WATERSHED PLAN AND ENVIRONMENTAL ASSESSMENT FOR THE COAL RIVER WATERSHED
KANAWHA COUNTY, WEST VIRGINIA

ARCHITECTURAL AND HISTORICAL RESOURCES IDENTIFICATION SURVEY REPORT

Prepared for:

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ABSTRACT

The Capitol Conservation District (CCD), in combination with the Natural Resources Conservation Service (NRCS), is preparing a Watershed Plan and Environmental Assessment for the Coal River Watershed to address public safety and resource concerns associated with an outdated dam located on the Coal River near the Town of Tornado in Kanawha County. The Markosky Engineering Group, Inc. (Markosky) conducted an architectural and historical survey for the project in order to identify historic resources within the study area and ensure compliance with federal and state cultural resource regulations, including Section 106 of the National Historic Preservation Act (NHPA), as amended; the Advisory Council on Historic Preservation guidelines (36CFR§800); and West Virginia State Code 29-1-8, and its implementing regulations, Title 82, Series 2: "Standards and Procedures for Administering State Historic Preservation Programs". The survey was conducted in accordance with the West Virginia State Historic Preservation Office (WV SHPO) National Register and Architecture/History Survey Manual (WV SHPO 2016).

The historic resources Area of Potential Effect (APE) for the Watershed Plan and Environmental Assessment for the Coal River Watershed accounts for potential effects of potential projects as part of the preliminary engineering for this project. The APE includes above ground structures located within the study area that are 45 years old or older, taking into account potential impacts of Project alternatives within Coal River's Upper Falls. As no final project has been chosen and, as such, no limit of disturbance (LOD) has been designed, the final APE may need to be altered and additional studies performed, including determination of effects studies.

The architectural and historical resources investigation consisted of background research, field survey, resource evaluation, and the preparation of this report. Markosky identified three (3) resources within the APE: two previously-recorded resources (KA-4675 and KA-4676) and one newly-recorded resources (KA-8493). An additional previously-recorded resource within the study area, KA-4677, was demolished and is no longer extant. The Lock and Dam No. 3 (KA-4675) and Old Lock No. 3 (KA-4676), located within the study area, are within the National Register of Historic Places (NRHP)-listed Coal River Locks, Dams, and Log Boom Archaeological District (NRHP 97001417), which is listed in the NRHP under Criteria A, B, and D. The extant above ground features of the Lock and Dam No. 3 (KA-4675) post date the period of navigation and log booms on the Coal River. As such, Lock and Dam No. 3 (KA-4675) is recommended as a non-contributing element of the district as well as individually not eligible for the NRHP. Old Lock No. 3 (KA-4676) is recommended as a contributing resource to the archaeological district. As no final project LOD has been established to date, project effects are unable to be assessed at this time.

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1.0 INTRODUCTION

1.1 Project Purpose

The Markosky Engineering Group, Inc. (Markosky) conducted a historic resources investigation for the Watershed Plan and Environmental Assessment for the Coal River Watershed (hereinafter referred to as, the Project) located in Jefferson and Washington Magisterial Districts, Kanawha County, West Virginia (**Appendix A: Figure 1**).

The historic resources investigation was designed and conducted to facilitate project compliance with state and federal legislation regarding cultural resources, including Section 106 of the National Historic Preservation Act (NHPA), as amended, and the Advisory Council on Historic Preservation guidelines (36CFR§800). The survey was conducted in accordance with historic and architectural survey protocols and procedures established by the West Virginia State Historic Preservation Office's (WV SHPO) National Register and Architecture/History Survey Manual (WV SHPO 2016). All evaluation work performed for the historic resources investigation was conducted by Markosky personnel who meet or exceed the professional qualifications as specified for their position in 36CFR§61.

1.2 Project Description

The project site is located at the Upper Falls on the Coal River, at the Town of Tornado, West Virginia. The Capitol Conservation District (CCD), in combination with the Natural Resources Conservation Service (NRCS), is preparing a Watershed Plan and Environmental Assessment for the Coal River Watershed to address public safety and resource concerns associated with an outdated dam located on the Coal River near the Town of Tornado (see **Appendix A: Figure 1**).

The Coal River is a popular destination for outdoor enthusiasts, and with initiatives such as the Water Trail, which further encourage the public to use the Coal River and its tributaries, a watershed project that improves public safety and provides long-term restoration with positive impacts to environmental, economic, and social aspects of living in the watershed, appears to be warranted. Several project alternatives will be considered. Removal of the dam would be consistent with recent stream restoration projects performed by the Department of Environmental Protection on the Coal River to improve public safety, enhance water quality and restore aquatic movement; however, the project will also consider alternatives that keep the dam in place, if those alternatives also provide environmental benefits. The project design could also include recreational enhancements such as improved water access, walking paths, etc. that extend beyond the dam's location.

1.3 Area of Potential Effects (APE)

The Area of Potential Effects (APE) is defined as the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16(d)).

The historic resources APE for the Watershed Plan and Environmental Assessment for the Coal River Watershed accounts for potential effects of potential projects as part of the preliminary engineering (**Appendix A: Figure 2**). The APE includes the study area, which consists of the

area of anticipated direct impacts. Within it Markosky identified above ground structures that are 45 years old or older, taking into account the potential Project alternatives within Coal River's Upper Falls. A one-mile buffer was used to examine previously-recorded resources in the area in anticipation of potential indirect impacts on National Register of Historic Places (NRHP)-listed or -eligible resources. As no final alternative has been chosen and, as such, no limit of disturbance (LOD) has been designated, the final APE may need to be altered and additional studies performed, including determination of effects studies.

Consulting Parties have not been solicited to participate in the Section 106 Process to date. The CCD and NRCS continue to plan the potential projects that may be implemented to improve public safety and enhance the environment. When final alternatives are developed, local groups will be contacted to participate in the Section 106 Process.

2.0 SURVEY METHODOLOGY

The approach for this Project was designed as a survey of above ground historic resources conducted to identify, document, and evaluate above ground resources that are at least 45 years old within the Coal River Watershed study area at Upper Falls. Markosky's senior architectural historian documented resources in the field that met the age requirement and were located within the Project's Historic Properties direct-impact study area.

The survey included the documentation of resources with Historic Property Inventory (HPI) forms, which consist of a minimum record of a photograph, location information, current and historic function, build date, style, and materials among other basic information, as well as an NRHP recommendation based on each resource's significance and integrity.

This Historic Structures Report for above ground historic properties includes an introduction with project description, an overview of the APE and study area, and a description of the methodology. The report presents a historic context focusing on the Coal River watershed and navigation history and a tabulation of the results of the background research and survey. A recommendation of the resource's eligibility for listing in the NRHP was included for each surveyed resource. The report is illustrated with current and historic annotated mapping and photographs as appropriate.

The Lock and Dam No. 3 (KA-4675) and Old Lock No. 3 (KA-4676), located within the study area, are located within the NRHP-listed Coal River Locks, Dams, and Log Boom Archaeological District (NRHP 97001417), which is listed in the NRHP under Criterion A for its association with regional economic, transportation, and navigation development. The district is also listed in the NRHP under Criterion B for its association with William Rosecrans, the original designer of the lock and dam navigation system; and Criterion D for its potential to contain information. The original NRHP nomination for the archaeological district noted 59 contributing resources and no non-contributing resources. However, an inventory of these contributing resources was not included.

Additional historic context information was gathered to identify the age and purpose of the extant parts of the resources in the study area. The extant above ground features of the Lock and Dam No. 3 (KA-4675) are not likely to have been constructed during the period of navigation and log booms on the Coal River. As such, Lock and Dam No. 3 (KA-4675) is recommended as a non-

contributing element of the district as well as individually not eligible for the NRHP. Old Lock No. 3 (KA-4676) is recommended as a contributing resource to the archaeological district.

The above ground survey occurred in October 2025. The resources within the study area were photographed and surveyed. The resources' current conditions were assessed and compared to historical descriptions of the Coal River Navigation lock and dam structures and related infrastructure. Markosky architectural historians then evaluated and provided recommendations of the resources' NRHP eligibility. As previously stated, as project alternatives are developed, the APE may need to be redefined and the potential effects on the resources may need to be assessed.

3.0 HISTORIC CONTEXT

The area of land comprising of present-day Kanawha County, including Coal River, Alum Creek, and St. Albans, has been inhabited by people since at least 10,500 B.C. Adena and Hopewell cultures occupied the area, leaving behind numerous mounds and earthworks. The region was occupied by Native peoples until the seventeenth century but was largely unoccupied before the encroachment of Euro-Americans. Non-residential Native Americans were intermittently present, and at various times, the region was part of the Iroquois Confederation towards the north, the Shawnee nation to the west, and the Cherokee nation to the south (Maslowski 2024). The supposed first European to pass through the region was George Arthur, a captive of Native Americans, in 1674. The next European visitors to the region did not arrive until 1742 during John Peter Salling and John Howard's exploration of the Coal River (Dean 2007:9-10). From this point, European interaction with the area gradually became more common throughout the eighteenth century, leading to George Clendenin's settlement of Charleston in 1788 (Harper 2024).

That same year in 1788, Fort Tackett was built near the mouth of Coal River. The log cabin and stockade provided protection to seven families from the local indigenous nations in the region. The Shawnee attacked the small fort and disbanded the sparse Euro-American settlement around the mouth of Coal River at the Kanawha River in 1790 as part of the war for the Ohio Valley between the native nations and the burgeoning United States. Because of these territorial battles, American settlement of this borderland was slow to develop, until the Treaty of Greenville in 1795 removed the Indian confederacy from the Ohio Valley, which included the Kanawha Valley. In 1799, the growing settlement of the area necessitated a ferry, which crossed both the Coal River and Kanawha River at a settlement known as Coalsmouth, present-day St. Albans (Dean 2007:5-6).

The initial industrialization of Kanawha County began with the rise of the salt industry. The region hosted over 50 salt furnaces and was capable of producing around 9,000 bushels of salt per day by the late 1840s. In the Coalsmouth area at the turn of the nineteenth century, logging and related enterprises were prominent businesses, including sawmills and boat building (Dean 2007:7). It was also during this period in the mid-nineteenth century that cannel coal production boomed along the Coal River (Harper 2024).

Coal was found in Virginia as early as the eighteenth century, but American cities were slow to use coal as a fuel source due to the abundance of wood. However, this trend changed when the

steam locomotive came into general use and required large amounts of coal. The first commercial coal company in the Kanawha Valley was established in 1834. The company focused mining efforts on the cannel coal found along the Elk River north of Charleston. Cannel coal was valuable because one bushel of coal could yield roughly two gallons of crude coal oil after refinement. Additionally, the coal was able to be easily ignited and burned with a steady, bright flame making it useful for lamps, fireplaces, and general illumination. By 1861, oil production in the region reached approximately 5,000 gallons per day (Dean 2007:13-14; Athey 2024).

One of the largest cannel coal producers of the region was William M. Peyton. A lawyer from eastern Virginia, Peyton explored the western part of the Commonwealth in the 1840s in search of cannel coal deposits. By 1848, he found extensive reserves along the Big Coal River and began purchasing land as early as 1849. Peyton organized mining efforts at Peytona, approximately 16.5 miles southeast of the Project area, which included organizing the Virginia Cannel Coal Company in 1851. Between 1849 and the organization of his company in 1851, Peyton oversaw the mining of thousands of bushels of cannel coal in the Peytona area. A newspaper account in 1850 described the transportation of the coal from this region, utilizing the Coal River system to ship the harvested coal to larger markets along the Kanawha and Ohio Rivers. The article reported the boats were loaded through the locks, which referred to crude sluice dams at the Upper and Lower Falls that funneled water through the falls (Athey 2024; Dean 2007:22-26).

Other coal companies were also established in the area during the 1850s, putting pressure on the region for internal improvements. In 1851, Peyton sold land to the newly-established Cannel Coal Company of Coal River in exchange for shares in the company. Peyton also partly organized the Western Mining and Manufacturing Company upriver from Peytona in 1853. At least three additional coal companies were established in the area during the early 1850s, the Kanawha Mining Company, the Coal River and Kanawha Mining and Manufacturing Company, and the Coal River and Ohio Mining and Manufacturing Company; all three by local landowner and lawyer, Edward Kenna. However, in order to be a reliable means of transportation for this growing industry, the Coal River needed necessary infrastructure and slack water improvements to assist navigation efforts (Dean 2007:28-37).

In 1849, the Virginia General Assembly approved plans from Peyton to organize the Coal River Navigation Company to construct improvements in the Coal River watershed to more easily navigate the river system. The first improvements along the river occurred in late 1849 and consisted of the removal of obstructions from the water, widening the the riverbed, as well as construction of the crude sluice navigation system at the Upper and Lower Falls. The company, which officially organized in December 1849 following Peyton's initial improvements to the river, decided in the first meeting to "attempt more than a sluice navigation" with more substantial locks and dams (Dean 2007:46-47).

To accomplish this goal, William S. Rosecrans, a future civil war general, began designing the 35-mile lock and dam system with Theodore Moss, temporary president of the Navigation Company, as early as 1853. Rosecrans became president of the Navigation Company in 1856 through mid-1857, in which time the construction of the navigation system was nearly completed (Dean 2007:58-59; Sutphin 2024).

Rosecrans, the project engineer and later company president, was a notable individual with a major impact on the development of infrastructure throughout the Coal River watershed. He attended West Point beginning in 1838. Throughout the antebellum period, Rosecrans assisted with developing Virginian coastal defenses and taught a variety of subjects at West Point. In 1854, Rosecrans resigned from the military and began working in numerous civilian pursuits. In the early 1850s, he became involved with the Coal River Navigation Company to assist in the lock and dam construction efforts. At the outbreak of the Civil War, Rosecrans rejoined the military as part of George B. McClellan's staff. He would go on to be a fairly successful Union general despite a disastrous defeat at Chickamauga Creek. Following the war, he served as U.S. Minister to Mexico and served as a congressman for the state of California (ABT 2025).

Between 1854 and 1859, the Company built a series of locks and timber crib dams on the Coal, Big Coal, and Little Coal Rivers (**Appendix A: Figures 3 and 4**). Nine sets of locks and dams were built along the three rivers. The project covered 35 slackwater miles from the Coal River's confluence with the Kanawha to the Town of Peytona, including a single site on the Little Coal near Ezekiel Branch. At the start of construction in 1854, Edward Kenna, who owned both sides of the river at Upper Falls in present-day Tornado, agreed to give half an acre of land on the lock side for maintenance space and a lock keeper's house. In exchange, Kenna requested a millrace and head gates on the west side of the falls to power his mill. Locks 1 through 4 were completed by 1856, and Locks 5 through 8 were built in 1856-1857. The project was nearly completed in 1857 when a flood damaged the newly built structures. Major Henry Kupp of Pennsylvania repaired the locks and dams in exchange for company shares, improving upon Rosecrans' original designs (Dean 2007:63-64; Binning and Moore 1997).

Lock and Dam No. 1 was constructed 1.5 miles from the mouth of the Coal River and was situated 17 feet above the Kanawha's water level. Lock and Dam No. 2 was 5 miles from the mouth of the river at Lower Falls and was 35 feet above the Kanawha. Lock and Dam No. 3 was 11.5 miles from the mouth of the river, located at Upper Falls near Tornado, and was 47 feet above the Kanawha. Lock and Dam No. 4 was 18.25 miles from the mouth of the river, located above Alum Creek below the fork, and was 55 feet above the Kanawha. Lock and Dam No. 5 was 20.33 miles from the mouth of the Coal, located above the Alum Creek fork, and situated 69.9 feet above the Kanawha. Lock and Dam No. 6 was 23.5 miles from the Kanawha River confluence, located near Briarport, and rested 83.6 feet above the Kanawha. Lock and Dam No. 7 was 29.66 miles from the mouth of the river, located below White Oak Creek, and was 94 feet above the Kanawha. Lock and Dam No. 8 was 31.75 miles from the mouth of the Coal, situated above Brush Creek, and was 105.2 feet above the Kanawha. Lock and Dam No. 9 was located on the Little Coal River (Binning and Moore 1997) (**Table 1**) (**Appendix A: Figure 4**).

Table 1. Coal River Navigation Company Lock and Dam Locations

Lock and Dam #	Built By	Location	Feet Above Kanawha River
Lock and Dam #1	1856	1.5 miles from the mouth of the Coal River	17 feet above Kanawha

Lock and Dam #	Built By	Location	Feet Above Kanawha River
Lock and Dam #2	1856	5 miles from the mouth of the Coal River	35 feet above Kanawha
Lock and Dam #3	1856	11.5 miles from the mouth of the Coal River	47 feet above Kanawha
Lock and Dam #4	1856	18.25 miles from the mouth of the Coal River	55 feet above Kanawha
Lock and Dam #5	1857	20.33 miles from the mouth of the Coal River	69.9 feet above Kanawha
Lock and Dam #6	1857	23.5 miles from the mouth of the Coal River	83.6 feet above Kanawha
Lock and Dam #7	1857	29.66 miles from the mouth of the Coal River	94 feet above Kanawha
Lock and Dam #8	1857	31.75 miles from the mouth of the Coal River	105.2 feet above Kanawha
Lock and Dam #9	1859	Little Coal River	n/a

The dams themselves were timber cribs filled with stone. The dams rested on wood piles and had thick boards driven into their upstream sides. The locks were 125 feet by 24 feet and had a minimum water depth of four feet. The locks were also built using timber cribs but had addition oak planks around their foundations to prevent undermining and were 12 feet thick. Notable exceptions to the general design were the locks located at No. 2 and No. 3 which were cut into the river's bedrock. Lock No. 3 at Upper Falls was 273 feet long, located 15.60 feet above the Miter Sill, and lifted a total of 11.60 feet of water (Binning and Moore 1997; Dean 2007:70-72).

Steamboat navigation operated on the river through the mid and late 1850s beginning at the mouth of Coal River and extended further upriver as the locks were completed. However, the first steamboat to pass through all the Coal River and Big Coal River locks occurred in March of 1859. In 1860, over 600,000 bushels of coal were shipped through the Coal River system's locks and dams from Peytona to St. Albans and then as far as Cincinnati and New Orleans. Prior to the construction of the locks and dams, coal mining operations had to build rafts of poplar wood to float the coal downstream. Once the rafts arrived at the collection point, they were disassembled and sold for building materials. However, the rafts were only functional when the water levels were high and required unnecessary amounts of labor to construct and deconstruct each raft. After the completion of the locks and dams, a single steamboat was capable of hauling two barges worth of coal from beginning to end. The steamboats entered the locks one at a time and functioned 24 hours a day (Steelhammer 2008; Dean 2007:63, 81).

The cost of the mortgaged navigation system and other financial obligations were leading to the end of the Coal River Navigation Company by the late 1850s. However, operations on the river only paused due to the Civil War for military and political considerations. Most coal companies

that utilized the navigation and paid for the lock tolls ceased operations during the war. In 1860, 588,332 bushels of coal were shipped on the Coal River, compared to 22,047 bushels shipped in 1861 at the start of the Civil War. In 1861, flooding caused widespread damage to the navigation system. Then Federal troops destroyed boats and lumber along the watershed. Due to the war, repairs were delayed until 1867 (Dean 2007:83-86, 104).

Beyond the damage they incurred from flooding in the early 1860s, the need for the locks and dams had already begun to dwindle. As such, the Coal River Navigation Company was put up for sale, as announced on July 26, 1865 in The West Virginia Journal (The West Virginia Journal 1865). A new organization, the Navigation Company of Coal River, purchased the old company in 1865 at auction. All locks and dams, except for Lock and Dam A on the Little Coal River, were repaired following the sale. For a few more years, coal continued to be transported on the river, as well as timber, barrel stays, and other lumber-related products (Binning and Moore 1997) (**Appendix A: Figure 5**).

Southwestern Pennsylvania's bituminous coal fields became a major competitor of the area's coal industry. An article in the West Virginia Journal detailed advantages of buying coal land along the Coal River by claiming the quality of bituminous coal in the region is equal quality to the Pennsylvanian fields. The article also touted that the Coal River lands were located 240 miles closer to major markets in Cincinnati and Louisville, and that the price per acre of West Virginian coal fields was well below that of Pittsburgh based coal operations (The West Virginia Journal 1866). However, despite advertisements such as these, the bituminous coal operations for the Coal River area wouldn't genuinely prosper until after a surge in the timber industry (Steelhammer 2008). In addition to competing coal fields, Pennsylvania's oil boom in the last half of the nineteenth century produced cheap kerosene and petroleum products, which led to the decline in need for cannel coal.

River travel on Coal River via the locks and dams ceased in 1881. Most of the works were scrapped for parts and materials. From the 1880s through the turn of the twentieth century, the river was used for driving logs to sawmills built along the river and its connected river systems. As a result, the remaining cannel coal companies disbanded and disposed of their assets (Dean 2007:104, 114-115). Meanwhile, the burgeoning logging companies utilized the Coal River to float their logs downstream to the mills where they could be processed. The river was largely unobstructed by the former lock and dam structures by 1882, which allowed the river to flow freely. In order to facilitate the transport of lumber along the river without the lock and dam system in the late nineteenth century, companies constructed log booms in the river. In general, log booms are logs that are attached end-to-end and used to collect other logs until they are ready for processing. These log booms were also used in conjunction with log piers called crib booms (Dean 2007:117; Binning and Moore 1997).

One such company was the Bowman Company in St. Albans, which constructed two crib booms along the Coal River. One was located upstream from Lower Falls and the other was above the mouth of Indian Creek. Each of these booms had 25 cribs with each being separated by 100 feet. The foundation of each crib was made on the bed of the river and formed a square measuring 45 feet per side. As the sides rose, they gradually tapered inwards until each were only 25 feet long and a few feet above the surface. These structures were then filled with rocks. Timbers were

fastened with heavy chains, and one end of the boom was able to be swung side to side through the assistance of a windlass (Binning and Moore 1997). Timber drives were also organized a few times a year that coordinated with the seasonal high waters of the river. During these drives, as many logs as possible were rolled into the river to ride the high waters to St. Albans. The lumber booms and drives along Coal River dominated the river's industry from the 1880s until circa 1905 when rail transport of timber became more commonplace (Dean 2007:129-130).

As the need for the navigation system dwindled in the latter half of the nineteenth century, railroads were constructed through the region that provided faster and more efficient modes of travel for the area's remaining industries. The Chesapeake and Ohio (C&O) Railway was completed through St. Albans by 1873. However, the C&O did not extend a branch along the Coal River. The Coal River Railroad Company of West Virginia was chartered in 1872 by coal company owners with the intent to build a 20-mile rail line up the Coal River valley. However, this railroad never came to fruition. This effort was repeated several times in the last decades of the nineteenth century by several different railroad ventures. The feat was finally accomplished by the Coal River and Western Railway in 1903. The rail line extended from C&O line at the mouth of the river on the Kanawha River to the Forks of the Coal River. Lumber and coal properties along the watershed were able to transport their natural resources faster, cheaper, and more efficiently, making the Coal River navigation system an unnecessary and outdated infrastructure. The C&O absorbed the rail line in December 1909 (Dean 2007:160-180) (**Appendix A: Figure 6**).

While other industries abandoned use of the river by the early 1900s, mills continued to operate along Coal River until the mid-twentieth century utilizing the river's water flow. Mills were built along the river's edge since early American settlement of the region. The first mill built along the Upper Falls was a simple gristmill consisting of round logs, a stone foundation, and a single tub wheel. James and Hamlin Ballard built the mill on behalf of Joseph Thomas sometime between 1801 and 1812 (Wood and Wisman 1988:18). Also, as previously noted, Edward Kenna owned a mill on the west side of the river in the mid-1800s, although it is not clear whether he built a new mill or utilized the earlier, existing building (Dean 2007:64).

However, the most notable grist mill to be built along the Upper Falls of Coal River was constructed on behalf of Roman Pickens, a wealthy individual from St. Albans and Kanawha County Sheriff at the turn of the twentieth century. Pickens hired Pike Trowbridge, the same individual who built the first bridge in Tornado, to build a mill in 1884 (Wood and Wisman 1988:18). Pickens rebuilt and expanded the mill in 1891 on land formerly owned by Jim Gray. Various people managed the mill until Pickens' death in 1922. Upon his death, Pickens' son-in-law, James Wisman, operated the mill with assistance from notable millwright George Washington Stumm. Wisman built the present dam in the 1920s in order to feed more water to the gristmill (Wood and Wisman 1988:18-19; Dean 2007:111). Pickens's mill was listed for sale in 1951, with $40,000 worth of machinery, being noted as "a landmark known to thousands of Kanawha countians who've explored the countryside around Tornado" (Connor 1951). Historic aerials place the grist mill as having been located near the existing dam along the current property of 7546 Coal River Road. The mill's demolition date is unknown, but likely occurred between the posted sale in 1951 and a historic aerial image from 1957 that shows the foundation stones with no extant roof

ridgeline. A foundational outline is visible along the banks of the river when vegetation is cleared (Netr 1957) (**Appendix A: Figures 7 and 8**).

After decades of falling into disrepair, a group of local property owners along the river, collectively known as the Upper Falls Improvement Association, raised money and repaired the concrete dam in 1955 to improve the river's water level. Rather than going over the dam, the water had begun to erode away the riverbanks, circumventing the dam. Dam improvements were required to prevent further lowering of the water levels and repair the riverbank (Charleston Daily Mail 1955; Johnson 1956). Less than a decade later, the dam required additional repairs due to damages incurred during the Winter of 1963-1964. The damages caused the water level to once again fall to shallow depths that threatened the local fishing and boating communities. The Upper Falls Improvement Association once again led the efforts to save the dam (Charleston Gazette 1964a, 1964b).

Outside of the river's historic industrial uses, the Coal River has also been used for regional recreation since the early twentieth century. However, the river's industries were often at odds with the locals' recreational river activities. Coal mine pollution increasingly impacted swimming and fishing during the early twentieth century. Industrial infrastructure also interfered. The Upper Falls Improvement Association sought to repair the Upper Falls dam to improve the water levels for boating and fishing along that stretch of the river. In more recent memory, the Coal River Group formed in 2004 when locals recognized the widescale pollution across the Coal River system. The grassroots group's primary goal was the conservation of the Coal River watershed. The Group raised awareness of the problem through building greater access to recreational opportunities throughout the watershed, headquartered at the Upper Falls. The Group increased community stewardship through greater visibility from fishing, paddling, and hiking along the watershed and organized clean-ups along the river several times throughout the year (Coal River Group 2025; Dean 2025; Richardson and Sheppard 2022).

4.0 BACKGROUND RESEARCH

The initial background research was focused on the study area of the lock and dam location, as well as a one-mile buffer of the Project's study area to identify any potential cultural resources concerns within an APE that accounts for impacts outside of construction disturbance, such as visual impacts. Utilizing the WV SHPO Interactive Map Viewer, 35 previously-recorded above ground resources were found within the one-mile buffer of the Project study area (**Appendix A: Figure 9**). These resources' were reviewed and organized into a data table (**Table 2**).

Of the 35 resources, three (3) are within the defined study area. Two (2) of those three resources, Lock and Dam No. 3 (KA-4675) and Old Lock No. 3 (KA-4676), are located within the NRHP-listed Coal River Locks, Dams, and Log Boom Archaeological District (NRHP 97001417). The NRHP nomination form noted 59 contributing resources within the district, and no non-contributing resources. However, an inventory of contributing resources was not included in the form. As no resources within the district were considered non-contributing, it is assumed previously-recorded resources within the archaeological district were considered contributing at the time of the original district survey. These resources are further examined in this report. The third resource in the study area, KA-4677, was demolished between 1997 and 2003. New buildings at that location were constructed in 2009 (Google Earth).

Within the one-mile radius of the Project study area, there is one (1) resource that is considered eligible for the NRHP, Andrew Heights Elementary (KA-7256). The resource is a contributing resource to the Mid-Century Kanawha County Schools Multiple Property listing and is located approximately 0.2 miles west of the study area on Coal River Road. The remaining resources are either considered not eligible for the NRHP (20) or have been demolished since their original recordation (11).

The two remaining river-related resources (KA-4675 and KA-4676) within the Project study area are further investigated in the field survey with updated HPIs located in Appendix B.

Table 2. Previously Recorded Resources in One-Mile Radius

HPI Number	Name	Location	Date	Status
KA-4675	Lock and Dam No. 3	Upper Fall Tornado, WV	c.1859	Contributing
KA-4676	Old Lock No. 3	Upper Fall Tornado, WV	c.1859	Contributing
KA-4677	Lock and Dam Worker's House	Upper Fall Tornado, WV	c.1920	Demolished
KA-7256	Andrew Heights Elementary	7776 Coal River Rd. Tornado, WV	1952	Considered Eligible
KA-7622	n/a	77 Riverbend Blvd. St. Albans, WV	c.1951	Not Eligible
KA-7753	n/a	43 Beachview Drive St. Albans, WV	1962	Demolished
KA-7754	n/a	148 Riverbend Blvd. St. Albans, WV	1967	Demolished
KA-7755	n/a	409 Riverbend Blvd. St. Albans, WV	1970	Demolished
KA-7756	n/a	419 Riverbend Blvd. St. Albans, WV	1969	Demolished
KA-7757	n/a	447 Riverbend Blvd. St. Albans, WV	1969	Demolished
KA-7758	n/a	170 Riverbend Blvd. St. Albans, WV	1960	Demolished
KA-7759	n/a	425 Riverbend Blvd. St. Albans, WV	1959	Demolished
KA-7760	n/a	459 Riverbend Blvd. St. Albans, WV	1964	Demolished
KA-7761	n/a	451 Riverbend Blvd. St. Albans, WV	1965-67	Demolished
KA-7762	n/a	41 Beachview Drive St. Albans, WV	1962	Demolished

HPI Number	Name	Location	Date	Status
KA-7763	n/a	161 Riverbend Blvd. St. Albans, WV	1964	Demolished
KA-7956	n/a	17 Lee Drive St. Albans, WV	c.1965	Not Eligible
KA-7958	n/a	169 Riverbend Blvd. St. Albans, WV	c.1959	Not Eligible
KA-7970	n/a	147 Riverbend Blvd. St. Albans, WV	c.1957	Not Eligible
KA-7973	n/a	38 Lee Drive St. Albans, WV	c.1962	Not Eligible
KA-7981	n/a	173 Riverbend Blvd. St. Albans, WV	c.1965	Not Eligible
KA-7982	n/a	108 Riverbend Blvd. St. Albans, WV	c.1960	Not Eligible
KA-7983	n/a	35 Beachview Drive St. Albans, WV	c.1958	Not Eligible
KA-7984	n/a	30 Beachview Drive St. Albans, WV	c.1957	Not Eligible
KA-7992	n/a	441 Riverbend Blvd. St. Albans, WV	c.1961	Not Eligible
KA-7993	m/a	445 Riverbend Blvd. St. Albans, WV	c.1960	Not Eligible
KA-7994	n/a	457 Riverbend Blvd. St. Albans, WV	c.1959	Not Eligible
KA-8000	n/a	23 Lee Drive St. Albans, WV	1962	Not Eligible
KA-8001	n/a	126 Maple Lane Tornado, WV	1958	Not Eligible
KA-8002	n/a	203 Riverbend Blvd. St. Albans, WV	1958	Not Eligible
KA-8057	n/a	153 Riverbend Blvd. St. Albans, WV	c.1958	Not Eligible
KA-8058	n/a	177 Riverbend Blvd. St. Albans, WV	c.1966	Not Eligible
KA-8059	n/a	201 Riverbend Blvd. St. Albans, WV	c.1958	Not Eligible
KA-8061	n/a	160 Riverbend Blvd. St. Albans, WV	1964	Not Eligible
KA-8062	n/a	7807 Coal River Rd. Tornado, WV	1961	Not Eligible

5.0 RESULTS OF FIELD SURVEY

Markosky conducted a field survey of the Project area in October 2025. In total, three (3) aboveground resources were documented as a part of the survey (**Appendix A: Figure 10**). Two (2) of the resources were previously surveyed (KA-4675 and KA-4676), and one (1) was a newly

identified resource (**Table 3**). A fourth resource, KA-4677, was demolished between 1997 and 2003.

Table 3. Surveyed Aboveground Resources

HPI Number.	Name	Location	Build Date	NRHP Recommendation
KA-4675	Lock and Dam No. 3	Upper Fall Tornado, WV	c.1920	Not Eligible
KA-4676	Old Lock No. 3	Upper Fall Tornado, WV	c.1855	Contributing
KA-4677	Lock and Dam Worker's House	Upper Fall Tornado, WV	c.1920	Demolished
KA-8493	Smart House	7546 Coal River Road	1927	Not Eligible

5.1 Previously Recorded Resources

For the previously-recorded resources, the survey confirmed the presence and condition of the historic Lock and Dam #3 (KA-4675 and KA-4676). A third previously-recorded resource, KA-4677, has been demolished. New and updated HPI forms for the resources are located in **Appendix B**.

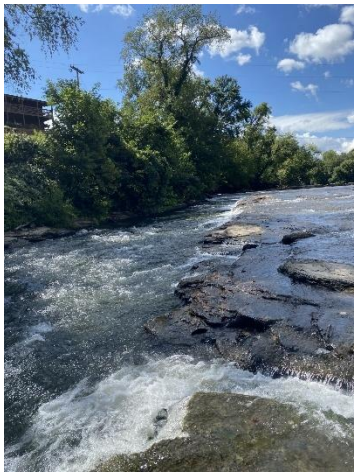
5.1.1 KA-4675 – Lock and Dam No. 3



Location: Upper Falls (Coal River)
Resource Classification: Structure
Historic Function: Transportation/Navigation
Year Built: ca.1920
Summary: The original HPI form misidentified the resource as Lock and Dam Number 6 and incorrectly associated the resource with a circa-1859 build date. However, the extant concrete dam at Upper Falls was constructed circa-1920 to service the Pickens Mill. A wooden log lays immediately adjacent to the concrete dam on the upriver side. The log may be a remnant of the circa-1855 timber crib navigation dam. However, research suggests that following the closing of the navigation lock and dam system on the Coal River, the log structures were removed from the river by 1882 to facilitate the transportation of local timber. The remaining log, which is visible when the river's water levels are low, may be from the 1884 Pickens mill and dam. As such, the remaining aboveground dam materials, both the concrete dam and log, are likely not associated with the Coal River Navigation Company's Lock and Dam Number 3. However, carved features in the bedrock from the Navigation Company's lock and dam construction are still present and visible at times of low water levels.
NRHP recommendation: The resource is currently located within the Coal River Locks, Dams, and Log Booms Archaeological District. The district was listed in 1997 under Criterion A for its association to river navigation and the coal industry during the mid-nineteenth century, Criterion B for the association to William Rosecrans, and Criterion D for potential information the site may

yield. The district's NRHP nomination does not note mill dams as contributing to the resource's significance. Due to the lack of association to the timber crib navigation system and log booms, the remaining aboveground dam structure at Upper Falls is recommended as a non-contributing element to the archaeological district and is recommended individually not eligible for the NRHP (Binning and Moore 1997).

5.1.2 KA-4676 – Old Lock No. 3



Location: Upper Falls (Coal River)
Resource Classification: Structure
Historic Function: Transportation/Navigation
Year Built: ca.1855
Summary: The ca.1855 bedrock-carved lock carries the Coal River waterflow through the Upper Falls in Kanawha County, WV. The lock was constructed into the solid bedrock of the riverbed and remains a pronounced feature on the river, although artifacts and above ground structures associated with the lock system have been removed.
NRHP recommendation: The resource is currently located within the Coal River Locks, Dams, and Log Booms Archaeological District. The district was listed in 1997 under Criterion A for its association to river navigation and the coal industry during the mid-nineteenth century, Criterion B for the association to William Rosecrans, and Criterion D for potential information the site may yield. The remaining bedrock-carved lock is recommended as a contributing element to the archaeological district (Binning and Moore 1997).

5.1.3 KA-4677 – Lock and Dam Worker's House (Demolished)



Location: Pettigrew Lane, Upper Falls (Coal River)
Resource Classification: Building
Historic Function: Transportation/Navigation
Year Built: ca.1920, demolished 1997-2003
Summary: The resource is no longer extant. It was formerly located on the east bank of Coal River at the Upper Falls along Lock Number 3, which is carved into the river bedrock. The property is located within a natural recreational park. According to the original HPI, the former resource was constructed of cement blocks. The property was located within the Coal River Locks, Dams, and Log Booms Archaeological District (NRHP 97001417) (Binning and Moore 1997). According to aerial images, the dwelling was demolished between 1997 and 2003 (Google Earth 1997, 2003). The present building was constructed in 2009 (pictured at right) (Google Earth 2009).
NRHP recommendation: The resource is no longer extant. The new building does not have a historical association with the archaeological district. Despite the loss of the resource, the Coal River Locks, Dams, and Log Booms Archaeological District is not substantially impacted by the demolition and is recommended to remain listed in the NRHP.

5.2 Newly-Identified Resources

The newly-identified resource consists of a property that is at least 45 years old located within the study area. The survey documented one (1) newly-identified resource (see **Table 2**). The completed HPI form is located in **Appendix B**.

5.2.1 KA-8493 – Smart House, 7546 Coal River Road



Name/address: Smart House / 7546 Coal River Road
Parcel: 20-16-012F-0050-0000
Resource Classification: Building
Historic Function: Domestic/Single Dwelling
Year Built: 1927
Summary: The resource consists of a 1927 one-story dwelling standing one bay wide on a concrete block foundation. The dwelling is clad with vinyl siding and capped with a gable roof covered with asphalt shingles. The primary entrance is located within a lattice-enclosed porch. The only visible fenestration includes a vinyl-sash horizontal-sliding window located on the southeast elevation.
NRHP recommendation: The resource does not represent a historic theme or event and is recommended not eligible for the NRHP under Criterion A. Research did not indicate an association with a historically-significant individual and is therefore recommended not eligible under Criterion B. The resource also does not significantly represent an architectural style, type, work of a master, or method of construction. As such, the resource is recommended not eligible under Criterion C. The resource has not been evaluated for significance under Criterion D for its potential to provide information important to the understanding of history and prehistory as part of this survey.

6.0 SUMMARY AND RECOMMENDATIONS

This Historic Structures Report documented a total of three (3) extant resources within the Project's Historic Properties study area (**Table 4**). Of these resources, Markosky identified two (2) previously surveyed resource, KA-4675 and KA-4676. Both resources are located within the Coal River Locks, Dams, and Log Booms Archaeological District. As the remaining mill dam structure of KA-4675 is not associated with the Coal River navigation or log boom systems, Markosky recommends the resource as a non-contributing element of the archaeological district and individually not eligible for the NRHP. Resource KA-4676, also located within the district, is recommended as a contributing element. A third previously-recorded, but non-extant, resource, KA-4677, was also identified during the project background research. Additionally, one (1) newly identified resource was included in the survey, which is recommended not eligible for NRHP listing due to a lack of significance and integrity. HPI forms and addendums were prepared for these resources, which are located in **Appendix B**.

Table 4. Surveyed Resources within the Study Area

HPI No.	Name	Location	Build Date	NRHP Recommendation
KA-4675	Lock and Dam No. 3	Upper Fall Tornado, WV	c.1920	Not Eligible
KA-4676	Old Lock No. 3	Upper Fall Tornado, WV	c.1855	Contributing
KA-4677	Lock and Dam Worker's House	Upper Fall Tornado, WV	c.1920	Demolished
KA-8493	Smart House	7546 Coal River Road	1927	Not Eligible

7.0 REFERENCES

American Battlefield Trust (ABT)

2025 "William S. Rosecrans." American Battlefield Trust. Available online at https://www.battlefields.org/learn/biographies/william-s-rosecrans. Accessed 15 July 2025.

Athey, Lou

2024 "Cannel Coal." e-WV: The West Virginia Encyclopedia. Available online at https://www.wvencyclopedia.org/entries/881. Accessed 14 July 2025.

Atkinson, Geo. W.

1876 *History of Kanawha County*. Charleson: The West Virginia Journal.

Binning, Jean Day and Warren H. Moore

1997 "Coal River Locks, Dams, and Log Booms Archaeological District." West Virginia State Historic Preservation Office. On file at WV SHPO, Charleston, WV. Accessed 14 July 2025.

Charleston Daily Mail

1955 "20 Pledges Received for Coal Project." *Charleston Daily Mail.* Charleston, WV October 23, 1955.

Charleston Gazette

1964a "Dam Repairs Planned by Upper Falls Group." *Charleston Gazette*. Charleston, WV July 11, 1964.

1964b "Coal River Confab Set." *Charleston Gazette.* Charleston, WV July 31, 1964.

The Clio

2022 "Upper Falls Gristmill (1884-1953)." Clio: Your Guide to History. Website at https://theclio.com/entry/18996. Accessed October 2025.

Coal River Group

2025 "About Us." Available online at https://coalrivergroup.com/about-us/. Accessed October 2025.

Connor, Charles

1951 "Anyone in the Market?" The Charleston Daily Mail. Available online at https://www.mywvhome.com/thirties/history.html. Accessed 17 July 2025.

Dean, William H.

2007 *Coal, Steamboats, Timber and Trains*. Pictorial Histories Publishing Company, Inc., Charleston, WV.

2025 "Coal River." e-WV: The West Virginia Encyclopedia. Available online at https://www.wvencyclopedia.org/entries/1316. Accessed October 2025.

Google Earth

1997 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.

2003 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.

2009 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.

2025 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.

Haley, Alison

2016 KA-7256. West Virginia Historic Property Inventory Form. Available at West Virginia State Historic Preservation Office.

Harper, Eugene R.

2024 "Kanawha County." e-WV: The West Virginia Encyclopedia. Available online at https://www.wvencyclopedia.org/entries/1062. Accessed 14 July 2025.

Johnson, Skip

1956 "Repairs to Dam Aiding Coal River." *Charleston Gazette*. Charleston, WV June 17, 1956.

Marshall University Department of Geography

1991a KA-4675. West Virginia Historic Property Inventory Form. Available at West Virginia State Historic Preservation Office.

1991b KA-4676. West Virginia Historic Property Inventory Form. Available at West Virginia State Historic Preservation Office.

1991c KA-4677. West Virginia Historic Property Inventory Form. Available at West Virginia State Historic Preservation Office.

Maslowski, Robert F.

2024 “Indians.” e-WV: The West Virginia Encyclopedia. Available online at https://www.wvencyclopedia.org/entries/805. Accessed October 2025.

Netr Online

1957 “Historic Aerials.” Netr Online. Available online at https://www.historicaerials.com/viewer. Accessed 16 July 2025.

Rice, Otis K.

1965 “Coal Mining in the Kanawha Valley to 1861: A View of Industrialization in the Old South.” *The Jounal of Southern History* (vol. 31, no. 4), pp 393-416.

Richardson, Neil and Samantha Sheppard

2022 “Upper Falls Beach.” Clio: Your Guide to History. Website at https://theclio.com/entry/22861. Accessed October 2025.

Steelhammer, Rick

2008 “Book Showcases Industrial History of Coal River.” *Charleston Gazette*. Accessed 16 July 2025.

Sutphin, Gerald W.

2024 “Coal River Navigation Company.” e-WV: The West Virginia Encyclopedia. Available online at https://www.wvencyclopedia.org/entries/1319. Accessed 14 July 2025.

United States Geological Survey (USGS)

1909 St. Albans, West Virginia topographic map, 15 minute quadrangle. United States Geological Survey, Washington, D.C.

1973 Charleston, West Virginia topographic map, 7.5 minute quadrangle. United States Geological Survey, Washington, D.C.

The West Virginia Journal (WVJ)

1865 “For Sale! Coal River Navigation Works.” *The West Virginia Journal*. Charleston, WV. July 26, 1865.

1866 “Coal River and Mineral.” *The West Virginia Journal*. Charleston, WV. April 4, 1866.

West Virginia State Historic Preservation Office (WV SHPO)

2016 *Nation Register and Architecture/History Survey Manual*. West Virginia State Historic Preservation Office.

The Wheeling Daily Intelligencer (WDI)

1888 "A New Railroad Company." *The Wheeling Daily Intelligencer.* Wheeling, WV. ,July 2, 1888.

White, M.W.

1873 "Putnam, Kanawha, Boone County Atlas." M.W. White, Grafton, WV. Website at https://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~28429~1120363:White-s-topographical,-county-&-dis. Accessed October 2025.

Wood, Joe, and Eloise Wisman

1988 *Tornado Remember*. Kanawha County Bicentennial. St. Albans Historical Society.

APPENDIX A
FIGURES

- Figure 1. Project Location
- Figure 2. Project Study Area
- Figure 3. Lock and Timber Crib Diagram
- Figure 4. Map of Coal River Locks
- Figure 5. Project Area in 1873
- Figure 6. Project Area in 1909
- Figure 7. Mill in Tornado, unknown date
- Figure 8. Project Area in 1957
- Figure 9. One-Mile Buffer
- Figure 10. Architectural and Historical Resources



MARKOSKY

N
W E
S

Study Area

Source: USGS 1973 Charleston

Figure 1: Project Location

Watershed Plan and Environmental Assessment for the Coal River Watershed
Kanawha County, WV



MARKOSKY

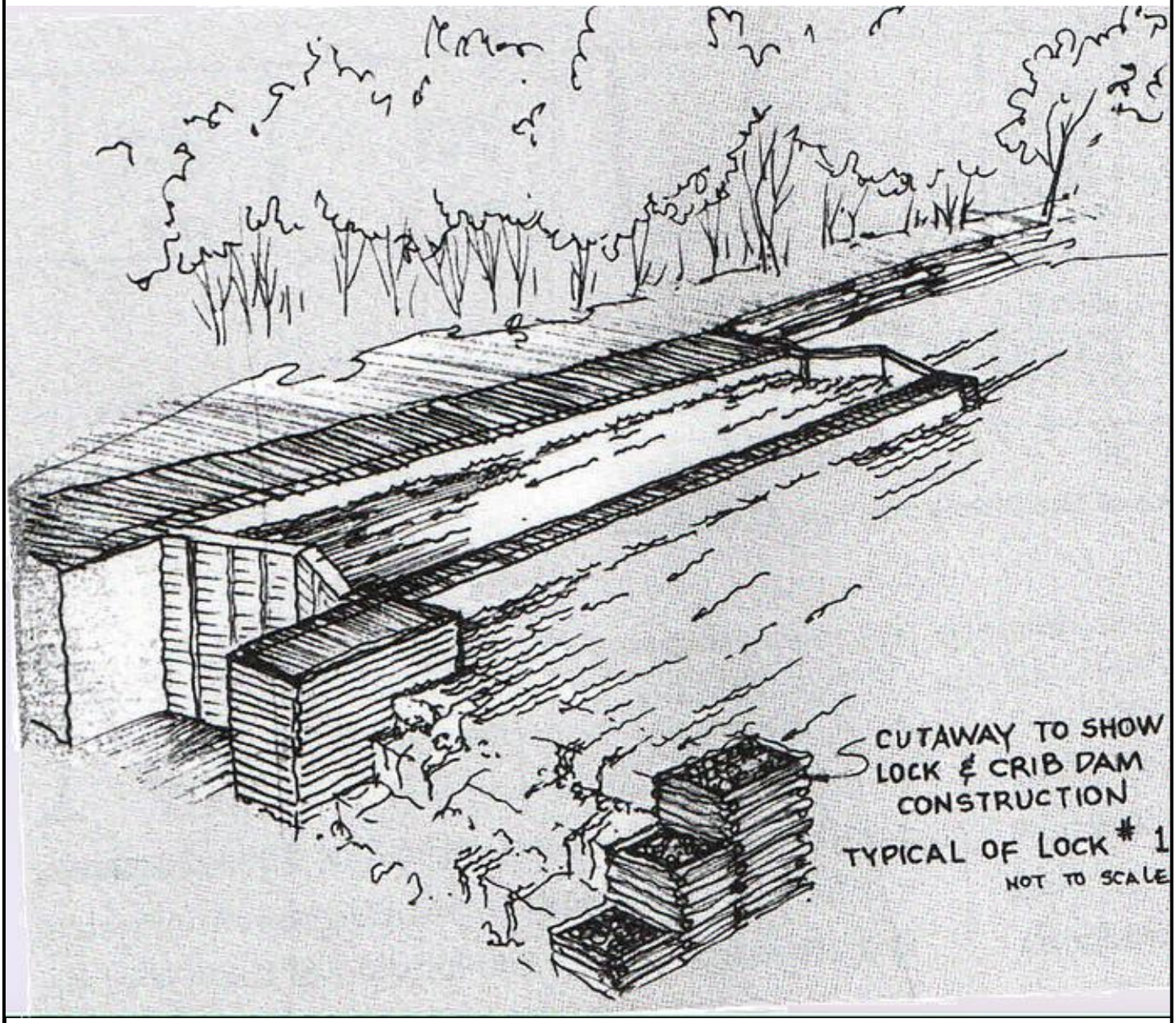
N
W
E
S

Study Area

Source: Google Earth 2025

Figure 2: Project Study Area

Watershed Plan and Environmental Assessment for
the Coal River Watershed
Kanawha County, WV



MARKOSKY

N
W
E
S

Figure 3: Lock and Timber Crib Diagram
Watershed Plan and Environmental Assessment for
the Coal River Watershed
Kanawha County, WV

Source: Sutphin 2024

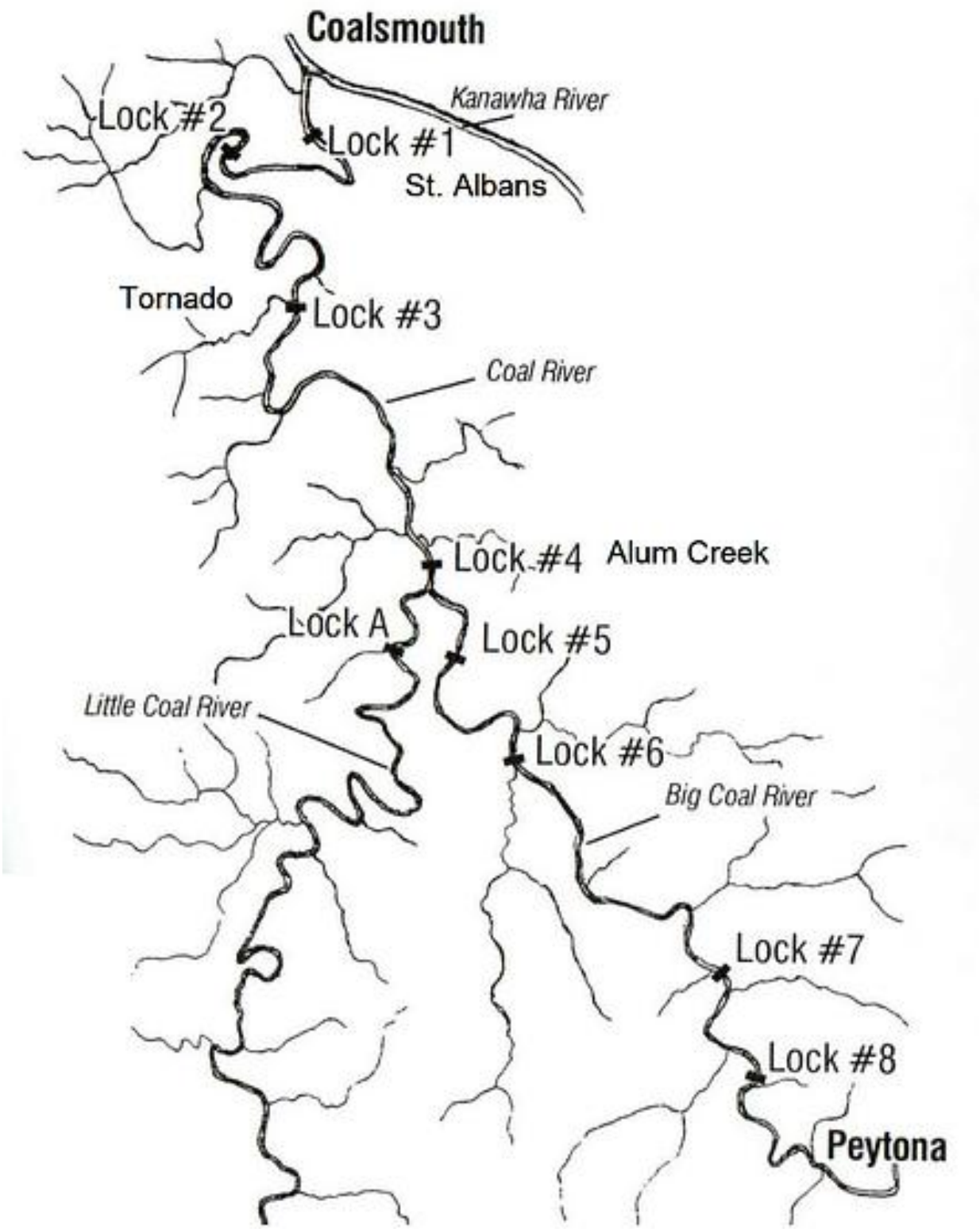
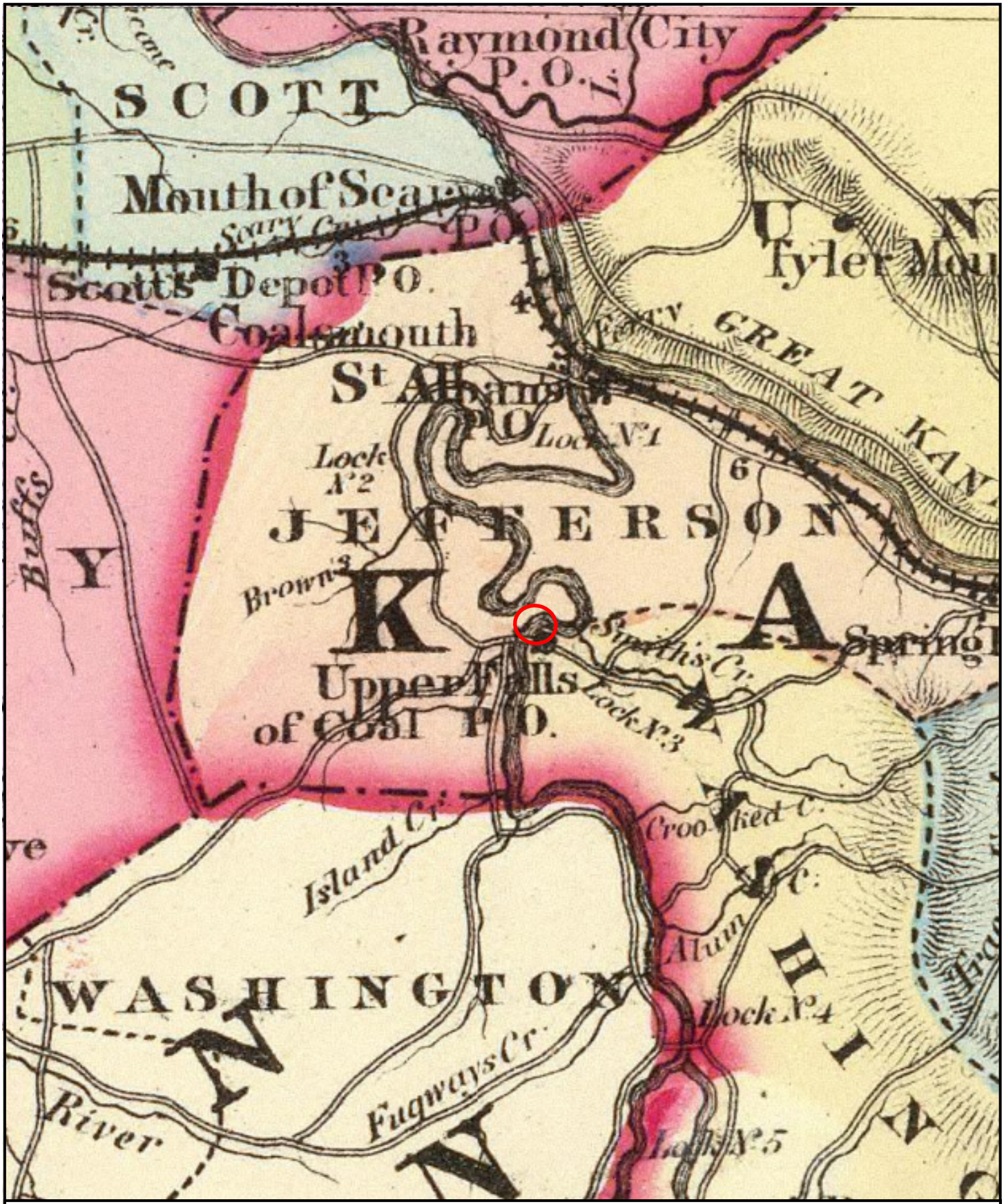


Figure 4: Map of Coal River Locks

Watershed Plan and Environmental Assessment for
the Coal River Watershed
Kanawha County, WV

Source: Sutphin 2024

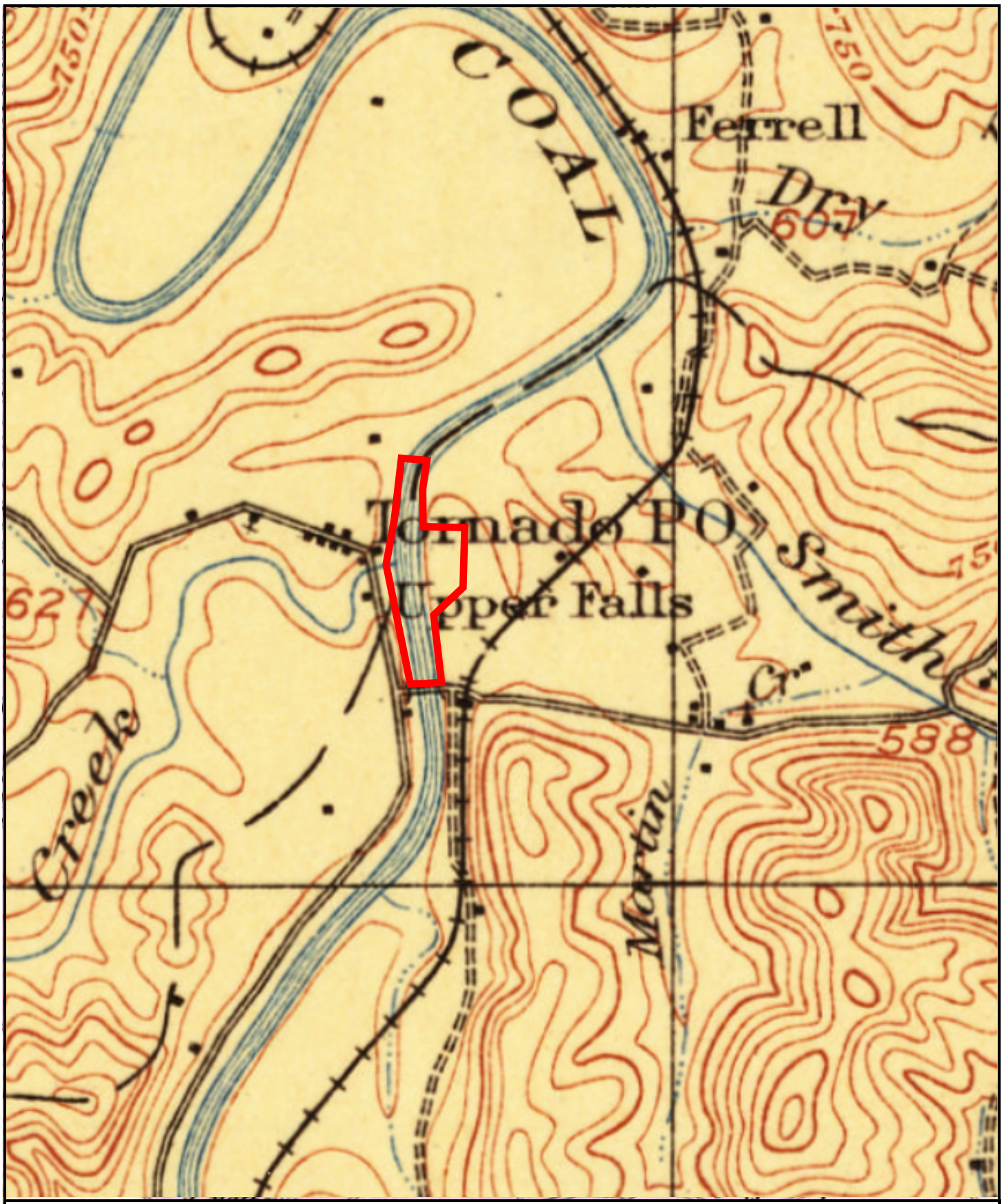


Approximate Project Location

Figure 5: Project Area in 1873

Watershed Plan and Environmental Assessment for the Coal River Watershed
Kanawha County, WV

Source: White 1873



MARKOSKY

Approximate Study Area

Source: USGS 1909 St. Albans

Figure 6: Project Area in 1909

Watershed Plan and Environmental Assessment for the Coal River Watershed
Kanawha County, WV



Figure 7: Mill in Tornado, unknown date
Watershed Plan and Environmental Assessment for
the Coal River Watershed
Kanawha County, WV

Source: Clio 2022



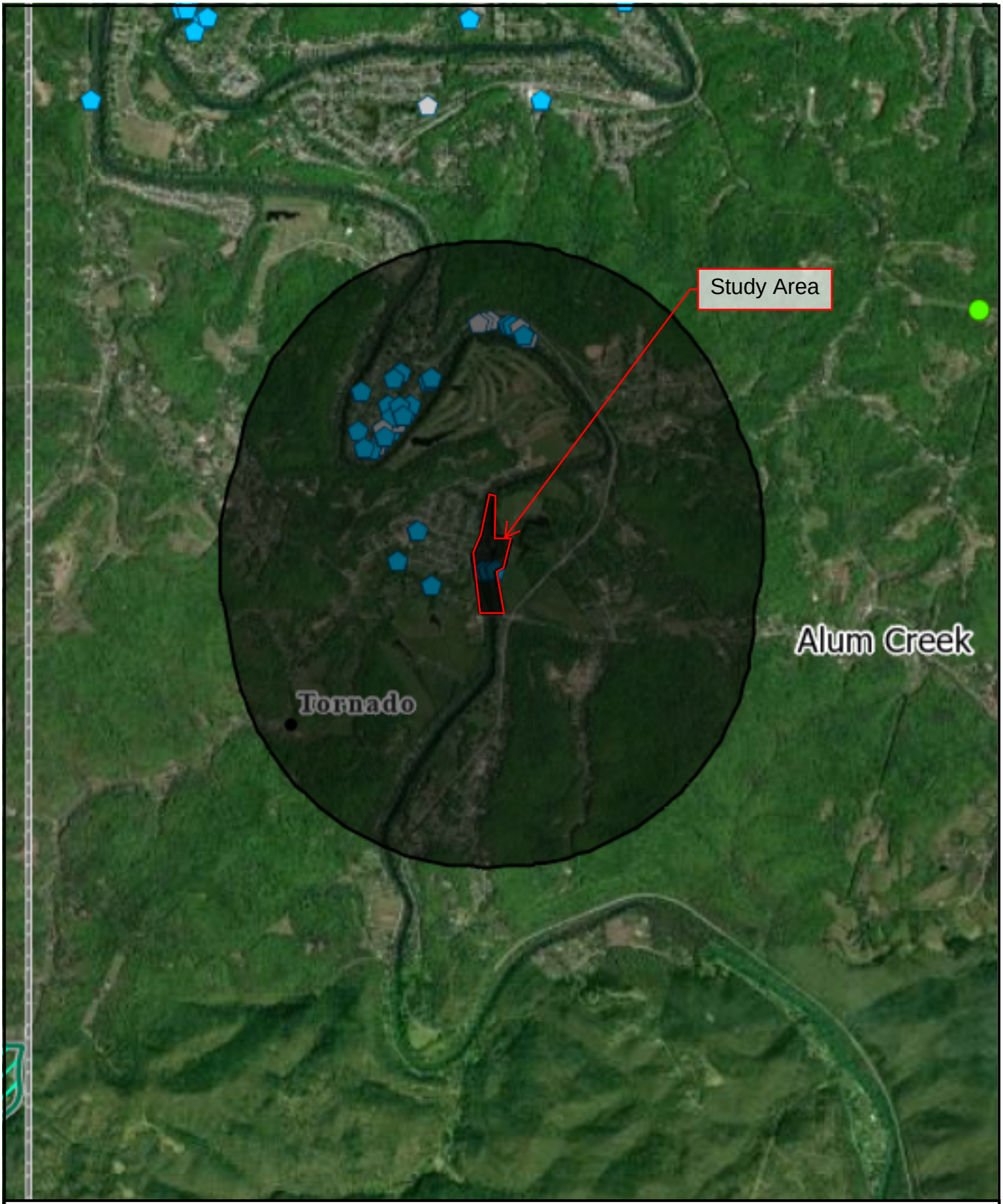
MARKOSKY

Study Area

Source: NETR 1957

Figure 8: Project Area in 1957

Watershed Plan and Environmental Assessment for
the Coal River Watershed
Kanawha County, WV



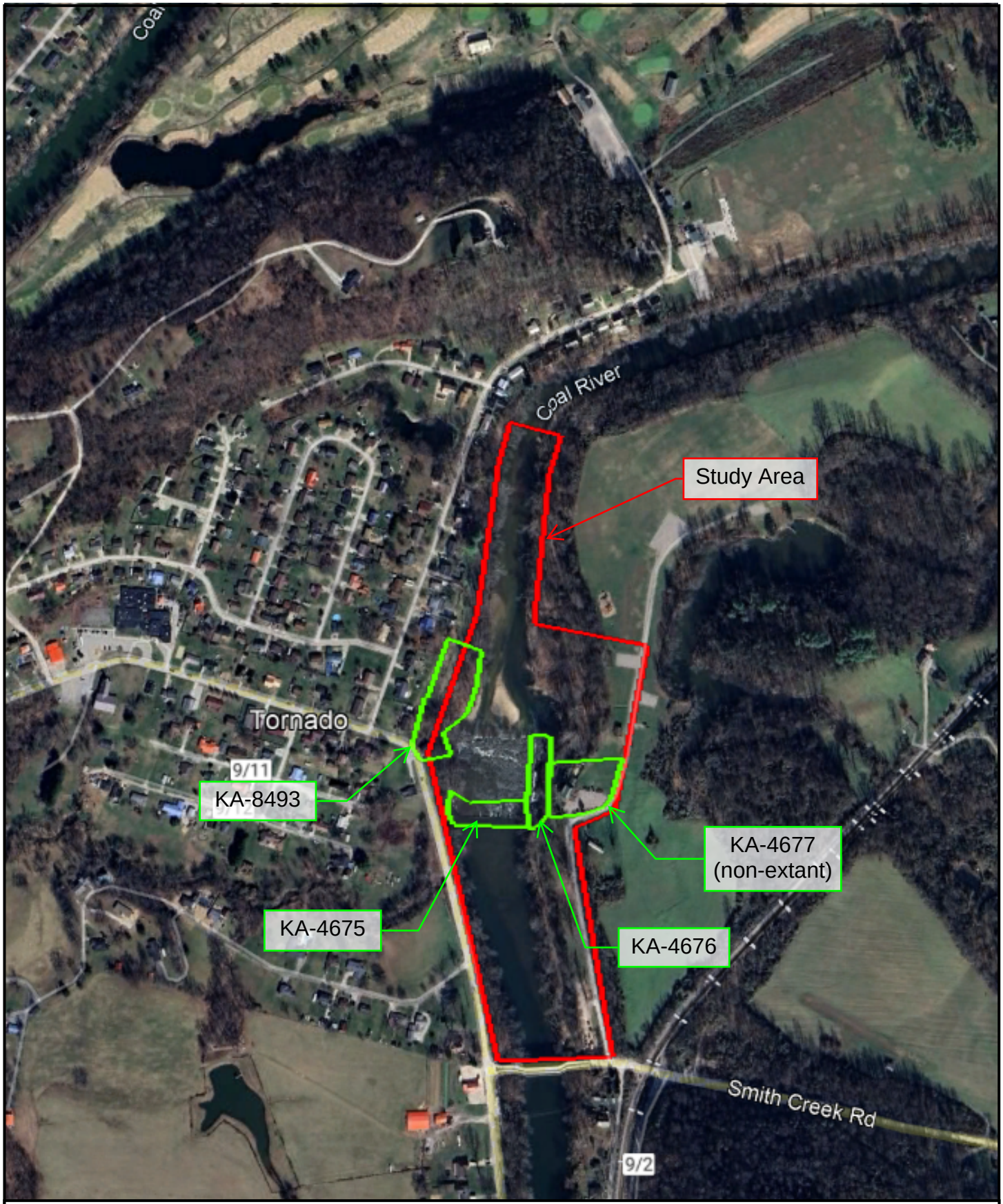
MARKOSKY

Study Area
One-mile Buffer
Resource Locations

Figure 9: One-Mile Buffer

Watershed Plan and Environmental Assessment
for the Coal River Watershed
Kanawha County, WV

Source: WV SHPO Map Viewer



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Study Area

Resource Locations

Figure 10: Architectural and Historical Resources
Watershed Plan and Environmental Assessment for the Coal River Watershed
Kanawha County, WV

Source: Google Earth 2025

APPENDIX B
Historic Property Inventory (HPI) Forms and Addendums

Previously Surveyed Above Ground Historic Properties

- Lock and Dam Number 3 (KA-4675)
- Old Lock Number 3 (KA-4676)
- Lock and Dam Worker's House (KA-4677)

Newly Identified Above Ground Historic Properties

- 7546 Coal River Road (KA-8493)



Internal Rating: _____

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address	**Common/Historic Name/Both**	**Field Survey #**	**Site # *(SHPO Only)***
Coal River Upper Falls	**O O X** Lock and Dam No. 3		KA-4675
Town or Community	**County**	**Negative No.**	**NR Listed Date**
Tornado	Kanawha		
Architect/Builder	**Date of Construction**	**Style**	
N/A	c.1856; c.1920	N/A	
Exterior Siding/Materials	**Roofing Material**	**Foundation**	
N/A	N/A	N/A	
Property Use or Function **Residence O** **Commercial O** **Other X**	**UTM#** 426460.38m E, 4244070.91m N	**Photograph** 	
Survey Organization & Date Markosky Engineering Group October 2025	**Quadrangle Name** Charleston		
	Part of What Survey/FR# Watershed Plan and Environmental Assessment for the Coal River Watershed		

Sketch Map of Property
Or Attach Copy of USGS Map

Site No.

Present Owners	Owners Mailing Address
N/A **Phone # N/A**	**N/A**

Describe Setting

_____ Acres

See continuation sheet

_____ Archaeological Artifacts Present

Description of Building or Site (Original and Present) **_____Stories** **_____Front Bays**

See continuation sheet

(Use Continuation Sheets)

Alterations [X] **Yes** [ ] **No** **If yes, describe:** original crib dam removed

Additions [X] **Yes** [ ] **No** **If yes, describe:** new concrete mill dam

Describe All Outbuildings

N/A

(Use Continuation Sheets)

Statement of Significance

See continuation sheet

(Use Continuation Sheets)

Bibliographical References

See continuation sheet

(Use Continuation Sheets)

Form Prepared By: Dana Cress **Date:** December 17, 2025

Name/Organization: Markosky Engineering Group, Inc.
Address:
3689 PA 711
Ligonier, PA 15658
Phone #: 724-238-4138

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WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Lock and Dam Number 3 (addendum) **SITE#** KA-4675

Describe Setting
The resource is located at the Upper Falls of Coal River, approximately 11.5 miles south of the mouth of Coal River along the Kanawha River. The Town of Tornado is located along the west riverbank of the dam and Meadowood Park is located to the east.

Description of Resource
The original HPI form misidentified the resource as Lock and Dam Number 6 and incorrectly associated the resource with a circa-1859 build date. However, the extant concrete dam at Upper Falls was constructed circa-1920 to service the Pickens Mill. A wooden log lays immediately adjacent to the concrete dam on the upriver side. The log may be a remnant of the circa-1856 timber crib navigation dam. However, research suggests that following the closing of the navigation lock and dam system on the Coal River, the log structures were removed from the river by 1882 to facilitate the transportation of local timber. The remaining log, which is visible when the river's water levels are low, may be from the 1884 Pickens mill and dam. As such, the remaining aboveground dam materials, both the concrete dam and log, are likely not associated with the Coal River Navigation Company's Lock and Dam Number 3. However, carved features in the bedrock from the Navigation Company's lock and dam construction are still present and visible at times of low water levels.

Statement of Significance
The resource is currently located within the Coal River Locks, Dams, and Log Booms Archaeological District. The district was listed in 1997 under Criterion A for its association with river navigation and the coal industry during the mid-nineteenth century, Criterion B for the association with William Rosecrans, and Criterion D for potential information the site may yield. However, the district's NRHP nomination does not note post-Navigation Company period mill dams as contributing to the resource's significance. Due to the lack of association with the timber crib navigation system and log booms, the remaining aboveground dam structures at Upper Falls are recommended not contributing to the archaeological district. As such, Lock and Dam No. 3 (KA-4675) is recommended as a non-contributing element of the district as well as not individually eligible for the NRHP (Binning and Moore 1997).

Bibliographical References

Binning, Jean Day and Warren H. Moore
1997 "Coal River Locks, Dams, and Log Booms Archaeological District." West Virginia State Historic Preservation Office. On file at WV SHPO, Charleston, WV. Accessed 14 July 2025.

Google Earth
2025 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.

Marshall University Department of Geography
1991 KA-4676. West Virginia Historic Property Inventory Form. Available at West Virginia State Historic Preservation Office.

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Lock and Dam Number 3 (addendum) **SITE#** KA-4675



Photograph 1. Lock and Dam Number 3, KA-4675, concrete mill dam, downriver side of dam, facing southwest.



Photograph 2. Lock and Dam Number 3, KA-4675, concrete mill dam, downriver side of dam, facing southwest.

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

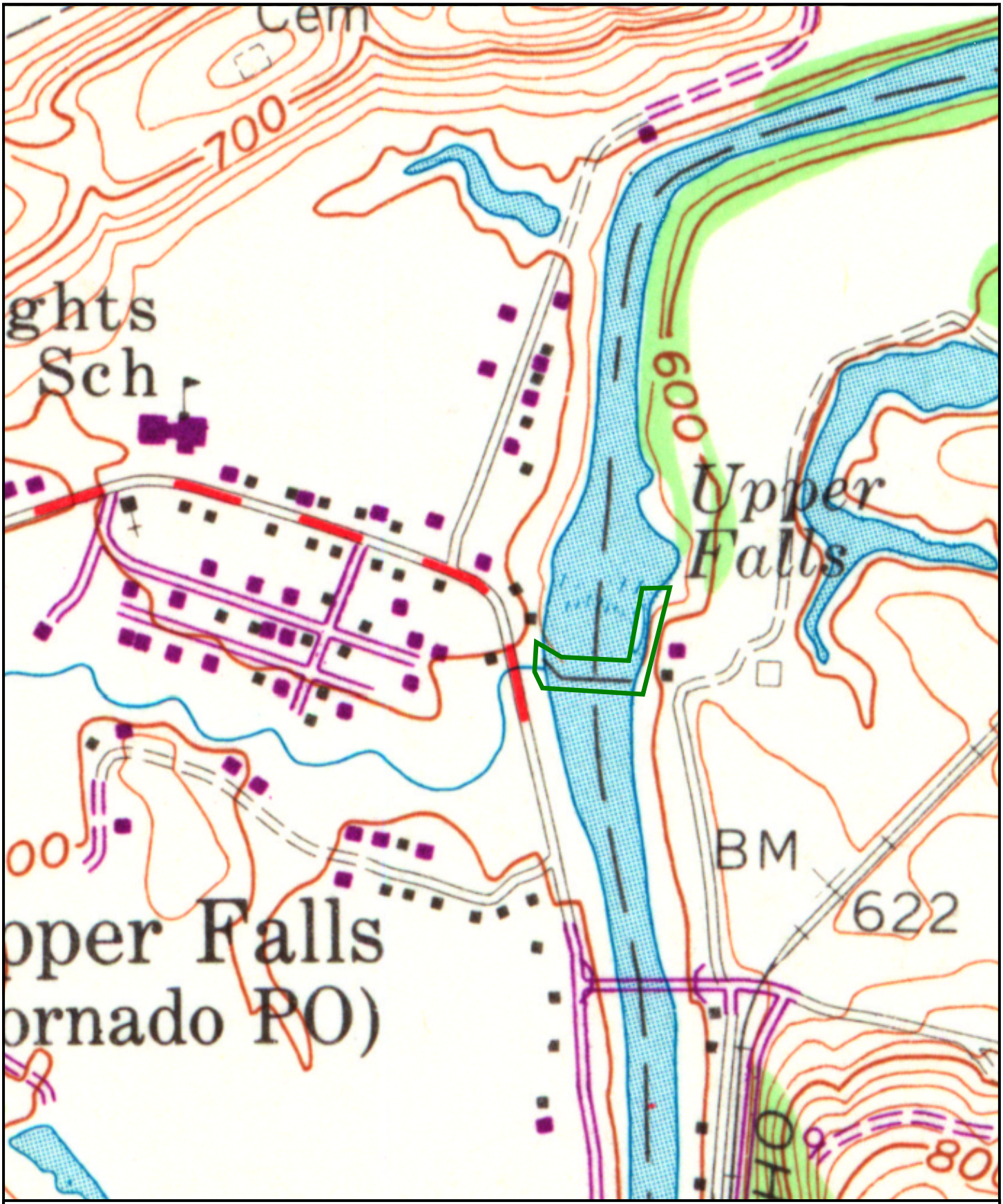
NAME Lock and Dam Number 3 (addendum) **SITE#** KA-4675



Photograph 3. Lock and Dam Number 3, KA-4675, concrete mill dam, facing west.



Photograph 4. Lock and Dam Number 3, KA-4675, looking upriver towards concrete mill dam in the background with lock on left side of image, facing south.



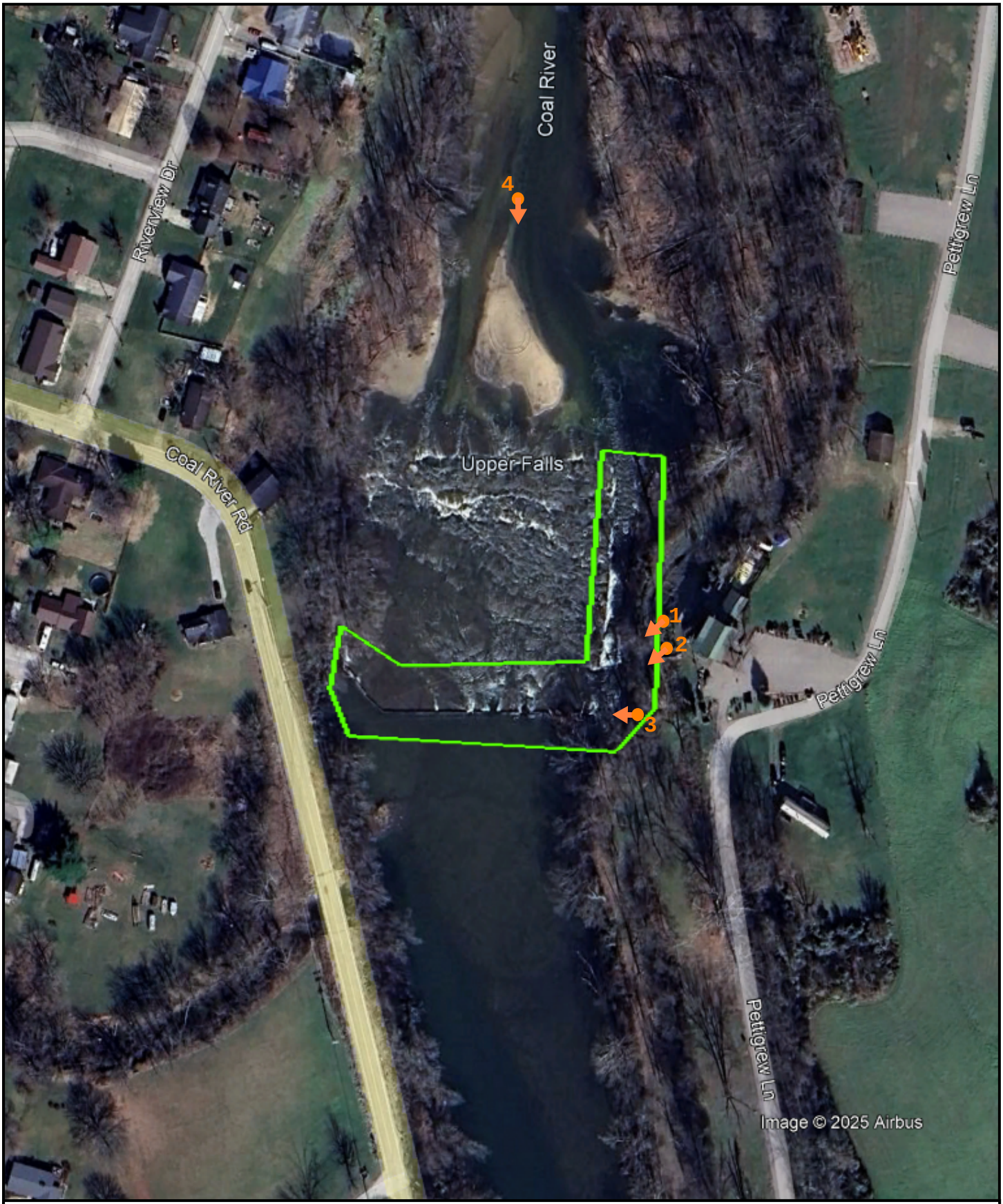
MARKOSKY

Resource Boundary

Lock and Dam Number 3, KA-4675
Tornado, Kanawha County, West Virginia

USGS MAP

Source: Google Earth 2025



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Photograph Locations

Resource Boundary

Lock and Dam Number 3, KA-4675
Tornado, Kanawha County, West Virginia

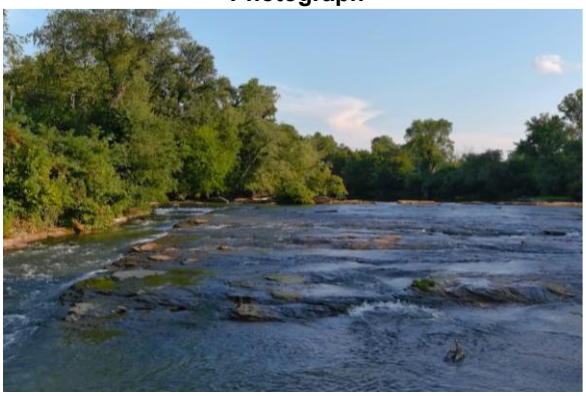
SITE MAP

Source: Google Earth 2025



Internal Rating: _____

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address	**Common/Historic Name/Both**	**Field Survey #**	**Site # *(SHPO Only)***
Coal River Upper Falls	**O O X** Old Lock No. 3		KA-4676
Town or Community	**County**	**Negative No.**	**NR Listed Date**
Tornado	Kanawha		
Architect/Builder	**Date of Construction**	**Style**	
N/A	c.1855	N/A	
Exterior Siding/Materials	**Roofing Material**	**Foundation**	
N/A	N/A	N/A	
Property Use or Function **Residence O** **Commercial O** **Other X**	**UTM#** 426501.14m E, 4244098.86m N	**Photograph** 	
Survey Organization & Date Markosky Engineering Group October 2025	**Quadrangle Name** Charleston		
	Part of What Survey/FR# Watershed Plan and Environmental Assessment for the Coal River Watershed		

Sketch Map of Property
Or Attach Copy of USGS Map

Site No.

Present Owners	Owners Mailing Address
N/A **Phone # N/A**	**N/A**

Describe Setting

_____ Acres

See continuation sheet

_____ Archaeological Artifacts Present

Description of Building or Site (Original and Present) **_____Stories** **_____Front Bays**

See continuation sheet

(Use Continuation Sheets)

Alterations [X] **Yes** [ ] **No** **If yes, describe:** timber cribs removed

Additions [ ] **Yes** [X] **No** **If yes, describe:**

Describe All Outbuildings

N/A

(Use Continuation Sheets)

Statement of Significance

See continuation sheet

(Use Continuation Sheets)

Bibliographical References

See continuation sheet

(Use Continuation Sheets)

Form Prepared By: Dana Cress **Date:** October 25, 2025

Name/Organization: Markosky Engineering Group, Inc.
Address:
3689 PA 711
Ligonier, PA 15658
Phone #: 724-238-4138

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WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Old Lock Number 3 (addendum) **SITE#** KA-4676

Describe Setting
The resource is located at the Upper Falls of Coal River, approximately 11.5 miles south of the mouth of Coal River along the Kanawha River. The Town of Tornado is located along the west riverbank of the dam and Meadowood Park is located to the east. The resource has no extant aboveground elements but consists of a carved bedrock feature.

Description of Resource
The ca.1855 bedrock-carved lock carries the Coal River waterflow through the Upper Falls in Kanawha County, WV. The lock was constructed into the solid bedrock of the riverbed and remains a pronounced feature on the river, although artifacts and aboveground structures associated with the lock system have been removed.

Statement of Significance
The resource is located within the Coal River Locks, Dams, and Log Booms Archaeological District. The district was listed in 1997 under Criterion A for its association with river navigation and the coal industry during the mid-nineteenth century, Criterion B for the association with William Rosecrans, and Criterion D for potential information the site may yield. The remaining bedrock features carved from the lock construction are recommended as contributing elements to the district (Binning and Moore 1997).

Bibliographical References

Binning, Jean Day and Warren H. Moore
1997 “Coal River Locks, Dams, and Log Booms Archaeological District.” West Virginia State Historic Preservation Office. On file at WV SHPO, Charleston, WV. Accessed 14 July 2025.

Google Earth
2025 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.

Marshall University Department of Geography
1991 KA-4676. West Virginia Historic Property Inventory Form. Available at West Virginia State Historic Preservation Office.

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

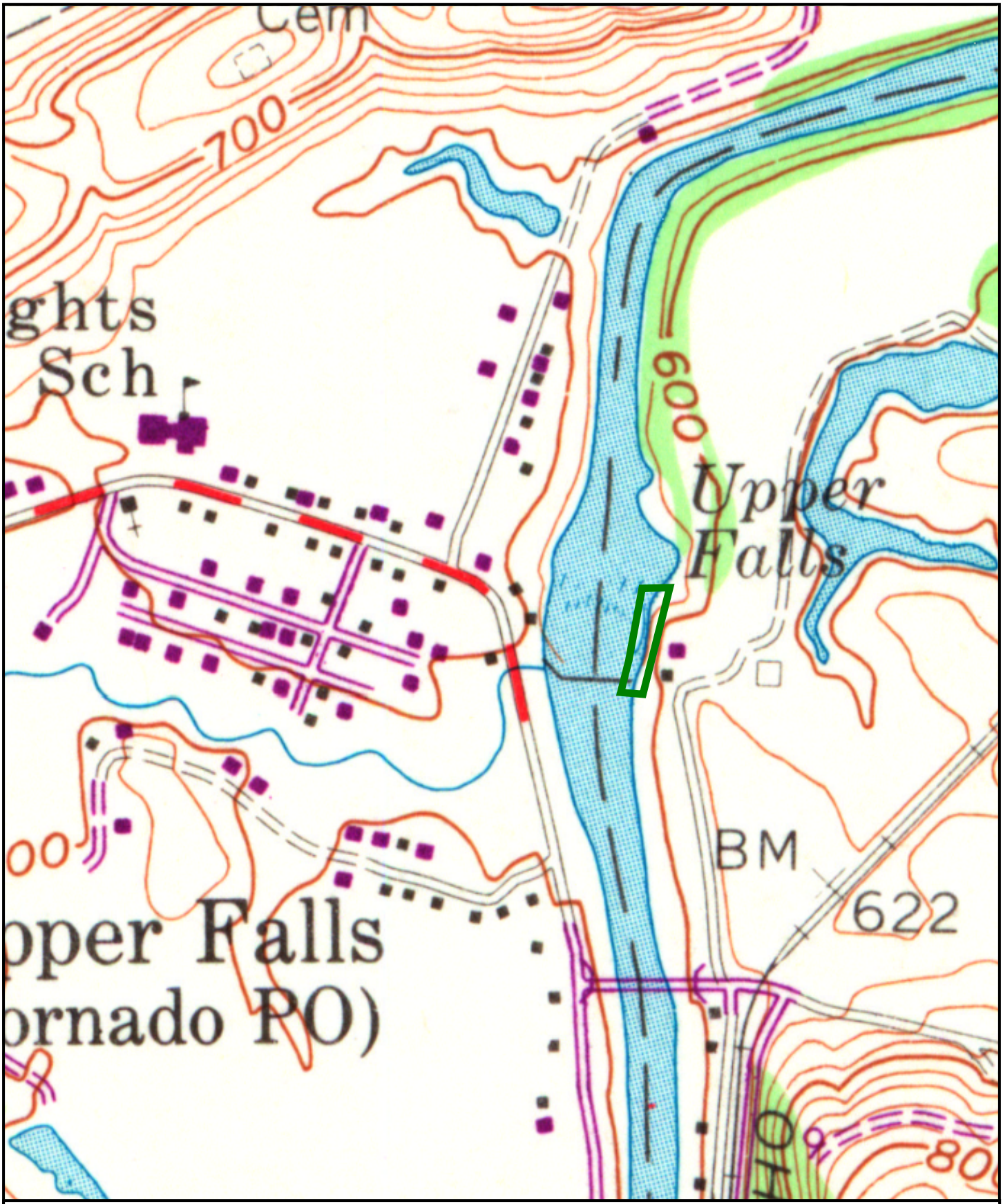
NAME_Old Lock Number 3 (addendum) **SITE#**_KA-4676_____



Photograph 1. Old Lock Number 3, KA-4676, looking upriver towards concrete mill dam in the background with lock on left side of image, facing south.



Photograph 2. Old Lock Number 3, KA-4676, lock cut into the riverbed, facing south.



MARKOSKY

Resource Boundary

Old Lock Number 3, KA-4676
Tornado, Kanawha County, West Virginia

USGS MAP

Source: USGS 1973



MARKOSKY

N
W
E
S

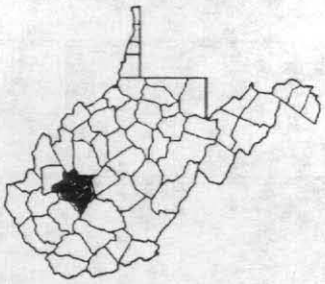
Photograph Locations

Resource Boundary

Old Lock Number 3, KA-4676
Tornado, Kanawha County, West Virginia

SITE MAP

Source: Google Earth 2025



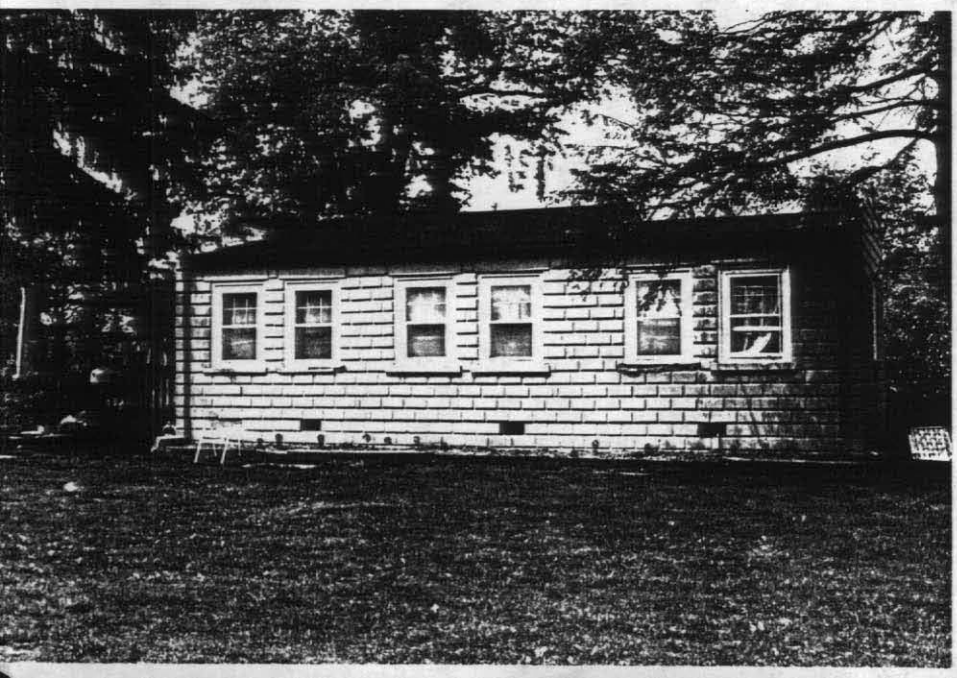
Demolished

No. 8
COAL RIVER

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

KA-4677

STREET ADDRESS Upper Falls	~~COMMON~~/HISTORIC NAME Lock and Dam worker's house	NO. IN SURVEY	NO. OF BAYS FRONT ☐ SIDE ☐
TOWN OR COMMUNITY Tornado, WV	COUNTY Kanawha	NEGATIVE NO. 10	NOT VISIBLE FROM ROAD ☐
ARCHITECT/BUILDER U.S. Government	DATE OF CONSTRUCTION Circa 1920	EXTERIOR BUILDING FABRIC Cement block	
DATE NAT. REGISTER LISTED _____ STATE REGISTER LISTED _____	ROOFING MATERIAL Asphalt shingle	STYLE (STAFF USE ONLY)	
PROPERTY USE OR FUNCTION Formerly housing for dock worker. Presently privately owned.	TYPE OF FOUNDATION Cement block		
	QUADRANGLE NAME Alum Creek, WV	PHOTOGRAPH (2" X 3" CONTACT)	
SURVEY ORGANIZATION AND DATE Marshall University Department of Geography May 1991	PART OF WHAT SURVEY West Virginia Navigable Rivers: Navigation Aids And Relics		



SEE ATTACHED MAP

Form incorrect

SITE NO. ☐

PRESENT OWNERS	OWNER ADDRESS
Unknown	

GENERAL CONDITION OF PROPERTY

Fair

ADDITIONS

YES	NO	IF YES, DESCRIBE
X		Porch added to structure

ALTERATIONS

YES	NO	IF YES, DESCRIBE
X		Roof added in last 10 years

NO. AND NATURE OF OUTBUILDINGS

DESCRIPTION OF PROPERTY (ORGINAL AND PRESENT)

House built for lock worker. Several foundations adjacent to house which indicate this site was similar to others on Kanawha River.

HISTORICAL/CULTURAL SIGNIFICANCE

Date (1859) and condition of structure allows for historic preservation.

BIBLIOGRAPHICAL REFERENCES

U.S. Army Corps of Engineers

FORM PREPARED BY
Mack H. Gillenwater, Ph.D.
Howard G. Adkins, Ph.D.
ADDRESS
Marshall University
Huntington, WV 25755-2664

DATE
May 1991


No. 8
Coal River
UNITED STATES
EPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
25 MI. TO U.S. 60
425000m E.
426
427 50'
1.2 MI. TO U.S. 60
428
Lower Falls
Cem
939
Trailer Park
RIVER
JEFFERSON
COAL
CHESTERFIRE
New Hope Ch
Bryant Cem
Hanley Cem
Ferrell
Andrews Heights Sch
House
Upper Falls
Upper Falls (Tornado PO)
Pleasant Hill Ch
Pleasant Hill Sch
Smith
Creek

WEST VIRGINIA HISTORIC PROPERTY FORM CONTINUATION SHEET

NAME Lock and Dam Worker's House (addendum) **SITE#** KA-4677

Describe Setting
The resource, a part of the Coal River Locks, Dams, and Log Booms Archaeological District, was formerly located on Pettigrew Lane on the east bank of Coal River at Upper Falls. The resource was demolished between 1997 and 2003 and is now the location of the Coal River Group Visitor Center, which was constructed in 2009.

Description of Resource
The resource is no longer extant. It was formerly located on the east bank of Coal River at the Upper Falls along Lock Number 3, which is carved into the river bedrock. According to the original HPI form, the former resource was constructed of cement blocks. The property is located within a natural recreational park. The property was located within the Coal River Locks, Dams, and Log Booms Archaeological District (NRHP 97001417) (Binning and Moore 1997). According to aerial images, the dwelling was demolished between 1997 and 2003 (Google Earth 1997, 2003). The present building was constructed in 2009 (Photograph 1) (Google Earth 2009).

Statement of Significance
The resource is no longer extant. The new building does not have a historical association with the archaeological district. Despite the loss of the resource, the Coal River Locks, Dams, and Log Booms Archaeological District is not substantially impacted by the demolition and is recommended to remain listed in the National Register of Historic Places.

Bibliographical References

Binning, Jean Day and Warren H. Moore
1997 "Coal River Locks, Dams, and Log Booms Archaeological District." West Virginia State Historic Preservation Office. On file at WV SHPO, Charleston, WV. Accessed 14 July 2025.

Google Earth
1997 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.
2003 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.
2009 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.
2025 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.

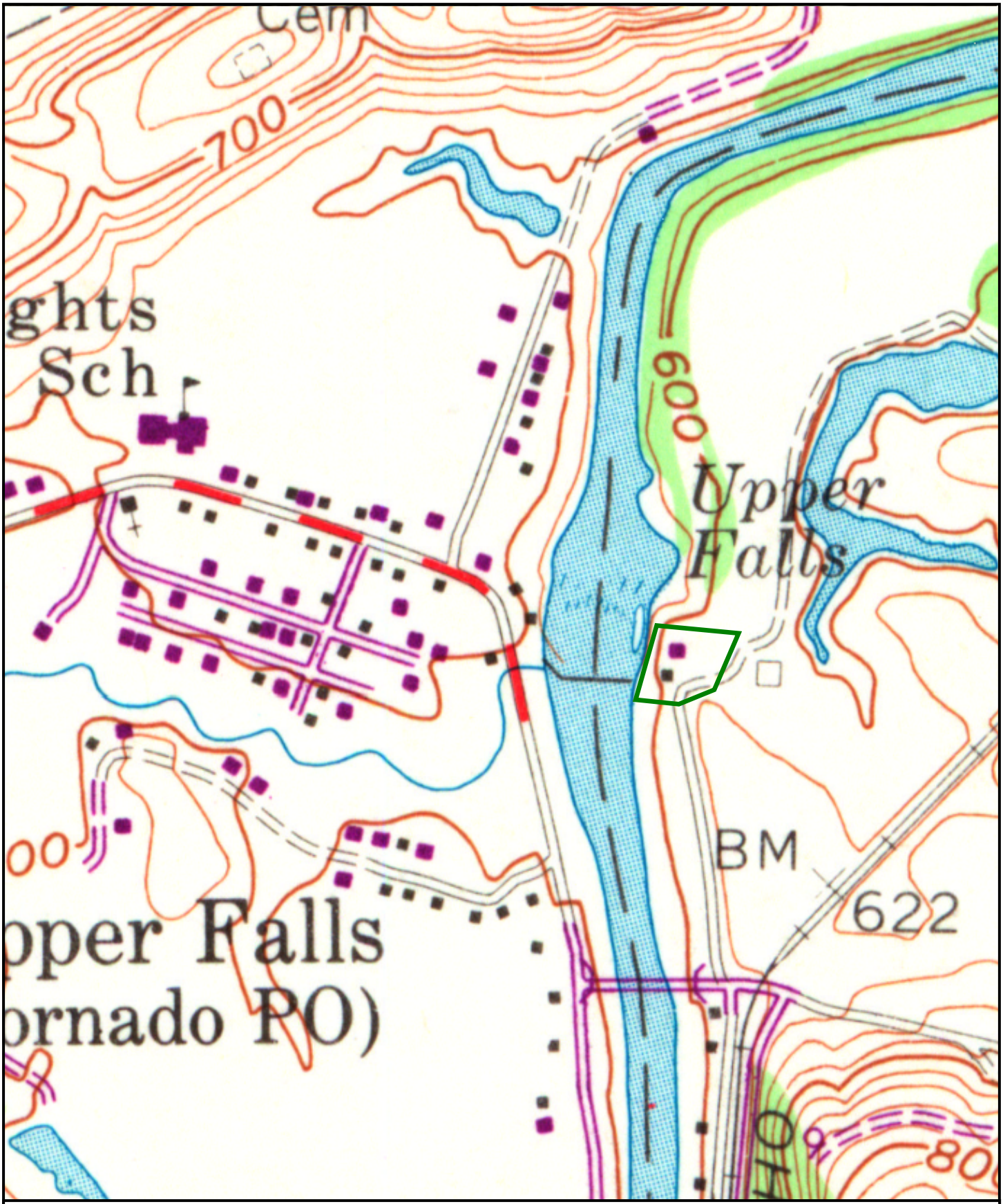
Marshall University Department of Geography
1991 KA-4677. West Virginia Historic Property Inventory Form. Available at West Virginia State Historic Preservation Office.

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Lock and Dam Worker's House (addendum) **SITE#** KA-4677



Photograph 1. Lock and Dam Worker's House, KA-4677, evidence of demolition and construction of Coal River Group Visitor Center, facing northeast.



MARKOSKY

Resource Boundary

Lock and Dam Worker's House, KA-4677
Tornado, Kanawha County, West Virginia

USGS MAP

Source: USGS 1973



MARKOSKY

Photograph Locations

Resource Boundary

Lock and Dam Worker's House , KA-4677
Tornado, Kanawha County, West Virginia

SITE MAP

Source: Google Earth 2025



Internal Rating: _____

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address 7546 Coal River Road	**Common/Historic Name/Both** **X O O** Smart House	**Field Survey #** M-01	**Site # *(SHPO Only)*** KA-8493
Town or Community Tornado	**County** Kanawha	**Negative No.**	**NR Listed Date**
Architect/Builder N/A	**Date of Construction** 1927	**Style** N/A	
Exterior Siding/Materials Vinyl	**Roofing Material** Asphalt Shingles	**Foundation** Concrete Block	
Property Use or Function **Residence X** **Commercial O** **Other O**	**UTM#** 426367.59m E, 4244152.97m N		
Survey Organization & Date Markosky Engineering Group October 2025	**Quadrangle Name** Charleston **Part of What Survey/FR#** Watershed Plan and Environmental Assessment for the Coal River Watershed		

Sketch Map of Property
Or Attach Copy of USGS Map

Site No.

Present Owners	**Owners Mailing Address**
SMART TERRY ALLISON & NORA LYNN **Phone # N/A**	7546 Coal River Road

Describe Setting

__1.37_____ Acres

See continuation sheet

_____ Archaeological Artifacts Present

Description of Building or Site (Original and Present) **_____Stories _____Front Bays**

See continuation sheet

(Use Continuation Sheets)

Alterations [X] **Yes** [ ] **No** **If yes, describe:** vinyl siding, replacement windows

Additions [X] **Yes** [ ] **No** **If yes, describe:** enclosed porch

Describe All Outbuildings

N/A

(Use Continuation Sheets)

Statement of Significance

See continuation sheet

(Use Continuation Sheets)

Bibliographical References

See continuation sheet

(Use Continuation Sheets)

Form Prepared By: Dana Cress **Date:** October 25, 2025

Name/Organization: Markosky Engineering Group, Inc.
Address:
3689 PA 711
Ligonier, PA 15658
Phone #: 724-238-4138

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WEST VIRGINIA HISTORIC PROPERTY FORM CONTINUATION SHEET

NAME Smart House **SITE#** KA-8493

Describe Setting
The resource is located on the northeast side of Coal River Road along the west bank of Coal River at the Upper Falls. The property is located at the eastern edge of residential construction within Tornado, WV.

Description of Resource
The resource consists of a 1927 one-story dwelling standing one bay wide on a concrete block foundation. The dwelling is clad with vinyl siding and capped with a gable roof covered with asphalt shingles. The primary entrance is located within a lattice-enclosed porch. The visible fenestration is a vinyl-sash horizontal-sliding window located on the southeast elevation.

Statement of Significance
The resource does not represent a historic theme or event and is recommended not eligible for the NRHP under Criterion A. Research did not indicate an association with a historically-significant individual and is therefore recommended not eligible under Criterion B. The resource also does not significantly represent an architectural style, type, work of a master, or method of construction. As such, the resource is recommended not eligible under Criterion C. The resource has not been evaluated for significance under Criterion D for its potential to provide information important to the understanding of history and prehistory as part of this survey.

Bibliographical References

Google Earth
2025 Aerial and street view imagery of Kanawha County. Website at https://earth.google.com/web/. Accessed October 2025.

West Virginia Property Viewer
2025 “WV Property Viewer.” WV Property Tax Division and GIS Technical Center. Website at https://mapwv.gov/parcel/?desktop=1?pid=20-24-0023-0007-0001. Accessed October 2025.

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Smart House **SITE#** KA-8493



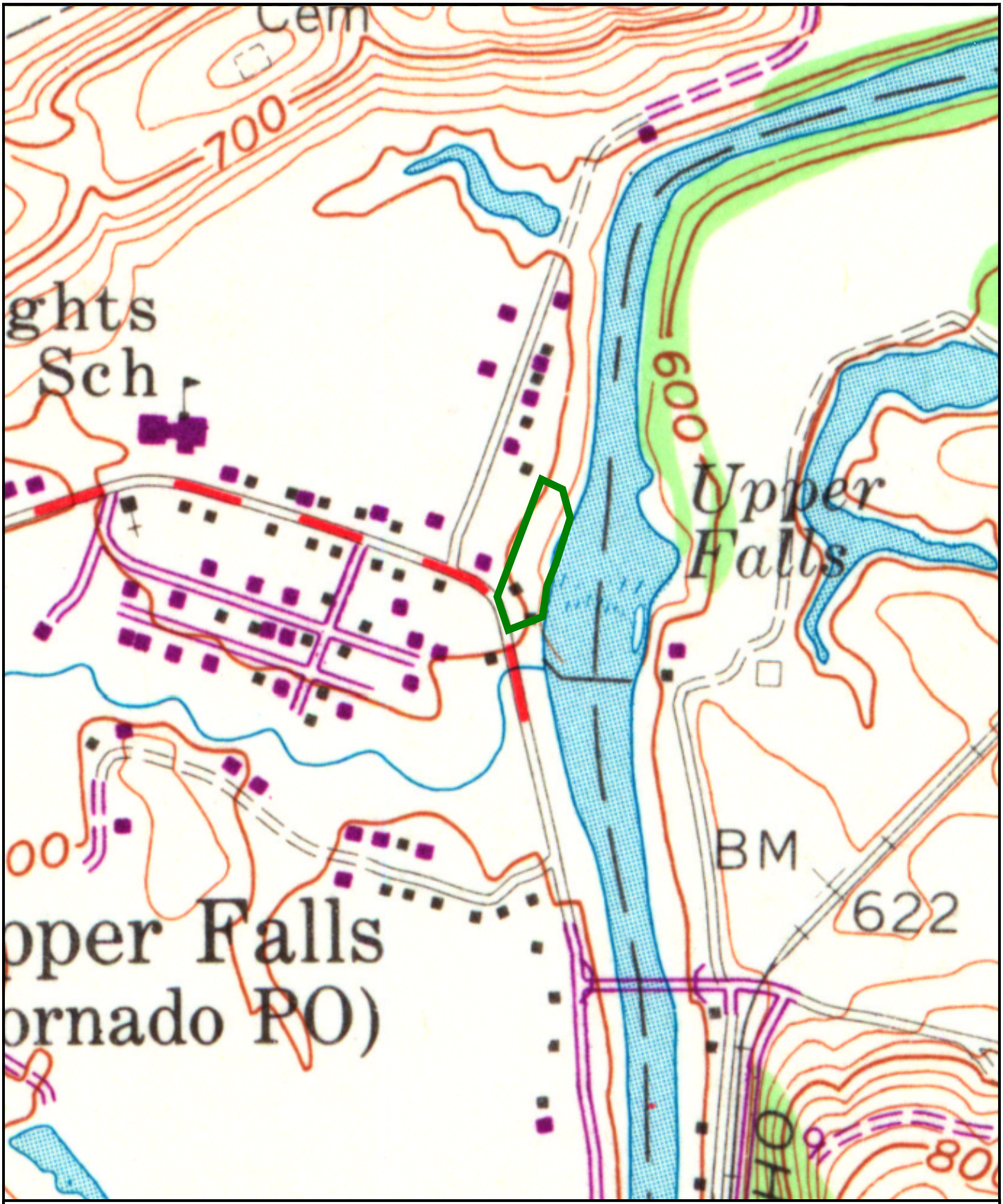
Photograph 1. Smart House, KA-8493, 7546 Coal River Road, facing northeast.



Photograph 2. Smart House, KA-8493, 7546 Coal River Road, facing north.



Photograph 3. Smart House, KA-8493, 7546 Coal River Road, facing east.



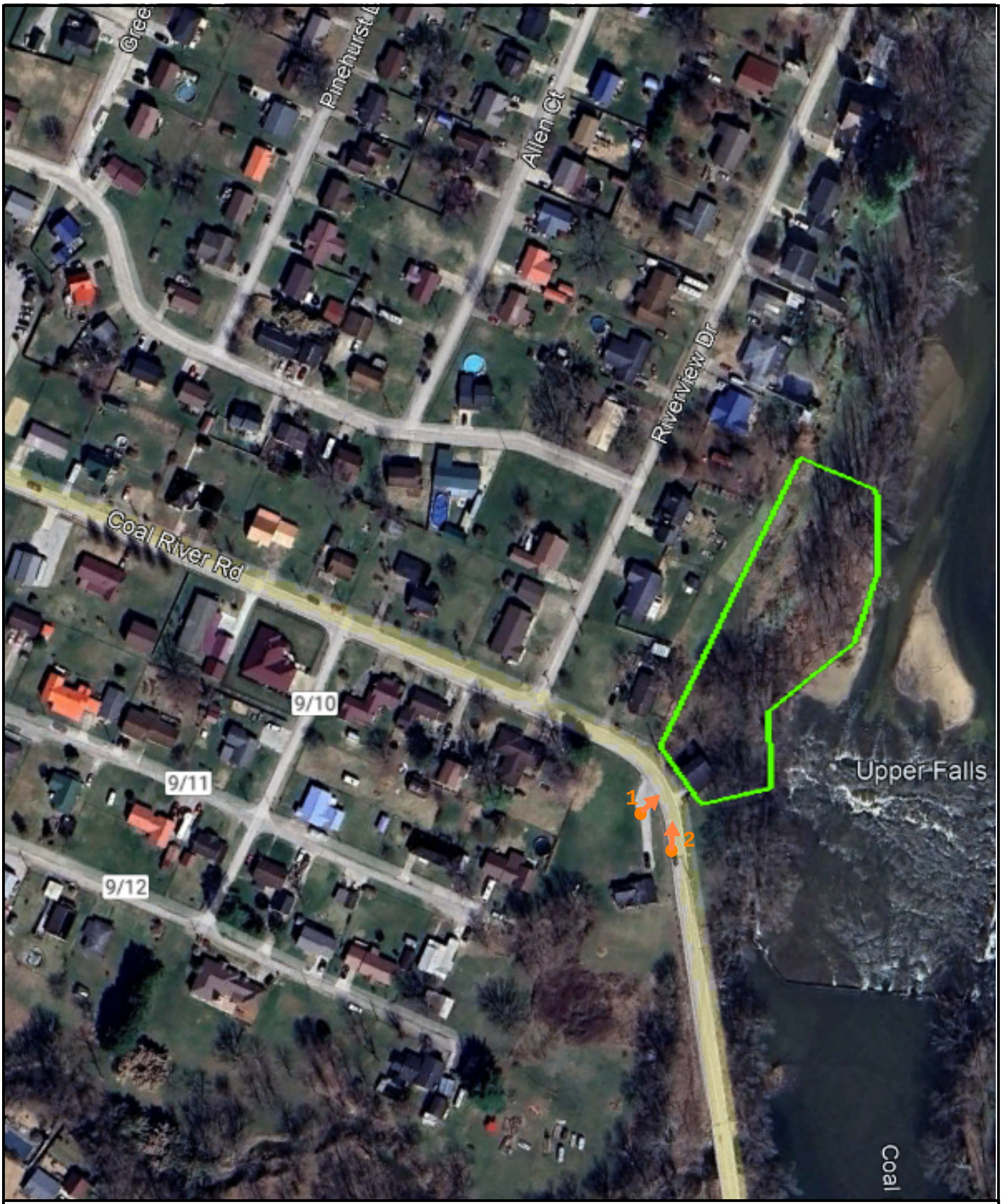
MARKOSKY

Resource Boundary

Smart House, KA-8493
Tornado, Kanawha County, West Virginia

USGS MAP

Source: USGS 1973



MARKOSKY

Photograph Locations

Resource Boundary

Smart House, KA-8493
Tornado, Kanawha County, West Virginia

SITE MAP

Source: Google Earth 2025