

North Platte Natural Resources District

Community Drought Plan

Adopted and Effective _____, 2017

Vision Statement: What we do today to plan and prepare for drought will affect our regional community both now and into the future.

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List of Acronyms Used in This Plan

DAMT	Drought Assessment Monitoring Team
DEQ	Nebraska Department of Environmental Quality
DHHS	Nebraska Department of Health and Human Services
DPCT	Drought Preparedness Communications Team
ESU	Education Services Unit
FEMA	Federal Emergency Management Agency
FWS	United States Fish and Wildlife Service
IMP	integrated management plan
NARD	Nebraska Association of Resources Districts
NDMC	National Drought Mitigation Center
NEMA	Nebraska Emergency Management Agency
NET	Nebraska Environmental Trust
NIDIS	National Integrated Drought Information System
NOAA	National Oceanic and Atmospheric Administration
NPNRD	North Platte Natural Resources District

NPVIA	North Platte Valley Irrigators Association
NRCS	Natural Resources Conservation Service
NRD	Natural Resources District
NSIA	Nebraska State Irrigators Association
NWRA	Nebraska Water Resources Association
PPHD	Panhandle Public Health District
PRBE	Platte River Basin Environments
PRRIP	Platte River Recovery Implementation Program
UNL	University of Nebraska Lincoln
US	United States
USACE	United States Army Corps of Engineers
USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
VFW	Veterans of Foreign Wars
WSF	Water Sustainability Fund

Introduction

The North Platte Natural Resources District (NPNRD), comprised of several counties in the Nebraska Panhandle (Map 1), frequently experiences droughts of varying length and severity. Drought affects local water supplies, agricultural production, and community well-being, and the effects of drought on the NRD can last for many years. As a result, the NPNRD Board of Directors authorized a drought-planning process to prepare the District for future droughts.

The NPNRD initiated its first-ever drought planning process in November 2016, with the successful staging of a Drought Tournament. This event, hosted in collaboration with the National Drought Mitigation Center (NDMC), brought together stakeholders from a variety of sectors across the District, including local government, agriculture, education, media, and commerce/industry. Tournament participants were asked to consider a specific set of drought conditions and develop drought mitigation, response, and recovery strategies to address the challenges arising from the drought scenario presented. The Drought Tournament provided an initial opportunity for stakeholders from across the District to begin discussing together the challenges and opportunities that NPNRD communities may face during drought. These conversations, and the ideas they generated, have evolved into the current Drought Plan.

To conceptualize its own interests in having a drought plan, the NPNRD developed preliminary goals and objectives to describe the NRD's intended outcomes for the process. The drought-planning stakeholders brought to the planning process their own personal and

sector-related definitions of drought vulnerabilities and impacts, as well as ideas for how to address them. As a result, some of the above-listed goals and objectives have been retained in the current Community Drought Plan, whereas others have been set aside or redirected toward the focus of this Plan. This Community Drought Plan represents the combined efforts of planning stakeholders and NPNRD staff to address the needs of the NPNRD itself and the various communities that exist within its borders.

As part of the review process, the NPNRD and stakeholders sought the input of the Advisory Group members listed at the beginning of this document. The organizations in this group have a direct connection to the NPNRD's existing responsibilities and/or would be involved in the implementation of a drought plan. Thus, the NPNRD invited representatives from these organizations to share information with the stakeholders during the planning process, as well as provide review assistance with the plan document itself. NPNRD stakeholders will continue to call on Advisory Group organizations both for implementation of the current Plan and for future revision of the Plan.

Plan Sections

- A. Education
- B. Drought Monitoring
- C. Impacts and Vulnerabilities Addressed in This Plan
- D. Plan Implementation, Evaluation, and Modification

NPNRD Community Drought Plan Goals, Objectives, and Action Items

A. Education

Goal 1: Educate the entire community on droughts and its effects, emergency management, and sustainable conservation practices.

Goal 1 Objectives and Action Items

Objective A: Municipalities will provide education and outreach to their citizens, system water users, and surrounding communities on water conservation and water efficiency practices.

Action Item I: Scottsbluff and Gering will set up a website with each municipality's specific water-conservation and drought policies, ordinances, outreach materials for citizens and smaller communities to access easily.

- A. Public works staff from the City of Scottsbluff and City of Gering will work with respective city clerks and/or city managers on website development.
- B. City of Scottsbluff stormwater management specialist will look into incorporating both general outreach and website-specific information into Scottsbluff's stormwater management plan.

Action Item II: NPNRD will assist in encouraging communication and sharing of information between municipalities within the District.

- A. Scottsbluff and Gering will continue ongoing staff-level discussions and collaborations.
- B. NPNRD, Scottsbluff, and Gering staff will look for additional ways to assist staff and leaders in other communities within the NPNRD.

Action Item III: NPNRD and drought-planning stakeholder entities will cooperate in using social media to provide drought-related education on topics keyed to stakeholder entities' respective areas of expertise (e.g., public health).

Action Item IV: NPNRD will assemble a list of contacts at agencies in the region and the emergency-related information each agency has available.

- A. This list will include churches, shelters, related nonprofits.
- B. NPNRD will contact Panhandle Partnership to ensure that Partnership's existing contact-list website also includes all contacts on the NPNRD's list.

Goal 2: Collaborate to explore opportunities to bring water education to additional younger groups (e.g., vocational, applied sciences, agricultural education, high schools).

Goal 2 Objectives and Action Items

Objective A: NPNRD will coordinate the gathering of information from the following groups, as well as other groups that may have water-education resources available:

- Nebraska Game & Parks Commission
- municipalities

- Riverside Discovery Center
- ESU13
- University of Nebraska Extension
- National Drought Mitigation Center
- National Park Service
- Nebraska Forest Service
- Nebraska Water Resources Association
- Nebraska State Irrigators Association
- Nebraska Well Drillers Association

Objective B: NPNRD and partnering organizations will create web-based clearinghouse of state education standards and schools, including link to “speakers bureau”, topics list, and curriculum bank, to connect classrooms, educators, and expertise.

Action Item I: ESU13, UNL Extension, and NPNRD will partner to apply for a Nebraska Environmental Trust grant and/or STEM (Science, Technology, Engineering, and Math) funding to develop web platform, in collaboration with entities that could provide expertise.

Action Item II: ESU13, UNL Extension, and NPNRD will seek out private-sector partners to assist in the grant-application process and in project accomplishment.

Action Item III: ESU13, UNL Extension, and NPNRD will coordinate with NDMC on potential NOAA NIDIS funding opportunities.

Goal 3: Develop and promulgate water education for adult populations.

Goal 3 Objectives and Action Items

Objective A: NPNRD will coordinate with groups listed in Goal 2, Objective A, along with local Chambers of Commerce, to develop water education for adults.

Action Item I: Include speakers, topics, and curriculum notes focused on adult education in the “speakers bureau”.

A. Include outreach on residential drought preparedness.

Action Item II: Request that specific formation on water conservation be added to the sustainable-landscaping portion of the Master Gardener certification program.

A. Work with current certified Master Gardener to submit request to the local Master Gardener program coordinator at UNL Extension.

B. Encourage Master Gardeners to include water conservation as part of required volunteer work and education efforts.

Action Item III: NPNRD will initiate efforts to incorporate water conservation topics into realtor continuing education programs.

A. NPNRD will work with Nebraska Real Estate Commission to get water education information approved for inclusion in curriculum.

Action Item IV: Municipalities and county planning/zoning authorities will provide requirements and information to local builders' association to encourage including water efficiency and conservation considerations in new and renovated construction.

- A. Incorporate additional permeable surfaces into planning for new construction areas.
- B. Incorporate planning to prevent or minimize impacts to water quality from construction and new land uses.

Action Item V: NPNRD will work with municipalities and other organizations to develop education materials to distribute to wider community.

- A. NPNRD, Master Gardeners, UNL Extension, and municipalities will develop pamphlets on water education and water conservation.
 - i. NPNRD, municipalities, realtors, and volunteers will distribute pamphlets to citizens at, e.g., real estate sales closings, utility sign-ups, and community events.
- B. NPNRD will develop items (e.g., columns, notices) suitable for newsletters and newspaper inserts.
 - i. NPNRD will coordinate with irrigation districts, public power districts, and municipalities to include items in informational materials distributed by the districts and cities.
- C. NPNRD will explore opportunities to incorporate YouTube/social media educational videos into education and outreach efforts.
 - i. NPNRD will capitalize on existing partnerships to produce short education segments for social media distribution. Partnerships will be utilized to ensure the following:
 - Sharing technical and technological expertise
 - Aligning priorities
 - Involving schools
 - Maintaining a consistent message
 - Capacity building
 - ii. NPNRD will partner with municipalities and other entities to put on a workshop on how to tell a story with Facebook/YouTube videos

Action Item VI: NPNRD and municipalities will collaborate to provide education to maintenance personnel at commercial, multi-unit residential, assisted living, etc., facilities on water conservation practices to incorporate into existing landscaping and maintenance operations at such facilities.

- A. Targeted audiences will include landscapers and the local nursery association on installation/planting and maintenance aspects of water conservation.
- B. Targeted audiences will include engineers and architects on design aspects of water conservation (e.g., incorporating sustainable landscaping into design plans).

C. NPNRD will work with respective state certifying commissions or boards to get water-education materials approved for inclusion in continuing education curriculum, where appropriate.

Action Item VII: NPNRD will work with local restaurants and municipalities to incorporate water conservation strategies into restaurant operations.

A. Build on ongoing efforts already in place for municipal stormwater education initiatives.

B. Include public in education campaigns to encourage changes in behavior when patronizing restaurants in their communities.

Action Item VIII: NPNRD will leverage its participation in the Conservation Partnership for the Nebraska Panhandle and work with private industry to put on field days and demonstration projects designed to showcase water-conservation practices in agricultural and non-agricultural settings.

A. NPNRD and its partners will cultivate connections with active and retired farmers to volunteer as speakers or demonstrators.

B. NPNRD and its partners will develop eye-catching signage to call attention to projects and successes.

C. NPNRD and its partners will collaborate to develop online attendance options to capture attendees who may not come in person.

Objective B: Hold Water Symposium on local water and water issues for the general public, potentially as annual event.

Action Item I: NPNRD will form committee of volunteers from the following entities to put together the structure and program of the symposium.

- Irrigation districts
- UNL Extension
- Municipalities
- US Bureau of Reclamation

A. The Symposium program will be designed to provide information on surface water, groundwater (quantity and quality), municipal use, water reuse, and other relevant topics selected by the committee and contributors.

B. NPNRD will explore the possibility of tying the Symposium schedule into annual Scottsbluff/Gering Chamber of Commerce water tour.

Action Item II: Work with NDMC to develop a drought-update component for the symposium.

B. Drought Monitoring

Goal 1: Establish a Drought Assessment and Monitoring Team (DAMT) to review climate and other conditions.

Goal 1 Objectives and Action Items

Objective A: NPNRD will coordinate the establishment and operation of the DAMT.

Action Item I: Gather team representatives from following entities, and others as appropriate:

- Universities (UNL Extension, Colorado State University, University of Wyoming)
- National Drought Mitigation Center
- Nebraska Department of Natural Resources
- Irrigation districts
- Bureau of Reclamation (data supply)
- NPNRD summer internship involvement - include in intern duties

Action Item II: NPNRD will communicate responsibilities and expectations of representatives and of DAMT.

Objective B: DAMT will monitor meteorologic, hydrologic, and other tools to assess current and projected conditions for the region.

- Groundwater levels
- Range conditions
- Snowpack
- Surface water storage
- Temperatures
- Precipitation amounts and patterns
- Vegetation
- Soil moisture
- Public health indicators, warnings, and reports
- Reports of disruption in water service

Action Item I: Establish data-monitoring schedule and frequency of meetings, which may be keyed to the specific season and prevailing conditions as follows:

- Weekly: gather information and disseminate to team members
- February-June: meet more frequently and focus attention on water supply
- June-September: meet occasionally and focus on current weather conditions and water use-practices
- October-January: meet one or two times and focus on (1) reviewing previous conditions; (2) examining responses to conditions; and (3) identifying ways to improve assessment

Action Item II: Identify data, tools, and indices that DAMT will monitor.

- A. Work with NEMA and similar organizations to take advantage of other existing monitoring and experience.

Action Item III: Research potential trigger thresholds for various impacts or conditions, to use in formulating recommendations to decision-makers and informing public.

- A. Consult with experts in relevant areas (e.g., wildlife, fire) to determine what triggers would be useful to those areas for decision-making purposes.
 - i. Start with snowpack, forecasted runoff into reservoirs for water supply
- B. Identify specific “trigger-point stakeholders” who receive information for wider dissemination when a given trigger or threshold is reached. Such stakeholders may include, but not be limited to, the following:
 - media
 - municipal staff and/or officials
 - financial sector representatives
 - county officials

Action Item IV: Develop informational materials and recommendations to decision-makers based on information team has assessed.

- A. Include information on factors contributing to or affecting current situation and how conditions may evolve.
- B. Communicate reports first to decision-makers and second to general public.
 - i. Involve decision-makers as specific triggers are reached.
 - ii. Publish quarterly reports online, and more often if a specified trigger is reached
- C. Educate decision-makers on team’s purpose, operations, and reporting
 - i. Invite officials to team meeting to introduce concept of team and information that will be made available, including takeaways and triggers.
 - ii. Include the following individuals and entities across the NPNRD in team’s education effort:
 - city administrators
 - mayors
 - department directors (e.g., water, utilities, health, law enforcement)
 - county commission chair
 - emergency management director
 - media
 - rural fire chiefs
 - National Park Service
 - Nebraska Game and Parks Commission
 - DHHS
 - DEQ
 - churches/ministerial organizations

Action Item V: Conduct annual self-assessment of team’s work.

- A. Define measurable tasks or results that can be assessed quantitatively.
- B. Solicit input from the following, to determine how effective team's assessment and information-sharing activities have been from target audiences' perspectives.
 - Drought planning stakeholders
 - Municipalities and other entities or decision-makers who formulate policy or regulations based on the NPNRD Drought Plan or DAMT's recommendations
 - Water users (e.g., irrigators, rural domestic well owners, livestock owners, downstream entities outside NPNRD)
- C. Publish yearly reports to track team activities and successes, as well as lessons learned.
 - i. Establish website on which DAMT's reports and information can be accessed.
 - ii. Archive annual reports on individual team members' websites.
- D. Link self-assessment results to activities outlined in Evaluation section of this Drought Plan.
 - i. Determine whether DAMT's triggers are appropriate and fit with the NPNRD Drought Plan goals, objectives, and evaluation criteria.
 - ii. Examine overall operational function of monitoring and identify process improvements that may be needed.
 - iii. Assess effectiveness of reporting efforts in conveying necessary information to implement the provisions of the NPNRD Drought Plan.

Goal 2: NPNRD will make available on its website the water-level and water-quality information collected from NPNRD monitoring wells.

Goal 2 Objectives and Action Items

Objective A: NPNRD will post on its website the presentations given at NPNRD Board meetings on water levels and water quality and incorporate presentations into social media platforms.

C. Impacts and Vulnerabilities Addressed in This Plan

I. Vulnerability: Municipal water use

Goal 1: Encourage municipalities within the NPNRD to implement water rate increases and water restrictions, with enforcement provisions, in times of drought.

Goal 1 Objectives and Action Items

Objective A: NPNRD will work with the organizations listed below to develop messaging to communities on the importance of drought-linked water rates and restrictions as part of municipal water policy.

- Crane Trust

- Central Nebraska Public Power & Irrigation District
- Nebraska Public Power District
- Platte River Recovery Implementation Program
- Platte River Basin Environments

Action Item I: NPNRD will contact the organizations to solicit messaging input and request that a staff person work with the NPNRD on outreach to communities.

Action Item II: The community messaging group will agree on the type and content of the messaging to be presented to municipalities and general public.

- A. NPNRD will coordinate document circulation and conference calls, as needed, to facilitate communication with the group.
- B. Group members will collaborate on the following:
 - outlining themes
 - researching similar ordinances and policies in other communities
 - identifying costs and benefits of implementing such ordinances

Action Item III: NPNRD and group members will work with municipal staff in each community to formulate messaging to city councils on why the new policy should be implemented.

- A. NPNRD will coordinate meetings with municipal staff to discuss policy ideas and strategies for presentation to municipal decision-makers.

Objective B: NPNRD, along with select group members, will present the request for municipal policy change to municipal decision-makers.

Action Item I: NPNRD will submit requests to place a policy-change item on city council agendas.

- A. NPNRD and select group members participate in municipal committee meetings prior to council meetings in which the proposed policy change will be discussed.
- B. Provide materials to decision-makers on costs and benefits of proposed rate changes.
- C. Give examples from other municipalities with similar ordinances and water-rate structures.

Action Item II: Support municipal staff and decision-makers in presenting information to general public at informational meetings, as well as public hearings.

Action Item III: Provide assistance to municipalities, if requested, in designing new ordinances and water rate structures.

Goal 2: Encourage municipalities in the NPNRD that do not currently have individual service-connection water meters within their water systems to install such meters.

Goal 2 Objectives and Action Items

Objective A: Explore NRD rule-making authorities or other regulatory avenues to provide push to cities, in conjunction with utilizing available funding sources (Drinking Water State Revolving Loan Fund, USDA Rural Development, etc.).

Action Item I: NPNRD staff will work internally on municipal-metering concepts for rules changes.

Goal 3: Identify and educate non-municipal public water systems and non-municipal commercial/industrial facilities on water conservation in drought and on metering, if applicable.

Goal 3 Objectives and Action Items

Objective A: NPNRD, DHHS, and individual counties will work together to identify water systems in the NPNRD in order to conduct targeted outreach.

Action Item I: NPNRD will assemble contact information for non-municipal systems from available resources.

Objective B: NPNRD will work with non-municipal systems to learn what these systems are already doing and develop education information tailored to systems' needs.

Action Item I: NPNRD will survey non-municipal systems to determine whether conservation measures are currently in place, including metering.

Action Item II: NPNRD will develop outreach materials based on the needs and knowledge gaps identified for area non-municipal systems.

A. NPNRD will work with DHHS and county officials to take advantage of existing outreach materials.

B. NPNRD, DHHS, and county officials will identify key regulatory or other topical items to include in outreach.

II. Vulnerability: Preparedness

Goal 1: Engage in community emergency-preparedness activities to determine strengths and weaknesses of existing emergency-response plans.

Goal 1 Objectives and Action Items

Objective A: NPNRD will work with the City of Scottsbluff to develop a drought-related emergency-response exercise.

Action Item I: NPNRD will coordinate with the mayor and city personnel to structure an exercise scenario and define expectations and responsibilities for entities involved in the exercise.

A. NPNRD will identify the specific drought-related components to be included in the exercise.

B. Identify persons and organizations who will be involved in the exercise and their respective roles.

C. Where possible, incorporate components from involved organizations' existing emergency-management plans.

D. Use products from UNL Drought THIRA project as appropriate.

Action Item II: NPNRD and city personnel will identify assessment points needed from the exercise.

A. Determine what is being tested during the exercise.

B. Identify how the results of the exercise and its assessment will be used.

C. Develop a list of recipients for the final report.

i. Agree on talking points for discussing the exercise and assessment results.

Action Item III: NPNRD and city personnel will develop and agree on a budget for the exercise and associated results assessment and reporting activities.

Objective B: Use experiences from Scottsbluff exercise to develop similar exercises with other municipalities in the District.

Action Item I: NPNRD will work with municipal staff to develop plans for emergency-response exercises.

Action Item II: Get on agendas for city council meetings to discuss proposed exercises.

Action Item III: Coordinate with regional emergency management to incorporate multiple organizations within a single community.

Objective C: Explore opportunity to conduct a regional, possibly multi-hazard, preparedness exercise.

Action Item I: NPNRD will work with regional emergency-management personnel to identify opportunities for incorporating drought-related hazards into a regional exercise.

Goal 2: Develop and engage in residential preparedness training for citizens of the NPNRD.

Goal 2 Objectives and Action Items

Objective A: Work with Red Cross, NEMA, FEMA, DHHS, rural fire departments, and local emergency management offices to design training for District residents (urban and rural).

Action Item I: Ensure, using all possible outreach methods, that residents across the community know that training and resources are available.

Action Item II: Coordinate with agencies' existing training capabilities to increase frequency, priority, and emphasis in case of drought conditions developing or worsening.

Action Item III: Conduct training in cooperation with churches and independent non-profit organizations to make resources available to wider community populations.

Objective B: Conduct outreach in conjunction with local Kiwanis, VFW, and similar community organizations to promote residential preparedness.

Action Item I: Give presentations at the meetings of participating organizations emphasizing the importance and implementation of preparedness before drought or other emergencies.

- A. Coordinate with Red Cross, NEMA, and FEMA personnel to provide outreach materials and schedule presentations
- B. Include presenters and topics in the “speakers bureau” referenced in Section A, Goal 3, Objective A of this Plan.

Goal 3: Work with District churches on drought preparedness planning.

Goal 3 Objectives and Action Items

Objective A: Work with churches and similar organizations on preparing for how drought impacts the populations these organizations serve.

Action Item I: Provide outreach materials to these organizations discussing the nature of potential drought impacts and the importance of preparing in advance for such impacts.

Action Item II: Encourage these organizations to develop a preparedness plan for their internal use.

Action Item III: Provide expertise and assistance to organizations in their planning efforts, if invited.

Goal 4: Develop a Drought Preparedness Communications Team (DPCT), comprised of “trigger-point stakeholders” identified in Section B, Goal 1, Objective B of this Plan.

Goal 4 Objectives and Action Items

Objective A: Work with DAMT to identify trigger points (e.g., physical, seasonal) for which specific communication strategies are needed.

Action Item I: Develop tailored communication strategies as needed to maximize communication effectiveness for each trigger point.

- A. Tie frequency and topics to seasonal conditions.
- B. Explore existing warning systems to find ways to incorporate those structures into communications.
- C. As needed, establish internal “warning system” for levels of communication and coordination with other interested organizations.

Action Item II: Include DAMT monitoring and assessment information currently available in public communications.

Action Item III: Establish communications schedule for recurring messages.

- A. Identify topics and frequency for regular communications, as well as for special announcements or warnings.

Action Item IV: Gather existing materials on preparedness from Extension and other organizations with expertise.

A. Update these materials as needed to reflect current best practices.

Objective B: Identify stakeholder contacts with whom communications will be shared when designated trigger points are reached.

Action Item I: Contact representatives of the following to determine the appropriate contact persons for drought-related communications.

- city administrators
- mayors
- department directors (e.g., water, utilities, health)
- county commission chairs
- emergency management directors
- media
- rural fire chiefs
- National Park Service
- Nebraska Game and Parks Commission
- DHHS
- DEQ
- UNL Extension
- churches (ministerial associations)
- independent nonprofit organizations

Objective C: Encourage agricultural producers to consider what their own trigger points may be for various drought and drought-related conditions.

Action Item I: Gather information from producers at ag-related events and other community venues in which the DPCT participates.

A. Use information gathered from producers to improve preparedness communication tools and develop outreach services, as needed.

Objective D: Prioritize the development of communication materials (both written and verbal) for non-English-speaking populations.

Action Item I: Identify trusted individuals within target communities who will assist the team in developing and disseminating materials.

Action Item II: Identify additional community/population-related barriers to drought preparedness.

Objective E: Work with law enforcement and county communications directors to assess resources available and the ability to distribute communications materials to target populations.

Action Item I: Identify contacts in area law enforcement and communications.

Action Item II: Identify locations, services, etc., utilized by target communities and assess them for the possibility of dispersing drought-related information.

Action Item III: Utilize existing informational and communication outlets to distribute drought-preparedness and drought-impact outreach materials.

III. Impact: Public health

Goal 1: Provide information on resources available to individuals in coping with mental-health effects of drought and drought-related impacts.

Goal 1 Objectives and Action Items

Objective A: Work with Panhandle Public Health District to identify contacts and gather contact information for resources keyed to drought impacts.

Action Item I: Publish contact and resource information on PPHD website.

Action Item II: Include in home-health services and worksite wellness newsletters and notifications.

Objective B: Evaluate the feasibility of conducting drought-related public health events or programs.

Action Item I: Work with PPHD and NDMC to develop project and/or event proposals.

A. Consider available resources (e.g., funds, time, staff) needed to carry out projects or events.

B. Determine the best uses of combined PPHD and NPNRD resources for implementing projects or events.

Objective C: Encourage banks, financial entities, and federal agriculture-related offices provide, or continue providing, information on crisis hotlines for distressed ag producers.

Action Item I: Include the Nebraska Rural Response Hotline, a statewide hotline sponsored by the Farm Crisis Response Council of the Interchurch Ministries of Nebraska.

Objective D: Coordinate with the Farm Crisis Response Council to identify other mental-health resources available in drought.

Action Item I: Contact Council representatives to assess the resource information the Council currently has available.

Action Item II: Work with Council representatives to research additional resources that may be available at a local or statewide scale.

Action Item III: Develop a web clearinghouse or other accessible outreach methods for providing resource information to the public prior to a drought.

Goal 2: Provide additional avenues for distributing public-health warnings issued by DEQ and other entities.

Goal 2 Objectives and Action Items

Objective A: Work with PPHD, NDMC, and other agencies to develop education on the increased human-health risks of water-borne diseases related to falling water levels in ponds during drought.

Action Item I: DPCT will develop general education messages for owners of residential and livestock ponds in the NPNRD.

- A. Tie the content of the messages to public-health information being gathered by DAMT.

Objective B: Provide information to NPNRD residents on drought-related health impacts relative to pets, livestock, birds, and wildlife.

Action Item I: DPCT will develop general education messages for owners of domestic and commercial animals and livestock.

- A. Distribute information to veterinarians and cattle feeders in the NPNRD.
- B. Work with media to broadcast public service announcements.

Action Item II: DPCT will develop public advisories on recognizing and reporting distressed or diseased wildlife.

- A. Work with Game and Parks, the National Park Service, and municipalities to distribute information at public recreational facilities in the District.
- B. Identify private recreational enterprises in the District.
 - i. Contact such enterprises to discuss willingness to provide information to facility customers.

Goal 3: PPHD, Panhandle Partnership, Region 1 Behavioral Health Services, and similar organizations will collaborate to develop comprehensive list of resources for maintaining and improving the physical, mental, and spiritual health of the community during drought.

Goal 3 Objectives and Action Items

Objective A: PPHD will continue to work with individual communities to assess their Community Health Improvement Plans to include lists of available health resources in such plans.

Action Item 1: Incorporate the adding and updating of health-resources lists into regular (three-year) review of community plans.

Objective B: Develop mechanisms by which ongoing gathering of environmental data may allow organizations to connect more effectively to vulnerable populations.

Action Item I: Use discussions and updates to identify ways to improve how, and with what information, target populations are reached.

IV. Vulnerability and Impact: Water quality

Goal 1: Maintain or improve surface water and groundwater quality during drought.

Goal 1 Objectives and Action Items

Objective A: Educate domestic well owners on the importance of testing wells regularly.

Action Item I: Ensure that water quality is included in education effort on surface water-groundwater system, for youth and adults.

Objective B: Encourage more frequent testing of wells during drought.

Action Item I: NPNRD will increase the distribution of water testing kits to domestic well owners.

- A. Research effective at-home or simple mail-in kits.
- B. Develop informational materials to distribute to well owners along with kits.
- C. Provide kits to visitors at ag-related and community events in which NPNRD participates.
- D. Include kits in materials distributed to students during NPNRD classroom events.

Action Item II: Encourage well owners to provide test results to NPNRD for monitoring and assessment.

- A. Include a NPNRD postcard or mailing envelope with materials provided to well owners.

Action Item III: NPNRD will work with DPCT to provide information to domestic well owners and other community members in the case of changing water-quality circumstances.

Goal 2: Develop a drought-focused water-quality monitoring plan for the NPNRD.

Goal 2 Objectives and Action Items

Objective A: NPNRD will, in cooperation with DEQ and DHHS as needed, develop drought-related additional groundwater sampling and testing protocols.

Action Item I: Identify specific constituents of concern that may become more concentrated in groundwater during drought conditions.

- A. Research costs for testing additional constituents and laboratories that provide testing services for those constituents.
- B. Analyze the expected cost/benefit balance for the NPNRD to perform additional sampling and testing, offer assistance with sampling, and/or advise residents on the availability of testing services.

Action Item II: Develop sampling/testing plan for any additional analyses that NPNRD will perform.

- A. Identify particular geographic areas, as needed, on which additional sampling will be concentrated.
- B. Determine appropriate sampling frequency to monitor water-quality conditions during a drought.

- i. Develop trigger points according to length, severity, and nature of drought conditions.
- C. Include applicable limitations on number of additional samples, amount of funds available, or other factors that may affect the implementation of additional sampling.
- D. Describe how data generated from additional analyses will be handled.

Action Item III: Build drought-related sampling provisions into NPNRD's annual Water Quality Fund budget.

Action Item IV: Seek additional funding sources as needed to cover sampling and testing costs.

IV. Vulnerability and Impact: Water quantity

Goal 1: Identify strategies to address streamflow variability.

Goal 1 Objectives and Action Items

Objective A: Establish ad-hoc drought project committee for the purpose of researching ways to retain water in the District when excess or additional supplies are available. The committee membership should contain the following areas of expertise:

- Legal
- Engineering/scientific
- Local hydrology
- Municipal
- Regulatory

Action Item I: NPNRD will coordinate the business of the committee.

- A. Identify an initial contact person for committee, who will collect project ideas as they become available.
- B. Work with regional universities, including UNL School of Natural Resources, to explore opportunities to involve graduate students in relevant fields for data collection and project analysis.
- C. Schedule meetings.

Action Item II: NPNRD and committee members will establish and maintain relationships between project-relevant organizations, which may include the following:

- Irrigation districts
- NRCS
- USBR
- NRD
- DNR
- FWS
- NPVIA

- DEQ
- USACE
- PRRIP
- municipalities

Action Item III: Identify projects that would benefit District water users in the event of drought conditions developing, such as excess flows storage (e.g., aquifer recharge, reservoir/small dam projects).

A. The committee will examine factors such as the following, in determining the feasibility, benefits, and detriments of proposed projects:

- Timing of water into the system
- Relative ease of capturing single-event supplies
- Location within a given irrigation district or relative to existing infrastructure
- Provisions/priorities of grants or other funding source that would be used to pay for project
- Willingness of landowners, or incentives needed, to find land for project
- Multiple benefits from single project (e.g., recharge, water quality, emergency supply, depletion offsets, wetlands, threatened and endangered species)
- Insurance and liability considerations

Action Item IV: Examine regulatory framework necessary to accomplish projects.

A. Establish regulatory subcommittee to research state and federal statutes and local regulations that may affect a project's feasibility.

- NPNRD
- Irrigation districts
- Attorneys (local or regional)
- Municipalities

Action Item V: Identify scientific and technical information needed to implement projects.

- Check with regional engineering firms to determine whether potential project locations have previously been identified for other efforts.
- Research projects in greater region (e.g., Colorado Tamarack projects) to assess local applicability.
- Interview irrigation district personnel on potential locations within service-area boundaries.

Action Item VI: Pursue local and outside funding sources to be able to implement selected projects. Potential funding sources may include the following:

- PRRIP

- PRBE
- WSF
- NRCS
- USBR
- Municipalities
- Counties
- NRD
- Irrigation districts (in-kind)
- DEQ (for water-quality components)
- NET

Objective B: Pursue administrative avenues to streamline operations for maximum beneficial use of water supplies through better communication.

Action Item I: Clarify ability to store water from rain events.

Action Item II: Increase understanding of the downstream effects of changing surface-water operations above Lake McConaughy.

Action Item III: Work with downstream entities to address potential concerns associated with operational changes.

Action Item IV: Work with the legislative and state-agency staff to suggest changes to existing state laws and agency regulations.

A. Educate state senators and state-agency personnel on needed changes.

B. Provide written examples of legislative-bill or rules language.

Objective C: Ensure that provisions of this section are incorporated into the NPNRD's second-increment integrated management plan.

Action Item I: Design projects with both drought and IMP goals in mind.

Action Item II: Clarify in the IMP how depletions credit toward NPNRD's IMP goals will be identified.

Action Item III: Emphasize benefits to streamflows and downstream users from drought-related projects and drought-plan implementation.

A. Return flows timing

B. Consistency of water supply

Action Item IV: Identify in the IMP common goals and requirements for all sectors of water use.

Action Item V: Link allocations or other triggers for drought that are developed in accordance with Section B, Goal 1, Objective B, Action Item V and Section C, Subsection II, Goal 4, Objective A of this Plan to allocations and other groundwater and surface water controls in the IMP.

Goal 2: Encourage NRDs downstream to meter their water use and conserve water.

Goal 2 Objectives and Action Items

Objective A: Educate legislators on the need for more uniformity in local groundwater regulations, especially in fully or overappropriated areas.

Action Item I: Focus educational efforts on Natural Resources Committee chair and committee members.

Action Item II: Include Appropriations Committee on education topics related to potential funding to NRDs from state agencies.

Objective B: Utilize media outlets in other parts of the Platte River Basin to promote the message of NRD-led conservation in downstream portions of the basin.

Action Item I: Promote NPNRD Drought Plan as a tool for conservation efforts.

- A. Put messaging in the context of existing management and conservation efforts.
- B. Illustrate this plan as a “living plan” that builds on past efforts and adapts to future conditions.

Action Item II: Frame stories to highlight what this area is already doing and how those actions benefits the state as a whole.

- A. Include information on NPNRD management activities (e.g., well moratorium, allocations).
- B. Include features not strictly related to NRD management activities, including showcasing partners and collaborations that achieve conservation goals.

Action Item III: Provide media story material that will be accessible to urban, agricultural, and other sectors.

Action Item IV: Develop traditional and social media features targeted to specific audiences.

Action Item V: Design a schedule of messaging tailored to maximize effective audience reception.

- A. Consider running items every two weeks.
- B. Look at marketing research to find out optimal frequencies for various media and message types.

Objective C: Use existing contacts to create opportunities for connecting with both existing and future board members from other NRDs.

Action Item I: Integrate networking with other NRD Board members into Drought Plan partners’ existing activities, such as at the following events:

- NWRA and NSIA meetings
- NARD meetings

Action Item II: Utilize the services of the UNL Water Center/Extension’s NRD liaison to understand common interests across NRDs.

Goal 3: Consider further temporary reductions in water use during severe, multi-year droughts, keyed to the geography, magnitude, and timing of shortages in the local and regional hydrologic system (e.g., reduced groundwater levels).

Goal 3 Objectives and Action Items

Objective A: NPNRD and partner organizations will collaborate on ways to cut water use during drought.

Action Item I: Ensure communication between surface water and groundwater users to understand need for and benefit of temporary additional reductions, if such restrictions are implemented.

- A. Learn what restrictions are currently in place, and what may be anticipated, for surface water users.

Action Item II: Determine the need for, and projected efficacy of, temporary lower groundwater irrigation allocations to address reduced groundwater levels and impacts to domestic and irrigation wells.

- A. Develop a framework of progressively stringent reductions, which would be implemented based on water-supply and climate conditions in multi-year drought (e.g., consecutive years of allocation on irrigation district water users).
- B. Identify geographic areas in which temporary additional regulations may be needed to address short-term impacts of multi-year drought on local water supply.

Action Item III: Explore additional ways to reduce urban and domestic water use.

- A. Hold a contest or challenge to encourage NPNRD residents to reduce their in-home water use, when water shortages are occurring or predicted to occur.
- B. Include water-reduction strategies in water-education programs for schools.
- C. Target both urban and rural domestic water users.

Goal 4: Develop strategies to protect water availability to users who rely on non-municipal sources for domestic water supply.

Goal 4 Objectives and Action Items

Objective A: Work with communities to establish pay-per-fill/use water stations for non-municipal users.

Action Item I: NPNRD will assist municipalities in identifying locations for water stations.

- A. Coordinate with existing facilities (e.g., public schools, private entities) to make facilities available for emergency sanitation/hygiene use.

Action Item II: NPNRD will assist municipalities, if requested, in seeking funding sources for water stations.

Objective B: Encourage municipal and county planning and zoning officials to require stable water supplies to be identified for new construction.

Action Item I: NPNRD will work with planning officials and staff to develop guidelines for prospective homebuilders and new homeowners on securing a long-term viable domestic water source.

- A. Design maps showing depth to water and saturated thickness, with short and accessible explanations on how to interpret the information presented.
- B. Assist homeowners and officials in understanding the importance of assessing hydrologic conditions when selecting and approving sites for home construction.

Action Item II: NPNRD will work with rural domestic water users to assess the vulnerability of existing domestic wells to drought-related risks.

- A. Utilize existing well information that may be on file with DNR or in possession of the water user.
- B. Perform a field investigation to measure well depth, water levels, water-quantity and quality conditions, and any other factors deemed necessary or useful to describe the potential vulnerability of a well.
- C. Suggest to water user ways that identified risks may be mitigated and available resources to assist with such mitigation.

V. Vulnerability: Soil health and land cover

Goal 1: Educate NPNRD communities on maintaining and improving soil health during drought.

Goal 1 Objectives and Action Items

Objective A: Develop educational materials on improving soil health for a variety of audiences.

Action Item I: Work with NRCS to develop and distribute information on using cover crops to protect soils.

Action Item II: Encourage the planting of native, drought-resistant plants as part of landscaping and land cover establishment.

Action Item III: Conduct workshops on soil health and planting choices for NPNRD residents.

Objective B: Promote the importance of livestock grazing plans as part of a drought-resistant land-management portfolio.

Action Item I: Work with NPNRD residents to develop grazing plans that will be protective of soils and plant communities during drought.

Action Item II: Work with NRCS to encourage the development of livestock grazing plans as part of agency program activities.

Goal 2: Implement and promote cost-share programs targeting soil-health measures that increase drought resilience.

Goal 2 Objectives and Action Items

Objective A: Use NPNRD's existing EPIC Program, and successor programs, to increase the number of acres planted to alternative crops.

Action Item I: Partner with NRCS to provide program information to crop producers.

Action Item II: Consult with UNL-Extension to identify alternative crops to include in programs.

- A. Include considerations of, e.g., equipment conversion needs and processing-facility locations.

Action Item III: Gather feedback from participating producers on ways to broaden and improve programs.

Objective B: Establish compliance measures to ensure that practices are implemented correctly over the long term.

Action Item I: Develop standards for each cost-share program to describe NPNRD expectations for funded projects and how compliance may be achieved.

Action Item II: In cooperation with NRCS, develop inspection schedules and protocols for projects funded through NPNRD cost-share programs.

Action Item III: Implement compliance procedures for projects which do not meet program standards.

D. Plan Implementation, Evaluation, and Modification

I. Implementation and Evaluation

Goal 1: Establish and foster the local and regional partnerships needed to implement the provisions of this Drought Plan.

Goal 1 Objectives and Action Items

Objective A: As appropriate, stakeholder organizations will take formal action to recognize their responsibilities in implementing this Plan.

Action Item I: Participating staff and officials will inform organization decision-makers of their organization's role as outlined in the Plan.

Action Item II: Draft formal resolutions or other necessary policy statements on which decision-makers can act.

Action Item III: Participating staff will develop internal procedures and lines of communication to ensure that their organizations meet their responsibilities under this Plan.

- A. Identify specific tasks that must be performed to meet goals and objectives of the Plan, as they relate to the organization.

- B. Include timelines for accomplishing necessary tasks.

Objective B: Drought-planning stakeholders will collaborate to promote the success of the planning effort.

Action Item I: Hold one or more news conferences to announce the adoption of the new NPNRD Drought Plan.

- A. Consider joint news conferences sponsored by multiple planning stakeholders.
- B. Create joint messaging to highlight the goals and anticipated outcomes for participating stakeholders.
- C. Encourage one or more NPNRD Board members to make statements outlining the Board's decision to adopt the Plan.

Action Item II: Jointly host public information sessions to explain the purpose of the Plan and how implementation will affect communities in the NPNRD.

- A. Schedule sessions in a variety of locations across the NPNRD.
- B. Develop informational materials to describe the goals and anticipated outcomes of Plan actions.
- C. Ensure that one or more sessions are scheduled, and informational materials developed, for non-English-speaking groups.

Objective C: NPNRD and stakeholder organizations will work individually and jointly to contact partners identified as key to implementing the provisions of this Plan.

Action Item I: Identify the most effective means of contacting partners and the stakeholder(s) best placed to initiate those contacts.

Action Item II: Develop brief outlines for stakeholders to use in contacting partners.

- A. Focus on concise explanation of partner's expected role and short- and long-term benefits of partnership.
- B. Frame in "sales-pitch" or other persuasive terms to promote successful interactions with partners.

Goal 2: Seek out potential funding opportunities for Plan implementation.

Goal 2 Objectives and Action Items

Objective A: Identify funding sources available from local, regional, and outside sources.

Action Item I: NPNRD will maintain, and keep current, a catalog of funding information for drought-related projects.

- A. Funding information will be posted on the NPNRD website.

Objective B: Encourage stakeholder organizations to build drought-related implementation funds into their respective budgets and commitments to Plan implementation.

Action Item I: Include the scope of potential financial contribution in information presented to organization decision-makers.

Action Item II: Prioritize drought-related spending during organizational budget-planning processes.

Goal 3: Measure the effectiveness of this Plan.

Goal 3 Objectives and Action Items

Objective A: Work with drought-planning stakeholders and partners to develop quantitative metrics for plan success.

Action Item I: Determine which provision of this Plan contain quantifiable elements, such as the following:

- Timelines
- Dollars spent or committed
- Community members reached
- Community members assisted
- Educational programs or training exercises completed
- Specific project milestones

Action Item II: Annually collect information on quantifiable metrics from participating stakeholder organizations.

Action Item III: Share collected information with stakeholders and community on an annual basis through public outreach efforts.

Objective B: Solicit qualitative feedback from stakeholders the public on plan implementation efforts, successes, and limitations.

Action Item I: Conduct periodic surveys to assess public understanding and perception of plan implementation.

- A. Include questions designed to identify gaps in the current Plan and implementation efforts.
- B. Ensure that surveys are also available in the native languages of non-English-speaking community members.

Action Item II: Share survey results with stakeholder organizations and community.

Action Item III: Provide annual feedback to stakeholder organizations highlighting achievements accomplished and progress still to be made, and obtain similar feedback from stakeholder organizations.

- A. For joint efforts, include suggestions for a path forward to accomplish additional tasks and meet specific goals and objectives.

Objective C: Issue, in conjunction with stakeholder organizations, an annual joint report card on plan implementation.

Action Item I: Collect information on annual progress from stakeholders.

Action Item II: Include report of quantitative metrics and qualitative feedback for each stakeholder organization individually, as well as for joint efforts.

Action Item III: Make report card available on stakeholder websites and through public outreach.

II. Plan Updates

Goal 1: Keep the Plan current.

Goal 1 Objectives and Action Items

Objective A: Review the Plan annually, in cooperation with stakeholders, to ensure that provisions of the Plan are up to date, based on then-current circumstances.

Action Item I: NPNRD will contact stakeholders to assess whether stakeholder-specific sections of the Plan need to be updated.

Action Item II: NPNRD will compile a list of necessary updates, based on stakeholder responses.

- A. Continually update this list as needed between the Plan Review meetings discussed in Section D, Subsection II, Goal 1, Objective B below.

Objective B: Every five years, or more often as needed, meet with stakeholders to accept and discuss proposals to modify the Drought Plan.

Action Item I: NPNRD will coordinate with stakeholders to schedule a Plan Review meeting, with the first meeting date occurring five years from the date on which the Plan is adopted.

Action Item II: NPNRD will solicit proposals for modifications to the Drought Plan not less than sixty (60) days prior to the Plan Review meeting date.

- A. Provide informal notice to the public, stakeholders, and NPNRD Board members through websites and other public-outreach efforts.
- B. Compile proposals received and distribute copies to stakeholder staff for review.
 - i. Include list of updates compiled under Goal 1, Objective A, Action Item II above.

Action Item III: NPNRD and stakeholder staff will review modification proposals received prior to the Plan Review meeting.

A. NPNRD and stakeholders may research or request additional information as needed to complete their review.

B. Develop additional quantitative or qualitative metrics as needed to measure the success of the proposed modifications, if adopted.

Action Item IV: At the Plan Review meeting, NPNRD and participating stakeholders will discuss all proposed plan modifications, including stakeholder-specific updates.

Action Item V: NPNRD and participating stakeholders will vote on the proposed modifications to the plan.

A. Stakeholders may be present at the meeting to vote or may submit their votes in writing to NPNRD not less than three (3) business days prior to the meeting.

B. A modification must receive at least a two-thirds majority of participating stakeholders' approval to be adopted.

C. Any modification not adopted may be resubmitted at a subsequent Plan Review meeting.

Action Item VI: Not more than forty-five (45) days following the Plan Review meeting, NPNRD will incorporate approved modifications into the Drought Plan and provide draft language to stakeholders for review.

A. Stakeholders shall review the draft language and either provide comments or indicate approval of the draft language not later than thirty (30) days following receipt of the draft modified plan from NPNRD.

Action Item VII: NPNRD and stakeholder organizations will take formal action to adopt the modified plan.

Objective C: Provide education to the public and stakeholders on the modified plan.

Action Item I: Include information on Drought Plan modifications in public outreach efforts.

Action Item II: Attend meetings of stakeholder organizations (e.g., city council meetings) to outline changes to the Drought Plan.

Action Item III: Work with communities to promote updated drought plan information.

Goal 2: Adapt this Plan to reflect lessons learned from drought situations as they occur.

Goal 2 Objectives and Action Items

Objective A: Use DAMT self-assessment information to improve monitoring and assessment of climate and drought conditions.

Action Item I: As needed, incorporate suggestions from annual DAMT self-assessments as plan modifications and/or new implementation strategies.

A. Work with DAMT members to develop strategies and responses, as needed, to improve DAMT function and Drought Plan implementation.

Objective B: Conduct listening sessions across the NPNRD to gather public feedback on strengths and weaknesses of drought response and recovery activities, as well as ideas for further mitigation activities.

Action Item I: Schedule sessions at multiple intervals during and after drought.

A. Clearly define the focus points or themes for each session.

B. Ensure that listening sessions are available to all community members.

Action Item II: Identify additional education needs based on information received from listening sessions.

Objective C: Identify methods for assessing gaps in drought mitigation and response strategies.

Action Item I: Use information from annual report cards and proposed revisions to Drought Plan to define areas needing improvement.

Action Item II: Solicit ideas on assessments from participants in listening sessions described in Section D, Subsection II, Goal 2, Objective B above.

Action Item III: Incorporate additional assessment mechanisms into Plan revisions.

- A. Include in such assessment language the party or parties responsible for assessment.
- B. Include information on accountability and metrics for such additional assessments.