Record of Decision – Twin Cities Army Ammunition Plant Round Lake Operable Unit, New Brighton/Arden Hills/Twin Cities Army Ammunition Plant Superfund Site, Ramsey County, Minnesota

August 2022

U.S. Army Environmental Command
2455 Reynolds Road
Joint Base San Antonio Fort Sam Houston, Texas 78234-7588

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Revision 02

U.S. Army Environmental Command
2455 Reynolds Road
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LIST OF ACRONYMS AND ABBREVIATIONS

%	percent
AH	Arden Hills
amsl	above mean sea level
ARAR	applicable or relevant and appropriate requirement
CAD	confined aquatic disposal
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
COC	chemical of concern
CUL	cleanup level
EPA	U.S. Environmental Protection Agency
ERA	ecological risk assessment
FFA	Federal Facility Agreement
FS	Feasibility Study
ft	foot/feet
HHRA	human health risk assessment
LUC	land use control
MDH	Minnesota Department of Health
MDNR	Minnesota Department of Natural Resources
MPCA	Minnesota Pollution Control Agency
mPEC-Q	mean probable effect concentration quotient
NB	New Brighton
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
NWR	national wildlife refuge
PCB	polychlorinated biphenyl
PIKA ARCADIS	PIKA ARCADIS U.S., Inc.
PRC	PRC Environmental Management, Inc.
RAB	Restoration Advisory Board
RAO	remedial action objective
ROD	Record of Decision

SQT	sediment quality target
SRI	Supplemental Remedial Investigation
TBC	to be considered
TCAAP	Twin Cities Army Ammunition Plant
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
USFWS	U.S. Fish and Wildlife Service

1. DECLARATION

1.1 SITE NAME AND LOCATION

New Brighton (NB)/Arden Hills (AH)/Twin Cities Army Ammunition Plant (TCAAP) (USARMY)

Round Lake Operable Unit

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) ID# MN7213820908

Ramsey County, Minnesota

This Record of Decision (ROD) presents the Selected Remedy for Round Lake, part of the NB/AH/TCAAP (USARMY) National Priorities List (NPL) Site (CERCLIS ID# MN7213820908). The NB/AH/TCAAP Site consists of a 25-square mile area located in Ramsey County, Minnesota (Figure 1). This includes the approximately 4-square mile area of the original TCAAP facility, referred to as the former TCAAP area, and portions of seven nearby communities: New Brighton, Arden Hills, St. Anthony, Shoreview, Mounds View, Columbia Heights, and Minneapolis. Round Lake is located southwest of the former TCAAP area, and in the southwestern corner of the intersection of Highway 10 and Highway 96, also in Ramsey County, Minnesota.

1.2 STATEMENT OF BASIS AND PURPOSE

This decision document presents the Selected Remedy for Round Lake, in Ramsey County, Minnesota, which was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986, and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) Part 300. This decision is based on the Administrative Record file for Round Lake. This ROD is also compliant with the Defense Environmental Restoration Program policies and guidance. The goal of the selected remedy documented in this ROD is to achieve the Remedial Action Objectives (RAOs) for Round Lake.

1.3 ASSESSMENT OF THE SITE

The response action selected in this ROD is necessary to protect the environment from actual releases of hazardous substances into the environment.

1.4 DESCRIPTION OF THE SELECTED REMEDY

The selected remedy for Round Lake is Alternative 4, Option A (PIKA ARCADIS U.S., Inc. [PIKA ARCADIS] 2021) (Figure 4). The remedy consists of dredging, dewatering, and disposal offsite of contaminated sediments. The major components of the selected remedy include:

- Dredging of contaminated sediment exceeding the cleanup level (CUL) of 0.6 mean probable effect concentration quotient (mPEC-Q); and
- Characterization, dewatering, and stabilization (if necessary), and disposal of contaminated sediment at an offsite landfill.

The selected remedy does not satisfy the statutory preference for treatment as a principal element of the remedy because no proven cost-effective treatment technologies exist to address the metals- and polychlorinated biphenyl (PCB)-contaminated sediment.

This remedial action is intended to be the final remedial action to address unacceptable risks to the environment at Round Lake. All unacceptable risks to the environment at Round Lake are expected to be addressed by the response action. There are no unacceptable risks to human health at Round Lake. The source of contamination to Round Lake has been eliminated.

If additional contamination posing an unacceptable risk to human health or the environment is discovered after execution of this ROD, the Army will undertake all necessary actions to ensure continued protection of human health and the environment.

1.5 STATUTORY DETERMINATIONS

The Selected Remedy is protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to the remedial action (unless justified by a waiver), is cost-effective, and utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable.

The remedy in this Site does not satisfy the statutory preference for treatment as a principal element of the remedy because no proven cost-effective treatment technologies exist to address the metals- and polychlorinated biphenyl (PCB)-contaminated sediment.

Because this remedy will not result in hazardous substances, pollutants, or contaminants remaining on-site above levels that do not allow for unlimited use and unrestricted exposure, a five-year review will not be required for this remedial action.

The Army, with concurrence from the U.S. Environmental Protection Agency (EPA) and the Minnesota Pollution Control Agency (MPCA), concluded that the selected remedy is protective of human health and the environment from the impact of the Round Lake contamination. The public participation requirements of Section 117(a) of CERCLA and NCP at 40 CFR § 300.430(f)(3) have been met.

If additional contamination posing an unacceptable risk to human health or the environment is discovered after execution of this ROD, the Army will undertake all necessary actions to ensure continued protection of human health and the environment.

1.6 DATA CERTIFICATION CHECKLIST

The following information is included in the Decision Summary (Section 2) of this ROD. Additional information can be found in the Administrative Record file for this site. The Administrative Record Index is provided as Attachment A of this ROD.

- Chemicals of Concern (COCs) and their respective concentrations (Section 2.6)
- Baseline risk represented by the COCs (Section 2.9)
- CULs (mPEC-Q of 0.6) established for COCs and the basis for these levels (Section 2.9)
- How source materials constituting principal threats are addressed (Section 2.13)
- Current and reasonably anticipated future land use assumptions and current and potential future beneficial uses of groundwater used in the baseline risk assessment and ROD (Section 2.8)
- Potential land and groundwater use that will be available at the site as a result of the selected remedy (Section 2.8)
- Estimated capital, annual operation and maintenance (O&M), and total present worth costs, discount rate, and the number of years over which the remedy cost estimates are projected (Section 2.12.7)
- Key factor(s) that led to selecting the remedy (Section 2.12).

1.7 AUTHORIZING SIGNATURES

REHEUSER.MICHAEL.E.1030889599

Digitally signed by REHEUSER.MICHAEL.E.1030889599
Date: 2022.09.19 15:16:55 -04'00'

MICHAEL E. REHEUSER
Director, Installation Services
Office of the Deputy Chief of Staff, G-9

Date

THOMAS SHORT Digitally signed by THOMAS SHORT Date: 2022.09.20 15:00:09 -05'00' for 09/20/22

Douglas Ballotti Date
Director, Superfund & Emergency Management Division, U.S. EPA, Region 5

09/19/2022

Jamie Wallerstedt Date
Remediation Division Director, MPCA

2. DECISION SUMMARY

2.1 SITE NAME, LOCATION, AND DESCRIPTION

This ROD presents the Selected Remedy for the Round Lake Operable Unit, part of the NB/AH/TCAAP (USARMY) NPL Site (CERCLIS ID# MN7213820908). The Site consists of a 25-square mile area located in Ramsey County, Minnesota (Figure 1). This includes the approximately 4-square mile area of the original TCAAP facility, referred to as the former TCAAP area, and portions of seven nearby communities: New Brighton, Arden Hills, St. Anthony, Shoreview, Mounds View, Columbia Heights, and Minneapolis. Round Lake is located southwest of the former TCAAP area, and in the southwestern corner of the intersection of Highway 10 and Highway 96, also in Ramsey County, Minnesota.

Round Lake was formerly considered a part of TCAAP and was transferred in 1974 to the U.S. Fish and Wildlife Service (USFWS), which currently manages the lake and its shoreline as a unit of the Minnesota Valley National Wildlife Refuge (NWR). Round Lake is located southwest of the former TCAAP area. It consists of approximately 154 acres of shoreline and lake. Figure 2 shows the lake location, along with property parcel boundaries. The current land use surrounding Round Lake ranges from residential, industrial, and major roadways. It is adjacent to a mix of single-family and higher density residential properties and Highway 10 to the east, a manufactured home community and Highway 96 to the north, commercial and industrial properties and Highway 35W to the west, and Interstate Highway 694 to the south.

The Department of Defense is the lead agency for Round Lake, and EPA and MPCA are the oversight agencies. The selected remedial action is expected to be funded through federal remedial action funding through the Defense Environmental Restoration Program.

2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES

TCAAP was constructed in 1941 to produce small-caliber ammunition for the U.S. military. Production activities included manufacturing small arms ammunition and related materials, proof-testing small arms ammunition and related items as required, and handling and storing strategic and critical materials for other government agencies. Ammunition production and related activities occurred periodically, commensurate with operations in wars, conflicts, and other national emergencies, and ceased in 2005.

In the early 1940s, Round Lake and the surrounding shoreline were acquired by the U.S. government. Round Lake historically received industrial processing wastewater, sanitary sewer, and storm sewer discharges from industrial facilities at TCAAP between the early 1940s and late 1960s, when the floor drains that had previously discharged to Round Lake were disconnected from the storm sewer. There are three inlets to Round Lake that functioned as potential conveyances of water from the former TCAAP area. Of these, the third inlet is a storm sewer that conveys stormwater from the southwest corner of the former TCAAP area, as shown on Figure 3. In the past, this storm sewer also received industrial waste and is identified as the pathway for the historical release of hazardous substances from the former TCAAP area into Round Lake. The source of contamination to Round Lake has been eliminated because the industrial discharge from TCAAP ceased and TCAAP is no longer in operation. Much of the storm sewer drainage to

Round Lake has been eliminated with Ramsey County's removal of the TCAAP storm sewer system within their property, which they acquired in 2013. Minnesota Department of Natural Resources (MDNR) considers Round Lake to be a Public Water Basin.

The U.S. Army declared the Round Lake area as surplus property in September 1973. Ownership of Round Lake was transferred to the USFWS in April 1974 as a waterfowl production area and was designated as the Round Lake Unit of the Minnesota Valley NWR in summer 1980. In 1983, the NB/AH/TCAAP Superfund Site was put on the NPL because EPA and MPCA determined that hazardous substances from TCAAP had been released into the environment.

2.2.1 Site Investigation Summary

The original remedial investigation for Round Lake was performed between 1987 and 2004, culminating in a Tier II ecological risk assessment (ERA) Report (U.S. Army Center for Health Promotion and Preventive Medicine [USACHPPM] 2004). The Tier II ERA Report received "consistency approval" under the 1987 Federal Facility Agreement (FFA) from EPA and MPCA in 2004.

EPA and MPCA requested that the U.S. Army prepare a Feasibility Study (FS) pursuant to the FFA. The U.S. Army submitted the first version of an FS for Round Lake in 2005 that recommended a remedy of monitored natural recovery, which was rejected by EPA and MPCA. The U.S. Army submitted multiple revisions to the FS between 2005 and 2010. After a request made by EPA and MPCA in 2010, the U.S. Army conducted a Supplemental Remedial Investigation (SRI) in January through March 2011.

The comprehensive sediment investigation was completed in 2011 as part of the SRI. In general, the results confirmed the presence of polychlorinated biphenyls (PCBs) and elevated metals concentrations in Round Lake sediments. Minnesota Department of Health (MDH) Sediment Screening Values are exceeded; however, concentrations are still less than actionable levels for human health risk. Results show that contamination above the CUL is largely confined to the upper 1-2 feet (ft) of sediment. Because there is a mixture of contaminants, and to provide a general depiction of metals' concentrations in sediments at various sediment depths, an mPEC-Q was developed as described in the Guidance for the Use and Application of Sediment Quality Targets for the Protection of Sediment-Dwelling Organisms in Minnesota (MPCA 2007). However, through this process, the U.S. Army, EPA, and MPCA had difficulty reaching a consensus on the ecological risks and commensurate remedy associated with Round Lake. The U.S. Army Environmental Command obtained the assistance of the Risk and Regulatory Analysis Team of the Environmental Sciences Division at the Oak Ridge National Laboratory. As a result, the U.S. Army submitted a SRI/FS Report in November 2013, incorporating a Supplemental ERA (PIKA ARCADIS 2021). MPCA and EPA disagreed with the conclusions and remedy presented in the SRI/FS. In addition, EPA considered the SRI/FS as failing the Consistency Test in Section XIVA of the FFA. On 28 April 2014, the U.S. Army initiated an informal dispute.

The U.S. Army, EPA, and MPCA met in June and December 2014 and October 2015 to resolve the major disagreements among the agencies. The informal dispute ended on 14 October 2016. As a result of the December 2014 meeting, the U.S. Army acknowledged the potential for

ecological risk at Round Lake as a result of the uncertainty in and lack of data in some areas of the lake and agreed to evaluate remedies in a revised FS. The agencies also decided to convene a technical working group to further discuss the appropriate RAOs for Round Lake in the context of the uncertainties at the site. As a result of the meetings of the technical working group in 2015, the U.S. Army conducted further evaluations through additional analysis of the existing data and refined the parameters of risk in the SRI and FS Report (PIKA ARCADIS 2021).

In addition to the ERA, a human health risk assessment (HHRA) was completed in 1991 (PRC Environmental Management, Inc. [PRC] 1991), and additional evaluations were completed following the 2011 SRI. The HHRA concluded there were no unacceptable risks to potential human receptors. The Supplemental ERA found that there was no unacceptable risk to piscivorous species and aquatic animals; however, the contaminated sediments have potentially adverse effects to benthic macro-invertebrates and waterfowl.

2.3 PUBLIC/COMMUNITY INVOLVEMENT

Pursuant to CERCLA Section 113(k)(2)(B)(i-v) and Section 117, the Proposed Plan for Round Lake at the NB/AH/TCAAP Superfund Site was released to the public for comment on 9 July 2021. Consistent with requirements of CERCLA Section 113(k), an Administrative Record containing information associated with CERCLA cleanup activities at Round Lake, NB/AH/TCAAP Superfund Site is available to the public. The Administrative Record Index is provided as Attachment A in this ROD. The location and contact information for the Administrative Record file are as follows:

U.S. Minnesota Army National Guard
Arden Hills Army Training Center
4761 Hamline Ave. N
Arden Hills, Minnesota
651-282-4420

Public Notices—Two public notices were printed in the Minneapolis Star Tribune and the St. Paul Pioneer Press on 9 July 2021. The first public notice invited the public to comment on the Proposed Plan; and the second public notice invited the community to an open house and a Restoration Advisory Board (RAB) virtual meeting at 7:00 pm on 20 July 2021. Public notices were also published in several local newspapers in the areas of Arden Hills, Shoreview, New Brighton, and the counties of Ramsey, Hennepin, and Anoka. Public notices are provided in Attachment D to this ROD.

Door Knocking Campaign—A door knocking campaign was completed on 13 July 2021. The campaign included visiting about 95 residential and business addresses adjacent to and near Round Lake. A Fact Sheet was produced and distributed to the residences and businesses. The Fact Sheet is provided in Attachment D to this ROD.

Open House—An open house was held in the gymnasium of the Minnesota Army National Guard Arden Hills Training Site on 20 July 2021, from 10:00 am to 3:00 pm. It was open to any interested person to review the Fact Sheet and posters regarding Round Lake and to provide

informal feedback about the Army's plans to remediate Round Lake. Twenty-three visitors attended the open house.

Public Meeting—A virtual public meeting was held on 20 July 2021, with representatives from the Army to explain the Proposed Plan and the remedial alternatives evaluated as presented in the SRI/FS, and to receive input and answer questions from the community. The meeting began at 7:00 p.m. in conjunction with the RAB meeting. A total of 46 people attended the meeting including representatives from EPA, MPCA, MDNR, USFWS, City of Shoreview, City of Mounds View, City of St. Anthony Village, and other RAB members, Army contractors, and members of the public. Comments were received during the public meeting as well as during the public comment period, from 9 July to 13 August 2021, most of which were supportive of the preferred alternative. Minutes and a full transcript of the public meeting are included in Attachment B. A Responsiveness Summary summarizing public comments and providing responses to the summary of public comments, including a copy of the presentation provided during the virtual public meeting, are provided as Attachment D of this ROD.

2.4 SCOPE AND ROLE OF RESPONSE ACTION

The scope of the response action selected in this ROD is limited to those sediments within Round Lake contaminated by COCs in excess of the CUL. These sediments pose an ecological risk to benthic macroinvertebrates in Round Lake sediment and the waterfowl that consume them.

This remedial action is intended to be the final remedial action to address unacceptable risks to the environment at Round Lake. All unacceptable risks to the environment at Round Lake are expected to be addressed by the response action. There are no unacceptable risks to human health at Round Lake. The source of contamination to Round Lake has been eliminated.

2.5 SITE CHARACTERISTICS

Round Lake is located southwest of the former TCAAP area, in the southwest corner of the intersection of Highway 10 and Highway 96 (Figure 2).

When Round Lake was first acquired by the U.S. Government, the surrounding land use was primarily agricultural. During Army control, significant urbanization occurred with development of the surrounding communities of Arden Hills and New Brighton. This growth also brought major transportation arteries. The current land use surrounding Round Lake ranges from residential, industrial, and major roadways. Round Lake is adjacent to a mix of single-family and higher-density residential properties and Highway 10 to the east, a manufactured home community and Highway 96 to the north, commercial and industrial properties and Highway 35W to the west, and Interstate Highway 694 to the south.

2.5.1 Physical Characteristics

Round Lake consists of approximately 154 acres of shoreline and lake. Round Lake's tributary area is approximately 409 acres (Emmons & Olivier Resources, Inc. 2009). Watershed yield (or runoff) into Round Lake has changed over the years as a result of development in the area.

The outlet of Round Lake is located near the southeastern corner of the lake (Figure 3). Runoff from the Round Lake watershed flows through the concrete outlet and into Valentine Lake located to the south, which in turn drains to a large wetland to the west before discharging to Long Lake. Discharge from Long Lake then flows to Rice Creek and discharges to the Mississippi River approximately 4 miles west of Long Lake.

The surface elevation of Round Lake was 891 ft above mean sea level (amsl) during the 2011 sediment sampling, at which, approximately 20 percent (%) of Round Lake was less than 4 ft deep. The median depth was 6–7 ft with a maximum water depth of approximately 26 ft. The deepest area is located in the south-central portion of the lake. An elevation of 892.0 ft amsl for the lake is considered a maximum elevation according to the Round Lake Conceptual Management Plan (USFWS 2013). Above that elevation, water starts to cause damage to adjacent properties. The water level of the lake is controlled by the water control structure at the lake.

Sediment in Round Lake consists of muck and peat over most of the surface with areas of sand. Round Lake is a shallow, predominantly depositional environment for sediment entering the lake with high sedimentation rates (greater than 1.5 centimeters per year) based on sediment core dating completed in 2011. Deposition of fine/organic sediments tends to be toward the deeper areas of the lake, creating higher sedimentation rates and greater thickness of the fine/organic sediments. The average total organic carbon content of the sediments was 22% (or an organic matter content of approximately 45%).

Given the current land use around Round Lake, stormwater entering the lake includes runoff from highways, residences, and commercial and industrial properties. The MPCA Trophic State Index classifies Round Lake as eutrophic with Trophic State Index parameters within the range expected for lakes in this ecoregion (MPCA 2019).

2.5.2 Vegetation

Submergent plants and 15 plant species were identified in the lake in the 1954 Fishery survey and 1978 lake survey. These species include eight rooted submergent species, four emergent species, and three floating species. Nine of these species rank as excellent to good waterfowl foods (e.g., slender and softstem bulrush, chara) (Minnesota Game & Fish Bureau of Planning 1978).

Shrubby vegetation, most notably willow and dogwood, was found at the lake. Cottonwood, maple, and box elder trees were found at lower (wetter) elevations in the woodlands, and northern pin oak was observed at higher (drier) elevations (USFWS 1982).

A palustrine emergent wetland has developed around the edge of the lake. This wetland is dominated by cattail (*Typha sp.*) (USACHPPM 2004). A small stand of willow exists along the northern shore. Coontail (*Ceratophyllum demersum*) was the dominant among the 10 species of submergent plants, and cattail was the dominant among the 14 species of emergent plants found in 2011 (USFWS 2011).

2.5.3 Wildlife

The Round Lake Unit provides habitat for both terrestrial and water-dependent wildlife. During an 8-hour daytime survey conducted in 2014, 5 mammal species, 42 bird species, 3 reptile species, 2 amphibian species, and numerous invertebrate species were observed (Sherry 2014).

The upland habitats at Round Lake provide nesting habitat for migratory songbirds, raptors, and cavity nesting birds, including some waterfowl such as wood ducks (*Aix sponsa*) and hooded mergansers (*Lophodytes cucullatus*). Round Lake is an important and valuable migration and nesting area for waterfowl. The number and species composition of waterfowl on Round Lake varies depending on the time of year and time of day observations recorded.

Considerable numbers of northern pike, bass, crappie, sunfish, and bullheads were observed in Round Lake (Sharp 1954). Populations of black crappies (*Pomoxis nigromaculatus*), black and brown bullheads (*Ameiurus melas* and *Ameiurus nebulosus*), and fathead minnows (*Pimephales promelas*) were identified in a 1981 survey of fish. Brook sticklebacks (*Culaea inconstans*) were also present in small numbers. Black bullheads, brown bullheads, and green sunfish *(Lepomis cyanellus*) were observed in the 2012 fish sampling conducted by MDNR.

Mammals (i.e., red fox [*Vulpes vulpes*], muskrat [*Ondatra zibethicus*], and mink [*Neovison vison*]) were found at Round Lake (USACHPPM 1997, 2004). The wetland areas are also used by a number of typical marsh birds, with red-winged blackbirds (*Agelaius phoeniceus*) and yellow-headed blackbirds (*Xanthocephalus xanthocephalus*) dominating. Waterfowl species rearing broods on the lake in recent years include Canada geese, mallards, blue-winged teal (*Anas discors*), and wood ducks. Large concentrations of ring-neck ducks and lesser scaup use Round Lake as a resting and feeding area during their spring and fall migrations. Round Lake also has confirmed use by bald eagles (*Haliaeetus leucocephalus*), black terns (*Chlidonias niger*), common loons, and trumpeter swans (*Cygnus buccinator*). A bald eagle nest is present near the western shoreline of the lake.

With respect to state-listed threatened or endangered species, MDNR completed a habitat assessment at Round Lake in August 2020. Blanding's turtle (*Emydoidea blandingii*), a state-listed threatened species, and the ghost tiger beetle (*Cincindela lepida*), a state-listed endangered species, were found to be present within a 1-mile radius of Round Lake based on a query of the MDNR's Natural Heritage Information Systems. Aquatic habitat within Round Lake was found to be suitable for occupancy by Blanding's turtles. No high quality nesting habitat was found in the upland portions of Round Lake, although the entire shoreline was not assessed. Blanding's turtle has been observed within the former TCAAP area where remedial action activities may occur. No ghost tiger beetle habitat was found in areas assessed, however, colonization by ghost tiger beetles of any dredge piles consisting of or mimicking open sand is possible (MDNR 2020).

2.6 NATURE AND EXTENT OF CONTAMINATION

The extent of contamination in sediment at Round Lake was based on the investigation results (PIKA ARCADIS 2021). Metals (cadmium, chromium, copper, lead, silver, and zinc), and PCBs are the COCs exceeding the CUL.

In general, the extent of COC distribution exceeding the CUL is largely confined to the upper 1-2 ft of sediment. The metal contamination is more extensive than the PCB contamination, with PCBs generally contained within the metal contaminated areas. Figure 4 provides the COC distribution of sediment at Round Lake. Approximately 82,000 cubic yards of sediment, including an over dredge allowance of 6 inches in depth, is impacted above the CUL.

As stated previously, the source of contamination to Round Lake has been eliminated. Sediment contamination is the only remaining contamination to be addressed for Round Lake.

2.7 CONCEPTUAL SITE MODEL

The conceptual site model was updated based on the results of SRI and supplemental ERA (Oak Ridge National Laboratory 2013) for Round Lake.

The exposure pathways for human health under current and future land use are considered incomplete. Potential human exposures to the contaminated sediment would be associated with USFWS workers performing occasional studies and maintenance work, or possibly with public fishing, wildlife observation, or USFWS environmental education activities. No wading, swimming, or boating are allowed at Round Lake. Concentrations of COC metals based on sample results were less than the corresponding MDH Sediment Screening Values, meaning that the human exposure pathways were incomplete for metals. In addition, the 2012 fish fillet results for PCBs were less than the current MDH fish consumption advisory level for PCBs. Therefore, the fish consumption pathway for PCBs is considered incomplete. Overall, sediment in Round Lake does not pose unacceptable risk to the public or USFWS workers, including ingestion of PCBs through consumption of fish.

Direct exposure to the COCs in the sediment of Round Lake could occur to benthic invertebrates and waterfowl by direct contact and ingestion/uptake. Subsequent indirect exposure of the contaminants to waterfowl could occur through the ingestion of benthic invertebrates. Piscivorous birds could be indirectly exposed to PCBs through the ingestion of fish that may have accumulated PCBs in their tissues. The exposure pathways to the contaminated sediment for benthic macro-invertebrates and waterfowl are considered complete and shall be addressed.

2.8 CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

Land use surrounding Round Lake ranges from residential, industrial, and includes major roadways. The current land use of Round Lake is as a national wildlife refuge. Round Lake has been incorporated as a unit of the Minnesota Valley NWR since 1980 and USFWS is responsible for managing and administering Round Lake. The Comprehensive Conservation Plan for the Minnesota Valley NWR (USFWS 2004) and the Draft Conceptual Management Plan for Round Lake (USFWS 2013) provide a detailed plan for Round Lake land use. The primary land use of the NWR is to provide quality wildlife habitat. The USFWS currently restricts public access to Round Lake to minimize public exposure to TCAAP-related contaminants.

Other than USFWS occasional studies and maintenance work at the lake, limited public recreational use, which would include fishing, wildlife observation, structured and self-led interpretive programs, or USFWS environmental education activities, may be permitted in the

future. Certain public use activities, including hunting, motorized vehicle use, public boating, wading, swimming, and camping would continue to be prohibited.

2.9 SUMMARY OF SITE RISKS

The response action selected in this ROD is necessary to protect the environment from actual releases of hazardous substances into the environment.

The HHRA completed for Round Lake concluded no unacceptable risks to potential human receptors and the Supplemental ERA found that there was no unacceptable risk to piscivorous species and aquatic animals (PIKA ARCADIS 2021); however, the contaminated sediments have potentially adverse effects to benthic macroinvertebrates and the waterfowl that ingest them.

Extensive risk assessment work has been conducted for Round Lake to evaluate risks to human and ecological receptors. The HHRA evaluated current and future conditions for mixed residential and commercial land use. The exposed population evaluated in the HHRA was local residents. The exposure pathways were dermal contact with surface water and sediment, incidental ingestion of surface water, and ingestion of fish (PRC 1991).

In addition, an evaluation was performed for ingestion of sediment. The HHRA concluded that human exposure to Round Lake surface water and sediment presents no unacceptable risks. The evaluation comparing the 2011 sediment data to MDH Sediment Screening Values and comparing the 2012 MDNR fish testing results for PCBs to MDH fish consumption advisory levels shows that the Round Lake COCs (metals and PCBs) do not represent a risk to the public or workers, including ingestion of PCBs through consumption of fish (PIKA ARCADIS 2021). Additionally, MDH Sediment Screening Values were exceeded; however, concentrations are less than actionable levels.

The Supplemental ERA indicated there is no unacceptable risk through direct or indirect exposure to species inhabiting or utilizing the surface water body, including algae, aquatic invertebrates, fish, amphibians, and piscivorous birds and mammals. Potential risk was identified for benthic invertebrates. The Supplemental ERA indicated a potential minimal risk to waterfowl from lead concentrations in sediment at a few locations in the lake (PIKA ARCADIS 2021).

MPCA uses mPEC-Q to predict toxic effects to sediment-dwelling organisms when there is a mixture of contaminants and contaminant classes. The Level I sediment quality target (SQT) for the mPEC-Q is the level at which toxic effects are unlikely. The Level II SQT for the mPEC-Q is the level above which toxic effects are likely. The Level I SQT is set at an mPEC-Q of 0.1. However, for Round Lake, the Level I SQT was adjusted upward to 0.35 to account for naturally occurring background levels of some metals in the sediment of Round Lake. The Level II SQT is set at an mPEC-Q of 0.6.

MPCA considers the Level II mPEC-Q as appropriate for use as a remedial target level at sediment contamination sites in Minnesota when the goal is to reduce the potential for acute toxicity and where natural recovery processes are expected to further reduce contaminant concentrations over time. MPCA uses SQTs as the primary basis for setting remedial action targets when other lines of toxic effects evident in an SQT approach (e.g., site-specific toxicity

testing and benthic community analysis) are either incomplete or are of unacceptable quality to MPCA. The Army's comprehensive evaluation of contaminant concentrations in Round Lake sediment created a robust sediment chemistry dataset that allows a meaningful comparison to the SQTs and provides a reasonable basis for setting a remedial target level at Round Lake.

Figure 4 shows the sediments exceeding the CUL of 0.6 mPEC-Q for metals.

2.10 REMEDIAL ACTION OBJECTIVES

The RAO was developed based on the contaminant levels and exposure pathways found to present potentially unacceptable risk to the environment, as described in the SRI/FS.

The RAO is to minimize the potential for adverse effects to benthic populations and the waterfowl that ingest them from exposure to the contaminated sediments from TCAAP-related discharges by achieving concentrations below the CUL of 0.6 mPEC-Q.

2.11 DESCRIPTION OF ALTERNATIVES

The remedial alternatives evaluated in the SRI/FS are listed below and further described in this section. Detailed descriptions of the alternatives are provided in the SRI/FS (PIKA ARCADIS 2021).

- Alternative 1: No Action
- Alternative 2: Monitored Natural Recovery
- Alternative 3: Enhanced Monitored Natural Recovery
- Alternative 4: Dredging, Dewatering, and Disposal Offsite (Option A; 4A) or at TCAAP (Option B; 4B); Alternative 4A is the selected remedy
- Alternative 5: In-Situ Cover
- Alternative 6: Dredging, Dewatering, and Disposal Offsite of Sediment (Option A; 6A) or at TCAAP (Option B; 6B) and In-Situ Cover of Remaining Sediment above the CUL
- Alternative 7: Dredging and Near-Shore Confined Aquatic Disposal (CAD) of Sediment within Round Lake
- Alternative 8: Dredging and Deep Water CAD of Sediment within Round Lake
- Alternative 9: Dredging and Deep Water CAD of Sediment within Round Lake and In-situ Cover of Remaining Sediment Above the CUL.

2.11.1 Alternative 1 – No Action

Alternative 1 is the no-action alternative, and no remedial measures would be taken to minimize the potential for adverse effects to ecological receptors. A no-action alternative is required by the NCP to provide a comparative baseline against which other alternatives may be evaluated.

2.11.2 Alternative 2 – Monitored Natural Recovery

Alternative 2 is monitoring recovery that occurs through natural processes. The alternative would include primarily sampling of the sediment to track and demonstrate the reduction of the ecological risk. It is expected that this alternative would take a long period of time before reaching the cleanup goal. Alternative 2 would require long-term monitoring and land use controls (LUCs) to prevent disturbance of the sediment such as prohibiting anchoring and installation of infrastructure (e.g., docks) in/on Round Lake, in addition to the CERCLA five-year reviews.

Alternatives 2 and 3 (Enhanced Monitored Natural Recovery listed below) were screened out based on uncertainty regarding their effectiveness. Specifically, EPA, MPCA, and the Army agreed that these alternatives might not be able to achieve the RAO in a reasonable timeframe. Therefore, these two alternatives are not included in the comparative analysis with the other alternatives in Section 2.12 below.

2.11.3 Alternative 3 – Enhanced Monitored Natural Recovery

Alternative 3 is the placement of a thin-layer of material (sand) over sediment that exceeds the CUL to accelerate the natural recovery process. Alternative 3 would include long-term monitoring, five-year reviews under CERCLA, and LUCs to prevent disturbance of the sediment such as prohibiting anchoring and installation of infrastructure (e.g., docks).

As stated previously, this alternative and Alternative 2 are not included in the comparative analysis due to the uncertainty of their effectiveness.

2.11.4 Alternative 4 – Dredging, Dewatering, and Disposal Offsite (Option A; 4A) or at TCAAP (Option B; 4B)

Alternative 4 is dredging of sediment exceeding the CUL. Dredged sediment would be transported to TCAAP to be dewatered, and then the dewatered sediment would be transported to the disposal site. Alternative 4 includes two disposal options, Option 4A for offsite disposal at a permitted landfill; and Option 4B for disposal and management at an impoundment developed on the TCAAP property. The water produced from dewatering process would be treated and returned to Round Lake or discharged to a sanitary sewer after obtaining any necessary permits, as determined during the design phase. Alternative 4A is the selected remedy (Figure 4).

A design for the dredging, dewatering, and stabilization (if necessary) under this alternative is required. The following design criteria were assumed for the purposes of developing and evaluating Alternative 4:

- Communications and coordination with EPA, MPCA, and other stakeholders are needed prior to and throughout the design and construction process. Other stakeholders include, but are not limited to, USFWS, Rice Creek Watershed District, MDNR, City of Arden Hills, Ramsey County, and the disposal facility, at a minimum. Property owners will need to be contacted for access consensus/agreements prior to and throughout the design for all of the areas to be used during construction. Frequent communication and coordination are also needed for construction planning and scheduling to avoid interfering with daily life and business of the property owners as much as possible.

- Availability of land is important for implementing this alternative. Land may be needed for constructing temporary support facilities, including access roads to the work site and from the dewatering area to the disposal location; a hydraulic pipeline crossing Highways 10 and 96 (see below for details); a staging area for materials and equipment; and a decontamination area. Therefore, as stated in the previous bullet, availability of access agreements to certain areas would impact the design and construction layout and methodology.

- A pre-design investigation may be conducted as part of the remedial design to evaluate the methods for sediment removal, dewatering, and water treatment. Accessing areas to the lake by barge would also be evaluated in the design phase.

- Lake drawdown is not anticipated to facilitate construction and, therefore, is not necessary. Sequencing and scheduling of construction can be aligned with low water levels of the lake to facilitate access to the shoreline.

- Sediment sampling and monitoring will be conducted to verify the RAOs have been achieved following completion of dredging. Dredging depth shown on Figure 4 was based on 2011 sediment analytical results. Therefore, details of sampling and analytical methods will be developed in the design phase to verify the sediment concentrations meet the design objectives.

- Typical range of vertical operating accuracy for most environmental dredges is ±10–±15 centimeters or ± 4–6 inches (U.S. Army Corps of Engineers 2008). The remedial design will evaluate and determine site-specific over dredge allowances and tolerances. Assuming an over dredge allowance of 6 inches over the design remedial depths, the total estimated sediment removal volume is 82,000 cubic yards. Over dredge allowances and tolerances would be evaluated during the design phase.

- USFWS goals on the post-remedy bathymetry of Round Lake would require further consideration during the remedial design phase. Decisions regarding the acceptability of potential bathymetry changes would be made in consultation with USFWS and MDNR. However, given the relatively limited depth of removal, the bathymetry changes are anticipated to be acceptable and backfilling of sediment removal areas may not be necessary.

- Temporary turbidity curtains would be installed around the sediment removal areas until removal is finished and adequate time for settling has elapsed to control spreading of re-suspended sediments from grids with potential risk into other unimpacted grids.

- It is assumed that hydraulic dredging would be used to remove the sediment and dredged material would be hydraulically transported to TCAAP for dewatering and handling. The most cost-effective dewatering method is using commercially available geotextile dewatering tubes for the sediment transported in a hydraulic pipeline. An area of approximately 3–10.5 acres is estimated for the footprint of the dewatering facility in the TCAAP property, depending on production rate and material characteristics. Note that the actual dredging method will be determined during the design phase.

- A dedicated pipeline crossing underneath Highways 10 and 96 would likely be required for hydraulic transferring of dredged material. Therefore, it would be necessary to obtain access agreements for the pipeline crossing through parcels adjacent to the U.S. Army property. Because dredge slurry solids concentrations from slurried sediments may be as low as 8–12% on average, and possibly lower, a large volume of water would need to be managed. The estimated quantity of water generated from dredging and hydraulic transport of sediment is approximately 30,000,000 gallons.

- A potential bald eagle nest is reportedly located near the western shoreline of the lake. Therefore, implementation of the alternative shall be scheduled and planned to minimize the impact on the bald eagle habitat, nesting, and fledglings. Work limits for eagle nesting would likely be from mid-February through mid-July. Implementation of the remedy will be coordinated with USFWS to comply with applicable work limitations and seasonal restrictions related to any bald eagle nest present at the time of remediation.

- Water generated from the dewatering process may need to be treated to remove solids and other materials including the COCs and any constituents regulated by federal and state surface water standards prior to being discharged back to the lake or to a municipal sewer system. Treatment would likely include commercially available multimedia filters, granular activated carbon filtration, and bag filters.

- Dewatered sediment will be disposed of offsite in a permitted facility for Option 4A or at an impoundment on the TCAAP property for Option 4B. However, the area planned for disposed sediment management at TCAAP is no longer available for use; therefore, Option 4B was not considered for selection. Under Option 4A, the Pine Bend and Elk River landfills can be considered and they are located 26 and 31 miles from Round Lake respectively.

- Dewatered sediment will be characterized for offsite disposal. Analysis, which will likely include the Toxicity Characteristic Leaching Procedure, will be conducted to characterize whether the dewatered sediment is hazardous. If the waste is hazardous, it will be treated and rendered nonhazardous for disposal at a Subtitle D landfill, potentially using stabilization technology. Based on the available data; however, it does not appear that the sediment would be characterized as hazardous.

- Confirmation sampling will likely need to be performed to determine the need for additional dredge passes and/or the application of a residual cover to guarantee that LUCs will not be needed following implementation. A residual cover is a thin, clean cover to help create a clean substrate for benthic organisms after suspended fines from the dredge process resettle (potentially creating higher contaminant concentrations than immediately following dredging) so that benthic organisms can reestablish themselves immediately.

- Long-term monitoring and CERCLA five-year reviews would not be required for the area within Round Lake after remediation under Option 4A because contaminated sediments would be removed to levels that would allow unlimited use and unrestricted exposure. It is noted, however, that the Round Lake Conceptual Management Plan (USFWS 2013) establishes certain property use restrictions for Round Lake as part of the larger Minnesota Valley NWR.

2.11.5 Alternative 5 – In-Situ Cover

Alternative 5 is placement of an in-situ cover (sand) to serve as a barrier to sediment that exceeds the CUL (Figure 5). A cover thickness of 2 ft is used as a basis for comparison. Alternative 5 would include long-term monitoring, five-year reviews, and LUCs to prevent disturbance of the sediment such as prohibiting anchoring and installation of infrastructure (e.g., docks).

It is estimated that approximately 124,000 cubic yards of cover material will be placed in the lake to cover the area with sediment exceeding the CUL. A borrow source will be obtained for clean cover materials. Samples will be collected from the borrow source for analysis of potential constituents prior to imparting the cover materials to ensure the cover material is clean and free of contaminants.

Placement of the cover material in the lake can be conducted using either hydraulic or mechanical methods.

Similar to Alternative 4, land availability is also important under this alternative for constructing temporary support facilities (i.e., access roads, staging areas, and decontamination areas). Therefore, communication and coordination with the stakeholders are essential to obtain access agreements to the areas to be used for constructing support facilities.

Monitoring would be conducted during the construction to verify the RAOs have been achieved and the thickness of the cover materials meets the design requirements.

LUCs would be implemented to prevent disturbance and damage of the in-situ cover after the construction. Long-term monitoring and maintenance will be required to inspect the cover surface for erosion prevention every 3–5 years. Sediment sampling will also be conducted every other year during the first 10 years following construction to ensure the constructed cover remains functional; five-year reviews would also be required under CERCLA.

2.11.6 Alternative 6 – Dredging, Dewatering, and Disposal Offsite of Sediment (Option A; 6A) or at TCAAP (Option B; 6B) and In-Situ Cover of Remaining Sediment above the CUL

Alternative 6 is a combination of technologies in Alternative 4A: Dredging, Dewatering, and Disposal and Alternative 5: In-Situ Cover (Figure 6). Under Alternative 6, sediment exceeding the mPEC-Q of 1.0 would be dredged, dewatered, and disposed of as described in Alternative 4. Alternative 6 also includes two disposal options for dredged sediment, Alternatives 6A and 6B, which are similar to Alternatives 4A and 4B, respectively. Sediment between the 0.6 mPEC-Q and 1.0 mPEC-Q would be covered as described in Alternative 5. A cover thickness of 2 ft is used as a basis for comparison for Alternative 6. As in Alternative 4A, the area planned for disposed sediment management at TCAAP is no longer available for use; therefore, Option 6B was not considered for selection.

The total volume of the sediment to be removed would be approximately 36,000 cubic yards under this alternative, lower than that under Alternative 4. The total volume of cover material to be placed would be approximately 76,000 cubic yards, lower than that under Alternative 5.

This alternative will also require monitoring and sampling during the construction as described under Alternatives 4 and 5. LUCs, long-term monitoring and maintenance, and five-year reviews will be required as described under Alternative 5.

2.11.7 Alternative 7 – Dredging and Near-Shore CAD of Sediment within Round Lake

Alternative 7 is dredging of sediment above the CUL and placement of the dredged sediment into a near-shore CAD facility located in the northwest part of the lake (Figure 7). A CAD is an underwater containment unit designed to isolate contaminated sediment from the environment and resist erosive forces that could lead to the release of the confined sediment. The sediment would be covered with material obtained from a portion of the lake with sediment concentrations less than the mPEC-Q of 0.35. The thickness of the cover would be approximately 2 ft.

The dredging approach under this alternative would be similar to that under Alternative 4, and CAD cover placement would be similar to that under Alternative 5. However, this alternative would consolidate and place the contaminated sediment into a CAD instead of covering the contaminated sediment in place in Alternative 5.

CAD design would be developed in consultation with USFWS and MDNR, with review and approval by EPA and MPCA. In particular, the bathymetry changes would be evaluated for potential impact to the lake and the regulatory agencies have to accept the bathymetry changes before finalizing the design.

This alternative would not generate the waste (i.e., sediment and wastewater from the dewatering process) that would require characterization and offsite disposal, especially for wastewater. Therefore, it would require less material handling and treatment technologies compared to Alternatives 4 and 6.

Alternative 7 would dredge and move approximately 46,600 cubic yards of sediment into the CAD. Approximately 96,000 cubic yards of clean material will be needed for the cover of the CAD. Sampling and analysis would be conducted to identify the location within the lake where the clean material with concentrations of less than 0.35 mPEC-Q would be removed and used for the CAD.

Under this alternative, considerations associated with dredging and cover under Alternatives 4 and 5 would be applicable to this alternative (i.e., post-remedy bathymetry of Round Lake, land availability for constructing support facilities, and monitoring during the construction to verify that the removal of contaminated sediment and CAD construction meet the design requirements).

This alternative would require LUCs, long-term monitoring and maintenance, and five-year reviews as described under Alternative 5.

2.11.8 Alternative 8 – Dredging and Deep Water CAD of Sediment within Round Lake

Alternative 8 is dredging of sediment above the CUL, and placement of the dredged sediment into a CAD located in the deepest portion of the lake (Figure 8). The sediment would be covered with material obtained from a portion of the lake with sediment concentrations less than an mPEC-Q of 0.35.

This alternative is the same as Alternative 7 except the location of the CAD. The CAD under this alternative would be located in the deepest portion of the lake. Therefore, mechanical placement of the cover materials may be more feasible for Alternative 8 compared to Alternatives 5 and 7 due to the deeper water in the CAD location.

This alternative would dredge and transport approximately 46,600 cubic yards of sediment into the CAD, the same amount of sediment as that under Alternative 7. Approximately 36,000 cubic yards of clean material will be needed for the cover of the deep water CAD.

This alternative would require LUCs, long-term monitoring and maintenance, and five-year reviews as described under Alternative 5.

2.11.9 Alternative 9 – Dredging and Deep Water CAD of Sediment within Round Lake and In-situ Cover of Remaining Sediment above the CUL

Alternative 9 is a combination of dredging and in-situ cover (Figure 9). Under this alternative, sediment that exceeds the mPEC-Q level of 1.0 would be removed by dredging and would be placed into a CAD located in the deepest portion of the lake. Sediment that exceeds the CUL and is below the mPEC-Q of 1.0 would be covered in place as described in Alternative 5. Therefore, this alternative is a combination of Alternatives 5 and 8.

Approximately 23,000 cubic yards of contaminated sediment would be dredged and moved into the deep water CAD. Approximately 89,000 cubic yards of clean material will be needed for the cover of the deep water CAD and over the remaining sediment above the CUL.

This alternative would also require LUCs, long-term monitoring and maintenance, and five-year reviews.

2.12 COMPARATIVE ANALYSIS OF ALTERNATIVES

The NCP at 300.430(e)(9)(iii) articulates nine evaluation criteria for assessing remedial alternatives for sites that require remediation or mitigation. Thus, the alternatives were compared to the nine criteria in the NCP. The nine criteria are divided into three categories by EPA as follows:

- ***Threshold Criteria***—The two criteria described below which must be met in order for an alternative to be eligible for selection as a remedy.

  - ***Overall protection of human health and the environment—***Evaluates whether a remedy provides adequate protection of human health and the environment and describes how risks posed by the site are eliminated, reduced, or controlled through treatment, engineering, or institutional controls.

  - ***Compliance with applicable or relevant and appropriate requirements (ARARs)***—Evaluates whether a remedy will meet all applicable or relevant and appropriate requirements (ARARs) of federal and state environmental statutes and/or justifies a waiver.

- ***Balancing Criteria***— The five criteria described below which are used to weigh major trade-offs among alternatives

  - ***Long-term effectiveness and permanence***—Refers to expected residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time, once CULs have been met.

  - ***Reduction in toxicity, mobility, or volume through treatment***—Evaluates the anticipated performance of treatment technologies that are included as part of a remedy to reduce the toxicity, mobility, or volume of the hazardous substances.

  - ***Short-term effectiveness***—Considers the length of time needed to implement a remedial alternative and the risks the remedial alternative poses to workers, residents, and the environment during implementation. This criterion also considers the effectiveness of mitigative measures and time until protection is achieved through attainment of the RAOs.

  - ***Implementability***— Considers the technical and administrative feasibility of a remedy from design through construction, including the availability of services and materials needed to implement a particular option and coordination with other governmental entities.

  - ***Cost***—Includes estimated capital, periodic, and annual operations and maintenance costs, as well as present worth cost. Present worth cost is the total cost of a remedial

alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of from +50 to -30%.

- ***Modifying criteria—***The two criteria described below can be fully considered only after public comment is received on the Proposed Plan.

  — ***State acceptance***—Considers whether the state support agency supports the preferred alternative presented in the Proposed Plan and concurs with the selected remedy.

  — ***Community acceptance***—Addresses the public's general response to the remedial alternatives and the preferred alternative presented in the Proposed Plan.

As stated previously, prior to detailed comparison of the alternatives, Alternative 2 (Monitored Natural Recovery) and Alternative 3 (Enhanced Monitored Natural Recovery) were screened out based on uncertainty regarding their effectiveness. The following is a summary of the comparison between remaining alternatives (Alternative 1 and Alternatives 4 through 9) for each of the nine criteria specified in the NCP. Attachment E provides a detailed analysis of remedial alternatives.

2.12.1 Overall Protection of Human Health and the Environment

Short-term and long-term protection of the environment and human health are considered under this criterion. The short-term protection factor considers affects from the implementation of the alternatives, while the long-term protection factor considers how the alternatives will achieve goals for protection of human health and the environment in the long-term.

With respect to long-term protection of human health, all alternatives are considered equal because there is no human health risk identified for the contaminated sediments in their existing state. With the exception of Alternative 1, all of the retained alternatives create short-term human health risk and may pose health and safety concerns associated with construction activities. Transportation of materials to and from the Round Lake Operable Unit will impact and increase traffic on the local roadways. The three alternatives that do not require transport of dredge material (Alternatives 7, 8, and 9) are more protective of human health in the short-term because there would be fewer corresponding impacts related to traffic.

With respect to long-term protection of the environment, Alternative 1 would provide no improvement over current conditions, would provide no risk reduction, and would not be protective of the environment. Alternatives 4 through 9, to varying degrees, reduce long-term risk to ecological receptors by removing and/or isolating sediment above the CUL and are considered equal for long-term protection of human health because there is no human health risk identified for the sediment (Section 2.12.3). All the alternatives (except Alternative 1) involve varying degrees of intrusive activity which create short-term risk to the benthic community through the removal of sediment and/or the placement of cover materials over existing sediment. Removal and covering of sediment disturbs habitat and creates turbidity in the surface water. Considering the area of lakebed disturbed and construction technologies used, Alternative 5 would have the least impact and Alternative 9 would have the most impact (Section 2.12.5).

2.12.2 Compliance with ARARs

Section 121(d) of CERCLA and NCP §300.430(f)(1)(ii)(B) require that remedial actions at CERCLA sites at least attain legally applicable or relevant and appropriate requirements, referred to as "ARARs," unless such ARARs are waived under CERCLA section 121(d)(4).

Applicable requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under Federal environmental or State environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. State standards that are identified by a state in a timely manner and that are more stringent than Federal requirements may be applicable. Relevant and appropriate requirements are those cleanup standards, standards of control, and other substantive requirements while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well-suited to the particular site. Only those State standards that are identified in a timely manner and are more stringent than Federal requirements may be relevant and appropriate.

Compliance with ARARs addresses whether a remedy will meet all of the applicable or relevant and appropriate requirements of other Federal and State environmental statutes or provides a basis for invoking a waiver.

ARARs are divided into chemical-specific, action-specific, and location-specific categories. Selected ARARs are described below.

- **Chemical-specific** ARARs include promulgated health- or risk-based standards, numerical values, or methodologies that, when applied to site-specific conditions, establish the acceptable amount or concentration of a contaminant that may be detected or discharged in the environment.

  Although no remediation of surface water is required, the Minnesota surface water quality standards in Minnesota Rule 7050 are a chemical-specific ARAR since the remedy selected in this ROD may result in returning water generated from sediment dewatering to Round Lake.

  For sediment, there are no state or federal ARARs that would serve as chemical-specific ARARs for Round Lake. The benchmark values from other reference sites and studies may serve as to be considered (TBC) criteria as described in the Tier II ERA Report (USACHPPM 2004) and Supplemental ERA (PIKA ARCADIS 2021). In addition, the *Guidance for the Use and Application of Sediment Quality Targets for the Protection of Sediment-Dwelling Organisms in Minnesota* (MPCA 2007) serve as TBC criteria. The Supplemental ERA presents and evaluates several sources of sediment quality criteria, including MPCA SQTs, which serve as TBC criteria.

  Action-specific ARARs include technology or activity-based requirements or limitations on actions taken with respect to hazardous substances, pollutants, and contaminants.

Action-specific ARARs include rules related to excavation and dewatering activities, transportation and disposal of wastes generated during remedial action, rules regarding state-listed threatened and endangered species, and the Bald and Golden Eagle Protection Act, which is intended to control disturbance to eagles and is applicable because there is a bald eagle nest near the western shoreline of Round Lake. Additionally, as the former TCAAP area where sediment dewatering may take place has noted the presence of Blanding's turtle, and a Ghost Tiger Beetle population is located within a 1-mile radius of Round Lake, an Avoidance Plan may also be developed.

- **Location-specific** ARARs are restrictions on hazardous substances or certain activities solely because of the particular location. No location-specific ARARs are identified for any of the alternatives evaluated.

All alternatives, other than Alternative 1, the No Action alternative, will meet the threshold criterion of complying with ARARs. Remediation under all other alternatives is expected to be conducted in a manner to attain all ARARs. A full list of ARARs is provided in Attachment C for the selected remedy.

2.12.3 Long-Term Effectiveness and Permanence

All alternatives, except Alternative 1, are expected to provide long-term effectiveness and permanence in reducing ecological risk. Alternative 4A, the selected remedy, and Alternative 4B provide the greatest long-term effectiveness and permanence by removing sediment above the CUL. Alternative 8 provides the second highest long-term effectiveness and permanence by consolidating sediment under a cover, which isolates the sediment in a portion of the lake that is protected from potential erosive forces. Alternatives 6A, 6B, 7, and 9 have similar long-term effectiveness and permanence. Alternative 5 has the lowest long-term effectiveness and permanence.

For the alternatives that include an in-situ cover component (Alternatives 5, 6, and 9), future erosion of the cover in the shallow water areas may reduce the long-term effectiveness. The near-shore CAD location in Alternative 7 may be more susceptible to erosion from stormwater inlets, waves, and ice. The CAD location in Alternatives 8 and 9 is in the deeper water area of Round Lake and has a lower risk of erosion.

2.12.4 Reduction of Toxicity, Mobility, or Volume through Treatment

The retained alternatives (Alternative 1 and Alternatives 4 through 9) are considered equal because none include treatment of the sediment. CERCLA has a statutory preference for treatment as a principal element of the preferred remedial alternative or an explanation must be provided as to why the preference for treatment will not be met. There are no proven cost-effective treatment technologies that address metals and PCBs in sediment.

2.12.5 Short-Term Effectiveness

Short-term impacts (both to the environment and human health) are those impacts that are associated with the efforts completed during implementation of the alternative. Alternatives 4 through 9 involve varying degrees of construction. Both covering and dredging will impact the

lake habitat, biota, and wildlife in the areas disturbed; however, the magnitude of impacts increases as the remedial area increases and construction becomes more complex. The alternatives, in order from greatest areal extent of lake disturbance to smallest, are as follows:

- Alternative 5
- Alternatives 6A and 6B
- Alternatives 4A and 4B
- Alternative 7
- Alternative 8
- Alternative 9

Evaluation of short-term effectiveness also considers the risk to human health during remedy implementation, either to site remediation workers or the general public. Although there is no unacceptable human health risk identified for the contaminated sediment, short-term risks would include safety of the remediation workers and impacts on the general public and roadways during implementation of the remedy. The greatest magnitude of short-term risk would be risk to the general public from over-the-road transportation of sediment and cover material. Alternatives 5, 7, 8, and 9 would involve relatively less material transportation by eliminating offsite disposal of dredged sediment and, therefore, fewer impacts on the general public and on roadways. Alternatives 4 and 6, however, would require more material transportation and Alternative 4A would require the most.

In addition, the duration for implementing the remedy also impacts the short-term effectiveness. A longer construction period would pose more impacts on the environment and human health. The estimated period of construction is approximately 2–4 years for Alternatives 4A and 4B, and 3 to 5 years for Alternatives 5, 6A, 6B, 7, 8, and 9.

Therefore, overall Alternatives 4A and 6A would pose most risks and rank lowest in short-term effectiveness, and Alternatives 7, 8, and 9 rank highest for short-term effectiveness.

2.12.6 Implementability

Implementability includes technical and administrative feasibility to construct and monitor the alternative; the availability of services and materials needed to implement a particular option; and coordination with other governmental entities. Using multiple construction techniques (e.g., removal, dredging, and covering) will increase the complexity of implementation and construction timeframe, and introduce more uncertainties. Land availability and access will impact the layout of the construction facilities, the remedial approach, and the complexity of the construction. For instance, a transload location is where equipment is launched on the lake, sediment is removed from the lake, and cover material is transferred to the lake, and its selection is essential for a safe and effective construction.

Alternatives 4 through 9 all require land for constructing an access road/ramp for in-water equipment, a staging area (for equipment and materials), and a decontamination area. Land will also be needed for dewatering operations for Alternatives 4 and 6. In addition, Alternatives 4 and 6 would likely also require a dedicated pipeline crossing underneath Highways 10 and 96 to

transport dredged material from Round Lake to TCAAP property for dewatering. Therefore, access agreements are required for the parcels in the area of the pipeline.

Alternative 5 is the most implementable because sediment would be covered in-place and does not require removal, relocation, dewatering (with potential water treatment), or disposal. Alternative 7 (near-shore CAD), Alternative 8 (deep water CAD), and Alternative 9 (deep water CAD/in-situ cover) are the next most implementable alternatives. While they are more complex than Alternative 5, the CAD and cover components do not involve the dewatering of sediment and offsite disposal. Alternatives 4 and 6, which involve dredging, dewatering, and disposal of sediment, would be more difficult to implement than the other alternatives due to construction effort and the complexities related to sediment dewatering.

Alternative 4A does not require monitoring or five-year reviews. Alternative 4B would likely require monitoring and five-year reviews for the disposal location on the TCAAP property. However, the area planned for disposed sediment management at TCAAP is no longer available for use; therefore, Alternative 4B is not implementable and cannot be selected as a remedy. Although Alternatives 6A and 6B include five-year reviews, these alternatives result in a small area that would require monitoring. Note that, similar to Alternative 4B, because the area planned for disposed sediment management at TCAAP is no longer available for use, Alternative 6B is not implementable and cannot be selected as a remedy. Alternatives 5, 7, 8, and 9 have equivalent long-term monitoring and five-year review requirements. Monitoring will be required to verify the integrity of the covers in areas where sediment is above the CUL. Alternative 8 would likely require less maintenance compared to Alternatives 7 and 9 because the CAD would be located in the deeper portion of the lake where erosion is less likely.

In addition, implementation of Alternatives 4 through 9 would need to meet substantive regulatory requirements, in accordance with the ARARs, although obtaining permits will not be necessary for on-Site activities because of the permit exemption in CERCLA 121(e). In addition, implementation of these requirements will be conducted through consultation with the appropriate regulating authorities.

2.12.7 Cost

Cost estimates were prepared for each alternative with an accuracy of from approximately +50% to -30%. Present worth costs for the alternatives are as follows:

- Alternative 1: $0
- Alternative 4A: $23.6 million
- Alternative 4B: $19.4 million
- Alternative 5: $13.8 million
- Alternative 6A: $20.5 million
- Alternative 6B: $19.2 million
- Alternative 7: $13.3 million
- Alternative 8: $12.0 million
- Alternative 9: $11.4 million.

Additional details are provided in Table 1.

2.12.8 State Acceptance

State acceptance reflects a consensus reached by MPCA and MDNR through combining the perspectives of both agencies' legally mandated considerations. Alternatives 5, 6, 7, 8, and 9 with shallow covers are not acceptable due to anticipated maintenance required to maintain long-term effectiveness and lake ecosystems as well as the difficulty in meeting the substantive requirements of MN Rule 6115.0190 and MN Rule 6115.0200. Alternatives 4A and 4B are acceptable based on permanence, long-term protectiveness, and effectiveness. The state of Minnesota supports Alternative 4A.

2.12.9 Community Acceptance

During the public comment period on the Proposed Plan, 22 written comments were received, most of which were supportive of the preferred alternative. These comments are discussed further in Attachment D. During the Proposed Plan public meeting, questions and comments were raised and the Army's responses are included in the Responsiveness Summary. Overall, the community accepts the preferred remedy as specified in the Proposed Plan.

2.13 PRINCIPAL THREAT WASTES

Principal threat wastes are those source materials that are highly toxic or highly mobile that generally cannot be reliably contained or would present a significant risk to human health or the environment should exposure occur. There are no materials remaining at Round Lake that would constitute a principal threat waste.

2.14 SELECTED REMEDY

Alternative 4A is the selected remedy and consists of the following components:

- Dredging of contaminated sediment exceeding the CUL of 0.6 mPEC-Q; and
- Characterization, dewatering, stabilization (if necessary), and disposal of contaminated sediment at an offsite landfill.

The selected remedy does not require LUCs, long-term monitoring and maintenance, and CERCLA five-year reviews because contaminated sediment will be removed to the levels that would allow for unlimited use of and unrestricted exposure at the property, and sediment in Round Lake will not pose unacceptable risk to the environment and human health.

Alternative 4A is selected as a remedy because it will achieve substantial risk reduction to the benthic community using a proven sediment remediation technology (Figure 4). Based on the nine criteria evaluated as part of the CERCLA process, Alternative 4A ranks among the highest of the alternatives with significant advantages of long-term effectiveness and protectiveness, and acceptability by the state. In the SRI/FS, Alternatives 4B and 8 ranked higher than Alternative 4A. The area planned for disposed sediment management at TCAAP is no longer available for use; therefore, Alternative 4B is not implementable. Alternative 4A is preferred because it does not require long-term operation, maintenance, and monitoring of a sediment containment facility

by the Army, which is required for Alternative 8. EPA and MPCA concur with the selection of the remedy.

Additionally, the land manager, USFWS, considers Alternative 4A to be compatible with its land management obligations at Round Lake under the National Wildlife Refuge System Administration Act. Alternative 4A would allow USFWS to effectively administer Round Lake for wildlife conservation and wildlife-dependent recreation. The Army has agreed to consult with USFWS during design and implementation of Alternative 4A and has created a Technical Working Group (of which USFWS is a member) to help facilitate these consultations.

Based on the information currently available, the Army believes the selected remedy meets the threshold criteria and provides the best balance of tradeoffs among the other alternatives with respect to the balancing and modifying criteria. The Army expects the selected remedy to satisfy the statutory requirements of CERCLA 121(b).

A pre-design investigation may be conducted as part of the remedial design phase to evaluate the removal, dewatering, and water treatment methods. The final plans for dredging, dewatering, stabilization (if necessary), and disposal will be developed during this phase with review and approval by EPA and MPCA.

The following are additional considerations subject to final determination during remedial design:

- Elutriate testing has not been completed and the potential need for and degree of pre-treatment of the elutriate is unknown. Elutriate testing would be completed during the remedial design phase and the design treatment requirements would be finalized during the remedial design.
- Air emission control will be evaluated during design. The COCs in Round Lake sediments (metals and PCBs) would not likely pose an air emission problem, especially because the sediment is wet. Testing may be required to confirm these assumptions. Control of dust on access roads would be important during transport of in-situ cover materials or dewatered sediments.
- Consideration for contractor proposed methods to evaluate the removal, dewatering, and water treatment methods may be incorporated into the final design, if appropriate.
- With respect to small, isolated areas of contaminated sediments exhibiting COCs above the CUL of 0.6 mPEC-Q not currently within the extent of the projected dredge area, the final determination on whether such areas would be included within the dredge extent would be made during the remedial design phase.
- With respect to areas that border the lakeshore that would not be fully accessible by barge, the final evaluation and decision on how to handle these areas would be made during the remedial design phase.
- Over dredge allowances and tolerances would be further evaluated during the remedial design phase.
- Decisions regarding the acceptability of potential bathymetry changes would be made in consultation with the USFWS and MDNR.

- Additional testing would be performed during the remedial design phase to characterize the contaminated sediment to determine the appropriate disposal method, and whether any stabilization of the metals would be needed prior to disposal.
- Additional evaluation and selection of the disposal facility would be completed as part of the remedial design.
- Additional details regarding the methods for verifying that the RAOs have been achieved would be developed as part of the remedial design.

The estimated cost for implementing the selected remedy (Alternative 4A) is approximately $23,600,000, with an accuracy of from approximately +50% to -30%. A detailed cost estimate for the remedy is provided in the SRI/FS Report (PIKA ARCADIS 2021).

2.15 STATUTORY DETERMINATIONS

This section confirms that the selected remedy attains the mandates of CERCLA §121 and, to the extent practicable, the NCP. Under CERCLA §121 and NCP §300.430(f)(5)(ii), the lead agency must select a remedy that protects human health and the environment, complies with ARARs, is cost-effective, and uses permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In addition, CERCLA also includes: (1) a preference for remedies that employ treatments that permanently and significantly reduce the toxicity, mobility, or volume of hazardous wastes; and (2) a preference for practical treatment technologies versus offsite disposal of untreated wastes. Periodic five-year reviews are required if the remedy will result in hazardous substances remaining in place above levels allowing for unlimited use and unrestricted exposure. The following sections discuss how the selected remedy meets these statutory requirements.

2.15.1 Protection of Human Health and Environment

The selected remedy (Alternative 4A) will protect human health and environment by removing and disposing of contaminated sediment in a permitted landfill. The ecological risk to benthic organisms and waterfowl will be removed and no unacceptable risk will remain at Round Lake. The off-site landfill will contain and immobilize the hazardous substances, minimize future leaching of contaminants into the groundwater, and prevent direct exposure to the contaminants.

2.15.2 Compliance with ARARs

The selected remedy is expected to be in compliance with ARARs. Attachment C provides a list of ARARs associated with the selected remedy.

Among the ARARs, Clean Water Act, and Minnesota surface water quality standards in Minnesota Rule 7050 are chemical-specific ARARs for the water generated from the dewatering process that will be treated and discharged into Round Lake.

Minnesota Statutes Chapter 473.515 Subdivision 3 can also be considered an ARAR if treated water is discharged to a local sanitary sewer.

The 40 CFR 261 and Minnesota Rule 7035.0800 are ARARs for waste management during the

construction and sediment characterization and disposal.

The Wetland Conservation Act and Bald and Golden Eagle Protection Act are also key ARARs during the implementation of the selected remedy, in addition to rules regarding state-listed threatened and endangered species.

2.15.3 Cost Effectiveness

In the Army's judgement, the selected remedy is cost-effective and represents a reasonable value for the money to be spent. In making this determination, the following definition, per 40 CFR 300.430(f)(1)(ii)(D), was used: "A remedy shall be cost-effective if its costs are proportional to its overall effectiveness." Overall effectiveness was evaluated by assessing three of the five balancing criteria used in the detailed analysis of alternatives: (1) long-term effectiveness and permanence; (2) reduction in toxicity, mobility, or volume through treatment; and (3) short-term effectiveness. Overall effectiveness was then compared to cost to determine cost-effectiveness. The selected remedy will attain the highest level of long-term effectiveness and is equal with other alternatives on reduction in toxicity, mobility, or volume. Although the selected remedy is highest in cost, the overall effectiveness of the selected remedy was determined to be proportional to its cost. Therefore, the selected remedy represents a reasonable value for the money to be spent.

The estimated net present worth for the selected remedy is $23,600,000.

2.15.4 Utilization of Permanent Solutions and Alternative Treatment Technologies to the Maximum Extent Practicable

The Army, in coordination with EPA and MPCA, has determined that the selected remedy represents the maximum extent to which permanent solutions and treatment technologies can be utilized in a practicable manner at Round Lake. The selected remedy provides the best balance of trade-offs in terms of the five balancing criteria, while the statutory preference for treatment as a principal element, and state and community acceptance are considered.

Long-Term Effectiveness

The dredging, dewatering, and offsite disposal of contaminated sediment included as a component of Alternative 4A provides long-term effectiveness through the removal of COC-impacted sediment. This alternative permanently eliminates the potential for ecological receptors to be exposed to the COCs in the sediment.

Reduction of Toxicity, Mobility, or Volume through Treatment

Alternative 4A does not employ treatment to reduce toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants, because no cost-effective treatment is available for the site contaminated sediments.

Short-Term Effectiveness

This alternative increases the potential for short-term risks to the lake habitat, biota, and wildlife in the areas disturbed during the dredging and dewatering. Although there is no unacceptable human health risk identified for the contaminated sediment, the selected remedy presents safety risks to remediation workers and the general public and impacts to the local roadways from transportation during the remedy implementation. Appropriate health and safety measures will be implemented during the construction of the remedial action. Restoration of the local roads may also be conducted after the construction if needed to minimize the short-term impacts of the selected remedy.

Implementability

Alternative 4A requires land for constructing an access road/ramp and other facilities to facilitate the construction. It will also require multiple technologies (dredging, dewatering, and treatment of wastewater from dewatering process), which makes its implementation complex, however, possible. The selected remedy does not require LUCs, long-term monitoring and maintenance, and CERCLA five-year reviews because there will be no remaining contaminated sediment after the remedy is completed, therefore there will be no long-term measures to implement.

2.15.5 Preference for Treatment as a Principal Element

The selected remedy does not employ treatment to reduce toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants because no proven cost-effective treatment technologies exist to address the metals- and PCB-contaminated sediment.

2.15.6 Five-Year Review Requirements

The selected remedy will result in unlimited use and unrestricted exposure for Round Lake and therefore, does not require five-year reviews.

2.16 DOCUMENTATION OF SIGNIFICANT CHANGES FROM THE PREFERRED ALTERNATIVE IN THE PROPOSED PLAN

There are no changes in this ROD from the proposed remedy described in the Proposed Plan for Round Lake.

However, it should be noted that, following presentation of the Proposed Plan, it was determined that Alternatives 4B, 6B and 8, would no longer be implementable due to a change in site conditions.

Furthermore, additional Minnesota Rules and Statutes were agreed upon as ARARs, based on comments from MDNR and discussions between the Army, MPCA, and USFWS. These additional ARARs have been incorporated into this ROD.

3. RESPONSIVENESS SUMMARY

The final component of the ROD is the Responsiveness Summary. The purpose of the Responsiveness Summary is to provide a summary of the public's comments, concerns, and questions about the proposed remedial decision at Round Lake and the Army's responses to those concerns. Attachment D provides the Responsiveness Summary, which also includes public notices, a fact sheet, and the presentation at the Public Meeting.

The Army is selecting Alternative 4A: Dredging, Dewatering, and Offsite Disposal as the remedy for Round Lake, with concurrence from EPA and MPCA.

The Army held a virtual Public Meeting on 20 July 2021 to formally present the preferred remedy identified in the Proposed Plan and to answer questions and receive comments. Questions and comments raised during the Public Meeting and their respective answers are available in the transcript provided in Attachment B. Questions and comments are summarized in the Meeting Minutes, which are also provided in Attachment B and included in the Administrative Record.

During the public comment period from 9 July to 13 August 2021, 22 written comments were received. Most of the comments were supportive of the preferred alternative (Alternative 4A). Only three comments were not supportive. Five comments were supportive and had some questions and concerns regarding implementation. These comments are further discussed in Attachment D.

3.1 TECHNICAL AND LEGAL ISSUES

No technical or legal issues have been identified for Round Lake with respect to this ROD.

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Figures

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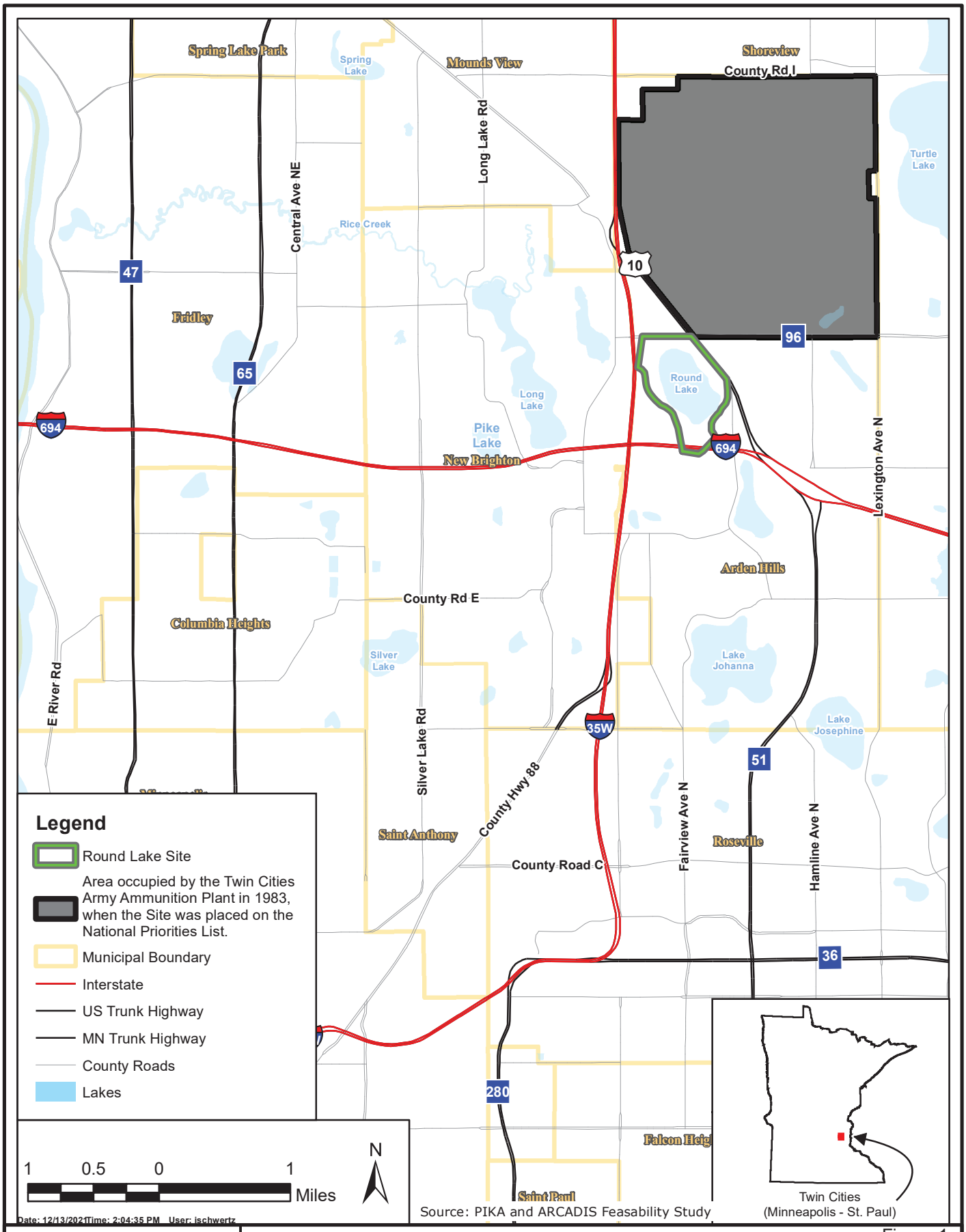

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Source: PIKA and ARCADIS Feasability Study

Figure 1

Site Location Map

RECORD OF DECISION

Round Lake Operable Unit,

New Brighton/Arden Hills/Twin Cities Army Ammunition Plant Superfund Site, Ramsey County, Minnesota

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Figure 2

Round Lake Vicinity Map

RECORD OF DECISION

Round Lake Operable Unit,

New Brighton/Arden Hills/Twin Cities Army Ammunition Plant Superfund Site, Ramsey County, Minnesota

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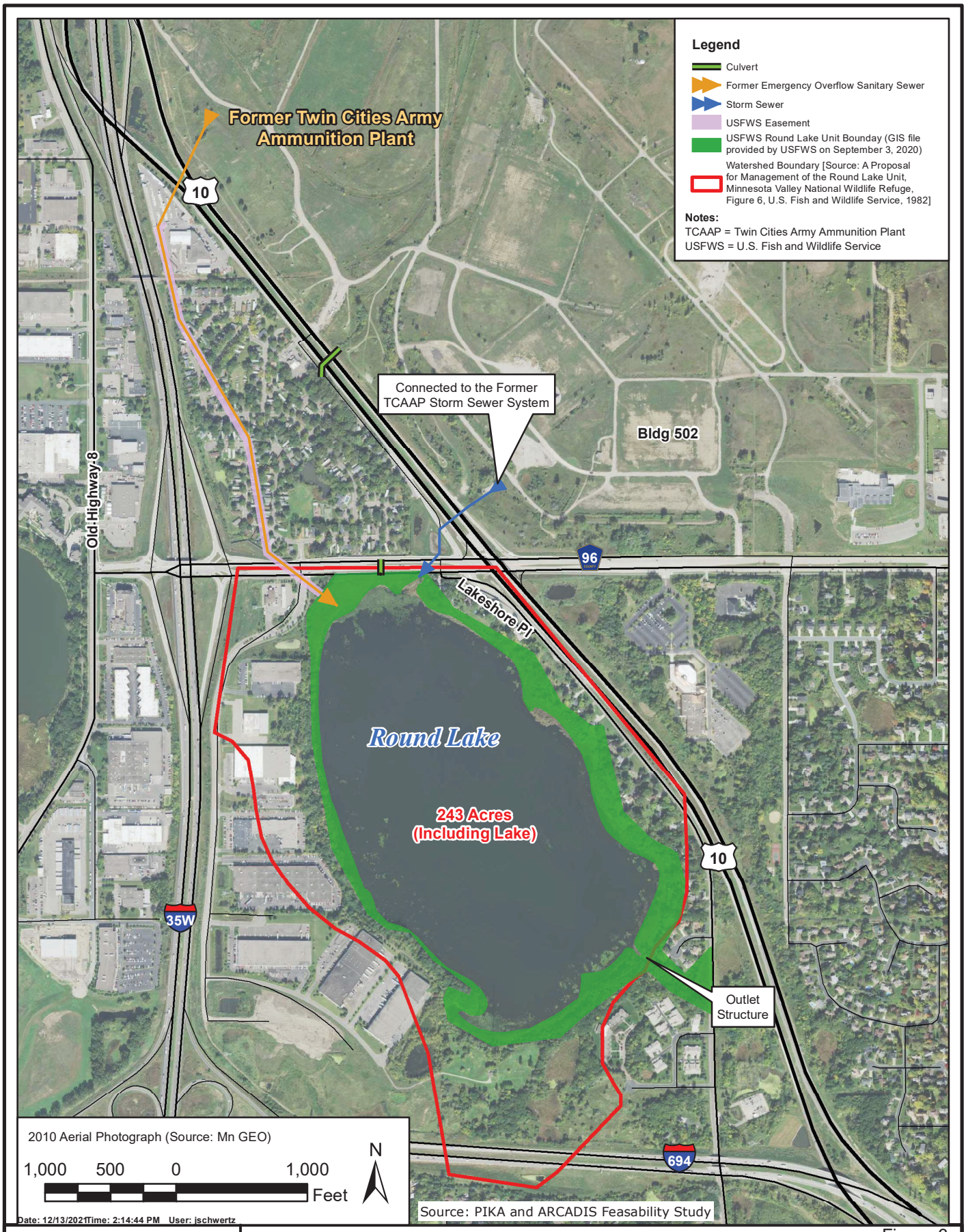

Figure 3

Round Lake Watershed

RECORD OF DECISION

Round Lake Operable Unit,

New Brighton/Arden Hills/Twin Cities Army Ammunition Plant Superfund Site, Ramsey County, Minnesota

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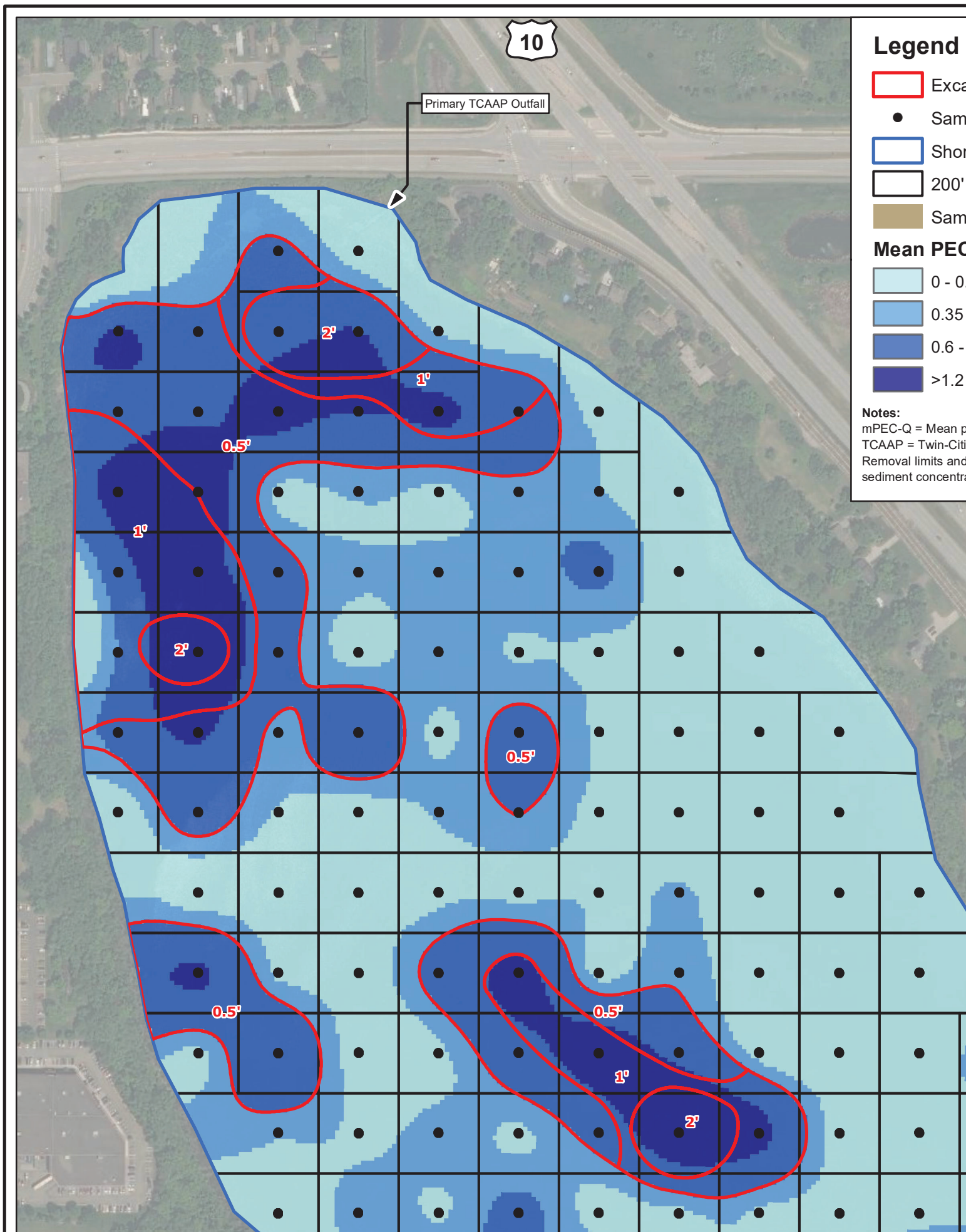
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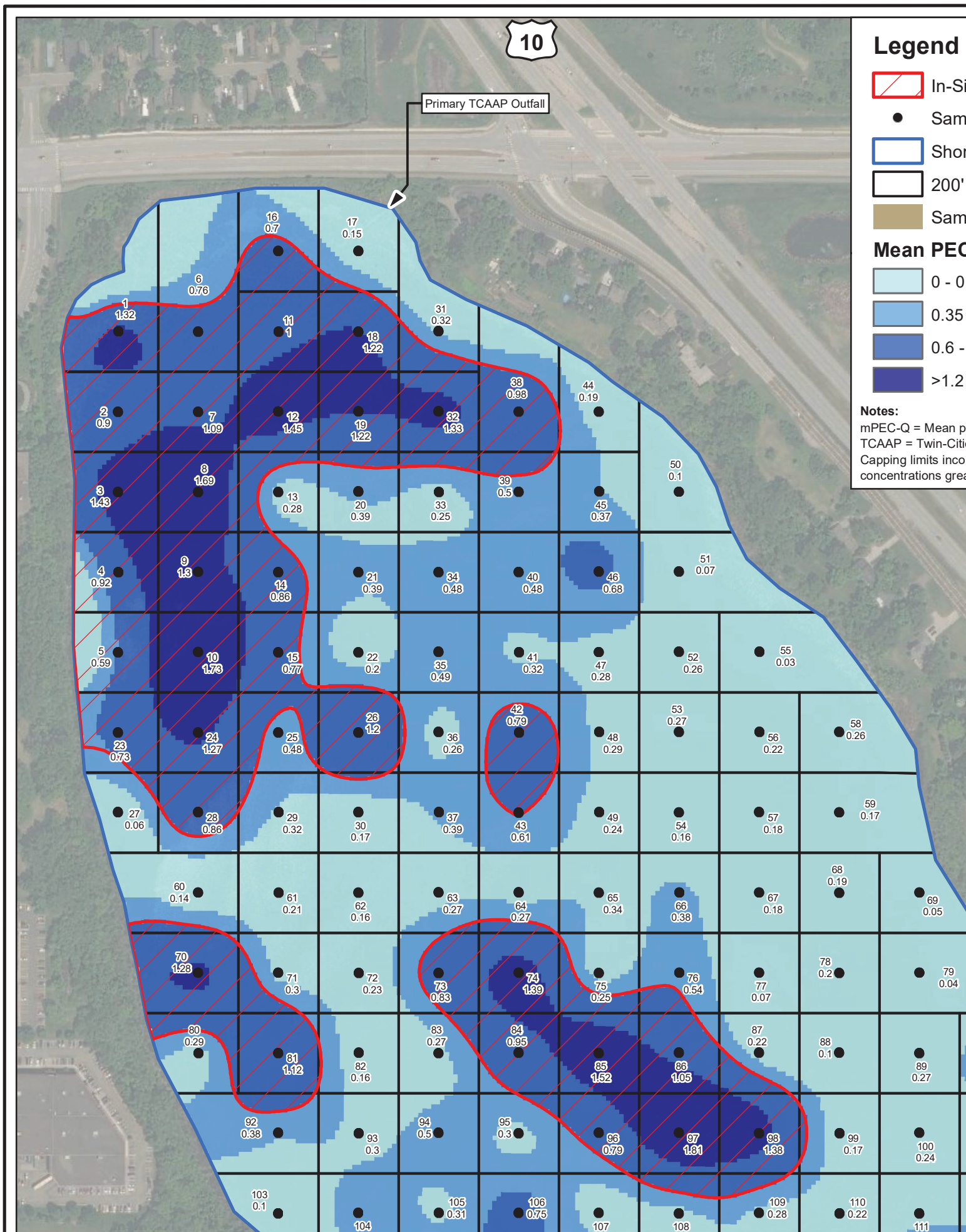
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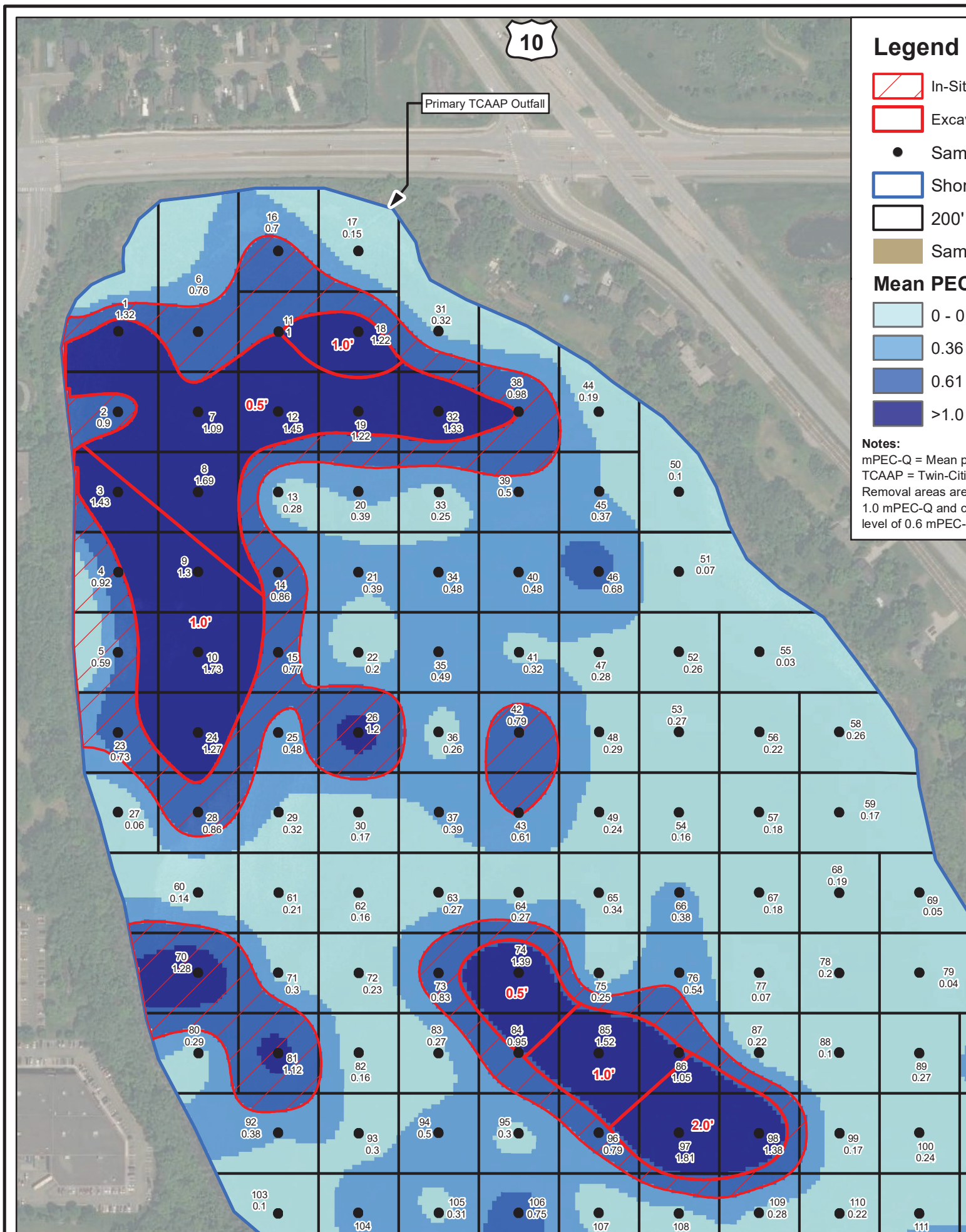
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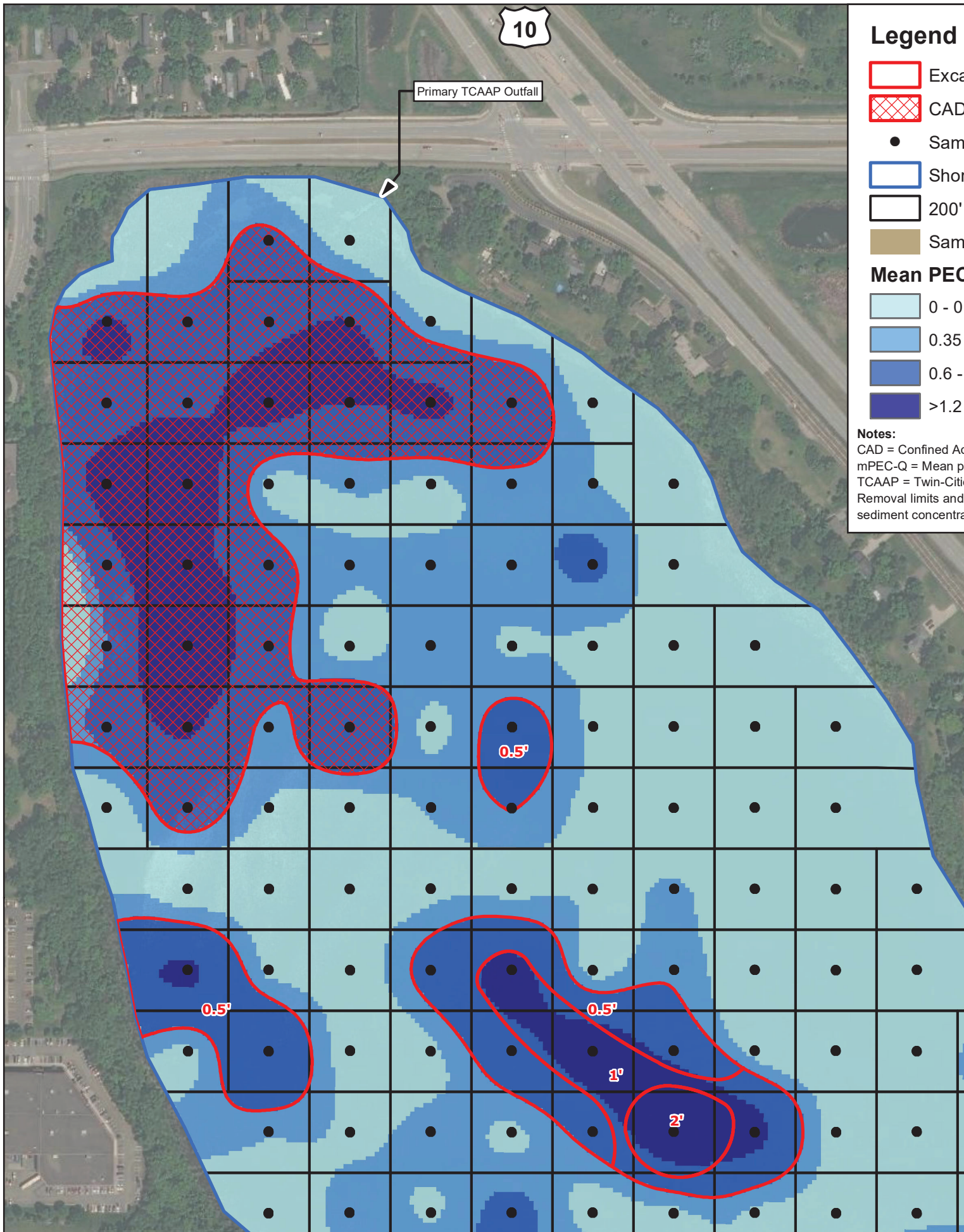
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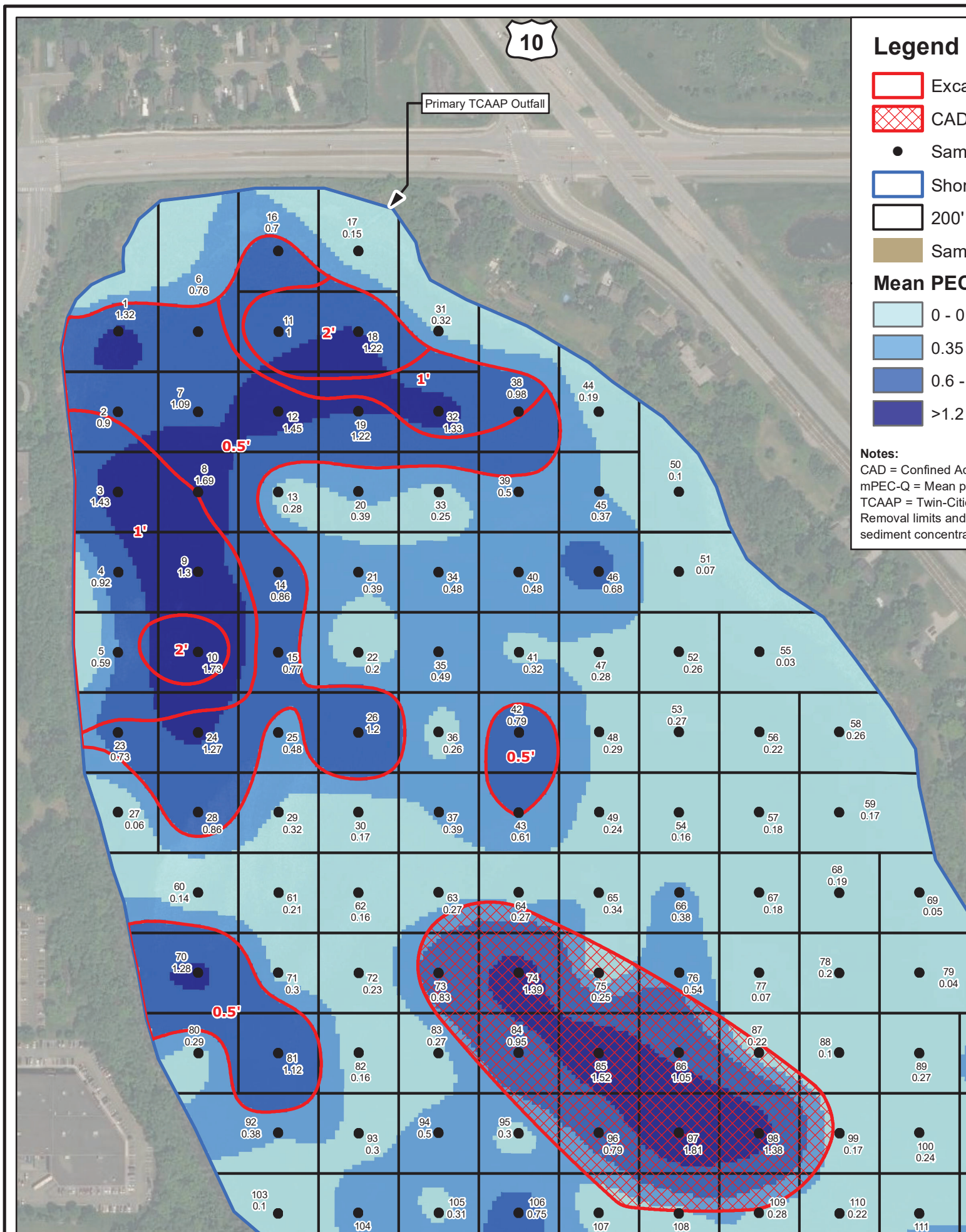
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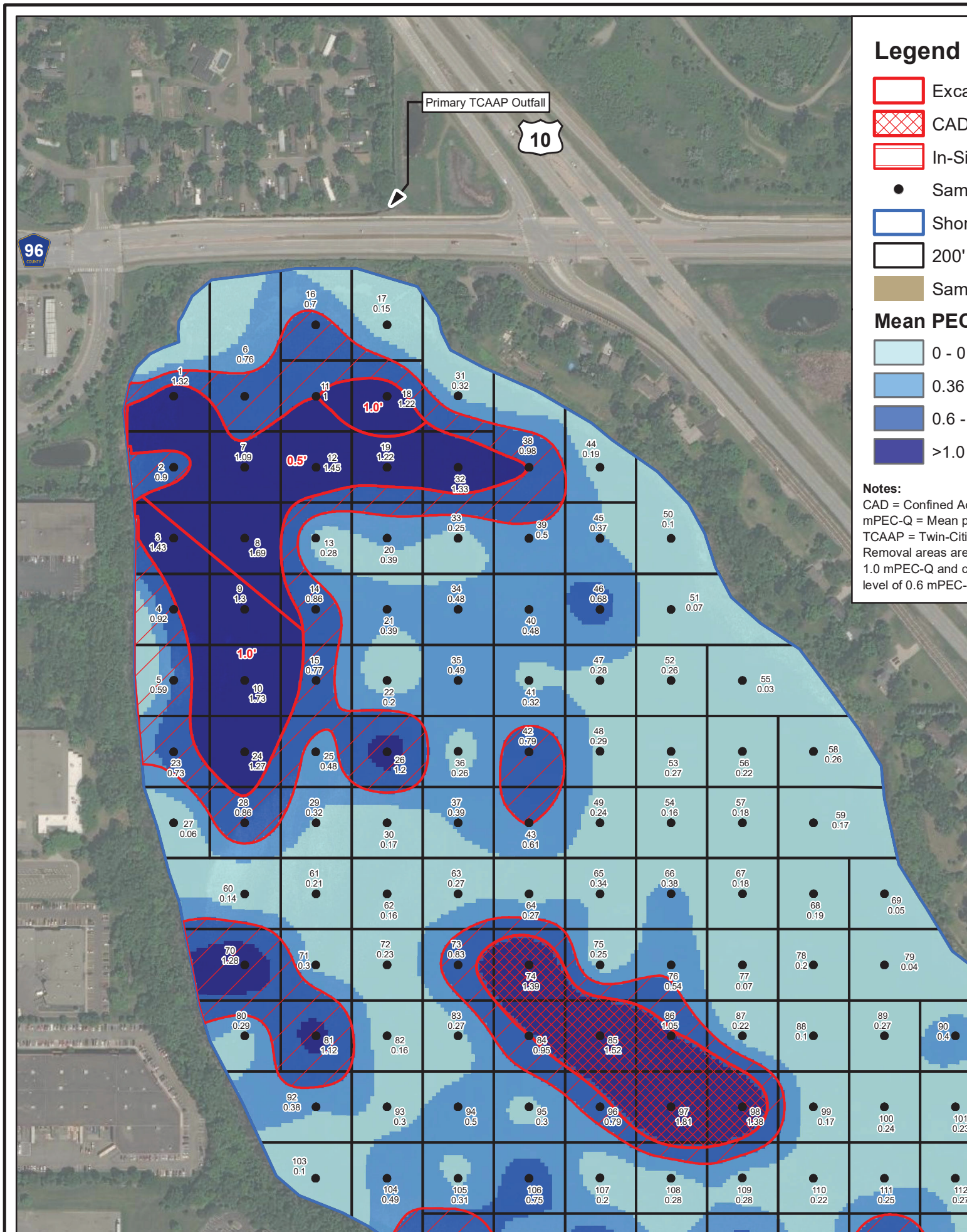
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Table

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Table 1. Cost Estimates for Alternatives

ternative	**Capital Cost**	**Lone-Term Operating Cost (30-year, New Present Worth)**	**Contingency**	**Total Cost**
	$0	$0	$0	**$0**
Recovery	$75,000	$362,000	$109,000	**$500,000**
ed Natural Recovery	$2,035,000	$362,000	$599,000	**$3,000,000**
ing, and Disposal Offsite	$18,840,000	$0	$4,710,000	**$23,600,000**
ing, and Disposal at TCAAP	$15,034,000	$500,000	$3,884,000	**$19,400,000**
	$10,500,000	$522,000	$2,756,000	**$13,800,000**
ing, and Disposal Offsite of tu Cover of Remaining e Selected Target Level	$15,928,000	$452,000	$4,095,000	**$20,500,000**
ing, and Disposal of Sediment Situ Cover of Remaining e Selected Target Level	$14,275,000	$1,072,000	$3,837,000	**$19,200,000**
-shore CAD of Sediment	$10,110,000	$512,000	$2,656,000	**$13,300,000**
Water CAD of Sediment	$9,120,000	$512,000	$2,408,000	**$12,000,000**
Water CAD of Sediment and In-Situ Cover	$8,620,000	$512,000	$2,283,000	**$11,400,000**

disposal
rmy Ammunition Plant

Attachment A

Administrative Record Index

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PROPOSED ROUND LAKE ADMINISTRATIVE RECORD

Date	Document
April 23, 1974	Transfer and Acceptance of Military Real Property Area H from Army to USFWS
December 24, 1974	TCAAP Quit Claim Deed for Round Lake
August 1, 1982	U.S Fish and Wildlife Service (USFWS), A Proposal for Management of the Round Lake Unit, Minnesota Valley National Wildlife Refuge, prepared by USFWS (August 1982).
April 1, 1991	PRC Environmental Management (PRC). 1991. Final Report Human Health Risk Assessment New Brighton/Arden Hills Superfund Site including Twin Cities Army Ammunition Plant, Ramsey County, Minnesota, Volume I, Work Assignment No. 04-5140, ARCS Contract 68-W8-0084. Remedial Planning Activities at Selected Uncontrolled Hazardous Waste Sites – Region V, U.S. Environmental Protection Agency Region V, Waste Management Division. April .
April 1, 1991	USAEHA. 1991. Ecological Assessment of Twin Cities Army Ammunitions Plant (TCAAP), New Brighton, Minnesota, February 1990 – April 1991 .
October 18, 1996	Department of the Army, Memorandum for T. Barounis (USEPA), D. Romano (MPCA), S. Hennes (MPCA), M. Ferrey (MPCA), P. Rissell (USAEC), M. McAtee (USACHPPM), J. Persoon (GES), and D. Warburton (USFWS), Review Meeting Minutes on the Tier I Screening Risk Assessment of Aquatic Ecosystems.
December 23, 1996	Department of the Army, Memorandum to T. Barounis (USEPA), D. Romano (MPCA), D. Warburton (USFWS), and J. Persoon (ATK), Minutes on the Tier I Screening Risk Assessment of Aquatic Ecosystems Update conference call held December 17, 1996.
October 24, 1997	Department of the Army, Letter to D. Romano (MPCA), T. Barounis (USEPA), D. Warburton (USFWS), and T. Balcom (MDNR), Responses to comments on the Final Draft Tier I Screening Risk Assessment of Aquatic Ecosystems, prepared by USACHPPM (June 1997).
November 4, 1997	Minnesota Pollution Control Agency (MPCA), Letter to M. McCleery (TCAAP), Consistency Test for the Tier I Screening Risk Assessment of Aquatic Ecosystems, October 1992 – July 1993, prepared by USACHPPM (27 October 1997).
November 12, 1997	United States Environmental Protection Agency (USEPA), Region 5, Letter to M. McCleery (TCAAP), Consistency Test for the Tier I Screening Risk Assessment of Aquatic Ecosystems, October 1992 – July 1993, prepared by USACHPPM (27 October 1997).

PROPOSED ROUND LAKE ADMINISTRATIVE RECORD

November 14, 1997	Department of the Army, Memorandum to T. Barounis (USEPA), D. Romano (MPCA), D. Warburton (USFWS), T. Balcom (MDNR), E. Barrett (RAB), M. Smyre (RAB), R. Goetzke (IOC), P. Rissell (USAEC), J. Hodges (USACE), R. Rockney (ATK), J. Persoon (ATK), D. Gosen (ATK), and M. McCleery (TCAAP), Distribution of Final Tier I Screening Risk Assessment of Aquatic Ecosystems, October 1992 – July 1993, prepared by USACHPPM (27 October 1997).
March 6, 1998	USACHPPM. 1998. Bioavailability of Sediment Metals in Round and Sunfish Lakes No. 39-EJ-1412-07, Preliminary Study, Tier II Ecological Risk Assessment, Twin Cities Army Ammunition Plan, Arden Hills, Minnesota. March 6 .
March 24, 1998	Department of the Army, Memorandum to D. Romano (MPCA), T. Barounis (USEPA), D. Warburton (USFWS), and R. Schultz (USFWS), Meeting Minutes from the March 4, 1998 Comment Resolution Meeting for Draft Bioavailability of Sediment Metals in Round and Sunfish Lakes, Preliminary Study, Tier II Ecological Risk Assessment, prepared by USACHPPM (October 1997) and Scoping Meeting for the Tier II Studies.
April 30, 1998	Department of the Army, Letter to D. Romano (MPCA), T. Barounis (USEPA), and R. Schultz (USFWS), Responses to Comments on the Draft Appendix E of Part 2 of the Tier II Ecological Risk Assessment Work Plan, prepared by USACHPPM (March 1998).
May 5, 1998	Minnesota Pollution Control Agency (MPCA), Letter to M. McCleery (TCAAP), Consistency Test for the Final Report, Bioavailability of Sediment Metals in Round and Sunfish Lakes, Preliminary Study, Tier II Ecological Risk Assessment, prepared by USACHPPM (March 6, 1998).
May 6, 1998	Department of the Army, Memorandum to D. Romano (MPCA) and T. Barounis (USEPA), Distribution of May 5, 1998, Consistency Determination Letter.
May 12, 1998	Department of the Army, Letter to D. Romano (MPCA), T. Barounis (USEPA), D. Warburton (USFWS), and R. Schultz (USFWS), Meeting Minutes from the May 5, 1998 Comment Resolution Meeting for Draft Appendix E of Part 2 of the Tier II Ecological Risk Assessment Work Plan, prepared by USACHPPM (March 1998).
June 2, 1998	United States Environmental Protection Agency (USEPA), Region 5, Letter to M. McCleery (TCAAP), in coordination with MPCA provided Consistency Test for the Sediment Toxicity Evaluation of Round Lake, Preliminary Study, Tier II Ecological Risk Assessment, prepared by USACHPPM (June 1, 1998).
July 7, 1998	Department of the Army, Letter to D. Romano (MPCA), T. Barounis (USEPA), Distribution of Final Sediment Toxicity Evaluation of Round Lake, Preliminary Study, Tier II Ecological Risk Assessment, prepared by USACHPPM (June 1, 1998).

PROPOSED ROUND LAKE ADMINISTRATIVE RECORD

April 14, 1999	Department of the Army, Memorandum to D. Warburton (USFWS), R. Schulz (USFWS), D. Romano (MPCA), T. Barounis (USEPA), J. Persoon (ATK), and D. Gosen (ATK), Comments Resolution Meeting Minutes for the Tier II Ecological Risk Assessment Work Plan, prepared by USACHPPM (August 1998).
January 12, 2000	U.S Fish and Wildlife Service (USFWS), Letter to M. McAtee (USACHPPM), providing a Water Level Management Plan for the Round Lake Unit and a March 2, 1998 Round Lake Unit Management Plan Update (Amendment to 1982 Original Plan).
January 1, 2002	USEPA (U.S. Environmental Protection Agency). 2002. Cadmium, Copper, Lead, Nickel, Silver, and Zinc: Proposed Sediment Guideline for the Protection of Benthic Organisms Technical Basis and Implementation, USEPA Office of Science and Technology and Office of Research and Development, EPA 701-R-02-001.
August 1, 2002	Wenning, R. J., G.E. Batley, C. G. Ingersoll, and D. W. Moore. 2005. Use of Sediment Quality Guidelines and Related Tools for the Assessment of Contaminated Sediments. Society of Environmental Toxicology and Chemistry (SETAC). Proceedings from the Pellston Workshop on Use of Sediment Quality Guidelines and Related Tools for the Assessment of Contaminated Sediments, August 2002 .
September 4, 2003	Meeting Record, Scoping Meeting for Risk Management Strategy Related to Ecological Risk at Waterbodies On and Near TCAAP.
January 1, 2004	USFWS (U.S. Fish and Wildlife Service). 2004. Comprehensive conservation plan and environmental assessment for Minnesota Valley National Wildlife Refuge and Wetland Management District. USFWS, Region 3, Fort Snelling, MN. 284p.
October 18, 2004	Wenck Associates, Inc., E-mail to D. Romano (MPCA), M. Ferry (MPCA), S. Hennes (MPCA), T. Barounis (USEPA), D. Hamernick (USANG), P. Rissell (USAEC), M. Fix (TCAAP), D. Fuller (TCAAP), and L. Gaizick (USACHPPM), Revised Summary of Meeting on September 8, 2004, regarding Tier II Ecological Risk Assessment and Ecological Feasibility Study.
November 24, 2004	Minnesota Pollution Control Agency (MPCA), Letter to M. Fix (TCAAP), in cooridnation with USEPA provides Consistency Test for the Tier II Ecological Risk Assessment Report, Volumes I and II, prepared by USACHPPM (December 2004).
December 3, 2004	U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM), Memorandum to M. Fix (TCAAP), Final Tier II Ecological Risk Assessment Report, Volumes I and II, prepared by USACHPPM (December 2004).

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October 17, 2005	Department of the Army, Letter to D. Romano (MPCA) and T. Barounis (USEPA), Responses to Comments on the Feasibility Study for Aquatic Sites, prepared by Tecumseh/Wenck Installation Support Services (June 2005).
December 1, 2005	USEPA. 2005. Contaminated Sediment Remediation Guidance for Hazardous Waste Sites. EPA-540-R-05-012, Office of Solid Waste and Emergency Response 9355.0-85. December.
December 8, 2005	Wenck Associates, Inc. (Wenck), E-mail to D. Romano (MPCA), M. Ferrey (MPCA), S. Hennes (MPCA), S. Colvin (MDNR), T. Schreiner (USFWS), P. Rissell (USAEC), M. Fix (TCAAP), and D. Fuller (TCAAP), Revised Meeting Record for October 27, 2005 Comment Resolution Meeting, Draft Feasibility Study for Aquatic Sites, prepared by Tecumseh/Wenck Installation Support Services (June 2005).
February 1, 2007	MPCA. 2007. Guidance For The Use And Application Of Sediment Quality Targets For The Protection Of Sediment-Dwelling Organisms in Minnesota, MPCA Document Number: tdr-gl-04, February 2007.
June 13, 2007	Wenck Associates, Inc. (Wenck), E-mail to T. Barounis (USEPA), E. Gawrys (MPCA), M. Fix (TCAAP), D. Romano (MPCA), J. Thene (Wenck), and J. Bischoff (Wenck), regarding agreement to convene a Round Lake Feasibility Study Working Group.
July 24, 2007	Wenck Associates, Inc. (Wenck), E-mail to T. Barounis (USEPA), E. Gawrys (MPCA), S. Hennes (MPCA), M. Ferrey (MPCA), J. Thene (Wenck), and J. Bischoff (Wenck), Revised Meeting Record for June 28, 2007 Round Lake Feasibility Study Working Group.
September 20, 2007	Wenck Associates, Inc. (Wenck), E-mail to T. Barounis (USEPA), K. Benker (Wenck), E. Gawrys (MPCA), J. Bischoff (Wenck), M. Ferrey (MPCA), S. Hennes (MPCA), and D. Warburton (USFWS), Providing Technical Memoranda to the Round Lake Technical Working Group regarding 1) the potential for drought conditions in Round Lake; and 2) the revised conceptual site model for Round Lake.
November 2, 2007	Wenck Associates, Inc. (Wenck), E-mail to K. Benker (Wenck), E. Gawrys (MPCA), S. Hennes (MPCA), T. Barounis (USEPA), M. Ferrey (MPCA), J. Bischoff (Wenck), and J. Madejczyk (Wenck), Providing Technical Memorandum to the Round Lake Technical Working Group regarding the work plan for sediment investigations to determine feasibility of MNR in Round Lake.
November 2, 2007	Wenck Associates, Inc. (Wenck), E-mail to J. Thene (Wenck), K. Benker (Wenck), E. Gawrys (MPCA), S. Hennes (MPCA), T. Barounis (USEPA), M. Ferrey (MPCA), and J. Bischoff (Wenck), Providing Technical Memorandum to the Round Lake Technical Working Group regarding the literature review of the potential effects of water level fluctuations on the toxicity and bioavailability of metals in the sediments of Round Lake.

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February 14, 2008	Wenck Associates, Inc. (Wenck), E-mail to D. Warburton (USFWS), T. Barounis (USEPA), E. Gawrys (MPCA), J. Bischoff (Wenck), J. Madejczyk (Wenck), M. Ferrey (MPCA), and S. Hennes (MPCA), Providing Technical Memorandum to the Round Lake Technical Working Group regarding Round Lake RAO measurement "matrix table" update.
March 6, 2008	Wenck Associates, Inc. (Wenck), E-mail to T. Barounis (USEPA), E. Gawrys (MPCA), S. Hennes (MPCA), M. Ferrey (MPCA), D. Warburton (USFWS), J. Bischoff (Wenck), and J Madejczyk (Wenck), Meeting Records for August 22, 2007; October 4, 2007; November 20, 2007; January 8, 2008; and March 4, 2008 Round Lake Feasibility Study Working Group meetings.
March 10, 2008	U.S. Fish and Wildlife Service (USFWS), E-mail to T. Barounis (USEPA), D. Romano (MPCA), E. Gawrys (MPCA), J. Bischoff (Wenck), J Madejczyk (Wenck), M. Ferrey (MPCA), and S. Hennes (MPCA), Comments to Meeting Record for March 4, 2008 Round Lake Feasibility Study Working Group.
May 1, 2008	Wenck Associates, Inc. (Wenck), E-mail to T. Barounis (USEPA), D. Romano (MPCA), E. Gawrys (MPCA), S. Hennes (MPCA), M. Ferrey (MPCA), D. Warburton (USFWS), M. Fix (TCAAP), and J. Bischoff (Wenck), Meeting Record for April 8, 2008 Round Lake Feasibility Study Working Group.
April 27, 2009	Minnesota Pollution Control Agency (MPCA), Letter to C. Blair (MN Valley National Wildlife Refuge), Regarding Clarification of MPCA Role in Remedy Selection.
June 2, 2009	Department of the Army, Letter to D. Romano (MPCA) and T. Barounis (USEPA), Responses to Comments on the Revised Draft Feasibility Study for Aquatic Sites, prepared by Wenck (January 2009).
September 29, 2009	Department of the Army, E-mail to D. Romano (MPCA), Clarifications regarding the Army's approach to revising the Draft Feasibility Study for Aquatic Sites, prepared by Wenck (January 2009).
October 18, 2009	Minnesota Attorney General's Office, E-mail to A. Williams (State of MN), D. Romano (MPCA), D. deAlwis (MPCA), T. Barounis (USEPA), T. Thurlow (USEPA), M. Fix (TCAAP), and J. Stuhltrager (USAEC), Meeting Minutes from September 3, 2009 Aquatic Feasibility Study Meeting.
November 9, 2009	Wenck Associates, Inc., E-mail to D. Hamernick (MNANG), M. Lee (MNANG), C. Netten (MAG), M. Danks (MDNR), M. Doperalski (MPCA), A Hadiaris (MPCA), D. Romano (MPCA), D. deAlwis (MPCA), S Hennes (MPCA), L. Salmela (RAB), P Bloom (RAB), J. Stuhltrager (USAEC), J. Bischoff (Wenck), M. Fix (TCAAP), P. Rissell (USAEC), T. Thurlow (USEPA), T. Barounis (USEPA), C. Blair (USFWS), G. Shimek (USFWS), and D. Warburton (USFWS), Meeting Minutes from October 29, 2009 Comment Resolution Meeting on the Revised Draft Feasibility Study for Aquatic Sites, prepared by Wenck (January 2009).

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December 11, 2009	United States Environmental Protection Agency (USEPA), Region 5, Letter to M. Fix (TCAAP), Follow-up to November 30, 2009 Conference Call regarding the PRG to be used for revising the Draft Feasibility Study for Aquatic Sites, prepared by Wenck (January 2009).
January 26, 2010	Department of the Army, E-mail to T. Barounis (USEPA), Response to December 11, 2009 USEPA Letter re: use of 0.1 as the mean PEC-Q as the remediation goal.
August 31, 2010	Wenck Associates, Inc., E-mail to D. Romano (MPCA), T. Barounis (USEPA), D. deAlwis (MPCA), A. Hadiaris (MPCA), S. Hennes (MPCA), R. Wieland (MDNR), C. Blair (USFWS), G. Shimek (USFWS), D. Warburton (USFWS), L. Salmela (RAB), and P. Bloom (RAB), Revised Meeting Minutes for the August 11, 2010, Meeting in which it was agreed to split Rice Creek, Sunfish Lake, Marsden Lake, and Pong G into a separate Feasibility Study (excluding Round Lake).
February 18, 2011	Wenck Associates, Inc., E-mail to T. Barounis (USEPA) and D. deAlwis (MPCA), Regarding Initial Data Receipt, Reporting Limits, and Calculation of Mean PEC-Q Values, Round Lake Sediment Investigation.
March 7, 2011	Wenck Associates, Inc., E-mail to T. Barounis (USEPA) and D. deAlwis (MPCA), Revised Meeting Minutes for the February 24, 2011 Conference Call regarding Reporting Limits and Calculation of Mean PEC-Q Values, Round Lake Sediment Investigation.
May 6, 2011	Wenck Associates, Inc., Memorandum to D. deAlwis (MPCA), T. Barounis (USEPA), P. Bloom (RAB), L. Salmela (RAB), D. Warburton (USFWS), and R. Wieland (MDNR), Draft Summary of Investigation Findings, Round Lake Sediment Investigation, prepared by Wenck (May 6, 2011).
May 31, 2011	Wenck Associates, Inc., E-mail to T. Barounis (USEPA), D. deAlwis (MPCA), P. Bloom (RAB), L. Salmela (RAB), D. Warburton (USFWS), and R. Wieland (MDNR), Submittal of Toxicity Testing Report for Round Lake Sediment Samples, prepared by Environmental Consulting and Testing, Inc. May 2011.
February 2, 2012	Department of the Army, E-mail to J. Bard (USAEC), D. Warburton (USFWS), T. Barounis (USEPA), D. deAlwis (MPCA) and R. Wieland (MDNR), Submittal of February 28, 2012 Round Lake Feasibility Study Investigation Meeting Agenda, Round Lake Core Report (Core Dating Results), and February 2, 2012 Wenck Memorandum on Round Lake Core Dating Results.
March 9, 2012	Wenck Associates, Inc., E-mail to T. Barounis (USEPA) and D. deAlwis (MPCA), Responses to Comments on the Revised "Redlined" Draft Feasibility Study for Aquatic Sites, prepared by Wenck (April 2010).
March 9, 2012	Wenck Associates, Inc., E-mail to T. Barounis (USEPA) and D. deAlwis (MPCA), Memorandum regarding Comparison of Old (1992) and New (2011) Metals/PCB Data for Sediment in Round Lake.

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March 9, 2012	Wenck Associates, Inc., E-mail to T. Barounis (USEPA) and D. deAlwis (MPCA), Memorandum regarding MPCA/USEPA-Proposed PRGs for Round Lake.
March 19, 2012	U.S. Fish and Wildlife Service (USFWS), E-mail to D. deAlwis (MPCA), T. Barounis (USEPA), M. Fix (TCAAP), D. Warburton (USFWS), K. Benker (Wenck), L. Salmela (RAB), M. Bowers (Wenck), M. Bares (MPCA), P. Bloom (RAB), S. Hennes (MPCA), M. Shodeen (MDNR), J. Bard (USAEC), R. Wieland (MDNR), M. Danks (MDNR), and J. Holler (USFWS), providing Round Lake Conceptual Management Plan for the Round Lake Unit, February 28, 2012 (Draft) and excerpts from the 2012 Water Management Plan, Minnesota Valley National Wildlife Refuge, March 20, 2012 (Draft).
April 9, 2012	Wenck Associates, Inc., E-mail to T. Barounis (USEPA) and D. deAlwis (MPCA), Meeting Record for the February 28, 2012 meeting regarding Data Evaluation and Next Steps, Round Lake Sediment Investigation.
April 9, 2012	Minnesota Department of Natural Resources (MDNR), Letter to M. Fix (TCAAP), DNR Permit Requirements for Remediation of Round Lake.
April 19, 2012	Wenck Associates, Inc., E-mail to T. Barounis (USEPA) and D. deAlwis (MPCA), M. Fix (TCAAP), J. Bard (USAEC), D. Warburton (USFWS), R. Wieland (MDNR), P. Bloom (RAB), L. Salmela (RAB) and K. Benker (Wenck), Meeting Record for the April 12, 2012 Comment Resolution Meeting for the Revised "Redlined" Draft Feasibility Study for Aquatic Sites, prepared by Wenck (April 2010).
May 8, 2012	United States Environmental Protection Agency (USEPA), Region 5, E-mail to M. Fix (TCAAP), Existing Fish Contaminant Sampling Data and Potential New MDNR Fish Contaminant Sampling in Round Lake.
June 19, 2012	United States Environmental Protection Agency (USEPA), Region 5, E-mail to M. Fix (TCAAP), USEPA approval of Army's suggested approach to completion of the Round Lake Feasibility Study; and the USEPA position on consideration of short-term risks during implementation of a remedy.
October 15, 2012	United States Environmental Protection Agency (USEPA), Region 5, E-mail to M. Fix (TCAAP), Clarification of USEPA Position on Risk to Other Ecological Endpoints in Round Lake.
October 15, 2012	Minnesota Pollution Control Agency (MPCA), E-mail to T. Barounis (USEPA) and M. Fix (TCAAP), Clarification of MPCA Position on Risk to Other Ecological Endpoints in Round Lake.
October 30, 2012	Department of the Army, Letter to D. deAlwis (MPCA) and T. Barounis (USEPA), Response to October 15, 2012 E-mails Clarifying USEPA and MPCA Positions on Risk to Other Ecological Endpoints in Round Lake.

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November 21, 2012	United States Environmental Protection Agency (USEPA), Region 5, Letter to M. Fix (TCAAP), Response to October 30, 2012 Army Letter regarding Round Lake Ecological Risk.
April 18, 2013	Minnesota Pollution Control Agency (MPCA), E-mail to M. Fix (TCAAP) and T. Barounis (USEPA), Providing Results from 2012 MDNR Fish Contaminant Sampling in Round Lake.
June 19, 2013	Department of the Army, E-mail to T. Barounis (USEPA) and D. deAlwis (MPCA), Round Lake Feasibility Study Status and Army's use of Oak Ridge National Laboratory to provide an independent ecological risk evaluation.
August 6, 2013	U.S. Fish and Wildlife Service, Minnesota Valley National Wildlife Refuge, Round Lake Conceptual Management Plan, Round Lake Unit (Arden Hills, Minnesota).
October 1, 2013	Oak Ridge National Laboratory, Supplemental Ecological Risk Assessment and Regulatory Framework for CERCLA Activities at Round Lake – October 2013
December 20, 2013	United States Environmental Protection Agency (USEPA), Region 5, Letter to M. Fix (TCAAP), Regarding USEPA Review of the Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake, prepared by Wenck (November 2013). Request for extension of review time.
March 6, 2014	Department of the Interior, Fish and Wildlife Service, Letter to T. Barounis (USEPA) and A. Hadiaris (MPCA), comments on the Supplemental Remedial Investigation and Feasibility Study for Round Lake (November 2013) documenting concerns identified in numerous reviews of drafts of the Feasibility Study produced since 2005.
April 28, 2014	Department of the Army, Letter to T. Barounis (USEPA) and A. Hadiaris (MPCA), Army's Initiation of a Dispute under the Federal Facility Agreement regarding the USEPA and MPCA determination not to provide Consistency Approval of the Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake, prepared by Wenck (November 2013); and Army's intention to try to resolve the dispute informally.
April 30, 2014	United States Environmental Protection Agency (USEPA), Region 5, Letter to W. O'Donnell II (Army), Response to Army April 28, 2014 letter indicating USEPA and MPCA agreement to attempt to resolve the dispute informally.
June 30, 2014	Department of the Army, E-mail to T. Barounis (USEPA) and A. Hadiaris (MPCA), Meeting Record for June 4-5, 2014 Round Lake Informal Dispute Resolution Meeting; and Questions for USEPA Risk Assessor(s), Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (November 2013).

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October 10, 2014	United States Environmental Protection Agency (USEPA), Region 5, Letter to J. Bard (USAEC & Interim TCAAP PM), Response to Army June 30, 2014 letter regarding questions for USEPA Risk Assessor(s).
November 25, 2014	Department of the Army, Letter to T. Barounis (USEPA), Response to USEPA October 10, 2014 letter and follow-up questions for USEPA Risk Assessor(s).
January 14, 2015	Department of the Army, Letter to T. Barounis (USEPA) and A. Hadiaris (MPCA), Meeting Record for the December 9, 2014 Round Lake Informal Dispute Meeting, Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (November 2013).
January 26, 2015	United States Environmental Protection Agency (USEPA), Region 5, Letter to M. Fix (TCAAP), Response to Army November 25, 2014 regarding follow-up questions for USEPA Risk Assessor(s).
May 27, 2015	Department of the Army, Letter to T. Barounis (USEPA) and A. Hadiaris (MPCA), Round Lake: Update for Working Group (May 27, 2015); and Responses to Comments on the Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake, prepared by Wenck (November 2013).
October 2, 2015	United States Environmental Protection Agency (USEPA), Region 5, Letter to M. Fix (TCAAP) and A. Hadiaris (MPCA), Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake, Extension of Dispute Resolution Period, October 2, 2015.
October 8, 2015	Department of the Army, E-mail to A. Hadiaris (MPCA) and T. Barounis (USEPA), Meeting Record for June 3-4, 2015 Round Lake Working Group Meeting, Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (November 2013).
October 15, 2015	Department of the Army, E-mail to A. Hadiaris (MPCA) and T. Barounis (USEPA), Round Lake Weight of Evidence Analysis and Suggested RAO and PRG (October 12, 2015), Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (November 2013).
October 16, 2015	Minnesota Pollution Control Agency (MPCA), E-mail to M. Fix (TCAAP) and T. Barounis (USEPA), MPCA Evaluation of Round Lake Toxicity Data.
January 1, 2016	USEPA. 2016. Weight of Evidence in Ecological Assessment. EPA/100/R-16/001, Office of Solid Waste and Emergency Response.
February 3, 2016	Department of the Army, Letter to T. Barounis (USEPA), Proposed Resolution of Dispute regarding the Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (November 2013).

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February 19, 2016	Minnesota Pollution Control Agency (MPCA), Letter to T. Barounis (USEPA), MPCA Response to Army's Proposed Resolution of Dispute regarding the Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (November 2013).
April 15, 2016	United States Environmental Protection Agency (USEPA), Region 5, Letter to M. Fix (TCAAP), USEPA Response to Army's Proposed Resolution of Dispute regarding the Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (November 2013).
August 24, 2016	Minnesota Pollution Control Agency (MPCA), Letter to J. Tanaka (USEPA), Response to Army's June 22, 2016 Proposed Path Forward, MPCA requests the Army to expand the footprint considered in the Feasibility Study.
August 25, 2016	United States Environmental Protection Agency (USEPA), Region 5, Letter to M. Fix (TCAAP), Response to Army's June 22, 2016 Proposed Path Forward; and USEPA request that the Army prepare a revised Supplemental Remedial Investigation and Feasibility Study for Round Lake that will consider a range of clean-up levels for each remedial alternative.
October 14, 2016	Department of the Army, Letter to T. Barounis (USEPA), documenting the agreement to end the informal dispute under the Federal Facility Agreement; and Army's agreement with the USEPA request that the Army prepare a revised Supplemental Remedial Investigation and Feasibility Study for Round Lake.
January 9, 2017	USEPA. 2017. Memorandum: Remediating Contaminated Sediment Sites – Clarification of Several Key Remedial Investigation/Feasibility Study and Risk Management Recommendations, and Updated Contaminated Sediment Technical Advisory Group Operating Procedures. OLEM Directive 9200.1-130. January 9.
August 8, 2018	Minnesota Pollution Control Agency (MPCA), Letter to N. Smith (TCAAP/USAEC), Request to include an additional scenario for confined aquatic disposal for contaminated sediment in the Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake, prepared by Oak Ridge National Laboratory and Wenck (May 2017).
August 27, 2019	Letter from K. Gilmore (Department of the Interior, Office of the Solicitor) to R. Reine (U.S. Army), Regarding Applicable or Relevant and Appropriate Requirements at Round Lake.
September 25, 2019	Arcadis, U.S. on behalf of the Department of the Army, E-mail to T. Barounis (USEPA) and A. Hadiaris (MPCA), Draft Meeting Record for September 25, 2019 Round Lake meeting to discuss Applicable or Relevant and Appropriate Requirements (ARARs) for use in the Feasibility Study and the U.S. Army's responses to comments to the revised Draft Supplemental Remedial Investigation and Feasibility Study for Round Lake (September 2018).

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October 4, 2019	E-mail from K. Gilmore (Department of the Interior, Office of the Solicitor) to G. Shimek (FWS), A. Hadiaris (MPCA), T. Barounis (USEPA), L. Albrecht (TCAAP/USAEC), Regarding Applicable or Relevant and Appropriate Requirements (ARARs) and materials To Be Considered (TBCs) at the Round Lake site.
January 30, 2020	Letter from B. McCollum (U.S. House of Representatives) to A. Beehler (Army) requesting the inclusion of the Refuge Act as an Applicable or Relevant and Appropriate Requirement (ARAR) in the Feasibility Study.
February 25, 2020	Arcadis, U.S. E-mail to L. Albrecht (TCAAP/USAEC), Meeting Record for February 25, 2020 Round Lake meeting to discuss Applicable or Relevant and Appropriate Requirements (ARARs) for use in the Feasibility Study and comments by the USEPA, MPCA and US Fish and Wildlife Service (USFWS) to the Feasibility Study, Draft-Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (December 2019).
August 24, 2020	United States Environmental Protection Agency (USEPA), Letter to L. Albrecht (TCAAP/USAEC), The USEPA accepts the Final Supplemental Remedial Investigation and Feasibility Study (SRI-FS, August 2020), and the SRI-FS passes the Consistency Test.
August 31, 2020	Memo from E. Hoaglund (MDNR) to L. Albrecht (TCAAP/USAEC) regarding Report of listed species habitat assessment of Round Lake and shoreline, part of the Round Lake Remediation Planning Site Visit Report.
October 14, 2020	U.S. Army (USAEC), Letter to T. Barounis (US EPA) and B. Hay (MCPA) requesting a 60-day extension for the Feasibility Study.
October 16, 2020	Minnesota Pollution Control Agency (MPCA), Letter to L. Albrecht (TCAAP/USAEC), Approval of U.S. Army request for extension of schedule for Round Lake Feasibility Study.
October 19, 2020	United States Environmental Protection Agency (USEPA), Letter to L. Albrecht (TCAAP/USAEC), Approval of U.S. Army request for extension of schedule for Round Lake Feasibility Study.
October 26, 2020	Arcadis, U.S. on behalf of the Department of the Army, E-mail to T. Barounis (USEPA) and B. Hay (MPCA), Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (August 2020).
October 28, 2020	Minnesota Pollution Control Agency (MPCA), Letter to L. Albrecht (TCAAP/USAEC), The MPCA accepts the criteria used in the Final Supplemental Remedial Investigation and Feasibility Study (SRI-FS, August 2020), and the SRI-FS passes the Consistency Test.

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December 14, 2020	U.S. Army (USAEC), Letter to T. Barounis (US EPA) and B. Hay (MCPA) requesting a 45-day extension to address the concerns raised in the U.S. Fish and Wildlife Service (FWS) additional comments dated November, 23, 2020, in a response to comments and to finalize the Supplemental Remedial Investigations and Feasibility Study for Round Lake (SRI-FS for Round Lake).
December 15, 2020	United States Environmental Protection Agency (USEPA), Letter to L. Albrecht (TCAAP/USAEC), The USEPA approves the 45-day extension to address the concerns raised in the U.S. Fish and Wildlife Service (FWS) additional comments dated November, 23, 2020, in a response to comments and to finalize the Supplemental Remedial Investigations and Feasibility Study for Round Lake (SRI-FS for Round Lake).
December 15, 2020	Minnesota Pollution Control Agency (MPCA), Letter to L. Albrecht (TCAAP/USAEC), The MPCA approves the 45-day extension for Army to address the concerns raised in the U.S. Fish and Wildlife Service (FWS) additional comments dated November, 23, 2020, in a response to comments and to finalize the Supplemental Remedial Investigations and Feasibility Study for Round Lake (SRI-FS for Round Lake).
January 29, 2021	Arcadis, U.S. on behalf of the Department of the Army, E-mail to T. Barounis (USEPA) and B. Hay (MPCA), Final Supplemental Remedial Investigation and Feasibility Study for Round Lake (August 2020), which was revised in response to comments from USFWS received on November 23, 2020.
March 12, 2021	United States Environmental Protection Agency (USEPA), Letter to L. Albrecht (TCAAP/USAEC), Approval of Final Supplemental Remedial Investigation and Feasibility Study for Round Lake, New Brighton/Arden Hills Superfund Site, Arden Hills, Minnesota, January 2021 (Final SRI-FS).
March 15, 2021	Minnesota Pollution Control Agency (MPCA), Letter to L. Albrecht (TCAAP/USAEC), The MPCA accepts the criteria used in the Final Supplemental Remedial Investigations and Feasibility Study for Round Lake, New Brighton/Arden Hills Superfund Site, Arden Hills, Minnesota (Final SRI-FS) dated January 27, 2021, and the SRI-FS passes the Consistency Test.
March 23, 2021	Arcadis, U.S. on behalf of the Department of the Army, transmission to S. Selbo (USFWS) and M. Collins (MDNR) through the DoD SAFE system, Final Supplemental Remedial Investigation and Feasibility Study for Round Lake, Cover Letter, Appendices A through I, Comment Table, FFA Consistency Approval, and MCPA Consistency Approval.
July 7, 2021	Arcadis, E-mail to V. Patel (USEPA) and B. Hay (MPCA) to submit the Final Proposed Plan for Round Lake.

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July 7, 2021	United States Environmental Protection Agency (USEPA), Letter to L. Albrecht (TCAAP/USAEC), The USEPA), in consultation with the Minnesota Pollution Control Agency (MPCA), has completed a review of the Proposed Plan, submitted July 7, 2021, for TCAAP-31 Round Lake, prepared for the New Brighton/Arden Hills/TCAAP NPL Site, in Arden Hills, Minnesota and determines that the Proposed Plan passes the Consistency Test.
August 1, 2021	MDNR, letter from K. Smith to L. Albrecht (TCAAP/USAEC).
August 3, 2021	MPCA , E-mail to V. Patel (USEPA) noting submittal of comments related to the remediation plan for Round Lake.
August 12, 2021	Forrest Kelley (RAB Co-Chair), letter to L. Albrecht (TCAAP/USAEC) regarding review of the Proposed Plan and support for Alternative 4.
August 12, 2021	MPCA, letter to L. Albrecht (transmitted via E-mail) providing comments on the Proposed Plan.
October 22, 2021	U.S. Army (USAEC), E-mail to M. Churchich (Ramsey County), F. Kelley (CRWD), K. Grant (MPCA), M. Collins (MDNR), M. Kocian (Rice Creek), V. Patel (USEPA), D. Perrault (Arden Hills), S. Selbo (USFWS), Draft Meeting Record for September 23, 2021 Round Lake Technical Working Group meeting.
December 11, 2021	U.S. Army (USAEC), Email to J. Nguyen (MDNR), M. Collins (MDNR), J. Gleason (MDNR), B. Hay (MPCA), C. Netten (MCPA), and V. Patel (USEPA) providing a finalized list of ARARs for MDNR for Round Lake.
April 4, 2022	USFWS, letter with attachments to L. Albrecht (TCAAP/USAEC) and V. Patel (USEPA) (submitted via E-mail) providing comments on the Draft Record of Decision.
May 27, 2022	EA Engineering, Science, and Technology, Inc. (EA), E-mail to V. Patel (USEPA), B. Hay (MPCA), and S. Selbo (USFWS) to submit Response-to-Comments on the Draft Final ROD for Round Lake, including responses as discussed during the Round Lake Technical Working Group Meeting held on May 2, 2022.
June 10, 2022	USFWS, letter to L. Albrecht (TCAAP/USAEC) and V. Patel (USEPA) (submitted via E-mail) providing comments on the Draft Final Record of Decision.
July 26, 2022	MPCA, letter to L. Albrecht (transmitted via E-mail) providing State Letter of Concurrence with the Chosen Alternative.
August 3, 2022	U.S. Army, letter to USFWS (S. Selbo) providing response to USFWS comments on Draft Final Record of Decision.

Attachment B

Public Meeting Minutes and Transcript

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RAB and Public Meeting Minutes

20 July 2021

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Former Twin Cities Army Ammunition Plant (TCAAP)
Combined Restoration Advisory Board Meeting and Public Meeting
Conducted Virtually using Microsoft Teams
July 20, 2021

Time/Place: 7:00 pm, July 20, 2021 – Microsoft Teams

Attendees: Approximately 46 people attended the meeting including 7 Restoration Advisory Board (RAB) Community Members and 10 Government RAB Members. Names of attendees are included in the attachment.

Agenda: Review/Approve Minutes from Last Meeting, Questions on the Supplemental RI/FS, Explanation of Round Lake Proposed Plan, and Questions on the Proposed Plan.

Introduction: Ms. Cathy Kropp took attendance. Mr. Forrest Kelley, called the meeting to order at 7:17 pm. Ms. Cathy Kropp provided plans for the evening.

Review/Approve Minutes of Last Meeting

- Draft minutes from the previous meeting were sent out to RAB members. No edits or changes were requested.

Questions on the Supplemental Remedial Investigation/Feasibility Study (RI/FS)

- Ms. Kropp asked if there were any questions on the Supplemental RI/FS.
- No questions were asked.

TCAAP RAB Meeting

- July 20 was originally scheduled to be a regular RAB meeting with a cleanup update, instead this meeting is being focused on Round Lake and the Proposed Plan to remediate the contaminated sediments at Round Lake.
- The public comment period will be open until August 13, 2021.
- At the next RAB meeting, the Army will provide an update on cleanup activities for the operable units. There are two options for the next RAB meeting date. Either the third Tuesday in August (August 17) or the third Tuesday in September (21 September).
- Each RAB member was asked to state their preference for the next RAB meeting date. Most members preferred September 21, 2021, for the next meeting date.
- Ms. Albrecht reminded the RAB meeting participants that the meeting was being recorded. At the end of the July 20 RAB meeting, the Army will officially ask for oral comments. This will provide an opportunity for anyone to record a comment who does not wish to provide a written comment.
- Ms. Kropp noted that responses to comments will not be given.

Presentations:

Explanation of Round Lake Proposed Plan, Linda Albrecht (USAEC)

- Originally, Round Lake was part of TCAAP. It was transferred to US Fish and Wildlife Service (USFWS) in 1974. A pipeline ran between the plant and the lake where the Army discharged industrial processing wastewater, sanitary sewer and storm sewer discharges. This led to Round Lake sediments being contaminated with seven metals

and Polychlorinated biphenyls (PCBs). Contaminants are generally limited to the upper foot of sediments.

- When the Army has contaminated property, it follows the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, a federal cleanup process often referred to as Superfund. The Army is currently in the Proposed Plan phase of the CERLCA process.
- All Federal Facility Partners (Environmental Protection Agency (EPA), Minnesota Pollution Control Agency (MPCA) and the US Army) agreed to use the mean probable effect concentration quotient (mPEC-Q) as a standard measure for success.
- The Army and the regulators went back and forth about the remedial investigation for several years. After the RI, the FS evaluated remedial alternatives, which led to the Proposed Plan where the preferred alternative is identified.
- One of the most important and most controversial reports for Round Lake was the Risk Assessment which included a human health risk assessment and an ecological risk assessment. It was concluded that there was no risk to humans and ecological risks were low.
- The RI established a Preliminary Remedial Action Objective (RAO) of mPEC-Q 0.6. The final RAO will be established in the decision document once public input on the Proposed Plan has been received and considered.
- Ms. Kropp noted that the July 20 RAB meeting presentation slides are available on the website at https://tcaaprab.org.
- In the FS, possible solutions to the problem are identified as well as alternative ways to meet the RAO.
- The Army worked with federal facility partners and others such as Minnesota Department of Natural Resources (MDNR) and (USFWS) to ensure alternatives are considered acceptable to all parties.
- Nine alternatives were evaluated for inclusion in the FS, with two having subsets. Of the nine evaluated, Monitored Natural Recovery and Enhanced Monitored Natural Recovery were not retained. The remaining seven alternatives were carried forward to the FS.
- The Round Lake Evaluation Alternatives Table was sent to RAB members via email. Since it was sent, USFWS removed all support for Alternative 8 (deep water confined aquatic disposal). They will submit that request officially but for now they wanted to ensure the public knows that they do not support Alternative 8.
- One member commented that if one digs deep enough, the aquitard will be breached, and water would begin to run out of the lake.
- One member commented that the area being removed is a small fraction of the lake and that organisms will quickly repopulate; they will come back.
- During the public comment period, the Army would like the community to review all the alternatives, the associated rankings, and provide feedback. One of the criteria that is considered is public/community acceptance.
- One member commented that with Alternative 4A, there is no future monitoring cost. Comparing cost, you must consider long term costs as well as immediate costs so that $23 million maybe should be discounted a bit compared to the other costs where continual monitoring is required.
- The Army co-chair noted that in the FS, the costs include monitoring for 30 years.
- The ability to implement and effectiveness are two important considerations for the Army.

- The estimated timeframe for Alternative 4A is 2-4 years after the Record of Decision (ROD). This includes remedial design, remedial action, and the closeout report.
- One member commented that Ramsey County is planning to do road reconstruction to the east of Round Lake. The preliminary plan is to begin in 2023.
- The RI/FS is complete, and the proposed plan is out for public comment. The next step is to document the selected alternative based on feedback from the community. The preferred alternative can change based on new information or input from the community, but, once all the Federal Facilities Partners agree on an alternative, the ROD will be published. It will include a responsiveness summary that responds to all the feedback from the public. After the ROD is signed and published, remedial action planning will begin.
- Mr. Forrest Kelley adjourned the RAB meeting at 8:06 pm.

Questions and Answers

- **Q: How long ago was the first study (RI), and has anything changed since then?**
  A1: The first study was in the early 1980s. The Army stopped discharging except for any stormwater overflow when TCAAP stopped operating in the early 1980s. The Army's contribution ceased in the 1980s and nothing has changed since that time (Linda Albrecht, USAEC).
  A2: Highways and business have been built so there have been changes in the area but not from the Army (Cathy Kropp, USAEC).

- **Q: Why are the benthic organisms in Round Lake costing $23 million dollars when they are similar to the benthic organisms in Snail Lake? I would like to see a cost benefit analysis to justify that.**
  A: The benthic organisms will be removed during the remediation because the sediment that they live in will be removed. Some of the benthic organisms will have to be replaced at the end to ensure there is adequate aquatic population (Linda Albrecht, USAEC).

- **Q: Where did these cost estimates come from? Is there additional detail such as itemized cost estimates in the RI/FS?**
  A: Yes, they are in the feasibility study, Appendix H. It is available online at https://tcaaprab.org (Cathy Kropp, USAEC).

- **Q: How deep is the lake, especially in the northwest corner?**
  A: It is 20-22 feet at the deep spot which is more in the middle of the lake than the northwest corner. The FS has a full map with all the depths (Linda Albrecht, USAEC).

- **Q: Does Alternative Four involve replacing any of the sediment that is removed? Will it make the lake slightly deeper?**
  A1: Alternative Four would make the lake slightly deeper. There was no intent to replace removed sediment. Overtime sediment will come back into the lake (Linda Albrecht, USAEC).
  A2: The dredging is only 2 feet and only in selected portions of the lake (Cathy Kropp, USAEC).

- **Q: Is there an estimate of the total cubic yards proposed to be removed?**

A: 82,000 cubic yards (Linda Albrecht, USAEC).

- **Q: By what method are you proposing to dredge the material?**
  A1: It would be determined and developed in the design phase of the project after the ROD (Linda Albrecht, USAEC).
  A2: Whichever alternative is decided on, the Army will meet with the RAB and talk about the design phase. The design proposals will be shared with the RAB as well (Cathy Kropp, USAEC).

- **Q: I thought hydraulic dredging was the presumed method of removal?**
  A1: More than likely hydraulic dredging is what they will decide on during the design phase, but in the FS, dredging was looked at as an alternative. The FS does not delve into the specific types of dredging (Linda Albrecht, USAEC)
- **A2:** Technology has changed over the years, and we do not know what technologies will be available during the design phase (Cathy Kropp, USAEC).

- **Q: What would be the earliest we would potentially see the remedial action phase?**
  A1: After the Proposed Plan comment period ends (August 13) the Army will make any required changes and prepare the ROD, which will probably take about 12 months, and then the design phase would begin in fiscal year (FY) 23 (Linda Albrecht, USAEC).
  A2: Because the ROD requires concurrence from EPA and MPCA, and the Army also works with MDNR and USFWS It could take a little longer than 12 months. The remedial action may take two full seasons (Cathy Kropp, USAEC).

- **Q: Is the Closeout Report just another study?**
  A1: The Closeout Report will document completion and have all the data in it that shows how the RAOs were met (Linda Albrecht, USAEC).
  A2: The Closeout Report is not a full study. It is not an investigation, it is a proof that the design works (Cathy Kropp, USAEC).

- **Q: It proves that you remediated all of it?**
  A: Yes, it proves that the Army met its objectives, and the mPEC-Q is below the number it is supposed to be and that work at Round Lake is complete from the Army's standpoint (Cathy Kropp, USAEC).

- **Q: Can you elaborate on impact to the public and workers related to construction activity?**
  A: From the transportation standpoint, impact to the public will occur during mobilization. When the dredging equipment is placed in the water it will require building something similar to a boat ramp. There may be some cranes there for a couple of weeks. The Army will also be placing pipes in the existing pipeline that goes to TCAAP which will also include equipment. The bulk of the transportation will be from the Ben Franklin Area where there is dewatering of sediment. After dewatering is complete, the dried sediment will be shipped by truck to a landfill, with an estimate of approximately 4,300 trucks (Linda Albrecht, USAEC).

- **Q: Is the lake water level going to go down a significant amount?**
- **A:** During the remediation, the bulk of the water removed will be the water with the sediment. There may be a slight drop, but it will not be very noticeable. After it is dewatered, that water will be put back into the lake and there would be no net impact. Post remediation the lake should look as it looks today. It may be slightly deeper in places but that would be the only real change (Linda Albrecht, USAEC).

- **Q: Will there be only one way in and one way out during construction or will there be several places throughout the lake?**
  A: That will be decided during the design phase but generally one way in and one way out is the easiest (Linda Albrecht, USAEC).

Questions and Answers - Proposed Plan

- **Q: Will a pipeline be installed to transfer the clean water back to Round Lake? Where and how would the water be routed?**
  A: It will be negotiated with MDNR during the design phase, but the initial thought is that after it is tested it will be discharged through the pipeline back to Round Lake (Linda Albrecht, USAEC).

- **Q: Have there been any studies on future or potential environmental impacts associated with disposing contaminated sediments at the landfill?**
  A: There have not been any environmental studies. The Army looks at the impacts when selecting alternatives, however, since the landfill will be permitted it is not seen as an impact (Linda Albrecht, USAEC).

- **Q: Is there any concern that during the remedial process, contaminants might spread to other parts of the lake? What would the impact to current fish and wildlife be within the lake?**
  A1: The dredging itself will not spread the contamination. It is a more exact science than it used to be. GPS is used to monitor location and depth. The Army will know how much sediment is being removed and where it is being removed from. Tools, such as sediment curtains, will be used to ensure sediment is not spreading to any other area where they are not dredging. The dredging will disturb the fish and wildlife. The birds will likely go to other areas while the work is being done. The birds will generally return once the remediation is complete (Linda Albrecht, USAEC).
  A2: USFWS is not anticipating the contamination to spread around the lake. Wildlife when exposed to loud noises and distraction might move temporarily. We fully expect once Round Lake is cleaned up; the wildlife will re-find the habitat in better condition (Sarena Selbo, USFWS).

- **Q: Is there a construction company already picked out for this process?**
  A1: After, or as the Army is finalizing, the ROD, the Army will begin working on the contract. The Army would more than likely send a request for proposal to all the Multiple Award Task Order Contract (“MATOC”) providers, and a winner would be selected from those contractors.

- **A2**: A MATOC contract is something that has been negotiated in the past for a certain length of time. Several contractors bid and won the ability to be a part of that contract (Cathy Kropp, USAEC).

- **Q**: **Is this based on price or experience?**
  A1: It is based on best value. The Army evaluates price, experience and any other technical criteria that is rated into the contract (Linda Albrecht, USAEC).
  A2: They submit proposals if they are interested in bidding on the contract (Cathy Kropp, USAEC).

- **Q: Is there anyway the community can see who is bidding on it?**
  A: No, there is not (Cathy Kropp, USAEC).

- **Q: Related to the homeowners that live on the lake. Will there be any financial impact to them long term, or do you anticipate any?**
  A: The Army does not anticipate a long-term financial impact because the lake will be better when the work is complete (Linda Albrecht, USAEC).

ATTENDEES

Government RAB Members Present

1. Linda Albrecht (Acting Army Co-Chair)
2. Viral Patel (EPA)
3. Brigitte Hay (MPCA)
4. David Yang (City of Shoreview)
5. Melissa Collins (DNR)
6. Kyle Axtell (Rice Creek Watershed District)
7. Nicole Menard (USFWS)
8. Mary Lee (MN ARNG Arden Hills Army Training)
9. Nyle Zikmund (City of Mounds View)
10. Bernard Walker (City of St. Anthony Village)

Community RAB Members Present

1. Forest Kelley (Community Co-Chair)
2. Paul Bloom
3. Tim Donakowski
4. Sara Frantz
5. Bobby Goldman
6. Niall Johnson
7. Lyle Salmela

Army and Army Contractors Present

1. Cathy Kropp (USAEC)
2. Robert Reine (USAEC)
3. Thomas Lineer (DCS G9)
4. Paul Muethling (DCS G9)
5. Kay Toye (ERG)
6. Hoa Voscott (Arcadis)

Visitors attending for public meeting

1. Sarena Selbo (USFWS alternate)
2. Catherine Bleau
3. Rich Straumann
4. Troy Worwa
5. David Cmiel
6. Diane Cmiel
7. Pete
8. Nate Cmiel
9. Katie Bach
10. Fran Holms
11. Lisa W.
12. Mike K.
13. Eric Runes
14. Kim Gilmore
15. Beverly
16. Amanda Crawford
17. Kimberley Child

18. Robert Petzel
19. Catherine Bleau
20. Leslie Coffey
21. Curtis Webber
22. Debb Loon
23. Jen Vojtech

RAB Meeting Transcript

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Forest:

Tell me when.

Kathy:

Go ahead.

Forest:

All right. I propose we call the meeting to order.

Kathy:

At 7:17. All right. So I'm guessing you all are seeing my screen now?

Group:

Yes.

Kathy:

Excellent. So we wanted to make sure everyone understands that this meeting is being recorded. It will most likely be posted on the internet for those people who are not available to attend so that they can access whatever is said in the meeting. We are going to give a presentation about the proposed plan for the remediation of Round lake. And following that, we will adjourn the RAB meeting and we will take public oral comments. If you are planning to send a written comment, you do not need to send an oral comment. If you are planning to do an oral comment tonight, you do not need to send a written comment. One or the other is sufficient. When we do the oral comments, we're going to try to limit it to five minutes per person so that we give everyone a chance. If you aren't finished in your five minutes, you can feel free to send the rest in writing. Any questions before we begin? All right, let's get started then. And I apologize if my computer does that again. It just totally kicked me out for no apparent reason.

Kathy:

Here's the agenda. So we did send out the minutes late, but did anyone have any questions or comments or edits for the minutes? All right. Were there any questions on the supplemental RI/FS? I know that we didn't get that. We did a presentation on that at the last meeting, but you hadn't really had a chance to review the document. So now that you've had a chance to review the document, were there any questions on the supplemental remedial investigation feasibility study? Some of your questions may be answered in the proposed plan presentation anyway, and you'll have another opportunity a little later to bring up any more questions you may have. All right, I'm going to turn it over to Linda.

Linda:

Good evening. As you know, July 20th was originally scheduled to be a regular round meeting with an update on cleanup. Instead, we're focusing this meeting on Round Lake and the proposed plan to remediate the contaminated sediments in Round Lake. The public comment period will be open until August 13th, and we have two options for our next meeting and the regular update of cleanup activities for the ongoing use. We can either meet the third Tuesday in August, which will be the 17th, but the Army may be pretty busy responding to comments on the proposed plan. Or we could meet in

September, which would be the 21st of September is the third Tuesday. So we're going to go through the RAB member list and ask you to tell us your desires for either an August or September meeting. And again, this meeting will be focused on the cleanup activities at the operable units not on Round Lake. Kathy, can you record each person's preference?

Kathy:

We're juggling computers here, so give me just a minute. Linda, what is your preference? Carol, your preference?

Carol:

September.

Kathy:

Bridget?

Bridget:

September.

Kathy:

Mary Lee?

Mary Lee:

September.

Kathy:

Okay. The computer's doing funny things again. Give me just a minute. Nicole?

Nicole:

September.

Kathy:

Melissa?

Melissa:

September.

Kathy:

Kyle?

Kyle:

No preference.

Kathy:

Nile?

Nile:
No preference.

Kathy:
Bernard?

Bernard:
September.

Kathy:
Paul?

Paul:
September.

Kathy:
Tim Donakowski?

Tim D.:
September.

Kathy:
Sarah?

Sarah:
September.

Kathy:
Bobby?

Bobby:
September.

Kathy:
Do I have Nile on here twice? Or do we have two Niles?

Nile 2:
There's two.

Kathy:
Okay. The other Nile?

Nile 2:

September.

Kathy:

My apologies. Forest?

Forest:

September.

Kathy:

Lyle?

Lyle:

September.

Kathy:

Okay. So looks like our next meeting is going to be September 21st. Thank you very much.

Linda:

And just so everybody knows, we had an open house this morning at the AHATS gym. It went very well. We had about just over 30 visitors and received a few written comments and several were emailed to us, as well. At the open house, we provided a copy of this briefing, posted some of these slides as posters, and responded to questions. And we're going to walk through the briefing. So everybody, here's the full presentation. This first slide is just showing where Round Lake is in relation to the former TCAAP boundaries. Oh, we already changed slides. Sorry. I'm a slide behind. Already changed that one too. I'm two slides behind. Just another reminder, this meeting is being recorded. And by speaking, you have giving your consent to being recorded. At the end of this meeting, after we go through the presentation, we will close the RAB meeting and officially ask for oral comments. And this will be the opportunity for anyone to record a comment who does not wish to provide a written comment.

Kathy:

Just for your knowledge, so when we do the public comments, we do not respond to the comments. They are just as if you had written it down, but it's just given orally. So we'll ask for your comment, and then we'll move on to the next person, the next person, as things go.

Linda:

So before we proceed with the proposed plan, did anybody have any comments on the SRI/FS? So now just going into some of the background, Round Lake was originally part of the Twin Cities Army Ammunition Plant property, but 1974, it was transferred to US Fish and Wildlife. There was a pipeline that ran between the plant and the lake, where the Army discharged industrial processing waste water, and storm sewer discharges, and sanitary sewer overflows. Ultimately, this led to Round Lake sediment being contaminated with seven metals and PCBs. During our investigation, we found that the contaminants were limited to the upper foot of sediments. And these graphics on this slide show the amount of contamination at the different depths. Any questions? So when the Army has contaminated

property, we follow the CERCLA Process, which is the federal cleanup law that's often referred to as Superfund. It's a very methodical process and is depicted on this slide. And we are currently at step four, which is the proposed plan stage in this process. Any questions?

Linda:

So just to give you some basic information, all of the federal facility partners, EPA, MPCA, and the Army agreed to use the mean probable effect concentration quotient, which you will hear referred to as the mPEC-Q. In order to set a goal for what clean really looks like, we needed to have a standard measure. And the Army and the regulators have gone back and forth about the Remedial Investigation, or the RI, for quite a few years. Some of you previous RAB members may remember this. So we wanted to be sure we had the right information and enough information to clearly define the contaminants and the risk, so we could clearly define what needed to be cleaned.

Linda:

After the RI, we moved to the Feasibility Study where we looked at the remedial alternatives, and that led us to the proposed plan, which is where we evaluate those alternatives and identify the preferred alternative, which you'll see in a few slides. One of the most important reports and the most controversial at this site, was the risk assessment. The Army evaluates the risk to people, and to the environment, and documents this analysis and the Human Health Risk Assessment and the Ecological Risk assessment. And this slide shows you what the main considerations were and what the results were. Are there any questions?

Troy:

Yeah, I have a quick question.

Linda:

Go ahead.

Troy:

How long ago was the first study and has that changed till now?

Linda:

The first study was...

Kathy:

Are you talking about the first Remedial Investigation?

Troy:

Yeah. When they drilled the holes in the lake. I mean, that was several years ago. Has anything changed since then on what's running off that site now?

Linda:

I believe the first study was in the early eighties, and the Army actually stopped discharging except for any storm water open flow, when TCAAP stopped operating. That was also in the early eighties. So none of the Army's contribution ceased in the eighties, and nothing has changed from that aspect.

Kathy:

But as you know, highways have been built in the area, businesses has been built, so there have been changes in the area, but not from the Army.

Troy:

Okay.

Kathy:

Does that answer your question?

Troy:

Yep. That'll do.

Linda:

This slide is the conceptual site model and it gives you an idea of what the pathways are between the contamination and the receptors, or who could be affected by the contamination. The studies show the adverse effects from the metals and PCBs and the sediment of Round Lake was only a problem for the Benthic invertebrates and the water fauna that eat these Benthic invertebrates. Are there any questions? Okay.

Linda:

In the RI, we established the Preliminary Remedial Action Objectives. What is our goal for the remediation? What are we trying to clean up and to what levels? How will we know when it's clean? This is where the mPEC-Q comes in, as well as the risk that was identified. This is the primary RAO. This is the preliminary RAO, and the final REO will be established in the decision documents once we've received and considered public input. I'm not sure how well you can see it, but the map on the right has red outlines that show you where the mPEC-Q is above 0.6, which is the cleanup level that we agreed to. Sorry, are there any questions on this?

Kathy:

We should have brought up earlier, if you want to download a copy of these slides, they're on the website, TCAAPRAB.org. T-C-A-A-P-R-A-B dot O-R-G.

Linda:

So in the feasibility, we try to identify all the possible solutions to the problem and the alternative ways that let us meet the Remedial Action Objective, which is our goal. This is the process that we used and the main ideas that we came up with. The Army worked with federal facility partners, EPA and MPCA, as well as others like MBNR and Fish and Wildlife to ensure that we had alternatives that are considered acceptable to all parties. We ended up evaluating nine alternatives with two having subsets, but when we really looked at the ability of the alternatives to reach our goal, we did not retain alternative two, which was monitored natural recovery or alternative three, enhanced monitored natural recovery. All

others were carried forward into the feasibility study and evaluated under CRC. We must follow nine criteria that were established by the EPA to evaluate the remedial alternatives. And you can see how they are divided up on this slide. Are there any questions?

Linda:

This slide, the evaluation of alternatives is an important slide because it shows you visually how all alternatives were stacked up against each other for each of the nine criteria. So I'll let you look at this for a minute. The table changed slightly from the one that you previously received in your email. US Fish and Wildlife wanted to remove any support for alternative eight. And they will submit that request officially, but they wanted to make sure that the public was aware that they did not support alternative eight. Are there any questions?

Linda:

This slide shows you how the alternatives compared to each other, as far as cost and ranking. Two of the alternatives were dropped, as a change in condition made them not implementable. For alternative 4B, the Army is transferring the land that was planned to be used in the remediation process. And alternative eight, which was the deep CAD, there were concerns about the matching of the depths in the bathymetry of the lake when we implemented that alternative, which is an awful lot of words in a row. But basically, we were concerned that having to keep the same bathymetry would require us to dig a deep hole that could disturb the bathymetry and damage the lake, so we decided that was not implementable.

Kathy:

So for those of you who don't speak science like me, this is Kathy, what she's talking about is the shallow levels needed to stay shallow, the deep levels needed to stay deep, and overall the lake needed to look similar to what it looked previously. And the alternative eight was to actually confine all the contaminated material within the lake, which would fill a hole. And so to put that hole back, we would've had to dig through and it could have damaged how the lake is bed. Does anybody have any questions? That's how I understand it. And she's shaking her head, so I think I got it right.

Paul:

This is Paul. I think if you dug deep enough, you'd go through the [inaudible 00:19:22], and then you'd start the water running out of the lake.

Kathy:

Longer considered. So it's not implementable based on the current site conditions.

Paul:

I would agree.

Kathy:

Lyle, you have a question?

Lyle:

Yes. Good workshop today. One thing I learned today that the... I asked about the cost benefit of 23 million and 600,000, and that I understand is basically to remove the Benthic organisms. And the Benthic organisms here were very similar to what are in Snail Lake. So why are the Benthic organisms in the Round Lake for 2020 three million dollars when they're similar to the Benthic organisms in Snail Lake? I'd like to see a cost benefit to justify that.

Linda:

So most of the Benthic organisms would be removed during the remediation because we are removing the sediment that they live in. And we will have to replace some of the Benthic organisms at the end to make sure we have an adequate aquatic population. But I think the rest of your question is, why these Benthics and not Snail Lake? And I guess I can't answer that. For the Army, the decision was there was contamination there and there would be a remedial action. I cannot speak to the decisions on Snail Lake.

Paul:

And I just want to make a short comment. Lyle, the area they're removing is a small fraction of the lake. It'll quickly repopulate. The organism will come back. I don't think that's a fundamental problem.

Kathy:

I'm guessing that was Paul?

Paul:

Yes. Yes. I'm sorry.

Kathy:

Okay. Thank you. I'm sorry. I can't see the hands raised or the members list the way we are operating right now. When we're at our home station, we have multiple screens and it's easy, but here, we have this single screen. So I apologize, we can't see when your hands are raised. It appears that someone's telling me we do have four hands raised, so if you could just speak up one at a time. Forest?

Forest:

Yeah. Thank you. I'm curious as to where these cost estimates came from or if there's additional detail on itemized cost estimates in the RI/FS.

Kathy:

Yes. They're in the feasibility study, appendix H.

Forest:

Thank you.

Kathy:

And you can get that online at TCAAPRAB.org. We've added quite a few files to the resources area, if you haven't been there lately. Looks like we have another hand up? Nile?

Nile 2:

Yep. I was just curious, how deep is the lake, especially in the Northwest corner?

Kathy:

Fish, can you answer that?

Serena:

Hi, Kathy. This is Serena. I don't have that information in front of me, but it is on the figure that has the depth.

Kathy:

Yeah. We believe it's 20 foot.

Linda:

20 to 22 foot at the deep spot, which is more in the middle of the lake than the Northwest corner.

Nile 2:

Okay. Thank you.

Linda:

I think the FS has a full bathymetry map in it if you want to see all of the depths.

Kathy:

Thank you, Serena. Yeah. Mike has a question?

Mike:

Yes. Does alternative four involve replacing any of the sediment that's removed? I mean, will alternative four ultimately make the lake slightly deeper?

Linda:

Alternative four would make the lake slightly deeper. There was no intent to replace any sediment that was removed. Over time, sediment will come back into the lake.

Mike:

Thank you.

Kathy:

The dredging is only two feet and only in selected portions of the lake as shown in that drawing that had the red outline. That helps. Okay. Any other questions before we move on?

Forest:

I have one more question. This is Forest. Any estimate of the total cubic yards proposed to be removed?

Kathy:

It was in the feasibility study. Hang on just a second. We'll see if we can look it up for you.

Linda:

Oh, 4,300 truckloads. I think it's around 80,000 cubic yards, but somebody's trying to verify that. 82,000 cubic yards.

Forest:

Thank you.

Kathy:

Any other questions? And I'm sorry, we don't have a copy of the feasibility study in front of us.

Kyle:

This is Kyle at Rice Creek. I do have one question. Forgive me if I didn't catch that in the feasibility study. By what method are you proposing to dredge the material? Would that be hydraulically dredged from the bottom of the lake, I presume?

Linda:

[inaudible 00:25:55] define that. That would actually be determined and developed in the design phase of the project after the record of decision.

Kyle:

Okay.

Kathy:

And whichever alternative is decided on, we will meet with the RAB and we will talk about the design phase and everything that happens during that phase. Do you have an understanding of how that works? And then, the design proposals will be shared, as well.

Paul:

This is Paul. I have a question about that because I thought in previous discussions over the years, hydraulic dredging was the presumed method of removal because they have to pump the stuff up to get it dewatered. So I'm assuming that's the most logical way of doing it, but...

Linda:

That is the most logical and more than likely it is what they would decide in the design phase. But in the FS, we looked at dredging as an alternative and did not delve into what specific types of dredging would be used.

Kathy:

And technology has changed over the years and we don't know what technology will be available when we get to the design phase. So we don't specify until we are there. Any other questions, comments, concerns? Okay, we're going to move ahead.

Linda:

So the alternative that was lifted in the proposed plan as the preferred alternative is for a removal of the contaminated sediment and offsite disposal. And this slide shows you the description of the preferred alternative. What we would like the community to do during the public comment period, is to look not just at this alternative, but to review all of the alternatives, the associated rankings, and give us your feedback because one of the criteria that we do consider is public community acceptance.

Kathy:

Any questions before we move on? Go ahead.

Speaker 6:

I was just going to add that one. One of the things that people have to think about is that, 4A, which gets the problem done with, then there's no future monitoring costs. So comparing costs, you have to think of long term costs, as well as the immediate costs. So that 23 million, maybe should be discounted a bit compared to the other costs where you have to have continual monitoring.

Linda:

Well, if you look at the FS, the other cost included the cost for monitoring in them for 30 years because that is...

Speaker 6:

They do that...

Linda:

30 years is the standard that we use.

Kathy:

Thank you for your comment.

Linda:

So this slide is looking at the implementability and effectiveness, which are two very important considerations for us. It also shows you the total cost and the estimated timeframe to complete the remediation of the contaminated sediments. As you can see, the timeframe is two to four years after the ROD.

Kathy:

ROD is Record of Decision.

Linda:

Are there any questions on this slide?

Kathy:

Did you have a question?

Speaker 1:

Yeah. I just had a question about the timeframe. So what would be the earliest we would potentially see the remedial action phase?

Linda:

So realistically, after the proposed plan public comment period ends.

Kathy:

Which is August 13th.

Linda:

We would make any required changes, and then we would prepare the record of decision, which will probably take about a year. And then, we would begin the design phase, FY23.

Speaker 1:

Okay. Yeah. The only reason I brought that up is...

Kathy:

[inaudible 00:30:48] for 12 months, but this requires concurrence from EPA and MPCA, and we work with MDNR and US Fish and Wildlife, so it may take a little longer than 12 months. And then the remedial action, we're thinking it's two full seasons, if that helps.

Speaker 1:

That definitely helps. The only reason I brought it up is I know Ramsey County's planning to do road reconstruction on old Snelling to the east of Round Lake. I think their preliminary plan is 2023, so I just wasn't sure how that would line up with this timeline.

Linda:

Sounds like they'll be ahead of us.

Kathy:

And you can please feel free to put that in your written comments, so we consider that, as well.

Speaker 1:

Sounds good. Thank you.

Kathy:

Troy, did you have a question?

Troy:

Yeah. The closeout report, is that just another study like the most recent one they did?

Linda:

The closeout report after remedial action will have all of the data in it that shows how they met the RAOs.

Kathy:

The Remedial Action Objective, so we have to prove that we met what we were supposed to do.

Troy:

So another test like you did to make sure you got it all. Correct?

Linda:

There would be some sampling involved, I'm sure, in the closeout report, but the basic thing it's used for is to document completion for remedial action.

Troy:

So it wouldn't be a test like you did before?

Kathy:

It isn't a study like you're thinking of, that we've shown in the remedial investigation. It's not an investigation. It's just a kind of a proof that the design works.

Troy:

Okay. And that proves that you remediated all of it then, or no?

Kathy:

Yes. It proves that the Army met its objective, that all the mPEC-Q is below the number it's supposed to be, and that we are done with Round Lake from the Army standpoint.

Troy:

Okay. Thank you.

Kathy:

Kathy, you have a question? Anybody else with a question?

Katie:

Can you elaborate on the construction related impact and the impact to the general public and workers related to the construction and the actual activity?

Linda:

So from the transportation standpoint, the impact of the general public will be when we mobilize actually placing the dredging equipment in the water will require us to build a boat ramp. We'll probably have some cranes there for a couple weeks. It's some pretty sizeable equipment. We also will be placing pipes inside the existing pipeline that goes to TCAAP. So there will be some equipment for that, but the bulk of the transportation will be from the Ben Franklin area where we're dewatering the sediment,

because once we've dewatered the sediment, the dried sediment will be shipped by truck to a landfill. And I want to say our estimate was 4,300 trucks.

Kathy:

So EPA provided a handout today at the open house. We're going to get a scanned copy of that and put it on the website so that everybody can see it. But it pretty well describes dredging so that you understand the concept better.

Lisa:

Kathy, I have a question. It says on the third bullet, water management at dewatering area, including treatment and potential discharge. I'm listening to some of the comments and wondering is the lake water level going to go down a significant amount or are we going to actually have a lake in the outcome with any of these alternatives?

Linda:

So you mean while we're taking the sediment out or post remediation? Actually, we can answer both. Nevermind. So during the remediation, the bulk of the water that they remove will be the water with the sediment. You might see a slight drop, but it would not be super noticeable. It's going to primarily be the sentiment that's being removed. And after they dewater it, that water, once we verify it's clean, would be put back into the lake. So there'd be no net impact post remediation. The lake should look as the lake looks today, we will have removed some sediment under it, so it might be slightly deeper in places, but that would be the only real change.

Lisa:

Thank you.

Kathy:

That answer your question?

Lisa:

It sure does. Thank you.

Kathy:

Troy, you have another question?

Troy:

Yeah, just real quick, as far as the construction part of it goes, is it one way in one way out, as far as where they're going to bring stuff in? Or is it going to be several places throughout the lake?

Linda:

That will really be decided in the design phase, but generally we would go for one way in one way out cause that's usually the easiest.

Troy:

Okay. Thank you.

Kathy:

Any other questions before we move on?

Linda:

So we have completed the SRI/FS at this, and the proposed plan, which is out for public comment. The public comment period ends 13 August. And the next step is really to document the selected alternative based on feedback from the community. The preferred alternative can change based on new information or input from the community, but once all the federal facility partners agree on an alternative, we will publish the record of decision, which is the ROD. And it will include a responsiveness summary that responds to all of the feedback that we've gotten from the public. We will meet with you again before we finalize the ROD. But after the rod is signed and published, we will begin planning the remedial action. Any questions?

Linda:

The public comment period is scheduled from July 9th, until August 13th. The proposed plan was available in the administrative record on July 9th. It didn't actually get published to the web until a couple days later, but the administrative record and information repository are both housed at AHATS, and the phone number is listed. If you want to come out and see any of the documents you can call and ask for an appointment and electronic copies can also be either emailed to you or downloaded from the TCAAP website for all of the comments. I am the point of contact, Linda Albrecht, with the Department of the Army. I'm the remedial project manager for TCAAP. My email and cell phone are both listed there. Any questions?

Kyle:

Kyle here, Rice Creek, again.

Linda:

Hi, Kyle.

Kyle:

One question related to the dewatering and the location at the Ben Franklin site. How would water... Would you guys install a pipeline or something to transfer the clean water back to Round Lake? Looking at our topography and stuff in that area, some of that area drains over to Sunfish Lake naturally, some of it heads to Round Lake, some of it heads up to Rice Creek. So depending on where you're at, that's just one question we had about where that water would be routed or how.

Linda:

That would actually be negotiated with MDNR during the design phase. But our initial thought would be that we would, after it's tested, discharge it through the pipeline to Round Lake. So it would go back to the lake.

Kyle:

All right. Thank you.

Kathy:

Any other questions? Sarah?

Sarah:

Yes. Yes. I have one additional question. I'm wondering if you could comment on whether there's been any sort of study on any future or potential environmental impacts from moving the sediment to a landfill, so any environmental impact from the contaminated sediment at the landfill site.

Linda:

The landfill will be a permitted site and there have not been any environmental studies, CERCLA includes, by definition, NEPA. And so, we do look at the impact when we pick the alternatives, but since the landfill will be permitted, it is not seen as an impact.

Sarah:

Okay, thank you.

Speaker 6:

I'd like to comment that this is what the main receptacle for all of the cleanup sites on the facility, most of those were transferred to a landfill. So it would be good, the same type of remediation that was done on the main property. And these are [inaudible 00:41:59]. What do you say?

Kathy:

It's an offsite landfill. It's not on TCAAP property.

Speaker 6:

Yeah. Offsite landfill is what I mean. Yeah. And they have linings and capping. They're capped and lined to prevent any leeching from the material that's stored there.

Linda:

That is correct.

Sarah:

Okay. Yeah. Thank you for that.

Kathy:

Leslie, do you have a question?

Leslie:

Yeah. I'm wondering if during the remedial process in removing the contaminants, if there's concern that it might spread to other parts of the lake and what the impact to the current water fowl and fish and wildlife would be within the lake.

Linda:

Was the first part, are you concerned that the sediment would spread to other lakes?

Leslie:

No. Within the lake. So you're planning on removing certain portions of the sediment from Round Lake, is there any concern that it could spread or contaminate other parts of the lake that you're not planning them focusing on? And then, how will it impact the current animal and wildlife within the lake?

Linda:

Okay. So the dredging itself will not spread the contamination. Dredging has gotten to be a much more exact science than it used to, and they use GPS monitors and stuff to make sure they're in the right location and going to the right depth. And they will map every day where they're at and be able to provide us with that information. So we will know how much sediment they're removing and where they're removing it from. They will use things like sediment curtains to ensure that the sediment is not spreading to any other area that they're not dredging. So we are not concerned about the contamination moving. It will disturb the wildlife while we are dredging. There is no way around that. The fish will definitely be disturbed by it as will the Benthic. The birds will probably go to other areas while there's active work going on. They generally don't like to be around that kind of equipment, but once the remediation is done, generally, they will come back. Serena, do you all have anything you want to add on that?

Serena:

I think that's it. This is Serena. SOBO from Minnesota Valley National Wildlife Refuge. I think you covered it. We're not anticipating the contamination to spread around the lake. Wildlife when exposed to loud noises and distraction might move temporarily. Like Linda said, we fully expect once Round Lake is cleaned up for them to refine the habitat in better condition.

Kathy:

Thank you. Troy, did you have a question?

Troy:

Yes. Do you have a construction company already picked out for this process or...?

Linda:

No, we do not. The way that the Army works is after, or as we're finalizing the record of decision, we would begin working on the contract. The Army has several contractors that they have a MATOC contract with, and we would more than likely go to one of them. It would be a bid that would go to all MATOC, and we'd pick the winner from them.

Troy:

Okay.

Kathy:

MATOC stands for Multiple Award Task Order Contract. So it's something that had been negotiated in the past for a certain length of time, and a number of contractors bid and want the ability to be part of that contract.

Troy:

Okay. Is this on price or experience or what do you guys look at for that?

Linda:

We would do this as a best value, which means that we would look at their price, their experience, and any other technical criteria that we write the contract.

Kathy:

So they all submit proposals if they're interested in bidding on the contract.

Troy:

Is there any way that we can see who's bidding on it prior? No?

Kathy:

No, sir.

Troy:

All right. Thought I'd ask. Thank you.

Linda:

You're welcome.

Kathy:

Leslie, did you have another question?

Leslie:

Yeah, I actually, I didn't. But now that you asked me, yes. One thing that came to mind was related to the homeowners that live on the lake. Will there be any financial impact to them long term or do you anticipate any?

Linda:

I do not anticipate any long term financial impact because the lake should be better when we're done. So if anything, I would think it would help.

Kathy:

Any other questions?

Katie:

Can you comment on the eventual public use planned for the lake? I know years ago there was discussion of a fishing pier on the south side, or is that sort of a next stage that's not part of this proposal?

Kathy:

Okay. So the Army does not own Round Lake. They're owned by the US Fish and Wildlife. And so, land use is their responsibility and they did ask to have some time to talk to you, but because it's not about the remediation, we're going to adjourn the restoration advisory board meeting, and then we'll let Fish and Wildlife give their presentation and answer any questions about the use of the Round Lake after. And then, we will begin the oral comment period for Round Lake's proposed plan. Is everybody okay with that? Forest, could you please adjourn? Oh, I'm sorry, Mike, you have a question?

Mike:

No. Actually, my question was the same as Katie's.

Kathy:

Okay. So Forest, would you adjourn the RAB meeting?

Forest:

I propose to adjourn the RAB meeting.

Kathy:

It is 8:06. So Serena, did you want to share something? Did you have a slide to share or did you want to just talk or...?

Serena:

I think I'll just talk. Thank you, Kathy. I'm going to actually, as I'm speaking, ask my colleague, Nicole, to drop in the chat, a website address to our conceptual management plan for Round lake. So the intent of the US Fish and Wildlife service, and in this situation, Minnesota Valley National Wildlife Refuge, is to have the lake cleaned up to a point where it's healthy for wildlife and for people. We care very deeply in our mission to make sure that this site can be a benefit for the community, for wildlife observation, fishing, hiking, walking, all sorts of activities that are compatible with also maintaining healthy wildlife populations and the opportunity to view wildlife in wild spaces.

Serena:

So our conceptual management plan touches upon some of the ideas and things that we may do, which include platforms for observation, potentially fishing piers. We've had initial discussions about maybe there's some connector trails that we can partner with the community with. The bottom line is that that won't come until the lake is clean and we will be very excited to work with the community and partner with you all as we're working through those next steps and what the future for Round Lake will look like. Any questions?

Katie:

Yeah. Looking at the conceptual management plan, it looks like it was a draft from 2013, is there a more recent update or is that still the same?

Serena:

Yeah, we left it in draft form until we would finish the planning, and then negotiations with the Army on the level of cleanup for Round Lake. So depending on what remedy is selected and the implementation of that action, then we'll determine the type of public use. So as you can see from the materials

provided tonight, the refuge is very supportive of alternative that is the full dredge and removal of the contamination. And then once we move through this process, we will determine our next steps, including the public for how to use the site into the future.

Katie:

One of the disallowed activities comment in that plan talks about public boating, regardless of method of propulsion. I guess I would imagine that a lake of this type is a good candidate for non-motorized paddling. Is there a reason that's considered out of scope or intended to be disallowed?

Serena:

On the surface, no. There's not a reason. And that's something that we would definitely re-look at again. Motorized boating is not something that's typically compatible with wildlife, but non-motorized paddling in some situations, depending on the type of season, making sure you're not disturbing birds, et cetera, can be compatible. It's situation dependent. So we will take a look at that again. Absolutely. Also, making sure that we understand the types of uses that can be out there based on the level of cleanup of the lake.

Katie:

Thank you.

Kathy:

Serena. I think Mike has a question.

Serena:

Mike?

Mike:

Yeah. I was wondering, do any of the ideas or plans that US Fish and Wildlife is thinking about or contemplating, do any of them involve, I guess, drastically changing the lake, as residents will kind of know it over the last 25 years in terms of depth and foliage, shoreline? Do most or all plans kind of involve keeping the lake with most of its characteristics that it has today, just changing the use on that lake?

Serena:

Yes. I think one of the benefits will be that we do have a water control structure on the lake and we have been keeping it pretty high in order to separate people and wildlife from the sediments. With a full cleanup, we could change the water levels very minor. We're talking inches in order to have different types of management strategies that can benefit wildlife, but the lake will still be a deep lake. That's very critical and important for the wildlife in this habitat. Round Lake is a special unit of the Minnesota Valley National Wildlife Refuge. We do not have very many deep lakes, so this is a priority for us to make sure that it's kept deep and kept good for the types of wildlife that need those habitats.

Mike:

Thank you.

Serena:

You're welcome. Do I see a question from Troy?

Troy:

Yeah. Besides the wildlife that's here, what else are you looking to attract?

Serena:

In general, we're looking at waterfall, and diving ducks, things like loons that would need to have those deeper waters. We're also very excited about Eagles that have been present in the past and likely will continue to be into the future. We have occurrences of turkeys, and deer, and fox and all sorts of kind of your typical Minnesota wildlife in the past. So we'd like to continue to provide habitats for those species, as well. Okay. Pollen, pollinators, and songbirds are in decline and that's something that is also important to maintain habitat for.

Troy:

Okay. All right. Thank you.

Serena:

You're welcome.

Lisa:

Serena, I have a question. If you're considering public observation decks and potentially some fishing for the public, what are you thinking about in terms for the homeowners on the lake itself? Are you going to allow docks or any sort of fishing from private land?

Serena:

Likely not individual docks. We are looking or we will consider observation platforms and fishing pier type platforms that would be available from a common space available to the public, but likely individuals will not be able to put docs out in front of their own properties. Any other questions?

Kathy:

Serena, this is Kathy. One of the questions that we got today at the open house and I referred them to you, but hopefully this might be of interest to others. The question was, will the public be involved or have any input into Fish's future plans after the cleanup is completed?

Serena:

Yes. We care very deeply about public engagement and outreach, and we're really looking forward to that next step. I got some great context today and met some new people, as well. And we've already had some good discussions with some of you on the call about potential connecting up to other trails that the community is planning. All of those things will be really important to coordinate moving forward. Lisa, did you have another question?

Lisa:

I apologize. I do not. Thank you.

Serena:

No worries. No worries.

Lyle:

This is Lyle.

Serena:

Hi, Lyle.

Lyle:

Okay. An interesting discussion with Robert today, and my hope was that some of the 23 million could be granted over to Fish and Wildlife so they can manage it as a wildlife refuge. And I understand Robert said that the only way that the Army has to spend all the money for the cleanup and the only way that there could be anything that would be grandfathered or granted over to fish and wildlife would be federal legislation. So I mentioned that to Serena that may be something they want might want to look into with McCollum or somebody in the federal legislation. Just a thought.

Robert:

Hey, this is Robert. Thanks again for the comment. And I appreciated the time earlier today to be able to talk with you. And what we discussed in part for other people's edification is 493 dirt money. And that is money that is specifically earmarked for restoration, and we cannot spend it in any other form or fashion. Because of that, any transfer of moneys from US Army to Fish and Wildlife services would be prohibited.

Kathy:

And just so you're aware, if we estimate 26 million and it costs 20 million, we don't have to spend the 26 million. That isn't the way that works. But we also don't get to do anything else with that money. It returns back to the Army for another remediation project because it is earmarked for remediation. Lyle, did you have any other comment?

Lyle:

That's all.

Kathy:

Forest?

Forest:

Yeah. And I know that you said the cost assessments are provided appendix H, but I haven't had a chance to look at that. Does the remediation cost include activities associated with the remediation, like potentially trapping and moving wildlife or relocating temporarily? Is that an eligible cost?

Linda:

It is an eligible cost. I don't think that we put that cost in the cost estimate because we did not know that there was that quantity of animals that we would have to trap and release them. And I don't know that Fish thinks there is. Serena?

Serena:

At this time, we don't believe that will be necessary.

Kathy:

Did you have any comments on that?

Melissa:

Yeah, this is Melissa with DNR. So we do have one state threatened species at Round Lake, and that's the Blanding's turtle. And so, one of the things that DNR will be advocating for throughout this whole process is that we do everything possible to avoid impact to Blanding's turtles. And so that might be routing turtles away from the area where we're working, or putting a fence to exclude them. It could potentially be adjusting the timing of the work, just so that we're not impacting them at all. So there's a bunch of different considerations and ways that we could potentially avoid impacts that don't involve trapping.

Serena:

Thanks for including that, Melissa. That is a big part of what we try to do is avoidance and there's things that we can do with timing and seasons, as well. And looking at that through the next phase of the planning will be important.

Kathy:

Serena, looks like there were a couple more questions. Nile?

Nile:

Yes. I was just curious, if a fishing pier was to be installed, at what point is it safe to ingest the fish from the lake? Do you have to wait five, ten years for the fish that existed with the contaminated sediment? What's the timeline on that? I'm just curious.

Serena:

Good question. We would work very closely with the state, with the DNR, probably EPA, as well, to determine the suitable level of ingestion of the fish. Depending on the different bodies of water in this state, there are limits for certain things. So there are experts out there that know the answers to that, and we would make sure that we're working very closely with them.

Linda:

During the ecological risk, the Army did not find a risk to the fish. The risk was to the Benthic invertebrates and to the water fowls that ingest that.

Kathy:

Looks like a couple more questions. Is that Troy over there?

Troy:

Yes. You were talking about the animals and stuff on the lake and the turtles were brought up. I can look across the lake right now and see 11 swans. I hear the loon, the coyote dens that are on the other side of the lake, the coyote and deer that I catch on a trail camp every night. Something going to be done about those? That was a question for the DNR. Thank you.

Speaker 16:

So a lot of this is going to be through the design phase. What is being proposed as far as installing some dredging, installing a pipe potentially to take that contaminated sediment away. It's not like we're going to be disturbing the entire site. We expect that some of this disturbance would be temporary and it would be well timed. And it would definitely not include the entire site at once. So I'm actually going to defer to Fish and Wildlife service just because it is their property and they are the ones managing the wildlife in that area. But we would definitely expect these impacts to be temporary.

Troy:

Okay. Thank you.

Kathy:

Looks like there's one more question. I can't see who it is though. Nile?

Nile:

My bad. Sorry.

Kathy:

Any more questions before we start the oral comments?

Forest:

This is Forest. I just have one comment to Troy's question. I think that insights like that from the community, specifically, the people on the lake about where known wildlife dens are will be very important in putting together the plan for the contractor so that we know where there are these places that should be avoided.

Kathy:

Thanks Forest. Okay. If there's no more questions, Fish and Wildlife, any other statements before we move to oral comments?

Serena:

Nope. I think I'm good, Kathy. Thank you.

Kathy:

Thank you. So we are going to begin the public comment portion of the meeting and this portion, each individual will state their name and provide their comment. No one will respond to the comment. It will be responded to in the responsiveness summary, which will be considered by the Army and then become part of the record of decision. If you don't want to make an oral comment or don't want to hear

the oral comments, you may sign off. If you want to give a public comment, hopefully you will speak up. We'll ask you to raise your hand and we'll call each person individually, provide your name and your comment. And when you are done, please say that is all so we know that is the end of your comment. And then, we will call on the next person until everyone who wanted to submit an oral comment has an opportunity to. Please note, if you're submitting written comments, oral comments are not necessary.

Kathy:

If you're submitting an oral comment, then a written comment is not necessary. Once we go through everyone who wants to provide an oral comment tonight, we'll ask again to make sure there are none left. Please be patient. All comments are important. So that no one is able to monopolize the entire comment period, we will limit your comment to five minutes. When the five minutes is up, we'll ask you to put the rest of your comment in writing so that we continue on with everyone else who wants to make comments, making sure everyone has the opportunity to comment. Again, this isn't like a voting system where if you put in three comments, you're kind of waiting the decision. It doesn't work that way. We look at the overall comments. If you submit multiple times, we're still only considering your comments once.

Kathy:

Does anyone have any questions before we begin? If you'd like to sign off, we're going to wait two minutes for everyone who wants to sign off to be able to do that. And you can raise your hand if you want to make a comment. Unfortunately, we can't see the order that people raise their hands, and so we are going to take them in the order they show up on our screen. And I have no clue how that works as far as who shows up on our screen in what order, but please go ahead and sign up.

Kathy:

If you're not interested, please keep your microphone muted until it is your turn to speak. If you are interested, please raise your hand. If you're on the phone, we will ask for any phone comments after everyone else has been able because there's no way for you to let us know that you want to make a comment, but we only have a couple of people on the phone. Okay, we're going to wait until 8:30. So another minute, and then we will start with the oral comment period. All right. Looks like the first commenter is Paul Bloom. Paul, go ahead.

Paul:

Yeah. I'm very happy to see that there's a consensus of the Army and the MPCA, DNR, Fish and Wildlife, and so forth on that. And I agree that option 4A is the only reasonable one. It's more expensive, but you're done with it. There's no monitoring in the future. There's no question of contamination or persisting. My only recommendation is make sure that there's good communication with the residents during the remediation phase, so that they're prized of what disruptions will be taking place. That's all I have to say.

Kathy:

Thank you for your comment. Bobby, you're next, please state your comment. You may be on mute.

Bobby:

Sorry about that. Yeah. So as kind of stated by majority of the other speakers tonight, I'm also in favor of option 4A. I think the short term disturbances are worth the long term effectiveness of the option, and then also the permanence of it and the opportunity to turn this lake into community resources that's there for a long time. That is all.

Kathy:

Thank you. Paul and Bobby, could you lower your hands, please? Do we have any other commenters on the phone or on the online portion?

Lisa:

Kathy, I'll go ahead and comment. This is Lisa Welter. I just want to say thank you for the thoroughness of the presentation and just offering all of these documents. Originally, I was looking at no action. I live on the lake. I watch these 12 swans daily. We walk on this lake or we walk around the lake every morning and my greatest concerns were for the wildlife. And I've just appreciated the way you've presented this, and including Fish and Wildlife. I'm comfortable with the presentation and with 4A or whatever decision is made just because of the way in which you're taking care of the land, taking care of the wildlife, and being just really careful and thoughtful of the process. So, thank you.

Kathy:

Thank you. Any other oral comments? So we want to thank everyone who took their time to visit us today at the open house and all of you who attended the meeting here. We really appreciate it. We will meet again September 21st and we will have our normal update at that point. So it will be mostly on the groundwater, but if we have an update on Round Lake, we will give it at that point, as well. If you have any suggestions for other topics for that or future meetings, our information is on the fact sheet that is downloadable it's on the website. Please feel free to give us any topics for inclusion in the agendas in the future. Hope y'all have a great night. Thank you.

Speaker 6:

Yeah. Well, thank you. Good work. Thanks everyone. Thank you.

Kathy:

Thank you, everyone.

Lisa:

Thank you so much.

Speaker 17:

Yes. Thank you all very much. It was an excellent presentation.

Kathy:

Thank you, everyone.

Speaker 6:

Special thanks to Fish and Wildlife for clarifying a bunch of issues.

Serena:

You're most welcome. Thank you for attending.

Public Meeting Transcript

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U.S. ARMY ENVIRONMENTAL COMMAND

MEETING FOR PUBLIC COMMENT ON THE PROPOSED PLAN

FOR ENVIRONMENTAL REMEDIATION

AT TCAAP-31 ROUND LAKE

NEW BRIGHTON/ARDEN HILLS/TWIN CITIES

ARMY AMMUNITION PLANT

SUPERFUND SITE.

MEETING CONDUCTED VIRTUALLY ON MICROSOFT TEAMS

Tuesday, July 20, 2021

7:00 p.m. Central Daylight Time

COMMENT PERIOD

July 9 to August 13, 2021

***

Ms. Kropp:

We are going to begin the public comment portion of the meeting. In this portion each individual will state their name and provide their comment. No one will respond to the comment. It will be responded to in the responsiveness summary, which will be considered by the Army and then become part of the record of decision. If you don't want to make an oral comment, or don't want to hear the oral comments, you may sign off. If you want to give a public comment, hopefully, you will speak up. We will ask you to raise your hand and we will call each person individually. Provide your name and your comment, and when you are done, please say "that is all" so we know that is the end of your comment. And then we will call on the next person until everyone who wanted to submit an oral comment has an opportunity to. Please note, if you are submitting written comments, oral comments are not necessary. If you are submitting an oral comment, then a written comment is not necessary.

Once we go through everyone who wants to provide an oral comment tonight, we will ask again to make sure there are none left. Please be patient, all comments are important. So that no one is able to monopolize the entire comment period, we will limit your comment to five minutes. When the five minutes is up, we will ask you to put the rest of your comments in writing so that we continue on with everyone else who wants to make comments, making sure everyone has the opportunity to comment. Again, this isn't like a voting system where if you put in three comments you are kind of waiting the decision. It doesn't work that

way. We look at the overall comments. If you submit multiple times, we're still only considering your comments once. Does anyone have any questions before we begin?

If you would like to sign off, we are going to wait two minutes for everyone who wants to sign off to be able to do that. And you can raise your hand if you want to make a comment. Unfortunately, we can't see the order that people raise their hands and so we are going to take them in the order that they show up on our screen and I have no clue how that works as far as who shows up on our screen and in what order. But please go ahead and sign off if you are not interested. Please keep your microphone muted until it is your turn to speak. If you are interested, please raise your hand. If you are on the phone, we will ask for any phone comments after everyone else has been able, because there is no way for you to let us know that you want to make a comment. But we only have a couple of people on the phone. Okay, we are going to wait until 8:30, so another minute and then we will start with the oral comment period. Alright it looks like the first commenter is Paul Bloom, Paul go ahead. Mr. Bloom:

Yeah, I am very happy to see that there is a consensus of the Army, MPCA [Minnesota Pollution Control Agency], DNR [Minnesota Department of Natural Resources], Fish and Wildlife [US Fish and Wildlife Service], and so forth on that. And I agree that option 4a is the only reasonable one. It's more expensive, but you are done with it. There is no

monitoring in the future, there is no question of contamination persisting. My only recommendation is to make sure that there is good communication with the residents during the remediation phase so that they are apprised of what disruptions will be taking place. So that is all I have to say.

Ms. Kropp:

Thank you for your comment. Bobby, you are next, please state your comment. You may be on mute.

Mr. Goldman:

Sorry about that, yeah so as kind of stated by a majority of the other speakers tonight, I'm also in favor of option 4a. I think the short-term disturbances are worth the long-term effectiveness of the option and then also the permanence of it and the opportunity to turn this lake into community resources that is there for a long time. That is all.

Ms. Kropp:

Thank you. Paul and Bobby could you lower your hands please. Do we have any other commenters on the phone or on the online portion?

Ms. Welter:

Cathy I will go ahead and comment, this is Lisa Welter, I just want to say thank you for the thoroughness of the presentation and just offering all of these documents. Originally, I was looking at no action. I live on the lake, I watch these twelve swans daily, we walk on this lake, or we walk around the lake every morning. My greatest concerns were for the wildlife. And I just appreciate the way you presented this and including Fish and Wildlife [US Fish and

Wildlife Service]. I am comfortable with the Presentation and with 4a or whatever decision is made just because of the way in which you are taking care of the land, taking care of the wildlife and being just really careful and thoughtful of the process. So, thank you.

Ms. Kropp:

Thank you. Any other oral comments? So, we want to thank everyone who took their time to visit us today at the open house and all of you who attended the meeting here. We really appreciate it. We will meet again September 21st and we will have our normal update at that point. So it will be, mostly on the groundwater, but if we have an update on Round Lake, we will give it at that point as well. If you have any suggestions for other topics for that or future meetings, our information is on the fact sheet that is downloadable it's on the website. Please feel free to give us any topics for inclusion in the agendas in the future. Hope y'all have a great night. Thank you.

Attachment C

Summary of Applicable or Relevant and Appropriate Requirements for Round Lake

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Attachment C: Summary of Applicable or Relevant and Appropriate Requirements for Rou

ARAR	Citation	Regulating Agency	Requirement	Applicabili
Action-Specific ARARs				
Bald and Golden Eagle Protection Act	16 USC. 668(a)	USFWS	Prohibits anyone from taking, possessing, or transporting a bald eagle or golden eagle, or the parts, nests, or eggs of such birds without prior authorization. This includes inactive nests as well as active nests. Take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb. Activities that directly or indirectly lead to take are prohibited without a permit. It also provide criminal penalties for the acts against the law.	Applicable construction disturb eagl
Clean Water Act	Section 404(b)(1); 40 CFR 230.10	U.S. Army Corps of Engineers	Issues permits for discharges of dredged or fill material at specified sites in waters of the United States. Section 404(c) prohibits, restricts, denies or withdraws the use of an area for discharge of dredged or fill material in waters of the United States, once it determines the discharge will pose unacceptable adverse impact on the environment.	Applicable materials in Under the S discharge fr surface wate substantive need to obta with the adn of the permi
MN Water Quality Standards	MN Rule 7050.0222 Subparts 4 & 7; Section 401 Certification	MPCA	Establishes the numerical and narrative water quality standards for protection of aquatic life and recreation designated public uses and benefits.	Applicable generated fr and returne can also be specific AR
MN Wetlands Standards and Mitigation	MN Rule 7050.0186 Subpart 1	MPCA		Applicable potential to existing cor

ARAR	Citation	Regulating Agency	Requirement	Applicabili
MN Threatened and Endangered Species	MN Statute 84.0895, Subpart 1, substantive portions only; MN Rule 6134.0200 Subparts 3(B)(2) and 10(B)(2); MN Rule 6212.1800 Subpart 1, substantive portions only; MN Rule 6212.2100, substantive portions only	MDNR	Prohibits anyone from taking, importing, transporting, or selling any portion of an endangered species of wild animal or plant, or selling or possessing with intent to sell an article made with any part of the skin, hide, or parts of an endangered species of wild animal or plant. Also defines state threatened and endangered species.	Relevant an threatened o suitable hab at the Site.
Wetland Conservation Act	MN Rule 8420.0105	MN BWSR and Rice Creek Watershed District	Designates that before any activity regarding draining, filling, or excavating occurs in a wetland an attempt must be made to first avoid the impact to the wetland, and if the impact cannot be avoided, the impact must be minimized, and if the impact cannot be minimized then the wetland must be replaced with one of equal public value.	Relevant an remedial act WCA jurisd ARAR can a location-spe

ARAR	Citation	Regulating Agency	Requirement	Applicabili
MN DNR Public Waters Resources	MN Rule 6115.0200 Subpart 5(A-J), substantive portions only; MN Rule 6115.0201 Subpart 3; MN Rule 6115.0221 Subpart 2, substantive portions only; MN Rule 6115.0270 Subpart 4(A-E), substantive portions only; MN Rule 6115.0271; MN Rule 6115.0670 Subparts 2(C) and 3(B)(4), substantive portions only; MN Statute 103G.285 Subparts 3 and 6, substantive portions only	MDNR	Establishes specific standards for excavation, water level controls, and drainage and drawdown activities in Public Waters.	Relevant an will be exca Water durin
NPDES Construction Stormwater Requirements	MN Rule 7090.2040, substantive portions only	MPCA	Establishes requirements for stormwater discharge from construction activities associated with NPDES permit.	Applicable activities th water into a
Noise Control	MN Rule 7030.0040 Subpart 2; MN Rule 7030.1040; MN Rule 7030.1060	MPCA	The Rules establish the noise standards and levels for all sources; for vehicles over 10,000 pounds; and other vehicles.	Relevant an construction equipment t exceedance
Waste Management	MN Rule 7035.0800	MPCA	Provides requirements for collection and transportation of solid waste, including requirements for containers and vehicles, and spill prevention and controls.	Relevant an excavated m from sedimen classified, an disposal.

ARAR	Citation	Regulating Agency	Requirement	Applicabili
Hazardous Waste Characterization	MN Rule 7045.0131; MN Rule 7045.0214	MPCA	Establish requirements for hazardous waste characterization and specify characteristics of a hazardous waste including ignitability, corrosivity, reactivity, toxicity, lethality, or being an oxidizer.	Applicable sediment to identified as hazardous p If the waste stabilized ar hazardous f D landfill.
Hazardous Waste Management	MN Rule 7045.0208; MN Rule 7045.0275	MPCA	Establish requirements of hazardous waste management by generators and hazardous waste spill reporting and recovery.	Applicable hazardous. waste mana
Airborne Particulate Matter	MN Rule 7011.0150	MPCA	Requires that no person shall cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne.	Applicable generate du managed ar
Industrial Discharge to Sanitary Sewer	MN Statutes 473.515 Subdivision 3	Metropolitan Council	Regulates any connections with metropolitan system for discharge of sewage, requires treatment prior to discharge, and may prohibit discharge into the metropolitan disposal system of any substance that may be harmful to the system or any person operating the system.	Applicable treatment/di from dewat local sanitar
OSHA Worker Protection	29 CFR 1910, 1926 and 1904	OSHA	Establish requirements for occupational health and safety applicable to workers engaged in hazardous waste site or CERCLA response actions.	Applicable implementa
Chemical-Specific ARARs				

ARAR	Citation	Regulating Agency	Requirement	Applicabili
Designation of Hazardous Substances, Determination of Reportable Quantities	40 CFR 302.4 – 302.5	USEPA	Provides tables on the following substances: a). Listed hazardous substances. The elements, compounds, and hazardous wastes appearing in Table 302.4 are designated as hazardous substances under Section 102(a) of CERCLA. b). Unlisted hazardous substances. A solid waste, as defined in 40 CFR 261.2, which is not excluded from regulation as a hazardous waste under 40 CFR 261.4(b), is a hazardous substance under Section 101(14) of CERCLA if it exhibits any of the characteristics identified in 40 CFR 261.20 through 261.24.	Applicable generated fr Other waste from decon is also subje Waste will determine w non-hazardo
Location-Specific ARARs				
Protection of Wetlands	Executive Order No. 11990	USEPA; USFWS	Mandates that Federal agencies and potentially responsible parties avoid, to the extent possible, the adverse impacts associated with the destruction or loss of wetlands and avoid support of new construction in wetlands if a practicable alternative exists.	Applicable. the site.

Notes:

ARAR = applicable or relevant and appropriate requirement

BMP = best management practice

BWSR = Board of Water and Soil Resources

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act

CFR = Code of Federal Regulations

MDNR = Minnesota Department of Natural Resources

MN = Minnesota

MPCA = Minnesota Pollution Control Agency

NPDES = the National Pollutant Discharge Elimination System

OSHA = Occupational Safety and Health Administration

RCRA = Resource Conservation and Recovery Act

USC = United State Code

USEPA = United States Environmental Protection Agency

USFWS = United States Fish and Wildlife Service

WCA = Wetland Conservation Act

Attachment D

Responsiveness Summary

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Round Lake
New Brighton/Arden Hills Superfund Site
Ramsey County, Minnesota
RESPONSIVENESS SUMMARY

Overview

The public comment period for the Round Lake Proposed Plan began on July 9, 2021 and ended on August 13, 2021. A Fact Sheet was prepared which summarized the Proposed Plan for Round Lake (site). The Fact Sheet summarized the site background, summary of site risks, proposed alternatives, preferred alternative, and the community feedback process including how to submit comments and the schedules for the open house and virtual public meeting. Alternative 4A is the preferred alternative because it will achieve substantial risk reduction to the benthic community using a proven sediment remediation technology.

Two public notices were printed in local newspapers. The first public notice invited the public to comment on the Proposed Plan after reviewing documents that make up the Administrative Record to gain a more comprehensive understanding of the site and the Superfund activities that have been conducted there. The other public notice invited the community to an open house and a Restoration Advisory Board (RAB) virtual meeting at 7:00 PM on July 20, 2021. These public notices were printed in the Minneapolis Star Tribune and the St. Paul Pioneer Press on July 9, 2021. Public notices were also published in several local newspapers in the areas of Arden Hill, Shoreview, New Brighton, and counties of Ramsey, Hennepin, and Anoka.

In addition to the public notices, a door knocking campaign was completed on July 13, 2021, This campaign included visiting about 95 residential and business addresses adjacent to and nearby Round Lake. Army representatives were able to speak directly with 35 residents using a prepared script. For the residents that we spoke with, we asked for their names and email addresses if they wanted to provide them. In addition, a packet with the Fact Sheet, a handout on how to provide comments, and an invitation to the open house and virtual public meeting were provided to each of the 95 addresses in person (if possible) or left at their doors.

The open house was held in the gymnasium of the Minnesota Army National Guard Arden Hills Training Site on July 20, 2021, from 10:00 am to 3:00 pm. It was open to any interested person to review the Fact Sheet and posters with information regarding Round Lake and to provide informal feedback about the Army's plans to remediate Round Lake. Representatives from the Army, Army partners, United States Environmental Protection Agency (USEPA), Minnesota Pollution Control Agency (MPCA), Minnesota Department of Natural Resources (MDNR), and Minnesota Valley National Wildlife Refuge & Wetland Management District (USFWS) were available to discuss site background, summary of site risks, proposed alternatives, preferred alternative and to answer questions. Approximately 23 visitors attended the open house.

During the virtual public meeting that was held on July 20, 2021, from 7:00 pm to 8:30 pm, verbal comments were accepted at the end of the RAB meeting. Three verbal comments were received from residents who were all in favor of the preferred alternative 4A. Questions were also received during the meeting and the meeting minutes were prepared and have been included in the Administrative Record. A recording of the meeting was completed, and a copy was provided to the USEPA.

During the comment period between July 7 through August 13, 2021, 22 written comments were received from the residents, RAB members, MPCA, MDNR, USFWS, Minnesota Valley Refuge Friends, Minnesota Valley Trust, Inc., and Rice Creek Watershed District. Most of the comments were very supportive of the preferred alternative 4A. Only three of the 25 comments were not supportive. Five of the 25 comments were supportive and had some questions and concerns regarding implementation. These comments are further discussed in Section Summary of Comments Received.

Background on Community Involvement

Contaminated groundwater has been an issue of very high concern in the communities surrounding TCAAP since it was first discovered by MPCA in 1981. In 1983, the New Brighton/Arden Hills/TCAAP Site was put on the National Priorities List after the USEPA and MPCA determined that hazardous substances from TCAAP had been released into the environment. Round Lake is located outside the former TCAAP area but receives stormwater from a portion of the former installation area.

Round Lake consists of approximately 154 acres of shoreline and lake. Round Lake received industrial processing wastewater, sanitary sewer, and storm sewer discharges from TCAAP. There are three inlets to Round Lake that acted as potential conveyances of water from TCAAP. Ramsey County removed the old TCAAP storm sewer that was the pathway for the historical release of hazardous substances from the former TCAAP area into Round Lake. With the signing of the Federal Facility Agreement among the Army, USEPA, and MPCA in 1987, a more coordinated effort toward site remediation was begun. The FFA and Community Relations Plan prepared by the Army, with USEPA and MPCA oversight, have improved community relations.

Following are highlights of past community relations actions taken by the Army, USEPA and MPCA at the site:

- Stakeholder Meeting on October 18, 1996 – Discussed the status of the Tier I Screening Risk Assessment of Aquatic Ecosystems.
- Stakeholder Call on December 17, 1996 – Discussed the comments on the Tier I Screening Risk Assessment of Aquatic Ecosystems Update.
- Stakeholder Meeting on March 24, 1998 – Discussed the status of the Tier II Ecological Risk Assessment and scoping for the Tier II Studies.
- Stakeholder Meeting on May 5, 1998 – Discussed comments resolution for the Draft Appendix E of Part 2 of the Tier II Ecological Risk Assessment Work Plan
- Stakeholder Meeting on April 6, 1999 – Discussed comments resolution for the Tier II Ecological Risk Assessment Work Plan.
- Stakeholder Meeting on October 27, 2005 – Discussed comment resolution for the Draft Feasibility Study for Aquatic Sites.
- Round Lake Working Group Meeting on June 28, 2007 – Discussed and resolved data gaps in order to complete Round Lake Feasibility Study.
- Round Lake Working Group Meeting on August 22, 2007 – Discussed drought analyses, conceptual site model, Sedimentation Rate Work Plan, and drawdown stimulation study.

- Round Lake Working Group Meeting on October 4, 2007 – Discussed and approved drought analyses and conceptual site model, and final revision to the Sedimentation Rate Work Plan.
- Round Lake Working Group Meeting on November 20, 2007 – Discussed issues for the Draft Feasibility Study.
- Round Lake Working Group Meeting on January 8, 2008 – Discussed additional issues for the Draft Feasibility Study.
- Round Lake Working Group Meeting on March 4, 2008 – Discussed remedial action objectives and endpoints for the Draft Feasibility Study.
- Round Lake Working Group Meeting on April 8, 2008 – Discussed remedial action objectives and remedial alternatives for the Draft Feasibility Study.
- RAB Meeting on April 6, 2009 – Discussed Round Lake in the context of the Aquatic Sites Feasibility Study.
- Round Lake Working Group Meeting on October 29, 2009 – Discussed comment resolution for the Revised Draft Feasibility Study for Aquatic Sites.
- Round Lake Working Group Meeting on August 11, 2010 – Discussed splitting Rice Creek, Sunfish Lake, Marsden Lake, and Pond G into a separate Feasibility Study (excluding Round Lake).
- Round Lake Working Group Meeting on April 12, 2012 – Discussed comment resolution for the Revised “Redlined” Draft Feasibility Study for Aquatic Sites.
- RAB Meeting on May 21, 2012 – Discussed Round Lake’s Draft Feasibility Study.
- RAB Meeting on May 17, 2015 – Discussed Round Lake and update on the ecological risk assessment, Draft Supplemental Remedial Investigation and Feasibility Study (SRI/FS), and dispute process.
- Round Lake Stakeholder Meeting on June 18, 2019 – Discussed USFWS’ goals for Round Lake and how success of those goals would be measured, so that this information could be considered when making decisions regarding remedial activities at Round Lake.
- Round Lake Stakeholder Meeting on September 15, 2019 – Discussed Applicable or Relevant and Appropriate Requirements (ARARs) for Round Lake, comments and responses to comments on the Draft SRI/FS, next steps on the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process, and the list of alternatives and mean probable effect concentration quotient (mPEC-Q) to confirm attendees are on the same page.
- Round Lake Stakeholder Call on July 14, 2020 – Discussed USFWS comments on the December 2019 revised SRI-FS and Army responses.
- Round Lake Stakeholder Call on September 1, 2020 – Discussed finalizing the August 2020 Final SRI-FS.
- RAB Virtual Meeting on January 14, 2021 - Discussed Round Lake and update on the finalization of the SRI/FS.

- RAB Virtual Meeting on February 16, 2021 – Discussed Round Lake and the pending Draft Proposed Plan.
- RAB Virtual Meeting on April 20, 2021 – Discussed Round Lake, the approved SRI/FS, the Draft Proposed Plan, and pending public meeting and comment period.

Ongoing community relations activities with regards to the site include:

- RAB Meetings.
- Round Lake Stakeholder Meetings.

Summary of Comments Received During the Public Comment Period

Comments received during the Round Lake public comment period on the Final Proposed Plan are summarized below. The comment period was held from July 9 through August 13, 2021. The summary groups the comments into the following categories:

- Remedial alternative preferences
- Best management practices, design, and implementation
- Restoration and final appearance of Round Lake
- Remediation cost
- Sampling
- Permitting

Remedial Alternative Preferences

Comments were received both for and against the preferred alternative. A total of 3 of the 25 comments received did not support the preferred alternative. Commenters preferred Alternative 1 no action and Alternative 3 enhanced monitored natural recovery. Stakeholders' preference for these alternatives were considered by the Army, USEPA, and MPCA in selecting the final remedy.

Comment. Multiple commenters and agencies expressed support for the preferred alternative.

Two commenters expressed preference for Alternative 1 no action based on the cost of the remediation versus the benefit of addressing potential risk to benthic macroinvertebrates and waterfowl and concern that dredging will cause contamination to migrate to downstream waterbodies.

A commenter expressed preference for Alternative 3 enhanced monitored natural recovery and is concerned about noise, disruption of the natural landscape, spread of pollution, and increased traffic on the lake from Alternative 4A.

Army Response. After considering the alternatives and public comment, the Army selected the remedial action described in the Record of Decision (ROD). The remedial action will consist of dredging the contaminated sediment and disposing of it offsite. Alternative 1 no action and Alternative 3 enhance monitored natural recovery were screened out based on uncertainty regarding the alternatives' effectiveness at meeting the remedial action objective. For further explanation of the process for selecting the remedial alternative, refer to the ROD.

USEPA, MPCA, and USFWS requested that a remedial action be performed. Construction activities will be scheduled to minimize effects on wildlife. Best management practices will be implemented to minimize the spread of contaminants. Monitoring will be performed during remediation to confirm water quality criteria are not exceeded and there are no unacceptable health impacts.

Construction activities will be scheduled to minimize disturbance to residents, including restrictions on work hours to minimize the noise impacts. During design, the need for restoration to restore the lake after remediation will be evaluated. The remediation will include a traffic control plan to minimize traffic impacts to residents.

Best Management Practices, Design, and Implementation

Comments were received on best management practices, design and implementation of the remedial action, including water depth in the lake, water quality controls during dredging, what landfill will be used, and impacts to the community from the construction. Most of these concerns will be addressed in the design, which will describe how the remediation will be performed and will provide instructions to the contractor on how to perform the cleanup. The remedial design will include construction quality assurance activities to confirm the remediation is performed as designed and meets the remedial action objective. Some of these concerns may be addressed during procurement of the contractor. For example, selection of the landfill may be left to the contractor who may be able to secure better disposal pricing, thus improving the cost effectiveness of the remediation.

Comment. Provide additional information on inhalation hazards during remediation and best management practices to limit transport of contaminants in water during remediation.

Army Response. The potential for inhalation hazards will be evaluated during design. Inhalation hazards could be dust and/or chemicals. If inhalation hazards are identified, there will be air quality controls and air monitoring. Air monitoring may include worker monitoring and community monitoring. The potential for water quality impacts during dredging will be evaluated during design. Best management practices will be identified that could be implemented if there are water quality affects. There will likely be water quality monitoring during remediation.

Comment. Consider local surficial drainage patterns to prevent transport of contaminants from Round Lake to downstream waterbodies during remediation. Water generated from dewatering the dredge material should be tested for contamination prior to discharge. Commenter prefers discharge of treated water to Round Lake or the sanitary sewer and suggested that flocculants be used to promote deposition of suspended contaminants in Round Lake during dredging. Best management practices should be used at the outlet of Round Lake to prevent the migration of contaminants out of the lake during remediation.

Army Response. If there are ground disturbing activities on the land adjacent to the lake, stormwater erosion control methods will be used. The potential for water quality impacts during dredging will be evaluated during design. Best management practices will be identified that could be implemented if there are water quality affects. There will likely be water quality monitoring during remediation. If water generated from dewatering the dredge material will be discharged to the lake, it will be done under the substantive requirements of state and f ederal permits. It is anticipated that those requirements will include testing of the water to confirm it meets discharge criteria.

Comment. Commenters requested that impacts to residents be minimized during remediation, including limiting the hours of operation of noisy equipment and confirming workers are respectful of residents'

properties, and that good communication be maintained with residents during implementation of the remedy.

Army Response. Noise and traffic from the remediation may affect residents. The Army will prepare a communication strategy with the community to inform the community of the remediation, including construction schedule, traffic plans, and noise restrictions. Construction activities will be scheduled to minimize disturbance to residents, including restrictions on work hours to minimize the noise impacts above the time weighted average. The remediation will include a traffic control plan to minimize traffic impacts to residents. Communication with the residents will continue through design and remediation. The Army will implement a communication plan to keep the residents informed and offer opportunities for feedback.

Comment. A commenter expressed preference for hydraulic dredging because it requires less water removal and provides the least disturbance to the lake bottom, area wildlife, and benthic organisms. A thin cover should be placed over the dredged area.

Army Response. The type of dredge used will likely be determined by the contractor to provide maximum flexibility and cost effectiveness. The need for thin cover will be evaluated during design. If it is determined that a thin cover may be appropriate, the potential ARARs associated with placing fill in the lake will be evaluated.

Comment. The Burnsville Landfill should not be used because it is in an undesignated floodplain that is near the Minnesota River and the Minnesota Valley National Wildlife Refuge.

Army Response. Landfill options will be evaluated during design. The contractor may propose a landfill and the Army will review and approve. It is unlikely the Burnsville Landfill will be proposed because it is a sanitary landfill, and the waste is industrial.

Restoration and Final Appearance of Round Lake

A number of comments were made on management of the lake after remediation, including lake water levels, construction of trails by the lake, and recreational use of the lake. USFWS, as the property owner and manager of the lake, will determine post remediation management and use of the lake.

Comment. The lake size, depth, and vegetation cover should remain unchanged following remediation. Dredging should not increase shallow areas or reduce the lake size that is clear of emergent vegetation.

Army Response. USFWS is responsible for lake management post remediation. MDNR is responsible for releasing water at the lake outlet and temporary lake water level draw down. The intent is to maintain similar water depths post remediation as exist currently. The remediation is not intended to affect lake size, depth, or vegetation. Water depths will be evaluated during design. During design, the need to restore the lake after remediation will be evaluated.

Comment. Multiple commenters expressed support for increased public use and access to the lake, including developing trails, allowing non-motorized watercraft, and allowing fishing.

Army Response. USFWS, as the property owner and manager of the lake, will determine post remediation public access to the lake, use of the lake, and whether trails are installed by the lake.

Remediation Cost

A number of comments were received related to the cost estimates and the potential for conducting a value engineering study. The cost estimates for the selected alternative will be updated through the design.

Comment. Perform additional evaluation of the costs as the estimates provided seem to be high.

Army Response. The cost estimate will be updated during design. As the project will be better defined during design, it is expected that the updated cost estimate will be more accurate.

Comment. A commenter recommended a value engineering study to evaluate dredging methods, dewatering locations, and disposal locations, with suggestions for specific dredge, dewatering location, and disposal location.

Army Response. The Army will consider doing a value engineering study during design. The type of dredge used will likely be determined by the contractor to provide maximum flexibility and cost effectiveness. The dewatering location will be finalized during design and the options suggested by commenters will be considered. Landfill options will be evaluated during design. Alternative 4A does not include disposing of the dredge material on TCAAP but rather disposing of the dredge material offsite. The contractor may propose a landfill that the Federal Facility Agreement signatories will review and approve.

Sampling

Commenters asked whether confirmation sampling of the sediment will be performed prior to remediation and after remediation. A number of comments were made on whether additional sediment data will be collected prior to remediation. Comments were made on whether post remediation confirmation sediment sampling will be performed to confirm the contamination was removed. The remedial design will include construction quality assurance activities, including how it will be confirmed that the contamination was removed.

Comment. Confirmation sampling should be completed following remediation to confirm the effectiveness of the remedy. What contingency measures would be implemented if the results did not meet the remedial action objective? The use of real time data collection methods was recommended.

Army Response. The confirmation sediment sampling approach will be developed during design. Confirmation sampling will likely consist of submitting samples to a laboratory for analysis to obtain data of sufficient quality to meet project needs. Contractor payment and demobilization will likely require meeting confirmation sampling requirements. The design will include contingency actions if confirmation sampling indicates contamination remains in place. Contingency actions will likely include additional dredging and/or placing a thin layer of material over the sediment.

Comment. Additional sampling to further delineate contamination prior to remediation should be performed. Comments included questions about additional sampling along the shoreline, in the vicinity of the former TCAAP outfall, and to further evaluate that mPEC-Q of 0.1 will be achieved in the long term.

Army Response. Additional sampling before remediation is not planned. The area for remediation was delineated during the RI. The remedial action objective that the FFA signatories and USFWS agreed to is 0.6 mPEC-Q.

Comment. Provide additional information on the risk assessment, conceptual site model of the extent of contamination and transport mechanisms, previous sampling and analytes, and sedimentation modelling.

Army Response. Commenters were directed to the internet URL or provided copies of additional documents, including the risk assessment. The conceptual site model is a living model that will be updated as additional information is available. A sedimentation model will probably not be prepared. There are sufficient sediment samples to delineate the vertical and horizontal extent of contamination.

Permitting

Comments were made on ARARs (CERCLA's term for federal, state, and local requirements). CERCLA requires potential ARARs to be listed as part of the FS and final ARARs selected in the ROD. Details of how ARARs will be met are determined during the design once the remedy is selected. During the remedy-selection phase, the Army has had several meetings with EPA, MPCA, and stakeholders to discuss and narrow potential ARARs that will be selected as part of the final remedy.

Comment. The Rice Creek Watershed District (RCWD) informed the Army that they implement a number of regulations that may apply to the remediation, including grading and erosion and sediment controls.

Army Response. The design will provide information on how ARARs will be met. RCWD will be invited to the technical working group.

Comment. USFWS disagrees with the Army's decision not to identify USFWS land management obligations as ARARs for Round Lake. USFWS maintains that the DOI must concur with a remedial action being selected and implemented by another federal agency on land managed by a DOI bureau before access can be granted to the other agency to implement that remedy.

Army Response. DDuring the remedy-selection phase, the Army has had several meetings with EPA, MPCA, and stakeholders to discuss and narrow potential ARARs including USFWS-proposed ARARs. Those statute and regulations that USFWS proposed do not meet the definition of an ARAR and are not included in the final ARARs located in Attachment B of the ROD. Army maintains that the DOI does not have a formal concurrence role in the selection of a CERCLA remedial action where DOI is not the lead agency responsible for completing the cleanup

Comment. MDNR stated that with the exception of Alternatives 4A, 4B, and possibly 8, the remaining alternatives may not meet Minnesota regulations. They provided a list of regulations to be added to Appendix H list of ARARs in the SRI-FS. They provided consideration of water appropriation, environmental review, bathymetry in the lake, and threatened and endangered species requirements.

Army Response. During the remedy-selection phase, the Army has had several meetings with EPA, MPCA, and stakeholders to discuss and narrow potential ARARs that will be selected as part of the final remedy. Final ARARs are included in Attachment B of the ROD.

Comment. MPCA suggested that a technical working group be formed to share information.

Army Response. The Army has formed a technical working group with stakeholders, including MPCA. The first meeting of the group was held September 23, 2021.

Attachments - all the community relations activities that the Army did about Round Lake.

- Public notices,
- Display ad,
- Notifications at RAB meeting,
- Presentations at RAB meetings about the RI/FS (April 20, 2021) and the Proposed Plan (July 20, 2021)
- Fact Sheet
- RAB Meeting Transcript (to be included)
- Video of the RAB meeting (to be included)

ATTACHMENT 1

Public Notices

AFFIDAVIT OF PUBLICATION

STATE OF MINNESOTA) ss
COUNTY OF ANOKA

Karen Nelson being duly sworn on an oath, states or affirms that he/she is the Publisher's Designated Agent of the newspaper(s) known as:

Anoka County Union Herald

with the known office of issue being located in the county of:

ANOKA

with additional circulation in the counties of:

ANOKA

and has full knowledge of the facts stated below:

(A) The newspaper has complied with all of the requirements constituting qualification as a qualified newspaper as provided by Minn. Stat. §331A.02.

(B) This Public Notice was printed and published in said newspaper(s) once each week, for 1 successive week(s); the first insertion being on 07/09/2021 and the last insertion being on 07/09/2021.

MORTGAGE FORECLOSURE NOTICES
Pursuant to Minnesota Stat. §580.033 relating to the publication of mortgage foreclosure notices: The newspaper complies with the conditions described in §580.033, subd. 1, clause (1) or (2). If the newspaper's known office of issue is located in a county adjoining the county where the mortgaged premises or some part of the mortgaged premises described in the notice are located, a substantial portion of the newspaper's circulation is in the latter county.

By: Karen Nelson
Designated Agent

Subscribed and sworn to or affirmed before me on 07/09/2021 by Karen Nelson.

Diane H. Erickson
Notary Public

DIANE H ERICKSON
NOTARY PUBLIC
MINNESOTA
My Commission Expires Jan. 31, 2024

Rate Information:
(1) Lowest classified rate paid by commercial users for comparable space:
$20.00 per column inch

Ad ID 1151704

ARMY INVITES COMMUNITY TO OPEN HOUSE AND RAB MEETING ON JULY 20, 2021

The Army will host an **Open House on July 20, 2021, 10:00 AM to 3:00 PM.** Please join us at:

Arden Hills Army Training Site
4761 Hamline Ave N,
Arden Hills, MN 55112

Please call (651) 282-4420 for directions.

Army personnel will be on hand at the Minnesota Army National Guard Arden Hills Army Training Site Gymnasium to respond to questions about the studies related to Round Lake.

Open house attendees will be required to adhere to all National, Regional, and State COVID-19 mandates and guidelines in place at the time of the Open House.

In addition, the Army will host a Restoration Advisory Board (RAB) virtual meeting at 7:00 PM using **Microsoft Teams**. Oral comments will be accepted at the end of the RAB meeting.

Army personnel will present information about the Proposed Plan (PP) and respond to questions from meeting attendees. At the end of the meeting, attendees can orally record their comments on the PP or submit their comments in writing before August 13, 2021.

Written comments on the Proposed Plan may be sent by email to:

USARMY.JBSA.AEC.MBX@mail.mil

Or by mail to:

U.S. Army Environmental Command,
2455 Reynolds Road, Mailstop 112
ATTN: AMIM-AEC-M/Albrecht
JBSA Fort Sam Houston, TX
78234-7588

RAB and Public Comment meeting information will be provided to RAB members by email. Interested members of the public should contact Kay Toye by phone at (520) 903-4363 or email at kay.toye@envrg.com to obtain meeting information and register to provide oral comments.

This RAB meeting will be focused on Round Lake. Updates on other TCAAP cleanup projects will be delayed until the September 21, 2021 RAB meeting. All RAB meetings are open to the public.

If you have questions or concerns, call Cathy Kropp at (443) 243-0313 or email USARMY.JBSA.AEC.MBX@mail.mil.

Published in the
Anoka County UnionHerald
July 9, 2021
1151704

AFFIDAVIT OF PUBLICATION

STATE OF MINNESOTA) ss
COUNTY OF ANOKA

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Anoka County Union Herald

with the known office of issue being located in the county of:

ANOKA

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By: Karen Nelson
Designated Agent

Subscribed and sworn to or affirmed before me on 07/09/2021 by Karen Nelson.

Diane H. Erickson
Notary Public

DIANE H ERICKSON
NOTARY PUBLIC
MINNESOTA
My Commission Expires Jan. 31, 2024

Rate Information:
(1) Lowest classified rate paid by commercial users for comparable space:
$20.00 per column inch

Ad ID 1151701

ARMY OPENS 30-DAY PUBLIC COMMENT PERIOD ON ROUND LAKE REMEDIATION

The Army invites the public to comment on the Proposed Plan (PP) for environmental remediation at Round Lake, Arden Hills, Minnesota. The PP, available for review at https://tcaaprab.org, describes investigations and risk assessments at Round Lake and presents the Army's preferred alternative to address metals- and polychlorinated biphenyls-contaminated sediment. This alternative includes dredging contaminated sediments, transferring dredged sediments to an upland processing area for dewatering and stabilization, and disposal of processed sediments at an offsite landfill.

To ensure that the community's concerns are addressed, a **public comment period runs from July 9, 2021 through August 13, 2021.** During this time, the public is encouraged to submit any comment on the PP to the Army. The public is encouraged to review the PP and the documents that make up the Administrative Record to gain a more comprehensive understanding of the Site and the Superfund activities that have been conducted here. Site documents are available for public review in the Administrative Record File and Information Repository at the Minnesota Army National Guard, Arden Hills Army Training Center. Please call (651) 282- 4420 for an appointment and directions.

Arden Hills Army Training Center
4761 Hamline Ave N
Arden Hills, MN 55112

Written comments on the Proposed Plan may be sent by email to:

USARMY.JBSA.AEC.MBX@mail.mil

Or by mail to:

U.S. Army Environmental Command,
2455 Reynolds Road, Mailstop 112
ATTN: AMIM-AEC-M/Albrecht
JBSA Fort Sam Houston, TX
78234-7588

The Army will host an **Open House on July 20, 2021, from 10:00 AM to 3:00 PM** at the **Arden Hills Army Training Site**, located at **4761 Hamline Ave N, Arden Hills, MN 55112.** Army personnel will be on hand to respond to questions about the studies related to Round Lake. Open house attendees will be required to adhere to all National, Regional, and State COVID-19 mandates and guidelines in place at the time of the Open House. In addition, the Army will host a **Virtual Public Meeting on July 20, 2021, at 7:00 PM using Microsoft Teams.** Army personnel will present the PP and meeting attendees can record their comments on the PP orally at the end of or after the virtual public meeting. Meeting information will be provided to Restoration Advisory Board members by email, and interested members of the public should contact Kay Toye by phone at (520) 903-4363 or email at kay.toye@envrg.com to register.

The Army is the lead agency responsible for environmental cleanup of Round Lake, under the oversight of the U.S. Environmental Protection Agency and the Minnesota Pollution Control Agency. The PP was prepared in consultation with the U.S. Environmental Protection Agency and the Minnesota Pollution Control Agency. The PP is open for public comment for a minimum of 30 days in accordance with the public participation requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 et seq. as amended) Section 117(a) and under 40 CFR Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan.

Published in the
Anoka County UnionHerald
July 9, 2021
1151701

AFFIDAVIT OF PUBLICATION
STATE OF MINNESOTA
COUNTY OF RAMSEY

Emily Kunz, being duly sworn on oath, says: that she is, and during all times herein states has been, Clerk of Northwest Publications, LLC., Publisher of the newspaper known as the Saint Paul Pioneer Press, a newspaper of general circulation within the Counties of Chisago, Dakota, Ramsey and Washington in Minnesota and Pierce and St. Croix in Wisconsin.

See Attached Legal TearSheet

That the notice hereto attached was from the columns of said newspaper and was printed and published therein on the following date(s):

July 9th 2021
Newspaper Ref./ Ad #0071473976

Emily Kunz
Emily Kunz (Jul 9, 2021 11:01 CDT)

Subscribed and sworn to before me this
9 July 2021

True Lee

True Lee (Jul 9, 2021 11:06 CDT)

NOTARY PUBLIC
Ramsey County, MN
My Commission Expires January 31, 2025

TRUE LEE
NOTARY PUBLIC
STATE OF MINNESOTA
MY COMMISSION EXPIRES
JANUARY 31, 2025

Twin

Wheels

35-149

51 Auto Auctions

PUBLIC VEHICLE AUCTION
1PM Thursday, July 15
11:30AM Viewing
SPPD Impound Lot
830 Barge Channel Rd.
Must be 18 w/proper ID
$5 Entry Fee, Auction
Hotline 651-266-5757

83 Oldsmobile

Oldsmobile Model 98 1995. Very good condition. Runs great. 651-771-2816. $2,300.

136 Motorcycles

Yamaha X Max 300 Scooter 2020 2,700 miles. Likenew. With warranty. $4,900. 651-770-4940.

Stuff

275-395

276 Antiques Collectibles

★ CASH FOR ★
Pistols, Rifles, Shotguns, Swords
651-247-4780

MN STAMP EXPO
Jul 16-18, Fri 10-6
Sat 10-5, Sun 10-4
Crystal Community Ctr
4800 Douglas Dr. N.
Crystal, MN
952-431-3273
stampsminnesota.com

WE BUY COMIC BOOKS!
Top Prices Paid
Will Come To You
1-888-88-COMIC
ComicBuyingCenter.com

Legal Services

270-271

270 Legal Notices

City of Mendota Heights
Dakota County, Minnesota

ORDINANCE NO. 566
SUMMARY PUBLICATION

AN ORDINANCE AMENDING PART OF MENDOTA HEIGHTS CITY CODE TITLE 5 - POLICE REGULATIONS AND TITLE 12 – ZONING REGARDING THE TEMPORARY KEEPING OF GOATS FOR GRAZING PURPOSES

The City Council of the City of Mendota Heights, Minnesota ordains as follows:

Title 5, Chapter 3, of the Mendota Heights City Code is hereby amended with certain new language to allow for and establish conditions under which the temporary and periodic use of a limited number of goats for invasive and noxious vegetation control is permitted and to establish the requirements for doing so in order to protect the environment and the health, safety, and welfare of the general population.

No goat may be kept, maintained, or harbored on any property in the city unless a goat grazing permit has been approved and issued by the city. The number of goats allowed, application process, duration of a permit, conditions of a permit, feeding and care of goats, and violations/penalties and other related standards are noted in the ordinance.

Title 12, Chapter 5 and Title 12, Chapter 8 of the Mendota Heights City Code are also hereby amended to allow for temporary and periodic use of a limited number of goats for invasive and noxious vegetation control on residential and commercial/industrial properties as per City Code Title 5-3-11; with certain subsequent sections renumbered as needed.

Adopted and ordained into an Ordinance this 6th day of July, 2021.

Legal Services

270-271

270 Legal Notices

276 Antiques Collectibles

COIN SHOW Sat 7/10
Roseville Skating Center
2661 Civic Ctr Dr, 9-4.
Buy, sell or trade.
612-770-1298

313 Estate, Craft & Misc Shows

Cottage Grove
ESTATE SALE July 9-11
Fri & Sat 9-5, Sun 9-2
62 years accumulation!
Antiques, lamps, clocks, furn, dishes, HH. Cash.
11040 70th St S 55016

350 Pets - Dogs

BOSTON TERRIER PUPS - M, 12wks, Collie AKC pups,11wks, shots, vet chk, call 320-552-5090 for pictures.

Labradoodle Pups
Ready for forever homes.
3 M. 4 F. $1,300.
Call or text for more info.
320-406-7899.

NEWFOUNDLAND PUPS. AKC, parents on site 612-868-6764 or 715-483-9118

Shepherd/Dobie Pups
7 weeks. $500
651-212 3290

Find the latest local news all day at **TwinCities.com.**

270 Legal Notices

Army Opens 30-Day Public Comment Period on Round Lake Remediation

The Army invites the public to comment on the Proposed Plan (PP) for environmental remediation at Round Lake, Arden Hills, Minnesota. The PP, available for review at https://tcaaprab.org, describes investigations and risk assessments at Round Lake and presents the Army's preferred alternative to address metals- and polychlorinated biphenyls-contaminated sediment. This alternative includes dredging contaminated sediments, transferring dredged sediments to an upland processing area for dewatering and stabilization, and disposal of processed sediments at an offsite landfill.

To ensure that the community's concerns are addressed, a **public comment period runs from July 9, 2021 through August 13, 2021**. During this time, the public is encouraged to submit any comment on the PP to the Army. The public is encouraged to review the PP and the documents that make up the Administrative Record to gain a more comprehensive understanding of the Site and the Superfund activities that have been conducted here. Site documents are available for public review in the Administrative Record File and Information Repository at the Minnesota Army National Guard, Arden Hills Army Training Center. Please call (651) 282-4420 for an appointment and directions.

360 Garage Sales

OAKDALE
APOLSTOLIC BIBLE INSTITUTE
SATURDAY JULY 10TH
8AM - 5PM
Huge church rummage sale!! Furniture, collectibles, kitchen items , tools, and much more.
6944 Hudson Blvd. N., Oakdale

St. Paul
Cool mid-summer sale or should've been a 2 years ago sale.
7/8 - 7/10
8am to 5pm.
Unique items, vintage pottery, books, tools, toys,furniture, fabric, art, linens, houseware, sporting goods, antiques and more!
2297 Hillside Ave.

ST. PAUL
HUGE GARAGE SALE
July 8th - July 10th
8am -6pm.
Everything must go!
2186 Upper Afton Road 55119

374 Misc for Sale

Misc. Items. Record player & radio combo, lumber, metal lockers, tools, push lawn mowers, storae cabintes, collector prints, & much more misc. items.
612-791-3985.

270 Legal Notices

District 833 School Board Meeting Unofficial Clerk's Minutes: 5/20/21

Called to Order by Schwartz at 6:30pm at the DSC. Board Members present: Dols, Driscoll, Hinz, Patnaik, Schwartz & Van Leer. Brunnette was absent. Student reps Alowonle (PHS), Nwanokwale (WHS) & Poor (ERHS) were present. Superintendent Nielsen was present. Moved by Van Leer, seconded by Driscoll to approve an amended agenda, adding 10.8, Unrequested Leaves of Absences. All in favor, none opposed, motion carried. Student Board Reps gave updates. The student board members were highlighted. One person approached the board about summer offerings. Moved by Van Leer, seconded by Dols to approve the following consent agenda items: Retirements, Resignations, Terminations, Leaves of Absence, New Employees, Change of Status, EFT's, Gifts, 4/22/21 & 5/6/21 School Board Meeting Minutes, Extended Field Trips, teaching agreement with St. Catherine's & the University of WI, Superior, April Cash Disbursements, Lease financing sheet & financing of student devices. All in favor, none opposed, motion carried. It was moved by Driscoll, seconded by Van Leer to approve the proposed policy changes. All in favor, none opposed, motion carried. It was moved by Hinz, seconded by Patnaik to approve the

374 Misc for Sale

2 Vikings season tickets 50 yard line Club access. 954-523-1700

390 Sporting Equipment & Recreation

DREAM BIKE 21" ladies 2017 Townie 21 spd. Easy on, easy off. Less than 100 mi. Like new. $500. 612-594-6020.

391 Wanted Merchandise

FREON WANTED: We pay $$$ for cylinders and cans of R12 R500 R11 R113 R114. Convenient. Certified Professionals. Call 312-291-9169 or visit RefrigerantFinders.com

mytcjob.com
and the Pioneer Press are the place to find out who's hiring.

270 Legal Notices

District 833 School Board Meeting Unofficial Clerk's Minutes: 6/17/21

June 17, 2021

Called to Order by Brunnette at 6:30pm at the DSC. Board Members present: Brunnette, Dols, Driscoll, Hinz, Patnaik, Schwartz & Van Leer. Superintendent Nielsen was present. Moved by Van Leer, seconded by Hinz to approve an amended agenda, adding 8.5 Approval of Resolution placing Teachers on Unrequested Leave of Absence & 8.6 Approval of Resolution Clarifying Terms & Conditions of Employment for Tier 2 & 3 Employees. All in favor, none opposed, motion carried. Two people addressed the board regarding masks in school next fall. Moved by Driscoll, seconded by Dols to approve the following consent agenda items: Retirements, Resignations, Terminations, Leaves of Absence, New Employees, Change of Status, EFT's, Gifts, 5/20/21 & 6/3/21 School Board Meeting Minutes, 2021-22 Miscellaneous Wage Sheet, Student Placement Agreement w/ Gustavus Adolphus College, Grant Application & Change to 2021-22 Board Meeting Dates. Information was shared on the Budget Adjustments. It was moved by Van Leer, seconded by Driscoll to approve changes to proposed policies. All in favor, none opposed, motion carried. It was moved by Hinz, seconded by Schwartz to approve the boundary change to Settlers Bluff. All in favor, none op-

Rentals

900-934

915 Apartment Services

Opening Waitlist for 1 and 2 bedroom project based section 8 apartments

Wednesday, July 28th 2021 from 9am to 12pm(noon).

In person applications ONLY at Real Estate Equities office located at 579 Selby Ave St. Paul MN 55102.

Please call or email to receive more information.

ShermanForbes@reeapartments.com

651-222-0822

EQUAL HOUSING OPPORTUNITY

Post your resume online at **myTCjob.com**

270 Legal Notices

Army Invites Community to Open House and RAB Meeting on July 20, 2021

The Army will host an **Open House on July 20, 2021, 10:00 AM to 3:00 PM**. Please join us at:

Arden Hills Army Training Site
4761 Hamline Ave N,
Arden Hills, MN 55112

Please call (651) 282-4420 for directions.

Army personnel will be on hand at the Minnesota Army National Guard Arden Hills Army Training Site Gymnasium to respond to questions about the studies related to Round Lake.

Open house attendees will be required to adhere to all National, Regional, and State COVID-19 mandates and guidelines in place at the time of the Open House.

In addition, the Army will host a Restoration Advisory Board (RAB) virtual meeting at 7:00 PM using **Microsoft Teams.** Oral comments will be accepted at the end of the RAB meeting. Army personnel will present information about the Proposed Plan (PP) and respond to questions from meeting attendees. At the end of the meeting, attendees can orally record their comments on the PP or submit their comments in writing before August 13, 2021.

Written comments on the Proposed Plan may be sent by email to: USARMY.JBSA.AEC.

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AFFIDAVIT OF PUBLICATION

STATE OF MINNESOTA)
COUNTY OF ANOKA) ss

Karen Nelson being duly sworn on an oath, states or affirms that he/she is the Publisher's Designated Agent of the newspaper(s) known as:

BSLP Col Hght Frid Life

with the known office of issue being located in the county of:

ANOKA

with additional circulation in the counties of:

ANOKA

and has full knowledge of the facts stated below:

(A) The newspaper has complied with all of the requirements constituting qualification as a qualified newspaper as provided by Minn. Stat. §331A.02.

(B) This Public Notice was printed and published in said newspaper(s) once each week, for 1 successive week(s); the first insertion being on 07/16/2021 and the last insertion being on 07/16/2021.

MORTGAGE FORECLOSURE NOTICES Pursuant to Minnesota Stat. §580.033 relating to the publication of mortgage foreclosure notices: The newspaper complies with the conditions described in §580.033, subd. 1, clause (1) or (2). If the newspaper's known office of issue is located in a county adjoining the county where the mortgaged premises or some part of the mortgaged premises described in the notice are located, a substantial portion of the newspaper's circulation is in the latter county.

By: Karen Nelson
Designated Agent

Subscribed and sworn to or affirmed before me on 07/16/2021 by Karen Nelson.

Darlene M MacPherson
Notary Public

DARLENE MARIE MACPHERSON
NOTARY PUBLIC - MINNESOTA
My Commission Expires Jan 31, 2024

Rate Information:
(1) Lowest classified rate paid by commercial users for comparable space:
$22.00 per column inch

Ad ID 1151705

ARMY INVITES COMMUNITY TO OPEN HOUSE AND RAB MEETING ON JULY 20, 2021

The Army will host an **Open House on July 20, 2021, 10:00 AM to 3:00 PM.** Please join us at:

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4761 Hamline Ave N,
Arden Hills, MN 55112

Please call (651) 282-4420 for directions.

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Or by mail to:

U.S. Army Environmental Command,
2455 Reynolds Road, Mailstop 112
ATTN: AMIM-AEC-M/Albrecht
JBSA Fort Sam Houston, TX 78234-7588

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This RAB meeting will be focused on Round Lake. Updates on other TCAAP cleanup projects will be delayed until the September 21, 2021 RAB meeting. All RAB meetings are open to the public.

If you have questions or concerns, call Cathy Kropp at (443) 243-0313 or email USARMY.JBSA.AEC.MBX@mail.mil.

Published in
The Life
July 16, 2021
1151705

AFFIDAVIT OF PUBLICATION

STATE OF MINNESOTA) ss
COUNTY OF ANOKA

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By: Karen Nelson
Designated Agent

Subscribed and sworn to or affirmed before me on 07/16/2021 by Karen Nelson.

Darlene M MacPherson
Notary Public

DARLENE MARIE MACPHERSON
NOTARY PUBLIC - MINNESOTA
My Commission Expires Jan 31, 2024

Rate Information:
(1) Lowest classified rate paid by commercial users for comparable space:
$22.00 per column inch

Ad ID 1151702

ARMY OPENS 30-DAY PUBLIC COMMENT PERIOD ON ROUND LAKE REMEDIATION

The Army invites the public to comment on the Proposed Plan (PP) for environmental remediation at Round Lake, Arden Hills, Minnesota. The PP, available for review at https://tcaaprab.org, describes investigations and risk assessments at Round Lake and presents the Army's preferred alternative to address metals- and polychlorinated biphenyls-contaminated sediment. This alternative includes dredging contaminated sediments, transferring dredged sediments to an upland processing area for dewatering and stabilization, and disposal of processed sediments at an offsite landfill.

To ensure that the community's concerns are addressed, a **public comment period runs from July 9, 2021 through August 13, 2021.** During this time, the public is encouraged to submit any comment on the PP to the Army. The public is encouraged to review the PP and the documents that make up the Administrative Record to gain a more comprehensive understanding of the Site and the Superfund activities that have been conducted here. Site documents are available for public review in the Administrative Record File and Information Repository at the Minnesota Army National Guard, Arden Hills Army Training Center. Please call (651) 282- 4420 for an appointment and directions.

Arden Hills Army Training Center
4761 Hamline Ave N
Arden Hills, MN 55112

Written comments on the Proposed Plan may be sent by email to:

USARMY.JBSA.AEC.MBX@mail.mil

Or by mail to:

U.S. Army Environmental Command,
2455 Reynolds Road, Mailstop 112
ATTN: AMIM-AEC-M/Albrecht
JBSA Fort Sam Houston, TX
78234-7588

The Army will host an **Open House on July 20, 2021, from 10:00 AM to 3:00 PM** at the **Arden Hills Army Training Site**, located at **4761 Hamline Ave N, Arden Hills, MN 55112.** Army personnel will be on hand to respond to questions about the studies related to Round Lake. Open house attendees will be required to adhere to all National, Regional, and State COVID-19 mandates and guidelines in place at the time of the Open House. In addition, the Army will host a **Virtual Public Meeting on July 20, 2021, at 7:00 PM using Microsoft Teams.** Army personnel will present the PP and meeting attendees can record their comments on the PP orally at the end of or after virtual public meeting. Meeting information will be provided to Restoration Advisory Board members by email, and interested members of the public should contact Kay Toye by phone at (520) 903-4363 or email at kay.toye@envrg.com to register.

The Army is the lead agency responsible for environmental cleanup of Round Lake, under the oversight of the U.S. Environmental Protection Agency and the Minnesota Pollution Control Agency. The PP was prepared in consultation with the U.S. Environmental Protection Agency and the Minnesota Pollution Control Agency. The PP is open for public comment for a minimum of 30 days in accordance with the public participation requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 et seq. as amended) Section 117(a) and under 40 CFR Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan.

Published in
The Life
July 16, 2021
1151702

AFFIDAVIT OF PUBLICATION

STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)

Carter Johnson, being first duly sworn, on oath states as follows:

1. I am the publisher of the QUAD COMMUNITY PRESS, or the publisher's designated agent. I have personal knowledge of the facts stated in this Affidavit, which is made pursuant of Minnesota Statutes §331A.07.

2. The newspaper has complied with all of the requirements to constitute a qualified newspaper under Minnesota law, including those requirements found in Minnesota Statutes §331A.02.

3. The dates of the month and the year and day of the week upon which the public notice attached was published in the newspaper are as follows:

   Once a week, for one week, it was published on Tuesday, the 13th day of July, 2021.

4. The publisher's lowest classified rate paid by commercial users for comparable space, as determined pursuant to §331A.06, is as follows:

   a) Lowest classified rate paid by commercial users for comparable space _____

   b) Maximum rate allowed by law for the above matter _____

   c) Rate actually charged for the above matter $ 10.24/inch

5. Mortgage Foreclosure Notices. Pursuant to Minnesota Statutes §580.033 relating to the publication of mortgage foreclosure notices: The newspaper's known office of issue is located in Ramsey County. The newspaper complies with the conditions described in §580.033, subd. 1, clause (1) or (2). If the newspaper's known office of issue is located in a county adjoining the county where the mortgaged premises or some part of the mortgaged premises described in the notice are located, a substantial portion of the newspaper's circulation is in the latter county.

We are a qualified newspaper in the following counties: Anoka, Ramsey and Washington

FURTHER YOUR AFFIANT SAITH NOT.

BY:
TITLE: Carter Johnson, Publisher
PRESS PUBLICATIONS
4779 Bloom Avenue
White Bear Lake, MN 55110

Subscribed and sworn to before me on this 13th day of July, 2021.

Myrna L. Press
Notary Public

MYRNA L. PRESS
Notary Public-Minnesota
My Commission Expires Jan 31, 2025

U.S. ARMY

ARMY INVITES COMMUNITY TO OPEN HOUSE AND RAB MEETING ON JULY 20, 2021

The Army will host an **Open House on July 20, 2021, 10:00 AM to 3:00 PM**. Please join us at:

Arden Hills Army Training Site
4761 Hamline Ave N,
Arden Hills, MN 55112

Please call (651) 282-4420 for directions.

Army personnel will be on hand at the Minnesota Army National Guard Arden Hills Army Training Site Gymnasium to respond to questions about the studies related to Round Lake.

Open house attendees will be required to adhere to all National, Regional, and State COVID-19 mandates and guidelines in place at the time of the Open House.

In addition, the Army will host a Restoration Advisory Board (RAB) virtual meeting at 7:00 PM using Microsoft Teams. Oral comments will be accepted at the end of the RAB meeting.

Army personnel will present information about the Proposed Plan (PP) and respond to questions from meeting attendees. At the end of the meeting, attendees can orally record their comments on the PP or submit their comments in writing before August 13, 2021.

Written comments on the Proposed Plan may be sent by email to:
USARMY.JBSA.AEC.MBX@mail.mil

Or by mail to:
U.S. Army Environmental Command,
2455 Reynolds Road, Mailstop 112
ATTN: AMIM-AEC-M/Albrecht
JBSA Fort Sam Houston, TX
78234-7588

RAB and Public Comment meeting information will be provided to RAB members by email. Interested members of the public should contact Kay Toye by phone at (520) 903-4363 or email at kay.toye@envrg.com to obtain meeting information and register to provide oral comments.

This RAB meeting will be focused on Round Lake. Updates on other TCAAP cleanup projects will be delayed until the September 21, 2021 RAB meeting. All RAB meetings are open to the public.

If you have questions or concerns, call Cathy Kropp at (443) 243-0313 or email USARMY.JBSA.AEC.MBX@mail.mil.

Published one time in the Quad Community Press on July 13, 2021.

AFFIDAVIT OF PUBLICATION

STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)

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Myrna L. Press
Notary Public

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Arden Hills, MN 55112

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Published one time in the Quad Community Press on July 13, 2021.

AFFIDAVIT OF PUBLICATION
STATE OF MINNESOTA
COUNTY OF RAMSEY

Emily Kunz, being duly sworn on oath, says: that she is, and during all times herein states has been, Clerk of Northwest Publications, LLC., Publisher of the newspaper known as the Saint Paul Pioneer Press, a newspaper of general circulation within the Counties of Chisago, Dakota, Ramsey and Washington in Minnesota and Pierce and St. Croix in Wisconsin.

See Attached Legal TearSheet

That the notice hereto attached was from the columns of said newspaper and was printed and published therein on the following date(s):

July 9th 2021
Newspaper Ref./ Ad #0071473974

Emily Kunz
Emily Kunz (Jul 9, 2021 11:02 CDT)

Subscribed and sworn to before me this
9 July 2021

True Lee

True Lee (Jul 9, 2021 11:07 CDT)

NOTARY PUBLIC
Ramsey County, MN
My Commission Expires January 31, 2025

TRUE LEE
NOTARY PUBLIC
STATE OF MINNESOTA
MY COMMISSION EXPIRES
JANUARY 31, 2025

CLASSIFIEDS + PUBLIC NOTICES

STARTRIBUNE.COM/CLASSIFIEDS
• 612.673.7000 • 800.927.9233

General Policies

Review your ad on the first day of publication. If there are mistakes, notify us immediately. We will make changes for errors and adjust your bill, but only if we receive notice on the first day the ad is published. We limit our liability in this way, and we do not accept liability for any other damages which may result from error or omission in or of an ad. All ad copy must be approved by the newspaper, which reserves the right to request changes, reject or properly classify an ad. The advertiser, and not the newspaper, is responsible for the truthful content of the ad. Advertising is also subject to credit approval.

Legal Notices

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Legal Notices

NOTICE OF A PUBLIC HEARING

July 20, 2021, 7:00 p.m.
City Hall, 3301 Silver Lake Road, St. Anthony, MN 55418
Notice is hereby given that the City of Saint Anthony Village Planning Commission will hold a public hearing to solicit public response to multiple updates to the City of St. Anthony Zoning, Section 152. 100 through 152.105 related to regulation of R-4 Multiple Family District.
The Planning Commission agenda and packet relating to this item will be made available prior to the meeting online at www.savmn.com.
Ways to Comment:
Online
Those persons having an interest are encouraged to attend via Zoom. The link to participate via Zoom can be found at https://www.savmn.com/Calendar.aspx?EID=1226
In Person
The public is welcome to attend in person at the City of Saint Anthony Community Center, 3301 Silver Lake Road, in the Council Chambers at 7:00 p.m.
Written
Written comments may be taken at the St. Anthony Village City Hall, 3301 Silver Lake Road, St. Anthony Village, Minnesota 55418 until the date of the public hearing.
Comments can also be conveyed via email, to planner@savmn.com until the date of the public hearing.
Questions?
Questions may be directed to the City Planner at 763-957-1100.

Steve Grittman
City Planner

Proposals for Bids

LOGIS is requesting
fully-insured proposals for Group Basic Life and AD&D/Voluntary Life and AD&D Insurance. The RFP, including all details, can be obtained by contacting Sue Frick at Gallagher Benefit Services: phone: (952)356-0698; e-mail: sue_frick@ajg.com. Any questions regarding the RFP should be directed to Sue Frick at Gallagher Benefit Services. Quoting carriers must provide a proposal via email, following the instructions outlined in the RFP no later than 2:00 pm on July 30, 2021. Proposals received after the deadline will be considered late and ineligible for consideration.

Garage Sales - NW, SW & W Suburbs

Robbinsdale Multi-Family Sale! 4313 Abbott Ave N. July 10, 10-5. Clothes, kids stuff, vintage, odds & ends!

Garage Sales - St. Paul

BANDANA SQUARE 7/8-7/10, 10-6. Crafts, blu-ray, dvds, cds, hunt/fish, toys, HH, cloz, sports. 1296 Taylor Ave

107 Home & Commercial Services

LAWN & LANDSCAPING
www.HappyYardMN.com
Clean-ups, gutter cleaning, shrub & brush removal, tree/shrub trimming, sod installation & landscaping, river rocks, topsoil, garden, trees, patio installation, privacy fence installation & repairs.
Residential & Commercial
20% Off Competitors!
J. Mendoza 612-990-0945

PAINTING - G.R.'s Painting Wallpaper Removal. Woodworking.. Int/Ext. Free Est. Low Rates. 20 Yrs Exp. In Fridley. Grant 763-789-2510

J. BROTHERS LANDSCAPING & LAWN CARE Mowing, mulch, rocks, gutter cleaning, new sod, clean-ups. FREE ESTIMATES. **10% off!** 612-380-4468

WE FINISH BASEMENTS SINCE 2001
www.OnTimeContractors.com
952-938-0730. Lic #466034

395 Misc. For Sale & Wanted

FREON WANTED: We pay $$$ for cylinders and cans of R12 R500 R11 R113 R114. Convenient. Certified Professionals. Call (312)291-9169 or visit RefrigerantFinders.com

403 Cats

Ragdoll Kittens TICA Ready to go! Vaccinated/vet checked. M $950:F $1,200. 218-616-0932

404 Dogs

Aussiedoodle F1 Toy Aussiedoodles for sale. 1 male and 1 female. Born April 12th,2021. Ready to go to forever homes. 2nd shots and worming done. $2,500 715-977-1721

AUSSIEPOO MINI PUPS Lonely? These soft & silky fun pups will make you laugh every morning & be your cuddly best friend all day. $950. 651-272-0357.

AUSTRALIAN SHEPHERDS MINIATURE Purebred, no papers, 1st shots, wormed $800 each Call/text **507-820-0126**

CAVASHON PUPS Black tri's, beautiful, wonder temperament, high quality. $1600. 320-841-2561. MN #118283

Doberman Pinscher Puppy 8 Month Female Doberman Pincher puppy. Ears cropped. Call Ron 763-248-3143

GERMAN SHEPHERD AKC PUPS! Black & tan, born 4/6, 1st shots, dewormed. M/F $900. 320-429-1294

GERMAN SHEPHERD PUPS
AKC. Exc temp. Genetic guar antee. 715-537-5413. **www.jerland.com**

****GOLDENDOODLE PUPPIES****
4 weeks. M/F $1200.
Call for more info 320-630-1563

Goldendoodles Goldendoodles F1bb. 3 males and 2 females. Black in color. House breaking started. Born 4/12, dews removed, 1st shots given, DNA done. Very cute and socialized. Call or text 320-333-5028. $1000. 320-333-5028

Goldendoodles - Miniatures
puppiesupnorth.com 320-250-2464.

HAVANESE AKC non allergenic, non shed, vet checked, shots, dews, family raised. Ready! **218-689-4002**

Labradoodle Puppies Black & Black with white spots. Some have slight brown hint. Male and females. Born: June 1 & Ready July 27. Parents AKC, hip and elbow checked. EIC clear. Mom chocolate lab. Dad brindle poodle. $1,000 507-450-1805

Labrador Retrievers Labrador Retriever Puppies - 2 red males and 2 yellow female. Born 5/16/2021. Dew claws removed, wormed, first series of shots given, and vet checked. Great hunting and family dogs. $800 - cell 320-221-1901 $800 320-221-1901

Lab Retriever AKC PUPS Yellows & Chocolates 605-949-0445. Ready 7/18 $600 foxysgundogkennels.com

MALTESE PUPPIES Males $600, Females $650. 10 weeks, 1st shots, family raised. 712-441-1863

MALTESE PUPPIES Ready now. High quality males. $800. 320-841-2561. MN #118283

Miniature Australian Shepherd
First shots and wormed. 700.00
218-851-6219

ROTTWEILER FEMALE WANTED
Puppy - 2 yrs old in good health. Tails & dews done. 612-824-0866

Wheaten Terrier APR Soft Coated 3m, 1F vet checked, 1st shots, dewormed, $2,200 218-443-3299

630 APTS & CONDOS UNFURN. MPLS

NOTICE: OPENING THE 1 BEDROOM WAIT LIST

Senior 62+ PRAC 202
Applications may be downloaded at

www.arborlakes.commonbond.org

beginning at 9AM July 6, 2021 un-

Mortgage Foreclosures

or cashier's check payable to the Secretary of HUD, before public auction of the property is completed.
The amount that must be paid if the mortgage is to be reinstated prior to the scheduled sale is $ N/A as of N/A, plus all other amounts that would be due under the mortgage agreement if payments under the mortgage had not been accelerated, advertising costs and postage expenses incurred in giving notice, mileage by the most reasonable road distance for posting notices and for the Foreclosure Commissioner's attendance at the sale, reasonable and customary costs incurred for title and lien record searches, the necessary out-of-pocket costs incurred by the Foreclosure Commissioner for recording documents, a commission for the Foreclosure Commissioner, and all other costs incurred in connection with the foreclosure prior to reinstatement.
Tender of payment by certified or cashier's check or application for cancellation of the foreclosure sale shall be submitted to the address of the Foreclosure Commissioner provided below.
Date: June 23, 2021

Adam Soczynski
Foreclosure Commissioner
Adam Soczynski, #0264805
Usset, Weingarden & Liebo PLLP
4500 Park Glen Road, Suite 300
St. Louis Park, MN 55416
Telephone: 952-925-6888 ext. 736
Email: adam@uwllaw.com
STATE OF MINNESOTA)
)ss
COUNTY OF HENNEPIN)
This instrument was acknowledged before me on June 23, 2021, by Adam Soczynski, Foreclosure Commissioner.
Michael Patrick Carney
Notary Public
THIS INSTRUMENT WAS DRAFTED BY:
Usset, Weingarden & Liebo P.L.L.P.
4500 Park Glen Road, Suite 300
St. Louis Park, MN 55416
7/2, 7/9, 7/16/21 Star Tribune

NOTICE OF MORTGAGE FORECLOSURE SALE

THE RIGHT TO VERIFICATION OF THE DEBT AND IDENTITY OF THE ORIGINAL CREDITOR WITHIN THE TIME PROVIDED BY LAW IS NOT AFFECTED BY THIS ACTION.
NOTICE IS HEREBY GIVEN, that default has occurred in conditions of the following described mortgage:
DATE OF MORTGAGE: May 4, 2006
MORTGAGOR: Peter M. Buonomo and Alene M. Buonomo, husband and wife as joint tenants.
MORTGAGEE: Mortgage Electronic Registration Systems, Inc., as mortgagee, as nominee for Countrywide Bank, N.A. its successors and assigns.
DATE AND PLACE OF RECORDING: Recorded June 1, 2006 Hennepin County Recorder, Document No. 8806395 and corrected by Document Dated June 29, 2013 Recorded July 12, 2013 as Document No. A09979814.
ASSIGNMENTS OF MORTGAGE: Assigned to: Bank of America, N.A. Dated September 15, 2017 Recorded September 19, 2017, as Document No. A10481924. And thereafter assigned to: Mortgage Electronic Registration Systems, Inc. Dated March 2, 2021 Recorded March 8, 2021, as Document No. 10927094. And thereafter assigned to: ABS Loan Trust V (U.S. Bank Trust National Association, as Trustee is current trustee). Dated January 9, 2020 Recorded January 24, 2020, as Document No. A10750010.
TRANSACTION AGENT: Mortgage Electronic Registration Systems, Inc.
TRANSACTION AGENT'S MORTGAGE IDENTIFICATION NUMBER ON MORTGAGE: 1001337-0001387430-3
LENDER OR BROKER AND MORTGAGE ORIGINATOR STATED ON MORTGAGE: Countrywide Bank, N. A.
RESIDENTIAL MORTGAGE SERVICER: Select Portfolio Servicing, Inc.
MORTGAGED PROPERTY ADDRESS: 26010 Shorewood Oaks Drive, Shorewood, MN 55331
TAX PARCEL I.D. #: 32-117-23-44-0021

Mortgage Fore

PUBLIC NOTICE
NOTICE OF MORTG CLOSURE SALE
THE RIGHT TO VERIF THE DEBT AND IDENT ORIGINAL CREDITOR TIME PROVIDED BY L AFFECTED BY THIS AC NOTICE IS HEREBY GIV fault has occurred in th of the following desc gage:
DATE OF MORTGAGE 2010
ORIGINAL PRINCIPAL MORTGAGE: $255,290.
MORTGAGOR(S): Charl Moneek Kimber Whi and wife
MORTGAGEE: Mortgag Registration Systems, solely as nominee for nancial Resources, Inc.
TRANSACTION AGEN Electronic Registratio Inc.
MIN#: 1003363000002
SERVICER: SN Servic tion
LENDER: American F sources, Inc.
DATE AND PLACE Sherburne County Mi corder, on August 1 Document No. 717078 by Loan Modificatior dated November 1, 2 corded August 2, 201 ment No. 876070.
ASSIGNED TO: Natio gage, LLC by an As Mortgage dated 09/24/ corded on 09/25/2013 No. 778702
American Financial Re by an Assignment of M ed 07/14/2014 and rec 15/2014 as Document MTGLQ Investors, LP b ment of Mortgage 25/2015 and record 26/2017 as Document NRZ Pass-Through V P an Assignment of Mort 1/30/2017 and recor 08/2017 as Document U.S. Bank Trust Natio tion, as Trustee of the IV Trust by an Assignm gage dated 07/16/2019 ed on 08/27/2019 as D 877491
LEGAL DESCRIPTION TY: Lot 2, Block 1, Win Elk River, CIC NO 42, the recorded plat there County, Minnesota.
PROPERTY ADDRES 194TH LN NW, ELK 55330
PROPERTY I.D: 75-707
COUNTY IN WHICH P LOCATED: Sherburne
THE AMOUNT CLAIME ON THE MORTGAGE O OF THE NOTICE: Thr Fifty-Eight Thousand T Nineteen and 31/100 ($
THAT no action or pro been instituted at law t debt secured by said any part thereof; tha been compliance wi foreclosure notice and requirements of said m /or applicable statutes;
PURSUANT, to the p contained in said m above described prop sold by the Sheriff of sa follows:
DATE AND TIME OF SA on September 8, 2021
PLACE OF SALE: Sherb Sheriff's Office, Sherb Government Center, ness Center Drive, El 55330 to pay the debt by said mortgage and actually paid by the m the premises and the c bursements allowed time allowed by law fo by said mortgagor(s), t representatives or ass months from the dat Mortgage is not reins Minn. Stat. §580.30 or is not redeemed under 580.23, the Mortgagor the property on or befo on March 8, 2022, or t ness day if March 8, 2 Saturday, Sunday or le
"THE TIME ALLOWED REDEMPTION BY TH GOR, THE MORTGAG

AFFIDAVIT OF PUBLICATION

STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)

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PRESS PUBLICATIONS
4779 Bloom Avenue
White Bear Lake, MN 55110

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Myrna L. Press
Notary Public

MYRNA L. PRESS
Notary Public-Minnesota
My Commission Expires Jan 31, 2025

U.S. ARMY

ARMY OPENS 30-DAY PUBLIC COMMENT PERIOD ON ROUND LAKE REMEDIATION

The Army invites the public to comment on the Proposed Plan (PP) for environmental remediation at Round Lake, Arden Hills, Minnesota. The PP, available for review at https://tcaaprab.org, describes investigations and risk assessments at Round Lake and presents the Army's preferred alternative to address metals- and polychlorinated biphenyls-contaminated sediment. This alternative includes dredging contaminated sediments, transferring dredged sediments to an upland processing area for dewatering and stabilization, and disposal of processed sediments at an offsite landfill.

To ensure that the community's concerns are addressed, **a public comment period runs from July 9, 2021 through August 13, 2021**. During this time, the public is encouraged to submit any comment on the PP to the Army. The public is encouraged to review the PP and the documents that make up the Administrative Record to gain a more comprehensive understanding of the Site and the Superfund activities that have been conducted here. Site documents are available for public review in the Administrative Record File and Information Repository at the Minnesota Army National Guard, Arden Hills Army Training Center. Please call (651) 282- 4420 for an appointment and directions.

Arden Hills Army Training Center
4761 Hamline Ave N
Arden Hills, MN 55112

Written comments on the Proposed Plan may be sent by email to:
USARMY.JBSA.AEC.MBX@mail.mil

Or by mail to:

U.S. Army Environmental Command,
2455 Reynolds Road, Mailstop 112
ATTN: AMIM-AEC-M/Albrecht
JBSA Fort Sam Houston, TX 78234-7588

The Army will host an **Open House on July 20, 2021, from 10:00 AM to 3:00 PM** at the **Arden Hills Army Training Site**, located at **4761 Hamline Ave N, Arden Hills, MN 55112.** Army personnel will be on hand to respond to questions about the studies related to Round Lake. Open house attendees will be required to adhere to all National, Regional, and State COVID-19 mandates and guidelines in place at the time of the Open House. In addition, the Army will host a **Virtual Public Meeting on July 20, 2021, at 7:00 PM using Microsoft Teams.** Army personnel will present the PP and meeting attendees can record their comments on the PP orally at the end of or after the virtual public meeting. Meeting information will be provided to Restoration Advisory Board members by email, and interested members of the public should contact Kay Toye by phone at (520) 903-4363 or email at kay.toye@envrg.com to register.

The Army is the lead agency responsible for environmental cleanup of Round Lake, under the oversight of the U.S. Environmental Protection Agency and the Minnesota Pollution Control Agency. The PP was prepared in consultation with the U.S. Environmental Protection Agency and the Minnesota Pollution Control Agency. The PP is open for public comment for a minimum of 30 days in accordance with the public participation requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 et seq. as amended) Section 117(a) and under 40 CFR Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan.

Published one time in the Vadnais Heights Press on July 14, 2021.

AFFIDAVIT OF PUBLICATION

STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)

Carter Johnson, being first duly sworn, on oath states as follows:

1. I am the publisher of the VADNAIS HEIGHTS PRESS, or the publisher's designated agent. I have personal knowledge of the facts stated in this Affidavit, which is made pursuant of Minnesota Statutes §331A.07.

2. The newspaper has complied with all of the requirements to constitute a qualified newspaper under Minnesota law, including those requirements found in Minnesota Statutes §331A.02.

3. The dates of the month and the year and day of the week upon which the public notice attached was published in the newspaper are as follows:

   Once a week, for one week, it was published on Wednesday, the 14th day of July, 2021.

4. The publisher's lowest classified rate paid by commercial users for comparable space, as determined pursuant to §331A.06, is as follows:

   a) Lowest classified rate paid by commercial users for comparable space _____

   b) Maximum rate allowed by law for the above matter _____

   c) Total amount charged for the above matter $ 11.69/inch

5. Mortgage Foreclosure Notices. Pursuant to Minnesota Statutes §580.033 relating to the publication of mortgage foreclosure notices: The newspaper's known office of issue is located in Ramsey County. The newspaper complies with the conditions described in §580.033, subd. 1, clause (1) or (2). If the newspaper's known office of issue is located in a county adjoining the county where the mortgaged premises or some part of the mortgaged premises described in the notice are located, a substantial portion of the newspaper's circulation is in the latter county.

We are a qualified newspaper in the following counties: Anoka, Ramsey and Washington

FURTHER YOUR AFFIANT SAITH NOT.

BY:
TITLE: Carter Johnson, Publisher
PRESS PUBLICATIONS
4779 Bloom Avenue
White Bear Lake, MN 55110

Subscribed and sworn to before me on this 14th day of July, 2021.

Myrna L. Press
Notary Public

MYRNA L. PRESS
Notary Public-Minnesota
My Commission Expires Jan 31, 2025

U.S. ARMY

ARMY INVITES COMMUNITY TO OPEN HOUSE AND RAB MEETING ON JULY 20, 2021

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Arden Hills Army Training Site
4761 Hamline Ave N,
Arden Hills, MN 55112

Please call (651) 282-4420 for directions.

Army personnel will be on hand at the Minnesota Army National Guard Arden Hills Army Training Site Gymnasium to respond to questions about the studies related to Round Lake.

Open house attendees will be required to adhere to all National, Regional, and State COVID-19 mandates and guidelines in place at the time of the Open House.

In addition, the Army will host a Restoration Advisory Board (RAB) virtual meeting at 7:00 PM using Microsoft Teams. Oral comments will be accepted at the end of the RAB meeting.

Army personnel will present information about the Proposed Plan (PP) and respond to questions from meeting attendees. At the end of the meeting, attendees can orally record their comments on the PP or submit their comments in writing before August 13, 2021.

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78234-7588

RAB and Public Comment meeting information will be provided to RAB members by email. Interested members of the public should contact Kay Toye by phone at (520) 903-4363 or email at kay.toye@envrg.com to obtain meeting information and register to provide oral comments.

This RAB meeting will be focused on Round Lake. Updates on other TCAAP cleanup projects will be delayed until the September 21, 2021 RAB meeting. All RAB meetings are open to the public.

If you have questions or concerns, call Cathy Kropp at (443) 243-0313 or email USARMY.JBSA.AEC.MBX@mail.mil.

Published one time in the Vadnais Heights Press on July 14, 2021.

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Misc: Affidavit-WBP-1Wk.docx

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Published one time in the White Bear Press on July 14, 2021.

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ATTACHMENT 2

Display Ad

YOU ARE INVITED – Let your voice be heard

Who: Anyone interested

What: Provide your feedback about the Army's plans to remediate Round Lake

When: Open House - July 20, 2021 10 a.m.–3 p.m. (in person)
(Virtual) Restoration Advisory Board (RAB) meeting July 20, 2021 at 7 p.m.

NOTE: Open house attendees will be required to adhere to all National, Regional, and State COVID-19 mandates and guidelines in place at the time of the Open House.

Where: Gymnasium of the:

MN Army National Guard Arden Hills Army Training Site
4761 Hamline Avenue North
Arden Hills, Minnesota 55112

Why:

- Learn about the Army's plans to remediate contaminated sediment in Round Lake
- Better understand the Army's proposed plan so that you can provide your input
- Get your questions answered about the associated studies related to Round Lake
- Be prepared to participate in the public comment period for Round Lake
- Let your voice be heard before a decision is made on Round Lake remediation

How:

- View information on the website https://tcaaprab.org/ or in the information repository
- Attend the Open House (call (651) 282-4420 for directions)
- Attend the virtual RAB public Meeting
- (contact Kay Toye at (520) 903-4363 or email: kay.toye@envrg.com)
- Provide your comments orally at the end of the RAB meeting (for the record)
- Provide your comments in writing before the end of the public comment period by:

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Public Comment Period is open from July 9 – August 13, 2021

ATTACHMENT 3

Notifications at RAB Meeting

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Public Comment Period is open from July 9 – August 13, 2021

More Information

Public Comment Period – **July 9 – August 13, 202**

Administrative Record and Information Repository available at:

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  Arden Hills, MN 55112
- Please call (651) 282-4420 for an appointment.

Electronic copies of the Proposed Plan can be prov by email and are available for download at:

https://tcaaprab.org

Point of Contact

- Linda Albrecht, Department of the Army
  Remedial Project Manager, TCAAP
  - Email - Linda.B.Albrecht.civ@mail.mil
  - Phone - (210) 861-4050

How to Submit Comments on Proposed P

The 30-day public comment period is open beginning **Ju 9, 2021**.

Written comments and questions should be submitted n later than **August 13, 2021**, and directed to:

U.S. Army Environmental Command
2455 Reynolds Road, Mailstop 112
ATTN: Linda Albrecht, TCAAP PP
JBSA Fort Sam Houston, TX 78234-7558

Email - Linda.B.Albrecht.civ@mail.mil

We are going to adjourn this RAB meeting and you may submit oral comments for the record.

NOTE – If you are submitting written comments, oral comments are not necessary.

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More Information

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ATTACHMENT 4

Presentations at RAB Meetings About the RI/FS (April 20, 2021) and the Proposed Plan (July 20, 2021)

Status of Cleanup at Twin Cities Army Ammunition Plant (TCAAP)

20 April 2021

US Army Env
Command

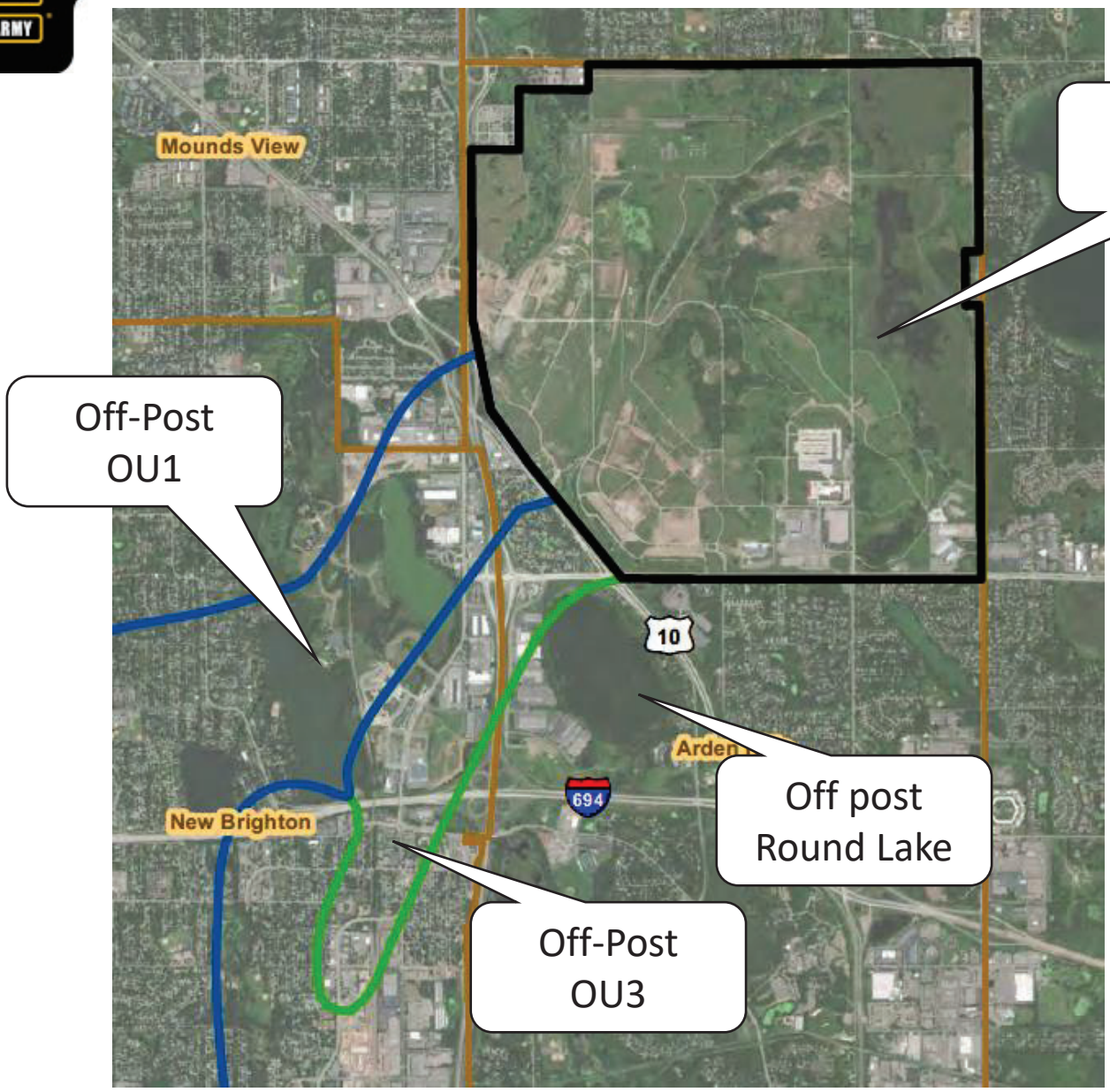
AGENDA – April 20, 2021 at 7 p.m.

- Review/Approve minutes of last meeting
- Old Business
- Cleanup Status Update
- New Business
- Next Meeting Agenda
- Public Comments

Old Business

- Vote to accept the minutes as changed
- Vote to accept changes to the Operating Procedures
- Vote to accept changes to the mission statement

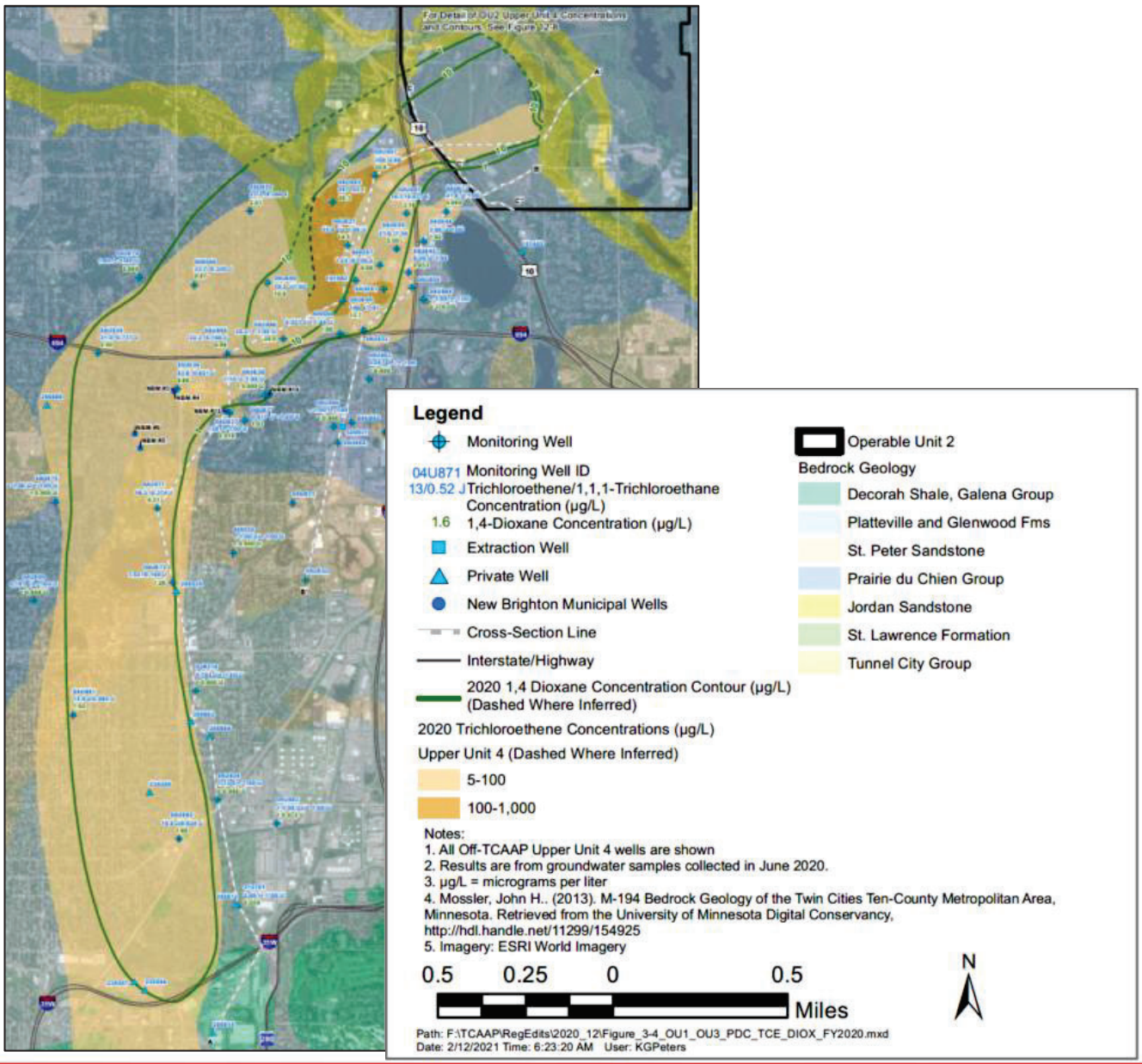
TCAAP Cleanup Status Update



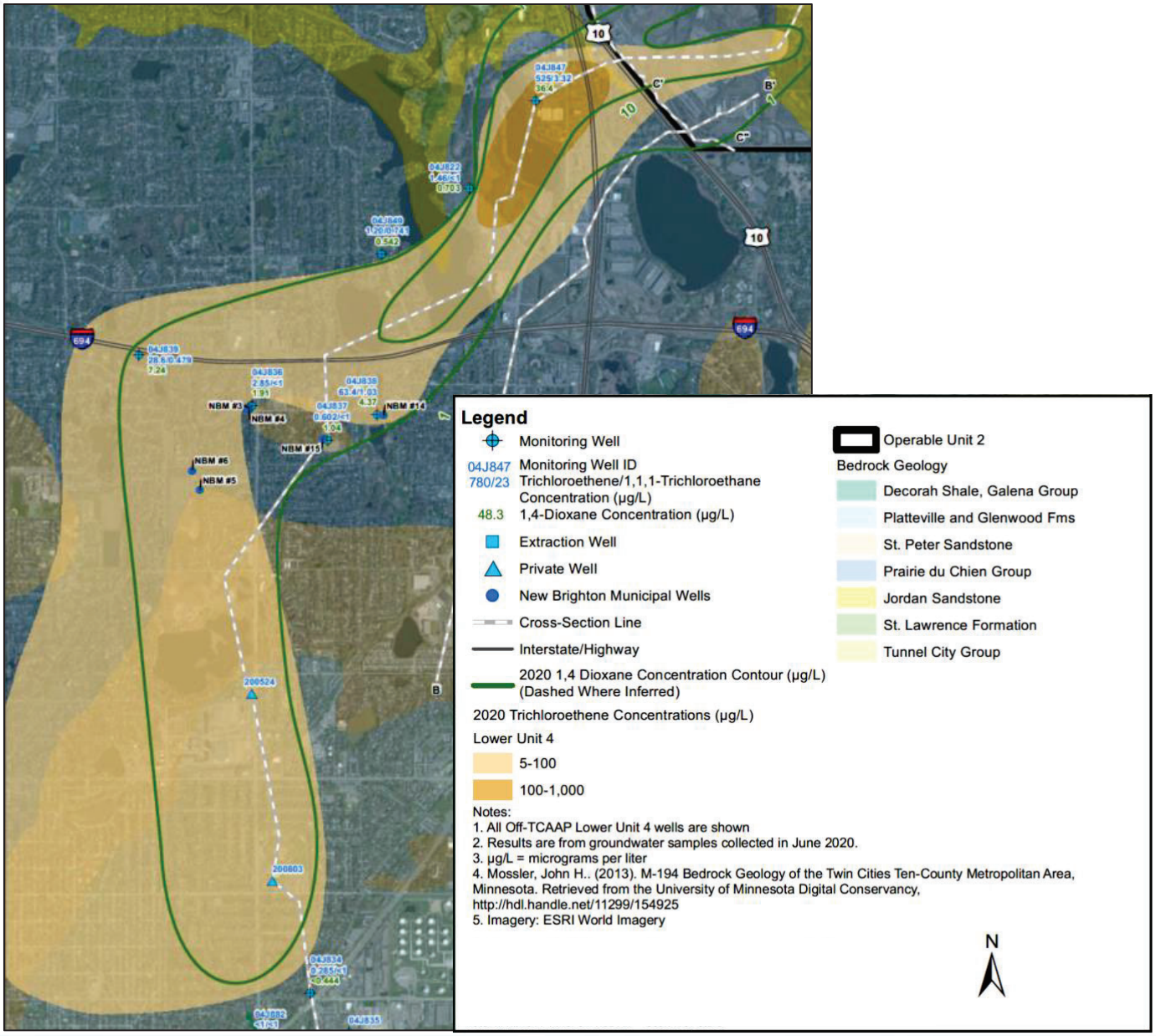
Groundwater Sampling Update

- February 2021 – submitted the Draft Final 2020 A
  Performance Report (APR) to the regulators (will
  posted on website after approval).
- Completed annual groundwater sampling of 228 A
  monitoring and extraction wells in June/July 2020
- Completed groundwater sampling of 2 commercia
- Groundwater sampling allows the Army to monito
  plumes and update the maps.
- Annual plume maps are available in the respectiv
  APRs.

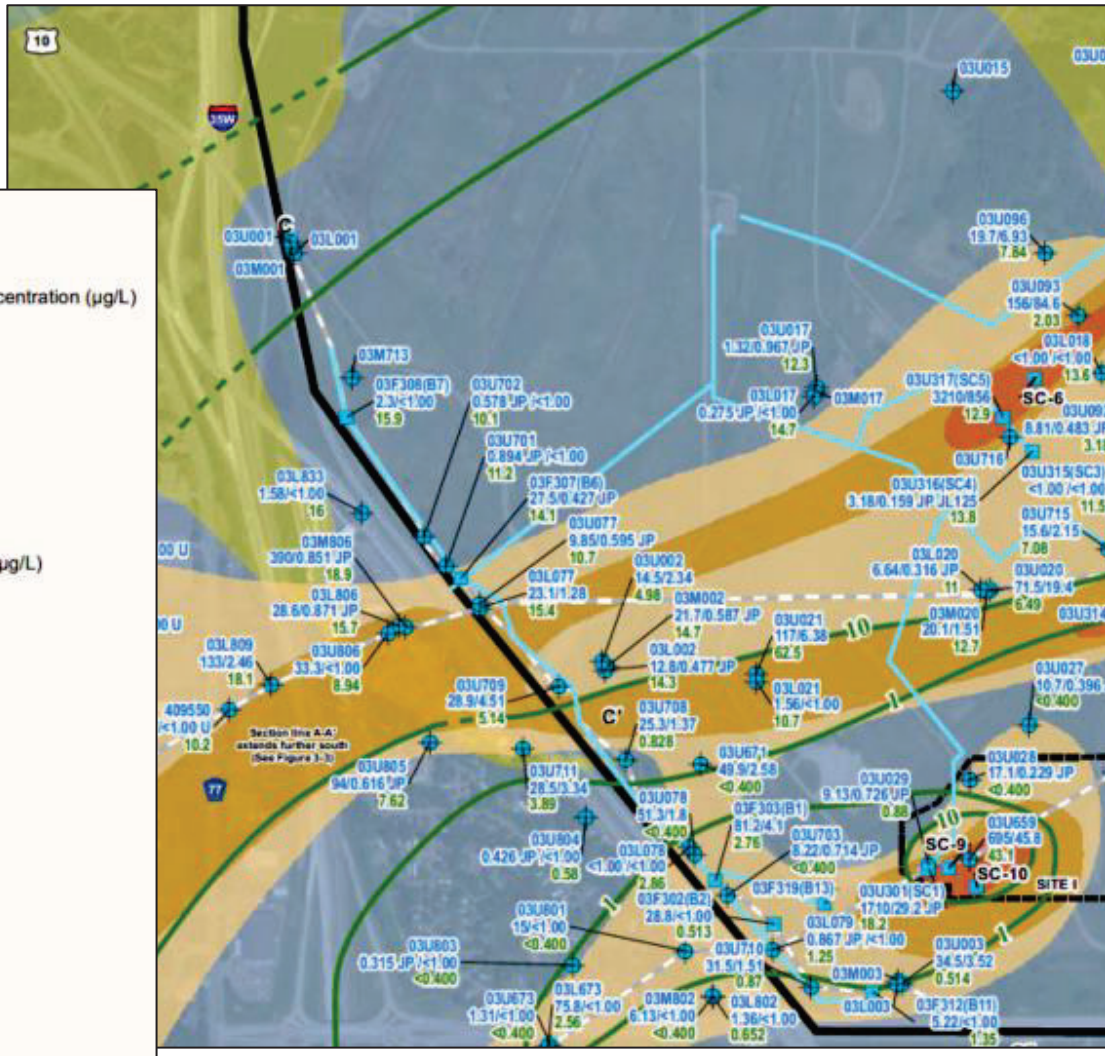
FY2020 –Prairie du Chien Plume Map



FY2020 –Jordan Plume Map



FY2020 – OU2 Unconsolidated Sediments Plume Map



Legend

03U093 Monitoring Well ID
130/55 Trichloroethene/1,1,1-Trichloroethane Concentration (µg/L)
1.6 1,4-Dioxane Concentration (µg/L)

- Extraction Well
- Private Well
- Cross-Section Line
- Site Boundary
- Extraction Well Piping
- 2020 1,4 Dioxane Concentration Contour (µg/L)

2020 Trichloroethene Concentrations (µg/L)
Upper and Lower Unit 3

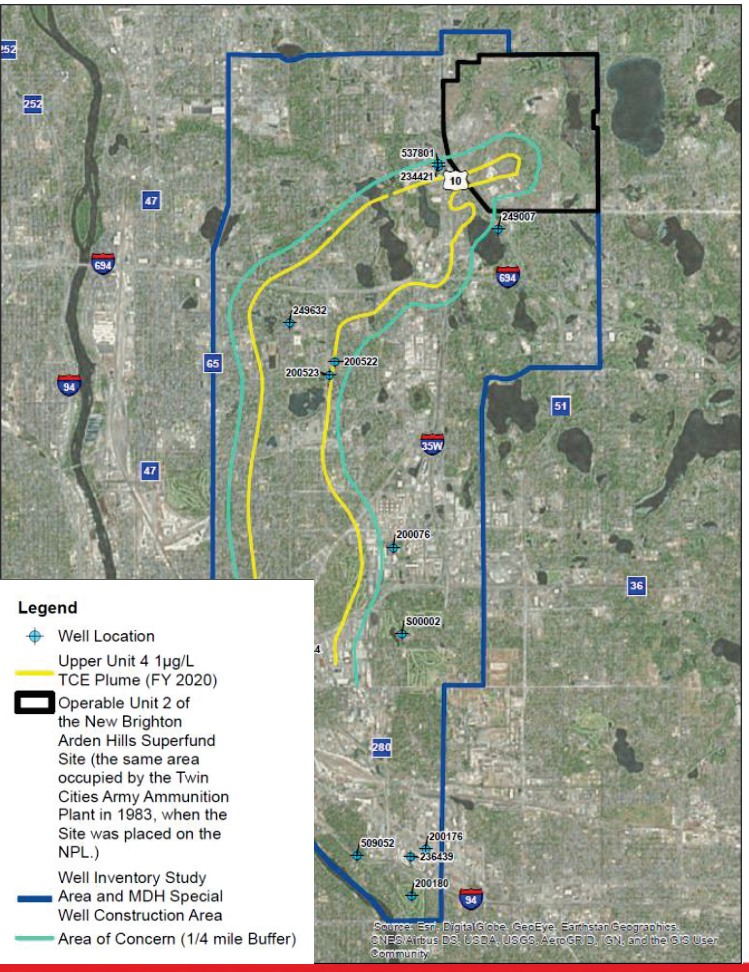
- 5-100
- 100-1000
- 1000+
- Operable Unit 2

Bedrock Geology

- St. Peter Sandstone
- Prairie du Chien Group
- Jordan Sandstone
- St. Lawrence Formation
- Tunnel City Group

Groundwater Sampling Update

- Completed sampling of 13 off-site irrigation/indust wells in 2020.
- This is required every 4 years.

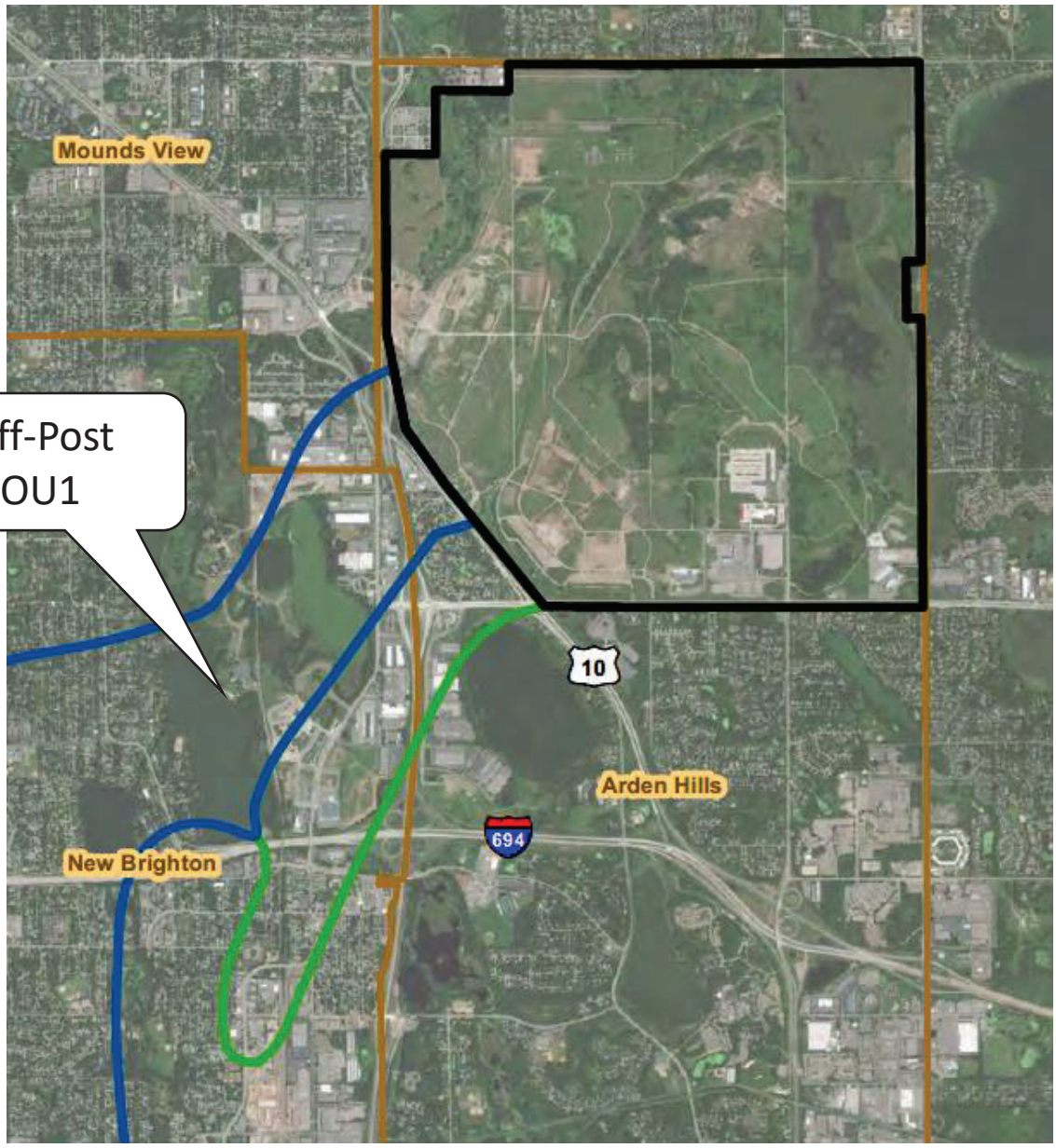


- Results showed 4 wells exce cleanup standards.
  - Irrigation, car washing, industri making), or out of service.
- The Army notified well owner have requested resampling i accordance with Army Alterna Water Supply Plan.
- Resampling expected to occu April 2021.
- None of these wells are used for drinking water.

What has the Army done since January 2

- Prepared Well Inspection Report for TCAAP to do the comprehensive well inspection for 333 active wells completed in 2020.
- Purpose was to verify any maintenance requirem ensure the wells were able to be sampled, assess requirements for the wells, and ensure the databa up to date.
- Army recommended abandoning 40 wells that are longer needed per the groundwater monitoring pl
- Report was submitted to the regulators in March 2 concurrence.

Twin Cities Army Ammunition Plant Clea



LEGEND:

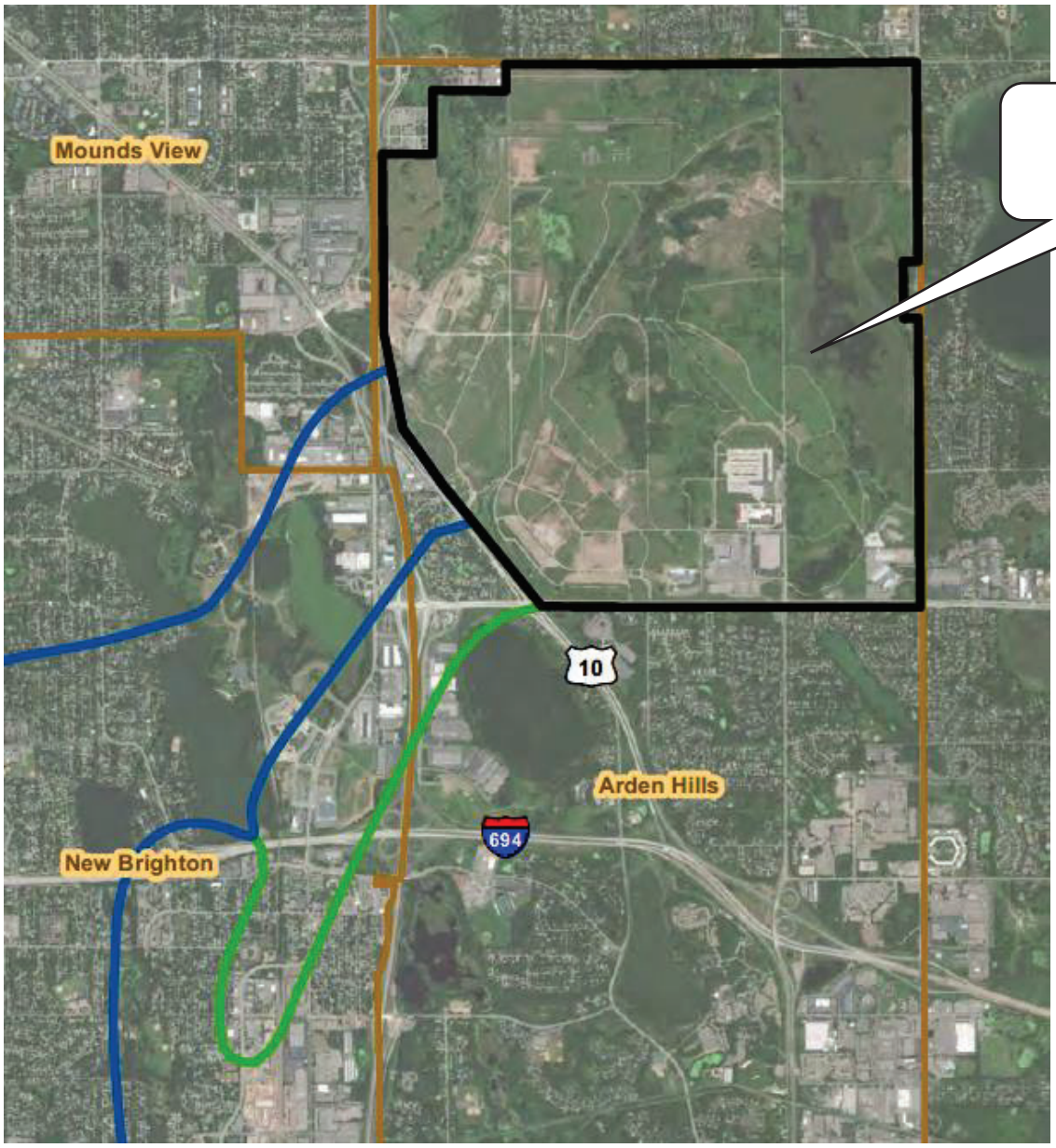
- Operable Unit
- Operable Unit Arden Hills Su area occupied Army Ammuni when the Site
- Operable Unit
- Municipal B

OU1 – Wells for Geophysics

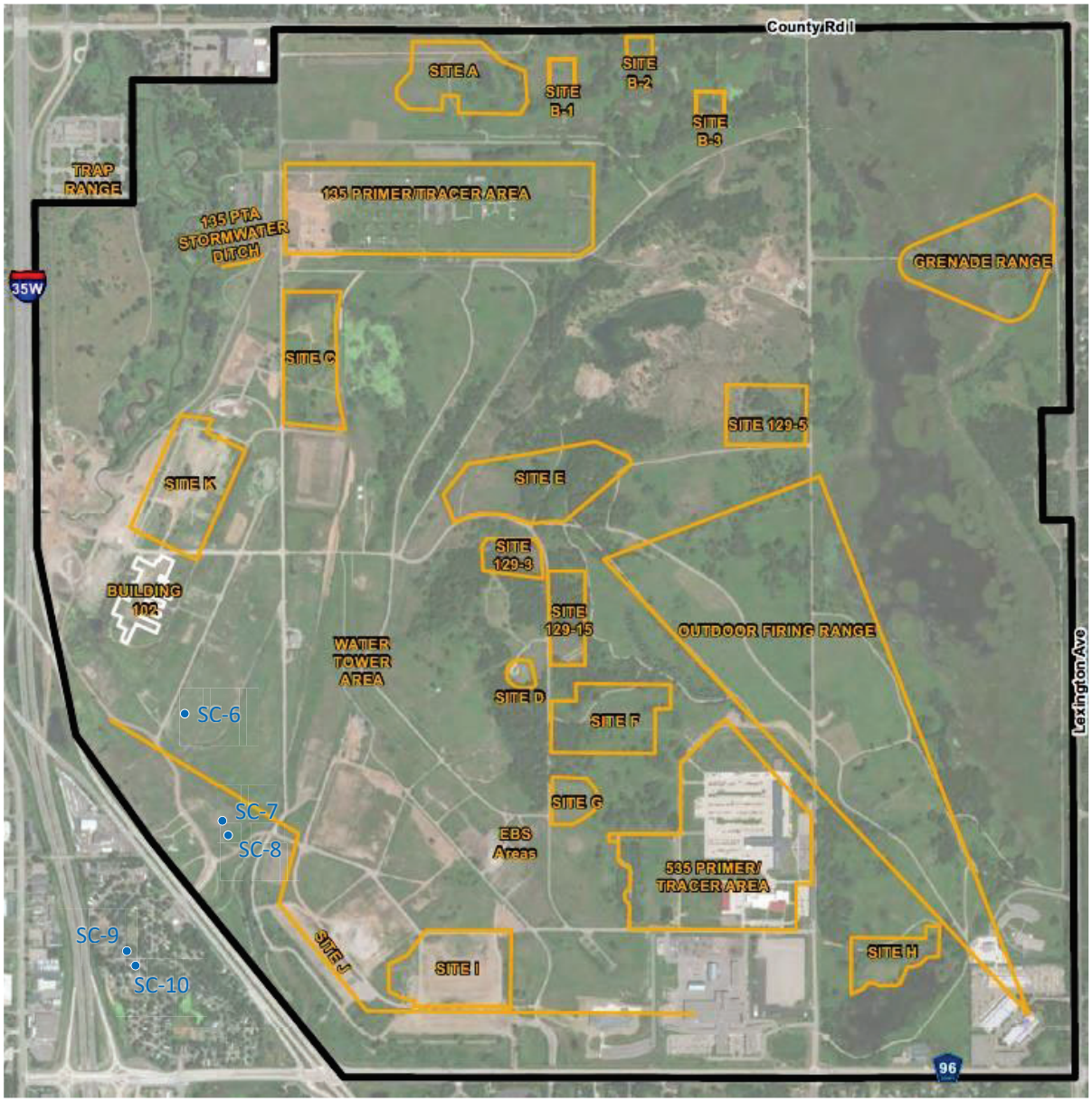
OU1 Optimization

- Purpose – to identify best locations for new extraction well to improve effectiveness of contaminant removal at the City of New Brigh
- Army presented results of optimization study EPA, MPCA, and New Brighton Feb 2021
- Drilling to refine location is anticipated Spring
- Goal: increase amount of contaminant remov relocating well more central to plume
- Once well location is finalized (approved by stakeholders) Army will fund and New Brighto install new well.
- Army will continue to work with New Brighton ensure drinking water treatment operations are not affected

Twin Cities Army Ammunition Plant Clea



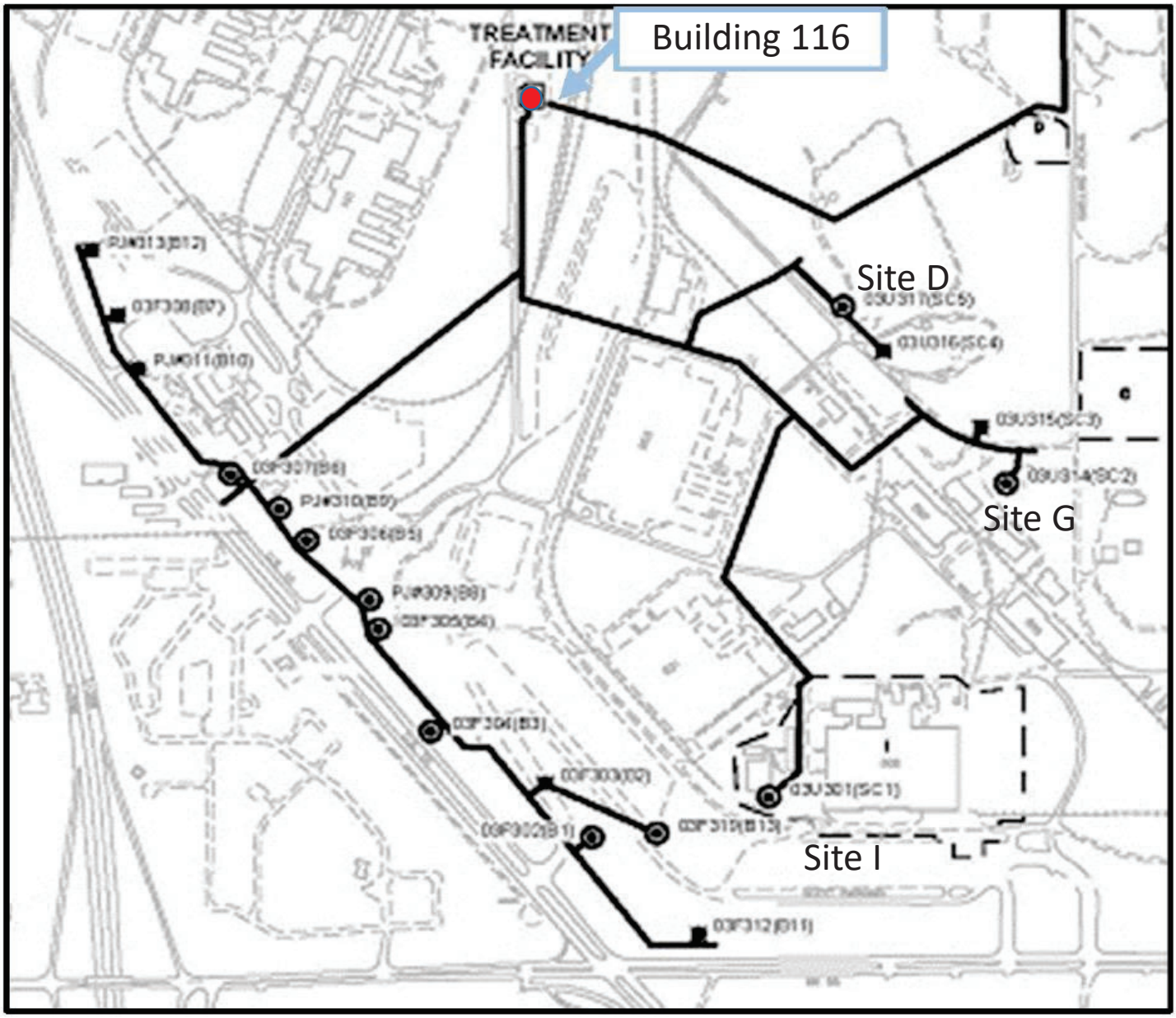
OU2


County Rd I
SITE A
SITE B-1
SITE B-2
SITE B-3
TRAP RANGE
135 PRIMER/TRACER AREA
135 PTA STORMWATER DITCH
35W
GRENADE RANGE
SITE C
SITE 129-5
SITE K
SITE E
SITE 129-3
BUILDING 112
SITE 129-15
OUTDOOR FIRING RANGE
WATER TOWER AREA
SITE D
SITE F
Lexington Ave
SC-6
SITE G
SC-7
SC-8
EBS Areas
535 PRIMER/ TRACER AREA
SC-9
SITE J
SITE I
SITE H
SC-10
96

OU2 Optimization

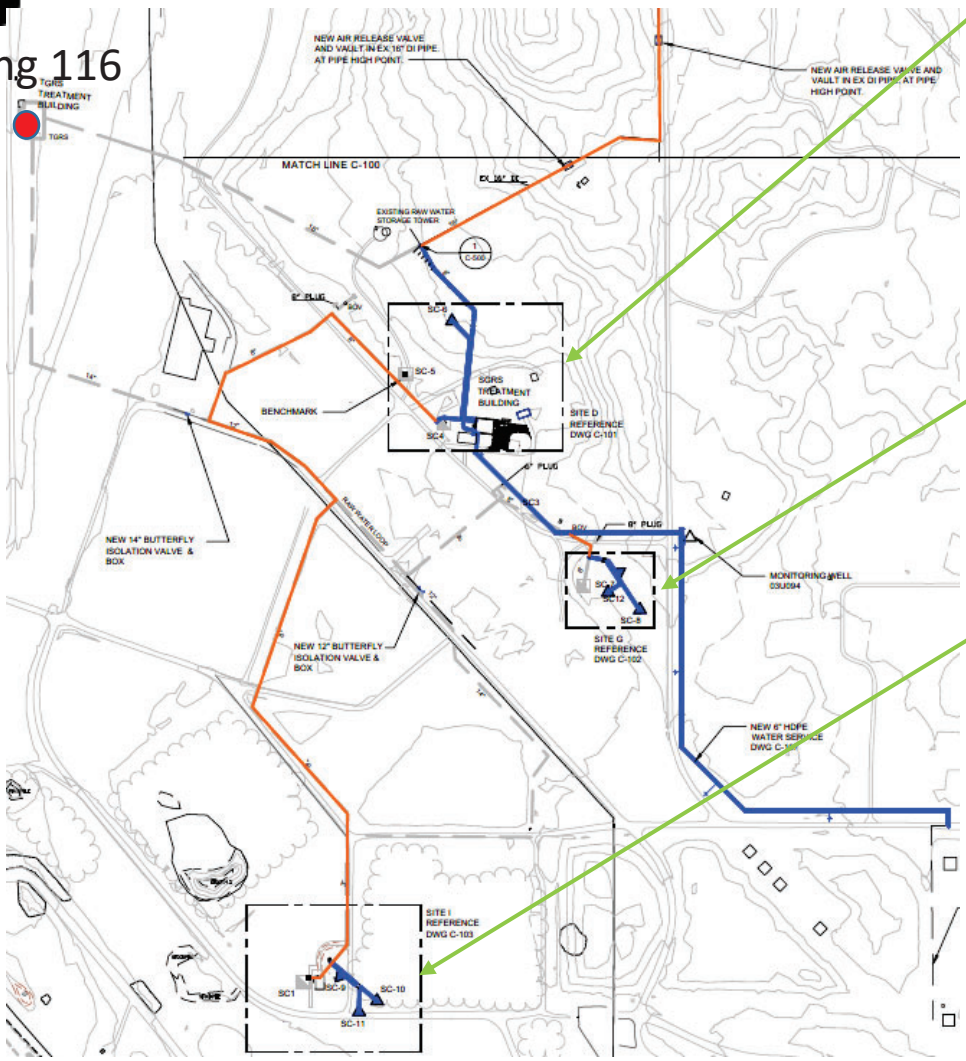
- TCAAP Groundwater Recovery System (TGRS) installed in 1987
- Install TGRS extraction wells nearer to the source areas
- Increases capture effectiveness and treatment of the plume
- Install secondary treatment called Source Groundwater Recovery System (SGRS)
- Anticipate SGRS construction 2021
- Anticipate SGRS operational 2022

Existing TGRS – Current Piping



Future SGRS – Pumping Plan

Building 116



Site D

- Location of SGRS Bui road and electrical acc
- SC-5 uses existing we 6 manifold inside SGR
- Discharge to Sand an

Site G

- One wellhouse servin extraction wells (SC-7 SC-12)

Site I

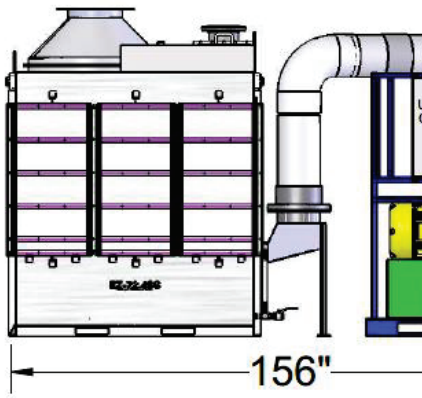
- One wellhouse serving extraction wells (SC-1 through SC-11)

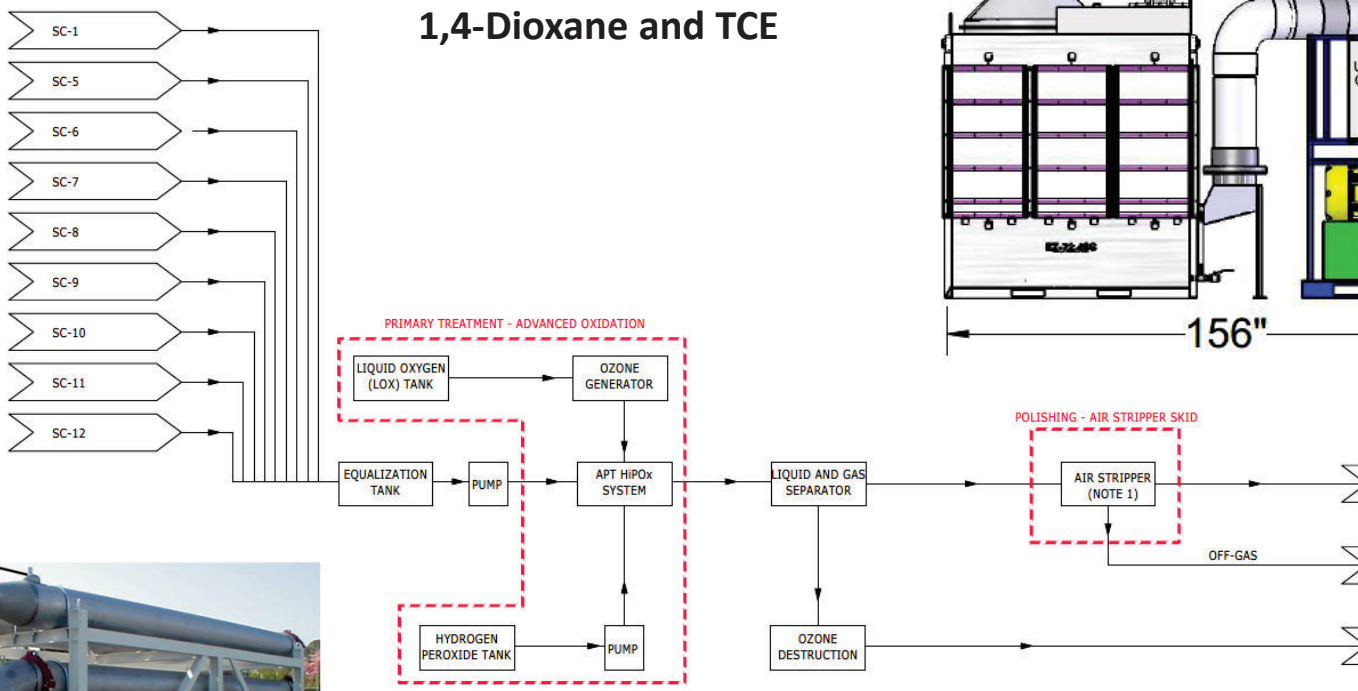
Pipe Routing

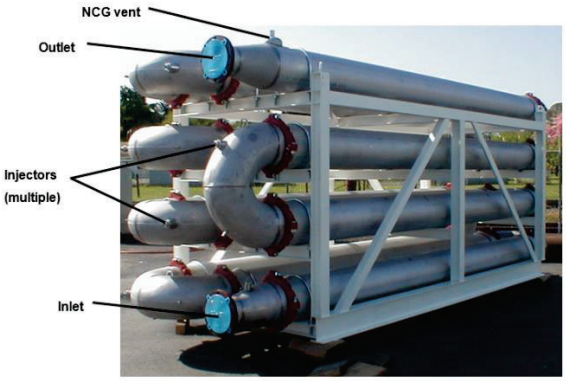
- New piping in blue
- Existing piping in oran

Future SGRS – Process Flow

SGRS will treat for both 1,4-Dioxane and TCE







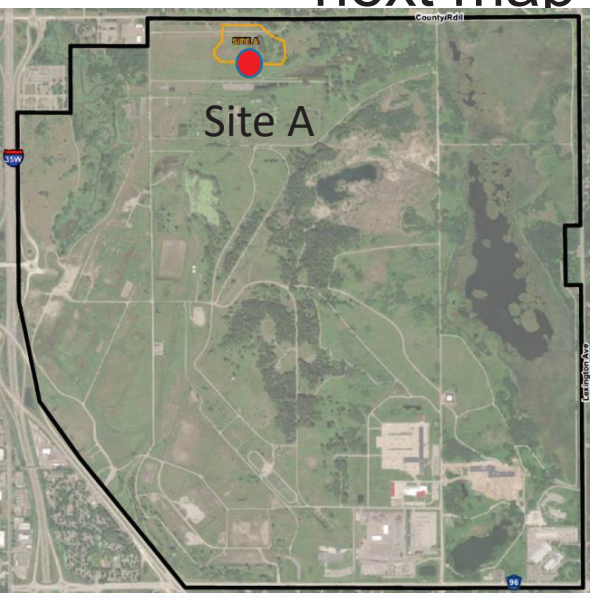
NOTE 1
Transfer pumps on Air Stripper Skid sized to discharge to Sand and Grave Pit

Future SGRS – Work since January 2021

- January 8 and 15 – MPCA and USEPA provided comments on the 60% design drawings
- February 16 – Held call with MPCA and USEPA to discuss their comments and Army responses
- March 19/26 – Submitted the 90% design drawing followed by the 100% design drawings in April
- March 26 – Bid walk for building contractors
- Construction is scheduled to start in May 2021

OU2 – Site A Site Investigation

- Purpose - to address the migration of a shallow groundwater plume that exists at Site A and the potential vapor intrustion (VI) risk it poses to th residential neighborhood directly north of the T property boundary.
- VI study in March (heating month) and May (no heating month) (on following map in purple)
- Temporary groundwater sampled collected in 2 next map in red)

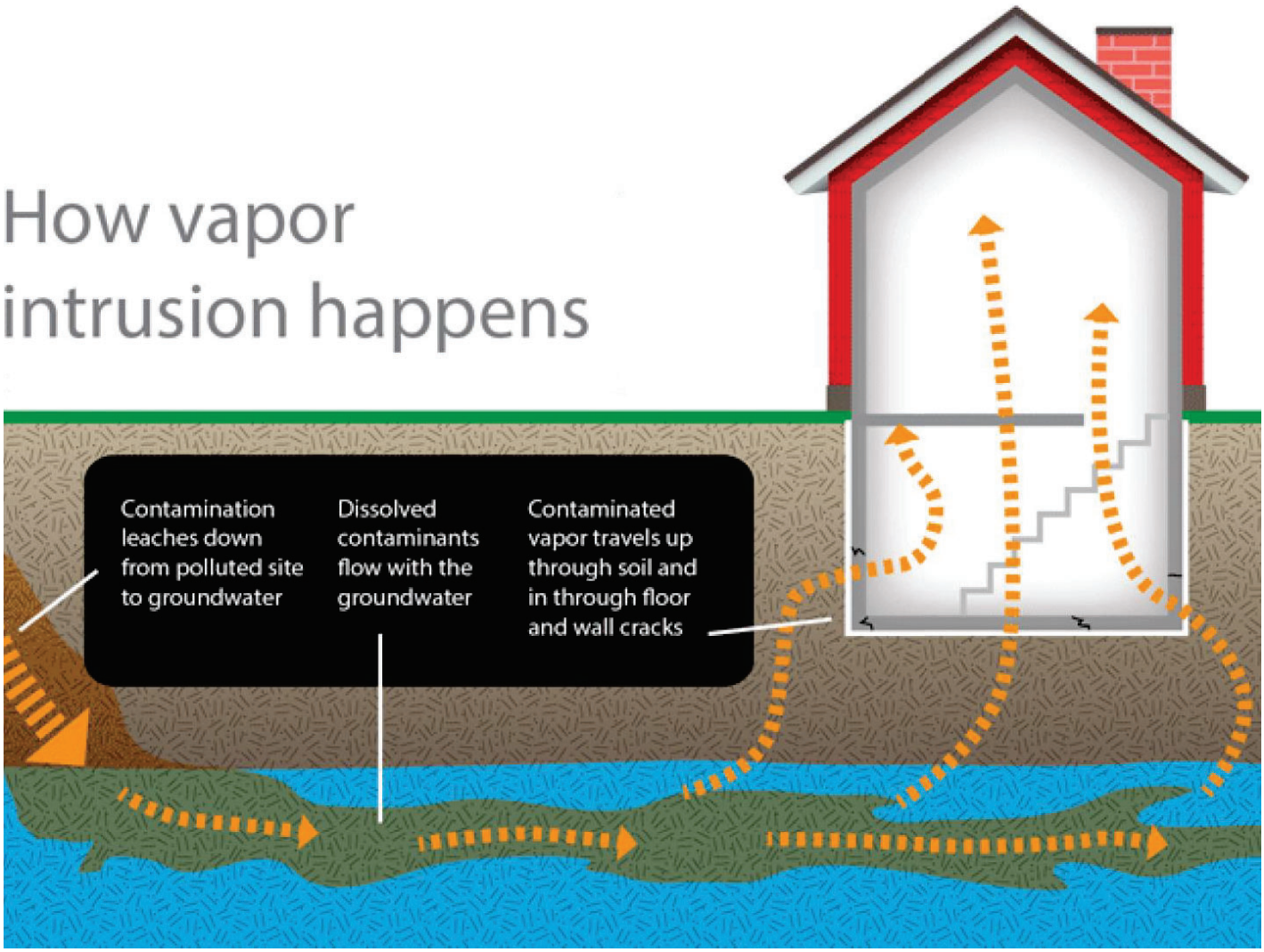


- Install additional monitoring wells a after plume delineation in 2021 (on map in orange).
- Previous VI investigation comple 2013.
  - No risk noted from 2013 study.
  - Shift in groundwater plume required new investigation.

What is Vapor Intrusion?

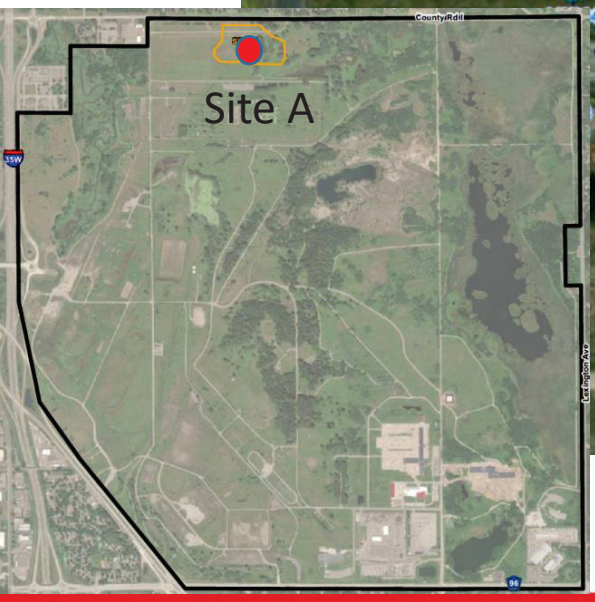
- Vapor intrusion is the migration of hazardous vap from any subsurface contaminant source (contaminated soil or groundwater), through the vadose zone and into the indoor air
- Usually occurs in overlying buildings through openings in the building foundation
  - cracks in the slab
  - gaps around utility lines
  - elevator shafts
- Volatile organic compounds or VOCs typically pos the most common vapor intrusion concerns.
- Trichloroethylene, or TCE, is a VOC and one of th contaminant of concerns at TCAAP
- 1,2 Dichloroethane or ethylene dichloride is anoth VOC that is a TCAAP contaminant of concern

How vapor intrusion happens



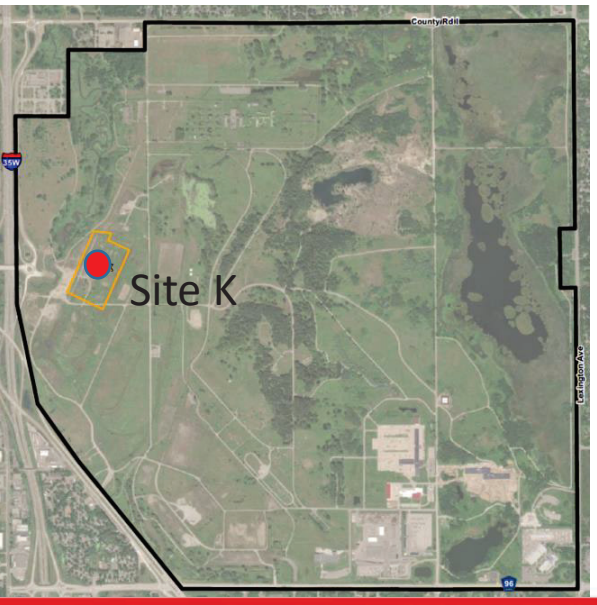
OU2 – Site A


Terrace Dr
Fairview Ave
1783 Pinewood Dr
(Sealed)
Pinewood Dr
Legend
01U353 Sealed Well Locati
01U353 Extraction Well Loc
01U355 Monitoring Well Lo
01U103 Piezometer Locatio
15 cis-1,2-dichloroeth
1945 Trench
2019 cis-1,2-Dichloroethene
(Dashed Where Inferred)
1-10 µg/L
10-100 µg/L
> 100 µg/L
Proposed Sampling
Proposed Monito
(Subject to chang
Direct Push Grou
Temporary Vapo
Contingency Vap
01U202
43
01U357
(EW-7)
<1
01U356
(EW-6)
15
01U355
(EW-5)
1.8
01U140
0.6 J
01U139
180
01U115
<1
01U116
<1
01U351 (EW1)
01U157
0.44 J
01U352 (EW2)
<1
01U125
01U117
36
01U158
55
01U353 (EW3)
0.81 J
01U354 (EW4)
01U138
<1

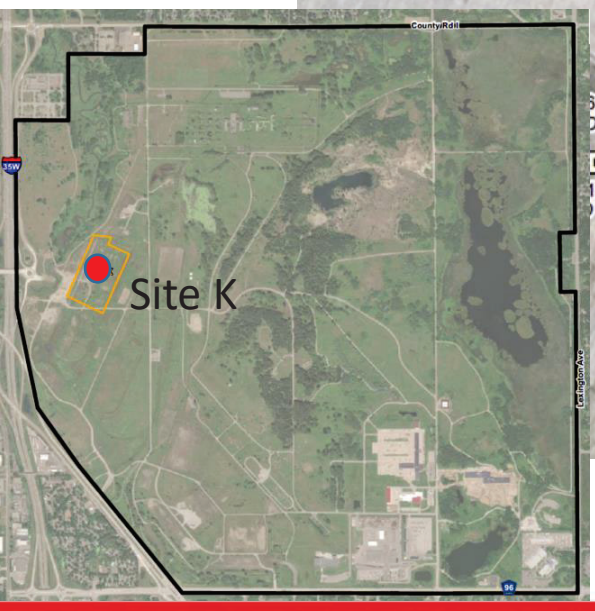

Site A

OU2 – Site K USGS Treatability Study

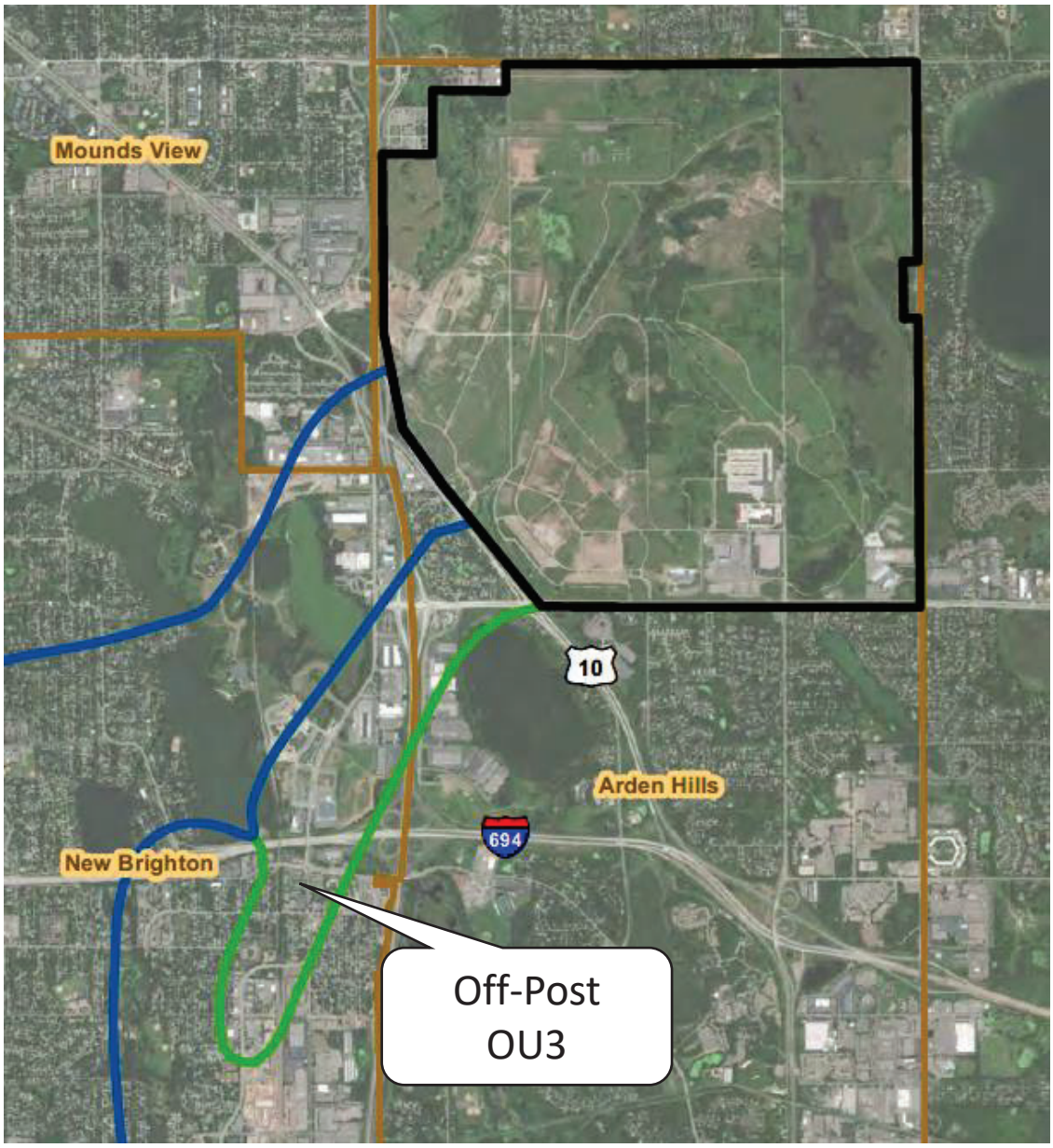
- Purpose: to improve shallow groundwater remediation of TCE.
- Draft workplan to be approved in 2021.
- Three-year treatability study scheduled to begin in July 2021.
  - Treatability will include bioremediation techniq
  - Install groundwater monitorin wells.



OU2 – Site K



Twin Cities Army Ammunition Plant Clea



LEGEND:

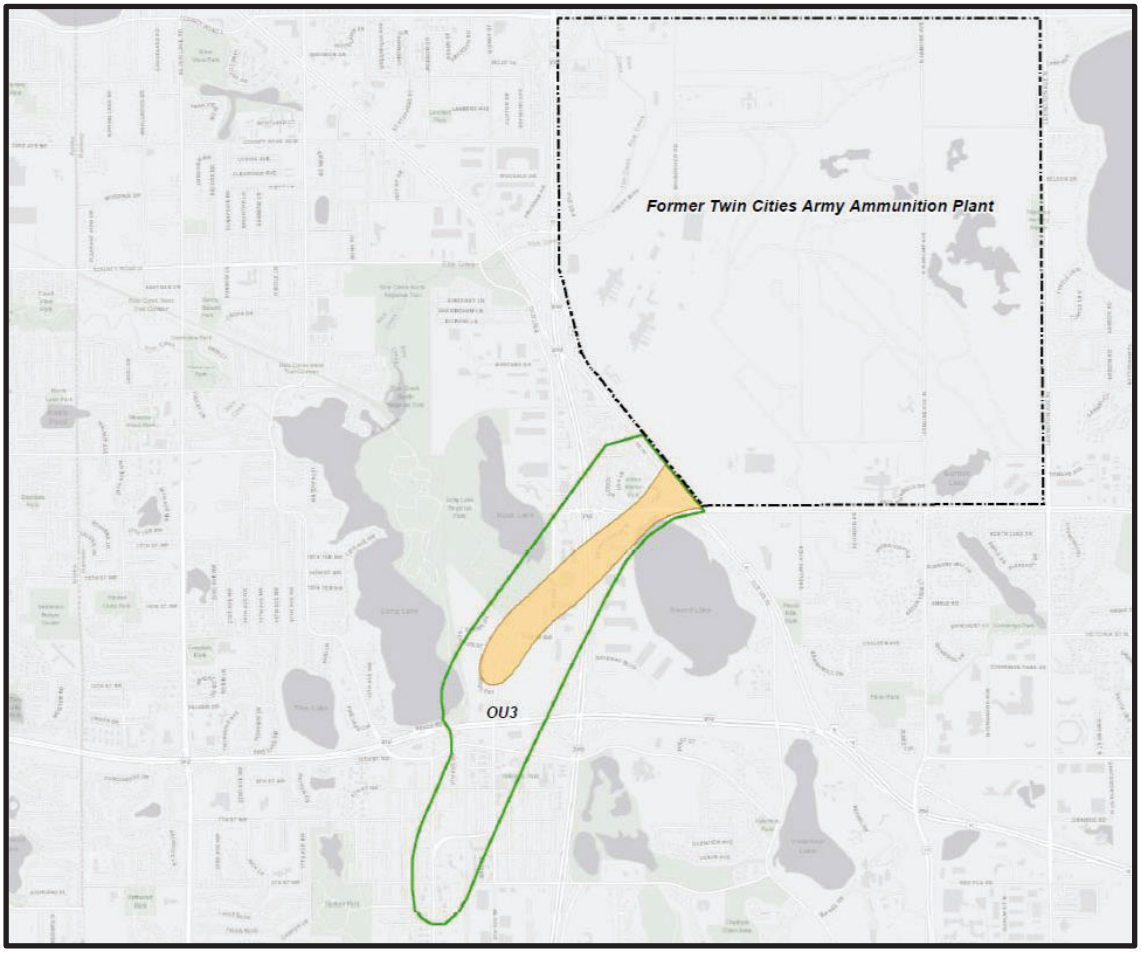
Operable Unit

Operable Unit
Arden Hills Su
area occupied
Army Ammuni
when the Site

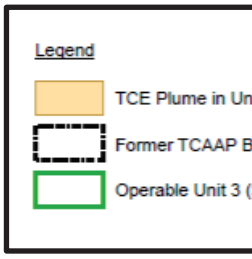
Operable Unit

Municipal B

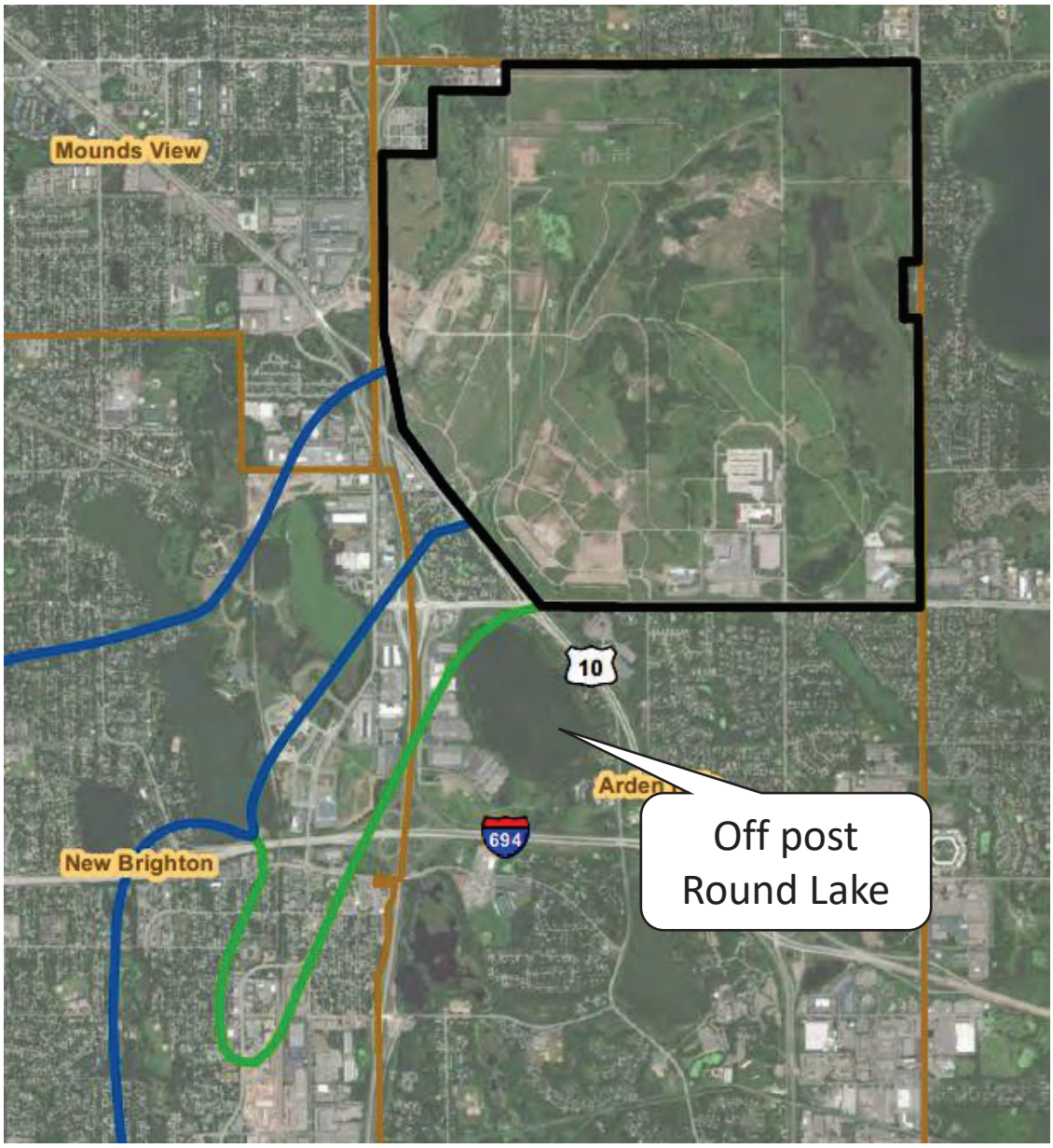
OU3 Plume



- Continued m
  natural atten
- Annual groun
  sampling eac
  summer
- Results from
  are available
  Annual Perfo
  Report



Twin Cities Army Ammunition Plant Clea



LEGEND:

Operable Unit

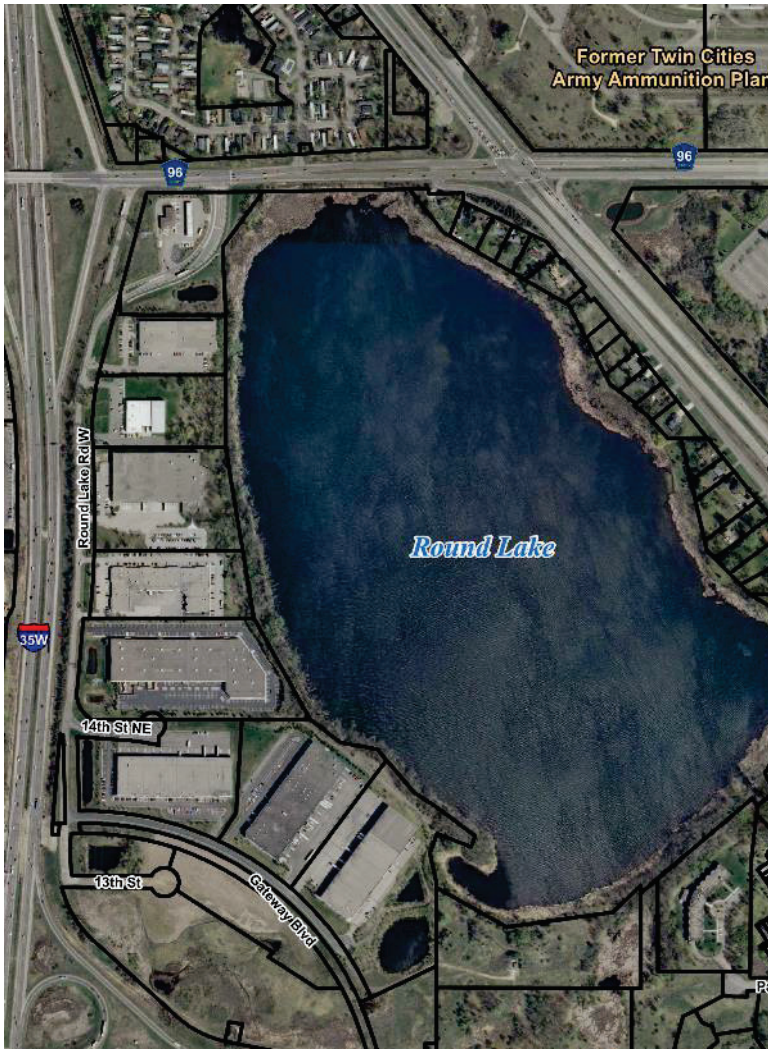
Operable Unit
Arden Hills Su
area occupied
Army Ammuni
when the Site

Operable Unit

Municipal B

Round Lake - Background

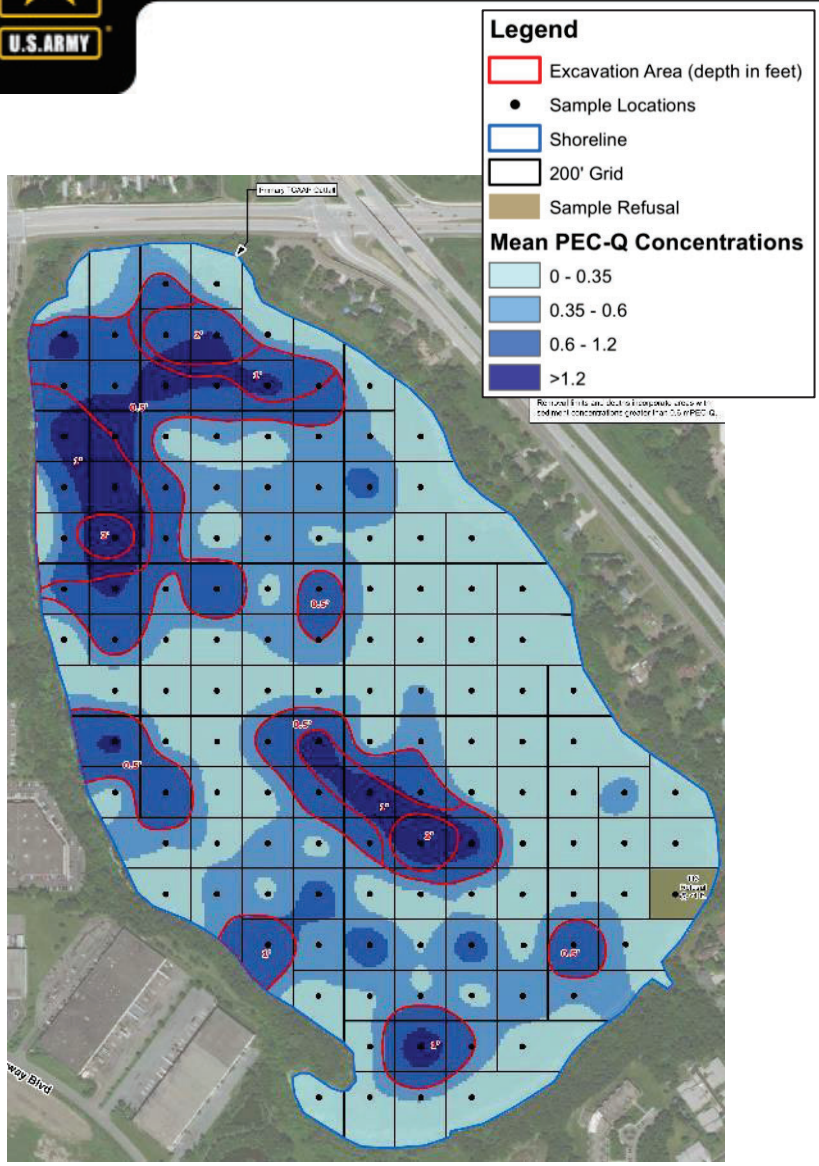
- Round Lake was part of TCAAP but was transferred to the U.S. Fish & Wildlife Service in 1974.
- Historical releases of hazardous substances from TCAAP to Round Lake were associated with the discharge of industrial processing wastewater, sanitary sewer, and storm sewer discharges.
- Contaminants of concern include seven metals (cadmium, chromium, copper, lead, silver, vanadium, and zinc) and PCBs.
- Contamination is largely confined to the upper 1 foot of sediment in the lake.



Round Lake - Background

- Because there is a mixture of contaminants, and to pro general depiction of metals concentrations in sediment various sediment depths, a mean probably effect conc quotient (mPEC-Q) is used to measure success.
- The original Remedial Investigation (RI) was conducte between 1987 and 2004.
- Human Health Risk Assessment identified no risk to hu Ecological Risk Assessment concluded ecological risks low.
- Action was delayed due to dispute between FFA partie
- Many revisions of the Feasibility Study (FS) have occu including input from EPA, MPCA, MDNR and USFWS.
- Supplemental RI/FS accepted by MPCA and USEPA in 2021. Sent to MDNR and USFWS for review.
- Available on TCAAP website.

Round Lake – Remedial Action Objective



- Preliminary Remedial Action Objective (RAO)

  To minimize the potential adverse effects to benthic populations and the water that ingest them from exposure to the contamina sediments from TCAAP-related discharges by achieving an mPEC-Q of

- Final RAOs will be established in the Reco of Decision (ROD)

Round Lake – Remedial Alternatives

Alternative	Remedy
1	No Action
2	Monitored Natural Recovery
3	Enhanced Monitored Natural Recovery
4A	Removal and Disposal Offsite
4B	Removal and Disposal at TCAAP Impoundment
5	In-Situ Cover
6A	Removal, Disposal Offsite, and In-Situ Cover
6B	Removal, Disposal at TCAAP Impoundment, and In-Situ Cover
7	Near Shore Confined Aquatic Disposal
8	Deep Water Confined Aquatic Disposal
9	Deep Water Confined Aquatic Disposal and In-Situ Cover

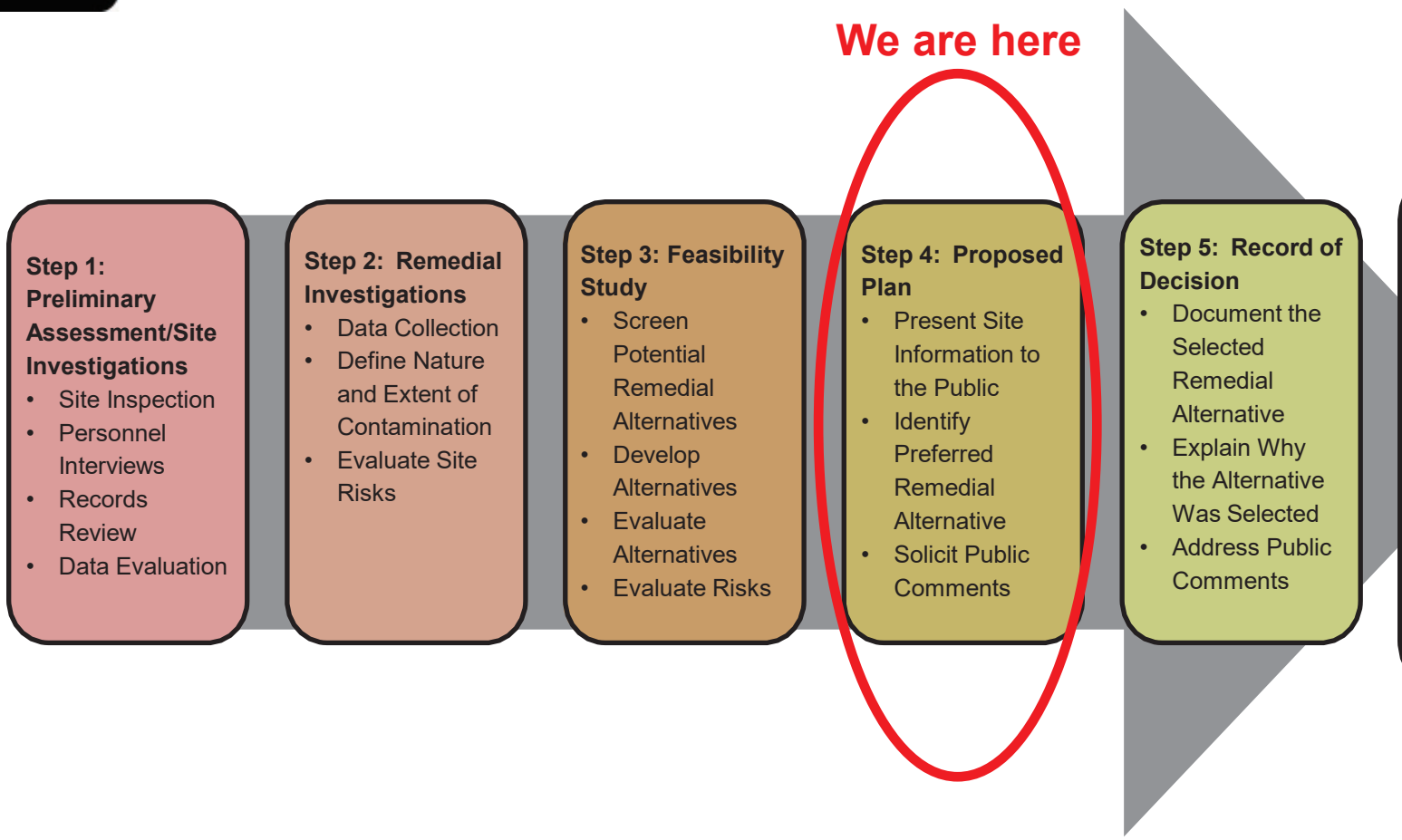
*No Action retained for comparison only

Round Lake – Alternative Comparison

Nine criteria established by CERCLA for evaluation remedial alternatives:

Threshold Criteria	Overall protection of human health and the environment
	Compliance with applicable or relevant and appropriate requirements (ARARs)
Balancing Criteria	Long-term effectiveness and permanence
	Reduction of toxicity, mobility, and volume throug treatment
	Short-term effectiveness
	Implementabilty
	Cost
Modifying Criteria	State acceptance
	Community acceptance

Round Lake – CERCLA Process



Currently preparing Proposed Plan. Will be available for public comment
days, after approval by USEPA and MPCA.

Round Lake – Next Steps

- Proposed Plan will summarize alternatives and identify preferred alternative; Proposed Plan will b released for public review and comment
- Written comments will be accepted for 30 days; o comments will be accepted at a public meeting to scheduled approximately 2 weeks after Proposed Plan is released to the public
- Record of Decision – will document selected alternative after all input has been considered
- Remedial Action – will include remedial design, construction, and reporting

What's Next

- OU1
  - Submit field summary report to document wor completed and work plan for two additional borings
  - Complete borings and propose new well locat
- OU2
  - Complete vapor intrusion investigation at Site
  - Begin USGS three-year treatability study at Si
  - Begin construction of SGRS
- OU3
  - Continue groundwater monitoring
- Round Lake
  - Develop Proposed Plan identifying Army's preferred alternative
  - Conduct Public Comment Period and Public Meeting

New Business

- Topics for future RAB meetings?
- Additional administrative requirements for RAB?
- Suggestions for improvement of RAB?

Next Meeting Agenda – Specifically about Rou

- Date To Be Determined
- Review/Approve minutes of last meeting
- Old Business
- Questions on the Supplemental RI/FS
- Explanation of Round Lake Proposed Plan
- Official Public Comments for Round Lake Proposed Plan
- Agenda for July 20, 2021 meeting

Public Comments

- Does anyone have any comments, concer
  or suggestions

Questions

You can ask questions now or at anytime us
the email listed on the website.

Chemicals of Concern at TCAAP

- **Primary Contaminants of Concern:**
  - chlorinated solvents
  - degradation compounds resulting from trichloroethylene impacts
  - 1,4-dioxane
- **Affected Media of Concern:**
  - Groundwater
  - Sediment
  - Soil
  - Surface Water
- Army Website: https://tcaaprab.org/
- EPA Website: https://cumulis.epa.gov/supercpad/cursitestinfo.cfm?id=0504010

Emerging Chemicals

1,4 Dioxane

- New Brighton discovered 1,4 Dioxane in their wells in early 2015.
- Water was pumped from deeper non-impacted aquifer and then purchased from Minneapolis while treatment train was designed and installed
- November 2018 an Ultraviolet/Peroxide Advance Oxidation Process became operational and treatment resumed.
- Periodic sampling continues.

• Per- and polyfluoroalkyl substances (PFAS)

- The Army is investigating potential releases of certain PFAS on all its installations.
- Army's priority is to quickly address PFOS and PFOA in drinking water above EPA safe levels.
- Preliminary Assessment anticipated in 2021.

Land Transfers

Property conveyance by parcel:

Parcel Name	Parcel Acres	Disposal Date	Parcel Recipient	Conv Auth
National Guard Bureau (NGB) 1	1,245.0	27 Sep 2000	NGB	Fed t
Arden Hills A	6.9	25 Jan 2001	Arden Hills City	Spec
NGB 2	276.0	1 Aug 2002	NGB	Fed t
Ramsey Maintenance Facility	39.8	30 Sep 2004	Ramsey County	Spec
Rice Creek & Railroad Spur, Rush Lake	115.5	27 Jun 2006	Ramsey County	PBC
Highway Right of Way	33.9	27 Sep 2007	State of Minnesota	PBC
Highway Right of Way	3.0	17 Jan 2013	State of Minnesota	PBC
Railroad Spur	23.5	31 Jan 2013	Commercial	Nego
Ramsey County	397.0	13 Apr 2013	Ramsey County	Nego
Ramsey County (Lease)	30.0	17 Dec 2017	Ramsey County	Nego
Wildlife Corridor	92.8	20 May 2019	Ramsey County	PBC
Primer/Tracer Area	42.5	4th Qtr FY20	Minnesota Dept. of Transportation (MDOT)	Nego

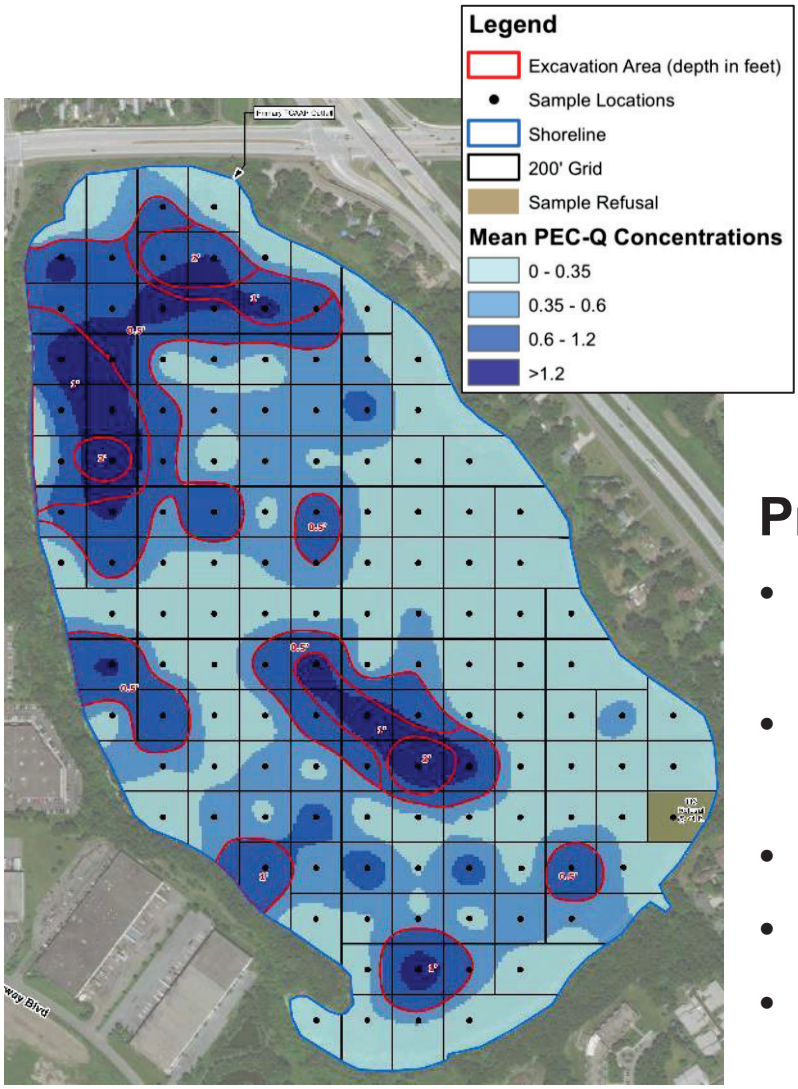
Due to the discovery of 1,4-dioxane in the groundwater, GSA was unable to complete the transfer of the la
EPA would not issue an Operating Properly and Successfully (OPS) determination. As a result, the Army p
Finding of Suitability for Early Transfer (FOSET) for one of the three parcels where the soils were ready fo
the Minnesota Governor concurred. On 12 December 2017, Army transferred a 30-acre parcel (consisting
environmental carve-outs) to Ramsey County. The Army also prepared a FOSET for the Wildlife Corridor
Governor concurred. On 20 May 2019, Army transferred the Wildlife Corridor to Ramsey County.
GSA is currently working with the Minnesota Department of Safety concerning possible interest
in the last Twin Cities parcel, Primer/Tracer Area.

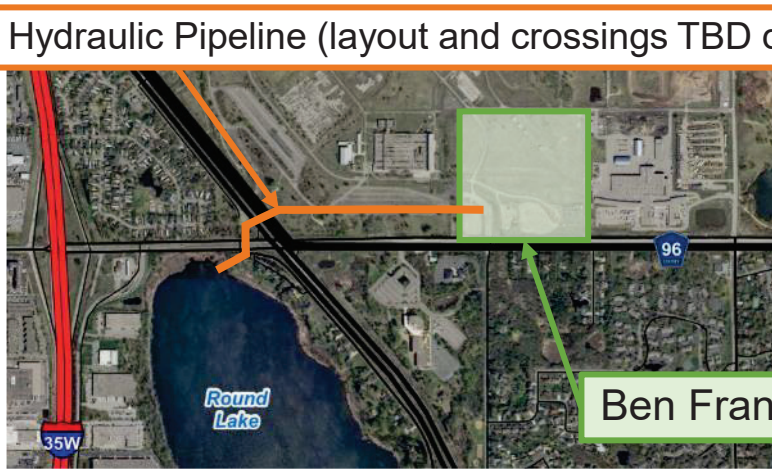
On-post vs Off-post

- When TCAAP was placed on the National Priorities List (NPL) in 1983, it occupied approximately 2,370 acres in northwest Rams County, Minnesota, within the Minneapolis/St. Paul metropolitan area.
- Since 1983, much of the property has been transferred outside of federal ownership to Ramsey County, the city of Arden Hills, Nation Guard Bureau and Army Reserves.
- For the purposes of cleanup, references to TCAAP include all of the Army-owned installa property in 1983, which is also referred to as operable unit (OU) 2 and considered on-post.

Round Lake – Preferred Alternative

Alternative 4A – Removal and Offsite Dis

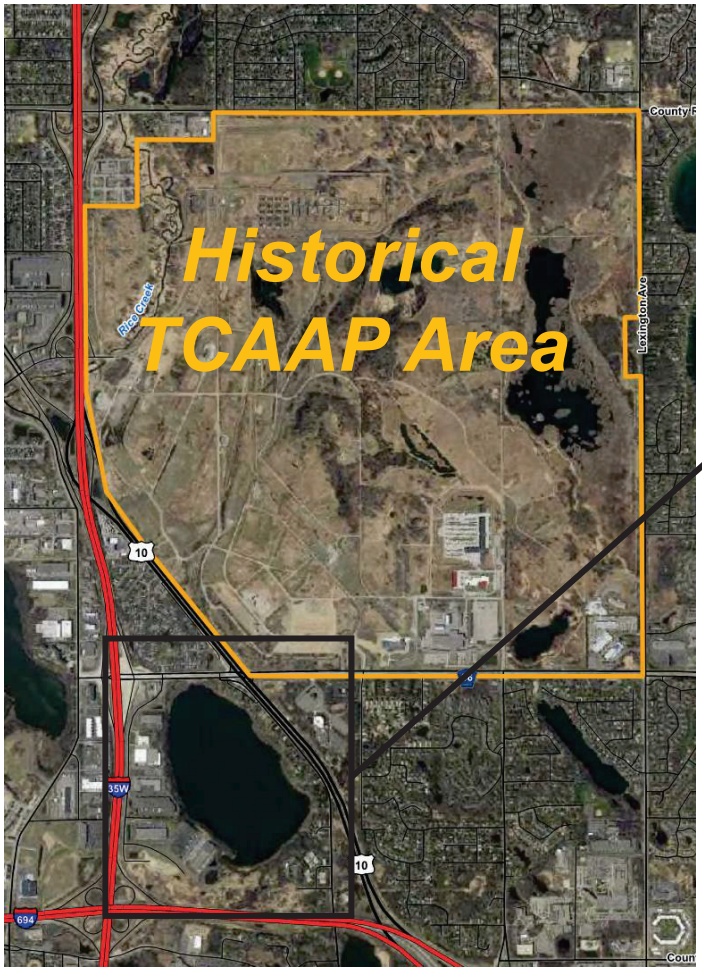




Primary Design Elements

- Mechanical or hydraulic dredging to r 82,000 CY of sediment
- Hydraulic transport of sediment to Be area (AHATS)
- Dewater in geotextile tubes
- Onsite treatment of water prior to dis
- Off-site disposal at permitted landfill

TCAAP RAB Meeting – July 20, 2021



Agenda – July 20, 2021 at 7PM

- Review/Approve minutes of last meetin
- Questions on the Supplemental RI/FS
- Explanation of Round Lake Proposed P
- Questions on the Proposed Plan
- Official Public Comments for Round Lak

  Proposed Plan

This meeting is being recorded

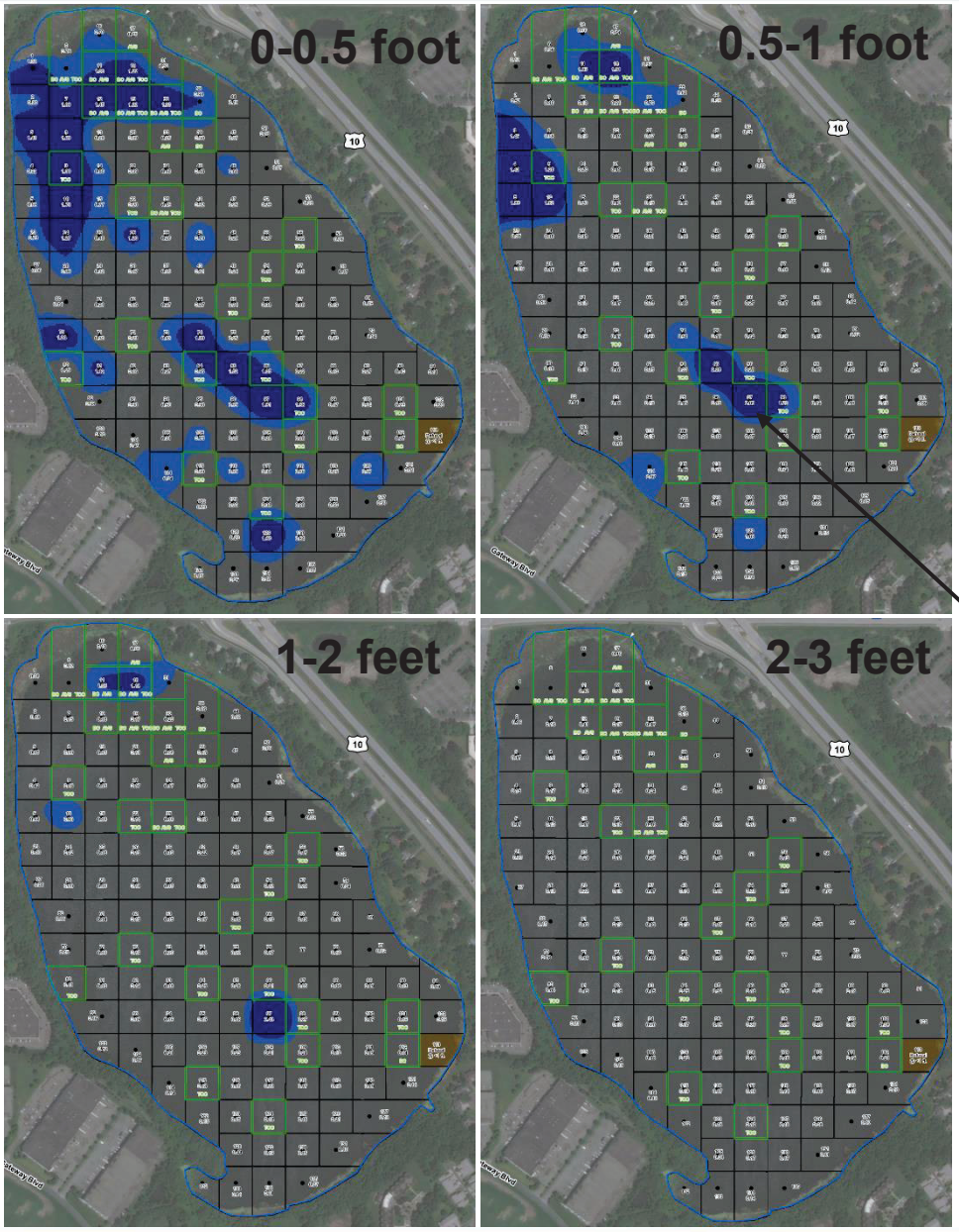
- This meeting is being recorded and may b published on the internet.
- By speaking at the meeting, you consent t having your comments recorded.

Questions on Supplemental RI/FS

Round Lake - Background

- Round Lake formerl TCAAP
- Transferred to the U & Wildlife Service in
- Historical releases c hazardous substanc TCAAP to Round La were associated wit discharge of industr processing wastewa sanitary sewer, and sewer discharges.

Round Lake - Background



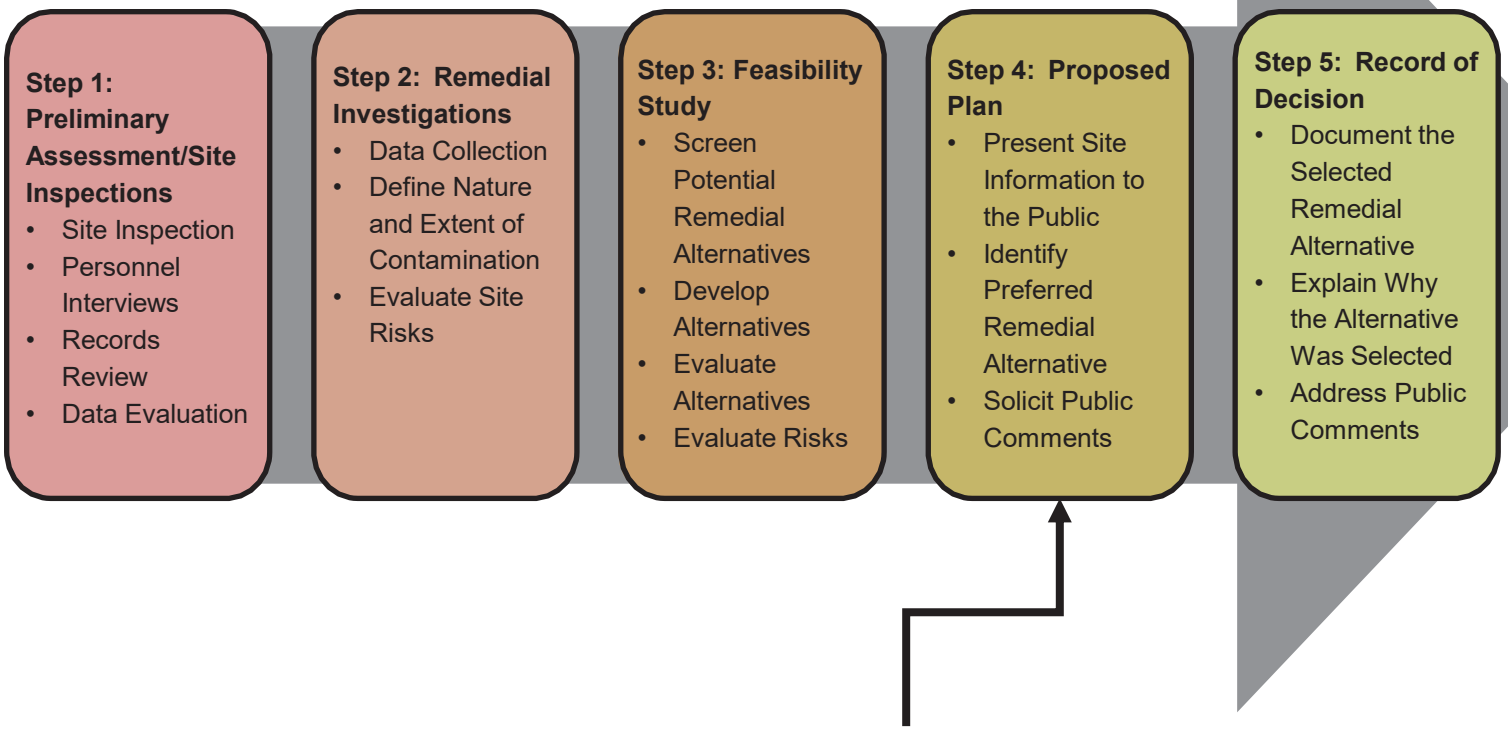
Contaminants of

- Metals (cadmium chromium, coppe silver, vanadium, and
- Polychlorinated b (PCBs)

Concentrations tha remediation shade

Contaminants gen limited to the uppe sediment

Round Lake – CERCLA Process



Currently soliciting public comments on Proposed Plan

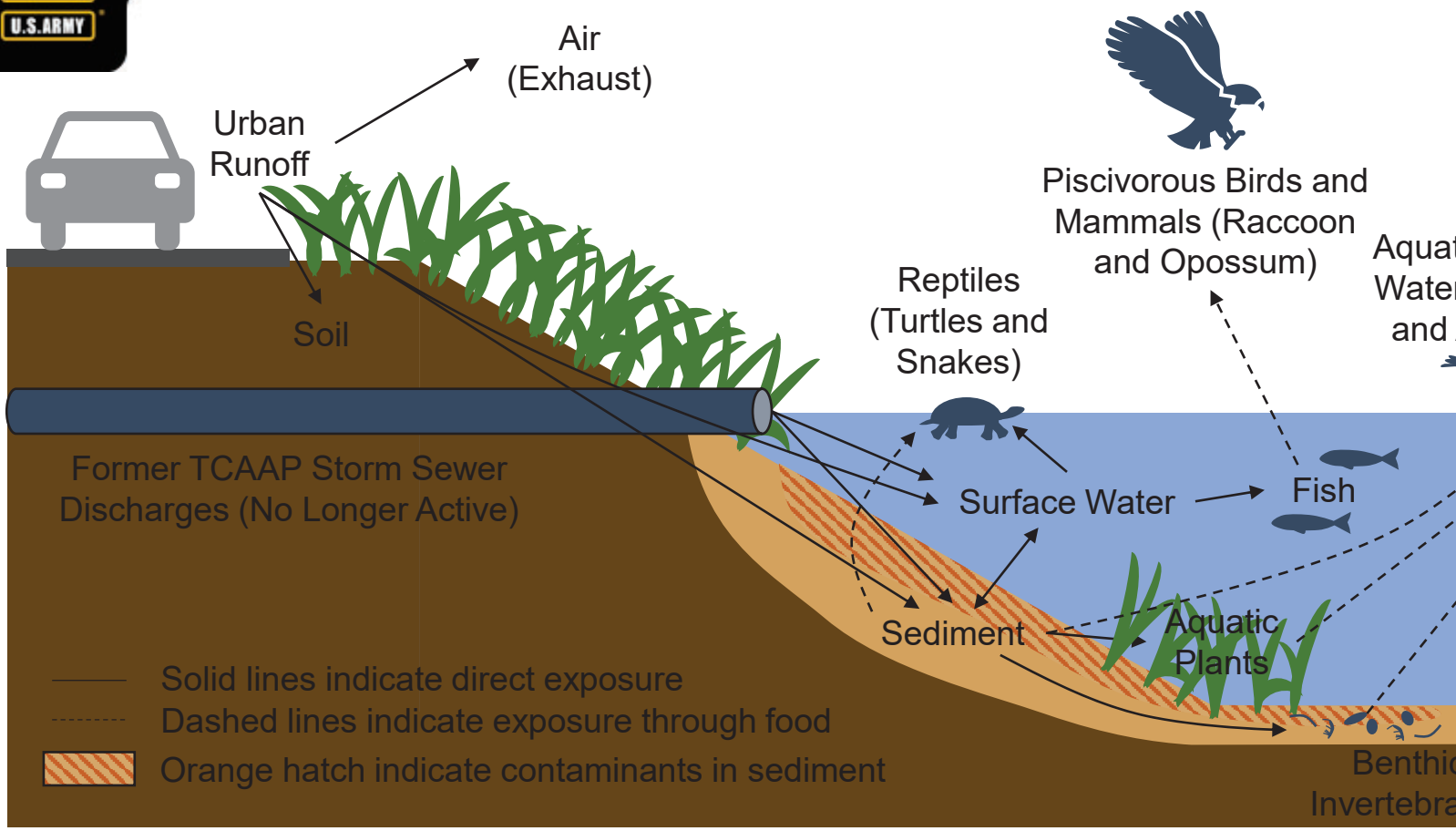
Round Lake - Background

- Because there is a mixture of contaminants, and provide a general depiction of metals concentrati in sediments at various sediment depths, a mean probable effect concentration quotient (mPEC-Q) used to measure success.
- The Remedial Investigation (RI) was conducted between 1987 and 2011.
- USEPA requested a Feasibility Study (FS).
- Supplemental RI/FS accepted by MPCA and USE in March 2021. Available to the community for rev

Risk Assessment

- Remedial investigations collected sediment data t inform evaluation of risks
- Human Health Considerations
  - Current and future use is as a unit of the Minnesota Valley NW
  - Exposure for site workers
  - Potential for future fish consumption
- Ecological Considerations
  - Benthic invertebrates
  - Fish
  - Aquatic invertebrates
  - Amphibians
  - Piscivorous birds and mammals
- Human Health Risk Assessment identified no risk humans.
- Ecological Risk Assessment concluded ecologica were low.

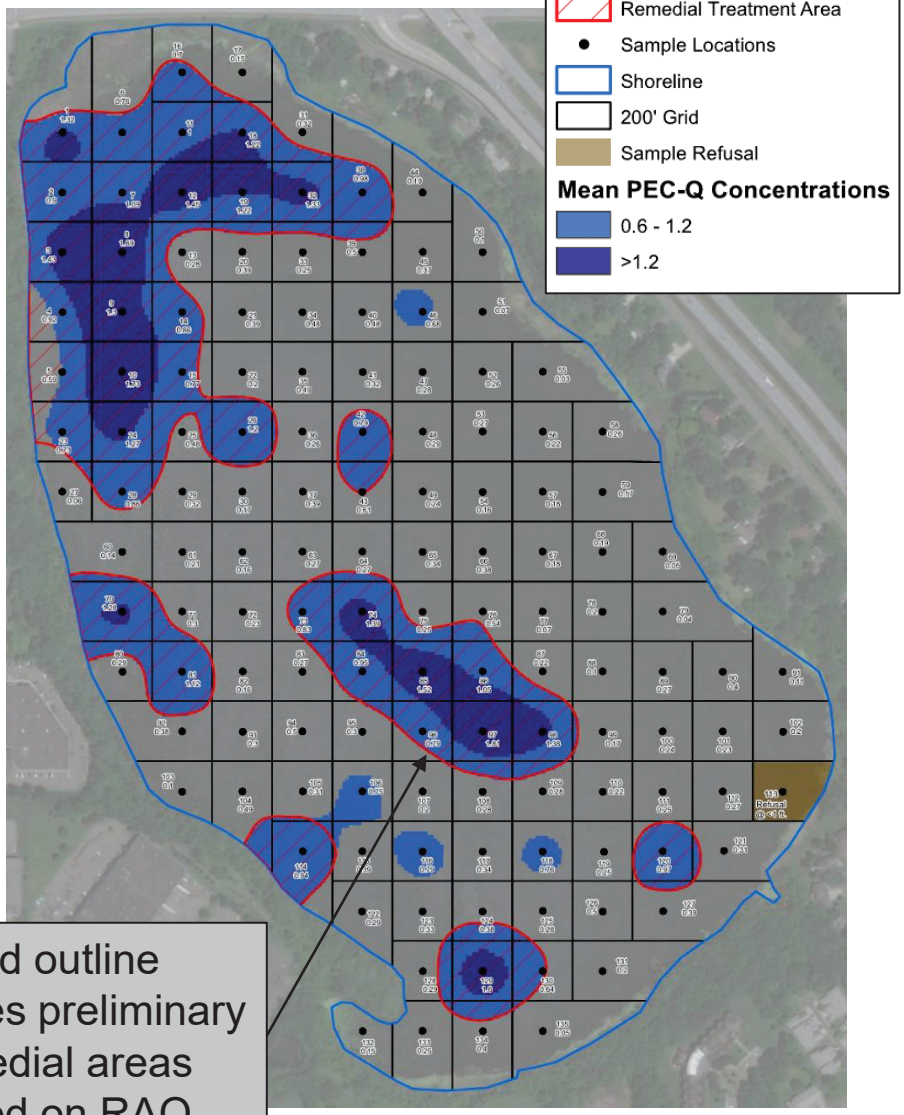
Potential Ecological Exposure Pathways



Note: Evaporation is not an exposure pathway.

The potential for adverse effects is limited to benthic invertebrates and waterfowl that ingest them.

Round Lake – Remedial Action Objective



Red outline indicates preliminary remedial areas based on RAO

- Preliminary Reme
  Action Objective

  To minimize the po adverse effects to populations and th waterfowl that inge from exposure to t contaminated sedi from TCAAP-relate discharges by achi mPEC-Q of 0.6.

- Final RAOs will b established in the of Decision (ROD

Identifying, Screening and Selecting Alternati

Identify General Response Actions and Technologies	Screen Technologies	Develop Alternativ
• Broad classes of responses or remedies that may be implemented.	• Initial screen based on effectiveness, implementabilty, and cost.	• Retained technologies combined into alternatives th address all components o site.

Key General Response Actions and Technologies

Removal/ Dredging	Confined Aquatic Disposal (CAD)	Land Use Controls	In-Situ Tr
In-situ Covering	Monitored Natural Recovery	Monitoring	

Green – retained for further evaluation

Round Lake – Remedial Alternatives

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Round Lake – Alternative Comparison

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Threshold Criteria	Overall protection of human health and the enviro
	Compliance with applicable or relevant and appro requirements (ARARs)
Balancing Criteria	Long-term effectiveness and permanence
	Reduction of toxicity, mobility, and volume through treatment
	Short-term effectiveness
	Implementabilty
	Cost
Modifying Criteria	State acceptance
	Community acceptance

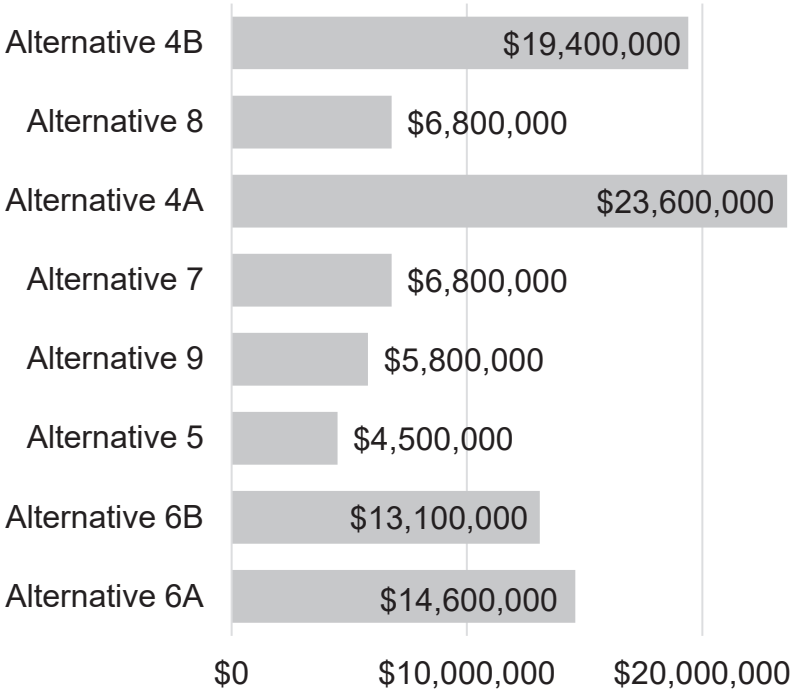
Round Lake - Evaluation of Alternatives

	Alt 4A Removal	Alt 4B Removal	Alt 5 Cover	Alt 6A Removal and Cover	Alt 6B Removal and Cover	Alt 7 Nearshore CAD	Alt Deep W CA
Protectiveness – HH short term	◔	◔	◕	◐	◐	●	●
Protectiveness – HH long term	●	●	●	●	●	●	●
Protectiveness – Eco short term	◔	◔	◕	◐	◐	◔	◔
Protectiveness-Eco long term	●	●	◐	◐	◐	◐	◕
ARARs	●	●	●	●	●	●	●
Long Term Effectiveness	●	●	◔	◐	◐	◐	◕
Reduction of Toxicity, Mobility and Volume	◐	◐	◐	◐	◐	◐	◐
Short-Term Effectiveness	◔	◐	◐	◔	◐	◕	◕
Implementability	◐	◐	●	◕	◕	●	●
Cost	◔	◔	◕	◔	◔	◕	◕
State Acceptance	●	●	○	○	○	○	◔
Community Acceptance	TBD	TBD	TBD	TBD	TBD	TBD	TB
USFWS	●	●	○	○	○	○	◔

As the circle becomes more filled, the alternative becomes more desirable.

Cost Comparison and Ranking

Estimated Remedial Cost



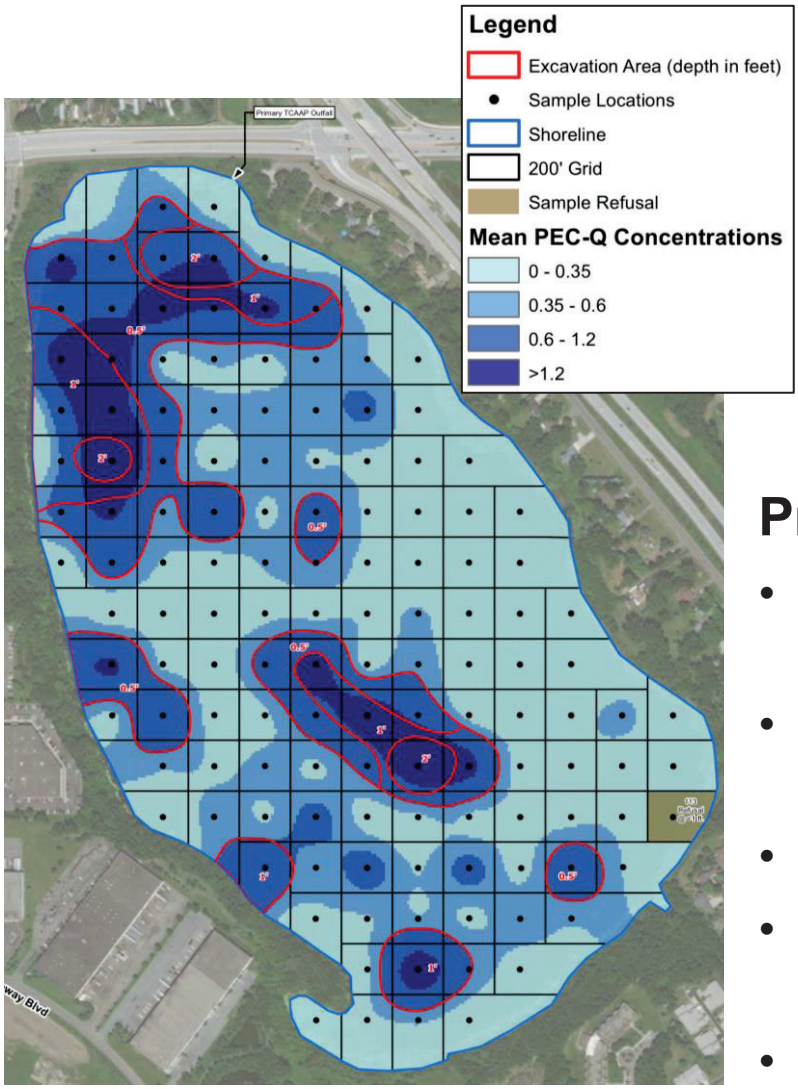
Alternative Ranking:

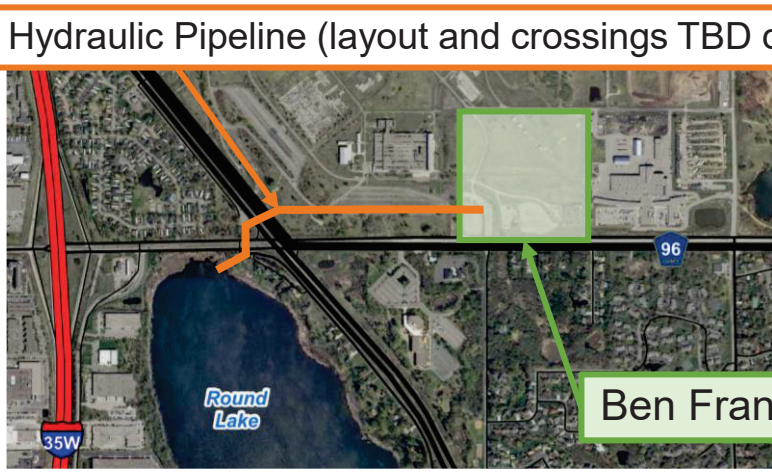
1. Alternative 4B – Removal and TCA
1. Alternative 8 – Deep Water CAD
3. **Alternative 4A – Removal and Of Disposal**
4. Alternative 7 – Near Shore CAD
4. Alternative 9 – Deep Water CAD, In
6. Alternative 5 – In-Situ Cover
7. Alternative 6B – Removal, TCAAP In-Situ Cover
8. Alternative 6A – Removal, Offsite D In-Situ Cover
9. Alternative 1 – No Action

- Alternatives 4B and 8 not implementable based on available site conditions.
- Alternative 4A is the highest ranking alternative that is implementable.

Round Lake – Preferred Alternative

Alternative 4A – Removal and Offsite Dis





Primary Design Elements

- Mechanical or hydraulic dredging to r 82,000 CY of sediment
- Hydraulic transport of sediment as a Ben Franklin area
- Dewater in geotextile tubes
- Onsite treatment of water prior to dis Round Lake or municipal sewer
- Off-site disposal at landfill.

Round Lake – Preferred Alternative

Alternative 4A – Removal and Offsite Dis

Implementability

- Access required for launching equipment near shore
- Pipeline may require access agreements and dedicated utility conduit
- Water management at dewatering area, including treatment and potential discharge to lake or sewer
- Traffic and trucking implications for offsite disposal

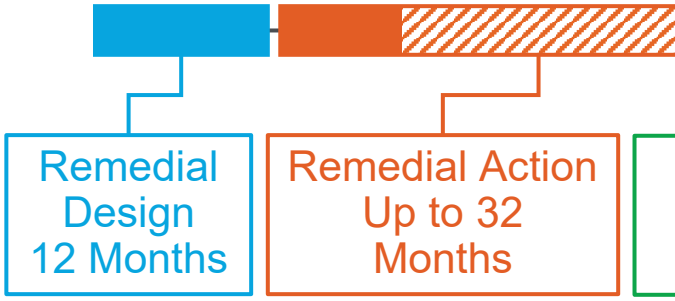
Effectiveness

- Highly effective for long-term remediation of lake sediments
- Relatively high construction-related impacts
- Offsite transport has relatively high impacts to the general public and workers due to construction and trucking

Total Cost

Alternative 4A - $23,600,000

Timeframe: 2 – 4 years



Round Lake – Next Steps

- Supplemental RI/FS – Complete
- Proposed Plan – Available for public comm
- Record of Decision – will document selecte alternative
- Remedial Action – will include remedial design, construction and reporting

More Information

Public Comment Period – **July 9 – August 13, 202**

Administrative Record and Information Repository available at:

- Arden Hills Army Training Site
  4761 Hamline Avenue North
  Arden Hills, MN 55112
- Please call (651) 282-4420 for an appointment.

Electronic copies of the Proposed Plan can be prov by email and are available for download at:

https://tcaaprab.org

Point of Contact

- Linda Albrecht, Department of the Army
  Remedial Project Manager, TCAAP
  - Email - Linda.B.Albrecht.civ@mail.mil
  - Phone - (210) 861-4050

Questions

Next Meeting Agenda – September 21, 2021 at

- Review/Approve minutes of last meeting
- Old Business
- Cleanup status update
- New business
- Next meeting agenda
- Establish next year of meetings
- Public comments

How to Submit Comments on Proposed

The 30-day public comment period is open beginning **Ju 9, 2021**.

Written comments and questions should be submitted n later than **August 13, 2021**, and directed to:

U.S. Army Environmental Command
2455 Reynolds Road, Mailstop 112
ATTN: Linda Albrecht, TCAAP PP
JBSA Fort Sam Houston, TX 78234-7558

Email - Linda.B.Albrecht.civ@mail.mil

We are going to adjourn this RAB meeting and you may submit oral comments for the record.

NOTE – If you are submitting written comments, oral comments are not necessary.

If you are submitting oral comments, written comments are not necessary.

Questions

Round Lake - ARARs

- Applicable or Relevant and Appropriate Requirements (ARARs)
  - Federal, state, and local
  - Action, chemical or location specific
  - Additional “to be considered” guidance

Activities with Potential ARARs

In-Water Work

Water Treatment and Discharge

Noise and Dus

Waste Management

Wildlife and Wetland Conservation

ATTACHMENT 5

Fact Sheet

TWIN CITIES ARMY AMMUNITION PLANT ROUND LAKE

July 2021

PROPOSED PLAN FACT SHEET

CONTACT:

Dept. of the Army
Remedial Project Manager
Twin Cities AAP

PHONE: (210) 861-4050

CONTACT: Linda Albrecht

EMAIL:
Linda.B.Albrecht.civ@mail.mil

Public Comment Period:

July 9 - August 13, 2021

The U.S. Army invites the public to comment on a Proposed Plan to remediate metals- and polychlorinated biphenyls (PCBs)-contaminated sediments in Round Lake in Arden Hills, MN at the New Brighton/Arden Hills/Twin Cities Army Ammunition Plant (NB/AH/TCAAP) Superfund Site. The NB/AH/TCAAP Superfund Site includes the former Twin Cities Army Ammunition Plant also in Arden Hills, MN. This fact sheet summarizes the Army's cleanup plan and encourages members of the public to provide comments during the 30-day public comment period (**July 9 – August 13, 2021**). The Proposed Plan and associated documents related to Round Lake are available in the Administrative Record and Information Repository at Arden Hills Army Training Site, 4761 Hamline Avenue North, Arden Hills, MN 55112. Please call (651) 282-4420 for an appointment. Electronic copies of the Proposed Plan can be provided by email and are available for download at https://tcaaprab.org.

Figure 1. Round Lake Relative Location to TCAAP

Site Background

The NB/AH/TCAAP Superfund Site consists of a 25-square mile area located in Ramsey County, Minnesota. This includes the approximately four-square mile area of the original TCAAP facility and portions of seven nearby communities. TCAAP was constructed in 1941 to produce small-caliber ammunition for the U.S. military. Ammunition production and related activities occurred periodically, commensurate with operations in wars, conflicts, and other national emergencies, and ceased in 2005.

In 1983, the NB/AH/TCAAP Site was put on the National Priorities List after the United States Environmental Protection Agency (USEPA) and Minnesota Pollution Control Agency (MPCA) determined that hazardous substances from TCAAP had been released into the environment. Round Lake is located outside the former TCAAP area as shown in Figure 1 but receives stormwater from a portion of the former installation area.

Round Lake consists of approximately 154 acres of shoreline and lake. Round Lake received industrial processing wastewater, sanitary sewer, and storm sewer discharges from TCAAP. There are three inlets to Round Lake that acted as potential conveyances of water from TCAAP. Ramsey County removed the old TCAAP storm sewer that was the pathway for the historical release of hazardous substances from the former TCAAP area into Round Lake.

Summary of Site Risks

The Human Health Risk Assessment completed for Round Lake concluded no unacceptable risks to potential human receptors. The Supplemental Ecological Risk Assessment found that there was no unacceptable risk to piscivorous species and aquatic animals. However, the Supplemental Ecological Risk Assessment found the metals- and PCBs-contaminated sediments present potentially adverse effects to benthic macro-invertebrates and the waterfowl that ingest them.

Proposed Alternatives

Nine remedial action alternatives were evaluated in the Final Supplemental Remedial Investigation/ Feasibility Study (SRI/FS). A brief description of the remedial alternatives is presented in the following paragraphs. In addition to the descriptions below, most of the alternatives (Alternatives 2, 3, 5, 6, 7, and 8) would include land use controls to prevent disturbance of the sediment such as prohibiting anchoring and installation of infrastructure (e.g., docks) in/on Round Lake.

Alternative 1 – No Action: No remedial measures would be taken to reduce risks to ecological receptors. A No Action alternative is required by the National Oil and Hazardous Substances Pollution Contingency Plan to provide a comparative baseline against which other alternatives may be evaluated.

Alternative 2 – Monitored Natural Recovery: Monitored natural recovery uses natural processes to meet the remedial action objective. There would be a stated goal for reduction of the ecological risk to a specified level and within a specified amount of time, with monitoring to track and demonstrate the reduction.

Alternative 3 – Enhanced Monitored Natural Recovery: A thin layer of material (sand) would be placed over sediment to accelerate the natural recovery process.

Alternative 4 – Dredging, Dewatering, and Disposal: Sediment would be dredged, dewatered on land, and disposed of. Dredged sediment would be transported to the TCAAP property, dewatered, and transported to the disposal site. The water produced from dewatering the sediment would be treated and returned to Round Lake or discharged to a sanitary sewer. Disposal Option A (4A) includes offsite disposal at an established landfill. Disposal Option B (4B) includes disposal and management at an impoundment developed on the TCAAP property. The estimated cost for Alternative 4A is $23.6M and Alternative 4B is $19.4M.

Alternative 5 – In-Situ Cover: Material (sand) would be placed to serve as a barrier between organisms and the sediment beneath the cover. The estimated cost is $13.8M.

Alternative 6 - Dredging, Dewatering, and Offsite Disposal of Sediment and In-situ Cover: A combination of technologies will be used including dredging, dewatering, and offsite disposal and in-situ cover. Sediment with higher concentrations of chemicals of concern would be dredged, dewatered, and disposed outside of Round Lake. Remaining sediment with concentrations above acceptable levels would be covered. There are two options for offsite disposal, including an established landfill (6A) and an impoundment constructed on the TCAAP property (6B). The estimated cost for Alternative 6A is $20.5M and for Alternative 6B is $19.2M.

Alternative 7 – Near-Shore Confined Aquatic Disposal (CAD) of Sediment within Round Lake: Sediment would be dredged and placed into a near-shore confined aquatic disposal (CAD) facility located in the northwest part of the lake. A CAD is an underwater containment unit designed to isolate contaminated sediment from the environment. The sediment would be covered with material obtained from Round Lake. The estimated cost is $13.3M.

Alternative 8 – Deep Water CAD within Round Lake: Sediment would be removed and placed into a CAD located in the deepest portion of the lake. The sediment would be covered with material obtained from Round Lake. The estimated cost is $12.0M.

Alternative 9 – Deep Water CAD within Round Lake and In-situ Cover: A combination of dredging and in-situ cover would be used. Sediment with higher concentrations of chemicals of concern would be removed by dredging and placed into a CAD located in the deepest portion of the lake. Remaining sediment with concentrations above acceptable levels would be covered as described in Alternative 5. The estimated cost is $11.4M.

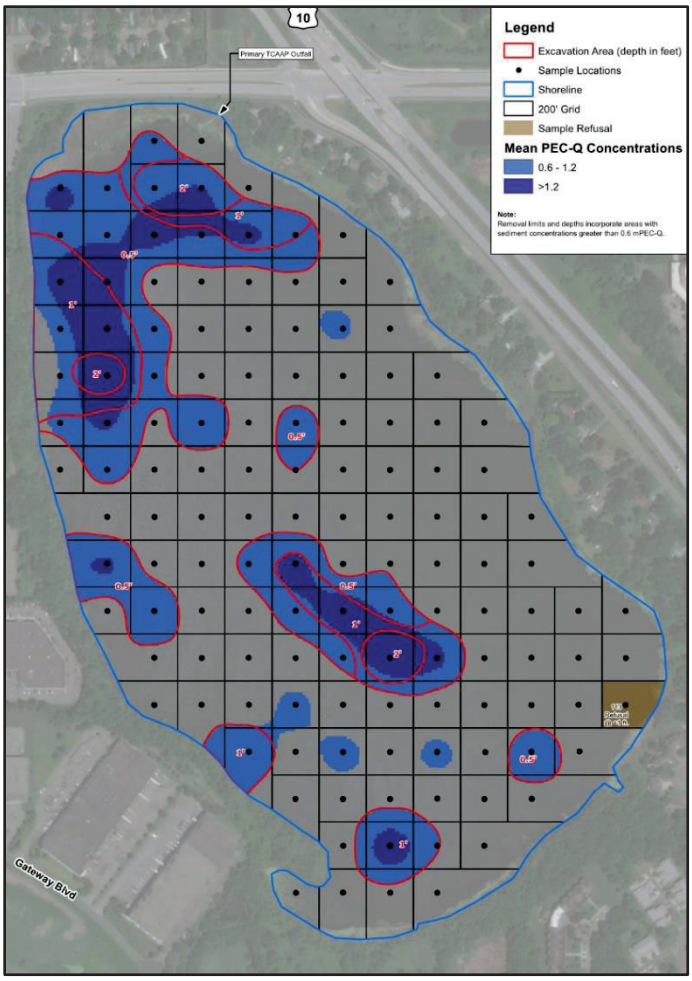


Figure 2. Conceptual Plan for Alternative 4A depicting Round Lake. Areas in light blue and dark blue are targeted for cleanup, as these are areas where contaminant concentrations in sediment exceed cleanup levels.

Preferred Alternative

Alternative 4A is the preferred alternative because it will achieve substantial risk reduction to the benthic community using a proven sediment remediation technology. Alternative 4A ranks among the highest alternatives with significant advantages of long-term effectiveness and protectiveness, and acceptability by the state and landowner.

Community Feedback

After reviewing comments received during the public comment period, the Army and USEPA, in consultation with MPCA, will select a final cleanup plan. The Army and USEPA, in consultation with the MPCA, may modify the proposed cleanup plan or select another option based on new information or public comments received during the public comment period, so your opinion is important. We encourage you to learn more about the Proposed Plan and the site and to make your views and concerns known. The cleanup plan that is finally chosen will be described in a Record of Decision that will include a summary of comments received and how the comments may have influenced the final decision.

More information is available in the Information Repository at the Arden Hills Training Site, 4761 Hamline Avenue North, Arden Hills, MN 55112. Call 651-282-4420 to arrange access.

How to Submit Comments

The 30-day public comment period is open beginning **July 9, 2021**. Written comments and questions should be submitted no later than **August 13, 2021**, and directed to:

U.S. Army Environmental Command
2455 Reynolds Road, Mailstop 112
ATTN: Linda Albrecht, TCAAP PP
JBSA Fort Sam Houston, TX 78234-7558
Email - Linda.B.Albrecht.civ@mail.mil

Oral comments are accepted after the RAB Virtual Public Meeting.

Open House & Virtual Public Meeting

The Army will host an Open House on **July 20, 2021, from 10:00 a.m. to 3:00 p.m.** at the Arden Hills Army Training site, located at 4761 Hamline Avenue North, Arden Hills, MN 55112. Army personnel will be on hand to respond to questions about the studies related to Round Lake. Attendees will be required to adhere to all National, State, and regional COVID-19 mandates and guidelines in place at the time of the Open House. In addition, the Army will host a virtual Restoration Advisory Board (RAB)/public meeting on **July 20, 2021, at 7:00 p.m.** using Microsoft Teams. Army personnel will present the Proposed Plan and respond to questions. Meeting attendees can submit their comments on the Plan orally at the end of this meeting. Meeting information will be provided to RAB members by email, and interested members of the public should contact Kay Toye by phone at (520) 903-4363 or email at kay.toye@envrg.com to obtain meeting information and register.

Frequently Asked Questions

1. **Who prepared the Proposed Plan?**

   As lead agency, the Army prepared and approved the Proposed Plan. The USEPA and MPCA reviewed and approved the Proposed Plan.

2. **What requires the Army to prepare a Proposed Plan?**

   The National Oil and Hazardous Substances Pollution Contingency Plan, which is the regulations on procedures for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), requires the preparation of a Proposed Plan. USEPA guidance provides content and format recommendations.

3. **What kind of installations require a Proposed Plan?**

   Installations listed on the National Priorities List (NPL), commonly known as Superfund Sites, require a Proposed Plan. Funding for an Army site, like TCAAP, comes from the Army itself. Being listed on the NPL requires the same types of documents be prepared as for other Superfund sites, including the SRI/FS and Proposed Plan.

4. **What is contained in a Proposed Plan?**

   Proposed Plans contain the lead agency's proposed remedial action for a site, which is selected from the alternatives that are compared in the SRI/FS and approved by USEPA and MPCA. Proposed Plans also include a brief description of the site and other alternatives considered.

5. **When does a Proposed Plan have to be developed?**

   Proposed Plans are developed as the SRI/FS is being finalized. The Proposed Plan is finalized before the public comment period.

6. **Why does a Proposed Plan have to be developed?**

   Proposed Plans are created as a single document that clearly states the proposed remedial action at a site so the public can understand and comment on it.

7. **How is the public involved with the Proposed Plan?**

   Proposed Plans are provided at information repositories near the site and online so the public can review and comment on it for a minimum of 30 days. The public is encouraged to comment on this Proposed Plan and attend the public meeting on **July 20, 2021**.

8. **What happens after the public comment period ends?**

   Following the close of the public comment period, the final remedial action selection will be made by the Army and USEPA in consultation with MPCA and issued in a document called the Record of Decision (ROD), after considering public comments. The ROD will contain a Responsiveness Summary addressing public comments.

9. **Does the preferred alternative listed in the Proposed Plan necessarily mean that it will be the one chosen?**

   No. The preferred alternative is proposed based on various criteria, such as protectiveness of human health and the environment, ability to satisfy Federal and State requirements, long- and short-term effectiveness, and cost. Community acceptance is also a required factor that must be considered before selecting the remedial action. Any community concerns raised during the comment period must be considered in conjunction with the other required factors before the remedial alternative is selected.

10. **What if the USEPA and MPCA do not agree with the Army's proposed alternative?**

    Any such disagreements are addressed during the preparation and review of the SRI/FS and the Proposed Plan. The published SRI/FS and Proposed Plan have been approved by the USEPA, MPCA, and the Army.

11. **What if the public does not agree with the Proposed Plan?**

    Comments on the Proposed Plan are accepted at the Virtual Public Meeting on **July 20, 2021**, as well as during the 30-day public comment period beginning **July 9, 2021**. All comments are addressed in writing by the Army in a Responsiveness Summary that is reviewed by the USEPA and MPCA and then published with the ROD. A news release will inform the public that the ROD and Responsiveness Summary are available.

12. **How can I submit comments?**

    Written comments may be sent to the Amy's mailing address or email address at the top of this page. Oral comments are accepted during the Virtual Public Meeting.

More information is available in the Information Repository at the Arden Hills Training Site, 4761 Hamline Avenue North, Arden Hills, MN 55112. Call 651-282-4420 to arrange access.

ATTACHMENT 7

Video of the RAB meeting (to be included)

Attachment E

Detailed Analysis of Alternatives for Round Lake

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CERCLA Criteria	Alternative 1: No Action	Alternative 4A: Removal/Disposal Option A	Alternative 4B: Removal/Disposal Option B	Alternative 5: In-Situ Cover	Rem
Overall Protection of Human Health and the Environment	▪ Human health is protected. ▪ Risks to the overall ecosystem are characterized as low. ▪ Natural recovery processes are expected to reduce risk to ecological receptors over time. ▪ Drawdowns planned by the USFWS are not expected to cause exceedance of water quality standards.	▪ Creates short-term risk to human health during construction. ▪ Creates short-term risk to biota because sediment is being removed from the bottom of the lake, which also removes biota. ▪ Reduces long-term risk to ecological receptors by removing contaminated sediment. ▪ Drawdowns planned by the USFWS are not expected to cause exceedance of water quality standards.	▪ Creates short-term risk to human health during construction. ▪ Creates short-term risk to biota because sediment is being removed from the bottom of the lake, which also removes biota. ▪ Reduces long-term risk to ecological receptors by removing contaminated sediment. ▪ Drawdowns planned by the USFWS are not expected to cause exceedance of water quality standards.	▪ Creates short-term risk to human health during construction. ▪ Creates short-term risk to biota during construction because material is being added onto the lake bottom. ▪ Reduces long-term risk to ecological receptors by installing a new, clean benthic zone and by covering contaminated sediment (containment). ▪ The cover could affect the lake bottom habitat. ▪ Drawdowns planned by the USFWS are not expected to cause exceedance of water quality standards.	▪ ▪ ▪ ▪ ▪
Compliance with ARARs	▪ No ARARs exist for sediment. Natural recovery processes are occurring. The timeframe required for such processes to reach the PRG is uncertain.	▪ No ARARs exist for sediment. Removal is expected to immediately attain the PRG by removal of the contaminated sediment. ▪ Removal and disposal can be conducted in a manner to comply with action-specific ARARs.	▪ No ARARs exist for sediment. Removal is expected to immediately attain the PRG by removal of the contaminated sediment. ▪ Removal and disposal can be conducted in a manner to comply with action-specific ARARs.	▪ No ARARs exist for sediment. Covering is expected to immediately attain the PRG by installing a new, clean benthic zone and by covering the contaminated sediment (containment). ▪ In-situ covering can be conducted in a manner to comply with action-specific ARARs.	▪ ▪
Long-Term Effectiveness and Permanence	▪ Human health is protected. ▪ The risk to the overall ecosystem is considered low, and would be expected to gradually diminish due to natural recovery processes. ▪ Relatively higher long-term natural resource injury due to longer timeframe for achieving risk reduction. ▪ CERCLA five-year reviews are not required, since selection of this alternative is dependent on a final risk management decision that the potential ecological risks are acceptable.	▪ Long-term human health is protected. ▪ The risk to the overall ecosystem is considered low, and would be expected to immediately decrease by removal and disposal off-site. ▪ Removal of the contaminated sediment can be considered relatively permanent, though it is transferred to another location, requiring long-term management at the disposal site (landfill). ▪ Relatively lower long-term natural resource injury due to shorter timeframe for achieving risk reduction. ▪ CERCLA five-year reviews are not required, since after contaminated sediment is removed the PRG would be attained.	▪ Long-term human health is protected. ▪ The risk to the overall ecosystem is considered low, and would be expected to immediately decrease by removal and disposal at the TCAAP property. ▪ Removal of the contaminated sediment can be considered relatively permanent, though it is transferred to another location, requiring long-term management at the disposal site (TCAAP property). ▪ Relatively lower long-term natural resource injury due to shorter timeframe for achieving risk reduction. ▪ CERCLA five-year reviews are required since contaminated sediment is managed at the TCAAP property..	▪ Long-term human health is protected. ▪ The risk to the overall ecosystem is considered low, and would be expected to immediately decrease by installing a new, clean benthic zone and by covering (containment). ▪ The cover would remain effective as long as it is not disturbed or eroded (the restricted access maintained by the USFWS helps ensure this). ▪ Relatively lower long-term natural resource injury due to shorter timeframe for achieving risk reduction. ▪ CERCLA five-year reviews are required.	▪ ▪ ▪ ▪ ▪ ▪
Reduction of Toxicity, Mobility, and Volume Through Treatment	▪ There would be no treatment of contaminated sediment.	▪ There would be no treatment of contaminated sediment.	▪ There would be no treatment of contaminated sediment.	▪ There would be no treatment of contaminated sediment.	▪

*Alternatives 2 and 3 are not included in the analysis due to the uncertainty of their effectiveness.

CERCLA Criteria	Alternative 1: No Action	Alternative 4A: Removal/Disposal Option A	Alternative 4B: Removal/Disposal Option B	Alternative 5: In-Situ Cover	Rem
Short-Term Effectiveness	▪ No construction-related short-term risk to workers or the public. ▪ No construction-related risk to habitat or biota. ▪ Relatively longer timeframe for risk reduction. ▪ No construction-related natural resource injury.	▪ Removal and transport create a relatively low risk to workers and/or the public from exposure to the contaminated sediment. ▪ Construction will create short-term risk to workers and/or the public in the form of construction safety, roadway accidents with truck traffic and associated carbon emissions. ▪ Construction will cause short-term impacts to the lake habitat and biota, and also to the upland areas used for access and support areas. ▪ Relatively shorter timeframe for risk reduction (occurs at the end of construction). ▪ Relatively high construction-related natural resource injury. ▪ The overall Remedial Action Construction phase is anticipated to be approximately 2 to 4 years.	▪ Removal and transport create a relatively low risk to workers and/or the public from exposure to the contaminated sediment. ▪ Construction will create short-term risk to workers and/or the public in the form of construction safety, roadway accidents with truck traffic and associated carbon emissions, but less than Option A since TCAAP property is closer than other landfill locations. ▪ Construction will cause short-term impacts to the lake habitat and biota, and also to the upland areas used for access and support areas. ▪ Relatively shorter timeframe for risk reduction (occurs at the end of construction). ▪ Relatively high construction-related natural resource injury. ▪ The overall Remedial Action Construction phase is anticipated to be approximately 2 to 4 years.	▪ Covering is not expected to create risk to workers or the public from exposure to the contaminated sediment. ▪ Construction will create short-term risk to workers and/or the public in the form of construction safety, roadway accidents, and associated carbon emissions. ▪ Construction will cause short-term impacts to the lake habitat and biota, and also to the upland areas used for access and support areas. ▪ Relatively shorter timeframe for risk reduction (occurs at the end of construction). ▪ Relatively high construction-related natural resource injury. ▪ The overall Remedial Action Construction phase is anticipated to be approximately 3 to 5 years.	▪ ▪ ▪ ▪ ▪

CERCLA Criteria	Alternative 1: No Action	Alternative 4A: Removal/Disposal Option A	Alternative 4B: Removal/Disposal Option B	Alternative 5: In-Situ Cover	Ren
Implementability	▪ No permitting or eagle disturbance. ▪ No construction; easy to implement. ▪ No land access agreements are needed. ▪ No long-term monitoring or five-year reviews.	▪ Requires coordination and/or approvals related to implementation, including waste characterization and disposal acceptance. ▪ Requires compliance with the Bald and Golden Eagle Protection Act, which may result in restrictions on construction work areas and/or schedules to minimize any Eagle disturbance. The estimated volume of contaminated sediment that will be removed from the lake is 82,000 cubic yards. ▪ The areas that border the lakeshore would not be fully accessible by barge. Overall, these inaccessible areas represent a very small portion of the overall area; however, they would need to be addressed by other means. The final evaluation and decision regarding how to handle these areas would be made in the remedial design phase. ▪ Construction support activities require access to USFWS upland areas, at a minimum, and possibly to other land areas that would require an access agreement. Given that contaminated sediment is involved, the property owner may be reluctant (or opposed) to entering such an agreement. ▪ Dewatering of sediment is required prior to disposal, increasing land access requirements and complexity. ▪ Water generated from sediment dewatering requires proper disposal. If water quality is acceptable and if it is approved, the water could potentially be returned to the lake; otherwise, treatment and/or sanitary sewer disposal would be required. ▪ No long-term monitoring or five-year reviews.	▪ Requires coordination and/or approvals related to implementation, including development of TCAAP management area. ▪ Requires compliance with the Bald and Golden Eagle Protection Act, which may result in restrictions on construction work areas and/or schedules to minimize any Eagle disturbance. ▪ The estimated volume of contaminated sediment that will be removed from the lake is 82,000 cubic yards. ▪ The areas that border the lakeshore would not be fully accessible by barge. Overall, these inaccessible areas represent a very small portion of the overall area; however, they would need to be addressed by other means. The final evaluation and decision regarding how to handle these areas would be made in the remedial design phase. ▪ Construction support activities require access to USFWS upland areas, at a minimum, and possibly to other land areas that would require an access agreement. Given that contaminated sediment is involved, the property owner may be reluctant (or opposed) to entering such an agreement. ▪ Dewatering of sediment is required prior to placement at TCAAP property, increasing land access requirements and complexity. ▪ Water generated from sediment dewatering requires proper disposal. If water quality is acceptable and if it is approved, the water could potentially be returned to the lake; otherwise, treatment and/or sanitary sewer disposal would be required. ▪ Monitoring and five-year reviews required for TCAAP management area. ▪ The area planned for disposed sediment management at TCAAP is no longer available for use; therefore, this alternative is deemed non-implementable.	▪ Requires coordination and/or approvals related to implementation. ▪ Requires compliance with the Bald and Golden Eagle Protection Act, which may result in restrictions on construction work areas and/or schedules to minimize any Eagle disturbance. ▪ The estimated volume of material that will be added to the lake for placement of the cover is124,000 cubic yards. ▪ The portions of the shoreline grids that are inaccessible by barge will need to be addressed by a second method of construction, such as placing the cover materials on the ice, which increases the complexity of implementation, lengthens the construction schedule, and introduces more potential uncertainties. ▪ Construction support activities require access to USFWS upland areas, at a minimum, and possibly to other land areas that would require an access agreement. ▪ Long-term monitoring is required and would likely include erosion monitoring and sediment sampling to confirm effectiveness of the cover. ▪ Long-term five-year reviews would be needed, and possibly maintenance of the cover.	▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪
Cost (Present Worth)	▪ $0	▪ $23,600,000	▪ $19,400,000	▪ $13,800,000	▪

CERCLA Criteria	Alternative 1: No Action	Alternative 4A: Removal/Disposal Option A	Alternative 4B: Removal/Disposal Option B	Alternative 5: In-Situ Cover	Rem
State Acceptance	▪ The state has indicated that No Action is unacceptable to them.	▪ Acceptable based on permanence, long-term protectiveness and effectiveness, and other factors.	▪ Acceptable based on permanence, long-term protectiveness and effectiveness, and other factors.	▪ Not acceptable due to anticipated maintenance required to maintain long-term effectiveness and lake ecosystems as well as the difficulty in meeting the substantive requirements of MN Rule 6115.0190 and MN Rule 6115.0200.	•
USFWS acceptance	• Unacceptable	▪ Most acceptable because no COCs greater than 0.6 mPEC-Q would remain onsite.	▪ Most acceptable because no COCs greater than 0.6 mPEC-Q would remain onsite.	• Undesirable because COCs become legacy on Refuge Unit. Undesirable because COCs greater than 0.6 mPEC-Q potentially subject to disturbance due to desired management actions.	•
Community Acceptance	▪ To be determined.	▪ To be determined.	▪ To be determined.	▪ To be determined.	▪