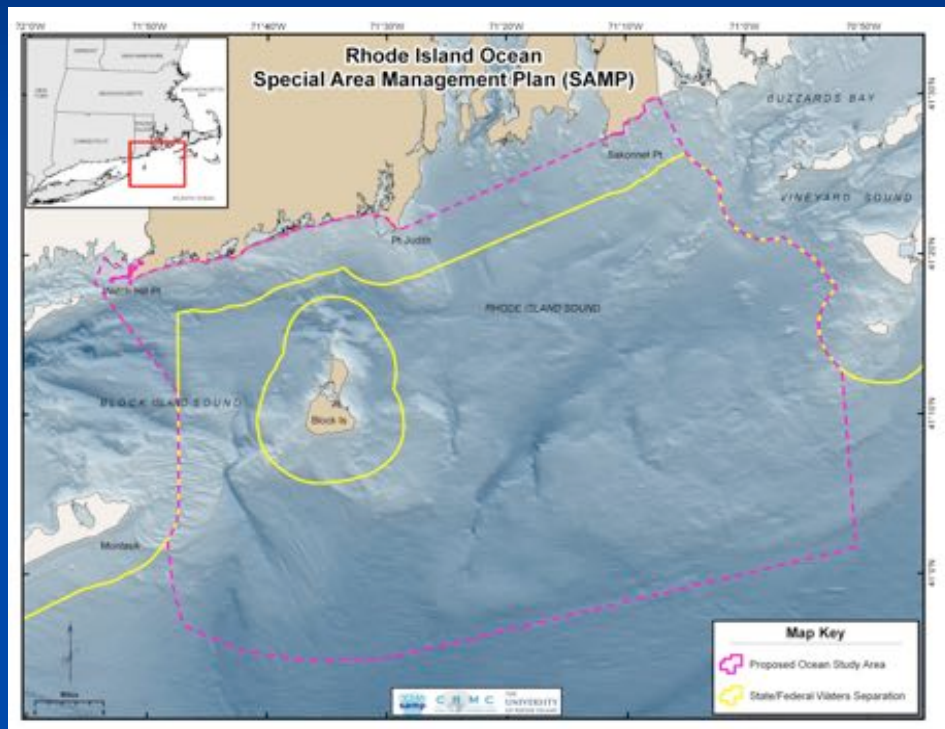


Fisheries data and coastal and marine spatial planning

Dave Beutel, RI Coastal
Resources Management Council
Fisheries and Leadership
Sustainability Forum
Stanford University
September 21, 2011



September 2008. Our Mission....

- Develop an Ocean SAMP fisheries chapter
- Engage Ocean SAMP fisheries stakeholders

with the goal of....

- Developing fisheries policies and standards that are based on the *research*; address the *key issues*; and supported by *stakeholders*



Working with fishermen

The background of the slide is a photograph of several fishing boats docked at a wooden pier. The boats are equipped with various fishing gear, including cranes and large spools. The water is calm, and the sky is clear and blue.

- Early meetings:
 - Mapping fishing areas (participatory GIS)
 - Introducing the Ocean SAMP
- Later meetings:
 - Issues and concerns
 - Fisheries research and chapter development
 - Communication with the developer
 - POLICY DEVELOPMENT
- “A seat at the table”

Fisheries Stakeholder Process: the Industry

- Major user of SAMP area
- Vocal at early stakeholder meetings
- Concerned about offshore wind and marine spatial planning
- Local knowledge of SAMP area

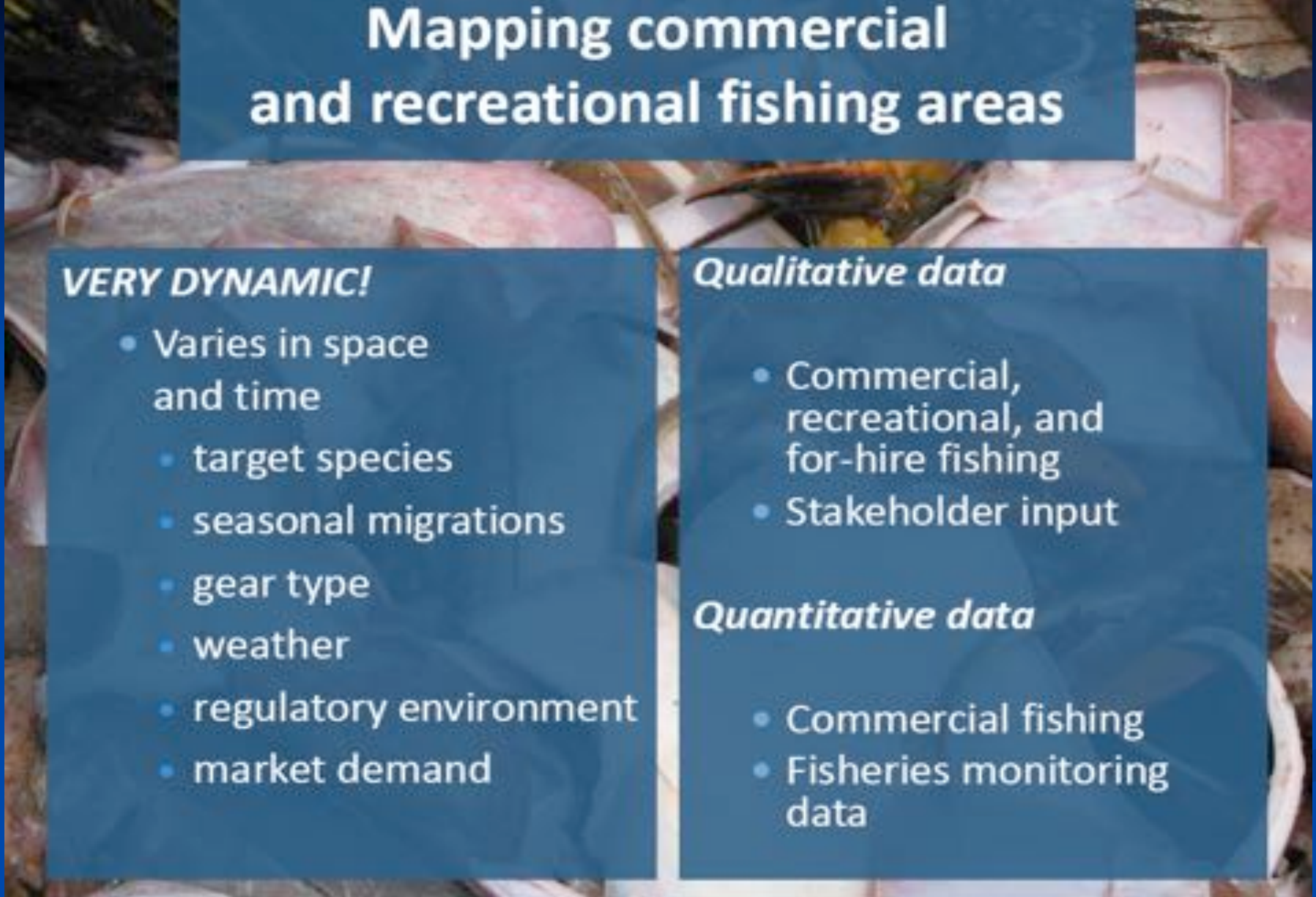


Members of Stakeholder Group and Fisheries TAC:

- RI Lobstermen's Assn.
- RI Commercial Fishermen's Assn.
- RI Monkfishermen's Assn.
- RI Fishermen's Alliance
- Ocean State Fishermen's Assn.
- Eastern New England Scallopers' Assn.
- Sakonnet Point Fishermen's Assn.
- Atlantic Offshore Lobstermen's Assn.
- RI Party and Charter Boat Assn.
- RI Saltwater Anglers Assn.

Fishing Industry Concerns

- Selection of developer
- Input into site selection process
- Transit/fishing access
- Navigational safety
 - Radar interference
 - USCG regulations
 - Travel lanes
 - Weather impacts on travel
 - Safety issues
- Economics/livelihoods
- Site-specific research
- Life history
 - Spawning
 - Juvenile habitat
 - Migration patterns
- Habitat impacts
 - Cable route
 - Structures
 - Electro-magnetic fields
 - Noise effects



Mapping commercial and recreational fishing areas

VERY DYNAMIC!

- Varies in space and time
 - target species
 - seasonal migrations
 - gear type
 - weather
 - regulatory environment
 - market demand

Qualitative data




- Commercial, recreational, and for-hire fishing
- Stakeholder input

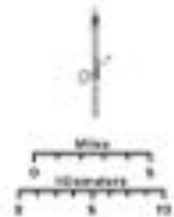
Quantitative data

- Commercial fishing
- Fisheries monitoring data

Rhode Island Ocean Special Area Management Plan (SAMP)

Map Key

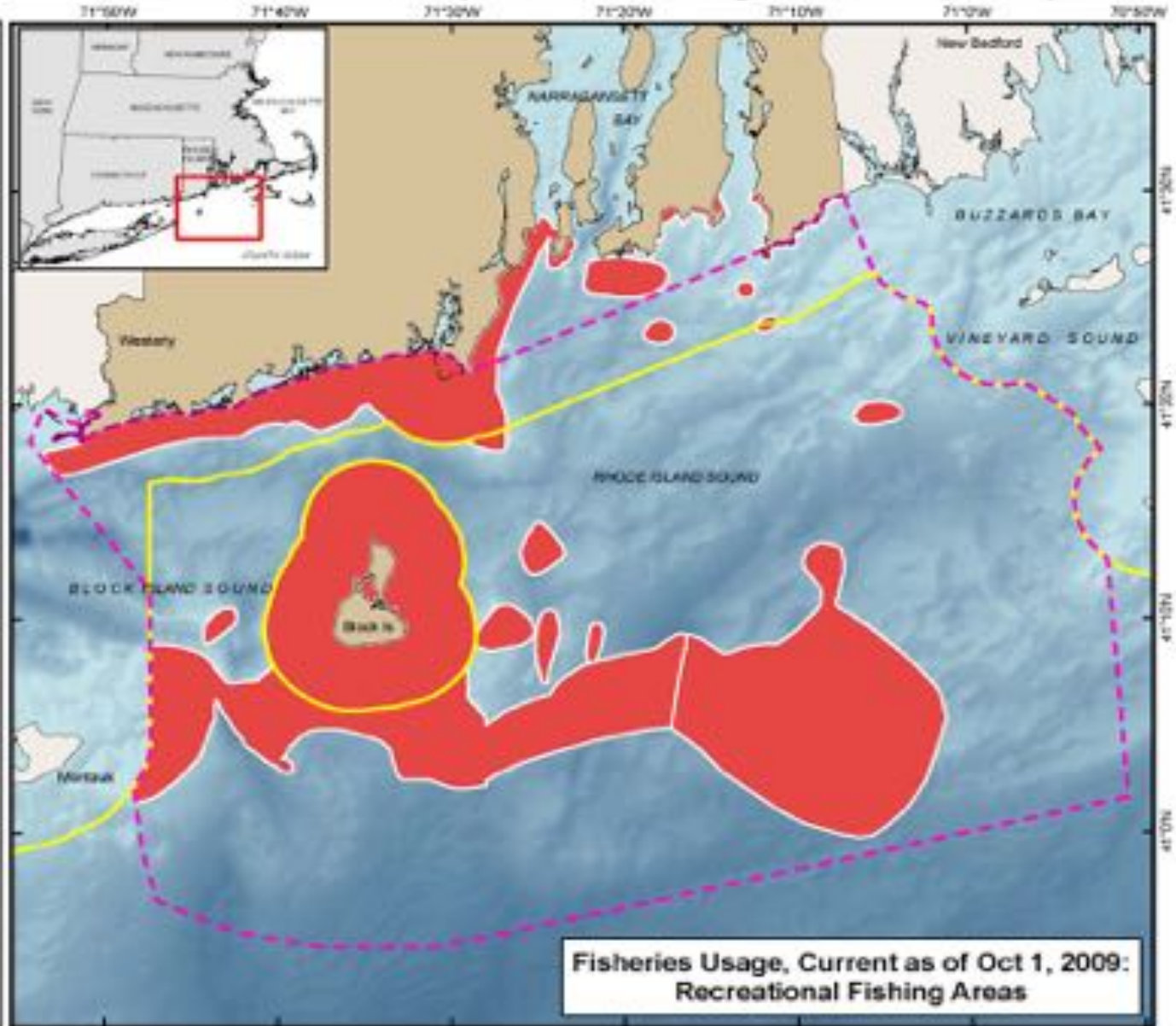
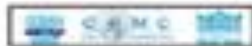
-  OceanSAMP Study Area
-  State/Federal Waters
-  Recreational Fishing Areas



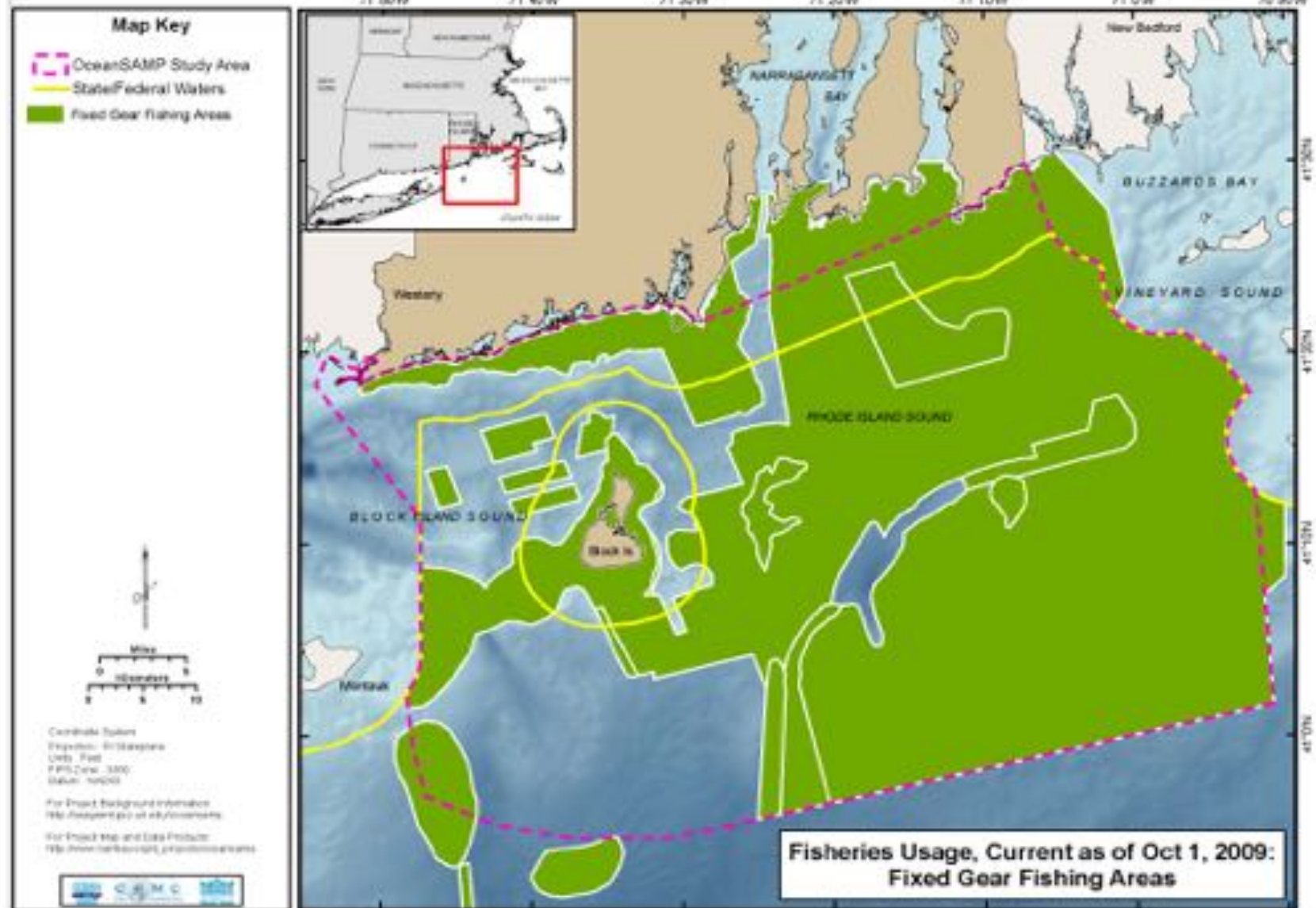
Coordinate System
 Projection: NAD83
 Units: Feet
 FIPS Code: 3300
 Datum: NAD83

For more background information
<http://www.doh.state.nh.us/oc/samp/>

For more map and data products
<http://www.doh.state.nh.us/oc/samp/data/>






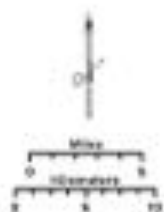
50W	71°40'W	71°30'W	71°20'W	71°10'W	71°0'W
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Rhode Island Ocean Special Area Management Plan (SAMP)

Map Key

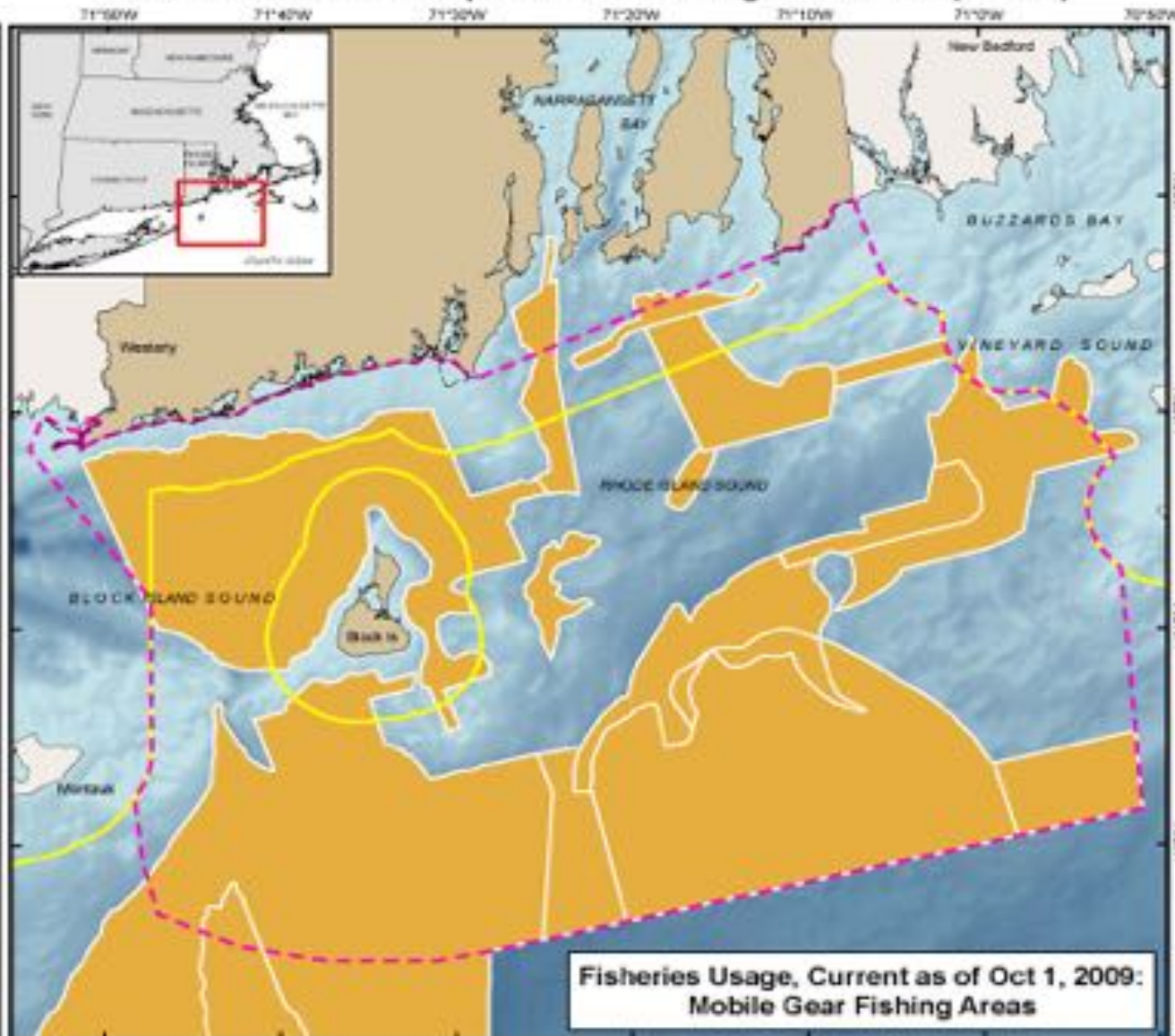
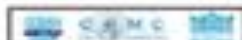
-  OceanSAMP Study Area
-  State/Federal Waters
-  Mobile Gear Fishing Areas



Coordinate System
 Projection: GCSNAD83
 Units: Feet
 FIPS Code: 3300
 Datum: NAD83

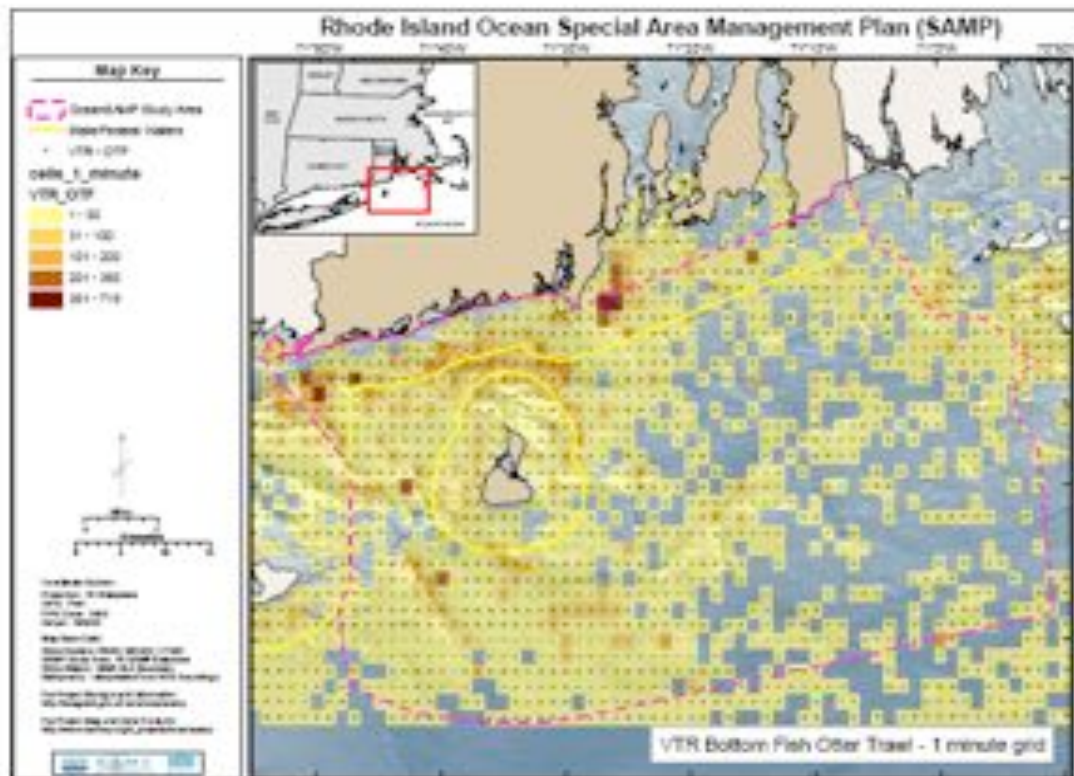
For Project Background Information
 Web: <http://www.samp.org>

For Project Map and Data Products
 Web: <http://www.samp.org>



**Fisheries Usage, Current as of Oct 1, 2009:
 Mobile Gear Fishing Areas**

VTR Bottom Trawl



50W 71°40'W 71°30'W 71°20'W 71°10'W 71°0'W



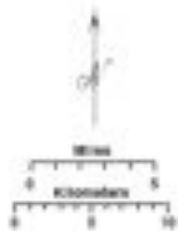
Rhode Island Ocean Special Area Management Plan (SAMP)

Map Key

OceanSAMP Study Area

State/Federal Waters

Number of Trips per Cell



Coordinate System:

Projection: NAD83

Units: Feet

PRG Zone: 18C

Datum: NAD83

Map Scale Data:

State Borders: RIGIS, RIGIS, CTGIS

SAMP Study Area: RIGIS Database

State Waters: RIGIS Database

Boundary: RIGIS Database

Boundary: RIGIS Database

Boundary: RIGIS Database

Boundary: RIGIS Database

Boundary: RIGIS Database

Boundary: RIGIS Database

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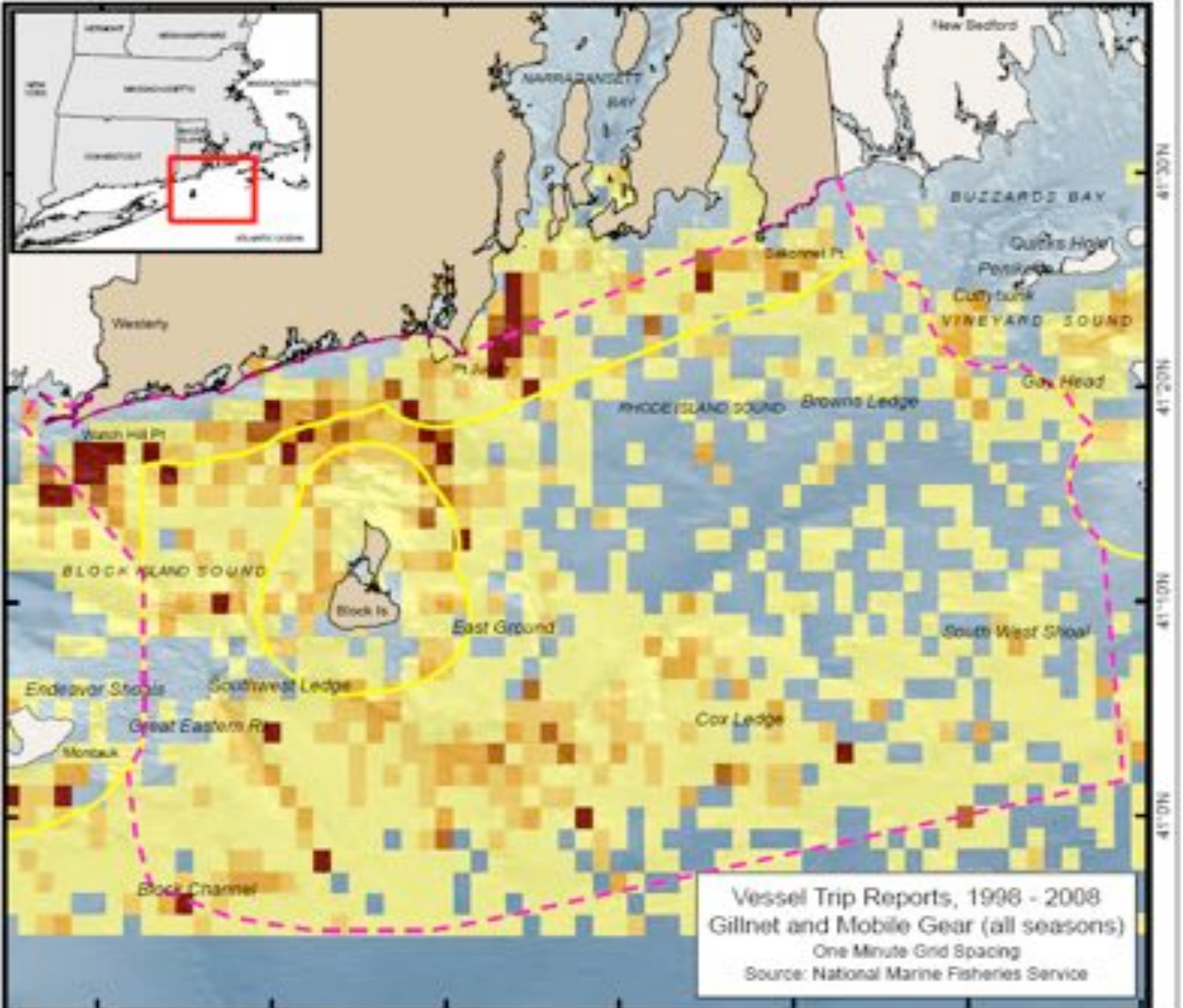
Boundary: RIGIS Database

Boundary: RIGIS Database

Boundary: RIGIS Database

Boundary: RIGIS Database

Boundary: RIGIS Database



Vessel Trip Reports, 1998 - 2008
Gillnet and Mobile Gear (all seasons)
One Minute Grid Spacing
Source: National Marine Fisheries Service



Figure 3.19. 500FTS Treatment Areas.



Chapter Development: *Commercial and Recreational Fisheries*

1. Marine fisheries resources

Commercially and recreationally targeted species

Baseline characterization

2. Fish habitat

3. Commercial and recreational fisheries

History and ports

Descriptions and fishing areas

Effort and landings

4. Economic impact of fishing

5. Impact of existing activities and trends on fisheries

6. Policies and standards

Chapter Development: *Renewable Energy*

Potential Effects on Fisheries Resources and Habitats

- Underwater sound
- Electromagnetic fields
- Habitat disturbance
- Water quality impacts
- Community composition
- Reef effect

Potential Commercial and Recreational Fishing Activity

- Fish populations
- Fish catch
- Access to fishing grounds
- Gear/vessel damage
- Changes to fishing activity



Policy Development

- Value of commercial and recreational fisheries
- Dynamic nature of fisheries
- Important fish habitats and fishing areas
- Offshore construction
- Fishing access
- Site-specific studies for future projects
- Drafts reviewed with fishermen, other stakeholders
- Extensive public comment period, multiple re-drafts

Some Policy Challenges

- Identifying “important” fishing areas
- Identifying “important” habitats
- Communicating the distinction between state and federal jurisdiction
- Communicating that we are not engaged in fisheries management
- Working to develop “enforceable” policies
- Keeping everyone at the table



Lessons Learned

- **Clarity and consistency**
- **"A seat at the table"**
- **Perception is everything; misconceptions are deadly**
- **Involvement matters: no two fishermen are alike**
- **Outreach is JUST as important as science**
- **Fishing areas: confidentiality, accuracy, and access challenges!**

