



Natural Resources Conservation Service
National Water and Climate Center



Strategic Plan

Fiscal Years 2015-2019



More Information

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National Water and Climate Center Strategic Plan

Fiscal Years 2015-2019

Mission

To lead the development and transfer of water and climate information and technology which support natural resources conservation.

Vision

To be a globally recognized source for a top-quality network of spatial snow, water, soil moisture, climate, and hydrologic information and technology.

Functions

The functions of the National Water and Climate Center (NWCC) are:

- Water Supply forecasting for western states
- Operating SNOTEL, snow course, and SCAN snow and climate data collection networks
- Storing and disseminating water and climate information nationwide

These support core NRCS functions:

- Natural resources planning
 - Data acquisition and management
 - Field operations assistance
 - Technology innovation and transfer
 - Partnerships and joint ventures
 - Program-wide training
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Strategic Objectives

With these main functions as a framework, the **National Water and Climate Center Strategic Plan** uses the broader objectives of the [Natural Resources Conservation Service \(NRCS\) Strategic Plan](#) to outline its strategies.

NRCS Chief Weller has set the following priorities for fiscal year 2015:

1. Deliver excellent service
 2. Strengthen conservation delivery
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3. Enhance and expand science and technology abilities
4. Broaden reach to customers

In addition, the NRCS Strategic Plan targets three goals:

1. Get more conservation on the ground
2. Increase organizational effectiveness and efficiency
3. Create a climate where private lands conservation will thrive

Objective 1: Get More Conservation on the Ground

Objective 1.1 Support natural resources planning: Maintain, expand, and improve the data collection network.

Strategic Initiatives:

- Maintain field operations to meet specified data quality, reliability, and delivery goals for the Snow Telemetry (SNOTEL) network and the Soil Climate Analysis Network (SCAN).
- Diversify telemetry at SCAN and SNOTEL sites in order to improve data acquisition and lower data acquisition costs.
- Improve efficiency of site operations by converting select snow courses to SNOTEL sites and automating aerial markers (SnoLite) by adding telemetry.
- Set standards for performance, quality, and maintenance of measurement sites for alternative telemetry types to maintain high quality data.

Objective 1.2 Support natural resources planning: Maintain, expand, and improve the water supply forecasting function.

Strategic Initiatives:

- Maintain existing water supply forecasting activities with added emphasis on forecast model updating and on forecast verification.
 - Improve capabilities of existing forecasting tools to enhance functionality, include new data types, and automate manual processes.
 - Develop hydrologic simulation model to expand operational and research applications.
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Objective 2: Increase Organizational Effectiveness and Efficiency

Objective 2.1 Improve ability to respond effectively to customer requests.

Strategic Initiatives:

- Document core functions, employee roles and responsibilities, and business rules in order to keep processes known and consistent throughout the program.
- Develop an NWCC intranet site in order to keep employees informed.
- Continue to improve the data integrity of WCIS databases by eliminating outdated and deprecated stations and station datasets, verifying metadata, and providing appropriate access to SSWSF Program staff.
- Transition into a unified organization with oversight for the Snow Survey and Water Supply Forecasting Program to optimize operations.

Objective 2.2 Program-wide training. Provide mandatory safety training and ongoing operational training.

Strategic Initiatives:

- Manage annual West-wide Snow Survey Training and Tower Climbing Training programs to ensure safety in the field.
- Manage ongoing Field Operations Workshop, Standard Program Operation Training, and SCAN Operations Training to improve operations.

Objective 2.3 Data acquisition and management. Improve delivery of information and products.

Strategic Initiatives:

- Enhance web services to allow for more efficient data transfer.
 - Provide improved data editing tools and thorough documentation of the standard operating procedures and protocols for data management to ensure the highest quality data is being delivered to customers.
 - Streamline NWCC web site and products to provide easier access to data, water and climate products, and applications.
 - Replace legacy software with web applications to provide easier access to data.
 - Improve application access security and provide limited access to specific site information (role management) to ensure data integrity. Investigate the use of z-roles for implementation.
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Objective 2.4 Ensure reliability and failover capability for mission-critical applications and data repositories.

Strategic Initiatives:

- Migrate Water and Climate Information System (WCIS) databases and web applications to primary NITC HA site to ensure accessibility and reliability.
- Ensure failover NITC site is operational.
- Develop a web application for assessing the operational health of the data network to help duty officers maintain data access.
- Eliminate legacy databases and merge current databases to eliminate duplication and ensure data integrity.

Objective 3: Create a Climate Where Private Land Conservation Will Thrive

Objective 3.1 Technology innovation and transfer. Provide tools for producers to adapt to climate change.

Strategic Initiatives:

- Assess impact of climate change and variability on snowpack and water availability using data from high elevation snow sites.
- Develop interactive map that shows site climate conditions so users can access specific information for their conservation plans and practices.
- Add information to data reports indicating level of quality control and assurance (data flagging) to help users understand the data.
- Produce an internet-based, centralized Geographic Information System and repository to incorporate the PRISM climate dataset.

Objective 3.2 Field operations assistance. Enhance and improve instrumentation at data collection sites.

Strategic Initiatives:

- Expand the suite of environmental sensors installed at Snotel and Scan monitoring sites
 - Continue research and evaluate the latest technology and sensor configuration to be able to reduce operating costs of the program and reduce any environmental footprint from monitoring efforts.
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