

Review Plan

(June 2023)

Project Summary: This Disposition study will determine whether it's in the federal interest to continue ownership of the two Minneapolis locks and dams, Lower St. Anthony Falls Lock and Dam and Lock and Dam No. 1, and the continual maintenance associated Mississippi River navigation channel between the lock sites. The study will include a National Environmental Policy Act decision document.

Project Name: Lower St. Anthony Falls Lock and Dam and Lock and Dam No. 1 Section 216 Disposition Study

Location: The project area is located on the Mississippi River in Minneapolis-St. Paul metropolitan area of Minnesota and includes two dams and the associated sub reach of the 9-foot Navigation Channel. Lower St. Anthony Falls Lock and Dam (LSAF) is located on the right bank of the

Mississippi River in Minneapolis, Hennepin County, Minnesota, at Upper Mississippi River mile 853.3. Lock and Dam No. 1 (L/D 1) is located on the right bank of the Mississippi River in Minneapolis, Hennepin County, Minnesota at Upper Mississippi River mile 847.9.

P2 Number: 504685 (L/D 1) & 504686 (LSAF)

Decision and Environmental Compliance Document Type: Disposition Study Report

Congressional Authorization Required: Yes

Project Purpose(s): Inland Navigation.

Non-Federal Sponsor: N/A, Lower St. Anthony Falls Lock and Dam and Lock and Dam No. 1 Section 216 Disposition Study

Points of Public Contact for Questions/Comments on Review Plan:

District: St. Paul District (MVP)

District Contact: Project Manager 651.366.7359

Major Subordinate Command (MSC): Mississippi Valley Division (MVD) **MSC**

Contact: Planning Division Chief 601.634.5854

Review Management Organization (RMO): Inland Navigation Planning Center of Expertise (PCXIN)

RMO Contact: Senior Planner 304.399.5848

Table 1. Key Review Plan Dates

Review Plan Activities	Dates
Date of RMO Endorsement of Review Plan	Pending
Date of MSC Approval of Review Plan	Pending
Date of IEPR Exclusion Approval	Reevaluation Pending
Has the Review Plan changed since RMO Endorsement?	No
Date of Last Review Plan Revision	None
Date of Review Plan Web Posting	Upon Approval

Table 2. Milestone Schedule and Other Dates

Milestones	Scheduled	Actual
FCSA Execution	N/A	N/A
Decision Meeting	June 2023	21 August 2017 (A)
Tentatively Selected Plan	April 2024	TBD
Release Draft Report to Public	November 2024	TBD
Final Report Transmittal	July 2025	TBD
Disposition Study	N/A	N/A

* Completion of milestones is subject to funding availability. Changes to milestones will be communicated through the SPOTREP process.

* Disposition Study guidance outlines required milestone. Milestone titles above are based on disposition guidance.

1. References

Engineer Regulation 1165-2-217 – Water Resources Policies and Authorities – Civil Works Review Policy, 1 May 2021.

Engineering Regulation 1165-2-119 Modification of Completed Projects 20 Sep 1982.

Engineer Circular 1105-2-412 – Planning – Assuring Quality of Planning Models, 31 March 2011.

Planning Bulletin 2013-02, Subject: Assuring Quality of Planning Models (EC 1105-2-412), 31 March 2013.

Office of Management and Budget, Final Information Quality Bulletin for Peer Review, Federal Register Vol. 70, No. 10, January 14, 2005, pp 2664-267

Interim Guidance for the Conduct of Disposition Studies. Mississippi Valley Division. 28 Sept 2016

Revised Implementation Guidance for Section 1168 of the Water Resource Development Act (WRDA) of 201, Disposition Projects. 25 Apr 2019.

The online USACE Planning Community Toolbox provides more review reference information at: <https://planning.erdc.dren.mil/toolbox/current.cfm?Title=Peer%20Review&ThisPage=Peer&Side=No>.

Water Resources Development Act of 24 October 2018, Sections 1168 and 1225, and subsequent USACE implementation guidance, published in April 2019.

CECW-P Memorandum, Subject: Interim Guidance on the Conduct of Disposition Studies. 22 Aug 2016.

CECW-CR memorandum, Subject: Real Estate Policy Guidance Letter No. 33 – Interim Guidance on Disposition Studies. 28 Sep 2016.

Engineering Circular 1165-2-220 - Policy and Procedural Guidance for Processing Request to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408. 10 Sep 2018.

CECW-ZB memorandum Further Advancing Project Delivery Efficiency and Effectiveness of USACE Civil Works. 21 June 2017.

Director's Policy Memorandum (DPM) Civil Works Programs (CW), Improving Efficiency and Effectiveness in USACE Civil Works Project Delivery (Planning Phase and Planning Activities), 03 May 2018.

CECW-P Memorandum, Subject: Revised Delegation of Authority in Section 2034(a)(5)(A) of the Water Resources Development Act of 2007 (WRDA 2007), as amended, 7 June 2018.

Water Control Manuals – Upper and Lower St. Anthony Falls, Lock and Dam 1.

2. Review Execution Plan

The general plan for executing all required independent reviews is outlined in the following two tables.

Table 1 lists each study product to be reviewed. The table provides the schedules and costs for the anticipated reviews. Teams also determine whether a site visit will be needed to support each review. The decisions about site visits are documented in the table. As the review plan is updated the team will note each review that has been completed. *No site visits are anticipated for review team members.

Table 2 identifies the specific expertise and role required for the members of each review team. The table identifies the technical disciplines and expertise required for members of review teams. In most cases the team members will be senior professionals in their respective fields. In general, the technical disciplines identified for a District Quality Control (DQC) team will be needed for an Agency Technical Review (ATR) team. Each ATR team member will be certified to conduct ATR by their community of practice. The table is set up to concisely identify common types of expertise that may be applicable to one or more of the reviews needed for a study.

Table 3: Schedule and Costs of Reviews

Product(s) to undergo Review	Review Level	Start Date	End Date	Cost	Complete
Draft Disposition Study Report and EA	District Quality Control	09/20/2024	10/04/2024	\$50,000	No
Draft Disposition Study Report and EA	Agency Technical Review	12/13/2024	02/18/2024	\$40,000	No
Draft Disposition Study Report and EA	Policy and Legal Review	12/13/2024	02/18/2024	n/a	No
Draft Disposition Study Report and EA	Public Review	11/07/2024	12/12/2024	n/a	No
Final Disposition Study Report and EA	District Quality Control	02/19/2025	03/04/2025	\$20,000	No
Final Disposition Study Report and EA	Agency Technical Review	04/15/2025	06/01/2025	\$20,000	No
Final Disposition Study Report and EA	Policy and Legal Review	04/15/2025	06/01/2025	n/a	No

Note: Follow on studies to implement the Recommended Plan identified by this disposition study will develop individual Review Plans and Environmental Compliance documentation. Future implementation efforts and environmental compliance activities are therefore not included in the scope of this Review Plan. Review schedule is subject to availability of funds.

Table 4: Review Teams - Disciplines and Expertise

Discipline / Role	Expertise	DQC	ATR
DQC Team Lead	Extensive experience preparing Civil Works decision documents and leading DQC. The lead may serve as a DQC reviewer for a specific discipline (planning, economics, environmental, etc.).	Yes	Yes
ATR Team Lead	Professional with extensive experience preparing Civil Works decision documents and conducting ATR. Skills to manage a virtual team through an ATR. The lead may serve on the ATR team for a specific discipline (such as planning, economics, or environmental work).	Yes	Yes
Planning	Skilled water resources planner knowledgeable in complex planning investigations and the application of SMART principle to problem solving.	Yes	Yes
Economics	Experience with applying theory, methods and tools used in the economic evaluation of water resources projects.	Yes	Yes
Environmental Resources	Experience with environmental evaluation and compliance requirements, national environmental laws and statutes, applicable Executive Orders, and other planning requirements.	Yes	Yes
Cultural Resources	Experience with cultural resource survey methods, area of potential effects, National Historic Preservation Act Section 106, and state and federal laws pertaining to American Indian Tribes.	Yes	Yes
Hydrology	Engineer with experience applying hydrologic principles and technical tools to project planning, design, construction, and operation.	Yes	Yes
Hydraulic Engineering	Engineer with experience applying hydraulic engineering principles and analytic tools to project planning, design, construction, and operation.	Yes	Yes
Cost Engineering	Experience using cost estimation software; working knowledge of water resource project construction; capable of making professional determinations using experience. Since it is expected that the recommended plan will only include rough order of magnitude costs, Cost Engineering MCX certification will not be required for the federal action recommended in this disposition study.	Yes	Yes
Dam Safety	The Dam Safety engineering reviewer should be able to verify that public safety has been evaluated and considered in the recommendations and that any other engineering considerations have been documented. Familiarity with disposition study guidance is recommended.	Yes	Yes

Table 4 Continued: Review Teams - Disciplines and Expertise

Discipline / Role	Expertise	DQC	ATR
Operations	The Operations reviewer should be experienced in the operation and annual and long-term maintenance of lock and dam structures. Familiarity with disposition study guidance is recommended.	Yes	Yes
Real Estate	Experience developing Real Estate Plans and experience in real estate fee/easement acquisition and residential/business relocations for Federal and/or Federally Assisted Programs for implementation of Civil Works projects.	Yes	Yes
Climate Preparedness and Resilience	A member of the Climate Preparedness and Resiliency Community of Practice knowledgeable of inland hydrology climate change assessment policy and practice.	Yes	Yes
Risk and Uncertainty	For decision documents involving hydrologic, hydraulic, and/or coastal related risk management measures, include on the ATR team an expert on multi-discipline flood risk analysis to ensure consistent and appropriate identification, analysis, and written communication of risk and uncertainty.	Yes	Yes
Geotechnical/ HTRW	Reviewer should have experience with experience applying hazardous, toxic, and radioactive waste disposal and CERCLA requirements.	Yes	Yes
Structural	Reviewer should have experience with experience applying structural principles and technical tools to project planning, design, construction, and operation.	Yes	Yes
Mechanical	Reviewer should have experience with experience applying Mechanical principles and technical tools to project planning, design, construction, and operation. Engineer with experience applying Mechanical engineering principles and analytic tools to project planning, design, construction, and operation.	Yes	Yes

3. Documentation of Reviews

Documentation of DQC. Quality Control will be performed continuously. A specific certification of DQC completion will be prepared at the base conditions (existing and future), draft and final report stages. Documentation of DQC will follow the District Quality Manual and the MSC Quality Management Plan. DrChecks will be used for documentation of DQC comments. An example DQC Certification statement is provided in ER 1165-2-217, Appendix D. Documentation of completed DQC, to include the DQC checklist, will be provided to the MSC, RMO and the ATR Team leader. The ATR team will examine DQC records and comment in the ATR report on the adequacy of the DQC effort.

Documentation of ATR. DrChecks will be used to document all ATR comments, responses, and resolutions. Comments should be limited to those needed to ensure product adequacy. All members of the ATR team will use the four-part comment structure (see ER 1165-2-217, Section 5). If a concern cannot be resolved by the ATR team and PDT, it will be elevated to the vertical team to resolve using the issue resolution process in ER 1165-2-217, Section 5.9. Unresolved concerns will be closed in DrChecks by noting the concern has been elevated. ATR documentation will include an assessment by the ATR team of the effectiveness of DQC. The ATR Lead will prepare a Statement of Technical Review (see ER 1165-2-217, Section 5.11, and Appendix D), for the draft and final reports, certifying that review issues have been resolved or elevated. ATR will be certified when all concerns are resolved or referred to the vertical team and the ATR documentation is complete.

4. Supporting Information

Study Background & Authority

Section 2010 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014), dated 10 June 2014, directed the USAF lock and dam be closed within one year of the date of enactment of the Act. WRRDA 2014 terminated navigational operations at the USAF site. Prior to the closure of the lock at USAF, the three locks located in the Minneapolis-St. Paul metropolitan area of Minnesota, (USAF, LSAF and L/D 1), operated as a system to support navigation on the upper reaches of the Mississippi River nine-foot navigation channel. With the lock at USAF closed to navigation, the demand for both commercial and recreational lockage at LSAF and L/D 1 has decreased due to the navigational disconnect in the Mississippi river at USAF.

An Initial Appraisal (IA) was conducted in 2015 to determine if conditions exist which may warrant further analysis on a completed project as authorized by Section 216 of the Flood Control Act of 1970 (PL 91-611). The IA recommended investigation under the authority of Section 216 of PL 91611 the future use or disposition of USAF, LSAF, and L/D 1.

The Decision Meeting Milestone was held on 21 August 2017 with the objective to determine if the appropriate action is “No Action” or “Proceed with a Disposition Study.” The decision to proceed with a Disposition Study was made by the Chief of Policy and Planning as a result of the Decision Meeting Milestone.

Sections 1168 and 1125 of the Water Resources and Development Act of 2018 (WRDA 2018) provided additional directions for conducting a disposition study.

Section 1168 of WRDA 2018 directs that disposition studies assess the deauthorization and disposal of the project in its entirety, as well as the project's separable elements, for purposes of overall environmental quality improvement. Section 1168 directs considerations of modifications for purposes of overall environmental quality improvement including removal of the project or separable element of a project. Section 1168 requires that disposition studies be carried out in a transparent manner.

Section 1225(d) of WRDA 2018 directs that disposition studies for LSAF and L/D 1 be conducted separate from the disposition study for Upper St. Anthony Falls.

The Water Resources Development Act of 2020 (WRDA 2020) was enacted on 27 December 2020. WRDA 2020 contained language pertinent to USAF but did not contain language pertaining to LSAF or L/D 1.

Study Area

The project area is located on the Mississippi River in Minneapolis-St. Paul metropolitan area of Minnesota and includes two dams and the associated subreach of the 9-foot Navigation Channel. Lower St. Anthony Falls Lock and Dam (LSAF) is located on the right bank of the Mississippi River in Minneapolis, Minnesota, at Upper Mississippi River mile 853.3. Lock and Dam No. 1 (L/D 1) is located on the right bank of the Mississippi River in Minneapolis, Minnesota at Upper Mississippi River mile 847.9. The associated subreach is that portion of the navigation channel extending from the Minneapolis Harbor to the confluence with the Minnesota River (mile 844 to 858). LSAF and L/D1 operate as part of a system with Upper St. Anthony Falls Lock and Dam (USAF). USAF is located on the right bank of the Mississippi River in Minneapolis, Minnesota, at Upper Mississippi River mile 853.9. USAF was evaluated in a separate Disposition Study.

Study Area Map

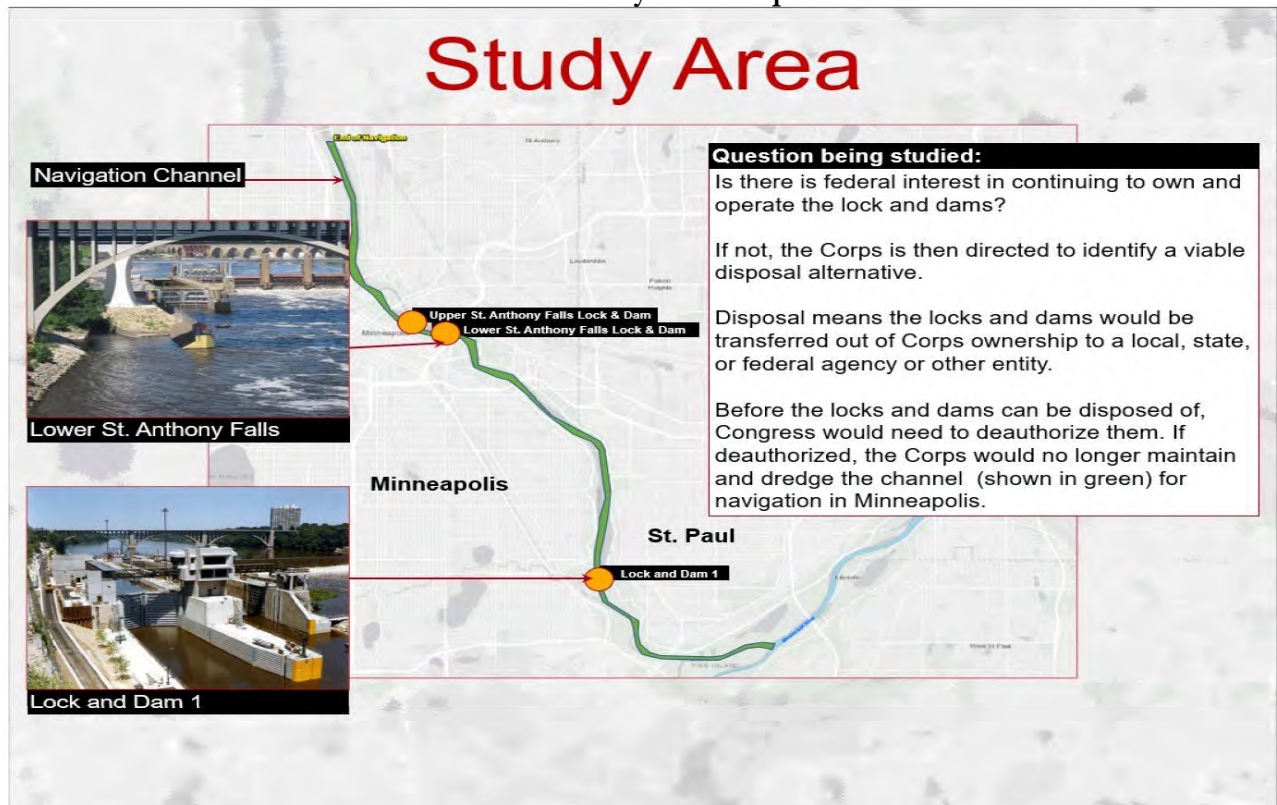


Figure 1 – LSAF and L/D 1 Disposition Study Area.

Problem Statement

LSAF, and L/D 1 once operated as a system providing commercial navigation to the city of Minneapolis. Since the 2015 closure of Upper St. Anthony Falls, commercial navigation has not been able to access the port of Minneapolis. Since 2015 LSAF and L/D 1 have had diminishing navigational use, with the primary users being recreational boaters and commercial passenger river cruise boats. In addition, beginning in 2012, local environmental groups pushed a voluntary reduction in the use of the locks to reduce the risk of the spread of invasive carp. The two locks are currently operated at a reduced service level, which offers lockages only on the weekends, or by appointment during the navigation season. There has been a reduction in staff at the two sites, with many shifts being filled through overtime by staff from other lock sites.

The overall problem for the LSAF Lock and Dam and Lock and Dam 1 and the associated navigation channel is the demand for commercial navigation has decreased. Furthermore, the projects are no longer fulfilling their authorized purpose of navigation. Despite minimal USACE Federal interest in repairing, operating, or maintaining the facilities, USACE remains responsible.

Goals and Objectives

The overall goal of the Disposition Study is to determine whether or not the Federal projects LSAF, L/D 1 and the associated navigation channel are serving their authorized purpose(s), and if not, whether or not sufficient Federal interests exist for the Federal government to continue to own, operate and maintain the projects. The study will be based on an evaluation and comparison of the

benefits, costs, and impacts (positive or negative) of continued operation, maintenance, repair, replacement, and rehabilitation, or lack thereof. If the analysis determines that the project is not serving its authorized purpose(s), the study will then examine the feasibility of disposal of some or all the Federal property and the means by which the property will be disposed as well as recommend deauthorizing the associated subreach of the navigation channel. The objective of the Disposition Study is to reduce to the maximum extent possible the federal investment for ownership and operations, maintenance, repair, rehabilitation, and replacement of LSAF, L/D 1, and the associated navigation channel over the next 50 years.

Future Without Project Conditions

WRDA 2018 indicates that partial disposal and dam removal be considered in addition to full disposal and no action. The future without action conditions would require the St. Paul District to continue operation of the sites in as-is condition. The Corps obligation will continue for the operations, maintenance, repair, rehabilitation, and replacement of the retained structures. Full deauthorization and disposal would include deauthorization by Congress of all Corps' federal missions at the sites, leading to complete disposal of the federal properties at the sites. Partial disposal would include partial deauthorization of federal missions at the sites combined with partial disposal of federal properties. Dam removal could either be carried out by the Corps of Engineers prior to disposal if found to be cost effective, or by a new owner after disposal. Deauthorizing the associated navigation channel would involve permanently halting maintenance activities such as dredging.

The USACE implementation guidance for Section 1168 of WRDA 2018 directs how modifications to the sties or dam removal must be assessed in a Disposition Study. The implementation guidance states: "Section 1168(a) directs the Secretary to consider modifications that would improve the overall quality of the environment in the public interest, including removal of the project or separable element of a project, when conducting a disposition study. When modification of a project or removal of project features and improvements is likely to be more costly than continued operation and maintenance but may be justified based on ecosystem restoration benefits, the Corps will continue to follow existing guidance in reference 1 a. That guidance allows modifications to projects, including removal of project features and improvements, for ecosystem restoration purposes to be further investigated in a feasibility study if a non-Federal interest is willing to share in the study costs."

Types of Measures/Alternatives Being Considered

This study will analyze a full array of potential alternatives, including no action, full disposal, partial disposal, removal of the project or separable element of a project, deauthorizing the associated subreach of the navigation channel, and reauthorization for a new purpose with a Federal or nonfederal cost share partner.

Estimated Cost/Range of Costs

Cost of alternatives and measures are unknown at this time. Other dam removal projects have been authorized around \$25M, therefore the total project cost is anticipated to be less than \$200 million if dam removal prior to disposal becomes the recommended alternative. Cost Engineering Mandatory Center of Expertise (MCX) certification is not required.

5. Models to be Used in the Study

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models are any models and analytical tools used to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making.

The following planning models may be used to develop the decision document:

Table 5: Planning Models.

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Certification / Approval
IWR-Planning Suite II	IWR Planning Suite II was developed by Institute of Water Resources as accounting software to compare habitat benefits among alternatives.	IWR-Planning Suite II
Economic Recreation Model	Recreation spreadsheet with estimated Unit Day Value. The unit day value method relies on expert or informed opinion and judgment to estimate the average willingness to pay of recreational users. By applying a carefully thought-out and adjusted unit day value to estimated use, an approximation is obtained that may be used as an estimate of project recreation benefits.	Approve for single use
Habitat Evaluation Procedures (HEP) – Habitat Suitability Index (HSI) Models:	HEP is a species-habitat approach to assessing the quality of habitat for selected evaluation species serving as proxies for the considered habitat type. The Habitat quality is documented with a HSI score on a scale of 0-1. This value is derived from an evaluation of key habitat components necessary for the reproduction, growth, and survival of the species support by the habitat. HSI models being considered include Bluegill, Veery, Black Capped Chickadee, and Grey Squirrel, although other HSI models may be considered, as appropriate, as plan formulation progresses.	Habitat Evaluation Procedures (HEP) – Habitat Suitability Index (HSI) Models

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue. The professional practice of documenting the application of the software and modeling results will be followed. The USACE Scientific and Engineering Technology Initiative has identified many engineering models as preferred or acceptable for use in studies. These models should be used when appropriate. For example, HH&C models need to comply with the requirements of HH&C CoP Enterprise Standard 08101.

These engineering models may be used to develop the decision document:

Table 6: Engineering Models.

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Approval Status
HEC-ResSim Version 3.5	The Hydrologic Engineering Center's Reservoir System Simulation (HEC-ResSim) program is used to model reservoir operations at one or more reservoirs for a variety of operational goals and constraints. The software simulates reservoir operations for flood management, low flow augmentation and water supply for planning studies, detailed reservoir regulation plan investigations, and real-time decision support. HEC-ResSim can represent both large- and small-scale reservoirs and reservoir systems	Approved

6. Factors Affecting Level and Scope of Review

All planning products are subject to the conduct and completion of District Quality Control. Most planning products are subject to Agency Technical Review and a smaller sub-set of products may be subject to Independent External Peer Review and/or Safety Assurance Review. Information in this section helps in the scoping of reviews through the considerations of various potential risks.

Objectives of the Reviews

Objective 1. DQC is the foundation of the USACE quality process. All work products will undergo robust, and appropriate DQC. DQC focuses on the internal review process of science and engineering to fulfill the project quality requirements as defined in the PMP and RP. DQC will include Quality Checks, a peer review/checking of the documents, computations, and graphics, and PDT Reviews. Cross-checking among the narrative documentation (the “write-up”), computations.

Objective 2. The ATR process ensures overall technical analyses and approaches are correct and compliant with all pertinent USACE guidance and facilitate vertical alignment early in work product development. The ATR Team will be involved throughout the project life cycle, especially early on when key decisions are made with the project.

Assessing the Need for IEPR

Mandatory IEPR Triggers

- Has the Chief of Engineers determined the project is controversial? **No**
- Has the Governor of an affected state requested an IEPR? **No**
- Is the cost of the project more than \$200 million? **No**

Discretionary IEPR

- Has the head of another Federal agency requested an IEPR? **No**

Potential IEPR Exclusion

- Is the project cost greater than \$200 million? **No**; and

- Does the project have an Environmental Impact Statement (EIS)? **No**.
- Does the study include an EIS? **No**
- Is the project controversial? **No**
- Does the project have more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources? **No**
- Does the project have substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures; **No**
- Does the project, before implementation of mitigation measures, have more than a negligible adverse impact on a species listed as endangered or threatened species under the Endangered Species Act of 1973 (16 U.S.C. § 1531 et seq.) or the critical habitat of such species designated under such Act. **No**
- Does the study include an EIS? **No**
- Does the project involve only the rehabilitation or replacement of existing hydropower turbines, lock structures, or flood control gates within the same footprint and for the same purpose as an existing water resources project; **No**
- Is for an activity for which there is ample experience within USACE and the industry to treat the activity as being routine; and
- Does the project have minimal life safety risk? **Yes**
- Does the study include an EIS? **No**; and
- Is the study being conducted under the general continuing authorities of the CAP? **No**

Assessing Other Risk Considerations

The Disposition study will utilize risk-informed planning in order to scale the effort of work to support each decision point. The PDT has identified the following assumptions that have informed the risk of the review schedule and scope:

- Disposition studies are cooperative efforts with shared information needs for deauthorization and disposal recommendations. The public and community engagement strategy will continue to evolve over the study based on input.
- There is significant public interest in the LSAF and L/D 1 sites. Public entities have potential conflicting future development desires for the disposition sites.
- Extent and detail of analysis to determine if dam removal is a feasible disposal option will need vertical alignment to ensure a common operating picture during study development
- Both lock and dam locations are eligible for listing on the NRHP, as such additional tasks will be necessary to overcome adverse effects under Section 106.
- Both lock and dam locations have existing hydropower projects and FERC license. Impacts will need to be evaluated as part of environmental compliance evaluation.
- Both lock and dam location may offer a key role in deterring the expansion of Asian Carp and other aquatic invasive species.
- Potential for congressional legislation that will direct a new course or process for disposal of both lock and dam locations may occur which may result in delays to study schedule and impacts to study budget,
- An integrated Disposition NEPA decision document will be the final study product utilize to make a recommendation to congress.

- Disposition study is 100% federal funded and will receive sufficient federal funds in a timely fashion to ensure the execution of the study plan.
- The disposition outcome will not include result in a recommendation for additional funding, therefore a certified cost estimate is not a requirement for the draft or final disposition report.
- Subsequent environmental compliance and engineering investigations will be needed prior to implementation of the recommended action.
- USACE will not be able to dispose of the projects until a willing nonfederal interest has been identified. At this time an interested party has not been identified.
- Will the study likely be challenging? If so, describe how? **No.** The LSAF and L/D 1 Disposition Studies are not expected to be challenging. However, the multiple stakeholder likely to be engaged and the level of public interest in these highly visible projects sites located in a major metropolitan area will add complexity to the study. A updated communication strategy is in development based on received scoping input. There is regional interest in the future use of LSAF and L/D 1, regardless of whether or not the Corps continues to operate and maintain the projects. A partial list of interested parties includes City of Minneapolis, Minneapolis Park and Recreation, City of St. Paul, Friends of the Falls, National Park Conservation Association, National Park Service, Brookfield Renewable Power, and American Rivers and other environmental action groups, Minnesota Department of Transportation, Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, public safety organizations, Friends of the Mississippi River, Tribal governments, recreational boaters, marina owners, rowing clubs, nearby neighborhood associations and residential developers. Coordination with the public and all interested parties will be complex.
- Provide a preliminary assessment of where the project risks are likely to occur and assess the magnitude of those risks.
 - Prior real estate use within portions of the study area has HTRW concerns. Preliminary data collection will address this risk by determining presence and if present potential for transport will also be investigated.
 - Recreational impacts will be difficult to estimate, a preliminary data collection to determine existing conditions, in coordination with National Park Service, will provide information to assist with impacts analysis
 - Extent and level of detail necessary to evaluate feasibility of dam removal will need to be vertically aligned.
 - The locks and dams are eligible for listing on the NRHP Programmatic Agreement will be developed to outline a process for overcoming adverse effects under Section 106.
 - Divergent public interests may yield diverse acceptance. A series of public scoping meetings was held in fall of 2022. Coordination with interested parties is on-going and will include formal and informal opportunities for discussions. A communication plan is currently in development based on scoping feedback. A summary of scoping feedback was developed and posted to USACE external website.
 - Existing hydropower projects and FERC license at each site.
 - The role of these locks and dams in deterring the range expansion of Asian carp and other aquatic invasive species
 - Congressional legislation

- Is the project likely to be justified by life safety or is the study or project likely to involve significant life safety issues? Briefly describe the life risk, including the District Chief of Engineering's assessment as to whether there is a significant threat to human life associated with aspects of the study or failure of the project or proposed projects. **No.** The study will not be justified by life safety and is not likely to involve significant threat to human life/safety assurance. Decision may be revisited if during the study significant life safety concerns are identified.
- Is the information in the decision document or anticipated project design likely to be based on novel methods, involve innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices? If so, how? **No.** There is expected to be broad public interest in the study recommendation. There is not expected to be significant public dispute as to the size, nature, or effects of the study recommendations. However, it is anticipated there will be public dispute on the fate of locks and dams after disposal.
- Does the project design require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design/construction schedule? If so, how? **No**
- Is the project expected to have more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources? If so, what are the anticipated impacts? **No.** The locks and dams are eligible for listing on the NRHP. A Programmatic Agreement will be developed, outlining a process for overcoming adverse effects under Section 106 following the outcome of the Disposition Study.
- Is the project expected to have substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures? If so, describe the impacts? **No**
- Is the project expected to have, before mitigation measures, more than a negligible adverse impact on an endangered or threatened species or their designated critical habitat? If so, what are the anticipated impacts? **No.** a determination to dispose will not impact ESA or threatened species. If disposal is recommended any modification or conveyance of the property would be considered under a separate NEPA evaluation.

7. Risk Informed Decisions on Level and Scope of Review

Targeted ATR. Will a targeted ATR be conducted for the study? **No.** The ATR Lead will prepare a Statement of Technical Review (see ER 1165-2-217, chapter 5.11, and Appendix D), for the draft and final reports, certifying that review issues have been resolved or elevated. ATR will be certified when all concerns are resolved or referred to the vertical team and the ATR documentation is complete.

IEPR Decision. IEPR is not required for this decision document. This review is the most independent level of review and is applied in cases that meet criteria where the risk and magnitude of the project are such that a critical examination by a qualified team outside of USACE is warranted. ER 1165-2-217 identifies three criteria for mandatory performance of IEPR. This project does not meet any of the three criteria. In addition to the mandatory triggers, a risk-informed decision is made as to whether IEPR is appropriate. The information in Section 1 – Factors Affecting the Scope of Review – informed the risk-informed decision to not conduct IEPR. An IEPR exclusion was granted on 24 August 2018, via approval of the previous review plan for the Disposition Study combining Upper and Lower St. Anthony Falls lock and dam and Lock and Dam 1. IEPR exclusion was reevaluated and

affirmed for LSAF Lower St. Anthony Falls lock and dam and Lock and Dam 1 as a result of this Review Plan submittal.

Safety Assurance Review. Safety Assurance Reviews are managed outside of the USACE and are conducted on design and construction products for hurricane, storm and flood risk management projects, or other projects where existing and potential hazards pose a significant threat to human life. In some cases, significant life safety considerations may be relevant to planning decisions. These cases may warrant the development of relevant charge questions for consideration during reviews such as ATR or IEPR. In addition, if the characteristics of the recommended plan warrant a Safety Assurance Review, a panel will be convened to review the design and construction activities on a regular schedule before construction begins and until construction activities are completed.

Decision on Safety Assurance Review. This Disposition Study will not result in any design or construction and a Safety Assurance Review will not be conducted. During disposal and prior to any design modification a follow-on study will be required by the gaining agency or entity.

8. Policy and Legal Compliance Review

Policy and legal compliance review of draft and final planning decision documents is delegated to the MSC (see EP 1105-2-61).

(i). Policy Review.

The policy review team is identified through the collaboration of the MSC Chief of Planning and Policy and the HQUSACE Chief of the Office of Water Project Review. The makeup of the Policy Review team will be drawn from Headquarters (HQUSACE), the MSC, the Planning Centers of Expertise, and other review resources as needed.

- The Policy Review Team will be invited to participate in key meetings during the development of decision documents as well as SMART Planning Milestone meetings. These engagements may include In-Progress Reviews, Issue Resolution Conferences, or other vertical team meetings plus the milestone events.
- The input from the Policy Review team should be documented in a Memorandum for the Record (MFR) produced for each engagement with the team. The MFR should be distributed to all meeting participants.
- Teams may choose to capture some of the policy review input in a risk register if appropriate. These items should be highlighted at future meetings until the issues are resolved. Any key decisions on how to address risk or other considerations should be documented in an MFR.
- Per CECW memo (Milestone Decision-Making Authority for Upper St. Anthony Falls Disposition Study, 27 July 2020), decision authority resides at HQ.

(ii). Legal Review.

Representatives from the Office of Counsel will be assigned to participate in reviews. Members may participate from the District, MSC and HQUSACE. The MSC Chief of Planning and Policy will coordinate membership and participation with the office chiefs.

- In some cases, legal review input may be captured in the MFR for the particular meeting or milestone. In other cases, a separate legal memorandum may be used to document the input from the Office of Counsel.

Each participating Office of Counsel will determine how to document legal review input.

9. Public Comment

This Review Plan will be posted on the District's website. Public comments on the scope of reviews, technical disciplines involved, schedules and other considerations may be submitted to the District for consideration. If the comments result in a change to the Review Plan, an updated plan will be posted on the District's website.

10. Documents Distributed Outside the Government

For information distributed for review to non-governmental organizations, the following disclaimer shall be placed on documents:

"This information is distributed solely for the purpose of pre-dissemination review under applicable information quality guidelines. It has not been formally disseminated by USACE. It does not represent and should not be construed to represent any agency determination or policy."

Appendix A – Brief Description of Each Type of Review

This section describes each level of review to be conducted. Based upon the factors discussed in Section 1, this study will undergo the following types of reviews:

District Quality Control. All decision documents and accompanying components will undergo DQC. This internal review covers basic science and engineering work products. It fulfills the project quality requirements of the Project Management Plan. The DQC team will read all reports and appendices. The review must evaluate the correct application of methods, validity of assumptions, adequacy of basic data, correctness of calculations (error-free), completeness of documentation, and compliance with guidance and standards. Districts are required to check all computations and graphics by having the reviewer place a highlight (e.g., place a "red dot") on each annotation and/or number indicating concurrence with the correctness of the information shown.

Agency Technical Review. ATR will be performed by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. These teams will be comprised of certified USACE personnel. The ATR team lead will be from outside the home MSC.

Cost Engineering Review. All decision documents will be coordinated with the Cost Engineering Mandatory Center of Expertise (MCX). The MCX assisted in determining the expertise needed on the ATR team. The RMO is responsible for coordinating with the MCX for the reviews. These reviews occur as part of ATR. Cost certification will not be provided by the MCX.

Policy and Legal Compliance Review. These reviews culminate in determinations that report recommendations and the supporting analyses and coordination comply with law and policy and warrant approval or further recommendation to higher authority by the home MSC Commander.

Public Review. The District will post the Review Plan and approval memo on the District's internet site. Public comment on the adequacy of the Review Plans will be accepted and considered. Additional public review will occur when the report and environmental compliance document(s) are released for public and agency comment.