# Appendix F Historical and Cultural Resources

Feasibility Report with Integrated Environmental Assessment Crains Island HREP

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## Historical and Cultural Resources Appendix F

## 1. General Historical and Cultural Setting

Documentation of the Mississippi River Valley prehistoric and historical sequence is extensive and only a brief outline is presented here. Prehistoric human occupation of the area is generally broken into four inclusive periods: Paleo-Indian, Archaic, Woodland, and Mississippian. Each period is characterized by differing degrees of social complexity and by changes in subsistence technologies and pursuits. The Paleo-Indian period represents the first populating of North America. The earliest evidence for the occupation of the mid-continental United States appears as fluted points made around 13,500 to 12,700 years ago (Morrow 2014; Fiedel 1999). Paleo-Indians are generally characterized as smaller groups of hunters and gatherers following migrating herds of large game. The period lasted until the end of the Wisconsin glaciation around 8000 B.P. when the stabilizing climate promoted the different ecological adaptations of the Archaic period. While hunting and gathering continued, people began to cultivate native plants. Larger communities formed as increasingly sedentary culture developed. The subsequent Woodland culture (1000 B.C. to 900 A.D.) is characterized by the widespread use of pottery, ever increasing reliance on agriculture, and development of long-distance trade. The socioeconomic traits generally ascribed to the following Mississippian period (900 to 1400 A.D.) include intensive agricultural adaptations, the appearance of large fortified towns, construction of pyramidal mounds, increased interregional trade, and a highly stratified sociopolitical organization. The most elaborate and famous expression of the culture is the extensive settlement of Cahokia Mounds located on the American Bottom near modern Collinsville, Illinois.

The historical period begins with European exploration of the Middle Mississippi and the voyage of Jacques Marquette and Louis Joliet down the river in 1673. A trading establishment and mission were built at "Grand Village of the Illinois" in 1675. Kaskaskia was established in 1703, Sainte Genevieve around 1750, and St Louis in 1764. For much of the 18th and 19th centuries, commerce on the river was driven by the fur trade, and there was some limited traffic in salt and lead. Along with increasing development of the region, the introduction of steamboats in the early 19th century greatly expanded both the volume of trade in general commodities and transportation for people. The number of vessels engaged increased yearly along with their size and the number of round trips each took (Haites and Mak 1971).

## 2. Project Area History

#### **Geomorphological History**

Crains Island, like most in the Mississippi River, has constantly shifted its location since first being recorded. The earliest detailed map available is the plat of 1815 (Figure 1). At that time the main course of the Mississippi River flowed on its Missouri side so the island was platted in Illinois. Approximately two-thirds of the project area was then within the Illinois chute of the island. The 1866 Warren series maps show the island in the same general location, but with some reworking of the river course (Figure 2). By 1880, however, the river's main course had shifted to the Illinois side, and the Missouri chute had largely filled in with the development of Willow Island (Figure 3). Thus the island became an exclave of Illinois.

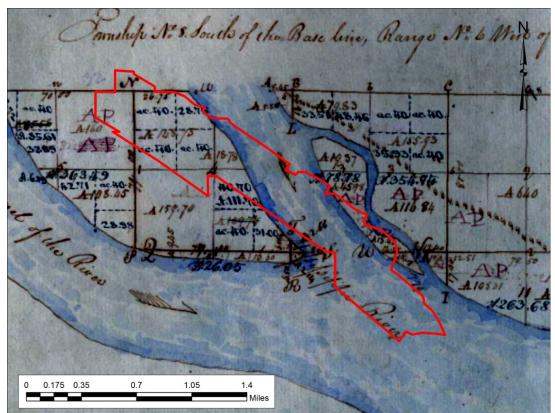


Figure 1. 1815 Plat map showing project boundary

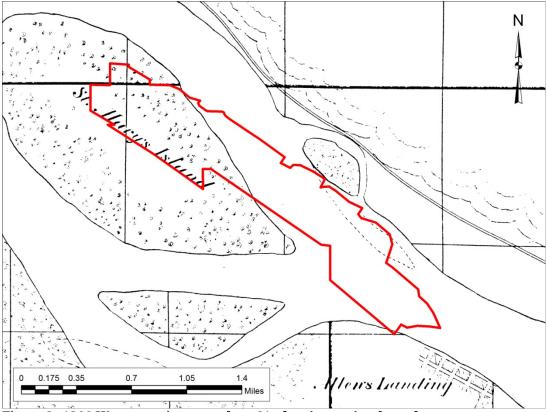


Figure 2. 1866 Warren series map, sheet 21, showing project boundary

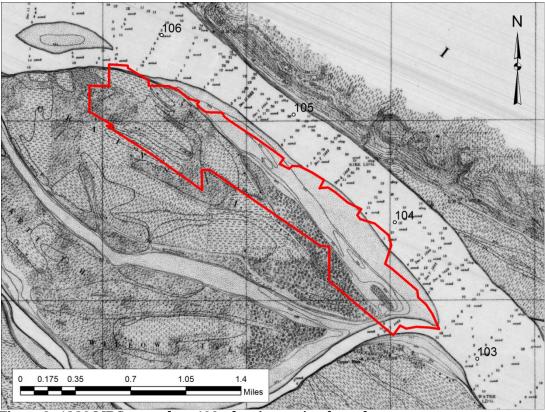


Figure 3. 1880 MRC map, chart 109, showing project boundary

By 1908 the upstream portion of the island had eroded away and another towhead (Willow towhead) had started to develop (Figure 4). By the late 1920s significant erosion on the Missouri bankline increased the river width by nearly 1000 feet (Figure 5). About half the current project area was then underwater. During the 1920s and 1930s, a series of dikes were constructed which resulted in the accretion of sediment (Figure 6) and the development of a new back channel by the 1960s (Figure 7). Interestedly, the back channel was diverted by Dike 104.4R for part of its length (Figure 8). The buried portion of the dike was an obvious feature during a site reconnaissance (Figure 9).

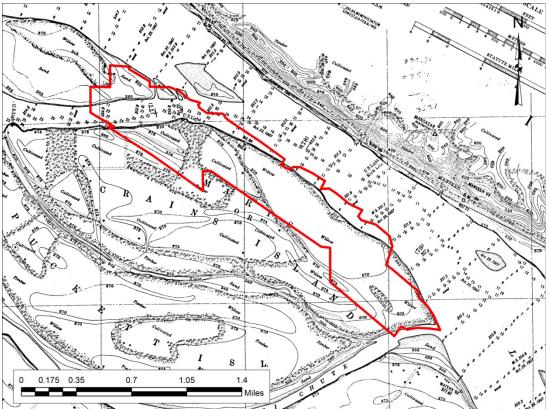


Figure 4. 1908 Board of Examination and Survey of the Mississippi map, chart 8, showing project boundary

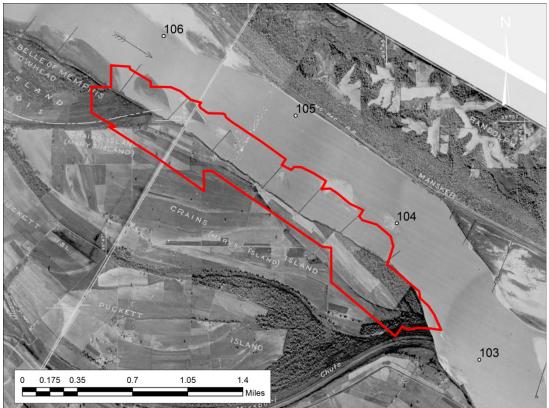


Figure 5. 1931 aerial photograph showing project boundary

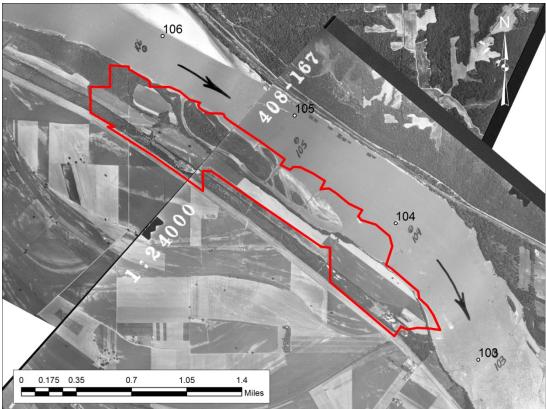


Figure 6. 1965 aerial photograph showing project boundary

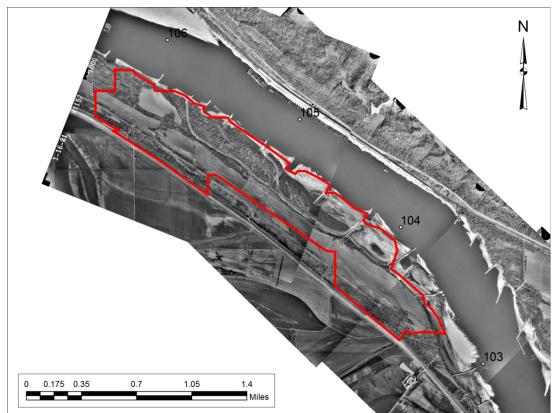


Figure 7. 1981 aerial photograph showing project boundary



Figure 8. 2014 aerial photograph showing project boundary and recon photo location (Figure 9)



Figure 9. Photo taken on field reconnaissance (3/23/15) showing buried portion of Dike 104.4R

### **Prehistoric Land Use**

There is no known prehistoric occupation Crains Island, but it has not been archaeologically surveyed. Much of the project area, however, is of recently (post-1930) accreted land. The area which has potential for prehistoric sites is shown in Figure 10.



Figure 10. Area of maximum prehistoric sensitivity for Crains Island

#### **Historic Land Use**

Sixteen sale-cash patents under the Land Act of 1820 were issued for the island (Figure 11 and Table 1). Eight, comprising 40 percent of the acreage, were sold to the Crain family (John, Ambrose, James and William).

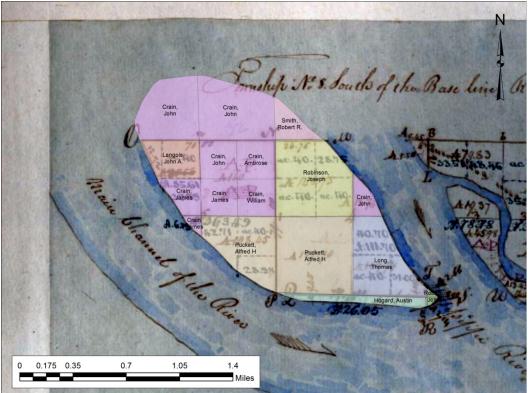


Figure 11. Sale-Cash patents issued for Crains Island

Table 1. Sale-Cash patents issued for Crains Island
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Name	Date	Township/Range	Section	Aliquots
Crane (sic), John	10/10/1840	008S-006W	4	NE1/4
Long, Thomas	8/1/1838	008S-006W	4	SE1/4
Puckett, Alfred H	8/1/1938	008S-006W	4	SW1/4
Robinson, Joseph	8/1/1838	008S-006W	4	NW1/4
Crain, Ambrose	8/1/1838	008S-006W	5	NE1/4 NE1/4
Crain, James H	8/1/1838	008S-006W	5	SW1/4
				SW1/4 NE1/4
Crain, James H	8/1/1838	008S-006W	5	S1/2 NW1/4
Crain, John	8/1/1838	008S-006W	5	NW1/4 NE1/4
Crain, William B	8/1/1838	008S-006W	5	SE1/4 NE1/4
Langlois, John A	8/1/1838	008S-006W	5	N1/2 NW1/4
Puckett, Alfred H	8/1/1838	008S-006W	5	SE1/4
Crain, John	8/1/1838	007S-006W	32	SW1/4
Crain, John	8/1/1838	007S-006W	32	SE1/4
Smith, Robert	8/1/1838	007S-006W	33	SW1/4
Robinson, Joseph	8/1/1838	008S-006W	3	SW1/4
Hogard, Austin	8/1/1838	008S-006W	9	N1/2

The first Euroamerican settler in Rockwood precinct of Randolph county, Illinois, was Benjamin Crain who settled along Mary's river in 1802 (McDonough 1883: 467). He had seven sons: Benjamin, Squire, William, James, Joel, Lewis, and John. They settled at the mouth of the river and on the island adjacent (i.e., Crains Island). John was the first to move to the island in 1812. He died there in 1850.

In the earliest map indicating land use, the 1880 MRC map, there are areas of cultivation interspersed with low-lying area of Cottonwood, Sycamore, and Elm forests (Figure 3 above). An 1883 account, using an alternative name for the island, "Mary's River island," records that "much of it is under cultivation" (McDonough 1883:467). The MRC map also indicates a number of buildings on the island. The pattern of land use is almost completely the same on the 1908 Board of Examination map (Figure 4 above). Early aerial photography shows almost the entire island under cultivation with the exception of the former chutes and northern and southern tips. Again some buildings are visible. The last of the structures in the project area, however, seem to have been removed by 1965 (Figure 6 above). The land was farmed until 2007 when the property acquired by the U.S. Fish and Wildlife Service and taken out of agricultural use.

## 3. Shipwreck Inventory

Losses among the many steamboats that traveled the Mississippi River were high. Primary reasons for their destruction were snags, fires, and explosions. Indeed, the average longevity for steamboats has been calculated to be only six (Haites and Mak 1971:54) or seven (Hall 1884:181) years. For this reason insurance rates were also high, and many operators carried none; those that did typically only did so for two-thirds or three-quarters the value of the boat (Haites and Mak 1971:55-56).

As part of a 2003 USACE study, archival research documented six hundred and eighty seven (687) ships abandoned or reported lost prior to 1940 between Saverton, Missouri and the confluence of the Mississippi and Ohio Rivers. The information was obtained by James V. Swift from a variety of sources, including unsigned, undated wreck data in the files of the Waterways Journal (St Louis), nineteenth century correspondence and newspaper accounts, insurance records, official government surveys and reports, private accounts, and published research (Norris 2003). Typically, losses were reported within a general location (e.g., Scudder Towhead, Brewer Point), which was researched and when possible converted to approximate river miles. The yearly mean for reported losses is just over five and half (5.5) with a peak in the 1850s to 1860s. Two (2) vessels are recorded as being wrecked in the immediate vicinity of the project area (Table 2).

Name	Location Indicated	Date	Notes
Gen. G. G. Totten	Crains Island	n.d.	Side-wheel
Mary Morton	Crains Island	10/1/1897	Stern-wheel; hit rocks

Table 2. Wrecks reported in the immediate vicinity of the project area

Between July and December of 1988, when the Mississippi River was at a particularly low level, the St. Louis District Corps of Engineers conducted aerial surveys of exposed wrecks between Saverton, Missouri, and the mouth of the Ohio River. Thirty four (34) historic wrecks were documented at that time. Since then, the Corps database has been updated when new wrecks are reported or when research provides new information on wreck location. A separate database of modern (i.e., metal) wrecked or abandoned vessels (including barges), which may pose a risk to navigation is also maintained by the Corps. The combined total of mapped locations is ninety (90). The nearest known historic wreck to the project areas is one and a half miles away. The nearest known modern obstruction is four miles away. The current side channel only developed

during the middle of the  $20^{\text{th}}$  century and so is very unlikely to be the location of any unknown watercraft.

## 4. Potential Effect on Cultural Resources

#### Prehistoric

There is no known prehistoric occupation of Crains Island, but it has not been archaeologically surveyed. Much of the project area, however, is of recently (post-1930) accreted land and has no realistically possible archaeological sensitivity. As outlined above, the area that may have potential for prehistoric sites is shown in Figure 10.

#### Historic

At least one buried remnant of a pile dike will likely be cut though during efforts to straighten and deepen the current side channel. As outlined above the pile dikes were constructed in the early 1930s by USACE and are ubiquitous features designed to maintain a nine foot navigation channel for the Mississippi. Thousands were constructed on the river from the middle of the 19<sup>th</sup> century to the middle of the 20<sup>th</sup> century.

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#### **Archaeological Survey**

USACE contracted an archaeological survey on the project's Area of Potential Effect (APE) that is within the potentially prehistorically sensitive zone (i.e., land that was not formed in the historic period) identified above (Figure 10). Currently, no haul roads, lay down areas, or other construction infrastructure are planned to be located in the delineated area. The area identified for the survey was a portion of the SD berm footprint along with a 50 foot buffer to insure construction access. A total of 16.5 acres was shovel tested at 15 meter intervals and no archaeological material was located.

#### Consultations

On 25 August 2015 a tribal consultation letter outlining the project was sent to the 28 federally recognized tribes affiliated with the St. Louis District. Five tribes responded with no objections being raised. On 28 July 2016, a letter was sent to the Illinois State Historic Preservation Officer (SHPO), initiating consultation under Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA). They replied with a letter dated 4 August 2016 requesting that a Phase I survey be conducted. The completed archaeological reconnaissance report was submitted on 29 November 2016 and in a letter dated 21 December 2016 SHPO concurred that no historic properties are affected and therefore they had no objections to the undertaking.

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