

**Marine Recreational Information Program
Fishing Effort Survey Transition
Checkpoint Report**

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For

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Transition Team

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Background

The MRIP Fishing Effort Survey (FES) was implemented in January, 2015 to estimate shore and private boat fishing effort for states in the Atlantic and Gulf of Mexico regions. The FES design, which was tested in MA, NY, NC and FL in 2013, has been identified as a more efficient and accurate approach for monitoring recreational fishing effort than the Coastal Household Telephone Survey ([Andrews et al., 2014](#)). Testing of the FES suggested that the design is less susceptible to survey errors than the CHTS and demonstrated that FES estimates were considerably larger than CHTS estimates.

Given the magnitude of differences between FES and CHTS effort estimates, NOAA Fisheries developed and executed a [Transition Plan](#) to facilitate the transition from the CHTS to the FES. The Transition Plan includes a three-year benchmarking period during which the FES and CHTS will be conducted concurrently in all Atlantic and Gulf coast states. This document describes results from the first three waves (Wave 1, 2015-Wave 3, 2015) of the benchmarking period.

Response Rates

Table 1 provides response rates for the 2015 FES and FES Pilot Study. Through wave 3, the 2015 FES has achieved an overall response rate of 35.5%. Among states, response rates range from 32.5% in NJ to 44.8% in ME. Pilot Study (36.4%) and 2015 FES (35.0%) response rates are consistent for the states that were included in the pilot study (FL, MA, NC, NY). Among these states, 2015 FES response rates ranged from 33.6% to 37.7%, while Pilot Study response rates ranged from 34.1% to 39.0%.

Table 1. Weighted response rates overall and by state for the 2015 FES and FES Pilot Study.

State	2015 CHTS	2015 FES	Pilot Study
AL	11.5	38.6	
CT	8.9	36.0	
DE	10.2	37.4	
FL	7.9	33.6	39.0
GA	10.3	34.6	
LA	8.6	35.1	
ME	14.7	44.9	
MD	7.5	36.6	
MA	7.0	37.7	36.5
MS	11.3	34.2	
NH	10.5	41.4	
NJ	7.2	32.5	
NY	7.3	34.3	34.1
NC	11.9	37.0	35.8
RI	4.8	37.8	
SC	11.3	37.2	
VA	8.5	38.0	
Overall	8.2	35.5	36.4
Pilot States	8.0	35.0	36.4

Note: American Association for Public Opinion Research Response Rate 2 (AAPOR RR2). Response rate formula excludes ineligible addresses.

FES/CHTS Estimate Comparisons

Overall, the FES estimate of total shore and private boat fishing across all states and waves (waves 1-3, 2015) is 3.3 times larger than the corresponding CHTS estimate (70,852,304 angler trips vs. 21,466,616 angler trips). This result is similar to pilot study results, where the overall FES estimate was 4.1 times larger than the CHTS estimate.

As in the pilot study, differences between FES and CHTS estimates are larger for shore fishing (4.3X) than for private boat fishing (2.4X) (Figure 1a, 1b). Differences between FES and CHTS estimates are considerably larger for shore fishing (Figure 2a, 2b) than private boat fishing (Figure 3a, 3b) in all sub-regions. Differences between FES and CHTS estimates range from a factor of 1.9 for private boat fishing in the Gulf of Mexico to a factor of 6.3 for shore fishing in the South Atlantic. Differences between FES and CHTS estimates are considerably less in the Gulf of Mexico than in the Atlantic coast sub-regions for both shore and private boat fishing.

To date, results from the 2015 FES are fairly consistent with results from the FES pilot study (Figure 4). For those states included in the FES pilot study (MA, NY, NC and FL), differences between FES and CHTS private boat estimates are nearly identical for the 2015 FES and FES pilot study; FES estimates are larger than CHTS estimates by a factor of 2.6 and 2.4 for the FES pilot study and 2015 FES, respectively. For shore fishing, differences between FES and CHTS estimates were larger in the FES pilot study (factor of 6.1) than the 2015 FES (factor of 4.9). These comparisons are confounded by differences in temporal coverage; results from the FES pilot study are for waves 4-6, 2013 and results from the 2015 FES are for waves 1-3, 2015. At present, we have no reason to believe that FES results are inconsistent with findings from the pilot study.

Figure 1a. 2015 FES and CHTS effort estimates by fishing mode across all states and waves (wave 1-3, 2015).

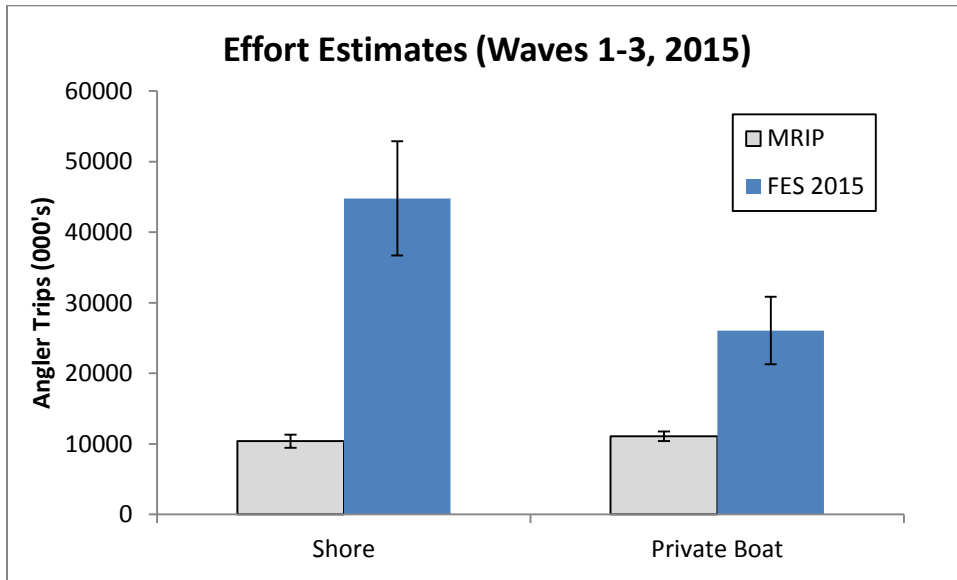


Figure 1b. Ratio of FES to CHTS effort estimates by fishing mode across all states and waves (wave 1-3, 2015).

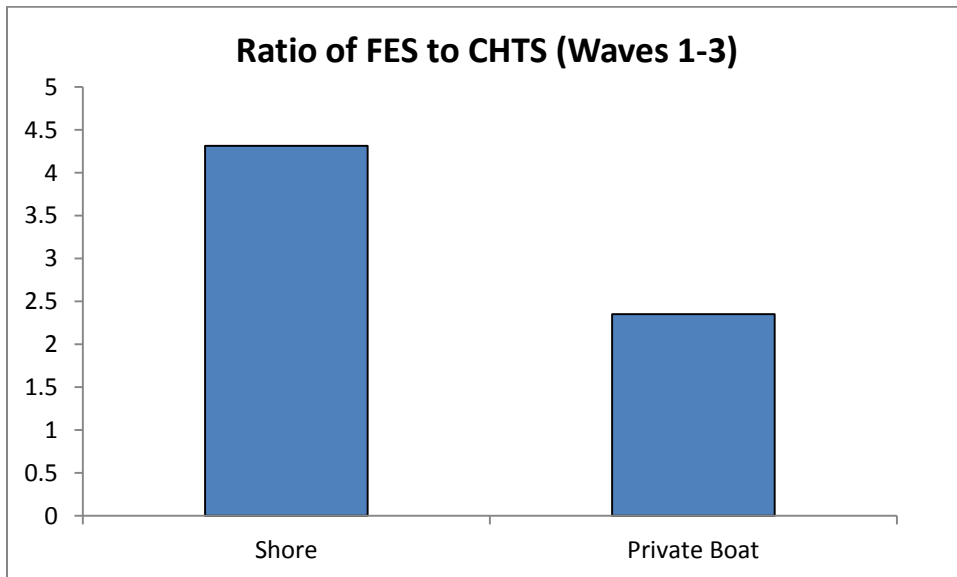
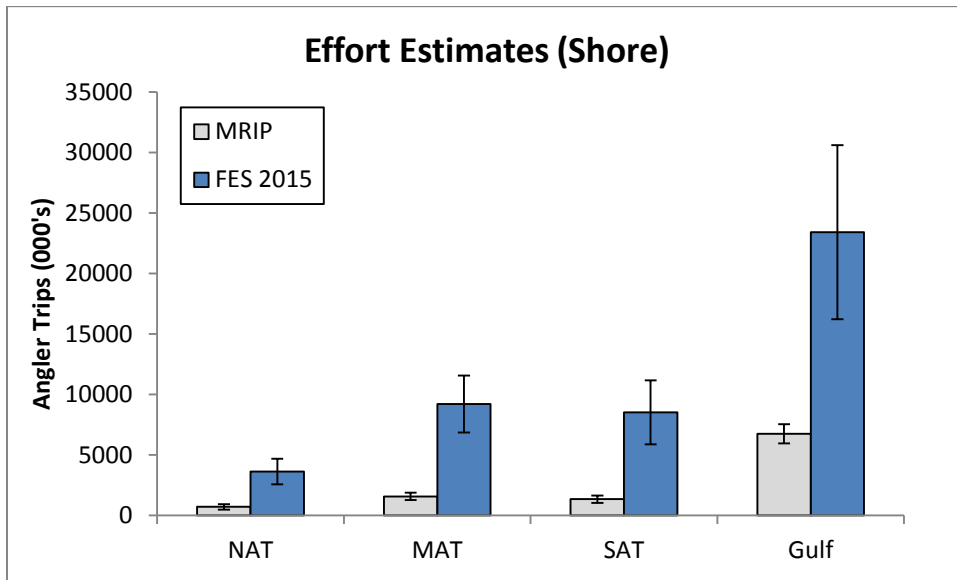
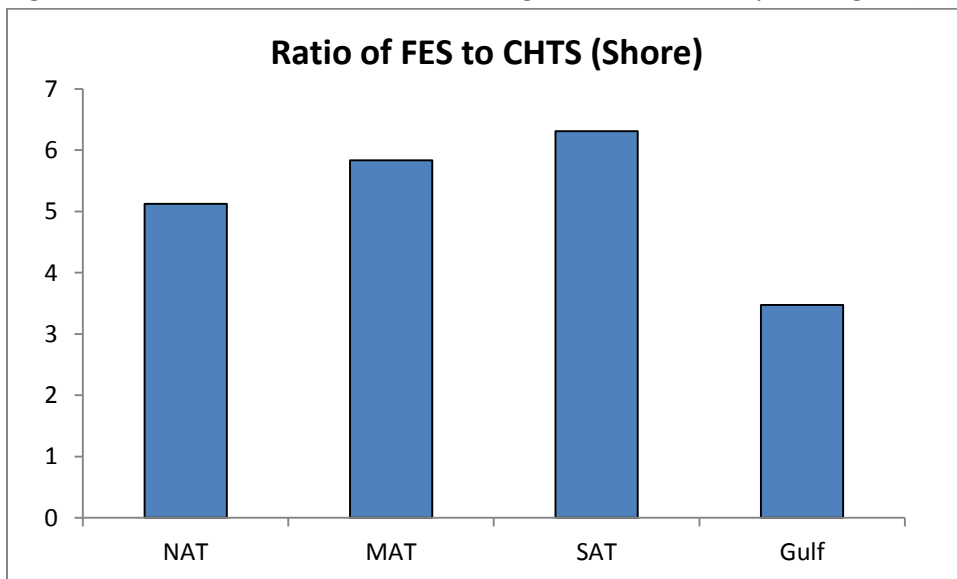


Figure 2a. 2015 FES and CHTS shore fishing effort estimates by sub-region (wave 1-3, 2015).



Note: Florida is included in the Gulf of Mexico subregion.

Figure 2b. Ratio of FES to CHTS shore fishing effort estimates by sub-region (wave 1-3, 2015).



Note: Florida is included in the Gulf of Mexico subregion.

Figure 3a. 2015 FES and CHTS private boat fishing effort estimates by sub-region (wave 1-3, 2015).

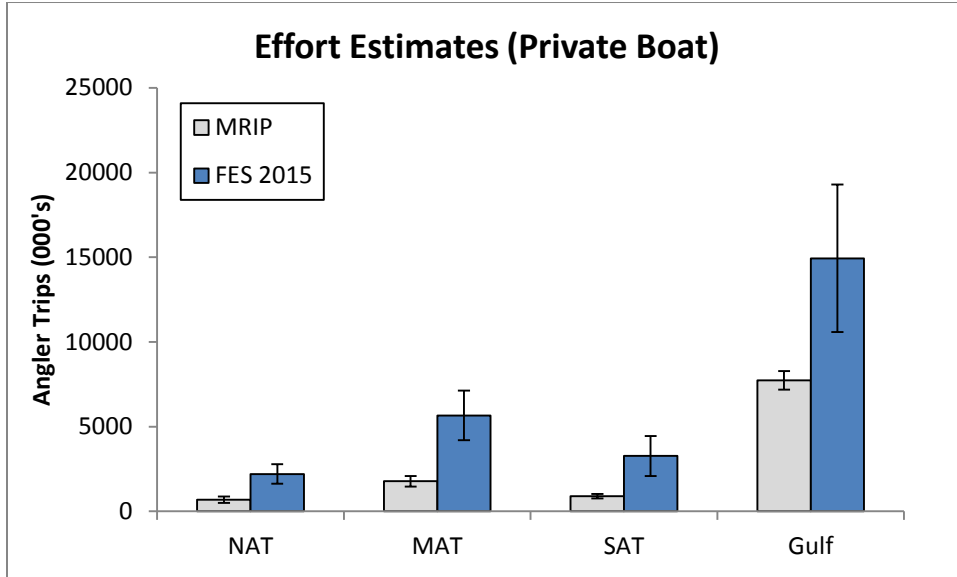


Figure 3b. Ratio of FES to CHTS private boat fishing effort estimates by sub-region (wave 1-3, 2015).

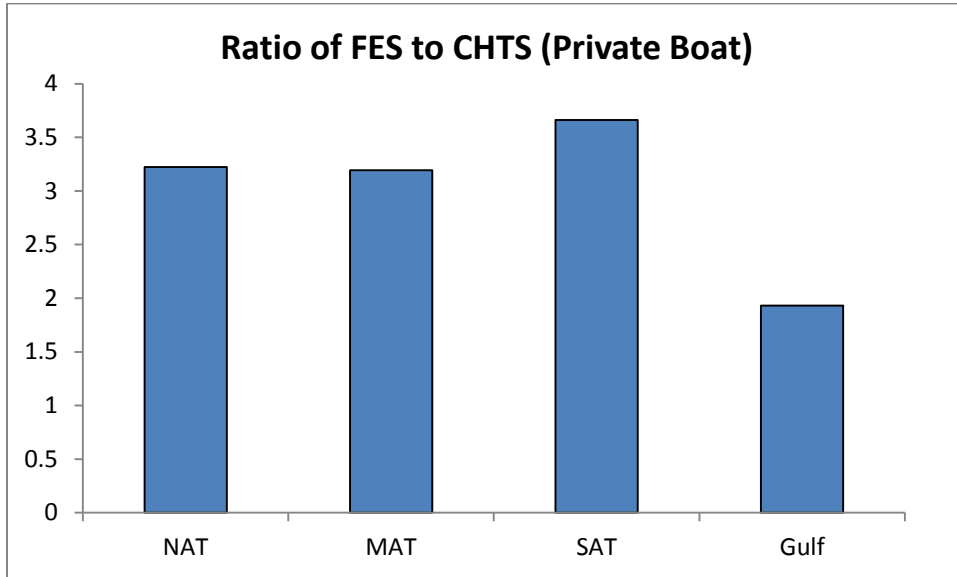
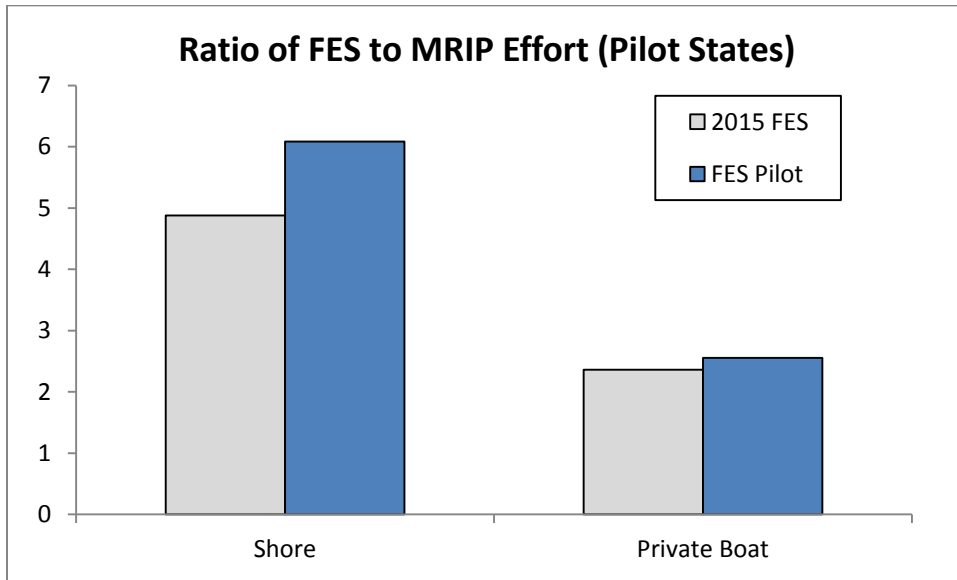


Figure 4. Ratio of FES to CHTS effort estimates by fishing mode for waves 1-3, 2015 and the FES pilot study for those states included in the FES pilot study (MA, NY, NC and FL).



References

Andrews, R., J.M. Brick, and N.M. Mathiowetz. 2014. Development and testing of recreational fishing effort surveys, testing a mail survey design. Available: http://www.st.nmfs.noaa.gov/Assets/recreational/pdf/2012-FES_w_review_and_comments_FINAL.pdf.