

CAPITAL INVESTMENT STRATEGY UPDATE

Inland Waterways Users Board Meeting #97
Walla Walla, WA
16 August 2022

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**US Army Corps
of Engineers®**





PURPOSE



- As recommended in the 2020 CIS Report (Section 5.1) - The CIS Report should be reviewed annually and updated in coordination with feedback from Inland Waterways Users Board.
- These annual updates will form the foundation of the report provided to Congress. The annual update is important so that data and analysis remain current in order to provide reliable and accurate information to decision makers.
- This document reflects the annual internal USACE review, and updates based on recent appropriations and project status changes since the 2020 CIS Report (dated December 2020) was transmitted to Congress.
- This update does not replace the requirement to provide Congress a report describing a 20-year program for making capital investments on the inland and intracoastal waterways based on the application of objective, national project selection prioritization criteria, which is required by Section 302(d) of WRDA 1986 at least every five years.
- The next report to Congress will be drafted and submitted not later than 2025.



CATEGORY 1 - ONGOING CONSTRUCTION PROJECTS

Project Title	Location	Remaining Cost (\$M)
Olmsted Locks & Dam	Ohio River	\$0
Locks & Dams 2, 3, and 4	Monongahela River	(see footnote 1)
Kentucky Lock Addition	Tennessee River	\$332.0
Chickamauga Lock	Tennessee River	\$39.3
Three Rivers ⁶	MKARNS	(see footnote 1)
Montgomery Locks & Dam ⁵	Upper Ohio River	(see footnote 1)
NESP Lock 25 ⁷	Mississippi River	(see footnote 1)
T.J. O'Brien Lock & Dam major rehabilitation ⁷	Illinois Waterway	(see footnote 2)
Emsworth Lock ⁶	Upper Ohio River	\$664.7
MKARNS 12 ft. Channel	MKARNS	(see footnote 2)
NESP LaGrange Lock ⁶	Illinois Waterway	\$672.4
Dashiels Locks ⁶	Upper Ohio River	\$716.0

Notes:

1. Project was funded to complete based on the estimated Total Project Cost (TPC) at the time of appropriation
2. Project scope and cost estimate are currently under review
3. Revisions from 2020 CIS report are denoted in blue font
4. Remaining costs and schedule information for are based on information dated 1 June 2022 and are in FY 2023 price level
5. Funded in FY 2021 work plan
6. Funded in FY 2022 appropriation
7. Funded in FY 2022 IIJA
8. Funded in FY 2022 IIJA addendum



CATEGORY 2 - NEXT CONSTRUCTION PROJECTS



<u>Tier</u>	<u>Project Title</u>	<u>Location</u>	<u>Fully Funded Cost (\$M)</u>
A	Brazos River Floodgate ⁴	GIWW	\$203.4
	NESP Lock 24 ³	Mississippi River	\$862
B	NESP Lock 22 ³	Mississippi River	\$727
	NESP Lock 21 ³	Mississippi River	\$749.9
C	NESP Peoria Lock ³	Illinois Waterway	\$688
	Colorado River Locks ⁴	GIWW	\$317.5
D	NESP Lock 20 ³	Mississippi River	\$624

Notes:

1. Revisions from 2020 CIS report are denoted in blue font.
2. Remaining costs for are based on information dated 1 June 2022 and are in FY 2023 price level.
3. Project needs construction funding. New start is not required.
4. Brazos River Floodgate & Colorado River Locks was authorized for construction in WRDA 2020. New start and construction funding is required to start construction.



CATEGORY 3 - ONGOING STUDIES



Project Title	Project Location	Status
Brandon Road L&D	Illinois Waterway	Ongoing MRR study
David D. Terry L&D (No. 6)	MKARNS	Ongoing MRR study
Dresden Island L&D	Illinois Waterway	Ongoing MRR study
GIWW Coastal Resiliency Study, TX	GIWW	Ongoing study. Fully funded in FY 2020.
GIWW, High Island to Brazos River, TX	GIWW	Study ongoing
Greenup Lock	Ohio River	MRR study initiated in FY 21
Inner Harbor Navigation Canal Lock	New Orleans, LA	Study ongoing
Lock & Dam 18	Mississippi River	Ongoing MRR study
Marmet L&D	Kanawha River	MRR study initiated in FY22
Meldahl L&D	Ohio River	MRR study initiated in FY21
New Cumberland Lock	Ohio River	MRR study initiated in FY22
Pike Island L&D	Ohio River	MRR study initiated in FY 20
Robert S. Kerr L&D	MKARNS	MRR study initiated in FY22
Starved Rock L&D	Illinois Waterway	Ongoing MRR study
Tennessee-Tombigbee Waterway and Black Warrior Tombigbee Rivers Deepening Study AL & MS	Tennessee-Tombigbee Waterway and Black Warrior Tombigbee River	New Study
Webbers Fall L&D	MKARNS	MRR study initiated in FY22
Winfield Lock & Dam	Kanawha River	Ongoing MRR study

Notes:

- Revisions from 2020 CIS report are denoted in blue font. Additional changes from 2020 CIS Report:
 - Calcasieu Lock study was removed from list because the study was closed due to lack of benefits and no further action was planned.
 - GIWW, Port O'Connor to Corpus Christi Bay study was removed from list since the study was closed and no further action was planned
 - Tennessee-Tombigbee Waterway and Black Warrior Tombigbee Rivers Deeping Study is a new project not identified in the 2020 CIS Report.
- Studies are funded by Investigations for specifically authorized studies and O&M for major rehabilitations.
- Projects listed in alphabetical order.



CATEGORY 4 - POTENTIAL STUDIES

Site	Project
Bayou Sorrel Lock	GIWW
Belleville Locks	Ohio River Locks & Dams
Braddock L&D	Monongahela River, PA
Hannibal Locks	Ohio River Locks & Dams
Lock No. 2 & Mills Dam	MKARNS
London Lock	Kanawha River Locks & Dams
Melvin Price Locks & Dam	Mississippi River between Missouri River and Minneapolis
Ozark-Jeta Taylor L&D	MKARNS
Racine Locks	Ohio River Locks & Dams
Willow Island Lock	Ohio River Locks & Dams

Notes:

1. This list of potential projects was submitted by districts for consideration. Prior to funding the work to develop a major rehabilitation reports, the potential project requires screening to validate the work qualifies for major rehabilitation.
2. Revisions from 2020 CIS report are denoted in blue font.
3. Projects listed in alphabetical order.



EFFICIENT CONSTRUCTION SCENARIOS



Baseline Scenario. The Baseline Scenario (Table 1) is similar to the 2020 CIS Baseline Scenario with updated cost share from 50%/50% to 65% (Gen Treasury)/35% (IWTF) and increased IWTF revenue.

10-Year Construction Scenario. The 10-Year Construction Scenario (Table 2) is an update of the 2020 10-Year Construction Scenario and represents a “what-if” scenario to demonstrate a strategy to complete construction of all Category 1 and Category 2 projects in a 10-year period starting in FY 2025. It assumes that the sufficient funding is appropriated annually for design and construction to construct the Category 1 and Category 2 projects by FY 2034. The specific assumptions are as follows:

- There is no limit to the General Treasury and the IWTF funding available to complete lock design and construction by FY 2034.
- USACE is not assuming any changes in the cost sharing, fuel tax rate, or other necessary expenses.
- For the purposes of this planning framework, the internal and external resources are assumed to be available to execute the work.



Key Assumptions

- The 2022 update to the 2020 CIS Report is a planning framework and does not take the place of the normal budget processes or represent a commitment by the Administration to budget the amounts shown.
- That current policies and practices will continue within the planning framework of this document (FY 2023 – FY 2042). The 2022 Update assumes current (FY 2022) cost sharing of 65 percent General Treasury and 35 percent IWTF will continue through the planning period*.
- For planning purposes at the time this report was prepared, it was assumed that FY 2022 IWTF receipts will be a total of \$131 million including the tax receipts and interest income. The assumed IWTF balance starting FY 2023 will be \$165 million. In addition, for planning purposes it was assumed that annual IWTF receipts and interest will grow at 1.5 percent annually throughout this 20-year analysis.
- The minimum IWTF balance is \$20 million and therefore, no construction project will be started if it will result in the IWTF balance dropping below the \$20 million minimum.
- Initial project cost estimates are FY 2023 price and then inflated to year of work shown. Construction costs are indexed according to Civil Works Construction Cost Index (CWCCIS) (EM 1110-2-1304).
- Projects were funded to complete based on the estimated Total Project Cost (TPC) at the time of appropriation.

**TABLE 1. 2022 BASELINE SCENARIO FROM FY 2023 – FY 2042 (\$M)**

Project	Project Description	Cost to Complete (FY23 price)	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	Construction (FY23 - FY42)
Monongahela Locks & Dams 2, 3, & 4	New 720 ft lock	See note #1 below.																					\$ -
Kentucky Lock Addition	New 1200 ft lock	\$332M			75	168	62	27															\$ 332
Chickamauga Lock	New Lock	\$39.3M	39																				\$ 39
MKARNs Three Rivers	channel protection	See note #1 below.																					\$ -
Montgomery Lock	New 600 ft lock	See note #1 below.																					\$ -
NESP Lock 25	New 1200 ft lock	See note #1 below.																					\$ -
TJ O'Brien Major Rehabilitation	Major rehab.	See note #2 below.																					\$ -
Emsworth Lock	New 600 ft lock	\$741.7M	106	109	113	116	120	123	127														\$ 814
MKARNs 12' Channel	channel deepening	See note #2 below.																					\$ -
NESP LaGrange Lock	New 1200 ft lock	\$672.4M	96	99	102	105	109	112	115														\$ 738
Dashields Lock	New 600 ft lock	\$715.9M							123	127	131	135	139	143	148								\$ 944
Brazos River Floodgates	New sector gate	\$203.4M							81	84	87	17											\$ 269
NESP Lock 24	New 1200 ft lock	\$862M									157	162	167	172	178	183	189						\$ 1,208
NESP Lock 22	New 1200 ft lock	\$727M										137	141	145	150	154	159	164					\$ 1,051
NESP Lock 21	New 1200 ft lock	\$942M															206	213	219	226	233	240	\$ 1,338
NESP Peoria Lock	New 1200 ft lock	\$688M																	160	165	170	176	\$ 671
Colorado River Locks	2 new sector gates	\$317.5M																					\$ -
NESP Upper Miss. River L&D 20	New 1200 ft lock	\$624M																					\$ -

Notes:

1. Project was funded to complete based on the estimated Total Project Cost (TPC) at the time of appropriation.
2. Project scope and cost estimate are currently under review.
3. The 20-yr construction total (FY 2023 – FY 2042) is \$7,033M. The total to complete all project shown is \$9,763M and construction is complete in 2052.
4. The 2022 update to the 2020 CIS Report is a planning framework and does not take the place of the normal budget processes or represent a commitment by the Administration to budget the amounts shown.

**TABLE 2. 2022 MAXIMIZED SCENARIO FROM FY 2023 – FY 2042 (\$M)**

Project	Project Description	Cost to Complete (FY23 price)	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	Construction (FY23 - FY42)
Monongahela Locks & Dams 2, 3, & 4	New 720 ft lock	See note #1 below.																					\$ -
Kentucky Lock Addition	New 1200 ft lock	\$332M			75	168	62	27															\$ 332
Chickamauga Lock	New Lock	\$39.3M	39																				\$ 39
MKARNS Three Rivers	channel protection	See note #1 below.																					\$ -
Montgomery Lock	New 600 ft lock	See note #1 below.																					\$ -
NESP Lock 25	New 1200 ft lock	See note #1 below.																					\$ -
TJ O'Brien Major Rehabilitation	Major rehab.	See note #2 below.																					\$ -
Emsworth Lock	New 600 ft lock	\$741.7M	106	109	113	116	120	123	127														\$ 814
MKARNS 12' Channel	channel deepening	See note #2 below.																					\$ -
NESP LaGrange Lock	New 1200 ft lock	\$672.4M	96	99	102	105	109	112	115														\$ 738
Dashields Lock	New 600 ft lock	\$715.9M			109	112	116	119	123	127	131												\$ 836
Brazos River Floodgates	New sector gate	\$203.4M			72	74	77	17															\$ 240
NESP Lock 24	New 1200 ft lock	\$862M			131	135	139	143	148	152	157												\$ 1,006
NESP Lock 22	New 1200 ft lock	\$727M			110	114	117	121	125	129	133												\$ 848
NESP Lock 21	New 1200 ft lock	\$942M			143	147	152	157	162	167	172												\$ 1,099
NESP Peoria Lock	New 1200 ft lock	\$688M					111	114	118	122	125	129	133										\$ 854
Colorado River Locks	2 new sector gates	\$317.5M					120	123	127														\$ 370
NESP Upper Miss. River L&D 20	New 1200 ft lock	\$624M					101	104	107	110	114	117	121										\$ 774

Notes:

1. Project was funded to complete based on the estimated Total Project Cost (TPC) at the time of appropriation.
2. Project scope and cost estimate are currently under review.
3. The 20-yr construction total (FY 2023 – FY 2042) is \$7,951M. All the projects are completed in 2034 for a total of \$7,951M.
4. The 2022 update to the 2020 CIS Report is a planning framework and does not take the place of the normal budget processes or represent a commitment by the Administration to budget the amounts shown



ACTIONS TO DATE AND NEXT STEPS



- ✓ Initial meeting held with Industry representatives and USACE personnel on March 28th to review CIS 2020 report and to discuss process for reporting updates
- ✓ No changes to the ranking methodology are being made during this update period.
- ✓ Comments received from each individual of the joint PDT on:
 - Proposed 2022 update process detailed below.
 - Initial Priorities for CAT 1, CAT 2, CAT 3, and CAT 4.
- ✓ USACE reviewed and revised project listings based on feedback.
- ✓ Follow-up meeting held with joint PDT week of April 11th to discuss revised project listings.
- ✓ Updated project listings presented at Inland Waterways Users Board Meeting on April 20th.
- ✓ USACE will review and revise project listing based on IWUB feedback.
- ✓ Joint PDT meeting following Users Board Meeting #96 to review & discuss feedback.
- ✓ Develop an initial baseline scenario based on feedback.
- ✓ Final updated baseline scenario developed.
 - Present updated report tables and scenarios at the Inland Waterways Users Board meeting on August 16th.
 - Prepare and finalize updated report tables and scenarios.



THANK YOU



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