### Abandoned Crab Trap Removal Project – February 2019 San Antonio Bay Area Cleanup Areas



POC	Bay Section	Description
А	Blackberry Shore	Blackberry Shoreline from Fishermans Cut to Army Cut
В	SW Matagorda Bay	Little Jetties, north to Powderhorn, and south into Sunday Cove and Fish Pond; East to
		Pass and Pennisula Shore, Big Jetty, to Breakwater
С	Bayucos N Shore	Chris's Cut, along Bayucos Shore to tip Grass Island
D	Barroom - BD Reef	Barroom Bay, Bill Day Reef, ES Bay til Army Channel
E	Suluria	Saluria west to Bayucos Point and south Grass Island and Farwell Island
F	Lighthouse Cove	Saluria west to Bayucos Point and south Grass Island and Farwell Island
G	Dewberry Island	From Army Cut west to Charlies Cut
Н	Powderhorn	Powderhorn Lake, including Coloma Creek
Charlie's		
I	Shoalwater / Lagoon	Shoalwater Bay west to Steamboat; Lagoon east to Army Cut
J	North West ES Bay	North half of West ES Bay, from Charlies Cut to Steamboat chain;
IJ	South West ES Bay	South Half of West ES Bay from South Pass shore to Contee entrance
К	East Lakes	Pringle, Contee & South Pass
L	West Lakes & SE SA Bay	Long Lakes and other Lakes to Panther Point; SE Bay quandrant
Ν	NE SA Bay	Turnstake north, including Welder Flats, to Seadrift and west to Victoria Barge Canal
Austwell /	Refuge	
М	Guadalupe Bay	Guadalupe Bay and Mission Lake; River
Ν	Hog Bayou	Hog & Goff Bayous
0	Hynes Bay	Hynes Bay south to ICWW & east to VBC
Р	W SA Bay	South of ICWW, west to 2nd Chain, east to Panther Lake
Q	Mesquite Bay	2nd chain west to third chain
S	Carlos Bay	
Т	St Charles Bay	

#### Results

B Powderho B SW Matag C Bayucos N D Barroom - E Suluria F Lighthouse G Dewberry H Powderho Charlie's I Shoalwate I Shoalwate I Shoalwate J South Wes JJ South Wes JJ South Wes L West Lake L West Lake L West Lake L West Lake L NA NE SA Bay N Turnstake N Back to Tu N Back to T	Section Oberry Shore Derhon Shore Matagorda Bay	Description	Captain / Crew	Traps	Deposited					
A     Blackberry       B     Powderho       B     SW Matag       C     Bayucos N       D     Barroom -       E     Suluria       F     Lighthouse       G     Dewberry       H     Powderho       Charlie's     I       I     Shoalwate       J     North Wes       JJ     South Wes       L     West Lake       L     West Lake       L     N       N     NE SA Bay       N     Turnstake       N     Back to Tu       M	derhon Shore			maps	Deposited	Mat	<u>Aransas</u>	# Boats	<u>Hrs</u>	Voluntee
B     SW Matag       C     Bayucos N       D     Barroom -       E     Suluria       F     Lighthouse       G     Dewberry       H     Powderho       :harlies     Shoalwate       I     Shoalwate       J     North West       JJ     South West       JJ     South West       JJ     South West       JJ     South West       L     West Lake       L     N       N     NE SA Bay       N     Back to Tu       ustwell /Refuge     M       Guadalupi     M       M     Guadalupi       M     Hog Bayou       O     Hynes Bay       O     Hynes Bay       O     W SA Bay       PQT     Mesquite       PQT     For arises		Blackberry Shoreline from Fishermans Cut to Army Cut	Karen Barton / Donald Goldman	5	TPWD			1	4	2
B     SW Matag       C     Bayucos N       D     Barroom -       E     Suluria       F     Lighthouse       G     Dewberry       H     Powderho       :harlies     Shoalwate       I     Shoalwate       J     North West       JJ     South West       JJ     South West       JJ     South West       JJ     South West       L     West Lake       L     N       N     NE SA Bay       N     Back to Tu       ustwell /Refuge     M       Guadalupi     M       M     Guadalupi       M     Hog Bayou       O     Hynes Bay       O     Hynes Bay       O     W SA Bay       PQT     Mesquite       PQT     For arises		POC Little Jetties north to entrance of Powderhorn Lake	A Berger / Doug Berger	3	TPWD	3		1	3.5	2
D Barroom - E Suluria F Lighthouse G Dewberry H Powderho charlie's I Shoalwate I Shoalwate I Shoalwate J North Wes JJ South Wes JJ South Wes JJ South Wes L C Vest Lake L West Lake L West Lake L N NE SA Bay N Turnstake N Back to Tu N Back t		Little Jetties, south into Sunday Cove and Fish Pond; East to Pass	Doug Berger/Brenda, Cameron & Kolton	7	TPWD	7		1	3.5	4
D Barroom - E Suluria F Lighthouse G Dewberry H Powderho charlie's I Shoalwate I Shoalwate I Shoalwate J North Wes JJ South Wes JJ South Wes JJ South Wes L C Vest Lake L West Lake L West Lake L N NE SA Bay N Turnstake N Back to Tu N Back t	cos N Shore	Chris's Cut, along Bayucos Shore to tip Grass Island	Allan Berger and Doug B.	8	TPWD			1	2	2
E     Suluria       F     Lighthouse       G     Dewberry       H     Powderny       I     Shoalwate       I     Shoalwate       J     North West       JJ     South West       JJ     South West       JJ     South West       L     West Lake       L     N       N     NE SA Bay       N     Back to Tu       N     Back to Tu       Ustwell /Refuge     M       M     Guadalup       M     Guadalup       M     Hog Bayou       O     Hynes Bay       O     Hynes Bay       O     W SA Bay       PQT     Mesquite       PQT     Farlow SA Bay	oom - BD Reef	Barroom Bay, Bill Day Reef, ES Bay til Army Channel	Bob Hill / Chris Hansel	35	TPWD			1	7	2
G Dewberry H Powderho Charlie's I Shoalwate I Shoalwate J North Wes JJ South Wes JJ South Wes JJ South Wes JJ South Wes L  K Mat Island L West Lake L  K Mat Island L West Lake L  K Mat Island L  K  Mat Island L  K  Mat Island L  K  Mat Island L  K  Mat Island L  K  Mat Island L  K  Mat Island L  K  Mat Island L  K  Mat Island L  K  K  Mat Island L  K  Mat		Saluria west to Bayucos Point and south Grass Island and	Dain Whitworth / David	9	TPWD			1	5	2
G Dewberry H Powderho Charlie's I Shoalwate I Shoalwate J North Wes JJ South Wes JJ South Wes JJ South Wes L West Lake L West Lake L U N NE SA Bay N Turnstake N Back to Tu N Back to T	house Cove	Farwell Island Saluria west to Bayucos Point and south Grass Island and	Berger Richard Porche / Charlie	25	TPWD			1	8	2
H Powderho charlie' I Shoalwate I Shoalwate J North Wes JJ South Wes JJ South Wes JJ South Wes L West Lake L West Lake L West Lake L NE SA Bay N Iurnstake N Back to Tu Back to Tu Back to Tu Back to Tu N Back t		Farwell Island	Kouba					-	0	-
Charlie's       I     Shoalwate       I     Shoalwate       J     South Wee       JJ     South Wee       JJ     South Wee       JJ     South Wee       L     West Lake       L     Image: Comparison of the second of	-	From Army Cut west to Charlies Cut	Not sufficiently coverd by boat							
I       Shoalwate         I       Shoalwate         J       North Wes         JJ       South Wes         JJ       South Wes         JJ       South Wes         L       West Lake         L       Turnstake         N       Back to Tu         N       Back to Tu         Usstwell /Refuge       M         M       Guadalup         M       Hog Bayou         O       Hynes Bay         O       W SA Bay         Q       Mesquite         S       Carlos Bay         PQT       Hesquite	lerhorn	Powderhorn Lake to Coloma Creek Bridge	Brian Franck & Fischer	7	TPWD	7		1	4	2
I     Shoalwate       J     North Wei       JJ     South Wei       JJ     South Wei       IJ     South Wei       K     Mat Island       L     West Lake       L     West Lake       L     N       N     NE SA Bay       N     Turnstake       N     Back to Tu       Justwell /Refuge     M       M     Guadalupi       M     Guadalupi       M     Hog Bayou       O     Hog Bayou       O     Hog Bayou       O     Winse Bay       O     Winse Bay       Q     Mesquite       S     Carlos Bay       PQT     PQT										
J North West JJ South West JJ South West L West Lake L West Lake L N NE SA Bay N Turnstake N Back to Tu N Back to Tu Starler M Guadalupe M	lwater / Lagoon	Shoalwater Bay west to Steamboat; Lagoon east to Army Cut		31	Charlie's			1	5	3
JJ South West JJ South West K Mat Island L West Lake L I N NE SA Bay N Turnstake N Back to Tu N Back to Tu N Back to Tu Stevell /Refuge M Guadalup M Guadalup M Guadalup M Hog Bayou O Hynes Bay O Hynes Bay O Hynes Bay O Hynes Bay O Mesquite S Carlos Bay PQT PQT	lwater / Lagoon	Lagoon / Shoalwater Sunday Cleanup	Bob Hill	2	Charlie's			1	5.5	1
JJ South West K Mat Island L West Lake L B N NE SA Bay N Turnstake N Back to Tu N Back to Tu Back to Tu Back to Tu Back to Tu N Back to Tu Sack to Tu Hog Bayou O Hynes Bay O Hynes Bay O Hynes Bay O Hynes Bay O W SA Bay P W SA Bay P Q Mesquite S Carlos Bay PQT	h West ES Bay	North half of West ES Bay, from Charlies Cut to Steamboat chain	Brent & Melissa Harrell, Charlotte Fitzgerld, Lila & Hunt Harrell	13	Charlie's			1	4	5
K Mat Island L West Lake L N SA Bay N N Turnstake N Back to Tu N Back to Tu N Back to Tu Streen M Guadalupe M Guad	h West ES Bay	South Half of West ES Bay from South Pass shore to Contee entrance	ICF Pistone, Grand, Alejandro	14	TPWD			1	5	3
L West Lake	h West ES Bay	Shoreline Contee to South Pass	A Berger, Laura Picariello, Ashley Berger	37	TPWD			1	5	3
L West Lake	Island East Lakes	Pringle, Contee & South Pass	Mark Saddler / Rod Graci	22	Charlie's			1	5	2
L N NE SA Bay N Turnstake N Back to Tu N Back to Tu stwell /Refuge M Guadalupi M Guadalupi M Hog Bayou O Hynes Bay O Hynes Bay	Lakes & SE SA Bay	Long Lakes and other Lakes to Panther Point- shoreline	Smisek, Caldwell - 2 boats		TPWD			2	5	7
N NE SA Bay N Turnstake N Back to Tu stwell /Refuge M Guadalup M Guadalup M M M M M Hog Bayou O Hynes Bay O Hynes Bay O Hynes Bay O W SA Bay Q Mesquite S Carlos Bay PQT PQT	LUNCS & JE SA Ddy	SE Bay quandrant	Not sufficiently covered	0	1 F VV D			0	0	0
N NE SA Bay N Turnstake N Back to Tu N Back to Tu Sack			by boat	-	ol				-	
N Turnstake N Back to Tu stwell / Refuge M Guadalup M Guadalup M M M M M Hog Bayou O Hynes Bay O Hynes Bay O Hynes Bay O Mesquite S Carlos Bay PQT PQT		North end near steamboat South Pass area	Rob and Sharon Snider TPWD 2-21	5 9	Charlies's Charlies			1	2	2
N Turnstake N Back to Tu stwell / Refuge M Guadalup M Guadalup M	A Davi		Not sufficienty covered	9	Charlies			0	0	0
N Back to Tu N Back to Tu Istwell /Refuge M Guadalupe M M M M M Hog Bayou O Hynes Bay O Hynes Bay O Hynes Bay O Hynes Bay O Mesquite S Carlos Bay PQT PQT	·	Turnstake north, including Welder Flats, to Seadrift and west to Victoria Barge Canal-see below	by boat- see below							
N Back to Tu stwell /Refuge M Guadalup M M M Hog Bayou O Hynes Bay O Hynes Bay O W SA Bay Q Mesquite S Carlos Bay PQT PQT	stake west to Shore	-	ABerger, Crane, Snider	28	Charlies			1	7	3
Istwell /Refuge M Guadalups M Guadalups M Guadalups M Guadalups M Guadalups M Guadalups M Hog Bayou M Hog Bayou M Hog Bayou M Hog Bayou M SA Bay M SA Bay M SA Bay M SA Bay M SA Bay	to Turnstake 2/23	continue	Allan & Brigid Berger	23	Charlies			1	5	2
M Guadalup M Guadalup M Hog Bayou O Hynes Bay O Hynes Bay O P W SA Bay P W SA Bay P Mesquite S Carlos Bay PQT PQT	to Turnstake 2/24	continue	Allan & Brigid Berger	26	Charlies			1	5	2
M Hog Bayou M Hog Bayou O Hynes Bay O Hynes Bay O P W SA Bay P W SA Bay P W SA Bay P Q Mesquite S Carlos Bay PQT										
M Hog Bayou N Hog Bayou O Hynes Bay O Hynes Bay O Y SA Bay P W SA Bay P W SA Bay P Q Mesquite S Carlos Bay PQT	lalupe Bay	Guadalupe Bay and Mission Lake; River	Jeff Crawford & Tina, Glenn Strickland 2/15	10	Charlies			1	3	3
M Hog Bayou O Hynes Bay O P W SA Bay Q Mesquite S Carlos Bay PQT PQT		Continue Crawford 2-20	Jeff Crawford, Glenn Strickland	11	Charlies			1	3	2
N Hog Bayou O Hynes Bay O P W SA Bay Q Mesquite S Carlos Bay PQT PQT		Continue Crawford and Glenn Strickland 2-21	Crawford, Strickland	21	Charlies			1	7	2
O Hynes Bay O P W SA Bay Q Mesquite S Carlos Bay PQT PQT		Guadalupe River from Calhouns, into Guadalupe Bay	Curtis Gosnell, Walter Brown & Billy Penney- GBRA	40	Austwell			1	6	3
O Hynes Bay O P W SA Bay Q Mesquite S Carlos Bay PQT PQT		Upper SA Bay	Jeff Crawford crew	12	TPWD					
O G G G G G G G G G G G G G G G G G G G	Bayou	Hog & Goff Bayous	GBRA Penney and Brown	40	Austwell			1	2.5	3
O G G G G G G G G G G G G G G G G G G G										
O P W SA Bay Q Mesquite S Carlos Bay PQT PQT	s Bay	Hynes Bay and N SA Bay from Seadrft	ABerger, Bridid , Ortego JPistone, Dodson, Tunnell	30 20	Austwell Austwell			1	4.5 4.5	3
P W SA Bay Q Mesquite S Carlos Bay PQT PQT			ABerger, Rusty & Denise Crane 2-21	45	Austwell			1	7	3
P W SA Bay Q Mesquite S Carlos Bay PQT PQT		McDowell Point	Colt S - 2/23	11				1	2	2
S Carlos Bay PQT PQT	Вау	South of ICWW, west to 2nd Chain, east to Panther Lake	not sufficiently covered by boat	0				0	0	0
S Carlos Bay PQT PQT		North of the oil platform west of Panther Reef	Troxler - TPWD 2/22	6	Charlies			1	1	3
S Carlos Bay PQT PQT	quite Bay	2nd chain west to third chain	see below							
PQT			covered by Aransas tpwd							
PQT		Mustang Lake , Rattllesnake 2-19 (Ayres 3)	USFW: Stetter & Sanspree	24	Refuge		3	2	3	5
		Mesquite, Ayres, W SA Bay Pier to Panther 2-20	USFW: Harrell, Sanspree, Affeldt	73	Refuge		36	3	6	10
PQT		W SA Bay 2-21	S Scott, Dan Reuscher- USFW	9	Refuge			1	4	5
PQT			Troxler Stack at Cedar lake- pu by Berger/Crane	18				1	3	2
		West Shore SA Bay 2/24 McDowell pt	Colt Sansfree	11				2	2	1
T St Charles		Circle St Charles Shore	Ed Boyer Crew	8	Goose Island		8	1	6	2
T Port Bay	arles Bay	_	Scott Affeldt John Kisalus crews	5 10	Goose Island		5 10	1 2	3 3.5	4
	•									
Preclosure Dock side	Вау									
	Bay osure		A Berger Berger threw in bin	10 1	TPWD TPWD					
	Bay osure		A Berger Berger threw in bin Total	1	TPWD TPWD	17	62	43	163.5	111



Legend: White circles with X denote recovered crab trap. Note: not all areas cleaned utilized the marking technology. Black dots represent aerial siting of traps or clusters of traps.

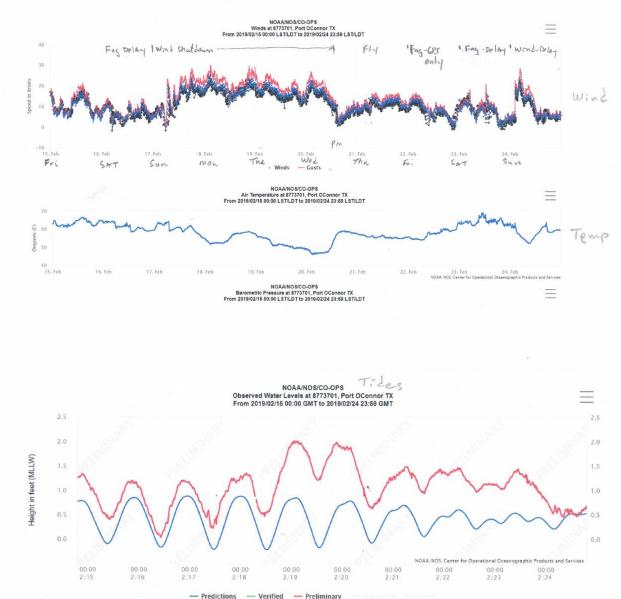
429 traps marked as picked up.

#### Weather and Tide Summary

-Fog and wind a consistent problem:

- 1. wind shutdown effort Sun Wednesday AM
- 2. Fog delayed start and reduced visibility on most days
- 3. Generally higher tides made access to shoreline traps easier

Crab Trap Closure Weather Summary – Feb 15-Feb 24, 2019





#### **Aerial Reconnaissance Plan**

Planned: Two 3 hour (1 fuel tank) flights over San Antonio and Aransas Bay systems

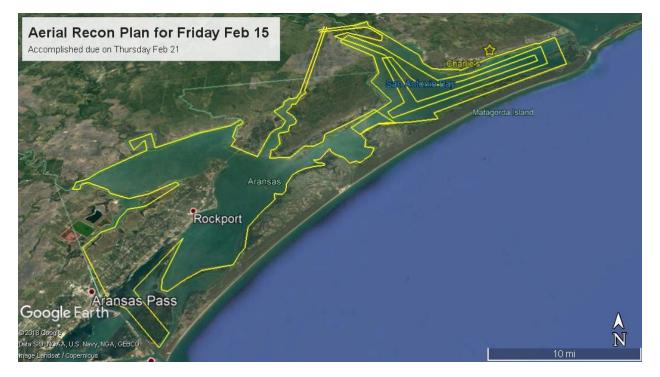
The recon flight from Daniel Flying Service was originally scheduled for the first closure day, Friday Feb 15, but flown on Thursday 2/21.

- mechanical issue prevented on Friday
- Weather issues prevented on Saturday
- then, Pilot unavailable until Thursday Feb 21

Pilot: Glenn Priddy, Victoria

Spotter: Brent Ortego

Note: By Thursday, a significant number of traps were already recovered.



#### **Cost Summary**

Crab Trap Removal Pro	gram Expenses by SAE	3P	
<b>Celebatory Party</b>			
Hoopers Bar & Grille	Food and Beverages		\$ 900.00
Jack Motley	Entertainment		\$ 500.00
Compadres Ink	Banner	9	\$ 81.19
Amount Due			\$ 1,481.19
Crab Trap Removal Pro	gram		
Daniel Flying Service	Aerial recon		\$ 1,040.00
Outburst Advertising	Caps for volunteers		\$ 1,190.00
Amazon	trap retrieval hooks		\$ 243.00
Action welding	trap retrieval hooks		\$ 140.20
Amazon	trap rope snipers		\$ 89.70
Amount Due to SABP			\$ 2,702.90
Other expenses by GBR	T via grant from Alask	an B	rewing CODE
3 gps	3 @\$250	9	\$ 750.00
gloves	100 @ \$10		\$ 1,000.00
gas Cards	<u>30 @\$50</u>		\$ 1,500.00
Estimated Expenses - GBRT			\$ 3,250.00
Total Budget			\$ 7,434.09

#### Sponsors

Program: \$7600 grant sought by GBR Trust from Alaskan Brewing Coastal CODE

Party: Funded by GBRA

Bins at TPWD POC, Charlie's Bait Camp, and Austwell Boat Ramp, arranged by TPWD and donated by Waste Management



Photo Gallery available at <a href="http://www.sabaypartnership.org/">http://www.sabaypartnership.org/</a>

#### **General Timeline**

- 1. Debrief / initial planning for next year April / May
- 2. Seek Funding ASAP
- Nov notice to volunteers hold the date; early route selection and data collection signup/training
  - a. Confirm closure period: Feb 17-26, 2020?
  - b. obtain equipment , Caps; plan party
  - c. aerial survey planning
- 4. Jan route defination and final signup to volunteers; press releast local newspapers
  - a. TPWD confirm bins
  - b. recruit groups (eg, cca, mctmn, gbra, ...)
- 5. Feb
  - a. Week prior to closure route assigments and final plans
  - **b.** Feb 17 aerial recon
  - c. Feb 18 main event POC / ES Bay and Party
- 6. March
  - a. press release re results
  - b. debrief and improvement plan

#### **Recommendations for 2020:**

- 1. **Aerial Recon**: Plan single flying the Friday Plan for both SABAY and Aransas Bay systems on the initial closure Friday.
  - a. Pilot Markings
    - i. traps with buoys, likely visible to boat
    - ii. traps w/o buoys, likely not visible to boat
- 2. **Volunteer Data Collection:** Strongly encourage volunteers to mark traps with a person assigned data responsibilities.
  - a. Signup and software training earlier ask Brigid to be trainer.
  - b. Data to be input:
    - i. Location of removed trap
    - ii. Trap owner from Tag, or "No tag"
    - iii. location characterization of removed trap:
      - 1. on land
      - 2. at shoreline
      - 3. in water
    - iv. Entrapment in traps removed- yes for all that apply
      - 1. blue crabs
      - 2. stone crabs
      - 3. diamondback terrapin
      - 4. sea turtle
      - 5. fish
    - v. Attach photo of items of significance or interest
    - vi. Traps not removed because:
      - 1. buried, or otherwise not retrievable
      - 2. inaccessible due water depth / mud
      - 3. inspected, but not a trap
      - 4. aerial marking could not be found
    - vii. Encourage volunteer photos of the volunteers in action and of catch of interest
    - viii. improve data sheet, including e-submittal
- 3. **Improve Logistics**: add Bins at Seadrift and Refuge; consider staging from Matagorda Shoreline? crushing? utilize airboats.
- 4. Develop **associated cleanup effort** of on shore traps, especially on remote Matagorda Island Shoreline and/or Marsh
  - a. Possible timing: with GLO Beach Cleanup programs
    - i. Spring Coastwide Cleanup: Saturday, April 13, 2019 –too soon to plan; earliest practical date would be mid- May
    - ii. Fall effort in September , generally associated with National Estuaries week
  - b. Effort might involve 25 volunteer transported to Matagorda Shoreline (South Pass to Panther Point to Ayres Point)
  - c. Walk / paddle beach and marsh to locate / stage / remove (?) truly derelict traps

- i. obtain tpwd permission
- **ii.** usfw and airboat support
- d. Potential Costs

i.	Transport 5 boats @ \$300	1500
ii.	kayak rental 5 @ 100	500
iii.	gloves and tools	300
iv.	dinner afterward	1000
v.	airboat rental	1000

- vi. aerial recon 1000
- vii. working est. 5000
- 5. Increase participation by area CCA Chapters target 50 boat days for period
- 6. Partner with TPWD and SeaGrant to establish relationship with commercial crabbers
  - a. background on regs: number of traps, tagging, frequency run?
    - b. enforcement statistics?
    - commercial communities: current relationships?, differences between Galveston and Seadrift, or Palacios? where is appropriate contact? common goals to protect resource. Options?
    - d. Note: workshop planned with ICF and Houston Zoo on Apr 3 to
- 7. Work with USFW re signage of restricted trapping areas on Matagorda Island marshes
- 8. Develop and fund **study** of recovered abandoned traps trends since program inception and of root causes of continue occurrence. recommend changes. Such a study might address:
  - a. Abandoned Crab Trap trends of traps removed, and the effort involved
  - b. Commercial Harvest
    - i. How many commercial traps are in SA / Aransas Bays, now and in past years
    - ii. What is the harvest
    - iii. what are TPWD crab abundance trends for SABay / Aransas Bay?
    - iv. what have been the enforcement activities
  - c. Analysis trap location data from 2019
    - i. characterize to the extent practical

ii. recommend data collection protocols that would be more informative (but efficient), eg

- 1. Mark actual location
- 2. Characterize location: on land, at shore, in water, in place with other traps?
- 3. Tag: yes, no, owner name
- 4. entrapped: crabs, fish, turtles
- 5. option to attach photo(s)

iii. review results of aerial surveys from 2019 (and previous years if it can be located)

iv. recommend improvements and /or additional reconnaissance needs to identify traps missed ( eg, submerged, no floats)

- d. Characterize causes of abandoned traps, eg
  - i. Weather events
  - ii. Crabber practices
  - iii. recreational boat incident (cut float line)
- e. Estimate the cost of abandoned traps to the industry, the public, and the environment
- f. Recommend improvements that would result in continually decreasing occurrence of abandoned traps
- 9. Work with potential partners in adjacent bays to strengthen their programs
  - a. Aransas Bay- identify champion / group to coordinate volunteer effort
  - b. Lavaca Bay Foundation try again
  - c. Matagorda Bay Foundation for Palacios area

# Press Release to local newspapers: Victoria Advocate, Port Lavaca Wave, POC/Seadrift Dolphin Talk 2/26/19 version (statistics finalized 2/28 and highlighted figures have since been updated)

#### Crab Trap Removal Effort Cleans Local Bays of Derelict Crab Traps

TPWD closes the bays to crabbing for 10 days each February requiring that all traps be removed. All remaining are assumed derelict and subject to removal. Derelict traps continue to entrap and kill crabs, fish and turtles.

The San Antonio Bay Partnership coordinates a systematic effort where volunteers signup to clean an assigned area of traps. This year, 20 areas centered around San Antonio Bay were identified, from Powderhorn Lake to St Charles Bay. The effort removed 769 traps from the three TPWD Coastal Fisheries Systems (San Antonio, Aransas, and Matagorda Bays).

The effort involved 42 boat days and 104 volunteer days from several organizations representing US Fish and Wildlife Service Aransas National Wildlife Refuge, TPWD Coastal Fisheries, CCA chapters in Port O'Connor/Victoria/ San Antonio/Houston/Austin; the Guadalupe Blanco River Authority; the International Crane Foundation, the Mid-Coast Texas Master Naturalists, the Mission-Aransas NERR, the San Antonio Bay Foundation, and other individuals who appreciate the Bay.

SABP Chairman, Allan Berger, states: "The effort was a great success! Participation was up from last year and new technology was employed to improve efficiency. While the technology helps, it's still about boats/volunteers and eyes on the water. We recovered fewer traps than last year, likely because we did not have another Harvey moving traps, but 769 traps is both a significant accomplishment and an indication that we have more work to do to clean the Bays."

The effort used, for the first time, USFW's capabilities to mark abandoned traps from the air and to make that data available to volunteers on the water. Unfortunately, mechanical and weather difficulties delayed the aerial survey until mid-closure when many traps were already removed. None-the-less, the aerial survey identified traps missed from the water that were then able to be located. Also, volunteers who participated in the technology were able to mark the location of traps removed. Berger continues "The data reveals that many of the derelict traps are on the shoreline, likely the result of weather events. However, a significant number appear to be in place and not picked up by commercial crabbers. It is anticipated that an analysis of the data can reveal root-causes and result in fewer lost traps in the future." (see map below)

The effort was funded by a grant obtained by Guadalupe Blanco River Trust from the Alaskan Brewing Company through its Coastal CODE (Clean Oceans Depend on Everyone) Fund. Monies went to the aerial survey, GPS devices, gloves and hooks, and a cap for volunteers. To celebrate the success of the effort, GBRA sponsored a party at Hooper's Bar and Grille in Port O' Connor.

Berger says that while the cleanup is a lot of work, it is essential to keeping our bays clean and productive—and it's fun. Additional boats and volunteers are needed to comprehensively cover the bays. "We did not get them all, which is always the goal." If you want to be included in the early planning for next year, contact Allan Berger at <u>allanrberger@comcast.net</u>.

(Photos and marking map included)