

Overview of the Standard Atlantic Fisheries Information System (SAFIS) Electronic Reporting



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Standard Atlantic Fisheries Information System



Standard Atlantic Fisheries Information System

- Real time
- Cost effective
- Collaboratively designed

SAFIS

More than just Dealer Reports

– eDR

- Federal and state dealer reporting



SAFIS
Electronic Dealer
Reports (eDR)

– eREC

- Private angler recreational reporting

– SMS

- Partner management interface

– eTRIPS

- State trip reporting



SAFIS
Electronic Vessel
Trip Reports (eTRIPS)



SAFIS
Management
System (SMS)

SAFIS Design

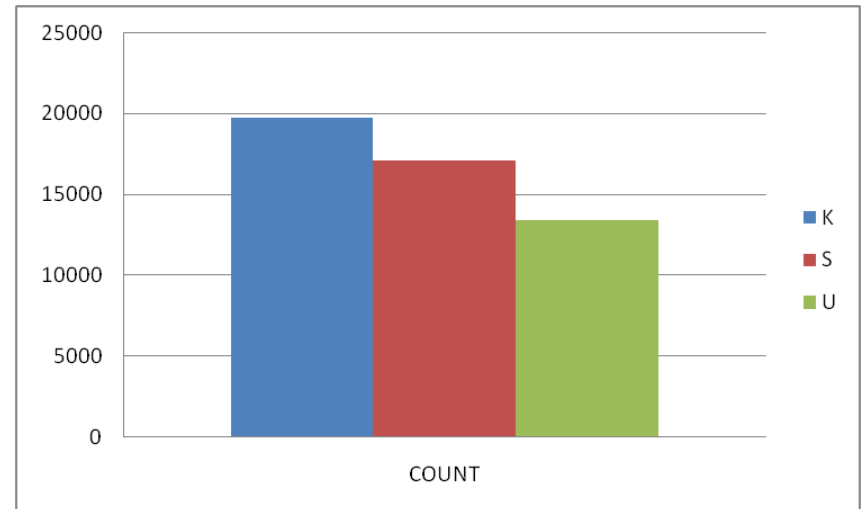
- SAFIS is a modular, integrated data collection system
 - Single, integrated database system
 - Combined federal and state reporting
 - One set of codes using ACCSP standard coding schemes
 - Complete catalog of:
 - Vessels
 - Dealers
 - Fishermen

SAFIS Integration

- SAFIS is a single, integrated dealer and fishermen/vessel system
 - Both modules use the same codes
 - Both modules use the same references
 - Trips much more easily linked to dealer reports

SAFIS Data Collection

- Flexible mechanism
 - On line
 - PC based application
 - Standardized file uploads



Recent Updates eDR

- Expansion in the SE Region
 - E-1Ticket
 - Deployed in South Carolina and Georgia
- Significant modifications made to support HMS
 - Additional fields
 - Logic to determine HMS vs non-HMS dealers

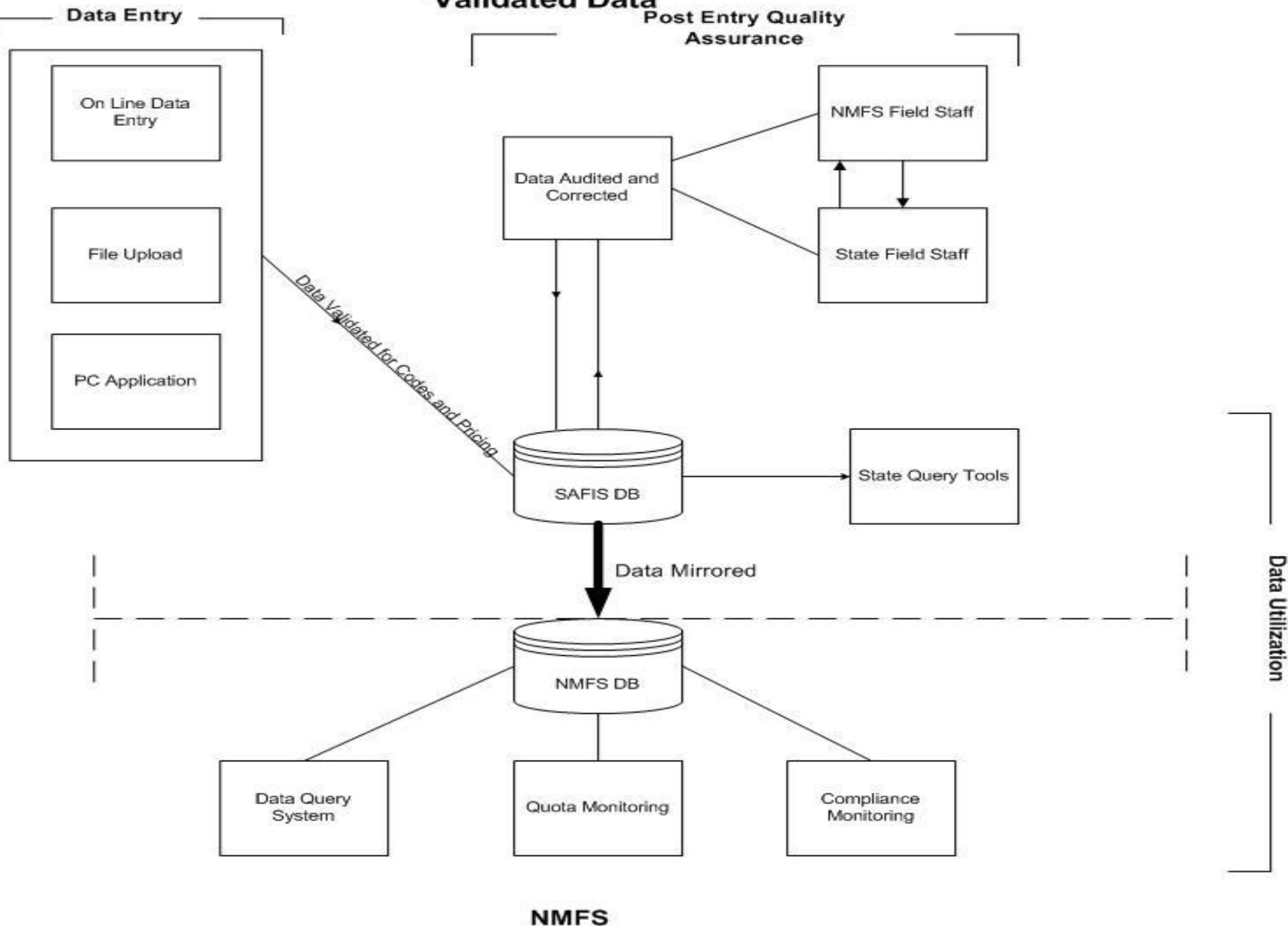
SE Dealer Electronic Reporting

- Data from Atlantic and Gulf State
 - On Line reporting deployed in South Carolina and Georgia
 - Florida and North Carolina data aggregated on SAFIS server from PC based software
 - Gulf data aggregated on GulfFIN system

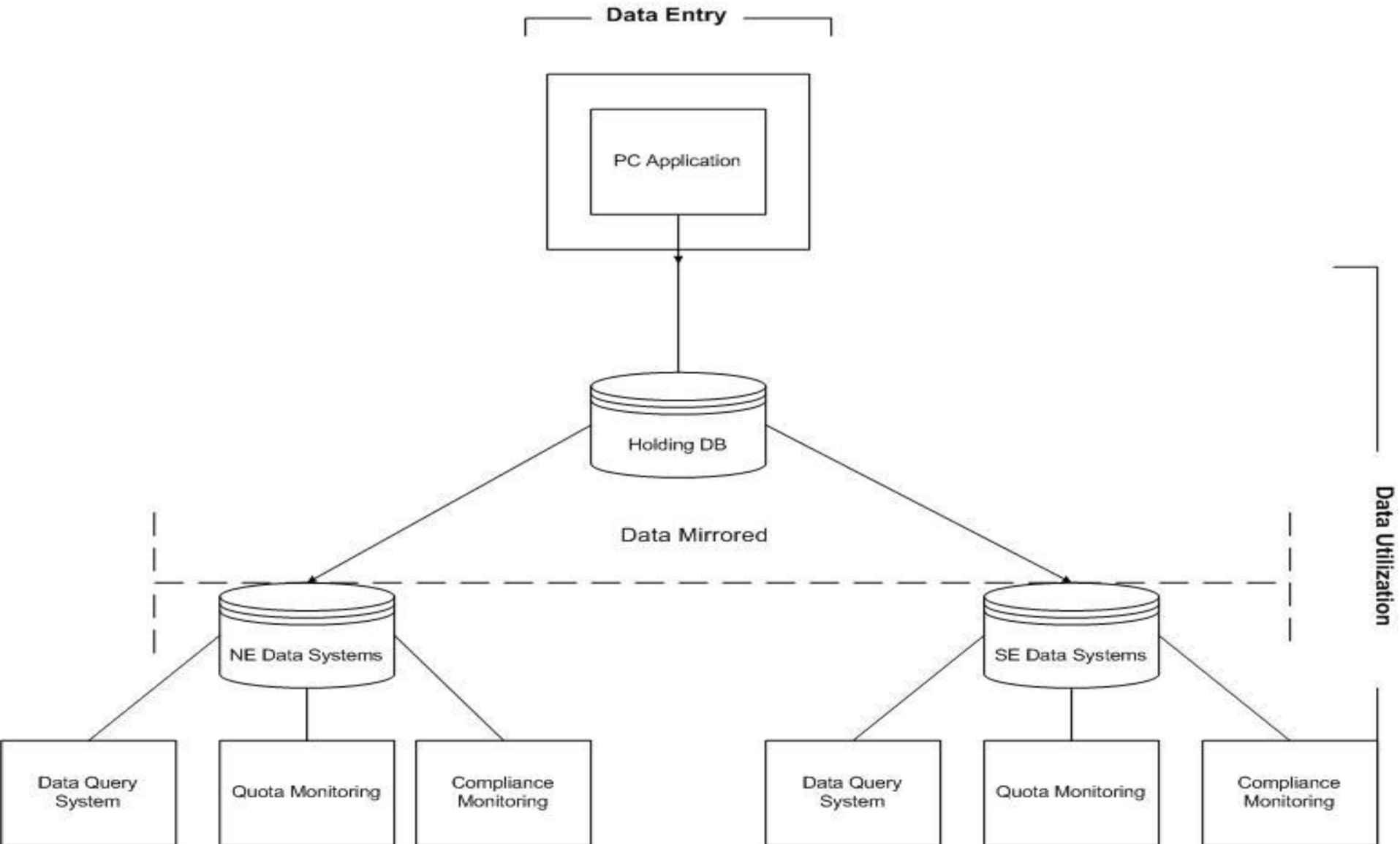
Validated vs Unvalidated Data

- Validated – meets SAFIS primary/foreign key constraints
 - Loaded and queried from SAFIS DB
 - Used as production data
 - Eventually transferred to warehouse and used in stock assessments etc
- Unvalidated – does not meet SAFIS primary/foreign key constraints
 - Many state systems don't meet
 - NC, FL and all Gulf states
 - Used for quota and compliance monitoring only

SAFIS Application Data Flow Validated Data



SAFIS Application Data Flow (Unvalidated Data)



eTrips - Background

- Initially envisioned as a multi-state system
- Most NE states participated in the initial planning
- Requirements developed over nearly a year

Base Requirements

- Based on ACCSP trip reporting standard
 - Single trip report
 - Multiple efforts per trip possible
 - Multiple catches per effort possible
- Must use ACCSP coding standards
- Must support both commercial and recreational trip reports

eTrips

- Integrated into SAFIS
- Initially deployed as a data entry tool for Partners
 - Concern over resistance by fishermen
 - Replaced various spreadsheets, dbases



SAFIS
Electronic Vessel
Trip Reports (eTRIPS)

Features

- Integrated into eDR system
 - Common tables
 - Common codes
 - Common references
- Makes matching with dealer reports much easier

Additional Requirements

- Some requirements went beyond the base standards
 - Support of carrying of animals
 - Allocation of catch amongst fishermen
 - Direct sales

eTrips - Expansion

- Collecting 100% in
 - Massachusetts
 - Connecticut
- Achieving near perfect matching with dealer reports
- Collecting partial in
 - Maryland
 - New York
 - Rhode Island
- First charter/headboat deployment
 - Maryland

eTrips Current Deployment Status

- eTrips
 - Commercial
 - MA, CT, NY, MD, RI
 - Recreational
 - MD
- eLogbook
 - NJ striped bass bonus fish
 - MA multi-species

Recent Updates eTrips

- Flexible collection options
 - Upload
- Continued expansion of scope
 - Looking for 100% commercial reporting
- Integrated with SE state reporting

eRec Background

- New Jersey needed a mechanism to report Striped Bass
 - Voluntary
 - Awarded 'Bonus Cards' to fishermen
 - Collected fisherman, effort and length data
- Other states looking for voluntary reporting

eRec Requirements

- Use as much of existing SAFIS structures as possible
 - Permits
 - Vessels
 - Locations
 - Coding schemes

eRec

- Usually integrated into existing state web sites
- First deployed in NJ
- Second deployment in MA

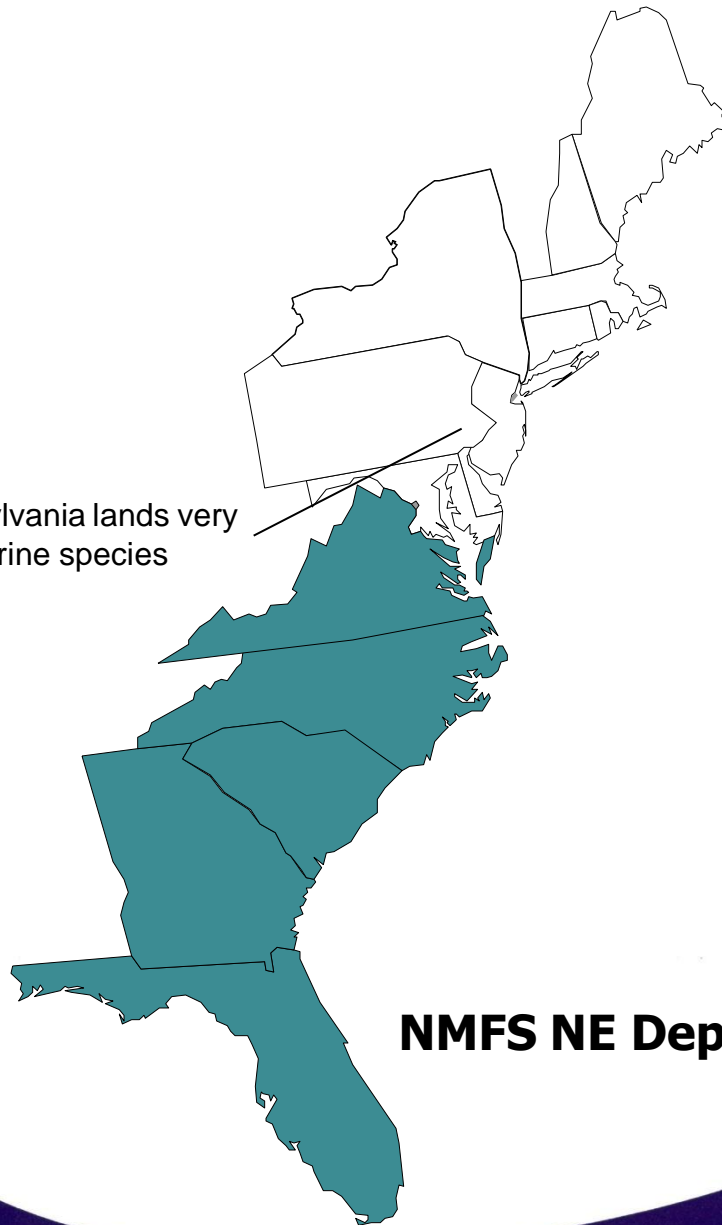
Future Directions eRec

- Integrate existing systems together
 - Create a standard set of features
 - Provide to any Partners with a need

2004

Atlantic Coast Data Collection Status

Pennsylvania lands very few marine species



 ACCSP Compliant

 ACCSP Compliant via SAFIS eDR

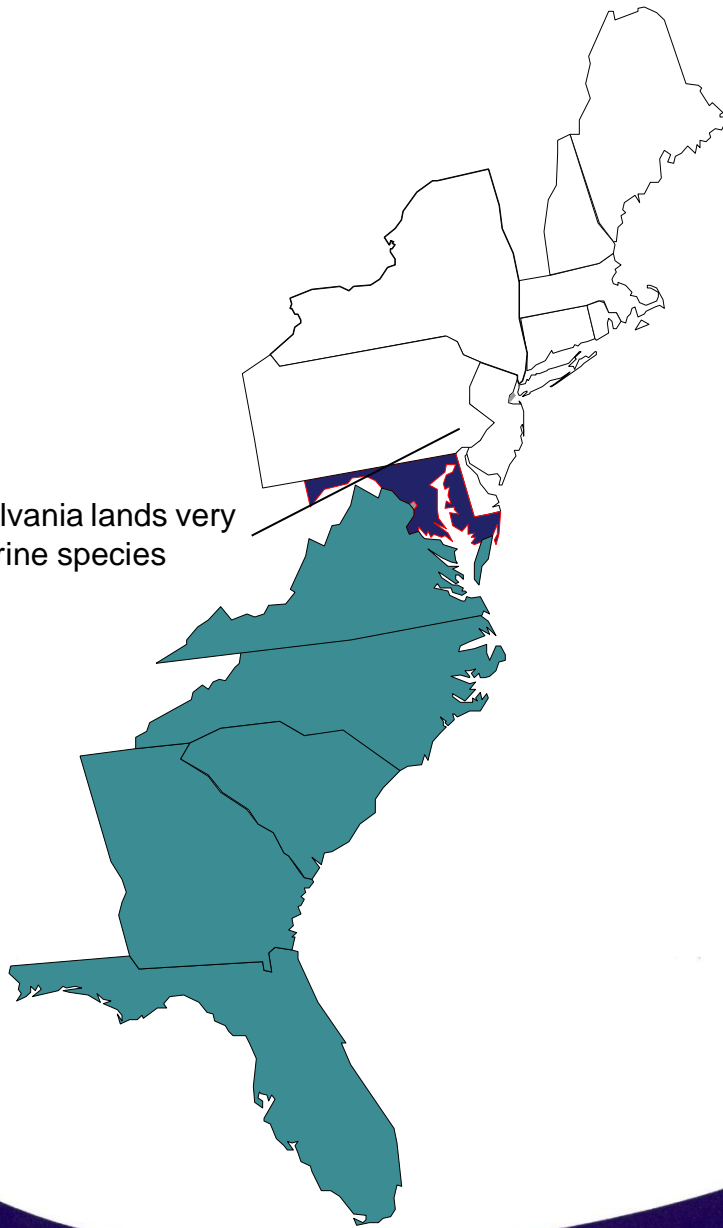
 ACCSP Compliant via SAFIS eDR and/or eTRIPS or eREC

NMFS NE Deployed for all Federal Dealers in May

2005

Atlantic Coast Data Collection Status

Pennsylvania lands very few marine species



 ACCSP Compliant

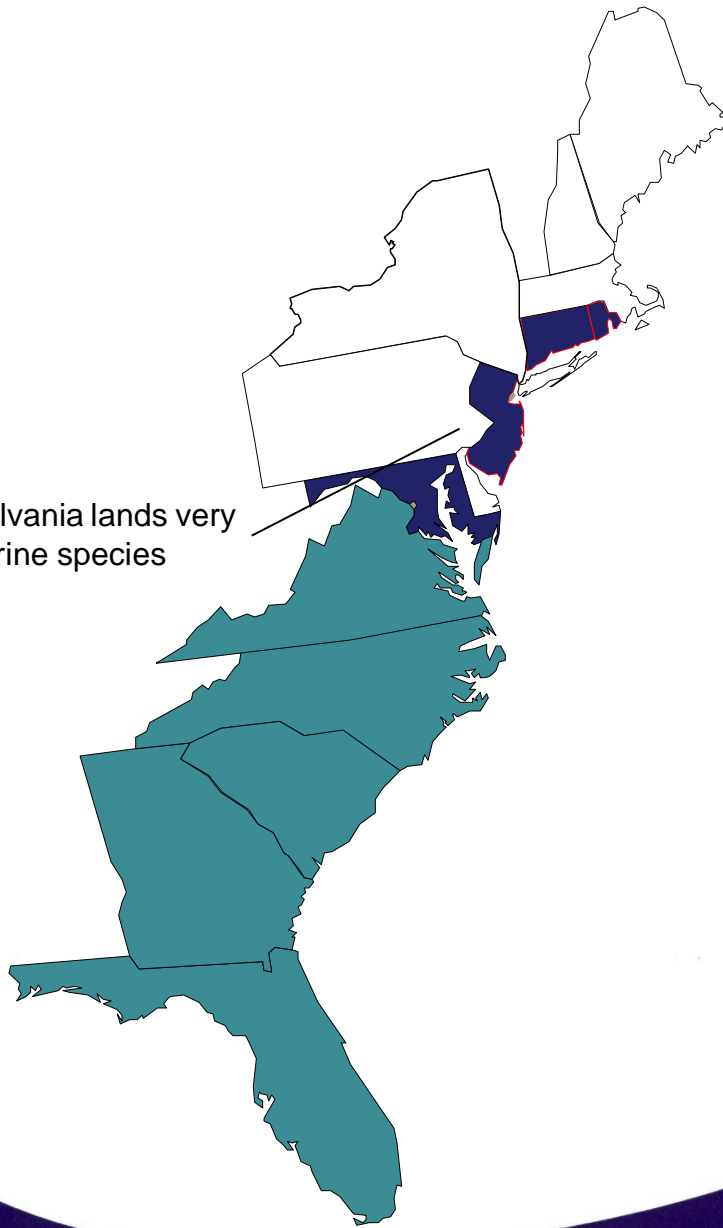
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2006

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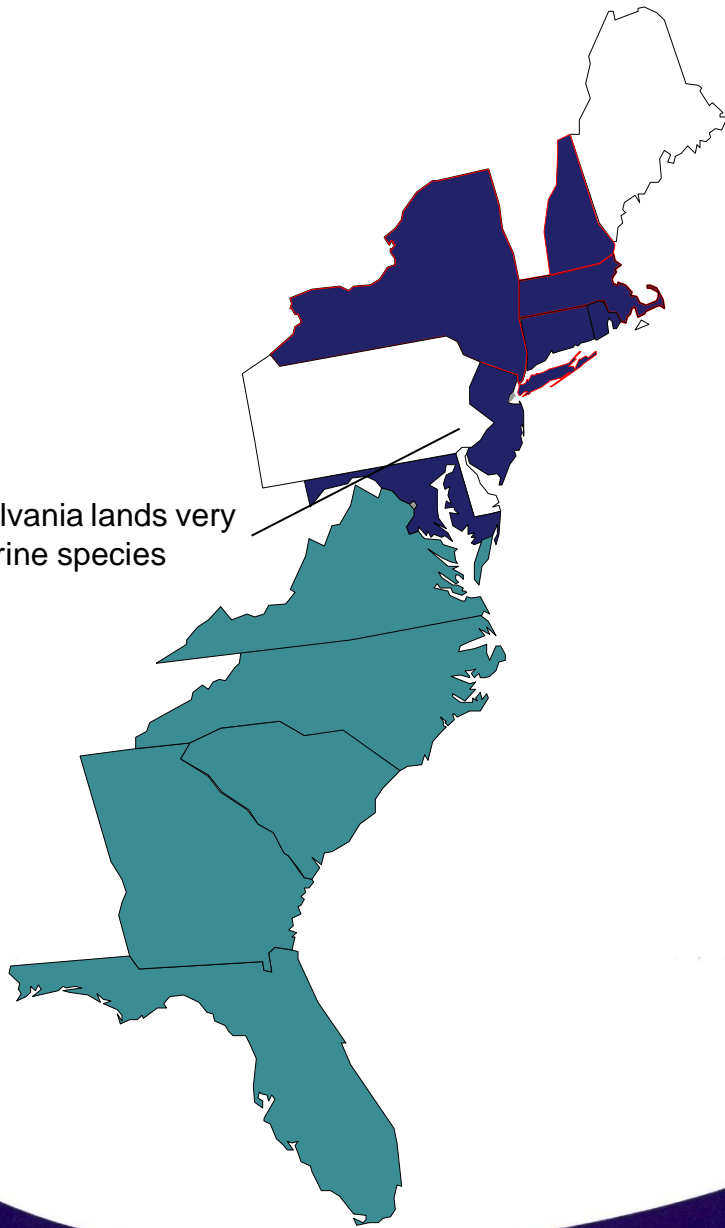
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2007

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 ACCSP Compliant

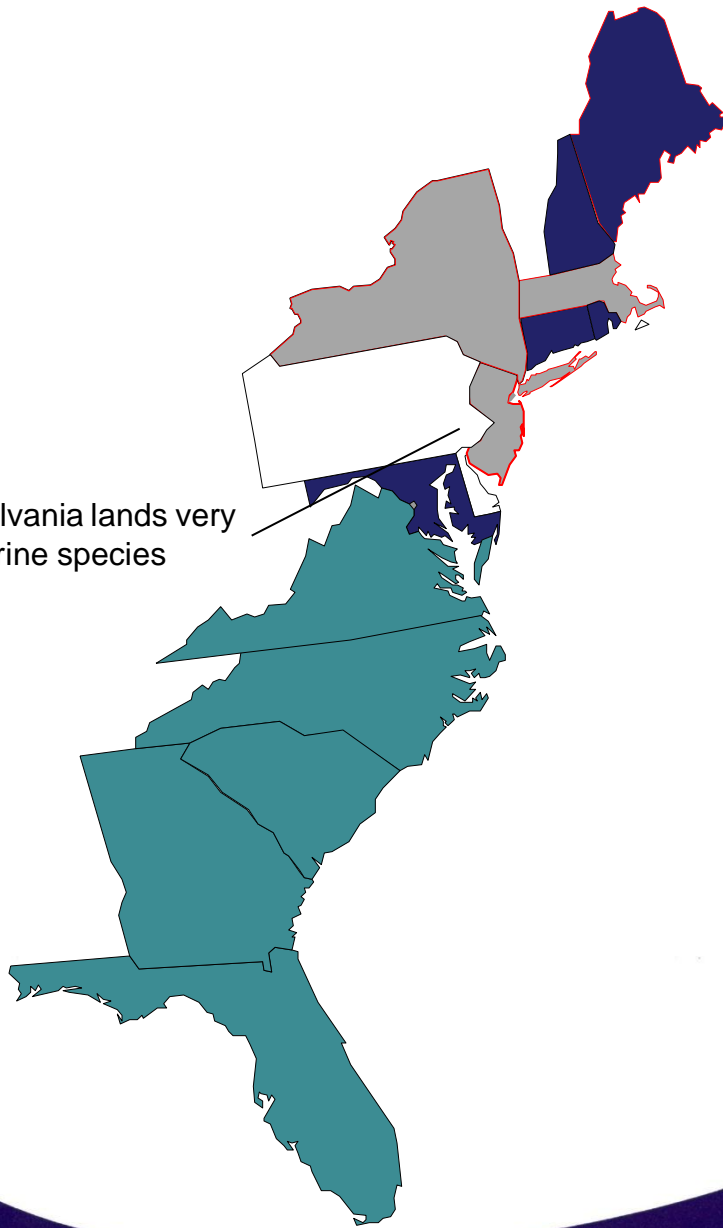
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2008

Atlantic Coast Data Collection Status

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ACCSP Compliant



ACCSP Compliant via SAFIS eDR

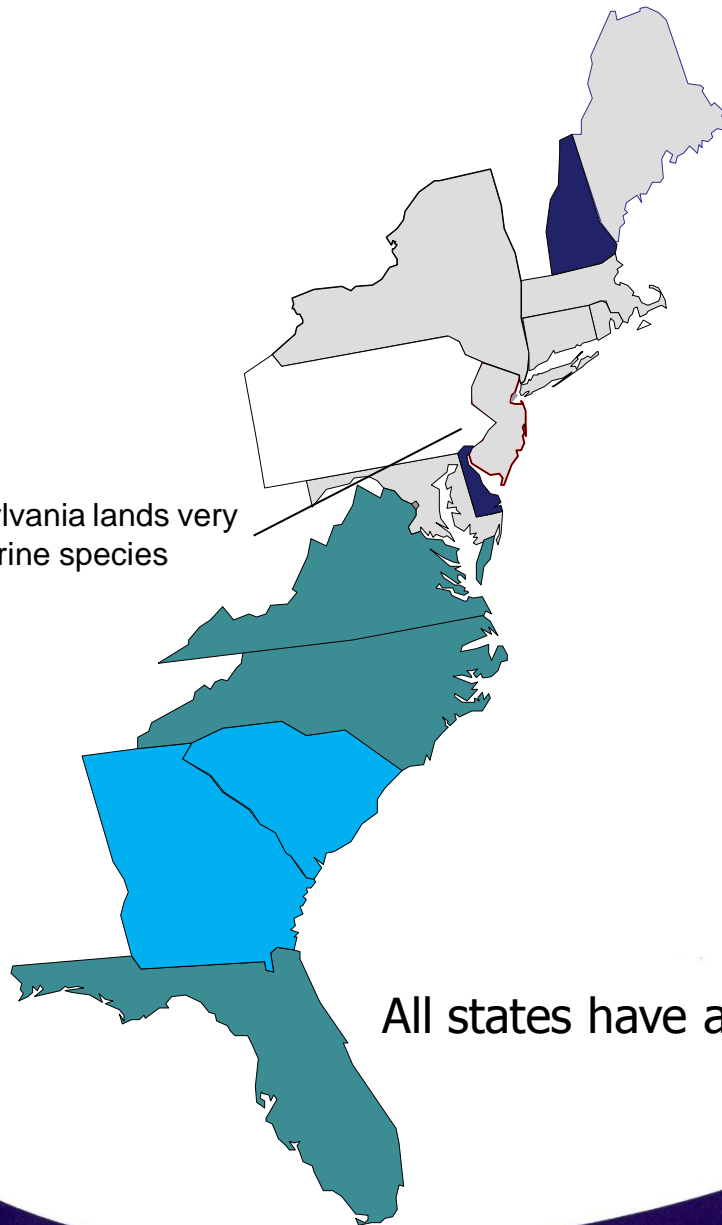






ACCSP Compliant via SAFIS eDR and/or eTRIPS or eREC

2012

Atlantic Coast Commercial Data Collection Status

Pennsylvania lands very few marine species



-  Other Data Collection Systems
-  Edr Only
-  Edr and Etrips
-  E1Ticket and State Systems

All states have at least some pc trip ticket reporting

Current Developments

- Integration of HMS reporting
 - Atlantic dealers will use SAFIS
 - On line Edr
 - PC based Trip Ticket
 - Gulf and Caribbean dealers will use either Edealer (new HMS application) or PC based Trip Ticket

Current Developments

- Alternate Reporting Methods
 - Additional eTrips upload option
 - Hand held option
 - Iphone
 - Ipad
 - DROID

SAFIS Benefits

- Near Real Time Data
 - Raw data are available immediately
 - Simplifies Quota Monitoring
- Eliminates Redundant Reporting
 - States accept Federal Reports
- Readily Adapted
 - Easily deployed
- Modules Integrated
- Automated Auditing

Fluke Quota in ME



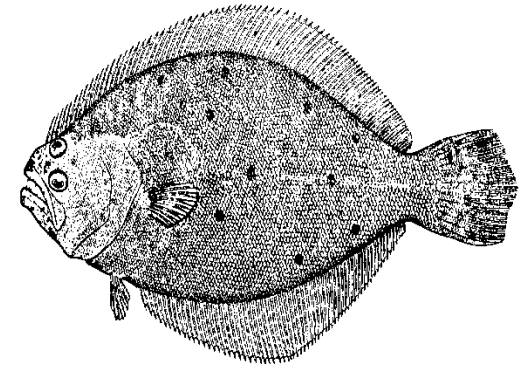
BEFORE SAFIS

- Inefficient quota tracking
- A single vessel could put the fishery over quota
- Once exceeded quota by the equivalent of 7 years

AFTER SAFIS

- Automatic daily emails distribute information to track quotas and summarize data audits
- ME can manage the fishery efficiently and prevent exceeding the quota

SAFIS - Benefits in ME



- ME is capable of timely and efficient management.
- Fishermen are not excluded from the fishery due to previous quota overages.



Filling Data Gaps in MA

- Prior to choosing to use the ACCSP systems the state of MA did not have a complete data set from which to determine the value of a fishery.
- Now that gaps are filled, MA can:
 - *Provide legislators with fishery valuations.*
 - *Provide NMFS with a more complete data set for Fisheries of the United States.*

Data Gap Example – MA Shellfish

Species	2006	2007	Units
Soft Clam	119,679	12,940	Bushel
Soft Clam	828,156	5,609,398	Pounds
Soft Clam	644	50	Meat Pounds
Oyster	11,855	1,123	Bushel
Oyster	143,468	8,686,593	Count
Oyster	10,208	219,188	Pounds
N. Quahog	303,305	26,363	Bushel
N. Quahog	476,266	21,991,925	Count
N. Quahog	48,890	777,092	Pounds

eTRIPS – Benefits to NJ



- Drastically reduce staff time spent entering harvest reports from paper
- Expectation of gaining increased amounts of commercial landings data
- Fisheries not part of any other database

eTRIPS - Benefits to NJ Fishermen



- Allows fishermen to enter their own data, receive a receipt and save time and postage.
- Allows fishermen opportunity to view previously reported data submissions.

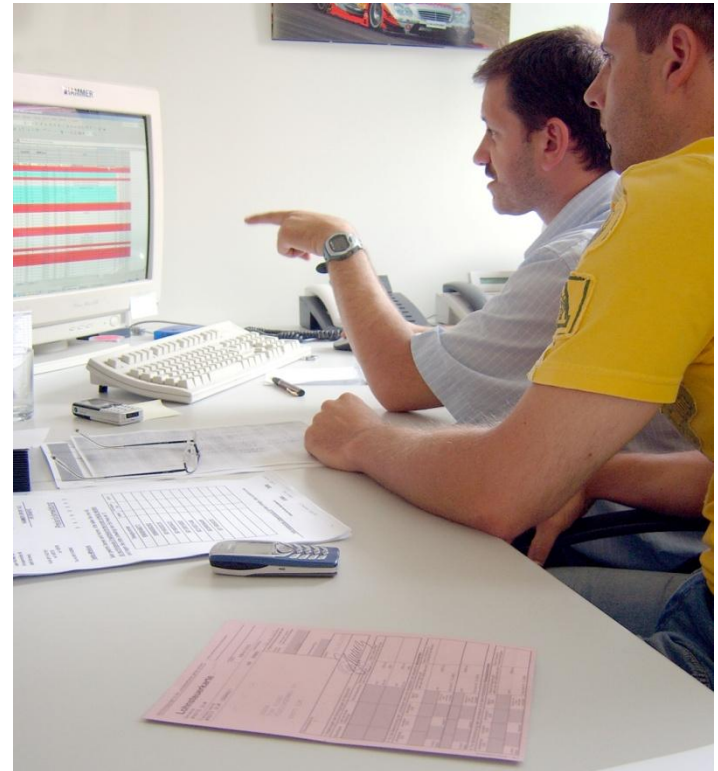
VA - Fishermen Compliance



- Virginia does not have a staff member dedicated to compliance coordination.
- SAFIS eDR allows VA to run queries, compare results to VA data and quickly generate a list of fishermen not reporting.
- The alternative to SAFIS would involve sending staff to dealers to collect information for later analysis.

SAFIS - Benefits to VA

- Allows VA to contact non-compliant fishermen in a timely fashion to request reports or ultimately take action.
- Saves state resources (salary & time).



Benefits to NMFS-NE

- Data are available almost immediately
- Vastly improved data quality
 - On entry validation prevents improper coding
 - Post entry automated audit process provides consistent, repeatable review and correction process
- Better quota/compliance management

Benefits to NMFS-SE

- On line Data are available almost immediately
- PC data available overnight
- Atlantic data aggregated together
 - Even non-ACCSP compliant data available
 - Enables merge with Gulf data for quota and compliance monitoring

Benefits to all

- SAFIS is extremely cost effective
 - Integrated into ACCSP budget
 - Estimate \$8M development cost avoidance coast wide
 - Estimate recurring yearly cost avoidance \$1M
- Promotes cooperation and coordination
 - Many more 'eyes' on data
 - Joint state/federal review

Questions?



ACCSP

Good Data, Good Decisions

www.accsp.org

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