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Center Hill Lake

Caney Fork River, TN



Project Features

- Flood Control Act of 1938 and the Rivers and Harbors Act of 1946. Primary authorized purposes are flood control, production of hydroelectric power, recreation, water supply, and environmental stewardship
- Center Hill Dam is located 26.6 miles up the Caney Fork River in DeKalb County, approximately 60 miles east of Nashville, Tennessee.
- The dam stands at a maximum height of 250' above the bed of the river and has a total crest length of 2,160'. The dam impounds Center Hill Lake, a reservoir able to contain and store a maximum of 2,092,000 acre-feet of water. A smaller, 770-foot long earthen dam blocks a natural saddle in the rim of the lake just upstream from the main dam.
- The hydropower plant operates three, main Francis turbine-generator units having a combined rated capacity of 135,000 kilowatts (kW). These units are being rehabbed with aerating Francis turbines with a capacity of 156,000 kilowatts which incorporates the 15% overload capability of the original units.
- Center Hill has 3 campgrounds, 5 day use recreation areas, 9 commercial marinas, 2 State Parks, 2 State Natural Areas and 4 additional water access points.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects on to the local and regional economy including: reduced electrical power production capabilities and increase potential for flooding along the Cumberland River.
- Closure of recreation areas will result in degradation of facilities, negative public recreation and potential Congressional inquiries



Regional Importance

- Center Hill Hydropower Plant, which produces approximately 321 million kilowatt hours of electricity annually, has the capacity to provide power quickly in order to meet peak power demands. Center Hill hydropower is renewable, reliable, clean, and efficient power. Hydroelectric power generation saves valuable fossil fuels for future generations.
- Center Hill Dam has prevented over \$1.058B in flood damages since becoming fully operational.
- The Center Hill Lake Resource Manager's Office is responsible for environmental stewardship of over 38,000 acres of water and land, thus protecting valuable natural resources and ensuring proper use of public property.
- The lake also hosts over 1 million visitors annual with outdoor recreational opportunities bringing \$35 million in visitor spending within 30 miles of the lake.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Hydropower	\$2,371	\$566	\$2,937	\$2,513	\$600	\$3,113	\$3,045	\$101	\$3,146
Joint	\$2,177	\$591	\$2,768	\$2,018	\$445	\$2,463	\$2,130	\$213	\$2,343
Recreation	\$1,556		\$1,556	\$1,537		\$1,537	\$1,571		\$1,571
Environmental Stewardship	\$231	\$185	\$416	\$196	\$226	\$422	\$189	\$226	\$415
Water Supply	\$42		\$42	\$42		\$42	\$44		\$44
Total	\$4,006	\$776	\$7,719	\$3,793	\$671	\$7,577	\$3,934	\$439	\$7,519

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21 Funding Requests for Maintenance (\$1,000)		Maintenance Needs
	Total	Packages \$	
Hydropower	\$150	\$150	Refurbish Governors
		\$450	Repair Power Plant Roof
Joint	\$3,415	\$100	Cumberland River System Assessment Study
		\$3,300	Phase 1 Repair & Provide Protective Coating to Spillway Gates
		\$15	Joint Activities for Dam Safety-Instrumentation, Data Collection, Analysis, FERC #537
Recreation	\$1,858	\$160	Repair Three Designated Beach Swim Lines and Depth Markers .
		\$205	Replace Restroom - Hurricane Bridge Recreation Area
		\$1,315	Riverbank Stabilization - Long Branch Recreation Area Campground
		\$178	Roadway Repairs - Hurricane Bridge Recreation Area
		\$260	Maintenance of Recreation Features
		\$10	Maintenance of Recreation Features not associated with PSAs

Additional Information

- Fee Lands: 38,551 acre
- Flowage Easement Lands: 528 acre
- Project Boundary Line Marked: 330 mile
- FY 19 Use Fee Revenues: \$373,39

Congressional Interests

Representative Scott DesJarlais, R-TN-4
 Representative John Rose, R-TN-6
 Senator Lamar Alexander, R-TN
 Senator Diane Black, R-TN



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Cheatham Lock and Dam

Cumberland River, Ashland City, TN



Project Features

- Authorization: Cheatham Lock and Dam Project was authorized by the Rivers and Harbor Act, approved 24 July, 1946. Inclusion of hydroelectric capability was approved on 19 June 1952. Primary authorized purposes are navigation, production of hydroelectric power, recreation, water supply and environmental stewardship.
- Cheatham Dam is located at mile 148.7 on the Cumberland River, approximately 41 river miles downstream from Nashville, Tennessee
- The project was complete for full beneficial use in November of 1960.
- Cheatham Dam is a concrete gravity type spillway extending 495 feet across with a 75 foot trapezoidal spillway crest controlled by seven tainter gates, 27 feet high by 60 feet wide. The lock chamber is 800' x 110', and provides a normal lift of 26'.
- Cheatham Dam has three hydroelectric power generators. Each unit contains a generator and a Kaplan turbine which weighs 175 tons and is capable of production 20,000 horsepower with 22 foot of head. Total potential output of all three units is 36 megawatts
- There are 9 Corps managed recreation areas on Cheatham Lake

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; and reduced electrical power production capabilities
- Closure of recreation areas will result in degradation of facilities, negative public reaction and potential Congressional inquiries.



Regional Importance

- Cheatham Lock passed over 11.1 million tons of cargo in 2019 valued at over \$2B of commodities and providing a transportation rate savings of \$154.6M. Commodities transported along the Cumberland River consist of coal, petroleum, crude materials, manufactured goods, farm products, chemicals and machinery. The lock is open 24 hours a day, 7 days a week.
- The estimated average annual energy output of the hydroelectric power plant is 186,000,000 kilowatt-hours. This production is enough to power an estimated 12,500 homes annually.
- There are 9 Corps operated recreation areas (including two campgrounds), and three water access points. The lake receives approximately 1.4 million visits annually with \$44.5 million in visitor trip sales revenue created within 30 miles of the project.
- The reservoir supplies numerous municipal commercial water users.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Hydropower	\$2,156	\$913	\$3,069	\$2,285	\$968	\$3,253	\$185	\$2,920	\$3,105
Navigation	\$2,242	\$402	\$2,644	\$2,287	\$404	\$2,691	\$2,333	\$3,112	\$5,445
Joint	\$1,140	\$334	\$1,474	\$1,103	\$90	\$1,193	\$1,106	\$93	\$1,199
Recreation	\$910		\$910	\$885		\$885	\$900		\$900
Environmental Stewardship	\$215	\$50	\$265	\$170	\$58	\$228	\$186	\$44	\$230
Water Supply	\$22		\$22	\$22		\$22	\$23		\$23
Total	\$4,529	\$786	\$8,384	\$4,467	\$552	\$8,272	\$4,548	\$3,249	\$10,902

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21 Funding Requests for Maintenance (\$1,000)		Maintenance Needs
	Total	Packages \$	
Hydropower	\$140	\$140	Refurbish Governors
Navigation	\$65	\$35	Standardization of Lock Lighting
		\$30	Standardization of Paint & Coatings
Joint	\$83	\$83	Cumberland River System Assessment Study
Recreation	\$365	\$37	Boat Ramp Repairs
		\$28	Correct Storm water Drainage Problems - Lock A Campground
		\$300	Improve Bank Fishing Accessibility - Tailwater Left Bank
Environmental Stewardship	\$30	\$30	Update Historical Properties Plan

Additional Information

- FY19 Lock Tonnage: 11,146,01
- FY 18 National Rank: 5
- Current Miter Gate In Service Date: 195
- Projected Year Lock Miter Gates Reac "F" Condition:
Downstream: 2017 Upstream: 2022
- Projected Miter Gate Replacement
Downstream: 2024 Upstream: 2029
- Fee Lands: 5,717 acre
- Flowage Easement Lands: 1,208 acre
- Project Boundary Line Marked: 105 mile
- FY 19 Use Fee Revenues: \$186,9 4

Congressional Interests

- Representative Jim Cooper, D-TN-5
- Representative John Rose, R-TN-6
- Senator Lamar Alexander, R-TN
- Senator Marsha Blackburn, R-TN



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Cordell Hull Lock and Dam

Cumberland River, Carthage, TN



Project Features

- Authorization: Cordell Hull Lock, Dam, and Lake Project was authorized by the Rivers and Harbors Act of 1946 and the Flood Control Act of 1938. Primary authorized purposes are navigation, production of hydroelectric power, recreation, and environmental stewardship.
- Cordell Hull Lock and Dam is located on mile 313.5 of the Cumberland River in Smith County, Tennessee, approximately 50 miles east of Nashville, Tennessee.
- Cordell Hull is a concrete-gravity and earthfill dam that stands at a maximum height of 93' above the bed of the river and has a total crest length of 1,306'. The lock chamber is 400' x 84', and provides a normal lift of 59'.
- Cordell Hull Dam has three Kaplan turbine hydroelectric power generators, having a combined rated capacity of 99,900 kilowatts (kW). Estimated annual energy output is 350,000,000 kW
- There are 10 Corps managed recreation areas and 9 water access points on Cordell Hull Lake.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; and reduced electrical power production capabilities
- Closure of recreation areas will result in degradation of facilities, negative public reaction and potential Congressional inquiries.



Regional Importance

- Cordell Hull Power Plant, which produces approximately 398 million kilowatt hours of electricity annually, has the capacity to provide power quickly in order to meet peak power demands. Cordell Hull hydropower is renewable, reliable, clean, and efficient power. Hydroelectric power generation saves valuable fossil fuels for future generations.
- Over 677,000 visit the 2 campgrounds , 7 day use recreation areas, 15.25 miles of hiking trails, 22 miles of horseback riding trails, and 2 commercial marinas , bringing \$20 million in visitor spending within 30 miles of the lake. The land surrounding the lake also includes several large wildlife management areas managed by the State of Tennessee, providing some of the best public hunting opportunities in the state.
- The Cordell Hull Lake Resource Manager's Office is responsible for the environmental stewardship of over 27,000 acres of water and land, thus protecting valuable natural resources and ensuring proper use of public property.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Hydropower	\$2,630	\$923	\$3,553	\$2,788	\$661	\$3,449	\$2,486	\$895	\$3,381
Navigation	\$508	\$50	\$558	\$519	\$51	\$570	\$532	\$52	\$584
Joint	\$1,611	\$229	\$1,840	\$1,734	\$234	\$1,968	\$1,637	\$241	\$1,878
Recreation	\$1,805	\$228	\$2,033	\$1,789		\$1,789	\$1,750		\$1,750
Environmental Stewardship	\$349	\$223	\$572	\$95	\$173	\$268	\$99	\$275	\$374
Water Supply	\$15		\$15	\$15		\$15	\$16		\$16
Total	\$4,288	\$730	\$8,571	\$4,152	\$458	\$8,059	\$4,034	\$568	\$7,983

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21 Funding Requests for Maintenance (\$1,000)		Maintenance Needs
	Total	Packages \$	
Hydropower	\$11,213	\$250	Refurbish Governors
		\$848	Rehab Powerhouse Elevator
		\$8,000	Repair Blade Trunnion, Repack and Re-wind the Generator.
		\$1,600	Repair Generator Cooling Water Piping and Coolers
		\$515	Replace Diesel Station Service Generator
Joint	\$1,463	\$103	Cumberland River System Assessment Study
		\$150	Install Dam Embankment Monitoring Instrumentation/Investigate Leak at Dam and Lock Interface
		\$1,210	Right Bank Bluff Stabilization
Recreation	\$741	\$254	Maintenance of Recreation Areas and Facilities
		\$260	Maintenance of Recreation Features
		\$217	Replace primary electric - Salt Lick Campground.
		\$10	Maintenance of Recreation Features not associated with PSA's
Environmental Stewardship	\$230	\$150	Management of Natural Resources for ES
		\$75	Management of Natural Resources for ES (Forest/Vegetation)
		\$5	Fisheries Management, Operations for Environmental Stewardship

Additional Information

- FY19 Lock Tonnage: 0
- National Rank: N/A
- Current Miter Gate In Service Date: 1973
- Projected Year Lock Miter Gates Reach "F" Condition:
Downstream: 2026 Upstream: 2026
- Projected Miter Gate Replacement:
Downstream: 2038 Upstream: 2038
- Fee Lands: 25,619 acres
- Flowage Easement Lands: 449 acres
- Project Boundary Line Marked: 410 miles
- FY 19 Use Fee Revenues: \$659,249

Congressional Interests

Representative John Rose, R-TN-6
 Senator Lamar Alexander, R-TN
 Senator Marsha Blackburn, R-TN



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Dale Hollow Lake

Obey River, Celina, TN



Project Features

- Authorization: Flood Control Act of 1938 and the Rivers and Harbor Act of 1946. Primary authorized purposes are flood control, production of hydroelectric power, recreation, water supply, and environmental stewardship.
- Dale Hollow Dam is located approximately 3 miles east of Celina, Tennessee on the Obey River, 7.3 miles above its confluence with the Cumberland River.
- The dam stands at a maximum height of 200' above the bed of the river and has a total crest length of 1,717'. The dam impounds Dale Hollow Lake, a reservoir able to store a maximum of 1,706,000 acres feet of water. The dam provides 353,000 acre feet of flood storage capacity for a 935 square mile drainage basin.
- The hydroelectric power plant operates three, main Francis turbine-generator units having a combined rated capacity of 54,000 kilowatts.
- Dale Hollow Lake reaches 61 miles upstream from Dale Hollow Dam. There are 620 miles of shoreline, 27,700 acres of water and 24,842 acres of land at normal summer pool (elev 651).

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; and reduced electrical power production capabilities
- Closure of recreation areas will result in degradation of facilities, negative public reaction and potential Congressional inquiries.



Regional Importance

- Over 890,000 people visit the lake's 10 Corps managed recreation areas (including 4 campgrounds) 3 swimming beaches, 34 primitive camping locations (80 sites), hiking trails, 15 commercial marinas, and a State Park. Dale Hollow Lake is a regional tourist vacation destination attracting a significant number of visitors from Ohio and Indiana in addition to housing local Tennessee and Kentucky visitors.
- Dale Hollow Power Plant, which produces approximately 127 million kilowatt hours of electricity annual, has the capacity to provide power quickly in order to meet peak power demands. Dale Hollow hydropower is renewable, reliable, clean and efficient power. Hydroelectric power generation saves valuable fossil fuels for future generations.
- The dam prevented over \$550M in flood damages since becoming fully operational.
- 890,000 visits resulted in \$35M in visitor spending within 30 miles of Dale Hollow Lake.
- Reservoir supplies numerous municipal and commercial water users.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Hydropower	\$2,728	\$649	\$3,377	\$2,892	\$688	\$3,580	\$2,915	\$693	\$3,608
Joint	\$1,676	\$249	\$1,925	\$1,616	\$190	\$1,806	\$1,650	\$408	\$2,058
Recreation	\$1,727		\$1,727	\$1,704		\$1,704	\$1,750		\$1,750
Environmental Stewardship	\$454	\$310	\$764	\$217	\$314	\$531	\$222	\$214	\$436
Water Supply	\$35		\$35	\$35		\$35	\$37		\$37
Total	\$3,892	\$559	\$7,828	\$3,572	\$504	\$7,656	\$3,659	\$622	\$7,889

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21 Funding Requests for Maintenance (\$1,000)		Maintenance Needs
	Total	Packages \$	
Hydropower	\$2,208	\$208	Refurbish Governors
		\$2,000	Station Service Generator Rehab
Joint	\$7,853	\$103	Cumberland River System Assessment Study
		\$4,200	Replace Spillway Gate Machinery & Controls
		\$250	Repair Spillway Bridge deck
		\$3,300	Phase 1 Repair & Provide Protective Coating to Spillway Gates
Recreation	\$1,989	\$150	Replace Campground Entrance Station - Willow Grove
		\$1,400	Replace Sewer Infrastructure Outfall #3 - Obey River Campground
		\$175	Design Acquisition for Replacment of Sewer Outfalls 001 & 002 with New Sewer System at Obey River Campground
		\$264	Maintenance of Recreation Features
		\$10	Maintenance of Recreation Features not associated with PSAs
Environmental Stewardship	\$50	\$50	Archaeological and cultural resource GIS database inventory

Additional Information

- Fee Lands: 52,449 acre
- Flowage Easement Lands: 102 acre
- Project Boundary Line Marked: 360 mile
- FY 19 Use Fee Revenues: \$847,49

Congressional Interests

- Representative Scott DesJarlais, R-TN-4
- Representative John Rose, R-TN-6
- Senator Lamar Alexander, R-TN
- Senator Marsha Blackburn, R-TN
- Representative James Comer, R-KY-1
- Senator Rand Paul, R-KY
- Senator Mitch McConnell, R-KY



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J. Percy Priest Lake

Stones River, Nashville, TN



Project Features

- Authorization: The J. Percy Priest Project was authorized by the Flood Control Act of 1946 under the title “Stewarts Ferry Reservoir”
- J. Percy Priest is a tributary, multi-purpose project that provides flood damage reduction, hydroelectric power, recreation, environmental stewardship, and water supply.
- The project is located at mile 6.8 on the Stones River which flows into the Cumberland River at mile 205.8, approximately 15 miles upstream of downtown Nashville, TN
- Construction of the J. Percy Priest Dam Project began in June of 1963 and was completed in 1968.
- At normal pool elevation, which is 490 feet above mean sea level, the lake has 14,200 surface acres of water.
- The dam is 2,716 feet long and 130 feet high and consists of concrete-gravity power plant and spillway section along with a rolled earth embankment.
- The 235 foot spillway section consists of four tainter gates with a capable discharge capacity of 187,320 cubic feet per second. Each tainter gate is 45 feet wide by 41 feet tall and weigh 152,565 pounds.
- There are 9 Corps operated recreation areas (including 3 campgrounds), 5 marinas, a state park, a water park, and two group camps on J. Percy Priest Lake.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; and reduced electrical power production capabilities
- Closure of recreation areas will result in degradation of facilities, negative public reaction and potential Congressional inquiries.



Regional Importance

- J. Percy Priest Lake was one of the first lakes to have recreation designated as an authorized project purpose. It receives approximately 3.9 million visits annually with \$105M in visitor spending created within 30 miles of the lake.
- One fixed blade power generating unit is housed in the power house section of the dam. The unit is capable of producing 28 megawatts. The estimated average annual energy output is 56,000,000 kilowatt-hours. This production is enough to power an estimated 3,500 homes annually.
- The Tennessee Wildlife Resources Agency manages over 10,000 acres of land for consumptive and non-consumptive use of wildlife. Two wildlife management areas on the lake offer outstanding public hunting opportunities.
- J. Percy Priest Dam has prevented over \$778M in flood damages since becoming fully operational.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Hydropower	\$698	\$152	\$850	\$740	\$563	\$1,303	\$813	\$164	\$977
Joint	\$1,794	\$553	\$2,347	\$1,577	\$453	\$2,030	\$1,690	\$208	\$1,898
Recreation	\$2,148		\$2,148	\$2,125	\$2,245	\$4,370	\$2,100		\$2,100
Environmental Stewardship	\$149	\$54	\$203	\$107	\$197	\$304	\$346	\$127	\$473
Water Supply	\$75		\$75	\$75		\$75	\$78		\$78
Total	\$4,166	\$607	\$5,623	\$3,884	\$2,895	\$8,082	\$4,214	\$335	\$5,526

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21 Funding Requests for Maintenance (\$1,000)		Maintenance Needs
	Total	Packages \$	
Hydropower	\$60	\$60	Refurbish Governors
Joint	\$1,025	\$62	Cumberland River System Assessment Study
		\$700	Replace Spillway Gate Chains
		\$263	Maintenance excl. Dredging, FERC #541, #542, #543, #544 and #545
Recreation	\$610	\$340	Replace Failing Sewer Infrastructure - Seven Points Day Use
		\$260	Maintenance of Recreation Features
		\$10	Maintenance of Recreation Features not associated with PSAs
Environmental Stewardship	\$10	\$10	Develop Cultural Resources Management Plan

Additional Information

- Fee Lands: 18,854 acre
- Flowage Easement Lands: 537 acre
- Project Boundary Line Marked: 159 mile
- FY 19 Use Fee Revenues: \$662,18

Congressional Interests

Representative Jim Cooper, D-TN-5
 Representative John Rose, R-TN-6
 Senator Lamar Alexander, R-TN
 Senator Marsha Blackburn, R-TN
 Representative Scott DesJarlais, R-TN-4



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Barkley Dam and Lake Barkley

Cumberland River, KY and TN



Project Features

- Authorization: Flood Control Act of 1938 and the Rivers and Harbor Act of 1946. Primary authorized purposes are navigation, flood control, and production of hydroelectric power.
- Barkley Dam is located 30.6 river miles from where the Cumberland River joins the Ohio River at Smithland, KY. The nearest community to the dam is Grand Rivers, KY.
- Barkley Dam is a concrete gravity and earth fill structure that measures 10,180 feet. The hydropower plant section of the dam contains four generating units capable of producing 130,000 kilowatts. The spillway section contains 12 tainter gates with a maximum discharge capacity of 520,000 cubic feet per second. The single lock chamber measures 800'x110'.
- The Barkley pool covers 57,000 acres along a 110 mile stretch of the Cumberland River through parts of KY and TN and is surrounded by 1,004 miles of shoreline.
- There are 14 Corps managed recreation areas (including 4 campgrounds) and 12 Corps managed launching areas at Lake Barkley.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; and reduced electrical power production capabilities
- Closure of recreation areas will result in degradation of facilities, negative public reaction and potential Congressional inquiries.



Regional Importance

- Barkley Lock passes over 2,260 government, commercial, and recreational vessels each year, carrying over 11.5 million tons of cargo consisting of coal, petroleum, crude materials, manufactured goods, farm products, chemicals, machinery, and other commodities.
- Barkley Canal is a 1.75 mile long excavated channel between Kentucky Lake and Lake Barkley. The canal provides a navigable channel between the two river systems allowing access to the Ohio River and the Tennessee Tombigbee Waterway.
- The four generators inside Barkley Dam's hydropower plant generate an average of 578,000,000 kilowatt hours per year. This production is enough electricity to power an estimated 112,000 homes annually.
- The dam has prevented over \$284M in flood damages since becoming fully operations.
- 4.1M visits resulted in \$153M in visitor spending and 1,338 jobs within 30 miles of Lake Barkley
- The reservoir supplies numerous municipal and commercial water users.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Hydropower	\$2,878	\$3,977	\$6,855	\$2,050	\$715	\$2,765	\$2,775	\$2,321	\$5,096
Navigation	\$2,105	\$3,982	\$6,087	\$2,148	\$411	\$2,559	\$2,191	\$419	\$2,610
Joint	\$1,843	\$246	\$2,089	\$1,889	\$8,204	\$10,093	\$2,224	\$1,059	\$3,283
Recreation	\$1,670		\$1,670	\$1,652	\$344	\$1,996	\$1,630		\$1,630
Environmental Stewardship	\$676	\$199	\$875	\$686	\$231	\$917	\$656	\$258	\$914
Water Supply	\$55		\$55	\$55		\$55	\$26		\$26
Total	\$6,349	\$4,427	\$17,631	\$6,430	\$9,190	\$18,385	\$6,727	\$1,736	\$13,559

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21		Maintenance Needs
	Funding Requests for Maintenance (\$1,000)	Packages \$	
Hydropower	\$3,305	\$200	Rehab/refurbish control room
		\$360	Refurbish Governors
		\$1,995	Rehab of HVAC
		\$750	Replace Station and Unwatering Valves
Navigation	\$815	\$30	Standardization of Material Selection and Guidance
		\$35	Standardization Tow Haulage Units
		\$750	Upper and Lower Miter Gate Strut Arm Replacement
Joint	\$12,865	\$200	Cumberland River System Assessment Study
		\$665	Dam Site Water Supply Line Replacement
		\$700	Remediate Dam Site Drainage- Right Bank Toe Drain
		\$7,950	Replace Intake & Spillway Crane - PKGE 1 of 2
		\$2,800	Spillway Gates Mech/Elec Rehab. Phase 1
Recreation	\$1,455	\$550	Spillway Emergency/Maintenance Bulkhead Section 4
		\$60	Replace Sewerline - Old Kuttawa Recreation Area
		\$325	Restroom Replacement - Linton Recreation Area
		\$260	Maintenance of Recreation Features
		\$10	Maintenance of Recreation Features not associated with PSAs
		\$400	Shower House Replacement - Hurricane Creek Recreation Area
Environmental Stewardship	\$25	\$400	Shower House Replacement - Eureka Recreation Area
		\$25	Operational Management Plan (OMP) Update

Additional Information

- FY19 Lock Tonnage: 11,523,10
- FY18 National Rank: 9
- Current Miter Gate In Service Date: 196
- Projected Year Lock Miter Gates Reach "F" Condition: 202
- Projected Miter Gate Replacement Downstream: 2035 Upstream: 2037
- Fee Lands: 18,932 acre
- Flowage Easement Lands: 32,236 acre
- Project Boundary Line Marked: 375 mile
- FY 19 Use Fee Revenues: \$491,74

Congressional Interests

- Representative James Comer, R-KY-1
- Senator Mitch McConnell, R-KY
- Senator Rand Paul, R-KY
- Representative Mark Green, R-TN-7
- Senator Lamar Alexander, R-TN
- Senator Marsha Blackburn, R-TN



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Wolf Creek – Lake Cumberland

Jamestown, KY



Project Features

- Authorization: Wolf Creek Dam was authorized by the Flood Control Act of 1938 and the Rivers and Harbors Act of 1946.
- Wolf Creek Dam is located on the Cumberland River at mile 460.9 about 10 miles southwest of Jamestown, KY.
- Lake Cumberland is a tributary, multi-purpose project that provides flood damage reduction, hydroelectric power, recreation, environmental stewardship and water supply.
- Wolf Creek Dam is the 25th largest dam in the United States. The reservoir ranks 9th in the U.S. in size, with a capacity of 6,100,000 acre feet of water, enough to cover the entire commonwealth of Kentucky in 3 inches of water. The main lake is 101 miles long and over 1 mile across at its widest point.
- Wolf Creek Dam has six hydropower generators, each capable of producing 45,000 kilowatts.
- Lake Cumberland is home to 8 Corps managed recreation areas including 5 campgrounds. There are also 9 commercial marinas and 4 state or municipal parks operated under lease.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; and reduced electrical power production capabilities
- Closure of recreation areas will result in degradation of facilities, negative public reaction and potential Congressional inquiries.



Regional Importance

- Lake Cumberland receives approximately 2.17 million visits annually with \$86M in visitor trip spending created within 30 miles of the project. This represents a sizable component of the economy in the local community.
- Six hydropower generating units are housed in the power house section of the dam with an average annual output of 940 million kilowatt hours.
- Wolf Creek Dam has prevented over \$3.18B in cumulative flood damages prevented since becoming fully operational.
- Natural and recreational resources at this project provide social, economic, and environmental benefits. 755 jobs within a 30 mile radius are a result of Lake Cumberland's presence in the community.
- Lake Cumberland provides communities with a clean and dependable water supply.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Hydropower	\$4,195	\$997	\$5,192	\$4,472	\$1,056	\$5,528	\$4,455	\$1,064	\$5,519
Joint	\$2,398	\$302	\$2,700	\$2,117	\$571	\$2,688	\$2,125	\$593	\$2,718
Recreation	\$1,664		\$1,664	\$1,636		\$1,636	\$1,710		\$1,710
Environmental Stewardship	\$387	\$300	\$687	\$336	\$309	\$645	\$345	\$310	\$655
Water Supply	\$70		\$70	\$150		\$150	\$157		\$157
Total	\$4,519	\$602	\$10,313	\$4,239	\$880	\$10,647	\$4,337	\$903	\$10,759

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21 Funding Requests for Maintenance (\$1,000)		Maintenance Needs
	Total	Packages \$	
Hydropower	\$1,347	\$600	Refurbish Governors
		\$747	Replace Station Service Governor
Joint	\$5,050	\$200	Cumberland River System Assessment Study
		\$1,200	Purchase of a Debris Removal System
		\$3,300	Remediate Spillway Gates and Bridge Superstructure
		\$350	Probable Maximum Flood Update
Recreation	\$656	\$1	Maintenance of Recreation Features not associated with PSAs
		\$81	Road Repair - Waitsboro Campground
		\$354	Waterline Replacement - Waitsboro Recreation Area
		\$220	Maintenance of Recreation Features

Additional Information

- Fee Lands: 89,734 acres
- Flowage Easement Lands: 5,796 acres
- Project Boundary Line Marked: 871 miles
- FY 19 Use Fee Revenues: \$527,181

Congressional Interests

Representative Hal Rogers, R-KY-5
 Senator Mitch McConnell, R-KY
 Senator Rand Paul, R-KY
 Representative James Comer, R-KY-1



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Laurel River Lake

Corbin, KY



Project Features

- Authorization: Laurel River Dam was authorized by the Flood Control Act of 1960.
- Construction of the project began in 1973 and the lake was impounded in December 1978.
- Laurel River Lake is a tributary, multi-purpose project that provides hydroelectric power production, recreation, environmental stewardship and water supply.
- The dam is located on the Laurel River, 2.3 miles above the confluence with the Cumberland River in the scenic mountain terrain west of Corbin, KY.
- The dam consists of a 1,420 foot long concrete gravity and earth fill dam with a flood control pool of 250,600 acre-feet of water. The project has a watershed of approximately 282 square miles.
- The U.S. Army Corps of Engineers and the U.S. Forest Service cooperate on developing recreational facilities around the reservoir. The U.S. Forest Service administers the lake and surrounding shoreline as the Daniel Boone National Forest. The U.S. Army Corps of Engineers oversees the operation of the lake's dam and nearby recreation facilities, including a picnic area and a swimming beach at the spillway.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; and reduced electrical power production capabilities
- Closure of recreation areas will result in degradation of facilities, negative public reaction and potential Congressional inquiries.



Regional Importance

- Laurel River Lake, with its cliff-lined shores and quiet coves, is a favorite destination. The lake provides a variety of outdoor recreational opportunities for thousands of visitors each year. Because of the temperature climate and relatively long recreation season, visitors have numerous activities from which to choose, including: fishing, camping, picnicking, boating, canoeing, hiking, horseback riding, diving, and relaxing at one of the deepest and cleanest lakes in Kentucky. The 5,600 acre lake averages 451,000 visitors per year, generating \$9.2 million dollars of visitor spending within 30 miles of the project.
- Hydropower operations at Laurel River Lake differ from those at other projects along the Cumberland River System. East Kentucky Power receives all the hydropower generated at Laurel and they determine when to run the unit. The Corps doesn't know until after the fact and has limited control over scheduling releases at Laurel. SEPA (Southeastern Power Authority) is the Corps' main contact concerning generations at Laurel.
- Average annual energy output is 75 million kilowatt hours.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Hydropower	\$1,111	\$251	\$1,362	\$1,178	\$266	\$1,444	\$1,186	\$268	\$1,454
Joint	\$648	\$37	\$685	\$586	\$108	\$694	\$612	\$111	\$723
Recreation	\$198		\$198	\$176		\$176	\$193		\$193
Environmental Stewardship	\$33	\$23	\$56	\$30	\$25	\$55	\$40	\$17	\$57
Water Supply	\$42		\$42	\$72		\$72	\$144		\$144
Total	\$921	\$60	\$2,343	\$864	\$133	\$2,441	\$989	\$128	\$2,571

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21 Funding Requests for Maintenance (\$1,000)		Maintenance Needs
	Total	Packages \$	
Hydropower	\$3,070	\$100	Refurbish Governors
		\$2,970	Replace Oil Circuit Breakers
Joint	\$100	\$100	Instrumentation Evaluation
Recreation	\$55	\$50	Maintenance of Recreation Features
		\$5	Maintenance of Recreation Features not associated with PSAs

Additional Information

- Fee Lands: 676 acre
- Flowage Easement Lands: 6,438 acre
- Project Boundary Line Marked: 6 mile
- FY19 Use Fee Revenues: \$3,47

Congressional Interests

Congressman Hal Rogers, R-KY-5
 Senator Mitch McConnell, R-KY
 Senator Rand Paul, R-KY



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Martins Fork Dam

Martins Fork of the Cumberland River,
Harlan, KY



Project Features

- Authorization: Martins Fork Dam was authorized by the Flood Control Act of October 1965.
- Construction of the project began in December 1973 and the lake was impounded in December 1978.
- Martins Fork is a tributary, multi-purpose project that provides flood damage reduction, recreation, environmental stewardship and water supply.
- The dam is located at river mile 15.6 on Martins Fork of the Cumberland River in scenic mountain terrain, 13 miles southeast of Harlan, KY.
- The dam consists of a 504 foot long concrete gravity and earth fill dam with a flood control pool of 21,000 acre feet of water. The project has a watershed of approximately 55 square miles.
- Recreation at Martins Fork was authorized under PL 89-72, which prohibits the project from providing recreation opportunities without a non-Federal cost sharing partner. Thirty-five acres are leased to a local partner, the Harlan County Fiscal Court as a public recreation area.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; and reduced electrical power production capabilities
- Closure of recreation areas will result in degradation of facilities, negative public reaction and potential Congressional inquiries.



Regional Importance

- The 340 acre lake is limited to 10 horsepower boat motors or trolling motor on larger boats.
- The lake averages 39,000 visitors per year, providing \$814,000 in visitor spending within a 30 mile radius to enhance the local economy.
- Martins Fork Lake offers numerous recreational opportunities throughout the year. During the summer months, swimming and boating are popular on the lake with a designated swimming area and beach. Other opportunities include 2 basketball courts and a volleyball court. Visitors also enjoy the Cumberland Shadow Trail, which follows the ridge lines behind the lake and is approximately 5 miles long. During the cooler months, the undeveloped areas of the lake offer great hunting and opportunities and the lake offers year-round fishing. The Cumberland Shadow Trail provides picturesque views of the fall foliage.
- Martins Fork Dam has prevented over 2 million dollars of flood damages since becoming fully operational.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Flood Risk Management	\$1,148	\$200	\$1,348	\$991	\$256	\$1,247	\$1,015	\$265	\$1,280
Recreation	\$18		\$18	\$19		\$19	\$30		\$30
Environmental Stewardship	\$153	\$176	\$329	\$250	\$216	\$466	\$267	\$62	\$329
Water Supply	\$2		\$2	\$2		\$2	\$3		\$3
Total	\$173	\$176	\$1,697	\$271	\$216	\$1,734	\$300	\$62	\$1,642

Additional Information

- Fee Lands: 1,39
- Flowage Easement Lands: 52 acre
- Project Boundary Line Marked: 17 mile

Congressional Interests

Congressman Hal Rogers, R-KY-5
 Senator Mitch McConnell, R-KY
 Senator Rand Paul, R-KY



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Old Hickory Lake

Cumberland River, Hendersonville, TN



Project Features

- Authorization: Old Hickory Lock and Dam Project was authorized by the Flood Control Act of 1938 and Rivers and Harbor Act of 1946. Construction of the project began in January 1952 and was completed with the lake being impounded in 1954. Full beneficial use began in 1957, when the placement of the final hydroelectric power unit.
- Old Hickory is a multipurpose project that provides navigation, hydroelectric power, recreation, environmental stewardship and water supply.
- Located at mile 216.2 on the Cumberland River, approximately 25 river miles upstream of Nashville, TN.
- Old Hickory Lock is one of four locks located on the 300 plus navigable miles of the Cumberland River. The single chamber measures 84' x 400' with a normal lift of 60'.
- Old Hickory Dam consists of a 3,750 foot long and 98 foot high concrete gravity power plant and spillway section and a rolled earthen embankment. The 355 foot long spillway has 6 tainter gates, each weighing 172k pounds.
- Four hydroelectric power generating units with Kaplan turbines are housed in the power plant and capable of producing 25 Mw each.
- There are 13 Corps operated recreation areas (including two campgrounds), eight non-Corps operated recreation areas, 11 marinas and 24 launching access points.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; and reduced electrical power production capabilities
- Closure of recreation areas will result in degradation of facilities, negative public reaction and potential Congressional inquiries.



Regional Importance

- The lock chamber requires 14,515,200 gallons of water per lockage with a minimum fill time of 12.6 minutes. It takes approximately two hours for a commercial tugboat with a four-barge tow, and 30 minutes for a pleasure craft to lock through.
- Approximately 3 million tons of cargo per year are locked through Old Hickory. Coal, sand, and gravel are the most common cargo. The lock is open 20/7 at no charge.
- Recent estimated average annual energy output of hydroelectric power plant is 470,000,000 kilowatt-hours. Enough to power an estimated 29,000 homes annually.
- Old Hickory Lake receives approximately 6.8M visits annually with \$215M in visitor trip sales revenue created within 30 miles of the project.
- To ensure the proper long-range management of public resources, Old Hickory Lake has implemented a shoreline management plan that allocates the shoreline to the following: Prohibited Access Areas, Public Recreation Area, Protected Shoreline Areas, and Limited Development Areas. Lake staff administers approximately 3,000 shoreline use permits with adjacent property owners.

U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Hydropower	\$2,548	\$900	\$3,448	\$2,786	\$636	\$3,422	\$2,422	\$2,856	\$5,278
Navigation	\$2,312	\$410	\$2,722	\$2,359	\$4,688	\$7,047	\$2,407	\$445	\$2,852
Joint	\$2,120	\$293	\$2,413	\$2,043	\$302	\$2,345	\$2,023	\$311	\$2,334
Recreation	\$1,906	\$184	\$2,090	\$1,880	\$45	\$1,925	\$1,883		\$1,883
Environmental Stewardship	\$602	\$186	\$788	\$581	\$205	\$786	\$606	\$369	\$975
Water Supply	\$30		\$30	\$30		\$30	\$31		\$31
Total	\$6,970	\$1,073	\$11,491	\$6,893	\$5,240	\$15,555	\$6,950	\$1,125	\$13,353

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21 Funding Requests for Maintenance (\$1,000)		Maintenance Needs
	Total	Packages \$	
Hydropower	\$9,867	\$990	HVAC System Replacement
		\$2,000	Phase 2 Plans & Specs for 69kv Switchyard Control Rehab
		\$2,400	Phase 3 Plans & Specs for 69kv Switchyard Control Rehab
		\$4,300	Phase 3 Plans & Specs for 69kv Switchyard Control Rehab
		\$177	Refurbish Governors
Joint	\$1,603	\$103	Cumberland River System Assessment Study
		\$1,500	SUS20 - Sustainability Upgrades to Waste Water Treatment Plant - Left Bank Area
Recreation	\$342	\$72	Shower House #2 Improvements - Cedar Creek Rec Area
		\$260	Maintenance of Recreation Features
		\$10	Maintenance of Recreation Features not associated with PSAs
Water Supply	\$31	\$31	Cumberland River Water Availability Study

Additional Information

- FY19 Lock Tonnage: 2,944,22
- FY18 National Rank: 12
- Current Miter Gate In Service Date: 195
- Projected Year Lock Miter Gates Reac "F" Condition:
Downstream: 2017 Upstream: 2022
- Projected Miter Gate Replacement
Downstream: 2025 Upstream: 2030
- Fee Lands: 25,802 acre
- Flowage Easement Lands: 3,651 acre
- Project Boundary Line Marked: 390 mile
- FY 19 Use Fee Revenues: \$479,56

Congressional Interests

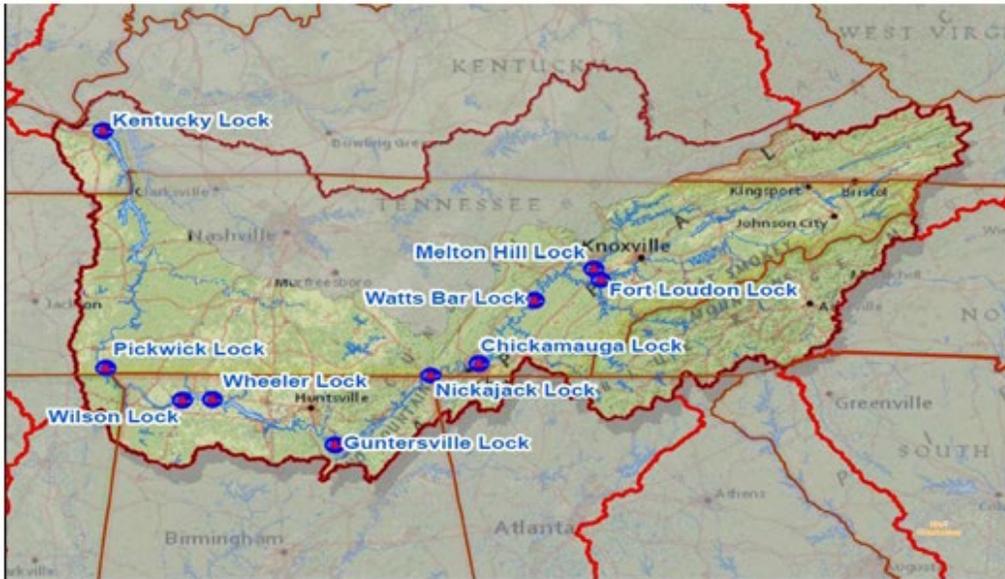
Representative Jim Cooper, D-TN-5
 Representative John Rose, R-TN-6
 Senator Lamar Alexander R-TN
 Senator Marsha Blackburn R-TN



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Tennessee River Locks

Nashville District

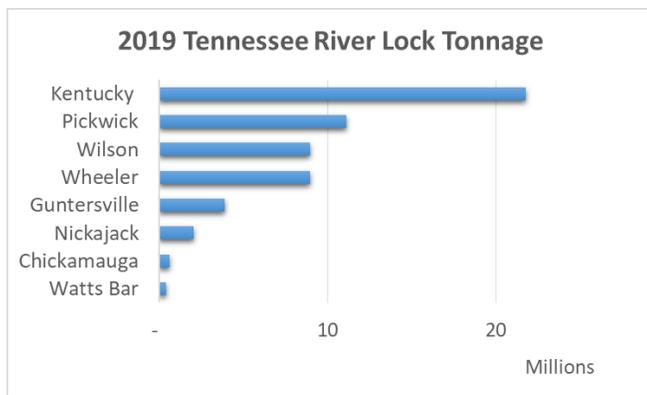


Basin Characteristics

- The Tennessee River system today is managed through a series of 10 locks and dams owned by TVA and managed by USACE
- The Tennessee River Basin consists of approximately 40,910 square miles and drains portions of 3 states. The Tennessee River Basin contains 650 miles of commercial channel flowing from Knoxville, TN to its confluence with the Ohio River in Paducah, KY
- Nine main river dams on the Tennessee and Melton Hill on the Clinch River form a “staircase” of quiet, pooled water and controlled current – a continuous series of reservoirs that stretches along the entire length of the Tennessee River. From its beginning, the river drops a total of 513 feet of elevation before it joins the Ohio River.

Regional Importance

- The largest tributary of the Ohio River, the Tennessee is part of the nation’s inland Waterway System. These interconnected river routes cover 11,000 miles and serve to strategically link geographic areas, major markets, suppliers of raw materials, processors and consumers
- Navigation has contributed greatly to the economic and industrial development of the Tennessee Valley as a whole. The economies of Decatur and Chattanooga would not be as dynamic as they are today, were it not for the Tennessee River
- Because one barge can transport as much cargo as 15 rail cars and 60 tractor-trailers, waterway transportation benefits the environment. It reduces fuel consumption and emissions, and makes roads safer by keeping more trucks off the highway
- Every year the locks provide passage for over 57 million tons of goods, including grain, steel, chemicals, petroleum, and even products for our nation’s defense.
- The Tennessee River is also a great source for recreation with a total of 6,739 recreational craft locked through each year in the system.

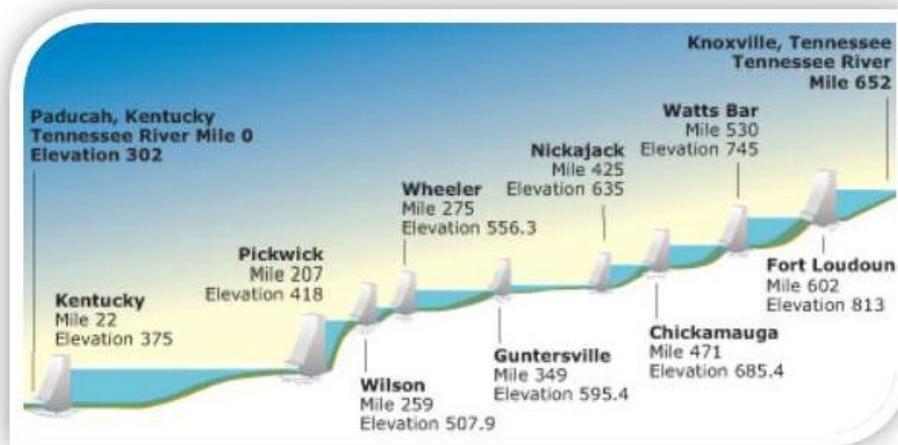


U.S. Army Corps of Engineers Fiscal Year (FY) Project Appropriations and President's Budget (\$1,000)

Business Line	FY19 O&M Appropriation			FY20 O&M Appropriation			FY21 O&M President's Budget		
	Operation	Maintenance	Total	Operation	Maintenance	Total	Operation	Maintenance	Total
Navigation	\$17,421	\$11,784	\$29,205	\$17,811	\$5,981	\$23,792	\$18,499	\$3,881	\$22,380
Total	\$17,421	\$11,784	\$29,205	\$17,811	\$5,981	\$23,792	\$18,499	\$3,881	\$22,380

In addition to annual appropriations, this project currently has the following maintenance needs in order operate at an optimum level of service and reliability.

Business Line	FY21		Maintenance Needs
	Total	Packages \$	
Navigation	\$2,580	\$1,700	Chickamauga L&D - Downstream Miter Gate Repairs
		\$45	Standardization Efforts of Stop Logs
		\$835	Wilson Lock - Miter Gate Repair Stop Log Liner & Strut Arms & Springs Replacement
		\$2,420	Watts Bar L&D - Repair Downstream Lock Gates





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Chickamauga Lock

Tennessee River, Chattanooga, TN



Project Features

- Chickamauga Lock is located at Tennessee River Mile 471 only 6.9 miles above Chattanooga, Tennessee. It is 58.9 river miles downstream of Watts Bark Lock and 46.3 miles upriver from Nickajack Lock.
- TVA commenced preliminary investigation for the Chickamauga project during May 1935, and the Board of Directors authorized its construction on December 31, 1935. Construction of the Chickamauga project started in January 13, 1936 and was opened to navigation in 1940.
- The name Chickamauga came from the Chickamauga Indians, a tribe who had separated from the main body of the Cherokee Indians.
- Chickamauga Lock's chamber is 360' long by 60' wide. This is large enough to accommodate one modern barge at a time and it takes around 1 hour to lock a single barge.
- The phenomenon of concrete growth was observed soon after initial construction and is caused by a reaction between the alkali in the cement and the rock aggregate.
- A new lock is required because of structural deficiencies of the existing lock resulting from physical expansion of the concrete structure due to concrete growth.

Consequences of Not Maintaining the Project

- Failure to maintain the project could result in a halt in the movement of commercial navigation. That stoppage would result in loss of rate savings to the shippers and delayed orders for more essential commodities and raw materials.
- Closure of the existing lock at Chickamauga prior to completion of the new lock would eliminate access to three locks and 38 river miles upstream of the dam.



Regional Importance

- Many industries and municipalities, such as the DOE Oak Ridge Nuclear Laboratories, TVA Watts Bar and Sequoyah Nuclear Power Plants and Kingston Steam Plant, the City of Knoxville, TN, Olin-Lonza Corporation, and many more businesses rely on Chickamauga Lock.
- Currently around 600,000 tons of cargo valued at over \$172M pass through this lock each year.
- Chickamauga Lock has the most recreational traffic on the Tennessee River, nearly 3 times more recreational lockages than any other lock on the Tennessee River in 2019

New Lock Construction

- The new lock will be 600' long and 110' wide. This will greatly decrease wait times at Chickamauga Lock.
- The new lock will be able to accommodate up to 9 barges
- The current expected completion date is 2024.

Additional Information

- FY19 Lock Tonnage: 604,716
- FY18 National Rank: 141
- Current Miter Gate In Service Date: 1940
- Projected Year Lock Miter Gates Reach "F"
Condition: 2021
- Projected Miter Gate Replacement: 2029

Congressional Interests

Representative Chuck Fleischmann, R-TN-3
Senator Lamar Alexander, R-TN
Senator Marsha Blackburn, R-TN



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Fort Loudoun Lock

Tennessee River, Lenoir City, TN



Project Features

- Fort Loudoun Lock is located 72.4 river miles upstream from Watts Bar Lock at Tennessee River Mile 602.3, which is 55 river miles downstream from the City of Knoxville, TN. Fort Loudoun Lock is the uppermost of 9 navigation locks on the Tennessee River.
- Authorization: Fort Loudoun Lock and Dam was taken on as an appropriation by Congress on April 18th, 1940 and later authorized by the TVA board of Directors on July 3rd, 1940. The project was completed ahead of schedule on August 2nd, 1943 as WWII created a sense of urgency to finish the dam earlier than originally planned in 1944.
- Fort Loudoun Dam is equipped with a navigation lock measuring 360' long x 60' wide with a maximum lift of roughly 73'.
- Like all lock facilities on the Tennessee River, Fort Loudoun Lock is owned by the Tennessee Valley Authority and operated by the U.S. Army Corps of Engineers.

Consequences of Not Maintaining the Project

- Failure to maintain the project could result in a halt in the movement of commercial navigation. That stoppage would result in loss of rate savings to the shippers and delayed orders for more essential commodities and raw materials.



Regional Importance

- Fort Loudoun Lock provides about 1,200 lockages with roughly 307,000 tons of bulk commodities locked through each year. The commodities transported through Fort Loudoun Lock include petroleum, crude materials, manufactured goods, farm products, chemicals, machinery, and other commodities.
- Fort Loudoun Lock is the final upstream lock that allows crucial cargo to be delivered to several Knoxville, TN area stakeholders in a timely manner
- The project was originally described as “the next logical step in the unified development of the Tennessee River and its tributaries.” This statement still holds true to this day.
- This reservoir supplies numerous municipal commercial water users.

Additional Information

- FY19 Lock Tonnage: 307,673
- FY18 National Rank: 144
- Current Miter Gate In Service Date: 1943
- Projected Year Lock Miter Gates Reach “F”
Condition: 2024
- Projected Miter Gate Replacement: 2034

Congressional Interests

Representative Tim Burchett, R-TN-2
Senator Lamar Alexander, R-TN
Senator Marsha Blackburn, R-TN



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Guntersville Lock

Tennessee River, Grant, AL



Project Features

- Guntersville Lock is located 75.7 river miles downstream from Nickajack Lock and 74.1 river miles upstream from Wheeler Lock. The nearest community to the dam is Grant, AL.
- Authorization: Authorized by the TVA Board of Directors, November 19th, 1934, the Flood Control Act of 1938 and the Rivers and Harbor act of 1946. Primary authorized purposes are navigation, flood control, and production of hydroelectric power.
- Guntersville Dam is a concrete gravity dam that measures 3,979 feet. The power plant section of the dam contains four generating units capable of producing 124 megawatts. The spillway section contains 18 tainter gates. The project has two lock chambers measuring 600' x 110' and 360' x 60'.
- The Guntersville pool covers 890 miles of shoreline and 67,900 acres of water surface along a 75 mile stretch of the Tennessee River through parts of Alabama and Tennessee. Guntersville Lake is fed by releases from TVA's Nickajack Dam system, in addition to unregulated flows from various smaller tributaries.
- Like all lock facilities on the Tennessee River, Guntersville Lock is owned by the Tennessee Valley Authority and operated by the U.S. Army Corps of Engineers.



Regional Importance

- Guntersville Lock passes over 1,500 government, commercial, and recreational vessels each year, carrying 3.9 million tons of cargo to the heart of the nation with major importance to the Tennessee Valley and the Port of Guntersville as well as the Port of Chattanooga. Cargo consists of coal, petroleum, crude materials, manufactured goods, farm products, chemicals, machinery, and other commodities.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy including: increase transportation costs and delays to the shipment of raw materials; reduced power production capabilities; and also a significant impact to the economy throughout Alabama and Tennessee due to the shipping of goods that rely on the Tennessee River to the Port of Guntersville.

Additional Information

- FY19 Lock Tonnage: 3,887,592
- FY18 National Rank: 114
- Current Miter Gate In Service Date: 1965
- Projected Year Lock Miter Gates Reach “F”
Condition: Main – 2023, Auxiliary - 2027
- Projected Miter Gate Replacement: Main –
2033, Auxiliary - 2041

Congressional Interests

Representative Robert Aderholt, R-AL-4
Senator Richard Shelby, R-AL
Senator Doug Jones, D-AL



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Kentucky Lock

Tennessee River, Grand Rivers, KY



Project Features

- Kentucky Lock is located at Tennessee River Mile 22.4 upstream of the confluence of the Tennessee and Ohio Rivers. It is 184.3 river miles downstream of Pickwick Lock in Savannah, TN.
- Kentucky Lock is the lower gateway to over 700 miles of navigable waters in the Tennessee River Basin.
- Kentucky Lake, formed by Kentucky Dam is the largest man-made lake east of the Mississippi River.
- Being a Tennessee Valley Authority project, construction started in 1938 and Kentucky Lock was put into permanent operation in September 1944.
- The lock chamber is 600' x 110' which allows 9 jumbo hopper barges at one time, much less than standard tow sizes today.
- A new lock is required because of the bottleneck caused by the small chamber and number of users that double lockages create. In recent years, the average delay per tow has ranged from 8 to 10 hours to use the existing chamber.

Consequences of Not Maintaining the Project

- Failure to maintain the project could result in a halt in the movement of commercial navigation. That stoppage would result in loss of rate savings to the shippers and delayed orders for more essential commodities and raw materials.
- Lack of maintenance has and will continue to increase the average delays for tows transiting the lock. The associated significant additional costs are passed on to the customers, and ultimately to the Nation's economy.



Regional Importance

- In coordination with its sister lock (Barkley Lock) these two Corps operated projects serve as navigation's "Gateway to the South". Ports south of the Ohio River Basin are heavily dependent on cargo that passes through the locks chamber daily.
- Currently around 21.8 million tons of cargo valued at over \$628B pass through this system each year.
- Kentucky Lock is identified as one of the most utilized navigation locks in the Lakes and Rivers Division.

New Lock Construction

- The new lock will be 1,200' x 110'. This will take wait times in excess of 10 hours to 0 hours.
- The new lock will be able to accommodate up to 15 barges and the boat.
- It is the 3rd highest priority lock project in the U.S.
- With efficient funding, the expected completion date is 2024 at a price of \$1.25B at a FY18 price level.
- The project has a benefit-to-cost ration of 1.2 at a 7% discount rate and a remaining-benefit-to-remaining-cost ratio of 1.9.

Additional Information

- FY 2019 Lock Tonnage: 21,757,463
- Recent traffic forecasts have indicated that tonnage levels are expected to increase into the foreseeable future.

Congressional Interests

Representative James Comer, R-KY-1
Senator Mitch McConnell, R-KY
Senator Rand Paul, R-KY



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Melton Hill Lock

Clinch River, Oak Ridge, TN



Project Features

- Melton Hill Lock is located 23 river miles upstream of the mouth of the Clinch River entering the main stem of the Tennessee River at mile 568.
- Authorization: TVA first proposed the Melton Hill project to Congress in 1957. President Dwight D. Eisenhower signed the funding bill into law on September 2nd, 1960, and TVA began construction on September 6th, 1960.
- Melton Hill Dam is a concrete gravity and earthen fill structure measuring 1,020 feet long, 103 feet high, and creates a pool of 5,470 acres of water surface. The power plant section of the dam contains two generating units capable of producing 79 megawatts. The spillway section contains 3 spillway with an average maximum discharge of 118,000 cfs. Melton Hill Dam is equipped with a navigation lock measuring 400' x 75' with a maximum lift of roughly 65'.
- The construction of Melton Hill Lock & Dam was completed on May 1st, 1963. The navigation lock itself was placed in service on June 10th, 1963.
- Like all lock facilities on the Tennessee River, Guntersville Lock is owned by the Tennessee Valley Authority and operated by the U.S. Army Corps of Engineers.



Regional Importance

- Melton Hill Lock is not currently staffed, so commercial and recreational interests are locking through by appointment only.
- Local recreational interests remain a focal point for engagement at the District level.
- Melton Hill Lock provides critical barge access to the Department of Energy, Y-12 Security Complex providing for delivery of goods and materials too large in size for other modes of transportation.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have certain effect to the local and regional economy resulting from lack of barge transportation access to industrial plants in Clinton, TN. Railroad rates in the region would increase as a result as well.

Additional Information

- FY19 Lock Tonnage: 0
- FY18 National Rank: 163
- Current Miter Gate In Service Date: 1965
- Projected Year Lock Miter Gates Reach “F”
Condition: Main – 2023, Auxiliary - 2027
- Projected Miter Gate Replacement: Main –
2033, Auxiliary – 2041

Congressional Interests

Representative Chuck Fleischmann, R-TN-3
Senator Lamar Alexander, R-TN
Senator Marsha Blackburn, R-TN



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Nickajack Lock

Tennessee River, Jasper, TN



Project Features

- Nickajack Lock is located 46.3 river miles downstream from the Chickamauga Lock and 75.7 river miles upstream from Gunterville Lock. This stretch of the river marks a region where the river begins to exit the once treacherous Tennessee River Gorge. Nickajack is 424 miles above the mouth of the Tennessee River. The nearest community to the dam is Jasper, TN.
- Authorization: The Nickajack Dam project was authorized January 9th, 1964. Construction began April 1st, 1964 and was completed December 14th, 1967. Primary authorized purposes are navigation, flood control, and production of hydroelectric power.
- Nickajack Dam is a concrete gravity and earth fill structure that measures 3,737 feet long and 81 feet high and holds a pool of 10,370 surface acres of water. The power plant section of the dam contains four generating units capable of producing 104 megawatts. The spillway section contains 10 spillway bays with a maximum discharge capacity of 360,000 cubic feet per second. The single lock chamber measures 600' x 110'.
- Like all lock facilities on the Tennessee River, Fort Loudoun Lock is owned by the Tennessee Valley Authority and operated by the U.S. Army Corps of Engineers.



Regional Importance

- Nickajack Lock completed 763 recreational lockages, 361 commercial towboats with barges, 15 light commercial towboats for a total of 1,124 vessels. Tonnage for 2019 was 2.0 million tons. Cargo consists of coal, petroleum, crude materials, manufactured goods, farm products, chemicals, machinery, and other commodities.
- Nickajack is the last 600' x 110' lock downstream of Chattanooga, Tennessee. This allows it to pass crucial cargo to several Chattanooga area stakeholders in a timely manner.
- The Nickajack Reservoir supplies numerous municipal commercial water users.

Consequences of Not Maintaining the Project

- Failure to maintain the project would have significant effect to the local and regional economy including: increase transportation costs and delays to the shipment of raw materials; reduced power production capabilities; and increased potential for flooding below Nickajack to the Ohio and Mississippi Rivers.

Additional Information

- FY19 Lock Tonnage: 2,005,405
- FY18 National Rank: 126
- Current Miter Gate In Service Date: 1967
- Projected Year Lock Miter Gates Reach “F”
Condition: 2024
- Projected Miter Gate Replacement: 2035

Congressional Interests

Representative Scott DesJarlais, R-TN-3
Senator Lamar Alexander, R-TN
Senator Marsha Blackburn, R-TN



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Pickwick Lock

Tennessee River, Savannah, TN



Project Features

- Pickwick Lock is located 52 river miles downstream from the Wilson Lock and 185 river miles upstream from Kentucky Lock. The nearest community to the dam is Savannah, TN.
- Authorization: Pickwick was authorized by the TVA Board of Directors, November 19th, 1934, the Flood Control Act of 1938, and the Rivers and Harbor Act of 1946. Primary authorized purposes are navigation, flood control, and production of hydroelectric power.
- Pickwick Dam is a concrete gravity and earth fill structure that measures 7,715 feet. The power plant section of the dam contains six generating units capable of producing 240,240 kilowatts. The spillway section contains 22 fixed wheel lift gates with a maximum discharge capacity of 650,000 cubic feet per second. The project has two lock chambers measuring 1000' x 110' and 600' x 110'.
- The Pickwick pool covers 42,700 acres along a 53 mile stretch of the Tennessee River through parts of Alabama, Mississippi, and Tennessee. Pickwick Lake is fed by releases from TVA's Wilson Dam, and smaller TVA dams on the Bear Creek system in addition to unregulated flows from the 1,777 square miles of local drainage.



Regional Importance

- Pickwick Lock passes over 2,400 government, commercial, and recreational vessels each year, carrying over 11 million tons of cargo to the heart of the nation with major importance to the Tennessee Valley and to Port of Mobile as well as Birmingham, Tuscaloosa, and Montgomery, Alabama. Cargo consists of coal, petroleum, crude materials, manufactured goods, farm products, chemicals, machinery, and other commodities.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effect to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; reduced power production capabilities; and also a significant impact to the economy throughout Alabama and Mississippi due to the shipping of goods that rely on the Tennessee Tombigbee Waterway to the Port of Mobile.

Additional Information

- FY19 Lock Tonnage: 11,091,609
- FY18 National Rank: 58
- Current Miter Gate In Service Date: 1984
- Projected Year Lock Miter Gates Reach “F”
Condition: Main – Upstream: 2041,
Downstream: 2014. Auxiliary – Upstream:
2029, Downstream: 2029
- Projected Miter Gate Replacement: Main –
Upstream: 2050, Downstream: 2050.
Auxiliary – Upstream: 2042, Downstream:
2042

Congressional Interests

Representative Mark Green, R-TN-7
Senator Lamar Alexander, R-TN
Senator Marsha Blackburn, R-TN



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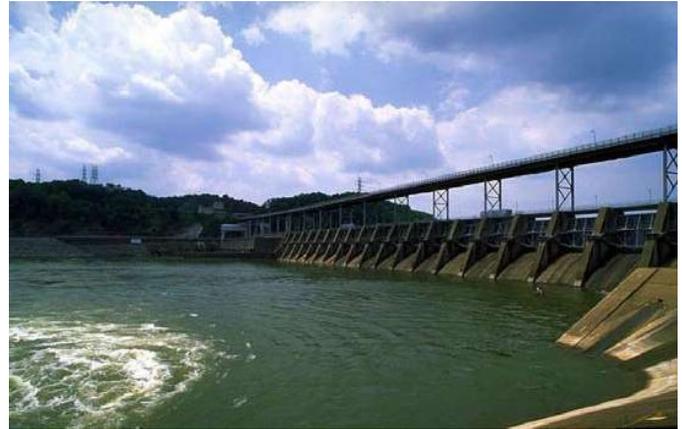
Watts Bar Lock

Tennessee River, Decatur, TN



Project Features

- Watts Bar Lock is located in Decatur, TN at Tennessee River Mile 529.9, which is 58.9 river miles upstream from Chickamauga Lock in Chattanooga, TN and 72.4 river miles downstream from Fort Loudoun Lock in Lenoir City, TN.
- Authorization: Watts Bar Lock and Dam was taken on as an appropriation by Congress on March 16th, 1939 and later authorized by the TVA Board of Directors on May 3rd, 1939.
- Watts Bar Dam is a concrete gravity and earth fill structure that measures 2,960' long, 112' high and impounds the 39,090 acre Watts bar Lake. The power plant section of the dam contains five generating units capable of producing 172.5 megawatts. The spillway section contains 20 spillway bays with a maximum discharge capacity of 560,000 cfs with the headwater elevation at 745 feet above sea level. Watts Bar Dam is equipped with a navigation lock measuring 360' x 60' with a maximum lift of roughly 70' with normal lift of 58'. There is space available for a future 600'x110; lock east of the present lock.
- Like all lock facilities on the Tennessee River, Watts Bar Lock is owned by the Tennessee Valley Authority and operated by the U.S. Army Corps of Engineers.



Regional Importance

- Watts Bar Lock averages about 775 recreational lockages per year and roughly 380,000 tons of bulk commodities locked through each year. The commodities transported through Watts Bark Lock include coal, petroleum, crude materials, manufactured goods, farm products, chemicals, machinery, and other commodities.
- Before TVA create Watts Bar Reservoir above Chattanooga, TN, the city had one of the most serious flooding problems in the nation. Now the river that often threatened the city contributes to its economy and is a major artery for commercial barge traffic.
- The Reservoir supplies numerous municipal and commercial water users.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effect to the local and regional economy including: increased transportation costs and delays to the shipment of raw materials; reduced power production capabilities; and increased potential for flooding downstream in populated areas.

Additional Information

- FY19 Lock Tonnage: 387,402
- FY18 National Rank: 140
- Current Miter Gate In Service Date: 1942
- Projected Year Lock Miter Gates Reach “F”
Condition: 2024
- Projected Miter Gate Replacement:
Downstream – 2034, Upstream – 2034.

Congressional Interests

Representative Scott DesJarlais, R-TN-4
Senator Lamar Alexander, R-TN
Senator Marsha Blackburn, R-TN



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Wheeler Lock

Tennessee River, Rogersville, AL



Project Features

- Wheeler Lock is located 74.1 river miles downstream from Guntersville Lock and 15.5 river miles upstream from Wilson Lock. The nearest community to the dam is Rogersville, AL.
- Authorization: Wheeler was authorized by the TVA Board of Directors, November 19th, 1934, and the Flood Control Act of 1938, and the Rivers and Harbor Act of 1946. Primary authorized purposes are navigation, flood control, and production of hydroelectric power.
- Wheeler Dam is a concrete gravity dam that measures 6,342 feet. The power plant section of the dam contains eleven generating units capable of producing 361 megawatts. The spillway section contains 60 tainter gates with a maximum discharge capacity of 650,000 cubic feet per second. The project has two lock chambers measuring 600'x110' and 400'x60'.
- The Wheeler pool covers 1,027 miles of shoreline and 67,070 acres of water surface along a 74.1 mile stretch of the Tennessee River through parts of Alabama. Wheeler Lake is fed by releases from TVA's Guntersville Dam, and various smaller tributaries.



Regional Importance

- Wheeler Lock passes over 2,300 government, commercial, and recreational vessels each year, carrying 8.9 million tons of cargo to the heart of the nation with major importance to the Tennessee Valley, while also serving the Port of Decatur, Port of Guntersville, and Port of Chattanooga. Cargo consists of coal, petroleum, crude materials, manufactured goods, farm products, chemicals, machinery, various components for the aerospace industry, and other commodities.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effect to the local and regional economy as well as the nation's defense capabilities including: increase transportation costs and delays to the shipment of raw materials; reduced power production capabilities; and also a significant impact to the economy throughout Alabama due to the shipping of goods that rely on the Port of Decatur, Port of Guntersville, and the Port of Chattanooga.

Additional Information

- FY19 Lock Tonnage: 8,965,883
- FY18 National Rank: 65
- Current Miter Gate In Service Date: 1963
- Projected Year Lock Miter Gates Reach "F"

Condition:

Main: Downstream: 2023 Upstream: 2023

Auxiliary: Downstream: 2028 Upstream: 2028

- Projected Miter Gate Replacement:

Main: Downstream: 2032 Upstream: 2032

Auxiliary: Downstream: 2042 Upstream: 2042

Congressional Interests

Representative Mo Brooks, R-AL-5

Senator Doug Jones, D-AL

Senator Richard Shelby, R-AL



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Wilson Lock

Tennessee River, Florence, AL

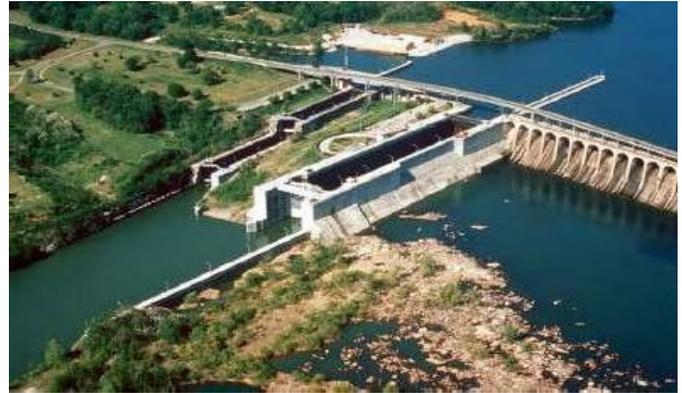


Project Features

- Wilson Lock is located 15.5 river miles downstream from Wheeler Lock and 52.7 river miles upstream from Pickwick Lock. The nearest community to the dam is Florence, AL.
- Authorization: Wilson Lock and Dam was authorized by the TVA Board of Directors, November 19th, 1934, the Flood Control Act of 1938, and the Rivers and Harbor Act of 1946. Primary authorized purposes are navigation, flood control, and production of hydroelectric power.
- Wilson Dam is a concrete gravity dam that measures 4,541 feet. The power plant section of the dam contains twenty-one generating units capable of producing 663 megawatts. The spillway section contains 50 tainter gates. The project has three lock chambers, one measuring 600'x110' and two 300'x60'.
- The Wilson pool covers 166 miles of shoreline and 15,500 acres of water surface along a 15.5 mile stretch for the Tennessee River through parts of Alabama. Wilson Lake is fed by releases from TVA's Wheeler Dam, and various smaller tributaries.
- Like all lock facilities on the Tennessee River, Wilson Lock is owned by the Tennessee Valley Authority and operated by the U.S. Army Corps of Engineers.

Consequences of Not Maintaining the Project

- Failure to provide adequate funding to maintain this facility will have significant effects to the local and regional economy as well as the nation's defense capabilities including: increased transportation costs and delays to the shipment of raw materials; reduced power production capabilities; and also a significant impact to the economy throughout Alabama due to the shipping of goods that rely on the Port of Florence, Port of Decatur, Port of Guntersville, and the Port of Chattanooga.



Regional Importance

- Wilson Lock passes over 2,300 government, commercial, and recreational vessels each year, carrying 8.9 million tons of cargo to the heart of the nation with major importance to the Tennessee Valley, while also serving the Port of Florence, Port of Decatur, Port of Guntersville, and Port of Chattanooga. Cargo consists of coal, petroleum, crude materials, manufactured goods, farm products, chemicals, machinery, various components for the aerospace industry, and other commodities.

Additional Information

- FY19 Lock Tonnage: 8,974,576
- FY18 National Rank: 64
- Current Miter Gate In Service Date: 1969
- Projected Year Lock Miter Gates Reach “F” Condition:

Main: Downstream: 2032 Upstream:*

Auxiliary: Downstream: 2028 Upstream: 2028

- Projected Miter Gate Replacement:

Main: Downstream: 2034 Upstream:*

Auxiliary: Downstream: 2041 Upstream: 2041

- District implements a spare gate program for gates. A supply of spare gate leaves are maintained and used to change out existing gate leaves when they near the end of expected service life.

Congressional Interests

Representative Mo Brooks, R-AL-5

Senator Doug Jones, D-AL

Senator Richard Shelby, R-AL