

Marco Island ATONs Survey Results

Waterways Advisory Committee

No 19, 2020

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Chair, Cooperative Charting Committee
America's Boating Club – Marco Island

America's Boating Club



- United States Power Squadrons®
we are
America's Boating Club®
- Nationally 27000 members, 346 clubs
 - Boating Courses & Seminars - safe boating through education
 - Vessel Safety Checks
 - Cooperative Charting (includes ATON surveys)
 - Other public service projects
 - Boating activities and social events
- Marco Island Squadron
 - Founded 1978
 - Classroom/headquarters in Chamber of Commerce Plaza
 - 160 members, >65 boats

Aids to Navigation Project

Marco Island

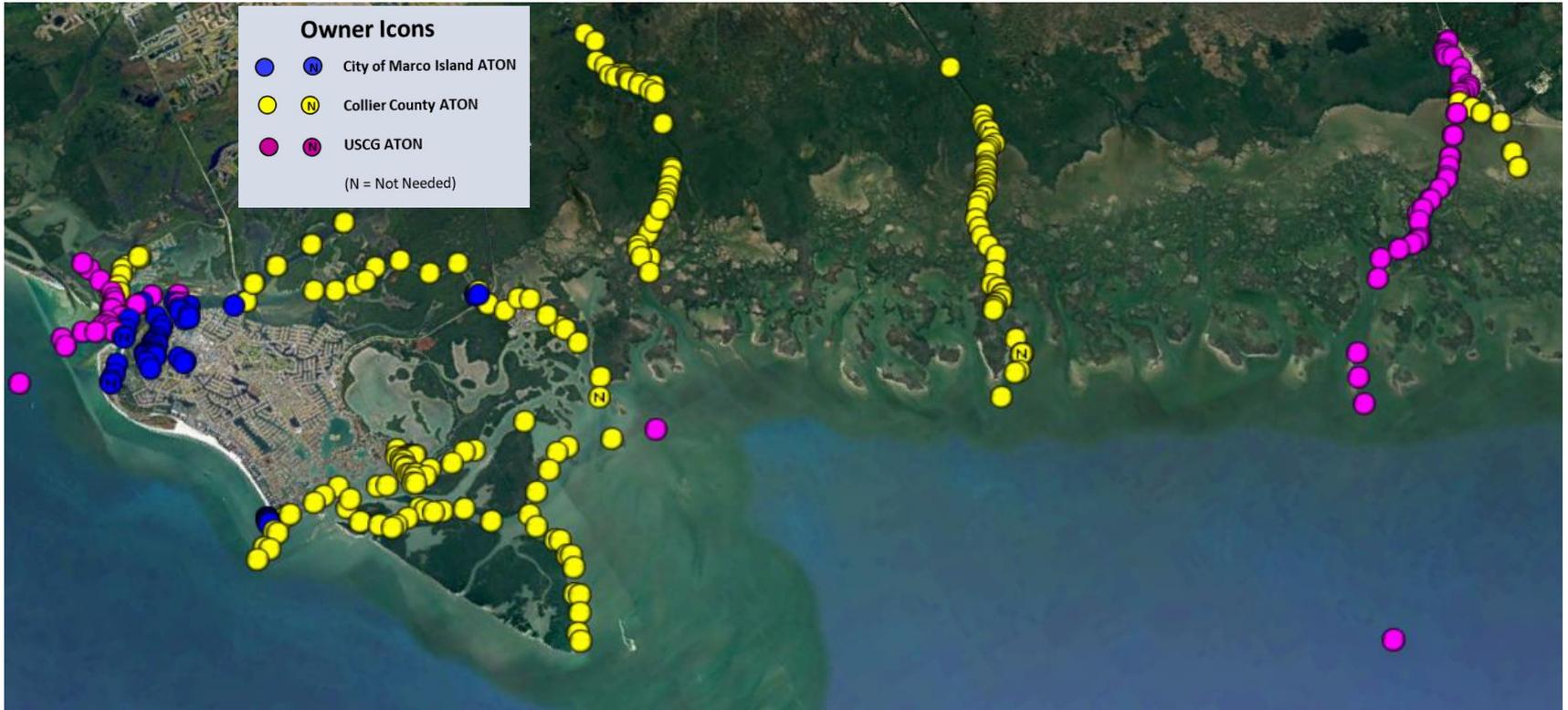
- Goals
 - Keep ATONs serviceable
 - Keep nautical charts accurate
- Activities
 - Periodically survey ATONs from Everglade City to a mile north of Marco Island
 - Report discrepancies to responsible agencies (City, County, USCG)
 - Publish survey results on marcoboatingclub.org

Aids to Navigation Project

Marco Island

- 2006: one-time survey of all water signs in Marco Island
- 2015: Initiate on-going survey of ATONs only
- 2016: Expand survey range - Everglade City to one mile North of Marco Island
- 2016-2020: Develop data presentation for website, *marcoboatingclub.org*
 - Excel file (data 2006 and 2015-2020)
 - Google Earth (kml file displaying most recent results)
 - Photos (2006-2020)

ATON Owners

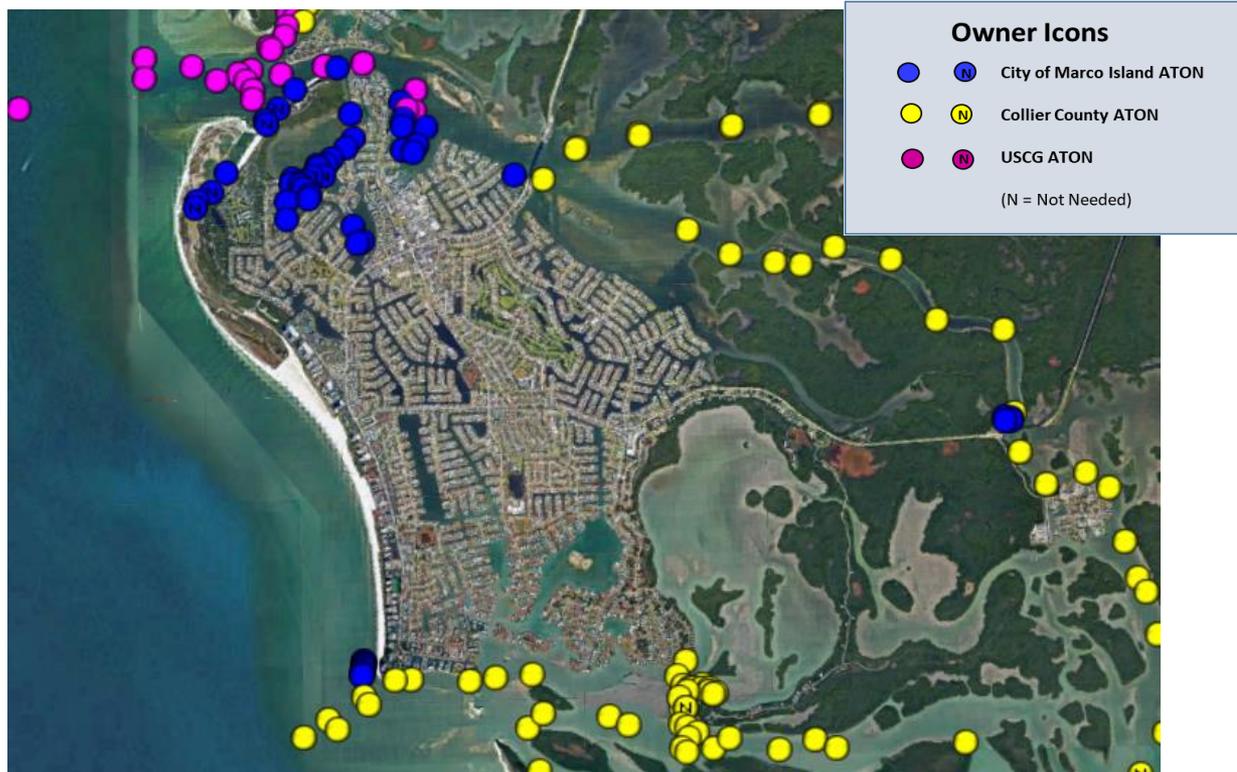


Owner	Number of Aids	Need Repair	Off station > 150 ft	Off station > 150 ft and on chart 11430
Collier County	204	49	79	48
USCG	68	1	0	0
Marco Island City	52	15	13	10
Total	324	65	92	58

Number of Aids =

- Observed
- Or on Light List

ATON Owners



- May 2000 Agreement transferred following from County to City:
“All waterways within the city limits except Caxambas Bay, Caxambas Pass, Big Marco River, Capri Pass and Horrs Island North Channel as defined in the USCG Light List and NOAA Chart 11430”

Summary

Condition of Marco Island ATONs

Surveys Jan - March 2020

Need Repair

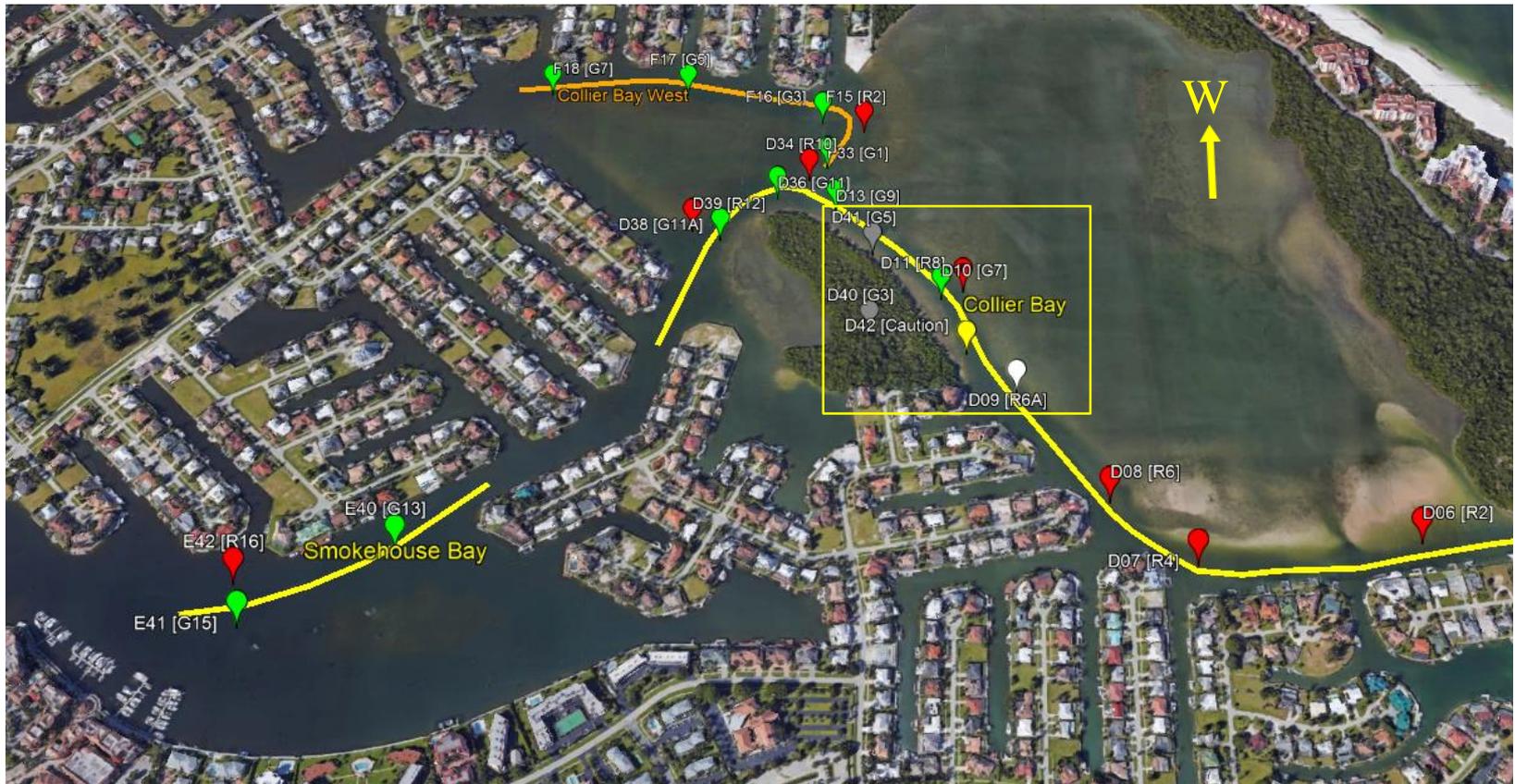
Channel Names	Channel Priority (1=High 4=Low)	Total ATONs	Need Repair	Need Repair					
				G (Good)	F (Fair)	P (Poor)	M* (Missing)	Mpo* (Piling Only)	M or Mpo but not needed
Collier Bay +Collier Bay West + Smokehouse Bay	C1	22	1	18	1	0	1	0	2
Factory Bay East + Factory Bay West	C1	7	0	7	0	0	0	0	0
Big Marco Pass	C2	5	2	1	1	1	1	0	1
Caxambas Breakwater**	C2	9	8	0	1	0	0	8	0
Marco Island Yacht Club ***	C3	1	1	0	0	0	1	0	0
Moran's Marina Channel	C3	4	3	0	1	0	1	2	0
South Point + Royal Marco Point	C4	4	0	0	0	0	0	0	4
Totals		52	15	26	4	1	4	10	7

* Not including aids marked "Not Needed"

** Need for signs on the center 7 breakwater pilings is debatable

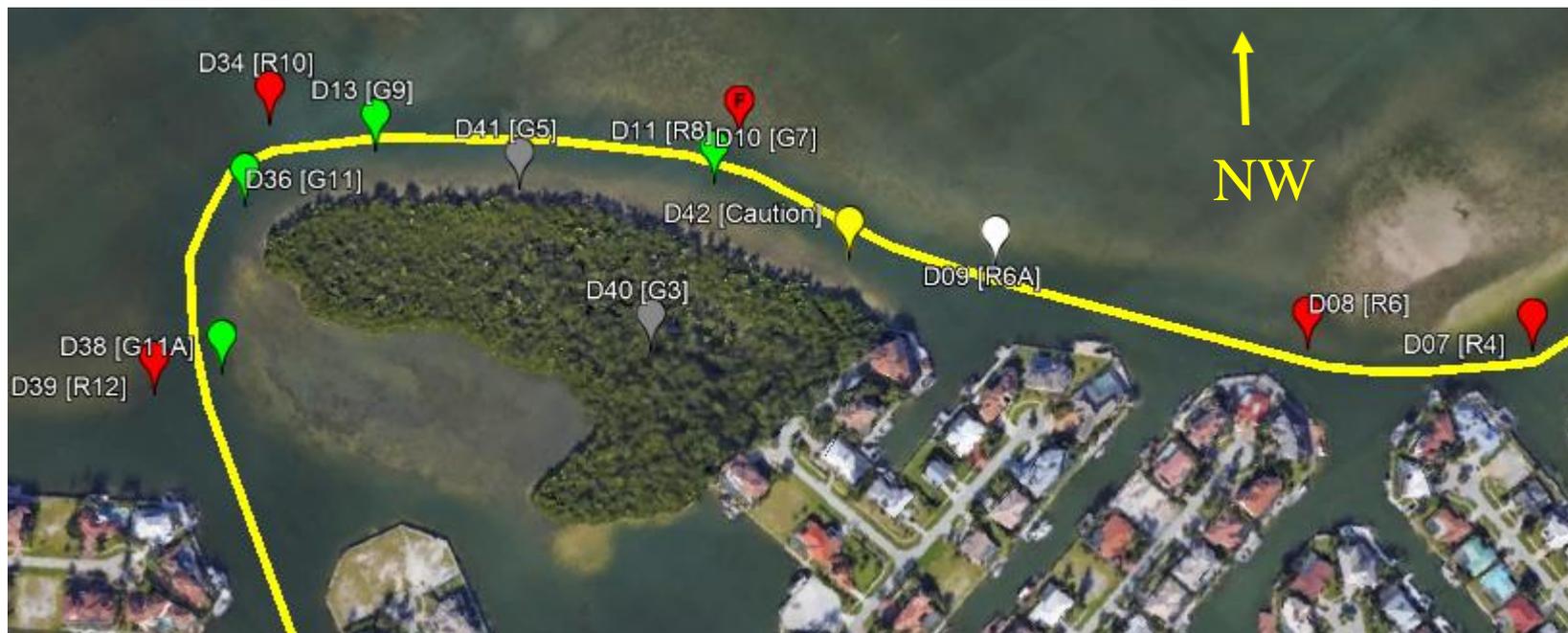
*** Need for obstruction light at MIYC is not clear

Collier Bay, Smokehouse Bay



- Three ATONs missing in Collier Bay, but two are not needed
- All others are in “Good” condition, but number contrast is low

Collier Bay



- Missing: “R6A”
- Missing but not needed: “G3” and “G5”
(On Light List but missing before 2006)

Collier Bay



- Number contrast is low; difficult to read on shady side
- These photos overstate the problem
- Next replacements should have better contrast

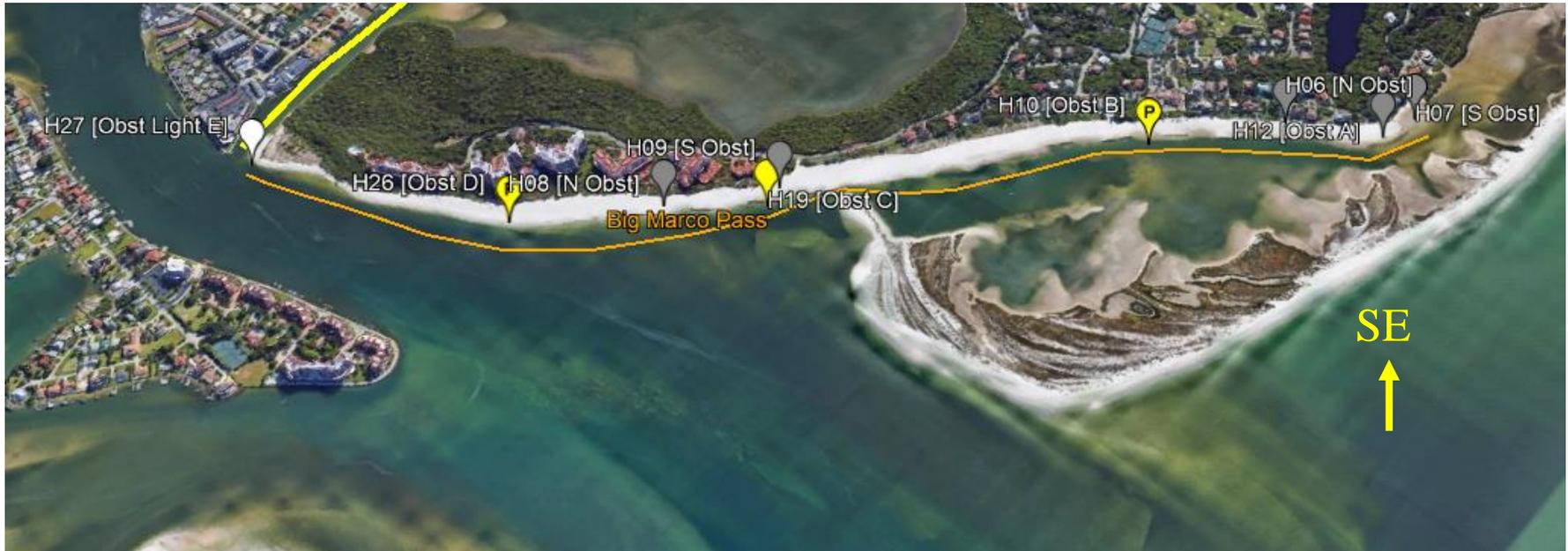
Factory Bay



- All ATONs in good shape
- Capri Pass Shoal A and B markers USPS owned

Big Marco Pass

(also South Point and Royal Marco Point)



- No longer a pass but four markers still useful
- Obst Light E (entrance to Collier Creek) missing since 2017
- Obst B: Poor condition, Obst D: Fair, Obst C: Good
- Five other obstruction markers missing but not needed (four are named “South Point” or “Royal Marco Point” on Light List)

Big Marco Pass

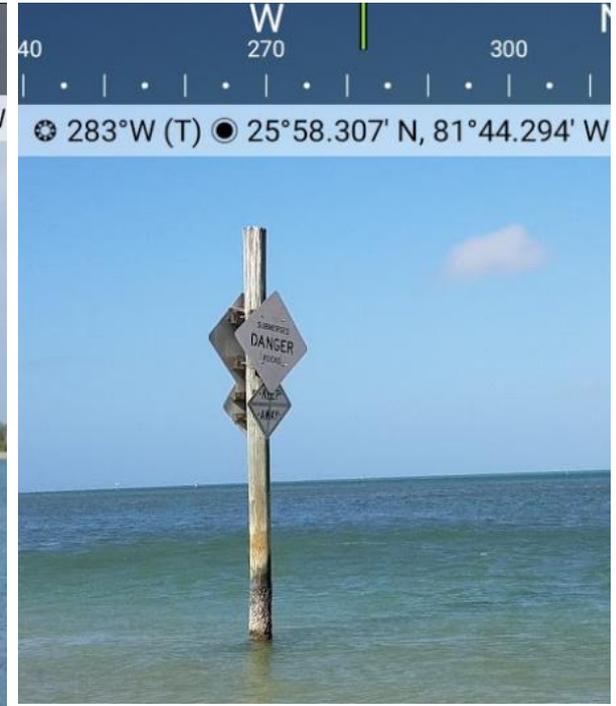
Jan 2020



Obst Light E
(2017 before Irma)
Now missing completely

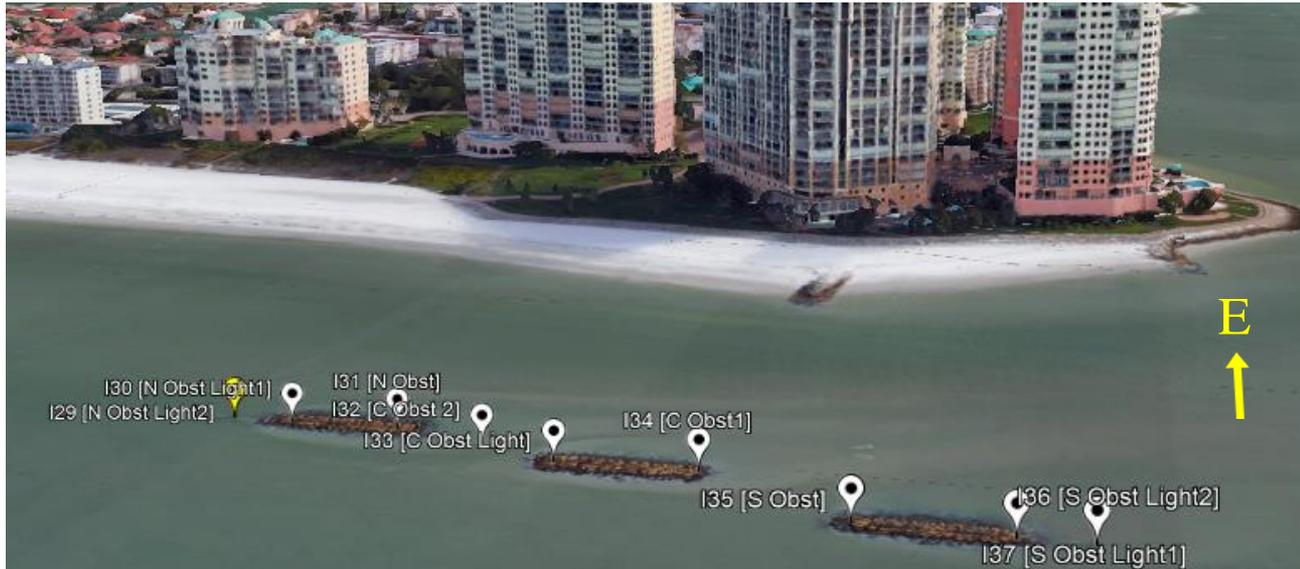


Obst B: Poor condition



Obst B: Fair condition

Caxambas Breakwater



- For years there have been 9 pilings, one at each end with sign “Rocks” and working light.
- Currently, both lights work, but sign is missing from south piling
- Light List shows 7 markers “Danger Breakwater”, 4 with lights
- Are signs really needed on other 7 pilings?

Caxambas Breakwater

May 2020



North end looking south



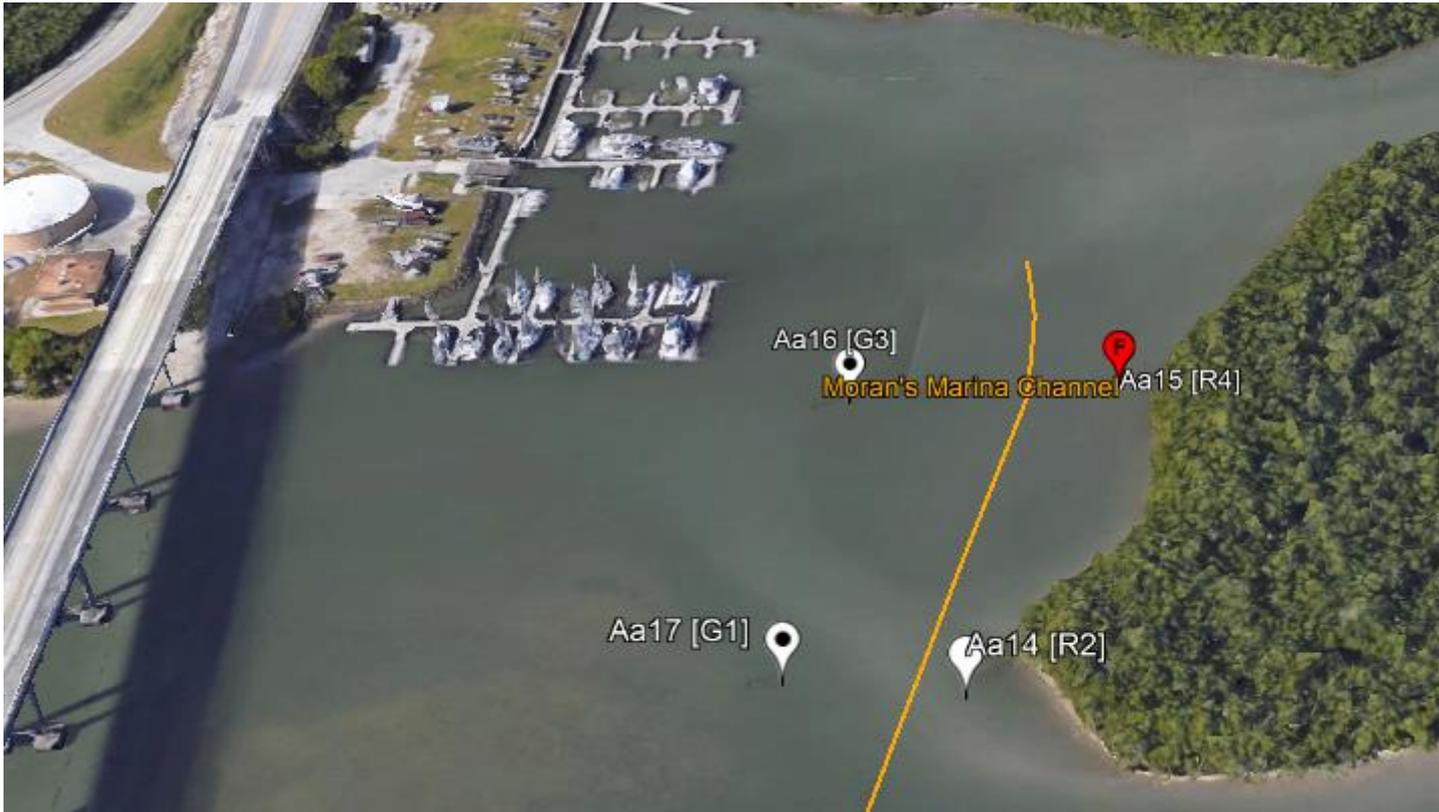
South end looking north

Marco Island Yacht Club



- Obstruction light is on Light List at MIYC
- Not there now nor in earlier surveys
- Is it needed? If so, riverside expansion will affect position

Moran's Marina Channel



- “R2” Missing completely
- “G1”, “G3” Pilings only
- “R4” Fair condition

Moran's Marina Channel

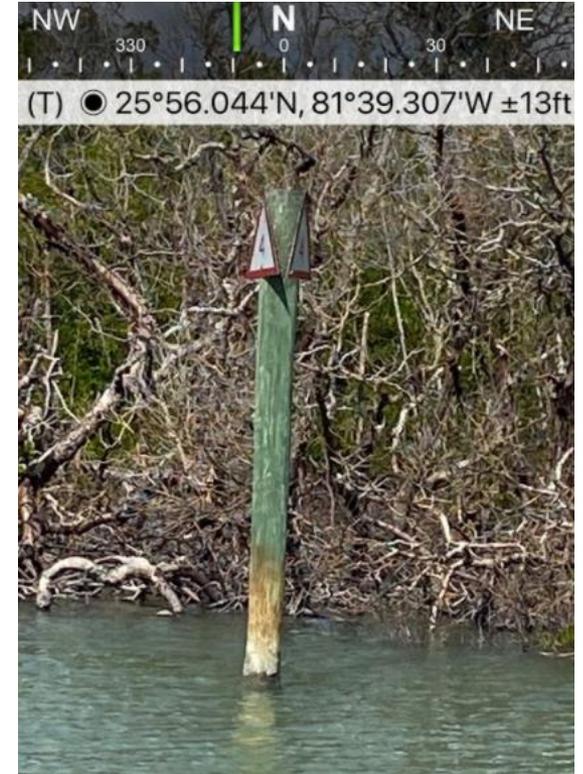
Jan 2020



“G1” Piling only



“G3” Piling only



“G4” Fair (faded, non-reflective background)

Summary

Marco Island ATONs

- City of Marco Island responsible for 52 ATONs
 - 15 need repair
 - 1 Poor condition
 - 4 Missing completely (1 may not be needed)
 - 10 Piling only (7 may not be needed)
 - 13 are off-station >150 ft. compared to USCG Light List
 - 10 of these are on chart 11430
 - Correction requires USCG action (none is in sight)
- Detailed ATON survey info:
 - <https://marcoboatingclub.org/aids-to-navigation>