

Coastal Zone Soil Survey Workshop

David Lindbo, USDA-NRCS, SSD January 9, 2018





Why Now?

Demand has grown

- Water quality, quantity
- Urban agriculture
- Wetlands
- Climate change
- Watershed planning

Needs have changed

- Field to county to national in scope
- New customers
- Enhanced data
- Updates

If we don't do it someone else is!

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Why Focus Teams?















Changes in workforce

- FTF decrease 1.
- Slow loss of expertise through attrition

Emerging areas of need

- Coastal zone
- Urban
- 3. Soil Biology
- Outreach
- Leadership development

Diversity of expertise 3.

- 1. Geographic
- Organizational
- 3. Cooperators

Silo busting

- Outside traditional chain-of-command
- 2. Transparency
- 3. Communication



Teams vs Committees 0 0 0





Teams

- Results driven
- Timely
- Changeable
- Field-based
- Bottom-up

Committees

- Process driven
- Timeless
- Rigid
- Managementbased
- Top-down

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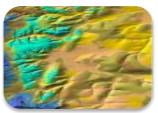




FOCUS TEAMS



Initial Inventory



Digital Soil Mapping



Coastal Zones



Urban Soils



Ecological Sites



Dynamic Soil Properties



Databases



Research



Soil Taxonomy



Training



Leadership &

Recruitment

NCSS



Outreach

Soils2026



SSD Director (David Lindbo, NRCS, NHQ)

NSSC Director (David Hoover, NRCS, NSSC)

Regional Directors (Chad Remley – RO5, Eva Muller – RO4)

State Soil Scientists (Cory Owens - OR, Debbie Surabian - CT, Wade Bott - ND)

NCSS Cooperators (Larry Laing - USFS, Mickey Ransom – Kansas State U, Joey Shaw – Auburn U, Ron McCormick - BLM) National Leader (Mike Robotham, NRCS, WDC)

- Provide leadership, guidance, and coordination to the Focus Teams
- Provide a national perspective to regions and teams



General Team Charge 🔾 🗘 🗘 🗘

- Act as liaisons across Divisions, Agencies and NCSS
- Provide leadership, guidance and coordination with their specified area of activity
- Serve as a repository of information in specified area of activity
- Coordinate with other teams to ensure continuity of activities, training and information exchange
- Supplement and enhance activities of regional and local board of advisors (BOA) and management teams (MGT)
- Provide a national perspective to regions and other teams
- **Report directly to Steering Team**
- **Develop and maintain website(s)**



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So how does this all work? \(\O \O \C









- 1. Volunteer if interested contact the Team Leader
 - 1. All welcome
 - Get permission from your supervisor
- 2. Communications
 - Websites 1.
 - 2. Teleconferences
 - Face-to-face meetings
- **New Teams propose to Steering Team**
- **Additional Questions?**

FOCUS TEAM INFORMATION

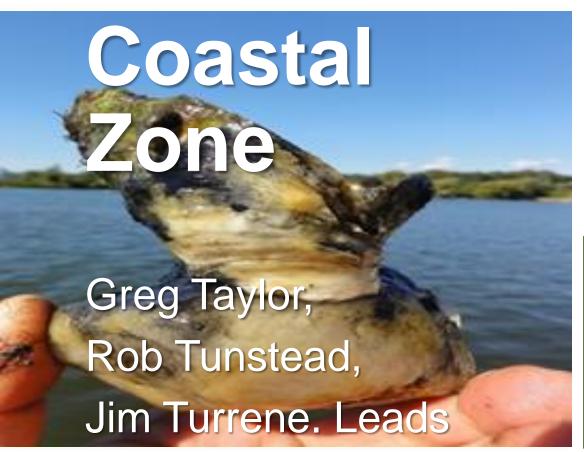
https://www.nrcs.usda.gov/wps/portal/nrcs/ main/soils/focusteams

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COASTAL ZONES





- Identify training needs, make recommendations
- Identify needs to update standards and taxonomy, propose solutions
- Identify needs to update taxonomy propose solutions
- Assemble existing data, identify gaps
- Identify coastal zone research needs
- Broaden partnerships in coastal zone areas
 - Communicate importance of coastal zone inventory



Coastal Zone Soil Survey – Why?

39%

Percent of the nation's total population that lived in Coastal Shoreline Counties in 2010 (less than 10% of the total land area excluding Alaska).

Source: U.S. Census Bureau, 2011

34.8 million

Increase in U.S. Coastal Shoreline County population from 1970 to 2010 (or a 39% increase).

Source: U.S. Census Bureau, 2011

446 persons/mi²

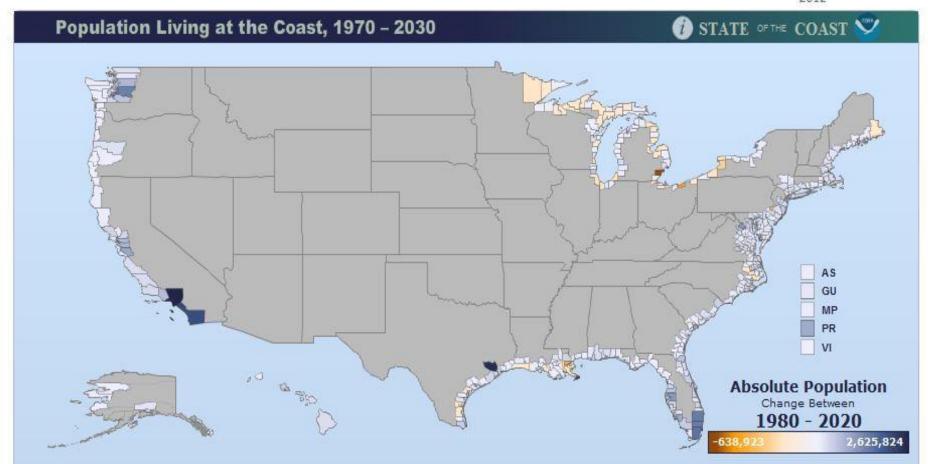
Average population density of the Coastal Shoreline Counties (excluding Alaska). Density in U.S. as a whole averages 105 persons/mi².

Source: U.S. Census Bureau, 2011

37 persons/mi²

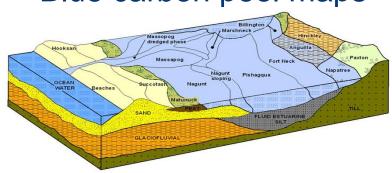
Expected increase in U.S. Coastal Shoreline County population density from 2010–2020. Expected increase for entire U.S. is 11 persons/mi².

Source: Woods & Poole, 2011; NOAA, 2012

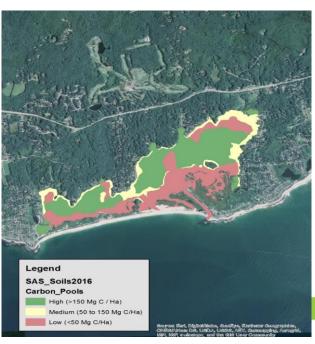


Coastal Zone Soil Survey Interpretations

- Eastern oyster and hard clam suitability and restoration potential
- Land utilization of dredged materials interpretation
- Salt marsh / thin layer placement potentials
- Eelgrass suitability potential and maps
- Mooring and deadweight interpretation
- Living Shoreline Project
 Interpretation
- Blue carbon pool maps







Current Conditions















Support for CZSS from

Division

States

NCSS

Limitations to overcome

Funding

Personnel

Public Relations

Project vs acre goals

Need for a plan

Cooperation

Flexible given limitations

Iterative





Expected Outcomes













Framework for a 10 year plan

Estimates of

Priority areas

Costs

Sampling

Lab setup

Equipment

Travel

Human capital

Details on sampling and sampling procedures
Sharing of resources including data
Development of common goals for CZSS



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In order to succeed... 🔾 🔾 🗘 🔾 🗸

- Cooperation break down silos
- Innovation everyone can innovate
- Willingness to do different

Change is inevitable...
...and scary at times





Resource Needs



The will to do better Freedom to be innovative



Talk to me

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Natural Resources Conservation Service

nrcs.usda.gov.

Questions?

