## MBARA Diver's Reef Survey Form Rev 30 May 2018

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Reef Number and Name 59 Garfield Wilson Reef							
Latitude (00 00.000) 29 53.688 Longitude (00 00.000) 85 31.260 Was published lat/lon correct? Yes Sonar Depth (ft) 54							
GPS Manufacturer & Model: Garmin							
Survey Date Sep 30, 2019 Dive # 2 Time 1200							
Cloud Cover % 10 Wind Spd & Dir Wave Height (ft) 1							
Boat Name    Bobcat    Boat Captain    Bob Cox    Crew    Carol Cox							
Divers Bob and Carol Cox							
Survey Type Roving Diver Depth Gauge Depth (ft) 53 Diver Bottom Time (minutes) 90							
Water Temp Surface (Fahrenheit)     84     Water Temp Bottom (Fahrenheit)     82							
Water Visibility Surface (feet) 20 Water Visibility Bottom (feet) 30							
Thermocline Depth (feet) Current Direction Current Speed (knots) none							
Other Water Column Characteristics (check all that apply)							
$\Box$ Plankton $\Box$ Algae $\Box$ Jellyfish $\boxtimes$ Turbid $\Box$ Other							
Bottom Composition (check all that apply)							
$\boxtimes$ Sand $\square$ Silt $\square$ Mud $\square$ Gravel $\boxtimes$ Shell $\square$ Other							
Reef Materials & Quantity 512 tons of concrete culverts and pipes							
Reef Height at Highest Point (measured from base to top of the reef)(feet) 8							
Physical Condition (Durability, stability, storm damage, other damage or movement):							
<ul> <li>No damage    Damage    O No movement    Movement</li> </ul>							
Explain damage/movement and suspected cause							

**Clear Form** 

## Fish Counts (Click on the hyper-links below for identification)

Angelfish-Blue	○ 1	2-10	○ 11-100 ○ 101+	Length (inches)	Comments
Angelfish-Queen	O 1	○ 2-10	) () 11-100 () 101+	- Length (inches)	Comments
Barracuda-Great	O 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Batfish-Polka-Dot	• 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Blenny-Seaweed	○ 1	2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Blenny-?	• 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments barred blenny
Blenny-?	○ 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Butterflyfish-Spotfin	O 1	2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Butterflyfish?	O 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Cardinalfish-Two-Spot	O 1	2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Chromis-Purple-Reeffish	O 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
□ Chromis-Yellowtail- <u>Reeffish</u>	O 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Damselfish-Cocoa	○ 1	2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Damselfish?	○ 1	2-10	○ 11-100 ○ 101+	- Length (inches)	Comments regal demoiselle
Drum-Cubbyu	O 1	○ 2-10	<ul> <li>● 11-100 ○ 101+</li> </ul>	- Length (inches)	Comments
Drum-Jackknifefish	O 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
<u>Eel?</u>	O 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Elounder-Gulf	O 1	○ 2-10	0 11-100 () 101+	- Length (inches)	Comments
Eilefish?	O 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Frogfish-Ocellated	O 1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Goby-Spotted	O 1	2-10	○ 11-100 ○ 101+	- Length (inches)	Comments
Goby?	1	○ 2-10	○ 11-100 ○ 101+	- Length (inches)	Comments seminole goby

Grouper-Gag	○ 1	● 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Grouper-Goliath	• 1	Length: <3ft () 3-5ft () >5ft	C Comments	
Grouper-Goliath	O 1	Length: <3ft 🔿 3-5ft 🔿 >5ft	C Comments	
Grouper-Goliath	O 1	Length: <3ft 🔿 3-5ft 🔿 >5ft	C Comments	
Grouper-Goliath	O 1	Length: <3ft 🔿 3-5ft 🔿 >5ft	C Comments	
Grouper-Goliath	O 1	Length: <3ft 🔿 3-5ft 🔿 >5ft	C Comments	
Grouper-Goliath	O 1	Length: <3ft 🔿 3-5ft 🔿 >5ft	C Comments	
Grouper-Goliath	O 1	Length: <3ft 🔿 3-5ft 🔿 >5ft	C Comments	
Grouper-Goliath	O 1	Length: <3ft 🔿 3-5ft 🔿 >5ft	C Comments	
Grouper-Goliath	O 1	Length: <3ft 🔿 3-5ft 🔿 >5ft	C Comments	
Grouper-Goliath	O 1	Length: <3ft 🔿 3-5ft 🔿 >5ft	C Comments	
Grouper-Graysby	○ 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Grouper-Red	○ 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Grouper-Rock-Hind	<u> </u>	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Grouper-Scamp	<u> </u>	○ 2-10 ④ 11-100 ○ 101+	Length (inches)	Comments
Grunt-Juvenile	○ 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Grunt-Tomtate	<u> </u>	○ 2-10 ④ 11-100 ○ 101+	Length (inches)	Comments
Grunt-White	<u> </u>	● 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Grunt?	○ 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
<u>Hogfish</u>	O 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Hogfish-Spanish	○ 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Jack-Almaco	• 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Jack-Blue-Runner	○ 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Jack-Greater-Amberjack	○ 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Jack-Rainbow-Runner	○ 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
□ Jack-Round-Scad-Cigar- Minnow	○ 1	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments
Jack?	○ 1	● 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments African pompano
Jack?	<u> </u>	○ 2-10 ○ 11-100 ○ 101+	Length (inches)	Comments

✓ Lionfish	O 1	2-1	0 () 11-100 ()	101+ Length (inches)	Comments 6
Mackeral-King	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Mackeral-Spanish	O 1	○ 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Minnows-Glass-Small-Fry	<u>(</u> ) 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Pinfish?	O 1	○ 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Porgy-Sheepshead- Porgy	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Porgy-Sheepshead	O 1	○ 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Porgy?	<u> </u>	○ 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
✓ Puffer-Bandtail	O 1	2-1	0 () 11-100 ()	101+ Length (inches)	Comments
✓ Puffer-Sharpnose	• 1	○ 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Duffer?	O 1	○ 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
<u>Ray?</u>	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Shark-Bull	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Shark-Sandbar	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
✓ <u>Shark?</u>	O 1	2-1	0 () 11-100 ()	101+ Length (inches)	Comments nurse shark
Sharksucker-Sharksucker	• 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Sand-Perch	O 1	2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Seabass-Bank	O 1	○ 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Seabass-Belted-Sandfish	O 1	O 2-1	0 (• 11-100 ()	101+ Length (inches)	Comments
Seabass-Black	<u> </u>	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Seabass-Pygmy	O 1	O 2-1	0 (• 11-100 ()	101+ Length (inches)	Comments
<u>Seabass?</u>	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Snapper-Gray	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
✓ <u>Snapper-Lane</u>	O 1	2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Snapper-Red	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
<u>Snapper-Vermillion</u>	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
<u>Snapper?</u>	O 1	O 2-1	0 () 11-100 ()	101+ Length (inches)	Comments
Soapfish-Whitespotted	O 1	2-1	0 () 11-100 ()	101+ Length (inches)	Comments

	Spadefish-Atlantic	0	1	0	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	
	Toadfish-Leopard	0	1	0	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	
$\checkmark$	Triggerfish-Gray	0	1	۲	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	
$\checkmark$	Wrasse-Painted-Wrasse	0	1	0	2-10	۲	11-100	0	101+ I	_ength (inches)		Comments	
	Wrasse-Slippery-Dick	0	1	0	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	
$\checkmark$	Unlisted-See-Comments	۲	1	0	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	townsend 🛨
$\checkmark$	Unlisted-See-Comments	0	1	۲	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	pearly razorfish
$\checkmark$	Unlisted-See-Comments	۲	1	0	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	doctorfish
$\checkmark$	Unlisted-See-Comments	0	1	۲	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	blue tang
$\checkmark$	Unlisted-See-Comments	0	1	۲	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	emerald 🛨
	Unlisted-See-Comments	0	1	0	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	
	Unlisted-See-Comments	0	1	0	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	
	Unlisted-See-Comments	0	1	0	2-10	0	11-100	0	101+ I	_ength (inches)		Comments	
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	Unlisted-See-Comments	$\sim$	•			$\sim$	11 100	$\sim$					
	Unlisted-See-Comments			0			11-100			_ength (inches)		Comments	
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Gr	Unlisted-See-Comments T <b>owth on Reef (C</b> Algae	0  ic  0	1 <b>( ON</b> 1 1-25% 1-25%	0	2-10 e hyp 26-509 26-509	0 0er % (	11-100 -links 51-75 51-75	0 5 be % () % ()	101+ 1 low fo 76-100 76-100	ength (inches) or identific % Size (inche	s)	Comments Describe	
Gr	Unlisted-See-Comments FOWTH ON Reef (C Algae Anemone	0  ic  0 0	1 <b>( ON</b> 1 1-25% 1-25% 1-25%	000000000000000000000000000000000000000	2-10 26-509 26-509 26-509	) ) (%) (%) (%) (%)	11-100 -links 51-75 51-75 51-75	© 5 be % © % ©	101+ ( low fo 76-100 76-100 76-100	ength (inches) or identific % Size (inche % Size (inche	s)	Comments Describe Describe	
Gr	Unlisted-See-Comments FOWTH ON Reef (C Algae Anemone Barnacles	0 licł 0 0	1 <b>C ON</b> 1 1-25% 1-25% 1-25%	00000	2-10 e hyp 26-509 26-509 26-509 26-509	) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	11-100 -links 51-75 51-75 51-75 51-75 51-75	© 5 be % © % ©	101+ 1 <b>low fo</b> 76-100 76-100 76-100 76-100	ength (inches) or identific Size (inche Size (inche Size (inche Size (inche	s) s) s) s)	Comments Describe Describe Describe	
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	Unlisted-See-Comments <b>cowth on Reef (C</b> Algae Anemone Barnacles Bivalves Coral-Colorful-Sea-Whip		1 <b>CON</b> 1 1-25% 1-25% 1-25% 1-25% 1-25%		2-10 26-509 26-509 26-509 26-509 26-509 26-509		11-100 -links 51-75 51-75 51-75 51-75 51-75 51-75 51-75	○ ; be % ○ % ○ % ○ % ○	101+ 1 <b>low fo</b> 76-100 76-100 76-100 76-100 76-100 76-100	ength (inches) or identific Size (inche Size (inche Size (inche Size (inche Size (inche	cation)         s)	Comments Describe Describe Describe Describe Describe	
	Unlisted-See-Comments <b>rowth on Reef (Cl</b> Algae Anemone Barnacles Bivalves Coral-Colorful-Sea-Whip Coral-Hard-Unkown		1 <b>CON</b> 1 1-25% 1-25% 1-25% 1-25% 1-25% 1-25%		2-10 e hyp 26-509 26-509 26-509 26-509 26-509 26-509		11-100 -links 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75	C       5 be       %	101+ ( 10w fo 76-100 76-100 76-100 76-100 76-100 76-100 76-100	ength (inches) or identific Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche	cation)         s)	Comments Describe Describe Describe Describe Describe Describe	
	Unlisted-See-Comments Cowth on Reef (Cl Algae Anemone Barnacles Bivalves Coral-Colorful-Sea-Whip Coral-Hard-Unkown Coral-Gorgonian		1 <b>CON</b> 1 1-25% 1-25% 1-25% 1-25% 1-25% 1-25% 1-25%		2-10 2-10 2-10 2-10 2-10 2-10 2-509 2		11-100 -links 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75	O       5 be       % C	101+ 1 <b>low fo</b> 76-100 76-100 76-100 76-100 76-100 76-100 76-100 76-100	ength (inches) or identific Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche	cation)         s)	Comments Describe Describe Describe Describe Describe Describe Describe Describe	
	Unlisted-See-Comments <b>Owth On Reef (Cl</b> Algae Anemone Barnacles Bivalves Coral-Colorful-Sea-Whip Coral-Hard-Unkown Coral-Gorgonian Coral-Occulina		1 <b>CON</b> 1 1-25% 1-25% 1-25% 1-25% 1-25% 1-25% 1-25% 1-25%		2-10 e hyp 26-509 26-509 26-509 26-509 26-509 26-509 26-509 26-509		11-100 -links 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75	C       5 be       %	101+ ( low fo 76-100 76-100 76-100 76-100 76-100 76-100 76-100 76-100	ength (inches) or identific Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche	Image: constraint of the second se	Comments Describe Describe Describe Describe Describe Describe Describe Describe Describe	
	Unlisted-See-Comments Owth On Reef (C) Algae Anemone Barnacles Bivalves Coral-Colorful-Sea-Whip Coral-Hard-Unkown Coral-Gorgonian Coral-Occulina Coral-White-Telesto		1 <b>CON</b> 1 1-25% 1-25% 1-25% 1-25% 1-25% 1-25% 1-25% 1-25% 1-25%		2-10 2-10 2-10 2-10 2-10 2-10 2-509 2		11-100 -links 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75 51-75	C       5 be       %	101+ 1 <b>low fo</b> 76-100 76-100 76-100 76-100 76-100 76-100 76-100 76-100 76-100 76-100 76-100	ength (inches) or identific Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche Size (inche	Image: constraint of the second se	Comments Describe	

Unlisted-See-Comments	O 1-25	% 🔿 26-50% 🔿 51-75% 🔿 76-100% Size (inches)	Describe
Unlisted-See-Comments	○ 1-25	% 🔿 26-50% 🔿 51-75% 🔿 76-100% Size (inches) 🗌	Describe
Unlisted-See-Comments	O 1-25	% 🔿 26-50% 🔿 51-75% 🔿 76-100% Size (inches) 🗌	Describe
Invertebrates at Re	eef (Cli	ick on the hyper-links below for iden	tification)
Cowry-?	○ 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
<u>Cowry-</u> ?	○ 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Cowry-?	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Crab-Hermit	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Crab-Yellowline-Arrow	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Crab?	○ 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Crab?	○ 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Lobster-Shovelnose	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Octopus	<u> </u>	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Sea-Cucumber	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Sea-Slug	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Sea-Star	<u> </u>	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Sea-Urchin	○ 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Shrimp-?	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Shrimp-?	○ 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
□ <u>Snail-Florida-Horse-</u> <u>Conch</u>	○ 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Snail-?	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Snail-?	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Unlisted-See-Comments	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Unlisted-See-Comments	<u> </u>	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Unlisted-See-Comments	○ 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Unlisted-See-Comments	O 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments
Unlisted-See-Comments	○ 1	○ 2-10 ○ 11-100 ○ 101+ Size (inches)	Comments

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## Turtles and Air Breathers/Mammals (Click on the hyper-links below for identification)

Dolphin?	O 1	O 2-10	○ 11-100	○ 101+	Length (inches)	Comments	
Turtle-Loggerhead	○ 1	O 2-10	○ 11-100	○ 101+	Size (inches)	Comments	
Turtle?	<u> </u>	○ 2-10	○ 11-100	○ 101+	Size (inches)	Comments	
Whale?	01	O 2-10	○ 11-100	○ 101+	Size (inches)	Comments	
Unlisted-See-Comments	01	O 2-10	○ 11-100	○ 101+	Size (inches)	Comments	

## ☑ Other Observations/Photos:

Observations	Survey video URL: https://youtu.be/g0xug52_X2Y
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Photos?	Yes	Attached?	Yes
Video?	Yes		

Print Form



lmage Field





Image Field







Image Field

Image Field



Image Field





Image Field

Image Field



Image Field

Image Field

Image Field

Image Field