



# 2021 NRI Grazing Land Webinar

## Overview

February 9, 2021

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USDA-NRCS NRI Grazing Lands National Leader

Ames, Iowa





# Protocol Webinars

## Webinar II & III - Protocol Reviews

- Cancelled for FY21
- Will be rolled into the online training sessions





# Today's Presenters

- ❑ **Patrick Flanagan – National Statistician (NRCS)**
- ❑ **Erik Suffridge – NRI Grazing Lands National Leader (NRCS)**
- ❑ **Todd Krueger – Senior Systems Analyst – Iowa State University (ISU) Center for Survey Statistics and Methodology (CSSM)**





# Agenda

- Introduction/Overview - Suffridge**
- Welcome - Flanagan**
- Training Sessions - Suffridge**
- Quality Assurance - Suffridge**
- What's New in 2021? - Krueger**





# Welcome

- 2020 Was a Tough Year (COVID)**
  - COVID: National Trainings cancelled
  - COVID: Restricted logistics
  - Contract Delays
  
- Grazing Land On-Site: 84% completed**
  
- BLM On-Site: 81% complete**





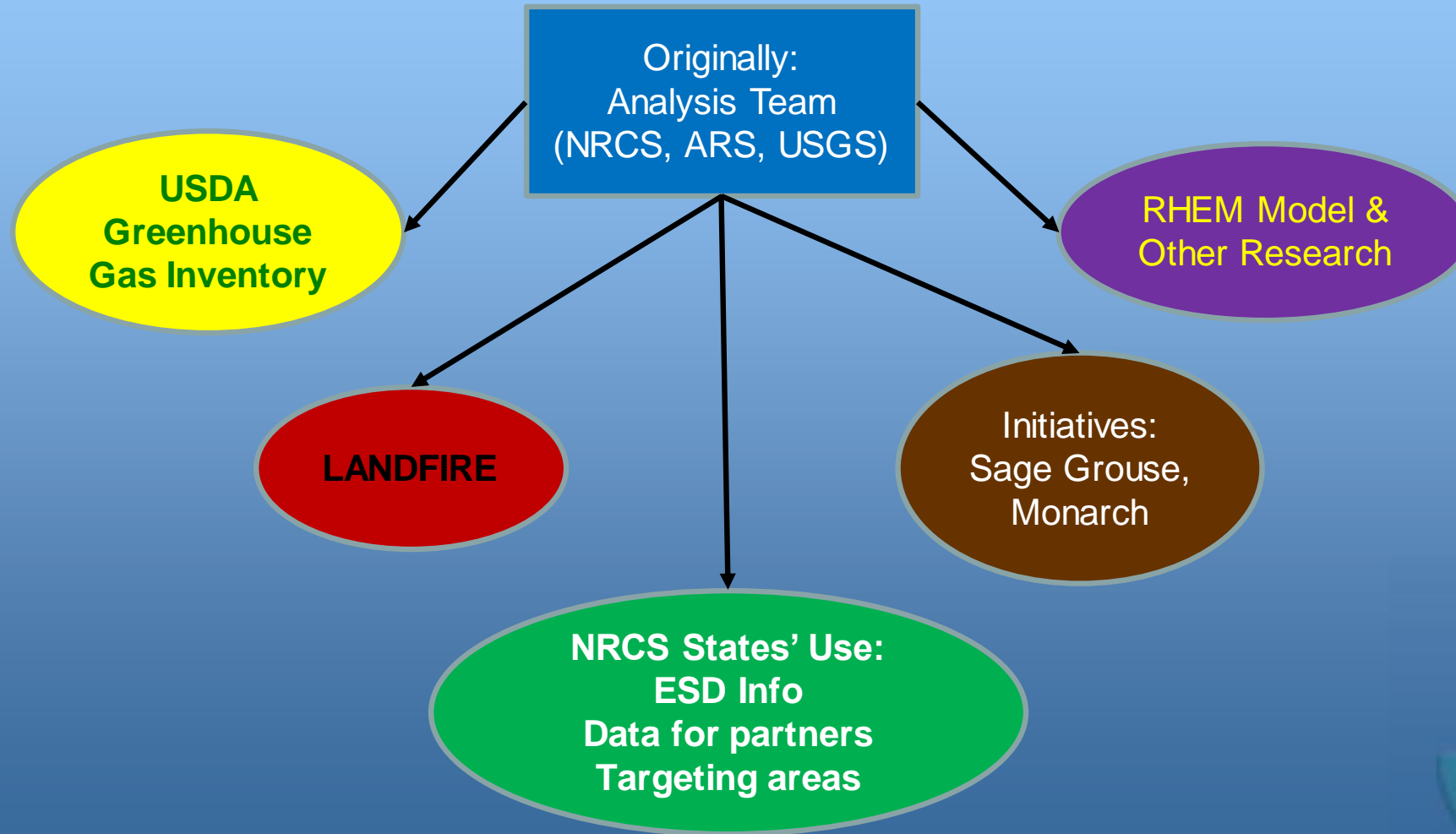
# Welcome

- ❑ **Need for Grazing Land (GL) On-Site Data**
  - Primary NRI - Limited GL Health Info
  - Info to target areas most in need
  - Vegetation, Resource Concerns, Practices
- ❑ **Importance of Training**
  - Everyone collecting the same things
  - Instructions are complicated
  - Small data set (comparatively)



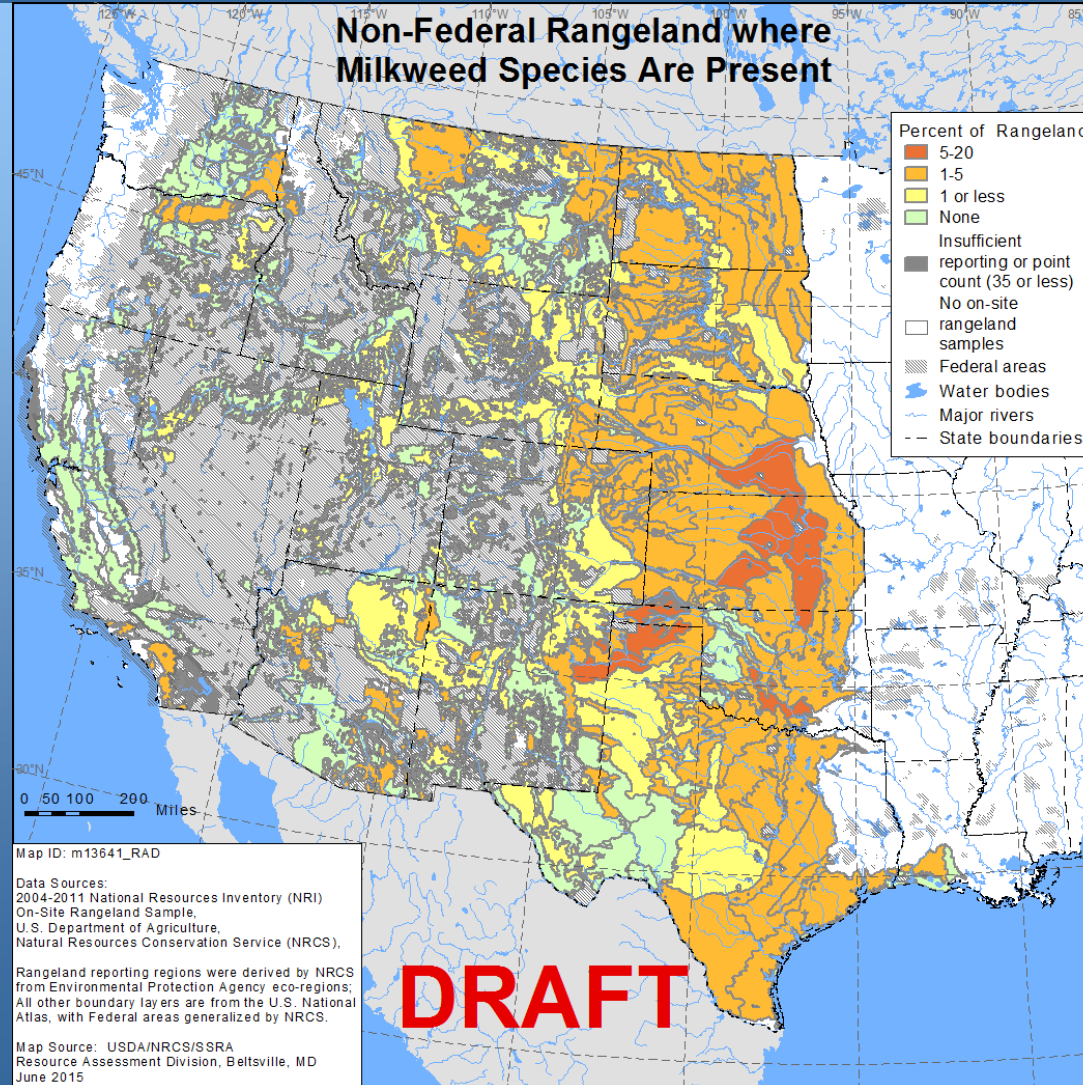


# On-Site Data Use





# Ex: Monarch: Milkweed







# Difficult but Important





# FY21 Training Sessions

- Online in FY21 due to agency in-person national training restrictions
- TBA





# Quality Assurance for NRI Grazing Land Surveys

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







# Training Policy

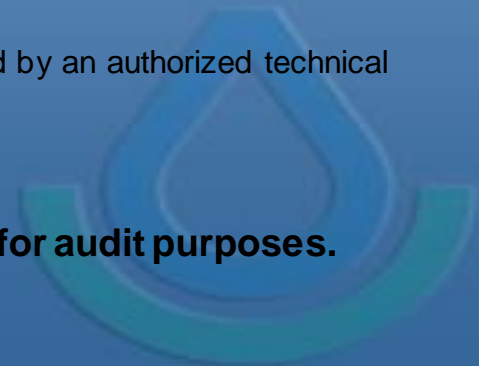
## TRAINING POLICY (HANDBOOK SECTION 2.4)

**Every grazing lands onsite data collection must be conducted by an authorized technical leader, accompanied by one or more crew members. Each of the collectors must be authorized annually before collecting data. Authorization is based on the combination of training and experience as indicated:**

- Crew Members.**—A crew member for a grazing lands onsite collection must attend one of the following the same year as the collection:
  - Grazing lands onsite training conducted by the FPAC Employee Development Section (EDS)
  - Grazing lands onsite training conducted locally by a national grazing lands trainer
  - Grazing lands onsite training conducted by an authorized technical leader

**The current year training may be waived if the crew member was also a crew member the previous year and conducted data collections at five or more points.**

- Technical Leader.**—The technical leader for any grazing lands onsite collection must—
  - Have been previously qualified as a crew member and acted as a crew member for data collections at five or more points, led by an authorized technical leader.
  - Have attended the EDS grazing lands onsite training for the year conducting collection as a technical leader.
- SRICs are to maintain training records for all NRI data collectors in order to ensure training compliance for audit purposes.**





# NRI Grazing Land On-Site Data Collection Authorization

## ❑ Two levels of authorization: Crew Member, Technical Leader

- Technical Leader -
  - Trained in field protocols at National FPAC-EDS 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 FPAC-EDS 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

- 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 field site
- In-field Review Check List provided (See Appendix C of the NRI Grazing Land On-Site Study QA Plan, (<https://grazingland.cssm.iastate.edu/>))





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





# What's New in 2021?

- ❑ No longer separate RANGE and PASTURE samples
- ❑ CSSM working on Android CASI for use on new Trimble TDC600 units

# RANGE and PASTURE now one NRI sample

- ❑ There will now be only two samples: (non-Federal) NRI and BLM
- ❑ For states with both rangeland and pasture (grassland/scrub-shrub not rangeland):
  - Change should not affect what is collected
    - For non-Federal segments, the rule has always been to collect the first two eligible points whether they be pasture (grassland/scrub-shrub not range) on RANGE sample points or rangeland on PASTURE sample points
  - Still supposed to collect pasture protocols if site not defined as range
  - We are expecting a similar ratio of each will be collected in the future, as we need both types to continue to produce separate rangeland and pasture data analyses

# New 5-year sampling period for 2021-2025

- ❑ Combined RANGE and PASTURE samples part of a new 5-year sampling period for 2021-2025
- ❑ Segment selection criteria similar to 2016-2020
  - Grassland or scrub-shrub rangeland
  - Grassland not range
  - Scrub-shrub not range with previous history of pasture
  - Hayland not in crop rotation
  - Revisits may occur at random, minimum 5-year gap before same segment appears again
  - All points in segment are included even though only one point may be eligible
- ❑ Total number of segments nationally remains the same, distribution among the states has changed a bit
- ❑ Allocation between states proportioned to the total rangeland and pastureland acres from the 2015 NRI raised to the 0.7 power
- ❑ Minimum of 6 per state for states with few acres, and numbers from five other states reduced to avoid too big a change from 2016-2020
- ❑ Potential segments divided into spatial strata and substrata to maintain good geographic spread, and then sample segments randomly chosen

# Android CASI on the horizon

- ❑ 150 Trimble TDC600 units purchased by NRCS for NRI work
- ❑ Units have been distributed to local ITS staff for configuration
- ❑ Translation of Grazing Lands software to Android is not ready
  - 20,000 lines of code written but still more to do
  - Can not predict when the new software will be ready – depends on quantity and severity of bugs found during alpha and beta testing
  - Software will not be released until it is thoroughly tested
- ❑ States should plan on using the old Windows Mobile units for 2021, especially those who need to start earlier

# Remember to...

- ❑ Approve 2021 roles using Account Manager on web site
  - As is done every year, each state's Grazing Manager will need to approve/deny access to Grazing Land web applications
  - Users that had a prior year's access must be re-approved for 2021
- ❑ Get support by emailing [nri-graze-help@iastate.edu](mailto:nri-graze-help@iastate.edu)
  - Data gatherers in field with a phone can also send a text message to "nri-graze-help@iastate.edu" instead of a phone number; please include in the message a call back number and a short description of the problem