ELLIS ISLAND, NY or ELLIS ISLAND, NJ?

R. L. Swanson Marine Sciences Research Center The University at Stony Brook Stony Brook, NY 11794-5000

The Statute of Liberty National Monument, which includes Ellis Island, is one of the most popular of the U. S. National Parks and Monuments. It ranks about tenth in the frequency of visitors and in 1997 there were more than 1.6 million visitors to Ellis Island alone (Carol Kelly, National Park Service Ranger, personal communication). This annual visitation rate is larger than the peak of 1.25 million immigrants that were processed at Ellis Island in 1907 (The National Park Service, 1997). Revenue and pride are at stake as the U. S. Supreme court ponders whether to cede at least part of Ellis Island to New Jersey or to hold with New York State's position that it was historically and still is the sovereign. Neither state showed much interest in the island after the Federal government abandoned the island in 1954 until The Statue of Liberty/Ellis Island Foundation raised money for its renovation and dedication as part of the park in the 1980s.

The Debate

The dispute between the two states is long standing and complex as is interpretation of the Compact of 1834 which addresses the issues of boundaries between the states and sovereignty of the states. Meaning and intent has been lost with time and it is not clear that the authors of the Compact anticipated that the island of 1834 would increase about five fold due to landfilling around the "original" island.

Recovering the "original" island using geological techniques was considered impractical if not impossible because of the extensive manmade modifications that have taken place on and around the island over the last 1.5 centuries. Time (the courts wait for no one) and expense was a consideration. However, the bulkhead of Fort Gibson (Figure 1) at the southeast end of the island was discovered and excavated as part of the recent renovation. This bulkhead is clearly delineated on the 1857 U. S. Coast Survey map of New York Harbor, Governors Island and helps to orient the "original" island relative to present conditions.

And what constituted the "original" island and what was its area? Today, Ellis Island is about 111.3x103 m2 (27.5 acres). New Jersey claims that at the time of the Compact it was 12.1x103 m2 (3 acres). Extant maps and charts from the time of the Compact display the island at scales of 1:5,000 or less. It is difficult to accurately scale the size of the island or its shape from these documents. On larger scale maps, often delineating

fortifications, little attention was given to identification of the shoreline. Was it high water, low water, or some arbitrary boundary that was of no relation to traditional mapping techniques. For example, the U. S. Coast Survey 1841 nautical chart of Upper Harbor of New York and New Jersey, did have the datum identified but it was 15.2 cm (O.5 feet) below the datum of low water. Datums and shoreline boundaries were commonly not identified in the legends.

Ellis Island originally was the northern of the Oyster Islands--a group of four low lying glacial moraine islands on the Jersey Flats that fringed the Hudson Channel (Squires, 1995). The terrain sloped seaward on the order 0.5 degrees (Swanson, 1995). (Robbins Reef, an underwater feature marked by a light is the only other visible remains of the islands.) Small errors in mapping or miss-identification of the shoreline and its relationship to a tidal datum makes a relatively large difference in the measured acreage of the "original" island.

Furthermore, the methodology for accurately determining datums or associated boundaries such as mean high water or mean low water, did not exist at the time of the Compact. The first continuously recording tide gage was installed in New York Harbor in the mid-1840s. Shorelines were probably determined by using a very short period of tidal observations--on the order of hours to days. Vertical datums determined from a one month series of tidal observations are only accurate to +/- 4 cm (Swanson, 1974). Datums determined from observations of hours to days are considerably less accurate. Seasonal variation of the low water datum in New York Harbor is 15 cm (Swanson, 1995). These large vertical uncertainties of 150 years ago translate into large horizontal errors considering the gentle slopes of the "original" island.

The major debate, however, concerns the determination of which state is the sovereign over the some 80.9x103 m2 (20+ acres) of Ellis Island that were landfilled following the signing of the Compact. The first three articles of the Compact are the focus of this bistate feud. Article First establishes the boundary line between the two states (Figure 2) which in this stretch is more or less the middle of the Hudson River. Article Second states that New York "shall retain its present jurisdiction of and over Bedlow's and Ellis's islands --- now under the jurisdiction ofthat state." (Note these islands lie to the west of the New York/New Jersey boundary. Article Third gives New York "exclusive jurisdiction of and over all waters of the Bay of New York; and of and over all the waters of Hudson river lying west of Manhattan Island-----; and of and over the lands covered by the said waters to the low water-mark on the westerly or New Jersey side thereof; subject to the following rights of property and jurisdiction of the state of New Jersey, that is to say:

1. The state of New Jersey shall have the exclusive right of property in and to the land under water lying west of the middle of the bay of New York, and west of the middle part of the Hudson river which lies between Manhattan island and New Jersey.

2. -----.

3. The state of New Jersey shall have the exclusive right of regulating the fisheries on the westerly side of the middle of said waters, Provided, That the navigation be not obstructed or hindered."

Simply stated, New Jersey's position is that the filled portion of Ellis Island occurred mostly following the signing of the Compact; the present jurisdiction (Article Second) refers only to the "original" island not the greatly enlarged island; that the fill occurred on New Jersey's underwater lands (Article Third, point 1) (Verkuil, 1997).

New York initially countered New Jersey's argument stating that New Jersey had deeded the underwater lands under discussion to the Federal government in 1904. New York also was of the opinion that "present jurisdiction" referred to Ellis Island of any size (Verkuil, 1997). The state believed that landfilling was a common practice at the time of the Compact and, in fact, landfilling had already taken place and that the authors of the compact anticipated it would occur again. Squires (1995) points out that landfilling, particularly along the East River had become such a problem that the New York Common Council, in 1795, established a Harbor Line--a line beyond which filling and pier construction could not take place. Later New York argued, that in terms of the Compact, boundary does not have to overlap with sovereignty (Verkuil, 1997).

New York also argues that it is the sovereign, regardless of the landfilling issue because New Jersey acquiesced to New York's prescriptive measures of providing essential services, taxing and licensing, etc. (Verkuil, 1997).

The Special Master, Paul R. Verkuil, assigned by the U. S. Supreme Court to hear arguments and render a judgement in the case, filed his Report in March of 1997 and both New Jersey and New York took exception. His recommendations are summarized:

1. The "original" island represents the sovereign boundary between New York and New Jersey on the present Ellis Island,

2. New Jersey has not acquiesced its sovereign rights on Ellis Island,

3. New York's sovereignty extends to the low water mark of the "original" island,

4. The acreage of the "original" island is to be "reconstituted" (Figure 3) in such a manner that the Main Building (the refurbished building) and the land immediately adjacent to it, including the present ferry slip be the sovereign territory of New York (Verkuil, 1997).

DISCUSSION

New York of course appealed the Special Master's recommendations, using several technical legal arguments because it was not given sovereignty over the entire 111.3x103 m2 (27.5 acre) Island. New Jersey also appealed because it objected to the size of the island being increased to about 19.8x103 m2 (4.89 acres) instead of its claim that the "original" island was 12.1x103 m2 (3 acres). New Jersey contends that the high water

mark of the "original" island is the proper boundary between the two states. New Jersey also objected to the recommendation that the acreage be adjusted so that the Main Building (this is where the revenue is raised at present) be assigned to New York. New Jersey's objection is that the Special Master had no authority to rearrange boundaries from that of the "original" island.

New York made its case based on the notion of ceding nothing to New Jersey. One can speculate that had New York argued for a middle ground that New York might have succeeded in being granted considerably more acreage by the Special Master--perhaps all the territory east of the Immigrant Building (about 52.6x103 m² or 13 acres). However, New York was at least successful in making the case that the "original" island was greater than 12.1x103 m2 (3 acres) and that the appropriate boundary for determining the size of the "original" island was the low water line; not the high water line as proposed by New Jersey. New York's estimates of the acreage above low water from various charts were accepted (Verkuil, 1997). However, I believe that the selection of the 1857 U.S. Coast Survey map of New York Harbor, Governors Island as the most accurate to make measurements was not appropriate. It was constructed two decades following the Compact--the shoreline on the map was not labeled, and sea level had risen some 6 cm over the intervening years. The acreage abovelow water estimated from the 1834 and 1841 charts were 24.0x103 m2 (5.94 acres) and 21.0x103 m2 (5.19 acres) respectively. The acreage above low on the 1857 chart was 19.0x103 m2 (4.69 acres). The Special Master actually recommended that New York's portion of the island be 19.8x103 m2 (4.89 acres); the additional acreage above that scaled on the 1857 map to compensate for landfilling and pier construction that had taken place prior to the time in question.

The appeals were presented to the U. S. Supreme Court on 13 January, 1998. A final judgement will probably be made in summer 1998. My guess, after hearing the arguments before the Supreme Court, is that the Special Master's decisions will be upheld.

REFERENCES

Squires, D. F. (1995) Ellis Island, its situation and enlargement. Report prepared for the State of New York, State of New Jersey v. State of New York, Supreme Court of the United States, University of Connecticut, Storrs, CT, 52pp.

Swanson, R. L. (1995) Ellis Island tidal boundaries and accuracy of their determination, Report prepared for the State of New York, State of New Jersey v. State of New York, Supreme Court of the United States, Marine Sciences Research Center, The University at Stony Brook, Stony Brook, NY, 24 pp+ figures and tables.

Swanson, R. L. (1974) Variability of tidal datums and accuracy in determining datums from short series of observations, NOAA Tech Report 64, National Oceanic and Atmospheric Administration, Rockville, MD, 41pp.

The National Park Service (1998) Statue of Liberty National Monument and Ellis Island, www.nps.gov/stli, 19 February.

Verkuil, P.R. (1997) State of New Jersey v. State of New York, Final report of the Special Master, Supreme Court of the United States, No. 120 Original, 170pp+appendices.