

PRESENTATION DISPOSITION STUDY - UPPER ST. ANTHONY FALLS LOCK AND DAM, MINNEAPOLIS, MN

Kevin Bluhm, Facilitator
Nanette Bischoff, Project Manager
Sierra Keenan, Project Planner
Mississippi Valley Division/St. Paul District
August 2019



US Army Corps
of Engineers®



INTRODUCTION



The Corps started a disposition study for Upper and Lower St. Anthony Falls and Lock and Dam 1 in 2018. Public meetings were held in July 2018.

This study was put on hold in October 2018, after enactment of America's Water Infrastructure Act (the Act). The Act affected the scope of the study.

As we said during the 2018 public meetings: **“If our scope changes, we’ll do more public meetings.”**

This presentation is geared both for folks who are familiar with the 2018 study, and for folks who are new to the study.



DEFINITION



Q: What does “disposition” mean?

A: In the study context, it refers to both the final determination of an issue, and also the act of transferring or relinquishing a property to another's care or possession.



FACILITATOR INTRO



Room logistics

Program handout

Comment card handout

Meeting format

The meeting will not be recorded



MEETING TOPICS



- Overview
- Steps leading to starting a disposition study
- Previous study
- New study
- Alternatives and “soft topics”
- Study process/visions/constraints
- Lands, structures and current uses
- Environmental scoping
- Study schedule
- Where we need your input/How to keep informed
- Questions and answer session



THE BIG QUESTION....



What is the future of St. Anthony Falls?



THE FIRST QUESTION....



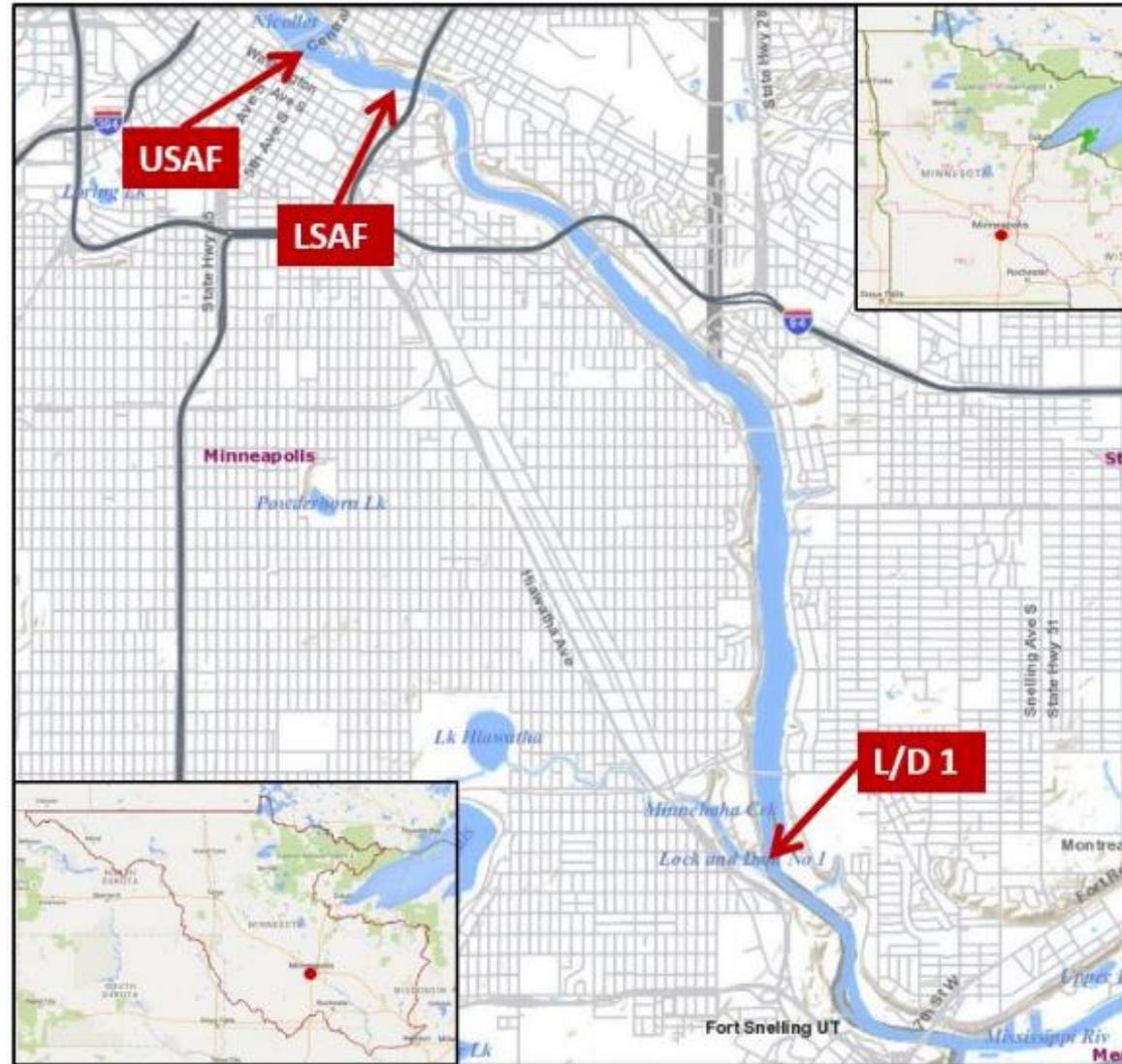
What is the future of the Corps of Engineers
at St. Anthony Falls?



OVERVIEW

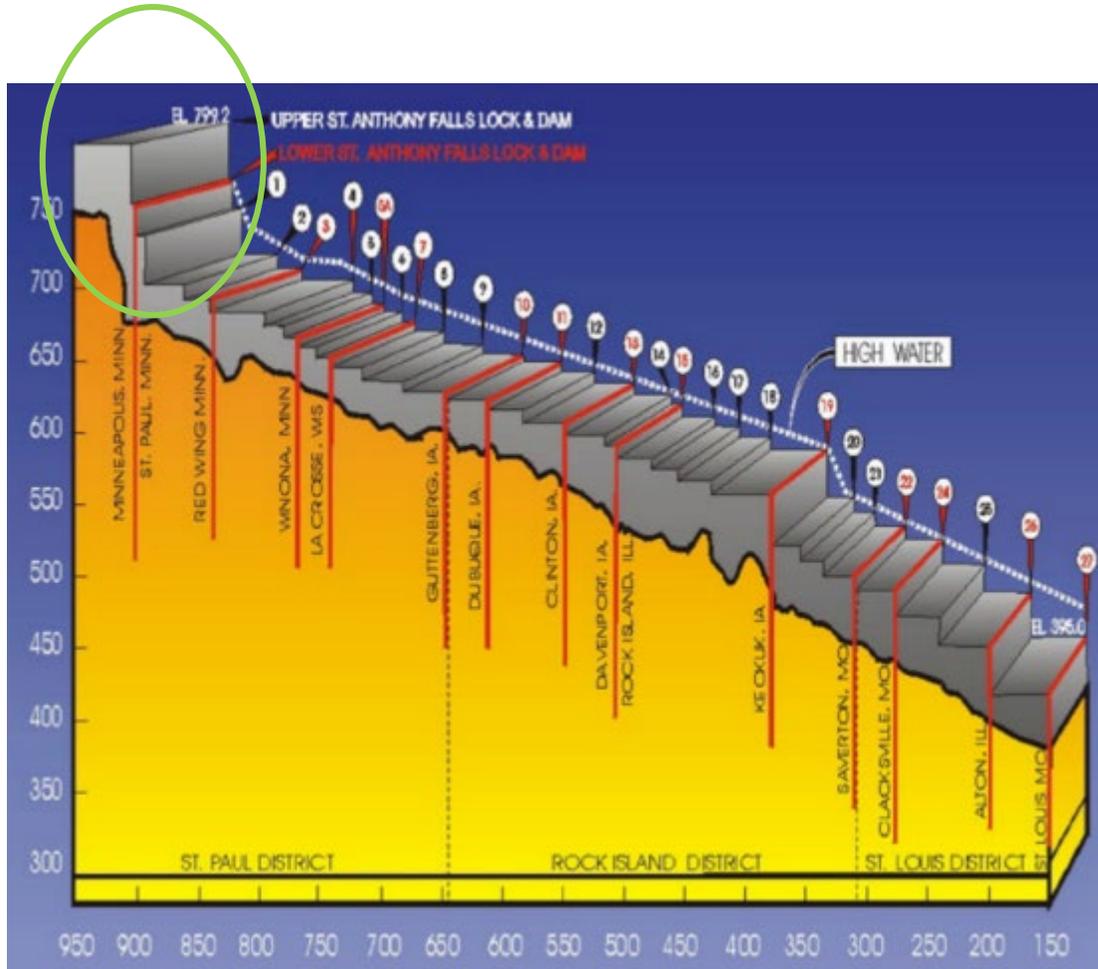
The Corps operates three federally-owned navigation projects on the Mississippi River in Minneapolis and St. Paul.

- Upper St. Anthony falls (USAF)
- Lower St. Anthony falls (LSAF)
- Lock and Dam 1 (L/D 1)





OVERVIEW



The twin cities locks and dams are the top 3 steps in in the upper Mississippi River “Stairway of Water”.

- Upper St. Anthony falls – 49’ step
- Lower St. Anthony falls – 25’ step
- Lock and Dam 1 – 36’ step

The three locks made commercial navigation possible between the Mississippi River confluence at the Minnesota River and the Minneapolis upper harbor.



OVERVIEW



Lock and Dam 1, in its current location, was completed in 1917.

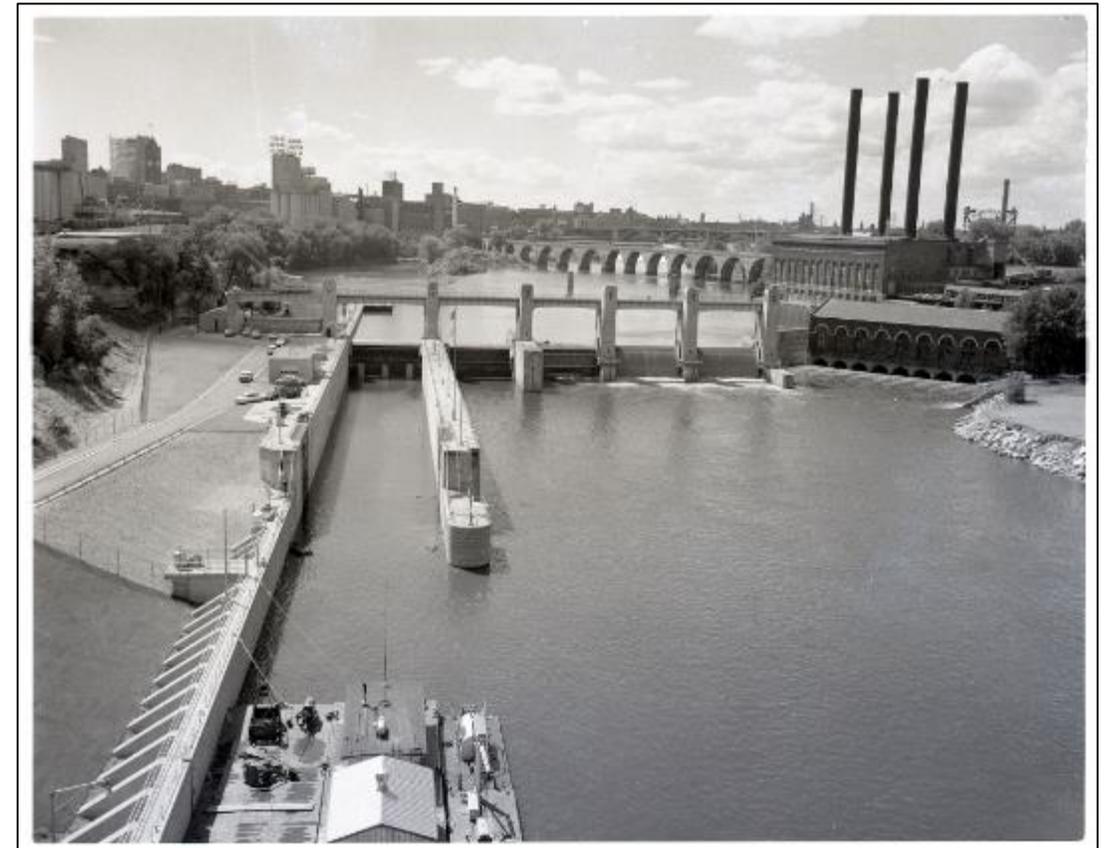




OVERVIEW



Lower St. Anthony Falls lock and Dam was completed in 1956 as part of the Minneapolis Upper Harbor project.





OVERVIEW



Upper St. Anthony Falls lock was completed in 1963 as part of the Minneapolis Upper Harbor project.





OVERVIEW



Authorized purposes

Every federal project is authorized for a specific purpose(s) by Congress.

Navigation



Recreation



Flood Risk Management





Upper St. Anthony Falls lock
(USAF)

Primary Purpose:

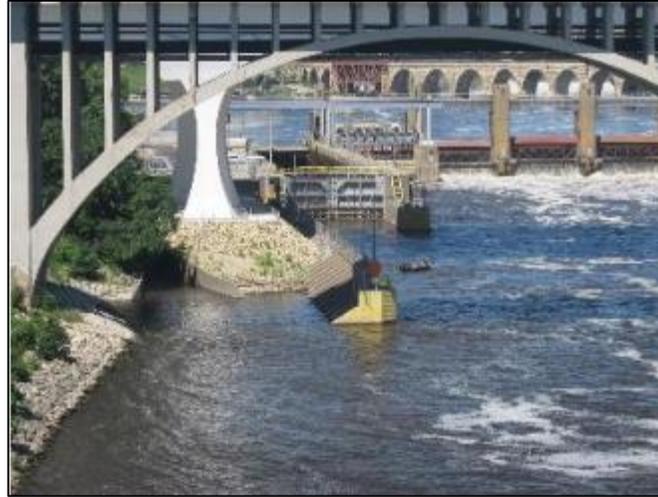
- Navigation

Secondary Purpose:

- Recreation

Also supports:

- Flood damage mitigation.
- Hydropower.
- Mpls Water supply.



Lower St. Anthony Falls lock and
dam (LSAF)

Primary Purpose:

- Navigation

Secondary Purpose:

- Recreation

Also supports:

- Hydropower.



Lock and Dam No. 1 (L/D 1)

Primary Purpose:

- Navigation

Secondary Purpose:

- Recreation

Also supports:

- Hydropower.



OVERVIEW - CLOSURE OF UPPER ST. ANTHONY FALLS LOCK



June 10, 2014

- Section 2010 of the Water Resources Reform and Redevelopment Act directed that Upper St. Anthony falls lock be closed.
- The Act directed the Corps to continue to operate for flood mitigation.

June 9, 2015

- The last lockage occurred at Upper St. Anthony Falls.





1963-2015



What happened between the time Upper St. Anthony Falls lock was built in 1963 and the time it closed to navigation in 2015?

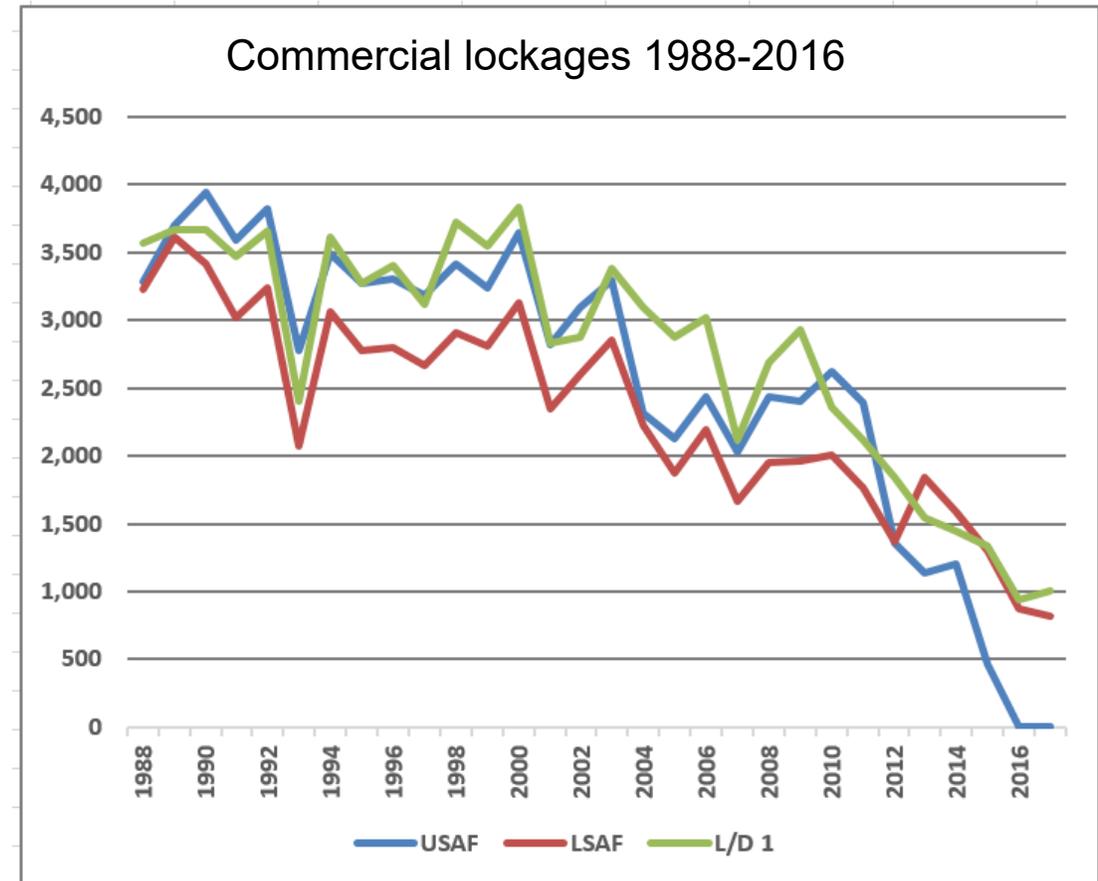
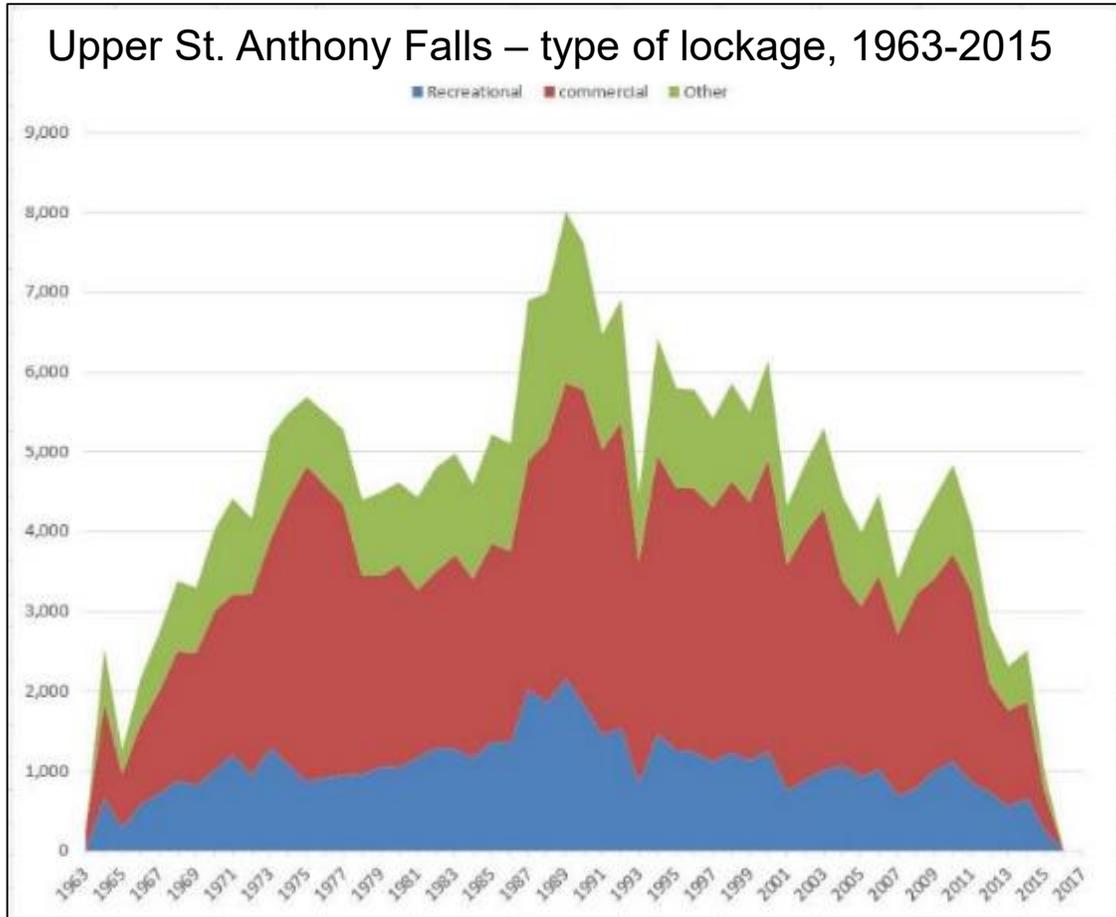


BEFORE THE UPPER LOCK CLOSURE: CHANGE IN DEMAND FOR NAVIGATION



The number of lockages at Upper St. Anthony Falls peaked in 1990 and was on a downward trend.

The downward trend in was also seen at the two locks downstream.





BEFORE THE UPPER LOCK CLOSURE: DECEMBER 2014 - MINNEAPOLIS UPPER HARBOR CLOSED

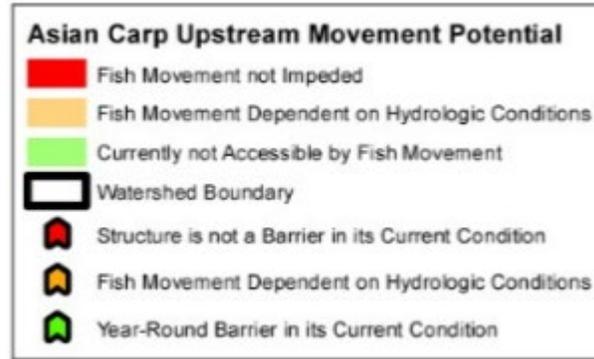
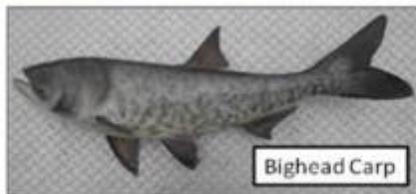




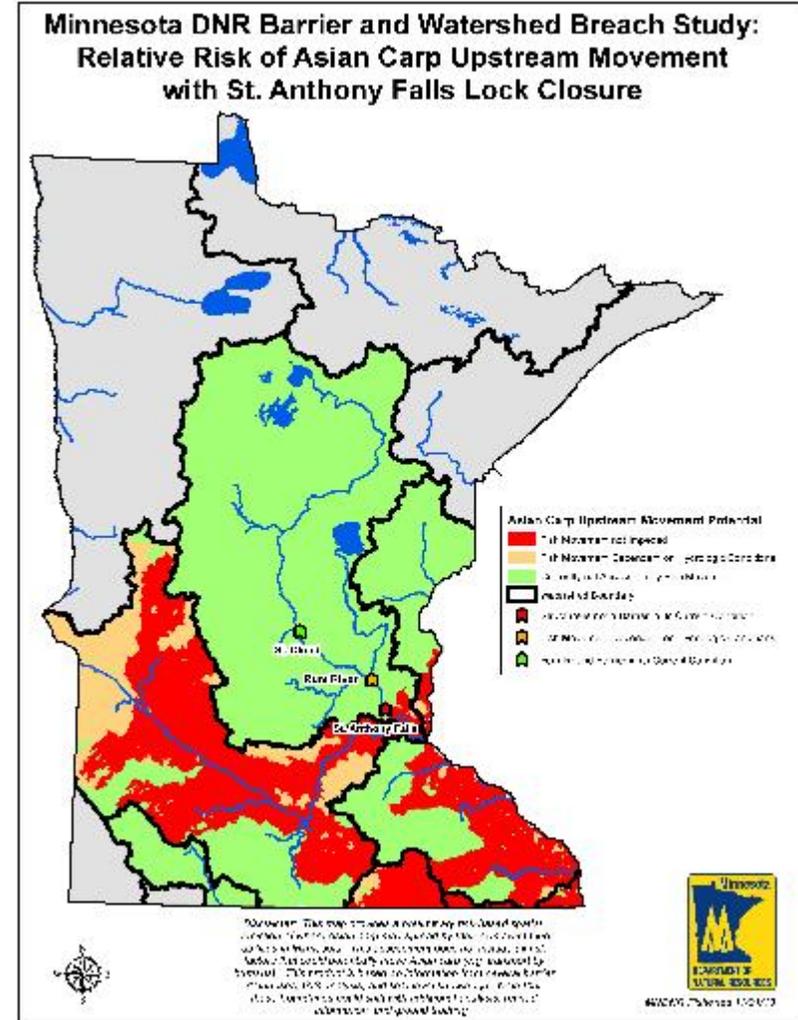
BEFORE THE UPPER LOCK CLOSURE - THE BUZZ ABOUT INVASIVE ASIAN CARP



After being accidentally introduced to the Mississippi River in the 1970's, invasive carp are being found further and further upstream.



The Minnesota DNR did a risk study in 2013 to show the risk of invasive carp spreading in the Mississippi basin.





UPPER ST. ANTHONY IS CLOSED – WHAT PURPOSE DO THE 3 LOCKS HAVE NOW?



	USAF	LSAF	L/D 1
Commercial Navigation	X	↓	↓
Recreational navigation	X	↓	↓
Other recreation (tours)	✓	N/A	✓
Gate operations	✓ (occasional)	✓ (daily)	N/A
Support Hydropower	✓	✓	✓
Support Mpls Water supply	✓	N/A	N/A

Annual maintenance costs remain ~ \$1.5M.



AUTHORITY TO DO A STUDY



Section 216 of the Flood Control Act of 1974 allows the Corps to conduct a disposition study for projects that are not fulfilling their authorized purpose.

August 2016 –

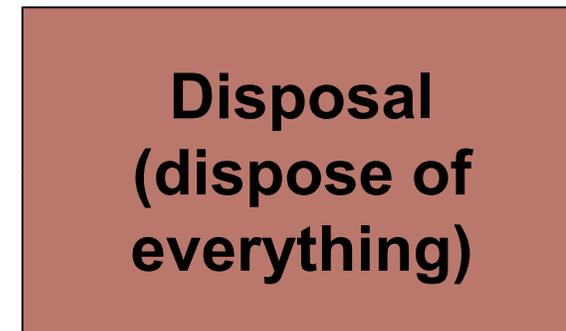
- The St. Paul District received permission to conduct a disposition study.
- First study: All three twin cities locks and dams were included.



ALTERNATIVES PROPOSED IN PREVIOUS STUDY



Alternative 1 – No action. Continue to operate as currently done or as demand dictates. Continue to allow agreements with National Park Service for temporary access and use. Continue maintenance as needed to preserve required operations. Low priority for dredging will continue due to lack of demand.





ALTERNATIVES PROPOSED IN PREVIOUS STUDY



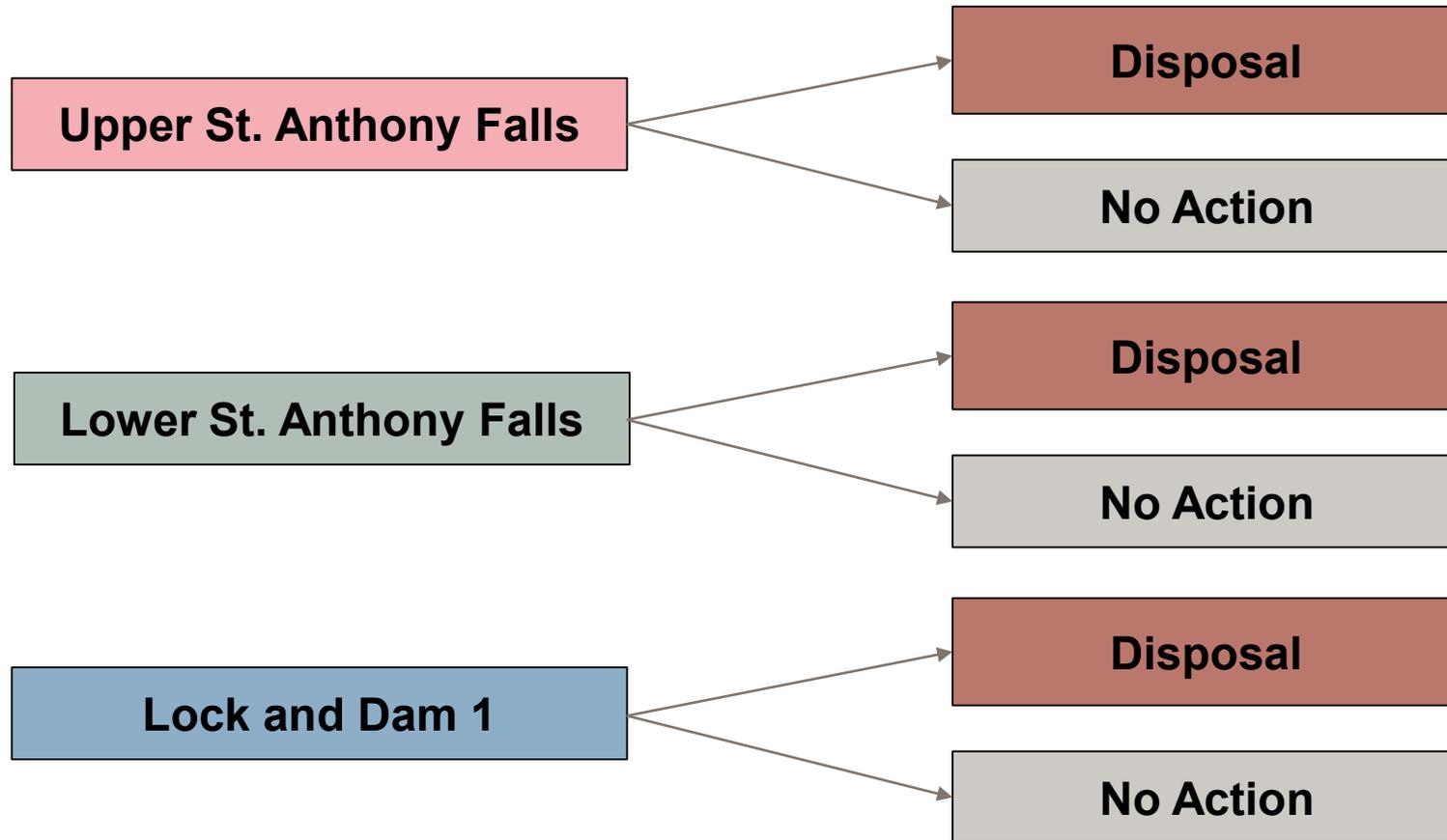
Alternative 2 – Deauthorize the navigation, recreation and flood mitigation missions and dispose of the federal project, including the lock structure, all lands, buildings, and property.

No Action (keep everything)

Disposal (dispose of everything)



PREVIOUS STUDY - EACH SITE COULD HAVE A DIFFERENT RECOMMENDATION





PREVIOUS STUDY



Start Study

Public Meetings

May 2018

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

June 2018

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

July 2018

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

August 2018

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

September 2018

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

October 2018

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

November 2018

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

December 2018

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Comments & statements of interest in ownership

America's water infrastructure Act passed, study put on hold



...NEW DIRECTION



Congress passed America’s Water Infrastructure Act on October 24, 2018, which re-directed the scope and timing of the study:

Section 1225: (in a nutshell)

- Do a separate study for USAF.
- Expedite the USAF study.
- Consider partial deauthorization and disposal, while maintaining flood control function.
- Preserve/enhance recreational opportunities and the health of the ecosystem, and maintain benefits to natural ecosystem and human environment (“soft topics”).

Applies in particular to the study for Upper St. Anthony Falls

Section 1168: (in a nutshell)

- Consider modifications to improve the overall environment in the public interest, including removal of the project or a separable element of the project.
- Provide opportunities for public input, and
- Publish the final study.

Applies to all disposition studies across the nation



“INTENT OF CONGRESS”



January 8, 2019 letter from Senators Amy Klobuchar and Tina Smith to the Corps:

“...cooperate with [Minneapolis] to develop a plan in which the Corps would continue to own, operate, and maintain the Upper Lock facility for flood control and water supply management and divest to the City a portion of the real property surrounding the Upper Lock in a manner that will facilitate public financing of the divested property....”

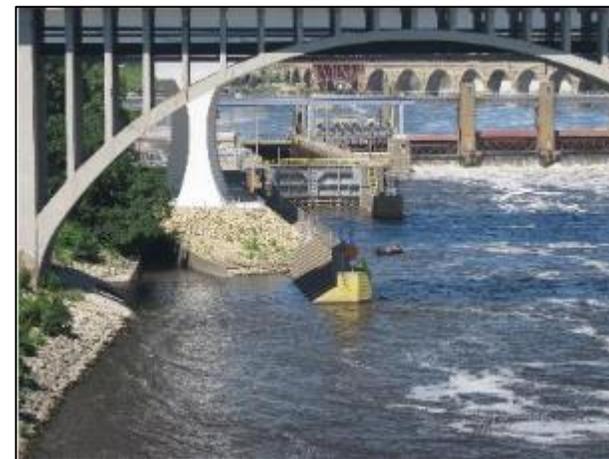
“...continue the City’s revitalization of the central riverfront and facilitate additional residential, commercial, and recreational growth”.



NEW DIRECTION: TWO STUDIES



Current Study (2019-2020): Upper St. Anthony Falls lock



Future study (late 2020-2022): Lower St. Anthony Falls lock and dam and Lock and Dam No. 1





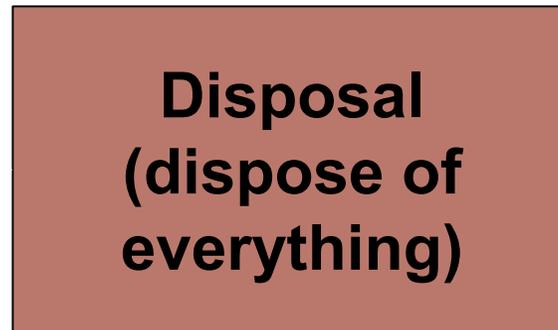
Current Study - Upper St. Anthony Falls



3 TYPES OF ALTERNATIVES AT USAF



Alternative 1 – No action. Continue to operate the flood gate as needed. Continue to allow agreements with the National Park Service to conduct tours at the site. Continue maintenance as needed to preserve the flood gate operation. While the navigation mission and the 9-foot channel will continue to be authorized, the low priority for dredging will continue due to lack of demand. Unless otherwise directed, under the no action alternative the lock would remain closed to all navigation.



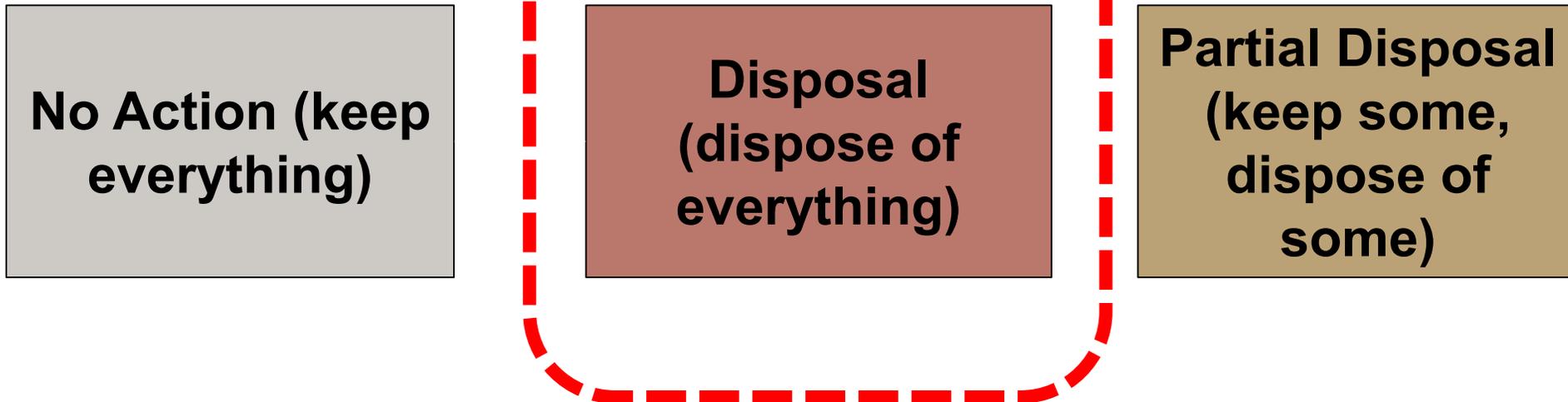


3 TYPES OF ALTERNATIVES AT USAF



Alternative 2 – Deauthorize the navigation, recreation and flood mitigation missions at USAF and dispose of the entire federal project, including the lock structure, all lands, buildings, and property and portions of the 9-foot channel maintained by the Corps.

- Consider structural removal prior to disposal.
- Consider disposal without structural removal.





3 TYPES OF ALTERNATIVES AT USAF



Alternative 3 – Retain those features of the project that are necessary for flood mitigation, while disposing of property and features not needed for flood mitigation. This could include deauthorization of the navigation mission at USAF, and deauthorization of the 9-foot channel upstream of USAF.

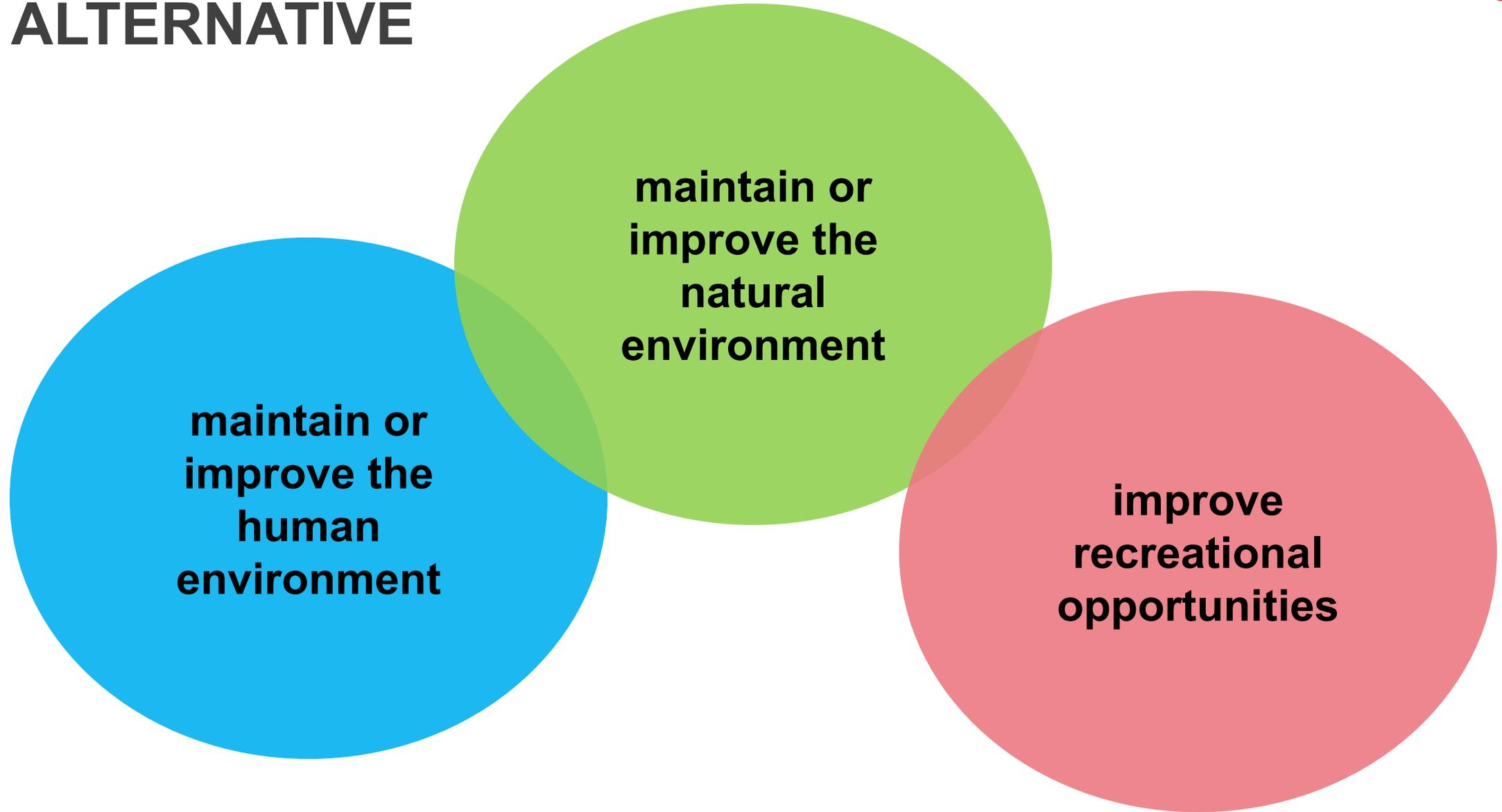
No Action (keep everything)

Disposal (dispose of everything)





“SOFT TOPICS” – CAN GO WITH ANY ALTERNATIVE



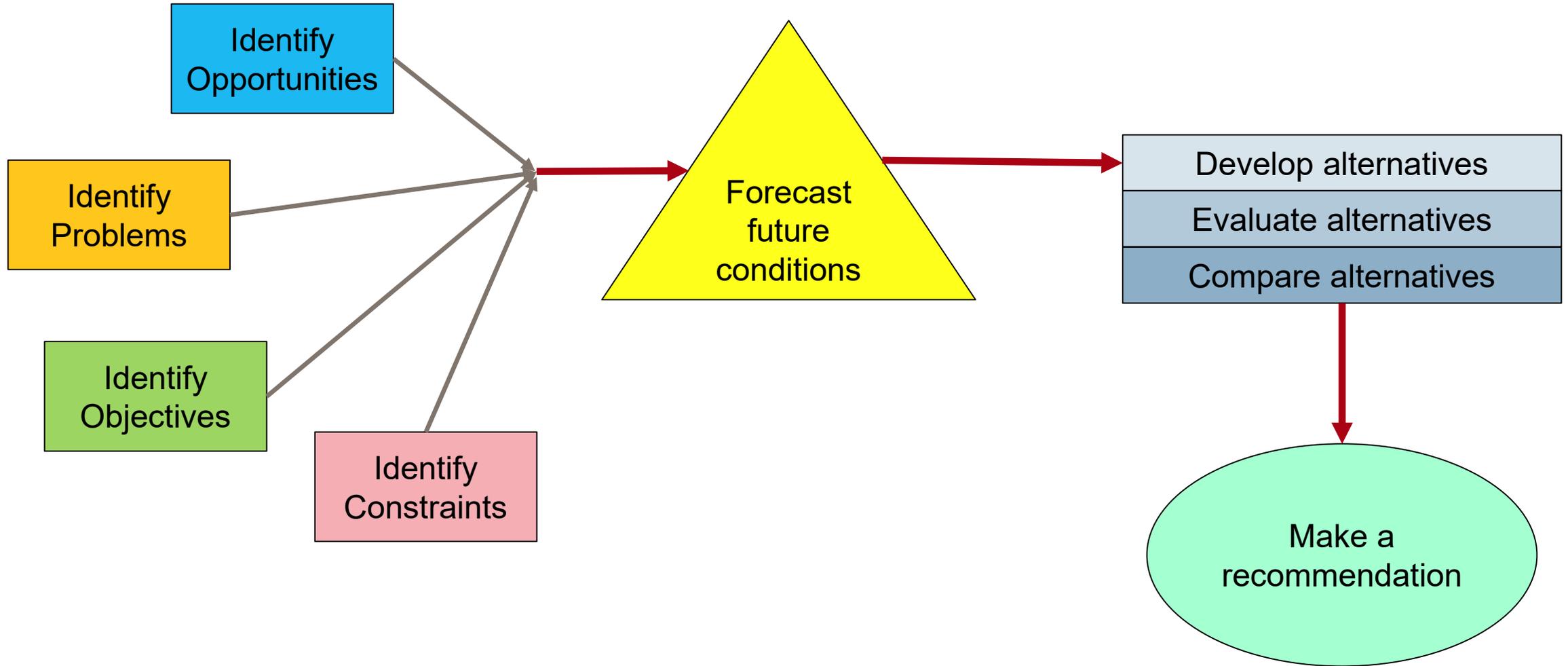
**maintain or
improve the
human
environment**

**maintain or
improve the
natural
environment**

**improve
recreational
opportunities**



THE CORPS PLANNING PROCESS



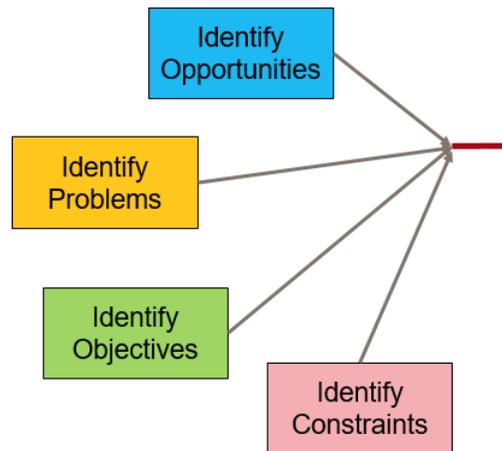


IDENTIFY PROBLEMS:



Example:

- Costs of operating and maintaining for navigation purpose
- Limited recreational opportunities
- Etc.



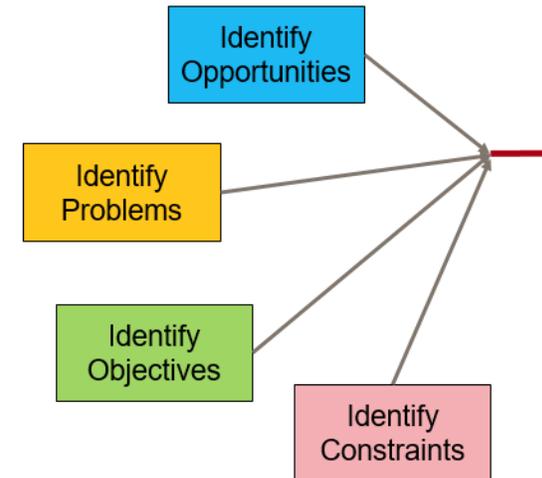


IDENTIFY OPPORTUNITIES



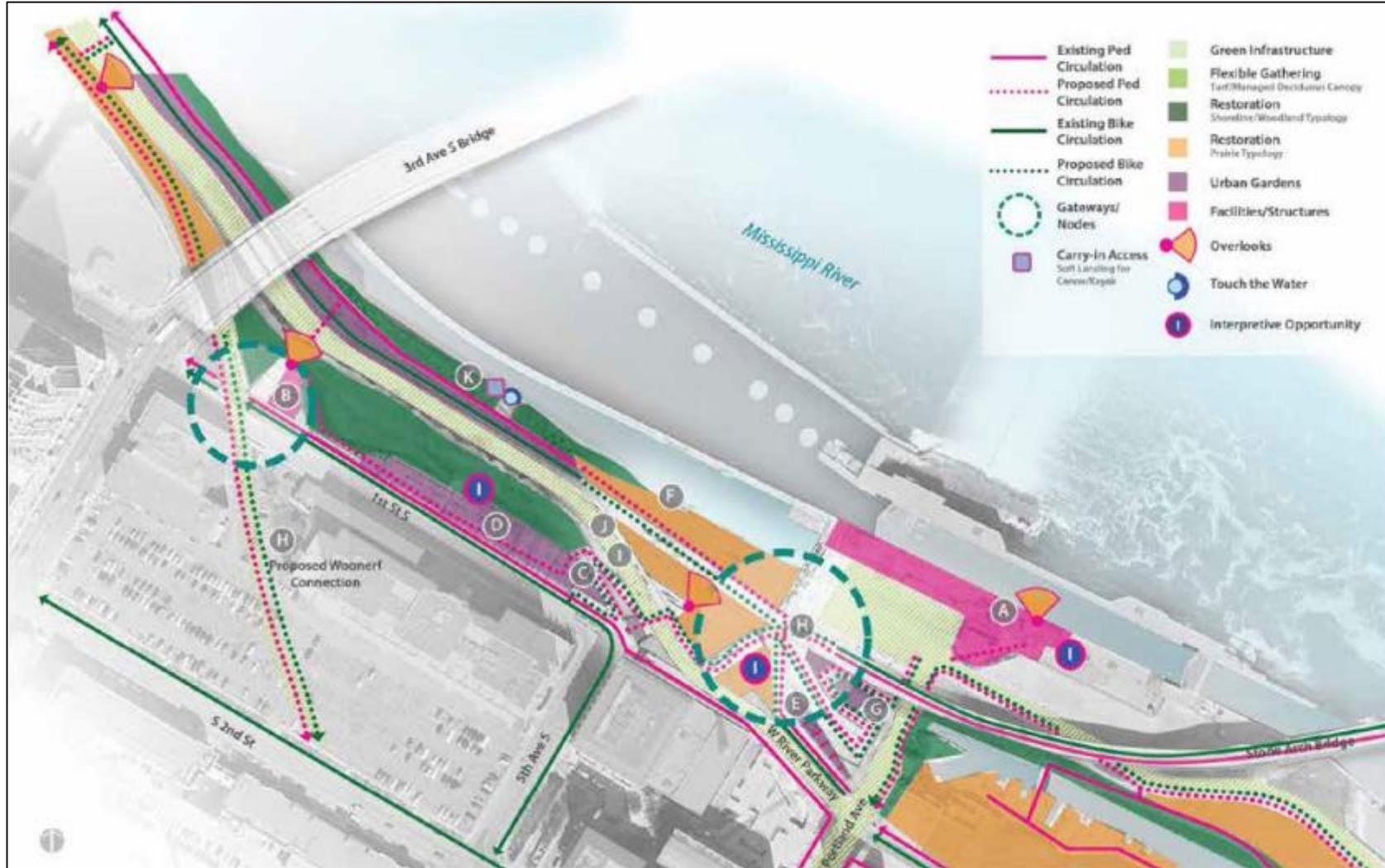
Example:

- Decrease the cost of operating and maintaining for navigation purposes.
- Improve or enhance recreation
- Improve or enhance the human environment
- Improve or enhance the natural environment
- Enable other visions for the site
- Etc.





VISIONS FOR THE USAF SITE – CENTRAL RIVERFRONT MASTER PLAN



- Recreation
- Tourism

Image from Aug 2016 MPRB Central Riverfront Master Plan

VISIONS FOR THE USAF SITE – WATER WORKS

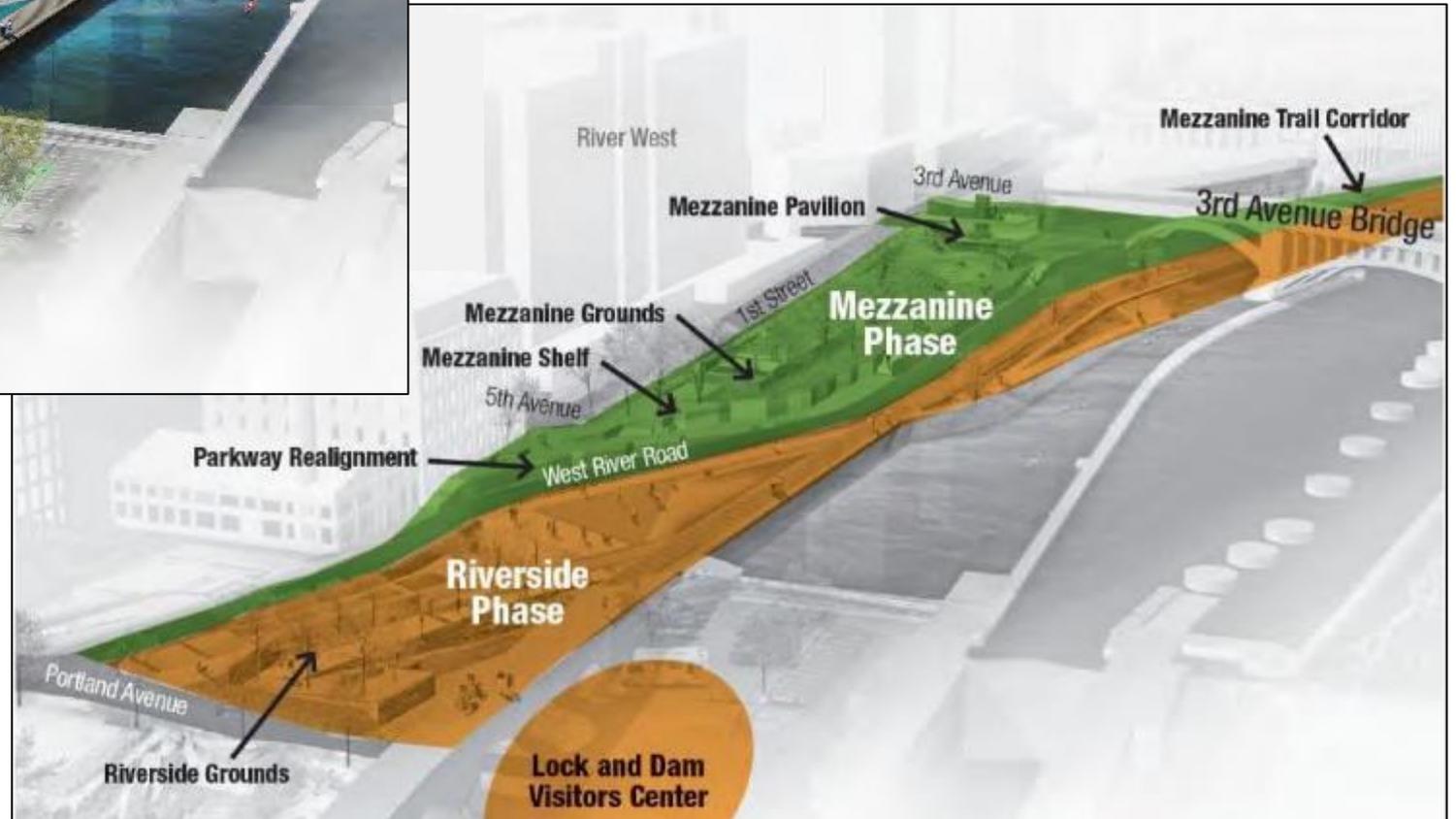


2015 Water Works concept



- Recreation
- Tourism

2015 conceptual images from on-line sources





VISIONS FOR THE USAF SITE – “THE FALLS”



- Recreation
- Tourism

“The Falls” image courtesy of Friends of the Lock and Dam and VJAA





VISIONS FOR THE USAF SITE - HYDROPOWER



- Hydropower



**Proposed location:
Crown Hydro
operations building**

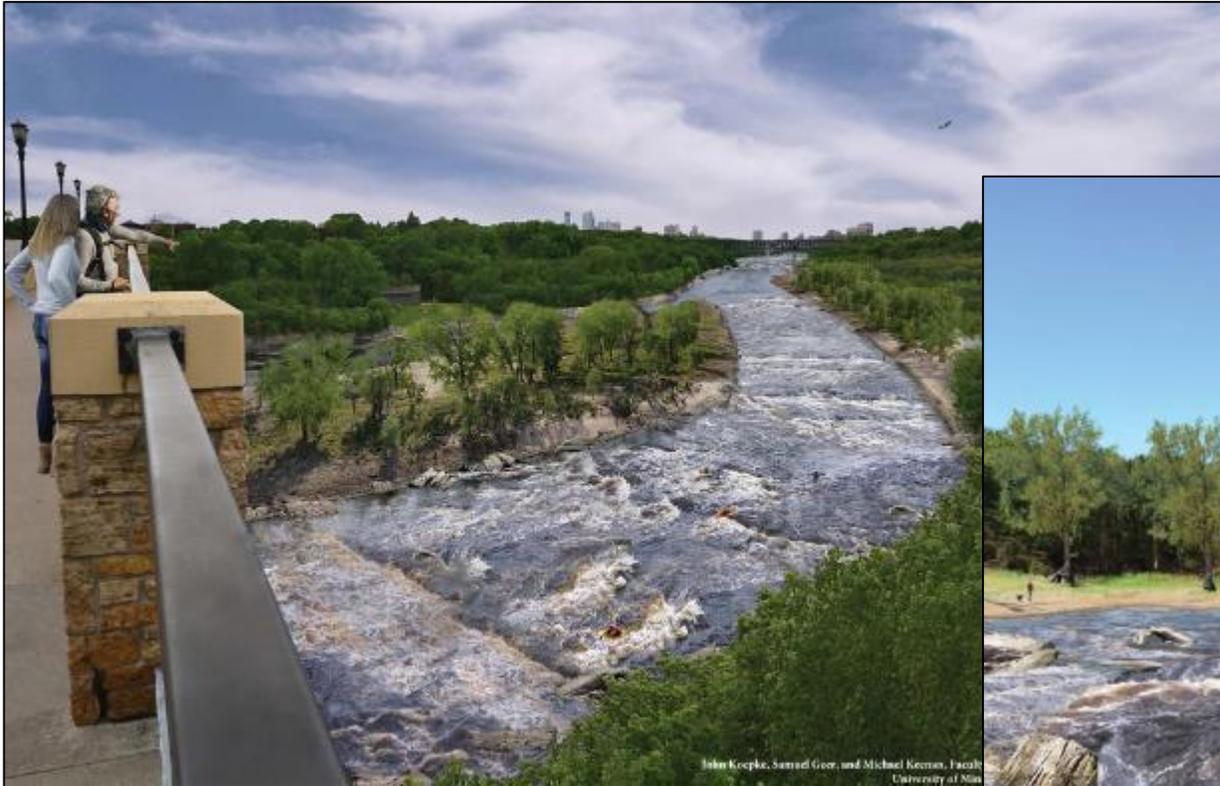
Used with permission from Crown Hydro



VISIONS FOR THE MISSISSIPPI RIVER - RESTORATION



- River restoration (river gorge downstream of St. Anthony Falls).



John Koepke, Samuel Geor, and Michael Keenan, Faculty
University of Minnesota



John Koepke, Samuel Geor, and Michael Keenan, Faculty
University of Minnesota

Images used with permission from American Rivers.



OTHER VISIONS?



Please share with Corps – (Make appointment with Nan).

Also:

How do these visions fit into the three Alternatives?

No Action (keep everything)

Disposal (dispose of everything)

Partial Disposal (keep some, dispose of some)

Do the visions depend upon the Corps remaining or being gone?

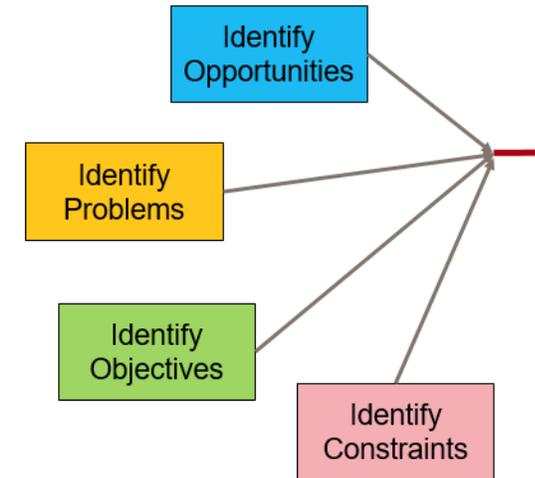


IDENTIFY CONSTRAINTS



Example:

- St. Anthony Falls is a culturally and historically sensitive area.
- Minneapolis water supply depends upon having a “damming surface” at USAF.
- Current uses include access for maintenance, water rescues, flood operations.
- Threat of invasive carp.
- We can't sell what we don't own (Xcel owns the spillways and most of dam).

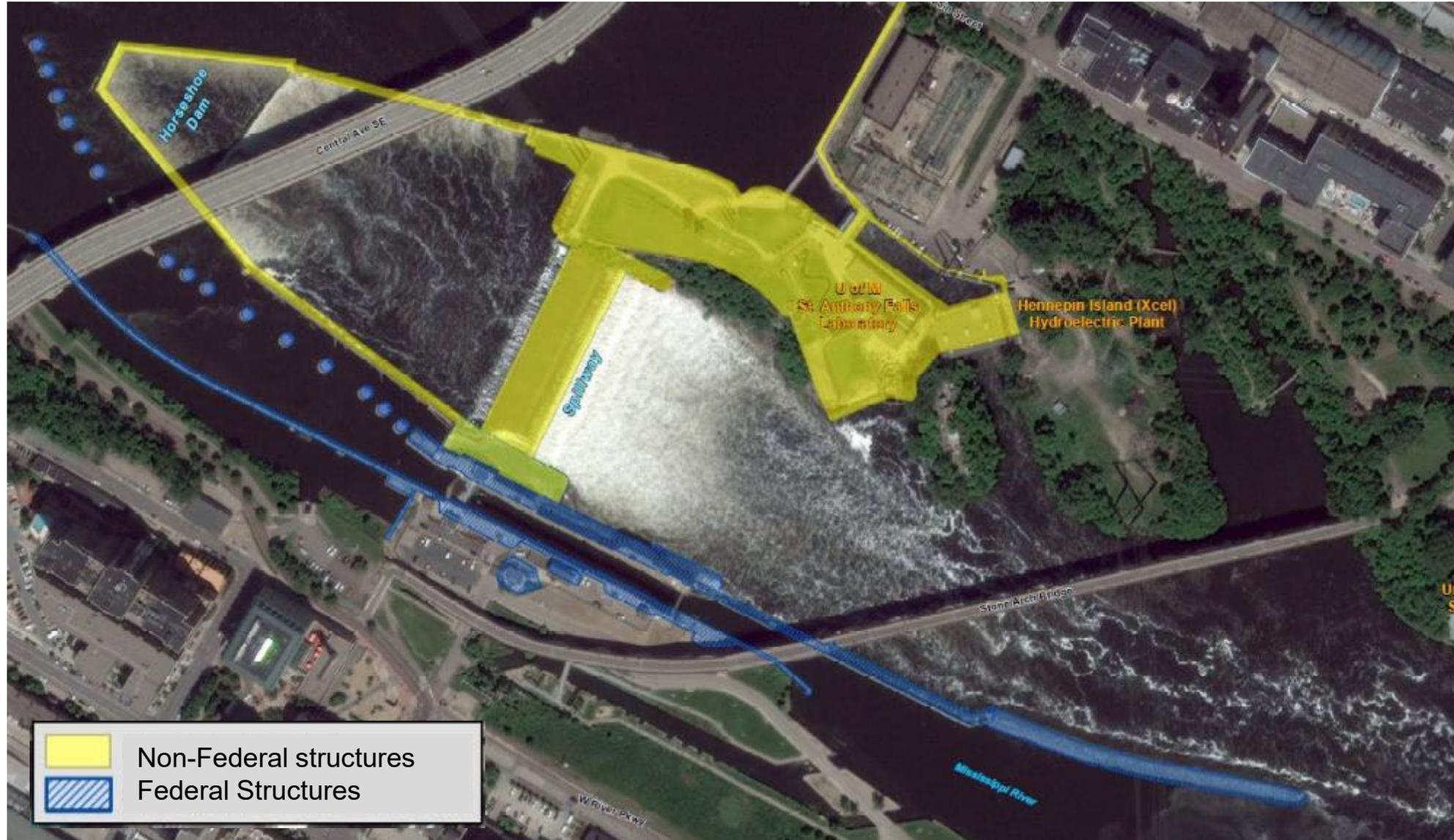




WHO OWNS WHAT? - LANDS

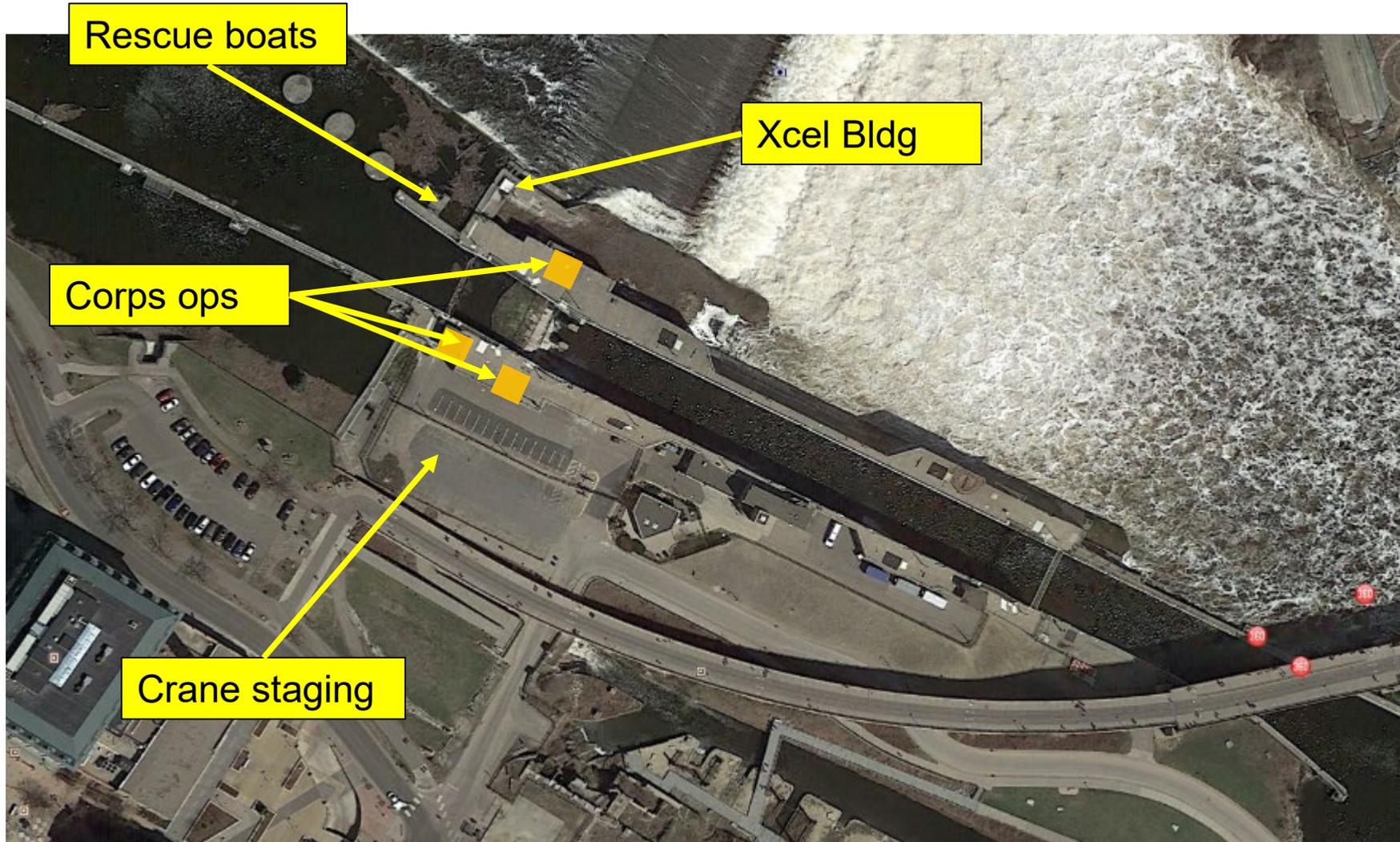


WHO OWNS WHAT? - STRUCTURES





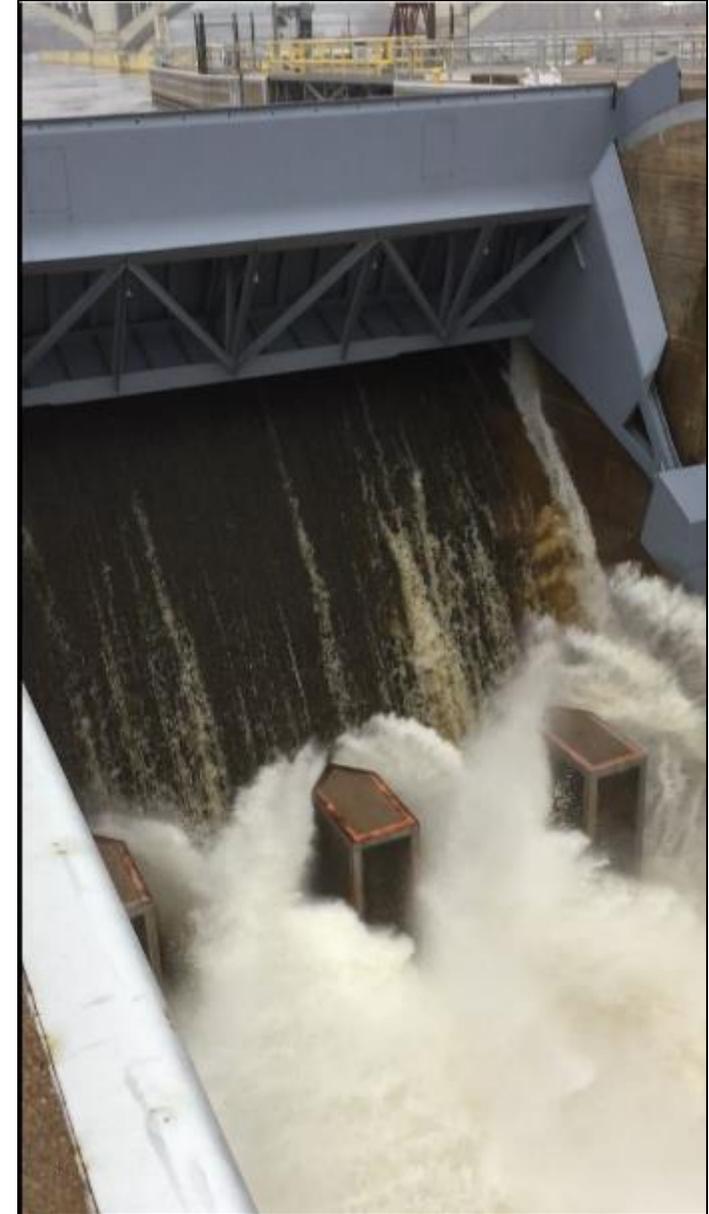
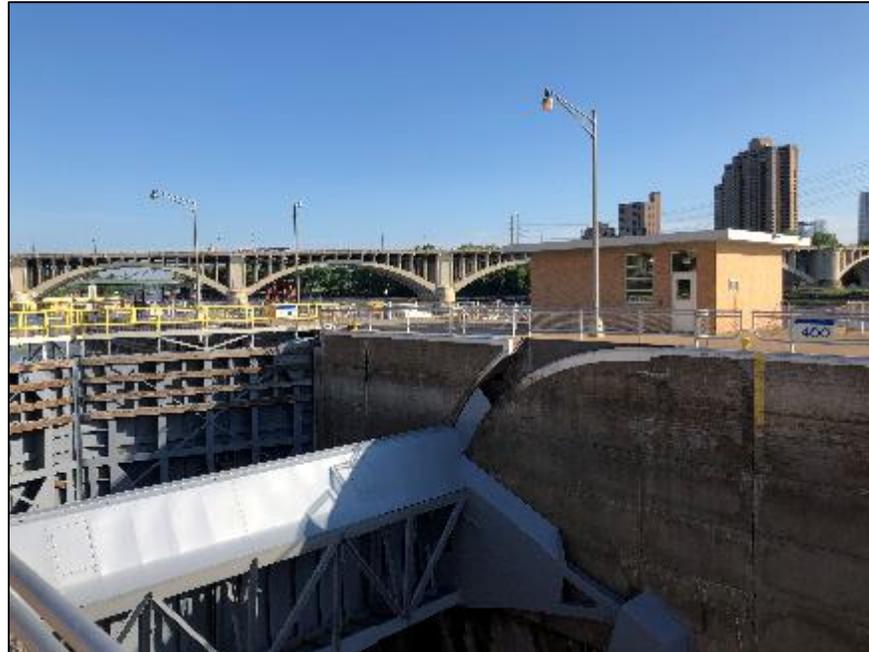
CONSTRAINT - WHAT DO WE NEED FOR OPERATIONS?





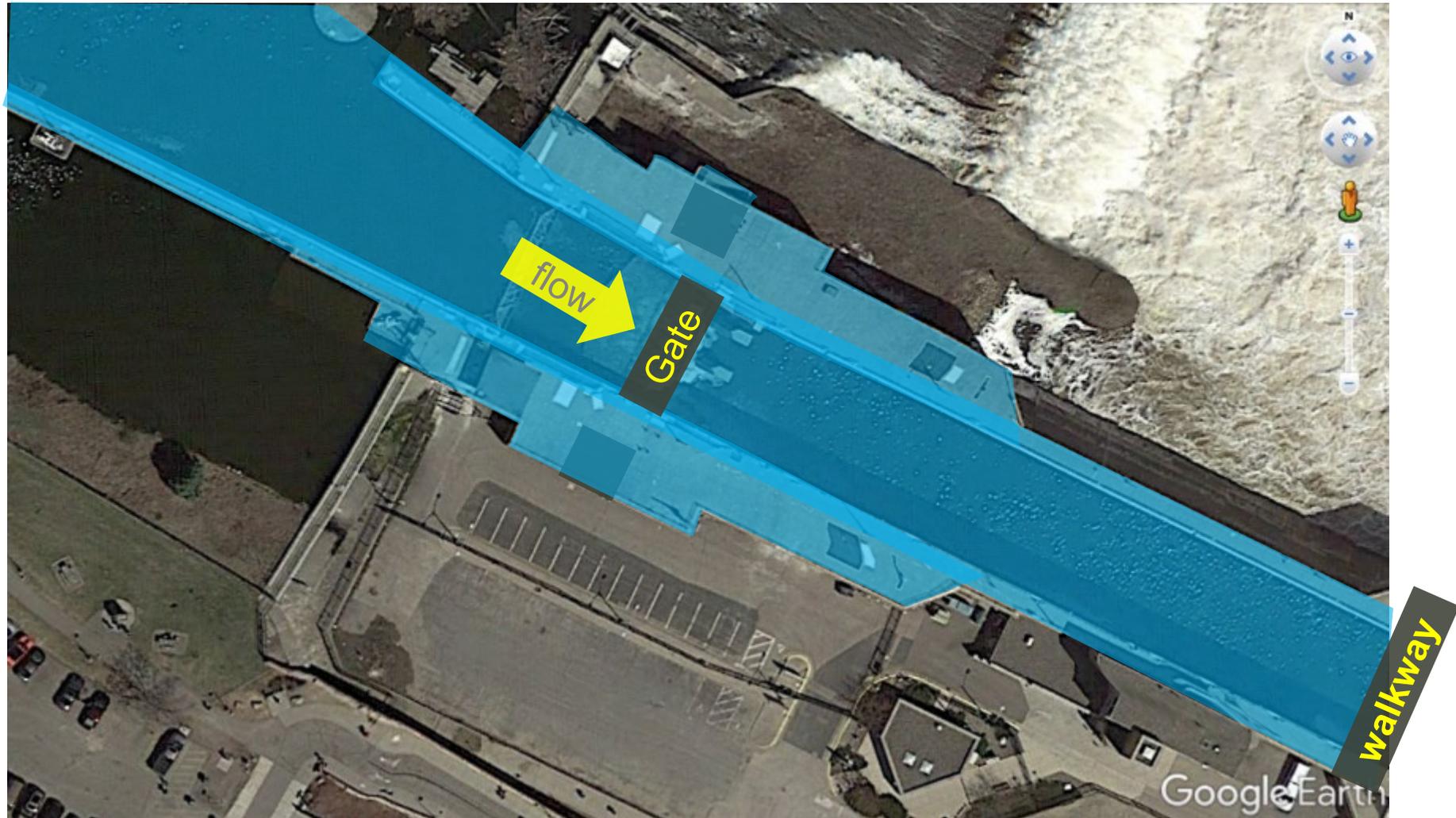
CONSTRAINT - WHAT DO WE NEED FOR OPERATIONS? – FLOOD GATE

Flood operations (~ every 10 years).
Routine operations and maintenance
Major maintenance



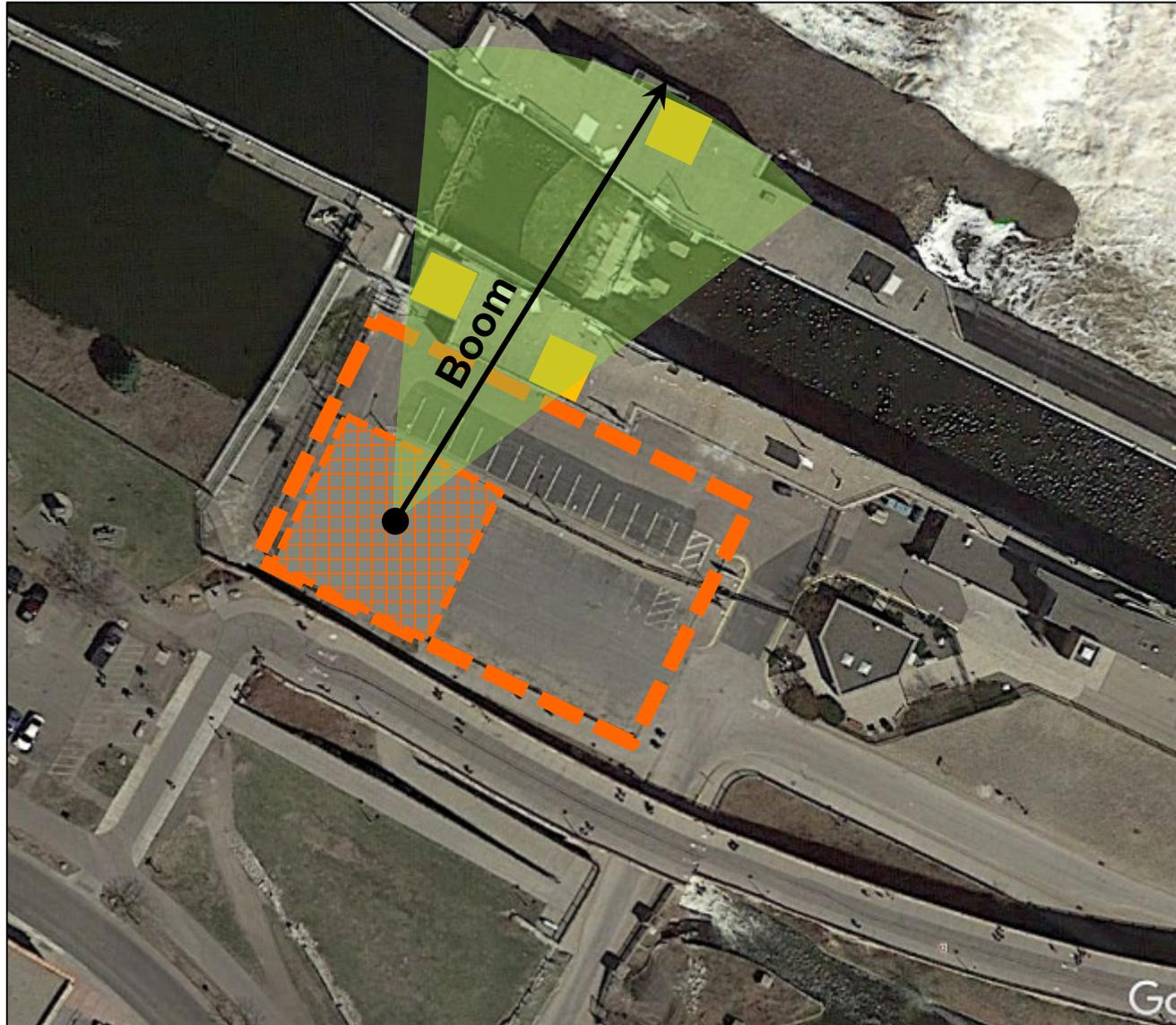


CONSTRAINT - OPERATING AREAS DURING FLOODING





CONSTRAINT - MAJOR MAINTENANCE - CRANE STAGING AREA



Access by barge-mounted crane no longer possible.

Minimum 350-ton land-based crane needed.

Position dependent upon geometry and load.





CONSTRAINT - CRANE ACCESS

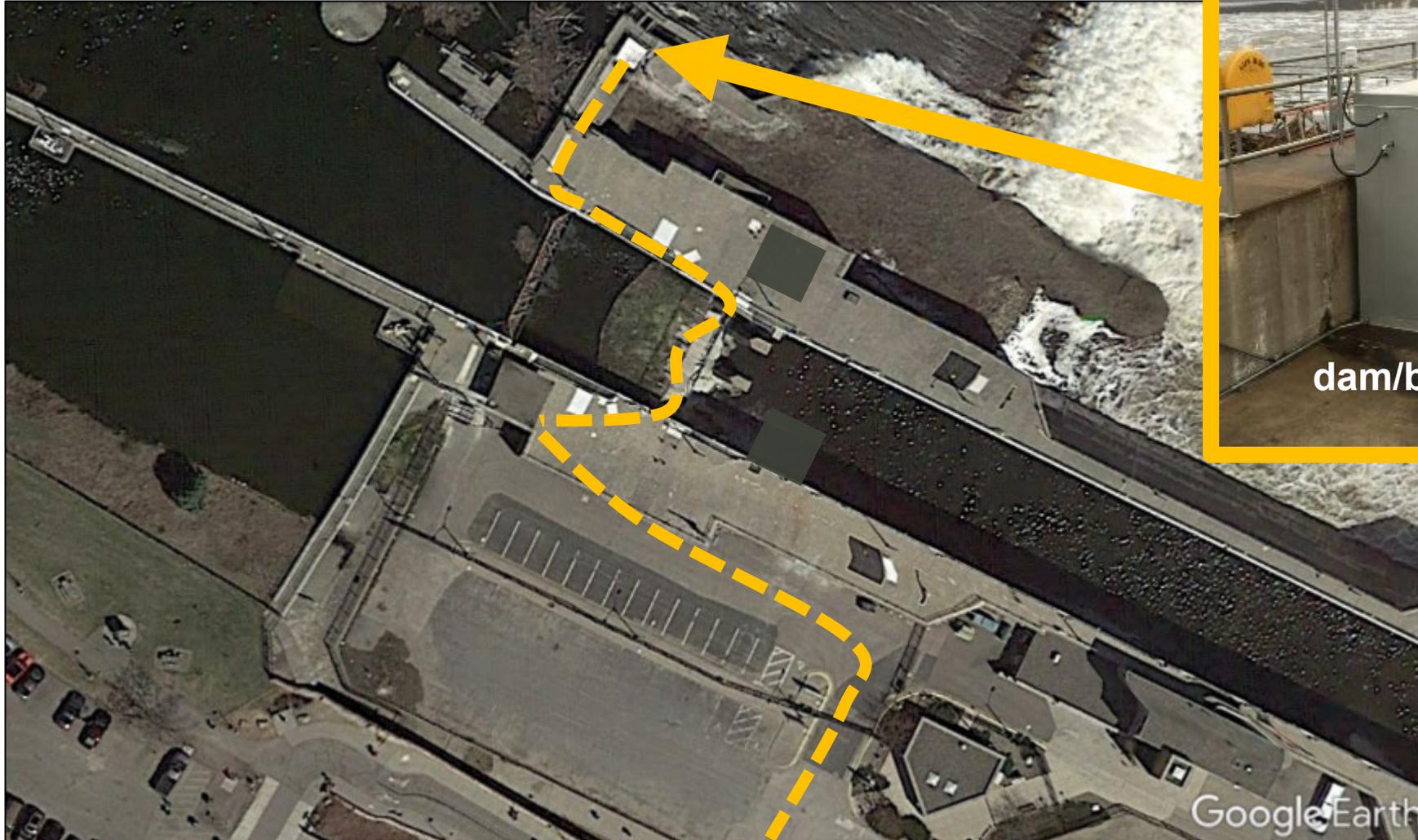


What can't access through Portland Avenue can be brought in through the lower lock access road.





CONSTRAINT - XCEL ACCESS FOR DAM MAINTENANCE



Northern States Power retained the rights to cross the property

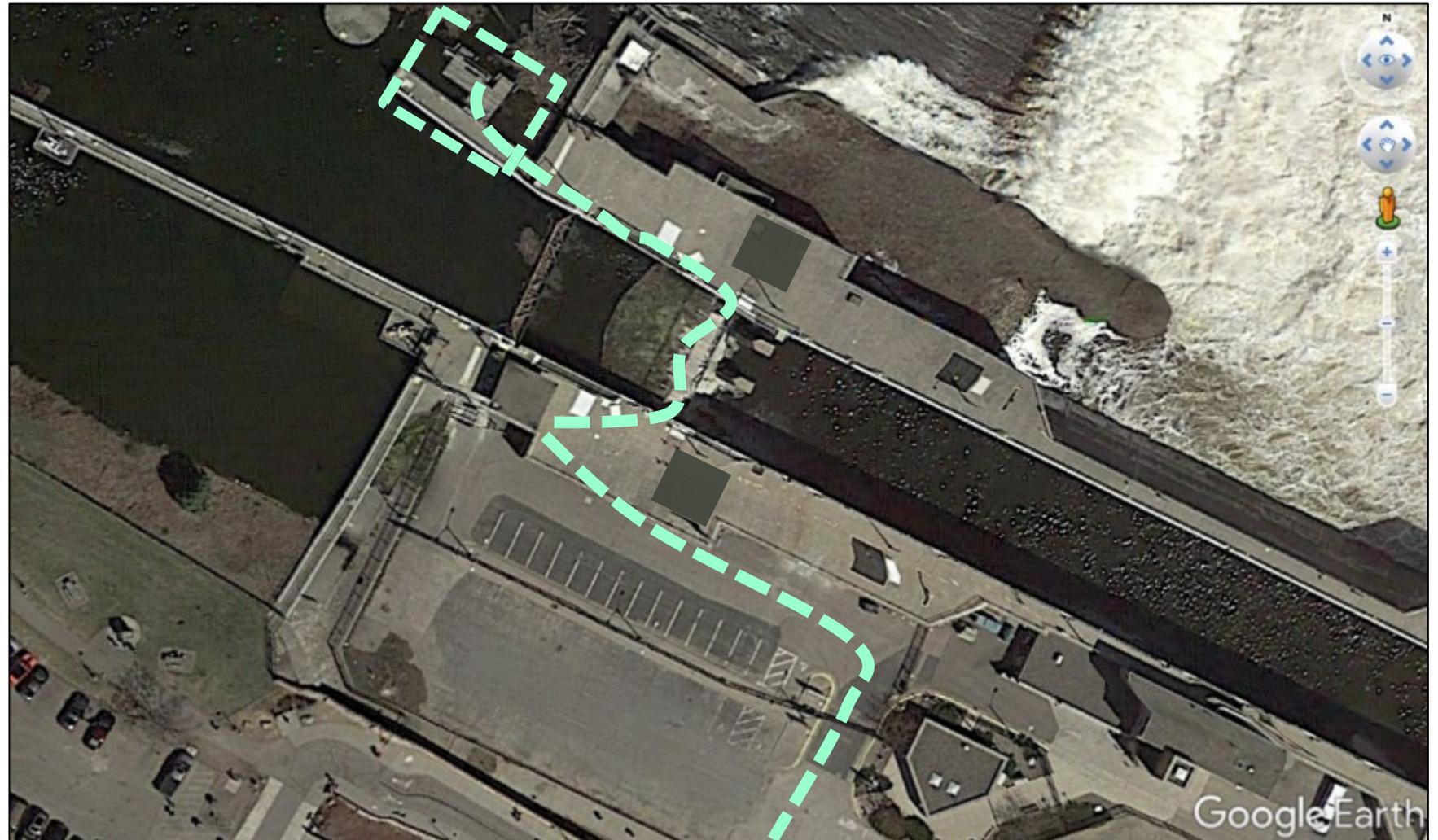


CONSTRAINT - ACCESS FOR EMERGENCY BOAT LAUNCH



Minneapolis water rescue and Hennepin County water patrol.

Provide access or an alternate site.





OPPORTUNITY

What we don't need for flood ops can be shared or used for something else.

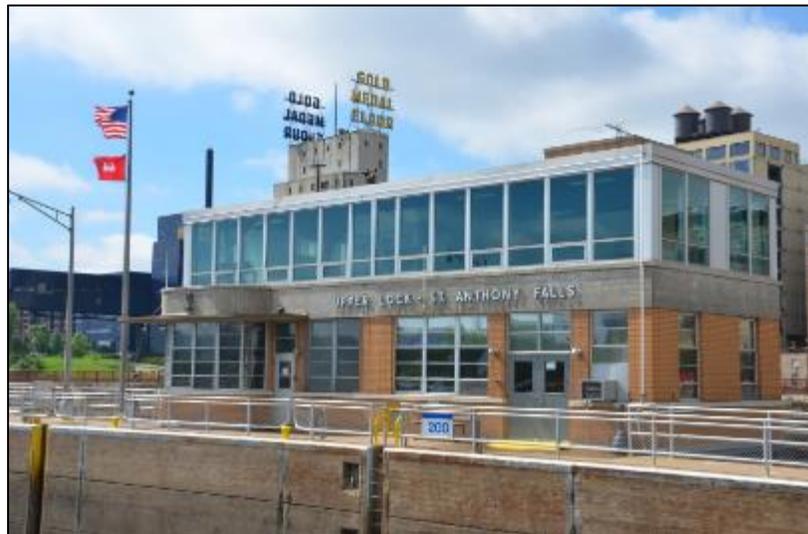


parts of
the lock



Restroom

Central Control station w/garage



Also,
Guidewalls,
rock dike,
sheet-pile
cells, lower
control
stand, etc.



CONSTRAINT – DON'T FORGET INVASIVE ASIAN CARP



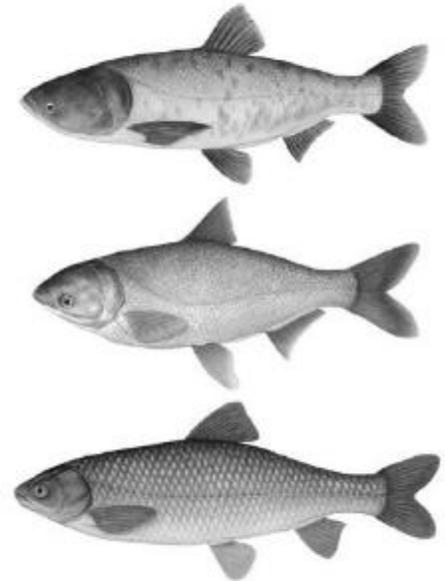
Don't make a pathway.

MnDNR produces a report each year on results of annual monitoring efforts through organized captures.

Table 2. Invasive Carp caught from January through December 2018 in Minnesota and Wisconsin boundary waters.

Date	Species	Water Body	Location	River Mile	Length (mm)	Weight (grams)	Sex	Maturity	Capture Method	Age
5/11/2018	Bighead Carp	St. Croix River	Andersen Bay	19	1105	21000	Female	Mature	Gill Net	11
5/11/2018	Bighead Carp	St. Croix River	Andersen Bay	19	1186	18000	Male	Mature	Gill Net	10
9/27/2018	Bighead Carp	Minnesota River	Near Granite Falls, MN	235	1173	16900	Male	Mature	Gill Net	10 or 11

INVASIVE CARP SAMPLING REPORT
 JANUARY – DECEMBER 2018
 MINNESOTA DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF FISH AND WILDLIFE
 SECTION OF FISHERIES



UPPER MISSISSIPPI RIVER, POOLS 1-8
 LOWER ST. CROIX RIVER, BELOW ST. CROIX FALLS
 MINNESOTA RIVER, BELOW GRANITE FALLS
 February 7th, 2019





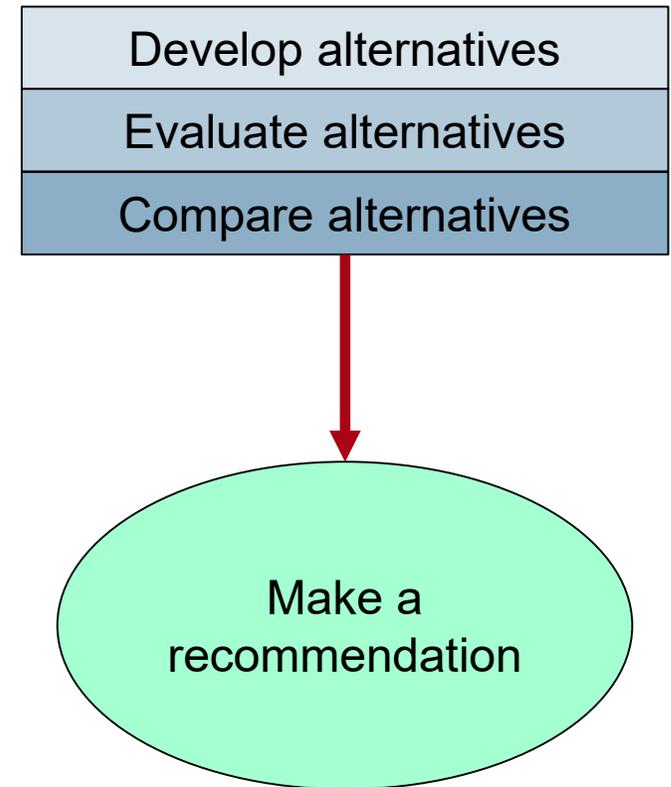
PROCESS



After gathering input, for each alternative we:

1. Examine Costs.
2. Examine Benefits.
3. Assess environmental, economic, social, cultural impacts.

Then we make a recommendation – summarize it in a draft report and put it out for public review.





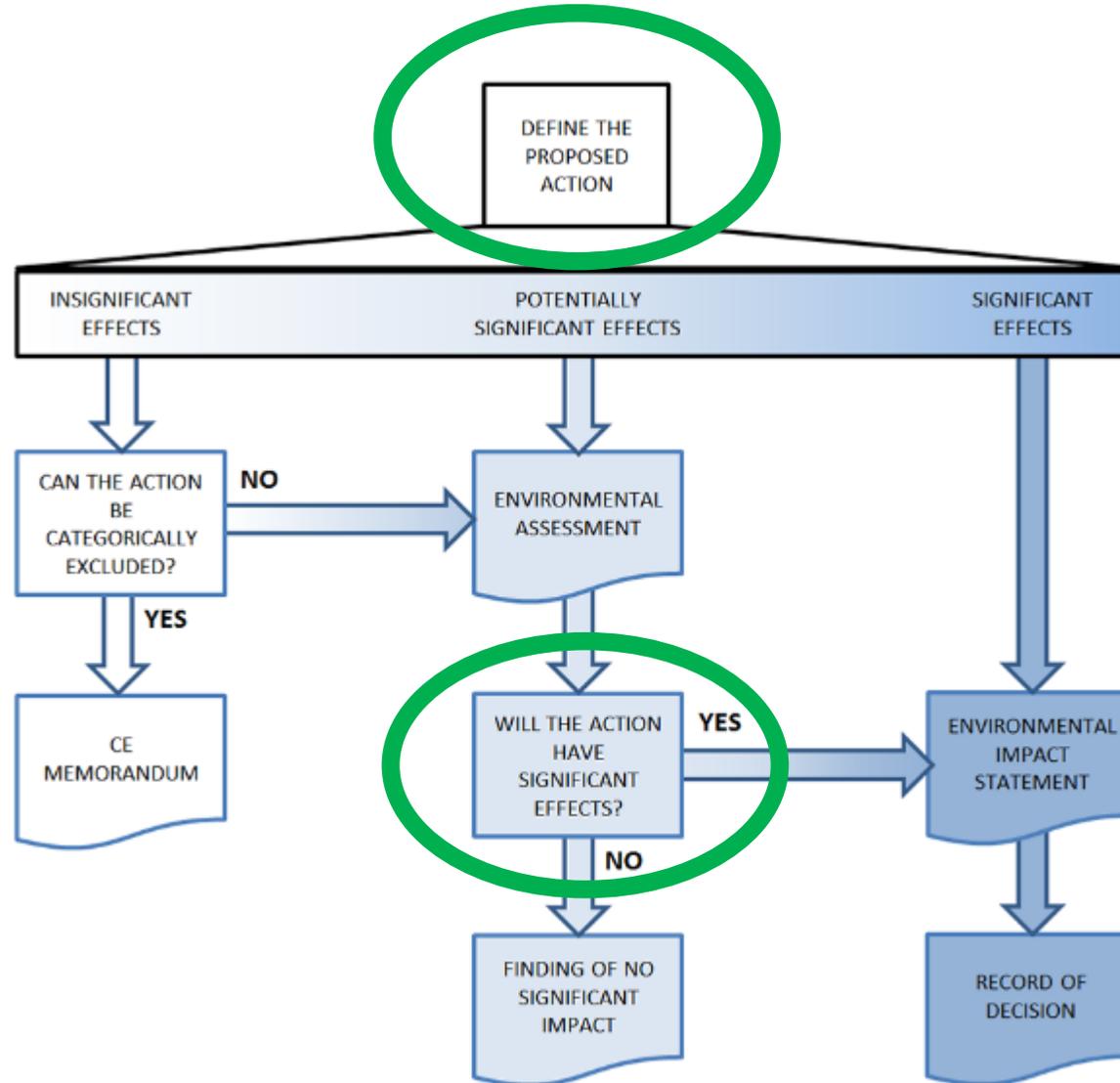
ENVIRONMENTAL MEMORANDA, LAWS & REGULATIONS TO BE CONSIDERED



- Clean Air Act
- Clean Water Act
- Consultation with Indian Tribal Governments (EO 13175)
- Endangered Species Act
- Environmental Justice (EO 12898)
- Federal Water Project Recreation Act
- Fish & Wildlife Coordination Act
- Invasive Species (EO 13112)
- National Environmental Policy Act
- National Historic Preservation Act
- Watershed Protection & Flood Prevention Act



NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) SCOPING



For each alternative, we have to:

- Define the Proposed Action, and
- Determine the effects of that Action, and
- Determine if those effects are significant.



NEPA SCOPING: NATURAL RESOURCES

Define Area of potential effects for natural resources.

Verify through coordination that this is the appropriate area, based on our proposed alternatives.



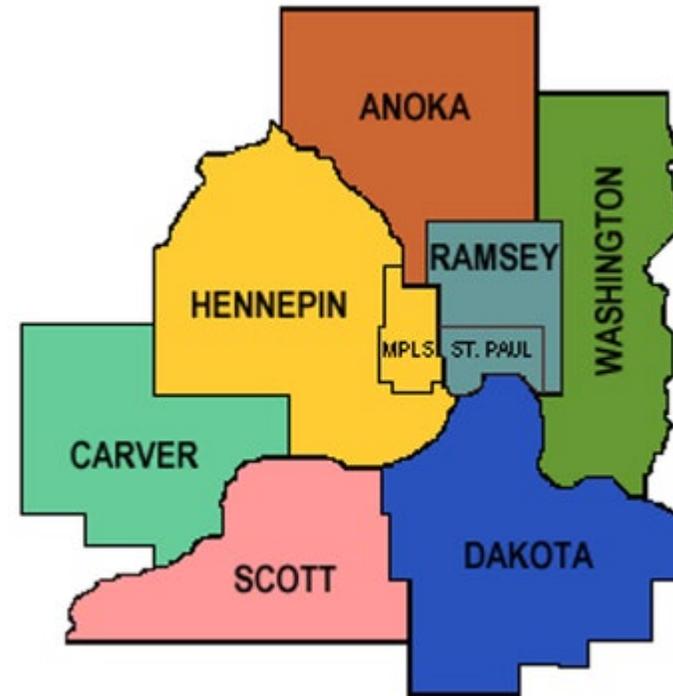


NEPA SCOPING: SOCIOECONOMIC EFFECTS

Define Area of potential effects for socioeconomics.

Verify through coordination that this is the appropriate area, based on our proposed alternatives.

Socioeconomic effects may extend well beyond the St. Anthony Falls area.





NEPA SCOPING: CULTURAL RESOURCES

Define Area of potential effects for cultural resources.

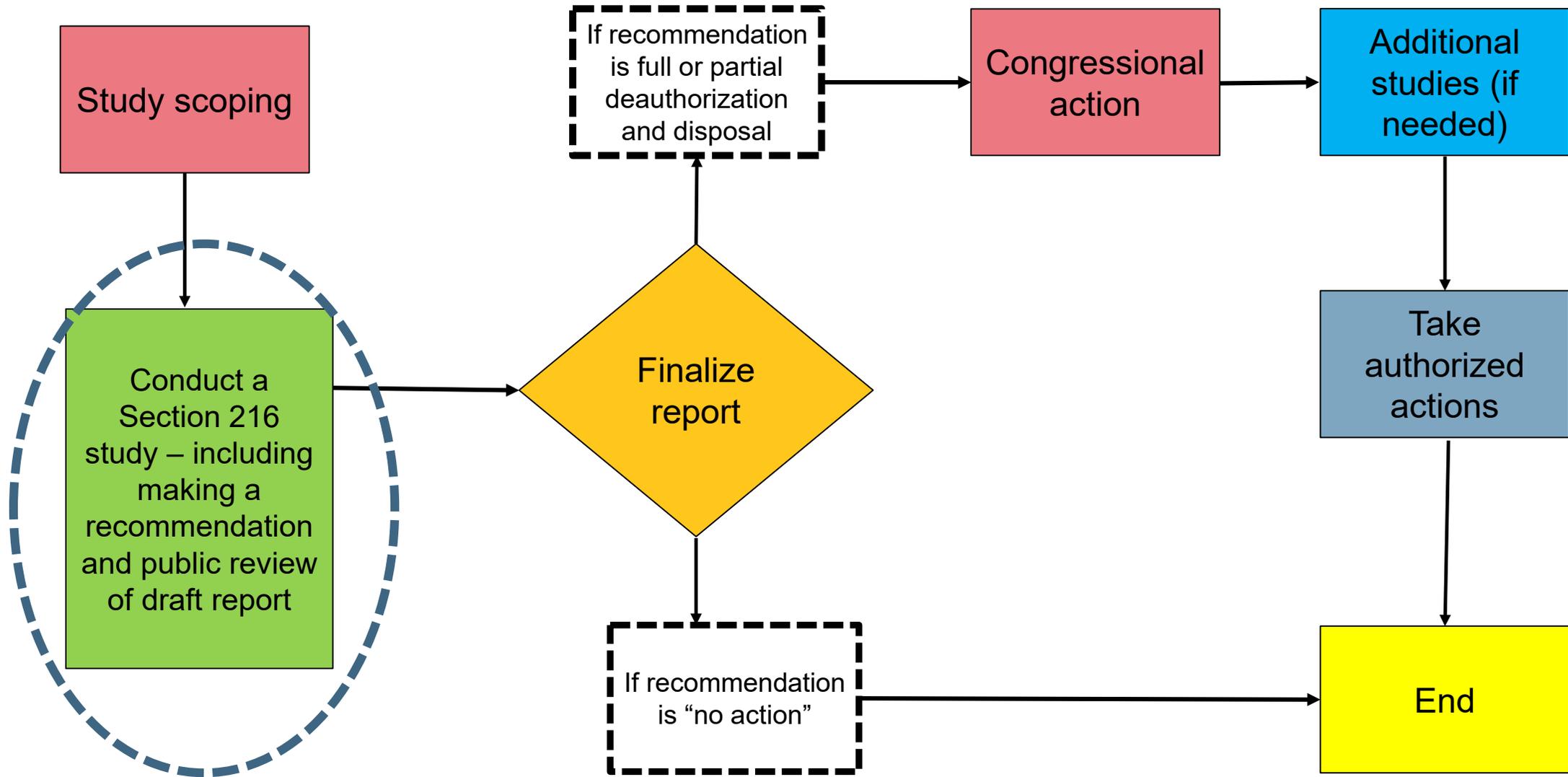
Verify through coordination that this is the appropriate area, based on our proposed alternatives.



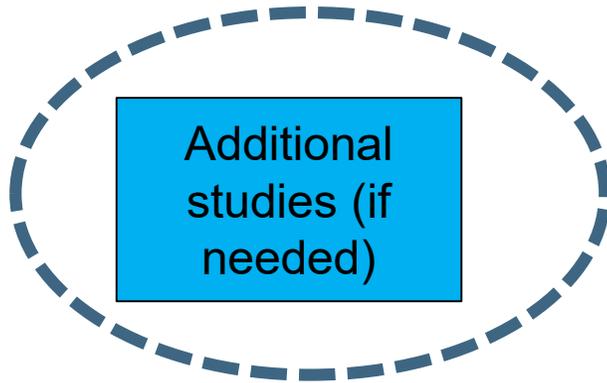
(APE for Crown Hydro – image used with permission).



NEXT STEPS – DEPEND ON RECOMMENDATION



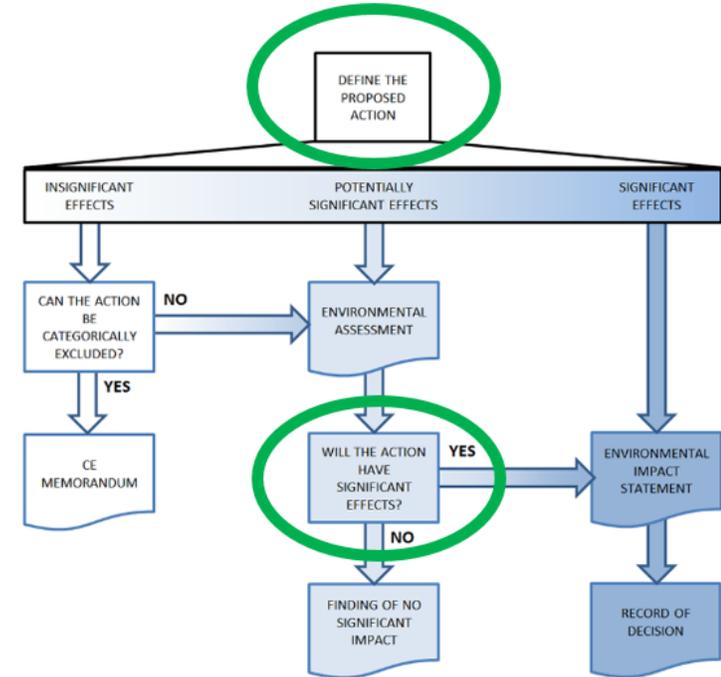
ADDITIONAL STUDIES – MORE PUBLIC INPUT



Additional NEPA documents may be required in the future, depending upon the recommended action, such as:

- Removal or partial removal of the structure
- Alterations/additions to the structure

Those documents would be prepared during follow-on studies, and would be subject to public review.

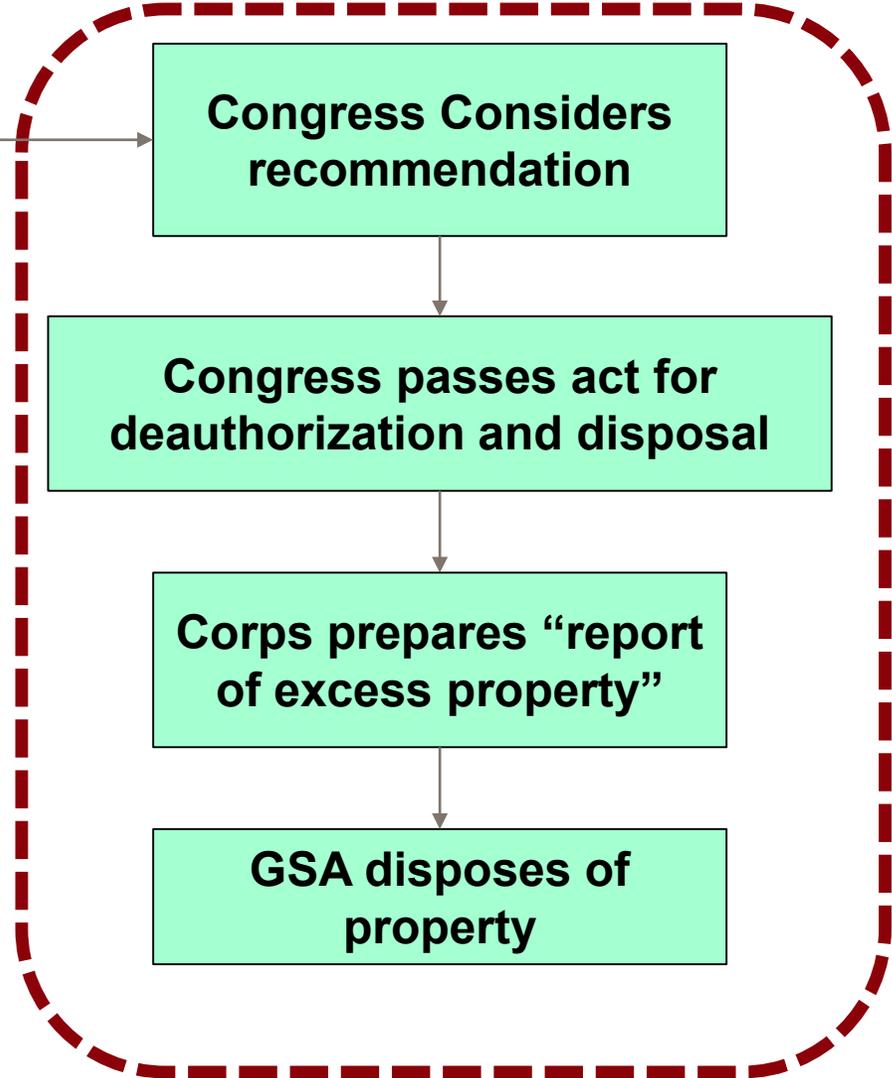




IF CORPS RECOMMENDS DISPOSAL – HOW IS THE PROPERTY HANDLED?



Corps forwards recommendation to Congress



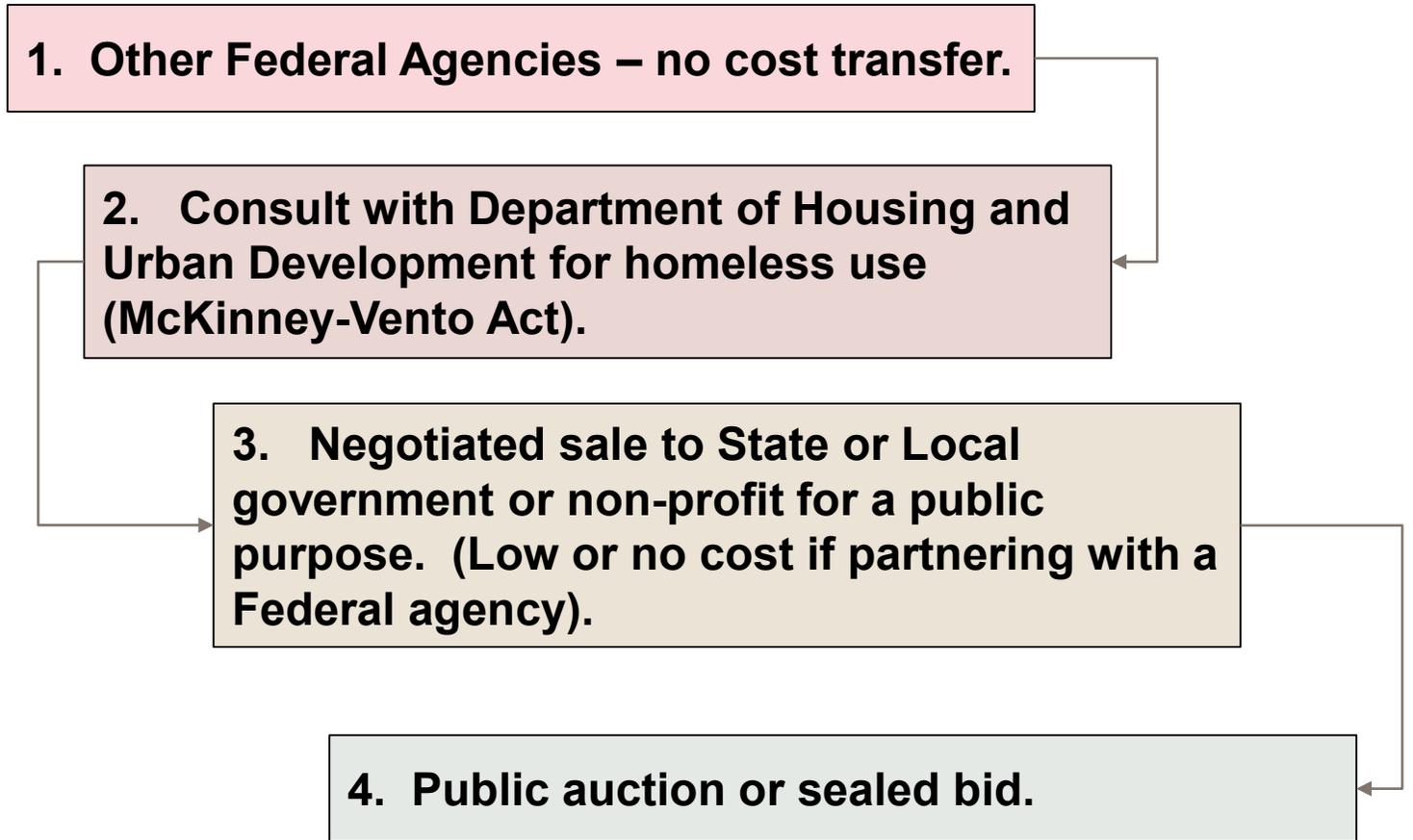
Congress may direct "to whom" the property should be disposed.



DISPOSAL OF FEDERAL PROPERTY - GENERAL SERVICES ADMINISTRATION (GSA) PRIORITIES



If Congress does not specify to whom the property should be transferred, GSA has a priority disposal list dictated by Federal law:





FACILITATOR - NEXT STEPS



Schedule

Providing input

Staying informed

Questions and answers.



PROPOSED SCHEDULE – USAF STUDY



Scoping comments/input to “soft topics” due –	20 October 2019
Info gathering/alternatives formulation/recommendations –	Now through Jan 2020
Write draft report with integrated NEPA document –	Jan-Apr 2020
Public review/public meetings	May-Jul 2020
Comments on draft report due –	Jul 2020
Submit final report for approval through Corps –	Dec 2020
Congressional action (if warranted) -	To be determined



WE NEED YOUR INPUT ON:



- 1. Study scope**
- 2. Suggestions to maintain/improve the human environment**
- 3. Suggestions to maintain/improve the natural environment**
- 4. Suggestions to maintain/improve recreational opportunities**
- 5. Other development visions that have not been publicized**



HOW TO STAY INVOLVED



Have a development vision or are you interested in being a future owner?

- Contact the Project Manager, Nan Bischoff.

Want to submit a comment/input to soft topics?

- Return the comment card,
- or send an email to: MplsLocksDisposition@usace.army.mil

Want to stay informed?

- Visit our website at:

<http://www.mvp.usace.army.mil/MplsLocksDisposition/>

- Watch for public notices in spring 2020 for the draft report public review (local media and Federal Register).
- This presentation and the comment card will be posted on the website.



QUESTIONS AND DISCUSSION

