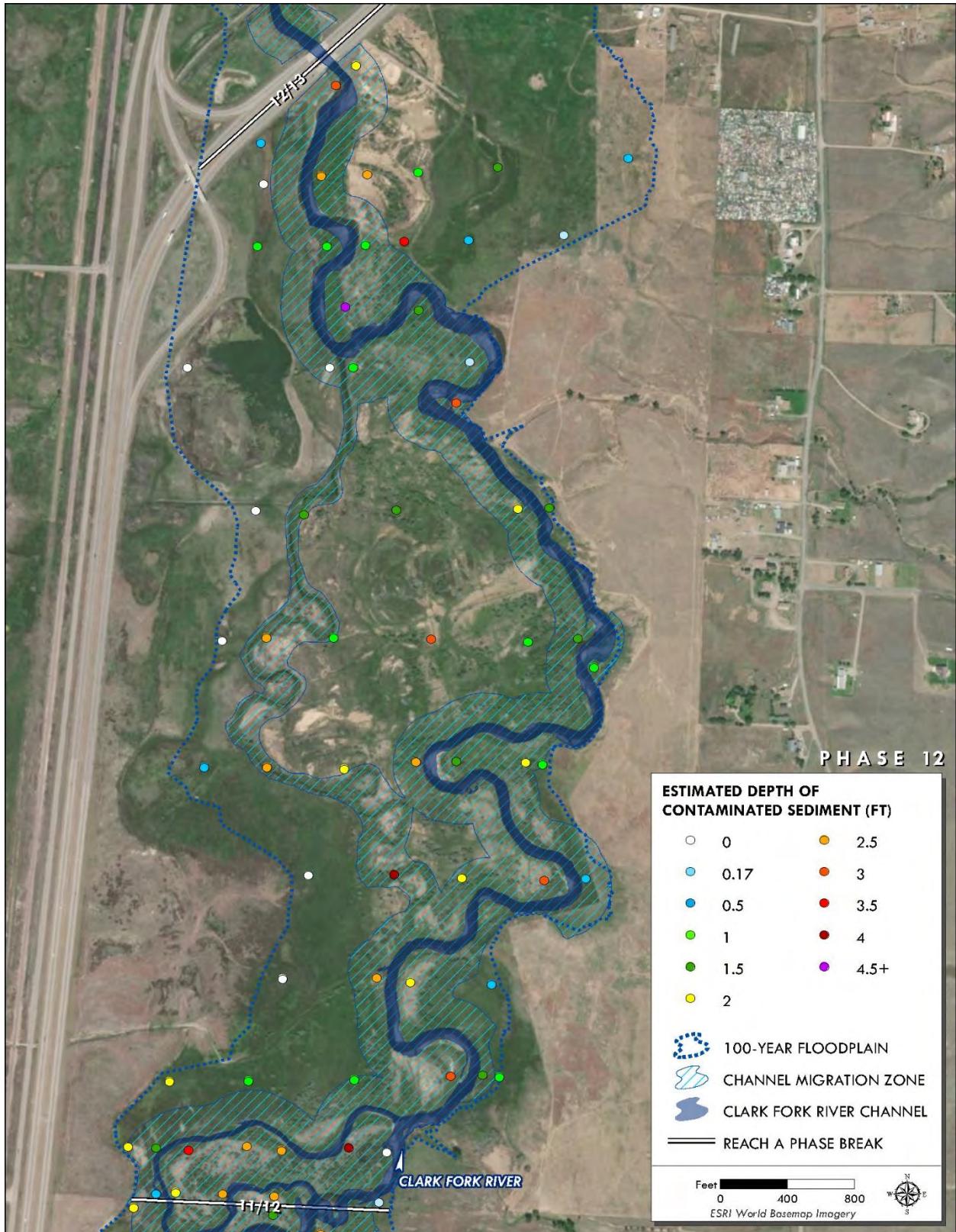
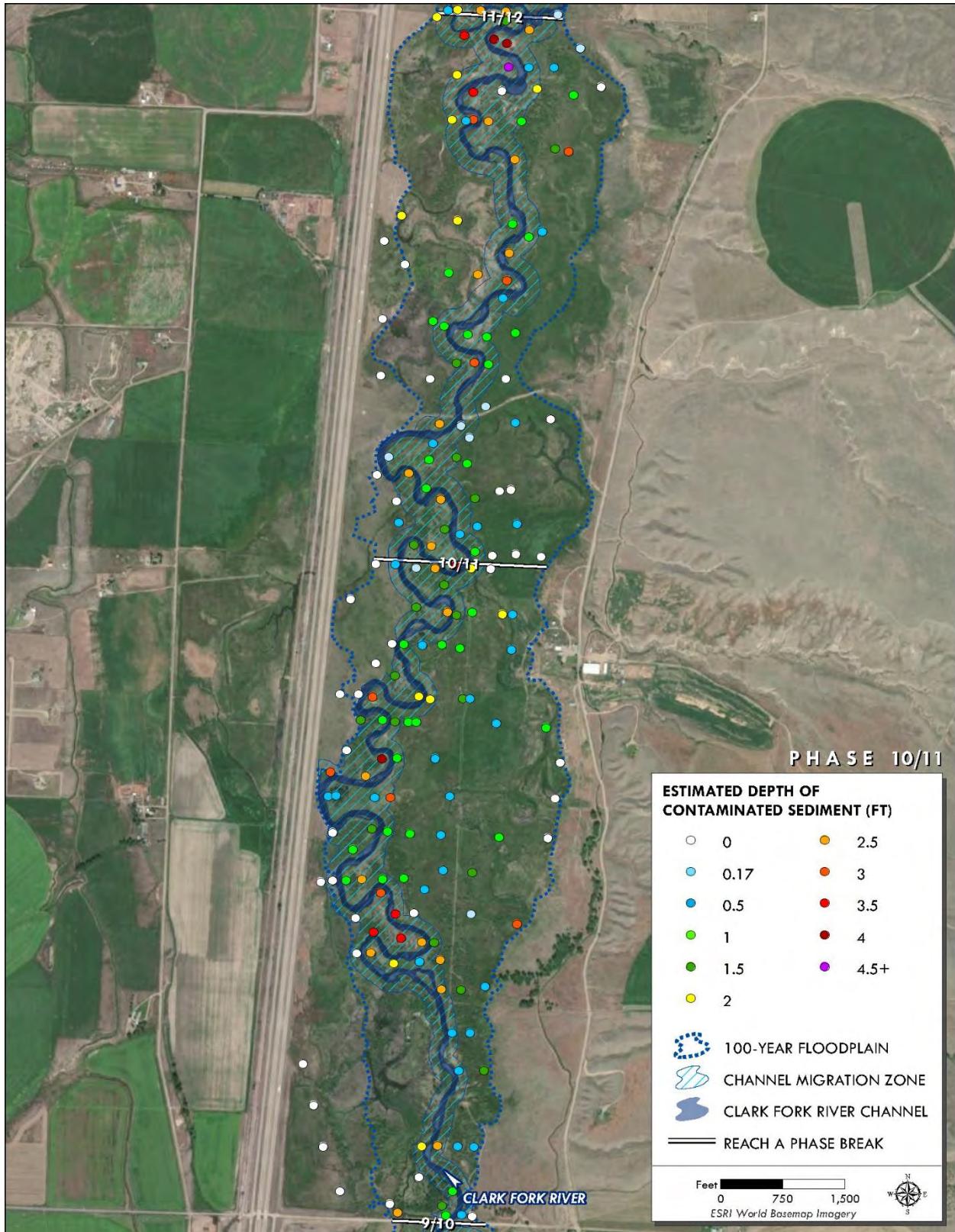


Figure 7. Phase 8/9 contaminated sediment removal scenarios.



**Figure 8.** Phase 12 sample pit locations symbolized by maximum depth of COC >1260 mg/kg.



**Figure 9.** Phase 10/11 sample pit locations symbolized by maximum depth of COC >1260 mg/kg.

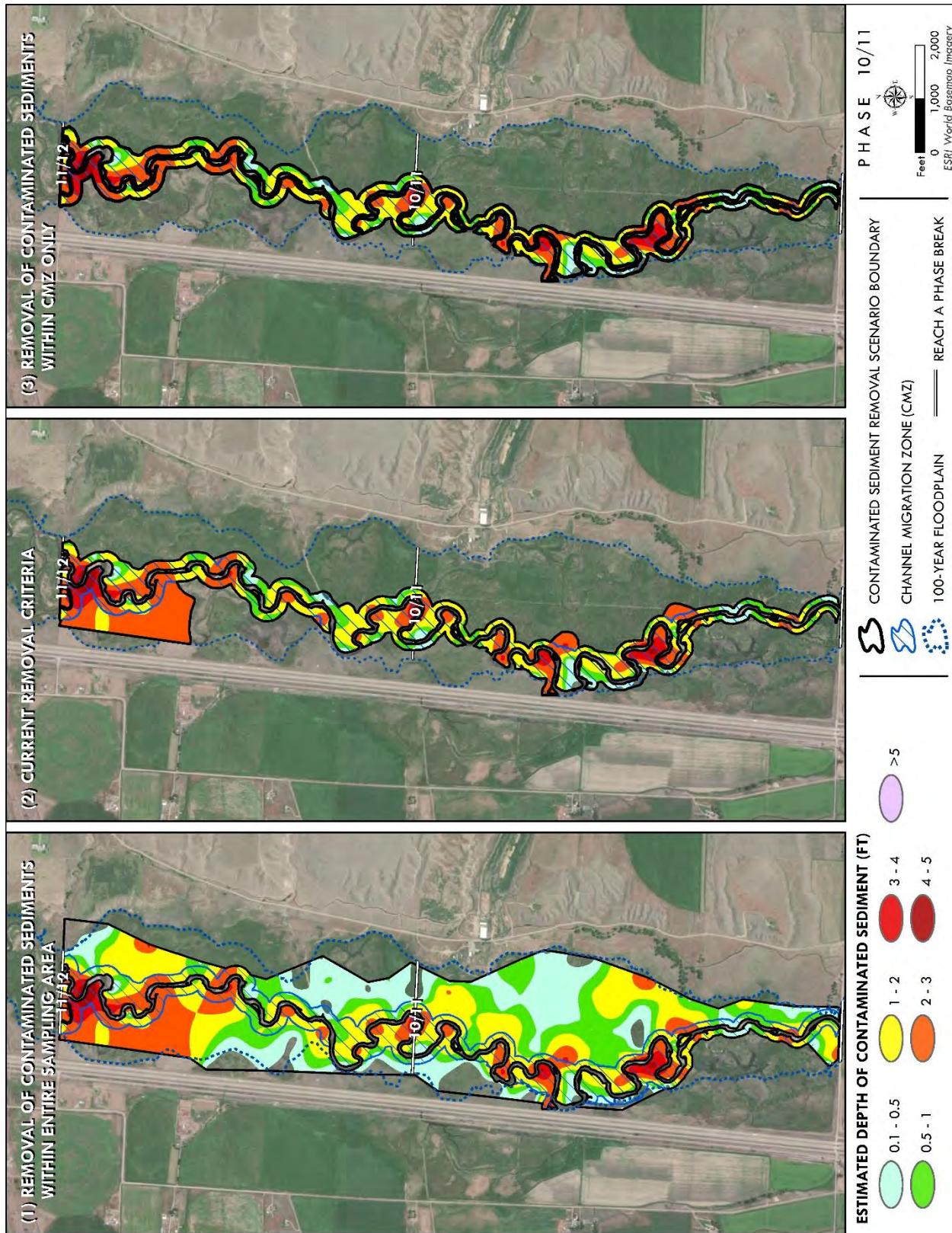


Figure 10. Phase 10/11 contaminated sediment removal scenarios.

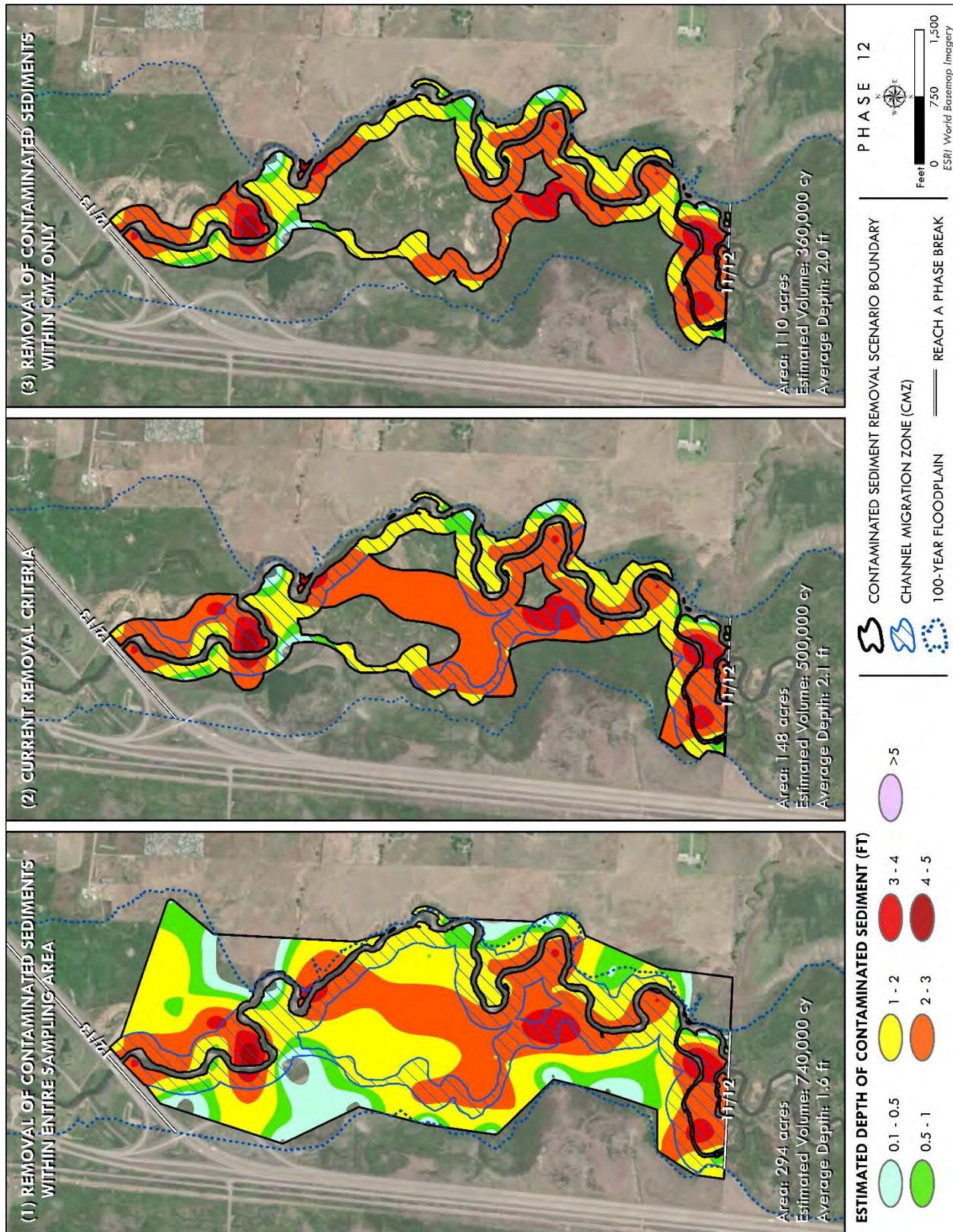
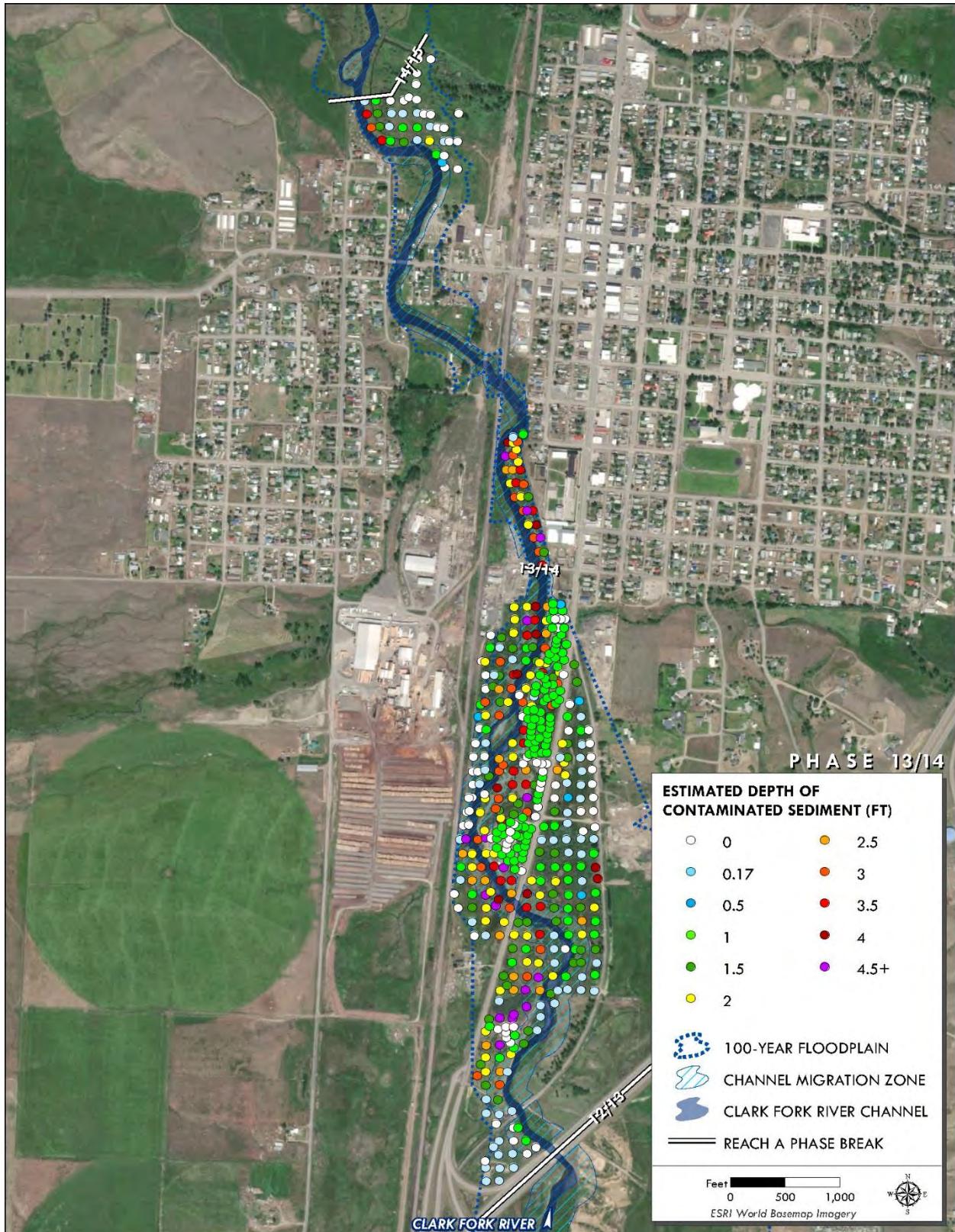


Figure 11. Phase 12 contaminated sediment removal scenarios.



**Figure 12.** Phase 13/14 sample pit locations symbolized by maximum depth of COC >1400 mg/kg.

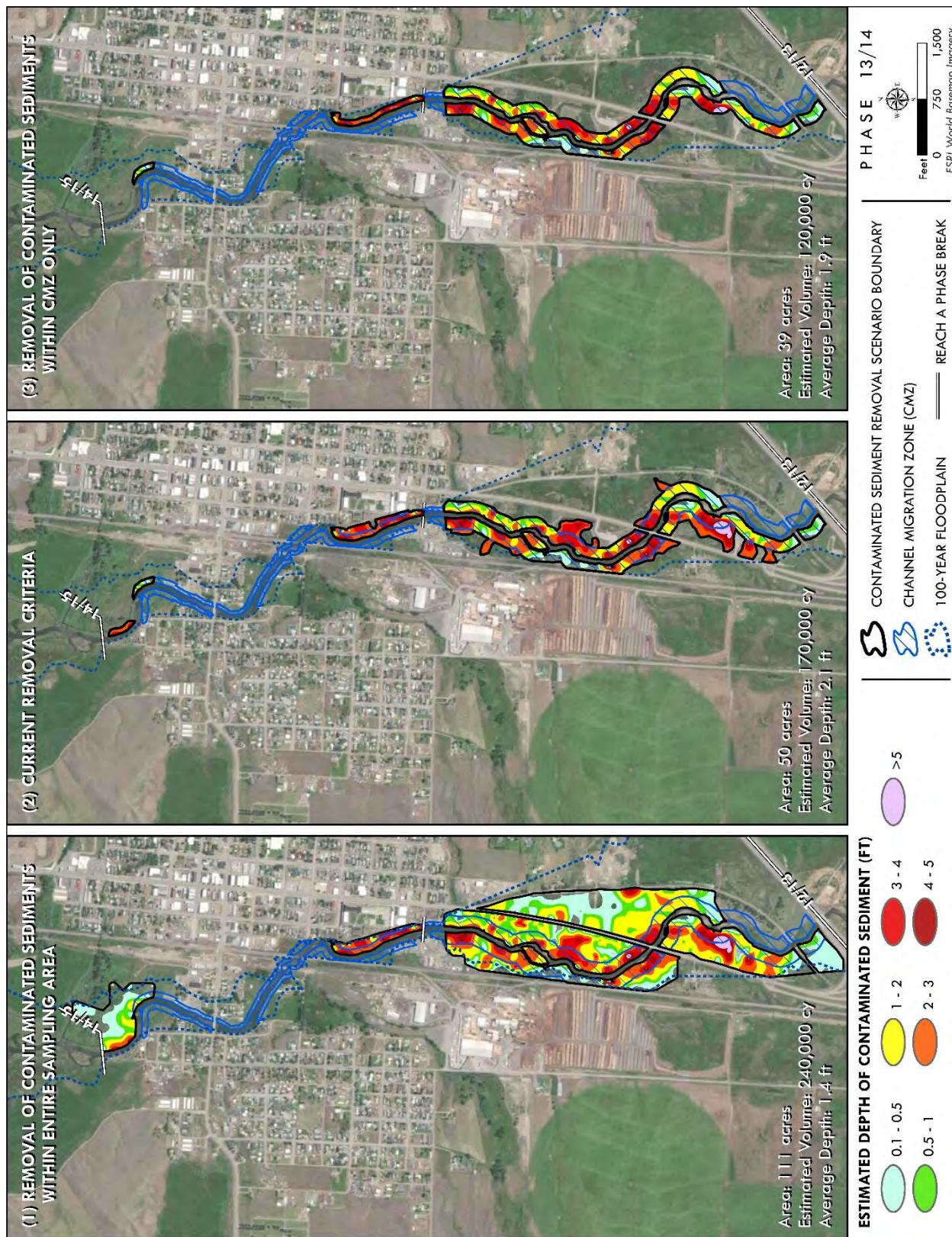


Figure 13. Phase 13/14 contaminated sediment removal scenarios.

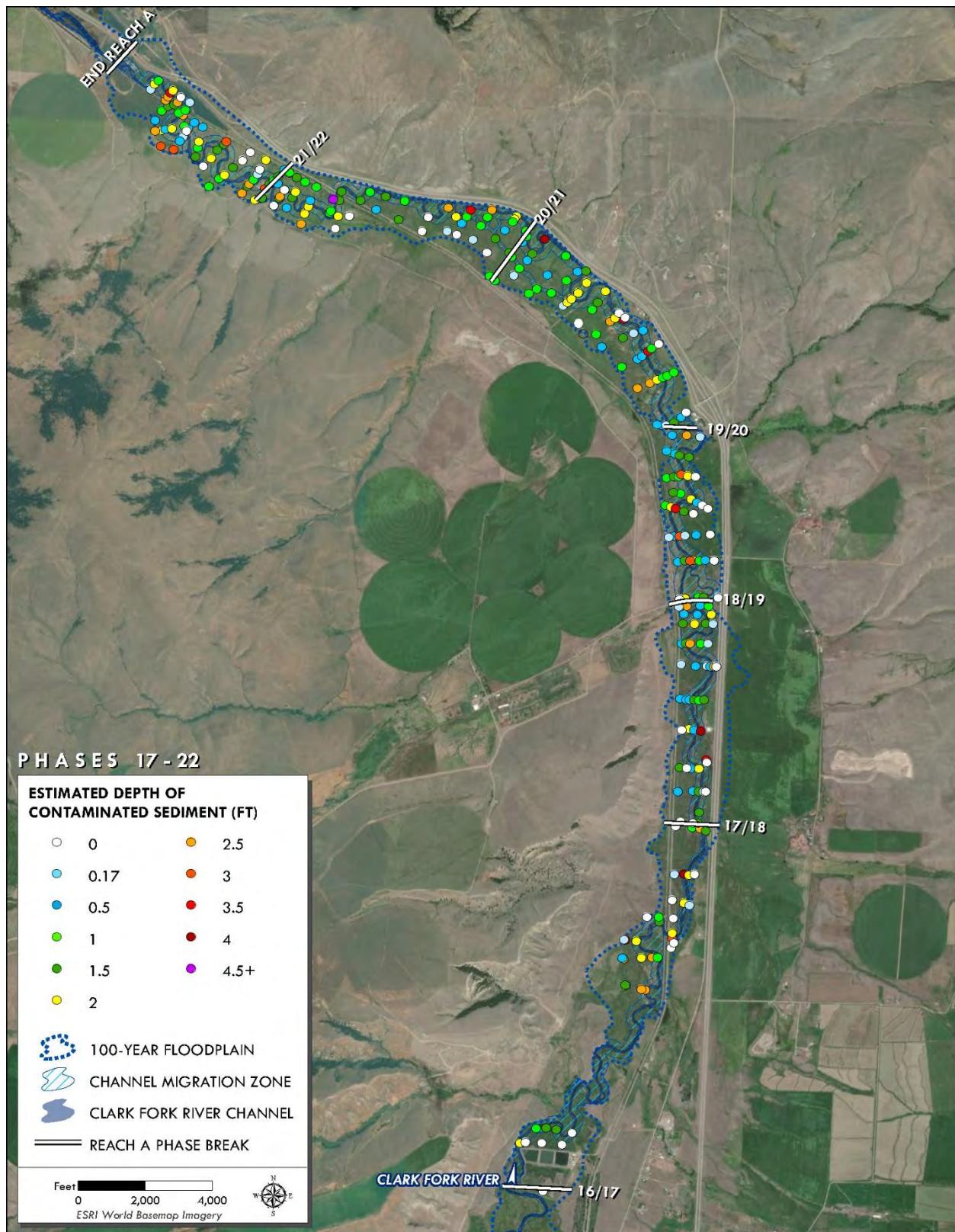


Figure 14. Phase 17 - 22 sample pit locations symbolized by maximum depth of COC >1400 mg/kg.

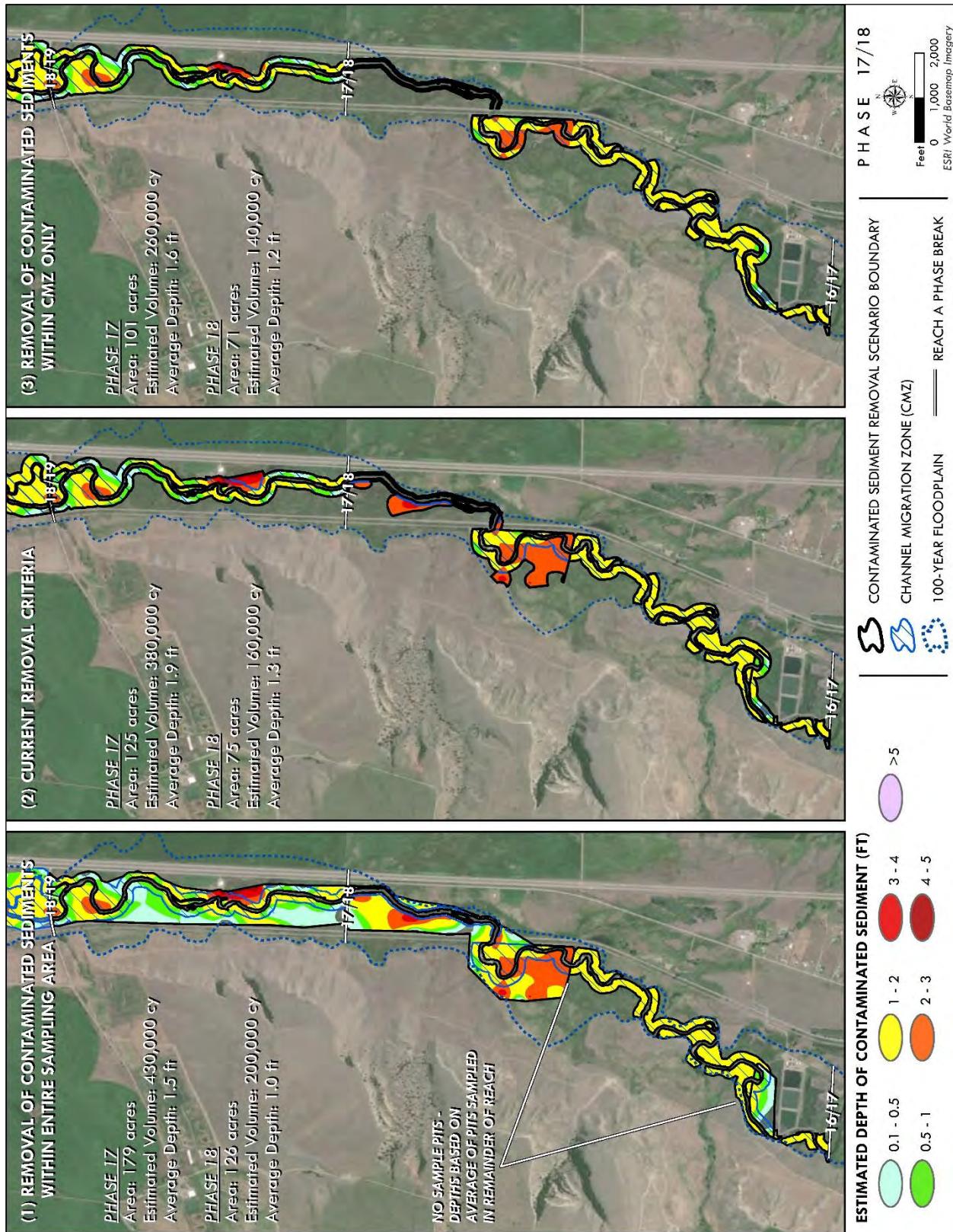


Figure 15. Phases 17 and 18 contaminated sediment removal scenarios.

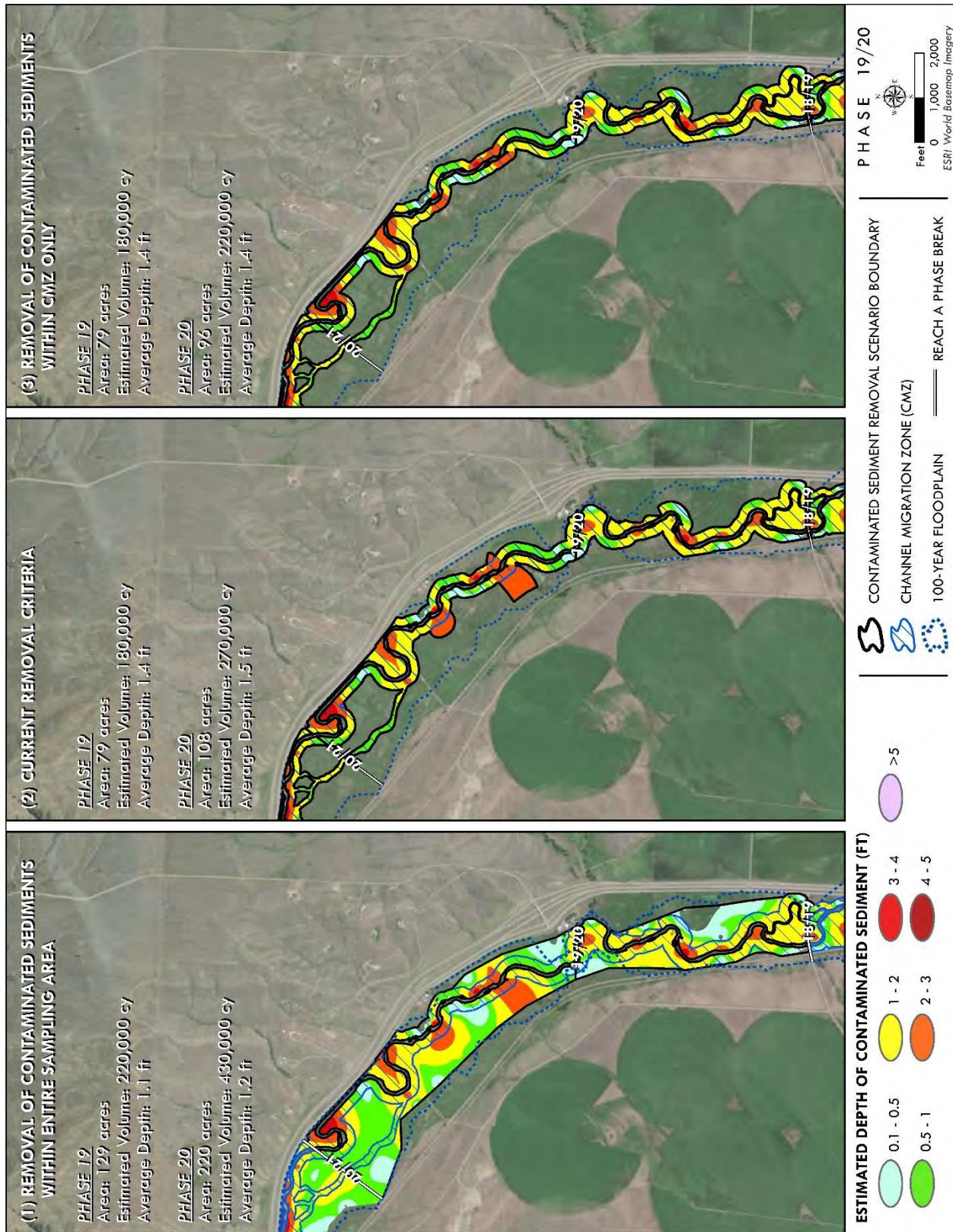


Figure 16. Phases 19 and 20 contaminated sediment removal scenarios.

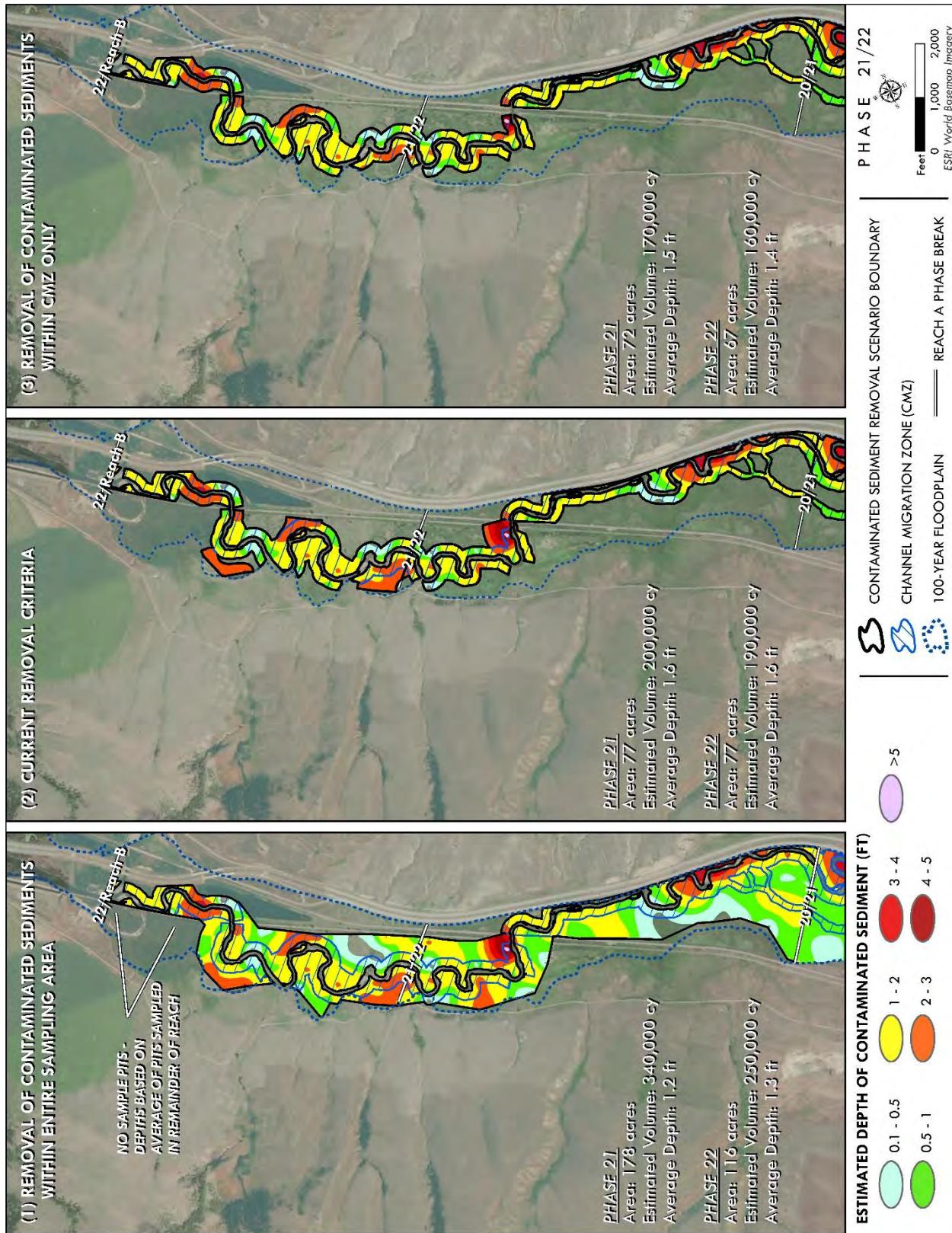


Figure 17. Phases 21 and 22 contaminated sediment removal scenarios.

## 5 Discussion

The information provided in this document is intended to support planning for remaining combined remediation and restoration work in CFROU Reach A, in particular as a basis for estimating remaining level of effort and costs. This work will be funded partially by remediation dollars managed by DEQ and partially by restoration dollars managed by NRD. Work will be guided by the ROD (EPA 2004), Explanation of Significant Differences (DEQ and EPA 2015), Consent Decree (State of Montana v. ARCO 2008), Site-specific Memorandum of Agreement (SMOA) (State of Montana et al. 2008) and the 2020 update to the *State of Montana's Revised Restoration Plan for the Clark Fork River, Aquatic and Riparian Resources* (2020 Restoration Plan) (Montana NRD 2020). The most cost-effective and best outcome for the Upper Clark Fork River will be achieved by integrating remediation and restoration work in the remaining Phases.

It is important to note again that impacted soil depths and volumes reported in this document are strictly estimates and do not include any additional earthwork such as over-excavation. Actual volumes of earthwork within each of the three scenarios would vary from the volumes reported here depending on data collected during future remedial designs, and field conditions encountered during construction of remedial and restoration actions.

## 6 References

CDM Smith (CDM), Applied Geomorphology, Inc. (AGI), and Geum Environmental Consulting, Inc. (Geum). 2016. Clark Fork River Reach A Design Approach. Memorandum prepared for Montana Department of Environmental Quality.

Environmental Protection Agency (EPA). 2004. Record of Decision, Clark Fork River Operable Unit of the Milltown Reservoir/ Clark Fork River Superfund site. U.S. Environmental Protection Agency (US EPA), Helena, Montana, with concurrence of Montana Department of Environmental Quality (MT DEQ), Helena, Montana. April 2004.

ESRI. 2021. Spline geoprocessing tool documentation. Accessed via the world wide web at <https://desktop.arcgis.com/en/arcmap/latest/tools/spatial-analyst-toolbox/how-spline-works.htm>

Montana DEQ and EPA. 2015. Clark Fork River Operable Unit (OU #3), Missoula Reservoir/Clark Fork River Superfund Site, CERCLIS Identification Number: MTD980717565, Explanation of Significant Differences.

Montana DEQ. 2016. Clark Fork River Reach A Phases 3 and 4 Preliminary Design Plan. Prepared by Applied Geomorphology, Inc., CDM Smith and Geum Environmental Consulting, Inc. for Montana Department of Environmental Quality.

Montana DEQ. 2017. Clark Fork River Reach A, Phases 13 and 14 Final Data Summary Report. Prepared by DOWL for Montana Department of Environmental Quality.

Montana DEQ and Montana NRD. 2017. Draft Clark Fork River Operable Unit, Milltown Reservoir/Clark Fork River NPL Site, Preliminary Design Plan, Reach A, Phase 7. Prepared by Applied Geomorphology, Inc., Geum Environmental Consulting, Inc. and Tetra Tech for Montana Department of Environmental Quality and Montana Department of Justice Natural Resource Damage Program

Montana NRDP. 2020. Revised Restoration Plan for the Clark Fork River Aquatic and Riparian Resources. Prepared by Geum Environmental Consulting, Inc. for Montana Natural Resource Damage Program.

State of Montana v. Atlantic Richfield Company. 2008. Helena, Montana. No. V-83-317-HLN-SHE Consent Decree.

State of Montana DEQ and NRDP, EPA and National Park Service. 2008. Site Specific Memorandum of Agreement for the Clark Fork Site and the State Property Remedial Commitments.

State of Montana. 2011. Clark Fork River Operable Unit Milltown Reservoir/Clark Fork River Superfund Site Powell, Deer Lodge, and Granite Counties, Phase 1 Preliminary Design Plan. Prepared by CDM, Tetra Tech, Geum Environmental Consulting and Applied Geomorphology.

## Appendix 1. Phase 8/9 Pit Sampling Data

Pit sampling data for Phases 8 and 9 are summarized below. Maximum concentrations out of all 6-inch intervals for a pit are reported in mg/kg for each contaminant of concern (COC). Maximum sum of COC's observed in one interval from each pit is also reported. The deepest soil interval where sum of COC's exceeded 1,400 mg/kg is reported as depth (e.g. 24 inches = 18 to 24 inch depth interval). This summary is based on tabular data provided by Tetra Tech, and these data are for lab results only.

Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
<b>PHASE 8</b>							
08-001	86	0	0	0	0	86	0
08-002	139	0	0	0	0	139	0
08-003	312	0	0	0	0	312	0
08-004	1240	8	5940	1340	4160	12688	24
08-005	871	15	6980	697	3300	11863	12
08-006	574	5	5190	528	2560	8767	36
08-007	46	0	0	0	0	46	0
08-008	235	0	0	0	0	235	0
08-009	93	0	0	0	0	93	0
08-010	167	0	0	0	0	167	0
08-011	735	25	5500	690	6660	13610	18
08-012	188	4	2540	200	1600	4459	12
08-013	163	0	0	0	0	163	0
08-014	269	18	1470	250	2170	3876	18
08-015	326	0	0	0	0	326	0
08-016	80	0	0	0	0	80	0
08-017	76	0	0	0	0	76	0
08-018	457	5	3700	253	1200	5615	18
08-019	415	8	6930	1090	2780	11219	30
08-020	240	6	1350	193	1470	3095	36
08-021	308	5	2910	358	1710	5291	18
08-022	112	0	0	0	0	112	0
08-023	390	0	0	0	0	390	0
08-024	422	0	0	0	0	422	0
08-025	515	4	6110	866	1350	8845	24
08-026	183	7	2810	271	2620	5891	36
08-027	95	0	0	0	0	95	0
08-028	112	0	0	0	0	112	0
08-029	97	0	0	0	0	97	0
08-030	157	0	0	0	0	157	0
08-031	263	0	0	0	0	263	0
08-032	1300	13	10400	815	2890	15418	18
08-033	192	0	0	0	0	192	0
08-034	94	14	1090	347	3340	4885	12
08-035	14	8	7470	20	954	8466	24
08-036	249	3	1590	659	1330	3831	24

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-038	205	0	0	0	0	205	0
08-039	624	5	2730	319	1300	4978	12
08-040	142	0	0	0	0	142	0
08-041	199	0	0	0	0	199	0
08-042	106	0	0	0	0	106	0
08-043	185	0	0	0	0	185	0
08-045	23	2	2180	19	383	2590	30
08-046	384	5	1780	275	1460	3871	18
08-047	675	5	3770	458	1670	6578	12
08-048	45	1	340	47	250	683	6
08-049	32	1	52	13	1380	1478	18
08-050	7	41	1440	17	2970	4475	42
08-051	16	10	2000	11	1940	2426	30
08-052	1140	10	5530	1890	2700	11070	24
08-053	172	8	1850	121	2270	4421	36
08-055	5	5	98	16	2920	3044	42
08-056	145	3	1160	161	789	2258	12
08-057	277	0	0	0	0	277	0
08-058	68	1	230	39	5410	5748	30
08-059	348	4	1600	316	1430	3604	36
08-060	435	7	3160	248	1640	5482	24
08-061	266	0	0	0	0	266	0
08-062	249	8	1810	200	2820	5016	30
08-064	1250	7	9740	1310	2670	14651	24
08-065	89	0	0	0	0	89	0
08-066	92	0	0	0	0	92	0
08-067	135	0	0	0	0	135	0
08-068	101	2	788	94	481	1466	12
08-069	17	0	0	0	0	17	0
08-070	227	12	1840	158	2260	4456	48
08-071	777	17	4930	492	5370	11586	12
08-072	340	3	3810	376	1260	5789	12
08-073	92	0	0	0	0	92	0
08-074	257	4	1990	218	1060	3529	12
08-075	212	10	1680	193	3090	5185	30
08-076	303	14	1960	125	2980	5278	42
08-077	90	24	1770	104	2890	4854	24
08-078	469	5	2640	275	1020	4409	12
08-1000	110	12	2240	147	1990	4417	12
08-1001	142	11	1700	123	1840	3816	12
08-1002	475	16	3450	371	2590	6902	12
08-1004	142	6	1430	108	1910	3578	42
08-1005	372	0	0	0	0	372	0
08-1006A	63	1	3580	13	392	4049	24
08-1006B	249	24	9880	893	4950	15996	12

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-1007	242	0	0	0	0	242	0
08-1008	338	10	4070	420	2100	6934	12
08-1009	169	0	0	0	0	169	0
08-1010	258	24	3420	703	4770	9175	18
08-1011	444	6	2510	636	1980	5576	36
08-1012	386	16	5560	650	4060	10672	30
08-1013	198	0	0	0	0	198	0
08-1014	401	3	680	348	693	2125	12
08-1015	712	6	2450	353	1170	4691	36
08-1016	157	5	996	146	1090	2394	2
08-1017	220	46	2990	146	4210	6978	40
08-1018A	324	19	2360	317	3200	6090	24
08-1018B	359	7	6600	685	1690	8741	18
08-1019	291	13	1900	206	3140	5159	30
08-1020	673	29	4800	475	5240	11208	36
08-1021	103	3	1170	156	1020	2452	12
08-1022	751	16	7240	662	3420	12089	48
08-1023	125	8	2160	110	1570	3973	24
08-1024	756	10	4460	1200	1580	7999	24
08-1025	608	7	4130	517	2050	7312	12
08-1026	475	9	2970	513	1780	4974	18
08-1027	181	7	3000	190	1140	4285	30
08-1028	277	8	3540	883	1750	6458	12
08-1029	467	9	3920	269	2250	6915	24
08-103	264	6	2440	201	1330	3958	36
08-1030	136	0	0	0	0	136	0
08-1031	1240	9	10900	2070	3360	17579	36
08-1032	130	0	0	0	0	130	0
08-1033	27	0	0	0	0	27	0
08-1034	62	0	0	0	0	62	0
08-1035	159	12	1520	182	2520	3523	24
08-1036	191	22	1720	182	2550	4665	24
08-1037	124	6	2460	216	1300	4106	12
08-1038	41	0	0	0	0	41	0
08-1039	49	0	0	0	0	49	0
08-1040	378	7	3530	312	1820	6047	18
08-1041	85	6	1290	2160	1990	5531	30
08-1042	26	0	0	0	0	26	0
08-1043	19	6	2670	30	2120	4845	36
08-1044	87	2	426	90	484	1068	0
08-1045	202	4	1650	279	1610	3745	42
08-1046	157	12	1150	125	2850	4294	30
08-1047	108	0	0	0	0	108	0
08-1048	250	2	5510	597	787	6034	36
08-1049	864	5	2630	1000	1650	6149	30

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-1050	535	3	2570	409	1140	4657	30
08-1051	18	0	0	0	0	18	0
08-1052	50	0	0	0	0	50	0
08-1053	187	11	1080	144	1980	3351	30
08-1054	420	0	0	0	0	420	0
08-1055	125	0	0	0	0	125	0
08-1056	248	8	1610	206	1940	3974	30
08-1057	262	20	2210	201	4950	7643	36
08-1058	101	4	634	71	1310	2105	12
08-1059	198	10	2230	117	3240	5783	36
08-1060	229	9	1790	171	2800	4999	36
08-1061	281	5	2590	233	3900	6802	30
08-1062	154	7	1710	182	2700	4729	36
08-1063	28	0	0	0	0	28	0
08-1064	33	0	0	0	0	33	0
08-1065	18	0	0	0	0	18	0
08-1066	22	0	0	0	0	22	0
08-1067	190	13	1760	203	5630	7725	36
08-1068	33	0	0	0	0	33	0
08-1069	180	5	1510	136	1810	3480	42
08-107	685	4	7100	1310	1790	10889	30
08-1070	376	9	1900	363	2070	4718	24
08-1071	191	5	1170	160	1590	3116	36
08-1072	210	6	1430	155	1620	3393	26
08-1073	16	0	0	0	0	16	0
08-1074	71	0	0	0	0	71	0
08-1075	92	0	0	0	0	92	0
08-108	993	17	16300	1070	3400	21780	0
08-115	195	2	7490	1190	1190	10067	18
08-116	22	14	1560	32	1780	3408	30
08-117	204	41	2270	134	8560	11209	24
08-118	179	18	1620	151	3990	5958	36
08-119	177	0	0	0	0	177	0
08-121	8	20	3550	16	6220	9814	42
08-127	677	15	6000	608	3780	11080	36
08-128	35	4	5290	54	905	6054	24
08-129	26	15	1860	62	2830	4793	24
08-130	197	0	0	0	0	197	0
08-131	188	0	0	0	0	188	0
08-132	233	11	1360	221	1960	3639	24
08-135	1520	33	14600	2230	5570	23953	48
08-136	17	12	3770	27	3490	7316	24
08-137	6	14	1340	10	1320	2690	24
08-139	300	11	3280	294	1940	5825	24
08-140	11	8	335	12	2150	2338	30

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-141	6	8	5140	15	1090	5737	30
08-142	92	0	0	0	0	92	0
08-143	58	3	3740	68	459	4328	24
08-144	21	3	2760	69	751	3603	36
08-145	172	6	1730	201	1610	3719	18
08-148	128	19	5320	244	1700	7011	36
08-149	12	3	2250	11	469	2694	24
08-152	94	4	2980	65	686	3829	6
08-153	906	3	3920	1370	1210	7409	18
08-154	1650	18	5230	1600	1600	9984	24
08-155	443	28	2890	364	6080	7668	36
08-156	1650	7	6350	1320	1610	10933	18
08-157	226	0	0	0	0	226	0
08-158	235	9	1820	242	2370	4675	18
08-160	92	8	257	1100	2130	3561	42
08-161	338	2	2620	200	701	3861	12
08-162	129	2	2770	172	555	3628	30
08-163	112	7	1060	86	1520	2785	36
08-164	7	3	126	14	2400	2546	36
08-165	7	2	432	14	436	891	30
08-166	179	12	3590	544	3240	7565	18
08-167	129	5	7260	580	1460	9434	36
08-171	27	6	474	12	1600	2119	18
08-172	25	3	93	433	2280	2711	30
08-173	357	29	2160	190	6120	8856	24
08-174	150	10	3470	224	2130	5984	18
08-175	223	0	0	0	0	223	0
08-176	206	4	1770	877	1110	3967	12
08-177	11	5	223	15	1820	2074	18
08-178	8	1	46	14	83	152	24
08-179	293	16	1870	294	2150	4517	30
08-183	8	10	1340	13	1740	2971	24
08-184	40	8	2590	54	1920	4612	24
08-185	427	5	2940	371	1310	5053	18
08-186	159	2	617	93	332	1203	6
08-187	299	15	1790	121	2520	4623	30
08-188	33	5	1600	40	1390	3068	36
08-189	959	6	4600	652	1810	7257	18
08-193	114	20	3060	215	2840	6249	12
08-195	183	4	2620	281	1160	4248	12
08-196	493	3	2150	325	883	3854	12
08-197	58	36	1220	12	1550	2853	36
08-198	142	7	1370	382	1750	3651	12
08-199	48	6	138	45	1750	1987	18
08-200	40	4	977	28	878	1927	24

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-201	21	0	0	0	0	21	0
08-202	95	4	676	97	1010	1857	18
08-203	24	9	790	18	2070	2911	24
08-204	18	0	0	0	0	18	0
08-205	348	8	5310	892	2660	9218	18
08-206	258	11	1950	236	2720	5003	18
08-207	321	8	5200	869	1550	7948	12
08-208	342	12	2880	434	3730	7138	36
08-209	42	13	3280	34	2260	5629	18
08-210	532	12	1810	740	1340	4145	18
08-211	53	10	1140	30	2230	3463	24
08-212	64	7	585	84	1370	1872	30
08-213	64	0	0	0	0	64	0
08-214	7	17	2260	15	1320	3578	42
08-215	13	6	2610	20	1300	3948	36
08-216	1230	13	10000	876	3570	15689	12
08-217	169	9	1850	113	2270	4411	18
08-218	49	2	139	19	868	1077	18
08-219	504	3	2290	401	786	3984	24
08-220	21	8	4100	38	2090	6257	42
08-221	38	6	4430	29	1090	5593	36
08-222	18	11	1220	19	1930	3196	30
08-223	31	2	60	15	2510	2617	24
08-224	142	4	1030	137	915	2228	30
08-225	37	0	0	0	0	37	0
08-226	81	8	5660	92	1970	7811	18
08-227	720	27	9060	726	3800	14333	24
08-228	1340	19	11900	673	4280	18212	12
08-229	16	12	2900	28	1750	4706	42
08-230	2470	7	18200	1020	2400	24097	48
08-231	10	37	3810	15	6000	9872	30
08-232	171	11	3140	149	2670	6141	30
08-233	743	0	0	0	0	743	0
08-234	513	6	3740	864	2110	7233	18
08-236	179	11	2130	175	4150	5861	30
08-237	11	7	1430	16	2120	3584	36
08-238	33	12	3660	23	2950	6677	24
08-239	6	3	491	16	980	1496	24
08-240	11	1	102	21	188	323	36
08-242	10	5	1960	18	1720	2817	30
08-243	116	2	275	405	734	1512	36
08-244	423	3	3150	549	1130	5255	18
08-245	441	8	3980	667	1460	6452	18
08-246	258	16	2320	580	3180	5890	36
08-247	566	9	3330	422	2640	6967	12

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-248	374	12	4780	655	2900	8721	12
08-249	6	0	0	0	0	6	0
08-250	60	18	2180	14	3060	5332	24
08-251	1660	10	10800	1070	3440	15865	24
08-252	11	13	2620	16	1350	4004	42
08-253	15	6	1590	17	1440	3067	36
08-254	889	21	6380	709	6870	14869	42
08-255	273	3	3760	320	774	5130	12
08-256	64	8	210	93	1790	2165	18
08-257	185	11	1150	126	2140	3612	18
08-258	276	0	0	0	0	276	0
08-259	341	6	2240	440	1870	4897	12
08-260	566	3	2180	495	1170	4376	18
08-261	11	12	2480	15	2150	4668	36
08-262	2070	14	14300	1040	2960	20384	12
08-263	8	7	131	16	1810	1972	30
08-264	27	6	230	49	1780	2092	18
08-265	190	26	2260	151	5160	7774	42
08-266	594	6	4900	961	2040	8501	12
08-267	380	0	0	0	0	380	0
08-268	206	0	0	0	0	206	0
08-269	19	0	0	0	0	19	0
08-270	9	0	0	0	0	9	0
08-271	1610	7	5400	1410	2260	10687	24
08-273	1890	15	16400	1440	3570	23315	30
08-274	535	41	46000	258	4350	51184	30
08-275	284	6	7220	848	1490	9848	18
08-276	569	11	5110	485	2960	9135	18
08-277	60	84	1830	26	11900	13900	42
08-278	164	5	5110	90	567	5934	36
08-279	782	8	4380	1480	1610	8256	24
08-280	505	4	4580	698	1330	7117	18
08-281	424	0	0	0	0	424	0
08-282	473	0	0	0	0	473	0
08-283	976	7	2480	787	2130	6378	30
08-284	112	5	1310	152	2110	3477	30
08-286	1940	17	13700	1000	4150	20807	42
08-287	1090	19	6440	661	4750	12541	42
08-288	92	25	3340	192	6310	9049	30
08-289	900	11	6310	1290	1890	10177	18
08-290	14	13	4580	45	1940	6432	48
08-291	30	11	4260	53	1250	5204	42
08-292	96	10	4150	412	1710	6378	24
08-293	390	4	2710	557	1130	4791	12
08-294	524	6	2600	785	1490	5380	12

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-295	606	11	4550	1090	2390	8647	24
08-296	30	0	0	0	0	30	0
08-297	96	0	0	0	0	96	0
08-298	20	15	5430	55	3540	6356	30
08-299	621	12	4590	438	3020	8681	42
08-300	1290	33	10700	1110	8320	20208	36
08-301	1150	15	7580	885	3430	13060	30
08-302	19	7	375	20	1220	1641	30
08-303	511	2	1760	565	1260	4098	12
08-304	250	0	0	0	0	250	0
08-305	468	10	3910	617	1950	6955	24
08-306	44	7	1220	774	847	2834	30
08-307	431	6	2480	219	1670	4806	12
08-308	20	0	0	0	0	20	0
08-309	462	8	3120	451	2100	6141	12
08-310	7	5	2040	15	1160	2895	30
08-311	30	10	1560	23	1930	3553	12
08-312	1030	16	5330	969	3570	9858	24
08-313	400	10	7630	1990	3540	13570	24
08-314	332	5	2750	460	1400	4947	12
08-315	190	0	0	0	0	190	0
08-316	197	0	0	0	0	197	0
08-317	82	0	0	0	0	82	0
08-318	553	9	2540	257	2220	5579	12
08-319	12	0	0	0	0	12	0
08-320	410	0	0	0	0	410	0
08-321	126	0	0	0	0	126	0
08-322	179	8	2790	118	2090	5185	12
08-323	694	9	5080	701	2300	8472	12
08-324	628	0	0	0	0	628	0
08-325	595	14	6270	507	2980	10366	12
08-326	756	7	5230	845	1480	8318	12
08-327	519	0	0	0	0	519	0
08-328	1270	15	12100	689	3690	17764	42
08-329	385	5	3280	327	1700	5697	24
08-330	11	0	0	0	0	11	0
08-331	683	15	6930	496	3780	10367	12
08-332	999	12	6980	690	3870	12551	12
08-333	290	5	2580	293	1590	4758	12
08-334	270	0	0	0	0	270	0
08-335	382	7	3750	492	1890	6521	12
08-336	709	10	5480	707	2440	9326	12
08-337	1010	23	12200	1130	4940	19303	36
08-338	1090	8	5520	1000	1930	9546	30
08-339	117	13	948	127	2410	3488	30

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-340	1050	7	4690	998	2480	9223	30
08-341	926	11	5500	449	2780	9651	24
08-342	145	5	1810	229	1130	3319	12
08-343	261	5	2350	283	1330	4229	12
08-344	283	5	2760	304	1220	4572	12
08-345	184	2	997	171	645	1999	12
08-346	43	5	1310	43	868	2269	12
08-347	53	15	929	42	2700	3739	12
08-348	825	15	9770	796	3070	14476	12
08-349	652	5	4420	644	1450	7171	12
08-350	505	5	3600	496	1610	6216	12
08-351	42	0	0	0	0	42	0
08-352	1260	2	2570	1070	1290	6192	24
08-353	1080	9	11500	2770	3410	18769	36
08-354	571	8	4710	656	2420	8365	18
08-355	32	0	0	0	0	32	0
08-356	226	4	1090	132	1330	2782	24
08-357	306	5	1550	280	1090	3231	12
08-358	302	0	0	0	0	302	0
08-359	1280	5	6340	951	1600	9999	30
08-360	868	5	4300	616	1450	7237	18
08-361	696	9	7990	1010	2530	11802	30
08-362	1520	10	10800	1210	3070	16610	18
08-363	2240	12	17900	985	2670	23807	30
08-364	375	6	5430	1210	1740	8761	24
08-365	56	0	0	0	0	56	0
08-366	510	11	3920	324	2690	7455	36
08-367	44	4	552	106	640	1346	0
08-368	22	0	0	0	0	22	0
08-369	543	11	3760	553	1760	6624	18
08-370	552	6	1970	373	1990	4891	6
08-371	537	9	3350	452	2880	7228	6
08-372	357	0	0	0	0	357	0
08-373	197	3	1650	174	937	2942	12
08-374	384	11	2240	292	2190	5117	18
08-375	103	3	5540	242	1020	6908	30
08-376	11	5	1130	14	1130	2290	24
08-377	1080	5	2940	1430	2620	8075	24
08-378	34	0	0	0	0	34	0
08-379	376	8	2890	363	1430	5067	12
08-380	154	0	0	0	0	154	0
08-381	174	4	1050	223	1020	2471	6
08-382	641	6	1710	485	1800	4642	12
08-383	469	17	9390	514	4400	14790	12
08-384	204	5	1490	213	1100	3012	6

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-385	83	4	361	51	713	1210	6
08-386	700	17	9150	639	3860	14366	18
08-387	1480	7	5270	1170	2210	10137	18
08-388	24	4	1210	55	585	1878	18
08-389	411	2	1750	313	753	3061	30
08-390	162	29	1240	179	1740	3020	42
08-391	31	0	0	0	0	31	0
08-392	69	3	3480	115	819	4486	30
08-393	1160	3	1610	657	1490	4920	24
08-394	369	10	3350	318	2260	6295	12
08-395	197	0	0	0	0	197	0
08-396	427	11	4520	385	2000	7341	18
08-397	116	0	0	0	0	116	0
08-398	1540	4	7430	1560	2470	13004	12
08-399	697	4	2610	389	1580	5280	12
08-400	92	12	11700	292	2870	14929	24
08-401	59	0	0	0	0	59	0
08-402	1050	36	9200	592	4910	15695	36
08-403	66	0	0	0	0	66	0
08-404	656	21	7380	463	3200	11720	36
08-405	129	4	3330	266	1110	4839	36
08-407	486	10	3760	400	2580	7236	6
08-408	504	7	4080	415	2290	7296	6
08-409	138	0	0	0	0	138	0
08-410	340	4	1890	214	1400	3848	24
08-411	816	9	2980	954	1380	6134	36
08-412	400	0	0	0	0	400	0
08-413	31	9	4630	29	1730	6397	42
08-414	233	7	1720	388	2950	5298	36
08-415	20	27	1930	20	4440	6437	18
08-416	46	0	0	0	0	46	0
08-417	147	4	1220	156	1890	3417	36
08-418	71	27	6980	404	4660	12142	42
08-420	40	0	0	0	0	40	0
08-421	184	0	0	0	0	184	0
08-422	101	0	0	0	0	101	0
08-423	111	8	840	112	1870	2923	36
08-424	36	5	4340	31	1690	6102	24
08-425	782	5	3530	926	1190	6430	30
08-426	34	3	2000	42	377	2420	42
08-427	99	12	883	131	1760	2885	36
08-428	270	10	9620	875	2270	13042	24
08-429	76	6	8850	88	1240	10260	36
08-430	12	3	147	15	732	909	36
08-431	12	1	3110	12	308	3438	36

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
08-432	124	0	0	0	0	124	0
08-433	84	0	0	0	0	84	0
08-434	1410	5	5630	987	1540	9572	12
08-435	993	22	6670	522	6330	14537	54
08-436	92	0	0	0	0	92	0
08-437	61	0	0	0	0	61	0
08-438	52	0	0	0	0	52	0
08-439	20	11	852	41	2000	2661	36
08-440	22	6	1960	24	982	2994	36
08-441	1070	8	4500	1190	1520	8152	18
08-442	38	7	1920	37	1970	2353	42
08-443	932	12	8060	1150	2530	12684	12
08-444	62	6	924	44	1120	2156	12
08-445	26	8	910	60	1360	2364	18
08-446	55	16	2240	355	2760	4226	30
08-447	2380	5	5600	2980	2600	13565	24
08-448	583	15	6100	505	2590	8376	36
08-449	55	0	0	0	0	55	0
08-450	86	0	0	0	0	86	0
08-451	560	8	3710	459	3160	7897	36
08-452	57	5	2980	65	875	3982	18
08-453	779	5	2760	1180	1660	6382	24
08-454	5	3	4910	12	415	5345	36
08-455	133	0	0	0	0	133	0
08-456	26	4	4160	28	594	4812	36
08-457	106	10	2970	112	2160	5358	18
08-458	352	9	6180	2650	3750	8062	42
08-459	1140	2	14100	2200	922	17492	42
08-460	4620	53	48300	5600	8090	66626	48
<b>PHASE 9</b>							
09-013	19	0	0	0	0	19	0
09-014	829	8	4220	920	2200	8176	18
09-015	103	6	1730	589	1770	4198	24
09-024	57	0	0	0	0	57	0
09-025	488	6	1840	354	1260	3948	12
09-026	641	0	0	0	0	641	0
09-035	22	0	0	0	0	22	0
09-036	168	0	0	0	0	168	0
09-037	327	3	3100	574	844	4848	36
09-053	335	4	3500	721	1550	6109	12
09-054	307	4	2690	1540	1320	5740	36
09-055	231	6	2660	1350	1140	5265	30
09-056	518	0	0	0	0	518	0
09-057	203	0	0	0	0	203	0
09-058	1180	6	7910	1120	2880	13096	18

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-059	843	9	5660	763	3200	10475	18
09-061	103	8	2520	307	904	3694	30
09-062	313	4	1850	244	1760	4001	42
09-063	151	5	1380	128	2080	3744	24
09-064	208	3	3060	160	893	3931	30
09-065	33	0	0	0	0	33	0
09-066	431	5	3360	816	1590	6202	12
09-067	287	7	2570	253	1720	4837	36
09-068	450	0	0	0	0	450	0
09-069	1120	15	15100	1600	3660	21373	24
09-070	285	0	0	0	0	285	0
09-071	55	3	151	25	3020	3246	30
09-072	44	0	0	0	0	44	0
09-073	128	4	869	132	866	1999	24
09-074	186	0	0	0	0	186	0
09-075	2260	26	19500	1780	5840	29406	48
09-076	371	0	0	0	0	371	0
09-077	72	12	425	44	2030	2583	24
09-078	546	6	4730	431	1950	7662	48
09-079	160	10	1330	146	2390	3992	42
09-080	28	2	163	17	582	789	30
09-081	57	0	0	0	0	57	0
09-082	53	0	0	0	0	53	0
09-083	176	4	1310	227	996	2658	18
09-084	537	10	3830	759	2350	7486	36
09-085	120	4	996	124	684	1928	12
09-086	314	6	1530	234	2120	4204	54
09-087	139	0	0	0	0	139	0
09-088	104	0	0	0	0	104	0
09-089	50	0	0	0	0	50	0
09-090	145	8	725	126	1480	2469	36
09-091	49	0	0	0	0	49	0
09-092	113	0	0	0	0	113	0
09-093	12	0	0	0	0	12	0
09-094	112	0	0	0	0	112	0
09-095	1300	0	0	0	0	1300	0
09-096	49	0	0	0	0	49	0
09-097	94	5	381	62	864	1406	12
09-098	155	0	0	0	0	155	0
09-099	76	3	1290	112	522	2003	24
09-100	19	0	0	0	0	19	0
09-1000	777	9	6650	741	2350	10527	42
09-1001	154	14	1160	151	1560	2651	30
09-1002	68	0	0	0	0	68	0
09-1003	12	6	44	15	2340	2405	18

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-1004	53	0	0	0	0	53	0
09-1005	83	0	0	0	0	83	0
09-1006	78	0	0	0	0	78	0
09-1007	17	1	47	15	875	945	12
09-1008	373	0	0	0	0	373	0
09-1009	373	0	0	0	0	373	0
09-101	171	0	0	0	0	171	0
09-1010	18	1	1600	29	326	1974	18
09-1011	236	3	3150	326	1260	4975	12
09-1012	234	0	0	0	0	234	0
09-1013	48	0	0	0	0	48	0
09-1014	66	0	0	0	0	66	0
09-1015	126	6	759	123	1420	2407	30
09-1016	249	11	1300	174	1740	3422	24
09-1017	187	0	0	0	0	187	0
09-1018	162	0	0	0	0	162	0
09-1019	842	15	4240	440	4620	10157	38
09-102	177	0	0	0	0	177	0
09-1020	487	4	354	332	1400	1861	18
09-1021	230	3	1350	179	681	2443	12
09-1022	156	0	0	0	0	156	0
09-1023	18	3	1810	68	456	2323	30
09-1024	168	2	2140	715	1190	4215	24
09-1025	322	5	1960	210	1590	3932	42
09-1026	841	7	8200	1330	2000	12378	18
09-1027	266	4	2170	258	972	3670	12
09-1028	325	0	0	0	0	325	0
09-1029	555	0	0	0	0	555	0
09-103	323	17	1960	125	3230	5605	36
09-1030	274	13	3900	442	2740	7369	18
09-1031	273	7	2260	387	1070	3997	36
09-1032	78	1	340	58	266	743	12
09-1033	438	6	3360	542	1760	6016	12
09-1034	80	0	0	0	0	80	0
09-1035	565	8	4070	575	1830	7048	36
09-1036	36	0	0	0	0	36	0
09-1037	125	0	0	0	0	125	0
09-1038	98	6	809	105	1190	2208	36
09-1039	109	0	0	0	0	109	0
09-104	97	0	0	0	0	97	0
09-1040	253	52	2050	240	4850	7445	30
09-1044	15	4	1090	13	900	2017	12
09-1045	18	1	2450	22	436	2715	24
09-1046	55	5	560	47	815	1482	18
09-1047	92	16	780	147	1910	2718	30

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-1048	49	10	2130	39	1540	3647	18
09-1049	121	5	1180	201	1890	3397	42
09-105	33	3	1480	18	416	1950	36
09-1050	335	5	1890	196	1730	4156	12
09-1051	28	0	0	0	0	28	0
09-1052	20	0	0	0	0	20	0
09-1053	637	23	3990	715	3160	6997	18
09-1054	242	0	0	0	0	242	0
09-1055	393	9	2800	260	1910	5372	12
09-1056	11	6	39	17	2270	2337	36
09-1057	44	4	2100	22	379	2549	30
09-1058	413	5	2550	344	1450	4762	12
09-1059	347	3	2390	394	1020	4154	12
09-1060	167	4	1480	268	1270	3189	24
09-1061	340	4	3180	366	1300	5190	12
09-1062	388	6	3870	468	1360	6092	12
09-1063	503	7	3130	430	1960	6030	12
09-1064	425	6	2530	334	1690	4985	12
09-1065	236	3	1790	232	730	2991	12
09-1066	167	0	0	0	0	167	0
09-1067	645	5	3260	460	1570	5940	12
09-1068	228	0	0	0	0	228	0
09-1069	209	3	2510	345	718	3785	12
09-107	252	0	0	0	0	252	0
09-1070	462	10	5040	674	1860	8046	12
09-1071	121	0	0	0	0	121	0
09-1072	146	0	0	0	0	146	0
09-1073	517	11	2970	416	2150	6064	36
09-1074	284	7	2950	401	1570	5212	12
09-1075	384	5	4160	425	1700	6294	18
09-1076	585	6	4810	447	1730	7578	18
09-1077	348	6	2420	267	1630	4671	18
09-1078	1260	12	9710	655	2730	14367	18
09-1079	201	6	1690	191	1630	3718	12
09-108	495	0	0	0	0	495	0
09-1080	248	0	0	0	0	248	0
09-1081	487	7	3460	301	1660	5915	12
09-1082	461	0	0	0	0	461	0
09-1083	87	0	0	0	0	87	0
09-1084	8	0	0	0	0	8	0
09-1085	124	0	0	0	0	124	0
09-1086	183	0	0	0	0	183	0
09-1087	17	0	0	0	0	17	0
09-1088	8	12	3260	16	1510	4802	42
09-1089	13	0	0	0	0	13	0

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-109	121	0	0	0	0	121	0
09-1090	11	0	0	0	0	11	0
09-1091	63	0	0	0	0	63	0
09-1092	708	3	3140	387	903	5141	36
09-1093	84	0	0	0	0	84	0
09-1094	767	8	5890	1250	1460	9370	42
09-1095	589	5	5200	616	1500	7910	36
09-1096	11	0	0	0	0	11	0
09-1097	765	14	7160	364	2350	10653	36
09-1098	3110	31	27500	1720	7890	40251	42
09-110	253	0	0	0	0	253	0
09-1100	583	8	3630	823	1680	6724	36
09-1101	56	11	752	32	3280	4131	48
09-1102	823	9	7850	790	2960	12432	18
09-1103	1020	6	7320	668	1780	10794	24
09-1104	91	0	0	0	0	91	0
09-1105	858	3	5330	948	1490	8629	18
09-1106	1480	9	10300	1180	2800	15769	18
09-1107	103	0	0	0	0	103	0
09-1108	19	47	24300	14	6760	30977	42
09-1109	42	0	0	0	0	42	0
09-111	16	0	0	0	0	16	0
09-1110	145	0	0	0	0	145	0
09-1111	82	8	5600	154	784	6250	42
09-1112	15	0	0	0	0	15	0
09-1113	262	0	0	0	0	262	0
09-1114	494	16	1980	230	4600	7320	12
09-1115	218	0	0	0	0	218	0
09-1116	47	0	0	0	0	47	0
09-1117	731	4	5670	415	1130	7950	36
09-1118	244	2	1840	151	516	2753	42
09-112	11	0	0	0	0	11	0
09-113	46	0	0	0	0	46	0
09-114	29	0	0	0	0	29	0
09-115	15	0	0	0	0	15	0
09-116	24	0	0	0	0	24	0
09-117	216	0	0	0	0	216	0
09-118	198	0	0	0	0	198	0
09-119	19	0	0	0	0	19	0
09-120	25	0	0	0	0	25	0
09-121	127	3	1100	82	1100	2412	30
09-122	11	0	0	0	0	11	0
09-123	11	0	0	0	0	11	0
09-124	36	0	0	0	0	36	0
09-125	21	0	0	0	0	21	0

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-126	134	5	984	124	1710	2776	30
09-127	58	0	0	0	0	58	0
09-128	56	0	0	0	0	56	0
09-129	162	5	1190	109	1620	2826	36
09-130	1040	3	1260	529	1260	4092	24
09-131	141	8	1050	128	2410	3737	30
09-132	418	6	4040	936	1990	7390	18
09-133	14	4	90	20	388	516	0
09-134	43	0	0	0	0	43	0
09-136	63	0	0	0	0	63	0
09-137	52	0	0	0	0	52	0
09-138	366	10	1980	211	2350	4917	36
09-139	1120	7	8050	652	1600	11429	24
09-140	331	5	2500	277	1610	4723	18
09-141	490	5	4270	512	1250	6526	30
09-142	40	0	0	0	0	40	0
09-143	47	0	0	0	0	47	0
09-144	67	0	0	0	0	67	0
09-145	47	0	0	0	0	47	0
09-146	355	5	2780	316	1510	4596	36
09-147	325	6	2570	384	1350	4635	18
09-148	135	0	0	0	0	135	0
09-149	1070	4	10500	1030	1040	13644	24
09-150	1570	3	5900	1120	1080	9673	30
09-151	65	0	0	0	0	65	0
09-152	40	0	0	0	0	40	0
09-153	62	2	605	113	274	1043	18
09-154	254	0	0	0	0	254	0
09-155	91	0	0	0	0	91	0
09-156	39	0	0	0	0	39	0
09-157	133	0	0	0	0	133	0
09-158	82	0	0	0	0	82	0
09-159	21	0	0	0	0	21	0
09-160	140	2	1380	123	332	1977	30
09-161	11	0	0	0	0	11	0
09-162	84	11	2060	14	1270	3438	18
09-163	197	4	1140	199	1570	3110	12
09-164	24	0	0	0	0	24	0
09-165	17	0	0	0	0	17	0
09-168	65	0	0	0	0	65	0
09-169	56	5	964	33	1120	2178	12
09-170	385	8	2340	130	2090	4925	30
09-171	63	0	0	0	0	63	0
09-172	20	0	0	0	0	20	0
09-173	247	3	3430	295	435	4410	30

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-174	26	0	0	0	0	26	0
09-175	60	0	0	0	0	60	0
09-176	161	0	0	0	0	161	0
09-177	11	0	0	0	0	11	0
09-178	337	13	2870	293	3450	6963	36
09-179	92	0	0	0	0	92	0
09-180	176	4	1640	174	655	2379	24
09-181	90	0	0	0	0	90	0
09-182	46	0	0	0	0	46	0
09-184	129	0	0	0	0	129	0
09-185	30	0	0	0	0	30	0
09-186	163	4	1030	120	914	2231	12
09-187	92	0	0	0	0	92	0
09-188	114	0	0	0	0	114	0
09-192	168	10	768	127	1830	2887	30
09-193	738	7	5410	637	2010	8802	18
09-194	131	0	0	0	0	131	0
09-195	1710	22	12400	1320	5520	20972	48
09-196	12	12	4010	22	1460	5516	18
09-197	103	0	0	0	0	103	0
09-198	183	0	0	0	0	183	0
09-199	142	0	0	0	0	142	0
09-202	70	0	0	0	0	70	0
09-203	72	7	3540	44	1060	4723	18
09-204	345	0	0	0	0	345	0
09-205	130	6	821	93	1100	2147	0
09-206	123	0	0	0	0	123	0
09-207	468	0	0	0	0	468	0
09-208	142	0	0	0	0	142	0
09-209	93	0	0	0	0	93	0
09-210	111	0	0	0	0	111	0
09-212	8	2	421	15	501	941	18
09-213	29	0	0	0	0	29	0
09-214	28	0	0	0	0	28	0
09-215	537	5	7360	411	2170	10483	30
09-216	62	2	5030	39	361	5494	24
09-217	525	3	5150	376	1130	7184	12
09-218	35	1	272	53	170	531	18
09-219	182	4	1750	287	811	3034	12
09-220	81	0	0	0	0	81	0
09-221	233	0	0	0	0	233	0
09-223	54	0	0	0	0	54	0
09-225	62	0	0	0	0	62	0
09-226	200	0	0	0	0	200	0
09-227	425	0	0	0	0	425	0

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-228	118	0	0	0	0	118	0
09-229	108	0	0	0	0	108	0
09-232	10	0	0	0	0	10	0
09-233	17	0	0	0	0	17	0
09-234	465	12	3240	361	1970	6048	36
09-235	126	0	0	0	0	126	0
09-236	259	5	1170	151	953	2538	0
09-237	241	0	0	0	0	241	0
09-238	248	0	0	0	0	248	0
09-239	26	0	0	0	0	26	0
09-240	115	4	2090	165	963	3337	18
09-241	31	2	264	19	642	956	12
09-242	777	2	2070	568	1120	3446	18
09-243	355	3	2800	800	1410	5368	42
09-244	360	3	2550	238	1100	4191	18
09-245	211	0	0	0	0	211	0
09-246	160	0	0	0	0	160	0
09-247	134	0	0	0	0	134	0
09-248	22	0	0	0	0	22	0
09-249	104	3	711	75	788	1681	24
09-250	49	1	2430	198	466	3025	42
09-251	245	2	817	180	1000	2244	18
09-252	1200	6	4310	940	2100	8556	30
09-253	366	16	2220	236	2400	4940	36
09-254	469	8	3410	272	2160	6319	12
09-255	578	4	4450	1570	1200	7130	24
09-256	530	5	2880	319	1320	5054	12
09-257	496	15	7770	523	2860	11606	18
09-258	16	0	0	0	0	16	0
09-259	9	5	1880	13	605	2505	24
09-260	751	7	5210	815	1440	8223	6
09-261	19	6	5140	101	1020	5932	30
09-262	642	9	4180	668	2440	7911	36
09-263	136	6	1430	138	2570	4278	42
09-264	109	7	2050	100	1400	3666	12
09-265	374	6	2580	295	1870	5125	12
09-266	214	0	0	0	0	214	0
09-267	187	0	0	0	0	187	0
09-268	652	16	5820	744	2740	9972	18
09-269	5	7	3010	13	1260	4291	36
09-270	37	3	4490	23	1160	5698	36
09-271	13	0	0	0	0	13	0
09-272	81	1	403	486	435	1406	24
09-273	362	3	3100	286	645	4396	12
09-274	29	0	0	0	0	29	0

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-275	30	6	1150	53	1160	2380	30
09-276	37	8	3900	216	2340	6501	30
09-277	70	3	917	107	1520	2617	42
09-278	262	0	0	0	0	262	0
09-279	153	0	0	0	0	153	0
09-280	440	6	3400	451	1500	5253	18
09-284	18	0	0	0	0	18	0
09-285	11	2	1370	44	406	1833	24
09-286	148	2	831	171	749	1901	18
09-287	303	11	3730	677	1740	6461	12
09-288	57	14	8560	34	1450	10115	18
09-289	227	16	3640	440	2020	5217	30
09-290	179	3	2930	226	1210	4548	18
09-291	234	33	1840	138	1820	3669	36
09-292	326	0	0	0	0	326	0
09-293	267	0	0	0	0	267	0
09-294	191	2	577	93	322	1185	18
09-298	417	8	3510	393	2260	6588	24
09-299	1180	7	10200	1490	3030	15907	24
09-300	71	0	0	0	0	71	0
09-301	1440	10	10500	1210	3590	16750	36
09-302	187	16	2180	361	5300	8044	42
09-303	382	2	2680	314	605	3983	30
09-304	36	5	4910	90	930	5965	30
09-305	207	9	2120	133	2420	4879	42
09-306	483	5	2930	402	1620	5440	12
09-307	147	2	537	74	449	1209	6
09-308	885	0	0	0	0	885	0
09-311	11	3	49	14	889	966	18
09-312	118	6	1180	94	1630	3028	42
09-313	4	3	1990	12	483	2488	36
09-314	211	9	2140	792	2530	5682	24
09-315	10	4	426	19	862	1321	12
09-316	278	9	2090	470	3950	6618	48
09-317	127	5	1260	84	1400	2876	42
09-318	552	9	6340	1010	2780	10429	24
09-319	212	4	1080	183	879	2358	12
09-322	951	8	8380	645	1930	11914	36
09-323	367	12	3130	316	2230	5117	30
09-324	380	8	2580	330	2010	5308	12
09-325	545	5	4040	407	1700	6697	18
09-326	52	0	0	0	0	52	0
09-327	147	3	1520	238	690	2598	18
09-330	494	10	12400	735	1680	15314	30
09-331	473	19	4820	720	3440	9472	24

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-332	239	0	0	0	0	239	0
09-333	258	0	0	0	0	258	0
09-334	18	0	0	0	0	18	0
09-335	1400	15	13000	1370	3980	19765	36
09-336	99	5	803	115	1560	2582	24
09-337	333	6	2750	361	1920	5370	12
09-338	301	5	1700	232	1410	3648	12
09-339	315	0	0	0	0	315	0
09-340	76	0	0	0	0	76	0
09-341	30	0	0	0	0	30	0
09-342	23	14	6820	21	2020	8166	30
09-343	472	7	3540	404	2290	6713	18
09-344	166	0	0	0	0	166	0
09-345	136	4	934	301	991	2366	24
09-346	58	0	0	0	0	58	0
09-347	11	0	0	0	0	11	0
09-348	509	17	7200	780	3960	12466	18
09-349	274	6	2110	290	1160	3840	12
09-350	277	0	0	0	0	277	0
09-351	8	0	0	0	0	8	0
09-352	72	0	0	0	0	72	0
09-353	768	12	7500	925	2730	11935	30
09-354	124	2	1110	137	452	1825	12
09-355	410	0	0	0	0	410	0
09-356	412	6	2930	485	1600	5432	18
09-357	550	5	3680	574	1710	6519	18
09-358	102	0	0	0	0	102	0
09-359	361	0	0	0	0	361	0
09-360	106	3	715	106	467	1397	6
09-361	254	2	1900	262	431	2849	18
09-365	222	12	3150	361	2500	6245	12
09-366	307	20	2130	252	3550	6259	18
09-367	580	11	5010	600	2850	9051	18
09-368	647	8	5140	595	2350	8687	12
09-369	416	0	0	0	0	416	0
09-370	56	4	7080	52	730	7922	36
09-371	186	12	1300	128	1900	3508	30
09-372	201	0	0	0	0	201	0
09-373	41	0	0	0	0	41	0
09-374	101	0	0	0	0	101	0
09-375	216	0	0	0	0	216	0
09-376	455	3	3800	492	1370	6120	18
09-377	607	5	2420	440	1480	4952	12
09-378	498	7	10400	1200	1860	13965	24
09-379	19	9	4730	43	1390	6140	36

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-380	133	0	0	0	0	133	0
09-381	700	5	6500	733	1690	9628	24
09-382	105	0	0	0	0	105	0
09-383	46	0	0	0	0	46	0
09-384	163	0	0	0	0	163	0
09-385	146	25	875	116	2520	3662	42
09-386	53	0	0	0	0	53	0
09-387	80	0	0	0	0	80	0
09-388	487	13	5530	602	3210	9842	30
09-389	492	11	4020	638	3060	8050	30
09-390	18	0	0	0	0	18	0
09-391	27	0	0	0	0	27	0
09-392	47	3	429	125	726	1330	12
09-393	90	0	0	0	0	90	0
09-394	71	7	2320	268	2590	5256	30
09-395	307	3	1770	277	1140	3497	18
09-396	255	0	0	0	0	255	0
09-397	25	0	0	0	0	25	0
09-398	51	0	0	0	0	51	0
09-399	24	5	311	13	1440	1779	24
09-400	796	5	3070	835	1530	6236	18
09-401	52	7	4180	55	1100	5394	18
09-402	68	4	5000	217	1040	6329	24
09-403	1550	7	9530	627	2000	13714	30
09-404	2010	16	12000	1150	3510	18114	42
09-405	1640	15	112	1230	72	2999	24
09-406	25	0	0	0	0	25	0
09-407	360	9	5310	846	2200	8725	18
09-408	11	4	532	10	1050	1607	24
09-409	758	4	8110	1130	1200	11202	30
09-410	721	7	3630	359	1900	5903	24
09-411	2130	11	11700	1250	2350	17441	18
09-412	156	0	0	0	0	156	0
09-413	683	11	5980	578	3250	10272	18
09-414	35	0	0	0	0	35	0
09-415	640	3	2730	554	2290	4967	24
09-416	14	7	4440	26	1380	5757	30
09-417	398	14	8690	1380	3110	13247	18
09-418	720	12	8530	1040	2700	13002	30
09-419	342	5	2700	349	1140	4536	18
09-420	45	0	0	0	0	45	0
09-421	825	10	7330	1440	1640	11241	18
09-422	282	5	2350	237	1420	4294	30
09-423	87	0	0	0	0	87	0
09-424	152	0	0	0	0	152	0

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-425	283	0	0	0	0	283	0
09-426	593	11	7640	1640	1490	11374	12
09-427	590	8	6750	742	2540	10630	18
09-428	205	0	0	0	0	205	0
09-429	18	25	3490	47	3470	4230	36
09-430	1440	7	14700	2410	3330	21887	36
09-431	1160	11	9350	842	2780	14143	18
09-432	88	0	0	0	0	88	0
09-433	885	13	11100	886	3570	16454	24
09-434	692	6	4170	725	1350	6943	12
09-435	330	4	4690	478	1460	6962	18
09-436	15	10	85	18	2510	2638	24
09-437	85	8	4740	53	1700	6508	18
09-438	762	7	12400	1080	2390	16615	18
09-439	107	0	0	0	0	107	0
09-440	216	4	3030	392	1140	4782	24
09-441	464	6	2590	565	1180	4805	12
09-442	190	0	0	0	0	190	0
09-443	127	10	2260	27	1090	3514	12
09-444	520	4	4710	448	1830	7512	12
09-445	671	14	9140	2240	4450	16515	24
09-446	540	6	6070	338	2530	8799	36
09-447	189	4	2100	558	982	3833	36
09-448	999	16	17100	1070	3790	22655	24
09-449	690	3	1570	437	1090	3790	30
09-450	41	6	1930	1990	946	4539	18
09-451	71	0	0	0	0	71	0
09-452	21	3	171	21	1320	1536	12
09-453	655	2	3530	941	656	5784	12
09-454	143	0	0	0	0	143	0
09-455	104	0	0	0	0	104	0
09-456	387	2	2560	319	682	3950	18
09-457	438	17	2760	377	3900	7357	18
09-458	362	11	783	86	3700	4942	12
09-459	475	5	3980	398	1640	6498	18
09-460	114	0	0	0	0	114	0
09-461	1720	33	12200	859	14900	29712	42
09-462	102	0	0	0	0	102	0
09-463	31	8	1310	118	1640	3107	18
09-464	358	5	2070	274	1340	4047	18
09-465	15	0	0	0	0	15	0
09-466	352	7	2760	306	1720	5145	12
09-467	111	23	671	78	3660	4543	24
09-468	67	0	0	0	0	67	0
09-469	21	8	2930	33	1730	4722	30

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-470	123	4	2070	186	779	3161	18
09-471	277	0	0	0	0	277	0
09-472	476	7	2740	376	1660	5259	12
09-473	26	2	2510	177	652	3367	24
09-474	302	7	2040	196	1920	4465	12
09-475	286	8	1100	87	1190	2671	18
09-476	14	5	4390	19	580	4885	30
09-477	285	3	3110	557	1130	5085	18
09-478	270	4	1430	160	991	2855	30
09-479	649	3	2440	315	1070	4416	12
09-480	7	3	3130	12	802	3688	30
09-481	5	8	5320	14	1560	6249	30
09-482	655	4	4650	455	1150	6830	36
09-483	85	3	989	79	711	1867	18
09-484	605	15	3860	495	1870	6191	36
09-485	5	14	67	14	2390	2490	30
09-486	184	2	1450	224	545	2405	24
09-487	250	4	1350	201	1210	3012	36
09-488	40	4	1610	207	904	2425	12
09-489	164	12	1320	164	2000	3551	36
09-490	201	0	0	0	0	201	0
09-491	99	3	4050	193	776	5110	30
09-492	5	3	2220	11	562	2801	18
09-493	139	5	2550	175	1120	3989	12
09-494	547	6	3510	518	1760	6341	12
09-495	61	3	252	56	813	967	0
09-496	174	8	1920	162	2380	4644	30
09-497	710	7	4210	993	1950	7584	24
09-498	146	0	0	0	0	146	0
09-499	257	13	4580	168	2260	7242	36
09-500	110	6	1950	1300	1010	4085	36
09-501	166	13	1440	121	2170	3905	36
09-502	55	0	0	0	0	55	0
09-503	107	3	1100	185	624	1999	18
09-504	203	13	1630	195	4060	6082	24
09-506	69	0	0	0	0	69	0
09-507	87	0	0	0	0	87	0
09-508	49	0	0	0	0	49	0
09-509	345	0	0	0	0	345	0
09-510	119	0	0	0	0	119	0
09-511	52	0	0	0	0	52	0
09-512	105	10	1120	87	1860	2864	36
09-514	40	0	0	0	0	40	0
09-515	667	2	2310	606	1080	4665	24
09-516	434	3	2260	341	1120	4158	30

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	Depth (inches)
	As	Cd	Cu	Pb	Zn		
09-517	293	1	7410	61	314	8079	48
09-518	463	14	5100	631	4720	10928	42

## Appendix 2. Data Gaps Pit Sampling Data

Pit sampling data for 10, 11, 12 and 17 - 22 are summarized below. Data were collected in the field using XRF. Maximum concentrations out of all 6-inch intervals for a pit are reported in mg/kg for each contaminant of concern (COC). Maximum sum of COC's observed in one interval from each pit is also reported. The deepest soil interval where sum of COC's exceeded 1,260 mg/kg is reported as depth (e.g. 24 inches = 18 to 24 inch depth interval). This summary is based on tabular data provided by Tetra Tech, and these data are for lab results only.

Pit	Maximum value from each pit						
	As	Cd	Cu	Pb	Zn	Sum CoC	DoC >1260 mg/kg (inches)
<b>PHASE 10</b>							
DG10-001	20.82	15.04	123.86	25.73	122.85	293.26	0
DG10-002	1457.69	7.28	2229.06	336.72	2216.15	5633.19	30
DG10-003	265.67	8.78	2319.13	340.32	983.01	2877.25	12
DG10-004	147.97	12.97	1039.36	130.04	684.59	1990.21	6
DG10-005	66.1	14.62	494.26	137.05	401.71	1112.51	0
DG10-006	61.12	0	717.68	193.98	314.82	1098.65	0
DG10-007	69.21	18.01	595.63	99.58	1184.9	1908.96	12
DG10-008	813.32	13.5	2031.05	1227.21	1324.92	5396.5	24
DG10-009	130.72	14.28	736.49	139.43	775.34	1498.69	30
DG10-010	190.26	17.48	541.81	234.9	360.05	1301.4	6
DG10-014	511.02	13.69	5049.99	652.18	1783	8009.88	6
DG10-015	301.16	12.9	4450.8	580.66	1313.52	6134.04	18
DG10-018	71.83	16.81	670.97	179.55	980.76	1512.81	6
DG10-019	122.04	7.91	1569.78	158.12	1026.46	2881.76	6
DG10-023	137.56	14.42	1413.2	532.21	1600.11	3697.5	30
DG10-024	275.7	12.61	2385.56	296.12	2232.73	5164.89	18
DG10-025	86.12	9.65	617.72	114.42	1117.01	1906.56	6
DG10-026	88.91	0	120.48	28.12	134.77	309.05	0
DG10-027	100.98	15.99	751.3	156.34	854.43	1737.58	30
DG10-028	208.78	13.94	1600.95	292.64	1599.65	3709.88	24
DG10-029	248.8	10.04	1388.9	254.93	1645.72	3541.47	6
DG10-030	555.7	18.89	4868.98	1039.65	2901.49	7593.68	30
DG10-031	372.67	22.5	2167.96	588.32	2042.08	4435.8	42
DG10-032	615.13	70.26	8888.65	433.91	2559.48	11616.03	42
DG10-033	78.57	21.2	760.74	200.11	1308.48	2271.75	30
DG10-034	346	19.79	1730.71	379.25	1306.87	3145.85	18
DG10-035	30.31	0	247.99	50.8	694.78	966.26	0
DG10-036	129.94	17.83	1229.92	157.32	1876.88	3291.12	36
DG10-037	129.06	15.16	1283.55	149.12	3478.24	4981.28	42
DG10-038	102.29	18.89	573.59	106.08	502.66	1223.48	0
DG10-039	105.16	8.4	813.79	81.73	718.24	1723.56	2
DG10-040	584.1	7.65	5063.12	443.74	1750.59	7810.45	36
DG10-041	24.97	19.35	155.77	67.87	153.62	357.36	0
DG10-042	38.32	19.14	134.33	30.91	114.08	296.43	0
DG10-043	828.26	8.54	4446.7	544.73	2277.59	6957.56	12
DG10-044	792.47	14.87	6660.34	490.89	2589.9	10548.47	30

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit						DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn	Sum CoC	
DG10-045	331.7	9.95	6985.39	286.59	2649.85	10263.48	12
DG10-046	238.03	7.02	1604.44	251.62	2495.51	4595.92	12
DG10-047	247.62	6.11	2806.89	423.9	2748.87	4820.4	18
DG10-048	26.61	16.93	95.6	20.5	121.36	261.86	0
DG10-049	417.33	12.92	3523.56	364.66	1088.46	5185.51	12
DG10-050	326.62	11.68	6327.32	899.78	1989.46	8986.71	18
DG10-051	218.12	6.87	1681.79	391.17	860.82	3158.77	12
DG10-052	206.9	15.32	3413.93	422.67	1092.93	4874.5	12
DG10-053	22.38	9.34	74.92	24.76	77.15	195.56	0
DG10-054	195.79	12.36	1091.08	187.69	717.28	1998.74	6
DG10-055	687.15	15.6	7195.08	3840.61	3547.24	14633.9	6
DG10-056	624.26	13.04	3344.14	611.65	1159.49	5040.28	36
DG10-057	285.35	14.03	2407	380.14	1955.57	4990.81	6
DG10-059	28.43	6.37	63.12	19.19	55.16	164.77	0
DG10-060	397.69	17.96	3970.92	360.21	2980.17	6397.45	36
DG10-061	838.82	14.06	6487.53	526.7	4079.45	8756.11	30
DG10-062	62.19	0	727.65	115.38	452.34	1138.29	0
DG10-063	1453.25	26.38	12111.5	720.7	7132.1	21443.93	48
DG10-064	352.514	10.138	3248.212	307.682	1660.162	5532.377	12
DG10-065	292.11	11.66	841.84	194.88	1622.84	2691.24	6
DG10-068	78.55	10.43	394.32	49.42	491.42	990.32	0
DG10-069	442.66	0	7043.87	732.22	1384.15	9602.9	18
DG10-070	87.99	15.68	803.25	123.46	525.69	1538.42	12
DG10-071	147.19	13.882	3535.472	165.464	927.218	4587.78	18
DG10-072	529.41	10.251	2936.477	516.83	1135.812	5125.56	12
DG10-073	50.43	6.14	494.97	160.27	776.62	1323.99	6
DG10-074	120.46	6	1451.2	264.53	1073.13	2915.32	12
DG10-075	36.85	16.71	150.08	65.73	164.55	405.53	0
DG10-076	45.61	0	324.27	75.8	282.46	728.14	0
DG10-077	159.62	25.27	1516.21	177.47	1585.62	3208.92	36
DG10-078	55.86	14.33	570.3	119.59	1258.97	1747.79	24
DG10-079	179.91	10.96	1358.17	262.95	1917.75	3536.33	24
DG10-080	206.85	12.1	1492.31	285.38	1085.28	2804.84	18
DG10-083	40.42	16.9	52.98	15.99	38.38	128.07	0
DG10-084	858.54	14.38	7720.17	1220.98	3116.1	12586.69	18
DG10-085	39.89	13.05	402.78	113.18	470.47	1022.41	0
DG10-086	354.42	10	8562.59	488.93	1334.97	10315.61	12
DG10-087	104.05	9.4	703.15	170.77	569.09	1480.69	6
DG10-088	317.21	10.89	2420.76	637.02	1170.91	4433.32	12
DG10-089	362.82	11.96	2042.07	464.73	1449.33	4170.96	12
DG10-090	182.93	14.32	1277.56	244.93	743.81	2463.55	6
DG10-091	68	0	152.64	47.91	89.51	358.06	0
DG10-092	2357.88	13.98	10321.25	968.32	1939.68	15587.13	18
DG10-093	242.37	21.1	1966.45	909.42	797.38	3469.15	30
DG10-094	412.99	12.36	2208.95	481.25	1013.65	3706.94	18

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn		
DG10-095	350.94	11.08	2145.62	371.95	1453.88	4160.35	12
DG10-096	623.05	11.79	7216.05	797.95	1533.33	10010.56	24
DG10-098	390.76	12.49	2515.75	678.2	1086.79	4357.88	18
DG10-099	28.15	12.19	200.9	51.71	198.74	477.17	0
DG10-100	292.05	24.89	2065.99	431.76	1503.82	4305.17	6
DG10-101	469.3	11.12	2955.72	411.39	637.05	4481.58	30
DG10-102	757.73	18.24	10756.06	1178.92	4717.52	14381.19	48
DG10-103	379.8	19.9	2290.88	407.54	1630.73	4679.42	24
DG10-104	48.18	10.76	156.59	39.43	151.95	406.49	0
DG10-106	71.314	14.74	604.534	103.745	479.819	1266.343	6
DG10-107	264.446	12.708	896.311	260.56	972.189	2367.591	6
DG10-108	500.617	6.533	5658.697	512.147	1807.069	8485.063	12
DG10-109	131.3	8.18	968.09	127.09	807.73	1802.62	6
RT10-001	330.65	18.77	1290.18	382.33	1787.88	2599.78	18
RT10-003	157.02	6.05	1797.33	302.51	1252.59	3413.54	6
RT10-004	51.19	13.57	556.6	82.4	656.4	1356.04	2
WF10-001	80.96	8.42	614.86	73.41	715.14	1460.9	6
WF10-002	243.57	9.49	1721.5	256.7	1619.76	3299.62	6
WF10-003	385.89	16.21	1596.26	679.17	621.23	3285.33	12
WF10-004	253.3	6.43	1083.81	318.69	657.14	2317.72	6
WL10-001	13.58	0	24.69	6.68	23.95	68.9	0
WL10-004	11.93	0	48.81	16.29	144.01	216.61	0
WL10-007	17.68	19.67	38.16	21.3	54.29	131.43	0
WL10-011	242.59	16.6	397.79	109.79	316.67	1066.84	0
<b>PHASE 11</b>							
DG11-001	71.16	13.7	482.56	93.72	1136.25	1736.46	18
DG11-002	545.5	12.58	10085.19	589.27	1011.82	10926.81	30
DG11-003	159.38	9.19	2439.94	310.64	1485.58	3736.17	12
DG11-004	602.97	11.36	5466.68	697.19	2447.26	7835.73	18
DG11-005	141.09	10.49	1692.5	249.2	1237.99	3330.78	6
DG11-006	39.39	18.12	171.11	47.8	151.38	382.19	0
DG11-007	332.015	26.453	5695.88	423.201	998.982	7298.064	12
DG11-008	149.94	23.31	1374.3	146.04	2565	4165.83	30
DG11-009	21.24	13.73	236.38	35.07	175.51	468.2	0
DG11-010	118.1	22.19	752.53	99.78	2140.63	2996.8	30
DG11-011	387.255	12.965	1709.151	432.721	906.434	3441.954	2
DG11-012	211.469	14.31	1841.8	256.083	1265.91	3304.005	18
DG11-013	78.785	16.544	991.848	108.892	902.174	1734.339	6
DG11-014	1252.53	13.5	9315.92	1025.6	2431.17	12419	30
DG11-015	275.855	13.334	1795.235	343.506	1380.9	3801.465	2
DG11-016	154.86	19.51	2355.25	177.02	2186.88	4759.26	36
DG11-017	1143.764	12.497	10781.64	1082.216	2523.198	15543.32	12
DG11-018	1079.32	24.68	9008.01	1622.69	3189.9	13498.32	12
DG11-019	189.665	12.661	1254.519	283.817	1214.964	2828.508	12
DG11-020	399.232	11.635	3639.219	850.498	1299.824	5791.456	12

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit						DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn	Sum CoC	
DG11-021	108.633	12.312	676.785	137.405	609.176	1498.047	6
DG11-022	199.19	24.07	1059.98	168.33	1301.53	2354.99	30
DG11-023	114.64	18.26	1063.01	166.97	2239.12	3214.36	36
DG11-024	133.672	20.256	945.996	154.741	1535.892	2686.793	30
DG11-025	123.88	13.38	917.14	144.48	1546.22	2745.1	24
DG11-026	554.4	31.59	4124.11	417.7	674.97	4785.42	24
DG11-027	170.75	15.18	992.55	197.83	1661.26	2731.55	12
DG11-029	226.593	25.736	971.767	255.711	1022.358	2316.347	30
DG11-030	1020.52	20.77	8187.36	744.66	3027.64	12999.33	24
DG11-031	216.41	14.32	1321.94	221.21	1034.23	2793.79	36
DG11-032	979.574	14.394	5080.058	1125.935	2840.665	9427.684	30
DG11-033	186.305	18.56	1244.376	233.777	3104.556	4758.676	12
DG11-034	98.419	22.073	656.676	222.537	1103.257	1625.561	42
DG11-035	50.928	7.203	482.631	52.718	272.294	863.06	0
DG11-036	542.75	14.89	7553.286	432.37	2179.598	10603.69	24
DG11-037	319.86	13.9	2379.85	542.92	1986.1	4520.49	24
DG11-038	651.37	26.51	3599.16	514.94	4987.68	7248.9	54
DG11-039	452.009	12.218	2829.214	422.888	2154.465	5859.674	6
DG11-040	336.612	11.161	2972.386	259.003	1977.026	5433.333	6
DG11-041	378.35	24.42	3318.65	262.33	2522.15	5663.78	24
DG11-042	473	25.57	9885.77	357.32	8887.65	13832.08	42
DG11-043	544.926	33.449	3833.539	797.675	9497.402	13634.04	48
DG11-044	554.51	20.15	3956.75	741.82	1346.3	6154.09	18
DG11-045	296.778	14.997	5093.845	549.13	2032.974	5953.373	30
DG11-047A	1258.423	22.149	7850.781	640.866	2575.862	11231.24	48
DG11-047B	64.92	15.46	725.64	117.1	700.52	1596.43	6
DG11-048	1862.681	17.245	16179.94	1476.257	4299.887	20546.33	12
DG11-049	245.189	15.29	1939.311	293.682	1127.737	3500.74	12
WF11-005	73.37	12.27	453.76	103.35	343.24	980.24	0
WF11-006	51.86	13.79	353.95	108.92	441.76	869.86	0
WF11-007	370.305	6.256	3252.474	479.262	1401.251	5508.936	6
WF11-008	164.78	17.07	579.92	144.91	609.98	1509.74	6
WF11-009	324.872	8.889	1963.694	367.769	2369.455	4949.747	18
WF11-010	83.283	9.159	434.93	99.294	321.593	893.918	0
WF11-012	386.509	10.402	1547.433	380.825	1202.152	3519.481	12
WF11-013	327.973	20.653	1196.066	193.534	1873.163	3611.389	2
WF11-015	104.807	6.361	166.793	60.838	529.353	836.024	0
WF11-016	120.973	8.187	786.315	135.456	705.948	1753.673	2
WF11-017	45.81	14.83	164.22	35.39	111.72	334	0
WF11-019	63.266	11.486	2341.475	181.777	519.271	3112.562	12
WF11-022	87.193	7.311	1060.864	109.059	618.111	1878.408	6
WF11-024	977.008	17.414	5807.729	477.875	3737.449	11014.92	18
WF11-025	161.638	5.973	840.142	108.483	942.828	1976.987	36
WF11-026	203.102	13.951	2535.331	396.022	1635.828	4775.889	12
WF11-027	19.293	8.572	123.093	24.332	165.553	336.474	0

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit						DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn	Sum CoC	
WF11-028	75.368	10.211	762.516	130.42	492.58	1463.5	2
WF11-029	63.687	5.428	719.86	184.945	655.018	1628.938	6
WF11-030	78.573	5.009	416.322	92.612	586.701	1178.956	0
WF11-031	82.65	10.7	482.22	85.52	523	1178.83	0
WL11-022	232.2	11.22	1726.29	257.51	1410.91	3461.24	6
WL11-023	25.49	0	86.72	28.74	84.82	217.76	0
WL11-024	142.1	11.73	495.85	123.03	245.54	1006.52	0
WL11-025	621.37	0	5401.14	690	1956.35	8668.86	18
WL11-026	11.48	0	34.11	13.83	55.64	91.99	0
WL11-027	523.73	0	760.2	354.69	716.76	2355.38	12
WL11-028	54.43	11.34	278.05	44.47	275.94	541.29	0
WL11-029	63.84	0	1651.7	155.6	792.37	2310.31	12
WL11-030	37.93	10.79	137.43	31.8	126.07	314.31	0
<b>PHASE 12</b>							
DG12-001	95.21	18.37	712.33	123.07	730.2	1606.96	6
DG12-002	614.71	18.33	2159.61	621.84	653.24	3496.9	24
DG12-003	668.96	16.75	1129.5	1356.38	1149.55	4178.75	30
DG12-004	143.24	23.23	1404.88	200.44	2266.6	3807.07	30
DG12-005	95.49	13.76	764.83	158.68	859.49	1878.49	2
DG12-006	753.08	14.56	5790.66	506.03	3292.56	10356.89	24
DG12-007	414.76	13.94	5233.28	598.07	983.85	7045.43	18
DG12-008	308.09	19.41	2258.04	238.71	1231.28	3791.76	42
DG12-009	996.6	12.74	2991.11	660.29	1646.52	4721.98	30
DG12-010	324.62	11.97	2022.83	263.32	2140.59	4763.33	30
DG12-011	399.35	51.43	2409.56	417.31	1586.2	3744.1	48
DG12-012	63.41	22.23	546.91	87.89	453.09	1151.3	0
DG12-013	92.97	11.72	1343.41	171.49	588.21	1959.48	24
DG12-014	780.71	17.39	5465.79	315.46	833.91	7212.42	12
DG12-015	559.83	9.47	2302.23	360.13	1553.25	4736.64	12
DG12-016	163.57	30.94	3477.27	488.07	2923.57	4857.97	36
DG12-017	903.84	17.31	5105.94	560.32	2750.5	8723.97	18
DG12-018	84.35	14.87	637.89	114.1	372.58	959.8	0
DG12-019	1251.88	25.05	13639.43	874.73	5362.54	20514.15	30
DG12-020	1109.63	13.96	5018.51	503.24	1727.66	7633.86	24
DG12-021	85.31	12.22	835.97	180.96	1424.16	2524.91	6
DG12-022	75.29	19.02	166.88	62.18	319.85	624.2	0
DG12-023	325.9	17.62	1831.22	231.98	2523.46	4189.99	48
DG12-024	345.65	14.37	1035.43	360.44	768.87	2328.64	24
DG12-025	308.28	13.08	6569.76	359.23	770.07	7880.84	36
DG12-026	232.48	15.09	2718.68	251.63	3117.69	6320.48	6
DG12-027	412.43	14.09	752.4	110.06	813.88	1689.35	6
DG12-028	184	31.61	1356.4	164.67	2608.97	4260.04	30
DG12-029	451.8	16.37	4197.43	634.56	827.23	6111.02	24
DG12-030	591.18	17.86	2152.19	660.04	1268.42	4460.57	30
DG12-031	829.62	15.81	2603.43	615.02	2114.71	5173.07	18

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn		
DG12-032	522.04	13.79	5422.23	1023.52	2220.29	9162.73	24
DG12-033	32.91	11.86	151.69	69.2	174.49	428.29	0
DG12-034	121.21	16.98	1473.44	194.35	3330.28	5119.28	30
DG12-035	686.98	12.25	8871.23	1405.58	1309.91	12273.7	12
DG12-036	2682.24	15.46	5155.64	1307.68	1695.08	8282.08	36
DG12-037	749.09	12.84	1777.85	705.04	1103.22	3713.21	12
DG12-038	1000.42	16.9	11564.01	1392.88	3024.6	16884.87	18
DG12-039	89.44	12.15	860.11	121.57	549.16	1553.05	12
DG12-040	64.91	0	107.78	31.47	124.78	328.94	0
DG12-041	582.41	12.65	2332.82	527.6	1454.84	4897.67	18
DG12-042	479.82	10.42	3298.4	519.9	3906.84	7407.55	18
DG12-043	736.2	17.52	2803.33	949.96	814.06	3652.2	24
DG12-044	215.94	13.71	1740.39	207.32	1059.11	2979.19	18
DG12-045	87.98	17.8	758.49	134.95	714.8	1696.22	36
DG12-046	20.99	11.31	54.06	17.6	60.63	151.56	0
DG12-047	46.02	17.95	486.62	69.04	314.59	934.22	0
DG12-048	879.21	19.93	7307.71	962.04	2690.46	11852.57	12
DG12-049	46.75	18.9	619.79	98.98	540.39	1310.26	2
DG12-050	1095.93	38.73	7718.46	657.38	7824.54	17320.59	60
DG12-051	92.51	19.01	552.89	105.04	886.86	1628.84	18
DG12-052	189.35	17.79	999.66	287.82	1203.81	2202	12
DG12-053	122.92	17.36	626.63	125.3	630.81	1461.53	12
DG12-054	499.67	24.02	4768.09	968.72	1329.77	6529.35	12
DG12-055	559.62	16.68	1890.24	551.71	1054.6	3207.81	42
DG12-056	290.69	18.7	2448.7	351.45	1342.11	4332.3	6
DG12-057	92.83	0	693.28	95.12	1294.49	2175.72	2
DG12-058	34.91	25.18	129.82	16.22	292.28	468.84	0
DG12-059	73.97	20.53	900.27	154.37	1282.58	2251.8	30
DG12-060	1448.31	13.11	4223.25	920.52	1899.03	6642.79	30
DG12-061	387.01	16.73	3409.84	822.1	1476.35	4752.27	12
DG12-062	233.53	17.83	4004.92	1078.32	1471.27	6617.51	18
DG12-063	186.32	13.72	2155.32	143.62	2367.81	4853.07	6
DG12-064	192	11.68	1546.95	107.57	523.04	2336.52	6
DG12-065	124.51	22.21	1684.33	94.62	730.14	2344.46	36
DG12-066	632	20.05	3030.12	955.76	1197.89	4581.79	24
DG12-067	1256.52	14.41	9104.91	1186.43	2193.01	13754.43	12
DG12-068	125.39	15.89	696.16	122.43	1080.96	1935.16	12
<b>PHASE 17</b>							
DG17-004	14.08	19.47	259.77	45.5	202.29	528.64	0
DG17-010	327.79	19.75	2896.65	585.71	1204.74	4466.19	24
DG17-011	21.35	11.7	50.67	17.16	114.82	187.24	0
DG17-012	54.53	21.6	401.26	89.96	385.31	938.19	0
DG17-013	37.62	9.55	289.86	33.2	121.83	411.16	0
DG17-015	240.21	18.94	4455.85	424.06	1178.82	6267.82	12
DG17-016	481.02	9.43	11069.99	1274.64	2190.6	13274.47	18

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn		
DG17-017	984.95	27.55	2352.15	694.62	1167.2	4318.94	18
DG17-018	38.36	15.32	433.24	52.42	367.1	888.76	0
DG17-042	781.85	16.04	4446.18	1130.61	2471.96	6727.54	24
DG17-043	334.94	18.4	3098.75	729.57	634.9	4543.71	30
DG17-046	684.32	26.98	5551.29	559.73	5947.04	12526.83	30
DG17-047	1214.23	16.59	8113.88	647	1876.85	10932.44	24
DG17-048	1242.39	14.87	4025.27	935.29	1600.1	6668.18	30
DG17-049	127.87	18.61	1125.93	161.48	884.96	2310.97	12
DG17-051	477.74	16.26	4472.89	591.53	2443.67	7811	42
DG17-052	483.22	17.54	3444.26	475.07	1777.06	6093.58	24
DG17-055	11.58	8.46	68.64	23.51	111.04	220.93	0
DG17-056	397.78	19.98	3868.48	444.13	4750.35	9475.15	36
DG17-058	272.13	16.45	1980.83	262.36	1672.24	4196.91	24
DG17-059	908.19	24.94	4910.12	573.49	2810.75	8907.19	18
DG17-060	259.29	14.73	1704.17	516.81	1993.65	4293.27	12
DG17-061	40.54	8.7	412.34	95.4	213.77	738.78	0
DG17-063	26.53	15.93	467.67	190.93	424.65	1118.43	0
DG17-064	413.48	15.03	3125.58	392.57	1087.76	4627.88	24
DG17-065	45.87	8.73	703.96	69.24	492.23	1295.47	2
DG17-066	151.08	21.24	1118.44	206.91	889.32	2381.56	2
DG17-067	1061.99	24.99	8555.63	745.09	5180.17	14722.37	48
DG17-068	229.27	11.92	1342.89	177.15	3345.09	4825.26	24
DG17-069	18.26	11.74	151.18	37.68	126.5	336.99	0
DG17-070	270.31	11.03	2843.66	682.37	2013.64	5819.14	12
DG17-071	173.25	18.31	1392.49	233.75	1753.99	3563.04	30
DG17-073	995.44	14.95	5029.28	647.43	1304.19	6593.73	18
DG17-074	205.13	15.99	2362.55	322.63	648.9	3547.43	18
DG17-075	130.26	14.66	1221.53	587.19	1034.53	2277.82	30
DG17-076	593.67	16.34	3970.46	408.51	2368.49	7357.47	6
DG17-077	42.47	14.31	638.59	130.55	740.2	1560.35	2
DG17-078	22.82	23.49	299.25	67.92	637.74	1036.82	0
DG17-079	12.63	8.99	89.38	18.15	104.37	232.35	0
DG17-080	60.51	9.18	140.76	189.33	686.49	1047.45	0
<b>PHASE 18</b>							
DG18-001	63.69	9.84	342.83	112.39	517.89	1043.82	0
DG18-002	36.8	10.86	461.48	97.79	443.19	1040.54	0
DG18-003	118.78	15	623.75	110.86	628.17	1487.89	18
DG18-004	476.79	15.06	2584.38	533.28	1758.03	4228.02	18
DG18-005	154.94	8.56	835.45	106.52	494.99	1598.6	6
DG18-006	37.43	21.82	751.29	106.08	621.27	1526.42	6
DG18-007	99.35	15.79	1025.89	128.99	1377.38	2629.72	18
DG18-008	32.75	10.32	1304.53	208.66	619.38	2172.83	2
DG18-009	19.63	8.6	448.2	54.61	270.64	800.5	0
DG18-010	117.44	11.85	1424.08	187.67	842.33	2082.51	18
DG18-011	53.21	24.89	448.58	103.72	522.63	1144.97	0

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit					Sum CoC	DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn		
DG18-012	192.56	14.27	1113.35	255.2	1437.04	3007.54	6
DG18-013	132.93	14.75	904.54	160.3	917.25	2124.53	24
DG18-015	96.83	12.6	984.34	53.07	2616.63	3378.85	42
DG18-016	22.01	19.13	278.1	71.44	306.09	685.02	0
DG18-017	236.61	19.5	3408.27	524.97	1540.88	5723.47	24
DG18-018	116.33	10.68	735.38	132.8	841.08	1782.87	6
DG18-019	830.47	20.61	9814.28	1828.17	6025.78	18518.26	48
DG18-020	155.27	13.1	984.62	220.56	1073.05	2443.4	6
DG18-021	319.82	17.67	2235.39	228.66	1146.07	3938.53	6
DG18-022	240.32	13.72	2693.1	233.38	797.03	3308.96	6
DG18-023	117.06	19.93	969.53	226.53	1453.64	2706.4	18
DG18-024	404.87	14.33	5460.61	690.04	1747.05	7387.71	12
DG18-025	95.97	15.07	2659.83	155.72	2052.27	4749.14	18
DG18-026	63.33	14.56	979.53	170.6	761.43	1974.78	2
DG18-027	339.13	15.54	3824.92	399.43	2620.77	7199.79	6
DG18-028	132.42	13.99	832.52	169.51	797.37	1940.73	2
DG18-029	218.12	13.62	4276.96	986.99	1286.78	6782.47	6
DG18-030	201.13	25	1357.6	185.23	3211.17	4909.99	30
DG18-031	22.43	15.76	208.38	40.62	197.36	471.35	0
DG18-032	475.89	18.31	3028.73	335.69	1911.81	5765.67	6
DG18-033	302.66	18.32	15804.38	338.46	4734.9	20854.87	18
DG18-034	214.42	20.9	702.43	300.55	1419.09	2460.68	30
DG18-035	1087.83	12.73	4660.63	422.94	1680.08	6573.1	12
DG18-036	26.05	17.17	1045.91	276.56	1007.87	2364.79	2
DG18-037	632.75	24.85	7620.65	549.82	1941.54	9007.57	18
DG18-038	598	16.62	5609.64	1214.47	2578.87	9150.83	24
DG18-039	962.45	23.94	2513.91	611.71	1700.06	3967.02	18
DG18-040	53.82	11.36	913.77	175.95	1026.09	2180.99	2
DG18-041	361.32	24.07	1522.74	297.71	1645.16	3231.34	6
DG18-042	359.04	13.75	1965.52	367.13	1625.64	3840.05	6
DG18-043	1453.35	26.61	15054.46	740.96	4327.23	21602.61	24
DG18-044	34.15	12	554.24	302.21	763.99	1663.26	2
DG18-045	46.47	14.39	553.97	142.07	597.67	1351.19	6
DG18-046	391.69	20.53	7273.3	331.95	1268.16	8584.54	30
DG18-047	438.72	14.13	1977.65	379.97	1140.4	3945.79	6
DG18-048	382.65	16.16	2174.24	432.88	1741.57	4747.5	12
DG18-050	27.28	10.29	212.01	56.4	236.97	542.02	0
<b>PHASE 19</b>							
DG19-001	22.92	12.39	113.86	22.1	90.75	257	0
DG19-002	51.58	15.85	946.35	83.89	526.33	1616.11	2
DG19-003	1241.97	11.85	1993.89	477.45	1458.1	4431.46	24
DG19-004	341.41	14.07	1798.93	318.53	943.79	3412.03	12
DG19-005	648.56	16.39	6994.57	1309.07	1883.19	10847.6	18
DG19-006	29.47	9.46	148.78	30.85	116.18	311.72	0
DG19-007	246.76	18.74	1194.65	326.01	989.14	2766.01	6

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit						DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn	Sum CoC	
DG19-008	613.17	15.21	4856.06	376.67	1298.6	7153.95	18
DG19-009	61.72	21.24	739.13	126.65	504.23	1446.72	30
DG19-010	156.9	12.96	1387.3	267.61	1506.25	3019.82	12
DG19-011	149.3	10.48	1734.88	232.63	1888.26	4013.54	6
DG19-012	25.89	9.49	136.45	47.28	333.14	552.12	0
DG19-013	241.91	16.84	1498.33	311.92	614.3	2675.21	2
DG19-014	392.55	12.62	1285.63	332.79	933.42	2750.16	6
DG19-015	168.22	17.97	2339.88	197.12	1545.77	4157.1	36
DG19-016	178.17	16.3	1858.59	238.82	1346.45	3632.15	2
DG19-017	212.71	17.34	2914.76	493.92	1409.59	5043.96	6
DG19-018	39.88	22.44	121.63	25.3	614.65	807.26	0
DG19-019	401.44	14.95	3982.98	446.61	1908.06	6754.04	12
DG19-020	847.58	14.38	2634.09	1346.97	1664.33	6133.03	24
DG19-021	126.34	21.23	1733.36	150.06	3874.42	5589.17	42
DG19-022	1091.53	9.59	8878.82	584.41	1821.12	11739.57	18
DG19-023	32.18	12.34	212.4	49.7	253.8	545.38	0
DG19-024	254.84	16.5	1766.7	284.06	1990.19	4305.7	12
DG19-025	210.89	19.75	2265.49	300.04	2166.78	4797.45	24
DG19-026	207.09	11.2	1819.84	307.84	1584.31	3928.35	6
DG19-027	15.83	8.11	151.97	29.45	153.93	358.97	0
DG19-028	7.57	7.81	36.17	10.42	135.25	196.28	0
DG19-029	412.15	19.42	3406.9	376.85	1788.78	5960.73	12
DG19-030	391.44	35.39	1259.13	331.46	976.37	2928.21	18
DG19-031	372.1	11.46	1749.81	347.4	2529.03	4803.58	12
DG19-032	1011.13	15.23	10427.7	754.82	1494.78	11832.69	36
DG19-033	150.64	10.7	1352.28	158.62	1465.71	3135.91	24
DG19-034	12.92	15.57	96.53	19.69	141.89	274.41	0
DG19-035	458.42	12.13	2331.71	428	1380.69	3727.8	12
DG19-036	428.83	13.41	4248.46	307.06	2470.89	7417.48	6
DG19-037	84.84	15.78	714.63	126.72	728.89	1531.09	18
DG19-038	232.36	15.44	2876.87	307.43	1016.02	4426.61	18
DG19-039	310.22	21.1	2127.68	253.78	690.74	3386.79	6
DG19-040	172.64	15.74	2645.24	212.6	1105.31	3869.38	30
DG19-041	71.12	15.44	711.42	112.18	625.07	1528.51	2
DG19-042	106.49	16.38	1010.23	143.82	2381.35	3628.69	36
DG19-043	465.83	12.94	1661.59	332.3	1364.8	3526.56	18
DG19-044	356.09	14.45	2932.5	310.85	1057.38	4665.39	6
<b>PHASE 20</b>							
DG20-001	292.86	20.29	4392.42	357.04	1001.49	5259.17	6
DG20-002	96.3	14.26	1482.14	196.2	901.19	2670.05	2
DG20-003	439.73	16.39	4260.68	597.01	1010.55	5983.44	18
DG20-004	24.06	13.22	272.32	40.84	2160.95	2508.05	6
DG20-005	13.32	13.61	85.59	27.87	258.46	393.3	0
DG20-006	1654.69	24.82	10703.64	744.68	7136.67	20264.5	30
DG20-007	948.18	42.77	7587.14	563.22	9227.75	17945.99	30

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit						DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn	Sum CoC	
DG20-008	153.89	18.74	1631.05	186.07	2476.48	4368.58	24
DG20-009	136.42	22.11	682.6	111.08	649.11	1508.5	12
DG20-010	282.02	14.9	2636.86	359.72	1471.07	4761.03	12
DG20-011	221.5	9.91	1920.11	230.82	1184.34	3565.06	12
DG20-012	429.67	17.2	3459.68	470.77	2211.95	6589.27	12
DG20-013	382.22	12.62	2086.19	419.63	1047.06	3714.07	6
DG20-014	336.01	10.31	1610.14	675.38	877.83	3509.01	6
DG20-015	184.63	16.82	1127.61	214.62	825.76	2225.15	42
DG20-016	81.65	14.82	628.6	99.71	1234.9	2054.07	12
DG20-017	48.24	14.51	331.75	79.34	366.72	794.3	0
DG20-018	589.56	12.83	3943.64	555.11	2692.57	7618.13	6
DG20-019	1311.97	31.78	9159.27	731.8	2358.8	13593.62	18
DG20-020	66.59	8.68	591.26	103.62	559.57	1328.95	2
DG20-022	99.33	11.31	745.54	163.24	857.69	1874.02	6
DG20-023	195.17	13.51	3602.02	571.43	1621.32	6000.6	12
DG20-024	163.25	15.52	1714.58	137.72	3899.4	5836.56	42
DG20-025	203.21	26.46	1857.2	352.18	1891.41	3597.19	30
DG20-026	298.51	15.47	1433.98	226.09	1948.8	3921.63	24
DG20-027	47.55	15.82	539.66	118.39	760.99	1232.46	0
DG20-028	35.73	14.8	201.43	19.81	108.53	364.23	0
DG20-029	418.48	10.8	2320.75	373.06	2019.65	5142.74	12
DG20-030	164.44	28.95	2777.05	343.54	2954.79	4753.19	18
DG20-031	492.62	21.26	13445.49	874.95	3027.1	17852.99	24
DG20-032	487.12	11.47	1977.88	492.36	1955.78	4922.78	2
DG20-033	472.88	18.28	3561.18	906.69	2817.81	7406.46	24
DG20-034	171.51	14.6	949.45	195.78	912.41	2199.51	24
DG20-035	152.73	21.18	1237.99	242.73	1116.13	2751.88	24
DG20-036	321.57	13.82	2934.27	367.7	1445.48	4273.14	24
DG20-037	306.78	25.57	2386.17	277.73	1376.02	3971.04	12
DG20-038	296.21	22.28	2508.91	292.29	1627.48	4682.44	12
DG20-039	220.34	9.49	2160.96	256.36	1179.28	3826.32	6
DG20-040	163.02	20.11	2997.41	179.91	2008.62	5275.39	18
DG20-041	55.99	17.24	1450.73	162.14	1003.33	1858.16	12
DG20-042	167.63	15.02	1698.53	188.6	1254.05	3230.94	12
DG20-043	178.99	15.62	971.18	113.85	834.26	2105.24	6
DG20-044	113.2	15.47	901.4	105.72	765.8	1901.59	12
DG20-045	68.49	14.59	695.43	190.88	811.58	1774.34	2
DG20-046	249.71	9.18	1749.83	317.73	2747.82	5074.27	12
DG20-047	228.73	10.03	1621.61	192.6	1442.85	3494.01	6
DG20-048	679.93	16.4	4167.84	514.34	2643.08	8020.22	18
DG20-050	201.8	24.98	1849.91	250.5	3321.09	5552.6	48
DG20-051	304.61	11.53	1141.84	184.36	1385.5	2965.78	12
DG20-052	302.41	16.93	8673.38	372.1	8094.49	13398.56	12
DG20-053	334.52	21.93	1876.13	365.27	2066.68	4661.58	6
DG20-054	526.91	18.36	3003.76	395.72	3236.65	6280.98	12

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit						DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn	Sum CoC	
DG20-056	531.26	15.54	2608.55	414.22	1538.3	4960.73	6
DG20-057	73.14	13.21	533.08	96.33	479.21	1190.85	0
<b>PHASE 21</b>							
DG21-001	339.32	19.2	4948.83	769.32	1326.96	6894.59	12
DG21-002	356.38	14.79	2267.87	518.26	1562.08	4719.38	18
DG21-003	763.97	13.74	3613.37	464.21	1342.66	4930.18	12
DG21-005	26.5	18.04	248.54	34.05	150.62	452.72	0
DG21-006	147.37	12.93	1212.07	152.46	1368.11	2891.31	18
DG21-007	534.89	19.27	3669.76	534.34	1452.08	6200.02	6
DG21-008	112.58	13.93	768.2	106.1	788.26	1766.84	24
DG21-009	40.91	10.44	385.85	140.7	1049.78	1624.11	2
DG21-010	473.93	9.59	3240.34	415.91	1918.55	5492.13	12
DG21-011	552.02	12.97	3218.73	441.6	1739.89	5915.06	12
DG21-012	129.16	15.13	1107.63	235.75	2875.1	4360.45	30
DG21-013	47.73	20.56	303.66	55.61	247	674.56	0
DG21-014	92.36	12.03	838.17	118.99	982.38	1866.14	6
DG21-015	611.46	17.78	1538.43	930.78	1071.09	4158.2	12
DG21-016	157.07	15.68	2043.95	180.97	2603.9	4935.52	42
DG21-018	28.97	8.9	636.5	118.99	560.82	1352.65	2
DG21-019	594.32	16.73	4691.99	756.37	2331.13	8165.27	24
DG21-022	713.44	10.76	1872.77	608.69	1041.27	3681.4	30
DG21-023	19.98	11.03	161.71	54.51	149.68	392.97	0
DG21-024	34.44	17.39	183.41	34.23	205.4	466.85	0
DG21-027	265.7	11.57	3184.09	358.63	2361.71	6181.7	18
DG21-028	443.24	21	2765.28	411.7	3030.67	5969.27	12
DG21-029	308.86	10.41	1829.1	300.1	1874.44	4321.81	6
DG21-030	287.16	14.07	1935.04	278.81	1756.5	4252.47	18
DG21-031	20.97	10.42	72.05	30.68	100.25	230.06	0
DG21-032	405.49	11.24	3855.86	325.03	3136.08	7397.41	18
DG21-033	558.39	13.01	3241.22	430.82	1537.23	5393.5	12
DG21-036	24.66	10.56	171.64	38.52	149.3	390.82	0
DG21-037	931.76	29.63	2464.09	1056.1	1427.57	5063.18	24
DG21-038	144.26	29.53	1215.61	429.41	1570.54	3330.49	18
DG21-039	173.56	17.48	847.47	192.89	1430.72	2486.13	18
DG21-040	180.86	19.84	1225.18	296.11	1371.32	3093.24	12
DG21-041	667.86	25.66	5888.78	506.67	7966.79	15005.39	60
DG21-043	599.92	15.28	3155.5	480.18	2047.11	6297.03	30
DG21-044	1838.52	16.82	4591.55	740.12	2199.8	8839.2	24
DG21-045	102.28	13.77	1053.61	139.77	2021.59	3254.09	24
DG21-046	211.76	11.74	1759.64	168.49	1035.32	3184.5	6
DG21-047	497.3	13.32	4722.91	452.43	1437.34	6908.02	12
DG21-048	287.15	9.66	1722.86	318.62	1284.57	3622.19	6
DG21-049	97.6	19.4	922.04	118.08	1717.18	2832.12	18
DG21-050	630.88	15.36	3775.37	853.53	1111.83	4334.1	24
DG21-051	1398.3	13.18	5307.59	1418.37	2118.84	9513.76	12

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit						DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn	Sum CoC	
DG21-052	17.29	15.18	74.01	25.45	109.2	235.5	0
DG21-053	267.26	19.3	1400.57	219.94	3233.06	5132.84	18
DG21-054	20.49	9.52	162.87	48.07	212.73	448.85	0
DG21-055	586.26	12.71	3193.33	846.1	1223.17	5671.22	18
DG21-056	470.56	11.38	2258.26	476.31	1428.67	3692.38	18
DG21-057	741.15	12.35	2408.24	509.51	1096.23	4108	30
DG21-058	436.55	9.54	2103.44	452.7	1318.86	4087.73	6
DG21-059	314.45	12.36	2811.14	221.46	913.24	4120.23	12
DG21-060	374.17	15.52	2121.58	306.24	2067.98	3706.66	12
DG21-061	256.87	12.34	4095.48	699.92	1400.2	5393.52	30
DG21-200	439.77	11.72	2454.68	427.65	2835.13	5805	24
DG21-201	657.63	11.49	3039.29	459.19	1466.98	4781.63	12
<b>PHASE 22</b>							
DG22-001	772.66	17.69	7312.5	504.07	986.45	9584.97	24
DG22-002	418.68	15.87	2218.31	373.49	1098.03	3568.67	36
DG22-003	112.79	17.67	691.44	129.88	1520.4	2470.94	18
DG22-004	321.17	9.73	3084.6	328.22	1767	5357.66	12
DG22-005	694.74	13.9	3079.89	933.33	891.26	5381.97	18
DG22-006	417.65	9.94	2822.37	433.87	2162.27	5845.62	6
DG22-007	876.47	12.7	2656.37	820.71	1195.53	4248.45	30
DG22-008	1234.32	10.96	5005.88	1106.82	2147.14	7897.32	18
DG22-009	1069.64	19.99	3571.89	999.27	2128.75	6966.15	30
DG22-010	72.3	15.31	695.24	208.86	585.38	1513.45	12
DG22-011	78.94	22.18	551.02	109.31	564.96	1312.55	2
DG22-012	53.86	14.48	459.74	78.5	556.2	1144.02	0
DG22-013	701.34	15.98	5755.81	547.3	1132.35	7066.56	24
DG22-014	531.38	11.41	3082.74	588.03	1228.91	5442.47	12
DG22-015	298.12	10.4	1742.28	273.99	1863.79	4187.58	12
DG22-016	105.47	18.16	767.34	132.49	2295.83	3096.74	24
DG22-017	223.77	14.08	2176.29	281.03	887.9	2557.56	18
DG22-018	26.43	9.46	258.65	110.7	306.28	706.32	0
DG22-019	25.65	9.44	235.81	71.51	233.62	561.24	0
DG22-020	45.31	10.03	384.14	114.4	440.14	984.19	0
DG22-021	1030.4	14.58	7208.13	752.08	2198.93	10524.44	24
DG22-022	778.58	13	5289.01	566.82	1693.01	7846.69	18
DG22-023	733.07	17.86	3562.99	814.08	2152.29	6965.09	18
DG22-024	738.64	16.53	3294.27	624.32	953.23	4251.18	36
DG22-025	97.56	25.08	730.47	119.86	1467.32	2436.19	18
DG22-026	466.87	9.23	5472.81	385.63	1426.76	7137.53	12
DG22-027	920.42	30.14	6207.2	608.92	4507.18	10802.64	24
DG22-028	293.31	20.27	1292.18	188.84	510.89	2303.19	6
DG22-029	706.78	26.26	5143.79	493.08	6104.07	12362.31	36
DG22-030	315.42	15.62	1461.27	284.51	2343.01	4397.67	6
DG22-031	137.09	14.17	616.24	118.97	622.77	1503.61	2
DG22-032	37.66	9.27	627.81	110.47	357.42	1128.1	0

*Preliminary Estimate of Contaminated Sediment Quantities, CFROU Reach A*

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Pit	Maximum value from each pit						DoC >1260 mg/kg (inches)
	As	Cd	Cu	Pb	Zn	Sum CoC	
DG22-033	141.54	15.53	1755.12	324.36	676.29	2903	6
DG22-034	360.22	13.16	2554.33	320.61	1008.93	4205.23	6
DG22-035	724.59	17.07	4847.03	566.15	1264.56	6334.17	36
DG22-036	1003.46	19.03	8984.46	772.75	3924.11	11180.71	30
DG22-037	830.09	17.94	5636.36	662.35	1866.31	8598.77	24
DG22-038	166.87	13.4	1282.79	187.52	904.64	2555.22	6
DG22-039	59.25	19.66	590.49	121.26	1834.22	2565.98	24
DG22-040	220.02	9.1	4012.97	289.58	1508.85	4957.4	12
DG22-041	724.28	12.63	863.77	404.95	1174.84	3100.22	30
DG22-042	151.01	12.03	1071.55	210.17	746.66	1744.14	12
DG22-043	65.52	10.75	811.84	150.29	536.42	1571.83	2
DG22-044	343.35	18.64	7302.04	244.61	3629.16	10999.42	12
DG22-045	325.95	10.93	3188.32	379.95	3175.98	7039.48	6
DG22-046	517.6	16.68	3787.03	360.07	2453.58	6609.62	12
DG22-047	552.17	7320.33	4275.1	451.32	2104.78	10452.68	18
DG22-048	384.27	21.58	13530.72	374.72	5283.4	15694.28	18
DG22-049	84.29	21.85	479.46	242.94	1479.73	2295.18	30
DG22-050	69.33	13.2	473.11	151.81	458.49	1112.33	0
DG22-051	921.11	12.95	3456.45	605.19	795.49	5646.51	30
DG22-052	1242.3	14.48	3238.36	505.83	1485.43	5749.73	30
DG22-053	206.58	16.23	1935.3	193.61	3037.8	4845.56	42
DG22-054	284.12	18	10255.64	402.53	2735.4	13686.61	2
DG22-055	450.71	12.35	3406.26	317.52	1136.28	4467.96	24
DG22-056	74.11	21.83	511	88.67	597.48	1280.29	12
DG22-064	997.36	11.05	4298.87	694.67	943.35	5113.43	24