



RIVER VALLEY SLACKWATER HARBOR





River Valley Slackwater Harbor

Contents

Introductory Information.....	3
Section I: Project Description.....	4
Existing Railroad Service	5
Nearby Ports	5
USACE Improvements to MKARNS.....	6
Future I-49 Route	6
Figure 5: Proposed I-49 Route	6
Recent Infrastructure Improvements	7
Projected Growth.....	8
Proposed Waterside Facilities.....	8
Section II: Project Location	11
Section III: Grant Funds, Sources, and Uses of Project Funds.....	12
Grant Funds.....	12
Sources.....	12
Uses of Project Funds.....	13
Project Infrastructure Development Project Cost Estimate:	14
Section IV: Merit Criteria	15
Section A: Achieving Safety, Efficiency, or Reliability Improvements.....	15
Section B: Supporting Economic Vitality at the Regional or National Level	16
Section C: Leveraging Federal Funding to Attract Non-Federal Sources of Infrastructure Investment .	17
Section D: Port Resilience	17
Section V: Selection Considerations	18
Section E: Climate Change and Sustainability	18
Section F: Equity and Justice ⁴⁰	20
Section G: Workforce Development, Job Quality, and Wealth Criteria.....	22
Section VI: Project Readiness.....	23
A. Technical Capacity:	23
Preparatory Work Completed.....	23
Construction Methodology	24
Project Schedule	25
Risk Mitigation	25
B. Environmental Risk	26
Environmental Permits and Reviews	26
State and Local Approvals.....	27
Environmental Reviews, Approvals, and Permits by Other Agencies.....	28
Section VII: Domestic Preference	28
Section VIII: Statutory Determinations	29



River Valley Slackwater Harbor

Figures

Figure 1: Existing Fiver Rivers Terminal	4
Figure 2: Proposed I-49 Route	6
Figure 3: Five Rivers Terminal Location and nearby railroads	7
Figure 4: Freight Forecast	8
Figure 5: Number of Barges & Total Tonnage.....	8
Figure 6: Slackwater Harbor Layout.....	9
Figure 7: Slackwater Harbor Section View.....	10
Figure 8: Completed Slackwater Dock for Port of Little Rock, 2020.....	10
Figure 9: Market Proximity	11
Figure 10: Multimodal Freight Network	11
Figure 11: Truck Trip Ends.....	12
Figure 12: River Valley Slackwater Harbor Benefits and Cost Savings.....	19
Figure 13: Truck VMT and VHT Savings 2027-2030	19
Figure 14: Environmental Justice Screening and Mapping Tool Results	21
Figure 15: Construction and Long-Term Direct & Indirect Jobs Created.....	22
Figure 16: Harbor Excavation.....	24
Figure 17: Sheetpile Installation.....	24
Figure 18: Flooded Harbor	24
Figure 19: Removing Dike.....	24

Tables

Table 1: Average Annual Tonnage	8
Table 2: River Valley Slackwater Harbor Project Cost Estimate	14
Table 3: Merit Criteria.....	15
Table 4: River Valley Slackwater Harbor Project Schedule	25
Table 5: Statutory Determinations	29

Appendices

- Appendix A: Letters of Commitment, Letters of Support
- Appendix B: No Rise Analysis Report



River Valley Slackwater Harbor

Introductory Information

Field Name	Guidance
Name of Lead Applicant	Joint Application Western Arkansas Intermodal Authority, Eligible Lead Entity Five Rivers Distribution, Primary Recipient
Project Name	River Valley Slackwater Harbor Project
Project Description	Project provides a new slackwater barge slip for bulk materials and containers and improves safety and capacity at existing port terminal.
Planning Project	No
Is this project at a coastal, Great Lakes, or inland river port?	Inland River Port
Is this project located in a noncontiguous State or U.S. Territory	No
GIS Coordinates (In Latitude & Longitude)	N 35°24'26"; W 94°19'50"
Is this project in an urban or rural area?	Rural
Project Zip Code	72956
Is project located in a Historically Disadvantaged Community (HDC), or a Community Development Zone (CDZ)?	Yes, located both in a HDC and CDZ.
Previous submission for PIDP	No
Other discretionary Grants applied for	None
Previous Recipient of TIGER, BUILD, RAISE, FASTLANE, INFRA, or PIDP	No
PIDP Grant Amount Request	\$15,096,000.00
Total Project Cost	\$18,870,000.00
Total Federal Funding	\$15,096,000.00
Total Non-Federal Funding	\$3,774,000.00
Will RRIF or TIFIA Funds be used for financing.	No

Contact Information for Western Arkansas Intermodal Authority:

Ms. Sasha Grist, Executive Director - 479.785.2651 sgrist@wapdd.org; www.wapdd.org

Contact Information for Five Rivers Distribution:

Mr. Marty Shell, President - 479.410.1557 marty@fiveriversdist.com; www.fiveriversdist.com



River Valley Slackwater Harbor

Section I: Project Description

The River Valley Slackwater Harbor project is a joint application with the Western Arkansas Intermodal Authority (WAIA) and Five Rivers Distribution, LLC. As the lead applicant, WAIA is responsible for the financial administration and grant oversight for the project. Five Rivers Distribution, as the project recipient will serve as the project manager, directing the scope, schedule, and budget: including the preconstruction, construction, technical, and engineering efforts. The letters commitment from these two parties is included as a supplement to this application.

WAIA's role is to plan and develop initiatives for transportation improvements that benefit and better support the movement of goods and freight that are so important in driving the region's economy.

The proposed slackwater harbor is designated as a large project. As noted within Section III, the funding request totals \$15,096,000. Included and attached to this application are the engineering benefit and cost estimates; the cost estimates include the necessary tasks and work items needed to complete this project.

As the newest intermodal port facility on the Arkansas River System, Five Rivers Distribution is located at River Mile 299, designated by MARAD as Marine Highway M-40. The 50-year-old McClellan-Kerr Arkansas River Navigation System (MKARNS) strategically connects the heartland of the United States with the rest of the world. The versatile, 445-mile waterway is a crucial part of the nation's transportation system providing navigation, as well as hydropower, recreation, water supply and fish and wildlife habitats. Ice-free year-round, the navigation system has withstood the test-of-time and continues to provide economic and environmental welfare to the region, nation and world. Equally, the site enjoys access to Interstate 40 via the I-540 spur reaches points westward as well as I-49 which runs north to the growing region of northwestern Arkansas.



Figure 1: Existing Fiver Rivers Terminal

Interstate 40 is a major east–west transcontinental Interstate Highway in the southeastern and southwestern portions of the United States. At a length of 2,556 miles (4,114 km), I-40 is the third-longest Interstate Highway in the country, after I-90 and I-80. From west to east, it passes through California, Arizona, New Mexico, Texas, Oklahoma, Arkansas, Tennessee, and North Carolina.



River Valley Slackwater Harbor

Existing Railroad Service

The site is served by the Union Pacific (UP) and Arkansas & Missouri Railroad (A&M) which connects to the Canadian Pacific/Kansas City Southern (KCS) for distribution north and south. The Canadian Pacific/KCS is the first single-line railway connecting Canada, the U.S., and Mexico. The UP routes coming into this area largely travel from Chicago and St. Louis to terminals in Baton Rouge, New Orleans, Dallas-Fort Worth, Houston, Austin, and San Antonio. UP's transportation routes span over 31,900 miles. The A&M is a Class III short-line railroad headquartered in Springdale, Arkansas, and operates 139.5 miles (224.5 km) of line from Fort Smith, Arkansas to Monett, Missouri. The railroad interchanges freight cars with Canadian Pacific/ Kansas City Southern Railway at Fort Smith, with Union Pacific Railroad at Van Buren, Arkansas, and with Burlington Northern Santa Fe (BNSF) Railway at Monett. A branch line connects Bentonville, Arkansas, with the main line in Rogers, Arkansas. A&M also leases 3.2 miles (5.1 km) of track (locally known as "the Bottoms") from Union Pacific at Van Buren, and provides haulage services for Union Pacific between Van Buren and the Fort Smith Railroad in Fort Smith.

Freight operations are based out of the headquarters location in Springdale as well as Fort Smith. Freight customers are predominantly located in those two geographic areas. The rail line was substantially upgraded between 2002 and 2005 and features continuous welded rail across its entire main line. The line handles 286,000 lb. (130,000 kg) railcars and has vertical clearances sufficient for double-stack intermodal cars throughout.^[1] Most traffic

is handled in scheduled freight trains although shuttle trains of corn make regular appearances in the Springdale area using locomotives from Union Pacific. Freight services operate seven days per week. Traffic generally consists of grain and feed supplements, paper products, sand, plastic, food products, steel, scrap, lumber, aluminum, and mineral products.

In addition, Five Rivers Distribution offers all modes of transportation and owns a trucking company. The inventory is EDI (Electronic Data Interchange) compatible. Five Rivers also owns 2200 linear feet with double track siding and Five Rivers receives daily switching from the Arkansas Missouri Railroad (A&M) short line with reciprocal switching with Union Pacific (UP), Burlington Northern Santa Fe (BNSF), and Canadian Pacific/Kansas City Southern (KCS).

Nearby Ports

The Port of Van Buren and the Port of Fort Smith are operated by Five Rivers Distribution; with the Port of Van Buren located at River Mile 299, and the Port of Fort Smith at River Mile 308.

Current Facilities at the Port of Van Buren & Five Rivers Distribution:

- 120,000 sq. ft. climate-controlled warehouse
- 180,000 sq. ft. bulk storage
- Covered barge, truck, and rail loading and unloading
- 65-ton cable cranes / 36-ton bridge crane
- Conveyor systems/forklifts up to 30,000/front end loaders
- 16,000 sq. ft. bulk storage warehouse
- Coal storage pad above the 100-year flood mark
- Fleeting for up to 85 barges simultaneously
- Three barge docks
- Rail connections to UP, KCS
- Located close to interstates - Future I-49, I-40, and I-540 as well as Highways 64, and 71.
- Ice-free year-round
- Future 12' foot draft



River Valley Slackwater Harbor

The Port of Fort Smith sits at the confluence of the Poteau and Arkansas Rivers. The Port of Fort Smith is a 28-acre facility with access to rivers (Poteau and Arkansas), road (Interstates 40 and 540 and highways 71 and 64) and rail (UP, BNSF and KCS). Predominant cargo handled at the Port is steel, including coiled plate, coiled wire rod, and bars. Existing facilities at Fort Smith/Van Buren focus on non-perishable bulk with dedicated steel operations. Operated by Five Rivers Distribution, the Port offers green space for future development, climate -controlled and bulk (and shed) storage. The facility's two barge docks offer direct truck-to barge transload, barge cleaning services and fleetings for up to 20 barges at a time.

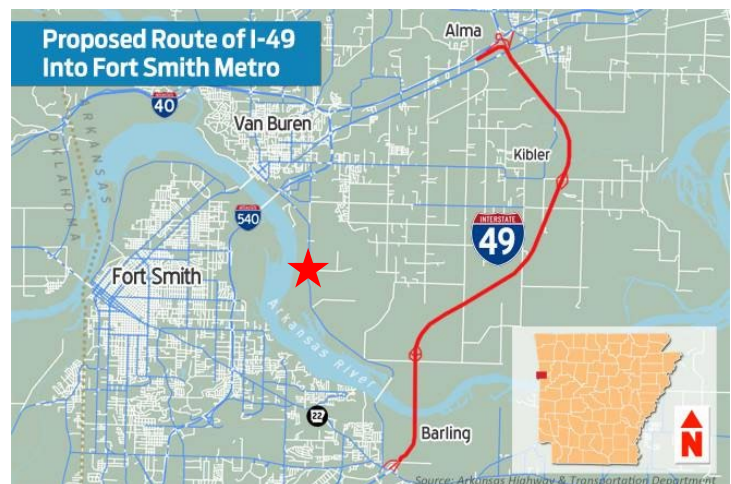
USACE Improvements to MKARNS

The U.S. Army Corps of Engineers is in the process of completing a 12-foot minimum depth channel near the outlet of the Arkansas River, known as the Three Rivers Project. The channel will spur a 43% increase in barge capacity, 76% more-ton miles/gallon of fuel by barge than by truck, and 1000% decreased CO2 emissions of barge versus truck. The River Valley Slackwater Harbor project will benefit from elimination of this bottleneck and prove capable of safely accepting the increased barge traffic from the Three Rivers Project.

Future I-49 Route

In addition to these efforts to improve capacity and efficiency, the construction and completion of the I-49 segment(s), and the Arkansas River bridge crossing will greatly increase ease of tractor/trailer access and freight movements. Located four miles east of Five Rivers Distribution, I-49 will facilitate intermodal connectivity and development for the region. Groundbreaking began on October 13, 2022, on the proposed southern extension of future I-49 with construction expected to occur 2024 or 2025 and should be completed by the end of 2029.

Figure 2: Proposed I-49 Route



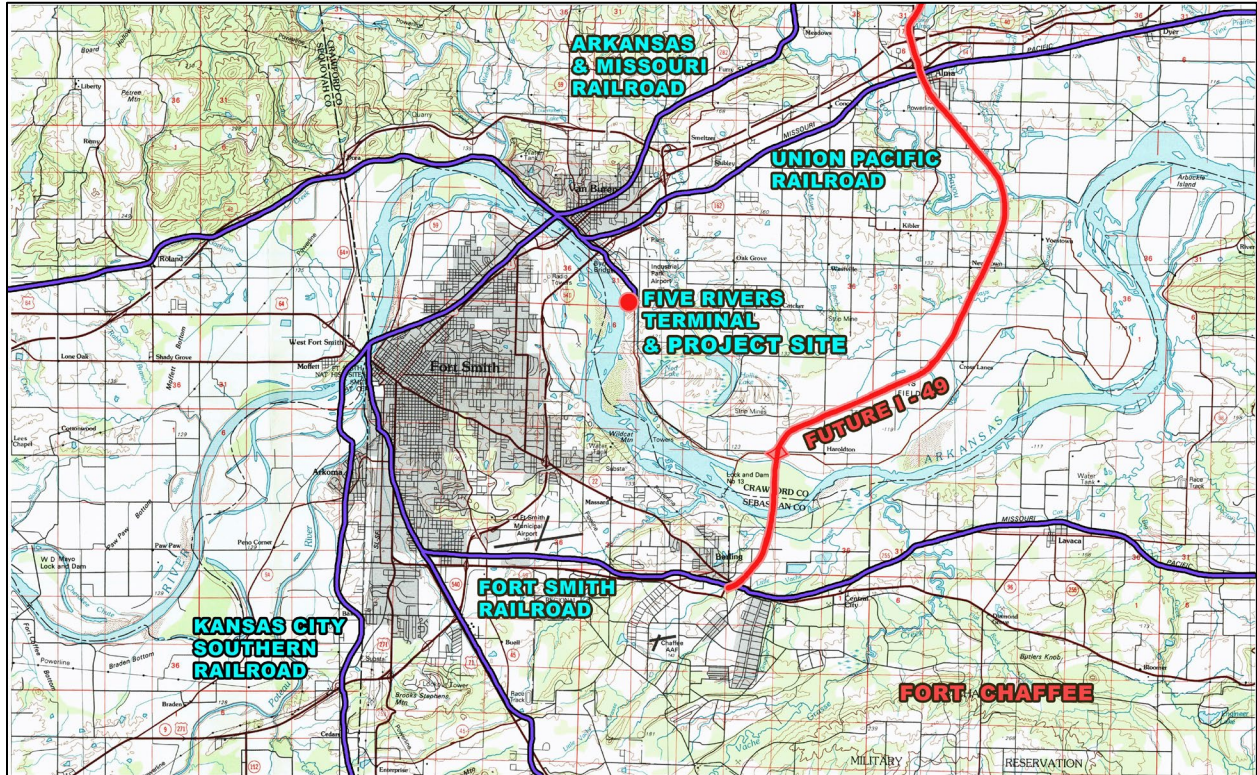
The I-49 project involves building a 13.6-mile section of interstate across the River Valley from Arkansas 22 near Barling in Sebastian County to the interchange of Interstate 40 and I-49 at Alma in Crawford County. The new section of I-49 will cost an estimated \$787 million. It requires a new bridge over the Arkansas River, expected to cost \$300 million to \$400 million. The new road will join with a four-lane section of U.S. 71 around Greenwood, Arkansas. The segment between Barling and Alma will finish a connection from Fort Smith north to Canada by way of I-49 and I-29 and to Duluth, Minn., and the Great Lakes by way of I-49 and I-35. Once the Arkansas sections are completed, I-49 will reach south to Shreveport and New Orleans. The positive impacts that I-49 will bring to western Arkansas in terms of economic growth and development, quality of life and transportation safety are immeasurable. Since 2012, Five Rivers handled a total of 1,545



River Valley Slackwater Harbor

barges. Barge movements slowed due to the immense flooding in 2019 and the COVID pandemic.

Figure 3: Five Rivers Terminal Location and nearby railroads



Recent Infrastructure Improvements

In 2007, the Van Buren Public Facilities Board established a strategic public/private partnership with Five Rivers Distribution for the development of a truck/rail transfer facility to increase capacity and efficiency. Five Rivers Distribution invested more than \$1 million in warehouse facilities in the Crawford County Industrial Park. With the purchase of the former chip mill property on the Arkansas River, Five Rivers invested an additional \$3 million to construct a covered dock/warehouse terminal, with one 15-ton crane and one 30-ton crane, on that property in 2012. Five Rivers Distribution comprises three material handling docks, one which is covered and served by a 30-ton overhead crane that traverses the length of the 76,500 square foot climate-controlled US Customs Bonded Warehouse. The total storage capacity at Five Rivers Distribution is 300,000 square feet.



River Valley Slackwater Harbor

Projected Growth

The projected natural port throughput demand is 1.17% year over year. According to the Benefit Cost Analysis performed by Mickle and Griffin Engineering, the new River Valley Slackwater Harbor will grow from 210,533 in 2026 to 528,331 tons by 2050. By 2035, the facility will handle an additional 250,000 tons of freight annually. This terminal expedites the movement of containers and bulk products such steel coils, wire rod coils, bar stock, pig iron, bulk feed, chemical, and petroleum

goods and all break bulk and finished good products. The current average annual tonnage of Van Buren (VB) cargo data is listed below.

Figure 4: Freight Forecast

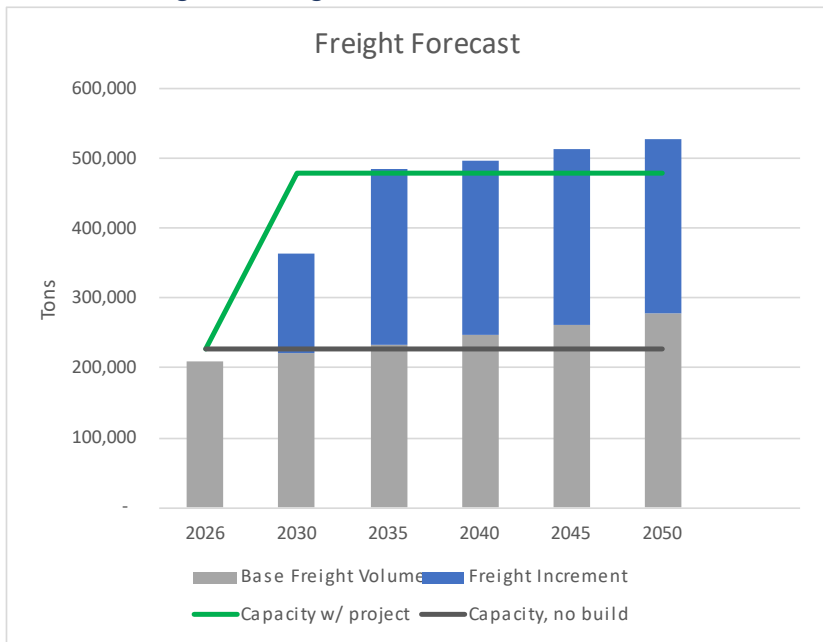
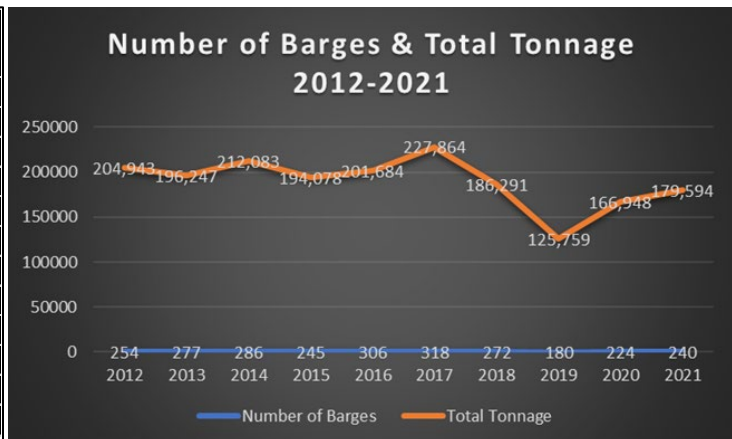


Table 1: Average Annual Tonnage

Port of Van Buren	Number of Barges	Total Tonnage	Tons per Barge
2012	254	204,943	806.9
2013	277	196,247	708.5
2014	286	212,083	741.5
2015	245	194,078	792.2
2016	306	201,684	659.1
2017	318	227,864	716.6
2018	272	186,291	684.9
2019	180	125,759	698.7
2020	224	166,948	745.3
2021	240	179,594	748.3
2022			
TOTAL:	2602	1,895,491	728.5

Figure 5: Number of Barges & Total Tonnage



Source: Five Rivers Distribution

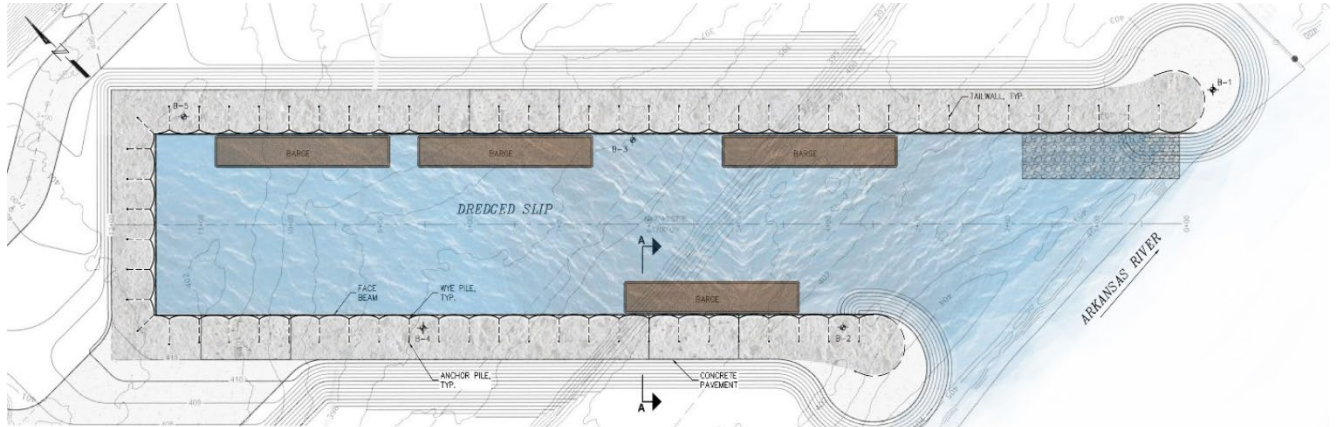
Proposed Riverside Facilities

Five Rivers Distribution has proposed a new slackwater harbor forming a 1000-ft long 200-ft wide slip off the main channel of the Arkansas River. This will provide capacity to moor and offload up to eight barges at a time. The new slackwater harbor will provide 2000 feet of dock frontage with a 50-ft wide concrete deck for mobile cranes to work from. The slackwater harbor will be out of the river current, and thus winching and line-handling will not be necessary. The concrete deck will be above the 100-yr flood to ensure year-round operation. The new slip will have lighting for extended operating times and improved safety.



River Valley Slackwater Harbor

Figure 6: Slackwater Harbor Layout



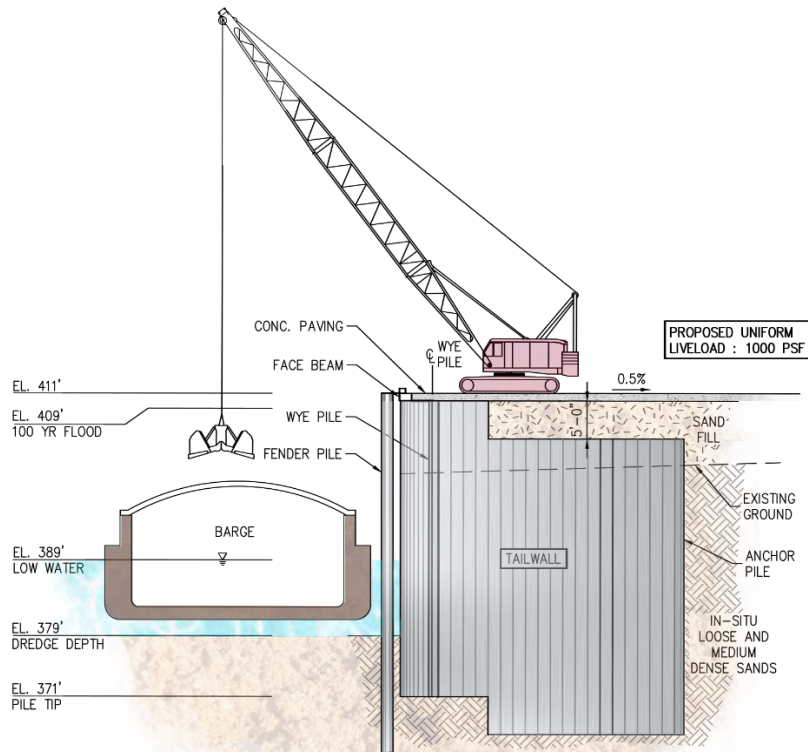
During the fall of 2022, Five Rivers Distribution contacted the marine design consultant, PND Engineers. After reviewing the site's topographic survey, geotechnical information, and other bulkhead types, PND Engineers determined that the site was suitable for the OPEN CELL SHEET PILE™ system, a soil retention system that has been used on similar barge slips on the inland waterways, including other MARAD funded projects. The system relies on flat sheet pile to form high-capacity bulkheads. The proposed uniform live load capacity for this site is 1000 psf, equivalent to a stack of five fully loaded containers. The construction of the new dock will result in systematic and efficient operations and provide the ability to move oversized equipment, such as wind turbines, etc. The River Valley Slackwater Harbor will construct 2000 feet of dock frontage with a 50-ft wide concrete deck that will offer safe harbor and improve barge capacity. Equally, this project will provide critical safety improvements and port resiliency, especially during times of high-water flows, flooding, and service disruptions.





River Valley Slackwater Harbor

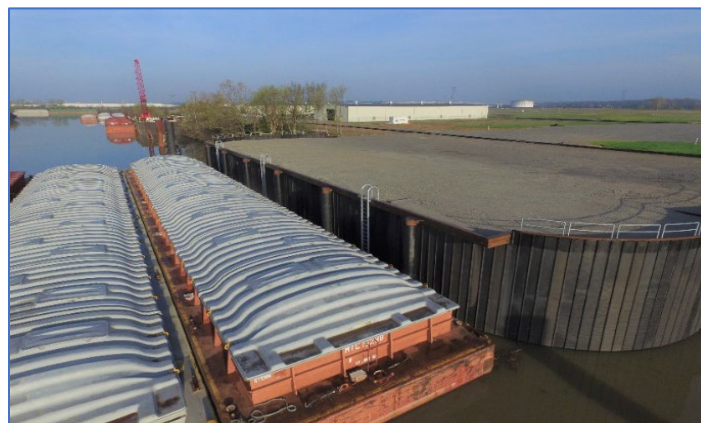
Figure 7: Slackwater Harbor Section View



By protecting not only marine vessels, barges, and staff during high water events, the River Valley Slackwater Harbor will also address climate change and the travel time reliability of the McClellan–Kerr Arkansas River Navigation System (MKARNS) network. The new dock will comply with OSHA (Occupational Safety and Health Administration) safety standards as described in Parts 1910 and 1917 and elsewhere concerning curbs, bull rails, ladders, guardrails, and fall protection.

The example shown below is a barge dock completed in 2018 by Massman Construction for the Port of Little Rock on the Arkansas River.

Figure 8: Completed Slackwater Dock for Port of Little Rock, 2020





River Valley Slackwater Harbor

Section II: Project Location

Centrally located at the crossroads of America, Five Rivers Distribution is close to major markets and populations both east-west and north-south. Approximately 47% of the U.S. population is within a one-day drive of the facility. Given the ease to either travel east-west or north-south, commercial vehicles can reach the I-40 corridor in less than 10 minutes either traveling east toward Little Rock or west toward Oklahoma City. The I-40 corridor serves as the major east-west freight route and is located 4.4 miles north of the Five Rivers project site. Once completed, the new north-south connector, I-49 will lie 10 minutes (about 6.6 miles) immediately east of the project site. Currently, I-540 which sits 1.4 miles immediately west of the site, serves traffic moving north-south. I-540 South merges into State Highway 271 South and State Highway 71 South. State Highway 71 South connects into the existing I-49 in Louisiana with the southern terminus reaching New Orleans. The primary freight corridors and truck trip ends are shown in Figures 10 and Figures 11 – with Crawford County showing between 30,001 to 50,000 truck trip ends.

Figure 9: Market Proximity

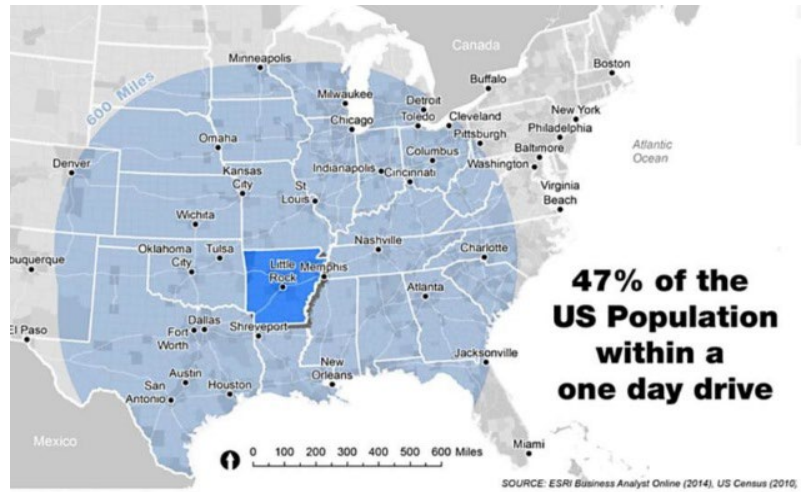
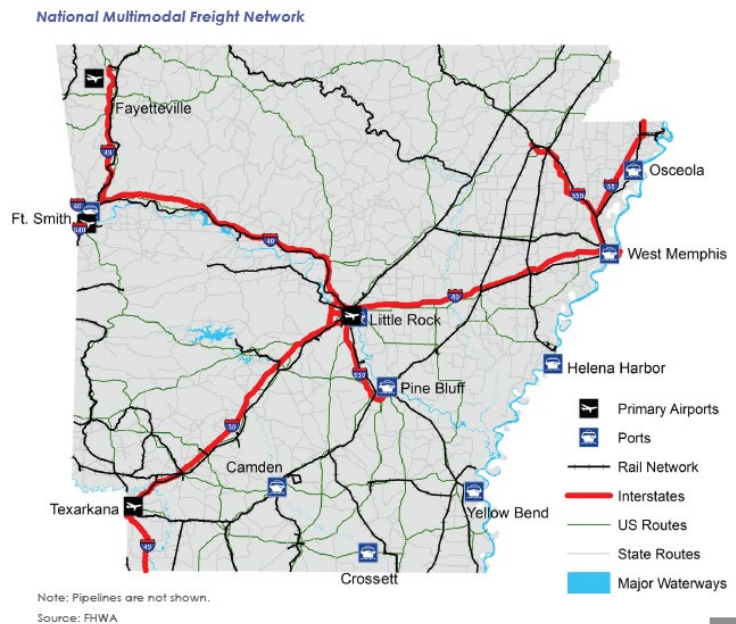


Figure 10: Multimodal Freight Network

Five Rivers Distribution is bordered by two Class I railroads and served by two Class III railroads. The Union Pacific and Kansas City Southern, and the Arkansas Missouri Railroad and the Fort Smith Railroad respectively.

Two main challenges face rail in Arkansas – weight and height restrictions. While Union Pacific can handle loads of over 268,000 lbs., the other carriers are restricted. Equally, without tunnels and other clearances double stacks are not feasible. Kansas City Southern reported that double stack intermodal cars cannot operate on the Fort Smith Branch. The most





River Valley Slackwater Harbor

significant height restriction on the Union Pacific is in the Van Buren Subdivision.

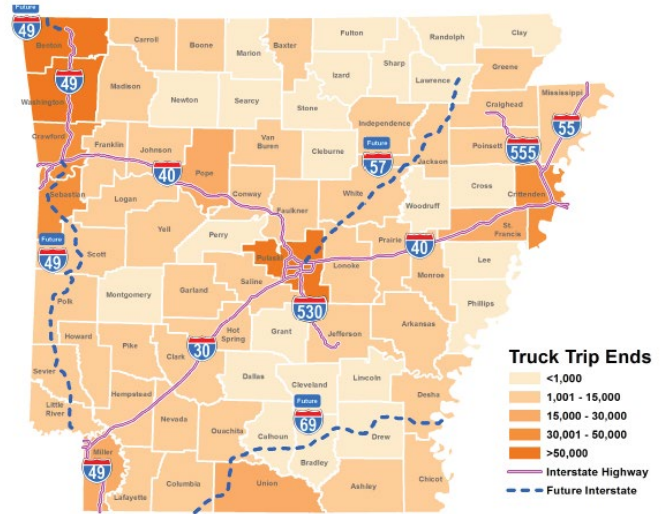
Figure 11: Truck Trip Ends

A tunnel is unable to accommodate double-stack intermodal railcars, thereby limiting any potential east/west intermodal movements traveling between Little Rock and Fort Smith. As a result, increased maritime capacity will help reduce delay and improve supply chain dependability and reliability.

Moreover, unfunded capacity needs for Class I Railroad across the State of Arkansas exceeds \$1,057,000,000.00. According to the Arkansas State Railroad Plan, the largest increases by tonnage are expected for overhead carload traffic, growing by about 20 million tons between 2015 and 2035—an increase of 19

percent. On a percentage basis, intermodal freight is expected to grow faster than carload freight, with inbound intermodal increasing by 73 percent, outbound intermodal increasing by 61 percent between 2015 and 2035, and overhead increasing 69 percent. Overall, rail tonnage originating in Arkansas is expected to grow by about 30 percent between 2015 and 2035, or about 1.3 percent per year. Rail tonnage terminating in Arkansas is expected to grow by 38 percent between 2015 and 2035, or about 1.6 percent per year. This growth is hindered by not only the lack of dedicated funds for capacity improvements, but also the weight and height restrictions limits on rail service. Rail delays and congestion caused by the inability to handle the forecasted growth is anticipated in the future. As a result, the need for increased barge capacity and handling, such as the River Valley Slackwater Harbor is critical to a dependable and reliable supply chain system.

Trucks Generated in Arkansas Counties, 2015



Section III: Grant Funds, Sources, and Uses of Project Funds

Grant Funds

A combination of local match and federal grant funds will deliver the River Valley Slackwater Harbor project. Below is a cost estimate of the components, services, and project management needs anticipated for the project.

Sources

Five Rivers Distribution will provide at least twenty percent (20%) of all eligible future project costs. All project costs are considered eligible future costs. Documentation of Five Rivers Distribution’s Funding Commitment is attached as Appendix A. Five Rivers Distribution will commit to matching the funds in the amount of \$3,774,000 (twenty percent of the project cost). As the grant administrator and lead applicant, Western Arkansas Intermodal Authority (WAIA)



River Valley Slackwater Harbor

will oversee and ensure compliance with all applicable local, state, and federal regulations; including procurement, Buy America compliance (such as domestic steel certification procurement), labor wages, financial monitoring, and project reporting. Also, WAIA will work in close coordination with Five Rivers Distribution to manage all project phases with the selected engineering firm and contractors.

Uses of Project Funds

The expenditures are outlined in the Project Cost Estimate and grouped into two general categories:

- 1) Construction Components: These are costs based on the project components, such as the bulkhead installation, slip excavation, concrete deck, and electrical lighting.
- 2) Design Services and Project Management: These are the costs for proceeding with the NEPA process for environmental assessment and USACE permitting. Costs for engineering services required to design plans, bid specifications, RFP procurement, and contract documents. Other costs include management of project construction and construction inspection. WAIA will provide grant administration and project oversight. WAIA will continue to monitor and provide reporting documents three (3) years after date of completion.



Five Rivers Distribution looking east

River Valley Slackwater Harbor will:

- Divert cargo from truck to inland waterways
- Provides phase approach to build up to maximum terminal throughput
- Allows for support of heavy cargo industries such as wind and project cargos
- Provides flexible open storage for container and heavy cargo
- Provides a useable harbor with a 40+ year life span
- Provide river access to support the growth of the Community Development



River Valley Slackwater Harbor

Project Infrastructure Development Project Cost Estimate:

The following cost estimate below was developed based on quantities take-offs and unit costs derived from similar projects. Funding sources are tabulated at the bottom of the table.

Table 2: River Valley Slackwater Harbor Project Cost Estimate

RIVER VALLEY SLACKWATER HARBOR PROJECT			
PROJECT COST ESTIMATE			
ESTIMATE CLASS 5 - CONCEPT LEVEL			
APRIL 2023			
PROJECT COST			
Component	Description	Estimated Cost	Subtotal
Sheet Pile Material	3,000 tons	\$ 9,200,000	
Sheet Pile Installation	3000 sheets (30 sheets/day)	\$ 3,800,000	
Excavation and Earthwork	300,000 cy	\$ 1,500,000	
Concrete apron, incl base	50-ft wide, 12" thickness, 4075 cy	\$ 2,800,000	
Electrical Service	power extension, 2000ft distance	\$ 150,000	
Lighting	6 masts	\$ 120,000	
			\$ 17,570,000
Design Services and Project Management			
Permitting	Federal and state permits, incl NEPA.	\$ 65,000	
Engineering Design	Typically 4% of construction	\$ 720,000	
Construction Administration	Assumed one year duration	\$ 300,000	
WAPDD Administration	Grant management	\$ 215,000	
			\$ 1,300,000
		PROJECT TOTAL:	\$ 18,870,000
PROPOSED FUNDING			
PIDP Fund Request:		\$ 15,096,000	
Other Federal Funds:		\$ 0	
Non-Federal (state or local) Funds:		\$ 0	
Matching funds (20% by grantee):		\$ 3,774,000	
Total:			\$ 18,870,000



River Valley Slackwater Harbor

Section IV: Merit Criteria

Table 3: Merit Criteria

A) Achieving Safety, Efficiency, or Reliability Improvements	The River Valley Slackwater Harbor project will mitigate safety risks to maritime and harbor staff, provide safe harbor for vessels, and improve reliability and dependability of national supply chain while using an energy efficient mode of transport.
B) Supporting Economic Vitality at the Regional or National Level	Create generational change and transformation through job creation, building regional economic assets, and optimizing the maritime supply chain system.
C) Leveraging Federal Funding to Attract Non-Federal Sources of Infrastructure Investment	The project will leverage federal funds and attract commercial developers to build and invest in intermodal, logistics, and distribution centers.
D) Port Resilience	Provides Safe Harbor out of main current; situated above 100-year flood; ensures year-round usage.

Section A: Achieving Safety, Efficiency, or Reliability Improvements

Between May and June 2019, an extended sequence of heavy rainfall events over the southcentral United States caused historic flooding along the Arkansas River and its tributaries. Substantial property damage occurred at both the Ports of Van Buren and Fort Smith. Overall, property damage in Arkansas totaled \$3 billion; five individuals lost their lives. Increased flooding and high flow conditions caused by climate change remain a continued concern. As part of this project, WAIA and Five Rivers Distribution will site the new facility above the 100-year flood elevation. At over 1,000-feet in length, the new slackwater harbor dock will provide a safe harbor, increase barge capacity, and protect personnel - away from swift river currents during high flow periods. The new facility will offer space for up to 15 tow barges, thereby improving network reliability not only during high water events, but also shortening travel times. Disruptions to service can also be mitigated by providing safe harbor and mooring capability. Further, as an energy efficient mode of transport, one barge can carry the



Courtesy: KFSM, Channel Five News



Courtesy: Marty Shell, Five Rivers Distribution



River Valley Slackwater Harbor

equivalent units of 16 rail cars or 70 large tractor trailers. One gallon of fuel will permit a barge to travel nearly 647 miles ([Barge Transport Wins on Fuel Efficiency \(maritime-executive.com\)](#)).

Also, in an analysis of vessel travel times by Pickering for WAIA, the 2021 study indicated that if the demand exists, the new slackwater harbor and dock, combined with a new faster shallow draft vessel(s,) can provide a competitive alternative to truck and rail. The new proposed vessel could potentially reduce the travel time from Fort Smith to New Orleans from 186 hours (7.75 days) to 94 (3.92 days). This reduced travel time, depending on cargo type, could attract volume truck and rail ([2021-10-22-WAIA Report Draft.pdf \(wapdd.org\)](#)). Equally, due to the constrained rail infrastructure and future congestion expected in Arkansas, the River Valley Slackwater Harbor provides a viable and fuel-efficient alternative to rail movements, thereby allowing freight, such as agriculture, bulk materials to continue to reach markets in a sustainable and timely manner.

Section B: Supporting Economic Vitality at the Regional or National Level

The McClellan–Kerr Arkansas River Navigation System (MKARNS) is an inland waterway system originating near Tulsa, OK. It runs 445 miles through Oklahoma and Arkansas and ends at the Mississippi River. On average, MKARNS carried about 9 million tons per year between 2013 and 2019. Due to the pandemic and flooding, volumes declined. Steel tariffs have also impacted volumes. However, the U.S. Corps of Engineers noted a 31% gain in inbound traffic pushed Arkansas River tonnage to 3.076 million tons in the first quarter of 2023, up 13.6% compared with the same period in 2022. Outbound shipments in the quarter totaled 950,709 tons, up 9.4% compared with the same period in 2022. While increases in tonnage are gradually rebounding, additional economic benefits by building the project would be achieved. Over a ten-year period, the added capacity would create 38 temporary jobs, with 48 direct jobs, and 22 additional jobs involved in cargo movement totaling about \$16 million in wages.

In addition, the Three Rivers project being undertaken by the U.S. Army Corps of Engineers will create a sales impact of \$10.7 million on the MKARNS, 65,383 direct/indirect jobs, 4.3 million agricultural related tonnage, 11 million in other tonnage, and a total value of tonnage of \$3.1 billion on the MKARNS. The River Valley Slackwater Harbor is needed in order to accommodate this future growth. The accompanying River Valley Slackwater Harbor Benefit Cost Analysis shows that another 200,000 tons will be generated by the River Valley Slackwater Harbor. At this time, 20 industries with 3,500 employees are reliant on and served by Five Rivers Distribution.

In collaboration with the University of Arkansas, Dr. Sarah Hernandez, greater understanding of this project

Freight Transportation Data Research Lab

Sarah Hernandez, University of Arkansas, Department of Civil Engineering

and the River Valley Slackwater Harbor “Port shed’s” economic impact can be assessed using the IMPLAN software economic analysis tool and the Automatic Identification System data collected by the U.S. Coast Guard and the Corps of Engineers. “Port sheds,” which fuse publicly available datasets, including truck and marine vessel tracking data and lock performance data, into freight fluidity measures to visualize and understand the economic impacts of freight activity at a port. WAIA intends to partner with Dr. Hernandez to use the River Valley Slackwater Harbor as a potential case study for her “Port Shed” analysis.



River Valley Slackwater Harbor

Section C: Leveraging Federal Funding to Attract Non-Federal Sources of Infrastructure Investment

Western Arkansas is home to global freight and logistics firms, with ArcBest, USA Truck, P.A.M. Transport, Old Dominion, Maverick, along with J.B. Hunt Wal-Mart, Tyson, and Butterball nearby. These major carriers have a vested long-term interest in optimizing supply chains along with strategically placing distribution centers and flash freeze operations near inland ports. Also, the City of Fort Smith and the Fort Chaffee Redevelopment Authority are currently negotiating with a key supplier to lease a 1 million square foot warehouse.

The River Valley Slackwater Harbor is situated at the crossroads of America's heartland with easy access to interstate, rail, and water. According to a project market overview assessment (Vickerman & Associates), an intermodal facility at the Five Rivers Distribution/Port of Van Buren would have a return of investment of 4:1, meaning that for every dollar invested, four dollars would be generated. With Tyson, Butterfield, and other producers, chicken exports from the regions surrounding the River Valley Slackwater Harbor are also a potential target commodity for a barge service. Chicken exports are a lower value exports at \$22,000 per box resulting in decreased safety stock and pipeline costs. A big box retailer such as Walmart may also consider using the River Valley Slackwater Harbor to import containers from New Orleans as a low-cost option for supplying the region.

The River Valley Slackwater Harbor is the economic catalyst that can draw further private investment and commercial developers, shippers, carriers, and rail. The initial federal funding will permit WAIA and Five Rivers Distribution to seek and market to Beneficial Cargo Owners (BCOs), container on barge operators, container on vessel operators, real estate developers, logistics firms, rail, warehouse/distribution center industries, meat producers, etc. to further develop this site.

Section D: Port Resilience

With the ability to maintain operations during and after disasters, flooding, technical accidents, human error, domestic attacks, etc. the River Valley Slackwater Harbor will help better withstand these events along with providing continued service along with quickly responding and adapting to these challenges. The facility will provide long-term safety and back-up. Equally, the River Valley Slackwater Harbor will support and play a role in supporting a higher capacity maritime system. Currently, the existing site and the MKARNS system are vulnerable. The new slackwater harbor will be out of the river current, with the concrete deck above the 100-yr flood. Also, the new slip will offer safe harbor to barges during flooding events.

Costs of recovery from these events can be enormous. For instance, the National Centers for Environmental Information (NCEI) estimated that the 2019 flooding in the Arkansas River basin caused \$3 billion in damage, with a 95% confidence interval between \$1.8–\$5.3 billion. Significant or repeated disruptions, whether due to events at the port itself or at other ports in the maritime network, can affect a port's reliability and ultimately its reputation. Even once fully restored, long-term losses in market share may result from lost customer confidence. This potential impact of an event to damage a port's reputation and negatively impact its attractiveness in the market is discussed in Chang (2000).



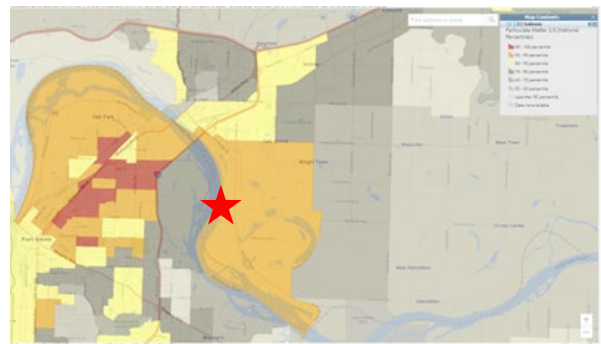
River Valley Slackwater Harbor

The River Valley Slackwater Harbor's ability to successfully and reliably operate across the full spectrum of operations and business lines is directly proportional to the protective factors enabled by the interconnected web of regulatory, law enforcement, emergency management, and first response capabilities ([People, Partnerships, and Ports: Keys to Resilience, Response, and Readiness | Proceedings - October 2021 Vol. 147/10/1,424 \(usni.org\)](#)). Partnerships, collaboration, and advanced technologies will help to protect assets and people; however, the construction of the River Valley Slackwater Harbor will immediately address maintaining an acceptable level of service and reduce the probability of disruption to climate related hazards such as tornadoes and flooding. Local, national, and global economies are highly dependent on reliable water transportation systems. The COVID-19 pandemic and the heightened disruptions to global maritime logistics observed over recent years have underscored the critical importance of risk management and emergency response preparedness and the need to build ever more agile and dependable maritime transportation systems ([Resilience: An emerging paradigm | UNCTAD](#)).

Section V: Selection Considerations

Section E: Climate Change and Sustainability

Freight is one of the largest contributors to air pollution, with heavy duty trucks being the fastest growing contributor to emissions. In fact, the EPA Environmental Justice Mapping Tool shows that Particulate Matter 2.5 ranges in the 90 to 95 percentiles near the site. A report by the U.S. National Waterways Foundation shows that barges can move a ton of cargo 647 miles with a single gallon of fuel. In contrast, trains can move the same ton of cargo 477 miles per gallon, and trucks can move the same ton of cargo 145 miles per gallon. On the MKARNS system, one barge removes 60 trucks from the current roadway network. In the future, the River Valley Slackwater Harbor will remove 1000 trucks from the road annually, reduce CO2 by 82,969 tons, and result in 100 fewer no injury truck accidents, 29 fewer possible injuries, and one fatality. While transport by barge represents only 3 percent of GHG emissions from the transportation sector, maritime plays a major role in helping reduce overall transportation related GHG emissions.



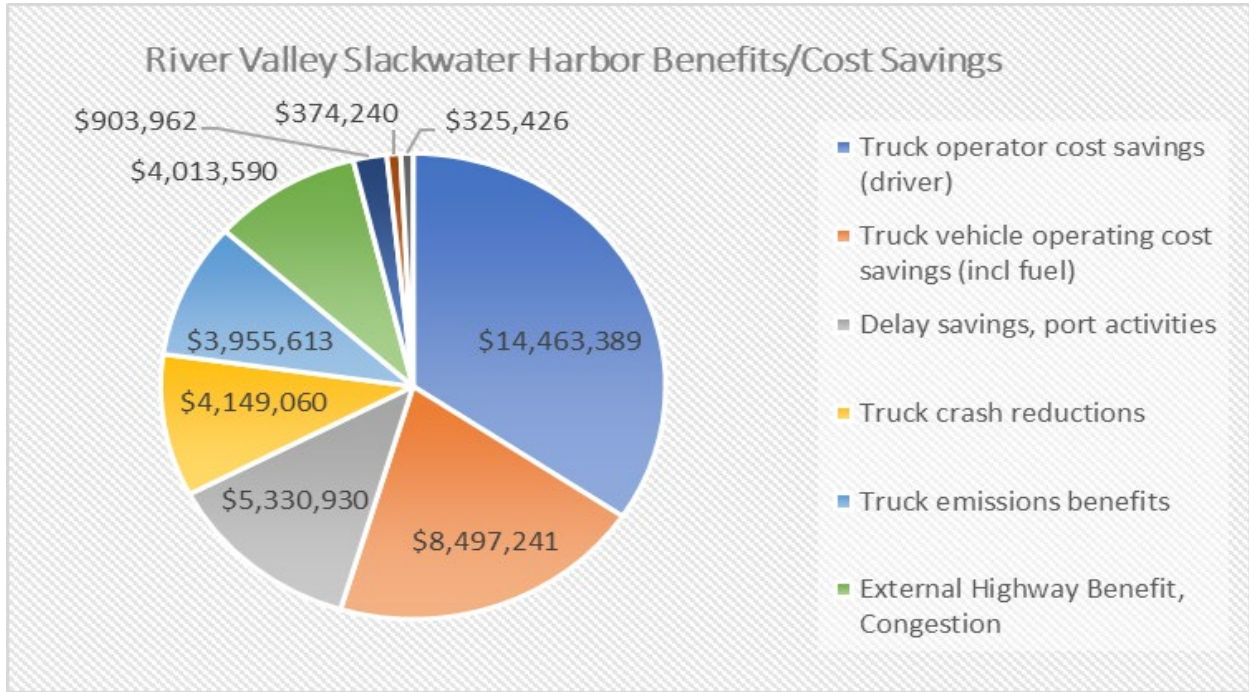
Courtesy: EPA Environmental Justice Mapping Tool, Particulate Matter 2.5 near the site.

The total benefits and cost savings generated from the River Valley Slackwater Harbor project total nearly \$31,507,394 (See Figure 12 below). Moreover, the new facility will have an average yearly delay savings due to unsafe high water of \$197,442. Other critical savings is in reducing the amount of trucks and drivers on the highway network through the reduction of operator, vehicle costs combined with reduced truck emission, crashes, and decreased highway congestion. Also, the River Valley Slackwater Harbor project is committed to procuring green vehicles, such as electric cranes, hoists, and yard holsters. Installation of battery and energy management systems combined with renewable energy will act as a sustainable practice to future proof the facility from disaster and disruptions.



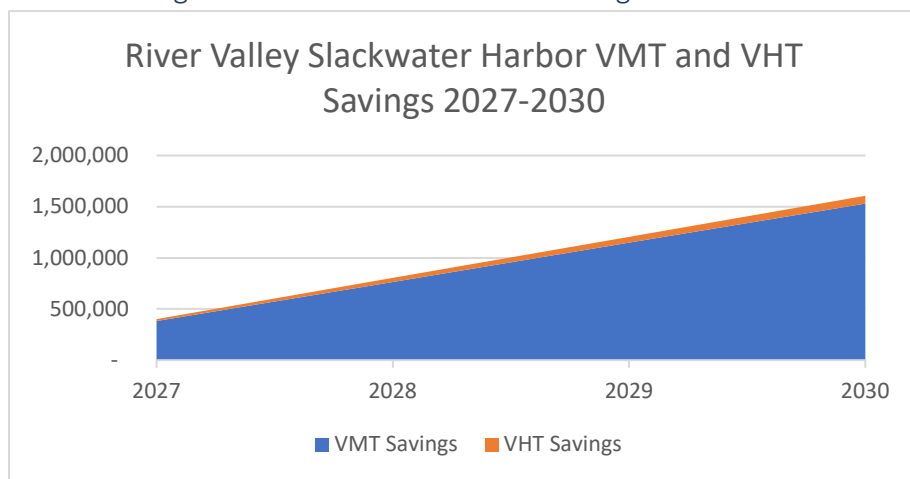
River Valley Slackwater Harbor

Figure 12: River Valley Slackwater Harbor Benefits and Cost Savings



Equally, the River Valley Slackwater Harbor project will result in an initial Truck Vehicle Miles Traveled (VMT) savings of 382,540 in 2027 reaching 1,530,159 by 2030. Also, a savings of Truck Vehicle Hours Traveled of 19,127 hours in 2027 with an expected savings of 76,508 hours by 2030.

Figure 13: Truck VMT and VHT Savings 2027-2030





River Valley Slackwater Harbor

Section F: Equity and Justice40

Located in a historically disadvantaged and rural area (See: Census Tract 205.01, Van Buren, Arkansas, [Grant Project Location Verification \(dot.gov\)](#)) both equity and Justice40 are priorities for community leaders. Also, the EPA's EJ Screen mapping tool shows that of the 4,101 residents in this census tract between 80 and 90 percent are people of color, low-income, and limited English speaking individuals are in the project area ([EJScreen \(epa.gov\)](#)). To better reach these vulnerable populations, WAIA is able to implement surveys and engage diverse populations with the Public Input software platform ([Community Engagement Software For Government | PublicInput](#)) that is licensed to Western Arkansas Planning and Development District, and Frontier Metropolitan Planning Organization. The platform is able to reach out to individuals using a several approaches from online public meetings, online surveys, query codes, social media, voicemail, and text messages. More importantly, the Public Input Tool can perform an equity mapping analysis to determine which diverse, low-income, and disabled populations need targeted. Equally, the Environmental Protection Agency's Environmental Justice Screen and Interactive mapping will help guide and pinpoint potential impacts to vulnerable residents ([EJScreen: Environmental Justice Screening and Mapping Tool | US EPA](#)). These tools among others will be incorporated to achieve equity and Justice40 goals for the River Valley Slackwater project.

All stakeholders – individuals, private sector, and public organizations are pivotal in directing the River Valley Slackwater Harbor project. Working together with our partners, transportation solutions can result.

As partners with Frontier Metropolitan Planning Organization, WAIA and Five Rivers Distribution support and endorse Frontier's initiative to develop plans, policies, and transportation infrastructure taking into consideration mobility access and transportation equity to meet the needs of all users, especially the historically marginalized, vulnerable, elderly, and persons of disability. In fact, the objective of Goal 8 from the Metropolitan Plan is to provide reliable and inclusive access to transportation services, goods, and choices to all segments of the population. To meet these regional policy and federal standards, WAIA will conduct an equity assessment; the following steps are expected:

Equity Assessment

Step 1 – Collect Data and Expert Input

Using the most recent U.S. Census, American Community Survey 5-year estimates, WAIA staff will collect the following data at the census tract or block group level:

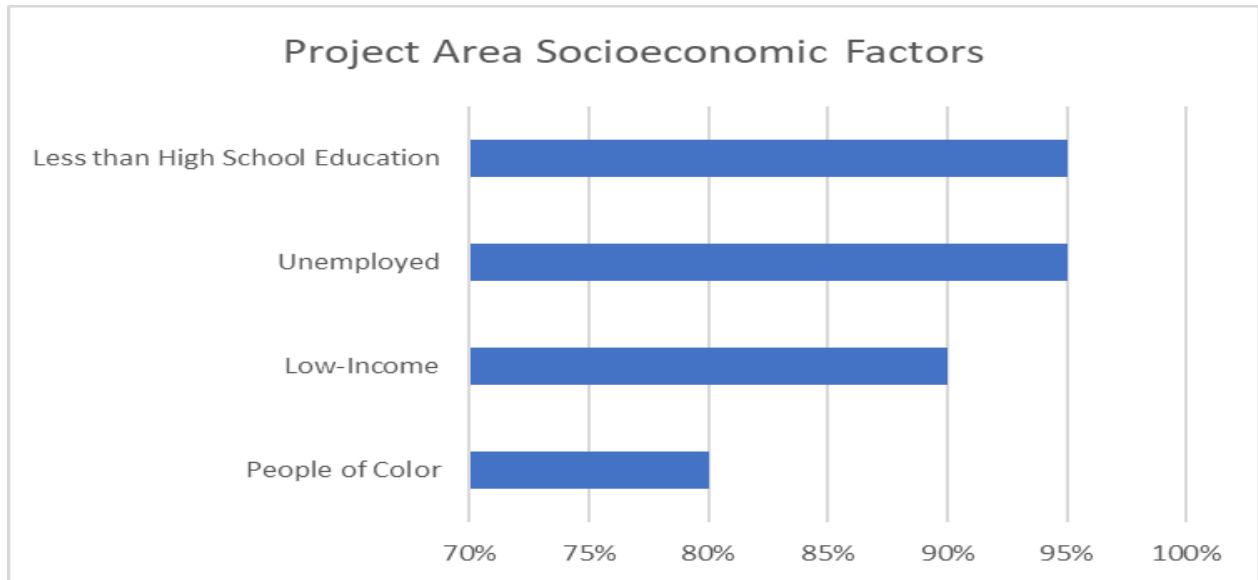
- Minority (Black, Hispanic or Latino, Asian American, American Indian and Alaskan Native, Native Hawaiian or other Pacific Islander)
- Place of Birth
- Low Income
- Limited English Proficiency
- Age — Population 65 years and older, under 5, and 5 to 17 years old



River Valley Slackwater Harbor

- People with Disabilities
- Gender
- Zero Vehicle Households
- Education
- Collect Expert Input from affected Community Members

Figure 14: Environmental Justice Screening and Mapping Tool Results



Step 2 – Consider Historical, Societal, and Policy Comparisons

After compiling the data for each of the demographic factors at the block group/census tract level, the same data will be gathered at the county level for comparison along with any historical, societal, and policy considerations. By scrutinizing these trends, this permits WAIA staff to anticipate inclusive and appropriate engagement strategies to ensure all voices are heard.

Step 3 – Analyze Potential or Current Affects

Once the demographic profile and expert input is completed, then ensure:

- Identify and address trends, and issues. Evaluate potential and current affects that the community deems reasonable.
- Avoid recommendations that have disproportionally high and adverse effects to any of the identified populations.
- Strive to reduce and eliminate barriers to meaningful participation. To gain additional input partner with local religious, civic or grassroots organizations that could serve as representatives of the community.
- Ensure geographic boundaries for analysis are reasonable and logical.
- Include zip codes or other geographical identifiers in surveys.

Step 4– Action and Accountability

- Document feedback and Title VI and EJ populations.



River Valley Slackwater Harbor

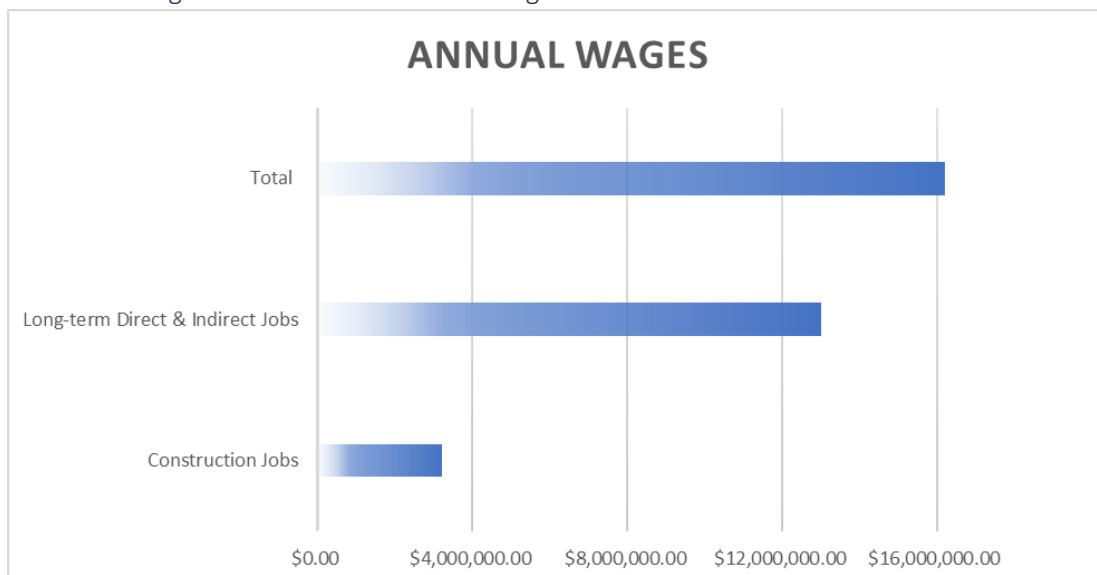
- Provide linguistic, cultural, institutional, geographic, and other amenities to facilitate meaningful participation (i.e., translating materials, or hosting pop-up/coffee chat outreach at community locations).
- Include non-traditional methods of outreach, such as radio ads and interviews on the local Hispanic radio station, translated flyers at non-English speaking stores and churches.
- Report back to the community about how their input was incorporated.
- Determine a method for delivering benefits and mitigating adverse impacts to affected populations.
- Identify any adverse effects in the short-, medium-, or long-term that is predominately borne by Title VI and EJ communities.

Section G: Workforce Development, Job Quality, and Wealth Criteria

The River Valley Slackwater Harbor can help accelerate workforce development, job quality, and wealth. The COVID-19 pandemic disproportionately hit low-wage workers, who are often Black, Hispanic, female, and young. Persons with disabilities also faced significant financial hardships due to fewer economic opportunities (e.g., lower income). For instance, in February 2020, 31.1% of people with disabilities were employed compared with 74.8% of people without disabilities ([Evaluation of Employment Loss and Financial Hardship Among US Adults With Disabilities During the COVID-19 Pandemic | Health Disparities | JAMA Network Open | JAMA Network](#)).

Historically, these communities lack the pathways to higher paying positions in construction, engineering, and maritime professions. The initial creation of about 38 skilled construction jobs is expected with an average pay of \$22.45 generating nearly \$3.2 million in wages during construction. Over a 10-year period, an additional 70 direct and indirect long-term positions would create \$16 million dollars annually in wages (Arkansas Dept. of Commerce, 2023). The River Valley Slackwater Harbor offers improved quality of life, provides living wages, and brings generational opportunities.

Figure 15: Construction and Long-Term Direct & Indirect Jobs Created





River Valley Slackwater Harbor

A healthy, prosperous region and community is one that recognizes the power of its workforce and invests on the success of those seeking to enter the workforce successfully. The Western Arkansas Planning and Development District's Workforce Development Division is crucially important to train the underemployed, develop apprenticeships for the unemployed, and reskill workers. The aim of the River Valley Slackwater Harbor project is to increase the income of local residents, especially the underserved, the disabled, and the disadvantaged through direct and indirect jobs, expand regional entrepreneurship, equip workers with appropriate training for these and future maritime positions.

Utilization of Disadvantaged Business Enterprises (DBE), minority-owned businesses, women-owned businesses, and 8(a) firms can be accomplished through the project construction, engineering, and consulting services contracts. WAIA has a history of administering federal grant funds and is well-versed in these requirements. All prime contractors awarded a contract with a DBE participation goal are required to meet the goal or document evidence of good faith efforts. The Arkansas Department of Transportation's DBE Directory provides a listing of all the certified DBEs within the State of Arkansas.

Moreover, in coordination with the MarTREC (Maritime Transportation Research and Education Center) Education and Workforce Development at the University of Arkansas ([About MarTREC | MarTREC | University of Arkansas \(uark.edu\)](#)), WAIA and Five Rivers Distribution intend to seek potential opportunities for student internships. It is anticipated that transportation agencies and private industry will be increasingly challenged to find highly qualified and technically trained employees in the coming years due to increased retirement rates, fewer entrants into the transportation field, and increased competition for skilled labor, engineers, and planners. MarTREC is dedicated to transportation education and workforce development.



All individuals hired as part of the River Valley Slackwater Harbor project have a free and fair chance to join a union in project design, engineering, construction, and other services.

All individuals hired as part of the River Valley Slackwater Harbor project have a free and fair chance to join a union in project design, engineering, construction, and other services.

Section VI: Project Readiness

A. Technical Capacity:

Preparatory Work Completed

Five Rivers Terminals has completed significant pre-construction tasks for the development of this project. A topographic survey was conducted by a local surveyor in 2020 covering the entire site including the river margin.

In September 2020, a geotechnical investigation was completed Geotechnical & Testing Services (GTS) of Fayetteville, AR. It comprised five borings within the footprint of the proposed slackwater harbor. The borings revealed that the in-situ soils consist of largely medium dense sand, while the deepest boring detected weathered shale at 358', roughly 40 feet below the surface.



River Valley Slackwater Harbor

Also, as part of the pre-development work, the 100-year flood elevation was identified at elevation 409' as determined from FEMA maps. A grading plan was developed across the site and situated the harbor layout, setting the deck final grade at 411'.

Construction Methodology

The recessed setting along the riverbank easily lends itself to a dredged harbor approach for construction. The harbor bulkhead was originally conceived as a tie-back wall system, but due to the presence of shallow bedrock, a cellular system was adopted with the OPEN CELL SHEET PILE system as the specific application. This system provides a durable and cost-effective bulkhead used numerous times before on the inland waterways of the US.

A previous example on the Ohio River in Lawrenceburg, Indiana, serves as proof of concept. The 65-ft long sheets were driven by cranes situated on land, which avoided the cost of deck barges. As the bulkhead was installed, the enclosure was excavated and dewatered with pumps to avoid dredging. After the excavation was completed, the dike was removed, and the harbor flooded. Photos of the construction are shown below.



Figure 16: Harbor Excavation



Figure 17: Sheet Pile Installation



Figure 18: Flooded Harbor



Figure 19: Removing Dike

The approach proposed for River Valley Slackwater Harbor involves a shorter bulkhead using 40-ft sheets and soils that are more easily drivable for pile installation and excavation.



River Valley Slackwater Harbor

Project Schedule

Project completion is expected in approximately 24 months. The first year is comprised of NEPA documentation and review, supported by engineering design, and United States Army Corps of Engineers (USACE) approval. The second year is allocated for contract preparation and bidding, so that construction can take place in the summer of 2025, with completion by the fourth quarter 2025. A tentative but realistic project schedule is shown below.

Table 4: River Valley Slackwater Harbor Project Schedule

RIVER VALLEY SLACKWATER HARBOR										
PROJECT SCHEDULE										
	2023		2024				2025			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Grant Award		◆								
Environmental Review (NEPA)		■	■	■	■	■				
Engineering Design				■	■	■				
Bidding & Contract Award						■				
Sheet Pile Procurement						■	■			
Sheet Pile Installation							■	■		
Excavation & Dredging & Grading								■	■	
Concrete Pavement									■	■
Electrical Installation										■
Project Completion										◆

Risk Mitigation

The Slackwater Harbor project has been conceived as a straightforward and stand-alone project. The project simply consists of one dredge slip created by a relatively long but uniform sheet pile bulkhead with a concrete deck. Procurement risk is low in that two steel rolling mills are located within 300 miles of the project site, which can deliver products directly to the site by rail or barge. The construction method described above mitigates risk as there are several contractors in the region with direct experience installing the system.

RISK ANALYSIS AND MITIGATION MATRIX		
Potential Risk	Mitigation Description	Risk Assessment
NEPA Approval	Site has previous No Rise Designation; other previous environmental studies have been undertaken.	Medium
Matching Funding	Applicant has means of funding initial	Low
Property Status	Property is owned by applicant	None
Material Procurement	Two regional mills produce flat sheets	Low
Contractor Availability	Several regional contractors are capable of performing job.	Low
Construction Method (Technique)	Construction method has been used before on Arkansas River at Port of Little Rock	Low
Construction Schedule	Adequate time has been allocated	Low
Pile Installation	Site geology has been investigated; soils are drivable.	Low
Excavation/Grading/Dredging	Scheduled for summer when water is low	Low
Grant Management	Hold regular progress meetings to inform project team.	Low
Weather delays	Site will be above 100-yr flood elev.	Medium



River Valley Slackwater Harbor

Another type of project risk, differing site conditions, is also low due to the complete set of exploratory borings within the project footprint which indicated easily drivable soil. The risk of construction interruption due to inundation is small since the sheet pile driving occurs after raising the site above the 100-year flood level and prior to the dredging of the slip.

Every project encounters challenges along the way, so communication among all team members is critical to success by spotting issues that arise and responding promptly to these issues. One effective means to achieve this is to have periodic video conferencing for easy exchange of information and concerns. Including MARAD representatives in such periodic meetings helps to alert other project participants to compliance with grant requirements and inform MARAD of progress.

B. Environmental Risk

The NEPA process has not commenced at the time of this grant application. However, the project team has allocated resources in terms of budget and project schedule to prepare the Environmental Site Assessment. Permit applications with the USACE will be initiated once notice of award is received.

Environmental Permits and Reviews

As part of the NEPA process, the proposed site is subject to the U.S. Army Corps of Engineers environmental permitting and review process. The USACE’s permitting process typically begins with receiving a jurisdictional determination on a property to determine if wetlands or other waters are present and if they are regulated by the Corps. If a project will impact a jurisdictional wetland or other water, then a permit from the Corps may be required. All federal laws, such as the Rivers and Harbors Acts, Clean Waters Act, Section 404, Marine Protection and Research Act, along with program regulations must be met. The River Valley Slackwater Harbor project schedule accounts for the USACE review time for permits and approval. In 2016, Five Rivers Distribution undertook a No Rise

ENGINEERING “NO-RISE” CERTIFICATE
FOR ARKANSAS COMMUNITIES
SITE INFORMATION

Community	Van Buren, AR	County	Crawford
Applicant	Five Rivers Distribution	Date	12/19/2016
Address	2020 Riverfront Road, VB, AR	Engineer	Lee J. Beshoner, PE, CFM
Telephone	479-410-1557	Address	124 W Sunbridge Dr, Ste. 3, Fayetteville, AR
		Telephone	(479) 571-3334
Project	Five Rivers Distribution	Lot	
Address	2020 Riverfront Road	Subdivision	
	Van Buren, AR 72957	Legal Description	

PROJECT INFORMATION

Description of Development:	Proposed development in Arkansas River floodway and floodplain
Principal Use of Premises:	Port Facility



FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

NFIP map(s) and panel(s) affected:	05033C0390J
Effective date of map:	December 3, 2010
Base Flood Elevation on FIRM:	409.5
Name of flooding source:	Arkansas River

CERTIFICATION

This is to certify that I am a duly qualified Professional Engineer licensed to practice in the State of Arkansas. I further certify that the attached engineering data supports the fact the proposed development would not result in any increase in flood levels within the community during the occurrence of a base flood event.

Lee J. Beshoner, PE, CFM	12942
CERTIFIER'S NAME	LICENSE NUMBER
FTN Associates Ltd.	
COMPANY NAME	
<i>Lee J. Beshoner</i>	12/19/16
SIGNATURE	DATE
Water Resources Engineer	
TITLE	



River Valley Slackwater Harbor

Analysis with FTN and Associates (See Appendix B). Based on the information available, it was not possible to remove the entire property from the Floodway of the Arkansas River. However, a large portion of the southern half of the property can then be used for developable areas. Additionally, this information was provided to the City of Van Buren to document the area that can be developed, and Five Rivers received a No Rise Condition and certification.

State and Local Approvals

Requirements under The National Environmental Policy Act (NEPA) are defined in [40 CFR 1508.18](#). There are two separate classifications of environmental reviews within the State of Arkansas:

- Categorical Exclusions (CE) (Environmental review decisions over the last six years for the federal programs have been 90% categorical exclusions)
- Environmental Assessment

The State of Arkansas may issue a CE for a project based on a detailed environmental analysis if the action does not “individually or cumulatively have significant effect(s) on the human environment.” An Environmental Information Document is required if a project doesn’t qualify under the criteria for a CE. The EID will determine if a proposed action has the potential to cause significant environmental effects or not. Generally, the EID includes a brief discussion of:

- The need for the proposed project
- Alternatives
- The environmental impacts of the proposed action and alternatives
- Required correspondence with environmental cross-cutting agencies

In Arkansas, EPA has delegated authority to issue a National Pollutant Discharge Elimination System to the Arkansas Department of Environmental Quality. The Water Permits Branch of the Arkansas Department of Environmental Quality is responsible for issuing permits assigned with pollution limits and conditions to protect water quality. Permits are issued as either Discharge or No-Discharge permits.

Discharge permits are also called National Pollutant Discharge Elimination System (NPDES) permits. The NPDES permit program is authorized by the federal Clean Water Act. Other permits are authorized through state and federal laws. The U.S. Environmental Protection Agency has delegated authority to DEQ to manage the state NPDES permit program. NPDES permits are required for facilities that release treated waste into waters of the state (creeks, streams, rivers or lakes). The NPDES program manages wastewater, construction, stormwater, and pretreatment.

No-discharge permits are authorized under the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. §8-4-101 et. seq.) These permits are issued for activities that are prohibited from resulting in a waste being discharged to waters of the state. This is accomplished by operational controls to prevent a discharge, land application, or sub-surface injection (underground injection control).



River Valley Slackwater Harbor

Environmental Reviews, Approvals, and Permits by Other Agencies

In 2021, WAIA undertook a baseline environmental review and delineation study conducted by FTN and Associates on property near the River Valley Slackwater Harbor site.



**PHASE I ENVIRONMENTAL SITE ASSESSMENT
WESTERN ARKANSAS INTERMODAL AUTHORITY
INTERMODAL FACILITY SITE
HIGHWAY 59 NORTH
VAN BUREN, CRAWFORD COUNTY, ARKANSAS**

Section VII: Domestic Preference

The sheet pile bulkhead surrounding the proposed slackwater harbor would be almost entirely comprised of steel PS31 flat sheets, which are commonly used in cellular structures. Flat sheets are produced domestically at mills near Blytheville, AR or Midlothian, TX. Therefore, compliance with the Buy America Act is readily attainable. Other materials needed for the project, such as concrete or reinforcing steel, will be locally sourced. No waivers or other exceptions are anticipated. Terms for domestic preference will be carried through to all agreements with contractors.



**DELINEATION OF POTENTIAL
SECTION 404 ISSUES
WESTERN ARKANSAS INTERMODAL AUTHORITY
VAN BUREN, CRAWFORD COUNTY, ARKANSAS**





River Valley Slackwater Harbor

Section VIII: Statutory Determinations

Table 5: Statutory Determinations

Statutory Determination	Guidance
1. The project improves the safety, efficiency, or reliability of the movement of goods through a port or intermodal connection to the port.	The River Valley Slackwater Harbor project improves the safety, efficiency, and reliability of transportation by construction of a barge terminal able to operate away from the current and throughout all river levels. This will result in an initial Truck VMT savings of 382,540, a Truck VHT of 19,127 hours, delay savings of nearly \$200,000 annually.
2. The project is cost effective.	The Benefit Cost Ratio is 1.96 with a NPV of \$20,587,125.
3. The eligible applicant has the authority to carry out the project.	WAIA was created in September 2009 through an act of the Arkansas State Legislature with the purpose of creating and promoting intermodal and multimodal assets in the region (SB478 as engrossed on 03-29-2023 09:47:19 (intermodal.org)). This legislative action gives WAIA the authority to enter into contracts, use and implement funding instruments, etc.
4. The eligible applicant has sufficient funding available to meet the matching requirement.	Attached are letters of commitment from WAIA, Five Rivers Distribution, Citizens Bank & Trust Company. Five Rivers Distribution will provide the local match \$3,774,000; with the federal share being \$15,096,000 for a total project cost of \$18,870,000.
5. The project will be completed without unreasonable delay.	The Project Schedule is a realistic forecast based on experience with similar projects, with generous time allowances for NEPA review, bidding, and procurement.
6. The project cannot be easily and efficiently completed without Federal Funding or financial assistance available to the project sponsor.	Federal assistance will allow for the prompt completion of this project rather than deferring the project indefinitely. Without federal funding, continued flooding and service disruptions will risk lives, assets, and economic viability for the region and weaken the national supply chain.