

2025 CAPITAL INVESTMENT STRATEGY

UMBRA 170th Quarterly Meeting

May 21, 2024



U.S. ARMY
US Army Corps
of Engineers®

WHAT IS THE CIS?

- The CIS is a statutory requirement to develop ***a 20-year capital investment strategy*** for the inland and intracoastal, fuel taxed waterways.
- The CIS is a ***planning framework*** and ***informs*** the normal budget process. It does not represent a commitment to budget the amounts shown in the scenarios.
- Section 302(d) of WRDA 1986, as amended requires ***“coordination with the Users Board”*** in developing the CIS. USACE will collaborate with industry stakeholders to the maximum possible extent within the provisions of the Federal Advisory Committee Act requirements.
- Ultimately, the criteria, processes, procedures, and results in the ***CIS reflect the judgment of OMB, Army, USACE, and IW Users Board.***

WHAT'S CHANGED SINCE 2020 CIS

- **BIL \$2.5B ... cost escalation.**
- **WRDA legislation**
 - Cost share change to 65% General Treasury / 35% IWTF
 - Brazos Floodgates & Colorado River Locks authorized for construction
- **Construction New Starts**
 - Upper Ohio (FY21 work plan)
 - NESP (FY22 BIL)
 - MKARNS Three Rivers (FY22)
 - TJ O'Brien (FY22 BIL)

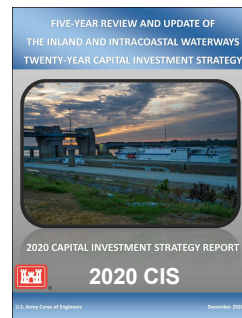
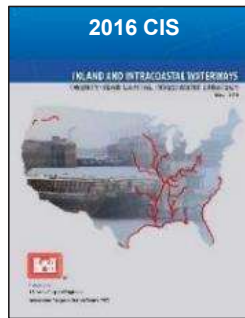
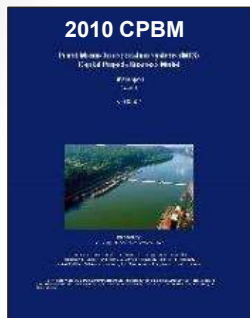
HISTORY

2010 Capital Project Business Model Report was in response *cost escalation & funding challenges*. Goals were to “identify ways to improve the Corps business model” & “developing an investment strategy”.

2016 CIS
1st Capital Investment Strategy
 Report was drafted in May 2015 & cleared by OMB in March 2016


2020 CIS
2nd Capital Investment Strategy
 5-yr Review & Update of 2016 Report. Report transmitted the report to Congress in January 2021.

2025 CIS
3rd Capital Investment Strategy
 5-yr Review & Update of 2020 Report. Target completion in spring 2025.



2014 WRRDA Section 2002, “in coordination with the Users Board, to develop and submit to Congress a report describing a **20-year strategy** for making **capital investments** on the inland and intracoastal waterways based on the application of objective, national project selection prioritization criteria”

2020 WRDA Section 2002, changed cost share to 65% General Treasury / 35% IWTF.

IJA / BIL allocated \$2.5B  for inland navigation construction.

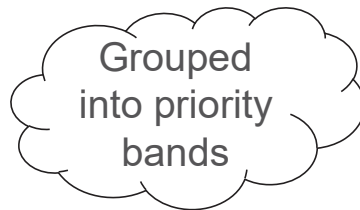
Prior reports available on IWR IWUB site at <https://www.iwr.usace.army.mil/Missions/Navigation/Inland-Waterways-Users-Board/About-the-IWUB/>



PRIMARY OUTCOMES OF CIS 2020

- Filtered projects filtered into 4 categories:

Category	Description
1	Ongoing Construction
2	Authorized & Awaiting Construction Start
3	Ongoing studies
4	Future Potential Projects



The 2020 CIS was well received and provides a strong starting point for 2025 report

- Developed 3 funding scenarios
 - Baseline – base program (50%/50% cost share)
 - Enhanced – annual program of \$400m/year
 - Maximized – complete all projects in 10-years

Project	Project Description	Waterway	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	Project Design Total (FY21 - FY40)	Project Construction Total (FY21 - FY40)	
Omaha Locks & Dam	New locks and dam	Ohio																					\$ -	\$ -	
Rees & Dams 2, 3, & 4 Monongahela River Navigation Project	New Lock	Monongahela																					\$ -	\$ -	
Kentucky Lock Addition	New Lock	Tennessee	60	89	63	11	8																\$ -	\$ 230	
Ovickameiga Lock	New Lock	Tennessee	110	165	139	132	19																\$ -	\$ 542	
NEP Upper Miss. River L&D 25	New 1200ft lock	Mississippi	6	101	104	107	110	113	20														\$ 6	\$ 555	
Three Rivers	channel	OKLAHOMA	5	5	64	82	85	11															\$ 11	\$ 246	
Upper Ohio - Montgomery L&D	New 600 ft lock	Ohio			17	8	1	42	103	168	205	145	26										\$ 26	\$ 709	
NEP FAW L&Range L&D	New 1200ft lock	Illinois								9	15	13	99	100	100	100	100	112	37				\$ 37	\$ 564	
NEP Upper Miss. River L&D 24	New 1200ft lock	Mississippi								5	16	36	113	117	136	134	134	43					\$ 41	\$ 694	
OKLAHOMA L2 channel	channel	OKLAHOMA										10	10	65	67	69	71	50	20				\$ 20	\$ 341	
NEP Upper Miss. River L&D 22	New 1200ft lock	Mississippi											9	14	9	100	100	109	111	11	12		\$ 32	\$ 564	
Upper Ohio - Emsworth L&D	New 600 ft lock	Ohio														19	20	22	117	150	266	201	60	\$ 60	\$ 834
NEP Upper Miss. River L&D 21	New 1200ft lock	Mississippi																	12	11	21	166	171	\$ 54	\$ 337
NEP FAW Peoria L&D	New 1200ft lock	Illinois																		12	21	22	111	\$ 56	\$ 112
Upper Ohio - Stebbins L&D	New 600 ft lock	Ohio																					\$ -	\$ -	
NEP Upper Miss. River L&D 20	New 1200ft lock	Mississippi																					\$ -	\$ -	
TIO'Brien	Lock Rehabilitation	Illinois																					\$ -	\$ -	

Baseline Scenario from FY 2021 – FY 2040

- Impact:**
 - Aligned stakeholders behind common message when lobbying Congress
 - IIJA / BIL referenced 2020 CIS for allocation of \$2.5B
 - USDA references CIS in multiple documents



WHAT WILL WE DO FOR CIS 2025 UPDATE

- Time Horizon: 2025 – 2044.
- Incorporate WRDA legislation changes (cost share changes 65%/35%)
- Refine Categories to Reflect Current Environment:
 - Category 1: From Ongoing Construction to (1a) Active construction and (1b) Active Design
 - Category 2: From Authorized & Awaiting Construction Start to Project authorized for construction & awaiting *design* funding
 - Category 3: from Ongoing Studies to (3a) Ongoing studies & re-evaluations and (3b) Ongoing major rehab reports
 - Category 4: Future Studies to Future Work
- Looking to the Future: Focus on identifying recapitalization of existing infrastructure and capacity expansion to prepare for future inland navigation.
- CIS is external communication '**document of record**' for Inland Navigation project funding & schedule with Congress, IWUB, and stakeholders



SCHEDULE

- **Key dates:**

- *May 2024 – Incorporating FY24 Workplan & IWUB comments and drafting report*
- Late June 2024 – Draft report review
- Mid July 2024 – USACE Sr. Leader IPR
- July/August 2024 – Briefing at IWUB Meeting
- August 2024 - Incorporate IWUB comments and finalize report
- September 2024 – Coordinate report with ASA(CW)

* Schedule does not include regular & reoccurring working meetings.



KEY TENETS/ASSUMPTIONS

- The 2025 CIS objective is to fund projects to completion as soon as possible in order to minimize cost growth & expedite construction completion.
 - Driver: Deliver **benefits** as soon as possible.
 - Concept is to efficiently fund ongoing construction while seeking opportunities to start new construction if it can be efficiently funded.
- Goal: Lock construction completed in 8-years or less.
 - A project will not start design work until 3 - 5 years before planned construction start.
 - Split design & construction into separate 'phases' with separate investment decisions.
- In all scenarios, projects must have certified cost estimates within last two years (policy compliant).
- Seek geographic distribution of projects in compliance with WRRDA 2014.

KEY TENETS/ASSUMPTIONS CONTINUED

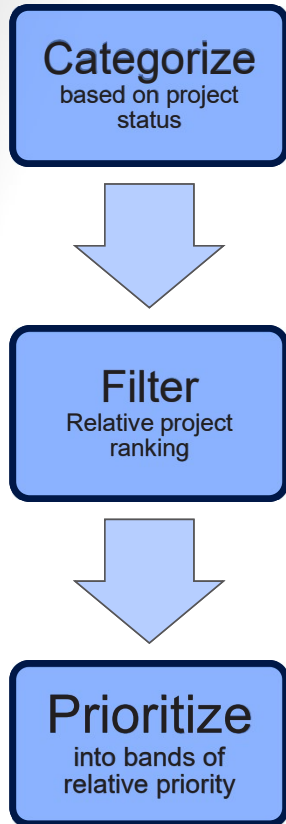
- Inflation assumed to be 4.2% per year (20-year average CWCCIS rate).
- FY24 appropriations ***funded to completion*** Chickamauga, Lower Mon 2, 3 & 4, & MKARNS Three Rivers
- FY25 funding assumptions: Kentucky funded to completion for \$332M
- USACE will seek to efficiently utilize IWTF available each fiscal year.
- The IWTF balance will not go below \$20M.
- IWTF revenue assumptions:
 - FY25 revenue = \$117M.
 - FY26 revenue = \$117M.
 - FY27 revenue = \$120M.
 - FY28 revenue = \$124M.
 - Assume that IWTF revenues after FY28 will grow annually at 3.0%.

KEY TENETS/ASSUMPTIONS CONTINUED

- Design cost assumed \$25M/year for 3 years (\$75M total).
- Lock operation assumed to be 3 years after project funded to completion.
- Cat 1A project priorities (based on amount to fund to completion):
Monongahela River L&Ds 2, 3 & 4 (Charleroi), MKARNS Three Rivers, Chickamauga, Kentucky, Montgomery, UMR Lock 25
- After current Cat 1A projects are funded to completion, the next lock construction project (i.e. MEGA project) will be LaGrange Lock followed by another lock to be determined in the future.
 - Will seek opportunities to efficiently fund smaller projects (Brazos or Major Rehabs).
- MEGA project after LaGrange (“Next Lock A”) construction first cost is assumed to be \$1.5B (2024 price level).

CATEGORIZE BASED ON PROJECT STATUS

Process



2020 Categories

CAT 1 – Ongoing construction
Olmsted (completed); Monongahela River 2, 3 & 4 (Charleroi); Kentucky; Chickamauga

CAT 2 – Authorized & awaiting construction start
Lock 25, MKARNS Three Rivers, Montgomery, LaGrange, Lock 24, MKARNS 12 ft Deepening, Emsworth, Lock 22, Lock 21, Dashields, Peoria, Lock 20, TJ O'Brien

CAT 3 – Ongoing studies

CAT 4 – Potential studies

Proposed 2025 Categories

CAT 1A – Active construction (in priority order)
Monongahela River 2, 3 & 4 (Charleroi), MKARNS Three Rivers, Chickamauga, Kentucky, Montgomery, Lock 25

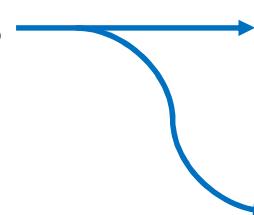
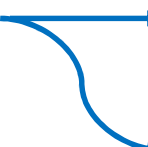
CAT 1B – Active design (in priority order)
LaGrange (based on FY24 earmark), Brazos* (require new start), Emsworth, TJ O'Brien MR *(ongoing scoping)

CAT 2 - Project authorized for construction & awaiting design start
(in alphabetical order) Colorado, Dashields, Lock 20, Lock 21, Lock 22, Lock 24, Peoria, Winfield MR

CAT 3A – Ongoing studies & re-evaluations
(in alphabetical order) Bayou Sorrel, GIWW Brazoria & Matagorda (2023 Chief report), IHNC Lock, J. Bennett Johnson 12 ft Deepening (new start in FY24), MKARNS 12 ft Deepening* (ongoing rescoping & reevaluation), Tenn-Tom/BWT Deepening Study

CAT 3B – Ongoing major rehab reports
Major rehabilitation reports listed on slide 16.

CAT 4 – Future Work
Identify future recapitalization projects and future expansion studies



DRAFT SCENARIOS

Scenario 1 – Constrained.

- Constrained scenario based on historical funding & execution trends with construction contracts are base + options.
- Continuing contract (CC) or Incremental Funding Clause (IFC) **NOT** available.
- Assumptions/constraints:
 - Limit IWTF contribution to cost share to 90% of annual IWTF revenue.
 - Example - If IWTF revenue is \$117M, total program would be \$300M (\$105M IWTF, \$195M).
 - Montgomery is funded FY25 – FY30 and Lock 25 FY27 – FY34.
 - Construction funding for LaGrange and New Lock A is spread over 17 years.

Project	Prior Year Funding Through FY23 (\$M)	FY2024 - FY2044																	FY25-FY44 Funding (\$M)							
		FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040		FY2041	FY2042	FY2043	FY2044			
Chickamauga Lock	\$ 717.60	36.8																								
MKARNS Three Rivers	\$ 270.62	186.1																								
Monongahela Locks & Dams 2, 3, & 4	\$ 1,124.36	1.00																								
NESP Mooring Cells		35.00																								
Kentucky Lock Addition	\$ 1,229.33		332																							
Montgomery Lock	\$ 897.79		205	200	165	120		111																		
Brazos River Floodgates	\$ 23.60				1	96																				
NESP Lock 25	\$ 747.72				148	100	337	236	337	348	340	352														
Major Rehabs									20	20	40	40	60	60	60	60	60	60	60	60	60	60	60	60	60	
NESP LaGrange Lock	\$ 71.00	10.00										17	18	139	149	160	172	184	198	212	228	245	262			
Next Lock A														41	43	45	164	176	189	202	217	233				

Ongoing revision based on FY24 workplan

- LEGEND:**
- Design
 - Construction
- Key Assumptions:
- 4.2% inflation
 - 3 years after lock funded to completion to be operational
 - Constrained / uncertain funding increases costs by 3%

DRAFT SCENARIOS CONTINUED

- Scenario 2 - Accelerated (8-year construction schedule).
 - Timely and certain funding to efficiently execute construction. Potential options:
 - Continuing contract (CC) or Incremental Funding Clause (IFC) available, Project funded annually PBud, or 5-year MILCON-like program.
 - Assumptions/constraints:
 - General Treasury funds available to match available IWTF. Seek to draw down available IWTF balance in FY25 – FY27.
 - After Lock 25 & Montgomery funded to completion, LaGrange funded to continue construction.

LEGEND:

Design 

Construction 

- Key Assumptions:
- 4.2% inflation
 - 3 years after lock funded to completion to be operational



Project	Prior Year Funding Through FY23 (\$M)	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	FY2043	FY2044	FY25-FY44 Funding (\$M)	
Chickamauga Lock	\$ 717.60	236.80																						\$ -
MKARNS Three Rivers	\$ 270.62	186.12																						\$ -
Monongahela Locks & Dams 2, 3, & 4	\$ 1,124.36	41																						\$ -
NESP Mooring Cells		35																						\$ -
Kentucky Lock Addition	\$ 1,229.33		332																					\$ 332
Montgomery Lock	\$ 897.79		205	460	136																			\$ 801
Brazos River Floodgates	\$ 23.60				1	96																		\$ 374
NESP Lock 25	\$ 747.72				220	280	360	368	272															\$ 1,500
Major Rehabs									20	20	40	40	60	60	60	60	60	60	60	60	60	60	60	\$ 720
NESP LaGrange Lock	\$ 71.00	40						16	17	209	377	393	354	369	376	240								\$ 2,351
Next Lock A													38	41	43	178	445	464	433	430	448	504		\$ 3,025
Next Lock B																				52	55	57		\$ 164

Ongoing revision based on FY24 workplan

DRAFT SCENARIOS CONTINUED

- Scenario 3 BIL Projects 100% Federal:
 - IIJA/BIL funded projects are completed 100% General Treasury
 - Assumptions/constraints:
 - Total annual Construction funding is \$500M - \$600M.
 - Funding toward BIL projects is approximately \$350M/year.
 - Starting in FY26, split funding (50/50) between to finish Montgomery and Lock 25.
 - Seek to fully allocate IWTF annual revenues and draw down balance.

LEGEND:

- Design 
- Construction 

- Key Assumptions:
- 4.2% inflation
 - 3 years after lock funded to completion to be operational

Project	Prior Year Funding Through FY23 (\$M)	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	FY2037	FY2038	FY2039	FY2040	FY2041	FY2042	FY2043	FY2044	FY25-FY44 Funding (\$M)
Chickamauga Lock	\$ 718	236.80																					\$ 718
MKARNS Three Rivers	\$ 271	186.12																					\$ 271
Monongahela Locks & Dams 2, 3, & 4	\$ 1,124	41																					\$ 1,124
NESP Mooring Cells		35																					\$ 35
Kentucky Lock Addition	\$ 1,229		332																				\$ 1,229
Montgomery Lock	\$ 898		205	350	175	175	71																\$ 898
Brazos River Floodgates	\$ 24		1	88	226																		\$ 24
NESP Lock 25	\$ 748				175	175	240	315	380	210													\$ 748
Major Rehabs									20	20	40	40	60	60	60	60	60	60	60	60	60	60	\$ 720
NESP LaGrange Lock	\$ 71	40		293	147	378	350	352	227														\$ 71
Next Lock A						31	32	33	362	348	347	275	287	265	338								\$ 2,319
Next Lock B												41	43	45	315	309	504	378	394	365			\$ 2,393
Emsworth Lock	\$ 83.40					31	32	33	139	348	347	346	344	376	365								\$ 83.40
Next Lock C															45	46	48	363	378	350	262		\$ 1,492

Ongoing revision based on FY24 workplan



QUESTIONS?