

**St. Andrew Bay
RESOURCE MANAGEMENT ASSOCIATION**
Post Office Box 15028
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12 November 2013

Kennard Watson, Turtle Watch Coordinator
St. Andrew Bay Resource Management Association
6509 Palm Court
Panama City Beach, Florida 32408

Dan Rowe, Director and CEO
Bay County Tourist Development Council
P.O. Box 9473
Panama City Beach, Florida 32417

Dear Mr. Rowe:

This letter provides results for the 2013 sea turtle nesting season on Panama City Beach. The information is provided by the St. Andrew Bay Resource Management Association (RMA) to fulfill requirements of our contract with the Bay County Tourist Development Council. Highlights of the 2013 season include near-record loggerhead hatchling production, the first nesting of endangered green turtles on Panama City Beach in more than a decade, and evidence of increasing impacts of vehicular activity on nesting and hatchling turtles. Also, two local ordinances affecting sea turtles were in full effect this year, but only one was enforced. Major results are summarized below. The attachments contain forms submitted to the Florida Fish and Wildlife Conservation Commission as part of reporting requirements under our State Permit No. 038.

Survey Area and Nourishment Activities. RMA monitors sea turtle activity along 17.6 miles of Gulf beach between St. Andrews State Park and Camp Helen State Park. Portions of the survey area were nourished in 2011 with sand pumped onto the beach from an off-shore source. Figure 1 is a map of the survey area showing the two construction areas. The western section extends about 5.3 miles from the Pinnacle Port Condo at 23223 Front Beach Road to the Seagull Villas at 17735 Front Beach Road. Nourishment operations were performed on this section between 10 October and 20 December 2011. The eastern section extends about 2 miles from the boundary of St. Andrews State Park to the Sterling Beach Condo at 6627 Thomas Drive. It was nourished during 20-31 December 2011.

Nesting and Hatchling Production. The 2013 season was marked by significant nesting of threatened loggerhead turtles and the first nesting of endangered green turtles on Panama City Beach since 2002. Figure 2 shows the location of all nesting and non-nesting (false crawl) emergences. Thirty six nests and 33 false crawls were made by loggerheads, and three nests were made by greens. The number of loggerhead nests is the third highest annual total on this beach since monitoring began in 1991. Figures 3 and 4 show results of the nest evaluations. Figure 5 shows the incubation periods for all hatched nests. The loggerhead nests produced 2117 hatchlings from 3455 eggs for an overall emergence success of 61% (35 evaluated nests). This is the largest hatchling production since 2000. Eighteen loggerhead nests were laid close to the water and moved to a higher elevation nearby within 12 hours of deposition to protect the eggs from surf flooding. The relocated nests had an overall emergence success of 70%. Average

loggerhead nest size was 101 eggs (range 59 to 139), and average incubation period was 66 days (range 57 to 71). The green nests produced 264 hatchlings from 354 eggs for an overall emergence success of 75% (3 evaluated nests). All of the green nests were left in place. Average green nest size was 118 eggs (range 109 to 122), and average incubation period was 69 days (range 66 to 75). No nesting turtles were tagged this year. Tables 1-4 and Attachments 1-2 provide detailed information on each nest and false crawl, including the location and date found.

Beachfront Lighting Affecting Hatchling and Adult Turtles. Beachfront property owners throughout the survey area were required to comply with the lighting ordinance beginning on May 1, marking the end of a 4-year grace period that began in 2009 when the ordinance was passed. In spite of this requirement, hatchling disorientations were worse than last year, with 1570 of 2167 hatchlings (72%) affected by artificial lights. Additionally, six adult female loggerheads were disoriented on the beach while searching for a nesting spot. One turtle found during the morning survey had crawled through the dunes and almost onto Front Beach Road before being rescued by Turtle Watch with help from a state law enforcement officer. Figure 6 shows the types of lights contributing to hatchling disorientation incidents this year (see Attachment 3 for detailed results). The two largest contributors were street lights (22%) and exterior house lights (18%). Condo exterior lights contributed only 13%, which is a significant improvement from last year (33%). Condos appear to be in generally good compliance through the use of shielded patio lights and absence of roof-mounted flood lights, which were disconnected or turned off. However, many other properties remain out of compliance, particularly single family homes. Enforcement was lacking this season in spite of timely submission of disorientation reports to code enforcement officers. Aside from enforcing the ordinance, the best way to reduce disorientation incidents is to convert street lights on Front Beach Road to turtle-friendly fixtures. In our area, Pier Park provides a good example of attractive street lighting that maintains safety for drivers and pedestrians without illuminating the beach where sea turtles nest.

Beach Furniture Affecting Nesting Turtles. The Leave No Trace ordinance requires all personal items to be removed from the beach daily between 7 pm and 7 am. Unlike the lighting ordinance, the Leave No Trace ordinance was effectively enforced this season. The beach was largely free of canopies and personal gear that used to routinely litter the beach at night, presenting obstacles to nesting turtles. Table 5 shows results for 10 incidents this season where loggerheads encountered obstructions. This compares to 17 incidents last year when the ordinance was in effect for only a portion of the nesting season. Problems were caused mostly by wooden lounge chairs owned by vendors and left on the beach at night, often in rows parallel to shore that present a barrier to nesting turtles. These items are not regulated by the ordinance and should be included in future versions.

Beach Driving Affecting Nesting and Hatchling Turtles. Beach driving is prevalent throughout the survey area and occurs during the day and night, posing numerous risks to sea turtles. Driving activities shown in Figure 7 include police response, garbage collection, commercial activities (beach raking, parasail, jet skis, lounge chairs), and environmental monitoring (sea turtles, shorebirds). Vehicle tire ruts often trapped hatchlings and were a contributing factor at 40% of the nests where hatchlings were disoriented by lights. Figure 8 shows an example of tire ruts and the track of a loggerhead hatchling caught in a rut. The garbage collection tractor operated by Coastal Parasail pulled a rake to smooth ruts, and this device was effective when used. With regard to nesting turtles, an endangered green was nearly run over near the Casa Loma Motel by the tractor collecting garbage on July 10 at about 11 pm. The tractor was on the beach at night in violation of the company's state permit. Additionally, police vehicles were on the beach at night this summer enforcing the Leave No Trace ordinance. Unlike last year, when enforcement was performed at night using all-terrain vehicles with red-filtered head lights, the police used trucks that left deep ruts and head lights with no filtering. It should be noted that the police were present at several hatched nests, and the officers turned off lights when requested and were very helpful with crowd control. If nighttime driving cannot be avoided, officers should follow Best Management Practices

(BMPs) developed by state and federal agencies which include the use of vehicles with low-pressure tires to avoid producing ruts. These BMP's will protect not only sea turtles but also shorebirds. Black skimmer chicks were present near the County Pier this season. These animals are especially vulnerable because they are hard to see and tend to wander beyond marked nesting areas.

Stranding Activities. Five loggerheads and four endangered Kemp's ridleys stranded within the survey area between May and October (Table 6). All were found dead on the beach. An additional ridley was rescued in the water close to shore and was taken to Gulf World where it died in treatment.

Nest Disturbance and Storm Effects. No poaching incidents occurred this year, and only a few nests experienced minor vandalism involving stakes knocked down and footprints inside the marked area. Nests on the west end of the survey area between Laguna Beach and Camp Helen were covered with wire screen to protect the eggs from predators. None of our screened nests were disturbed, and we saw no predator tracks near the nests. As a result, screening will be discontinued in 2014. With regard to storm effects, three nests failed to hatch due to surf flooding (2, 16, 18) and one nest (13) was completely washed away by surf. Additionally, two nests were exposed by surf (38, 39) and another was partially washed away by runoff from a stormwater drain (34). Overall, storm effects were less severe than previous years due to the lack of significant tropical activity in the Gulf. However, Panama City Beach experienced torrential rains in July which hampered surveys and may have resulted in some nesting activity being missed.

If you have questions, please contact me during business hours at (850) 234-4643 or at pcbturtle@yahoo.com. Thanks.

Sincerely,

Kennard Watson

Kennard Watson
Turtle Watch Coordinator

cc: Linda Brown (COE Mobile), Lisa Lehnhoff (FWS Panama City), Meghan Koperski (FWC Tequesta), Kelly Roberts (FWC Tallahassee), Beth Brost (FWRI St Petersburg), Ed Smith (Bay County Manager), Dan Shaw (Bay County Asst Manager), Martin Jacobson (Community Development Manager), Scott Hair (Bay County Code Enforcement Manager), Jenny McNemar (Bay County Code Enforcement), Mario Gisbert (Panama City Beach City Manager), James Tindle (Panama City Beach Code Enforcement), Lisa Armbruster (Sustainable Beaches), Linda Fitzhugh (RMA), Jeff Whitton (RMA)

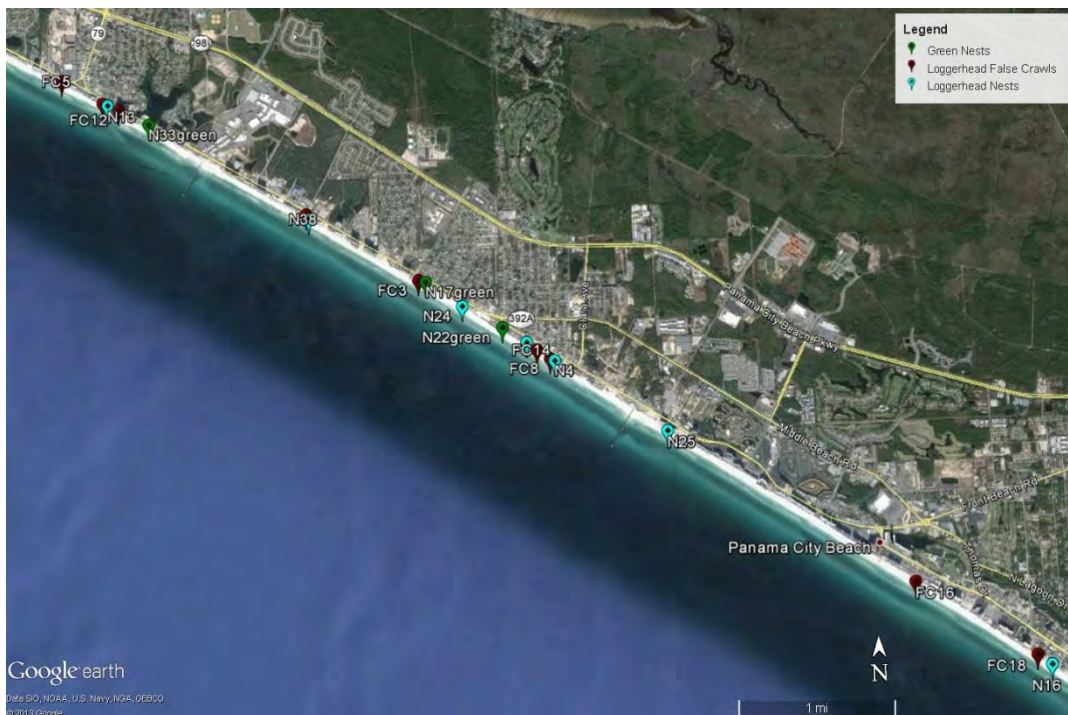
Attachments: (1) Nesting reports, (2) Nest productivity and nourishment monitoring worksheets, (3) Disorientation incident reports.



Figure 1. Map of 17.6 mile survey area showing two nourished beach sections.



(a) West section between Camp Helen State Park and Highway 79

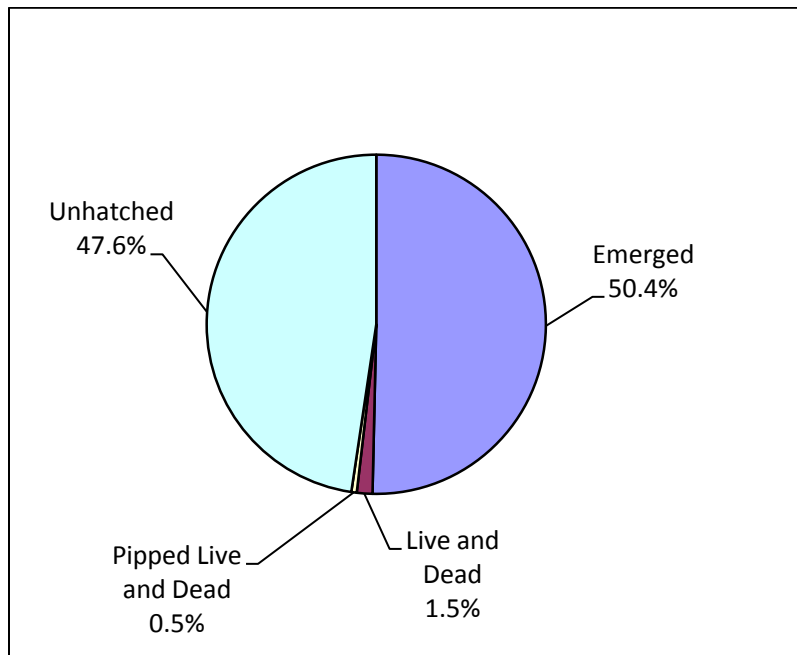


(b) Central section between Highway 79 and Joan Avenue

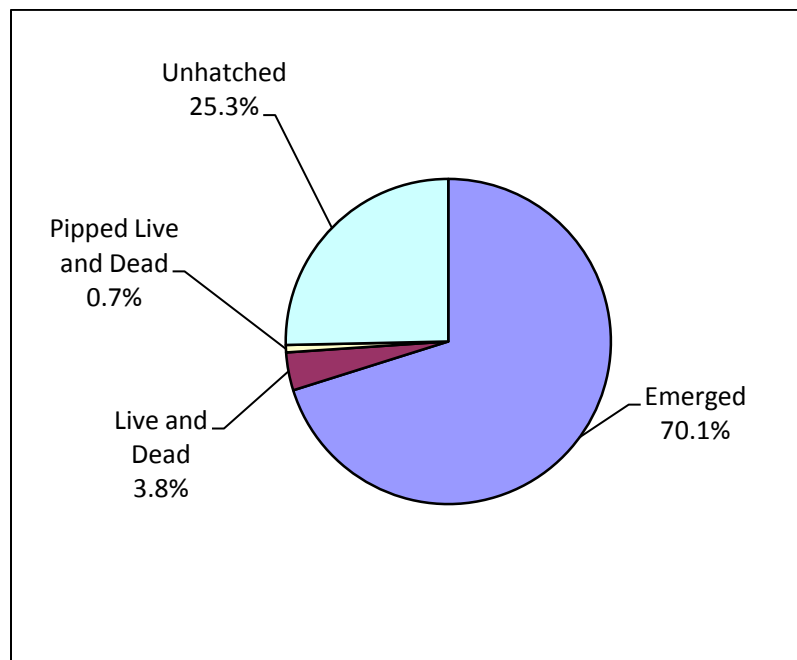


(c) East section between Joan Avenue and St. Andrews State Park

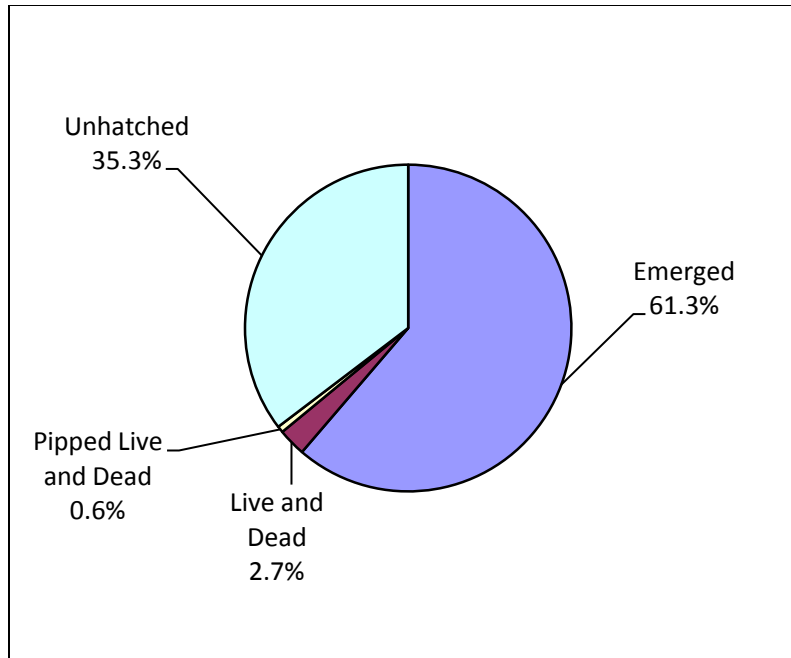
Figure 2. Sea turtle nest and false crawl locations on Panama City Beach in 2013.



(a) In situ nests (17)



(b) Relocated nests (18)



(c) All nests (35)

Figure 3. Emergence success for loggerhead nests on Panama City Beach in 2013. Contents are unhatched eggs, live and dead hatchlings found in nest, pipped eggs where hatchling partially broke free of shell, and emerged hatchlings that escaped the nest.

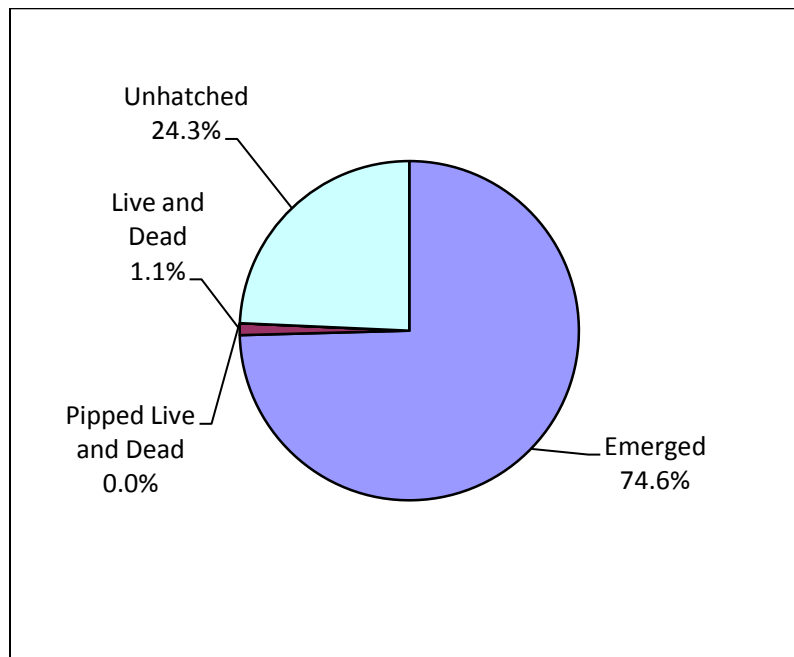


Figure 4. Emergence success for green nests on Panama City Beach in 2013. Contents are unhatched eggs, live and dead hatchlings found in nest, pipped eggs where hatchling partially broke free of shell, and emerged hatchlings that escaped the nest.

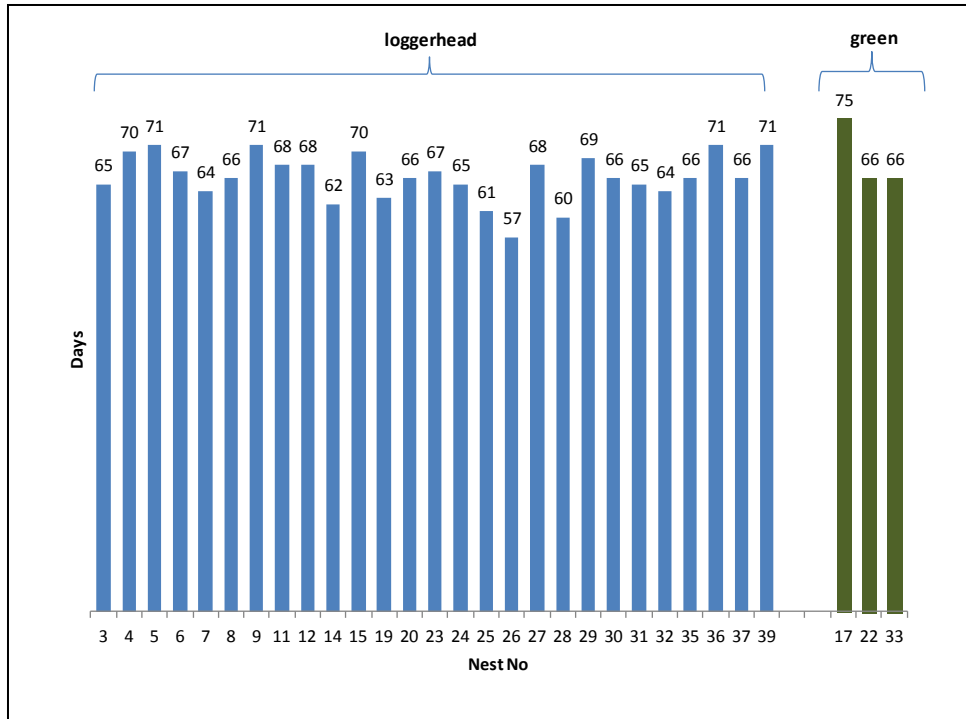


Figure 5. Loggerhead and green nest incubation periods on Panama City Beach in 2013 (30 nests).

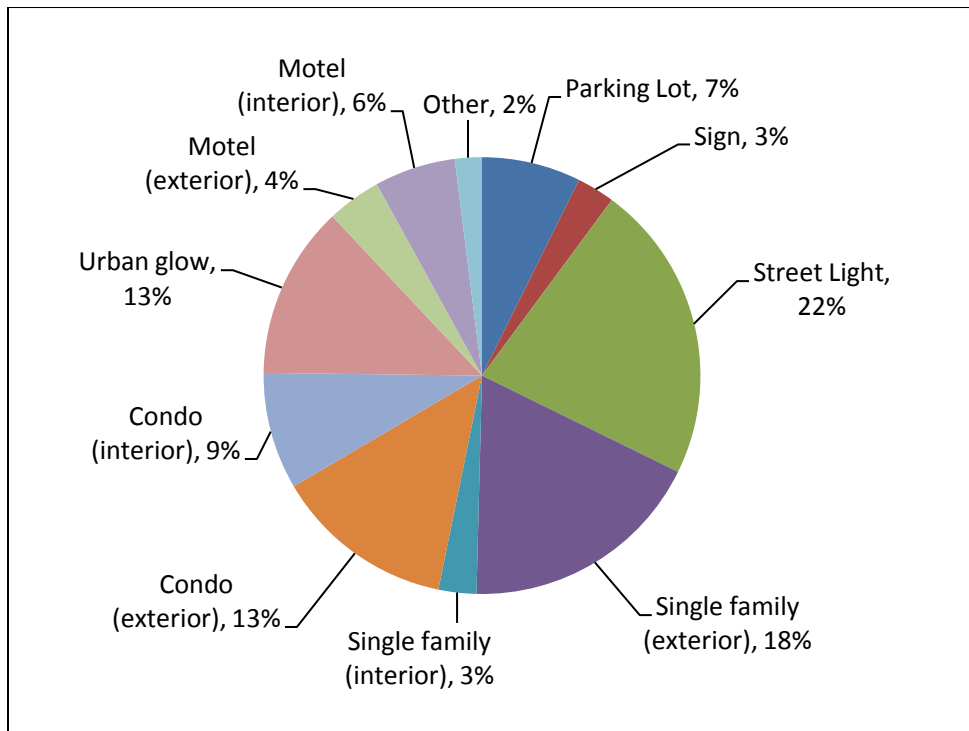


Figure 6. Lights contributing to loggerhead hatchling disorientation incidents on Panama City Beach in 2013 (25 nests).



Figure 7. Types of vehicular activity on Panama City Beach.



Figure 8. Tire ruts contributing to hatchling disorientations.

Table 1. Nest locations and hatching information for 36 loggerhead nests and three green nests identified on Panama City Beach in 2013. Latitude/longitude data were obtained from a GPS unit. Species column identifies nesting turtle as either loggerhead (*Caretta caretta*) or green (*Chelonia mydas*).

Nest No.	Address	Species	In Situ or Relocate	Date Laid	Date Hatched	Incubation Period (days)	Total Eggs/Emerge	Latitude	Longitude
1	House, 21619 Front Beach Rd	CC	Relocated	23-May	Failed	Failed	139/0	30.25228	-85.95485
2	Pelican Walk Condo 6905 Thomas Dr	CC	In situ	28-May	Failed	Failed	109/0	30.154708	-85.773243
3	Pineapple Beach Villas, 19979 Front Beach Rd	CC	Relocated	2-Jun	5-Aug	65	136/97	30.2422	-85.93268
4	Paradise Palms Motel, 12907 Front Beach Rd	CC	Relocated	4-Jun	12-Aug	70	88/82	30.19437	-85.83963
5	Tropic Winds Condo, 17643 Front Beach Rd	CC	Relocated	4-Jun	13-Aug	71	69/64	30.23127	-85.90927
6	Moonspinner Condo, 4425 Thomas Dr	CC	In situ	10-Jun	16-Aug	67	85/77	30.133956	-85.746565
7	Beachside Resort, 21905 Front Beach Rd	CC	Relocated	14-Jun	16-Aug	64	117/86	30.25357	-85.9582
8	House, 104 Beachside Dr, Carillon Beach	CC	Relocated	17-Jun	21-Aug	66	129/62	30.26207	-85.97883
9	House, 21010 Front Beach Rd	CC	Relocated	18-Jun	27-Aug	71	115/74	30.24858	-85.9465
10	Schooner's, 5121 Gulf Dr	CC	Relocated	18-Jun	Failed	Failed	80/0	30.14053	-85.75483
11	Summerwinds Condo, 6323 Thomas Dr	CC	In situ	23-Jun	29-Aug	68	77/42	30.150230	-85.767101
12	House, 4723 Spyglass Dr	CC	Relocated	23-Jun	30-Aug	68	124/115	30.13693	-85.75025
13	House, 16917 Front Beach Rd	CC	In situ	25-Jun	Failed	Failed	Unknown	30.220550	-85.887770
14	Emerald Isles Condo, 17545 Front Beach Rd	CC	Relocated	27-Jun	27-Aug	62	123/93	30.22893	-85.90472
15	Thomas Donut & Snack Shop, 19208 Front Beach Rd	CC	Relocated	27-Jun	4-Sep	70	88/86	30.23715	-85.92165
16	Lollye on the Beach Condo, 8507 Surf Dr	CC	In situ	29-Jun	Failed	Failed	134/0	30.164335	-85.787900
17	House, 14204 Front Beach Rd, Bid-a-Wee Beach	CM	In situ	30-Jun	12-Sep	75	109/31	30.202303	-85.853358
18	House, 13227 Oleander Dr	CC	In situ	30-Jun	Failed	Failed	96/0	30.196198	-85.842586
19	House, 5623 Gulf Dr	CC	In situ	8-Jul	8-Sep	63	71/38	30.144696	-85.759927
20	Townhouse,	CC	In situ	8-Jul	11-Sep	66	92/86	30.248044	-85.945402

	21000 Front Beach Rd								
21	Shores Condo, 22519 Front Beach Rd	CC	In situ	9-Jul	Unknown	Unknown	59/3	30.258223	-85.969278
22	House, 13403 Oleander Dr	CM	In situ	10-Jul	14-Sep	66	123/121	30.197707	-85.845151
23	House, 19600 Front Beach Rd	CC	In situ	12-Jul	16-Sep	67	98/91	30.239526	-85.926518
24	House, 13708 Front Beach Rd	CC	Relocated	14-Jul	16-Sep	65	105/92	30.19987	-85.84945
25	Beach Tower Resort Motel, 12001 Front Beach Rd	CC	Relocated	16-Jul	14-Sep	61	123/107	30.18737	-85.82773
26	Regency Condo, 5801 Thomas Dr	CC	Relocated	18-Jul	13-Sep	57	107/79	30.1464	-85.76233
27	Townhouse, 7901 Surf Dr	CC	In situ	20-Jul	25-Sep	68	81/64	30.16	-85.78092
28	Blue Horizon Retreat, 19016 Front Beach Rd	CC	Relocated	20-Jul	19-Sep	60	87/53	30.236211	-85.919654
29	Landmark Condo, 17501 Front Beach Rd	CC	In situ	23-Jul	29-Sep	69	93/76	30.228	-85.90277
30	Townhouse, 7831 Surf Dr	CC	In situ	23-Jul	26-Sep	66	122/112	30.15972	-85.7807
31	Seaside Villas Condo, 4701 Thomas Dr	CC	Relocated	23-Jul	26-Sep	65	91/86	30.13605	-85.7491
32	House, 4914 Spyglass Dr	CC	In situ	24-Jul	25-Sep	64	129/76	30.13863	-85.75225
33	Polynesian Village Condo, 16621 Front Beach Rd	CM	In situ	26-Jul	29-Sep	66	122/112	30.21852	-85.88327
34	Sugar Sands Motel, 20723 Front Beach Rd	CC	In situ	Failed	Failed	Failed	78/0	30.24642	-85.94165
35	House, 22115 Front Beach Rd	CC	Relocated	31-Jul	2-Oct	66	109/90	30.25515	-85.96202
36	House, 8223 Surf Dr	CC	In situ	3-Aug	12-Oct	71	74/51	30.162685	-85.785266
37	Pirates Cove Villas, 23001 Front Beach Rd	CC	Relocated	3-Aug	7-Oct	66	76/71	30.25923	-85.9718
38	Legacy by the Sea Condo, 15325 Front Beach Rd	CC	In situ	Failed	Failed	Failed	62/0	30.20878	-85.86592
39	Latitude 29 Condo, 21703 Front Beach Rd	CC	In situ	23-Aug	1-Nov	71	89/64	30.25282	-85.95617

Table 2. Loggerhead false crawl locations and crawl date on Panama City Beach in 2013.
Latitude/longitude data were obtained from a GPS unit.

Crawl No.	Address	Crawl Date	Latitude	Longitude
1	House, 17883 Front Beach Rd	5-May	30.23503	-85.91683
2	House, 21010 Front Beach Rd	2-Jun	30.24822	-85.94558
3	Fontainebleau Terrace, 14401 Front Beach Rd	8-Jun	30.2025	-85.85413
4	Beachcomber By-the-Sea Motel 17101 FBR	8-Jun	30.22077	-85.8883
5	Aquavista Condo, 17155 Front Beach Rd	8-Jun	30.2231	-85.89278
6	Surfside Villas, 17561 Front Beach Rd	8-Jun	30.22945	-85.90563
7	House, 21000 Front Beach Rd	8-Jun	30.2479	-85.94497
8	Paradise Palms Inn, 12907 Front Beach Rd	8-Jun	30.19457	-85.8401
9	Legacy by the Sea Condo, 15325 Front Beach Rd	9-Jun	30.20922	-85.86618
10	House, 21302 Front Beach Rd	10-Jun	30.25053	-85.9505
11	House, 21515 Front Beach Rd	14-Jun	30.2519	-85.95387
12	Tidewater Condo, 16819 Front Beach Rd	17-Jun	30.22007	-85.88658
13	House, 20705 Front Beach Rd	17-Jun	30.24613	-85.94118
14	House, 13013 Oleander Dr	27-Jun	30.19545	-85.8415
15	Carousel (store), 19440 Front Beach Rd	27-Jun	30.2381	-85.92378
16	House, 9622 Beach Blvd	2-Jul	30.17243	-85.80193
17	Ramsgate Condo, 23011 Front Beach Rd	2-Jul	30.25995	-85.9735
18	Whispering Seas Condo, 8610 Surf Dr	7-Jul	30.1653	-85.78938
19	Townhouse, 17879 Front Beach Rd	8-Jul	30.23478	-85.91665
20	House, 19110 Front Beach Rd	8-Jul	30.23693	-85.9211
21	House, 19901 Front Beach Rd	8-Jul	30.24067	-85.92925
22	House, 20113 Front Beach Rd	8-Jul	30.24343	-85.93537
23	House, 20635 Front Beach Rd	8-Jul	30.24575	-85.94028
24	Pineapple Villas, 19979 Front Beach Rd	9-Jul	30.24229	-85.93135
25	Condo, 19504 Front Beach Rd	12-Jul	30.23912	-85.92557
26	Townhouse, 21000 Front Beach Rd	12-Jul	30.2479	-85.94493
27	House, 388 Beachside Dr, Carillon Beach	15-Jul	30.2614	-85.9771
28	House, 19300 Front Beach Rd	16-Jul	30.23747	-85.92218
29	House, 20816 Front Beach Rd	21-Jul	30.24775	-85.94473
30	Pelican Walk Condo, 6905 Thomas Dr	22-Jul	30.15482	-85.77347
31	House, 17825 Front Beach Rd	28-Jul	30.2339	-85.91487
32	Blue Horizon Retreat, 19016 Front Beach Rd	28-Jul	30.23648	-85.92025
33	Beachside Resort, 21905 Front Beach Rd	5-Aug	30.25417	-85.95972

Table 3. Loggerhead nest excavation data on Panama City Beach in 2013. Emergence success is defined as the number of emerged hatchlings divided by the total number of eggs. Rows in red are nests partially washed away by storms.

Nest No.	Eggs	Emerged	Live in Nest	Dead in Nest	Pipped Live	Pipped Dead	Unhatch	Emergence Success	Relocated or in situ
1	139	0	0	0	0	0	139	0.00	Relocated
2	109	0	0	0	0	0	109	0.00	In situ
3	136	97	2	0	0	0	37	0.71	Relocated
4	88	82	1	0	0	0	5	0.93	Relocated
5	69	64	0	0	0	0	5	0.93	Relocated
6	85	77	0	0	0	0	8	0.91	In situ
7	117	86	1	0	0	0	30	0.74	Relocated
8	129	62	10	1	0	0	56	0.48	Relocated
9	115	74	9	0	0	0	32	0.64	Relocated
10	80	0	0	0	0	0	80	0.00	Relocated
11	77	42	2	0	0	0	33	0.55	In situ
12	124	115	2	1	0	0	6	0.93	Relocated
14	123	93	18	0	2	1	9	0.76	Relocated
15	88	86	1	0	0	0	1	0.98	Relocated
16	134	0	0	0	0	0	134	0.00	In situ
18	96	0	0	0	0	0	96	0.00	In situ
19	71	38	0	0	0	0	33	0.54	In situ
20	92	86	0	0	0	0	6	0.93	In situ
21	59	3	0	0	0	1	55	0.05	In situ
23	98	91	1	0	0	0	6	0.93	In situ
24	105	92	1	0	0	0	12	0.88	Relocated
25	123	107	1	5	0	1	9	0.87	Relocated
26	107	79	13	0	5	5	5	0.74	Relocated
27	81	64	0	0	0	0	17	0.79	In situ
28	87	53	2	1	0	0	31	0.61	Relocated
29	93	76	1	0	0	0	16	0.82	In situ
30	122	112	0	0	0	0	10	0.92	In situ
31	91	86	0	0	0	0	5	0.95	Relocated
32	129	76	3	0	0	1	49	0.59	In situ
34	78	0	1	0	0	0	77	0.00	In situ
35	109	90	1	0	0	0	18	0.83	Relocated
36	74	51	0	0	0	1	22	0.69	In situ
37	76	71	2	0	0	0	3	0.93	Relocated
38	62	0	0	0	0	0	62	0.00	In situ
39	89	64	15	0	5	0	5	0.72	In situ
TOTAL	3455	2117	87	8	12	10	1221	61.3%	

Table 4. Green nest excavation data on Panama City Beach in 2013. Emergence success is defined as the number of emerged hatchlings divided by the total number of eggs.

Nest No.	Eggs	Emerged	Live in Nest	Dead in Nest	Pipped Live	Pipped Dead	Unhatch	Emergence Success	Relocated or in situ
17	109	31	2	0	0	0	76	0.28	In situ
22	123	121	0	0	0	0	2	0.98	In situ
33	122	112	2	0	0	0	8	0.92	In situ
TOTAL	354	264	4	0	0	0	86	74.6%	

Table 5. Obstacles encountered by loggerheads during nesting attempts on Panama City Beach in 2013. Latitude/longitude data were obtained from a GPS unit.

Crawl No.	Crawl Type	Address	Latitude	Longitude	Incident Date	Obstacles Encountered
2	Nest	Pelican Walk Condo, 6905 Thomas Dr	30.154708	-85.773243	28-May	lounge chairs
6	Nest	Moonspinner Condo, 4425 Thomas Dr	30.133956	-85.746565	10-Jun	lounge chairs
25	Nest	Beach Tower Resort Motel, 12001 Front Beach Rd	30.18737	-85.82773	16-Jul	lounge chairs
26	Nest	Regency Condo, 5801 Thomas Dr	30.1464	-85.76233	18-Jul	lounge chairs
31	Nest	Seaside Villas Condo, 4701 Thomas Dr	30.13605	-85.7491	23-Jul	lounge chairs
9	False crawl	Legacy by the Sea Condo, 15325 Front Beach Rd	30.20922	-85.86618	9-Jun	lounge chairs, storage container
12	False crawl	Tidewater Condo, 16819 Front Beach Rd	30.22007	-85.88658	17-Jun	lounge chairs
18	False crawl	Whispering Seas Condo, 8610 Surf Dr	30.1653	-85.78938	7-Jul	lounge chairs
19	False crawl	Townhouse, 17879 Front Beach Rd	30.23478	-85.91665	8-Jul	sand castle pit
30	False crawl	Pelican Walk Condo, 6905 Thomas Dr	30.15482	-85.77347	22-Jul	lounge chairs

Table 6. Sea turtle strandings on Panama City Beach from 1 May to 31 October 2013.

No.	Date	Location	Species	Shell Length (inches)	Condition	Final Disposition
1	6-May	House, 13207 Oleander Dr	Kemp's ridley	12.6	dead on beach, moderately decomposed, missing LFF (cut mark), hole in shell	NMFS
2	22-May	Splash Condo, 17698 Front Beach Rd	Loggerhead	36.3	rescued in gulf by Gulf World, lethargic, floating close to shore, emaciated, barnacles and parasites covering animal, deceased 5/22/13, GPS from Google Earth	Gulf World
3	28-May	House, 316 Beachside Dr, Carillon Beach	Kemp's ridley	22.3	dead on beach, severely decomposed, missing half of RFF	Disposed in landfill
4	31-May	Chateau Motel, 12525 Front Beach Rd	Kemp's ridley	7.4	dead on beach, moderately decomposed	NMFS
5	16-Jun	Regency Condo, 5801 Thomas Dr	Loggerhead	UNK	turtle washed up in pieces	Disposed in landfill
6	24-Jun	Grand Panama Beach Resort, 11807 Front Beach Rd	Kemp's ridley	10.7	dead on beach, moderately decomposed, fishing hook and line wrapped around LFF, hook in LRF (salvaged hook and line)	Disposed in landfill
7	2-Jul	House, 19907 Front Beach Rd	Kemp's ridley	27.0	dead on beach, moderately decomposed, missing head and all flippers	Disposed in landfill
8	6-Aug	Holiday Terrace, 11831 Front Beach Rd	Loggerhead	26.4	dead on beach, moderately decomposed, brown algae and large barnacles on shell, plastron separating (bloated), fly eggs and small barnacles in mouth	Disposed in landfill
9	5-Sep	Aquavista Condo, 17155 Front Beach Rd	Loggerhead	UNK	dead on beach, severely decomposed, head and flippers barely attached, shell not intact, GPS measurement on form incorrect	Disposed in landfill
10	15-Oct	County Pier, 12213 Front Beach Rd	Loggerhead	31.6	dead on beach, severely decomposed, head and flippers barely attached, shell not intact, GPS measurement on form incorrect	Disposed in landfill

Attachment 1

Nesting reports

11 November 2013

Prepared by:

Kennard Watson
St. Andrew Bay Resource Management Association
6509 Palm Court
Panama City Beach, Florida 32408

Prepared for:

Dan Rowe
Bay County Tourist Development Council
P.O. Box 9473
Panama City Beach, Florida 32413



**FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
FISH AND WILDLIFE RESEARCH INSTITUTE
SEA TURTLE NESTING REPORT FOR 2013**

1. PRINCIPAL PERMIT HOLDER INFORMATION

Principal Permit Holder:			Permit Number:		
Organization:					
Address:					
County:		Email Address:			
Day Telephone (include area code):		Night Telephone:			
Beach Name:					
Point of Contact & Phone #		Email Address for Point of Contact: (if different from above)			

2. GENERAL SURVEY INFORMATION

Survey Boundary Information: Please describe survey boundaries geographically. If boundaries have changed, please enter the new boundaries in the space below. Be specific and use known landmarks that can be found on a map (or include a marked map).

Beginning Survey Boundary:			
Ending Survey Boundary:			
Beach Length: KM (miles):		Was this the same survey area as last year? (Y or N)	

IF NO, please explain the specific differences, new survey length, AND why the survey area changed:

Start Date of Survey (mm/dd/yy):		End Date of Survey (mm/dd/yy):	
Time of Day Surveyed: Start (include AM or PM)		Finish (include AM or PM)	
Number of Days Per Week Surveyed:			

Total # of Days Surveyed in 2013 (this is the total # of days between start and end dates MINUS any missed days):	
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How are surveys conducted?	By Vehicle? (Y or N)		If yes, describe type of vehicle.		On Foot? (Y or N)	
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If you did not survey 7 days per week throughout the nesting season, please describe your survey schedule (how many days per week, what days of the week). It is recommended to adhere to a fixed schedule if 7 days/week is not possible (e.g., 5 days/week every week), and these days would preferably be consecutive.

If you did not survey 7 days per week, how were tracks counted on the day that surveys resumed after a missed day? It is recommended that only tracks from the previous night be counted when the survey resumes.

Were all non-nesting crawls (false crawls) counted during your survey? Yes or No	
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How many people were involved in surveying your nesting beach this season?	
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3. NESTING BEACH MANAGMENT INFORMATION			
Do you collect GPS data for your nests? (Y / N)			Do you archive these data? (Y/N)
If nests were RELOCATED, were they relocated Individually (Ex: simply moving the nest directly landward of the original location or otherwise maintaining natural nest spacing) or in a Group with other relocated nests (i.e., self-releasing and/or restraining hatchery)?			
Please give reasons for relocating nests. (Example: nest located below high tide line, in high foot traffic area, etc.)			
If a HATCHERY was used, please give reasons AND specific location:			
4. FATE OF NEST INFORMATION			
How many nests were marked?			
How many marked nests were negatively affected by predators other than humans during the course of the season? Note: this includes both partially and completely predated nests			
List all non-human predators that were documented predating nests this season:			
If predator control methods <i>other than screening/caging</i> were employed, please describe below:			
How many marked nests were negatively affected by the nesting female or another nesting sea turtle?			
How many marked nests were negatively affected by roots (i.e., <i>damaged eggs, impeded hatchling emergence</i>)?			
How many marked nests were negatively affected by erosion, accretion, inundation, and storm-related events PRIOR to hatching? <i>Note: this <u>does not</u> include stake loss.</i>			
Please give details:			
How many marked nests were taken or disturbed by humans (Example: nest dug into, eggs removed, etc.)? <i>Note: this <u>does not</u> include stake removal.</i>			
Please give details:			
If human disturbances occurred, were they reported to law enforcement?			Yes or No
Unmarked Nests: If known, please enter any comments regarding fate of unmarked nests on your beach. (Example: 14 unmarked nests were predated by raccoons, etc.)			
How many disorientation events occurred on this survey area in 2012 2013			
If disorientation events occurred, have all disorientation reports been submitted to FWC?			Yes or No

I certify the above information to be true and accurate to the best of my knowledge. (type in name & date)	
	Date:



**FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
FISH AND WILDLIFE RESEARCH INSTITUTE
SEA TURTLE NESTING REPORT FOR 2013**

1. PRINCIPAL PERMIT HOLDER INFORMATION

Principal Permit Holder:	Permit Number:
Beach Name:	

2. GENERAL NESTING DATA

	<i>C. caretta</i> (Loggerhead)	<i>C. mydas</i> (Green Turtle)	<i>D. coriacea</i> (Leatherback)	<i>E. imbricata</i> (Hawksbill)	<i>L. kempii</i> (Kemp's Ridley)
Total # of Nests					
Total # of Non-Nesting Emergences (False Crawls)					
Date (mm/dd/yy) of First Documented Nest					
Date (mm/dd/yy) of Last Documented Nest					

Total # of Nests Prior to 15 May:					
Total # of Nests After 31 Aug:					

Comments:	
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In the spaces below, please provide information on the initial nest treatment (e.g., in situ, screened, relocated, etc.). For example, if the initial treatment was in situ with no protection, it should be included in "(a) # of Nests left in place without additional protection" even if you later relocate the nest due to erosion.

Nest Data for nests left in place (where the turtle deposited the clutch): These nests may be left without additional protection, screened with a self-releasing flat screen, or covered with self-releasing or restraining above-ground cages.

Record the number of nests by category and species. For each species, rows a+b+c+d should equal the total number of nests left in place. Please check to make sure this is the case.	<i>C. caretta</i> (Loggerhead)	<i>C. mydas</i> (Green Turtle)	<i>D. coriacea</i> (Leatherback)	<i>E. imbricata</i> (Hawksbill)	<i>L. kempii</i> (Kemp's Ridley)
TOTAL # OF NESTS LEFT IN PLACE (a + b + c + d)					
(a) # of Nests left in Place without Additional Protection					
(b) # of Nests left in Place with Self-Releasing Flat Screen					
(c) # of Nests left in Place with Self-Releasing Cage					
(d) # of Nests left in Place with Restraining Cage					

Relocated Nest Data: Relocated nests are those where the clutch is removed from its original site of deposition and reburied at another site. These nests may be relocated to individual sites or as a group to a hatchery (a permanent or semi-permanent fenced or caged area where many nests are re-buried as a group). As with nests left in place, relocated nests may be left without additional protection, covered with self-releasing flat screen, or covered with a self-releasing for restraining above-ground cages. Hatcheries may be self-releasing (hatchlings escape unaided) or restraining (hatchlings cannot escape unaided).

Record the number of nests by category and species. For each species, rows a+b+c+d+e+f should equal the total number of relocated nests. Please check to make sure this is the case.	<i>C. caretta</i> (Loggerhead)	<i>C. mydas</i> (Green Turtle)	<i>D. coriacea</i> (Leatherback)	<i>E. imbricata</i> (Hawksbill)	<i>L. kempii</i> (Kemp's Ridley)
TOTAL # OF NESTS RELOCATED (a + b + c + d + e + f)					
(a) # of Relocated Nests without Additional Protection					
(b) # of Relocated Nests with Self-Releasing Flat Screen					
(c) # of Relocated Nests with Self-Releasing Cage					
(d) # of Relocated Nests with Restraining Cage					
(e) # of Relocated Nests to Self-Releasing Hatchery					
(f) # of Relocated Nests to Restraining Hatchery					

Additional Comments for the 2013 Season

Beach Name:

[illegible]

Attachment 2

Nest productivity and nourishment monitoring worksheets

11 November 2013

Prepared by:

Kennard Watson
St. Andrew Bay Resource Management Association
6509 Palm Court
Panama City Beach, Florida 32408

Prepared for:

Dan Rowe
Bay County Tourist Development Council
P.O. Box 9473
Panama City Beach, Florida 32413

FWC Fish and Wildlife Research Institute Sea Turtle Nest Success Information for Relocated and Caged nests, 2013																								
(Note: Please do not add or delete columns, change column headings or change text in red.)																								
Beach Name										Panama City Beach					Permit #		038		Permit Holder Name:			Kennard Watson		
Species Codes: CC (loggerhead); CM (green turtle); DC (leatherback) ; EI (hawksbill); LK (Kemp's ridley)										Nest Treatment Codes: Left in Place: A=No Additional Protection; B=Self-Releasing Screen; C=Self-Releasing Cage; D=Restraining Cage. Relocated: E=No Additional Protection; F=Self-Releasing Screen; G=Self-Releasing Cage; H=Restraining Cage; I=Self-Releasing Hatchery; J=Restraining Hatchery.														
Species (Use Codes listed above)	Nest label	Date nest made (mm/dd/yy)	Clutch Size (for relocated nests; otherwise enter Unk)	Initial Treatment	Negative Impacts to Nests (Answer Y or N unless otherwise noted)										Emergence Date(s) Multiple dates are okay; if not observed enter "unk" mm/dd)	Date Nest was Inventoried (mm/dd)	Hatched Eggs			Unhatched Eggs			Additional Comments	
					Predated	List of Predators	Impacted by Nesting Sea Turtle	Impacted by Roots	Poached	Inundated	Washed Over	Washed Out	Impacted by Accretion	# of Hatchlings in Nest			# of Empty Shells >50% complete (hatchling escaped)	# of Pipped Eggs		# of Whole Eggs (all stages of embryos inside)	# of Damaged Eggs (damaged by predators, roots, etc.)			
																		Dead	Live			Dead		Live
CC	CC-1	23-May	UNK	A	N		N	N	N	N	NO	N	UNK	UNK	13-Aug	0	0	0	0	0	139	0	Double-chambered nest. Excavation showed that 119 eggs had discernable embryos (115 fully formed). Collected 10 unhatched eggs at excavation for	
CC	CC-2	28-May	125	E	N		N	N	N	Y	Yes	N	UNK	UNK	12-Aug	0	0	0	0	0	109	0	Excavation showed that 84 eggs have some embryonic development (54 with large embryos). 10 eggs collected at excavation for UCF student	
CC	CC-3	2-Jun	UNK	A	N		N	Y	N	N	No	N	UNK	5-Aug	8-Aug	0	2	99	0	0	35	2	Turtle disoriented after nesting, crawled into stormwater ditch and had to be assisted back to gulf. Excavation showed vegetation roots around one	
CC	CC-4	4-Jun	123	E	N		N	N	N	N	No	N	UNK	12-Aug	15-Aug	0	1	83	0	0	5	0	Hatchlings emerged between 3 am and 4 am according to motel staff. 5 eggs collected at excavation for UCF student Simona Ceriani.	
CC	CC-5	4-Jun	89	F	N		N	Y	N	N	No	N	UNK	13-Aug	16-Aug	0	0	64	0	0	5	0	Excavation showed that vegetation roots were growing into egg chamber, no adverse effects. 5 eggs collected at excavation for UCF student Simona	
CC	CC-6	10-Jun	UNK	A	N		N	N	N	N	Y	N	UNK	16-Aug	19-Aug	0	0	77	0	0	8	0	Nesting turtle reported by beach cleaner removing tents as part of Leave No Trace ordinance. Bystanders moved lounge chairs to enable turtle to nest.	
CC	CC-7	14-Jun	UNK	A	N		N	N	N	N	N	N	UNK	16-Aug	19-Aug	0	1	87	0	0	26	4	Excavation showed that 11 unhatched eggs had no embryos. 10 eggs collected at excavation for UCF student Simona Ceriani.	
CC	CC-8	17-Jun	UNK	A	N		N	Y	N	N	N	N	UNK	21-Aug	24-Aug	1	10	73	0	0	51	5	Excavation showed that 39 unhatched eggs with discernable embryos. Some vegetation roots in nest. 10 eggs collected at excavation for UCF	
CC	CC-9	18-Jun	UNK	B	N		N	N	N	N	N	N	UNK	27-Aug	30-Aug	0	9	83	0	0	29	3	Several hatchlings from main emergence trapped in tire ruts. Excavation showed 13 of 19 eggs with discernable embryoss. 10 eggs collected at	
CC	CC-10	18-Jun	UNK	B	N		N	N	N	N	N	N	UNK	UNK	3-Sep	0	0	0	0	0	80	0	Turtle was laying eggs when volunteers arrived at 11:15 pm. Shell hash and compacted sand in area where eggs were moved. Excavation revealed	
CC	CC-11	23-Jun	UNK	B	N		N	N	N	N	N	N	UNK	29-Aug	1-Sep	0	2	44	0	0	33	0	Pool lights at Princess Condo contributed to hatchling disorientation. Excavation showed no discernable embryos in 21 of 23 unhatched eggs. 10	
CC	CC-12	23-Jun	104	E	N		N	N	N	N	Y	N	UNK	30-Aug	2-Sep	1	2	118	0	0	6	0	Bystanders who saw nesting turtle reported a "blinking" tracking device on its shell. Forwarded report to Meg Lamont of USGS, who said this turtle	
CC	CC-13	25-Jun	123	E	N		N	N	N	Y	Y	Y	UNK	UNK	UNK	UNK	UNK	UNK	UNK	UNK	UNK	UNK	Nest washed away by storm.	
CC	CC-14	27-Jun	105	E	N		N	N	N	N	N	N	UNK	27-Aug	30-Aug	0	18	111	1	2	7	2	Volunteers thought this was a false crawl during night response (did not see turtle), but surveyor determined it was a nest following morning.	
CC	CC-15	27-Jun	UNK	A	N		N	N	N	N	N	N	UNK	4-Sep	7-Sep	0	1	87	0	0	1	0	The one unhatched egg collected at excavation for UCF student Simona Ceriani.	
CC	CC-16	29-Jun	87	F	N		N	N	N	Y	Y	N	UNK	UNK	12-Sep	0	0	0	0	0	134	0	Nest reported at night during severe storm, surveys cancelled next morning, nest found by volunteers after storm passed. Excavation showed that 124	
CC	CC-17	30-Jun	UNK	A	N		N	N	N	Y	Y	N	UNK	UNK	15-Sep	0	0	0	0	0	96	0	Nest in standing water during storm on July 4. Excavation showed 84 eggs with no discernable embryos and 12 eggs with embryos. 10 unhatched eggs	
CC	CC-18	8-Jul	UNK	A	N		N	N	N	N	N	N	UNK	8-Sep	11-Sep	0	0	38	0	0	30	3	Excavation showed 19 eggs with no discernable embryos and 1 with fully formed embryos. 10 unhatched eggs collected at excavation for UCF	
CC	CC-19	8-Jul	91	E	N		N	N	N	N	N	N	UNK	11-Sep	14-Sep	0	0	86	0	0	5	1	5 unhatched eggs collected at excavation for UCF student Simona Ceriani.	
CC	CC-20	9-Jul	UNK	A	N		N	N	N	N	Y	N	UNK	UNK	23-Sep	0	0	3	1	0	55	0	Excavation shoed that 55 unhatched eggs had discernable embryos, 3 hatched eggs at top of clutch. 10 unhatched eggs collected at excavation	
CC	CC-21	12-Jul	UNK	F	N		N	N	N	N	Y	N	UNK	16-Sep	19-Sep	0	1	92	0	0	5	1	5 unhatched eggs collected at excavation for UCF student Simona Ceriani.	

MANDATORY FIELDS - THIS PAGE TO BE COMPLETED UPON SUBMISSION

PROJECT NAME:	Bay County Beach Restoration (MOD 25)
COUNTY:	BAY
DEP PERMIT NUMBER:	0128852-001-JC
DATE SAND PLACEMENT COMPLETED (mm/yyyy):	Dec-11
TYPE OF SAND PLACEMENT :	ON - Nourishment - Offshore Sand Source
LENGTH OF PROJECT/SAND PLACEMENT AREA (kilometers):	11.7 km (estimate)
LENGTH OF REFERENCE/CONTROL AREA (kilometers):	16.6 km (estimate)
YEAR OF MONITORING:	YR 2 = 2nd season following sand placement
NEST MARKING SCHEME (indicate if different for each species):	ALL
MARINE TURTLE PERMIT HOLDER(S) (name and MTP number):	Kenard Watson 038
FLORIDA DEP R-MONUMENT (start):	Eastern Reach: R-81 (30.15298; -85.770653) to R-92 (30.13296; -85.745265)
FLORIDA DEP R-MONUMENT (end):	Western Reach: R-5 (30.261495; -85.97681) to R-29 (30.231585; -85.909352)
NESTING BEACH NAME:	Panama City Beach

Species	Within Project Area	Total # of Nests Counted (Marked and Unmarked)	Total # of False Crawls Counted (Marked and Unmarked)
LOGGERHEAD	Yes	22	22
LOGGERHEAD	No	14	11
GREEN	Yes	0	0
GREEN	No	3	0
LEATHERBACK	Yes	0	0
LEATHERBACK	No	0	0

INFORMATION ON THIS PAGE IS AUTOMATICALLY GENERATED FOR NOURISHMENT PRODUCTIVITY

Species	Within Project Area	NSR	# of FCs Characterized	% of FCs: No Digging	% of FCs: Body Pit	% of FCs: Egg Chamber	% of Marked Nests Disoriented	# of Nests Marked	# of Nests Inventoried	% of Marked Nests Washed Out	Average HSR Excluding Relocated Nests	Average HSR Excluding Nests Washed Out/ Depredated/ Relocated	Average ESR Excluding Relocated Nests	Average ESR Excluding Nests Washed Out/ Depredated/ Relocated	Average HSR for Relocated Nests Excluding Nests Washed Out/ Depredated/ Relocated
Loggerhead	Yes	50.00%	22	77.27%	18.18%	4.55%	68.2%	22	22	4.55%	50.7%	57.0%	49.9%	56.1%	68.8%
Loggerhead	No	56.00%	11	81.82%	18.18%	0.00%	64.3%	14	13	14.29%	35.8%	46.1%	35.7%	45.9%	91.6%
Green	Yes	#DIV/0!	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Green	No	100.00%	0	#DIV/0!	#DIV/0!	#DIV/0!	33.3%	3	3	#DIV/0!	74.0%	74.0%	72.9%	72.9%	#DIV/0!
Leatherback	Yes	#DIV/0!	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Leatherback	No	#DIV/0!	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Nest Mean Dist to Dune (m)	Nest Mean Dist to MHW (m)	FC Apex Mean Dist to Dune (m)	FC Apex Mean Dist to MHW (m)
32.1	10.0	34.8	12.6
28.8	10.7	28.9	11.9
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6.7	35.4	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

C c Nest Worksheet

If **VOL** then inventory, **HLandH** values will automatically be generated as 'U' or 'V' if available. Inventory data for parts/workbooks can be entered without **HLandH** unless **VOL** or **Replenishment Productivity**.

IF NEST WAS INVENTORIED, DO NOT LEAVE INVENTORY DATA CELLS BLANK, TYPE 0, IF NO DATA EXISTS.

RED CELLS WERE AUTOMATICALLY GENERATED OR WERE ENTERED AS 8

RED CELLS WERE AUTOMATICALLY GENERATED OR WERE ENTERED AS 8

CELLS ARE AUTOMATICALLY GENERATED

actual data entered in the seed inventory columns.

actual data entered in the seed inventory columns.

These columns will be hidden from NTP holders not participating in the SNDS Nest Productivity Program.

This additional information is requested only from NTP holders participating in SNDS Nest Productivity Program.

Information should be provided on a voluntary basis and is not required by regulatory permits for sand placement.

Information should be provided on a voluntary basis and is not required by regulatory permits for sand placement.

Information should be provided on a voluntary basis and is not required by regulatory permits for sand placement.

[illegible]

FALSE CRAWL WORKSHEET

[illegible]

Attachment 3

Disorientation incident reports

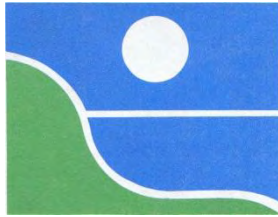
11 November 2013

Prepared by:

Kennard Watson
St. Andrew Bay Resource Management Association
6509 Palm Court
Panama City Beach, Florida 32408

Prepared for:

Dan Rowe
Bay County Tourist Development Council
P.O. Box 9473
Panama City Beach, Florida 32413



St. Andrew Bay
RESOURCE MANAGEMENT ASSOCIATION
Post Office Box 15028
Panama City, Florida 32406
www.sabrma.org

11 November 2013

Kennard Watson, Turtle Watch Coordinator
St. Andrew Bay Resource Management Association
6509 Palm Court
Panama City Beach, Florida 32408

Meghan Koperski
Florida Fish and Wildlife Conservation Commission
Post Office Box 3478
Tequesta, Florida 33469

Dear Meghan:

This letter summarizes results of 25 hatchling disorientation reports and six adult nesting turtle disorientation reports for the 2013 nesting season on Panama City Beach (Permit 038). We documented significant hatchling disorientations this season, with 1570 of 2167 hatchlings (72%) affected by artificial lights. Additionally, six adult female loggerheads were disoriented on the beach while searching for a nesting spot. The following provides detailed results for each incident and includes a description of the survey area, methodology used to quantify disorientations, and discusses the types of lights contributing to disorientation incidents and related impacts caused by beach driving.

Survey Area, Nest Marking, and Monitoring Procedure. The survey area extends 17.6 miles from St. Andrews State Park to Camp Helen State Park. This entire area is now under a lighting ordinance, passed in 2009 by the City of Panama City Beach and Bay County. The 4-year grace period for implementation expired this year on May 1, and the ordinance was in full effect this season. All loggerhead nests were marked with four stakes, orange survey tape, and an informational sign with the nest number. We checked the nests for signs of emergence each morning (6-8 am), early evening (7-9 pm), and late night (10-12 pm). The early morning checks were done by the surveyors, while volunteers performed the early evening and late-night checks. The start date for nighttime monitoring was determined from the measured sand temperature in the vicinity of the nest. Nighttime monitoring of the loggerhead nests is not required by our permit but is performed due to the serious lighting problems in our survey area. Three endangered green nests were found this year, and restraining cages were placed over the nests to protect the hatchlings from lights. Nighttime monitoring was required for these nests, and they were checked three times a day, including a nightly check between 11 pm and 1 am.

Method to Quantify Hatchling Disorientations. We submit disorientation reports only for main emergences and not for small numbers of hatchlings that may emerge afterward. All reports are submitted electronically to FWC and local code enforcement officers during the season, usually within three days of the incident. Most incidents are documented during night surveys by volunteers who are at the nest when the hatchlings emerge or arrive shortly after the emergence while hatchlings are still on the beach and tracks are fresh. Volunteers collect disoriented hatchlings and estimate the number of turtles reaching the water by observing the animals or counting tracks. Volunteers note the location of lights attracting the hatchlings and document the sky condition at the time of emergence, including the presence

or absence of moonlight. When volunteers are present during the emergence, the number of disoriented hatchlings is determined by how many the volunteers collect, in addition to any turtles observed reaching the water after wandering. Nest excavation data are used to adjust some disorientation estimates. For example, if volunteers arrive after an emergence and see all tracks leading away from the water, the nest is assumed to have 100% disorientation and the number of disoriented hatchlings is obtained from the excavation data. For the nests protected with restraining cages, we estimate disorientation by two methods. We observe the distribution of turtles within the cage, noting how many are on the seaward side indicating no disorientation. We also release a sample of 10 hatchlings at the nest site and observe their behavior as they crawl to the water. If this group becomes disoriented, the remaining turtles are taken to a dark beach within our survey area and released.

Hatchling Disorientation Results. Table 1 shows results of all nests that hatched at night, including those at which no disorientation occurred. The column for “Total Emerged” represents the main emergence which excludes stragglers that may have emerged afterwards. The column for “Local Gov” indicates the jurisdiction of the nest location, either Panama City Beach or Bay County. Information also is provided on the method used to document the hatchling emergence. Volunteers documented emergences during night surveys at 75% of the nests (21 of 28) and were present at the main emergence at 46% (13 of 28). Using the data in this table, two metrics are computed to assess overall disorientation within the survey area.

- The first represents the fraction of hatched nests at which disorientation reports were filed. Reports were filed for 25 of 28 nests, giving a disorientation rate of 89%. The disorientation incidents were not evenly spread across the survey area but occurred mostly on the east and west ends, as shown in Figure 1.
- The second represents the number of hatchlings that were disoriented, expressed as a fraction of all hatchlings that emerged at night. This approach shows that 72% of hatchlings were disoriented by lights, or 1570 of 2167 turtles.

Any measurement of hatchling disorientation is subject to errors. Of the two metrics shown above, I believe the second is a better estimate of lighting effects, because it is a more direct measurement of the turtles’ response to lights.

Adult Disorientation Results. Table 2 shows results of six disorientation incidents involving adult loggerheads. At five of these incidents, disorientation was determined based on a wandering track found during the morning survey after the turtle had returned to the water. At one incident, the turtle was found on the beach during the morning survey. She had wandered through the dunes and almost onto the coastal highway before being rescued by Turtle Watch with help from FWC Law Enforcement.

Lights Contributing to Hatchling Disorientation. Figure 2 shows the types of lights contributing to hatchling disorientation incidents this year. The two largest contributors were street lights (22%) and exterior house lights (18%). Condo exterior lights contributed only 13%, which is a significant improvement from last year (33%). Condos appear to be in generally good compliance through the use of shielded patio lights and absence of roof-mounted flood lights, which were disconnected or turned off. However, many other properties remain out of compliance, particularly single family homes. Enforcement was lacking this season in spite of timely submission of disorientation reports to code enforcement officers.

Beach Driving Affecting Hatchling and Adult Turtles. Beach driving is prevalent throughout the survey area and occurs during the day and night, posing numerous risks to sea turtles. Driving activities include police response, garbage collection, commercial activities (beach raking, parasail, jet skis, lounge chairs), and environmental monitoring (sea turtles, shorebirds). Figure 3 shows deep ruts left by tractors and

trucks (atv's used for environmental monitoring do not leave deep ruts). Figure 4 shows the track of a loggerhead hatchling caught in a rut. Vehicle tire ruts often trapped hatchlings and were a contributing factor at 40% of the nests where hatchlings were disoriented by lights. With regard to adult turtles, an endangered green was nearly run over while nesting by a tractor collecting garbage on July 10 at about 11 pm. The tractor operated by Coastal Parasail was on the beach at night in violation of the company's state permit. State and federal authorities were notified in addition to the Bay County Tourist Development Council which funds the garbage collection.

If you have questions on the enclosed material, please contact me during business hours at (850) 234-4643 or at pcbturtle@yahoo.com. Thanks.

Sincerely,

Kennard Watson

Kennard Watson
Turtle Watch Coordinator

Attachments

Table 1. Nighttime hatchling emergences from 27 loggerhead nests and one green nest on Panama City Beach in 2013.

Nest No.	Nearest Landmark	Incident Date	Total Emerged	Number Disoriented	Percent Disoriented	Method Used to Document Hatchling Emergence	Report Filed	Local Gov
3	Pineapple Beach Villas, 19979 Front Beach Rd	5-Aug	97	97	100%	Night survey: hatchlings observed emerging from nest	Yes	County
4	Paradise Palms Motel, 12907 Front Beach Rd	12-Aug	82	82	100%	Night survey: tracks identified and hatchlings collected	Yes	City
5	Tropic Winds Condo, 17643 Front Beach Rd	13-Aug	59	55	93%	Night survey: hatchlings observed emerging from nest	Yes	City
6	Moonspinner Condo, 4425 Thomas Dr	16-Aug	77	77	100%	Bystander report	Yes	County
7	Beachside Resort, 21905 Front Beach Rd	17-Aug	86	86	100%	Morning survey: tracks identified and hatchlings collected	Yes	County
8	House, 104 Beachside Dr, Carillon Beach	21-Aug	56	0	0%	Night survey: hatchlings observed emerging from nest	No	County
9	House, 21010 Front Beach Rd	27-Aug	74	66	89%	Night survey: tracks identified and hatchlings collected	Yes	County
11	Summerwinds Condo, 6323 Thomas Dr	29-Aug	42	42	100%	Night survey: hatchlings observed emerging from nest	Yes	County
12	House, 4723 Spyglass Dr	30-Aug	115	5	4%	Night survey: hatchlings observed emerging from nest	Yes	County
14	Emerald Isles Condo, 17545 Front Beach Rd	28-Aug	93	93	100%	Morning survey: tracks identified and hatchlings collected	Yes	City
15	Thomas Donut & Snack Shop, 19208 Front Beach Rd	4-Sep	86	76	88%	Morning survey: tracks identified and hatchlings collected	Yes	County
19	House, 5623 Gulf Dr	8-Sep	38	36	95%	Night survey: tracks identified and hatchlings collected	Yes	County
20	Townhouse, 21000 Front Beach Rd	11-Sep	83	2	2%	Night survey: hatchlings observed emerging from nest	No	County
23	House, 19600 Front Beach Rd	16-Sep	91	0	0%	Night survey: tracks identified	No	County
24	House, 13708 Front Beach Rd	16-Sep	92	91	99%	Night survey: hatchlings observed emerging from nest	Yes	City
25	Beach Tower Resort Motel, 12001 Front Beach Rd	14-Sep	107	28	26%	Night survey: hatchlings observed emerging from nest	Yes	City
26	Regency Condo, 5801 Thomas Dr	13-Sep	79	79	100%	Morning survey: tracks identified and hatchlings collected	Yes	County
27	Townhouse, 7901 Surf Dr	25-Sep	64	62	97%	Night survey: tracks identified	Yes	County

						and hatchlings collected		
28	Blue Horizon Retreat, 19016 Front Beach Rd	19-Sep	52	38	73%	Night survey: hatchlings observed emerging from nest	Yes	County
29	Landmark Condo, 17501 Front Beach Rd	29-Sep	58	58	100%	Night survey: hatchlings observed emerging from nest	Yes	City
30	Townhouse, 7831 Surf Dr	26-Sep	112	112	100%	Night survey: tracks identified and hatchlings collected	Yes	County
31	Seaside Villas Condo, 4701 Thomas Dr	26-Sep	86	86	100%	Morning survey: tracks identified	Yes	County
32	House, 4914 Spyglass Dr	25-Sep	76	76	100%	Night survey: tracks identified and hatchlings collected	Yes	County
33	Polynesian Village Condo, 16621 Front Beach Rd	29-Sep	111	67	60%	Night survey: tracks identified and hatchlings collected (caged nest)	Yes	City
35	House, 22115 Front Beach Rd	4-Oct	90	40	44%	Night survey: hatchlings observed emerging from nest	Yes	County
36	House, 8223 Surf Dr	12-Oct	51	48	94%	Night survey: hatchlings observed emerging from nest	Yes	County
37	Pirates Cove Villas, 23001 Front Beach Rd	8-Oct	71	31	44%	Morning survey: tracks identified and hatchlings collected	Yes	County
39	Latitude 29 Condo, 21703 Front Beach Rd	1-Nov	39	37	95%	Night survey: hatchlings observed emerging from nest	Yes	County
TOTAL			2167	1570	72.5%			

Table 2. Adult loggerhead disorientation incidents on Panama City Beach in 2013.

Crawl No.	Crawl Type	Nearest Landmark	Incident Date	Observations	Report Filed	Local Gov
3	Nest	Pineapple Beach Villas, 19979 Front Beach Rd	2-Jun	Turtle disoriented after nesting, crawled into stormwater ditch and was assisted back to gulf	Yes	County
11	Nest	Summerwinds Condo, 6323 Thomas Dr	23-Jun	Turtle made two body pits	Yes	County
3	False Crawl	Fontainebleau Terrace, 14401 Front Beach Rd	8-Jun	Turtle made one body pit	Yes	City
6	False Crawl	Surfside Villas, 17561 Front Beach Rd	8-Jun	Turtle made one body pit	Yes	City
9	False Crawl	Legacy by the Sea Condo, 15325 Front Beach Rd	9-Jun	Turtle obstructed by lounge chairs and storage container	Yes	City
24	False Crawl	Pineapple Villas, 19979 Front Beach Rd	9-Jul	Turtle crawled over dunes and almost onto road, rescued with assistance from FWC	Yes	County

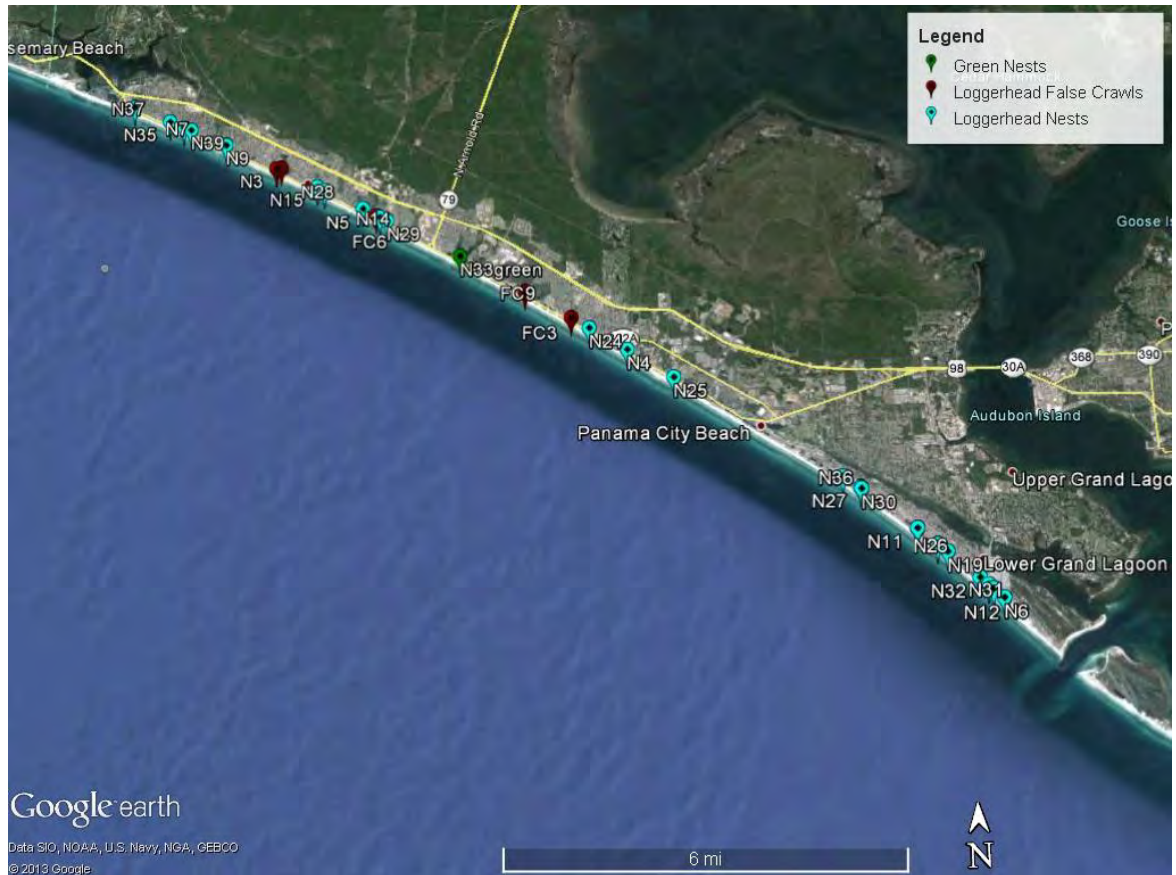


Figure 1. Map showing location of nests on Panama City Beach in 2013 at which hatchling and adult turtle disorientation reports were filed.

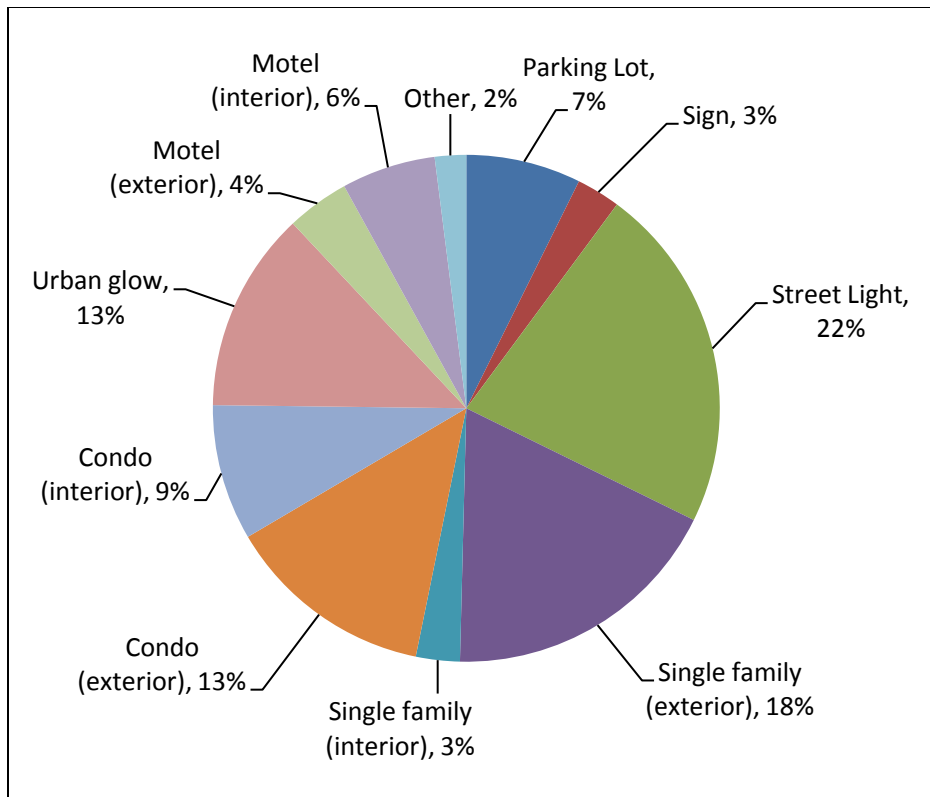


Figure 2. Lights contributing to hatchling disorientation incidents on Panama City Beach in 2013 (25 nests).

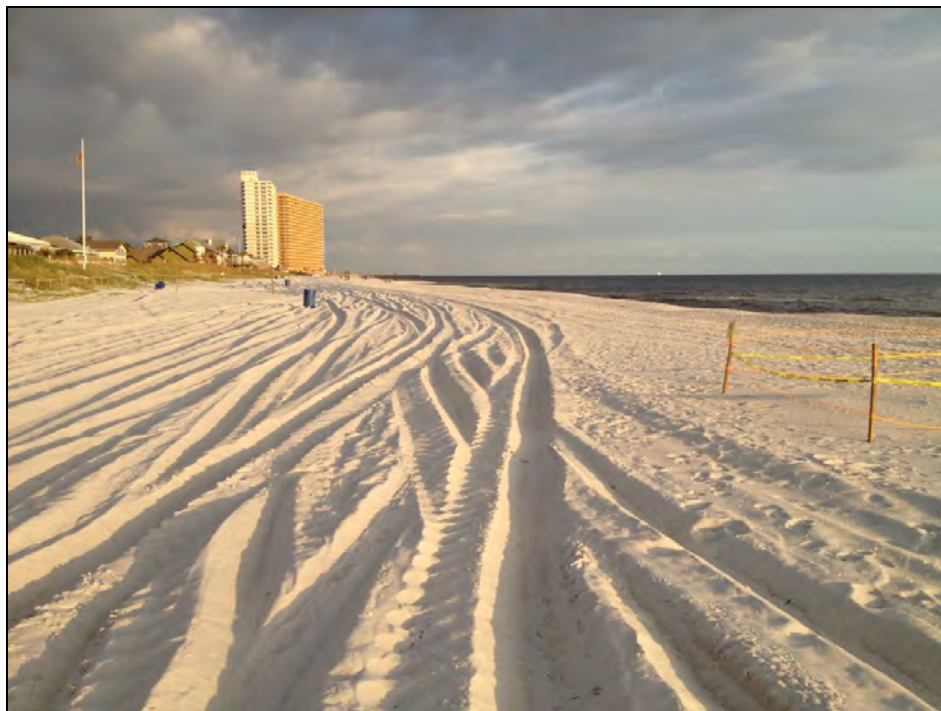


Figure 3. Tire ruts on Panama City Beach near Nest 19.



Figure 4. Track of a loggerhead hatchling caught in a tire rut near Nest 9.

K P W 1 3 1 1 0 1 0 1 B A Y

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MYFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 11/01/13Observer's Name: Christine Lawrence and Katrina WilliamsTelephone (include area code): 850-234-6917 E-mail address: KatrinaWilliams2@yahoo.comLocation of Disorientation Event: (address, beach name and/or nearest landmark): Latitude 29 CondoCity: PCB Panama City Beach County: BayLocal nest ID#: 39 Zone nest was located in: 31

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.25282 Longitude: -85.95617

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used)
		☐ Restraining Cage
		☒ Self-releasing Screen/Cage
		☐ Light Barrier (i.e., silt screen)
		☐ Relocated

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ DaytimeWas the incident photographed? ☐ YES ☒ NOWas the source nest found? ☒ YES ☐ NOWas the nest excavated? ☒ YES ☐ NOIf "YES" report date of excavation: 11/4/13

21715 FRONT BEACH ROAD



Number of turtles disoriented:

- ☐ 1
☐ 2-10
☒ 11-50
☐ >50

Disoriented turtles reaching the water:

- ☒ All
☐ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number: _____

37 released in Sunnyside

Addresses/landmarks turtle(s) disoriented towards: Urban glow + House light
on 21715 Front Beach RdWere probable/possible light source(s) identified? ☒ YES ☐ NOIf "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- ☐ parking lot
☐ dune crossover
☐ restaurant/bar
☐ pier

- ☐ street light
☐ single family home (interior)
☒ single family home (exterior)
☐ sign

- ☐ condominium (interior)
☐ condominium (exterior)
☒ sky glow/urban glow
☐ other: _____

Additional comments (use back if necessary):

37 disoriented - taken to Sunnyside & released to swim awayLocal authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Signature of Observer

Date

KPW-13-10-08-01-BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 38 Date of Incident: 10-8-13
 Observer's Name: Nancy Evou + Kennard Watson
 Telephone (include area code): 850-624-4239 E-mail address: ncpanamared@knology.net
 Location of Disorientation Event: (address, beach name and/or nearest landmark): 23001 Front Beach Rd. Pirate Cove Villas, Unit 102
 City: Panama City Beach County: Bay
 Local nest ID#: 37 Zone nest was located in: 33
 Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):
 Latitude: 30.259462 Longitude: -85.971667

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☒ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	---

Incident was documented during: (check one) ☒ Morning Survey ☐ Night Survey ☐ Daytime



Was the incident photographed? ☒ YES ☐ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 10/10/13

Number of turtles disoriented: ☐ 1 ☐ 2-10 ☒ 11-50 ☐ >50	Disoriented turtles reaching the water: ☐ All ☒ Some ☐ None ☐ Not investigated
Were any disoriented turtles found dead? ☒ YES ☐ NO If "YES" indicate the number: <u>5</u>	

Addresses/landmarks turtle(s) disoriented towards: 22519 Front Beach Rd. Shores Condo

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|---|
| ☐ parking lot | ☐ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant/bar | ☐ single family home (exterior) | ☒ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: _____ |

Additional comments (use back if necessary): Tracks found during morning survey on 10/8 showed that most disoriented turtles crawled east toward urban glow of Panama City Beach

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Kennard Watson

Signature of Observer

10/11/13

Date

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 10/12/13

Observer's Name: Kennard Watson

Telephone (include area code): (850) 238-9895 E-mail address: pcbturtle@yahoo.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): House, 8223 Surf Drive

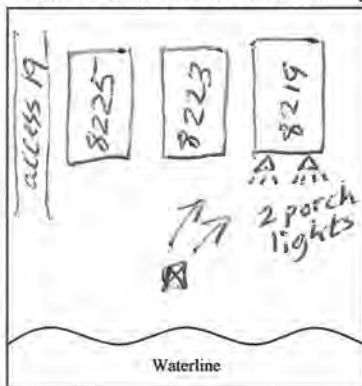
City: Panama City Beach County: Bay

Local nest ID#: 36 Zone nest was located in: 7

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.162685 Longitude: -85.785266

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	--	---

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime

Was the incident photographed? ☐ YES ☒ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 10/15/13

Number of turtles disoriented: ☐ 1 ☐ 2-10 ☒ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
---	--

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: Turtles crawled toward exterior porch lights on house at 8219 Surf Dr which were brightest in vicinity of nest. Interior lights next door at 8223 Surf Dr also visible.

Were probable/possible light source(s) identified? ☒ YES ☐ NOIf "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☐ parking lot	☐ street light	☐ condominium (interior)
☐ dune crossover	☒ single family home (interior)	☐ condominium (exterior)
☐ restaurant/bar	☒ single family home (exterior)	☐ sky glow/urban glow
☐ pier	☐ sign	☐ other: _____

Additional comments (use back if necessary): All but 5 hatchlings from main emergence crawled toward house lights. 48 disoriented turtles were collected by bystanders at ~9 pm, and they called Turtle Watch. We released them at Sunnyside Beach.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Kennard Watson

Digitally signed by Kennard Watson
 DN: cn=Kennard Watson, o=RMA, ou=038,
 email=pcbturtle@yahoo.com, c=US
 Date: 2013.10.13 08:40:52 -0500

Signature of Observer

10/13/13

Date

KPW-13-10-04-01-BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 38 Date of Incident: 7 OCT 2013

Observer's Name: Tina Buddi

Telephone (include area code): 850 630 6301 E-mail address: BUDDIT@SAIC.COM

Location of Disorientation Event: (address, beach name and/or nearest landmark):

22115 Front Beach Rd

City: PCB County: BAY

Local nest ID#: 35 Zone nest was located in: 32

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.255375 Longitude: -85.961775

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	--

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime



Was the incident photographed? ☐ YES ☒ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO
 If "YES" report date of excavation: 10/7/13

Number of turtles disoriented: ☐ 1 ☐ 2-10 ☒ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
Were any disoriented turtles found dead? ☐ YES ☒ NO If "YES" indicate the number: _____	

Addresses/landmarks turtle(s) disoriented towards: Beachside resort, 21905 Front Beach Rd, stairwell and balcony lights

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☐ parking lot	☐ street light	☐ condominium (interior)
☐ dune crossover	☐ single family home (interior)	☒ condominium (exterior) hotel
☐ restaurant/bar	☐ single family home (exterior)	☒ sky glow/urban glow
☐ pier	☐ sign	☐ other: _____

Additional comments (use back if necessary): Turtles were also stuck in multiple deep tire ruts.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Signature of Observer: Tina Buddi

Date: 5 OCT 2013

KPW 13 09 29 02 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 9/29/13

Observer's Name: Karen Simonsen

Telephone (include area code): (850) 233-4454 E-mail address: spetalk3@aol.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): 1602 Front Beach Rd./

City: Panama City Beach County: Bay

Local nest ID#: 33 Zone nest was located in: 21

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.218521 Longitude: -85.383273

SPECIES: (check one) ☐ Cc = Loggerhead ☒ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☒ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	---

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime

Was the incident photographed? ☐ YES ☒ NO

Was the source nest found? ☒ YES ☐ NO

Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 10/2/13



Number of turtles disoriented: ☐ 1 ☒ 2-10 ☐ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
---	--

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number:

Addresses/landmarks turtle(s) disoriented towards: Sterling Breeze (16701 Front Beach Rd.) Condos had a very bright flood light on 19th floor; plus, east wall was illuminated by street lights.

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other:

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☐ parking lot ☐ dune crossover ☐ restaurant/bar ☐ pier	☒ street light ☐ single family home (interior) ☐ single family home (exterior) ☐ sign	☐ condominium (interior) ☒ condominium (exterior) ☐ sky glow/urban glow ☐ other:
---	---	--

Additional comments (use back if necessary): An exterior flood light located on the 19th floor of Sterling Breeze Condo was very bright causing a majority of a sample of 10 Green turtles to head west toward the Condo away from the water. Therefore, we decided to relocate the other 107 turtles to Sunnyside.

Local authority provided a copy of this report: ☒ City ☐ County ☐ FWC ☐ Other:

Signature of Observer: Karen Simonsen

Date: 9/29/13

NEST 32

KPW 13 09 25 02 BAY
Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 638 Date of Incident: 9-25-13
Observer's Name: LINDA YATES
Telephone (include area code): 850-230-4408 E-mail address: lyateslcb@gmail.com
Location of Disorientation Event: (address, beach name and/or nearest landmark): 4914 SPY GLASS PCB

City: PANAMA CITY BEACH County: BAY
Local nest ID#: 32 Zone nest was located in: 1
Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):
Latitude: 30.138620 Longitude: -85.752235

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	--	---

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime
 Was the incident photographed? ☐ YES ☒ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO
 If "YES" report date of excavation: 9/28/13



Number of turtles disoriented: ☐ 1 ☐ 2-10 ☒ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☒ Some ☐ None ☐ Not investigated
Were any disoriented turtles found dead? ☐ YES ☒ NO If "YES" indicate the number:	

Addresses/landmarks turtle(s) disoriented towards: 4914 SPY GLASS BAD PORCH LIGHTS
 THEN WEST IN TREE CUTS TOWARDS TREASURE ISLAND
 I WENT 1/5 MI TO SCHOONERS

Were probable/possible light source(s) identified? ☒ YES ☐ NO
 If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other:

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|---|---|
| ☐ parking lot | ☐ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant/bar | ☒ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: |

Additional comments (use back if necessary): TURTLES FOLLOWED IN TREE CUTS AFTER
 COWLING OUT OF NEST TOWARD LIGHTS

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other:

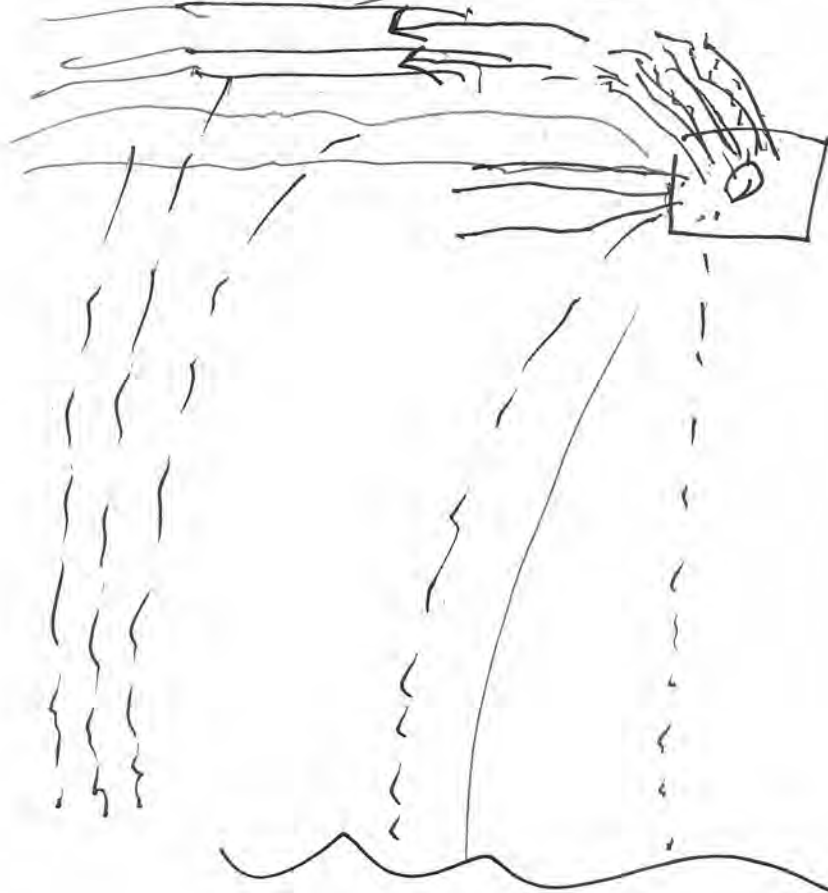
Linda Yates
Signature of Observer

9-25-13
Date

TREASURE ISLAND

4914 SPYGLASS

TIRE RUTS



ALL WENT NW OUT OF NEST
EXCEPT A FEW

GOT CAUGHT IN TIRE RUTS
& WENT WEST ↑ AS FAR
AS SCHOOONERS

WATER

1 TURTLE FOUND BY SCHOOONERS - ~~CHABE~~

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 9/26/13

Observer's Name: Kennard Watson and Nancy Evou

Telephone (include area code): (850) 238-9895 E-mail address: pcbturtle@yahoo.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): Seaside Villas, 4701 Thomas Drive

City: Panama City Beach County: Bay

Local nest ID#: 31 Zone nest was located in: 1

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.135978 Longitude: -85.748713

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other	TYPE OF EVENT: (check one) ☐ Adult – Nesting Emergence ☐ Adult – False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	--

Incident was documented during: (check one) ☒ Morning Survey ☐ Night Survey ☐ Daytime

Was the incident photographed? ☐ YES ☒ NO

Was the source nest found? ☒ YES ☐ NO

Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 9/29/13



Number of turtles disoriented:

- ☐ 1
☐ 2-10
☐ 11-50
☒ >50

Disoriented turtles reaching the water:

- ☒ All
☐ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number:

Addresses/landmarks turtle(s) disoriented towards: turtles went west parallel to shoreline toward lights of Commodore Condo, 4715 Thomas Dr, and Treasure Island Condo, 5004 Thomas Dr

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other:

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|--|
| ☐ parking lot | ☐ street light | ☒ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☒ condominium (exterior) |
| ☐ restaurant/bar | ☐ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: |

Additional comments (use back if necessary): Tracks found during morning survey on Sep 26 indicated that turtles eventually reached water after wandering west parallel to shore, some caught in tire ruts. Based on night survey performed on Sep 27, brightest lights were interior lights at Commodore and exterior white lights on north side (street side) of Treasure Island, visible due to condo's proximity and orientation relative to water.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other:

Kennard Watson

Digitally signed by Kennard Watson
 DN: cn=Kennard Watson, o=RMA, ou=038,
 email=pcbturtle@yahoo.com, c=US
 Date: 2013.09.28 09:06:29 -0500

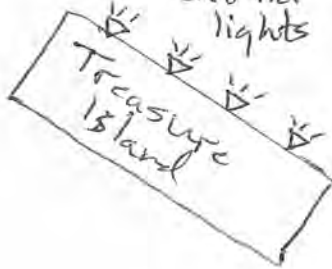
Signature of Observer

9/29/13

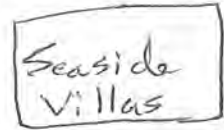
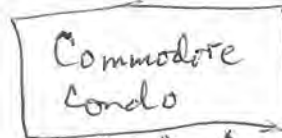
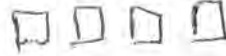
Date

5004 Thomas

numerous
exterior
lights



4715 Thomas



interior lights

some caught
in tire ruts



water

FWC MARINE TURTLE DISORIENTATION REPORT*If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975***Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com****Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469**Marine Turtle Permit #: 038 Date of Incident: 9/26/13Observer's Name: Kennard WatsonTelephone (include area code): (850) 238-9895 E-mail address: pcbturtle@yahoo.comLocation of Disorientation Event: (address, beach name and/or nearest landmark): Townhouse at 7831 Surf DriveCity: Panama City Beach County: Bay: Local nest ID#: 30 Zone nest was located in: 6

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.159708 Longitude: -85.780703**SPECIES: (check one)**

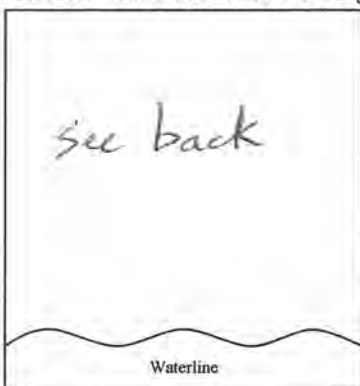
- ☒ Cc = Loggerhead
☐ Cm = Green Turtle
☐ Dc = Leatherback
☐ Un = Unidentified
☐ O = Other _____

TYPE OF EVENT: (check one)

- ☐ Adult - Nesting Emergence
☐ Adult - False Crawl
☒ Hatchling

NEST TREATMENT: (check all used)

- ☐ Restraining Cage
☐ Self-releasing Screen/Cage
☐ Light Barrier (i.e., silt screen)
☐ Relocated

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ DaytimeWas the incident photographed? ☐ YES ☒ NOWas the source nest found? ☒ YES ☐ NOWas the nest excavated? ☒ YES ☐ NOIf "YES" report date of excavation: 9/29/13**Number of turtles disoriented:**

- ☐ 1
☐ 2-10
☐ 11-50
☒ >50

Disoriented turtles reaching the water:

- ☐ All
☒ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: hatchlings crawled generally westward, tracks confusedWere probable/possible light source(s) identified? ☒ YES ☐ NOIf "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____**Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)**

- | | | |
|---|---|---|
| ☐ parking lot | ☐ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant/bar | ☒ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: _____ |

Additional comments (use back if necessary): Turtles emerged just after sunset and may have benefited from skyglow, as most crawled in direction of sunset. All tracks went to water from nest but then became confused with some caught in tire ruts (police vehicle at nest). 5 exterior lights visible from nearby homes mostly west of nest. Brightest light was flood at 7817 Surf Dr. 16 live hatchlings collected and released at Sunnyside Beach.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____**Kennard Watson**

Digitally signed by Kennard Watson
 DN: cn=Kennard Watson, o=RMA, ou=038,
 email=pcbturtle@yahoo.com, c=US
 Date: 2013.09.28 08:18:29 -0500

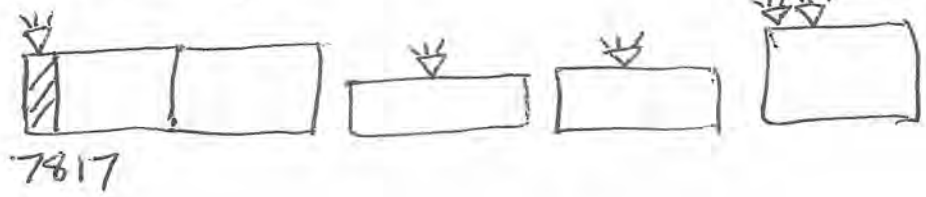
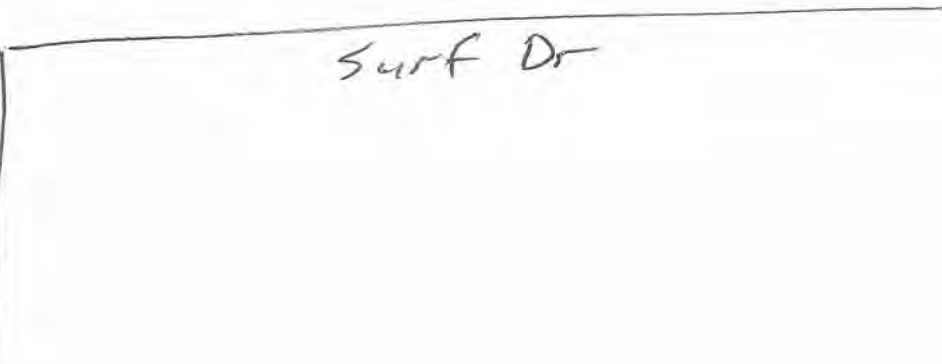
Signature of Observer

9/29/13

Date

public access 16

choctaw



water

tracks confused but many entered water

some caught in tire ruts

1 live hatchling

several live turtles found ~200 yd west

7817

Surf Dr

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: September 29, 2013Observer's Name: Laura GiereTelephone (include area code): (850) 249-1262 E-mail address: Rockcraze@aol.comLocation of Disorientation Event: (address, beach name and/or nearest landmark): 17501 Front Beach Road, Landmark Condo, public access 68City: Panama City Beach County: BayLocal nest ID#: 29 Zone nest was located in: 23

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.227962 Longitude: -85.902725

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	--	---

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ DaytimeWas the incident photographed? ☐ YES ☒ NOWas the source nest found? ☒ YES ☐ NOWas the nest excavated? ☒ YES ☐ NOIf "YES" report date of excavation: 10/2/13

Number of turtles disoriented:

- ☐ 1
☐ 2-10
☐ 11-50
☒ >50

Disoriented turtles reaching the water:

- ☒ All
☐ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: streetlights outside of Landmark CondominiumWere probable/possible light source(s) identified? ☒ YES ☐ NOIf "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- ☐ parking lot
☐ dune crossover
☐ restaurant/bar
☐ pier

- ☒ street light
☐ single family home (interior)
☐ single family home (exterior)
☐ sign

- ☐ condominium (interior)
☐ condominium (exterior)
☐ sky glow/urban glow
☐ other: _____

Additional comments (use back if necessary): 58 disoriented hatchlings headed to streetlights on Front Beach Road near Landmark Condominium (address 17501 Front Beach Road)Local authority provided a copy of this report: ☒ City ☐ County ☐ FWC ☐ Other: _____

Laura Giere
 Signature of Observer

9/29/2013
 Date

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 13-038B Date of Incident: 9-19-13

Observer's Name: Helen Hernandez

Telephone (include area code): 850-866-1083 E-mail address: mizzyh@bellsouth.net

Location of Disorientation Event: (address, beach name and/or nearest landmark): 19016 Front Beach Rd. (Blue Horizon Retreat)

City: Panama City Beach County: Bay

Local nest ID#: 28 Zone nest was located in: 26

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.23649 Longitude: -85.91945

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☒ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	---

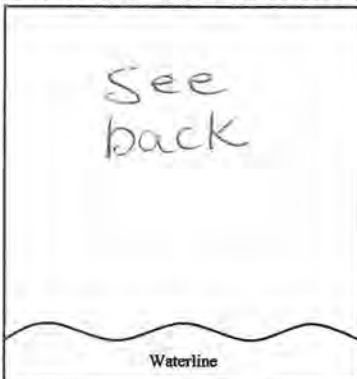
Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime

Was the incident photographed? ☐ YES ☒ NO

Was the source nest found? ☒ YES ☐ NO

Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 9/22/13



Number of turtles disoriented:

- ☐ 1
☐ 2-10
☒ 11-50
☐ >50

Disoriented turtles reaching the water:

- ☒ All
☐ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead?

☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: went towards Carousel sign (west)
and also Condos to the east (urban glow)

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|---|
| ☐ parking lot | ☐ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant/bar | ☐ single family home (exterior) | ☒ sky glow/urban glow |
| ☐ pier | ☐ sign | ☒ other: <u>Carousel Store Sign</u> |

Additional comments (use back if necessary): Several hatchlings had trouble in tire ruts.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Helen Hernandez
Signature of Observer

9-19-13
Date



Full
moon
w/ partly
cloudy skies

Carousel

FB Road

urban
glow



Nest 45 emerged

Tire Ruts

Tire Ruts

7 Hatchlings made it
to water - 38 disoriented

Water

NEST 27

KPW 13 09 25 01 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 9-25-13

Observer's Name: LYNDIA YATES

Telephone (include area code): 850-230-4408 E-mail address: lyatesprb@gmail.com

Location of Disorientation Event: (address, beach name and/or nearest landmark):

7901 SURF DRIVE

City: PANAMA CITY BEACH County: BAY

Local nest ID#: 27 Zone nest was located in: 6

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.159988 Longitude: -85.780916

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
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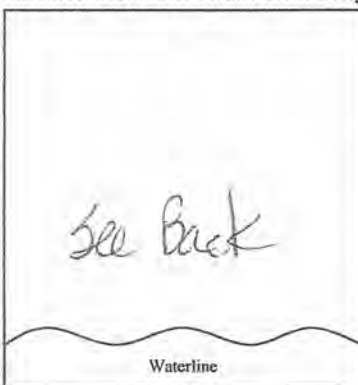
Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime

Was the incident photographed? ☐ YES ☐ NO

Was the source nest found? ☒ YES ☐ NO

Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 9/28/13



Number of turtles disoriented:

- ☐ 1
☐ 2-10
☒ 11-50
☐ >50

Disoriented turtles reaching the water:

- ☒ All
☐ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead? ☐ YES ☒ NO

☒ If "YES" indicate the number:

Addresses/landmarks turtle(s) disoriented towards: 7901 SURF - PORCH 7901 SURF #1 & #7
8001 - SURF - COURT YARD - ALL USE: BAD

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other:

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

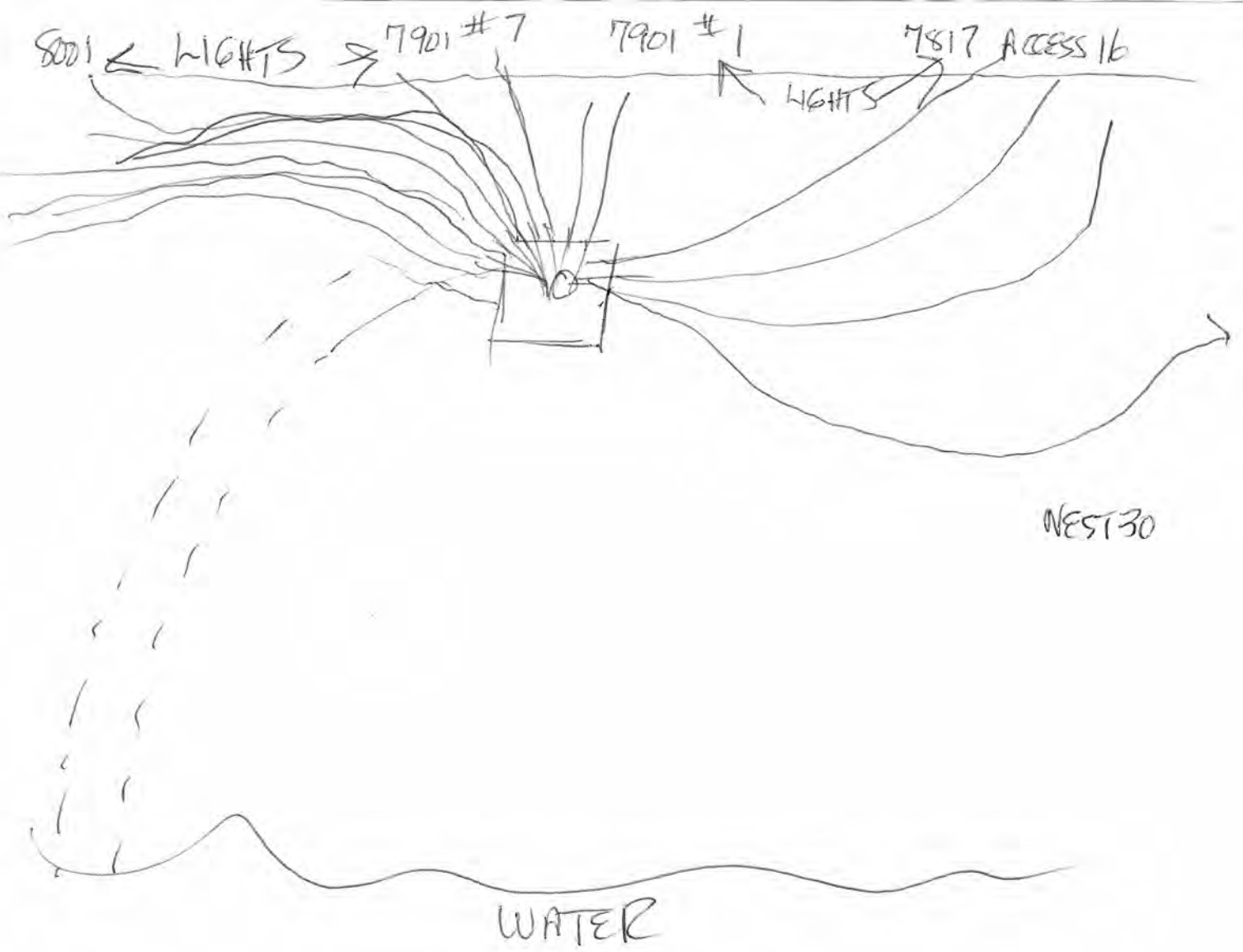
- | | | |
|---|---|---|
| ☐ parking lot | ☐ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant/bar | ☒ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: |

Additional comments (use back if necessary): 16 released @ sunnyside 4th ST
+ 3 released @ NEPT

☒ Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other:

Signature of Observer

Date



K P W 1 3 0 9 1 3 0 1 B A Y

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 9/13/13
 Observer's Name: Kennard Watson + Nancy Evers
 Telephone (include area code): 850-238-9895 E-mail address: pcbturtle@yahoo.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): Regency Condo,
5801 Thomas Dr

City: Panama City Beach County: Bay

Local nest ID#: 26 Zone nest was located in: 3

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.14656 Longitude: -85.76209

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
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Incident was documented during: (check one) ☒ Morning Survey ☐ Night Survey ☐ Daytime

Was the incident photographed? ☐ YES ☒ NO

Was the source nest found? ☒ YES ☐ NO

Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 9/16/13



Number of turtles disoriented:

- ☐ 1
☐ 2-10
☐ 11-50
☒ >50

Disoriented turtles reaching the water:

- ☐ All
☒ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead? ☒ YES ☐ NO

If "YES" indicate the number: 1

Addresses/landmarks turtle(s) disoriented towards: Lights in vicinity of Nova St
and Watercrest Condo, 6201 Thomas Dr

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

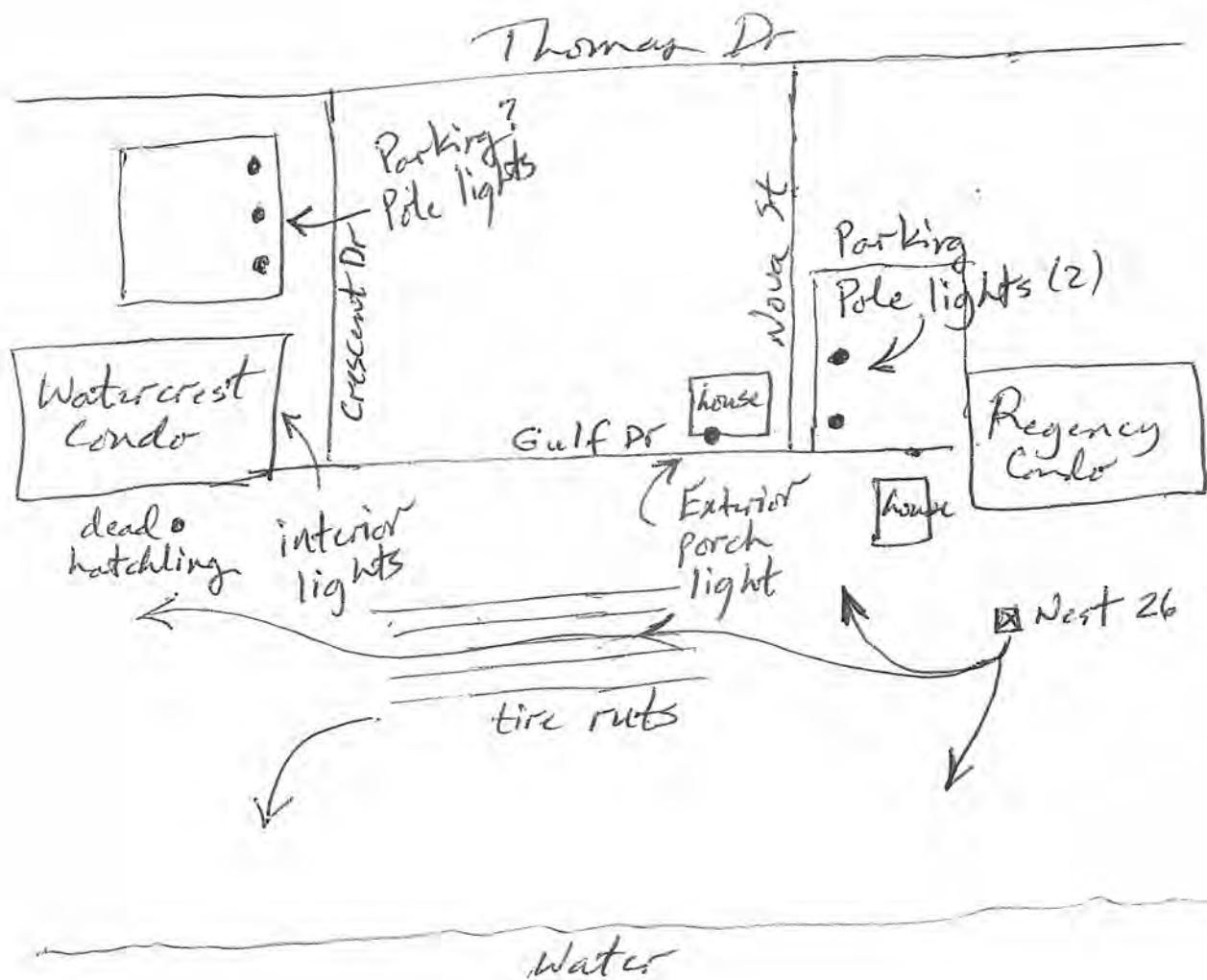
- | | | |
|---|---|--|
| ☒ parking lot | ☐ street light | ☒ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant/bar | ☒ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: _____ |

Additional comments (use back if necessary): turtle tracks found during morning survey.
As initially went to water then turned west, some caught in tire ruts,
some went toward Nova St, and some went 71000 ft to Watercrest
Condo, where I found dead. Checked area for lights on 9/19, 7:20pm

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Kennard Watson
 Signature of Observer

9/19/13
 Date



KPW 13 09 14 01 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

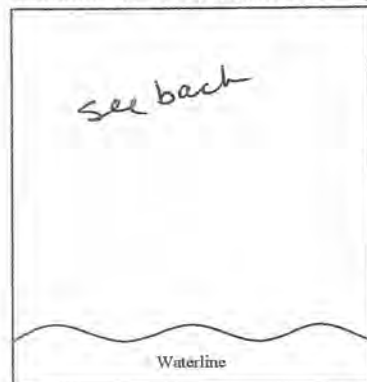
Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 38 Date of Incident: 9/14/2013
 Observer's Name: Betsy & Roger Staley
 Telephone (include area code): 850-769-7244 E-mail address: possummamas3@gmail.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): Beach Town Resort
12001 Front Beach Road, Panama City Beach
 City: Panama County: Bay
 Local nest ID#: 25 Zone nest was located in: 13
 Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):
 Latitude: 30.18785 Longitude: -85.82762

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	--

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime
 Was the incident photographed? ☒ YES ☐ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO
 If "YES" report date of excavation: 9/17/13



Number of turtles disoriented: ☐ 1 ☐ 2-10 ☒ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
Were any disoriented turtles found dead? ☐ YES ☒ NO If "YES" indicate the number: _____	

Addresses/landmarks turtle(s) disoriented towards: westward hatchlings west toward pier parking lights and both side street lights. Eastward hatchlings west toward street lights and Sun Salons which has very bright lights.
 Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____
Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)
☒ parking lot concrete ☒ street light ☐ condominium (interior)
☐ dune crossover ☐ single family home (interior) ☐ condominium (exterior)
☐ restaurant/bar ☐ single family home (exterior) ☐ sky glow/urban glow
☐ pier ☐ sign ☐ other: _____

Additional comments (use back if necessary): Hatchlings headed SW upon leaving the nest somewhat in the direction of the moon. When they got down on the beach they could see the lights on the north side of FBR and headed east and west. Late crew took 26 hatchlings to release at Sun side. We then found two more hatchlings about 270 yards west traveling to pier parking lights - we released them in dark area near the
 Local authority provided a copy of this report: ☒ City ☐ County ☐ FWC ☐ Other: _____

Gale A. Staley
 Signature of Observer
9/14/2013
 Date
 dark area near the

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975
 Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com
 Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 9-16-13
 Observer's Name: Isis Kaendees
 Telephone (include area code): 850-249-2921 E-mail address: 1515K@usa.net
 Location of Disorientation Event: (address, beach name and/or nearest landmark): 13708 Front Beach Rd
in Bid-a-Wee Subdivision
 City: PCB County: Bay
 Local nest ID#: 24 Zone nest was located in: 16
 Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):
 Latitude: 30.20015 Longitude: -85.84933

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	--

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime
 Was the incident photographed? ☒ YES ☐ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO
 If "YES" report date of excavation: 9/19/13



Number of turtles disoriented: ☐ 1 ☐ 2-10 ☐ 11-50 ☒ >50	Disoriented turtles reaching the water: ☐ All ☒ Some ☐ None ☐ Not investigated
Were any disoriented turtles found dead? ☐ YES ☒ NO If "YES" indicate the number: _____	

Addresses/landmarks turtle(s) disoriented towards: Most turtles were headed towards moon
in S.E. but got caught in many deep ruts & started going
towards lights

Were probable/possible light source(s) identified? ☐ YES ☐ NO
 If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____
Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)
☐ parking lot ☒ street light ☐ condominium (interior)
☐ dune crossover ☒ single family home (interior) ☐ condominium (exterior)
☐ restaurant/bar ☒ single family home (exterior) ☒ sky glow/urban glow
☐ pier ☒ sign ☐ other: _____

Additional comments (use back if necessary):

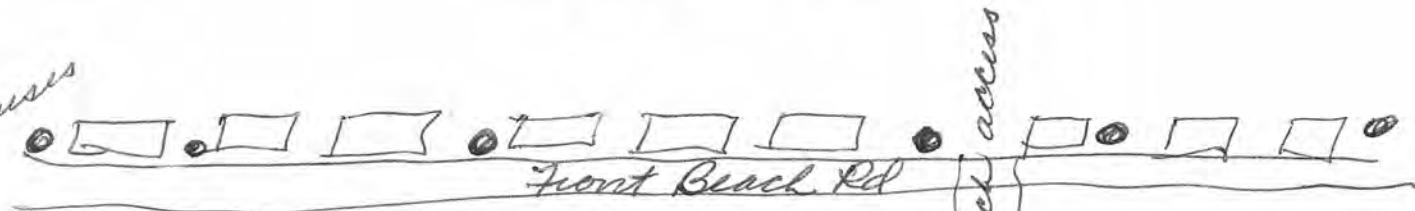
Local authority provided a copy of this report: ☒ City ☐ County ☐ FWC ☐ Other: _____

Signature of Observer: Isis Kaendees Date: 9-17-13

N

⊙ = street lights

houses



Front Beach Rd

Back + new beach access

Dunes

W

nest

E
deep
cuts

one went to water

water

S

K P W 1 3 0 9 0 8 0 1 B A Y

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

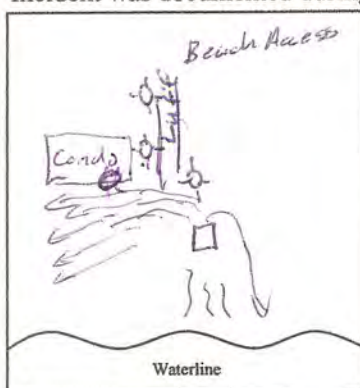
Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 8 Sep 2013
 Observer's Name: Lydia Ambrose & George Walrand & Kennard Watson
 Telephone (include area code): 850 896-8907 E-mail address: gwalrand1@comcast.net

Location of Disorientation Event: (address, beach name and/or nearest landmark): 5623 Gulf Dr.

City: Panama City Beach County: Bay
 Local nest ID#: 19 Zone nest was located in: 3
 Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):
 Latitude: 30.14470 Longitude: -85.75993

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	--	---

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime

Was the incident photographed? ☐ YES ☒ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO
 If "YES" report date of excavation: 9/11/13

Number of turtles disoriented: ☐ 1 ☐ 2-10 ☒ 11-50 ☐ >50	Disoriented turtles reaching the water: ☐ All ☐ Some ☒ None ☐ Not investigated
Were any disoriented turtles found dead? ☐ YES ☒ NO If "YES" indicate the number: _____	

Addresses/landmarks turtle(s) disoriented towards: Street light at access, Condo lights
Lights to west of nest

Were probable/possible light source(s) identified? ☒ YES ☐ NO
 If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|--|
| ☐ parking lot | ☒ street light | ☒ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☒ condominium (exterior) |
| ☐ restaurant/bar | ☐ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: _____ |

Additional comments (use back if necessary): Panama City Beach Police truck at nest
with lights on when we arrived ~9:20pm. Three street lights
at Luff St were brightest in vicinity of nest. 36 disoriented
turtles released at Sunnyside

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

George Walrand
 Signature of Observer

9-8-13

Date

KPW-13-09-04-01-BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

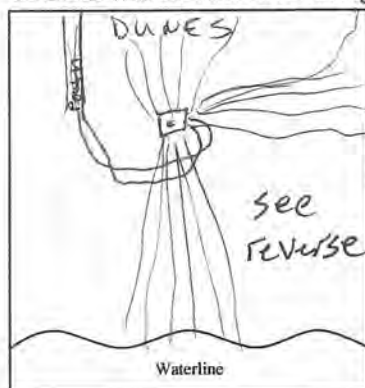
Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 38 Date of Incident: 9/4/2013
 Observer's Name: Betsy Straley
 Telephone (include area code): _____ E-mail address: possummama53@gmail.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): _____
19208 Front Beach Road
 City: Panama City Beach County: Bay
 Local nest ID#: 15 Zone nest was located in: 25
 Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):
 Latitude: 30.237484 Longitude: -85.921430

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	--

Incident was documented during: (check one) ☐ Morning Survey ☐ Night Survey ☒ Daytime (early)



Was the incident photographed? ☒ YES ☐ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO
 If "YES" report date of excavation: 9/7/13

Number of turtles disoriented: ☐ 1 ☐ 2-10 ☐ 11-50 ☒ >50	Disoriented turtles reaching the water: ☐ All ☒ Some ☐ None ☐ Not investigated
---	--

Were any disoriented turtles found dead? ☒ YES ☐ NO
 If "YES" indicate the number: 15

Addresses/landmarks turtle(s) disoriented towards: headed east toward sunrise - north toward dunes and streetlights

Were probable/possible light source(s) identified? ☒ YES ☐ NO
 If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☐ parking lot	☒ street light	☐ condominium (interior)
☐ dune crossover	☐ single family home (interior)	☐ condominium (exterior)
☐ restaurant/bar	☐ single family home (exterior)	☐ sky glow/urban glow
☐ pier	☐ sign	☐ other: _____

Additional comments (use back if necessary): nest hatched early morning - called in to FWC by passerby who saw hatchlings in street. One dead in crab hole, one dead on foot path and 13 dead in street (Front Beach Road) live hatchlings were found across FBR and up side streets. Live hatchlings released on site.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

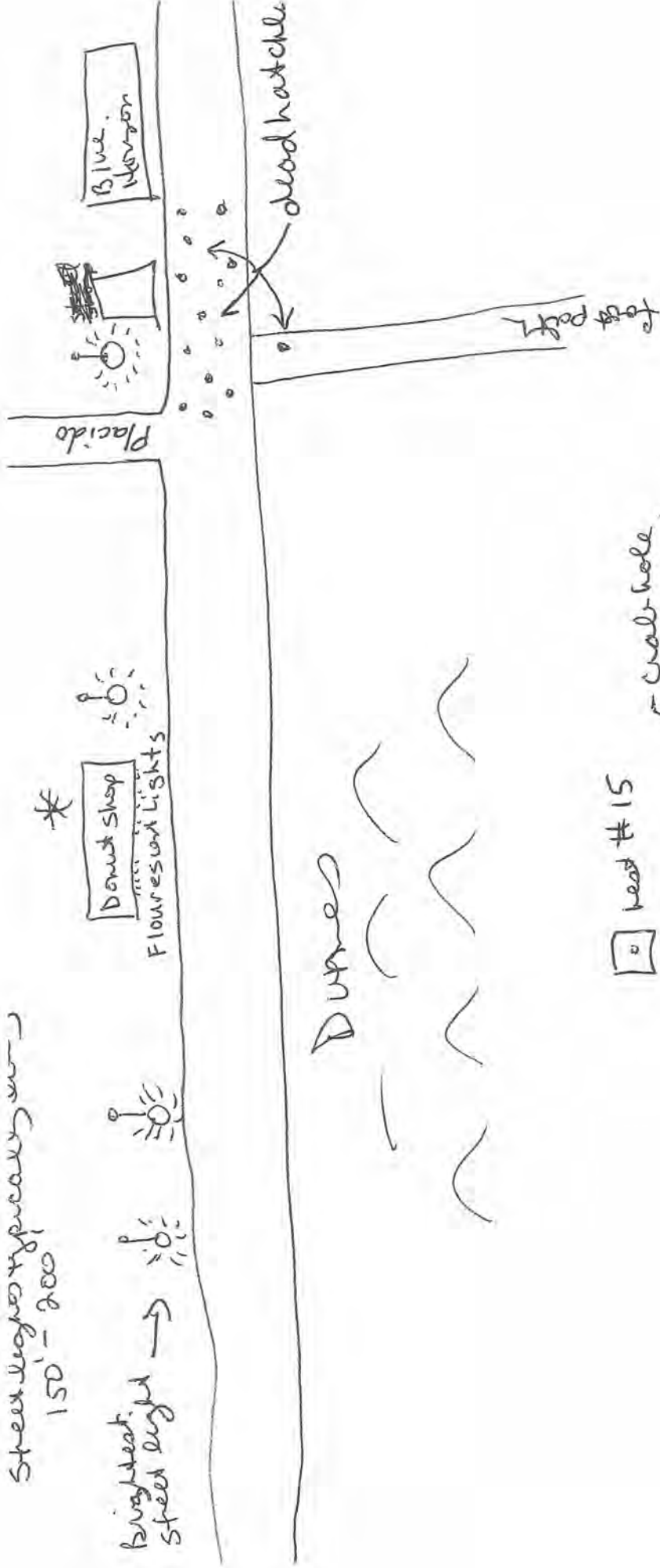
Gallon Aska
 Signature of Observer

4 Sept 2013
 Date

Street lights typically are ~
150' - 200'

Brightest
street light →

* Donut Shop
Flourescent lights



Water

* Note - donut shop most
light but in a narrow
field of view. Most
prominent source of light is
at 12h

KPW 13 08 28 01 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory: (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 8/28/13

Observer's Name: Robert Gilmore

Telephone (include area code): 850 819 6562 E-mail address: gilzach@yahoo.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): West of Emerald Isles Condo, 17545 Front Beach Rd

City: Panama City Beach County: Bay Co

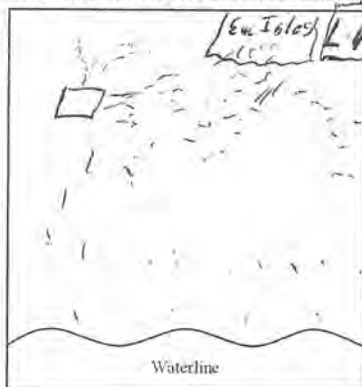
Local nest ID#: 14 Zone nest was located in: 24

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.22963 Longitude: -85.90544

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	--

Incident was documented during: (check one) ☒ Morning Survey ☐ Night Survey ☐ Daytime



Was the incident photographed? ☐ YES ☒ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☒ NO

If "YES" report date of excavation: 8/30/13

Number of turtles disoriented: ☐ 1 ☐ 2-10 ☐ 11-50 ☒ >50	Disoriented turtles reaching the water: ☐ All ☒ Some ☐ None ☐ Not investigated
---	--

Were any disoriented turtles found dead? ☐ YES ☒ NO
 If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: Emerald Isles Condo 17545 Front Beach Rd.

Were probable/possible light source(s) identified? ☒ YES ☐ NO
 If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☒ parking lot (condo)	☒ street light	☐ condominium (interior)
☐ dune crossover	☐ single family home (interior)	☐ condominium (exterior)
☐ restaurant/bar	☐ single family home (exterior)	☐ sky glow/urban glow
☐ pier	☐ sign	☐ other: _____

Additional comments (use back if necessary): A few went due North towards street light. Most, 12 at elevator doors in garage, 10 in pool+hot tub, 6 more around garage all at Emerald Isles. Nine more were found scattered in dunes all the way to landmark to the East

Local authority provided a copy of this report: ☒ City ☐ County ☐ FWC ☐ Other: _____

Robert Gilmore
 Signature of Observer

8/28/13
 Date

I received a telephone call (6:15^{AM}) from Jason Hurt, a tourist, from Athens Alabama staying at Emerald Isles. I had met Jason at the nest two nights earlier and exchanged phone #s since he planned on watching the nest. This AM Jason was going fishing and encountered 12 hatchlings at the elevator door. (This was at 5:10 AM, Jason 1st encountered) He gathered up 20 total, put them in a cooler, brought them to the nest and released them to walk to the water with his family escorting them. He then remembered that he had my number and called me at 6:15.

I arrived and they were following the last three to the water.

We gathered an additional 17. Ten of these were from an Emerald Isle employee that found them in the pool + Hot tub. (See ...)

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

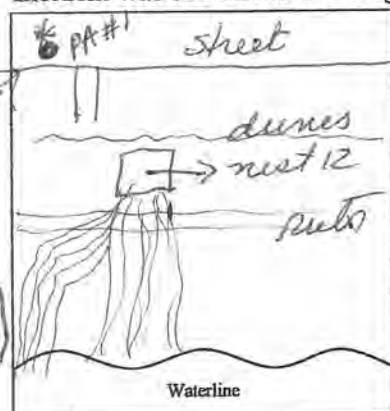
Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 8-30-13
 Observer's Name: Isis Koenders
 Telephone (include area code): 850-249-2921 E-mail address: ISISK@usa.net
 Location of Disorientation Event: (address, beach name and/or nearest landmark): 4723 Spyglass Dr
Next to beach public access #1
 City: PCB County: Bay
 Local nest ID#: 12 Zone nest was located in: 1
 Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):
 Latitude: 30.13704 Longitude: -85.75018

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	--

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime
 Was the incident photographed? ☒ YES ☐ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO
 If "YES" report date of excavation: 9/2/13



Number of turtles disoriented: ☐ 1 ☒ 2-10 ☐ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
Were any disoriented turtles found dead? ☐ YES ☒ NO If "YES" indicate the number: _____	

Addresses/landmarks turtle(s) disoriented towards: Sheet light at corner of Spyglass
and Lookout and Treasure Island condo.

Were probable/possible light source(s) identified? ☒ YES ☐ NO
 If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____
Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☐ parking lot	☒ street light	☐ condominium (interior)
☐ dune crossover	☐ single family home (interior)	☒ condominium (exterior)
☐ restaurant/bar	☐ single family home (exterior)	☐ sky glow/urban glow
☐ pier	☐ sign	☐ other: _____

Additional comments (use back if necessary): Most hatchlings went at an angle toward
water. Few hatchlings had difficulty going over tire ruts. 5 hatchlings
went sideways due to lights on corner by public access 1 and condo
east of Schooners.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Isis Koenders
 Signature of Observer

8-31-13
 Date

K P W 13 08 29 01 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 8/29/2013

Observer's Name: Laura Gjere

Telephone (include area code): (350) 249-1262 E-mail address: Back Oracle@aol.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): 6323 Thomas

Drive, Summerwinds Condo

City: Panama City Beach County: Bay

Local nest ID#: 11 Zone nest was located in: 4

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.15023 Longitude: -85.76710

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
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Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ DaytimeWas the incident photographed? ☐ YES ☒ NOWas the source nest found? ☒ YES ☐ NOWas the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 9/1/13

Number of turtles disoriented: ☐ 1 ☐ 2-10 ☒ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
---	--

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number:

Addresses/landmarks turtle(s) disoriented towards: 6415 Thomas Drive, Princess Condo

Pool lights & beachside door light alcove light

Were probable/possible light source(s) identified? ☒ YES ☐ NOIf "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other:

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☐ parking lot	☐ street light	☐ condominium (interior)
☐ dune crossover	☐ single family home (interior)	☒ condominium (exterior)
☐ restaurant/bar	☐ single family home (exterior)	☐ sky glow/urban glow
☐ pier	☐ sign	☒ other: pool

Additional comments (use back if necessary): 42 disoriented turtles collected. All headed toward pool lights and a bright white alcove light at Princess Condo

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other:

Laura Gjere
 Signature of Observer

8/29/2013
 Date

KPW-130827-01-BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 8/27/2013

Observer's Name: Laura Gjere

Telephone (include area code): (850) 381-3841 E-mail address: RockOracle@aol.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): 21010 Front Beach Road

City: Panama City Beach County: Bay

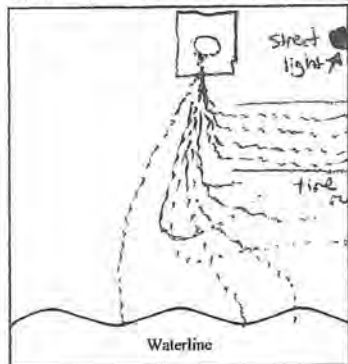
Local nest ID#: 9 Zone nest was located in: 29

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.24883 Longitude: -85.94628

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☒ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	---

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime



Was the incident photographed? ☐ YES ☒ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 8/30/13

Number of turtles disoriented: ☐ 1 ☐ 2-10 ☐ 11-50 ☒ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
---	--

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: Streetlight at 20723 Front Beach Road, North side of street

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☐ parking lot	☒ street light	☐ condominium (interior)
☐ dune crossover	☐ single family home (interior)	☐ condominium (exterior)
☐ restaurant/bar	☐ single family home (exterior)	☐ sky glow/urban glow
☐ pier	☐ sign	☐ other: _____

Additional comments (use back if necessary): Streetlight directly across from Sugar Sands at the laundromat. Additionally, many hatchlings were stuck in deep tire ruts and some went over 1/2 mile in the ruts.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Laura Gjere
Signature of Observer

8/27/2013
Date

KFW-13-08-17-01-BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 17 Aug 2013Observer's Name: Tina BuddiTelephone (include area code): 850 630 6301 E-mail address: BUDDIT@SAIC.comLocation of Disorientation Event: (address, beach name and/or nearest landmark): 21905 Front Beach
Beach Break hotelCity: PCB County: BAYLocal nest ID#: 7 Zone nest was located in: 31

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.25382 Longitude: -85.95807

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☒ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☒ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
--	--	---

Incident was documented during: (check one) ☒ Morning Survey ☐ Night Survey ☐ Daytime

Was the incident photographed? ☐ YES ☒ NO
 Was the source nest found? ☒ YES ☐ NO
 Was the nest excavated? ☒ YES ☐ NO
 If "YES" report date of excavation: 8/19/13

	Number of turtles disoriented: ☐ 1 ☐ 2-10 ☒ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All <u>7</u> ☐ Some ☐ None ☐ Not investigated
	Were any disoriented turtles found dead? ☒ YES ☐ NO If "YES" indicate the number: <u>7 by ants</u>	

Addresses/landmarks turtle(s) disoriented towards: They went to vacant restaurant
lights above the hotel. They were lost in thick vegetation.Were probable/possible light source(s) identified? ☒ YES ☐ NO
If "NO" indicate why: (check one) ☐ No lights present ☒ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☐ parking lot	☐ street light	☐ condominium (interior)
☐ dune crossover	☐ single family home (interior)	☐ condominium (exterior)
☐ restaurant/bar	☐ single family home (exterior)	☐ sky glow/urban glow
☐ pier	☐ sign	☒ other: <u>hotel interior lights</u>

Additional comments (use back if necessary): returned at noon to find
9 more, 3 alive & 6 dead. notified hotel of the
bar lights were too bright.Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Signature of Observer

Date

KPW 13 08 16 01 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 16 Aug 2013

Observer's Name: Tina Buddi + Shirley Brown

Telephone (include area code): 850 630 6301 E-mail address: Buddi@SAK.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): Moonspinner Cords
4425 Thomas Dr

City: PCB County: BAY

Local nest ID#: 6 Zone nest was located in: 1

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.13396 Longitude: -85.74656

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
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Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime

Was the incident photographed? ☒ YES ☐ NO

Was the source nest found? ☒ YES ☐ NO

Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 8/19/13



Number of turtles disoriented:

- ☐ 1
☐ 2-10
☐ 11-50
☒ >50

Disoriented turtles reaching the water:

- ☒ All
☐ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: They went towards room lights at moonspinner that had drapes open.

Were probable/possible light source(s) identified? ☒ YES ☐ NO
 If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|--|
| ☐ parking lot | ☐ street light | ☒ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant/bar | ☐ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: _____ |

Additional comments (use back if necessary): Visitors found hatchlings and reported to beach patrol. They put turtles in water. We found one turtle stuck in a ~6 inch deep tire track.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Signature of Observer

Date

K P W 13 08 13 01 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 8-13-2013Observer's Name: Patty P. Kelly and Melissa ByarsTelephone (include area code): 850-532-5401 E-mail address: patricia-kelly@fwc.gov

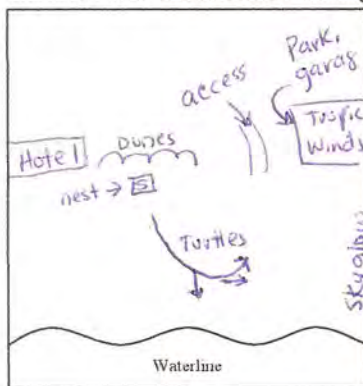
Location of Disorientation Event: (address, beach name and/or nearest landmark):

17643 Front Beach Rd., lot West of Tropic WindsCity: Panama City Beach County: BayLocal nest ID#: 5 Zone nest was located in: Far of dune 24

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.23150 Longitude: -85.90908

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☒ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	--	--

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ DaytimeWas the incident photographed? ☐ YES ☒ NOWas the source nest found? ☒ YES ☐ NOWas the nest excavated? ☐ YES ☒ NO

If "YES" report date of excavation: _____

Number of turtles disoriented: ☐ 1 ☐ 2-10 ☐ 11-50 ☒ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
---	--

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: Skyglow to East and parking garage associated with Tropic Winds.Were probable/possible light source(s) identified? ☒ YES ☐ NOIf "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☒ parking lot /garage ☐ dune crossover ☐ restaurant/bar ☐ pier	☐ street light ☐ single family home (interior) ☐ single family home (exterior) ☐ sign	☐ condominium (interior) ☐ condominium (exterior) ☒ sky glow/urban glow ☐ other: _____
--	--	--

Additional comments (use back if necessary): turtles left the nest in a southeast direction before moving more to an east /north east direction.Local authority provided a copy of this report: ☒ City ☐ County ☐ FWC ☐ Other: _____
Patty P. Kelly
 Signature of Observer

8-13-13
 Date

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 8/12/13

Observer's Name: Kennard Watson

Telephone (include area code): (850) 238-9895 E-mail address: pcbturtle@yahoo.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): Paradise Palms Motel, 12907 Front Beach Rd

City: Panama City Beach County: Bay

Local nest ID#: 4 Zone nest was located in: 15

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.194584 Longitude: -85.839451

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	--

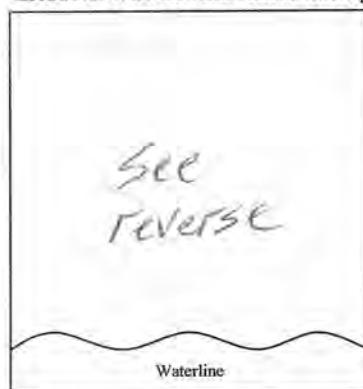
Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime

Was the incident photographed? ☒ YES ☐ NO

Was the source nest found? ☒ YES ☐ NO

Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 8/15/13



Number of turtles disoriented:

- ☐ 1
☐ 2-10
☐ 11-50
☒ >50

Disoriented turtles reaching the water:

- ☐ All
☒ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: same as above

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|--|
| ☐ parking lot | ☐ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant/bar | ☐ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☒ other: motel |

Additional comments (use back if necessary): Arrived before sunrise at ~5:10 am after call from security at motel. Tracks indicated that turtles crawled east toward motel and into dense vegetation. Fewer than 10 turtles reached reached water unaided, about 30 were rescued and released on site. Brightest lights were 3 unshielded yellow hallway lights on east side of building, 5 shielded roof floods, and interior lights from a few motel rooms

Local authority provided a copy of this report: ☒ City ☐ County ☐ FWC ☐ Other: _____

Kennard Watson

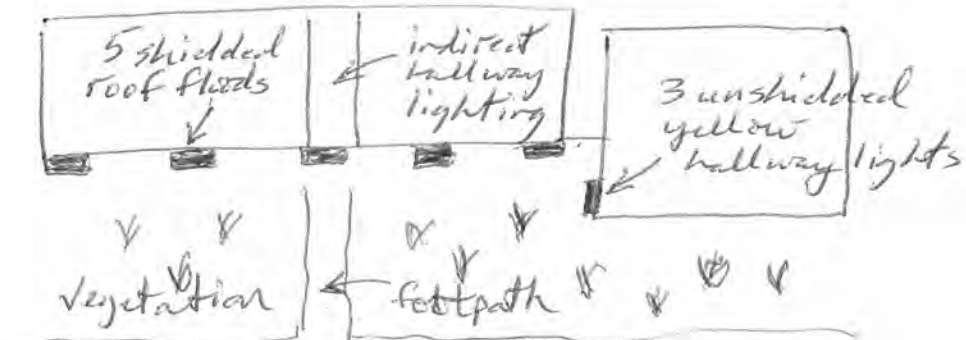
Digitally signed by Kennard Watson
 DN: cn=Kennard Watson, o=RMA, ou=038,
 email=pcbturtle@yahoo.com, c=US
 Date: 2013.08.12 08:24:46 -0500

Signature of Observer

8/12/13

Date

12907 Front Beach Rd



No tracks going
directly to water
from nest

water

KPW 13 08 05 01 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 8/5/13

Observer's Name: Kennard Watson

Telephone (include area code): 850-238-9895 E-mail address: pcbturtle@yahoo.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): Pineapple Beach Villas, 19979 Front Beach Rd

City: Panama City Beach County: Bay

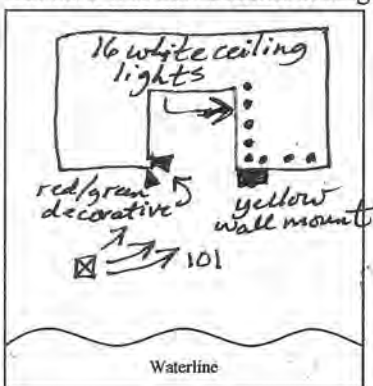
Local nest ID#: 3 Zone nest was located in: 27

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.24254 Longitude: -85.93249

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☐ Adult - False Crawl ☒ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☒ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☒ Relocated
---	--	---

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime



Was the incident photographed? ☒ YES ☐ NO

Was the source nest found? ☒ YES ☐ NO

Was the nest excavated? ☒ YES ☐ NO

If "YES" report date of excavation: 8/8/13

Number of turtles disoriented:

- ☐ 1
☐ 2-10
☐ 11-50
☒ >50

Disoriented turtles reaching the water:

- ☒ All
☐ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead? ☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: same as above

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|--|
| ☐ parking lot | ☐ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☒ condominium (exterior) |
| ☐ restaurant/bar | ☐ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: _____ |

Additional comments (use back if necessary): All turtles crawled toward lights at Pineapple Beach Villas. Brightest lights were yellow wall-mount (partly shielded) and 16 white ceiling lights. I watched hatchlings emerge at 10:40 pm. They were collected and released at Sunnyside Beach.

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Kennard Watson

Signature of Observer

8/6/13

Date

KPW 13 07 09 01 BAY

Permit Holder Initials Year Month Day Dis. = by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 38 Date of Incident: 7/9/13

Observer's Name: Bob Gilmore

Telephone (include area code): 850 819 6562 E-mail address: gilzach@yahoo.com

Location of Disorientation Event: (address, beach name and/or nearest landmark): Extensive

Wandering track in front + behind dune 19974

City: Panama City Bch County: Bay Pront Bch Rd

Local nest ID#: false crawl 24 Zone nest was located in: 027

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.24229 Longitude: -85.93135 (Google Earth)

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☒ Adult - Nesting Emergence ☐ Adult - False Crawl ☐ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	--	---

Incident was documented during: (check one) ☒ Morning Survey ☐ Night Survey ☐ Daytime

Was the incident photographed? ☒ YES ☐ NO

Was the source nest found? ☐ YES ☐ NO

Was the nest excavated? ☐ YES ☐ NO

If "YES" report date of excavation: _____



Number of turtles disoriented:

- ☒ 1
☐ 2-10
☐ 11-50
☐ >50

Disoriented turtles reaching the water:

- ☒ All
☐ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead?

☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: extensive wandering
difficult to determine

Were probable/possible light source(s) identified? ☐ YES ☒ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|---|
| ☐ parking lot | ☐ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant bar | ☐ single family home (exterior) | ☐ sky glow urban glow |
| ☐ pier | ☐ sign | ☐ other: _____ |

Additional comments (use back if necessary): Nancy found tracks + traced

to disoriented turtle in dunes - call to
FWC + Kennard Watson - we used turtle
stretcher to load on FWC pick up truck
and drove to water + released

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Robert Gilmore

Signature of Observer

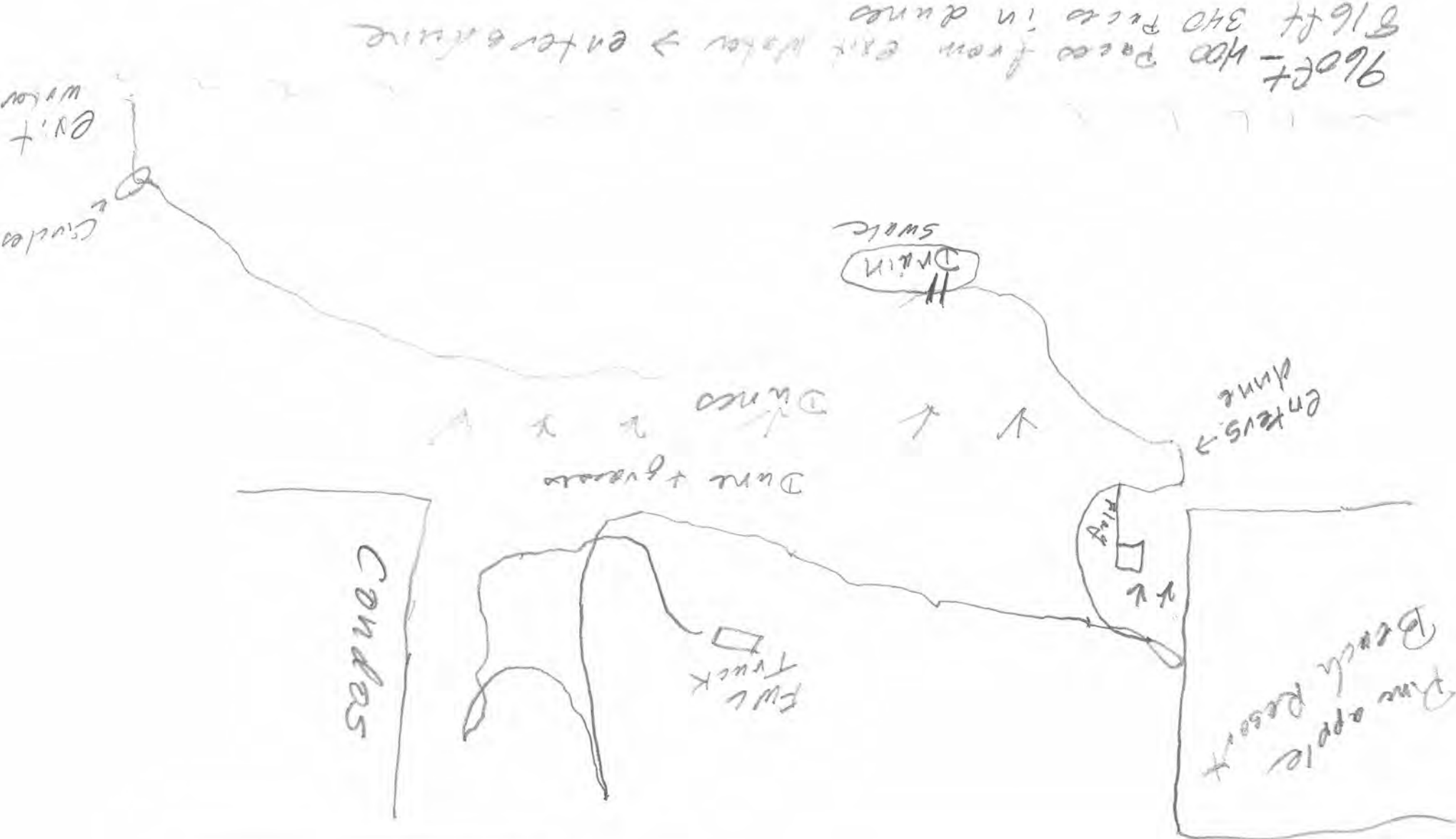
7/9/13

Date

Track 30" wide

1 pace = 2.4 ft
 740 paces = 1,776 ft

Front Blk Rd 19974 FB Rd



K P W 1 3 0 0 9 0 1 8 4 4

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: U38 Date of Incident: 10-9-13

Observer's Name: Jenny Ragland

Telephone (include area code): 779-251-1402 E-mail address: jenny.ragland@myfwc.com

Location of Disorientation Event: (address, beach name and/or nearest landmark):

15325 FBR, Legacy by the Sea Condos

City: Panama City Beach County: Bay

Local nest ID#: false crawl 9 Zone nest was located in: 18

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.20922 Longitude: 85.810618

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☒ Adult - False Crawl ☐ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	--	---

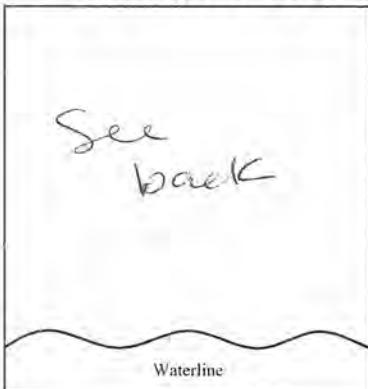
Incident was documented during: (check one) ☒ Morning Survey ☐ Night Survey ☐ Daytime

Was the incident photographed? ☒ YES ☐ NO

Was the source nest found? ☐ YES ☒ NO

Was the nest excavated? ☐ YES ☒ NO

If "YES" report date of excavation: _____



Number of turtles disoriented: ☒ 1 ☐ 2-10 ☐ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
Were any disoriented turtles found dead? ☐ YES ☒ NO If "YES" indicate the number: _____	

Addresses/landmarks turtle(s) disoriented towards: _____

Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|--|
| ☐ parking lot | ☒ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☒ condominium (exterior) |
| ☐ restaurant/bar | ☐ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: _____ |

Additional comments (use back if necessary): FC 9

Very populated area - directly in front of condos - could have several light sources as problematic

- track was also disturbed by humans, ATV traffic and rain

Local authority provided a copy of this report: ☒ City ☐ County ☒ FWC ☐ Other: _____

Signature of Observer: Jenny Ragland Date: 10/11/13

Restaurant/bar

Legacy
Condos

dunes

33.2 ft

← large ATV tracks

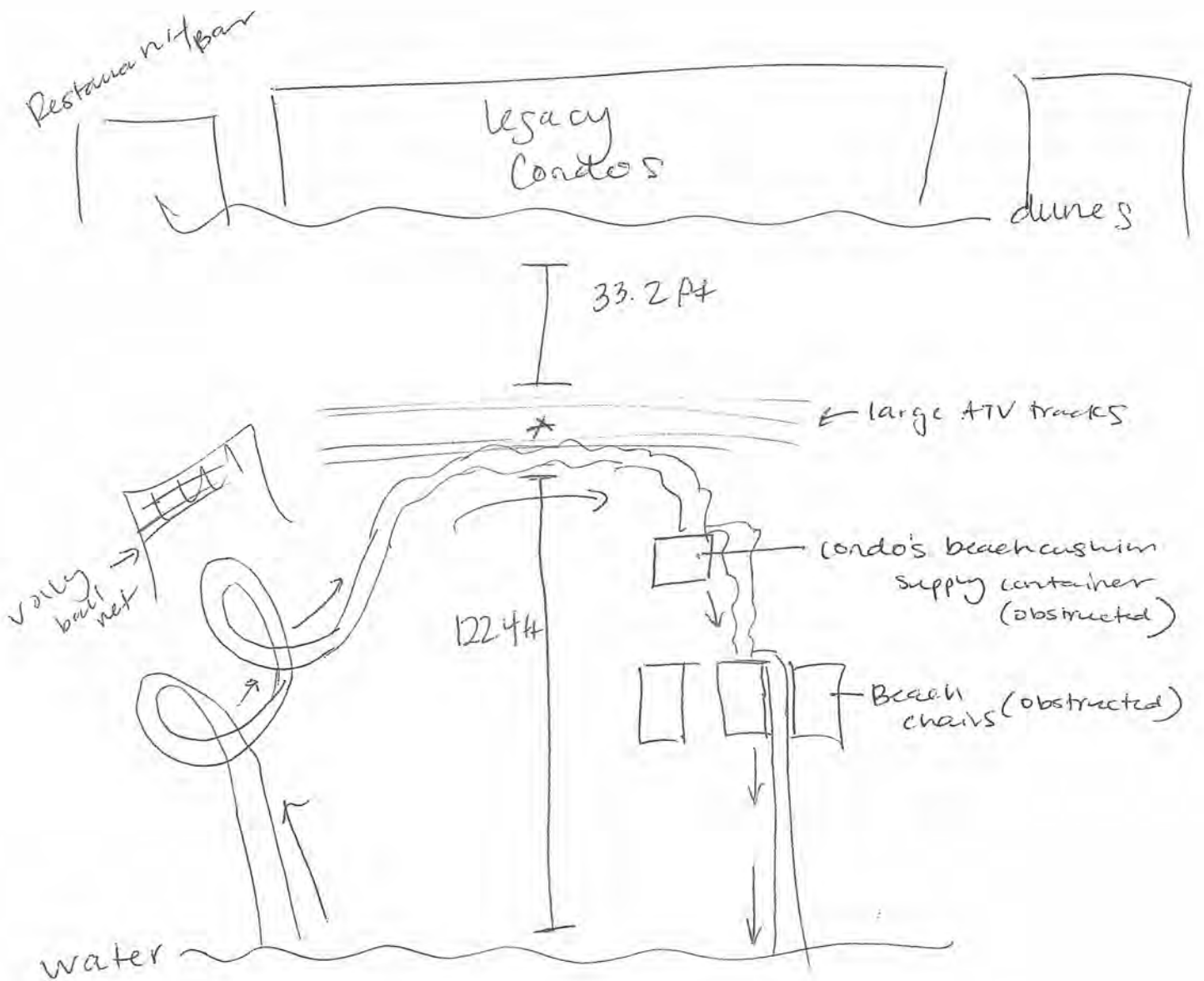
volley
ball
net

122.4 ft

condo's beach cushion
supply container
(obstructed)

Beach
chairs (obstructed)

water



KPW 13 06 08 02 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

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Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 638 Date of Incident: 6/8/13

Observer's Name: Jenny Ragland

Telephone (include area code): 229-251-1442 E-mail address: jenny.ragland@noaa.gov

Location of Disorientation Event: (address, beach name and/or nearest landmark):

17561 Front Beach Road, surfside villas, Beach Access 70

City: Panama City Beach

County: Bay

Local nest ID#: false crawl 6

Zone nest was located in: 24

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.22945

Longitude: 85.90563

SPECIES: (check one)

- ☒ Cc = Loggerhead
☐ Cm = Green Turtle
☐ Dc = Leatherback
☐ Un = Unidentified
☐ O = Other

TYPE OF EVENT: (check one)

- ☐ Adult - Nesting Emergence
☒ Adult - False Crawl
☐ Hatchling

NEST TREATMENT: (check all used)

- ☐ Restraining Cage
☐ Self-releasing Screen/Cage
☐ Light Barrier (i.e., silt screen)
☐ Relocated

Incident was documented during: (check one)

☒ Morning Survey

☐ Night Survey

☐ Daytime

Was the incident photographed?

☒ YES

☐ NO

Was the source nest found?

☐ YES

☒ NO

Was the nest excavated?

☐ YES

☒ NO

If "YES" report date of excavation:



Number of turtles disoriented:

- ☒ 1
☐ 2-10
☐ 11-50
☐ >50

Disoriented turtles reaching the water:

- ☒ All
☐ Some
☐ None
☐ Not investigated

Were any disoriented turtles found dead?

☐ YES

☒ NO

If "YES" indicate the number:

Addresses/landmarks turtle(s) disoriented towards:

Were probable/possible light source(s) identified?

☒ YES

☐ NO

If "NO" indicate why: (check one)

☐ No lights present

☐ Too many lights

☐ Other:

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- ☐ parking lot
☐ dune crossover
☐ restaurant/bar
☐ pier

- ☒ street light (3 visible)
☐ single family home (interior)
☐ single family home (exterior)
☐ sign

- ☐ condominium (interior)
☐ condominium (exterior)
☐ sky glow/urban glow
☐ other:

Additional comments (use back if necessary): Body pit was irregular with an additional disturbance next to it - turtle or human activity undetermined.
Street lights + parking lot light most probable.

Local authority provided a copy of this report:

☒ City

☐ County

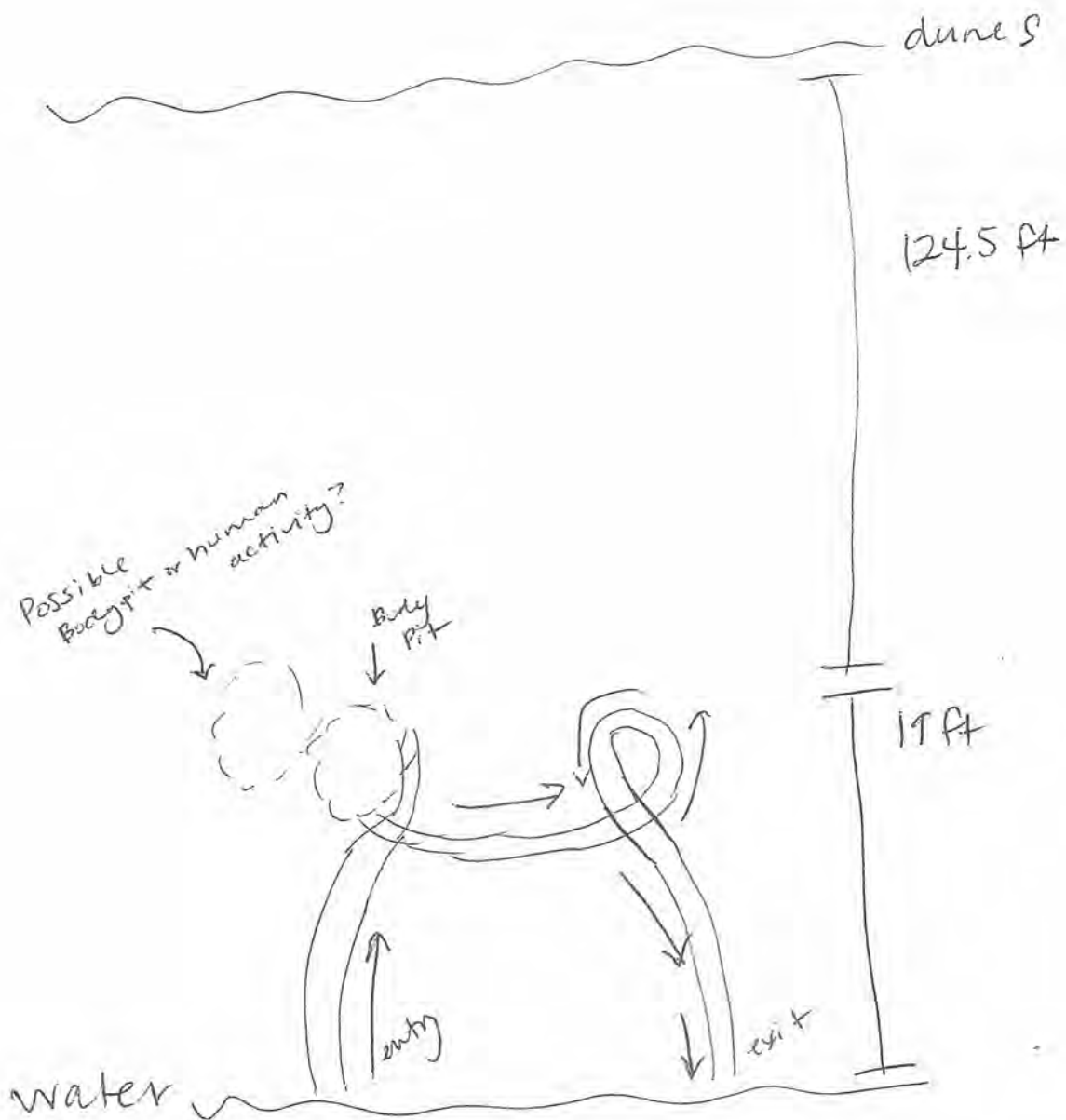
☒ FWC

☐ Other:

Jenny Ragland
 Signature of Observer

6/11/13

Date



K P W 1 3 0 6 0 8 0 1 B A Y

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: U38 Date of Incident: 6/8/13Observer's Name: Jenny RaglandTelephone (include area code): 229-251-1442 E-mail address: jenny.ragland@noaa.gov

Location of Disorientation Event: (address, beach name and/or nearest landmark):

14401 FBR, near Fontaine BleauCity: Panama City Beach County: BayLocal nest ID#: false crawl 3 Zone nest was located in: 17

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.20250 Longitude: 85.85413

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☐ Adult - Nesting Emergence ☒ Adult - False Crawl ☐ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	--	---

Incident was documented during: (check one) ☒ Morning Survey ☐ Night Survey ☐ DaytimeWas the incident photographed? ☒ YES ☐ NOWas the source nest found? ☐ YES ☒ NOWas the nest excavated? ☐ YES ☒ NO

If "YES" report date of excavation: _____



Number of turtles disoriented:

- ☒
- 1
-
- ☐
- 2-10
-
- ☐
- 11-50
-
- ☐
- >50

Disoriented turtles reaching the water:

- ☒
- All
-
- ☐
- Some
-
- ☐
- None
-
- ☐
- Not investigated

Were any disoriented turtles found dead?

☐ YES ☒ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: _____

Were probable/possible light source(s) identified? ☒ YES ☐ NOIf "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

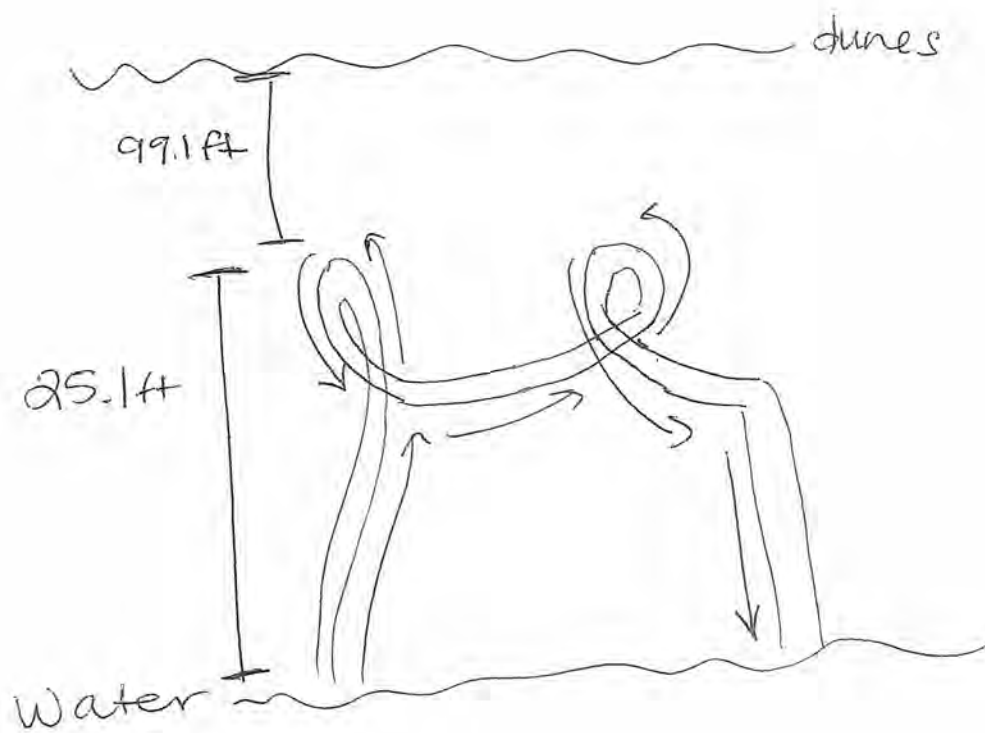
Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

- | | | |
|---|--|---|
| ☒ parking lot | ☒ street light | ☐ condominium (interior) |
| ☐ dune crossover | ☐ single family home (interior) | ☐ condominium (exterior) |
| ☐ restaurant/bar | ☐ single family home (exterior) | ☐ sky glow/urban glow |
| ☐ pier | ☐ sign | ☐ other: _____ |

Additional comments (use back if necessary): FC 3 (crawl)no direct house or condos in front - street light most probableLocal authority provided a copy of this report: ☒ City ☐ County ☒ FWC ☐ Other: _____

Signature of Observer

6/11/13
 Date



KPW 13 06 23 01 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MvFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 6-23-13

Observer's Name: Katrina Williams Christine Lawrence

Telephone (include area code): 850 234 6917 E-mail address: _____

Location of Disorientation Event: (address, beach name and/or nearest landmark): 6323 Thomas Dr

Summerwinds Condo

City: PCB County: Bay

Local nest ID#: 11 Zone nest was located in: 4

Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):

Latitude: 30.15023 Longitude: -85.76710

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☒ Adult - Nesting Emergence ☐ Adult - False Crawl ☐ Hatchling	NEST TREATMENT: (check all used) ☐ Restraining Cage ☐ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	--	---

Incident was documented during: (check one) ☐ Morning Survey ☐ Night Survey ☒ Daytime



Was the incident photographed? ☐ YES ☒ NO

Was the source nest found? ☒ YES ☐ NO

Was the nest excavated? ☐ YES ☐ NO

If "YES" report date of excavation: _____

Number of turtles disoriented: ☒ 1 ☐ 2-10 ☐ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
---	--

Were any disoriented turtles found dead? ☐ YES ☐ NO

If "YES" indicate the number: _____

Addresses/landmarks turtle(s) disoriented towards: _____

Were probable/possible light source(s) identified? ☐ YES ☒ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____

Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)

☐ parking lot	☐ street light	☐ condominium (interior)
☐ dune crossover	☐ single family home (interior)	☐ condominium (exterior)
☐ restaurant/bar	☐ single family home (exterior)	☐ sky glow/urban glow
☐ pier	☐ sign	☐ other: _____

Additional comments (use back if necessary): _____

Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

K Williams

Signature of Observer

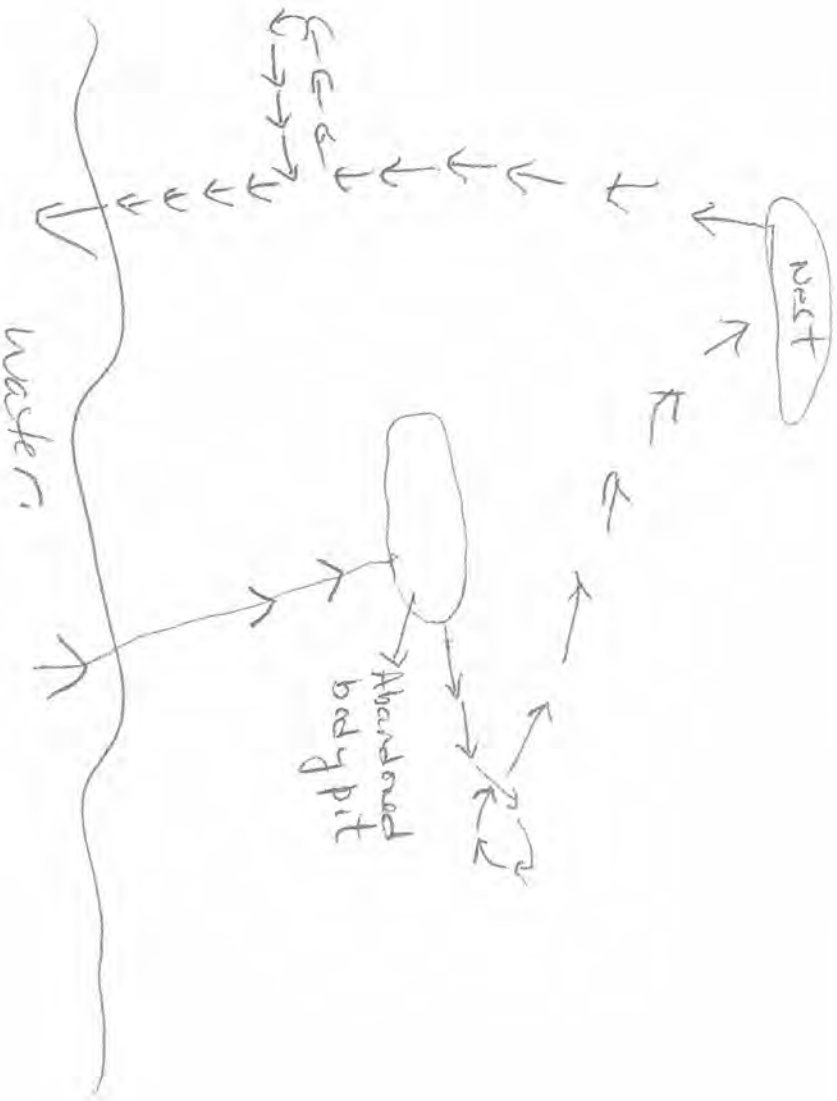
6/24/13

Date

Finca
Cabo

6323 Thomas Dr.
Summerwind

Marine
West



KPW 13 06 02 01 BAY

Permit Holder Initials Year Month Day Dis. # by Day County Code

FWC MARINE TURTLE DISORIENTATION REPORT

If you have any questions, please contact FWC at the Tequesta Field Laboratory (561) 882-5975

Fax reports to: (561) 743-6228 or Email reports to: SeaTurtleLighting@MyFWC.com

Send reports to: Disorientation Reports, FWC, 19100 SE Federal Highway, Tequesta, FL 33469

Marine Turtle Permit #: 038 Date of Incident: 06-02-13
 Observer's Name: LYNDA YATES
 Telephone (include area code): 850-230-4408 E-mail address: lyatespcb@gmail.com
850-774-2361 (C)
 Location of Disorientation Event: (address, beach name and/or nearest landmark):
19979 FRONT BEACH ROAD
 City: PANAMA CITY BEACH County: BAY
 Local nest ID#: 3 Zone nest was located in: 27
 Nest GPS Coordinates (use decimal degrees: i.e., Lat 26.845412 Long -80.458796):
 Latitude: 30.24220 Longitude: -85.93268

SPECIES: (check one) ☒ Cc = Loggerhead ☐ Cm = Green Turtle ☐ Dc = Leatherback ☐ Un = Unidentified ☐ O = Other _____	TYPE OF EVENT: (check one) ☒ Adult - Nesting Emergence ☐ Adult - False Crawl ☐ Hatchling ☒ NESTING FEMALE	NEST TREATMENT: (check all used) ☐ Restraining Cage ☒ Self-releasing Screen/Cage ☐ Light Barrier (i.e., silt screen) ☐ Relocated
---	---	--

Incident was documented during: (check one) ☐ Morning Survey ☒ Night Survey ☐ Daytime
 Was the incident photographed? ☐ YES ☐ NO
 Was the source nest found? ☐ YES ☐ NO
 Was the nest excavated? ☐ YES ☐ NO
 If "YES" report date of excavation: _____



Number of turtles disoriented: ☒ 1 ☐ 2-10 ☐ 11-50 ☐ >50	Disoriented turtles reaching the water: ☒ All ☐ Some ☐ None ☐ Not investigated
Were any disoriented turtles found dead? ☐ YES ☐ NO If "YES" indicate the number: _____	

Addresses/landmarks turtle(s) disoriented towards: 19440 FRONT BEACH RD - EAST OF NEST
CAROUSEL MARKET PARKING LOT FLOOD LIGHT - T.S. ALSO
POSSIBLE - WATER IN DITCH ATTRACTED HER?
 Were probable/possible light source(s) identified? ☒ YES ☐ NO

If "NO" indicate why: (check one) ☐ No lights present ☐ Too many lights ☐ Other: _____
Indicate categories of light(s) identified as probable/possible lighting sources: (check all that apply)
☒ parking lot ☐ street light ☐ condominium (interior)
☐ dune crossover ☐ single family home (interior) ☐ condominium (exterior)
☐ restaurant/bar ☐ single family home (exterior) ☐ sky glow/urban glow
☐ pier ☐ sign ☒ other: STORE FLOOD LIGHT

Additional comments (use back if necessary): TURTLE WENT EAST & GOT LODGED IN
A DRAINAGE DITCH THAT RUNS PARALLEL TO WATER - SHE
LEFT NEST HEADING EAST & HAD TO BE ASSISTED OUT OF
DITCH

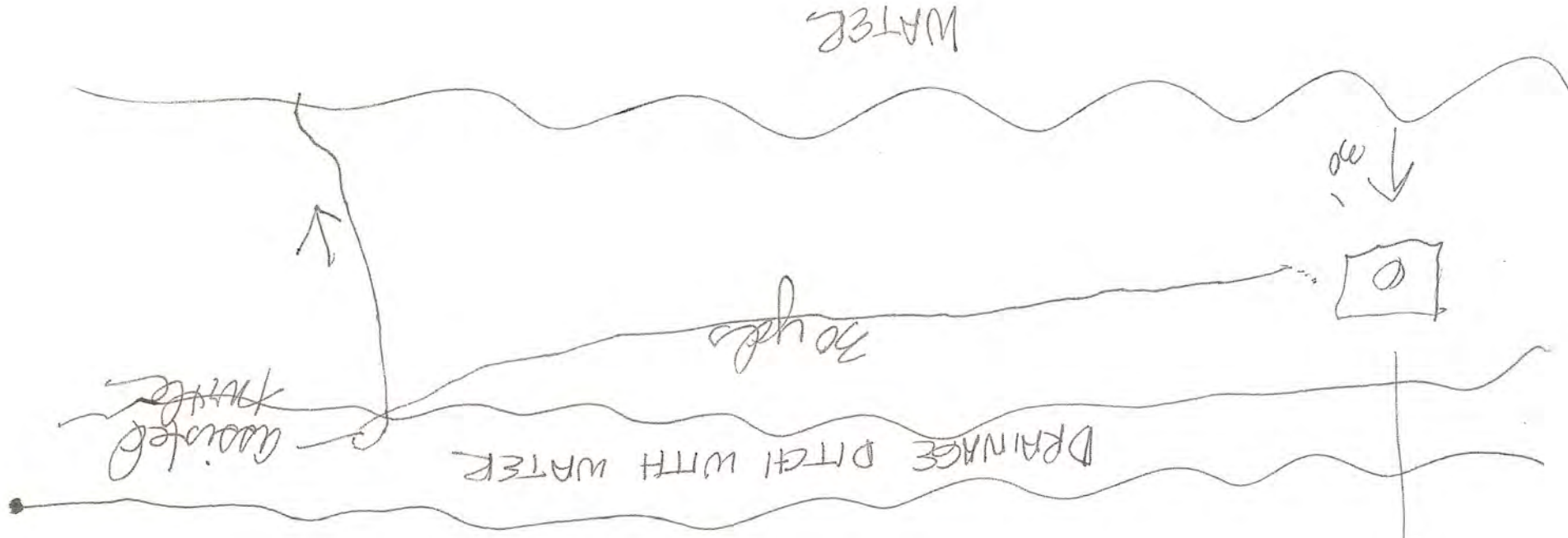
Local authority provided a copy of this report: ☐ City ☒ County ☐ FWC ☐ Other: _____

Lynnda Yates
 Signature of Observer

6-2-13
 Date

SEE BACK

1991
 MARKET
 FLOOD LIGHT
 About 1/4 mi
 East of wall



1991 RD ROAD
 ACCESS 77
 PINEAPPLE VILLAGES

