

NYC SWIM

July 23, 2014

Dear Brooklyn Bridge Swim Participants,

Sunday's event went very well for 200+ swimmers and differently than planned for the rest, and for us as well. The race did not unfold the way we wanted our final Brooklyn Bridge Swim to go down. We have been doing our own due diligence to fully understand what happened and wanted to share some information.

This recap is quite LONG, so please set aside some time to read it in its entirety. Open water swimming, while inherently unpredictable, is even more complex when crossing the East River due to construction zones, vessel traffic, tides, and the like. We want everyone to have all the information and come to their own conclusions based on the facts and not perceptions.

The occurrences on Sunday were an aberration for this event and our events in general, and we regret—and share—the disappointment.

Preliminary results are posted at http://www.nycswim.org/Event/Event.aspx?event_id=2407&from=results, and we will post complete and final results including boat-assisted finishers once we are sure there will be no more changes/amendments.

Background

When the course is from Manhattan to Brooklyn, the event is timed as the East River is transitioning from ebb to flood. Our window to get everyone across the channel is about 25 minutes at the most ideal moment, and that is when we try to have the slowest swimmers cross the channel. We have the faster swimmers go before the ideal moment, since because of their speed they are able to counter a current that is going against them or pushing them off course. Slow swimmers will not make progress against a current of a half knot, compared to the fastest swimmers who still can make progress against a 2-knot current.

As stated in our webinars, the East River does not change directions at the same moment. It first changes on the Brooklyn side, then the Manhattan side, and then finally mid-channel 40 minutes later. When it changes, usually the speed increases gradually over the course of three hours to its max.

When the course is from Brooklyn to Manhattan, the window is much longer (35 minutes) since the swim is organized during the transition from flood to ebb. Since the flood is usually much slower than the ebb, we can start earlier and have the slower swimmers have a longer time to cross the channel. However, due to the construction on the Manhattan side, the optimal course was not an option.

Some have suggested the swim on Sunday should be held during the flood to ebb. When we tested that scenario the ideal window was 10 to 15 minutes for the slower swimmers, and the failure rate was much higher.

Tide Predictions

Tide predictions are like weather forecasts—they are influenced by many variables and are not always right or as nuanced as the experience on the ground/in the water. Before Superstorm Sandy, we could look at NOAA data from the Narrows to see if the tides were regularly turning earlier or later than predicted. Sandy knocked out the equipment, making us more blind than we were in the past. Ironically, for the first time in a while, NOAA is again providing observations from the Narrows, however these started on Monday around 10 am—two days too late to help the event. (Please see Narrows observations by clicking <http://downloads.nycswim.org/NarrowsCurrentObsJuly20.jpg>.)

The last wave started 13 minutes (12:18 pm) before the predicted mid-channel change at the Brooklyn Bridge. (Please click <http://downloads.nycswim.org/BBTidesJuly20.jpg> to see the graphic for the mid-channel current change for 7/20). Before the wave began, our boats took tide readings, and the water was still ebbing at the Manhattan Bridge. Given that the wind was coming at 10 mph from the north, based on our experience we would have thought the ebb-to-flood change would have been delayed, not early. However, by the time the swimmers from the last ferry reached the Manhattan Bridge 10 minutes later, the tide had turned. The switch was very quick. (Some swimmers have stated that we placed swimmers in the water after the tide had changed in the middle of the channel, but we did not.)

Start Time

Our permit with Coast Guard stated the earliest start time for the first wave would be 11:15, with a most likely start time of 11:30 (please see coast guard operational memo by clicking http://downloads.nycswim.org/2014_BB_MEMOra.pdf). Just as we were readying to depart Pier 11, we were asked to hold for a DEP boat that was supposed to come through at 11:50. We initially agreed to this hold out of respect for who was asking. The DEP is the reason the water is swimmable, after all, and the Coast Guard is our event partner. However, when the tides were showing that our window of opportunity was closing, we asked for the race hold to be removed and, after negotiation, were granted permission to proceed. We started 10 minutes after the targeted time of 11:30 once everyone was in position. The time differential between the fastest and slowest wave starts was 25 minutes – 11:40 to 12:05 (please see wave start times by clicking <http://downloads.nycswim.org/wavestartimes.jpg>), which was two minutes more than our land-based start last year. 20-23 minutes was our desired spread.

For a whole host of reasons, it took longer for all the swimmers to get going to the start (when jumping off of the ferry when compared to the starting from the shoal) and as compared to our experience with the Governors Island Swim, which also has a Water Taxi start. We could have cut a minute or two off of the spread if things were a bit tighter, but not much more.

Seeding

Traditionally, we have run the swim fastest to slowest, where the faster swimmers face tougher water and slower swimmers have an easiest time. In reality this year, due to the factors on Sunday, waves 5-6 had the easiest time. If we ran the seeding slowest to fastest, many of the slower swimmer would have swum in place at the start since the flood had barely begun when we started and the winds would have pushed the swimmers backward toward the Water Taxi.

Race Course

The last-minute course change was out of concern that the earlier waves may either not be able to cleanly launch off the ferry or could be pushed by the strong ebb into the Pier 17 construction zone south of the Brooklyn Bridge. By honoring the permitted security zone and by stretching out the first leg of the course toward the Manhattan Bridge, we could have a protected area between the bridges, which was in keeping with our permit with the Coast Guard in case anything went wrong (please see our permitted Coast Guard Security Zone by clicking <http://downloads.nycswim.org/BBSecurityZone.pdf>). Additionally, we were worried that if the tides were running late, we would not have been able to have everyone swim due to the fixed period for which we had the use of NY Water Taxis. This proved unfounded but was a real concern in advance. Not until double and triple checking all logistical plans with all parties did the necessity of the change become apparent.

Halting the Event

The decision was made to halt the event when it became clear that a significant number of swimmers had no chance of finishing and that they would only become more spread out if they were allowed to continue. At that point, swimmers on the farthest extremes were picked up first and then the boats worked their way toward the middle of the field. Those farthest off course were about 200 yards east of the Manhattan Bridge. Some swimmers refused to exit the water and argued with boaters and race officials, which delayed other pickups and compromised the overall event safety operation.

Hindsight Is 20-20

Would the originally posted course have worked given the early tide switch and delayed start? Yes, most likely there would have been fewer swimmers pulled if that course were used. The faster swimmers would have had difficulty staying east of the Brooklyn Bridge. If we had a do-over with full knowledge of the real-time conditions, then the ideal course would be the one <http://downloads.nycswim.org/BB-Hindsight-Course.jpg>. But as is the norm with open water swimming, Mother Nature provides a different experience every single day.

Why couldn't we change the course when we knew the tide had changed?

The tide switched early and after all the swimmers were in the water. If we had known it was about to change, we would have had to hold the last ferry and let the first two ferries worth of swimmers finish, then reset all the boats, communicate the changes, and launch the final group. This would have taken 30 to 40 minutes at a minimum, or more than twice as long to also move race marks. To switch everything around on the fly would be unwise.

If we started on time, would fewer swimmers have been pulled even if the tide switched early?

Yes.

So did the 10- to 15-minute delay have *that* big of an impact on the on the whole race that it cause so many swimmers to have to be pulled?

Yes. The East River can be brutal. We have been very good at starting the race at the precisely right moment time in past years.

Are you going to do the Brooklyn Bridge Swim next year?

Most likely not. If someone else takes on the race in the future, we would suggest placing a floor on speed of the slowest swimmer permitted to enter like we did in early years and only holding the event on one of the four or five super-low tide days during the summer. Going from Brooklyn to Manhattan during the flood-to-ebb transition would have the best outcome, if shoreside conditions allow.

Are you giving refunds?

No, our usual policy applies: If an event has to be canceled or halted while swimmers and race staff are on site, the advance cancellation policies do not apply.

We appreciate the feedback from many of you about how much you enjoyed the event and even, in many cases, the police rescue—something we do not normally condone. Open water swimming is inherently full of variables and has the potential for many different outcomes. We hope you find much that is positive to take away from the experience regardless of the course you swam and whether you finished on your own.

Thanks for reading and swimming,
NYC Swim