

United States Department of the Interior
 National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name: Seneca Chief shipwreck

Other names/site number: Seneca Chief steam yacht shipwreck

Name of related multiple property listing:

N/A

(Enter "N/A" if property is not part of a multiple property listing)

2. Location

Street & number: Canandaigua Lake

City or town: Canandaigua State: NY County: Ontario

Not For Publication: Vicinity:

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the meets does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

national statewide local

Applicable National Register Criteria:

A B C D

<p>_____ Signature of certifying official/Title:</p>	<p>_____ Date</p>
<p>_____ State or Federal agency/bureau or Tribal Government</p>	

Seneca Chief shipwreck
Name of Property

Ontario Co., NY
County and State

In my opinion, the property ___ meets ___ does not meet the National Register criteria.	
<hr/> Signature of commenting official:	Date
<hr/> Title :	State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

- ___ entered in the National Register
- ___ determined eligible for the National Register
- ___ determined not eligible for the National Register
- ___ removed from the National Register
- ___ other (explain:) _____

Signature of the Keeper Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

- Private:
- Public – Local
- Public – State
- Public – Federal

Category of Property

(Check only **one** box.)

- Building(s)
- District
- Site
- Structure
- Object

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Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
_____	_____	buildings
<u>01</u>	_____	sites
_____	_____	structures
_____	_____	objects
<u>01</u>	_____	Total

Number of contributing resources previously listed in the National Register 00

6. Function or Use

Historic Functions

(Enter categories from instructions.)

TRANSPORTATION-water related

Current Functions

(Enter categories from instructions.)

OTHER/shipwreck

7. Description

Architectural Classification

(Enter categories from instructions.)

OTHER/steam yacht (excursion and mercantile)

Materials: (enter categories from instructions.)

Principal exterior materials of the property: steel (hull), wood (gunwale, aka gunnel)

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Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

In 1970, American photojournalist and early underwater archaeologist Peter Throckmorton wrote: “A...ship, seen as an artifact, is one of the most interesting and beautiful of human creations. In it is concentrated the accumulated knowledge of half a dozen crafts through many generations. Like public buildings, ships are expressions of the societies that create them.”¹ This is the case with the vessel *Seneca Chief* of the late 19th century, a steamer that plied the waters of Canandaigua Lake, in western NY. The *Seneca Chief* shipwreck is located on the bottomlands of Canandaigua Lake, the fourth largest of NY state’s 11 Finger Lakes. The waterway area is today renowned for its beauty, excellent water quality, recreational tourism, for grape growing, and for its wineries. When the *Seneca Chief* was put onto the lake in 1887, it was frequently described as a “steam yacht.”² This class of commercial steamboat was known for its versatility as both a passenger- and cargo-carrying boat. Steam yachts were characterized as being speedy, low draft, and not too large. The *Seneca Chief* was built for the Canandaigua Lake Steamboat Company, a business established in 1880, under the direction of James McKechnie and fellow entrepreneurs.³ In December 1887, four months after the *Seneca Chief* steamer was launched, the maritime transportation endeavor was reorganized under the new name—Canandaigua Lake Steam Navigation Company.⁴ Steel-hulled vessels, like the *Seneca Chief*, lasted longer than wooden watercraft. They were more resistant to dilapidation due to age and from the effects from collision. Thus, when the *Seneca Chief* was introduced in the summer of 1887, it was called “a valuable addition to the craft now afloat” on Canandaigua Lake.⁵ The steamboat was constructed along the Buffalo River in Buffalo, NY⁶ by prominent shipbuilder David Bell (1817–1903), a native of Scotland.⁷ When construction of the vessel was completed and it was pushed out of Bell’s shipbuilding plant on River Street, the steamer was described as a “trim” yacht, “fully equipped,” and with “neat finishings.”⁸ When the propeller-driven craft departed the shipyard in early August 1887, it was reported to be 54 feet long with a beam of 9 feet, 6 inches.⁹ Two weeks before the vessel was launched, a Buffalo newspaper recorded that the steamer had the “capacity for seventy-five passengers.”¹⁰ On August 2, 1887, the steam yacht was transported by train on two flat cars from Buffalo to Canandaigua Lake.¹¹ The attractive vessel was then launched onto Canandaigua Lake. After only a few days on those waters, a Rochester, NY newspaper declared that the *Seneca Chief* was “the fastest boat on the lake.”¹² On August 12, 1887, a local newspaper recorded the steamboat could make “twelve miles an hour,”¹³ a notable speed for a steamer of that time. After nearly ten seasons on the waterway and after “having out-lived [*sic* outlived] its usefulness” as both a popular excursion vessel and part-time workboat, the vessel was prepared for abandonment. Prior to abandonment, the *Seneca Chief*’s owners salvaged the steam yacht’s engine, deck, and upper works. According

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to the May 13, 1896 issue of the *Rochester Democrat and Chronicle* newspaper, on May 12, 1896, the *Seneca Chief* was “towed into deep water and sunk.”¹⁴ Today, the *Seneca Chief* shipwreck, with great historic integrity, is a highly representative example of a steam yacht of its era, a vessel class important to the tourist, commercial, and agricultural industries of Canandaigua Lake during the late 19th century.

Setting

The *Seneca Chief* sits upright on the bottomlands of Canandaigua Lake in the Town of Canandaigua (Ontario County), NY. The waterway is 16 miles long, 1.5 miles wide, and is 276 feet deep.¹⁵ The lake’s elevation is 688 feet, and the waterway has 36 miles of shoreline.¹⁶ Unlike some of the other Finger Lakes which were connected to the Erie Canal by other smaller-length canals, Canandaigua Lake did not have such a manmade-waterway outlet. However, during the late 1800s, because of Canandaigua Lake’s network of commercial steamboats, stagecoaches, horse-drawn wagons, and nearby trains and rail tracks, effective transportation was provided for passengers and trade goods to easily move around the northeastern United States.

The sunken boat rests on its bottom. According to Scott Hill, the person who discovered the shipwreck: “Since it’s only in about 13 feet of water and it’s a fairly heavy steel boat, it settled level in the soft mud bottom.”¹⁷ The shipwreck lies .49 miles off the eastern shore, is .71 miles from the lake’s western shoreline, and rests 1.05 miles from the north end of Canandaigua Lake. The shipwreck is in the Town of Canandaigua waters, but the sunken vessel sits on state bottomlands.¹⁸

The sunken steamer’s centerline orientation is 21/201 degrees.¹⁹ The lake bottom at this site consists of a semi-hard substrate covered by a muddy, soft sediment mixed with remnants of steam engine clinker deposited decades ago during the lake’s steamboat era. There is little aquatic plant life at the *Seneca Chief* site during the winter and into the late spring. However, subsurface vegetation at the site peaks in the summer months, engulfing much of the shallow-water shipwreck.

Type/Vessel As Designed

The *Seneca Chief* was a propeller-driven, steel-hulled, commercial steam yacht, a type of low-draft watercraft sometimes seen on inland waters during the late 19th and into the early 20th centuries before steam propulsion was replaced by gasoline engines. The word, “yacht,” is Dutch and means “boat.” The term, yacht, was used to describe the *Seneca Chief* because it was a fast, commercial watercraft.

No archival information has been found to shed light upon why the vessel’s name, *Seneca Chief*, was chosen by James McKechnie. However, Canandaigua Lake is in the ancestral lands of the Seneca Nation, Indigenous Peoples that are part of the Haudenosaunee Confederacy. Thus, the steam yacht’s name was possibly selected to honor one or collectively, several prominent Seneca leaders of the 18th and 19th centuries, such as Goyasuta, Cornplanter, Red Jacket, and Ely S. Parker. Additionally, there were several other regional historic vessels from the 1800s with the

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name *Seneca Chief*. Among them: 1) an Erie Canal packet boat that participated in the opening of the Erie Canal in 1825, 2) a Seneca Lake, NY steamboat (1828–1833) that in 1833, was renamed *Geneva*,²⁰ and 3) a Lake Ontario steamboat that burned in 1896.²¹ Furthermore, there was a famous post-Civil War racehorse and sire with the name *Seneca Chief*.²²

Canandaigua Lake's steel-hulled *Seneca Chief* was constructed in 1887 in a Buffalo shipyard and was used for nearly a decade during the height of the lake's resort era. A vessel whose hull was built entirely of steel was stronger and more durable than a watercraft assembled of wood. By the late 1880s, iron and steel materials were becoming much more popular in shipbuilding than wood, since an iron or steel boat didn't have the heavy timbers required for framing. Further, iron or steel vessels constructed in the 1880s cost only about a quarter more in price.²³ When the *Seneca Chief* left the Buffalo shipyard in the summer of 1887, it was reported the craft measured 54 feet in length and 9 feet, 6 inches in breadth.²⁴

Discovery

For nearly 120 years, historians and others believed the shipwreck lay hidden in the lake's abyss. That was not the case. In 2014, the steel hull of the submerged *Seneca Chief* was discovered by Canandaigua, NY-resident Scott Hill, using high-tech aerial imagery from Pictometry, complemented by scuba exploration.²⁵ The submerged watercraft's hull lies in 13 feet of water. The sunken vessel is 2,590 feet from the east side of the lake.²⁶ Though the *Seneca Chief* was abandoned in Canandaigua Lake, because of the skills of its shipbuilder, the steamboat's sturdy steel hull, and since it rests in freshwater that is far less corrosive than saltwater, the vessel's hull has survived, nearly intact. It is in an excellent state of preservation as a unique maritime artifact from the Gilded Age (1877–1900), a period in American history characterized by unprecedented technological and industrial growth, sometimes at the expense of the well-being of the working populace. Moreover, the *Seneca Chief* (1887–1896) was the first steel-hulled, screw-propellor excursion boat on Canandaigua Lake and it is the only extant example of its class from this era found in the waterway.

Current Condition—The Hull's Form

More recently, decades after its deck, upper structure, and propulsion machinery were salvaged prior to abandonment, the vessel was measured using Pictometry aerial instrumentation as having a length of 50 feet; this was confirmed by a dive team's measurement. This slight discrepancy in length, 54 feet to 50 feet, may in part be due to a common practice of increasing the length dimension of a vessel by including the ensign staff that was frequently flown from the stern and generally was angled aft.²⁷ Moreover, a scuba team recorded the height of the sunken vessel's stem as standing about 9 feet above the lake bottom. The hull's gross tonnage measurement (internal volume), using the Moorsom system that was adopted in 1854, is about 23 tons.²⁸

The steam yacht's hull has a sharply pointed bow with a stem that is ever so slightly raked forward from plumb. The top of the stem appears to be more prominent in underwater

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photographs of the *Seneca Chief* than from a contemporary, late 19th century photograph of the vessel. This may be because the boat's wooden deck and combing were removed during the abandonment process, thus exposing more of the upper section of the stem. Furthermore, the aft side of the stem has a rabbet-like recess cut into it that would have received some planks of the foredeck. Without its foredeck, the top of the stem is more exposed.

The *Seneca Chief* has semi-rounded bilges and a stylish fantail stern. During its pre-depositional salvage, the *Seneca Chief*'s deck, cabin, canopy top, ensign (national flag), burgee (organization flag), and its steam propulsion system were removed. The steam engine and associated machinery from the *Seneca Chief* were reportedly then installed into a new steamer, the *Orianna*,²⁹ put onto the lake in 1896; sometimes in the literature record this watercraft was spelled *Oriana*.³⁰

Current Condition—The Hull's Exterior and Interior

The SS *Great Britain*, the first ship in the world entirely constructed of iron, was built in 1843. By the 1880s, steel, an alloy of iron and carbon, began to be employed by many shipbuilders around the world.³¹ The *Seneca Chief*'s hull is constructed of steel plates.

Due to zebra and quagga mussel infestation over the entirety of the hull's exterior, it is not clear if the dimensions of the steel plates, that form the hull, are similar in size or if they vary. Moreover, scuba diver Scott Hill said his dive team did not wish to disturb the physical integrity of the hull, so they did not scrape the sunken steam yacht's steel plates, covered with invasive mollusks, to determine if the sunken vessel was carvel- or clinker-constructed.³²

According to Hill, the vessel's steel hull is strengthened by a network of metal frames. These frames are constructed of angle iron and are 1 foot 4 inches apart in the amidships section of the sunken steamboat. The hull plates are attached to these frames by metal bolts. The frames span the hull's interior, fore and aft, and from the keelson/keel up to just below the gunwale. A total of approximately 38–39 frames are still articulated to the hull's interior port side, the side of the sunken vessel that is easiest to inspect; heavier sedimentation covers the inside of the hull on the starboard interior. Supporting most of these frames are stringers that run fore and aft.

Inside the hull, over the vessel's centerline, is a significant deposit of sediment, built up over decades since the vessel was abandoned. This heavy sedimentation prevents closer visual examination of the keel, keelson, and other parts of the interior. The metal frames on this sunken vessel appear smaller in their dimensions (sided and molded) than what would be typically found on wooden vessels of this size and shape.

Current Condition—The Hull's Bow

The bow of the sunken boat is remarkably intact except for a few cracks that are visible. The top of the stem, at the bow, is nine feet from the lake bottom. The small fissures in the hull near the stem may have been caused because this portion of the hull is not fully supported upon the semi-

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firm lake bottom. Without a solid-ground base for this section of the shipwreck, there is probably some sagging at the bow that may have contributed to creating a few fractures in that part of the craft. There are also a couple of larger holes, somewhat rectangular in shape, in the starboard bow. Due to their location, it is unlikely either of these were cut to install a hawse hole (aka cat hole) to receive an anchor line or chain.

The vessel's steel bow is dominated by a formidable metal stem that stands proud above the sheer. The vessel as a shipwreck has no decking. That structural feature (decking) of the steam yacht appears to have been made of wood. This decking, as well as the rest of the upper structure, are missing, presumed salvaged in 1896 as part of the craft's abandonment preparations. Further, during the abandonment process, the valuable steam-engine parts and the upper-structure components fashioned of wood and metal were salvaged. The forward-deck area would have also served as the anchor deck. Upon the foredeck, just aft of the stem, there was a rather tall jack staff (aka flagstaff). Attached to the jack staff would have been a pennant, known as the burgee, that likely flew the navigation company's flag. In this time in history, an ensign, the national flag of the vessel, was typically displayed from an ensign staff at the vessel's stern. Moreover, an examination of a contemporary photograph of the *Seneca Chief* shows the jack staff in the bow to have been about 13 feet tall.

A newspaper article published on August 4, 1887, reported the *Seneca Chief* had a "very trim cabin," which was also likely removed during the pre-sinking abandonment process.³³ This wooden cabin, seen in a photograph of the *Seneca Chief*, is estimated to have been about 35 feet long. Because a contemporary photograph of the *Seneca Chief* as a floating vessel shows several people standing on top of the cabin, that structure had a sturdy hard top. It appears there were at least six openings per side along the cabin, those cut as either windows for viewing or simply as openings to allow air to circulate inside. The forward part of the cabin shows a "retractable" side canvass rather than a hard, wooden panel.

According to Scott Hill, a veteran scuba diver with decades experience inspecting and photographing shipwrecks, the top of the watercraft's gunwale was fashioned of wood. Underwater images of the shipwreck show the gunwale to be relatively intact along parts of the hull. Additionally, in the late 19th century photograph of the *Seneca Chief*, taken along the east side of the lake with South Hill (aka "Whaleback") in the background, you can make out coaming, a protrusion along much of the top of the gunwale. This feature was common on vessels of this type in this era. The coaming's primary purpose was to prevent water from entering the interior of the craft during rough waves upon the waterway.

Current Condition—The Hull's Stern

Clearly noticeable on the sunken steamer's hull is its classic-fantail stern, called this because it looked like an open, hand-held fan. This type of rounded stern protruded over the rudder and propeller blades. The fantail offered a degree of protection for the rudder and propeller. Further, fantail sterns looked architecturally pleasing to a "discerning nautical eye," and this part of the craft also may have provided added deck space. When built, the steamboat's fantail stern

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reportedly had the words, “Seneca Chief, Canandaigua,” inscribed on it to identify the excursion watercraft.³⁴

Like with the rest of this sunken vessel’s hull, the fantail stern is without its decking, thus you can clearly view its cant frames in the stern. These cant frames are not at right angles to the watercraft’s keel. This style of framing was introduced to waterborne-vessel construction by the English in the early 18th century.

When David Bell designed this vessel, he likely was looking to optimize the hydrodynamic efficiency of this excursion steamer. He undoubtedly wanted a stern that avoided unnecessary vibrations and one that allowed a uniform flow of water to the propellor.

The archaeological divers were unable to determine if the hull’s rudder blade and propeller lie under the fantail stern, an area of the shipwreck that is covered by sediment. Due to sedimentation build up on the lake bottom around and under the fantail stern, it was not possible to determine if the rudder blade and propeller are still present.

The rudder was invented over two-millennia ago by the Chinese during the Han Dynasty, 206 B.C.–220 A.D.³⁵ Prior to this invention, paddles or oars were employed for steerage. The rudder blade on the *Seneca Chief* is downstream (aft) of the propeller. The rudder blade and propellor were likely fashioned of metal. Unlike the typical rudder during the “age of sail” that was mounted to the aft end of the hull using pintle and gudgeon hardware, the *Seneca Chief*’s rudder was a thru-hull mount, located near the center of the fantail stern.

In the aft of the *Seneca Chief*’s hull is a narrow, rectangular-shaped “box,” with a single, exposed circular hole. This shaft probably received the rudder post. The rudder post included the shank, with the rudder blade at the deep end, and other attachments near the top. This assembly allowed for its operation to steer the watercraft.

There is a very noticeable and heavy infestation of invasive mollusks, zebra mussels (*Dreissena polymorpha*) and quagga mussels (*Dreissena bugensis*), that are attached to the shipwreck. Zebra mussels, a fingernail-sized invasive mollusk, were discovered in Canandaigua Lake in 1994.³⁶ Quagga mussels were introduced around 2009–2010.³⁷ These invasive species cover almost the entire length and width of the submerged vessel except for small parts of the stern and port gunwale. The thickness of this coverage of these invasive mussels is about one inch over most of the sunken watercraft. Unfortunately, heavy-mollusk infestation on the sunken boat prevents a full and detailed inspection of the steamer’s exterior and interior hull.

Current Condition–The Interior and Upper Structure

The *Seneca Chief* is a “shipwreck,” but a more accurate description might be that it is an “abandoned sunken vessel.” Therefore, future archaeological inspection of the site will likely fill in more architectural details about this nationally significant, historic steamer.

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There are several notable signatures of the vessel's salvage and abandonment. It appears the 1896 abandonment of the *Seneca Chief* was motivated not because the craft lacked speed, or was difficult to operate, or was unreliable. Rather, the navigation company desired to acquire a more sizable vessel, that being the *Orianna*. Recent archival research undertaken to prepare this National Register nomination, found no literature documentation from 1887–1896, that suggests the *Seneca Chief* was of poor design or inadequate propulsion. However, some literature, published decades after the steam yacht's deliberate sinking, has been somewhat disparaging of the *Seneca Chief* steam yacht. A 1922 article cites that the steamer had "little deck room and poor accommodation for passengers or freight."³⁸ Five-and-a-half decades later, in 1978, two other historians claimed it was "never very successful as a commercial lakeboat [*sic*]."³⁹ After examining the contemporary literature, there is little validity to this wholesale criticism. Simply stated, the *Seneca Chief* was never intended to rival the *Onnalinda*, an opulent, 142-foot long, 600-passenger, wooden-sidewheel steamship put onto the lake in 1888. That colossal craft righteously became known as the "Queen of the Steamboat Era" on Canandaigua Lake.⁴⁰ Historians today have better research technology that allows for computer-generated, archival-based research that can uncover more detailed historical information to ascertain what the local populace felt about this steam yacht during its 10 seasons on the lake. Moreover, the craft's pre-dispositional salvage clearly hints that the steamboat certainly had valuable-marine materials, important enough to be saved and installed in two other lake vessels.

In the case of the *Seneca Chief*, the pre-sinking salvage resulted in a significant portion of this steam yacht ending up for other uses. For "secondary use," the *Seneca Chief*'s steam engine was installed into a major lake ship, the *Orianna*. For "recycled use," the vessel's upper wooden structure was possibly converted into other forms. It was not uncommon during this period in history, for salvaged boat timber, metal fasteners, and other hardware fittings to end up as construction materials, incorporated into houses, barns, boats, and other structures. Moreover, salvaged timbers from vessels were also often repurposed into personal items such as canes, gavels, and candlesticks.⁴¹

The excursion vessel's propulsion unit, that is its steam-engine parts, was perceived as being precious enough to be recovered and installed into a new steamer on the lake, the *Orianna*. Ironically, in mid-December 1896, the wooden-hulled *Orianna* had to be fitted with sheets of steel in its bow "to continue regular trips as long as the ice will permit."⁴² During its career on the lake, the steel-hulled *Seneca Chief*, with its brawny steel hull structure, did not have to undergo such temporary alteration to strengthen it from the effects of thin lake ice. Further, the *Seneca Chief*'s steam engine, which saw time in the *Orianna*, also was later installed into a pile-driver vessel named *Mary Ann*.⁴³

Examining another steamer from this period of nearly the same length, with a similar-looking bow and fantail stern, provides more insight into what probably was featured architecturally on the 1887–1896 *Seneca Chief*. Lake George, NY's 48-foot-long steam launch *Cadet* (ex *Olive*), built in 1893, six years after the *Seneca Chief* was constructed, is a suitable example of a steam vessel with a comparable appearance. The *Cadet*, fashioned of wood, was a steamboat abandoned and deliberately sunk in Lake George, circa 1910. Over 1997–1999, the sunken

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Cadet steam launch was studied by a team of experienced archaeological divers under the direction of maritime archaeologist, Dr. D. K. Abbass. Several years later, in 2002, the *Cadet* (ex *Olive*) was listed onto the National Register of Historic Places.⁴⁴ The *Cadet* had a canopy top that was supported by stanchions mounted along the gunwale. The canopy top protected passengers from the hot sun and lake spray. The *Cadet* (ex *Olive*) was deemed historically significant enough to be listed on the National Register of Historic Places, and so, too, is Canandaigua Lake's *Seneca Chief* a worthy candidate of such designation.

Current Condition—Propulsion

The *Seneca Chief* was propelled by steam, specifically with a screw propeller, and the boat was built for James McKechnie, principal of the Canandaigua Lake Navigation Company. The reported cost for the steam yacht was \$3,500.⁴⁵ The vessel's hull, upperworks, and most likely, its steam engine, were constructed by Buffalo shipbuilder David Bell, an immigrant from Scotland.

Credit for the first steam engine usually goes to Scotland-native James Watt, who improved upon an existing steam engine in 1769.⁴⁶ That invention helped "fuel" the beginning of the Industrial Revolution, which decades later had its dramatic imprint upon shipbuilding.

The steam-vessel *Seneca Chief* had a screw propeller and was not a stern or side-paddle wheeler. There is often debate as to who invented the screw propeller, a noteworthy marine accessory for steamboats. There is a lengthy list of candidates,⁴⁷ but the National Inventors Hall of Fame cites that in America, the screw propeller was "invented" in 1839 by John Ericsson, a Swedish immigrant.⁴⁸ Ironically, Ericsson designed this monumental marine propulsion gear for use on canals and inland waters,⁴⁸ but it was initially incorporated into two pioneering American warships, the wooden-hulled USS *Princeton* (1843) and the groundbreaking-ironclad USS *Monitor* (1862).⁴⁹

The development of the screw propeller in steamships and steamboats was quite significant. This type of propulsion was more efficient than steam-powered, paddle-wheel crafts for several reasons. First, the propeller was small and took up less space than oversized paddle wheels. Second, because the propeller was completely submerged, it was less likely to be struck and damaged by floating objects or projectiles. Third, there was less rolling of the craft. After the mid-1800s there was a growing appreciation and adoption of screw propellers over paddle wheels in both the commercial and naval sectors of shipbuilding.⁵⁰ Additionally, prior to the introduction of the screw propeller, innovators had to first develop a steam-engine design so that power was generated from the bottom of the steam machinery. That provided direct drive along the propeller shaft inside the hull, but below the waterline. Paddle wheel vessels had their power-drive system mounted above the waterline.

The quarter century following the Civil War (1861–1865) was an era often characterized by experimentation with the design of vessels and their propulsion form. Things like varying hull designs, iron versus wooden hulls, sidewheel- versus screw-powered, and what types of steam

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engines were optimal to maximize power and speed. Moreover, Buffalo, NY, at the crossroads of Lake Erie and Lake Ontario and strategically situated in the center of the St. Lawrence River-Great Lakes waterborne passage, was in the forefront of this industrial experimentation in shipbuilding. Soon after the Civil War, steam began to replace sail on the major waterways, and iron- and later steel-hulled vessels were quickly becoming the norm in shipbuilding. Additionally, sidewheel and stern-mounted paddle wheel steamboats, once popular on the Great Lakes and inland waters, were gradually being phased out and replaced by screw (propeller) propulsion.

As previously mentioned, the steam engine from the *Seneca Chief* was salvaged prior to its abandonment in May 1896, and then installed into another watercraft.⁵¹ Therefore, because contemporary literature does not record what type of steam engine provided the propulsion for the *Seneca Chief*, experts in steamboat engines were consulted.

According to the sole photograph of the *Seneca Chief*, the vessel's steam propulsion unit is positioned just slightly forward of the mid-section of the craft. Further, the steam engine's smokestack (aka funnel) was secured in position by cables. There appears to have been four of these support lines. Two cables ran from near the top of the smokestack and were angled fore and the other two ran aft. Each cable was secured to the top of the robust wooden cabin.

No documentation has been found to specifically describe the type of steam engine aboard the *Seneca Chief*. With the vessel's breadth, only 9 feet, 6 inches, the hull's interior was only spacious enough to receive either a simple, single-cylinder, vertical-steam-power unit⁵² or a "direct action double expansion horizontal engine."⁵³ According to the National Park Service, the triple-expansion steam engine for vessels became "fully developed by the early 1880s" and initially was for "ocean steamships."⁵⁴ Thus, it is unlikely this type of larger and more complex steam engine was readily available in 1887 for installation on a steam yacht built for inland waters.

Notes

1. Peter Throckmorton, *Shipwrecks and Archaeology: The Unharvested Sea* (London: Victor Gollancz, 1970), 31–32.

2. *Buffalo Commercial*, Buffalo NY, August 3, 1887.

3. Lynn Paulson, "Raise a glass to McKechnie," *Canandaigua Daily Messenger*, Canandaigua, NY, July 19, 2015.

4. Ray Henry (Town of Canandaigua Historian), "History of Ontario County: Mr. Mueller and the 'People's Line'—the steamboat era on Canandaigua Lake," *Canandaigua Daily Messenger*, July 12, 2014.

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5. *Ontario County Journal*, "The Seneca Chief [*sic Seneca Chief*] a Success," Canandaigua, NY. August 12, 1887.
6. *Buffalo Weekly Express*, "New Steam Yacht for Seneca [*sic Canandaigua*] Lake," Buffalo, NY, August 4, 1887.
7. *Buffalo Evening News*, "David Bell Dead," Buffalo, NY, April 20, 1903.
8. *Buffalo Weekly Express*, "New Steam Yacht for Seneca [*sic Canandaigua*] Lake," Buffalo, NY, August 4, 1887.
9. *Neapolitan Record*, Naples, NY, August 10, 1887.
10. *Buffalo Times*, Buffalo, NY, July 18, 1887.
11. *Watkins Express*, Watkins Glen, NY, August 10, 1887.
12. *Rochester Democrat and Chronicle*, "Ontario," Rochester, NY, August 16, 1887.
13. *Ontario County Journal*, Canandaigua, NY, August 12, 1887.
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8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

- A. Owned by a religious institution or used for religious purposes
- B. Removed from its original location
- C. A birthplace or grave
- D. A cemetery
- E. A reconstructed building, object, or structure
- F. A commemorative property
- G. Less than 50 years old or achieving significance within the past 50 years

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Areas of Significance

(Enter categories from instructions.)

ARCHAEOLOGY/historic-non-aboriginal
MARITIME HISTORY

Period of Significance

1887-1896

Significant Dates

1887, 1896

Significant Person

(Complete only if Criterion B is marked above.)

N/A

Cultural Affiliation

Euro-American

Architect/Builder

David Bell

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Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

STATEMENT OF SIGNIFICANCE

The *Seneca Chief* shipwreck is significant under Criterion D as a property that has yielded, or is likely to yield, information important in prehistory or history, in the context of Canandaigua Lake's maritime history in the development of late-19th century transportation and tourism, and in the context of marine architecture, engineering, and commerce on this, one of the Finger Lakes in the Empire State. Built in 1887, this steam yacht is a rare-surviving artifact of a class of watercraft found on inland waters in northeastern USA. Over the course of its career, the steam vessel ran daily recreational cruises, delivered mail to homes, cottages, and businesses around the lake, as well as delivering locally grown fruit to lakeside towns and villages for final transit by ground transportation to urban sites in the northeastern United State during the late 19th century. If this sunken vessel can be effectively managed and protected by state and local cultural resource managers and other stake holders, the site has the potential to reveal other details about the craft's design, techniques about late-19th century vessel salvage and abandonment, and its shipwreck formation processes. The latter two aspects are of growing importance in the field of maritime archaeology.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

Shipbuilder David Bell

The *Seneca Chief* steam yacht's builder, David Bell, began his work in industrial manufacturing in 1834 in the United Kingdom. Bell apprenticed as a millwright at an iron-production factory in Scotland and later moved to England, where he developed broad expertise in "all things mechanical."¹ In 1841, David Bell migrated to the United States and lived in New York City for a year before moving to Buffalo where he was employed by the Buffalo Steam Engine Works. For the rest of his life, except for a short sojourn working in Cleveland, Ohio, Bell resided and worked in Buffalo. He soon became superintendent of the Buffalo Steam Engine Works. Bell mastered his craft and in 1861, he constructed the first iron-hulled, steam-powered watercraft on the Great Lakes, a 700-ton-burden vessel named *Merchant*. For over four decades, Bell labored to build iron- and steel-hulled steamers. A list of Bell's iron and steel vessels, compiled by maritime historian Tim Colton in 2016, gives a total of at least 53 iron or steel watercraft constructed by David Bell's shipbuilding business from 1859 to 1903.² Also, Bell's manufacturing company fabricated steam locomotives.³ In 1887, the same year the steam yacht

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Seneca Chief was constructed, David Bell frequently ran this advertisement in newspapers that succinctly summarized his company's manufacturing skills:

SHIPBUILDER
DAVID BELL

Builder of
Iron Ships, Iron and Steel Steam Yachts,
Engines and Boilers,
Improved Propeller Wheels,
Steam Hammers a Specialty.⁴

When the *Seneca Chief* rolled out of Bell's manufacturing plant in August 1887, it appears to have been about the 35th iron or steel vessel that he constructed in Buffalo.⁵ In an obituary article in 1903 published in the *Buffalo Courier* newspaper, Bell was described as "a pioneer in building large lake craft."⁶

Steamboat Navigation

Though steamboat-pioneer John Fitch in 1787, tested his odd-looking, experimental steamboat on the Delaware River,⁷ most American school children can recite that the first-commercially successful steamboat navigation in North America was Robert Fulton's seminal watercraft, the *North River Steamboat of Clermont*, in 1807, on the Hudson River.⁸ Soon, other steam-powered vessels debuted around the northeastern United States: the 1808 sidewheel-steamer *Phoenix* along the Atlantic Coast and in the Delaware River, the 1809 *Vermont* and 1815 *Phoenix* on Lake Champlain,⁹ the 1817 sidewheel-steamer *James Caldwell* on Lake George,¹⁰ the 1817 sidewheel steamer *Ontario* on Lake Ontario,¹¹ and the 1818 sidewheel-steamer *Walk-in-the-Water* on Lake Erie,¹² to name but a few. All of those were wooden-hulled steamboats and none were screw driven.

Steam-powered vessels can be considered one of the first significant contributions to technology in the United States. Prior to their introduction, waterborne travel was solely by human power (rowed) or by sail. Steamboats provided their own propulsion and thus this form of travel greatly changed the world.

Commercial steamboat travel appeared on Canandaigua Lake in 1827, with *Lady of the Lake*.¹³ This early steamboat reportedly was 80 feet long.¹⁴ Nearly two decades afterwards in 1845, the sternwheel steamer *Ontario* came on the lake.¹⁵ Two years later, this steamboat was destroyed by fire.¹⁶ In 1855, a decade after the *Ontario* was launched, the wooden-hulled, sidewheel steamer *Joseph Wood* appeared on the waterway.¹⁷ Sometimes known as "Joe Wood," the watercraft reportedly measured 91 feet in length.¹⁸

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Seven years later, in 1862, “iron first met iron” on American waters in a far-reaching naval engagement when the ironclad USS *Monitor* battled the CSS *Virginia* (ex USS *Merrimac*) during the second day of the Battle of Hampton Roads, near Norfolk, Virginia on March 9, 1862.¹⁹ So, when one thinks of early steam-powered watercraft fashioned of iron, almost immediately the USS *Monitor*, the first U.S. Navy warship of iron, designed and built under the direction of Swedish immigrant John Ericsson, comes to mind. The 173-foot-long warship was constructed in 1862 in Greenpoint, Brooklyn, NY, though some parts of the revolutionary craft were manufactured elsewhere.²⁰

That same year, 1862, David Bell, the builder of the steam yacht *Seneca Chief* in 1887, constructed the first iron-hulled steamboat on the Great Lakes. It was the screw-powered steamer *Merchant*.²¹

Soon thereafter, iron, and later steel, began replacing wood for the hulls of vessels constructed in the upstate region of the Empire State. Buffalo became a center for this type of manufacturing, whereas former major shipbuilding centers like greater New York City, were slower to adopt the iron or steel hull form.

The emergence of steamboat travel upon Canandaigua Lake was stimulated by the area’s natural beauty, its fine soil and weather for growing fruits and other crops, its nearby proximity to rail and canal transportation, and the many towns and villages along or near the lake’s 36-mile shoreline.

During the years of the *Seneca Chief* (1887–1896), steamboats on Canandaigua Lake served multiple purposes: a) they were excursion vessels to promote tourism, b) they transported lake residents around the waterway to attend social and recreational events such as picnics, dances, and other activities, c) they took workers to their places of employment, and d) sometimes they hauled agricultural products to markets.

The grape-growing industry around the Finger Lakes dates to the 1830s, fostered by an influx of German and French immigrants to the region who brought wine-making skills from their European homelands. Today, the Finger Lakes region is renowned for its great-tasting, cool-climate wines made from grapes and other fruits grown along the slopes adjacent to the lake. This fruit production is in great part because the lake waters keep the air temperature warm enough for these crops to survive during a growing season characterized by the cool summer nights that add acidity to the fruits giving the wine its distinct flavor.²² However, one of the steamboat captains in the late 1890s noted that many of the grapes harvested around Canandaigua Lake were transported by steamboat to local train stations where they were moved by rail to Boston.²³

Brief Chronology of History of Canandaigua Lake’s *Seneca Chief*

Once the *Seneca Chief* was on Canandaigua Lake in mid-summer 1887, it was assigned to ambitious daily cruise routes. The Canandaigua Lake Steam Navigation Company operated the

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steam yacht in conjunction with another of their steamers, the 110-foot-long sidewheeler *Canandaigua* (1865–1889).^{24, 25} That year, the *Seneca Chief* departed from the Town of Canandaigua to Woodville at 9:30 a.m. and 2:30 p.m. The craft's route was along the eastern shore of the lake. The watercraft left Woodville for Canandaigua at 11:00 a.m. and again at 6:00 p.m. The steamer *Canandaigua* ran along the west side of the 16-mile-long waterway departing Woodville for Canandaigua at 6:00 a.m. and 1:30 p.m., and with trips from Canandaigua to Woodville at 9:30 a.m. and 5:30 p.m. However, on Sundays the *Seneca Chief* ran an abbreviated schedule, departing Canandaigua at 10 a.m. and leaving Seneca Point at 5 p.m.²⁶

This seemed to work fine until the “new steamer *Seneca Chief* [*sic*] on Canandaigua Lake, was burned” on November 9, 1887.²⁷ The November 12, 1887 *Rochester Democrat and Chronicle* theorized the fire at the steamer's mooring three days earlier looked “very much like incendiarism.” This theory was offered because James McKechnie's steamboat *Ontario* was likewise burned several months earlier in the spring of 1887. There reportedly was no insurance on the *Seneca Chief* and it was very suspicious that two steamboats owned by McKechnie's company would be burned in the same year.²⁸ Fortunately, it was soon announced the “hull of the steamer *Seneca Chief* of Canandaigua Lake was not materially injured in the late fire.”²⁹ H. L. Hunt, who owned a machine shop in Canandaigua, was given the contract for the repair of the minor damage to woodwork on the watercraft.^{30, 31}

During the 1888 steamboat season, the *Seneca Chief* was competing with another commercial steam propeller craft, the *Mayflower*. Both excursion vessels operated on the same time schedule and the two steamers also carried “passengers at the same rate,” twenty-five cents.³²

However, the sleek and fast *Seneca Chief* had one added advantage that other steamboats on Canandaigua Lake didn't have. Unlike wooden-hulled vessels, the sturdy-steel hull of the *Seneca Chief* had the ability to navigate during thin-ice, lake-surface conditions. Therefore, the 54-foot-long steam yacht could be put onto the lake earlier in the springtime,^{33, 34} and likewise stay longer on the waterway into the early winter season.³⁵ The *Watkins Democrat* newspaper reported on February 1, 1894, that the “*Seneca Chief* [*sic*] has made daily trips on Canandaigua Lake this winter...leaving Woodville at 8 a.m. and Canandaigua at 3 p.m. This is a winter record of rare occurrence on that Lake [*sic*].”³⁶

In early 1889, the *Seneca Chief* was “overhauled and handsomely repainted,” periodic and standard maintenance for excursion vessels of this era.³⁷

While the *Seneca Chief* was used primarily for excursion trips on Canandaigua Lake, it was also called upon by the directors of the steamboat company to support infrastructure construction and maintenance. In October of 1889, the steamboat was tasked with transporting cut timber to a work site along the water. The work barges were loaded with logs felled by lumberjacks from nearby forests. For these cruises, the “staunch little steamer” towed two scows at a time, loaded with lumber. The wood was then employed reinforcing the Canandaigua breakwater.³⁸

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In 1891, the *Seneca Chief* was one of three steamboats being operated on the lake by the Canandaigua Lake Steamboat Company. The other two vessels being the *Onnalinda* and *Ogarita*.³⁹

In its eighth season on Canandaigua Lake, the David Bell-built steam yacht was still making regularly scheduled excursion trips,⁴⁰ yet signs were beginning to appear that the *Seneca Chief's* career would soon dramatically change. On July 2, 1894, the *Rochester Democrat and Chronicle* newspaper announced that the *Seneca Chief* was assigned to run “as a mail boat on the east side of the lake only, while the *Onnalinda* and *Ogarita* will alternate as regular and excursion boats.”⁴¹ In September 1894, the *Seneca Chief* was towing the company’s scow that was occupied by a group of friends on a Sunday afternoon cruise. Suddenly, one of the barge’s passengers, Harry Reif, fell through a feeble and temporary railing on the flat boat. Reif, a non-swimmer, appeared to be drowning. A boat occupant then jumped overboard and rescued him.⁴²

In 1895, the vessel’s last full year on the lake, the steam yacht undertook a variety of cruises including transporting locally grown fruit. On September 19, the *Seneca Chief* towed a scow loaded with 22 tons of grapes and peaches.⁴³

Eight months afterwards, on May 12, 1896, the “one-time favorite steel yacht” was towed out into what was reported to be deep water, and the *Seneca Chief* was scuttled,⁴⁴ then to await an inquisitive explorer.

How Was the *Seneca Chief* Abandoned?

For the field of maritime archaeology, some of the least-studied aspects of vessel “scuttling” (the deliberate act of sinking a vessel to dispose of it) are specific details on how watercrafts were prepared for that final act in a career on the water. Therefore, future study of this sunken boat might impart more details about its abandonment. Such as, more details on what was removed from the steamer prior to it being scuttled. How was the steamboat towed to its place of sinking? What methodology was employed to facilitate the sinking the craft?

We can look to history for some possible hints about vessel abandonment. Dr. John D. Broadwater, formerly the Virginia State Underwater Archaeologist, studied the 1781 sunken British fleet at Yorktown, Virginia. He wrote we “have good information on the scuttling of the Yorktown fleet [during the American Revolution, 1775–1783]. One logbook describes bringing the ships into the ‘sinking line.’ HMS *Fowey* [1744–1748] was scuttled [off Florida during the War of Jenkins’ Ear] by boring a hole beneath the starboard forechains. *Betsy*, [a British collier that was studied by Broadwater’s team of underwater archaeologists,] had a hole cut just below the lower deck clamp.”⁴⁵

Moreover, Broadwater provided further details on the *Betsy's* scuttling in his 1996 final report of the study of the British transport shipwreck at Yorktown. In that report he elaborated: “...a large hole was cut in order to sink the *Betsy* more quickly; perhaps this method was preferred by the person in charge of the scuttling; or possibly the explanation is simply that the *Betsy* was scuttled

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using the tools readily available at the time. In any case, the opening of a six-inch hole below the waterline must have produced an impressive stream of water which would have quickly sunk the vessel.”⁴⁶

Therefore, how did the steamboat company workers deliberately sink the *Seneca Chief*? Were the small holes near the starboard bow the source of the steam yacht’s scuttling? Or was it sunk by removing the rudder post and thus opening a hole in the fantail? Conversely, was this final act in the history of the *Seneca Chief* undertaken using a different strategy? Future underwater archaeological investigation of the sunken steamboat may provide clearer answers to these research questions.

One detail about the events of May 12, 1896, the day the *Seneca Chief* was deliberately sunk, has recently been deduced. Historical weather data from the time of the sinking sheds some light upon what likely happened. According to the May 12, 1896 issue of the *Buffalo Courier*, the forecast for that day was for “westerly winds, fresh to brisk.”⁴⁷ On January 24, 2023, at the request of one of the preparers of this National Register nomination, the Meteorologist in Charge of the National Weather Service–Buffalo, NY office examined national weather records for May 12, 1896. The climate historian reviewed contemporary weather charts and interpreted that the winds that day for the Rochester, NY area, about 25 miles away from the northern part of Canandaigua Lake, were “north/northwest...at 6 mph.”⁴⁸ Thus, it appears the hull was taken into the deep water in the middle of the lake near the north shore, but this slight breeze pushed the watercraft closer to the eastern shoreline of the lake, where it finally sank into shallow depths, only about 13 feet of water. It seems the disabled vessel probably drifted several hundred yards or more, toward the southeast, before finally settling onto the lake’s bottomlands. Though historical documentation reported the *Seneca Chief* was towed to deep water to sink, the craft ended up in considerably shallower water and a significant distance away from its intended spot. Also, the wind for the day of the 1896 scuttling likely caught the craft broadside, and thus when the boat plunged into the depths, the breeze oriented the vessel’s centerline, with the bow pointing to the north/northeast.

Since the *Seneca Chief* was not completely torn up and was only partially salvaged on shore, the sunken remains of the 128-year-old steam yacht offers unique opportunities for future archaeological study. Protected by state and federal laws and with cultural resource management strategies to further study and interpret the vessel, previously unknown information about the sunken boat may likely be gleaned. Moreover, the *Seneca Chief* has great potential to uncover more historical information about Canandaigua Lake during the latter years of the Gilded Age (1877–1900) and early years of the Progressive Era (1890–1929).*

*Many historians overlap these two eras, the Gilded Age and Progressive Era, in American history. The Gilded Age in America was known for economic growth that primarily enriched industrialists and bankers, often at the expense of the poor. The Progressive Era was characterized by political reform and the beginning of social change.

Conclusion

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The discovery of the *Seneca Chief* shipwreck in 2014 by underwater photographer Scott Hill, and subsequent print and television coverage of that significant historical find,⁴⁹ eventually coalesced in 2022 into a community-based research project supported by the Canandaigua Lake Watershed Association and Rochester Area Foundation. The ad hoc team's goals were: 1) to inspect the sunken craft to acquire more information about the watercraft's form, 2) to devise strategies, such as nominating the shipwreck to the National Register of Historic Places, to protect and preserve this extraordinary maritime artifact, and 3) to develop submerged cultural resource programs, such as a shipwreck preserve, for controlled public access to the site.

By 1896, after nearly 10 years on Canandaigua Lake, the slender steam yacht had simply “out-lived its usefulness” in favor of a larger steamboat capable of more diversified maritime missions. On April 22, 1896, three weeks before the *Seneca Chief* was deliberately sunk in the waterway, the Canandaigua Lake Navigation Company, then in its seventh year of existence, announced it had reorganized its leadership. J. E. Dayton became president and the lake business promptly reported: “The company will improve its service this year by an addition to its fleet of a staunch steam yacht, ninety feet long, which will be used for a general utility boat. It will run express service between Seneca Point and Canandaigua every Saturday night, making connections with Central trains for Rochester.”⁵⁰ That “general utility boat” was the *Orianna* (1896–1926).⁵¹

The *Seneca Chief* shipwreck can provide opportunities in the future to obtain a clearer understanding of scuttled vessels in the inland waters of the Empire State. What type of salvage was undertaken prior to final abandonment? What procedural steps were undertaken to deliberately sink a steel-hulled steamer? And what aspects of shipwreck formation processes of abandonment watercraft might be derived by future archaeological investigation?

Furthermore, future study of the hull's interior may answer one fundamental question asked by archaeologists and historians. Why wasn't the *Seneca Chief* completely salvaged at its berth near shore or at a marine scrap yard, to fully monetize the valuable steel plates and scantlings that formed the hull?

Future archival research and archaeological investigation of the *Seneca Chief* has the potential to reveal further details about the *Seneca Chief*'s noteworthy design by its master shipbuilder, David Bell. Moreover, such an archaeological study might provide more specifics about how it was fitted out as both an excursion craft and part-time utility boat, as well as providing details on what steps were taken during its abandonment in 1896.

In summation, the *Seneca Chief*'s history shows it was the “little steamer” that “could,” even though it was somewhat diminutive in size compared to a steamboat put onto the lake in 1888, one year after the *Seneca Chief* introduction to Canandaigua Lake i.e. the 142-foot-long *Onnalinda* sidewheeler steamboat.⁵² During the operating years of the *Seneca Chief*, it transported vacationers to and from hotels as well as residents from their homes to social events and on shopping sprees. The watercraft likewise carried mail, towed work scows loaded with

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grapes, peaches, plums, logs, and party revelers, and took workers to their jobs around the waterway that was known to early Indigenous Peoples (Seneca Nation) as “Ganondagan,” also “Kanandarque,” meaning the “Chosen Spot.” Because the *Seneca Chief* was not totally dismantled on shore, nor was its form altered by restoration for display in a museum, the *Seneca Chief*'s scuttled hull is intact, resting in the lake, and not much different from the day it was sunk in 1896. Therefore, the submerged watercraft offers unique opportunities to gather more information about this class of vessel.

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Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____
- recorded by Historic American Landscape Survey # _____

Primary location of additional data:

- State Historic Preservation Office
 - Other State agency
 - Federal agency
 - Local government
 - University
 - Other
- Name of repository: Canandaigua Lake Watershed Association

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreage of Property .023 acres

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates

Datum if other than WGS84: _____
(enter coordinates to 6 decimal places)



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Verbal Boundary Description (Describe the boundaries of the property.)

The boundary of the nominated site, the *Seneca Chief* shipwreck in Canandaigua Lake, NY, is delineated by a rectangle that measures 60 feet x 17 feet. This boundary is shown as a bold line in the enclosed maps

Boundary Justification (Explain why the boundaries were selected.)

The boundary delineation of shipwreck (nominated site) is a rectangle that measures 60 feet x 17 feet. This was based upon observation of the submerged site by a scuba diving team directed by Scott Hill. These boundary dimensions were determined because the *Seneca Chief* measures 50 feet long x 9 feet, 6 inches. Moreover, there is some fragmentary hull structure lying just off the main hull, not far from the sunken craft. Therefore, to encompass the entire sunken vessel, the boundary delineation has been determined to be a rectangle that is 60 feet x 17 feet.

11. Form Prepared By

name/title: Scott Hill (underwater photographer and member of the Canandaigua Lake Watershed Association) and Joseph W. Zarzynski (independent maritime archaeologist and principal researcher & writer of this National Register nomination)

organization: independent researcher, Scott Hill, Canandaigua Lake shore resident and member of the Canandaigua Lake Watershed Association

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city or town: Canandaigua state: NY zip code: 14424

Mailing address: 4220 West Lake Rd., Canandaigua, NY 14424

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date: December 24, 2023

The following people were consulted in some form for providing information used in the preparation of this National Register nomination: Tim Harrington, Lindsay McMillan (Association Director, Canandaigua Lake Watershed Association), Dr. John D. Broadwater (Maritime Archaeologist, Sprintsail Enterprises, Former Chief Archaeologist-NOAA's Office of National Marine Sanctuaries, and Former Virginia Underwater State Archaeologist), Dr. D. K. Abbass (Marine Archaeologist, Rhode Island Marine Archaeology Project), Trish Lambaise (President, Naples Historical Society), Chris Andrlle (Buffalo Maritime Center), Cynthia Van Ness, MLS, (Director of Library & Archives, Buffalo History Museum), Mark Peckham (Hudson River Maritime Museum), John Meaney (retired marine pollution control professional), John Scarano (President & Lead Designer, Scarano Boat Builder, Inc.), Issac Johnson (Special Collections, Grosvenor Room, Buffalo & Erie County Public

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Library), Jim Kennard (Shipwreck World), Dennis McCarthy (St. Lawrence River Historical Foundation, Inc.), Daniel A. Bagrow (Historic Preservation Program Analyst, Division for Historic Preservation-New York State Parks, Recreation & Historic Preservation). Brendan Burke (Virginia State Underwater Archaeologist), Dr. Russell P. Bellico (maritime and naval historian-Lake Champlain, NY & VT and Lake George, NY), Mary Patram Meaney (library information specialist), Sharon Gribbon (genealogist), Basil Gribbon (retired engineer), Judith Levan (Meteorologist in Charge, National Weather Service-Buffalo, New York Office), Dr. Gwen Saul (Ethnographer and Cultural Anthropologist, New York State Museum), Don Smith (steam engine expert), Dr. James P. Delgado (maritime archaeologist and historian, former Director of Maritime Heritage, NOAA's Office of National Marine Sanctuaries), and Dana Carris (nautical archaeologist).

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Paperwork Reduction Act Statement: This information is being collected for nominations to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.). We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

Estimated Burden Statement: Public reporting burden for each response using this form is estimated to be between the Tier 1 and Tier 4 levels with the estimate of the time for each tier as follows:

Tier 1 – 60-100 hours
Tier 2 – 120 hours
Tier 3 – 230 hours
Tier 4 – 280 hours

Tier 4 – 280 hours; **estimated time for the Seneca Chief shipwreck (Canandaigua Lake, NY) nomination to be 500+ hours—calculation provided by Joseph W. Zarzynski, RPA (Register of Professional Archaeologists)**

The above estimates include time for reviewing instructions, gathering and maintaining data, and preparing and transmitting nominations. Send comments regarding these estimates or any other aspect of the requirement(s) to the Service Information Collection Clearance Officer, National Park Service, 1201 Oakridge Drive Fort Collins, CO 80525.

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Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered, and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: *Seneca Chief* shipwreck

City or Vicinity: Canandaigua

County: Ontario

State: NY

Photographers: Scott Hill and Tim Harrington

Dates Photographed: The date of each underwater photograph is cited in the photographs log found below.

Description of Photograph(s) and number, include description of view indicating direction of camera:

Please note, the section below includes photographs as well as drawings:

NY_Ontario_Seneca_Chief_shipwreck_0001

June 10, 2018. Bow area of the *Seneca Chief* shipwreck in Canandaigua Lake, NY, looking at the stem from the port side of bow (photo credit: Scott Hill).

NY_Ontario_Seneca_Chief_shipwreck_0002

July 23, 2023. Bow, showing a starboard view, of the *Seneca Chief* Steam yacht shipwreck's stem, intact, and standing proud above the foredeck. Note the heavy infestation of quagga mussels and/or zebra mussels on this Canandaigua Lake, NY sunken vessel. The mollusks cover most of the extant hull, including the stem at the bow. In this photograph, it is mid-summer, so underwater vegetation is seen around the submerged watercraft (photo credit: Scott Hill).

NY_Ontario_Seneca_Chief_shipwreck_0003

June 20, 2020. Scuba diver Scott Hill inspects the starboard bow of the *Seneca Chief* shipwreck in Canandaigua Lake, NY (photo credit: Tim Harrington).

NY_Ontario_Seneca_Chief_shipwreck_0004

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June 10, 2018. View of Canandaigua Lake's *Seneca Chief* shipwreck and its picturesque fantail stern, minus its decking which was removed prior to the steamboat's abandonment in 1896. The photograph was shot facing toward the aft of the sunken watercraft and slightly from the starboard side of hull. This image clearly shows the cant frames in the stern interior of the hull (photo credit: Scott Hill).

NY_Ontario_Seneca_Chief_shipwreck_0005

July 23, 2023. Scuba diver Tim Harrington records the frame spacing along the *Seneca Chief* shipwreck's port side, amidships. Note the infestation of invasive mussels covering the steel angle frames and other hard substrates hull structure of the sunken steam yacht (photo credit: Scott Hill).

NY_Ontario_Seneca_Chief_shipwreck_0006

July 23, 2023. This close-up photograph shows details of one of the *Seneca Chief* shipwreck's steel frames minus quagga and/or zebra mussel coverage. The photograph was taken along the port side interior of the sunken steam yacht's hull (photo credit: Scott Hill).

NY_Ontario_Seneca_Chief_shipwreck_0007

June 20, 2020. A fish (bass) swims along the port side interior of the hull of the sunken *Seneca Chief* steamboat. Though most of the shipwreck is covered with quagga and/or zebra mussels, this photograph, taken about one-third of the way from the bow of the sunken vessel, shows a sunken steamboat hull that is remarkably intact. This is due to the master shipwright, David Bell, that oversaw production of the vessel in 1887, as well as the sturdy steel material employed in the craft's construction (photo credit: Tim Harrington).

NY_Ontario_Seneca_Chief_shipwreck_0008

June 20, 2020. Looking aft from the starboard bow. Note the intact hull. The bow's stem at the hull stands proud, measured at nine feet above the lake bottom (photo credit: Tim Harrington).

NY_Ontario_Seneca_Chief_shipwreck_0009

June 20, 2020. Scuba diver Scott Hill swims along the exterior of the port side of the *Seneca Chief* shipwreck, approximately 15–20 feet from the bow, with a fish (bass) swimming along the interior of the steel hull (photo credit: Tim Harrington).

NY_Ontario_Seneca_Chief_shipwreck_0010

June 10, 2018. Close up of part of the sunken *Seneca Chief*'s stern section. This hole likely functioned to receive the rudder stock. The watercraft's rudder assembly was apparently salvaged during the steam yacht's abandonment in 1896 (photo credit: Scott Hill).

NY_Ontario_Seneca_Chief_shipwreck_0011

May 6, 2018. Overhead view of the stern of Canandaigua Lake's *Seneca Chief* steam yacht shipwreck. The decking was removed during abandonment in 1896. Thus, you clearly see the framing pattern of the cant frames in the stern. Moreover, note the vegetation that covers

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part of the centerline of the shipwreck (photo credit: Scott Hill).

NY_Ontario_Seneca_Chief_shipwreck_0012

June 20, 2018. Scuba diver Amanda Harrington hovers over the port side gunwale (aka gunnel) of the hull of the *Seneca Chief* shipwreck in Canandaigua Lake, NY. This photograph of the sunken vessel, taken at the amidships, clearly shows the framing pattern of the interior of the steel vessel. Additionally, there is a stringer, about a foot-and-a-half down from the gunwale, that runs perpendicular to the frames (photo credit: Scott Hill).

David_Bell(Buffalo,NY_shipbuilder)(cr-Forest_Lawn)_0013

Photograph of David Bell of Buffalo, NY, a renowned shipbuilder of iron- and steel-hulled vessels. In 1887, his shipyard, located on the Buffalo River, launched the *Seneca Chief* steam yacht that was transported by rail and used on Canandaigua Lake for 10 seasons (photo credit: Forest Lawn).

Seneca_Chief_Canandaigua_Lake_Photo(OCHS)_0014.jpg

This contemporary photograph is of the *Seneca Chief* steam launch on Canandaigua Lake, NY; the exact date of photograph is unknown (photo credit: Ontario County Historical Society).

Seneca_Chief_(drawings)_ (Zarzynski)_0015

This shows two drawings of the Canandaigua Lake steam yacht *Seneca Chief*. The top drawing depicts a profile view of the starboard side of the 50-foot-long vessel. The bottom drawing shows a slightly oblique view of the *Seneca Chief* shipwreck, with the port interior side on top and the starboard interior side on the bottom (drawing credit: Joseph W. Zarzynski).

Seneca_Chief_(sketch)_ (Zarzynski)_0016

Sketch of the *Seneca Chief* shipwreck in a slightly oblique perspective. The sketch is annotated to show key features of the sunken vessel in Canandaigua Lake, NY (sketch credit: Joseph W. Zarzynski).

Seneca_Chief_shipwreck(photogrammetry_Dennis_McCarthy)_0017

This photogrammetry-produced still image is of the *Seneca Chief* steam yacht, a Canandaigua Lake, NY shipwreck. The image is mostly complete but is missing some details along the port side interior and the interior centerline. Nonetheless, this video/computer-generated image shows the shipwreck's configuration (image credit: Dennis McCarthy).

NY_Ontario_Seneca_Chief_shipwreck_0018

April 20, 2014. This Pictometry-generated aerial image shows the location of the *Seneca Chief* shipwreck with a yellow line drawn to the north to show the distance to the north shore of Canandaigua Lake, NY (photo credit: Pictometry & Scott Hill).

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Name of Property

Ontario Co., NY

NY_Ontario_Seneca_Chief_shipwreck_0019

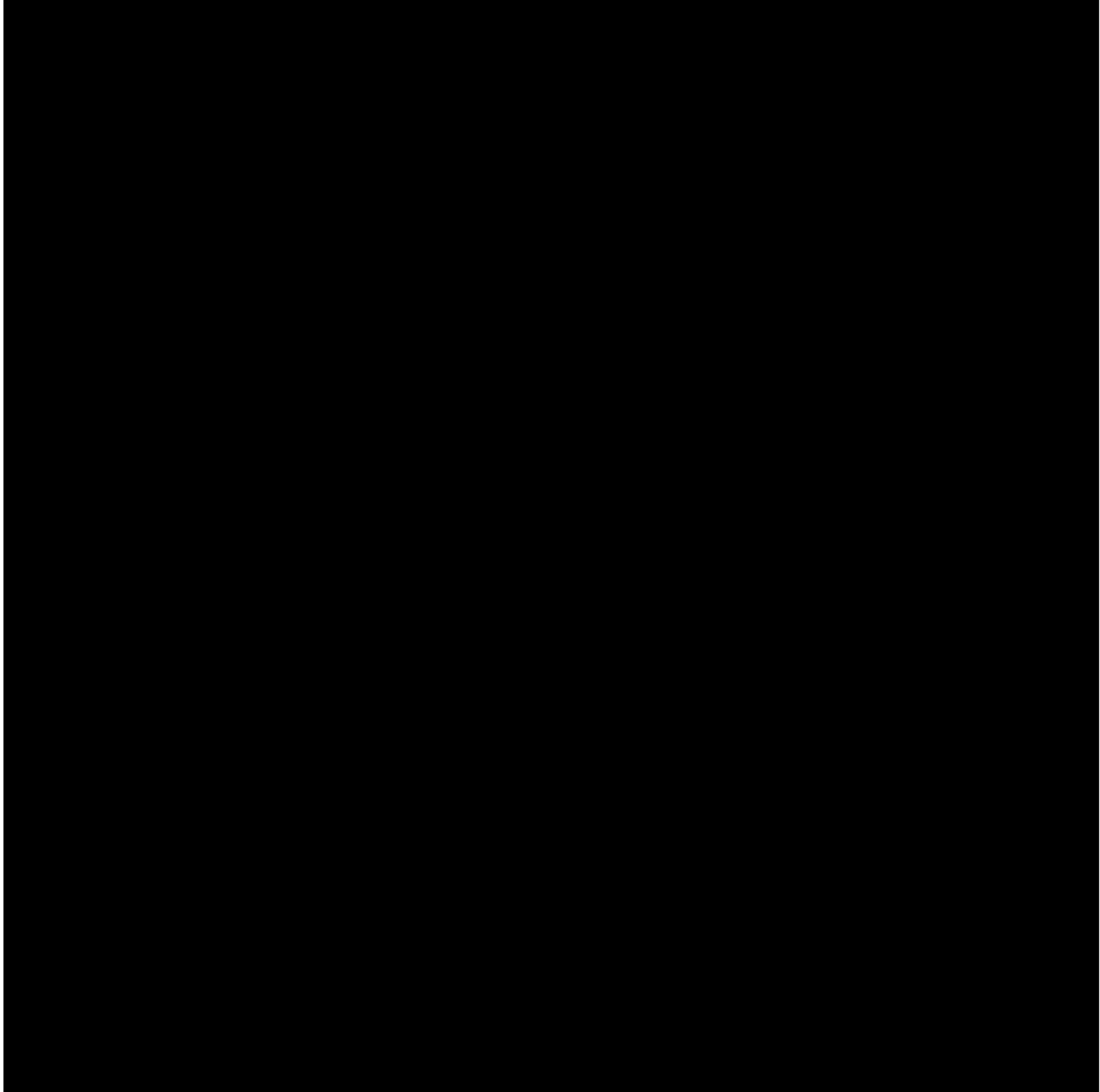
April 20, 2014. This Pictometry-generated aerial image shows the location of the *Seneca Chief* shipwreck with a yellow line drawn to the east to show the distance to the east shore of Canandaigua Lake, NY (photo credit: Pictometry & Scott Hill).

NY_Ontario_Seneca_Chief_shipwreck_0020

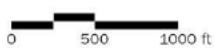
Drawing of the *Seneca Chief* shipwreck (Canandaigua Lake, NY) that is annotated to show the locations of 12 underwater photographs of the sunken steam yacht (photo log sketch credit: Joseph W. Zarzynski with input from Scott Hill).

Seneca Chief shipwreck
Name of Property

Ontario Co., NY



1:12,000



Projection: WGS 1984 UTM Zone 18N



Seneca Chief Shipwreck

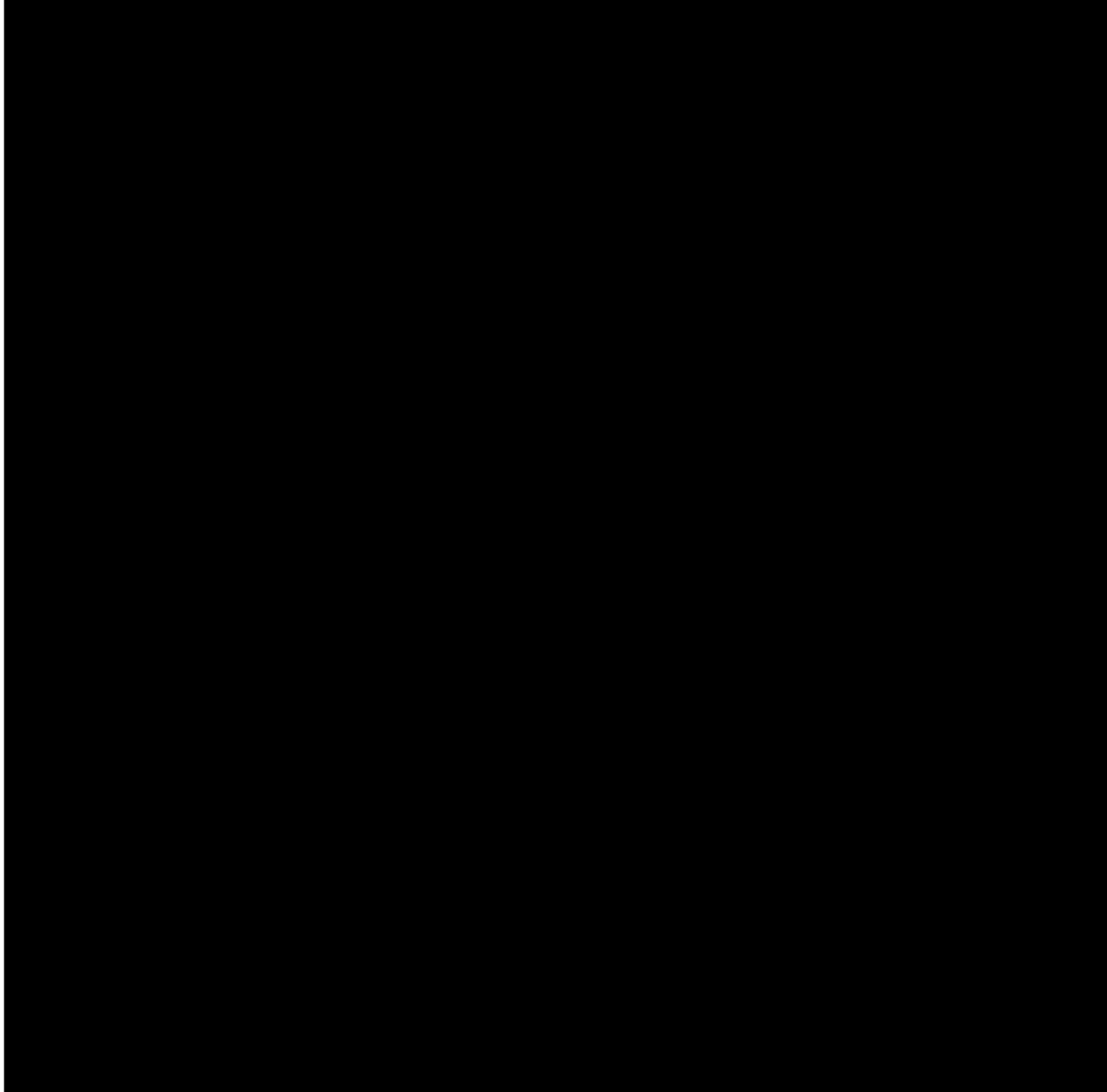


New York State
Parks, Recreation and
Historic Preservation

Mapped 08/22/2024 by Matthew W. Shepherd, NYSHPO

Seneca Chief shipwreck
Name of Property

Ontario Co., NY



1:1,200



Projection: WGS 1984 UTM Zone 18N



Nomination Boundary (0.02 ac)

New York State Orthoimagery Year: 2023



New York State
Parks, Recreation and
Historic Preservation

Mapped 08/22/2024 by Matthew W. Shepherd, NYSHPO







