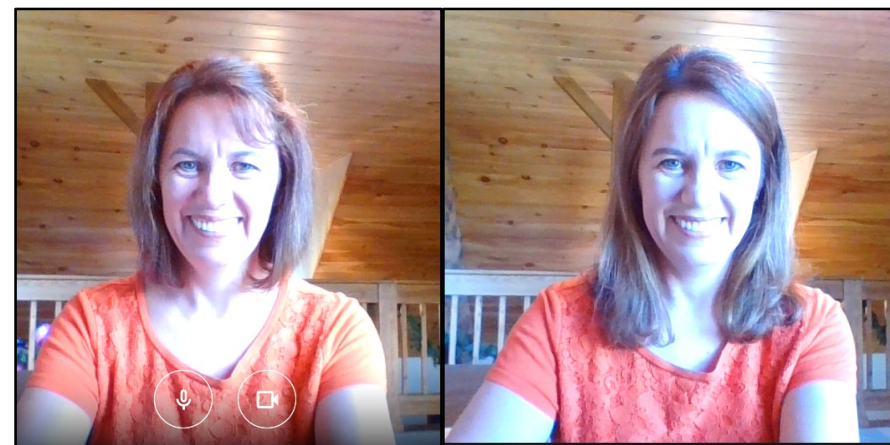




Cooperative Observer Program Updates

Amy Fritz
National Weather Service
May 2021



2020

2021

COOP Overview

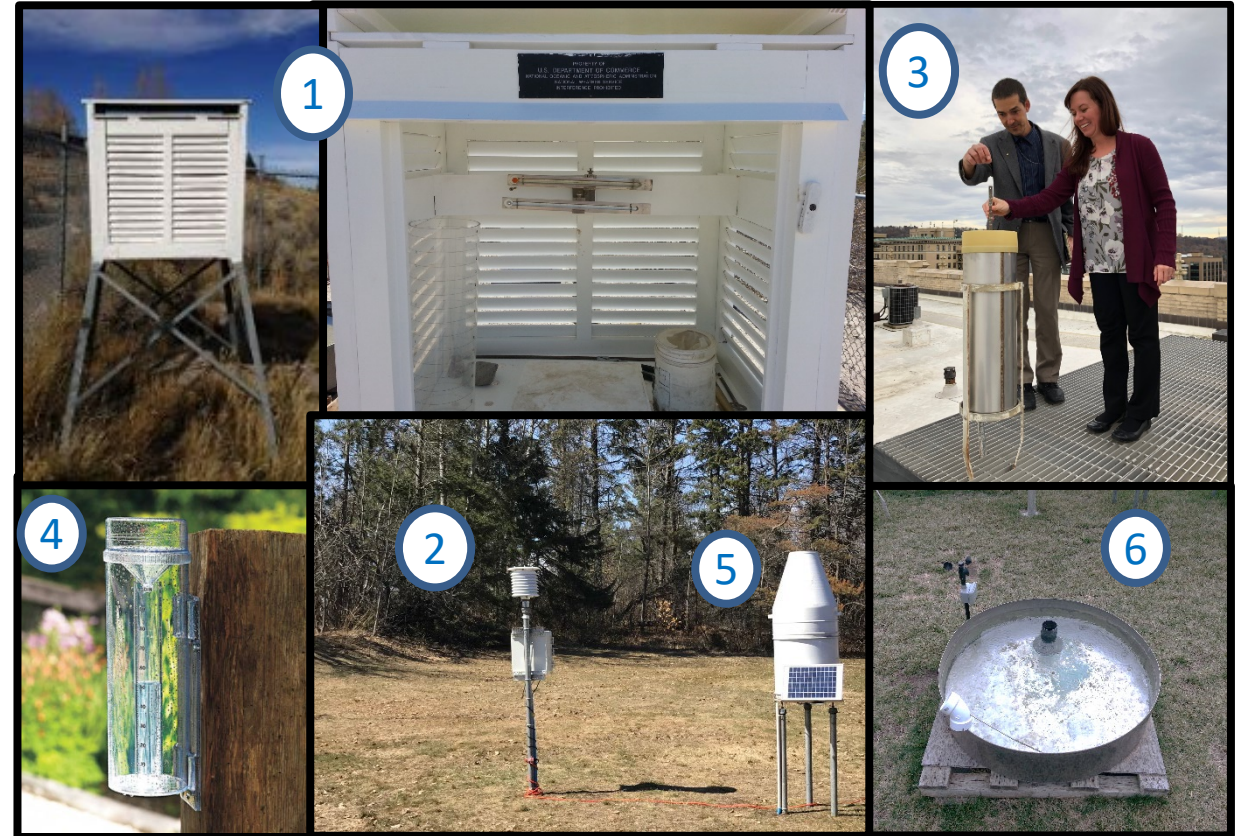
Equipment used to measure temperature

- 1) Liquid-in-Glass (LIG) thermometers housed in a Cotton Region Shelter (CRS)
- 2) Max/Min Thermometer System (MMTS)

Equipment used to measure precipitation

- 3) Standard 8" Rain Gauge (SRG)
- 4) Plastic 4" Rain Gauge
- 5) Fisher-Porter Rain Gauge

Other equipment used to measure snowfall, snow depth, evaporation (6), and other hydrological elements





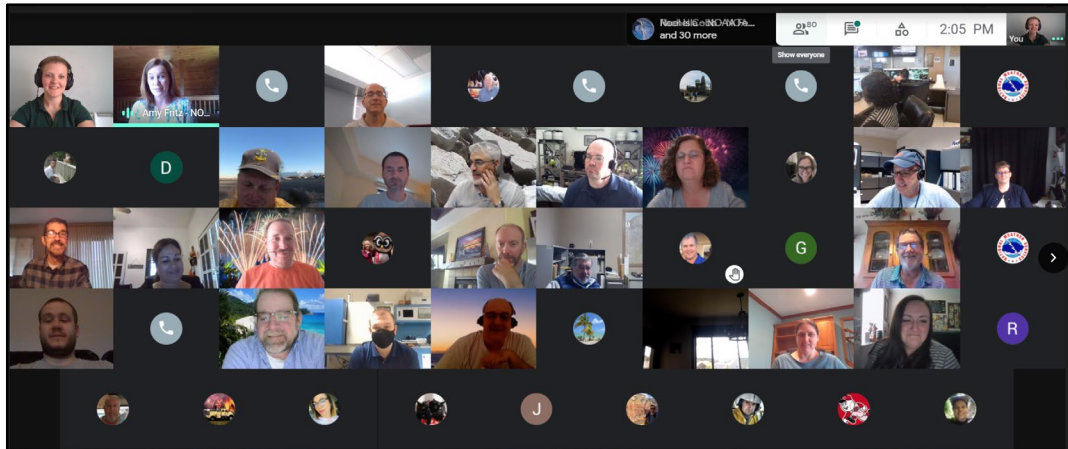
COOP Overview



NWS COOP Program Updates

Recent Activities:

- Baseline program continued – Unofficial COOP sites
- National COOP Plan drafted
- Restock equipment and supplies
- Covid-19 impacts
- Innovations





NWS COOP Program Updates



Unofficial COOP (UCOOP) sites:

- Identified 682 sites (242 remaining sites)
- Recommended sites either be:
 - Made into Official COOP sites = 111
 - Designate under another program = 373
 - Disposed (already inactive or closed) = 75
- Other NWS program designation for UCOOPs:
 - Hydrology/Drought Monitor = 240
 - SnowPaid = 48
 - Fire Weather = 8
- **CoCoRaHS or Weather Spotter = 77 (57 already converted)**
- Remaining sites are either used for Synoptic reporting at forecast offices (81) or yet to be determined (42).
- Official Memo signed and disseminated on **April 20th, 2021**





NWS COOP Program Updates



Recent Activities: National COOP Plan

- Four priorities
 - New instrument solution
 - New software system
 - Workforce
 - Volunteers
- First draft submitted Summer 2020
- Reviewed by Office of Observations and Regional Directors
- Feedback incorporated into revisions
- Second draft submitted for second review prior to official routing March 18th, 2021



Volunteer at Yampa, CO receiving service award



NWS COOP Program Updates



Recent Activities: Restock equipment and supplies

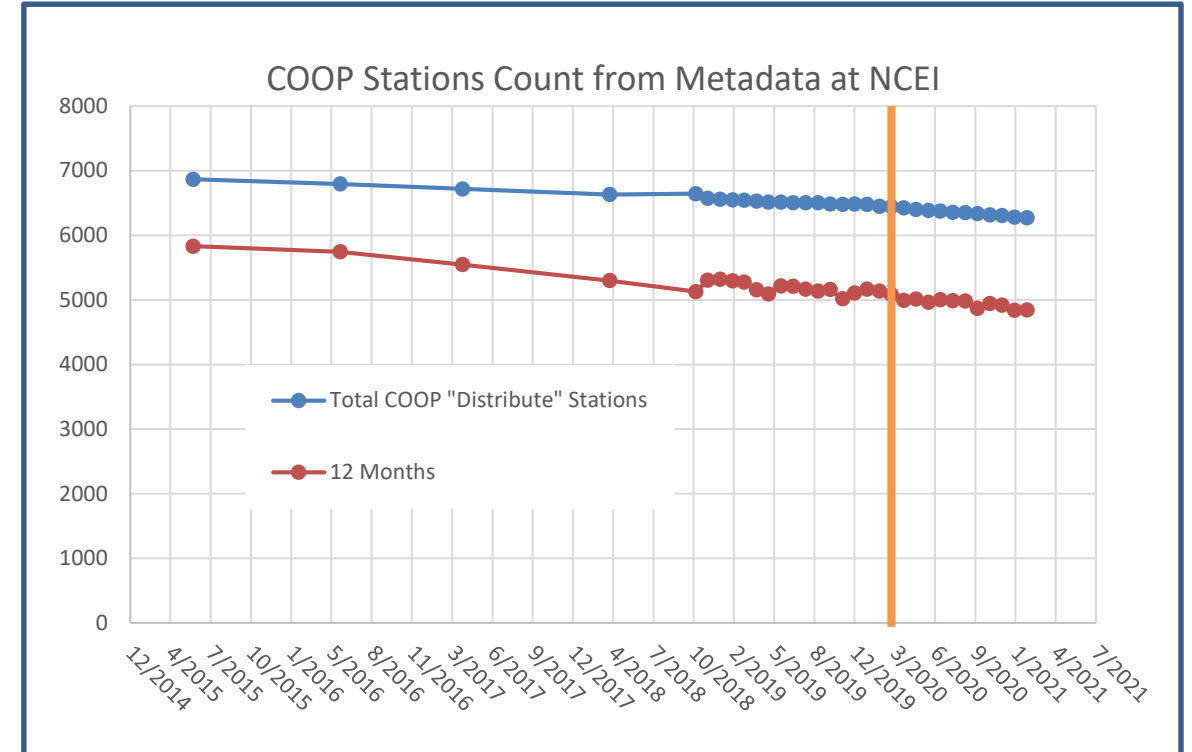
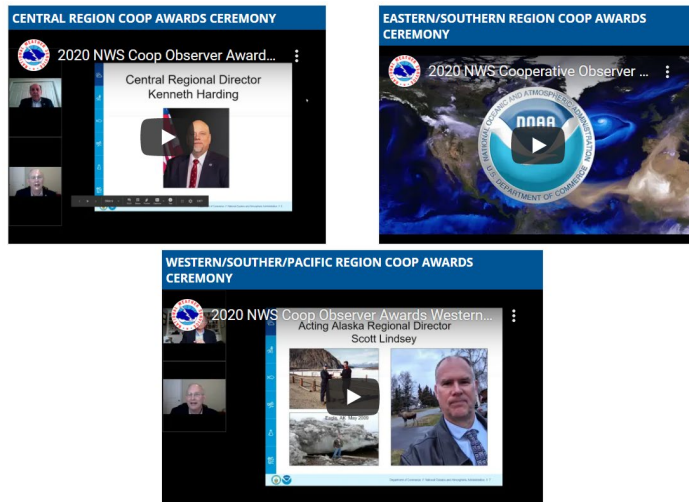
- 4" plastic rain gauge (CoCoRaHS) - Qty: 700
 - Different mounting bracket
- Lightning Protection (smaller grommets)
- Digital Thermometers (Evaporation)
- Evaporation pans



NWS COOP Program Updates

Recent Activities: Covid-19 impacts

- Observations
- Maintenance
- Award Ceremonies
- Training



Graph of daily reported observations (2014-2021), does not include hourly precipitation data from Fischer Porter Rain gauges.
Data courtesy of NCEI.



NWS COOP Program Updates



Recent Activities: Innovations

- MMTS – Wireless
- Cellular COOP



MMTS-Wireless at Sterling Field Support Center

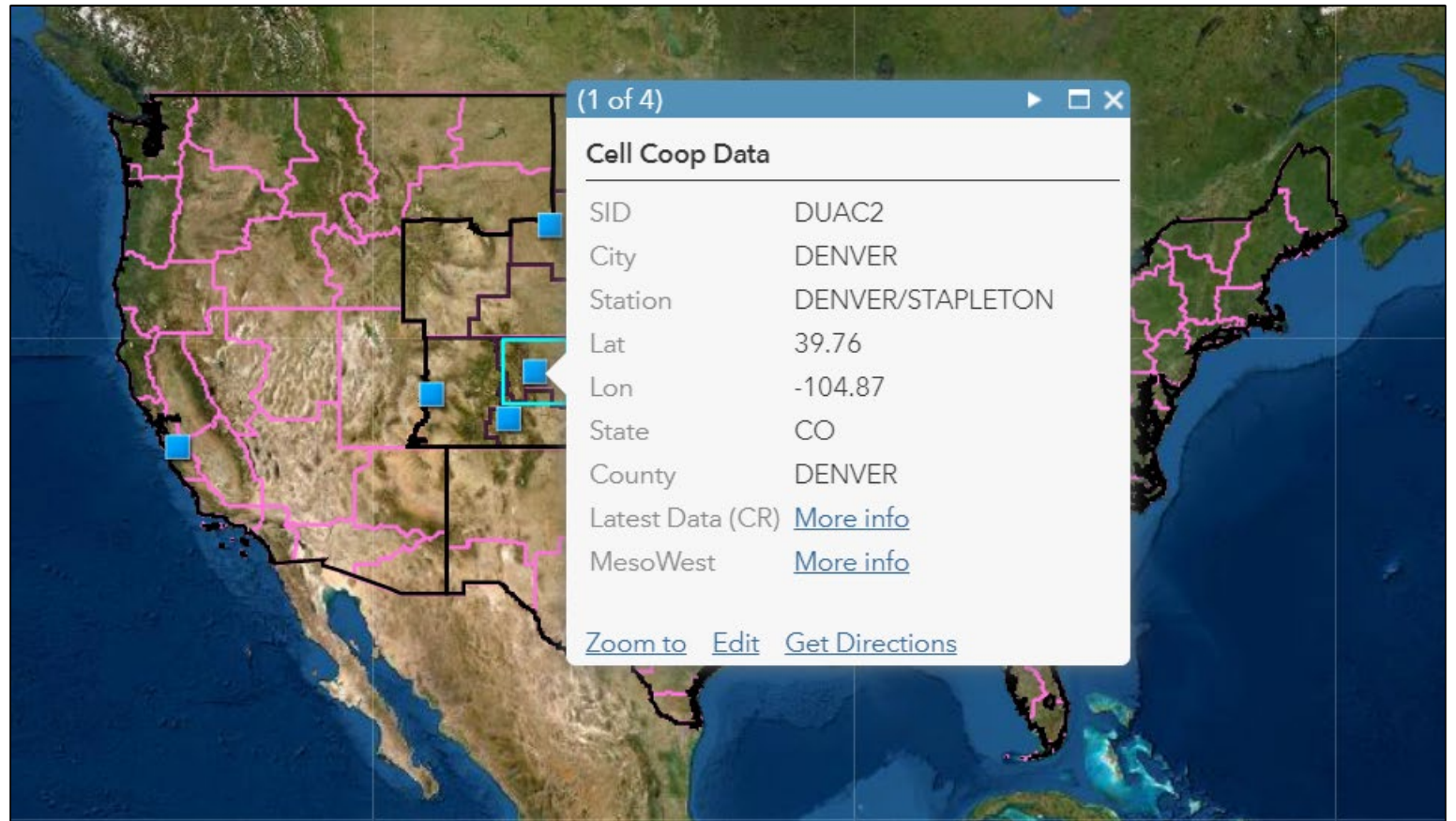


CCOOP at Sand Lake National Wildlife Refuge, SD

NWS COOP Program Updates

Recent Activities: Cellular COOP

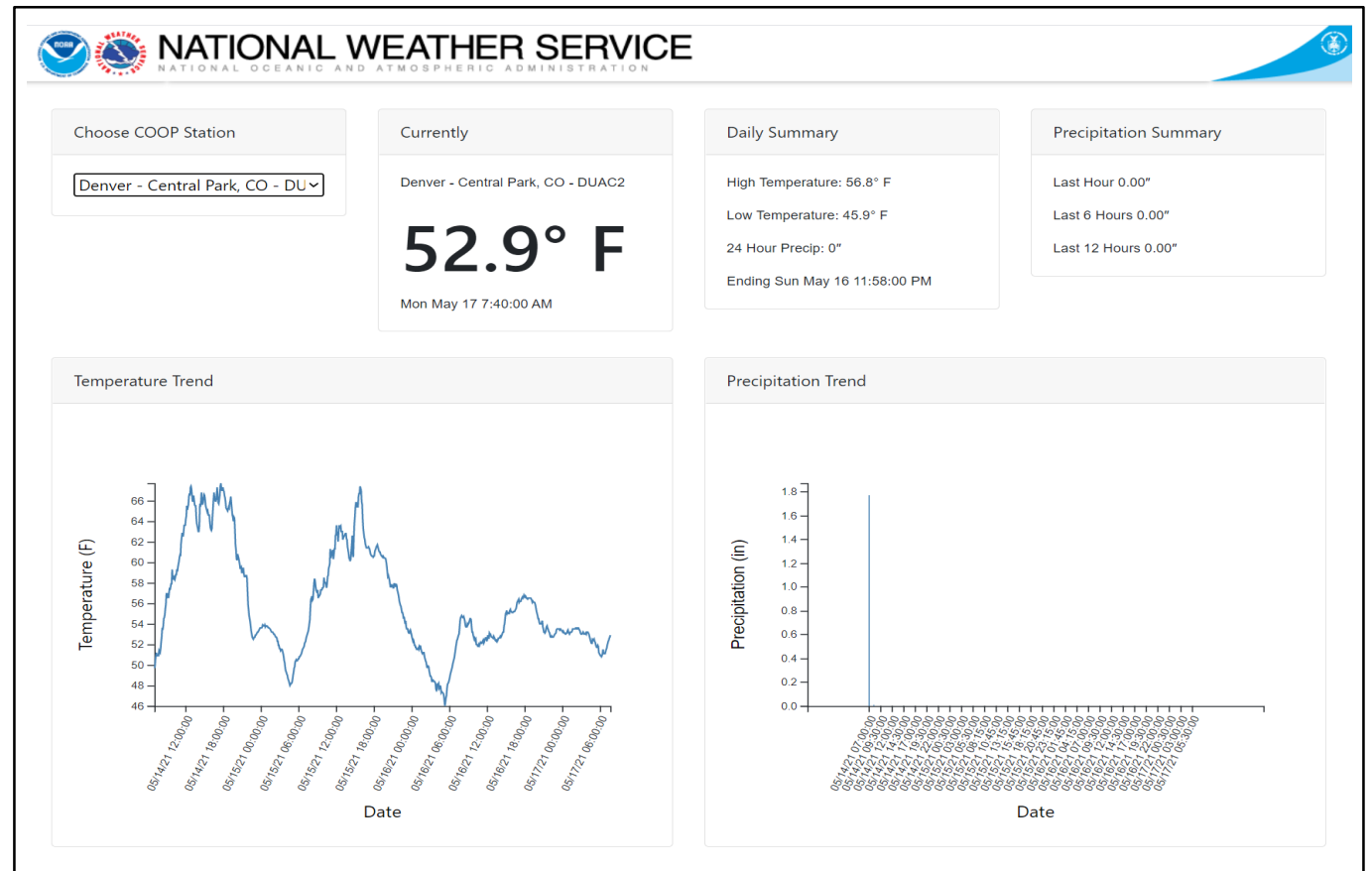
- Prototype
- Stopgap measure
- Preserving USHCN
- Very limited (30 sites)



NWS COOP Program Updates

Recent Activities: Cellular COOP weather.gov/crh/ccoop

- **Daily reports:**
 - 24 hour Min and Max Temperature,
 - Temperature at time of observation
 - 24 hour precipitation
- **Extras**
 - Current Temperature - every 5 minutes
 - Precipitation Level - every 15 minutes
 - Automatic transmission of monthly HPD log files to NCEI





NWS COOP Program Updates



Questions?

