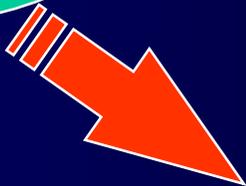


# Coastal Work Group Meeting

April 11, 2001

ACWI

FGDC



NOAA

CA

BLM

USGS

NSGIC

USFS

Subcommittee  
on Spatial  
Water Data  
(FACA)

FEMA

TVA

COE

AK

NRCS

TX

EPA

ASCE

NWS

**Subcommittee  
on Spatial  
Water Data**

```
graph TD; A[Subcommittee on Spatial Water Data] --> B[Coastal Watersheds Work Group]; A --> C[Guidelines Work Group]; B --> D[FGDC HUC Interagency Guideline]; C --> D;
```

**Coastal Watersheds  
Work Group**

**Guidelines  
Work Group**

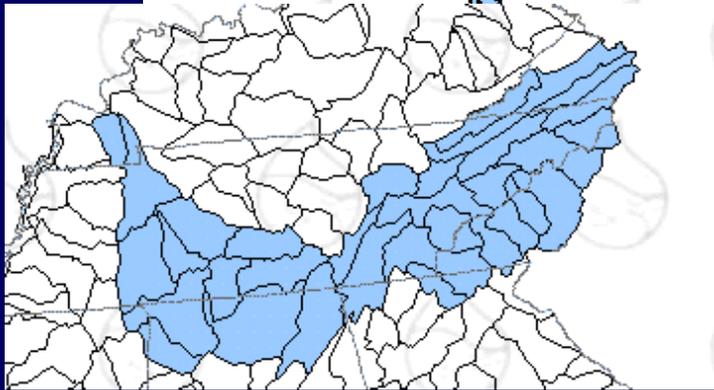
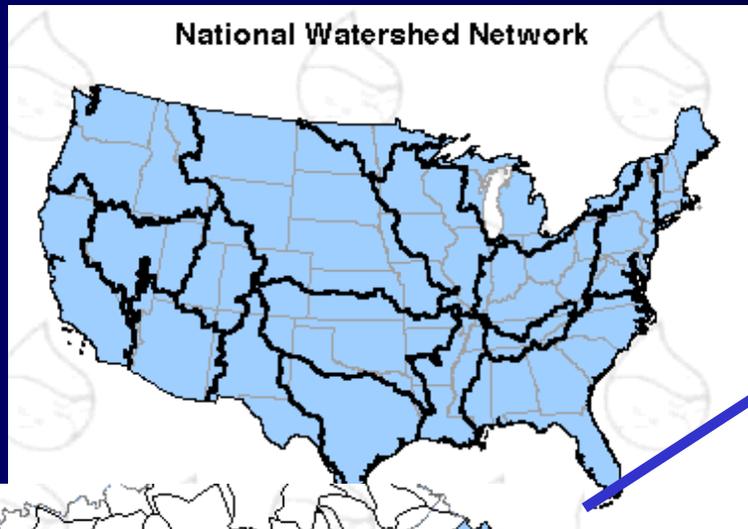
**FGDC  
HUC Interagency  
Guideline**

**SUBCOMMITTEE**

# **Guidelines Workgroup**

**Meeting, April 10&11,  
2000**

# Hydrologic Units



2-digit= 1st level = 22 regions

4-digit= 2nd level = 222 subregions

6-digit= 3rd level = 789 accounting

8-digit= 4th level = 2223 cataloging

**new!**

10-digit= 5th level = ~22,000 watersheds

12-digit= 6th level = ~160,000 subwatersheds

# HUC History

- **WRC** 1960's
- **Hydrologic Units** 1970's
- **NRCS pioneer** late 80's & early 90's
- **USGS, BLM, USFS review**
- **Subcommittee** 2000
  - **Many agencies helping to build high resolution datasets**

# Watershed Boundary Dataset

# WBD

focus:

# Integration of key Spatial Water Datasets

- **National Hydrography Dataset (NHD)**
- **Watershed Boundary Dataset (WBD)**
- **National Elevation Dataset (NED)**
- **Hydrologic Derivatives (NED-H)**

# Partnering Agencies

No one agency can do this by themselves!

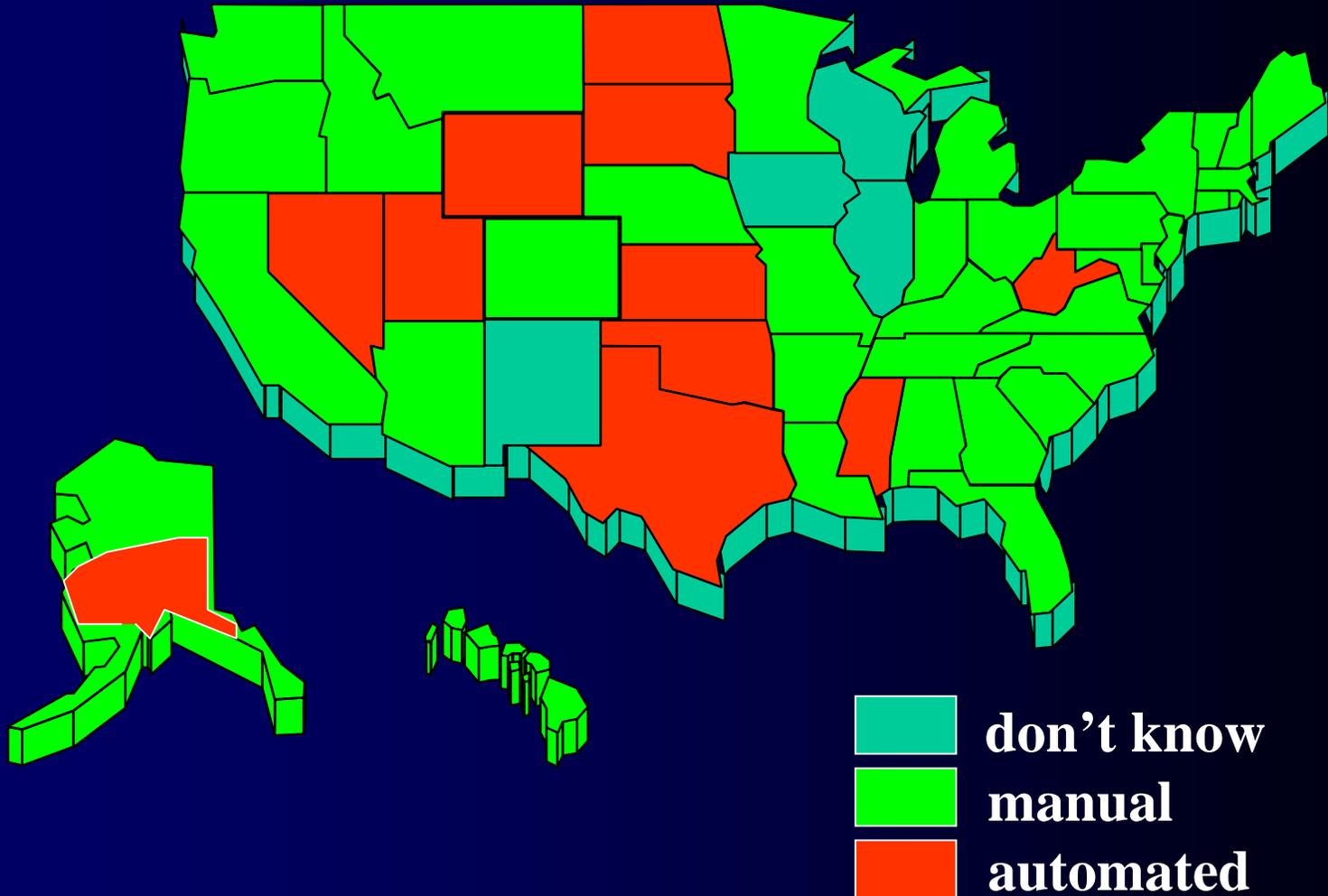
- **NRCS**
- **USGS**
- **USFS**
- **NWS**
- **EPA**
- **State & Regional Agencies**
- **Water Resource Consortium**

# Methods / Approaches to delineating watersheds/subwatersheds

- **manual**
- **semi-automated**  
**(NED/NED-H)**
  - QA, delineate some/many HUCs

# MANUAL vs AUTOMATED

Interior of U.S. is getting done



# NED

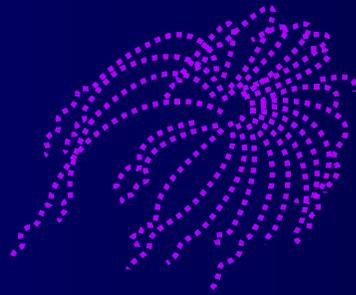
National Elevation Dataset



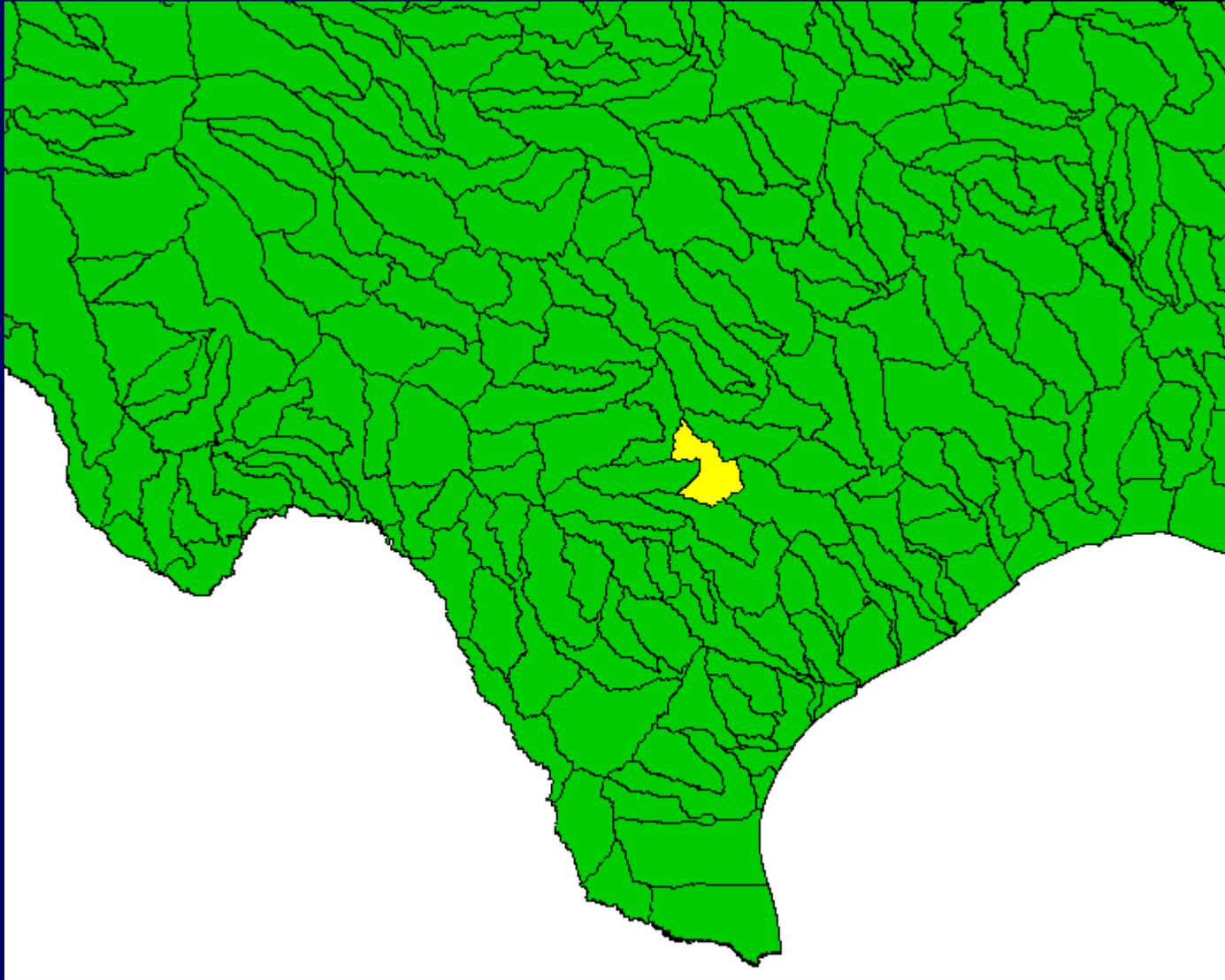
SUBCOMMITTEE  
spatial water data



# National Weather Service



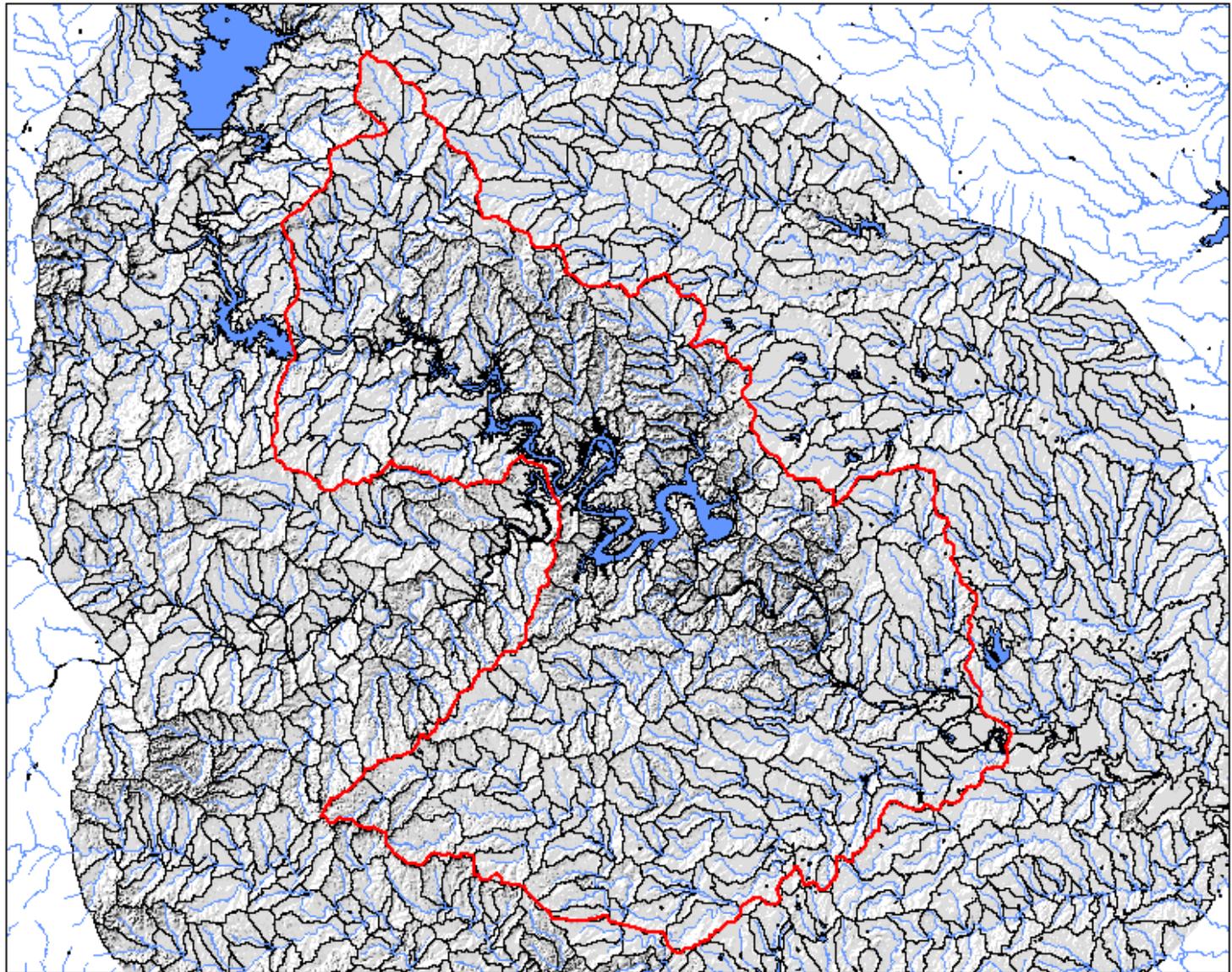
SUBCOMMITTEE  
spatial water data



**SUBCOMMITTEE**  
spatial water data

# South Texas HUC 12090205

5000pixels  
2 sq.miles!

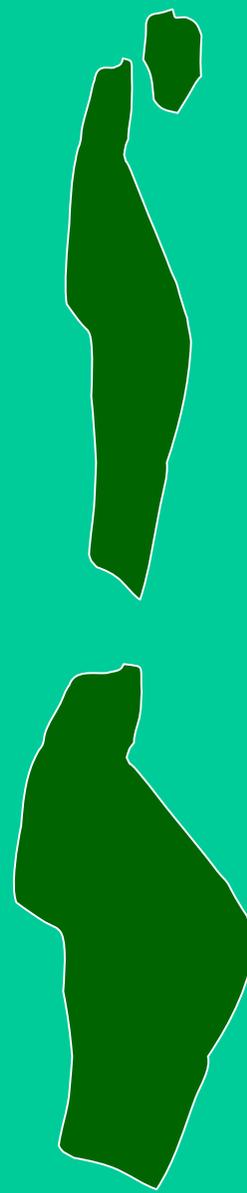


-  Original HUC Boundary
-  DLG Lakes
-  DLG Streams
-  Delineated Basins

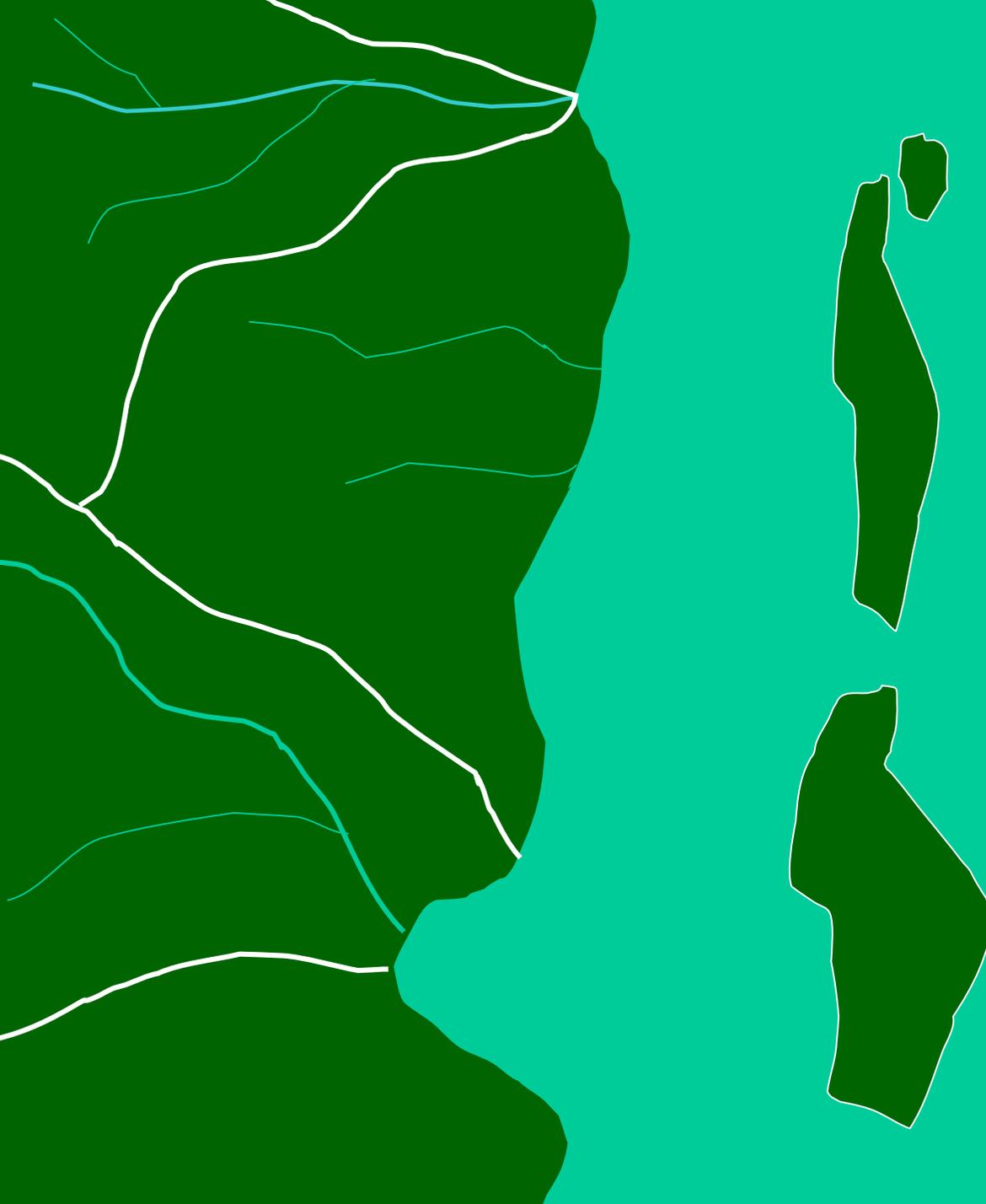
5 0 5 10 Miles



**SUBCOMMITTEE**  
spatial water data



# **coastal delineation Options?**



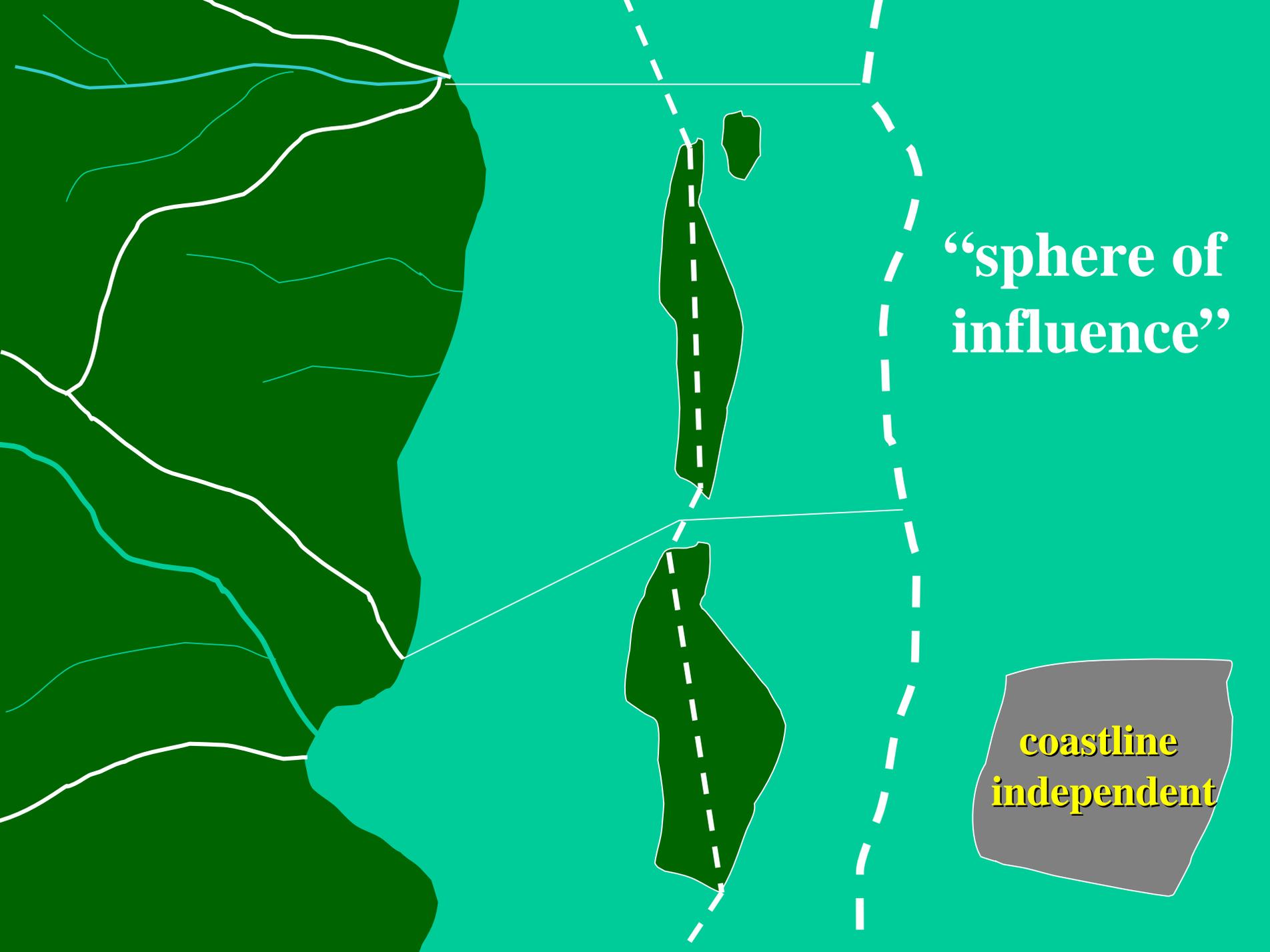
# Carto- based options



**“land limited”**

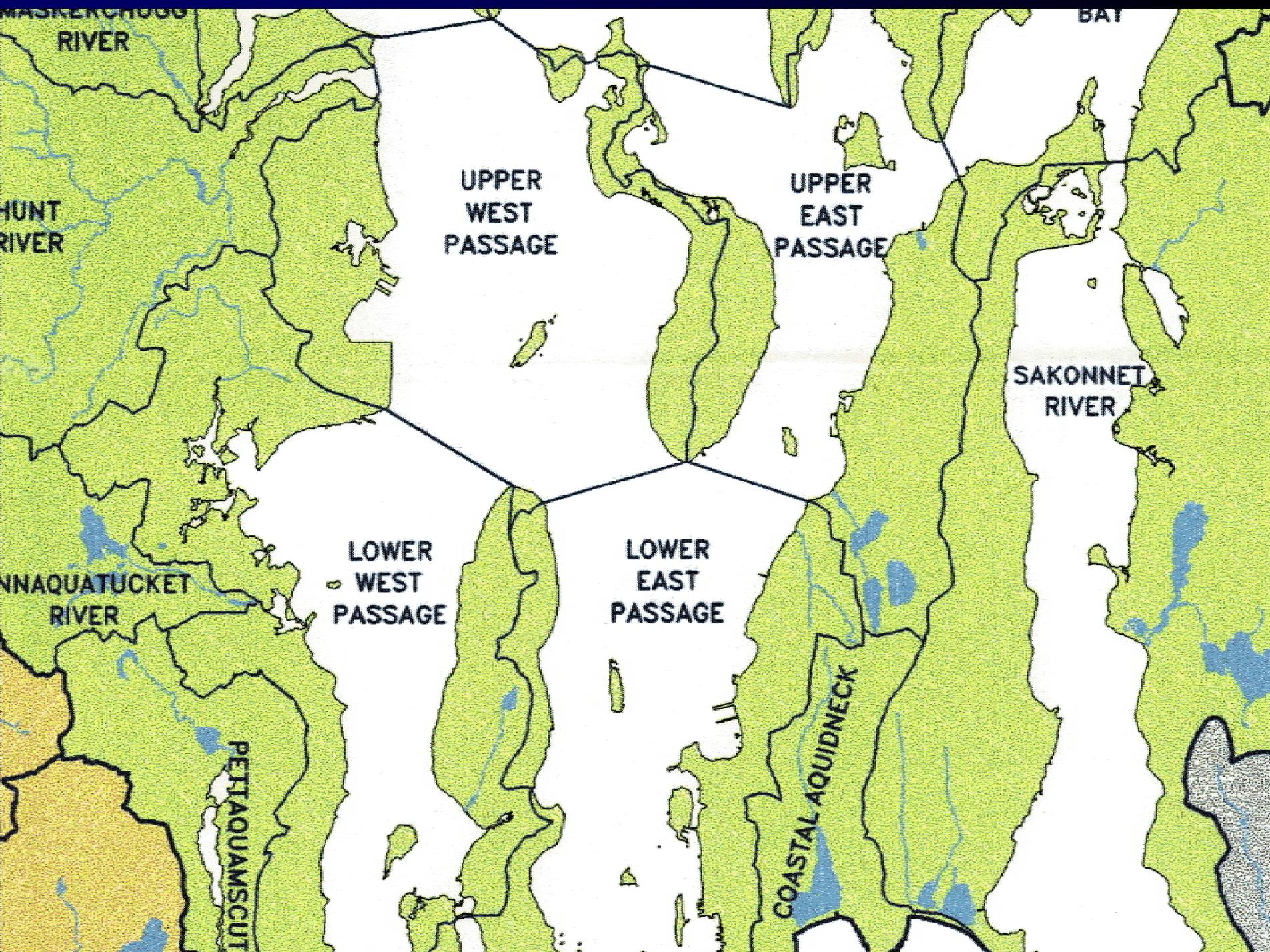


**coastline  
dependant**



“sphere of influence”

coastline  
independent



MASHKECHOGG RIVER

HUNT RIVER

UPPER WEST PASSAGE

UPPER EAST PASSAGE

SAKONNET RIVER

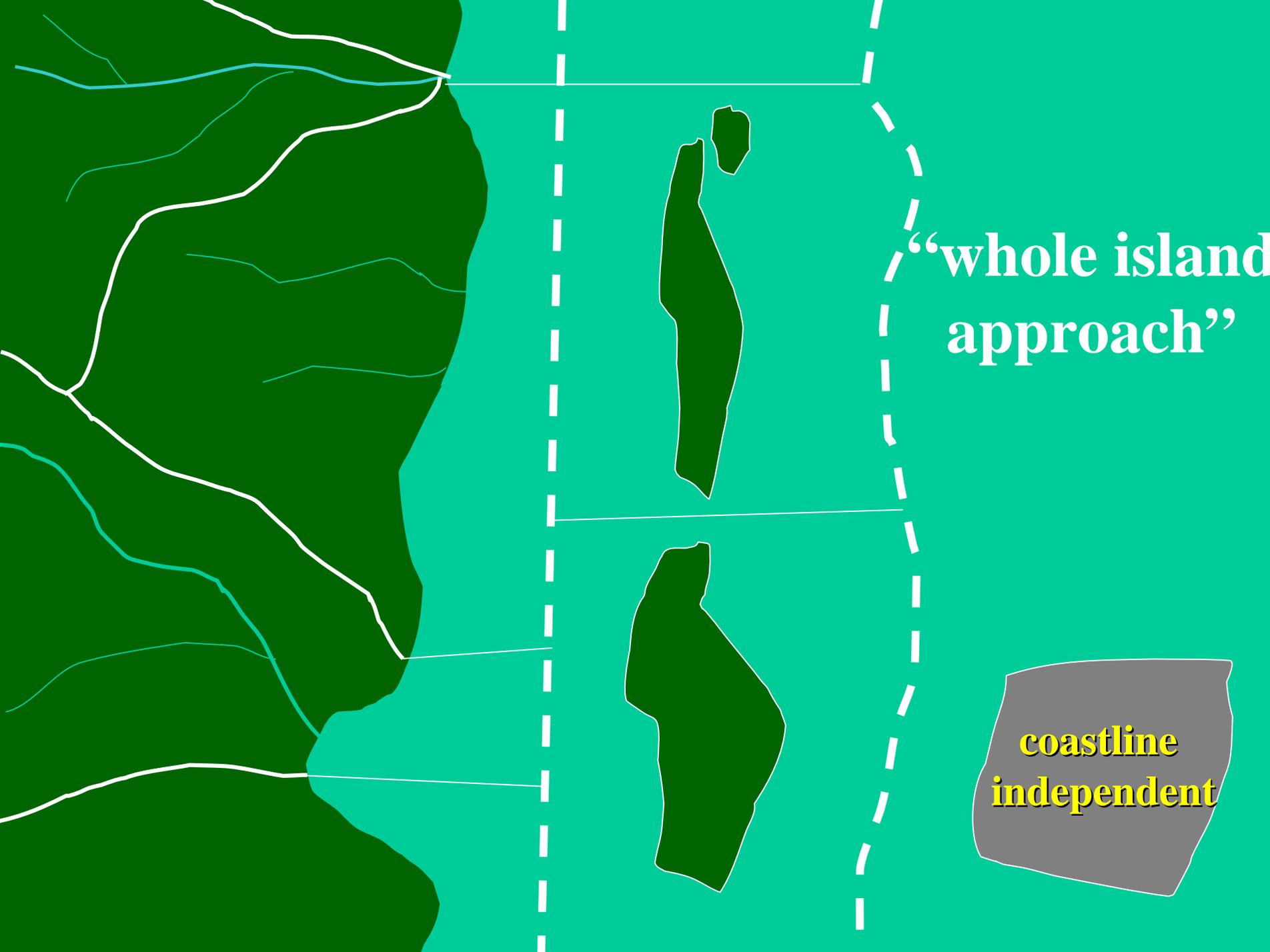
NNAQUATUCKET RIVER

LOWER WEST PASSAGE

LOWER EAST PASSAGE

PETTAQUAMSCUTT

COASTAL AQUIDNECK



**“whole island  
approach”**

**coastline  
independent**





# Geologic process Based options

# NOAA/NOS Implementation

- **Pilots**
- **Coastal delineation guidance**
- **state/coast implementation**
  - **Assisting state groups**
    - **Workshops**
    - **Data and data manipulation**
    - **One-on-one with States**

# Issues to be resolved

- **Coastline – can watersheds be independent of coastline?**
- **Estuarine systems – no clear hydrologic controls of flow.**
- **Deltaic coastlines – streams do not converge to a point.**
- **Barrier Islands – are they their own hydrologic unit or defined by area of influence?**
- **Island Groups – (e.g. FL Keys, Pacific Islands, Aleutian, Tongas Nat. Forest)**

# Target Dates:

- **Jan'01** “draft” Unified Guideline into Subcommittee and FGDC review
  - “place holder” in Unified Guideline
- **Sept'01** “coastal guideline” addendum into review
- **Sept'01** submission as FGDC Standard Guideline

**For additional information visit...**

**[water.usgs.gov/wicp](http://water.usgs.gov/wicp)**

**[www.fgdc.gov](http://www.fgdc.gov)**

**[www.ftw.nrcs.usda.gov](http://www.ftw.nrcs.usda.gov)**

**[http://www.ftw.nrcs.usda.gov/huc\\_data.html](http://www.ftw.nrcs.usda.gov/huc_data.html)**

the end