

DATE: May 4, 2020

REGARDING: 2019 US Watercraft Theft and Recovery (through 03/10/2020 **(Public Dissemination)**)

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Introduction

This ForeCASTSM Report analyzes the 4,240 watercraft thefts and corresponding recoveries¹ with information reported to the US Federal Bureau of Investigation's (FBI) National Crime Information Center (NCIC). The 3 sections to this report consist of: an analysis of the watercrafts, a geographical analysis, and a temporal analysis. "Section 1: The Watercraft" analyzes 2019 watercraft thefts and recoveries by manufacturer, boat type², manufacturer and boat type combined, and boat type and propulsion type combined. "Section 2: Geographic Analysis" analyzes the 2019 watercraft thefts and corresponding recoveries by state, by boat type and state, then by county and city (excluding recovery records from outside of the US). "Section 3: Temporal Analysis" analyzes the 2019 watercraft thefts and corresponding recoveries by month, holiday, and the number of days between the theft date and recovery date from 01/01/2019 through 03/10/2020.

There will be several graphical representations throughout this report, including tables, charts, and maps. Apart from the maps on pages 6 and 7 of this report, 'Red' relates to theft information, while 'Blue' relates to recovery information. Additionally, all percentages, including those already mentioned, are rounded to the nearest whole number.

Executive Summary

There was a total of 4,240 Watercraft thefts in 2019, a 6% decrease in watercraft thefts from 2018. The watercraft stolen most often in 2019 was the "Yamaha – WaveRunner® personal watercraft (PWC)" (467 thefts), followed up by the "Sea-Doo PWC" (225 thefts). Of the 4,240 watercrafts stolen in 2019, 1,745, or 41% were recovered through 03/10/2020. The highest number of watercraft thefts in 2019 took place in Florida (22%). The Top 3 watercraft theft counties were Broward County, Florida (87 thefts), Miami-Dade County, Florida (85 thefts), and Sacramento County, California (49 thefts). The Top 3 watercraft theft cities in 2019 were Fort Lauderdale, Florida (43 thefts), Sacramento, California (39 thefts), and Tampa, Florida (35 thefts). Of the 1,745, recovered watercrafts from 01/01/2019 through 03/10/2020, 56% were recovered within 9 days of being stolen. The holiday with the most watercraft thefts in 2019 was Independence Day, with 25 thefts.

In the furtherance of watercraft theft awareness and prevention, the NICB brochure: "Boat Theft: Leave Thieves in Your Wake", suggests that boat owners should use a common-sense approach to protecting their watercrafts. The suggested prevention methods tell boat owners to: "dock your craft in well-lit areas; secure your boat to the dock with a locked steel cable; remove expensive equipment from your boat when not in use; lock the boat's cabin, doors, and windows when not in use; remove registration or title papers in the craft; disable the boat when not in use by shutting off fuel lines and removing the battery or distributor cap; install an alarm system and a kill switch in the ignition system; use a trailer hitch lock after parking a boat on its trailer; park your trailer in a locked garage, secured boat storage facility, or a well-lit, fenced area; and ensure your marine insurance policy includes your equipment, boat, and trailer. Also, to be prepared for the possibility of a watercraft theft, NICB encourages boat owners to take photos of their boat, and to be sure that their boat and equipment are marked with a Hull Identification number (HIN), a serial number that uniquely identifies every boat and will ultimately help law enforcement with recovery efforts."

¹ A corresponding recovery is defined as recovery information that relates to its respective theft.

² The terms "watercraft" and "boat" will be used interchangeably throughout this report.

SECTION 1: The Watercraft

This section will provide an analysis of the 2019 watercraft thefts and recoveries in 4 ways: [1] by the Top 10 manufacturers; [2] the 13 boat types recognized by the NCIC; [3] the Top 10 manufacturers and boat type combinations; [4] and the boat type and propulsion type combinations.

2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Manufacturer

There were 674 different manufacturers identified in the 2019 watercraft theft and recovery data. The table below lists the top 10 manufacturers with theft along with recovery information in descending order by number of thefts. Totalling 1,695 thefts, the Top 10 manufacturers represent 40% of all watercraft thefts in 2019. The manufacturer with the largest number of stolen watercrafts was “Yamaha Motor Group., USA” with 539 thefts. Of the Top 10 manufacturers, “Bayliner Marine Corp.” had the highest recovery rate of 54%, while “Perception Kayaks Inc.” had the lowest recovery rate of 20%.

2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Manufacturer

Manufacturer	Thefts	Recoveries	Recovery Rate %
1. Yamaha Motor Corp., USA	539	177	33%
2. Sea-Doo	269	94	35%
3. Bombardier Corp.	213	73	34%
4. Tracker Marine L. P	199	89	45%
5. Kawasaki Motors MFG	114	45	39%
6. Bayliner Marine Corp.	97	52	54%
7. Alumacraft Boat Co.	91	32	35%
8. Perception Kayaks Inc.	69	14	20%
9. Starcraft Marine LLC	54	21	39%
10. Lowe Industries	50	22	44%

2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Boat Type

There are 13 boat types recognized by the NCIC³ and 3,101 of the 2019 theft records identified 1 of those types as the type of boat stolen. The remaining 1,139 provided a boat code not recognized by NCIC or did not provide a code at all. Of the 3,101 records with NCIC-recognized boat codes, 34%, or 1,039 were identified as “All Other”. Excluding the “All Other” category, the Top 5 stolen boat types comprised of 48% (2,014) of all 2019 watercraft thefts. The most frequently stolen watercraft was the “Personal Watercraft,” with 1,049 thefts. Of the Top 5 boat types, the “Sailboat” had the highest recovery rate of 62%, while “Personal Watercraft” had the lowest of 33%. An analysis of the number of thefts of each boat type per Top 10 Theft state is located on page 8 of this report.

The list below provides the number of thefts and recoveries per the top 5 boat types in 2019 in descending order by number of thefts, excluding the “All Other” category. The Top 5 stolen boat types are ranked and numbered, and a sample photo⁴ for each boat type is provided.

³ As noted in the Appendix, NCIC uses “Jet Ski” to describe all personal watercraft (PWC). “Jet Ski” is the trademarked brand name for Kawasaki Motors Corporation’s PWC. Thus, the term “Jet Ski” has been replaced with personal watercraft, or PWC, unless referring specifically to the Kawasaki product.

⁴ Pictures are not of actual stolen watercrafts; all images were found through Google Images to provide one general example of what each type of boat may look like.

1. Personal Watercraft

- Thefts: 1,049
- Recoveries: 350
- Recovery Rate: 33%



2. Runabout

- Thefts: 466
- Recoveries: 224
- Recovery Rate: 48%



3. Utility

- Thefts: 261
- Recoveries: 114
- Recovery Rate: 44%



4. Cruiser

- Thefts: 193
- Recoveries: 101
- Recovery Rate: 52%



5. Sailboat

- Thefts: 45
- Recoveries: 28
- Recovery Rate: 62%



Thefts and Corresponding Recoveries (through 03/10/2020) by Manufacturer & Boat Type Combined

The table below ranks the Top 10 stolen manufacturer and boat type combinations along with recovery information, listed in descending order by number of thefts. Only records that identified a manufacturer and a NCIC-recognized boat type were included in the analysis. Totaling 1,177 thefts, the Top 10 manufacturer and boat type combinations comprised 28% of all watercraft thefts in 2019. The most frequently stolen combination in the Top 10 was the “Yamaha – WaveRunner® PWC”, with a total of 467 thefts. The combination with the highest recovery rate, in the Top 10, was “Tracker Marine, L.P. - Utility” at 63% recovered. The lowest recovery rate in the top 10 was for the “Perception Kayaks Inc. - Other”, at a recovery rate of 20%.

2019 Watercraft Theft and Recoveries (through 03/10/2020) for the Top 10 Manufacturer & Boat Type Combinations

Manufacturer	Boat Type	Thefts	Recoveries	Recovery Rate %
1. Yamaha	PWC	467	153	33%
2. Sea-Doo	PWC	225	73	32%
3. Bombardier Corp.	PWC	155	49	32%
4. Kawasaki Motors MFG.	PWC	100	37	37%
5. Tracker Marine L. P	Other	72	30	42%
6. Perception Kayaks Inc.	Other	51	10	20%
7. Alumacraft Boat Co.	Other	36	15	42%
8. Tracker Marine L. P	Runabout	25	11	44%
9. Tracker Marine L. P	Utility	24	15	63%
10. Lowe Industries	Other	22	11	50%

2019 Watercraft Theft and Corresponding Recoveries (through 03/10/2020) by Boat Type & Propulsion Type Combined

The table below ranks the Top 10 stolen boat type and propulsion type combinations, including the number of recoveries and recovery rate for each, listed in descending order by number of thefts. Only records that identified a boat type and a propulsion type recognized by the NCIC were included in the analysis. Totaling 1,980 thefts, the Top 10 boat type and propulsion type combinations represent 47% of all 2019 watercraft thefts. Of the Top 10 boat type/propulsion type combinations, “PWC – Inboard” had the highest number of thefts with 593. The Top 10 combinations with the highest recovery rate of 54% was both the “Runabout – Outboard” and the “Cruiser – Inboard”, while the combination with the lowest recovery rate was “Other–Manual” at 24%.

2019 Watercraft Theft and Recoveries (through 03/10/2020) for the Top 10 Boat Type & Propulsion Type Combinations

Boat Type	Propulsion Type	Thefts	Recoveries	Recovery Rate %
1. PWC	Inboard	593	182	31%
2. Other	Outboard	417	204	49%
3. Runabout	Outboard	260	141	54%
4. Other	Manual	212	50	24%
5. Utility	Outboard	150	72	48%
6. Runabout	Inboard	93	44	47%
7. Cruiser	Inboard	85	46	54%
8. Cruiser	Outboard	67	34	51%
9. Other	Inboard	66	28	42%
10. PWC	Outboard	37	14	38%

SECTION 2: Geographic Analysis

The Geographic Analysis Section analyzes the 2019 watercraft thefts and corresponding recoveries in 4 parts: [1] the 2019 watercraft thefts and corresponding recoveries by theft state; [2] the 2019 watercraft thefts per state by boat type; [3] the 2019 watercraft thefts and corresponding recoveries for the Top 10* theft counties; [4] the 2019 watercraft theft and corresponding recoveries for the Top 10* theft cities.

2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Theft State

All 4,240 watercraft thefts in 2019 identified a state where the theft occurred. Hawaii was the only state in which there were no recorded thefts or recoveries to either the FBI or NCIC during the timeframe of this report. The following table lists the thefts and corresponding recoveries⁵ for each state in descending order by number of thefts. The Top 10 theft states are identified in the table below. Totalling 2,752 thefts, the Top 10 theft states comprised of 65% of all 2019 watercraft thefts. Consistent with 2018, the state with the highest number of thefts was Florida with 942, representing 22% of all watercraft thefts in 2019. This is almost twice as many thefts as the next highest theft state, making Florida a watercraft theft hotspot. Of the Top 10 theft states, California had the highest recovery rate of 56%. There were two states tied with the lowest recovery rate of the top 10, North Carolina and Georgia both with 37% of stolen watercrafts being recovered.

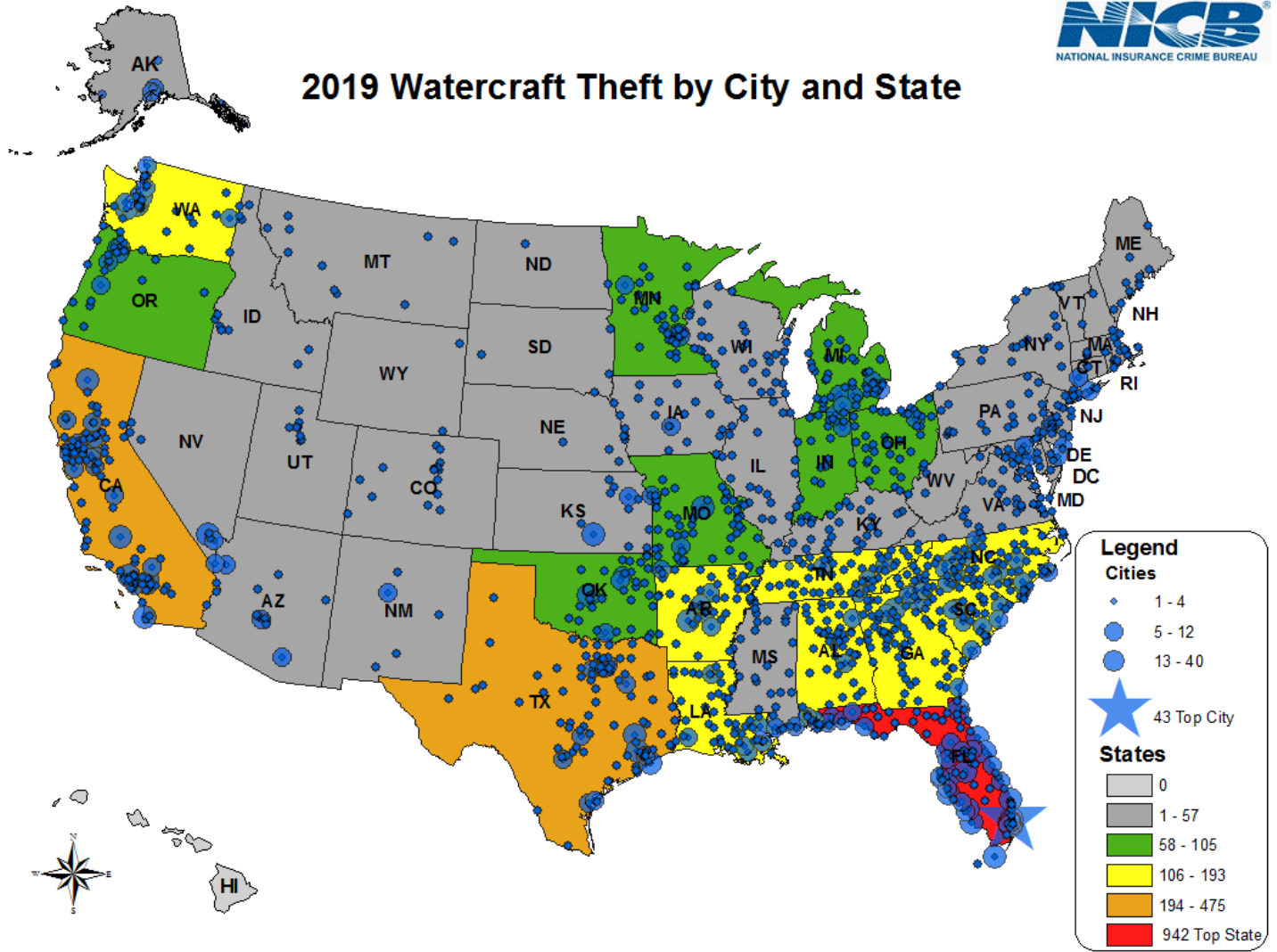
2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Theft State

State	Thefts	Recoveries	Recovery Rate %
1. Florida	942	377	40%
2. California	475	264	56%
3. Texas	332	126	38%
4. North Carolina	193	71	37%
5. South Carolina	147	62	42%
6. Louisiana	145	64	44%
7. Washington	136	68	50%
8. Tennessee	135	52	39%
9. Georgia	124	46	37%
10. Alabama	123	51	41%

The map shown below is a geographic representation of the volume of Watercraft thefts by city and state in 2019.

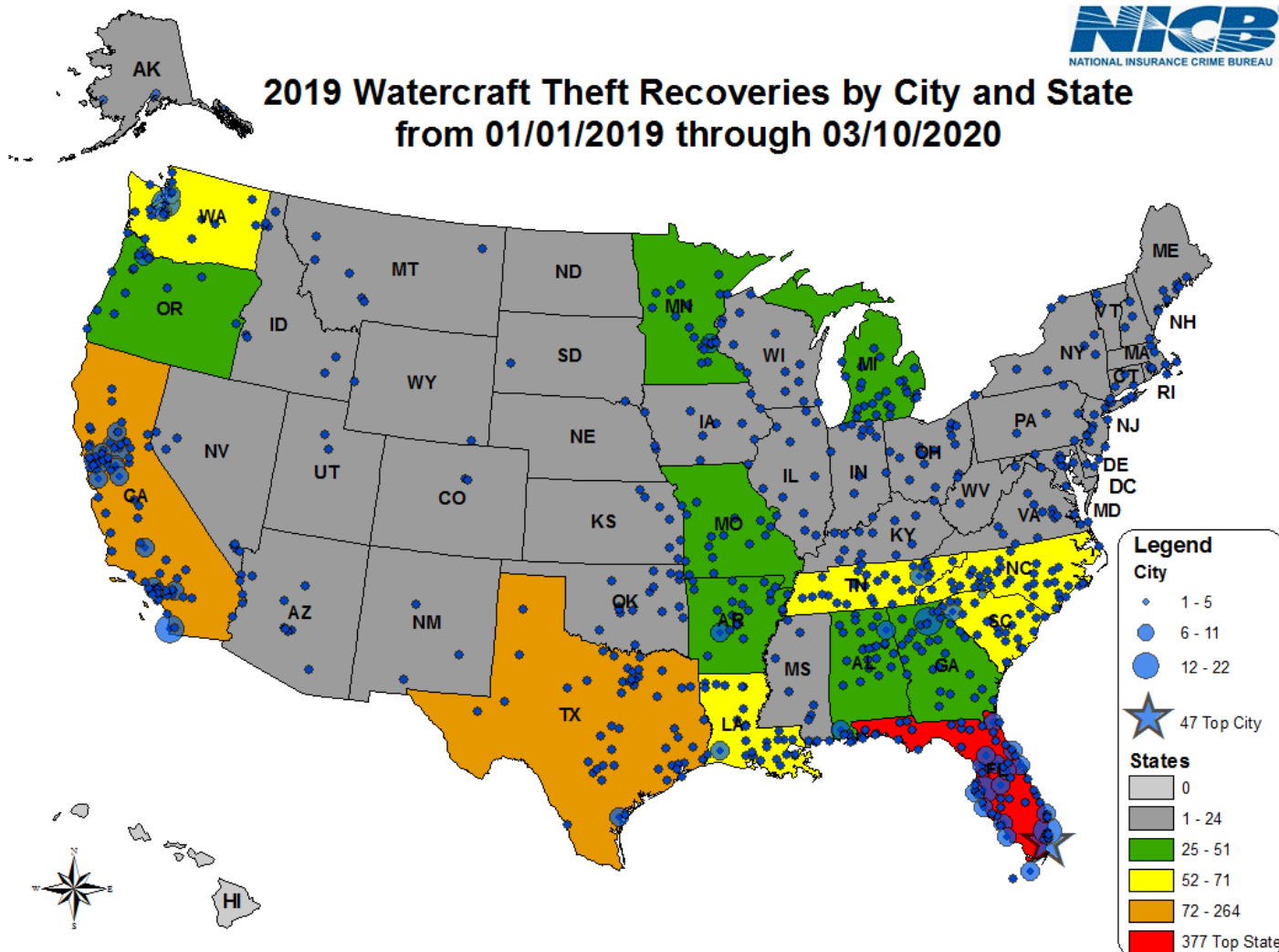
⁵ The recovery information for this section corresponds to the thefts per state in order to provide an accurate recovery rate. If a watercraft was recovered in a different state than where it was stolen, it was counted in the recovery information for the theft state, as opposed to the recovery information for the recovery state. Also, records from outside of the U.S. were not included in the counts.

2019 Watercraft Theft by City and State



The map shown below is a geographic representation of the volume of Watercraft theft recoveries by city and state from 01/01/2019 through 03/10/2020.

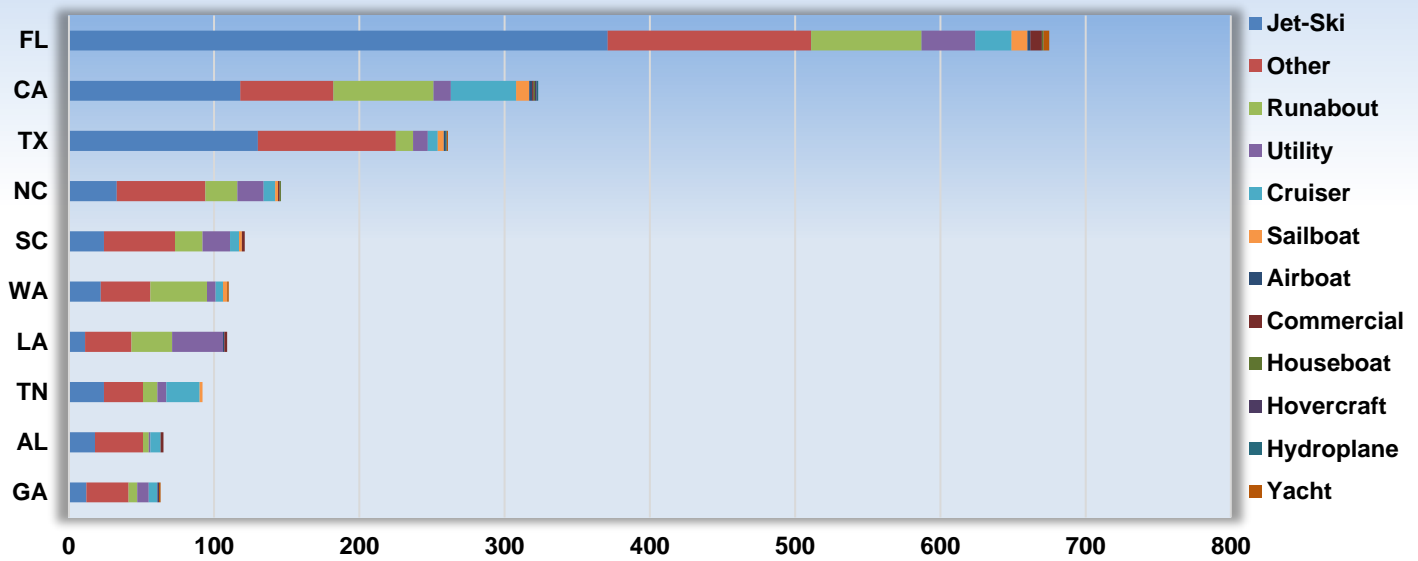
2019 Watercraft Theft Recoveries by City and State from 01/01/2019 through 03/10/2020



2019 Watercraft Thefts by Boat Type per Top 10 Theft States

The following chart shows the number of reported watercraft thefts per top 10 theft states that had one of the 13 NCIC recognized boat types listed. Florida had the highest number of reported thefts for PWC (371), Runabouts (76), Utility (37), and Sailboats (11), Commercial boats (8); California reported the highest number of thefts of Cruisers (45).

2019 Watercraft Thefts by Boat Type per Top 10 Theft States



2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Theft County

Of the 4,240 theft records, there were 1,001 counties identified in the 2019 watercraft theft and recovery data. Twenty-Five (25) counties with recoveries were not identified with a watercraft theft. The county with the highest number of stolen watercrafts was Broward County, Florida; with 87 thefts. Of the Top 11* theft counties, Contra Costa County, California had the highest recovery rate of 72%, while Harris County, Texas had the lowest at 15% recovered. Of note, 6 of the top 10* theft counties were located in California, with the remaining counties located in Florida (3), Texas (1), and Washington (1). An asterisk (*) represents that there was a tie in the Top 11* Theft Counties.

2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Top 11* Counties

County	State	Thefts	Recoveries	Recovery Rate %
1. Broward	FL	87	27	31%
2. Miami-Dade	FL	83	30	35%
3. Sacramento	CA	49	27	55%
4. Contra Costa	CA	46	33	72%
5. Los Angeles	CA	41	19	46%
6. San Diego	CA	37	25	68%
7. Hillsborough	FL	36	18	50%
8. Harris	TX	34	5	15%
*9. San Joaquin	CA	33	19	58%
*9. King	WA	33	20	61%
11. Riverside	CA	29	13	45%

2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Theft City

All of the 4,240 theft records identified the city in which the theft occurred, while 1,540 of the 1,745 recovery records reported the city where the watercraft was recovered. Of the 4,240 watercraft stolen in 2019, 1,745, or 41% were recovered through 03/10/2020. There were 1,248 unique cities identified in the 2019 watercraft theft

and recovery data. Totalling 409 thefts, the Top 15* theft cities account for 10% of all watercraft thefts in 2019. The theft city with the highest number of stolen watercrafts was Fort Lauderdale, Florida with 43 thefts. Of the Top 15* theft cities, Martinez, California had the highest recovery rate of 87%, while Naples, Florida and had the lowest at 24% recovered. The below table depicts the total thefts by city, along with the total number of those thefts recovered (through 03/10/2020). An asterisk (*) represents that there was a tie in the top 15* Theft Cities.

2019 Thefts and Corresponding Recoveries (through 03/10/2020) by Theft City

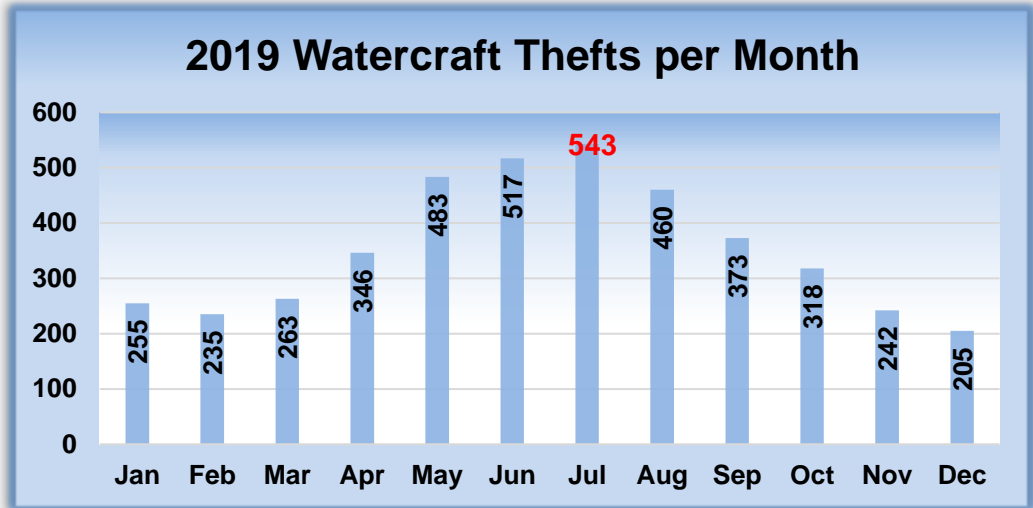
City	State	Thefts	Recoveries	Recovery Rate %
1.Ft. Lauderdale	FL	43	15	35%
2.Sacramento	CA	39	19	49%
3.Tampa	FL	35	18	51%
4.San Diego	CA	34	22	65%
5.Miami	FL	33	13	39%
*6. Naples	FL	25	6	24%
*6. Hialeah	FL	25	10	40%
*8. Tacoma	WA	23	12	52%
*8. Martinez	CA	23	20	87%
*8. Inverness	CA	23	10	43%
*11. Gainesville	GA	22	14	64%
*11. Seattle	WA	22	14	64%
*13. West Palm Beach	CA	21	8	38%
*13. Bakersfield	CA	21	12	57%
15. Conroe	TX	20	6	30%

Section 3: Temporal Analysis

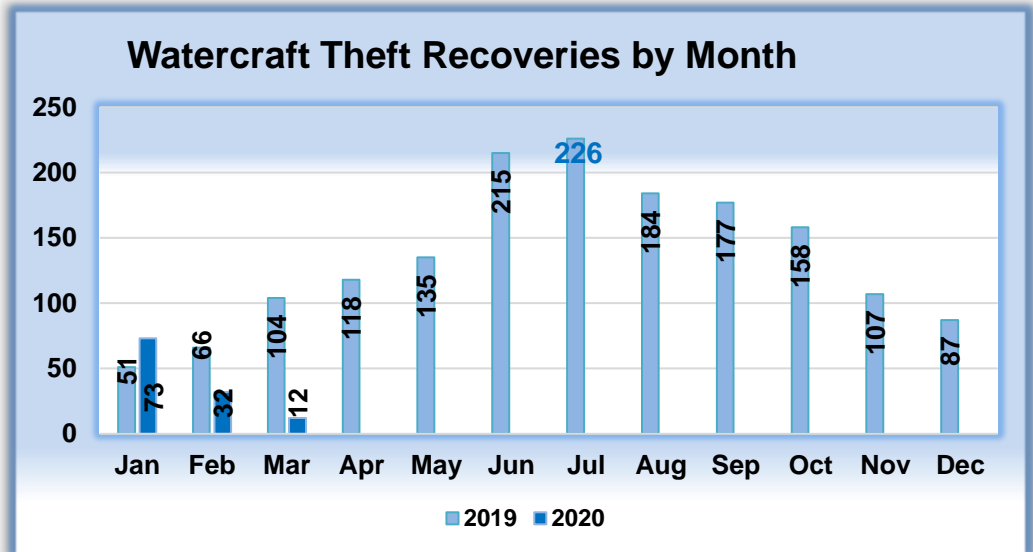
On average, there were approximately 12 watercraft thefts per day, 82 per week, or 353 per month in 2019. However, watercraft thefts are not distributed evenly over time and the following Temporal Analyses will aim to show when to be the most prepared for potential thefts by analyzing the 2019 watercraft thefts and recoveries in 3 ways: [1] by theft month and recovery month; [2] by holiday [3] by the average number of days between theft date and recovery date for each boat type recognized by the NCIC.

2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Theft Month

The graph to the right displays the 2019 watercraft thefts per theft month. As previously mentioned, watercraft thefts are not evenly distributed over the year and this graph clearly highlights that. Watercraft theft is a seasonal crime with more thefts occurring in spring and summer, as the months of May through September all exceed the monthly average of 353. July had the highest number of thefts with 543, while December had the fewest thefts with 205.



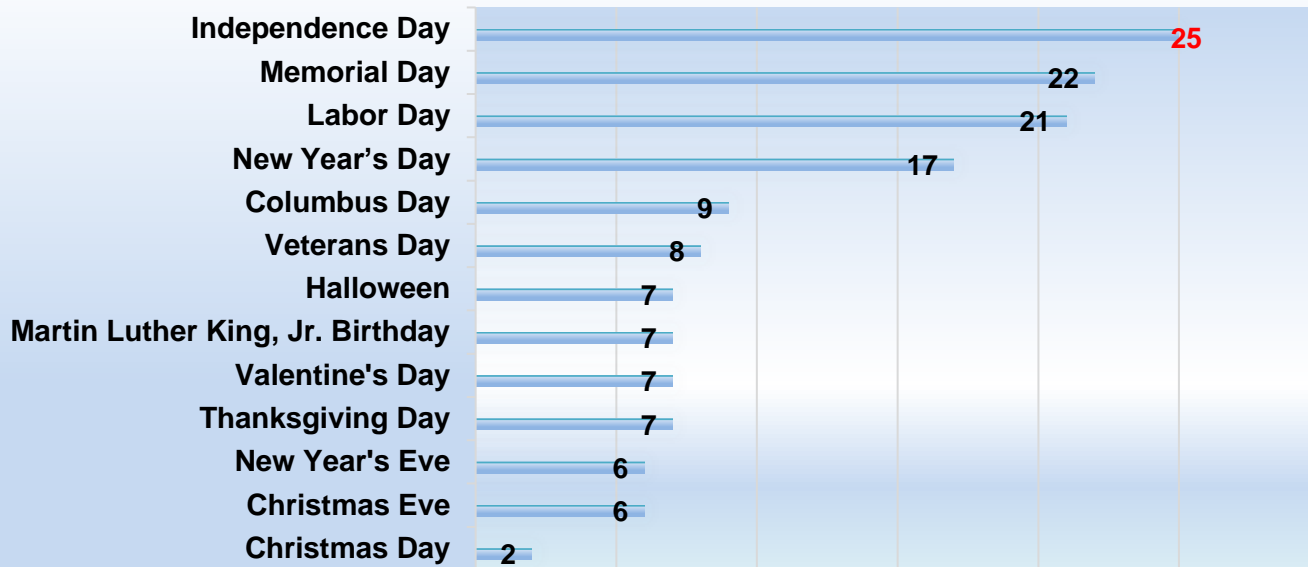
The graph to the right displays watercraft theft recoveries per month for the period of 01/01/2019 through 03/10/2020. Of the watercraft thefts in 2019, there was an average of 136 recoveries per month. As with the thefts, recoveries appear to be seasonal with June through October having a higher than average number of recoveries. July had the highest number of recoveries at 226, and January had the fewest number of recoveries at 51 in 2019.



2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020) by Holiday

The graph on the following page displays the number of watercraft thefts by holiday in 2019. The holiday with the most watercraft thefts in 2019 was Independence Day, with 25 thefts, and the holiday with the least number of thefts was Christmas Day with two (2) thefts.

2019 Watercraft Thefts by Holidays



2019 Watercraft Thefts and Corresponding Recoveries (through 03/10/2020): Analysis of the Number of Days between Theft Date and Recovery Date

The following table displays the top 10 number of days between a watercraft's theft and recovery date in descending order by number of recovered thefts. All 1,745 recoveries from 1/01/2019 through 3/10/2020 were included in this analysis. Of the 1,745 recovered thefts, 233 were recovered on the same day as the theft, representing 13% of all recoveries. 222 were recovered by the end of the following day, representing an additional 13% of all recoveries.

Top 10 Number of Days Between Theft Date and Recovery Date

Days to Recovery	Recovered Thefts	% of All Thefts	% of All Recoveries
0 (Same Day)	233	5%	13%
1	222	5%	13%
2	138	3%	8%
3	91	2%	5%
4	80	2%	5%
6	56	1%	3%
7	55	1%	3%
5	36	1%	2%
8	38	1%	2%
9	25	1%	1%
Totals	974	23%	56%

Methodology

Data parameters were defined as all watercraft stolen in the US between January 1, 2019 and December 31, 2019 that were reported to the NCIC. Corresponding recovery information was collected from the NCIC and included only watercraft that were stolen in 2019 but were recovered between January 1, 2019 and March 10, 2020. Watercraft stolen from the US but recovered outside of the US are not included. Steps taken to clean the data included:

1. Removing records not classified as watercraft by the NCIC (the NCIC classifies watercraft by assigning a file number beginning with the letter 'B')
2. Removing all records that did not identify a HIN
3. Removing duplicate records
4. Removing records with a theft location outside of the US
5. Removing all records used for testing and training purposes.

NCIC can be considered one of the most reliable and comprehensive sources of watercraft theft and recovery data, as it is a centralized database where local, state, and federal law enforcement agencies throughout the US can report crime information. Despite its reliability, many validity issues still arise through inaccurate or incomplete information within each individual record, which may result in limitations in the data. Of all 4,240 thefts in 2019, 27% did not supply or gave incomplete information on the boat type, and 39% did not provide or gave incomplete information on propulsion type. To offer all watercraft theft stakeholders with the most valuable information, any records with miscellaneous, misidentified, or unidentified information were not included in any Top 10, within this report; however, all relevant calculations were evaluated based on the premise of 4,240 total thefts.

Appendix 1 2019 Watercraft Theft and Recovery per 50 States (through 03/10/2020)

State	Thefts	Recoveries	Recovery Rate %
FL	942	377	40%
CA	475	264	56%
TX	332	126	38%
NC	193	71	37%
SC	147	62	42%
LA	145	64	44%
WA	136	68	50%
TN	135	52	39%
GA	124	46	37%
AL	123	51	41%
AR	116	44	38%
MO	105	34	32%
MI	93	40	43%
MN	86	38	44%

OK	76	24	32%
OR	72	36	50%
IN	72	23	32%
OH	66	21	32%
MS	57	15	26%
AZ	56	23	41%
VA	49	18	37%
WI	48	24	50%
IL	47	17	36%
MD	44	16	36%
NY	44	19	43%
KY	41	19	46%
PA	40	9	23%
NJ	38	10	26%
IA	36	11	31%
KS	33	11	33%
NV	30	15	50%
CT	30	10	33%
MA	25	9	36%
AK	23	11	48%
CO	21	2	10%
ID	18	11	61%
ME	17	9	53%
RI	15	7	47%
NE	13	7	54%
NM	12	5	42%
MT	12	6	50%
WV	11	3	27%
UT	11	3	27%
DE	8	2	25%
SD	7	3	43%
WY	5	3	60%
ND	4	1	25%
VT	4	2	50%
NH	3	3	100%
HI	0	0	-

Appendix 2 NCIC Boat Types defined

Airboat	Undefined
Commercial	Ferry, oyster boat, motor barge, towboat, tug, clam dredge, coaster, riverboat, smack boat, etc.
Cruiser	A boat with an inboard motor that is at least 25 feet long but no longer than 50 feet
Houseboat	Undefined
Hovercraft	Undefined
Hydrofoil	Undefined
Hydroplane	Undefined
Jet Ski (PWC)	Aqua Bike
Runabout	Launch, motorboat, outrider, speedboat, etc.
Sailboat	Cat, catamaran, cutter, bark, ketch, lateen, lugger, pinnace, schooner, sloop, yawl, etc.
Utility	Fisherman, sedan, etc.
Yacht	A boat with an inboard motor that is more than 50 feet in length and is used mainly for pleasure or recreation
All Other	Canoe, dinghy, dory, johnboat, kayak, lifeboat, paddleboat, rowboat, scull, skiff, etc.