

# Removal Report on Jordan's Point Concrete Dam and Timber Crib Dam: May 23-25, and May 28-30, 2019

Prepared for: The Virginia Department of Game  
and Inland Fisheries

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April 2019 (Before Removal)



May 2019 (After Removal)

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## **ACKNOWLEDGEMENTS:**

Maral S. Kalbian sincerely thanks J. Daniel Pezzoni, Architectural Historian with Landmark Preservation Associates, for his many contributions to this report and his invaluable help in monitoring and documenting the dam demolition in May 2019. Mr. Pezzoni authored the National Register Nomination of the Jordan's Point Historic District (DHR # 117-5027) in 2016, so he was uniquely qualified to contribute to this project. Much of the early historic context for this report draws directly from that nomination. Louise Finger, Stream Restoration Biologist with the Virginia Department of Game & Inland Fisheries (DGIF), provided valuable support on many levels. Alan Weaver, Fish Passage Coordinator with DGIF, furnished information regarding the fish ladder attached to the dam. Virginia Department of Historic Resources (DHR) staff including, Roger Kirchen, Blake McDonald, and Quatro Hubbard also provided helpful guidance. Millwright Ben Hassett provided valuable confirmation as to the construction technique of the crib dam. Monte (Boogie) Atkins, and Paul Shaver of Shenandoah Streamworks, LLC were very considerate in their meticulous work, allowing us the opportunity to well document the work as it was being conducted.

Numerous persons in the local community provided insight and context to better interpret the Jordan's Point Dam. These include: Seth McCormick-Goodhart and Lisa McCown of the Leyburn Special Collections at Washington & Lee (W&L) University Library; Col. Keith Gibson, Director of the Virginia Military Institute Museum System at VMI; local historian Richard Halseth; The Rockbridge Historical Society; and the Miller's House Museum. Zoe Eckman, Research Services Intern at the David M. Rubenstein Rare Book & Manuscript Library of Duke University helped Kalbian research the Marshall McDonald archive records held there.

Aerial imagery was provided by James Fulcher and W&L University. The 3-D models of the site during demolition were furnished by Dave Pfaff of the Integrative and Quantitative Center of W&L University in coordination with the research of David Harbor of the W&L Geology Department. All have very generously allowed the use of their imagery in this report.

## **PROJECT BACKGROUND:**

In 2018, an intensive-level architectural survey of the Jordan's Point Dam was completed by Hurt & Proffitt (H&P) and was included in a report entitled "Intensive-Level Architectural Survey of the Jordan's Point Dam (DHR# 081-7164), the Jordan's Point Millrace (DHR# 117-5027-0004), and the Chesapeake and Ohio Railroad Piers (DHR# 081-7165) in the City of Lexington and Rockbridge County, Virginia." The purpose of that study was to identify the historic resources within the Area of Potential Effect (APE) that would be impacted by the partial demolition of the Jordan's Point Dam in the Maury River at Lexington. The dam was deemed structurally compromised and its removal, undertaken by the owner, the City of Lexington, in partnership with DGIF and the U.S. Fish and Wildlife Service (Service), was intended to restore riverine hydrology and habitat as well as improve public safety.

The June 2018 H&P report identified that the concrete dam was a potentially contributing resource to both the Jordan's Point Historic District (2016; DHR# 117-5027) and the eligible East Lexington Historic District (DHR# 081-0601). As a consequence, the documentation of and monitoring of the demolition of the dam was required as part of compliance with the National Historic Preservation Act (Section 106) as specified in 36 CFR Part 800.11(e).

A Memorandum of Agreement (MOA) among the Service, the State Historic Preservation Office (SHPO), the City of Lexington, and DGIF stated that the proposed federally-funded undertaking to partially remove the Jordan's Point Dam (DHR# 081-7164) would have an adverse effect on the eligible dam and an adverse effect on the Jordan's Point Millrace (DHR# 117-5027-0004) within the Jordan's Point Historic District (DHR# 117-0027) and the eligible East Lexington Historic District (DHR# 081-0601). To meet the mitigation requirements of the MOA, DGIF contracted with Maral S. Kalbian, LLC to monitor and photo-document the removal of the dam and update any earlier architectural survey documents (at an intensive level) to DHR standards. In addition, any previously unrecorded dam or other structures associated with the dam (and within the APE) would also be documented at the intensive level and be entered in the Virginia Cultural Resource Information System (V-CRIS) for review and approval by DHR. The concrete fish ladder that extends downstream from the dam at its northern end was not to be demolished but would remain for any future historical interpretation in connection with the dam. Additional information about this structure was to be added to the existing dam documentation.

The work for this project was completed in accordance with the *Secretary of Interior's Standards* and DHR's "Guidelines for Conducting Historic Resource Survey in Virginia" (updated October 2011). Kalbian's work, which is meant to mitigate the adverse effect of the demolition of the Jordan's Point concrete dam, specifically included: 1) Monitoring of the dam during demolition in order to capture any new information on its construction and amend the existing V-CRIS file to reflect the demolition; 2) Documenting the fish ladder at an intensive level, which was only briefly mentioned in the earlier H&P work, and updating the dam file to include this additional information; 3) Documenting at an intensive-level any other previously unrecorded structures associated with the dam that might be revealed and which are within the APE; 4) Entering all the new data into DHR's V-CRIS data sharing system; and 5) Completing a final written report including all of the new information.

Before the project began, wooden timbers were sometimes visible in the accumulated sediment of the Maury River directly upstream of the concrete dam. It was uncertain if these were associated with the wooden bridge that once was there or if they were remnants of an earlier (1806, ca. 1840) crib dam. These timbers were briefly mentioned in the 2018 report. Work on the concrete dam removal began on the afternoon of May 23, 2019, and by the end of the day, as the water level began to drop, remnants of the timber dam upstream became more clearly visible. The remainder of the concrete dam was removed on May 24 and 25, with only a bit of fine-tuning left to be done to the remnant portions of the dam at both the north and south bank. By that time the level of the river had dropped enough to reveal more of the structural components of the timber crib dam above it, allowing for better documentation and the retrieval of some wooden members that were loose and traveled downstream. At that point it was determined that these remnants were associated with an earlier wooden dam and not with the bridge that had been demolished in the mid-1940s. By May 25, the timber dam was still under a substantial

amount of water and river cobble so it was not fully visible. Before work on the dam could continue, a report was drafted by Maral S. Kalbian, LLC, outlining what had been observed thus far and providing a sample of the level of documentation that would be ultimately be included in the previously unrecorded survey file. The report (“Intensive Survey Information for the Jordan’s Point Crib Dam May 23-25, 2019”) was submitted to and approved by DHR on May 28 so that work could continue and the remnants of the timber dam, which were causing a potential hazard within the river, could be removed. The May 28 report to DHR included an aerial image of the site provided by James Fulcher and a 3-D image created by David Pfaff from W&L University, both of which proved invaluable in understanding the partially submerged wooden dam.

The MOA stipulates that some timbers of the wooden dam, along with two millstones that had been retrieved by DGIF downstream of the concrete dam in April 2019, would be stored by the City for potential interpretive use by local historical organizations.

## **METHODOLOGY:**

Professional Architectural Historian Maral Kalbian was contracted to complete the work in late December 2018. During January 2019, she familiarized herself with previous surveys of the area and the site as well as conducted historical research to determine the actual construction date of the concrete dam (1911). She visited the site on February 5, 2019, to better understand how the demolition was to proceed and visited the Leyburn Special Collections at W&L University Library, where she gathered further historical information on the dam along with historic images, including one from ca. 1900 that shows the timber dam. Kalbian was present on April 11, when the two millstones were removed from the Maury River and placed in a secure area before being transferred to the City. One of these is now in the front yard of the Miller’s House Museum and the other will be sent to the Frontier Culture Museum in Staunton, Virginia. Kalbian conducted further research in Lexington on April 12 including meeting with Col. Keith Gibson of the Virginia Military Institute to gather information regarding the fish ladder and its possible association with Col. Marshall McDonald.

The project to partially remove the dam began after the mid-April removal of eight of the thirteen concrete piers from a former railroad bridge located downstream from the concrete dam. Some of the material from the demolished piers was used to construct a temporary causeway to allow the heavy equipment to reach the dam. Kalbian and Pezzoni were on site on May 23-24 to monitor removal of the concrete dam itself. It was during this time that remnants of the crib dam and another structural remnant (possibly associated with a lock that once existed along the south end of the crib dam) were exposed in the Maury River, immediately upstream of the concrete dam. Pezzoni was present on May 25 when the rest of the concrete dam, except for remnants on both ends and the fish ladder, were removed. After the May 28 approval from DHR to proceed, Kalbian and Pezzoni were back on the site until May 30 and continued to monitor the removal of parts of the timber dam and document any previously unrecorded structures that were revealed.

An approximately thirteen-foot section of the concrete dam and the crib dam on the south bank was left in place. The wooden crib dam pieces near the south abutment were mostly covered with river stone and silt. On the north bank, approximately sixteen feet of the concrete dam was left

along with the fish ladder. These were retained to enhance future historical interpretation. Some wooden remnants of the crib dam attached to the bedrock near the north bank that became visible when the dam was breached were left undisturbed. The crib dam that was exposed is believed to date to ca. 1840 with a few pieces reused from earlier reiterations of the dam. The center portion of the crib dam was removed to eliminate potential navigational hazards in the Maury River. An intact section of cribbing that was exposed near the north bank was tagged, dismantled piece-by-piece, and moved to the City of Lexington public works yard. That crib used only round logs, whereas the other portions of the crib dam were either round or squared timbers. Selected timbers from the demolished portion of the crib dam were also moved to the City yard. All these timbers will be available for historical interpretive purposes. Structural remnants were also observed along the south bank, upstream of the crib dam, and believed to be possible remnants of a bateau lock. These were photographed, sketched, and left undisturbed.

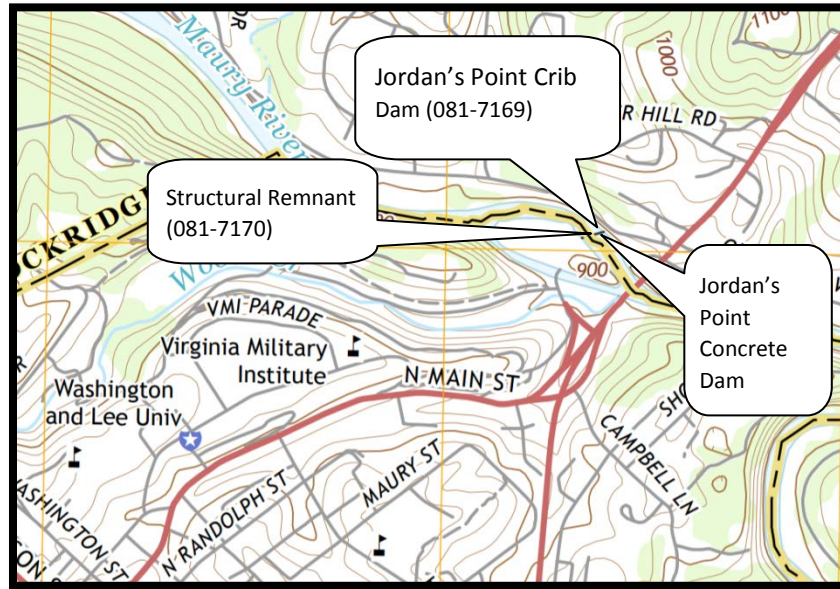
The deliverables as part of this project include: 1) documentation of the removal of the Jordan's Point concrete dam; 2) documentation of the wooden crib dam and its removal; 3) more detailed and updated photographs and information on the fish ladder and; 4) documentation of the structural remnant that was revealed along the south side of the river, and which is believed to be part of an old lock. All visible elevations and character-defining features of the resources were photographed. Field drawings were made of the previously unrecorded resources and submitted to DHR, including the crib dam, the structural remnant, and the fish ladder. The existing V-CRIS file on the concrete dam was updated to include the fish ladder and the monitoring of the demolition. Two new V-CRIS records were created for the previously unrecorded resources: the crib dam (DHR# 081-7169) and the structural remnant (DHR# 081-7170) and were submitted to DHR for review and approval. Hard-copy and digital photographs were provided to DHR according to their standards "Photographic Documentation-Virginia Department of Historic Resources Architectural Survey" (updated December 2015). In addition, six printed copies and one digital copy of this report were provided to DGIF.

## **SITE DESCRIPTION:**

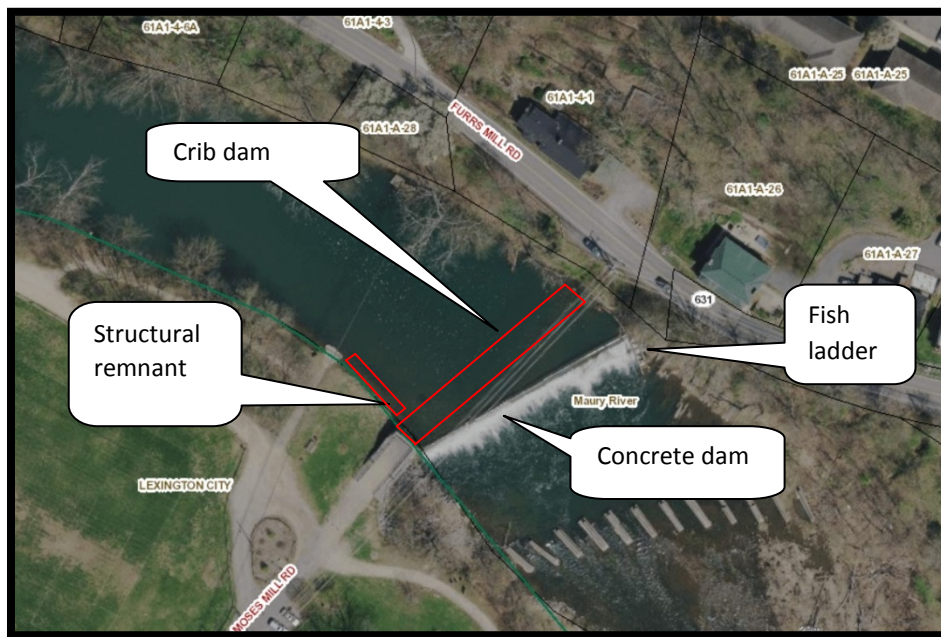
The Jordan's Point concrete dam spans the Maury River directly north and adjacent to Jordan's Point Park in the City of Lexington, Virginia. It was historically part of the large, industrial milling complex at Jordan's Point, an area formed at the confluence of the Maury River and Woods Creek. After milling and industrial operations ceased at Jordan's Point in the late 1920s, the property was sold and was eventually purchased in 1950 by the City of Lexington, which constructed a sewage treatment plant on the site. Near the end of the 20<sup>th</sup> century, the property was repurposed as a public park. Although the Rockbridge County line runs along the south side of the Maury River at this location, the concrete dam is owned by the City of Lexington, which also owns what is now known as Jordan's Point Park. It is uncertain who owns the remnants of the wooden crib dam and the structural remnant, both of which are located directly upstream of the concrete dam.

The 2018 H&P report investigated previously unrecorded resources within the APE, whereas this report relates to the concrete dam itself, the fish ladder, and the two previously unrecorded resources that were exposed during the demolition. The original 1830s covered bridge crossing the Maury at this location was destroyed in 1864 and was replaced by two other bridges, one in

ca. 1865-1869 and another in 1872, until it was finally demolished in 1946 after the 1930s construction of the current concrete bridge that carries Route 11.<sup>1</sup>

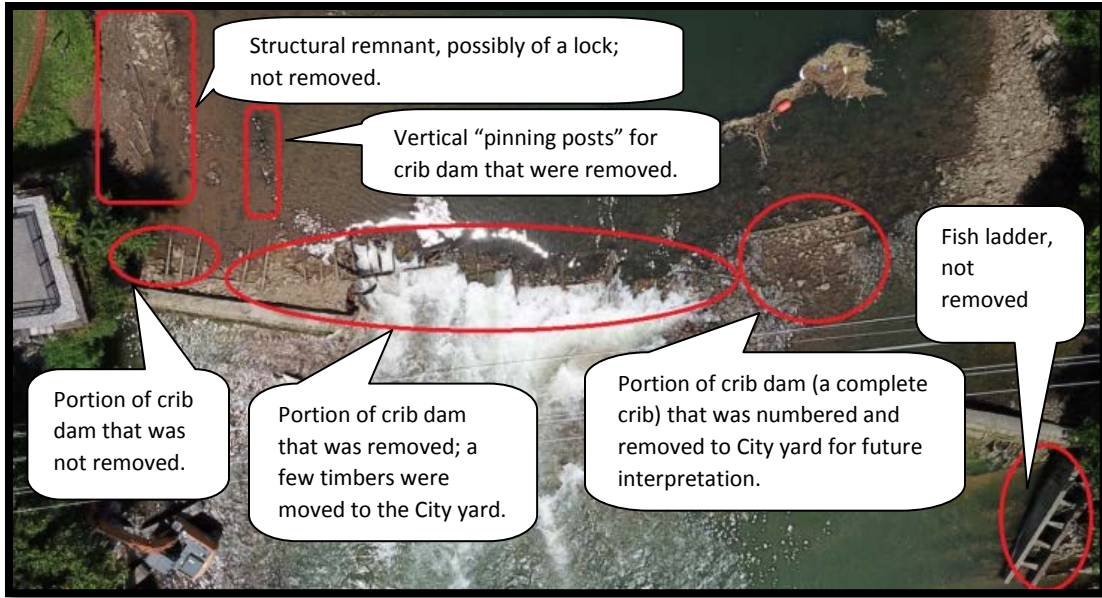


**Figure 1: Jordan's Point Concrete Dam, Jordan's Point Crib Dam, and Structural Remnant, Maury River Depicted on 7.5 Lexington USGS Quad (2016).**



**Figure 2: Adapted aerial view before any demolition, showing locations of concrete dam and fish ladder, crib dam, and structural remnant (Rockbridge County GIS).**

<sup>1</sup> *Lexington Gazette*. Bi-Centennial Issue. December 16, 1938, section 3, p. 14. Catherine M. Gilliam. "Jordan's Point- Lexington, Virginia: A Site History." *Proceedings of the Rockbridge Historical Society* 9 (1975-1979); p. 136.



**Figure 3: Adapted aerial detail of undocumented resources that became apparent after the Jordan's Point concrete dam was breached (May 24, James Fulcher).**



**Figure 4: Aerial view showing completed project. Note that parts of the concrete dam on the south side as well as on the north side (along with the fish ladder) remain. The portion of the crib dam at the southern abutment has been covered as has some of the structural remnant. (David Pfaff, W&L University)**



## HISTORIC CONTEXT:

The anticipated result of monitoring the removal of the Jordan's Point Concrete Dam was that it would enhance information about the early-20<sup>th</sup>-century dam and fish ladder. As the demolition progressed and the timber dam was exposed, along with the other timber structural remnant, much of the research focus shifted to these previously undocumented resources.

Dan Pezzoni's National Register Nomination for Jordan's Point Historic District (DHR #117-5027; 2016) provides excellent information regarding the early history and the partnership between John Jordan and John Moorhead, who first developed the site.

“The historic industrial complex at Jordan's Point was initially developed by the firm of Jordan and Moorhead, consisting of entrepreneurs John Jordan and John Moorhead. Jordan moved to Lexington as a young man in 1802. With builder Benjamin Darst he formed the partnership of Jordan and Darst, a leading area construction business in the first half of the nineteenth century. In 1804 Jordan partnered with John Moorhead for the purpose of developing a mill seat at the Great Road crossing of the Maury River, the future Jordan's Point complex...Jordan and Moorhead's initial development focused on the construction of a tubmill, sawmill, and dam in 1806...The dam was replaced before 1840 and replaced again one or more times afterward. No traces of the 1806 tubmill and sawmill appear to survive aboveground, although remnants of a crib dam of unknown date are said to survive in the river.”<sup>2</sup>

In addition to the National Register Nomination for Jordan's Point, the Chancery Case of *Admr of Moorhead etc v. Andrew Alexander and John Jordan (Moorhead v. Jordan)* is an invaluable tool for learning more details about the crib dam and what was the function of the structural remnant along the south bank of the Maury River. The chancery case is available on-line through the Library of Virginia, and includes 560 pages of detailed descriptions of the site, the day-to-day functions of the complex, the attitudes of the workers there, and specifics as to modifications that were made to many of the buildings and structures on Jordan's Point during the period of 1806 to 1840. The bulk of the relevant information is included in affidavits taken from various key figures who were involved in the operation of the mills on Jordan's Point.<sup>3</sup>

The chancery case confirms that a previous dam was swept away and a new one built before 1840. John Alexander testified in October 1838, “I know the old dam had been swept away and the works silent some time before the erection of the new dam.” He confirmed that the “head race near the south abutment” had been frequently broken.<sup>4</sup> When asked, “Do you consider the

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<sup>2</sup> Daniel J. Pezzoni. “National Register of Historic Places Registration Form for Jordan's Point Historic District.” Virginia Department of Historic Resources, DHR# 117-5027, June 16, 2016, Section 8, pages 16 and 17.

<sup>3</sup> [https://www.lva.virginia.gov/chancery/case\\_detail.asp?CFN=163-1844-031](https://www.lva.virginia.gov/chancery/case_detail.asp?CFN=163-1844-031) (Rockbridge County 1844-031).

<sup>4</sup> That headrace was for a sawmill that stood south of the abutment. It is uncertain if the “old” dam he refers to is the original ca. 1806 one or another one that may have replaced it.

lock indispensable at the new dam for the passage of boats in order to comply with the laws,” he responded, “Absolutely necessary.” Alexander further confirms that the lock had been built at the new dam along with a two-track covered bridge that rests on “the abutments of the dam.”<sup>5</sup> An advertisement for a sale that ran in the newspaper, *The Virginian* from October 26 to December 12, 1840, and which was included in the chancery papers, notes, “a new dam has been lately built across the North River, giving to the mills an extensive supply of water...the bridge across the river being a fine arch bridge of one span, thrown over the dam.”<sup>6</sup>

This evidence implies that the crib dam, which became exposed during the demolition of the concrete dam, was in place by 1840 and likely by the fall of 1838. It may have incorporated parts of the earlier 1806 dam, but according to the written evidence, most of that had been washed away and the location moved. Many of the timbers that were exposed during the demolition were secured using long iron spikes, confirming the later 19<sup>th</sup>-century date, although one or two had evidence of wooden pegs, suggesting they were reused pieces from the earlier crib dam.

The few wooden timbers that were exposed near the south side of the Maury River slightly upstream from the dam were most probably associated with a lock that was constructed there during the same time as the crib dam, and also mentioned in the chancery case. Some of those timbers also showed evidence of wooden pegs and may be remnants or reused wooden pieces from the earlier head race also referenced in the chancery case. This earlier head race was most certainly associated with the saw mill that once stood just downstream of the south abutment.

Page 177 of *Moorhead v Jordan* provides a detailed diagram of the 1806 crib dam, confirming that the approximately 160-foot dam was not a single structure but was rather built of multiple cribs joined together. The upstream side had a “slanting wall” that was covered in planks. A witness in the case recalls that the earlier crib dam was often repaired, “Some time after the first dam was built, a flood washed out the foundation of the dam about the center of the river so deep that the water could not be stopped. That was my reason for advising Col. Jordan to build the new dam in another place...The whole river went under the bottom sill of the dam when the river was too high to ford. I have seen both Jordan & Moorhead with wagons and teams hauling large brushy cedars and rocks to stop the breach under the dam.”<sup>7</sup>

A rendering included in the Virginia Board of Public Works Records from 1818 is one of the earliest images found of Jordan’s Point. It shows Jordan’s house, the bridge, a mill, the millrace and another possible dam near the headrace.<sup>8</sup>

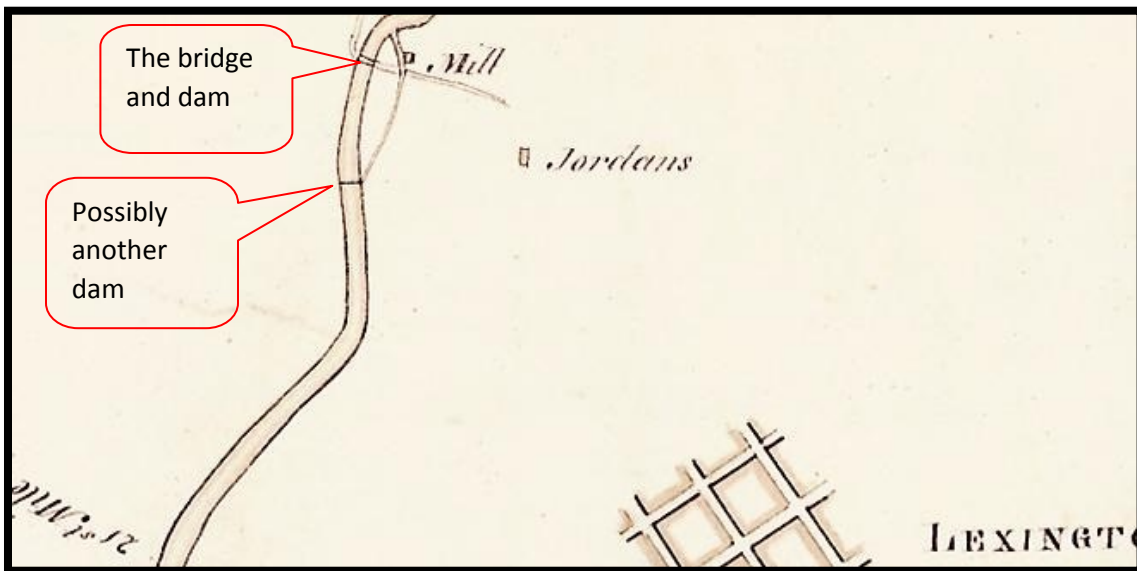
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<sup>5</sup> *Moorhead v. Jordan*, pp. 94-95. Recent research by local historian, Reed Belden, suggests that Andrew Alexander may have been a silent partner in the milling operations at Jordan’s Point.

<sup>6</sup> *Moorhead v. Jordan*, p. 143. The Maury River was originally known as the North River.

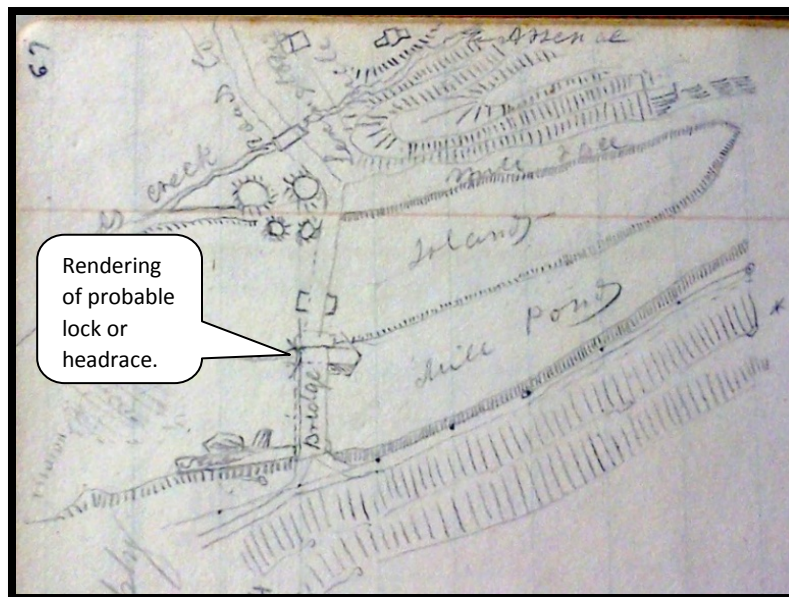
<sup>7</sup> *Moorhead v. Jordan*, p. 102. Deposition of Andrew Alexander. Another witness, William Caruthers also confirmed the construction of the new dam, pp. 87-88.

<sup>8</sup> This possible crib dam is located approximately 40 feet upstream of the Jordan’s Point headrace and is outside the APE, but remnants of a timber structure near this location were visible, though submerged, after the removal of the Jordan’s Point Crib Dam (May 28) and could be more fully investigated in the future.



**Figure 5: “Plan of the North Branch From its Mouth to Winter’s Dam,” by Thomas Mifflin Ladd, 1818, Virginia Board of Public Works. (Library of Virginia).**

Another early (ca. 1837) rendering of Jordan’s Point, completed as part of a survey of improvements on the North River by the Virginia Board of Public Works, is notable because it shows the covered bridge along with a structure on the south abutment side which is probably the lock mentioned in the chancery case. The angled lines on the upstream side suggest a gate that could be opened and closed.



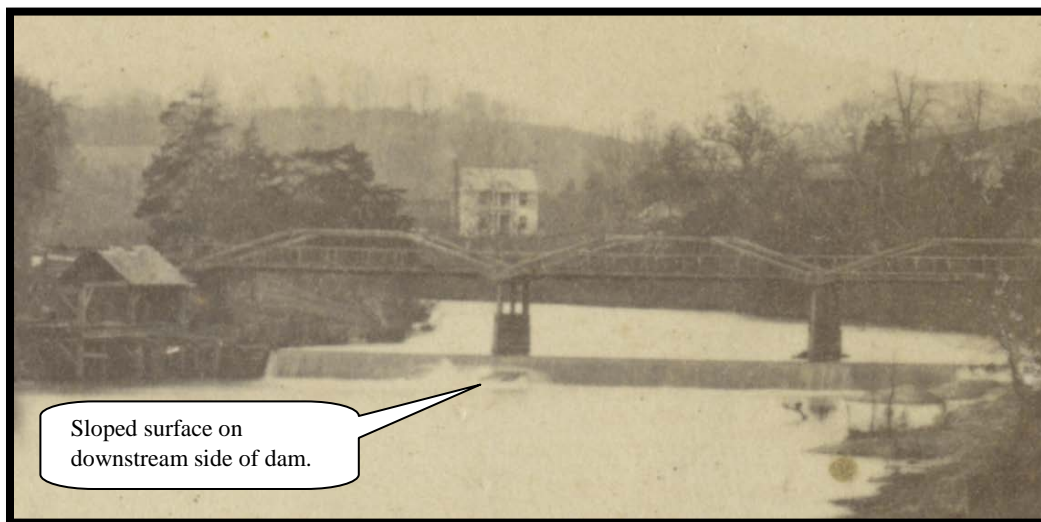
**Figure 6: Ca. 1837 “Survey Map of the North Branch of the James River,” detailing Jordan’s Point. Drawn by William B. Thompson surveyor for the Virginia Board of Public Works (W&L University Leyburn Library Special Collections).**

A painting of Jordan's Point by James Henry Waddell, likely from the early 1860s, depicts Jordan's Point and the covered bridge (destroyed in June 1864, by defending Confederate forces during Hunter's Raid), the saw mill, and the log crib dam with a gate-like feature, perhaps the end of a possible lock, at its south end.



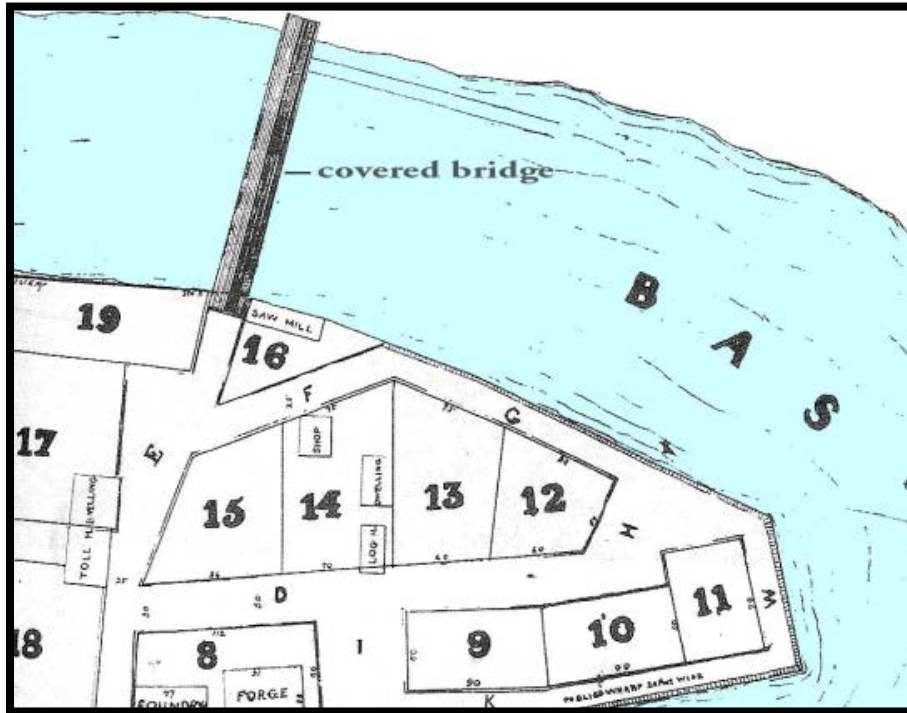
**Figure 7: Detail of a painting by James H. Waddell depicting the covered bridge, the dam, the sawmill and possibly the lock (The Rockbridge Historical Society).**

A ca. 1865-70 image of Jordan's Point by an unknown photographer captures the three-span bridge (built after the one that burned and before a covered bridge was built in 1870 and destroyed several months later in a flood), the crib dam, and the saw mill. Also in the photograph is a log structure on the south end of the dam, possibly the lock. The sloped surface at the front of the dam visible about 1/3 of the way across the river is most probably a buttress added to the front of the dam for reinforcement.



**Figure 8: Detail of a photo of Jordan's Point bridge and crib dam, ca. 1865-1869 (W. Walker Shindle Digital Collection, W&L University Leyburn Library Special Collections).**

By 1873, another covered bridge had been constructed and which is depicted on Farnham’s Map, with the crib dam presumably resting beneath it. The saw mill is shown, although the lock on the south side of the bridge is not specifically called out.<sup>9</sup>



**Figure 9: A section of H. W. Farnham’s “Map of Jordan’s Point, 1873 (W&L University Leyburn Library Special Collections).**

Ownership of the Jordan’s Point property changed during the mid-19<sup>th</sup> century. The North River Navigation Company acquired land in 1850 with the aim of constructing a canal to Jordan’s Point from the James River and Kanawha Canal at Glasgow.<sup>10</sup> After John Jordan’s death in 1854, some of his land on the Point was sold, including in 1860 to the James River and Kanawha Company, which in turn sold it in 1863 to Calvin McCorkle.<sup>11</sup> The covered bridge was burned in June 1864 by defending Confederate troops and a bridge built during the 1865-1869 period, which is shown in Figure 8. A new covered bridge was completed in June 1870 and destroyed by a flood four months later.<sup>12</sup> Another covered bridge was then completed in 1872.<sup>13</sup> Also during this time, new improvements were made related to the canal, along with new wharfs that are depicted on Gray’s 1877 Map. The bridge and presumably the crib dam are shown on

<sup>9</sup> Pezzoni suggests that the Farnham Map, while dated 1873, may reflect the area as it was during 1859, before the catastrophic September 1870 flood. Pezzoni, “Jordan’s Point Historic District National Register Nomination.” Section 8, page 23.

<sup>10</sup> Gilliam, pp. 116-117.

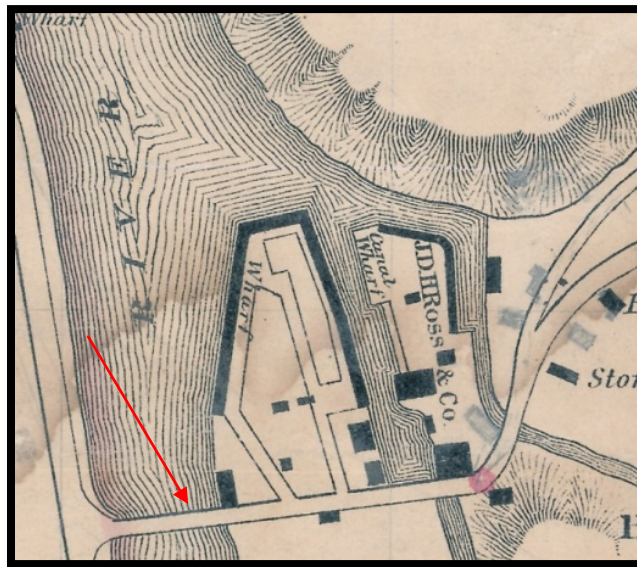
<sup>11</sup> Gilliam, pp. 122-126.

<sup>12</sup> Frits van der Leeden. “Chronology of Major Floods in Rockbridge County.” Prepared for the Rockbridge Conservation Council, 1992, p. 2.

<sup>13</sup> *Lexington Gazette*. Bi-Centennial Issue. December 16, 1938, section 3, p. 14.

the map along with a structure just downstream of the south abutment, which was most probably the saw mill.

After that time, the property passed through several owners and in 1900 was sold at auction as part of a chancery case of *U. B. Simpson and Son v. The Lexington Manufacturing Company*.<sup>14</sup> It was purchased by P. B. Moses who along with others operated the Lexington Roller Mills there as the firm of Moses Brothers.<sup>15</sup> The new concrete dam was constructed by Moses Brothers in 1911. The Moses family sold the Jordan's Point property to the Virginia Military Institute in 1946, which four years later sold it to the Town of Lexington.<sup>16</sup>



**Figure 10: “Gray’s New Map of Lexington”, Philadelphia, 1877 showing bridge and a structure along the south bank that is the sawmill (W&L University Leyburn Library Special Collections).**

A ca. 1900 photograph of the covered bridge provides a close-up view of the crib dam before it was replaced in 1911 by Moses Brothers. The image shows several men on scaffolding painting the east side of the bridge with an advertisement for “Wacoma- the Perfect Cure for Pain.” The image provides a better understanding of the construction of the crib dam, which was made up of several independent cribs tied together. Some areas on the downstream side of the dam have a sloped feature that is covered in planks. These structures or bulwarks help carry water past the dam so as to prevent it from running back under the cribs and undermining their foundations. Acting as buttresses, these sloped timber features also help to tie together the individual cribs and give the dam additional strength. The sloped features in the ca. 1900 photo look a bit different than those that appear in the ca. 1865-1869 photograph (Figure 8), confirming that the crib dam and the buttressing was repaired and/or rebuilt in places, most probably due to damage incurred

<sup>14</sup> Gilliam, 135.

<sup>15</sup> Pezzoni, “Jordan’s Point Historic District National Register Nomination.” Section 8- page 23.

<sup>16</sup> Gilliam, 136. During the 1950s, Lexington was a Town; it is now a City.

during multiple floods. It is documented that there was a massive flood in 1870, but there were certainly many other times that the Maury flooded, requiring repairs be made to the crib dam and its associated features.<sup>17</sup>



**Figure 11: Ca. 1900 photo of the covered bridge and crib dam at Jordan’s Point. The applied arrows show the sloped buttresses covered in wooden planks that helped to strengthen the dam (W&L University Leyburn Library Special Collections).**



**Photo 12: ca. 1910 photograph of the bridge and crib dam at flood level (Courtesy of Louise Finger).**

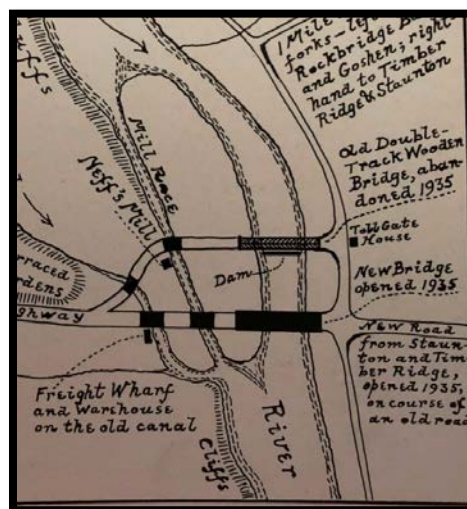
Several accounts in the *Lexington Gazette* from the summer of 1911 confirm the construction of the new concrete dam. In July 26, 1911, it was reported that H. M. Donald had been awarded the

<sup>17</sup> According to Van der Leeden’s “Chronology of Floods...” (page 2), the dam was damaged by a large flood that occurred in December 1847.

contract “for the erection of a concrete dam across North River just below their present dam.” By August 16, the paper noted, “work on the concrete dam across North River at Moses’ Mill is progressing nicely, and when completed will be a great improvement as well as a source of increased water supply.” Fourteen days later, it was reported that the “coffer dam at Moses’ Mill, used in connection with building a new concrete dam, was washed away.”<sup>18</sup>

The concrete dam at Jordan’s Point is a 10-foot tall structure built of formed concrete with large stones as aggregate. Its sloped concrete cap was applied to the top of the dam independently of the primary structure and does not contain large aggregate. Reinforcing metal was not used in the dam’s construction except for several pieces of railroad rail that were incorporated into the concrete near the north end. The dam measures roughly 180 feet long. The southern end of the dam ties into the south bridge abutment. It runs to the north shore at an angle, incorporating a large piece of bedrock that rises from the riverbed.

Farther north near the bank is an approximately 32-foot long, concrete, pool-and-weir fishway that extends downstream.<sup>19</sup> It has six steps before it peaks at the top of the dam. Currently in poor and non-functional condition, the floor of the structure is missing in several places and parts of the side walls are cracked. Surprisingly the fish ladder (or “fishway”) was not mentioned in any of the historical materials consulted as part of this study and there is no evidence to suggest that it was a later addition to the dam. The fish ladder was not removed as part of the dam project and has been left in place for interpretive purposes.



**Figure 13: “East Lexington Bridges and Historic Homes” from *Historic Homes of Northern Virginia* by John W. Wayland, 1937. This depicts the new concrete dam just downstream of the covered bridge and is one of the last drawings of the site before the wooden bridge was demolished in 1946. It does not depict the fish ladder, which was probably an oversight.**

<sup>18</sup> *Lexington Gazette*, July 26, August 16 and August 30, 1911. Accessed on the “Chronicling America” Library of Congress website on April 1, 2019. <https://chroniclingamerica.loc.gov/>

<sup>19</sup> Alan Weaver, Fish Passage Coordinator, DGIF. E-mail correspondence with Maral Kalbian on June 12, 2019.



## DESCRIPTION OF THE CONCRETE DAM AND FISH LADDER (#081-7164):

The concrete dam at Jordan's Point was constructed in the summer of 1911 superseding the earlier timber dam that stood directly upstream underneath the bridge crossing the Maury River. The formed concrete dam uses stones of varying size as aggregate. Measuring 10 feet tall and 180 feet long, it has a sloped concrete cap. The majority of the concrete dam was demolished on May 23-28, 2019, but remnants of it at both banks were retained for interpretive purposes. The area that was left along the north side of the Maury River also includes the concrete fish ladder that extends downstream. Though the fish ladder was maintained, much of the bottom surface is gone. Large cracks along the side walls are also evident. The construction technique of the concrete dam is typical of others in the region of this time period. Before the demolition, it was thought that the dam was perhaps of stone construction with a concrete veneer or even incorporated an earlier dam. Both of these considerations were proven to be inaccurate.



**Figure 14: Beginning of removal, view from downstream (May 23).**



**Figure 15: End of day on May 23, 2019, showing breached dam.**



**Figure 16: View from downstream south end, showing poor condition of dam wall and distinct joint between wall of dam and the cap (May 24).**



**Figure 17: View of dam removal from south abutment on May 24, showing the sloped concrete cap that was applied independently and the makeup of the concrete dam with stones of varying sizes used as aggregate. By this time, the timber crib dam directly upstream was beginning to be exposed.**



**Figure 18: May 25 view of removal of concrete near bedrock and fish ladder at north bank.**



**Figure 19: May 28 view from south bank, upstream of dam. By that time, water had continued to drop and more remnants of the crib dam were exposed. Some of these included vertical pinning posts for the crib dam and the structural remnant near the south bank. The vertical posts were removed as part of the crib dam removal.**

Fish ladders, also called fishways, are found throughout the world and function to facilitate fish migration through dams, waterfalls, and other encumbrances. The physical evidence suggests that the one at Jordan's Point was constructed in 1911 at the same time as the dam. It is a pool-and-weir type of fish ladder, a common form used during this period. The design is a series of stepped pools that lead from the river above the dam to the river below. Water flows from each pool and the fish can ascend by either swimming through the orifices or jumping upstream over the weirs. Known as the "Improved Cail Design," the sloped concrete flume has a rectangular cross section and is divided into a series of compartments by cross walls that have rectangular orifices at alternating corners which can create eddies and still water allowing different types of fish to pass.<sup>20</sup> This fish ladder has six pools and is approximately 32 feet in length. Measured drawings were made of the fish ladder and are included in the V-CRIS file on the dam (DHR# 081-7164).



**Figure 20: View fish ladder taken from downstream, north bank. (February 2019).**



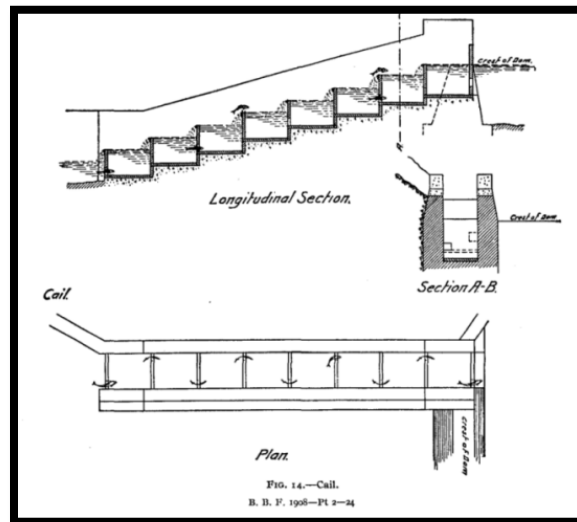
**Figure 21: Close-up view of fish ladder, showing deteriorated condition (May 2019).**

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<sup>20</sup> The Cail fishway was the ca. 1870 invention of Mr. Richard Cail, who was mayor of Newcastle-on-Tyne, England. Charles G. Atkins. "On Fish-Ways." *United States Commission of Fish and Fisheries Report of the Commissioner for 1872 and 1873*. Washington: Government Printing Office, 1874, pp. 608-609. [http://penbay.org/cof/cof\\_1872\\_1873.html](http://penbay.org/cof/cof_1872_1873.html)



**Figure 22: Interior view of the fish ladder showing the pools and the offset orifices in the cross walls to allow for fish passage (May 24).**



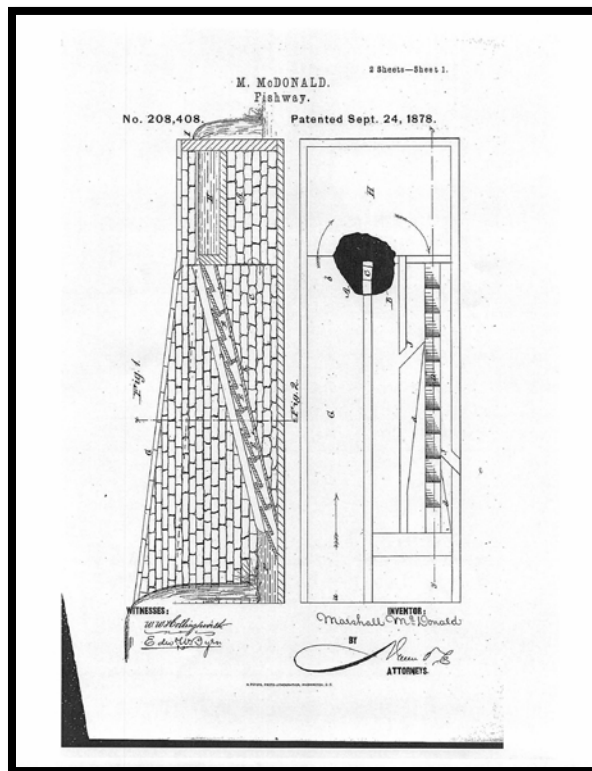
**Figure 23: This design of “Improved Cail Fishway” by H. Von Bayer, Commissioner of Fisheries, 1908, shows strong similarities with the fish ladder at Jordan’s Point Dam.**

Commissioner of Fisheries, H. Von Bayer, presented a paper on fishways at Fourth International Fisheries Congress held in Washington DC from September 22-26, 1908. His presentation illustrated the Cail Fishway and touted the design as one of the most effective stating, “The improved Cail fishway is now the pattern recommended by the United State Bureau of Fisheries.”<sup>21</sup> The published report of the meeting and his presentation entitled “Fishways” also included a drawing of an “Adaptation of the improved Cail Fishway, constructed of concrete and

<sup>21</sup> H. Von Bayer, Architect and Engineer, United States Bureau of Fisheries. *Fishways*. Paper presented before the Fourth International Fishery Congress held in Washington, DC September 22 to 26, 1908, page 1053.

designed by H. Von Bayer for the Shenandoah River in Virginia.”<sup>22</sup> The design of the Shenandoah River fish ladder is somewhat similar to the one at Jordan’s Point and begs the question of whether Von Bayer may have been involved in the design of the Jordan’s Point fish ladder or if it was copied from one seen in the nearby Shenandoah River.

The pool-and-weir type of fishway had been advocated by Col. Marshall McDonald (1835-1895), who had attended VMI, fought and was an engineer in the Civil War, became a professor at VMI (1866-1880), and was appointed as the first full-time Commissioner of the U.S. Commission of Fish and Fisheries (1888-1895). While teaching at VMI, he opened a fish hatchery in Lexington and was responsible for numerous patents for fish hatching devices and also for a fish ladder.<sup>23</sup> Although McDonald’s fish ladder design was of a pool-and-weir type, it is significantly dissimilar to the Jordan’s Point Dam fish ladder. No historical evidence was found that suggests that the Jordan’s Point fish ladder was McDonald’s design.<sup>24</sup>



**Figure 24: Marshall McDonald’s Patent No. 208,408 was issued on September 24, 1878.**

<sup>22</sup> Von Bayer, page 1056.

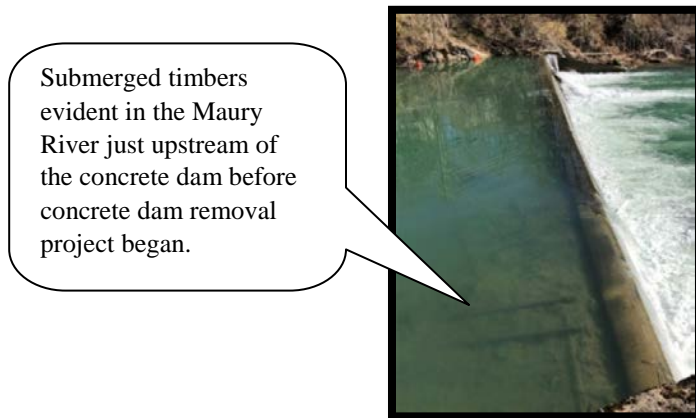
<sup>23</sup> United States Patent Office. “Marshall McDonald Fishway.” Patent No. 208,408. September 24, 1878.

<sup>24</sup> National Oceanic and Atmospheric Administration. *Diadromous Fish Passage: A Primer on Technology, Planning, and Design for the Atlantic and Gulf Coast*. October 2015, pp. 12, 49. Figure 8-3 on page 49, are two photographs of the ca. 1905 pool-and-weir fishway at the Blewett Falls Dam in the Pee Dee River in North Carolina. The caption states that the fishway was designed by Marshall McDonald. This would have been ten years after McDonald’s death. No citation is given for the source of this information. cursory research at the VMI archives and the Marshall McDonald papers at Duke University yielded no information. Mention of the significance of McDonald’s influence and contributions to the field of fish passages could be included in any future historical interpretation of the Jordan’s Point Dam site.

During the later 19<sup>th</sup>- and early 20<sup>th</sup>- centuries, the U.S. Commission of Fish and Fisheries was actively improving ways to protect fish and their migration routes. Numerous new designs or ones that improved on existing ones were introduced. The Cail Fishway appears to have been such a design and is the most likely basis for the fish ladder constructed at the Jordan's Point Dam in 1911. It was the most common type of fish ladder in the east coast during this period, built primarily to allow Shad, Atlantic Salmon, American Eel, Trout, and Striped Bass to pass, though its effectiveness was marginal.<sup>25</sup>

## DESCRIPTION OF THE CRIB DAM (#081-7169):

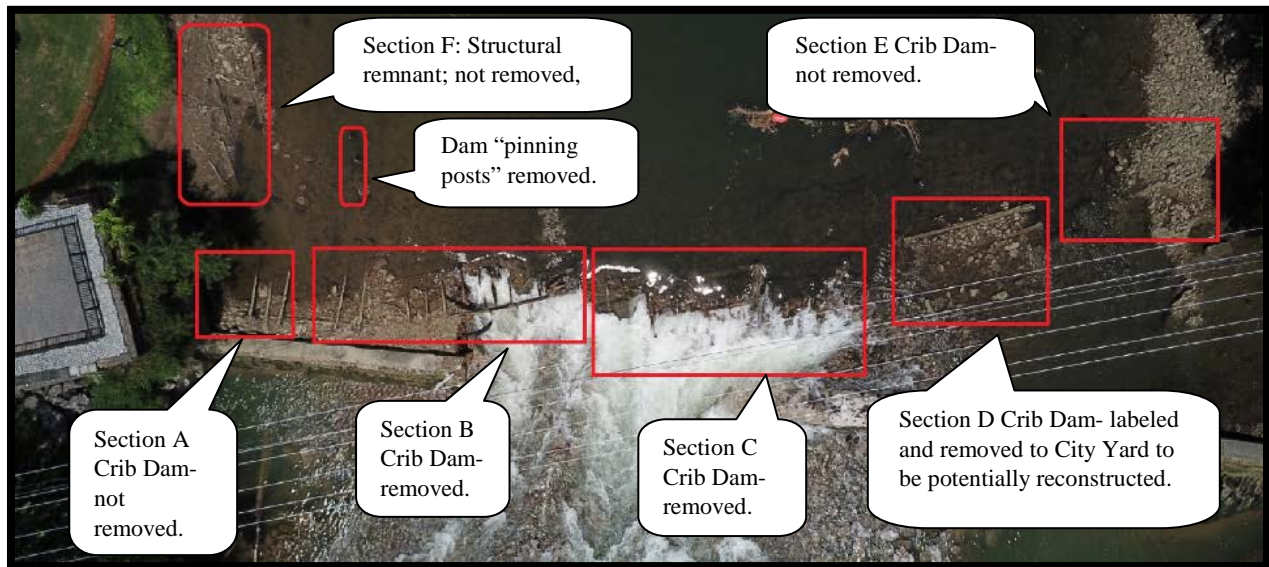
Prior to the removal of any part of the masonry dam at Jordan's Point, portions of what appeared to be a timber crib dam were visible below the water surface behind the concrete dam and directly below the southern, stone bridge abutment. There was some thought that the timbers could also be associated with the covered bridge that was demolished in 1946. When the concrete dam was breached May 23-25, 2019, both the water level upstream of the dam was lowered and a large amount of sediment washed downstream, exposing larger portions of timber that were confirmed to be a timber crib dam. It was determined that the Jordan's Point crib dam is a relatively complete 19<sup>th</sup>-century timber dam spanning the Maury River. Sections of timberwork with members attached perpendicularly stretched from the bridge abutment on the south side of the river to near the north river bank, approximately a 180-foot distance. The remnants of the crib dam were composed of five distinct sections. They were not strictly aligned, suggesting that portions were rebuilt, parts were missing, and that as is usual in crib dams of this length, they were built in sections. Limitations in the length of timbers, as well as in the practicality of constructing large sections of a wooden dam while water is flowing, generally dictate that dams of this nature were built in several sections or cribs.<sup>26</sup>



**Figure 25: Visual evidence of wooden structure in Maury River (February 2019).**

<sup>25</sup> Charles H. Clay. *Design of Fishways and Other Fish Facilities*. Second Edition. Boca Raton, FL: CRC Press, Inc, 1995, p. 14. Alan Weaver, Fish Passage Coordinator, DGIF. E-mail correspondence with Maral Kalbian on June 12, June 22, and June 24, 2019.

<sup>26</sup> Ben Hassett, Millwright. Interview with Maral S. Kalbian, Berryville, VA, June 21, 2019.



**Figure 26: This drone image taken on May 24 captures the five distinct features of the crib dam along with a structural remnant (F) that became exposed after the concrete dam was breached. Sections B and C of the crib dam were removed along with the associated pinning posts; Section D was tagged and moved to the City of Lexington public works yard; and Sections A and E were not removed and are still intact in the riverbed. The structural remnant (F) was also not removed. (May 24, 2019, James Fulcher).**

The crib dam is constructed of squared (sawn and/or hewn) and relatively unmodified (log-like) timbers fastened together with iron rods and spikes, the joints in some instances are notched. Many rounded cedar logs were also found to be used in the crib dam construction, suggesting that repairs had been made on several occasions. A few members have notched ends where they presumably overlapped missing intersecting members. There are many missing wooden members and in some cases the metal spikes extend above the structure itself. The crib dam is full of cobble and sediment.

A surprising surviving feature of the crib dam was the vertical wooden planking that was submerged on the upstream side of some of the cribs (Sections B, C and E). Some of these planks were removed when Sections B and C were demolished, while evidence suggests there are others along Section E and perhaps parts of Section A. The planking was observed to have been applied at approximately a 60-degree angle, not strictly vertical. Several vertical posts that were initially thought to be associated with the old bridge turned out instead to be parts of the crib dam and are believed to have helped secure it in place upstream. These posts measured approximately ten feet long each with a diameter of eight inches. Two that were located on the north side of Section C and D and four upstream from Section B were removed. The bottoms of these vertical posts had worked speared ends, while the tops were flat, although deteriorated by the river flow. The majority of cut nails observed on the timbers appear to date to the pre-ca. 1890 period.



As shown in Figure 26, the different crib sections do not exactly line up with each other. One possible explanation considered at the beginning of the documentation (May 23-25) was that parts had shifted during floods or pulled back when the new concrete dam was built. As more of the crib dam was taken down, it became evident that some parts of the dam had been removed, either by flooding, deterioration, or to make room for the concrete dam. It also became evident that not all sections of the crib dam were constructed at the same time, although most of the timbers were red cedar. The wooden pieces were held together with large metal spikes and in a very few cases (from sections B and C) there was evidence of wooden pegs. This suggests that some of these pieces were reused from an earlier dam on the site, possibly the ca. 1806 one. The center sections (B and C) were in the poorest condition, with most of the downstream-facing portions already missing and the cribs reduced mainly to a few vertical posts upstream, parts of the crib, and some of the sloped pieces on top. These sections were mainly hewn timbers but some were also rough cedar logs. A few were saved and moved to the City's public works yard for future interpretation. Measured sketches were made of the exposed sloped cedar posts on the top of Section A. The rest of Section A was and remains covered by river material. It lies in the area directly adjacent to the south abutment where some historic drawings suggest there may have been a flume and then a lock of some sort. It does not appear to connect directly to the stone abutment.

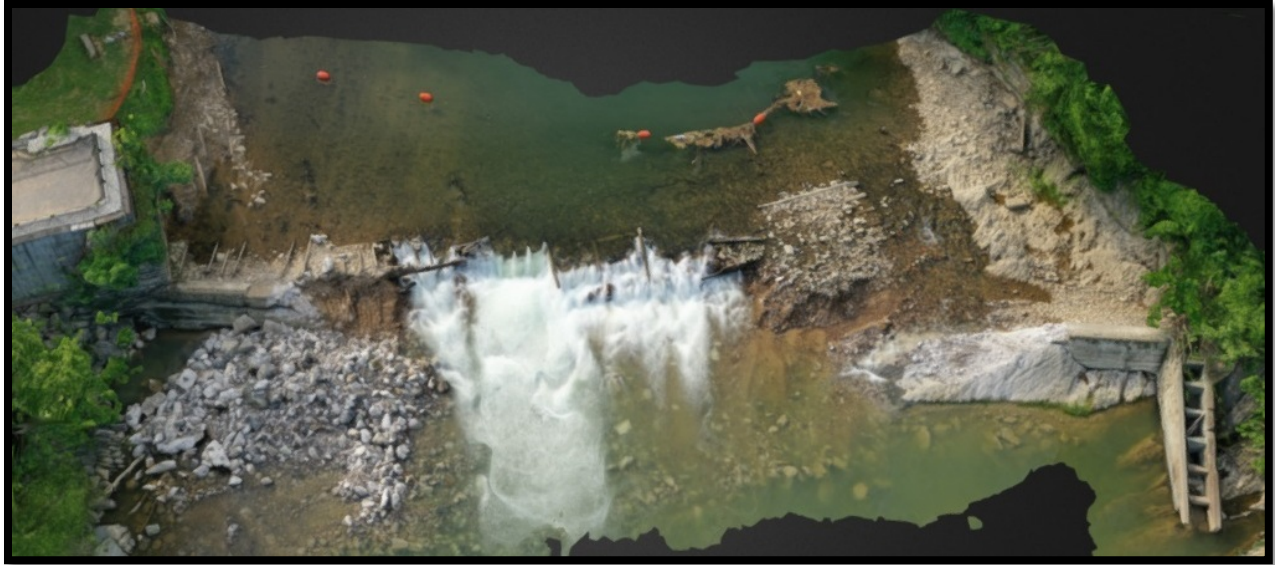
Section D of the crib dam was found to be an intact, rectangular log crib made up of six layers of four logs each, ranging in length from twelve feet to twenty-two feet, and filled with large river stones. The longer wooden crib members were laid perpendicular to the river, while the shorter ones were parallel. This crib was different from the other sections of the crib dam as the members were not hewn or rough cedar but instead rounded logs of cedar. It appears that Section D may have been a later addition to the crib dam, perhaps when a section had washed out or even part of one of the coffer dams constructed while the concrete dam was being built. The pieces were carefully numbered and moved to the City's public works yard on May 29 and 30 for potential use in future historical interpretation.

The two historic photographs (Figures 8 and 11) show that some areas of the crib dam had sloping faces on the front (downstream) side that acted as reinforcement of the cribs. The images confirm that even within a period of 30 years, the size and location of those sections had changed, illustrating the somewhat ephemeral nature of these log crib dams, which often required repair. Even the 1838 account of a mill worker included in *Moorhead vs. Jordan* explained how the dams at Jordan's Point were constantly being repaired.<sup>27</sup>

Sketches completed by Architectural Historian Dan Pezzoni document in detail the distinct parts of the crib dam that were revealed by the end of the day May 24, 2019, and are included in the V-CRIS record on the Jordan's Point Crib Dam.

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<sup>27</sup> *Moorhead v. Jordan*, p. 102.



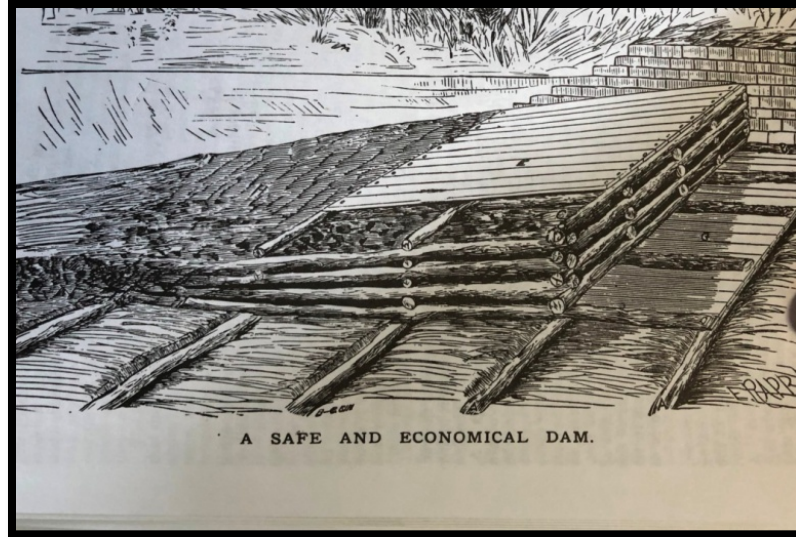
**Figure 27: 3-D image of the site made on May 25, 2019, showing completion of partial removal of concrete dam and exposure of wooden crib dam (Courtesy of David Pfaff, W&L University, Integrative and Quantitative Center).**

The crib dam like the one at Jordan’s Point is basically a tiered stack of poles or logs laid crisscross at regular intervals and the spaces between the timbers are filled in with stones and rubble for strength and stability. Planking is then laid on the upstream top of the angled dam to prevent water from penetrating the dam. The presence of at least two top timbers with multiple nails in them at Jordan’s Point suggests a former planked top surface. Planking can also be laid on the downstream side on another apron or buttress. Crib dams usually rest on a wooden foundation on the bottom of the body of water. The ca. 1900 photograph (Figure 11) confirms that there was planking on sections of the downstream sloped sections of the dam.

A cursory examination of historical literature on the subject revealed that there are many types of crib dams and that they were a common dam construction technique of the 19<sup>th</sup> century. One that appears similar in form and construction to the one at Jordan’s Point is illustrated in James Leffels’ book *Construction of Mill Dams* (1881) and is titled a “Safe and Economical Dam.” The Jordan’s Point Crib Dam has the tiered and interlaced structure illustrated in Leffel, and the discovery of a timber with multiple cut nails in it at the base of the dam suggests the existence of a formerly planked apron as shown in Leffel.<sup>28</sup> The two historic photographs (Figures 8 and 11) also show a sloping face or buttress downstream. This helped prevent water coming back and undermining the foundations of the crib and also made the structure stronger.

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<sup>28</sup> Ben Hassett, Millwright. Interview, June 21, 2019. He concurred that this is the most similar type of dam to the one at Jordan’s Point and was very common.



**Figure 28: From Leffel's *Construction of Mill Dams* (Springfield Ohio: James Leffel & Co, 1881, p. 17).**



Detail of Section B, showing large iron spikes projecting from the exposed wooden structure.

**Figure 29: Remnant of Section B removed near the south end of the crib dam (May 24).**

The construction date of the crib dam at Jordan's Point that was removed and the portions that remain is somewhat uncertain. According to the Jordan's Point Historic District Nomination by Dan Pezzoni (2016), there was a crib dam at this site by 1806. The chancery case confirms that it was replaced by October 1838 and suggests it was not in the same location. Historic photographs from ca. 1865-1870 and ca. 1900 clearly show that portions of the downstream side of the dam had changed in those thirty years. The pieces that were removed from the river in Sections B and C suggest they could date to the 1838 dam. A very few pieces were found that could in fact have come from the original dam and were perhaps pieces from lower parts of the cribs that had become dislodged. Section D is definitely later than the other sections of the dam and is different in the type of logs used. To further confuse the issue a newspaper article from

1911, at the time of the construction of the concrete dam states that the coffer dam was “washed away” due to a flood. Several coffer dams would have been built in order to construct the concrete dam.



**Figure 30: East side of Section D crib that was numbered and salvaged (May 29, 2019).**



**Figure 31: Removal of Sections B and C of the crib dam (May 29, 2019).**



**Figure 32: Vertical planks attached to the upstream side of the Section C of the crib dam, and which were removed (May 29, 2019).**



**Figure 33: The four angled posts to the left of the abutment are the remnant of the Section A of the crib dam before being covered over. The four vertical members at the bottom left of the photo were removed and are believed to have been “pinning posts” that helped secure the crib dam in place (May 30, 2019).**



**Figure 34: View from south abutment after completion of dam demolition (May 30, 2019).**



**Figure 35: Logs from the Crib Dam being moved to City Yard (May 29, 2019).**

## DESCRIPTION OF STRUCTURAL REMNANT, SOUTH BANK (#081-7170):

After the concrete dam was partially removed and parts of the crib dam removed, the water level dropped to a degree that an area along the shore of the south bank west of the abutment became exposed (Section F). Several timbers running parallel with the river were observed and initially were thought to be remnants of a 19<sup>th</sup>-century bateau quay. After further investigation, it appears that this structural remnant is either associated with the headrace or the lock that were both mentioned in *Moorhead vs. Jordan*.<sup>29</sup> A structure at that location is depicted on the 1837 map (Figure 6), the early 1860s painting (Figure 7), and the ca. 1865-1870 photograph (Figure 8). This area was photo documented and sketch maps were drawn by Dan Pezzoni, which are included in the V-CRIS file at DHR. The remnant was not disturbed and could be the site of future physical investigations to more fully understand its age and its exact function.

The structural remnant consists of a number of parallel beams built into the bank and former river bottom that define a linear structure aligned with the riverbank. At least two of the beams have pegs, which suggest they date at least in part to the earliest phase of river-related construction activity at Jordan's Point, possibly as early as ca. 1806. Adjoining one of the beams and parallel with it is a line of four vertical posts (originally thought to be three) extending about twelve and a half feet in length. This may be a remnant of a post-in-ground foundation, or it may have served to anchor the structure to the bank. A single post on the other side of the beam (the river-ward side), which is secured to the beam by a square-shafted iron spike, suggests the latter interpretation (anchoring and reinforcement). Though the posts are similar to the "pinning posts" observed in association with the crib dam, they are not believed to be associated with the dam. Several beams run perpendicular to the others, two of which are stacked one on top of the other at the upstream end of the structure.

It is possible the structure is a remnant of the headrace known to have existed at or near the location and mentioned in the 1840 chancery case, however a more compelling argument can be made that it is a remnant of the bateau lock known to exist at the exact location by the late 1830s. The two lines of parallel beams are approximately five and a half feet apart at their closest, which is too narrow for bateaus, however the remnant may represent part of the floor or foundation of the lock of which the other, river-ward side is missing. Because the remnant may be a lock floor, the crosswise or perpendicular beams would not have impeded the passage of bateaus. The two, stacked, perpendicular beams at the upper end of the structure may represent a portion of the lock wall structure. Although square-shafted iron spikes have been observed in the construction of the structure, and such spikes are generally thought to be indicative of non-original construction in river features at Jordan's Point, in this instance the spikes may have been added to a structure originally built with pegs, perhaps as early as ca. 1806. Regardless whether the structure was built ca. 1806 or in the 1830s, if it is a remnant of a bateau lock then it would be a rarely-surviving historic resource in Virginia. Archaeology would have the potential to test theories about the structure's date, function, and association.<sup>30</sup>

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<sup>29</sup> *Moorhead v. Jordan*, pp. 94-95.

<sup>30</sup> The previous three paragraphs were written by Dan Pezzoni who carefully inspected the structural remnant and provided the discussion as to other potential functions of this structural remnant.



**Figure 36: View of Section F looking east showing the series of timbers running parallel to the Maury River (May 30, 2019).**



**Figure 37: Detail of some of the cross members located within this structural remnant, Section F (May 30, 2019).**



## MILLSTONE REMOVAL:

As part of the mitigation measures stipulated in the MOA, on April 11, with the assistance of a scuba diver and heavy equipment, two millstones were recovered from the Maury River, about 75 feet downstream of the Jordan's Point Dam. These millstones were identified during the 2007 engineering analysis of the dam by Comprehensive Construction Services, Inc. One of the millstones measures four feet in diameter and is about 9 ½ inches thick. It has a three-inch square metal rod approximately 20 inches long on the dressed side, which extends about six inches on the underside. The hand-stitching on the bands of the stone have a nicely visible dress pattern. The pattern suggests the stones rotated in a clockwise direction, usually indicative of “flour” or wheat stones.<sup>31</sup>

The smaller millstone measures 43 inches in diameter and is also about 9 ½ inches thick. It has a metal shaft that is chamfered and which is attached to a spur gear drive (cast iron) on the underside. The cast “spur” gears have an interesting arrangement, where the spur gear is disengaged from its driving gear by raising the gear out of mesh, to allow other machinery to run when not milling. The gearing, shaft, and drivers all appear to be cast iron, and probably date to the late 1800s. The gear works do not appear to be of the work of the Fitz Waterwheel company, which was the largest and longest surviving producer of this vintage of works.<sup>32</sup>



**Figure 38: Removal of millstone from Maury River on April 11, 2019.**

<sup>31</sup> Ben Hassett, interview with Maral S. Kalbian. Berryville, VA, Email from April 15, 2019.

<sup>32</sup> Ben Hassett, interview with Maral S. Kalbian. Berryville, VA, June 21, 2019 and email from April 15, 2019.

The two stones that were removed from the river are of conglomerate sandstone and probably came from the Brush Mountain Millstone Quarry in nearby Montgomery County, Virginia.<sup>33</sup> This conglomerate is a “white or gray siliceous sandstone containing round quartz pebbles of various sizes”<sup>34</sup> that is particularly well suited for grain milling stones. Although it is not known for certain from which mill or mills these stones came, it is highly probable that it was from the gristmill that operated at Jordan’s Point. One of these millstones is now located in front of the Miller's House Museum, and the second millstone is destined for the Frontier Culture Museum in Staunton, Virginia.



**Figure 39: Millstone pulled from the Maury River with intact gearing (April 11, 2019).**



**Figure 40: Second millstone salvaged from the Maury River. Note the fine dressed pattern (April 11, 2019).**

<sup>33</sup> Charles D. Hockensmith, Editor. *Millstone Manufacture in Virginia: Interviews with the Last Two Brush Mountain Millstone Makers*. Society for the Preservation of Old Mills. Raleigh, NC: Marblehead Publishing. 1999, pp. 5-35.

<sup>34</sup> Charles D. Hockensmith. *The Millstone Industry: A Summary of Research on the Quarries and Producers in the United States, Europe and Elsewhere*. Kentucky Heritage Council. Jefferson, NC: McFarland & Company, Inc, 2009. p. 49.

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# ADDENDUM (V-CRIS SURVEY FORMS):

## 081-7164 Jordan's Point Dam

Virginia Department of Historic Resources  
Architectural Survey Form

DHR ID: 081-7164  
Other DHR ID: 081-0601, 117-5027

Property Information		
<b>Property Names</b>		<b>Property Evaluation Status</b>  The Primary Resource is no longer extant.
<b>Name Explanation</b> Current Name	<b>Name</b> Jordan's Point Dam	
<b>Property Addresses</b>		
Current - Maury River		
<b>County/Independent City(s):</b>	Rockbridge (County)	
<b>Incorporated Town(s):</b>	No Data	
<b>Zip Code(s):</b>	24450	
<b>Magisterial District(s):</b>	No Data	
<b>Tax Parcel(s):</b>	No Data	
<b>USGS Quad(s):</b>	LEXINGTON	

Additional Property Information	
<b>Architecture Setting:</b>	Town
<b>Acreage:</b>	No Data
<b>Site Description:</b>	
<p>January 2018: The Jordan's Point Dam spans the Maury River, just north of the Jordan's Point land formation. The Jordan's Point Dam is located north of the Jordan's Point Park that consists of a soccer field and a trail with historic interpretative signage.</p> <p>June 2019: The Jordan's Point concrete dam spans the Maury River directly north and adjacent to Jordan's Point Park in the City of Lexington, Virginia. It was historically part of the large, industrial milling complex at Jordan's Point, an area formed at the confluence of the Maury River and Woods Creek. After milling and industrial operations ceased at Jordan's Point in the late 1920s, the property was sold and was eventually purchased in 1950 by the City of Lexington, which constructed a sewage treatment plant on the site. Near the end of the 20th century, the property was repurposed into a public park. Although the Rockbridge County line is along the south side of the Maury River at this location, the concrete dam is owned by the City of Lexington, which also owns what is now known as Jordan's Point Park.</p> <p>The majority of this concrete dam was removed in May 2019. An approximately thirteen-foot section of the concrete dam and the discovered crib dam on the south bank were left in place. The wooden crib dam pieces near the south abutment were mostly covered with river stone and silt. On the north bank, approximately sixteen feet of the concrete dam was left along with the fish ladder. These were retained to enhance future historical interpretation.</p>	
<b>Property Event Type:</b>	
Destroyed	
<b>Surveyor Assessment:</b>	
<p>January 2017: The Jordan's Point area has been a center of industry and commercial businesses since the latter part of the eighteenth century. Though the area is named for John Jordan, it was William Alexander who first brought commerce to Jordan's Point when he opened a store on the site in 1778. William Alexander sold a variety of items at his store, primarily food and other household goods. Apparently, Alexander also sold liquor at his store; he was fined in November of 1778 for selling liquor without a license. Alexander died in 1797 and the property transferred to his sons. There was little change in the use and development of the Jordan's Point property until John Jordan moved to the area in the early-nineteenth century (Gilliam 1982, 111-112).</p> <p>John Jordan established considerable commercial and industrial enterprises in the Jordan's Point area. Based on mapping for the Virginia Board of Public Works, a dam spanned this portion of the Maury River since 1837. Sketches for Board of Public Works records identify a Jordan's Mill Bridge and Dam. Jordan owned and operated a variety of different mills in the area and constructed a dam to harness the power of the river (Pezzoni 2015, 162). When the Maury River is low and the water clear, remnants of an earlier dam are visible in the water.</p> <p>The North River Navigation Company purchased property from the Jordan family in 1852 for construction of a canal (Rockbridge County Deeds). At this time, the canal stretched from Richmond to Lynchburg and the establishment of the North River Navigation Company was to facilitate the continuation of the canal to Lexington. The James River and Kanawha Canal Company eventually purchased the North River Navigation Company (Gilliam 1982, 116).</p> <p>In 1863, the James River and Kanawha Canal Company sold a portion of its land holdings at Jordan's Point to Calvin McCorkle. The deed from that sale states that the property sold "includes the Dam across the North (Maury) River." The property changed hands multiple times after 1863 and became the focus of a Chancery Court Case, U.B. Simpson and Son versus the Lexington Manufacturing Company. Because of the Chancery Court Case, special commissioners sold the property containing the dam and headrace to the Moses family in 1904. In 1928, the Moses family sold the property "including the headrace and dam" to the Virginia Public Service Company. The City of Lexington acquired the property from the Virginia Public Service Company in 1940. A covenant on the deed states that the dam may generate power to operate machinery, not for electricity. The property is now part of the Jordan's Point Park (Rockingham County Deeds).</p> <p>The Jordan's Point Dam possesses integrity of location, setting, feeling, association, and materials, the resource is not unique in its design or engineering. The Jordan's Point Dam does contribute to the history of the Jordan's Point area and the construction of the</p>	

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Dam falls within the period of significance for the Jordan's Point Historic District (VDHR No. 117-5027). Therefore, H&P recommends that the Jordan's Point Dam is not individually eligible for the NRHP under Criteria A, B, or C; Criterion D is not applicable. The Dam does not represent any important people or events in history and the design, workmanship, and materials are stock and unremarkable. However, H&P does recommend that the Jordan's Point Dam is a contributing resource to the Jordan's Point Historic District.

June 2019: The majority of this concrete dam was removed in May 2019. Portions of it were left along each bank along with the fish ladder. These could be used to enhance future historical interpretation of the site.

Additional historical information about fish ladders is included in the final report on the removal of the Jordan's Point Dam (Kalbian, July 2019).

Although it has been almost completely removed, the Jordan's Point Concrete Dam still retains integrity of association, location, and setting. As a remnant, it would still be considered contributing to both the Jordan's Point Historic District and the eligible East Lexington Historic District.

Surveyor Recommendation: Recommended Not Eligible

**Ownership**

Ownership Category	Ownership Entity
Local Govt	No Data

**Primary Resource Information**

Resource Category:	Industry/Processing/Extraction
Resource Type:	Dam
NR Resource Type:	Structure
Historic District Status:	No Data
Date of Construction:	1911
Date Source:	Written Data
Historic Time Period:	Reconstruction and Growth (1866 - 1916)
Historic Context(s):	Industry/Processing/Extraction
Other ID Number:	No Data
Architectural Style:	No discernible style
Form:	No Data
Number of Stories:	No Data
Condition:	Demolished
Threats to Resource:	Demolition, None Known, Structural Failure

**Architectural Description:**

January 2017: The Jordan's Point Dam is a stone dam with a concrete cap that measures approximately 205 feet long and 10 feet in height. A concrete overflow is visible on the northeast end of the dam (Figures 3, 4, and 5). The dam spans the Maury River from the Jordan's Point area to the north bank of the river. The exact construction date of the extant dam is unknown, but based on the use of concrete, construction of the Jordan's Point Dam likely occurred in the late-nineteenth or early-twentieth centuries. The construction type and use are consistent with the first period of the evolution of dam design and construction in Virginia. Dams of this time are typically constructed of local stone; however concrete, becomes the building material of choice in the early-twentieth century (Louis Berger & Associates 1990, 7).

June 2019: The concrete dam at Jordan's Point was constructed in the summer of 1911, superseding the earlier timber dam that stood directly upstream below the bridge crossing the Maury River. The concrete dam is a 10-foot tall, 180-foot long structure built of formed concrete with large stones as aggregate. Its sloped concrete cap was applied to the top independently of the primary structure and does not contain large aggregate. Reinforcing metal was not used in the dam's construction except for several pieces of railroad rail that were incorporated into the concrete near the north end and were discovered during the removal of the dam.

The southern end of the dam ties into the south bridge abutment. It runs to the north shore at an angle, incorporating a large piece of bedrock that rises from the riverbed. The majority of the concrete dam was removed on May 23-28, 2019, but remnants of it at both banks were retained for interpretive purposes. The area that was left along the north side of the Maury River also includes a concrete fish ladder that extends downstream. Though the fish ladder was maintained, much of the bottom surface is gone. Large cracks along the side walls are also evident. The construction technique of the concrete dam is typical of others in the region of this time period. Before the demolition, it was thought that the dam was perhaps of stone construction with a concrete veneer or even incorporated an earlier dam. Both of these considerations were proven to be inaccurate.

**Secondary Resource Information**

Secondary Resource #1

**Resource Category:** Other  
**Resource Type:** Other  
**Date of Construction:** 1911  
**Date Source:** Site Visit  
**Historic Time Period:** Reconstruction and Growth (1866 - 1916)  
**Historic Context(s):** Subsistence/Agriculture, Technology/Engineering  
**Architectural Style:** No discernible style  
**Form:** *No Data*  
**Condition:** Poor  
**Threats to Resource:** None Known, Structural Failure

**Architectural Description:**

June 2018: The physical evidence suggests that the fish ladder at Jordan's Point was constructed in 1911 at the same time as the dam. It is a pool-and-weir type of fish ladder, a common form used during this period. The design is a series of stepped pools that lead from the river above the dam to the river below. Water flows from each pool and the fish can ascend by either swimming through the orifices or jumping upstream. Known as the "Improved Cail Design," the sloped concrete flume has a rectangular cross section and is divided into a series of compartments by cross walls that have rectangular orifices at alternating corners which can create eddies and still water allowing different types of fish to pass. This fish ladder has six pools and is approximately 32 feet in length.

**Historic District Information**

**Historic District Name:** *No Data*  
**Local Historic District Name:** *No Data*  
**Historic District Significance:** *No Data*

**CRM Events**

**Event Type: Survey:Phase II/Intensive**

**Project Review File Number:** *No Data*  
**Investigator:** Maral Kalbian  
**Organization/Company:** Maral S. Kalbian, LLC  
**Photographic Media:** Digital  
**Survey Date:** 5/30/2019  
**Dhr Library Report Number:** *No Data*

**Project Staff/Notes:**

This survey was done as part of the monitoring of the dam demolition at Jordan's Point in the City of Lexington and Rockbridge County. An intensive -level survey of the dam was completed in June 2018. As part of the Section 106 process, the demolition of the dam needed to be monitored and documented and any new information or resources recorded in V-CRIS at an intensive level.

**Project Bibliographic Information:**

Kalbian, Maral S., LLC. "Removal Report on Jordan's Point Concrete Dam and Timber Crib Dam: May 23-25, and May 28-30, 2019." Prepared for: The Virginia Department of Game and Inland Fisheries. July 1, 2019.

Kalbian, Maral S., LLC. "Intensive Survey Information for the Jordan's Point Crib Dam May 23-25, 2019." Prepared for DHR, May 28, 2019.

**Period Of Significance:** 1911-1940  
**Level Of Significance:** Local  
**Phase II Intensive Survey Integrity Recommendations:** Association, Location, Setting

**Event Type: DHR Staff: Not Eligible**

**DHR ID:** 081-7164  
**Staff Name:** Ethel Eaton  
**Event Date:** 5/31/2018  
**Staff Comment**  
DHR File No.: 2017-0344: Contributing to Jordan Point Historic District

**Event Type: DHR Staff:HistDist, Contributing**

**DHR ID:** 081-7164  
**Staff Name:** Ethel Eaton  
**Event Date:** 5/31/2018  
**Staff Comment**  
DHR File No.: 2017-0344

**Event Type: DHR Staff:HistDist, Contributing**

**DHR ID:** 081-7164  
**Staff Name:** DHR Evaluation Committee  
**Event Date:** 5/3/2018  
**Staff Comment**

E. Eaton presenting:  
Jordan's Point Dam, Rockbridge County, DHR File No. 081-7164, DHR Project No. 2017-0334  
The Jordan's Point Dam is a stone dam with a concrete cap that measures approximately 205 feet long and 10 feet in height. A concrete overflow is visible on the northeast end of the dam. The dam spans the Maury River from the Jordan's Point area to the north bank of the river. The City of Lexington is along the west side of the Maury River while Rockbridge County is along the east side. The exact construction date of the extant dam is unknown, but based on the use of concrete, construction of the Jordan's Point Dam as it currently appears likely occurred during the late-nineteenth or early-twentieth centuries. The construction type and use are consistent with the first period of the evolution of dam design and construction in Virginia.

The evaluation committee recommended the dam would be contributing to the adjacent Jordan's Point Historic District (117-5027) should the district boundaries be increased.

Note: A short time after the evaluation, it was discovered that the dam is within the proposed East Lexington Historic District (081-0601), which was identified in 1996 by the Virginia Department of Transportation as a potentially eligible historic district. The dam has potential to contribute to this district should a nomination be prepared.

**Event Type: Survey:Phase II/Intensive**

**Project Review File Number:** 2017-0334  
**Investigator:** Ben Leatherland  
**Organization/Company:** Hurt & Proffitt  
**Photographic Media:** Digital  
**Survey Date:** 1/29/2018  
**Dhr Library Report Number:** RB-092

**Project Staff/Notes:**

Sarah Clarke  
Architectural Historian

DHR Report No. RB-092  
DHR Project No. 2017-0334

Clarke, Sarah M.  
Intensive-Level Architectural Survey of the Jordan's Point Dam (081-7164), the Jordan's Point Millrace (117-5027-0004), and the Chesapeake and Ohio Railroad Piers (081-7165) in the City of Lexington and Rockbridge County, Virginia  
Hurt & Proffitt, Inc.  
June 14, 2018

**Project Bibliographic Information:**

Kalbjan, Maral S., LLC. "Removal Report on Jordan's Point Concrete Dam and Timber Crib Dam: May 23-25, and May 28-30, 2019." Prepared for: The Virginia Department of Game and Inland Fisheries. July 1, 2019.

Kalbjan, Maral S., LLC. "Intensive Survey Information for the Jordan's Point Crib Dam May 23-25, 2019." Prepared for DHR, May 28, 2019.

**Period Of Significance:** 1911-1940  
**Level Of Significance:** Local  
**Phase II Intensive Survey Integrity Recommendations:** Association, Location, Setting

**Event Type: Survey:Phase II/Intensive**

**Project Review File Number:** 2017-0334  
**Investigator:** Ben Leatherland  
**Organization/Company:** Hurt & Proffitt  
**Photographic Media:** Digital



Survey Date: 1/28/2018

Dhr Library Report Number: No Data

Project Staff/Notes:

No Data

Project Bibliographic Information:

Kalbjan, Maral S., LLC. "Removal Report on Jordan's Point Concrete Dam and Timber Crib Dam: May 23-25, and May 28-30, 2019 ." Prepared for: The Virginia Department of Game and Inland Fisheries. July 1, 2019.

Kalbjan, Maral S., LLC. "Intensive Survey Information for the Jordan's Point Crib Dam May 23-25, 2019." Prepared for DHR, May 28, 2019.

Period Of Significance: 1911-1940

Level Of Significance: Local

Phase II Intensive Survey Integrity Association, Location, Setting

Recommendations:

Event Type: Survey:Phase II/Intensive

Project Review File Number: No Data

Investigator: Ben Leatherland

Organization/Company: Hurt & Proffitt

Photographic Media: Digital

Survey Date: 1/27/2018

Dhr Library Report Number: No Data

Project Staff/Notes:

No Data

Project Bibliographic Information:

Kalbjan, Maral S., LLC. "Removal Report on Jordan's Point Concrete Dam and Timber Crib Dam: May 23-25, and May 28-30, 2019 ." Prepared for: The Virginia Department of Game and Inland Fisheries. July 1, 2019.

Kalbjan, Maral S., LLC. "Intensive Survey Information for the Jordan's Point Crib Dam May 23-25, 2019." Prepared for DHR, May 28, 2019.

Period Of Significance: 1911-1940

Level Of Significance: Local

Phase II Intensive Survey Integrity Association, Location, Setting

Recommendations:

#### Bibliographic Information

##### Bibliography:

Gilliam, Catharine M.  
1982 "Jordan's Point-Lexington, Virginia: A Site History." Rockbridge  
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Virginia Department of Historic Resources (VDHR)  
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Available at [http://www.dhr.virginia.gov/review/Survey\\_Manual\\_Web.pdf](http://www.dhr.virginia.gov/review/Survey_Manual_Web.pdf)

June 2019:

Atkins, Charles G. "On Fish-Ways." United States Commission of Fish and Fisheries Report of the Commissioner for 1872 and 1873. Washington: Government Printing Office, 1874, pp. 608-609. [http://penbay.org/cof/cof\\_1872\\_1873.html](http://penbay.org/cof/cof_1872_1873.html)

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National Oceanic and Atmospheric Administration. Diadromous Fish Passage: A Primer on Technology, Planning, and Design for the Atlantic and Gulf Coast. October 2015. <https://www.greateratlantic.fisheries.noaa.gov/stories/2015/october/fishpassageprimer.pdf>

Trout, William E., III. The Maury River Atlas. Virginia Canals and Navigations Society, 1991.

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Waddell, James Henry papers. Manuscript # 0130, Virginia Military Institute Archives <https://archivesspace.vmi.edu/repositories/3/resources/210>  
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Weaver, Alan. Fish Passage Coordinator, DGIF. E-mail correspondence with Maral Kalbian on June 12, June 22, and June 24, 2019.

**Property Notes:**

This property is partially located within the boundaries of the Jordan's Point Historic District though it was not included in the survey and inventory for the district. For additional information about the status of this resource refer to the CRM Events and/or contact DHR staff.

June 2019: Most of this concrete dam was removed in May of 2019. About 13-feet of the dam was retained on the south side and 16 feet on the north side along with the fish ladder and approximately 3 feet between the fish ladder and the bank.

# Jordan's Point Crib Dam (081-7169)

Virginia Department of Historic Resources  
Architectural Survey Form

DHR ID: 081-7170  
Other DHR ID: 081-0601, 117-5027

Property Information		
<b>Property Names</b>		<b>Property Evaluation Status</b> Not Evaluated
<b>Name Explanation</b> Descriptive	<b>Name</b> Structural Remnant, Maury River	
<b>Property Addresses</b>		
Current - Maury River		
<b>County/Independent City(s):</b>	Rockbridge (County)	
<b>Incorporated Town(s):</b>	No Data	
<b>Zip Code(s):</b>	24450	
<b>Magisterial District(s):</b>	No Data	
<b>Tax Parcel(s):</b>	No Data	
<b>USGS Quad(s):</b>	LEXINGTON	

Additional Property Information	
<b>Architecture Setting:</b>	Town
<b>Acreage:</b>	No Data
<b>Site Description:</b>	
<p>June 2019: The Jordan's Point concrete dam spans the Maury River directly north and adjacent to Jordan's Point Park in the City of Lexington, Virginia. It was historically part of the large, industrial milling complex at Jordan's Point, an area formed at the confluence of the Maury River and Woods Creek. After milling and industrial operations ceased at Jordan's Point in the late 1920s, the property was sold and was eventually purchased in 1950 by the City of Lexington, which constructed a sewage treatment plant on the site. Near the end of the 20th century, the property was repurposed into a public park. Although the Rockbridge County line is along the south side of the Maury River at this location, the concrete dam is owned by the City of Lexington, which also owns what is now known as Jordan's Point Park. It is uncertain who owns the remnants of the wooden crib dam and the structural remnant, both of which are located directly upstream of the concrete dam.</p> <p>These wooden structural remnants are located off the south bank of the Maury River, just upstream from the crib and concrete dams which were partially removed in May 2019. They became visible after the water level of the Maury dropped due to the removal of the Jordan's Point concrete and crib dams. The remnants were documented but otherwise left undisturbed.</p>	
<b>Surveyor Assessment:</b>	
<p>June 2019: After the concrete dam was partially removed and parts of the crib dam removed, the water level dropped to a degree that an area along the shore of the south bank west of the abutment became exposed (Section F). Several timbers running parallel with the river were observed and initially were thought to be remnants of a 19th-century bateau quay. After further investigation, it appears that this structural remnant is either associated with the headrace or the lock that were both mentioned in Moorhead vs. Jordan Chancery Case. Regardless whether the structure was built ca. 1806 or in the 1830s, if it is a remnant of a bateau lock then it would be a rarely-surviving historic resource in Virginia.</p> <p>The resource has integrity of location, setting, feeling, association, and materials. Archaeology would have the potential to test theories about the structure's date, function, and association and could potentially determine its actual use. At this time, as a remnant, it could be considered contributing to both the Jordan's Point Historic District and the eligible East Lexington Historic District.</p>	
<b>Surveyor Recommendation:</b>	Recommended for Further Survey
<b>Ownership</b>	
<b>Ownership Category</b> Local Govt	<b>Ownership Entity</b> No Data

Primary Resource Information	
<b>Resource Category:</b>	Transportation
<b>Resource Type:</b>	Canal Lock
<b>NR Resource Type:</b>	Structure
<b>Historic District Status:</b>	No Data
<b>Date of Construction:</b>	Ca 1806
<b>Date Source:</b>	Written Data
<b>Historic Time Period:</b>	Early National Period (1790 - 1829)
<b>Historic Context(s):</b>	Transportation/Communication

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**Other ID Number:** *No Data*  
**Architectural Style:** *No discernible style*  
**Form:** *No Data*  
**Number of Stories:** *No Data*  
**Condition:** *Ruinous*  
**Threats to Resource:** *Neglect, None Known*

**Architectural Description:**

June 2019: The structural remnant consists of a number of parallel beams built into the bank and former river bottom that define a linear structure aligned with the riverbank. At least two of the beams have pegs, which suggest they date at least in part to the earliest phase of river-related construction activity at Jordan's Point, possibly as early as ca. 1806. Adjoining one of the beams and parallel with it is a line of four vertical posts (originally thought to be three) extending about twelve and a half feet in length. This may be a remnant of a post-in-ground foundation, or it may have served to anchor the structure to the bank. A single post on the other side of the beam (the river-ward side), which is secured to the beam by a square-shafted iron spike, suggests the latter interpretation (anchoring and reinforcement). Though the posts are similar to the "pimning posts" observed in association with the crib dam, they are not believed to be associated with the dam. Several beams run perpendicular to the others, two of which are stacked one on top of the other at the upstream end of the structure.

It is possible the structure is a remnant of the headrace known to have existed at or near the location and mentioned in the 1840 chancery case, however a more compelling argument can be made that it is a remnant of the bateau lock known to exist at the exact location by the late 1830s. The two lines of parallel beams are approximately five and a half feet apart at their closest, which is too narrow for bateaus, however the remnant may represent part of the floor or foundation of the lock of which the other, river-ward side is missing. Because the remnant may be a lock floor, the crosswise or perpendicular beams would not have impeded the passage of bateaus. The two, stacked, perpendicular beams at the upper end of the structure may represent a portion of the lock wall structure. Although square-shafted iron spikes have been observed in the construction of the structure, and such spikes are generally thought to be indicative of non-original construction in river features at Jordan's Point, in this instance the spikes may have been added to a structure originally built with pegs, perhaps as early as ca. 1806.

**Secondary Resource Information**

**Historic District Information**

**Historic District Name:** *No Data*  
**Local Historic District Name:** *No Data*  
**Historic District Significance:** *No Data*

**CRM Events**

**Event Type: Survey:Phase II/Intensive**

**Project Review File Number:** *No Data*  
**Investigator:** Maral Kalbian  
**Organization/Company:** Maral S. Kalbian, LLC  
**Photographic Media:** Digital  
**Survey Date:** 5/30/2019  
**Dhr Library Report Number:** *No Data*

**Project Staff/Notes:**

This survey was done as part of the monitoring of the dam demolition at Jordan's Point in the City of Lexington and Rockbridge County. An intensive -level survey of the dam was completed in June 2018. As part of the Section 106 process, the demolition of the dam needed to be monitored and documented and any new information or resources recorded in V-CRIS at an intensive level.

**Project Bibliographic Information:**

Kalbian, Maral S., LLC. "Removal Report on Jordan's Point Concrete Dam and Timber Crib Dam: May 23-25, and May 28-30, 2019 ." Prepared for: The Virginia Department of Game and Inland Fisheries. July 1, 2019.

Kalbian, Maral S., LLC. "Intensive Survey Information for the Jordan's Point Crib Dam May 23-25, 2019." Prepared for DHR, May 28, 2019.

**Period Of Significance:** 1806-1900  
**Level Of Significance:** Local  
**Surveyor's NR Criteria** A - Associated with Broad Patterns of History, D - Potential to Yield Important Historic and/or Pre-Historic

<b>Recommendations:</b>	Information
<b>Phase II Intensive Survey Integrity Recommendations:</b>	Association, Location

<b>Bibliographic Information</b>
<b>Bibliography:</b> June 2019: Jordan's Point Photos at Special Collections, James G. Leyburn Library, Washington and Lee University, Lexington, VA. Moorhead, John's Admr. v. Jordan, John; Alexander, Andrew. Rockbridge County Chancery Case 1844-031. Accessed online at the Library of Virginia website: <a href="http://www.lva.virginia.gov/chancery/case_detail.asp?CFN=163-1844-031">http://www.lva.virginia.gov/chancery/case_detail.asp?CFN=163-1844-031</a> . <b>Property Notes:</b> June 2019: This structural remnant became evident after the water level dropped when the concrete dam at Jordan's Point was breached in May 2019. The visible members were sketched and photographed and left in situ. Some were covered with river silt so they would not pose a hazard to river users.

## Structural Remnant, Maury River (081-7170):

Virginia Department of Historic Resources  
Architectural Survey Form

DHR ID: 081-7170  
Other DHR ID: 081-0601, 117-5027

Property Information	
<b>Property Names</b> <b>Name Explanation</b> Descriptive	<b>Name</b> Structural Remnant, Maury River
<b>Property Evaluation Status</b> Not Evaluated	
<b>Property Addresses</b> Current - Maury River	
<b>County/Independent City(s):</b>	Rockbridge (County)
<b>Incorporated Town(s):</b>	No Data
<b>Zip Code(s):</b>	24450
<b>Magisterial District(s):</b>	No Data
<b>Tax Parcel(s):</b>	No Data
<b>USGS Quad(s):</b>	LEXINGTON

Additional Property Information	
<b>Architecture Setting:</b>	Town
<b>Acreage:</b>	No Data
<b>Site Description:</b> June 2019: The Jordan's Point concrete dam spans the Maury River directly north and adjacent to Jordan's Point Park in the City of Lexington, Virginia. It was historically part of the large, industrial milling complex at Jordan's Point, an area formed at the confluence of the Maury River and Woods Creek. After milling and industrial operations ceased at Jordan's Point in the late 1920s, the property was sold and was eventually purchased in 1950 by the City of Lexington, which constructed a sewage treatment plant on the site. Near the end of the 20th century, the property was repurposed into a public park. Although the Rockbridge County line is along the south side of the Maury River at this location, the concrete dam is owned by the City of Lexington, which also owns what is now known as Jordan's Point Park. It is uncertain who owns the remnants of the wooden crib dam and the structural remnant, both of which are located directly upstream of the concrete dam.  These wooden structural remnants are located off the south bank of the Maury River, just upstream from the crib and concrete dams which were partially removed in May 2019. They became visible after the water level of the Maury dropped due to the removal of the Jordan's Point concrete and crib dams. The remnants were documented but otherwise left undisturbed.	
<b>Surveyor Assessment:</b> June 2019: After the concrete dam was partially removed and parts of the crib dam removed, the water level dropped to a degree that an area along the shore of the south bank west of the abutment became exposed (Section F). Several timbers running parallel with the river were observed and initially were thought to be remnants of a 19th-century bateau quay. After further investigation, it appears that this structural remnant is either associated with the headrace or the lock that were both mentioned in Moorhead vs. Jordan Chancery Case. Regardless whether the structure was built ca. 1806 or in the 1830s, if it is a remnant of a bateau lock then it would be a rarely-surviving historic resource in Virginia.  The resource has integrity of location, setting, feeling, association, and materials. Archaeology would have the potential to test theories about the structure's date, function, and association and could potentially determine its actual use. At this time, as a remnant, it could be considered contributing to both the Jordan's Point Historic District and the eligible East Lexington Historic District.	
<b>Surveyor Recommendation:</b>	Recommended for Further Survey
<b>Ownership</b>	
<b>Ownership Category</b> Local Govt	<b>Ownership Entity</b> No Data

Primary Resource Information	
<b>Resource Category:</b>	Transportation
<b>Resource Type:</b>	Canal Lock
<b>NR Resource Type:</b>	Structure
<b>Historic District Status:</b>	No Data
<b>Date of Construction:</b>	Ca 1806
<b>Date Source:</b>	Written Data
<b>Historic Time Period:</b>	Early National Period (1790 - 1829)
<b>Historic Context(s):</b>	Transportation/Communication

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<b>Other ID Number:</b>	<i>No Data</i>
<b>Architectural Style:</b>	No discernible style
<b>Form:</b>	<i>No Data</i>
<b>Number of Stories:</b>	<i>No Data</i>
<b>Condition:</b>	Ruinous
<b>Threats to Resource:</b>	Neglect, None Known
<b>Architectural Description:</b>	
<p>June 2019: The structural remnant consists of a number of parallel beams built into the bank and former river bottom that define a linear structure aligned with the riverbank. At least two of the beams have pegs, which suggest they date at least in part to the earliest phase of river-related construction activity at Jordan's Point, possibly as early as ca. 1806. Adjoining one of the beams and parallel with it is a line of four vertical posts (originally thought to be three) extending about twelve and a half feet in length. This may be a remnant of a post-in-ground foundation, or it may have served to anchor the structure to the bank. A single post on the other side of the beam (the river-ward side), which is secured to the beam by a square-shafted iron spike, suggests the latter interpretation (anchoring and reinforcement). Though the posts are similar to the "piling posts" observed in association with the crib dam, they are not believed to be associated with the dam. Several beams run perpendicular to the others, two of which are stacked one on top of the other at the upstream end of the structure.</p> <p>It is possible the structure is a remnant of the headrace known to have existed at or near the location and mentioned in the 1840 chancery case, however a more compelling argument can be made that it is a remnant of the bateau lock known to exist at the exact location by the late 1830s. The two lines of parallel beams are approximately five and a half feet apart at their closest, which is too narrow for bateaus, however the remnant may represent part of the floor or foundation of the lock of which the other, river-ward side is missing. Because the remnant may be a lock floor, the crosswise or perpendicular beams would not have impeded the passage of bateaus. The two, stacked, perpendicular beams at the upper end of the structure may represent a portion of the lock wall structure. Although square-shafted iron spikes have been observed in the construction of the structure, and such spikes are generally thought to be indicative of non-original construction in river features at Jordan's Point, in this instance the spikes may have been added to a structure originally built with pegs, perhaps as early as ca. 1806.</p>	

**Secondary Resource Information**

<b>Historic District Information</b>	
<b>Historic District Name:</b>	<i>No Data</i>
<b>Local Historic District Name:</b>	<i>No Data</i>
<b>Historic District Significance:</b>	<i>No Data</i>

<b>CRM Events</b>	
<b>Event Type: Survey:Phase II/Intensive</b>	
<b>Project Review File Number:</b>	<i>No Data</i>
<b>Investigator:</b>	Maral Kalbian
<b>Organization/Company:</b>	Maral S. Kalbian, LLC
<b>Photographic Media:</b>	Digital
<b>Survey Date:</b>	5/30/2019
<b>Dhr Library Report Number:</b>	<i>No Data</i>
<b>Project Staff/Notes:</b>	
<p>This survey was done as part of the monitoring of the dam demolition at Jordan's Point in the City of Lexington and Rockbridge County. An intensive -level survey of the dam was completed in June 2018. As part of the Section 106 process, the demolition of the dam needed to be monitored and documented and any new information or resources recorded in V-CRIS at an intensive level.</p>	
<b>Project Bibliographic Information:</b>	
<p>Kalbjan, Maral S., LLC. "Removal Report on Jordan's Point Concrete Dam and Timber Crib Dam: May 23-25, and May 28-30, 2019." Prepared for: The Virginia Department of Game and Inland Fisheries. July 1, 2019.</p> <p>Kalbjan, Maral S., LLC. "Intensive Survey Information for the Jordan's Point Crib Dam May 23-25, 2019." Prepared for DHR, May 28, 2019.</p>	
<b>Period Of Significance:</b>	1806-1900
<b>Level Of Significance:</b>	Local
<b>Surveyor's NR Criteria</b>	A - Associated with Broad Patterns of History, D - Potential to Yield Important Historic and/or Pre-Historic

<b>Recommendations:</b>	Information
<b>Phase II Intensive Survey Integrity Recommendations:</b>	Association, Location

#### Bibliographic Information

**Bibliography:**

June 2019:

Jordan's Point Photos at Special Collections, James G. Leyburn Library, Washington and Lee University, Lexington, VA.

Moorhead, John's Admr. v. Jordan, John; Alexander, Andrew. Rockbridge County Chancery Case 1844-031. Accessed online at the Library of Virginia website: [http://www.lva.virginia.gov/chancery/case\\_detail.asp?CFN=163-1844-031](http://www.lva.virginia.gov/chancery/case_detail.asp?CFN=163-1844-031).

**Property Notes:**

June 2019: This structural remnant became evident after the water level dropped when the concrete dam at Jordan's Point was breached in May 2019. The visible members were sketched and photographed and left in situ. Some were covered with river silt so they would not pose a hazard to river users.