

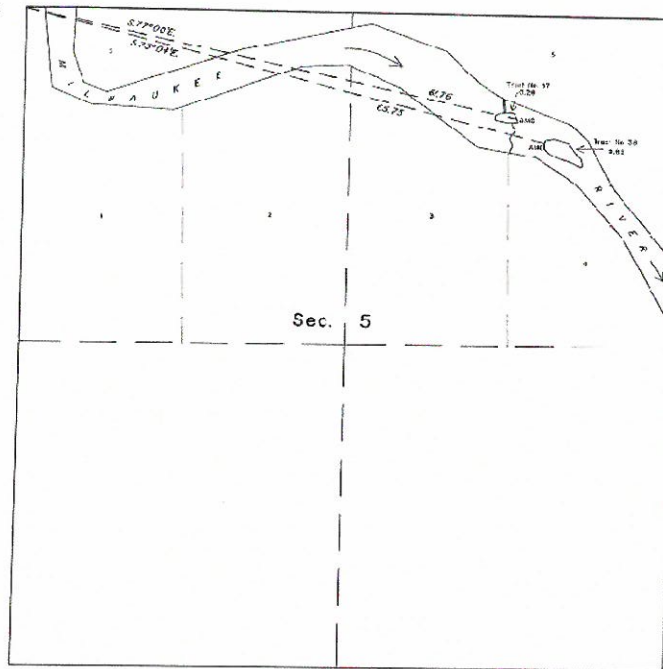
Estabrook Dam Island Ownership

Cadastral Analysis



TOWNSHIP 7 NORTH, RANGE 22 EAST, FOURTH PRINCIPAL MERIDIAN, WISCONSIN.
 SURVEY OF TWO ISLANDS

Latitude: 43°04'5.27" N.
 Longitude: 87°55'56.65" W.
 "NAD 21"



A history of surveys is contained in the field note record.

This plot represents the survey of two islands in the Milwaukee River, in Sec. 5, T. 7 N., R. 22 E., Fourth Principal Meridian, Wisconsin.

Except as indicated herein, the bearings and areas are as shown on the plot dated July 21, 1835.

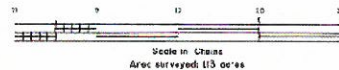
Survey executed by Stephen C. Douglas, Cadastral Surveyor, beginning August 29, 1894 and completed September 26, 1894, pursuant to special instructions for Group No. 152, Wisconsin, dated and approved August 22, 1894.

UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 Springfield, Virginia March 13, 1995

This plot is strictly conformable to the approved field notes, and the survey, having been correctly executed in accordance with the requirements of law and the regulations of this Bureau, is hereby accepted.

For the Director

Stephen G. Hoggan
 Chief Cadastral Surveyor
 Eastern States



T. 7N., R. 22E., 4th Principal Meridian, Milwaukee, Wisconsin

Source: Duplicate Original General Land Office (GLO) Survey, 1835
Projection: NAD 1983, UTM Zone 16N

Map 1



Legend

— 1835 Record Meanders

Islands

▨ 1835 East Island Zone

▨ 1835 West Island Zone

- The original General Land Office (GLO) survey, approved in 1835, included the exterior boundaries, the subdivisions, and the meanders of the Milwaukee River
- In the Northeast quadrant of Section 5, the plat shows two unsurveyed islands with rapids to their west
 - The field notes give the position of the head and foot of each island in relation to the courses of the meanders thus identifying zones within which the islands rest
 - The general position of the islands on the plat is consistent with the field note description



0 250 500 1,000 1,500 2,000
Feet

T. 7N., R. 22E., 4th Principal Meridian, Milwaukee, Wisconsin

Source: US Geological Survey, 15'x15' Sheet, Milwaukee, Wisconsin, July 1892
Projection: NAD 1983, UTM Zone 16N

Map 2



Legend

— 1835 Record Meanders

- - - 1892 Meanders

Islands

▨ 1835 East Island Zone

▨ 1835 West Island Zone

▭ 1892

- A topographic survey was conducted in 1890 and published in 1892 by the US Geological Survey (USGS)
- The survey revealed changes in the configuration of the banks and islands during the intervening half century since the original GLO survey
 - The survey, however, indicates the persistence of islands in the same general location as the original GLO survey
- Subsequent maps through the late 1920s exhibit the same bank and island configuration as the USGS sheet



0 250 500 1,000 1,500 2,000
Feet

T. 7N., R. 22E., 4th Principal Meridian, Milwaukee, Wisconsin

Source: US Department of Agriculture, Aerial Photograph, 4 Aug 1937, Roll 22, Exposure 2053

Projection: NAD 1983, UTM Zone 16N

Map 3



Legend

— Original
- - - 1892 Meanders

Islands

▨ 1835 East Island Zone
▨ 1835 West Island Zone
□ 1892

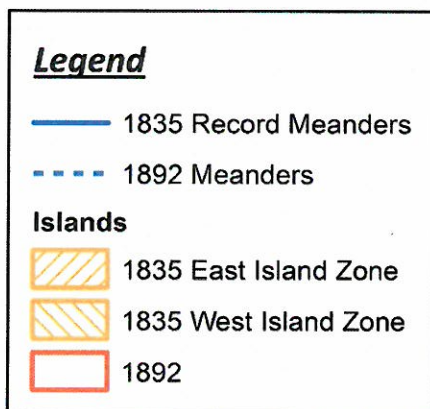
- The 1937 aerial photograph displays the anthropogenic changes of the 1930s to the banks and islands prior to the construction of the Estabrook Dam
 - A single island persists in the same general location as the islands in the original GLO survey



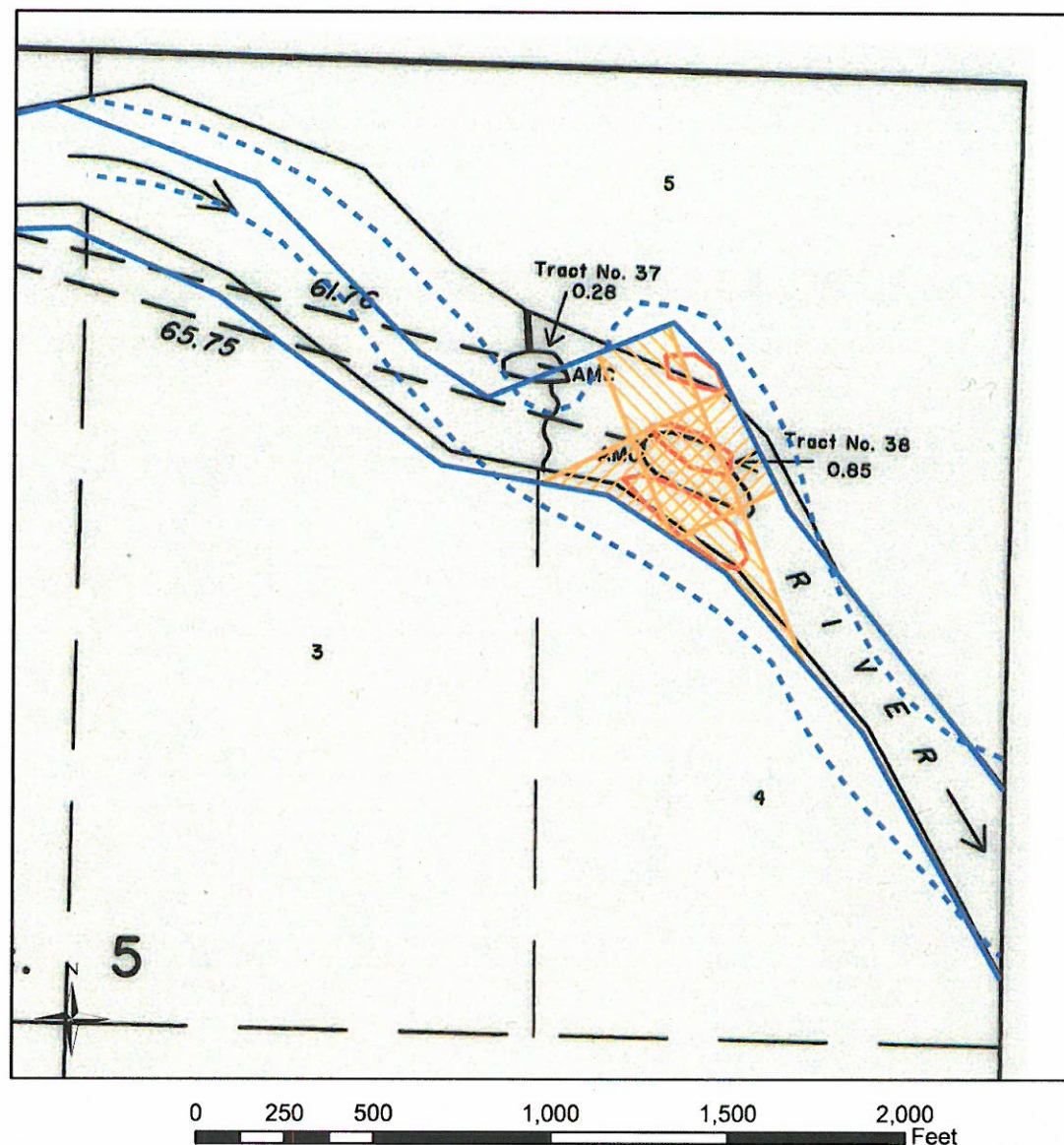
T. 7N., R. 22E., 4th Principal Meridian, Milwaukee, Wisconsin

Source: Duplicate Original Bureau of Land Management (BLM) Plat, Survey of Two Islands, 13 Mar 1995
Projection: NAD 1983, UTM Zone 16N

Map 5



- The Bureau of Land Management (BLM) conducted a survey of two islands in the Milwaukee River in 1994 under Group 152, Wisconsin. The survey was accepted in 1995
 - Tract 38 was coincident with the position of islands in the original GLO survey and the 1892 USGS sheet
 - Tract 37 overlaid the southern reaches of Lot 5 in the original GLO survey and was consistent with an island shown on the 1958 USGS quadrangle



T. 7N., R. 22E., 4th Principal Meridian, Milwaukee, Wisconsin

Source: Duplicate Original Bureau of Land Management (BLM) Plat, Survey of Two Islands, 13 Mar 1995

Projection: NAD 1983, UTM Zone 16N

Map 5A



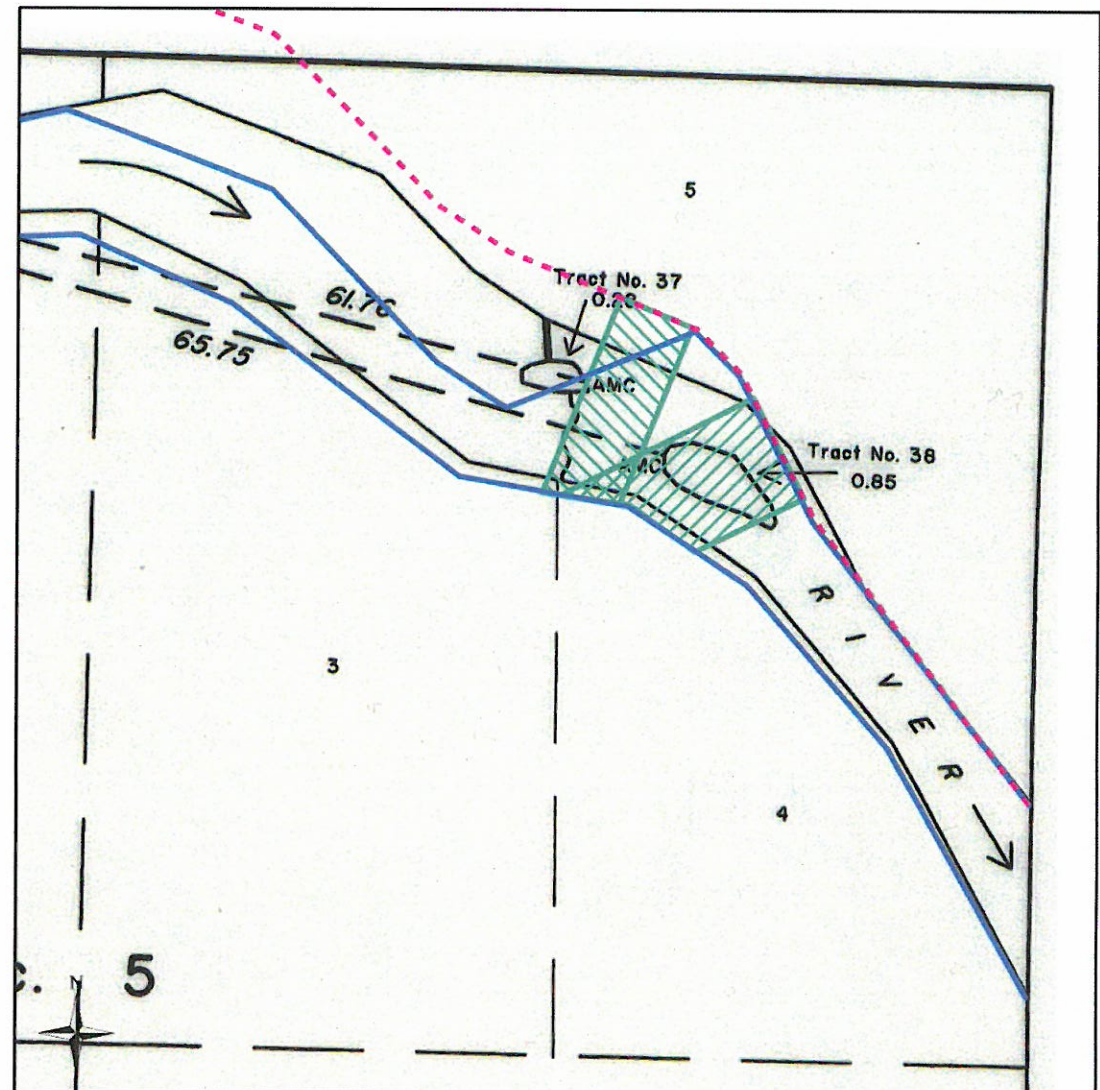
Legend

- 1835 Record Meanders
- - - 1835 Duplicate FN Meanders - Left Bank

Islands

- 1835 Duplicate FN - East Island Zone
- 1835 Duplicate FN - West Island Zone

- The field notes and plat for the 1995 survey do not indicate the data source for the meanders on the plat
- The right bank meanders (south bank on the plat) match the 1835 record meanders adjusted proportionately for closing error. This is a strong indication the intent was to render the record meanders on the plat in adjusted form
- The left bank meanders (north bank on the plat) do not match the 1835 record meanders given in the original field notes either before or after adjustment
 - They appear to reflect an adjustment to the meanders as given in the duplicate field notes. These notes differ significantly from the meanders in the original notes and on both the original and duplicate plats
 - The transcription errors in the duplicate field notes lend the impression that Tract 37 was midstream in 1835 and was in close proximity to an island zone
 - The erroneous duplicate field notes are a potential factor contributing to the assertion of Federal ownership of Tract 37 in the 1995 survey



T. 7N., R. 22E., 4th Principal Meridian, Milwaukee, Wisconsin

Source: High Resolution Orthoimagery, 10 Apr 2010, USGS Earth Explorer
Projection: NAD 1983, UTM Zone 16N

Map 6



Legend

- 1835 Record Meanders
- Islands**
- 1835 East Island Zone
- 1835 West Island Zone
- 1995

- Respecting the current islands in the Northeast quadrant of Section 5, it is the contention of the BLM-ESO Branch of Cadastral Survey that:
 - Tract 38 is an island within the Federal Public Domain having persisted since the original GLO survey in 1835 despite natural and anthropogenic changes to the river courses and islands
 - Tract 37 was encompassed within Lot 5 in the original GLO survey of 1835. This lot was patented in 1837 and is no longer within the Federal Public Domain

