

# 2025 CAPITAL INVESTMENT STRATEGY

Inland Waterways Users Board Meeting #103  
St. Charles, MO

August 1, 2024



U.S. ARMY



US Army Corps  
of Engineers®





# PURPOSE

- To receive feedback on draft report documenting the 20-year capital investment strategy (funding scenarios).
- Section 302(d) of WRDA 1986, as amended requires “coordination with the Users Board” in developing the CIS.
- The CIS is a planning framework that informs the normal budget process.
- The CIS aligns & manages project work and funding to complete lock in 8 years.



# WORK COMPLETED & NEXT STEPS

- **Work completed by CIS PDT (USACE & stakeholders):**
  - Scope, schedule, assumptions, & key tenets – January 2024
  - Draft scenarios – March 2024
  - CIS presentation & feedback at IWUB #102 – April 2024
  - Draft report – June 2024
- **Next Steps**
  - August 2024 - Incorporate IWUB comments & finalize report
  - September 2024 – Submit report to ASA(CW)
  - **Goal:** January 2025 - Submit cleared report to Congress



# 2025 CIS ACTIVE PROJECTS

## Cat 1a Active Construction

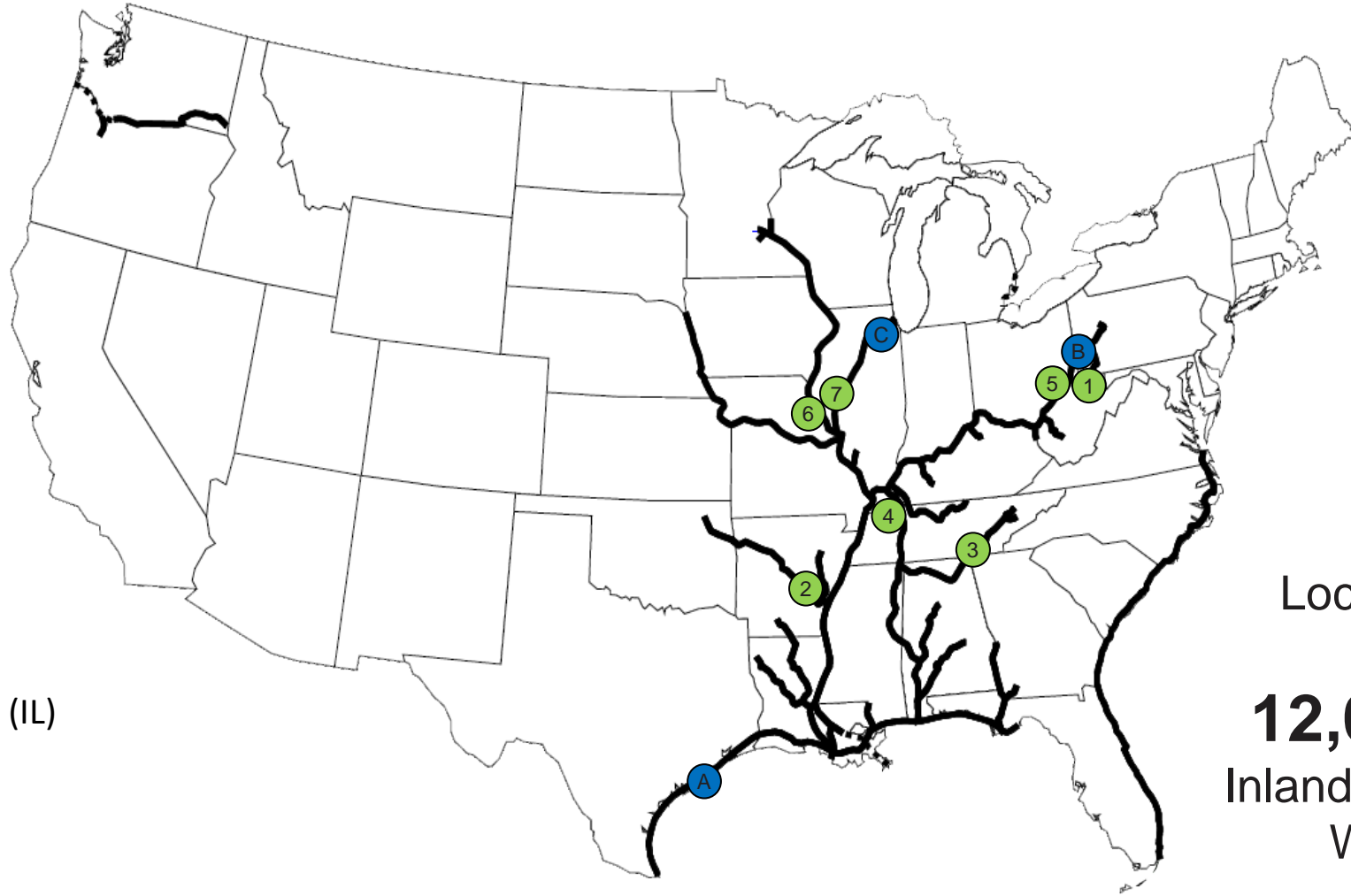
(in priority order)

1. Monongahela River 2, 3 & 4 (Charleroi) (PA)
2. Three Rivers Project (AR)
3. Chickamauga Lock (TN)
4. Kentucky Lock (TN)
5. Montgomery Lock (PA)
6. L&D 25 (MO, IL)
7. Lagrange L&D (IL)

## Cat1b Active Design

(in priority order)

- A. Brazos River (TX)
- B. Emsworth Lock (PA)
- C. TJ O'Brien major rehabilitation (IL)



# 237

Lock Chambers

# 12,000 miles

Inland & Intracoastal  
Waterways

# SCOPE, ASSUMPTIONS, & KEY TENETS

- Time Horizon: 2025 – 2044 (statutory 20-yr timeline)
- Incorporates WRDA legislation changes (cost share 65%/35%)
- Refines Categories to Reflect Current Environment:
  - Category 1a Active Construction and Category 1b Active Design
  - Category 2 Project authorized for construction & awaiting design funding
  - Category 3a Ongoing studies & re-evaluations and Category 3b Ongoing major rehab reports
  - Category 4 Future Work
- Fund projects in order to minimize cost growth and expedite construction completion.
- Target is to complete lock construction in 8 years or less.
  - A project will not start design work until 3 - 5 years before planned construction start.



# SCENARIO SUMMARY

<u>Scenario</u>	<u>Description</u>	<u>Summary</u>
<b>Scenario 1 - Inefficient</b>	Constrained funding scenario based on historical funding & execution trends. Assumes that projects will have multiple construction contracts with base and options.	<p>In the 20 years from FY 2025 to FY 2044, eight construction projects could be funded to completion, two would be ongoing, and several major rehabilitations completed for a total of \$7.68 billion.</p> <ul style="list-style-type: none"> <li>Completed projects: Chickamauga; Three Rivers; Mon Locks 2,3,4; NESP Mooring Cells; Kentucky; Montgomery; Brazos; &amp; Lock 25</li> <li>Ongoing construction: Lagrange &amp; Next Lock A</li> <li>Major Rehabilitation project funding: \$720M</li> </ul>
<b>Scenario 2 - Efficient</b>	Accelerated construction timeline with MEGA project completed in eight years or less. Assumes that there is timely and certain funding needed to execute construction efficiently. Assumes that each project will one construction contract to complete construction.	<p>In the 20 years from FY 2025 to FY 2044, ten construction projects could be funded to completion, one would be ongoing, and several major rehabilitations completed for a total of \$9.75 billion.</p> <ul style="list-style-type: none"> <li>Completed and operational projects: Chickamauga; Three Rivers; Mon Locks 2,3,4; NESP Mooring Cells; Kentucky; Montgomery; Brazos; Lock 25; &amp; Lagrange</li> <li>Funded to completion, not operational: Next Lock A</li> <li>Ongoing construction: Next Lock B</li> <li>Major Rehabilitation project funding: \$720M</li> </ul> <p>➡ <u>Comparison to Scenario 1 Inefficient</u>: Additional \$2.1B funds LaGrange and Next Lock A to completion</p>
<b>Scenario 3 - Enhanced / BIL Projects 100% Federal</b>	Annual program ranges between \$500M - \$600M with BIL projects approximately \$350M/year. IIJA/BIL funded projects are completed with 100% General Treasury (no IWTF funds). Assumes that each project will have one construction contract to complete construction.	<p>In the 20 years from FY 2025 to FY 2044, eleven construction projects could be funded to completion, one would be ongoing, and several major rehabilitations completed for a total of \$11.55 billion.</p> <ul style="list-style-type: none"> <li>Completed and operational projects: Chickamauga; Three Rivers; Mon Locks 2,3,4; NESP Mooring Cells; Kentucky; Montgomery; Brazos; Lock 25; Lagrange; &amp; Next Lock A</li> <li>Funded to completion, not operational: Next Lock B</li> <li>Ongoing construction: Next Lock C</li> <li>Major Rehabilitation project funding: \$720M</li> </ul> <p>➡ <u>Comparison to Scenario 2 Efficient</u>: Additional \$1.8B funds to completion Next Lock B and starts Next Lock C</p>





# NEXT MEGA PROJECT

- The PDT recommends that the decision on starting next project after LaGrange Lock be deferred until there is potential to efficiently fund another MEGA project. Therefore, the next MEGA project is generically referred to as “Next Lock A”, “Next Lock B”, etc.
  - Current estimate to finish Cat 1a Active Construction projects ranges from \$6.2B (Scenario 1 – Inefficient) to \$4.9B (Scenario 3 – Enhanced/BIL 100% Fed)
  - The earliest possible construction start of next MEGA project is 2034 and as late as 2042
- Potential next MEGA project (based on current authorization):
  - NESP Lock 24
  - Emsworth Lock
  - NESP Lock 22
- Additionally, there are Category 3a Ongoing studies & re-evaluations projects (ex. IHNC, Bayou Sorrel, or MKARNS 12 ft. channel) that could be the next MEGA project if it is recommended and/or authorized.



# SUMMARY

- The 5-yr update of Capital Investment Strategy is a statutory requirement.
- CIS is a planning framework that informs the budget. It is tool to managing the work within available funding.
  - Annual updates are essential to ensure current information is available to decision makers.
- Goal is to complete lock construction in 8 years or less.
  - Given current funding, only 2 locks at a time can be efficiently funded.
- Goal is to submit 2025 CIS to Congress NLT January 2025.





# DISCUSSION

# BACKUP SLIDES



U.S. ARMY



US Army Corps  
of Engineers®



# FUNDING SCENARIOS

## ■ Scenario 1 – Inefficient:

- Inefficient & Constrained funding based on historical funding & execution trends
- Continuing contract (CC) or Incremental Funding Clause (IFC) not available.
- Lock construction requires multiple base + options contracts.

### LEGEND:

Design

Construction

Key Assumptions:

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

Project	Prior Year Funding Through FY24 (\$M)	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	\$ 954.40																					\$ -
MKARNS Three Rivers	\$ 456.74																					\$ -
Monongahela Locks & Dams 2, 3, & 4	\$ 1,165.36																					\$ -
NESP Mooring Cells	\$ 35.00																					\$ -
Kentucky Lock Addition	\$ 1,229.33	332																				\$ 332
Montgomery Lock	\$ 897.79	205	206	175	131		117															\$ 834
Brazos River Floodgates	\$ 23.60				96									223	239							\$ 558
NESP Lock 25	\$ 747.72			168	103	326	224	338	339	320	325	124										\$ 2,267
Major Rehabs								20	20	40	40	60	60	60	60	60	60	60	60	60	60	\$ 720
NESP LaGrange Lock	\$ 111.00									18	19	152	163	175	188	201	216	232	249	267	287	\$ 2,166
Next Lock A																46	50	53	202	217	233	\$ 802

**Total Funding:** \$ 537 \$ 206 \$ 343 \$ 331 \$ 326 \$ 341 \$ 358 \$ 359 \$ 378 \$ 384 \$ 335 \$ 223 \$ 458 \$ 487 \$ 308 \$ 326 \$ 345 \$ 511 \$ 544 \$ 580 \$ 7,680

**Est. Annual IWTF Revenue:** \$ 117 \$ 120 \$ 124 \$ 128 \$ 131 \$ 135 \$ 139 \$ 144 \$ 148 \$ 152 \$ 157 \$ 162 \$ 166 \$ 171 \$ 177 \$ 182 \$ 187 \$ 193 \$ 199 \$ 205  
**IWTF Balance on 30 Sep:** \$ 226 \$ 274 \$ 278 \$ 289 \$ 307 \$ 323 \$ 337 \$ 355 \$ 370 \$ 388 \$ 427 \$ 511 \$ 517 \$ 518 \$ 587 \$ 654 \$ 721 \$ 735 \$ 743 \$ 744



# FUNDING SCENARIOS

## ■ Scenario 2 – Efficient:

- Accelerated construction to finish lock construction in 8 years or less
- Requirement: Timely and certain funding to efficiently execute construction.
  - Potential options: Continuing contract (CC) or Incremental Funding Clause (IFC), Project funded annually PBud, or 5-year MILCON-like program
- Lock construction completed in single contract

Project	Prior Year Funding Through FY23 (\$M)	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	\$ 954.40																					\$ -
MKARNS Three Rivers	\$ 456.74																					\$ -
Monongahela Locks & Dams 2, 3, & 4	\$ 1,165.36																					\$ -
NESP Mooring Cells																						\$ -
Kentucky Lock Addition	\$ 1,229.33	332																				\$ 332
Montgomery Lock	\$ 897.79	205	293	293																		\$ 791
Brazos River Floodgates	\$ 23.60		88					266														\$ 355
NESP Lock 25	\$ 747.72			300	500	500	200															\$ 1,500
Major Rehabs								20	20	40	40	60	60	60	60	60	60	60	60	60	60	\$ 720
NESP LaGrange Lock	\$ 111.00					15	16	307	390	377	363	354	361									\$ 2,182
Next Lock A											38	39	41	410	427	445	416	423	441			\$ 2,681
Next Lock B																	48	50	52	510	524	\$ 1,185

Total Funding: \$ 537 \$ 381 \$ 593 \$ 500 \$ 515 \$ 216 \$ 593 \$ 410 \$ 417 \$ 440 \$ 453 \$ 462 \$ 470 \$ 487 \$ 505 \$ 524 \$ 533 \$ 553 \$ 570 \$ 584 \$ 9,746

Est. IWTF Revenue: \$ 117 \$ 120 \$ 124 \$ 128 \$ 131 \$ 135 \$ 139 \$ 144 \$ 148 \$ 152 \$ 157 \$ 162 \$ 166 \$ 171 \$ 177 \$ 182 \$ 187 \$ 193 \$ 199 \$ 205  
 IWTF Balance on 30 Sep: \$ 226 \$ 212 \$ 129 \$ 81 \$ 32 \$ 92 \$ 23 \$ 24 \$ 26 \$ 24 \$ 22 \$ 22 \$ 24 \$ 24 \$ 24 \$ 22 \$ 23 \$ 22 \$ 21 \$ 22



# FUNDING SCENARIOS

- Scenario 3 – Enhanced / BIL project 100% Federal:
  - Accelerated construction to finish lock construction in 8 years or less
  - Requirement: Timely and certain funding to efficiently execute construction.
  - MKRANS Three Rivers, Kentucky, Montgomery, and NESP Lock 25 were intended to be funded to completion in IIJA/BIL 2022. Assumption is that these projects will be completed at 100% Federal.
  - Total annual funding is \$500M - \$600M. Funding for BIL projects is approximately \$350M/year.
  - Lock construction completed in single contract

Project	Prior Year Funding Through FY24 (\$M)	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	\$ 954.40																					\$ -
MKRANS Three Rivers	\$ 456.74																					\$ -
Monongahela Locks & Dams 2, 3, & 4	\$ 1,165.36																					\$ -
NESP Mooring Cells																						\$ -
Kentucky Lock Addition	\$ 1,229.33	332																				\$ 332
Montgomery Lock	\$ 897.79	205	350	175	61																	\$ 791
Brazos River Floodgates	\$ 23.60		88						139	145												\$ 372
NESP Lock 25	\$ 747.72			175	289	350	350	336														\$ 1,500
Major Rehabs								20	20	40	40	60	60	60	60	60	60	60	60	60	60	\$ 720
NESP LaGrange Lock	\$ 111.00			250	250	250	250	211	406	317												\$ 1,935
Next Lock A								33	35	36	544	535	492	461	410							\$ 2,546
Next Lock B													41	43	45	540	541	540	487	486	472	\$ 3,194
Next Lock C																			52	55	57	\$ 164

Total Funding: \$ 537 \$ 438 \$ 600 \$ 600 \$ 600 \$ 600 \$ 600 \$ 600 \$ 600 \$ 538 \$ 584 \$ 595 \$ 593 \$ 564 \$ 514 \$ 600 \$ 601 \$ 600 \$ 600 \$ 600 \$ 589 \$ 11,554

Est. IWTF Revenue: \$ 117 \$ 120 \$ 124 \$ 128 \$ 131 \$ 135 \$ 139 \$ 144 \$ 148 \$ 152 \$ 157 \$ 162 \$ 166 \$ 171 \$ 177 \$ 182 \$ 187 \$ 193 \$ 199 \$ 205  
 IWTF Balance on 30 Sep: \$ 414 \$ 503 \$ 539 \$ 579 \$ 623 \$ 671 \$ 718 \$ 651 \$ 611 \$ 559 \$ 507 \$ 461 \$ 430 \$ 422 \$ 388 \$ 359 \$ 337 \$ 320 \$ 308 \$ 307

# HISTORY

## 2010 Capital Project Business Model

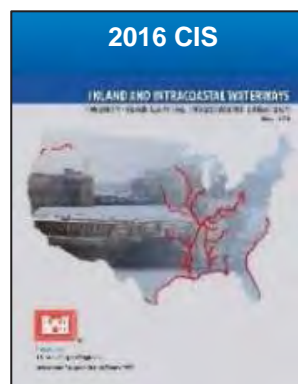
Report was in response **cost escalation & funding challenges**. Goals were to “identify ways to improve the Corps business model” & “developing an investment strategy”.



## 2016 CIS

### 1<sup>st</sup> Capital Investment Strategy

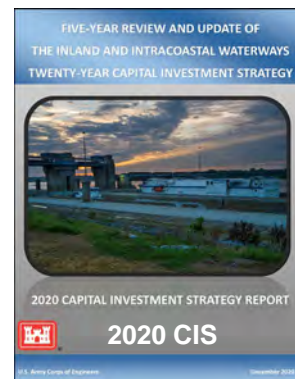
Report was drafted in May 2015 & sent to Congress in March 2016.



## 2020 CIS

### 2<sup>nd</sup> Capital Investment Strategy

5-yr Review & Update of 2016 Report. Report transmitted the report to Congress in January 2021.



## 2025 CIS

### 3<sup>rd</sup> Capital Investment Strategy

5-yr Review & Update of 2020 Report. Target completion NLT Jan 2025.



Nov. 2022 update of scenarios and project status / work categories.

**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.

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





# WHAT IS THE CIS?

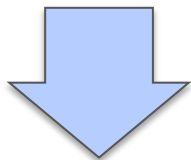
- The CIS is a statutory requirement to develop and *update every 5-years* a 20-year capital investment strategy.
  - CIS is “living document” with at least annual updates of funding scenarios.
- Section 302(d) of WRDA 1986, as amended requires “coordination with the Users Board” in developing the CIS.
- The CIS is a planning framework that informs the normal budget process.
- The CIS aligns & manages project work and funding to complete lock in 8 years.
  - Given current funding, only 2 locks at a time can be efficiently funded.



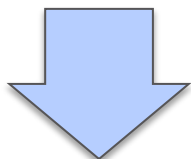
# CATEGORIZE BASED ON PROJECT STATUS

## Process

Categorize



Filter



Prioritize

## 2020 CIS

### CAT 1 – Ongoing construction

Olmsted; 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

## 2025 CIS

### CAT 1a – Active construction (in priority order)

Monongahela River 2, 3 & 4 (Charleroi), MKARNS Three Rivers, Chickamauga, Kentucky, Montgomery, Lock 25, LaGrange

### CAT 1b – Active design (in priority order)

Brazos\* (require new start), Emsworth, T.J. 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

### CAT 3b – Ongoing major rehab reports

### CAT 4 – Future Work

Identify future recapitalization projects and future expansion studies



# COMPARISON OF 2020, 2022 & 2025 PROJECT RANKING

<u>Project Title</u>	<u>2020</u>	<u>Interim 2022 Update</u>	<u>2025 Category</u>	<u>Status</u>
Olmsted Locks and Dam	Category 1	Category 1	NA	Complete.
Locks & Dams 2, 3, and 4 (Charleroi)	Category 1	Category 1	Cat 1a Active Construction	Funded to completion
Kentucky Lock Addition	Category 1	Category 1	Cat 1a Active Construction	Construction ongoing. Remaining funding \$332M.
Chickamauga Lock	Category 1	Category 1	Cat 1a Active Construction	Funded to completion
NESP Lock 25	Category 2 – Group A	Category 1	Cat 1a Active Construction	Design ongoing. Lock contract scheduled for award in 2027.
Three Rivers	Category 2 – Group A	Category 1	Cat 1a Active Construction	Funded to completion
Montgomery Lock	Category 2– Group A	Category 1	Cat 1a Active Construction	Solicitation. Contract award scheduled in 2024.
NESP LaGrange Lock	Category 2– Group A	Category 2– Group A	Cat 1b Active Design	Design ongoing. Scheduled to be complete in Sep 2025.
Brazos River Floodgates	Category 3	Category 2– Group A	Cat 1b Active Design	Design complete. Awaiting new start & construction funding.
NESP Lock 24	Category 2– Group B	Category 2– Group B	Cat 2 authorized & awaiting design start	
MKARNS 12 ft. channel	Category 2– Group B	Category 1	Cat 3 Ongoing Studies & Re-evaluations	
Emsworth Lock	Category 2– Group B	Category 1	Cat 1b Active Design	Ongoing design. Potential funds move to Montgomery.
NESP Lock 22	Category 2– Group C	Category 2– Group B	Cat 2 authorized & awaiting design start	
NESP Lock 21	Category 2– Group C	Category 2– Group C	Cat 2 authorized & awaiting design start	
NESP Peoria Lock	Category 2– Group C	Category 2– Group C	Cat 2 authorized & awaiting design start	
Colorado River Locks	Category 3	Category 3	Cat 2 authorized & awaiting design start	
Dashields Lock	Category 2– Group D	Category 1	Cat 2 authorized & awaiting design start	
NESP Lock 20	Category 2– Group D	Category 2– Group D	Cat 2 authorized & awaiting design start	
T.J. O'Brien major rehabilitation	Category 2– Group D	Category 1	Cat 1b Active Design	Ongoing project scoping.

## 2020 & 2022 Category:

- Category 1 Ongoing Construction
- Category 2 Authorized & Awaiting Construction Start
- Category 3 Ongoing Studies
- Category 4 Potential Studies

## 2025 Category:

- Category 1a – Active construction
- Category 1b – Active design
- Category 2 - Project authorized for construction & awaiting design start
- Category 3a – Ongoing studies & re-evaluations
- Category 3b – Ongoing major rehab reports
- Category 4 – Future Work