

# Marine Recreational Information Program

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#### **Learning Objectives**

 Provide broad MRIP overview.



- Explain how we estimate recreational fishing activity.
- Describe how the data are used.

#### **MRIP**

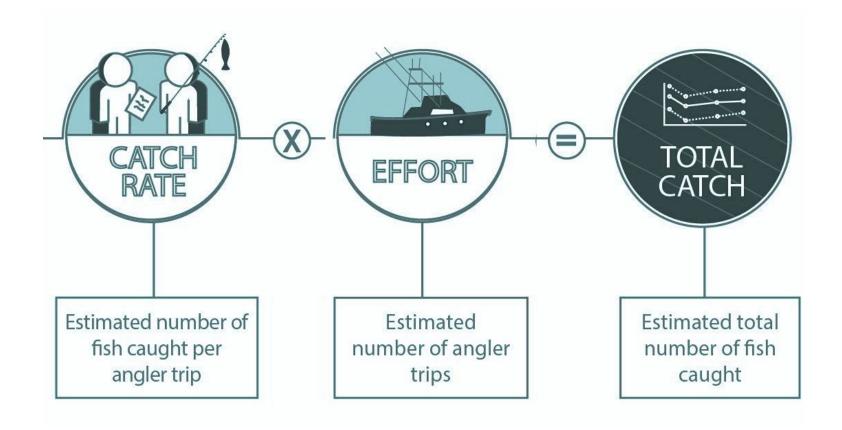
 The angler-state-regional-federal partnership responsible for developing, improving, and implementing surveys that measure how many trips saltwater anglers take, and how many fish they catch.



countmyfish.noaa.gov

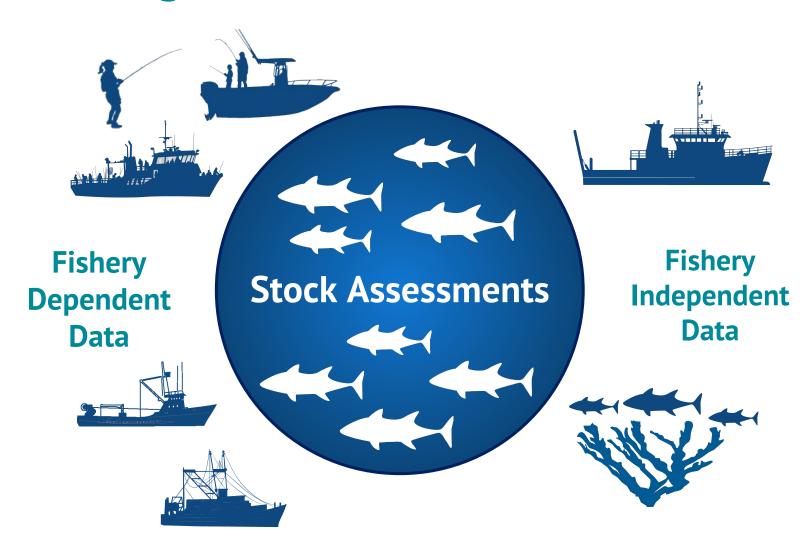


#### **Estimating Total Recreational Catch**



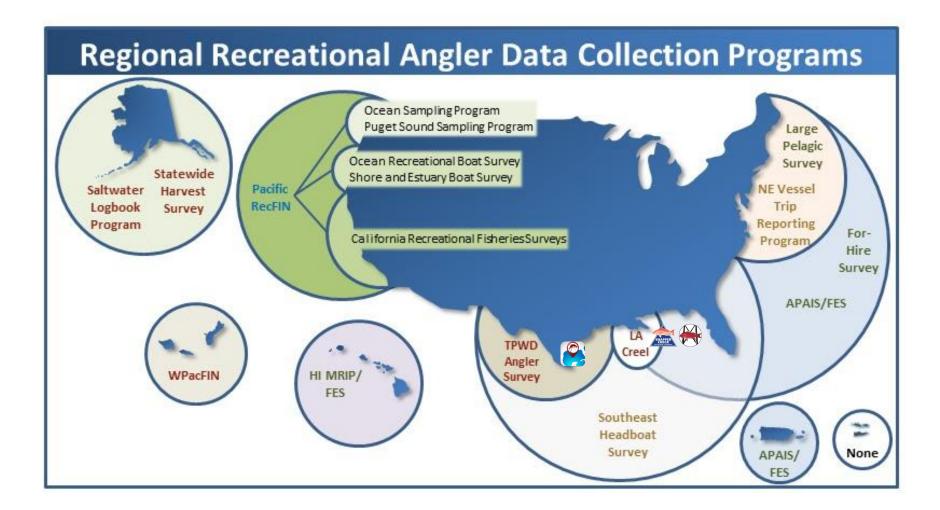


## **Assessing the Health of Fish Stocks**





#### Regional Surveys, National Certification





#### Regional Surveys — Atlantic States

- MRIP.
  - Access Point Angler Intercept Survey (ME to MS).
  - Fishing Effort Survey (ME to MS).
  - For Hire Telephone Survey (ME to MS).
    - GARFO Vessel Trip Report data (ME to VA/NC)
- Large Pelagics Survey (ME to VA).
  - Angler Interview Survey.
  - Telephone Survey.
  - HMS Reporting (Atlantic and Gulf).
- Southeast Regional Headboat Survey (NC to TX).



### Regional Surveys — Gulf States

- MRIP (FL to MS).
  - Access Point Angler Intercept Survey.
  - Fishing Effort Survey.
  - For Hire Telephone Survey.
- LA Creel Survey.
  - Telephone Survey (Effort).
  - Dockside Intercepts.
- TX iAngler.
- FL Gulf Reef Fish Survey.
- MS Tails n' Scales.
- AL Snapper Check.
- Southeast Regional Headboat Survey (NC to TX).



#### Regional Surveys — Pacific States

#### California.

- Recreational Fishing Surveys.
  - Commercial Passenger Vessel Survey.
  - Shore, primary, secondary private boat surveys.
  - Effort Surveys.

#### Oregon.

- Ocean Recreational Boat Survey.
- Shore and Estuary Boat Survey.

#### Washington.

- Ocean Sampling Program.
- Puget Sound Sampling Program.
- Salmon/Halibut Catch Card Surveys.



# Regional Surveys — Alaska, Pacific Islands, Caribbean

- Alaska.
  - Saltwater Logbook Program.
  - Statewide Harvest Survey.
- Hawaii.
  - Marine Recreational Fishing Statistics Survey.
- Puerto Rico.
  - APAIS.\*
  - o FES.\*
- \* Suspended in 2018.

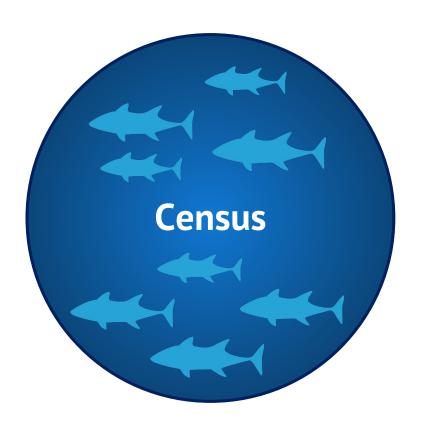


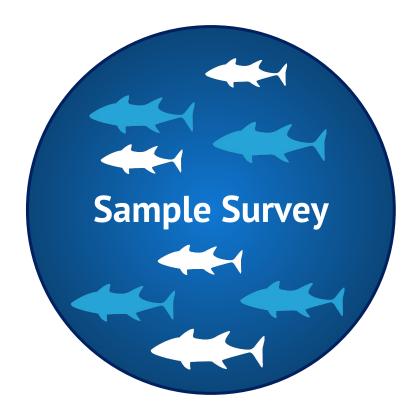
# MRIP Regional Implementation Planning

- Plans ID regional data collection needs, priorities.
- Developed by Fishery Information Networks.
- Plans completed for Caribbean, Gulf, Atlantic, Atlantic HMS, Western Pacific Islands.
- Plans in progress for Alaska, Pacific states.
- Inform national data collection priorities.
  - Coordinated through Regional Implementation Council.

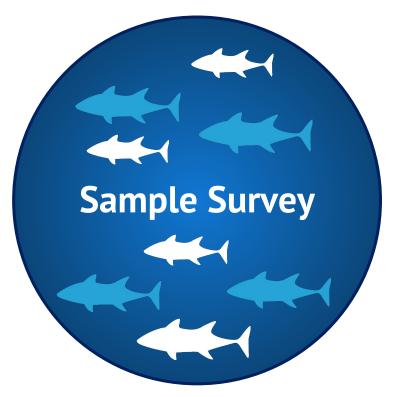


### Census vs. Sample Survey





#### Why Sample Surveys









- Used when not possible or practical to conduct a census.
- Tried and true, mathematically sound approach.
- Key considerations.
  - Properly designed.
  - Design accounted for in use of survey.



# **Estimating Catch Rate**

Access Point Angler Intercept Survey.

Shoreside and Dockside Intercept.

At-Sea Party/Headboat Sampling.





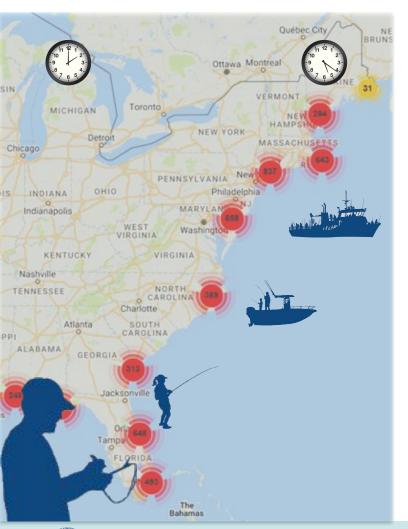


- Large Pelagics Survey.
  - Dockside intercept.





#### **Estimating Catch Rate — APAIS**



- Specially-trained state-based samplers.
  - MRIP data are state data.
- Detailed assignments by date, time, sites, and type of fishing.
  - Mix of high- and low-activity sites.
  - Representative sample of anglers.
- Interview as many anglers as possible.
  - Count, measure, weigh any catch.
  - Ask about releases.
- Nearly 5,000 public sites on Atlantic and Gulf Coasts.



# **Survey to an Estimate**









### **Estimating Effort**

 Fishing Effort Survey. Shore and private boat. For-Hire Survey. Charter, Party/Headboats. Large Pelagics Survey. Telephone survey.

# **Fishing Effort Survey**

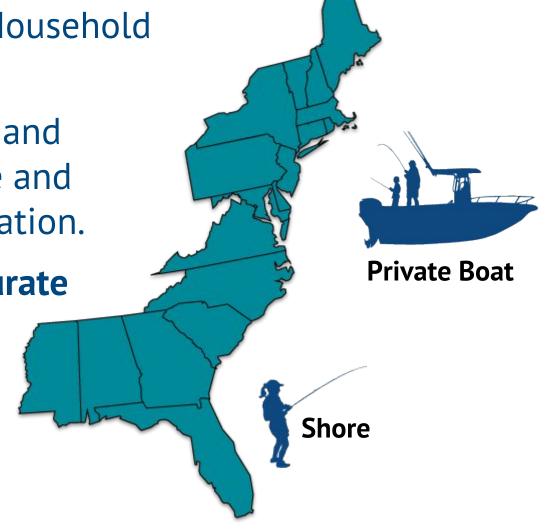
 Replaced Coastal Household Telephone Survey.

 Uses USPS records and state-based license and registration information.

Provides more accurate

estimates.

 Estimates are several times higher than CHTS.



#### **More Accurate Estimates**



We're reaching more anglers.



Surveys get into the right hands.



Improved questionnaire.



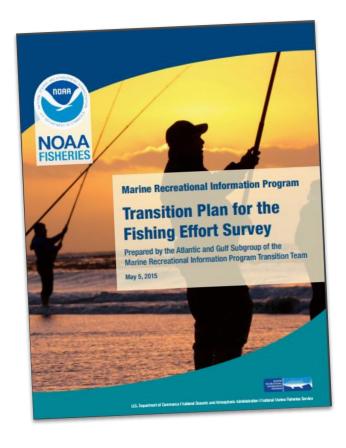
More complete answers.



Three times the response rate.

#### Implementing the FES

- Three-year Transition Plan.
- Developed by NOAA, states, councils, commissions.
  - Side-by-side benchmarking.
  - FES calibration model.
  - APAIS adjustments.
  - Re-estimation.
    - Stock assessments.
    - Management decisions.





#### **2018 Annual Catch Limits**



FES CHTS
Calibration model converts both directions



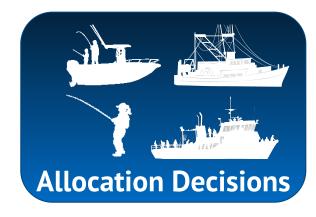


#### FES and Recreational Fishing











#### What's Next for FES

2018

- Revised total catch estimates now available for use in planned stock assessments.
- 2018 ACLs and catch estimates will be in the **same** "currency."

2019

- Preliminary management changes may be made for re-assessed stocks.
- Calibrated statistics incorporated into additional stock assessments.

2020

 Based on new stock assessments, management changes could occur for a number of species.



#### **Electronic Reporting**





### Three Things to Remember

- MRIP data found at countmyfish.noaa.gov.
- FES will result in higher estimates of fishing effort.
- MRIP is an angler-regional -state-federal partnership.











# **NOAA** FISHERIES

Office of Science and Technology

Questions?

Discussion.

## **Extensive Testing and Peer Review**

"[The APAIS methods are] a vast improvement over the previous sampling and estimation procedure and reflect state-of-the-art method in survey sampling."





### **Anatomy of an Estimate**

