**iPhone GPS Protocol**

(Matthew Williams and Brian Roddy, Summer 2014)

A. Overview

If the Lowrance HDS5 GPS unit malfunctions, an iPhone (or similar smart phone) can be used as a replacement GPS device. While the iPhone’s GPS is slightly less reliable than the Lowrance’s, it can be used as a good back-up, since natural drift on the lake causes a small error in location, even if using the more precise Lowrance GPS unit.

B. Materials Needed

* iPhone (or similar smart phone with GPS capabilities)
* List of GPS coordinates

C. Procedure

These steps are for the iPhone, although other phones should have a similar method of entering GPS coordinates.

1. Ensure that the iPhone is fully charged (constant GPS usage is very power-consuming).
2. Open the “Maps” app.
3. Enter GPS coordinates into the top bar of the app in the following format (“d" is degree, “m” is minute, “s” is second):

N do m’ s’’ W do m’ s’’

example: N 40o 42’ 46.021’’ W 74o 0’ 21.388’’ (for New York City)

[GPS coordinates can also be expressed in decimal degrees]

1. A red pin should show up at the location of the coordinates entered in step 3.
2. Tap the icon in the upper right corner of the screen (looks like a box with an upward arrow).
3. Tap “Add to Favorites.”
4. Save the location with the site number (or some other identifier).
5. In order to travel to this location, tap the search bar at the top of the app.
6. Tap “Favorites,” then select the desired saved location.
7. The site appears as a red pin, and your current location is a blue circle.
8. Arrive at the location by zooming in and out as needed in order to see both the blue circle and the red pin, and by travelling until the two markers are in approximately the same location.