**Recreational Angler Survey of Sea Turtle Interactions**

**Survey Design**

**Survey Goals**

1. To collect data on angler fishing practices, fishing site characteristics, and sea turtle interactions with fishing gear.
2. To identify factors contributing to interactions and potential mechanisms to reduce interactions from occurring.
3. Begin to understand the level of sea turtle pier interactions that are occurring regionally and/or by state or local area.

**Implementation and Survey Design Guidelines**

We have created these guidelines to facilitate compilation and comparison of fishing activities and sea turtle bycatch across states and regions, and encourage you to implement surveys as described below. We recognize that there may be unique challenges for some partners and strongly encourage you to contact us to discuss how these may be overcome in your survey design. Prior to implementing the survey in your state or region, please contact Melissa Cook (melissa.cook@noaa.gov for NC through TX) and Ellen Keane (ellen.keane@noaa.gov for ME through VA) to provide guidance and coordination with other co-occurring survey efforts. Any data collected during your survey could be contributed to a larger database managed by NOAA. NOAA can provide an electronic database for data entry and storage. Survey design was based on standards developed by the [NOAA Fisheries Access Point Angler Intercept Survey](https://www.fisheries.noaa.gov/recreational-fishing-data/access-point-angler-intercept-survey-glance) (APAIS) and the [APAIS Manual](https://data.gsmfc.org/APAIS/APAIS_Procedures_Manual_GULF_NOFHTS.pdf).

**Site Selection**

* Review the available information on fishing sites in the area of interest, including the [NOAA Site Registry](https://www.st.nmfs.noaa.gov/msd/html/siteRegister.jsp) for your state to identify your local Angler Fishing Sites.
	+ In considering what sites to prioritize, include: 1) those with high reporting rates, 2) those with low rates, and 3) those with a higher number of anglers.
	+ Angler fishing seasonality should be considered when developing the survey period. The survey period is defined as the 3-year time period covered under this PRA. The survey period does not need to include all months (i.e. March through September in 2025 and 2026).
	+ Data on seasonality and fishing pressure can be found on the [NOAA Site Registry](https://apps-st.fisheries.noaa.gov/msd/), under the ‘Pressure’ tab, to view the fishing pressures, which are the average number of anglers expected to use that site during 6-hour time intervals on an average weekday and weekend.
* Review existing sea turtle stranding and incidental capture data for your state to determine if there are fishing access sites with known sea turtle interactions.
* Consider the survey goals when selecting sites. Sites with prior reported interactions may be given preference over sites without reported interactions. Alternatively, some sites may have already been well surveyed for angler practices, fishing site characteristics, and sea turtle interactions. If sufficient data exists at certain sites, you may consider giving preference to sites that have never been surveyed.
* Select a minimum of 2 sites and no more than 10 sites per state. If there are sites with known captures in the survey area, select at least one with known captures and at least one low/no known captures.

**Survey Collection**

* Visit each site at least once per month during the designated survey period, when reasonable, and target 200 surveys per site over the survey period.
	+ The survey period can be defined as a set of months within a 1-3 year time period, and does not need to include all months (i.e. a survey period could be designated as March through September in 2025 and 2026). You may not repeat a survey period at a given site within the 3-year PRA approval period (defined as 2025-2027).
* Complete up to 20 angler surveys per site on a single day.
* Conduct surveys over a 1 - 3 year period to obtain a maximum of 200 surveys per site, and 2,000 surveys per state. (Ex. 10 sites x 200 surveys = 2,000)
* Target collecting 60 - 70 percent of surveys on Fridays through Sundays and federal holidays and 30 - 40 percent Mondays through Thursdays.
* Spend at least 2 hours (unless weather or other conditions become unsafe to remain on site) and no more than 3 hours at each site. Survey days & times should be randomly selected at least a month before they are conducted. Time intervals are as follows:
	+ 6 am - 9 am - start time not flexible
	+ 9 am - 1 pm - 3 hrs within this period
	+ 1 pm - 5 pm - 3 hrs within this period
	+ 5 pm - 8 pm - start time not flexible
* Leave the site after completing 20 surveys or if 3 hours have passed, even if <20 surveys were completed.
* Complete up to two sites per day.