



NOAA
FISHERIES

Tab F, No. 5(c)

For-hire data usages

Better data, better management



Original program's purpose and need

- Purpose: to improve accuracy and timeliness of landings, discards, effort, and socioeconomic data of federally permitted for-hire vessels participating the Gulf reef fish and coastal migratory pelagic fisheries.
- Need: to improve management and monitoring of Gulf fisheries.



To assist with discussion

- Review data needs for stock assessments vs management
- Comparison of data streams between MRIP (APAIS and FHS), SEFHIER, and SRHS
- Components to consider when building a data collection survey
- Review of components that assist in validation and compliance



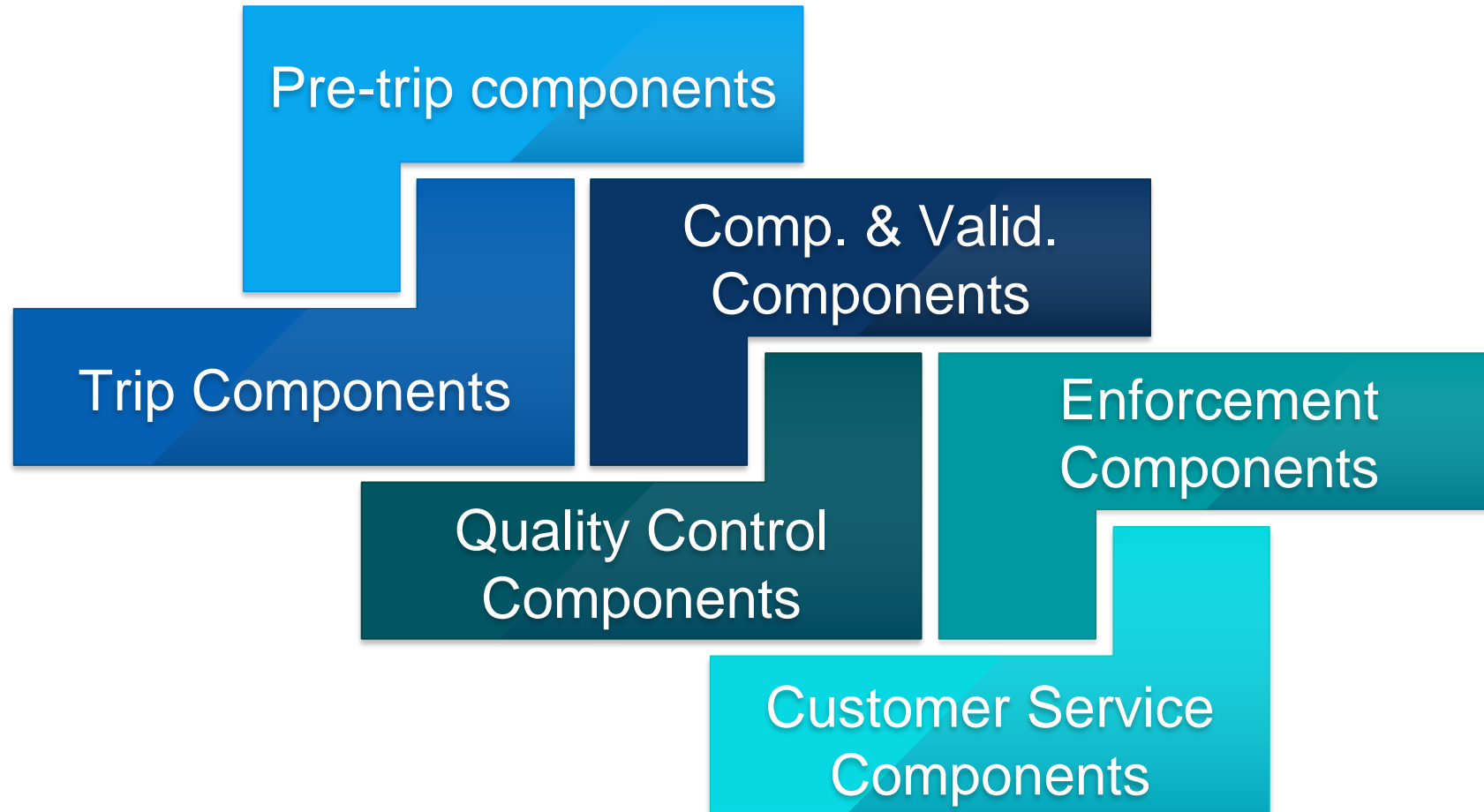
Stock Assessment Needs

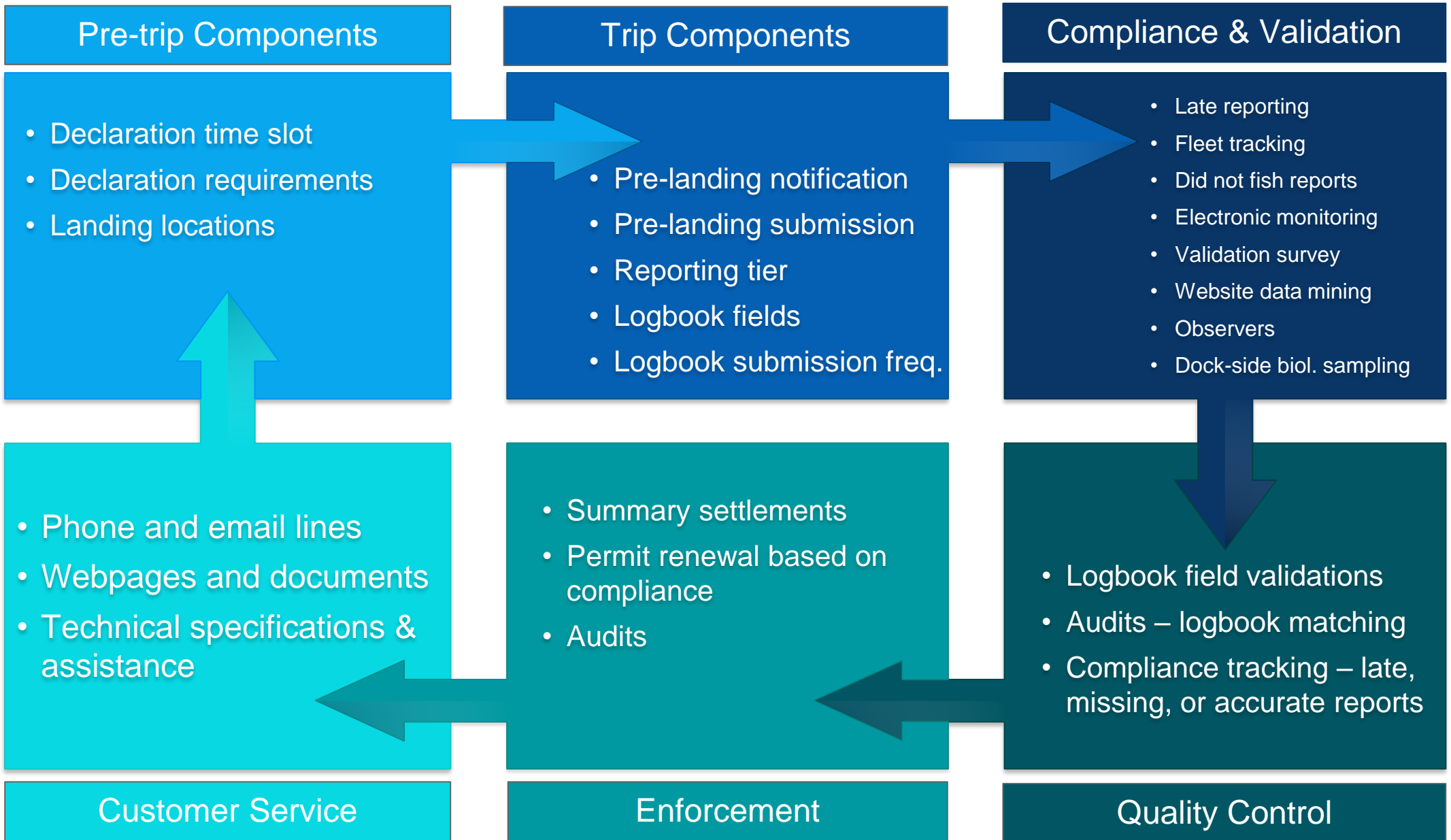
- Purpose
 - To examine the effects of fishing and other factors to describe the past and current status of a fish stock, answer questions about stock size, provide information to make sound decisions
- Data
 - Utilizes fishery-dependent and fishery-independent data
 - Catch, relative abundance, and biological data (life history)
 - Annual trends

Management Needs

- Purpose
 - To predict potential changes in management regulations (e.g. trip/bag limits, size limits, seasonal closures, etc.)
- Data
 - Fishery-dependent data sets
 - Requires fine-level temporal data (e.g., weeks, months, wave) for seasons, spatial data, and trip (or set) level data, catch per unit effort, and discard disposition for limitations
 - Target species required for economic analyses

Program Components





Recreational Data Source Comparisons

	MRIP		SRHS		Gulf SEFHIER	
	APAIS	FHS	Logbook	Dockside Intercept	Logbook	Validation Survey
Species ID ¹	Reliable	No	Semi-reliable ¹	Reliable	Semi-reliable ¹	Reliable
Landings	Yes, observed	No	Yes, self reported ²	Yes	Yes, self reported ²	Yes
Discard	Limited, self-reported (A, B1, B2)	No	Self-reported, limited (Kept or Released)	No	Self-reported, limited (Kept or released)	Self-reported, limited (kept or released)
Lengths & Weights	When sampled	No	No	When sampled (~8.5%)	No	Limited funding prevented sampling
Spatial (“Fishing locations”)	Very limited: Federal or state water, state	Limited	Limited: per trip to nearest square mile	No	Limited: per trip to nearest square mile	Limited (state, 3 or 10 mi offshore)
Effort	Yes	Yes	Yes	Yes, counts anglers	Yes	Yes
Target Species	Yes	Yes	No	No	Yes	No
Economic	Yes, every 5 years	No	Yes	No	Yes	No
Coverage	State and federal vessels		Federal, selected vessels (69)		Federal permitted vessels	

¹Mis-identification occurs due common names meaning (e.g., black grouper, true black, carbo) which change based on locality; early MRIP (1981-1991) lacked training to question species identity

²Landings data will not include size information on sub-legal sized individuals and typically reports in numbers

Validation and Compliance Components

- Validation and compliance components are often used together to ensure accuracy of data collected for sustainable management
- Selection of tools may vary by fishery
 - Validation surveys (catch & effort estimation)
 - Fleet position monitoring (trip tracking and potential fishing activity)
 - Declaration (trip tracking and fishing activity)
 - Pre-landing notification (trip tracking, catch audit)
 - Did not fish reports (trip tracking and no expected fishing activity)
 - Website data-mining (cross-verification of economic information)
 - Observers (catch & effort estimation)
 - Electronic monitoring (catch & effort estimation)
 - Dockside sampling (catch & effort estimation and biological samples)
 - Enforcement action (deterrent to non-compliance)

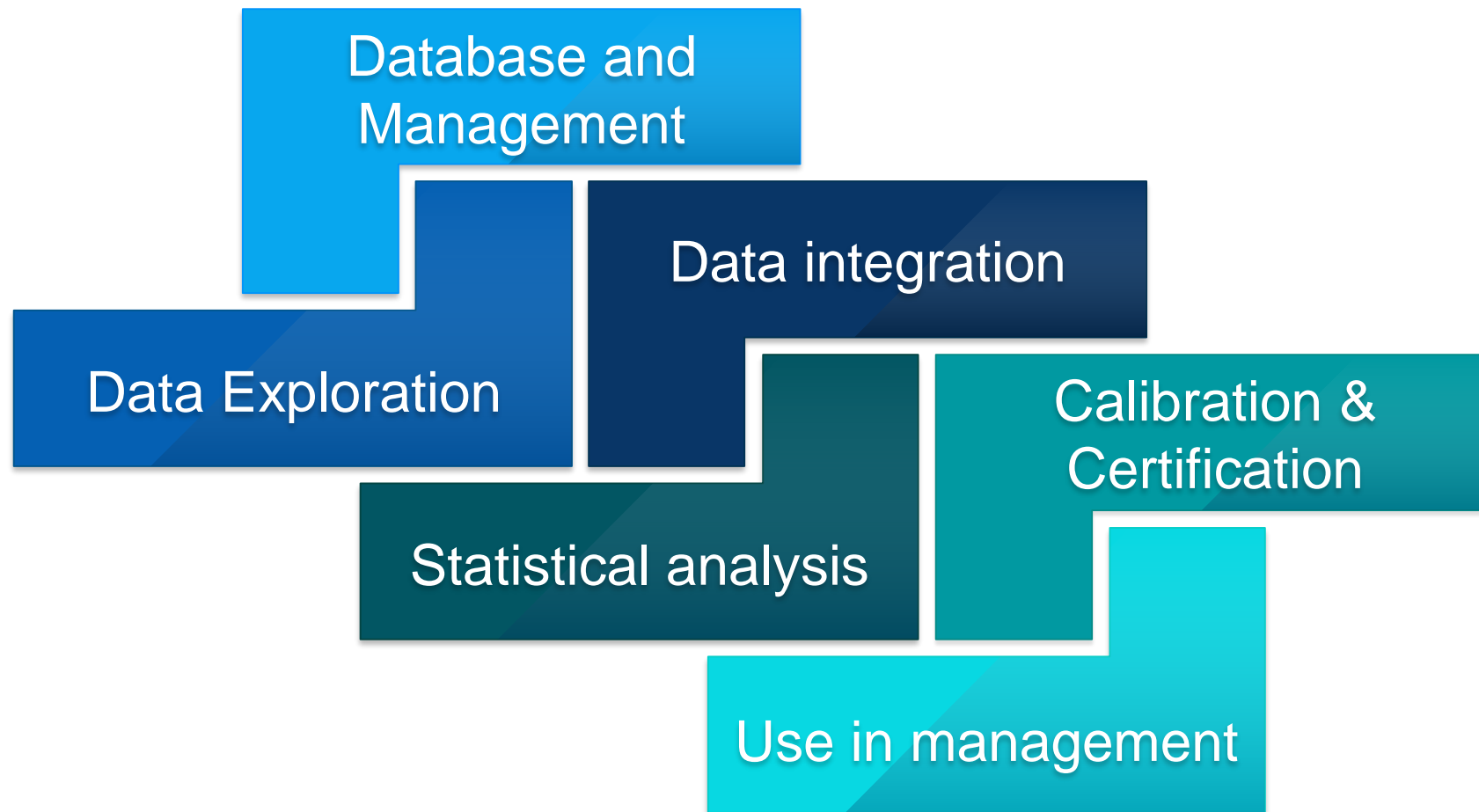
Validation and Compliance Components

	Catch & Effort Estimation	Fishing Activity	Independent validation	Cross verification	Compliance deterrent	Biological samples
Validation survey	Yes	Yes	Yes		Indirect	Optional
Fleet monitoring	Indirect	Yes		Yes	Yes	
Declaration		Yes			Yes	
Pre-landing notification	Yes	Yes			Yes	
Did not fish reports	Yes	Yes				
Website mining				Yes		
Observers	Yes	Yes	Yes		Yes	Optional
Electronic monitoring	Yes	Yes	Yes		Yes	
Dockside sampling	Indirect	Yes	Yes			Yes
Enforcement option			Yes		Yes	

Validation and Compliance Component Costs

	Cost Fishermen	Cost Agency
Validation survey	Time for survey	\$\$\$ (boots on the ground)
Fleet monitoring	\$\$	\$
Declaration	Time	\$
Pre-landing notification	Time	\$
Did not fish reports	Time	\$
Website mining	None	\$\$ (time and collation)
Observers	\$ (displace crew or customer)	\$\$\$ (boots on the ground)
Electronic monitoring	\$\$\$ (equipment)	\$\$\$ (infrastructure, review)
Dockside sampling	Time	\$\$\$ (boots on the ground)
Enforcement option	\$ (penalties, permit renewal delays)	\$\$

Analysis and Use Components





Interactions

- Needs to balance fishermen burden and ability to monitor compliance via intercepts
 - Original SEFHIER program attempted to balance the needs by combining together the declaration and Pre-landing Notification into one report.
 - SEFHIER balanced burden of reporting with asking only for landed and discarded instead of discard disposition
 - Not including a Did Not Fish report or observer coverage due to VMS ability to validate



Questions to consider



Discussion

- What are the goals and objectives for revised SEFHIER?
- What information could a rebuilt program supply that current for-hire surveys do not capture?
- What are the data priorities?
- Any particular requests of the for-hire advisory panel, in addition to the directive passed last meeting?



Next Steps

- Interdisciplinary team (IPT) formed in July
- More data exploration of SEFHIER data
- Council provide guidance to staff on goals, objectives, and additional information necessary for a new program