

Rapid Lesson Sharing

Event Type: Unplanned Huli

Date: May 2, 2022

Location: Carquinez Striaight, Benicia CA

Brief Summary

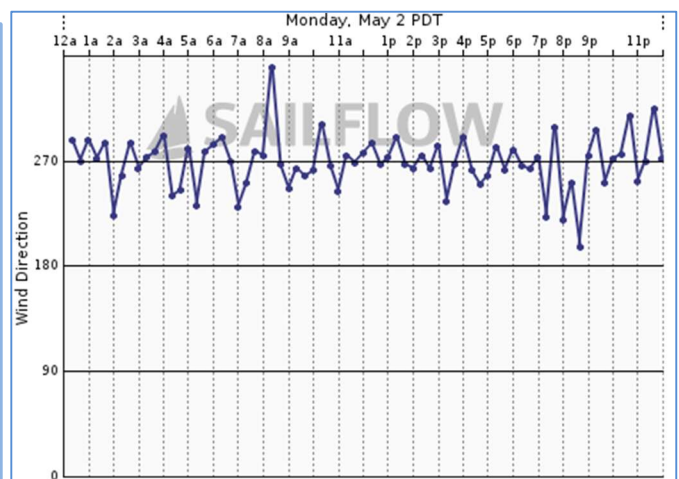
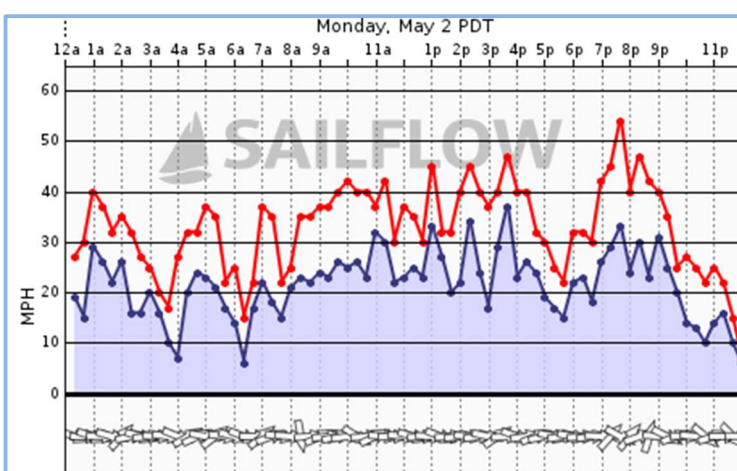
On May 2, 2022 during a routine practice session for Benicia Outrigger Canoe Club (BOCC) the OC6 WA'A capsized (huli'd) off of the north shore near the Arneson Park area of Benicia. The WA'A held six experienced crewmembers who practice together on a regular basis. The effort to right the canoe, get all crewmembers back into the canoe, and return to the 9th street dock took longer than expected. The event went beyond a routine huli drill and bordered on an emergency situation.

Narrative:

Leaving 9th Street

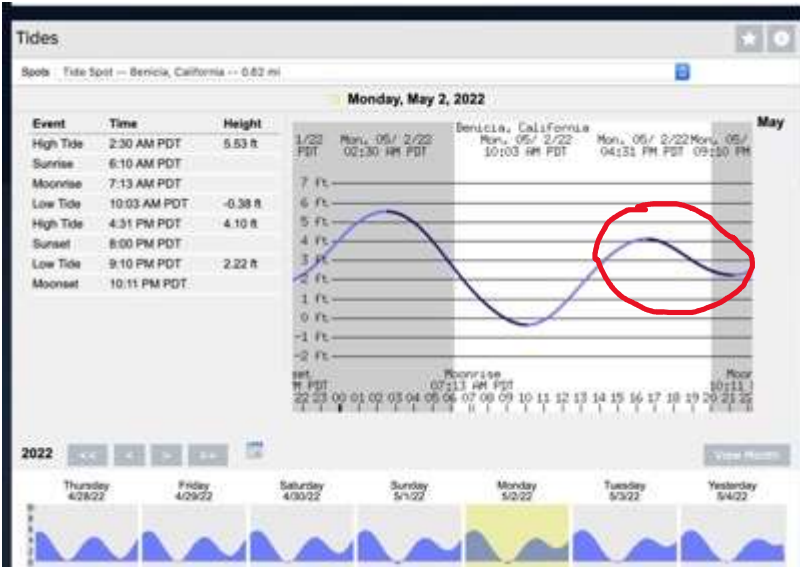
At approximately 1800 three outrigger canoes left the 9th street boat ramp for a routine practice session. Two of the canoes held a full complement of 6 and the third had 5 crewmembers. Prior to meeting for practice a few of the steerspeople made contact to discuss winds and conditions. They asked a local clubmember to go down to 9th street and check conditions. "It's not too bad," he reported. The lead coach for the session had arrived just a few minutes prior to departure, but had enough time to instruct the other two steerspersons on the intended route and plan for the cruise. "Let's not go into the Benicia Marina, but straight up to the stick," he said. "we'll re-evaluate there if we want to go all the way to the fueling dock."

Weather and tides:



Winds during practice: 20-30 mph (blue line), Gusts 20-50+ (red line)

Wind Direction: initially due west, shifting to southwest (270 – 200 degrees +/-)



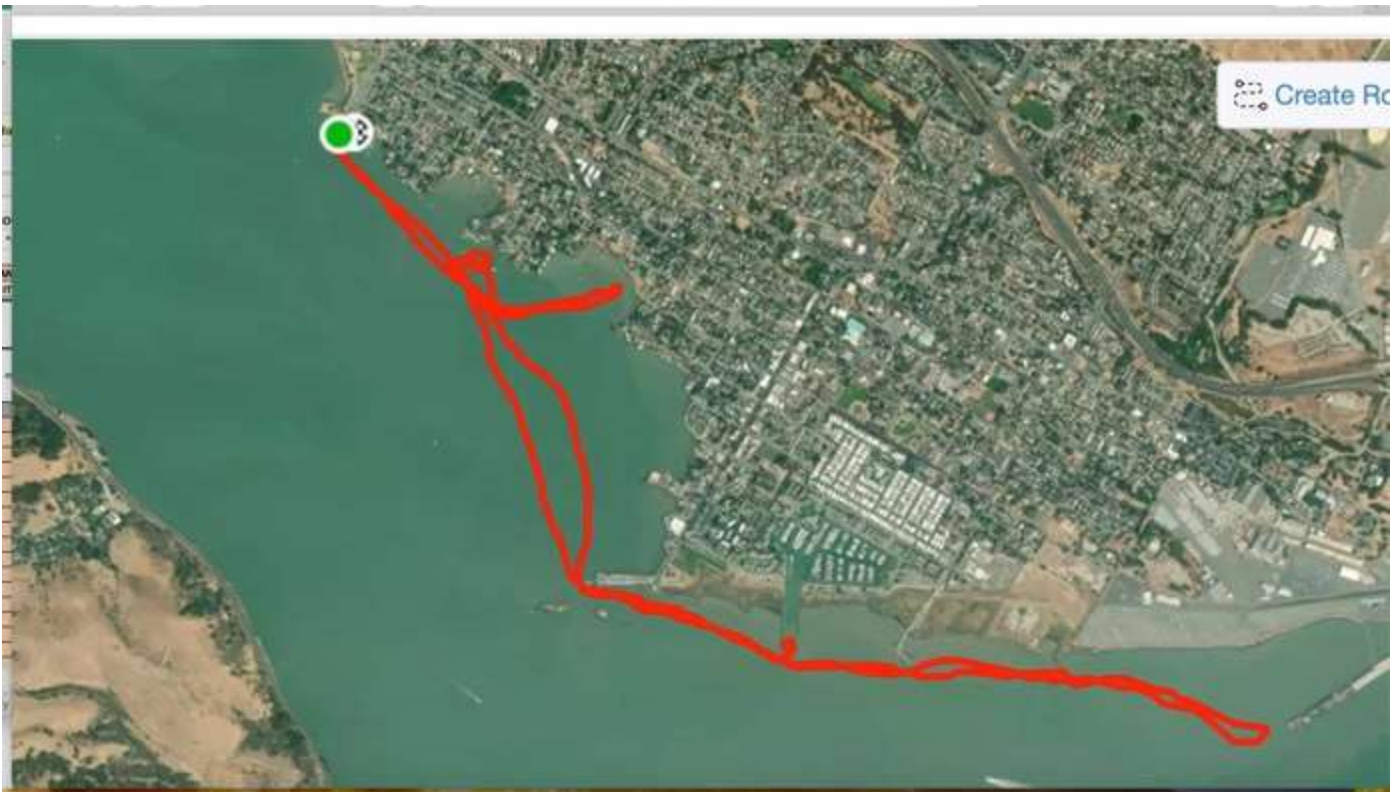
Tides for Benicia, May 2, 1800-2000

Max flood at 1631

Shifting from slack to ebb during canoe practice

Max low tide at 2110

Map of practice route May 2, 2022



Initial Leg of Practice

The initial leg of practice proceeded without anything out of the ordinary. The lead boat quickly separated itself from the other two and built a substantial lead. As the WA'A approached the Benicia Marina, the steersperson made the turn to enter the breakwater thinking they'd seen the lead boat do the same. A quick turn to get back on course and meet the other boats at the stick didn't take long. At the stick, the steerspersons asked the group about going up the the fueling dock and everyone supported the plan. "I know it's a slog getting up here," the WA'A steersperson mentioned at the fueling dock during a short rest. "I could not paddle, just steer to keep us on track." The three canoes turned west and started the return leg to 9th street. In the WA'A, I mentioned to the steersperson, "I think it's going to be a lot more of a slog getting back."

"Hug the shore and go inside the island," the lead steersperson said as they started up. They quickly got ahead of the other two boats – clearing 1st street about 0.5 miles head of the WA'A.

The paddle back and a bouncy ama:

Seat 3 (and everyone else) in the WA'A noticed the ama bouncing considerably on the return leg. Seat 3 called normal changes, but would adjust their change a stroke or two to mitigate the restless ama. Seat 3 also called out "everyone on the left" once or twice to keep the boat stable. When the WA'A rounded 1st street peir, the steersperson asked seat 4 to stop paddling and lean on the ama. The wind noise and chop made it hard to hear, but after another change, seat 4 stopped padding and leaned left on the ama. A change or so later, the steersperson told seat 5 to stay on the left, to not change with the rest of the crew. The steersperson tried to angle the canoe right, to get closer to shore, while balancing the impacts of approaching waves.

The Huli:



The huli occurred approximately 0.5 miles southeast of the 9th street dock, indicated on the map by the yellow arrow. Several things occurred in rapid succession:

The WA'A huli'd at approximately 1920

The crew counted off, although hap-hazardly

Seat 5 climbed on top of the canoe, as practiced in drills, but seat 2 couldn't.

The crew righted the canoe quickly and seat 2 got in and started bailing. The larger bailing bucket had drifted off.

Seats 3 and 4 could not climb into the canoe. They repositioned the huli rope a few times, but it was too short.

Steersperson directed seat 4 to hold the bow and seat 1 to hold down the ama, and seat 5 to get into canoe to start bailing.

Steersperson got in canoe and initiated radio contact with lead steersperson. Radio traffic was garbled and unclear. The lead canoe had, at this point, likely docked and unloaded their boat.

The third canoe – with 5 people – attempted to assist the WA'A, but lacked the horse power and struggled themselves to manoeuvre in the wind and chop.



The area the WA'A huli'd is littered with abandoned pilings from old peirs. Avoiding a collision with the pilings while trying to get the crew aboard presented conflicting priorities. (Time 1935)

With seats 1, 2, 5, and 6 in the boat, seats 3 and 4 hanging on, the crew attempted to paddle to 9th street. That

proved impossible, a second huli appeared imminent, and was quickly abandoned in favor of a small beach in a cove (orange arrow).

The steersperson, having difficulty with radio communications, at some point asked the lead steersperson (at 9th street by now) to contact the U.S. Coast Guard for assistance. This was attempted, but they were placed on hold.

By this time seat 3 had gotten back into the canoe and seat 4 began to struggle to hang on.

Steering the canoe was difficult and moving the boat required great effort. The beach seemed the best option to get seat 4 out of the water. Within 25 yards of the beach, seat 4 could stand up and get into the canoe. (time 1955)

The WA'A made it's way back to 9th street with seat 4 holding down the ama. Docking and storing the canoes went in a routine manner. (Time 2010)

The steersperson called club leadership that evening to debrief incident. Seats 2, 3, 4 and 5 met for dinner the next evening to recount the events themselves.

Lessons Learned: It's tempting to look at simple or obvious explanations of unexpected events. Hitting the easy button and writing it off as a mistake made by one person doesn't help with getting better as a team. I'd suggest focusing on **"What's right, not who's right."**

1. Risk Awareness and Managing the Unexpected

- Safety IS the top priority for the club
 - How does that play out day-to-day? SOPs, radios, crew make-up, etc.
 - Is safety *always* more important than other club values?
- Outrigger canoeing is a risky sport. Does everyone assume the same risk within the crew or team?
 - PFDs/Lifevests are still an essential element of safe canoeing.
 - In managing personal risk, are all team members aware of consequences of failure?
- Everyone has a voice in safe practices: "If you see something, say something."
 - Don't let quieter voices go unheard – sometimes it's that voice that sees a threat
 - Brief on weather and tides and consider mitigations as a team.
- Consider increased training/discussion for steerspeople and coaches on these topics.

2. Staffing canoes and building teams

- **** advises the WA'A, being narrower than the other boats, needs special attention when putting the crew together. WA'A may have been too heavy to trim properly and manage the conditions.
- "It's always hard to put the crews together. You have to balance several variables," he told us. "I'll bet the canoe was sitting low in the water and the ama wanted to come up a lot."

- Crew make-up should emphasize safety above other priorities.
3. Situational Awareness on weather and tides
 - Per ****: The west wind and ebb tide is a tough combination. Especially if the wind shifts to SW
 - Are there trigger points in canceling practice due to conditions? Who knows those trigger points?
 - Do all steerspeople monitor weather and tides with the same methods?
 4. Ability and mitigations necessary to get back into canoe
 - Everyone has to be able to get into the boat after a huli.
 - If someone needs their own huli rope, bring it to every practice.
 - “We never huli...” “It’s extremely rare to huli...” Be prepared to manage a huli everytime a boat is on the water.
 5. Communications and Radios
 - Steersmen should be well practiced at radio communication
 - Whistles seem to get lost during huli incidents, consider how to mitigate lost whistles.
 - Communication is key in any emergency: Stay calm, think clearly, and act decisively.
 6. Staying together
 - The lead coach/steersperson for that session should ensure all boats are accounted for before docking themselves.
 - Rendezvous’ at strategic locations should be a routine
 - Balancing crew horsepower should be routine

References and Resources:

[HULI RECOVERY OVERVIEW](#) – Link To BOCC Website

[NOAA Tides and Currents](#) – NOAA tide data for Benicia.

[Small Craft Advisory](#) – NOAA definition and criteria

[Sailflow](#) – archived weather data

[How to Conduct an Effective After Action Review](#) – wildland fire AAR methods

This RLS was submitted by: WA’A crew
