

# 2018 NRI Grazing Land Webinar I

## Overview/Data Uses/Technical Support & Equipment

February 13, 2018

Eastern States: 10 EST; 9 CST

Western States: 2 CST; 1pm MST, 12pm PST, 10am HAST

# Today's Presenters

- Patrick Flanagan – National Statistician and Acting Resource Inventory Division Director (RID), NRCS RID
- Gary Hallbauer – Soil Conservationist, NRCS National Geospatial Center of Excellence (NGCE)
- Todd Krueger – Senior Systems Analyst – ISU Center for Survey Statistics and Methodology (CSSM)
- Roni Lessard – Agricultural Statistician, NRCS Resource Inventory Division (RID)

# Agenda

- Welcome
- Field PC & WMDC
- CASI Installation & Communications with CSSM Server
- Equipment and Navigation
- What's New in 2018?
- Web-based NRI Grazing Land Applications
- Quality Assurance
- Training Sessions

# Welcome

- Why are these data important?
- How Will the Data Be Used?
  - Ecological Site Descriptions
  - Sage Grouse, Monarch & Regal Butterflies, & LANDFIRE
  - NRCS State Office Applications
  - Climate Change Analysis
- Data Quality – You are the key!
  - Training, Consistency, & Scope

Field PCs  
Windows Mobile OS  
Windows Mobile Device Center  
CASI Install / Communications  
Navigation with CASI

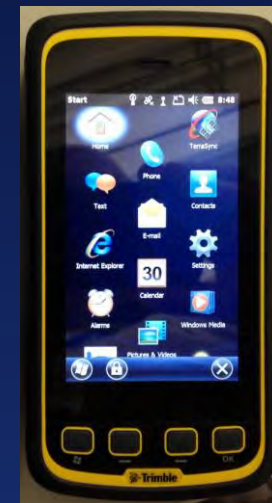
Gary Hallbauer, NGCE  
Fort Worth, Texas  
13 February 2018

## In this part of the session...

- Field PC readiness
- Windows Mobile OS tips
- Windows Mobile Device Center updates
- Installation of the CASI on the field PC
- Communication with CSSM server
- Equipment and tools
- Navigation

# Field PCs supported by the CASI

- GeoXT
- Nomad 900
- Geo 6000 / 7000
- Juno 5D
- Garmin with Recon (tethered)
- New option this year – Nomad 1050



## Starting the season with hand held data collectors

- Get them out of storage
- Get them onto power and charge overnight
- Evaluate % charge after one full night
- Should be 100% after one full night
- If not 100% contact **Support**  
([nri-graze-help@iastate.edu](mailto:nri-graze-help@iastate.edu))



# Is your field PC ready?

- Inspected, charged, tested?
- Screen protectors installed? Stylus condition?
- USB / power cables in good condition?
- Procured vehicle chargers (2.0 – 2.4 amp per port for Juno)?



**'Juice Pack'  
External Battery**



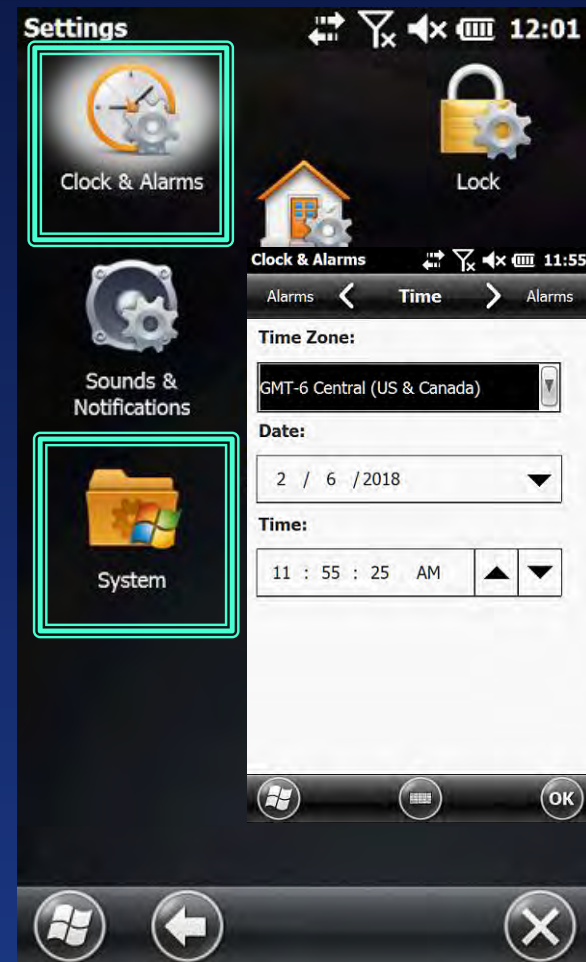
# Keep work going with resets...

- 3 types of resets
  - Soft – clears memory, stops running apps, daily use is recommended
  - Hard – Same as soft but also settings
  - Factory – wipes installed apps, memory, registry, all settings, all data files
- Contact **Support** if you need help

# Windows Mobile OS important stuff

*Also known as Windows Embedded Handheld (WEHH)*

- Set current date and time
  - Affects time stamping of files
- Set power **settings** – affects field usability
- Turn off Advanced Network Functionality **settings**
  - Affects connection to field PC
- Refer to web site for additional info



# Windows Mobile power states

- Field PC is on – apps running
- Field PC is suspended (sleep)
  - Apps suspended but not closed
  - Data collection suspended
- Handheld is shutdown
  - Unsaved data is lost
  - All running programs are stopped
- Storage mode (Junos)
- Battery is removed (Geo 6K/7K, Nomads)



## Field PC Power Management Best Practices

- Top off charge on the way to job site and in between sites
- Minimize display timeout & backlight brightness to lowest tolerable settings
- Turn off all wireless connections
  - Bluetooth, Wi-Fi, Phone (if unit has that)

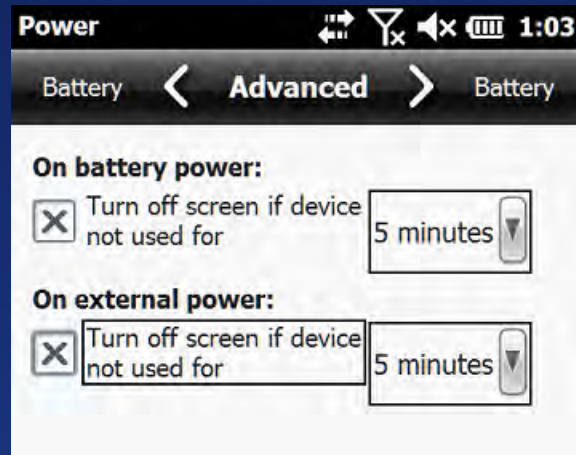
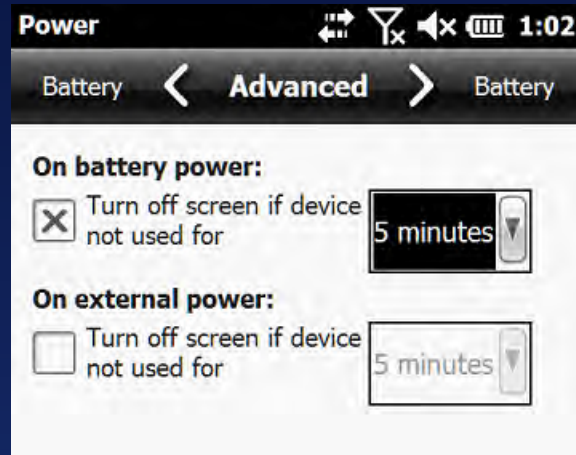


Settings > Connections > Wireless Manager



# More Power Management Best Practices

- Charge every night when in use
- Remove from power when not in use
  - 1 to 2 days
- Shutdown totally when not in use
  - Greater than 2 days (but recharge every week)
- Do not charge from computer (transfer data only)
- On Nomads – calibrate battery



## New to Windows Mobile?

- Download and view the Windows Mobile related archived PDF presentations from:
  - <https://grazingland.cssm.iastate.edu/>
  - Covers OS tips that are common to several types of field PC's in current use
- Contact **Support** with questions and issues

# Windows Mobile Device Center (WMDC) application

- Approved CCE application
- Request install from CTS
- Can be downloaded and installed remotely
- See past guides for detailed information for using WMDC



# New WMDC info for NRCS Windows 10 workstations in 2018

- WMDC issues and Windows 10 on Govt. workstations
  - CTS needs to install WMDC onto Windows 10 workstations
  - CTS needs to refer to IT Resources and implement a registry fix on the W10 workstation
- Once WMDC is installed and the registry fix is implemented – you should be able to install the 2018 CASI and test communications

## WMDC fix procedure...

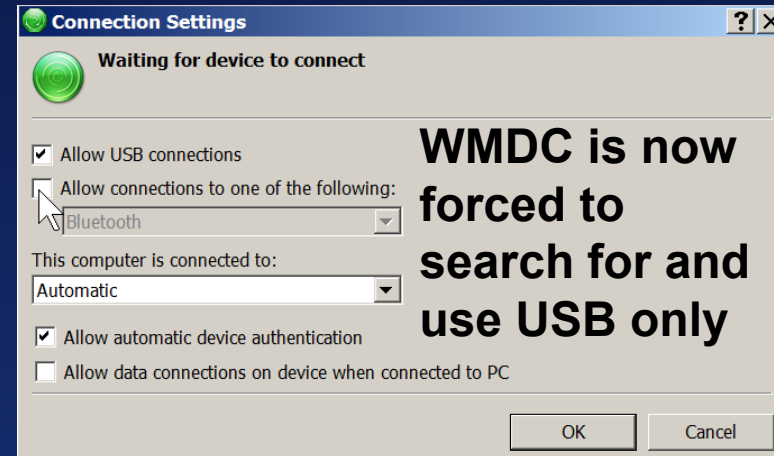
- Download a copy of the 30 November 2017 CTS News Flash and provide a copy to the CTS agent working with you
- <https://grazingland.cssm.iastate.edu/> is your source for the news flash

## After the CTS / WMDC 'fix'

- Connect your Windows Mobile device to the workstation
- Attempt to run WMDC as you normally would
- Contact **Support** if there are still issues.

# If possible – after install - have CTS as Admin . . .

- Open Connection Settings as Admin
- Uncheck...
  - ‘Allow connections to...’
- Click OK button to close
  - Close WMDC, then log off as admin



## If you have trouble with WMDC connections

- You may need to try several times on the initial connection – device recognition issues can occur
  - Try connecting to different USB ports
  - Try restarting the device and reconnecting
- With USB connected – turn off – then turn on the field PC – repeat until you see signs of activity in WMDC
- Connect as ‘Guest’ and never sync
  - Can’t connect to NRI server if synced

## Worst case WMDC connection issues

- In Windows 7 Device Manager (Admin)
  - Stop all USB ports
  - Power down computer completely
  - Turn computer back on
- On field PC
  - Soft reset
  - Hard reset (if available)
  - Factory reset (ask for assistance)

# CASI Installation and Communications with CSSM Server

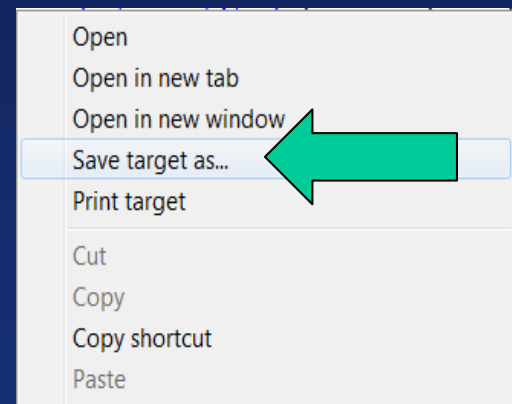
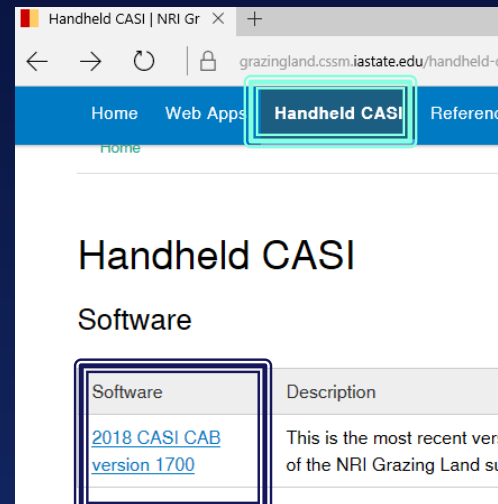
## \* \* \* Important \* \* \*

- You must install Windows Mobile Device Center on the PC workstation before you install the CASI onto the Field PC
- You must also have CTS perform the 'Fix' on Windows 10 workstations running WMDC




# Downloading the CASI

- Go to download site
  - <https://grazingland.cssm.iastate.edu/>
- Then go to **Handheld CASI** tab at top of page
- Look at the first row under software
- Save the install file (CAB) to your PC
  - Right click on CAB link
  - ‘Save Target As’ – to your desktop is easiest



In pop up window looks like:

Name	Date modified	Type	Size
 install_nri_grazing_land_survey_v1700.cab	2/9/2018 10:06 AM	WinZip File	11,520 KB

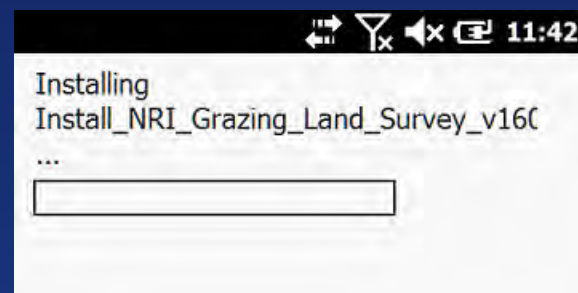
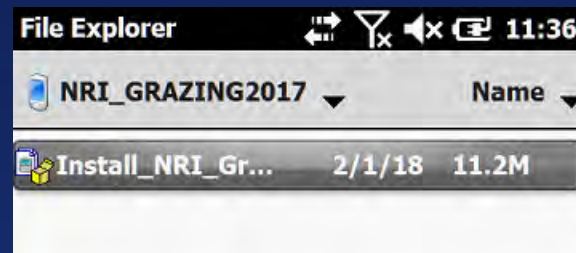
## \*\* Helpful Hint \*\*

- Remove old versions of the CASI cabinet install files from your workstation and your field PC
  - Avoid confusion if you need to re-install the current version
- In Windows Mobile / WEHH File Explorer – icon may look like a box



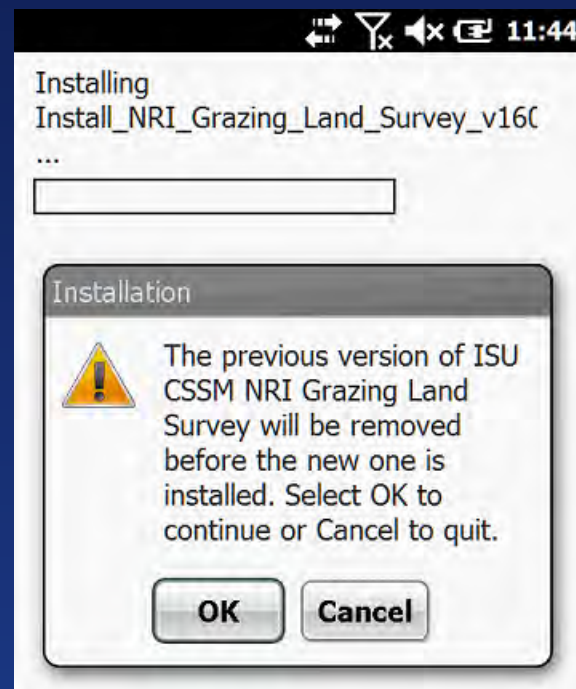
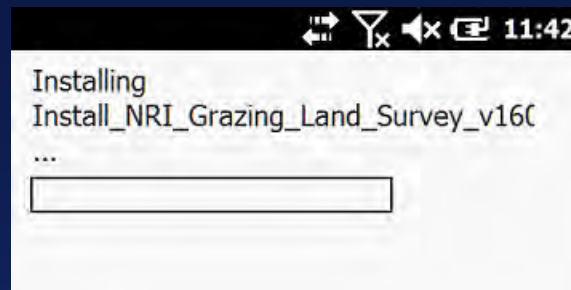
## Installing the CASI on the field PC

- Transfer the file to field PC
  - Copy / Paste to 'My Documents'
- Unplug the field PC from the computer
- Navigate to My Documents on the field PC
- On the field PC -Tap on the CAB to install



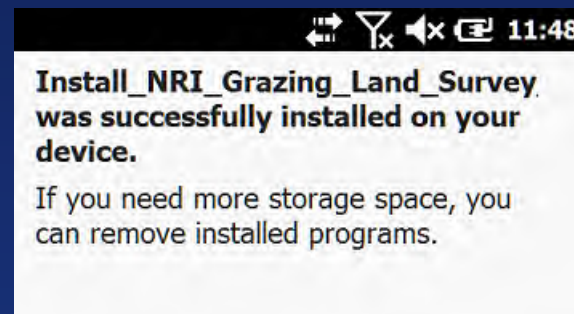
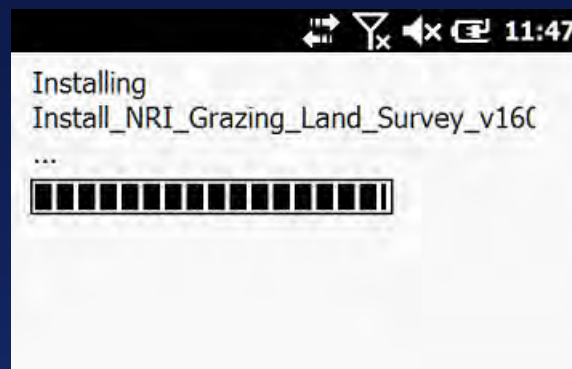
## Beginning of the install...

- Status window opens with timer bar
- Right after the install starts - user is prompted to overwrite the prior version
  - Tap 'OK' to continue



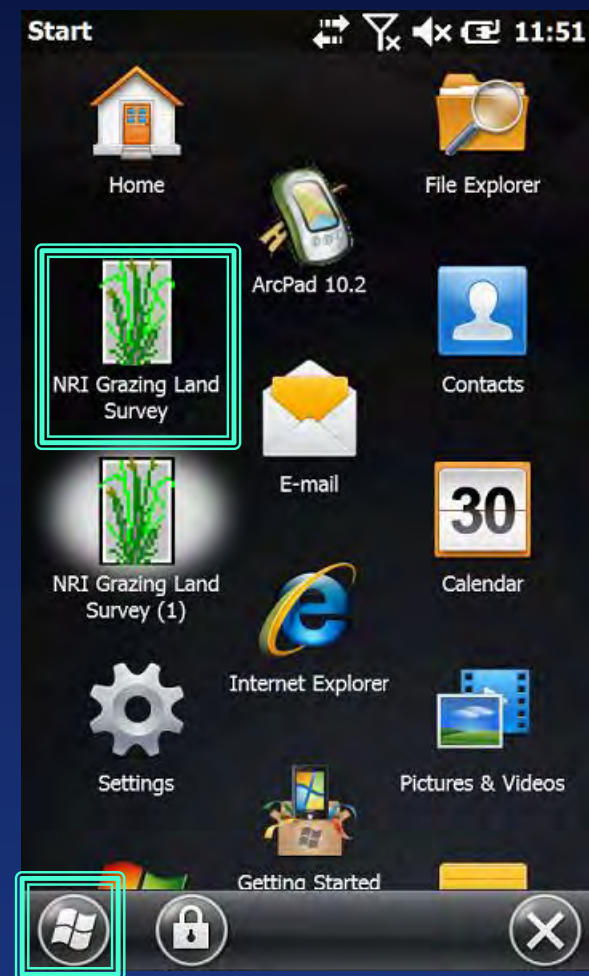
# Installation continues...

- Tap 'OK' to complete the installation



# Installation Results

- NRI Grazing Lands icon and shortcut should appear in the Start Menu on the Field PC
- There may be two links –
  - either one will work just fine
  - Tap on the link in the Start menu to open the program

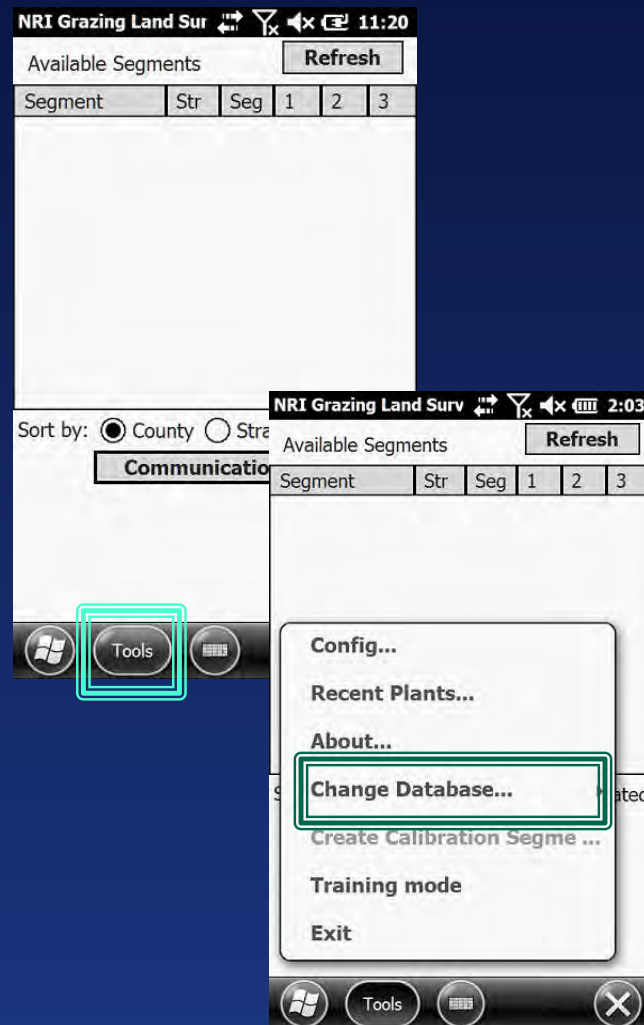


# Field PC to Server Communications

- How segment point data moves from CSSM server to field PCs and back
- Must be connected through workstation (WMDC) or Wi-Fi (test first with Internet Explorer – inconsistent results)
- Contact **Support** for connectivity issues
- See Instructions, Appendix A, for detailed instructions

# Field PC to Server Communications

- Must be 'live' – not in training mode
- Communications button at bottom of screen
- Use the Tools menu to change the data base to 2018





# Communications startup

- Click on the Communications button
- Register your field PC
  - Serial number
  - Primary user
    - First/Last Name
    - Email address
    - Phone, including extension
- *Field PC must be registered with Roni Lessard (to be listed on CSSM server); do so before using the CASI register button*

Communications 5:34

Connect Not connected

Database **GRAZINGLAND-2017**

Serial No. ?

First Name

Last Name

Email

Phone (  )  -   
Extension

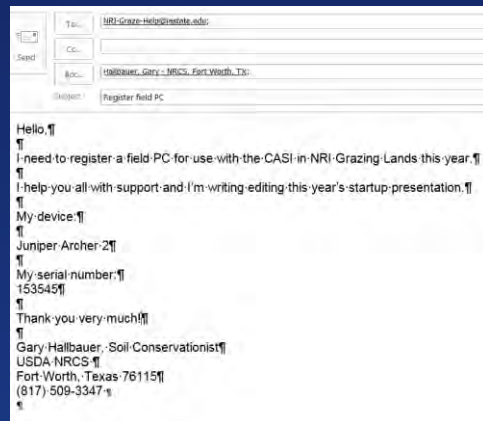
Register >

Login Check Out Return Comm Log

OK

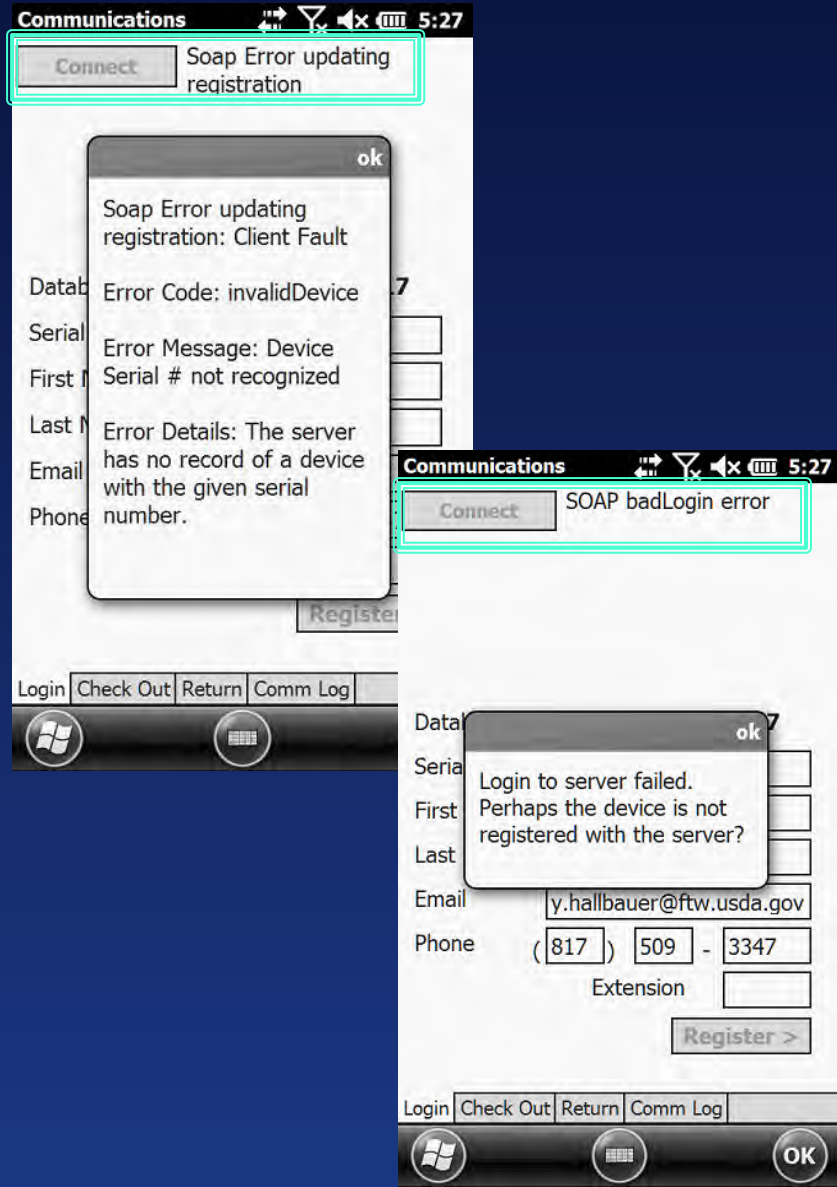
# Registration with CSSM

- The server is looking for
  - Device
  - Serial number
- Email information to:  
**NRI-Graze-Help@iastate.edu**



# Registration fail...

- The server does not recognize your device when you try to register
- Have you registered using the serial number and device you provided?
- The server *knows*...



# Registration succeeds

- You will see
  - A greeting from the server
  - You will be able to connect
- Connect to the server and confirm the connection is good

Communications 1:32

Connect Connecting...

Database **GRAZINGLAND-2017**

Serial No. [?] 153545

First Name Gary

Last Name Hallbauer

Email gary.hallbauer@ftw.usda.

Phone (817) 509 - 3347

Extension

Register >

Login Check Out Return Comm Log

OK

Communications 1:32

Connect Connecting...

Database **GRAZINGLAND-2017**

Message from Server: ok

Grazing Land Survey Database

Serial No. [?] 153545

First Name Gary

Last Name Hallbauer

Email gary.hallbauer@ftw.usda.

Phone (817) 509 - 3347

Extension

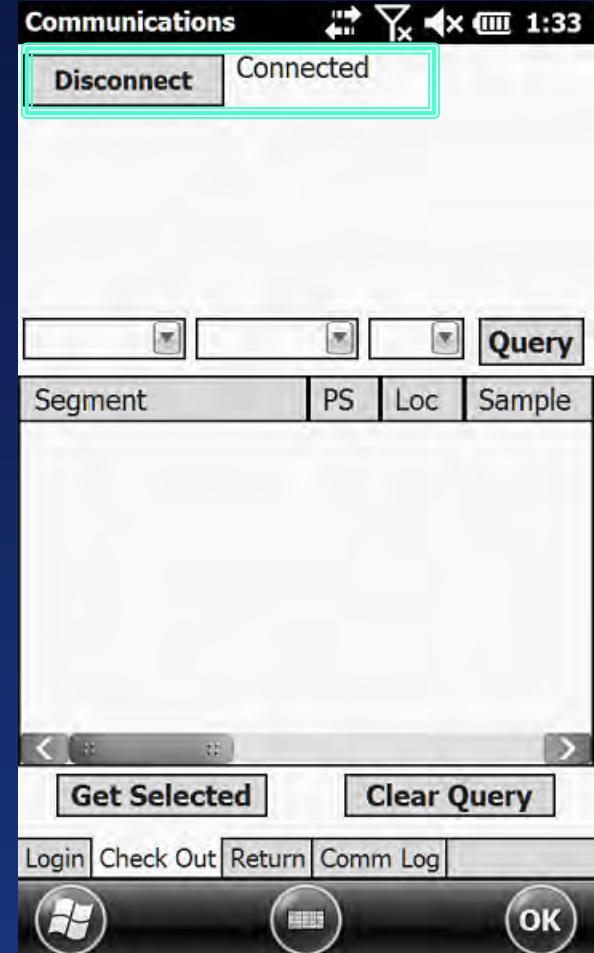
Register >

Login Check Out Return Comm Log

OK

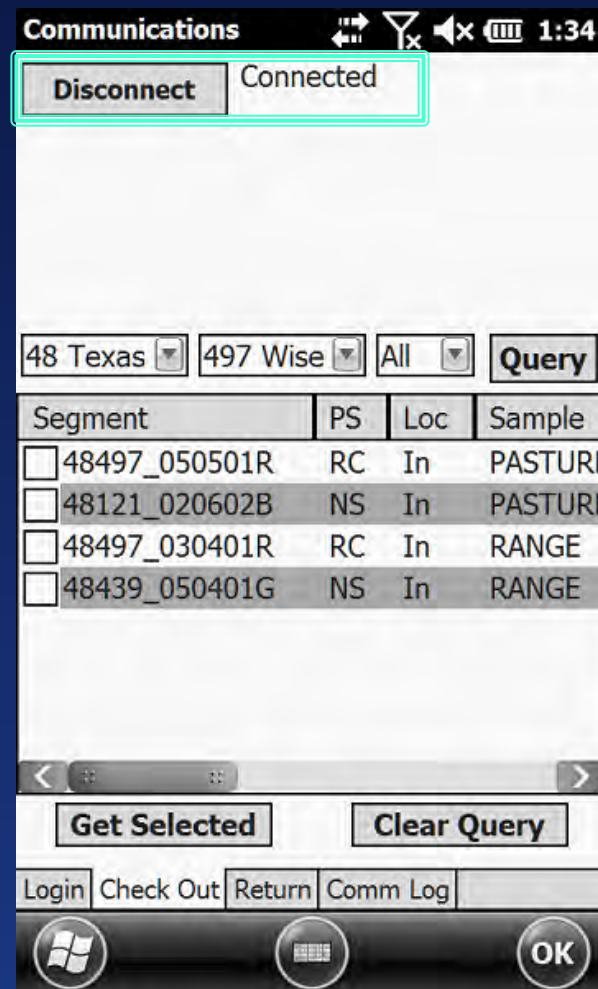
# Confirm connection

- Status is 'Connected'



# Confirm CASI Field PC registration

- Run a query to test
- Test all devices – even those used previously
- Contact **Support** with issues



# CASI segment check out / return

- Check Out page functions
  - Connect, Disconnect (with Server)
  - Query, Select, Clear Query // Get Selected
  - Return (enter status code)
- Details are found in the Instructions, Appendix A, Pgs. 1 – 11
- **#1 Lesson Learned over last 14 years** – test communications and check out segments well before going to the field





# Tools and Equipment



# Transect set up

- **Compass** – sighting is best (Ch. 3)
- **Tape measures, 150'** (Inst. – Ch. 3)
  - Inspect current equipment and replace if needed
- **Pins (survey arrows)** – Forestry Suppliers (Ch. 3)
  - Used to tie down transect ends, center, and keep tape from flapping in the wind
  - Minimum of 11, replace lost / broken, order spares



# Macroplot documentation

- **Digital camera (Ch. 3)**
  - Check memory card and batteries, run test shots; source from Batteries Plus or on web
- **Clipboard / whiteboard–transect endpoint labeling (Ch. 3)**
  - Substitute other media but be sure that writing supplies are in good order and practice to make writing visible
  - See 2018 web site, Reference, Photo Protocol Labels



# Landscape and soils

- **Digging tools (Ch. 7)**
  - Drain spades/shovels
  - Auger
- **Ruler, yardstick, or tape** - to measure 20 inch depth
- **Clinometer** – measuring slope



# Measuring tools

- **Pasture stick** or folding ruler for height measurements (Ch. 12)
- **Ensure** units on the stick are readable
- **Scale** (weigh clipping samples (Ch. 14)
  - *Inspect and check calibration*



## Soil Health

- Soil Stability kits – (Ch. 11)
  - Check screens for corrosion, holes
  - Water (distilled demineralized)
  - Order replacement kits
  - Sold by Forestry Suppliers - \$42.85
    - Search for Stock Number 78511



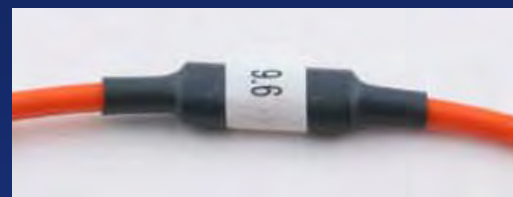
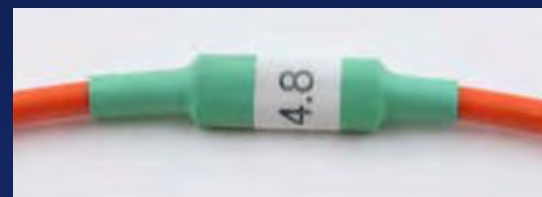
# Vegetation Dry Weight, Species Composition by Weight, Standing Biomass

Ch. 13, Ch. 14, Ch. 15

- Vegetation sampling hoops

- **Choose** from

- 1.92 sq. ft.
- 4.8 sq. ft.
- 9.6 sq. ft.



- **Lightweight** rugged and flexible hoops
  - Forestry Suppliers for sourcing

Find the segment

Navigate to the point

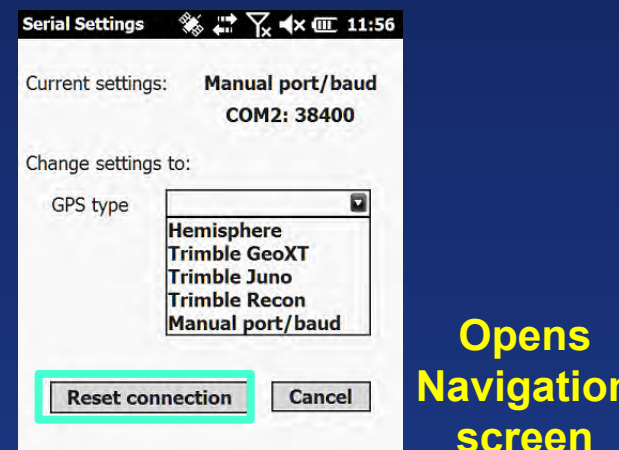
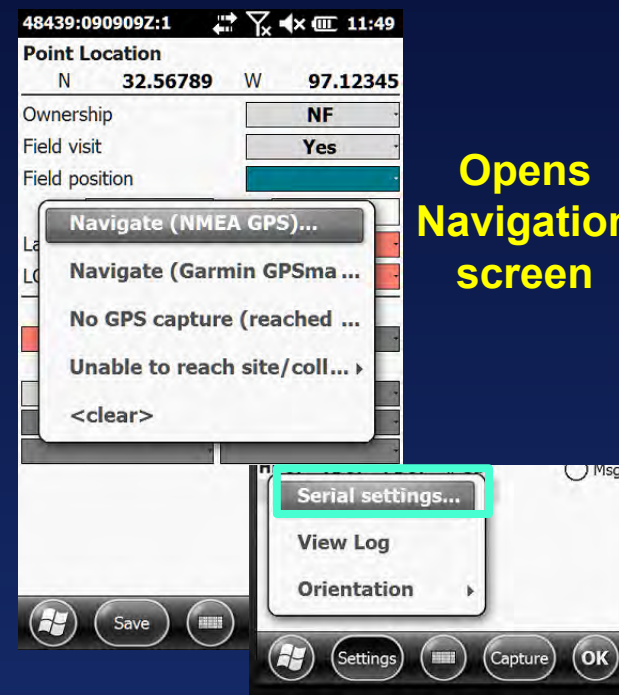
# Finding segments and points

- Use list of segments and coordinates to:
  - Review using the new Grazing Lands segment web mapping application
    - Note: Imagery may not be current
  - Prepare supplemental maps from the web mapping application
  - Use supplemental maps to arrive at ‘Closest Point of Approach’
  - Use the web mapping application to determine best routes between segments



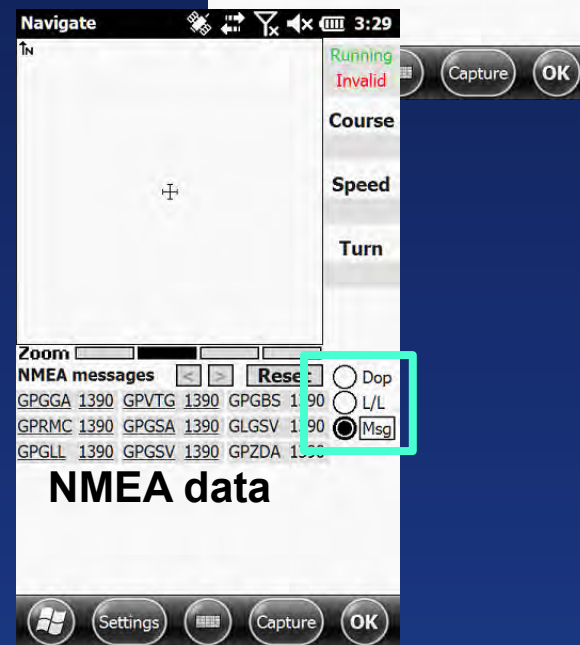
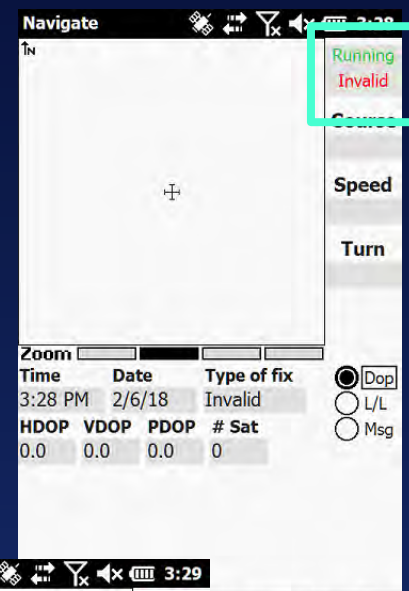
# Prepare to navigate to point

- Reference Instructions, Ch. 3
  - Open point, Location protocol, and fill in required info
  - For Field Location
    - Choose Navigate NMEA
  - Reset Serial to device or Manual setup if needed
  - See Ch. 3 for Legacy Field PC setup
  - Contact **Support** with issues



# Validate the GPS signal

- 'Running' status – CASI receiving data
- 'Invalid' data – no positions
- Use Msg radio button to view data streaming
- Contact **Support** with issues



# Instructions Chapter 3

## Navigation review

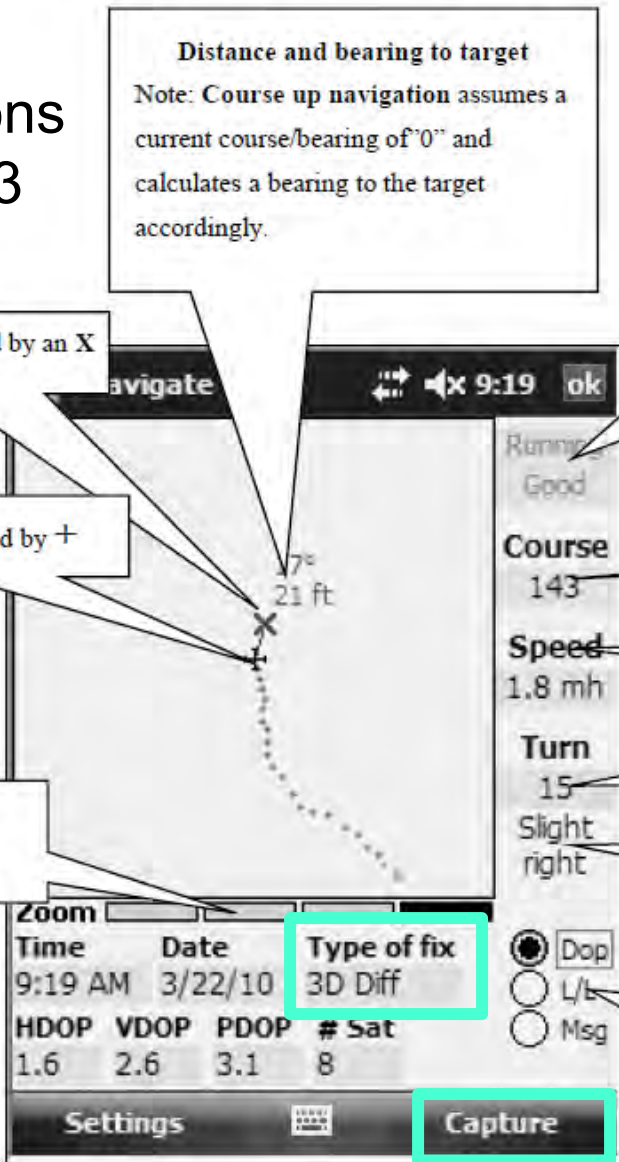
**Distance and bearing to target**  
Note: Course up navigation assumes a current course/bearing of "0" and calculates a bearing to the target accordingly.

**Possible Messages**  
Stopped: Indicates no communication taking place with GPS)  
Running: Indicates communication with GPS  
Invalid: GPS position not valid for navigation  
Good: GPS position adequate for navigation

Target location is marked by an X

Current position marked by +

Zoom Control  
Out ← → In



**Course:** While navigating, indicates the course in degrees

**Speed:** Indicates your speed while navigating

**Turn:** Indicates suggested turn needed to stay on course in degrees (-180 to 180)

**Text description:** Text message displayed to assist in navigation.

**Radio Button Choices**  
Dop (dilution of precision): GPS signal quality information  
L/L: Displays latitude and longitude of target and current position  
Msg: Displays status of NEMA string retrieval to navigation process

## Capturing the point

- Use the Distance indicator to come as close as possible (<15 feet) to the point
- Tap Capture button in lower right corner of the Navigation screen
- GPS Capture window will open, tap OK if acceptable



Tap Save when you are returned to the Location screen

# Wrapping up navigation

- Place a survey arrow or peg at the segment point location determined with the GPS
- Pull out support maps and confirm location
- Move on to laying out the transect tapes and photographing the transects and macroplot



## What's New in 2018?

- **No changes to protocols**
- **Substitute sample segments are no longer part of the survey**
- **Navigation map application**
- **Website - new look**



# NRI Grazing Land Data Collection Protocols

Chapter Number	Protocol <sup>1</sup>	Non-Federal Range	BLM-Managed Range	Non-Federal Pasture
3	Point Locations and Plot Transect Layout			
4	Data Gatherers			
5	Ownership			
6	Land Cover/Use			
7	Landscape and Soils			
8	Ecological Site/Forage Suitability Transect Information and Use			
9	Line Point Intercept			
10	Gap Intercept			
11	Soil Stability Test			Opt
12	Plant Height			
13	Dry Weight Rank	Opt	Opt	Opt
14	Species Composition by Weight (production)		N/A	N/A
15	Standing Biomass	N/A	N/A	
16	Plant Census			
17	Resource Concerns			
18	Conservation Practices			
19	Disturbance Indicators			
20	Rangeland Health			NA
21	Pasture Condition	N/A	N/A	
22	Sagebrush Shape			NA

<sup>1</sup>Status:

**Yellow:** Protocol change

**Green:** No change in protocol

N/A: Protocol does not apply.

OPT : Optional

# BLM Survey

- Second year of the second 5-year NRCS-BLM interagency agreement
- BLM preparations:
  - Ownership verification for sample points
    - GIS verification from the BLM National Office Center (NOC)
  - Logistics (e.g., access across private land, resource concerns)



## Communication Between NRCS and BLM

- If communication breaks down between the BLM State Contact and the NRCS State Contact, the SRIC should call the BLM Field Office Manager associated with the set of sample segments
- If the information is slow, the NRCS SRIC should send an email to the national BLM contact, Sherm Karl ([mkarl@blm.gov](mailto:mkarl@blm.gov)), and the NRI Grazing Land Help Desk ([NRI-Graze-Help@iastate.edu](mailto:NRI-Graze-Help@iastate.edu))

# Grazing Land Maps Application

- Use for navigation or survey planning
- Select entire state, or
- Select a county within the state
- Bing maps background
- Zoom for more detail

# Select Your State



The screenshot shows the 'USDA Grazing Land Maps' web application. At the top left is the USDA logo and the text 'Grazing Land Maps'. At the top right is the 'CSSM' logo and a 'Log Out' link. Below the header, a message reads: 'Choose the area for your navigational map. Choosing a county is optional.' A link for 'View National Map' is provided. The main form contains two dropdown menus: 'State' (set to '56 Wyoming') and 'County' (set to 'Entire State'). Each dropdown has a corresponding 'Clear Selections' or 'Clear County' button. A 'Get Map' button is located below the dropdowns. At the bottom, the footer text reads: 'Natural Resources Conservation Service', 'Center for Survey Statistics and Methodology, Iowa State University', and 'Last updated: 2/12/2018'.

**USDA** Grazing Land Maps CSSM [Log Out](#)

Choose the area for your navigational map. Choosing a county is optional.

[View National Map](#)

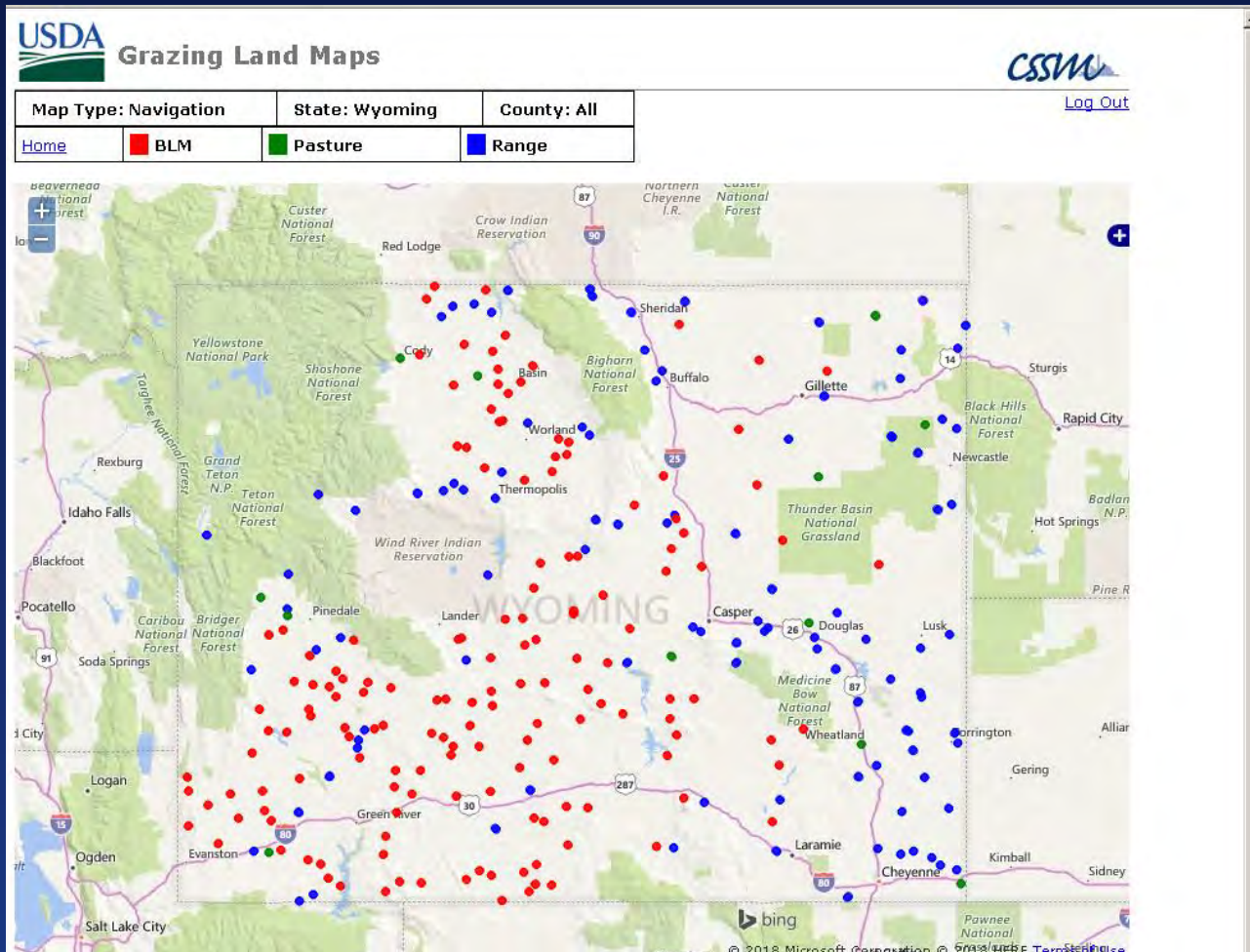
**State**

**County**

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Natural Resources Conservation Service  
Center for Survey Statistics and Methodology, Iowa State University  
Last updated: 2/12/2018

# Selection by State





## Grazing Land Maps



[Log Out](#)

Choose the area for your navigational map. Choosing a county is optional.

[View National Map](#)

**State**

56 Wyoming



Clear Selections

**County**

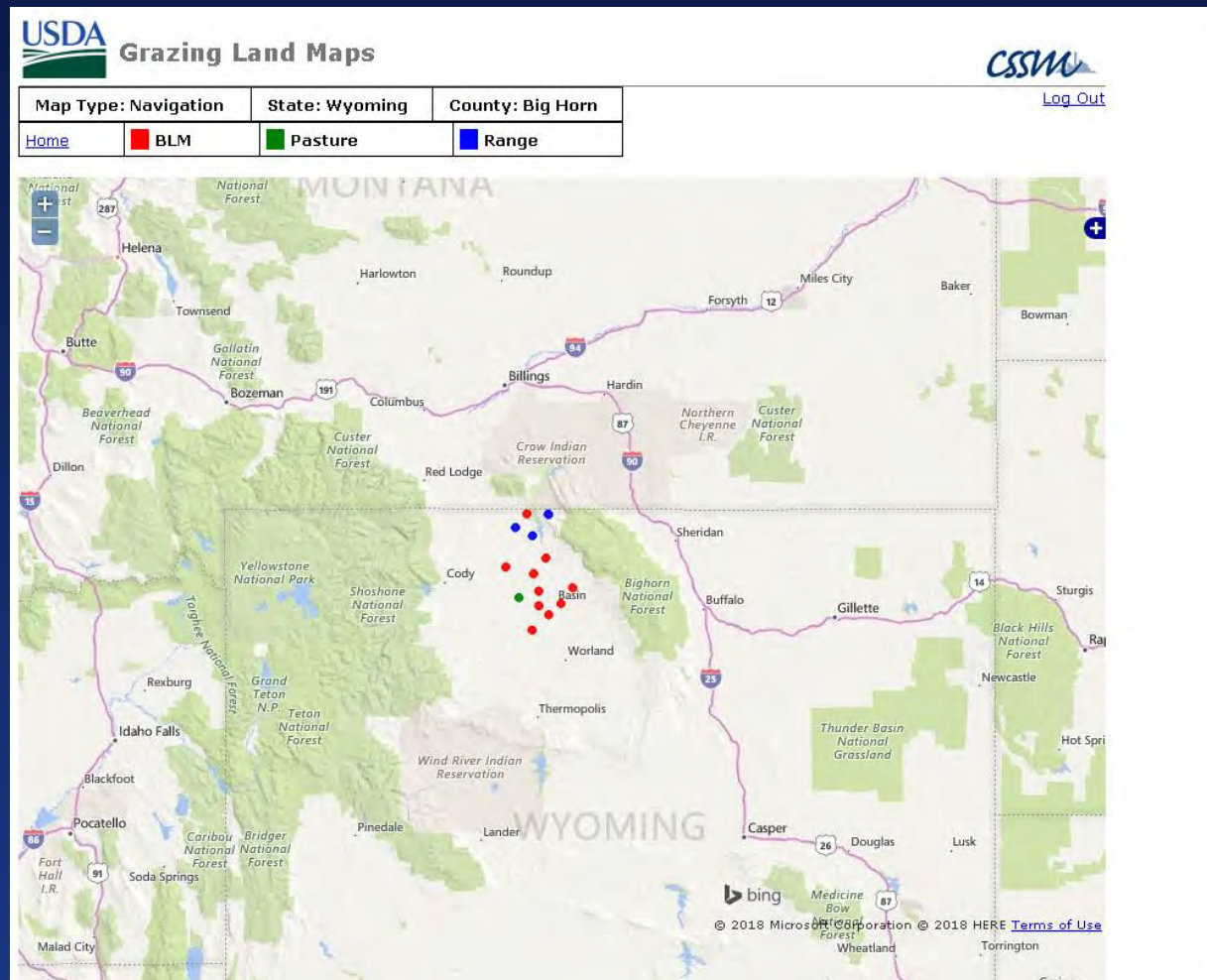
003 Big Horn



Clear County

Get Map

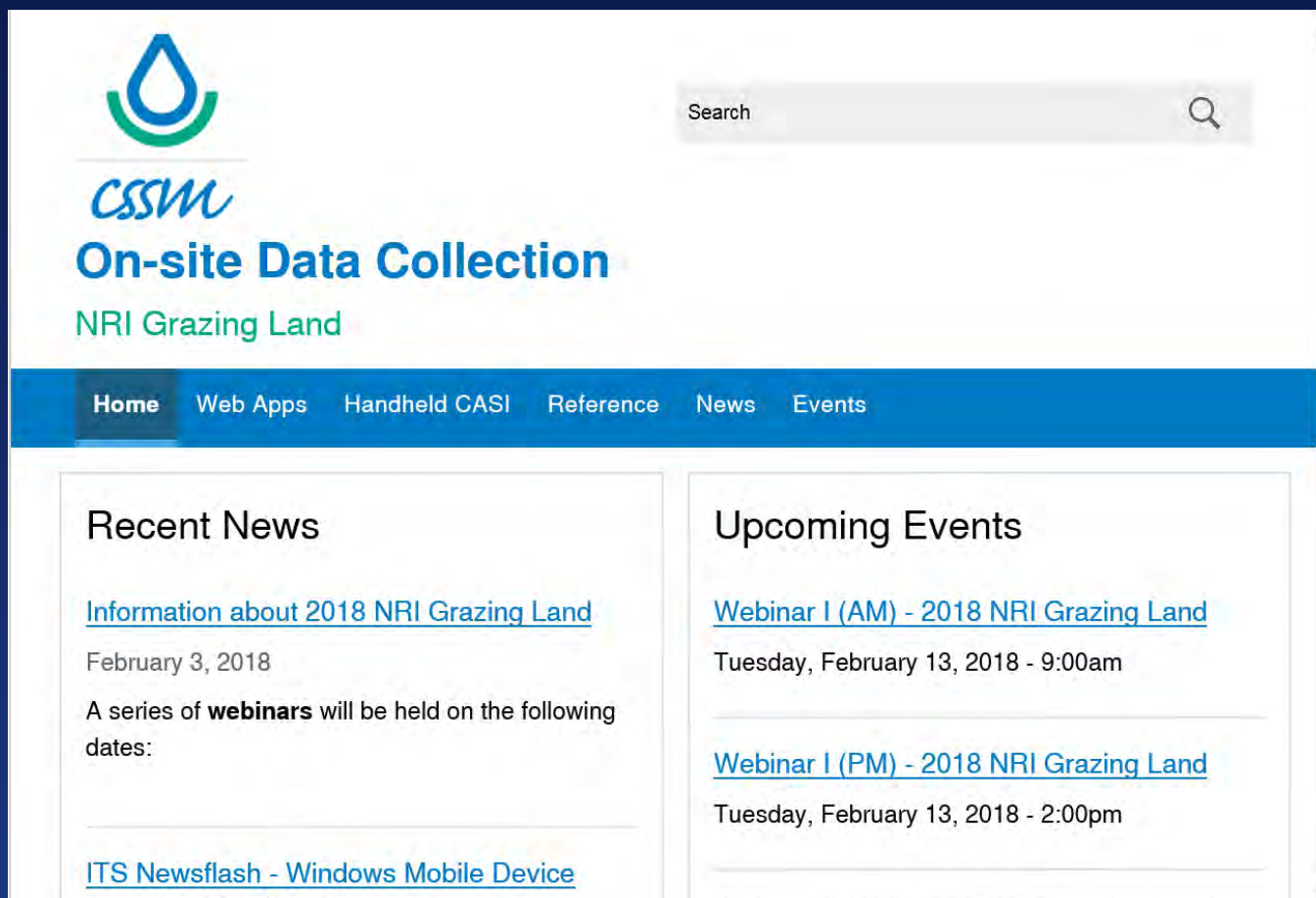
# Selection by County Within a State





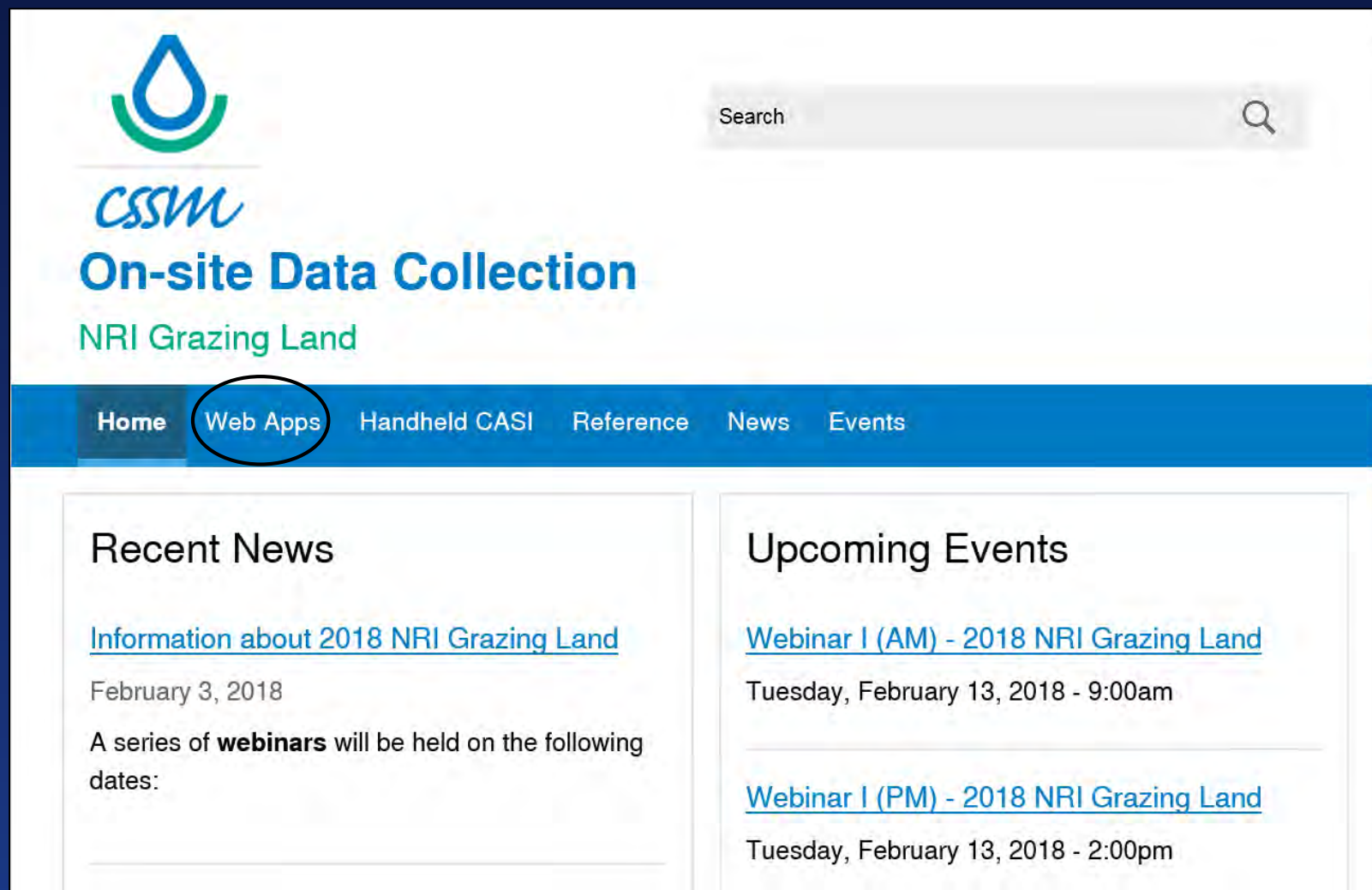
# Bookmark the website!

<https://grazingland.cssm.iastate.edu/>



The screenshot shows the homepage of the CSSM On-site Data Collection website. The header features the CSSM logo (a stylized water drop) and the text "CSSM On-site Data Collection NRI Grazing Land". A search bar is located in the top right corner. Below the header is a blue navigation bar with the following menu items: Home, Web Apps, Handheld CASI, Reference, News, and Events. The main content area is divided into two columns. The left column is titled "Recent News" and contains two news items: "Information about 2018 NRI Grazing Land" dated February 3, 2018, and "ITS Newsflash - Windows Mobile Device". The right column is titled "Upcoming Events" and contains two events: "Webinar I (AM) - 2018 NRI Grazing Land" on Tuesday, February 13, 2018, from 9:00am to 9:00am, and "Webinar I (PM) - 2018 NRI Grazing Land" on Tuesday, February 13, 2018, from 2:00pm to 2:00pm.

# Web-based NRI Grazing Land Applications



The screenshot shows the website interface for the CSSM On-site Data Collection NRI Grazing Land. At the top left is the NRCS logo. To its right is a search bar with the text 'Search' and a magnifying glass icon. Below the logo is the text 'CSSM On-site Data Collection NRI Grazing Land'. A blue navigation bar contains the following links: Home, Web Apps (circled in red), Handheld CASI, Reference, News, and Events. The main content area is divided into two columns. The left column is titled 'Recent News' and contains a link 'Information about 2018 NRI Grazing Land' dated February 3, 2018, with a sub-heading 'A series of **webinars** will be held on the following dates:'. The right column is titled 'Upcoming Events' and contains two links: 'Webinar I (AM) - 2018 NRI Grazing Land' on Tuesday, February 13, 2018 - 9:00am, and 'Webinar I (PM) - 2018 NRI Grazing Land' on Tuesday, February 13, 2018 - 2:00pm.



# Web-based NRI Grazing Land Applications

- Account Manager
- Grazing Land Survey Instrument (CASI)
- Grazing Land Images
- Grazing Land Maps
- Grazing Land Review Tables
- Grazing Land Reports
- Grazing Land Review Complete

## NRI Grazing Land

- Home
- Web Apps**
- Handheld CASI
- Reference
- News
- Events

Home

Page

# Web-based Applications

The web-based applications for NRI Grazing Land on-site data collection are under a security system managed by the User Manager (SRIC or designee) in each state. The system requires each user to create an account using the [NRI Account Manager](#) site. Once your account has been created, log into the Account Manager site and select Request Application Access. The User Manager will grant access based on your responsibilities.

Application Name	Required Role	Supported Browsers	Description
<a href="#">Grazingland Web CASI</a>	Grazing	Internet Explorer	Web-based version of the handheld survey instrument (CASI)
<a href="#">Grazingland Images</a>	Grazing	IE 6+, Firefox, Chrome, Safari	Upload photos taken during on-site data collection
<a href="#">Grazingland Navigation Maps</a>	Grazing	IE 6+, Firefox, Chrome, Safari	View location of points in state or county
<a href="#">Grazingland Reports</a>	GrazingReview	IE 6+, Firefox, Chrome, Safari	View data collection progress by sample, access Data View and Point Summary
<a href="#">Grazingland Status</a>	GrazingReview	IE 6+, Firefox,	View segment status summaries

# Account Manager

- The User Manager uses Account Manager to approve/deny access to Grazing Land Applications
- Names with 2017 access must be approved (or denied) access by the User Manager for 2018
- New people must use the Account Manager site to:
  - Create an account
  - Request access to Grazing Land applications
- Forgot your password? Create a new one using this application.
- Forgot your username? Send an email to the NRI Grazing Land Help Desk ([nri-graze-help@iastate.edu](mailto:nri-graze-help@iastate.edu))

## NRI Grazing Land

- Home
- Web Apps**
- Handheld CASI
- Reference
- News
- Events

Home

Page

# Web-based Applications

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# Web-based Grazing Land Survey Instrument

- Includes the same data entry screens as the CASI on the field PC
- Used for entering disposition data and data editing
- Power point for general use is also posted on the Web-based NRI Grazing Land Applications page

## NRI Grazing Land

[Home](#)

Page

# Web-based Applications

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<a href="#">Grazingland Reports</a>	GrazingReview	IE 6+, Firefox, Chrome, Safari	View data collection progress by sample, access Data View and Point Summary

# Grazing Land Images

- Used to upload images taken in the field, tag (add additional attribute data) them, mask identifying information, and submit to the permanent server
- Power point for NRI Grazing Land Images Uploading and Tagging is also posted on this page

## NRI Grazing Land

- Home
- Web Apps**
- Handheld CASI
- Reference
- News
- Events

[Home](#)

Page

# Web-based Applications

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<a href="#">Grazingland Reports</a>	GrazingReview	IE 6+, Firefox, Chrome, Safari	View data collection progress by sample, access Data View and Point Summary



# Grazing Land Maps Application

- Use for navigation or survey planning
- Select entire state or a county within the state
- Bing maps background
- Zoom for more detail

<a href="#">↗</a>			(CASI)
<a href="#">Grazingland Images</a> <a href="#">↗</a>	Grazing	IE 6+, Firefox, Chrome, Safari	Upload photos taken during on-site data collection
<a href="#">Grazingland Navigation Maps</a> <a href="#">↗</a>	Grazing	IE 6+, Firefox, Chrome, Safari	View location of points in state or county
<a href="#">Grazingland Reports</a> <a href="#">↗</a>	GrazingReview	IE 6+, Firefox, Chrome, Safari	View data collection progress by sample, access Data View and Point Summary
<a href="#">Grazingland Status Detail</a> <a href="#">↗</a>	GrazingReview	IE 6+, Firefox, Chrome, Safari	View segment status summaries
<a href="#">Grazingland Review Tables</a> <a href="#">↗</a>	GrazingReview	IE 6+, Firefox, Chrome, Safari	Download detailed Excel tables displaying point data by year
<a href="#">Grazingland Review Complete</a> <a href="#">↗</a>	GrazingDataManagement	IE 6+, Firefox, Chrome, Safari	Change segment status to Review Complete

# Grazing Land Reports

- Provides general and detailed status reports of NRI Grazing Land data collection
- 2018 Status Detail allows you to obtain lists of segments by data collection period, sample type, and status
- Used to monitor progress of on-site data collection

## National Resources Inventory

### On-Site Studies Data Collection Reports

[Log Out](#)

- [Status Detail](#)
- [2018 Grazing Land \(Range Sample\) Data Collection Progress](#)
- [2018 Grazing Land \(Pasture Sample\) Data Collection Progress](#)
- [2018 Grazing Land \(BLM Sample\) Data Collection Progress](#)
- [2018 Grazing Land Data View](#)
- [2018 Grazing Land Point Summary](#)
  
- [2017 Grazing Land \(Range Sample\) Data Collection Progress](#)
- [2017 Grazing Land \(Pasture Sample\) Data Collection Progress](#)
- [2017 Grazing Land \(BLM Sample\) Data Collection Progress](#)
- [2017 Grazing Land Data View](#)
- [2017 Grazing Land Point Summary](#)
  
- [2016 Grazing Land \(Range Sample\) Data Collection Progress](#)
- [2016 Grazing Land \(Pasture Sample\) Data Collection Progress](#)
- [2016 Grazing Land \(BLM Sample\) Data Collection Progress](#)
- [2016 Grazing Land Data View](#)
- [2016 Grazing Land Point Summary](#)
  
- [2015 Grazing Land \(Range Sample\) Data Collection Progress](#)
- [2015 Grazing Land \(Pasture Sample\) Data Collection Progress](#)
- [2015 Grazing Land \(BLM Sample\) Data Collection Progress](#)
- [2015 Grazing Land Data View](#)



## National Resources Inventory

2018 BLM Sample, Grazing Land Field Study Data Collection Status

[PDF Version](#)

	Total	In - Not Started	In - UC	Checked Out	In - Complete	Reviewed
<b>National Totals</b>	1000	1000	0	0	0	0
<b>Arizona</b>	37	37	0	0	0	0
<b>California</b>	75	75	0	0	0	0
<b>Colorado</b>	65	65	0	0	0	0
<b>Idaho</b>	117	117	0	0	0	0
<b>Montana</b>	75	75	0	0	0	0
<b>Nevada</b>	246	246	0	0	0	0
<b>New Mexico</b>	36	36	0	0	0	0
<b>Oregon</b>	114	114	0	0	0	0
<b>South Dakota</b>	1	1	0	0	0	0
<b>Utah</b>	79	79	0	0	0	0
<b>Washington</b>	1	1	0	0	0	0
<b>Wyoming</b>	154	154	0	0	0	0


### Key

- State** State
- Total** Total number of segments
- In - Not Started** Number of segments on the server where data collection has not yet begun
- In - UC** Number of segments on the server that were returned to the database only partially complete
- Checked Out** Number of segments currently checked out to the CASI
- In - Complete** Number of segments on the server where data collection is complete
- Reviewed** Number of segments on the server for which data collection and data review have been completed

## National Resources Inventory

### On-Site Studies Data Collection Reports

[Log Out](#)

- [Status Detail](#) 
- [2018 Grazing Land \(Range Sample\) Data Collection Progress](#)
- [2018 Grazing Land \(Pasture Sample\) Data Collection Progress](#)
- [2018 Grazing Land \(BLM Sample\) Data Collection Progress](#)
- [2018 Grazing Land Data View](#)
- [2018 Grazing Land Point Summary](#)
  
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- [2016 Grazing Land \(Pasture Sample\) Data Collection Progress](#)
- [2016 Grazing Land \(BLM Sample\) Data Collection Progress](#)





## Status Detail

NRI Grazing Land

Home Web Apps Handheld CASI Reference News Events Message

2018

04 (AZ)

Collection Period	Sample	Total	In - Not Started	In - UC	Checked Out	In - Complete	Reviewed
March - May	All	71	71	0	0	0	0
	RANGE	41	41	0	0	0	0
	PASTURE	3	3	0	0	0	0
	BLM	27	27	0	0	0	0
May - July	All	35	35	0	0	0	0
	RANGE	25	25	0	0	0	0
	PASTURE	1	1	0	0	0	0
	BLM	9	9	0	0	0	0
July - September	All	12	12	0	0	0	0
	RANGE	10	10	0	0	0	0
	PASTURE	1	1	0	0	0	0
	BLM	1	1	0	0	0	0
All	All	118	118	0	0	0	0
	RANGE	76	76	0	0	0	0
	PASTURE	5	5	0	0	0	0
	BLM	37	37	0	0	0	0

March - May / PASTURE / In - Not Started (3 segments)

Click on a segment ID to see details for that segment.

04003\_100201A 04011\_040503P 04012\_230401P

Click on value to get list of segments (see bottom of the page)

Click on listed segment to get Segment Detail (see next slide)



## Status Detail

NRI Grazing Land

Segment Detail  
04012\_230401P

PASTURE, March - May, NS

Point	Ownership	Field Visit	Field Position	Land Cover/Use	Date of Field Visit	Primary Gatherer	Collectable
-------	-----------	-------------	----------------	----------------	---------------------	------------------	-------------

1	(no point data)						
---	-----------------	--	--	--	--	--	--

2	(no point data)						
---	-----------------	--	--	--	--	--	--

### Field Visit Notes

Point 1 (none)

Point 2 (none)

### Transaction History


02/08/2018 14:06:45 Set as NS



## National Resources Inventory

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### On-Site Studies Data Collection Reports

- [Status Detail](#)
- [2018 Grazing Land \(Range Sample\) Data Collection Progress](#)
- [2018 Grazing Land \(Pasture Sample\) Data Collection Progress](#)
- [2018 Grazing Land \(BLM Sample\) Data Collection Progress](#)
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- [2016 Grazing Land \(Pasture Sample\) Data Collection Progress](#)
- [2016 Grazing Land \(BLM Sample\) Data Collection Progress](#)

## National Resources Inventory



On-Site Studies Data Collection Reports

[Log Out](#)

State

Sample	Survey	State	County	County Name	PSU	Point	Point Status	PSU Status	Field Collected	Field Image Count
BLM	2018	8	17	El Dorado	201015B	1	NS	NS	No	0
BLM	2018	8	17	El Dorado	201015B	2	NS	NS	No	0
BLM	2018	8	17	El Dorado	201015B	3	NS	NS	No	0
BLM	2018	8	25	Imperial	200101B	1	NS	NS	No	0
BLM	2018	8	25	Imperial	200101B	2	NS	NS	No	0
BLM	2018	8	25	Imperial	200101B	3	NS	NS	No	0
BLM	2018	8	25	Imperial	200114B	1	NS	NS	No	0
BLM	2018	8	25	Imperial	200114B	2	NS	NS	No	0
BLM	2018	8	25	Imperial	200114B	3	NS	NS	No	0
BLM	2018	8	25	Imperial	200518B	1	NS	NS	No	0
BLM	2018	8	25	Imperial	200518B	2	NS	NS	No	0
BLM	2018	8	25	Imperial	200518B	3	NS	NS	No	0
BLM	2018	8	25	Imperial	200517B	1	NS	NS	No	0
BLM	2018	8	25	Imperial	200517B	2	NS	NS	No	0
BLM	2018	8	25	Imperial	200517B	3	NS	NS	No	0
BLM	2018	8	25	Imperial	200807B	1	NS	NS	No	0
BLM	2018	8	25	Imperial	200807B	2	NS	NS	No	0
BLM	2018	8	25	Imperial	200807B	3	NS	NS	No	0
BLM	2018	8	25	Imperial	200820B	1	NS	NS	No	0
BLM	2018	8	25	Imperial	200820B	2	NS	NS	No	0
BLM	2018	8	25	Imperial	200820B	3	NS	NS	No	0
BLM	2018	8	25	Imperial	203404B	1	NS	NS	No	0
BLM	2018	8	25	Imperial	203404B	2	NS	NS	No	0
BLM	2018	8	25	Imperial	203404B	3	NS	NS	No	0

<a href="#">CASI</a>				instrument (CASI)
<a href="#">Grazingland Images</a>	Grazing		IE 6+, Firefox, Chrome, Safari	Upload photos taken during on-site data collection
<a href="#">Grazingland Navigation Maps</a>	Grazing		IE 6+, Firefox, Chrome, Safari	View location of points in state or county
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<a href="#">Grazingland Review Tables</a>	GrazingReview		IE 6+, Firefox, Chrome, Safari	Download detailed Excel tables displaying point data by year
<a href="#">Grazingland Review Complete</a>	GrazingDataManagement		IE 6+, Firefox, Chrome, Safari	Change segment status to Review Complete

# Grazing Land Review Tables

- On-site data from multiple points are organized in tables by themes
- Used for reviewing the data, identifying anomalies
- Editing is done using the web-based CASI or CASI on the field PC
- Guidance document posted on the Grazing Land Review Tables site provides direction for using these tables

<a href="#">CASI</a>				instrument (CASI)
<a href="#">Grazingland Images</a>	Grazing	IE 6+, Firefox, Chrome, Safari		Upload photos taken during on-site data collection
<a href="#">Grazingland Navigation Maps</a>	Grazing	IE 6+, Firefox, Chrome, Safari		View location of points in state or county
<a href="#">Grazingland Reports</a>	GrazingReview	IE 6+, Firefox, Chrome, Safari		View data collection progress by sample, access Data View and Point Summary
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<a href="#">Grazingland Review Tables</a>	GrazingReview	IE 6+, Firefox, Chrome, Safari		Download detailed Excel tables displaying point data by year
<a href="#">Grazingland Review Complete</a>	GrazingDataManagement	IE 6+, Firefox, Chrome, Safari		Change segment status to Review Complete

# Grazing Land Review Complete

- Use to mark segments as Reviewed and Complete (RC)
- Provides information about sample segments
- Select Year from drop down list
- Select State from drop down list



# Review Complete

NRI Grazing Land

Home Web Apps Handheld CASI Reference News Events vlessard ▾

2018 ▾

01 (AL) ▾

### Filter by Collection Period

Mar - May  May - Jul  Jul - Sep

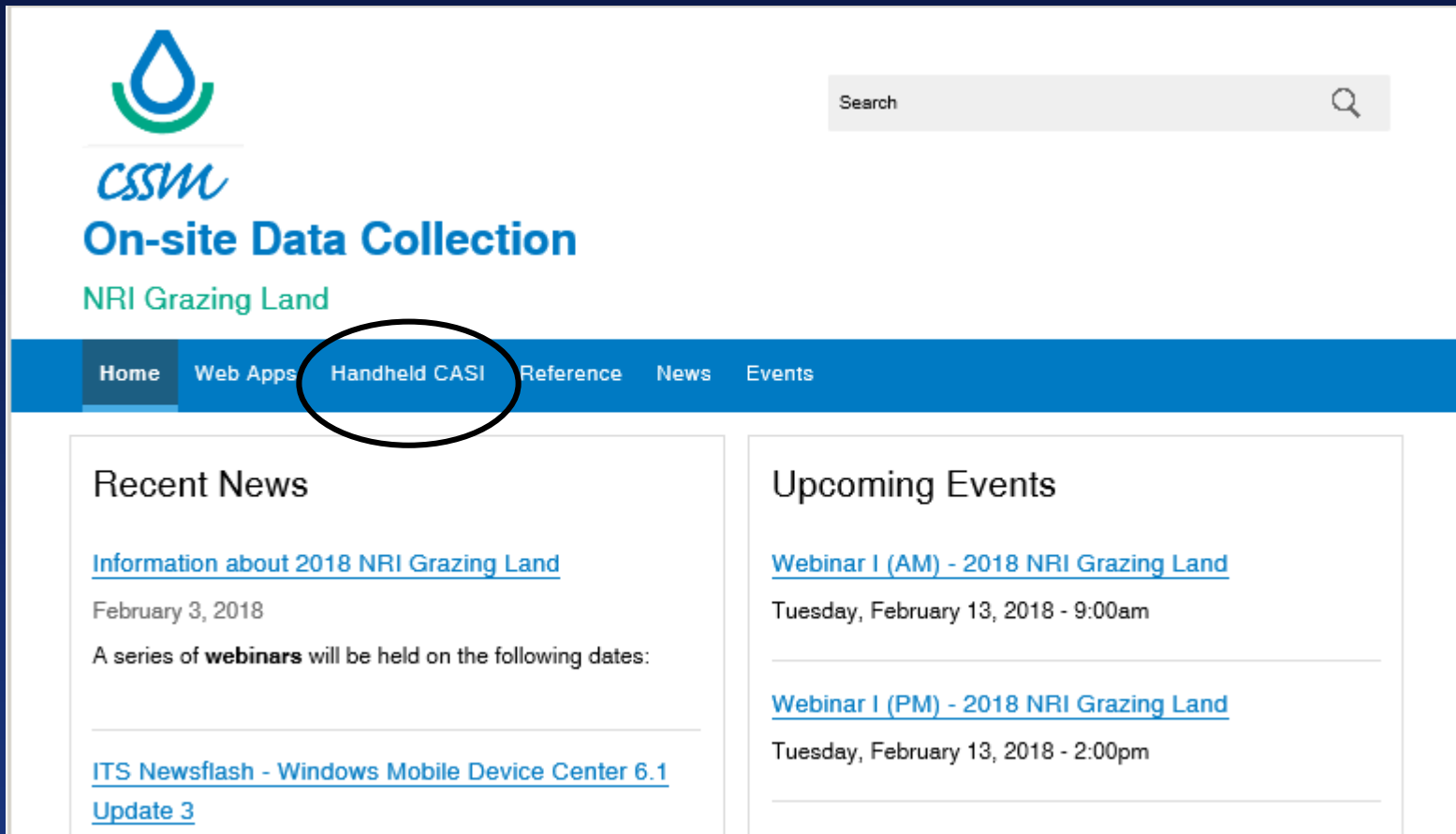
### Filter by Sample

RANGE  PASTURE  BLM

Survey	State	County	Segment	Status	Details	Sample	Collection Period	Date First CO
2018	01	005	020203R	NS	✘ Not Complete	PASTURE	Jul - Sep	
2018	01	013	010201B	NS	✘ Not Complete	PASTURE	Jul - Sep	
2018	01	019	050203B	NS	✘ Not Complete	PASTURE	May - Jul	
2018	01	019	060303R	NS	✘ Not Complete	PASTURE	May - Jul	
2018	01	043	020201R	NS	✘ Not Complete	PASTURE	May - Jul	



# Handheld CASI

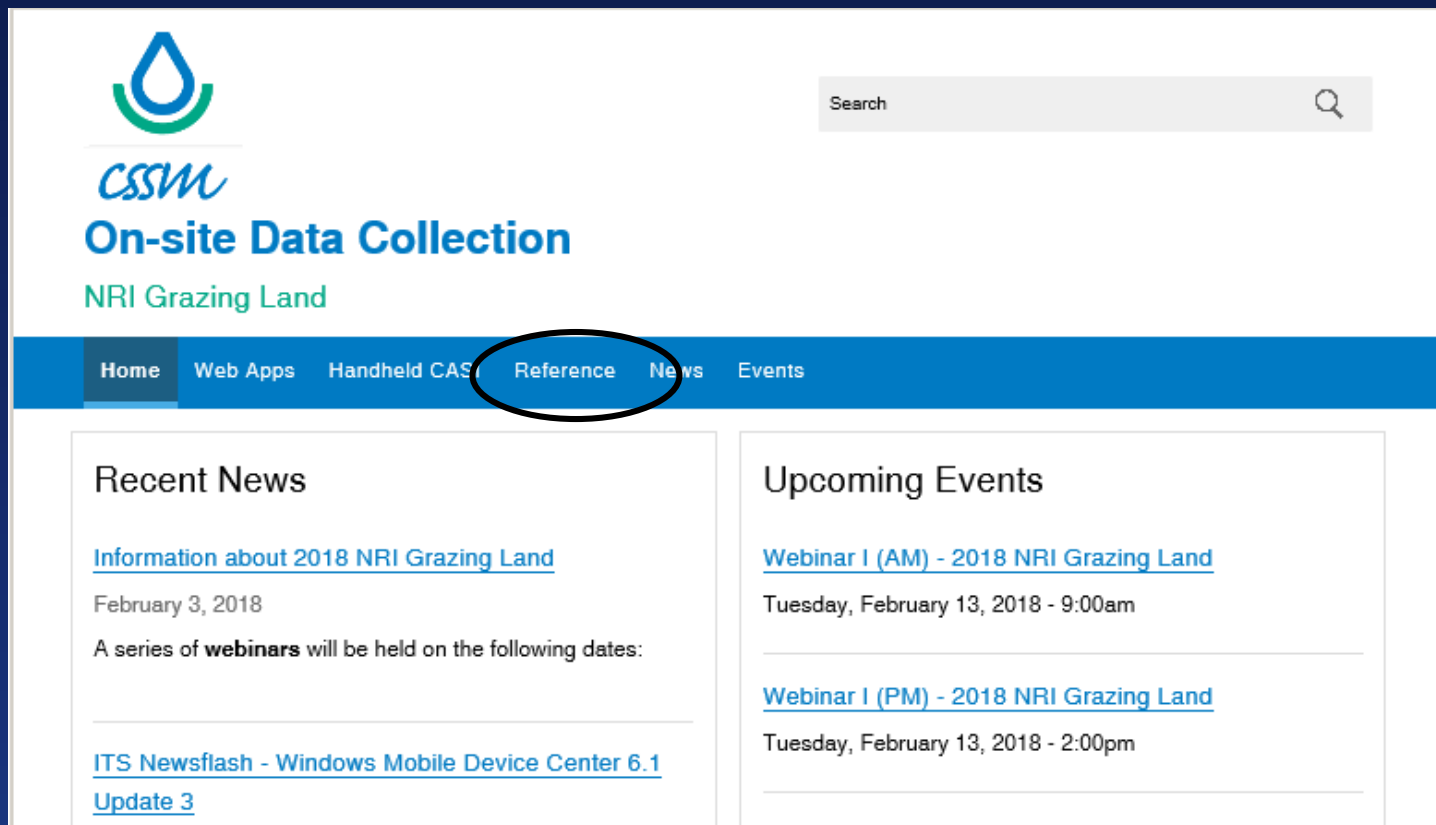


The screenshot shows the website interface for CSSM On-site Data Collection. The top navigation bar includes links for Home, Web Apps, Handheld CASI (circled in black), Reference, News, and Events. Below the navigation bar, there are two main content areas: 'Recent News' and 'Upcoming Events'. The 'Recent News' section features a link for 'Information about 2018 NRI Grazing Land' dated February 3, 2018, and another link for 'ITS Newsflash - Windows Mobile Device Center 6.1 Update 3'. The 'Upcoming Events' section lists two webinars for February 13, 2018: 'Webinar I (AM) - 2018 NRI Grazing Land' from 9:00am to 9:00am, and 'Webinar I (PM) - 2018 NRI Grazing Land' from 2:00pm to 2:00pm.

- Download the CASI Cab file to install on handheld data logger
- Support documentation provides related information



# Reference Materials



The screenshot shows the website interface for the CSSM On-site Data Collection. The top navigation bar includes links for Home, Web Apps, Handheld CAS, Reference (circled in black), News, and Events. The main content area is divided into two columns: 'Recent News' and 'Upcoming Events'. The 'Recent News' section contains two items: 'Information about 2018 NRI Grazing Land' dated February 3, 2018, and 'ITS Newsflash - Windows Mobile Device Center 6.1 Update 3'. The 'Upcoming Events' section contains two items: 'Webinar I (AM) - 2018 NRI Grazing Land' on Tuesday, February 13, 2018, at 9:00am, and 'Webinar I (PM) - 2018 NRI Grazing Land' on Tuesday, February 13, 2018, at 2:00pm.

- **Data Collection Handbook of Instructions**
- Soils Tables
- Landowner Resources
- Plants
- Calibration
- Photo Protocol Labels
- Segment Status Types
- Protocol Videos
- Quality Assurance Plan
- Confidentiality Agreement
- Substitute Segments

# 2018 NRI Grazing Land On-Site Trainings

- Tucson, AZ, February 27-March 1
- Knoxville, TN, April 24-26

Please sign up for Knoxville session using AgLearn by 3/13/2018!

Send contactor names to Christopher Lavergne ([christopher.lavergne@ftw.usda.gov](mailto:christopher.lavergne@ftw.usda.gov)) or the NRI Grazing Land Help Desk ([nri-graze-help@iastate.edu](mailto:nri-graze-help@iastate.edu)) – Additional documentation is needed by NEDC

# Quality Assurance for NRI Grazing Land Surveys

- Training
- Calibration
- In-field reviews
- Review of collected data

# NRI Grazing Land On-Site Data Collection Authorization

- Two levels of authorization: Crew Member, Technical Leader
  - Technical Leader -
    - Trained in field protocols at National NEDC training (every other year if active – 5 or more points)
    - Pass written test
    - Sign confidentiality agreements
    - Perform calibration exercises
    - Pass performance based post training test (See NRI Grazing Land On-Site Data Collection Quality Assurance Plan Appendix A, NRI Grazing Land On-Site Data Collection Protocol Performance Checklist).
  - Crew Member
    - Trained in field protocols at National NEDC training or by authorized Technical Leader or national grazing lands trainer (every other year if active – 5 or more points)
    - Pass written test
    - Sign confidentiality agreements
    - Perform calibration exercises

# Calibration for Grazing Land On-Site Protocols

- **Conducted for:**
  - Line Point Intercept
  - Gap Intercept
  - Plant Height
  - Soil Aggregate Stability (Optional for pasture)
  - Species Composition by Weight (Plant Production – Not done for pasture)
    - Double sampling methods (if used)
    - Plant production protocol
- **Minimum requirement**
  - During training session
  - Two additional calibrations during field season
    - (1 additional if fewer than 15 PSUs assigned)
- **See NRI Grazing Land Instructions Appendix E**

# NRI Rangeland/Grazing Land In-Field Reviews

- Field supervisor visits at least 5% of segments completed by each crew (minimum of 1 if fewer than 20 segments)
- Field crew may or may not be present
- Field crews keep field supervisors apprised of their schedules
- Collected data is compared with the segment
- In-field Review Check List provided (See Appendix C of the NRI Grazing Land On-Site Study QA Plan, (<http://www.nrisurvey.org/nrcs/Grazingland/2018>))

# Review of Collected Data

1. Process formalized in 2015 with Grazing Land Review Complete application
2. Download review tables using the Grazing Land Review Tables application
3. Follow the Data Review Guidance Document linked on the site
4. Edit the data with the web-based NRI Grazing Land Survey Instrument
5. Mark reviewed segments as Review Complete (RC) using the Grazing Land Review Complete application

Applications are linked on the NRI Grazing Land website:

<http://www.nrisurvey.org/nrcs/Grazingland/2018/>

# Announcements

- Sign up deadline for Knoxville session of NRI Grazing Land On-site training is March 13, 2018.
- Install the CASI on the field PC prior to attending trainings.  
Contact NRI Grazing Land Help Desk ([nri-graze-help@iastate.edu](mailto:nri-graze-help@iastate.edu)) for assistance.
- Data collection must be completed by September 30, 2018
- Data review must be completed by October 31, 2018



# Protocol Webinars

- Webinar II - Protocol Review Part 1
  - Wednesday, February 14, 2018
- Webinar III - Protocol Review Part 2
  - Thursday, February 15, 2018

Eastern States: 10 EST; 9 CST

Western States: 2 CST; 1pm MST, 12pm PST, 10am HAST