

# The Use of Remote Sensing in Local Planning

## The Hilton Head Island Experience

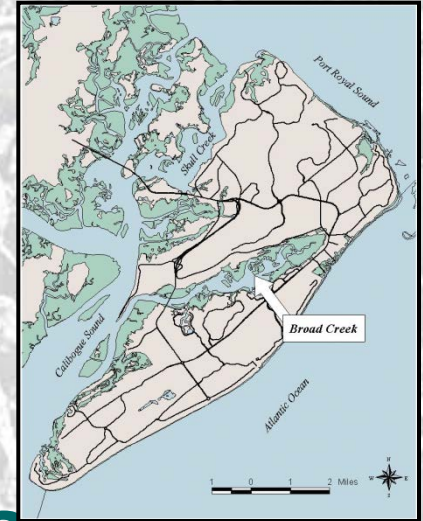
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# Introduction

- **Hilton Head Island**
  - barrier island
  - about 80% developed
  - shellfish closures
- **Broad Creek Management Plan**
  - comprehensive look at water quality, wildlife, recreational use, and land use
  - shellfish resources didn't match DNR's 1981 maps
  - pilot study to determine changes



# Oyster Mapping - Pilot Study

- **Methodology**

- Get Plenty Sloppy! (**GPS**)

- **Results**

- estimated significant losses in live oysters
  - both extent of beds and strata types

- **Conclusions**

- significant impact in one area from boat wakes
  - need more accurate maps for whole creek
  - Goes Pretty Slow (**GPS**)





# Mapping Method Choices

- **GPS** - yuck (I mean, muck) not to mention big bucks

- **Remote sensing**

**N**ot subjective

**E**fficient

**A**ccurate results

**T**echnologically proven

**O**kay, let's use it



# How can a town remotely sense?

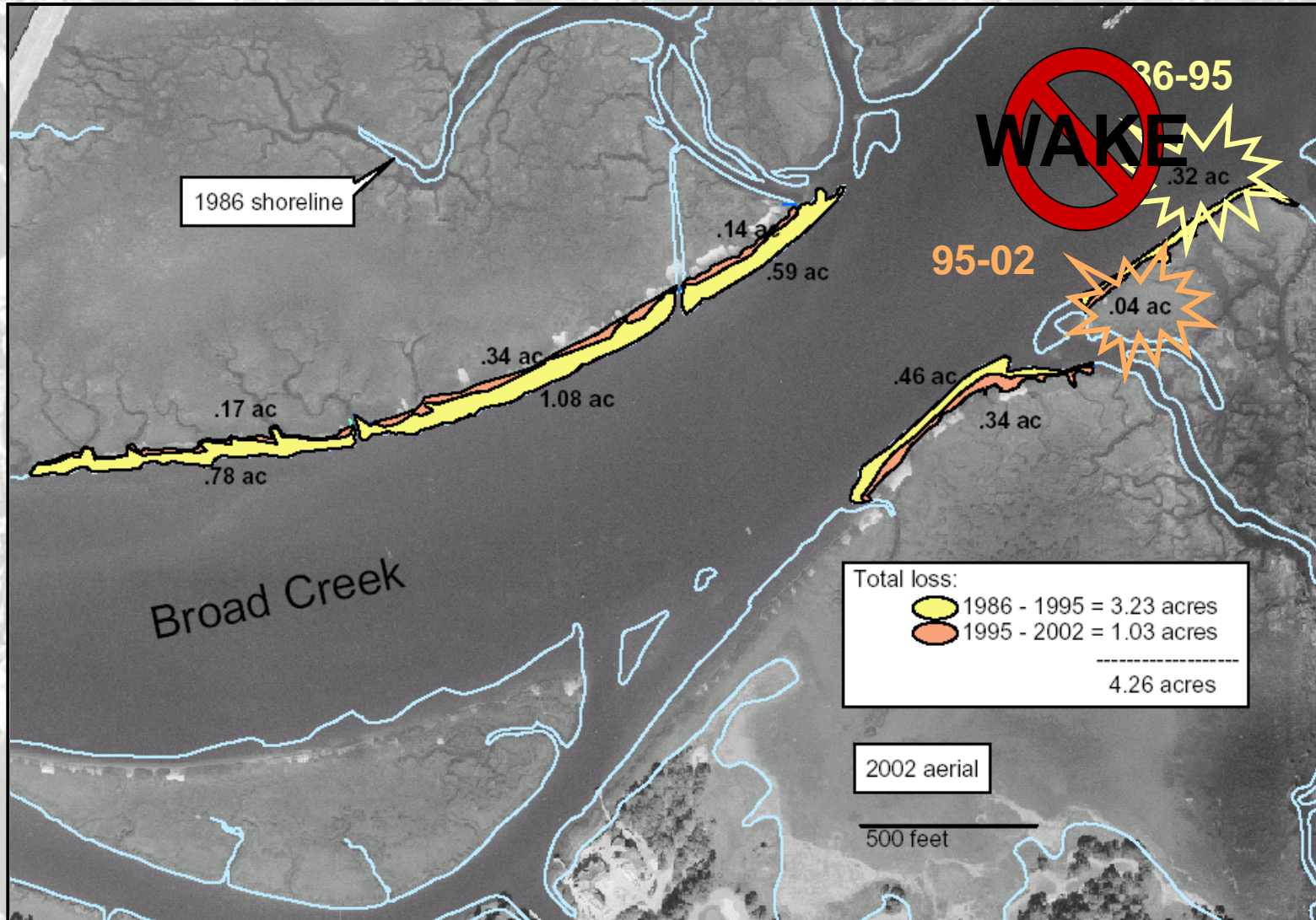
- **Collaborating with NOAA's CSC & DNR**
  - You already heard about project from Mark & Bill
    - we got involved because we already had baseline data
    - we're anxious to get additional data for the creek
  - Hilton Head Island plans to further this effort
    - add strata data "by hand" to the polygons
    - compare to 1981 data
    - analyze results with land uses, outfalls, etc.

**Question of the Day:**

**Can a town remotely make sense?**



# Shoreline Erosion





# erosion from natural causes





# erosion from boat wakes







**old solution**





new “solution”





another option...



# What do we need this info for?

- **Identify:**
  - oyster restoration sites
  - erosion problem areas
  - land use impacts
  - marina/boating impacts
  - wildlife & habitat impacts





# Why should we care?

- **Local government** has the affect and use
  - zoning
  - standards
  - management
- **Stewardship** local way
  - everyone needs to help take care of our environment...
- **Healthy estuaries are vital to the continued wellbeing of the local economy**





# So... What are we going to do about it?

- **Public education** ← Pretty dang important

- **Revise our development regulations**

✓ zoning

✓ stormwater management standards (lot coverage, etc)

✓ stormwater management

- **Work with other agencies to address issues**

✓ water quality

✓ wildlife habitat

- **Monitor changes**

✓ shoreline

✓ shellfish

*Educate the Public!*

*Teach 'em!*



I'm outta here  
Charlie, this place  
is a dump. Let's  
go git us some  
Islanders!

the end.

