







# **Upper Platte River Drought Contingency Plan**

January 6, 2021

Funding Opportunity Announcement No. BOR-DO-20-F003

WaterSMART Drought Response Program: Drought Contingency Planning

Grants for Fiscal Year 2020 and 2021

Department of the Interior

Bureau of Reclamation













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# **Table of Contents**

1.0 Executive Summary	4
2.0 Background Data and Project Location	5
2.1 Water Supplies	5
2.2 Water Demands and Uses	6
2.3 Water Supply Risks	6
2.4 Previous Working Relationships with the Bureau of Reclamation	7
3.0 Project Description	7
3.1 Phase I	8
3.2 Phase II	8
4.0 Evaluation Criteria	11
4.1 Evaluation Criterion A – Need for a Drought Contingency Plan (45 points)	11
4.2 Evaluation Criterion B – Inclusion of Stakeholders (25 Points)	15
4.3 Evaluation Criterion C - Project Implementation (10 Points)	16
4.4 Evaluation Criterion D - Nexus to Bureau of Reclamation (10 points)	17
4.5 Evaluation Criterion E - Bureau of Reclamation Priorities (10 points)	18
5.0 Appendix	19
A. Project Budget	19
B. Required Permits or Approvals	20
C. Existing Drought Contingency Plan (Not Applicable)	20
D. Letters of Project Support	20
E. Official Resolution	20
F Cost-Share Reduction or Waiver (Not Applicable)	20

# TECHNICAL PROPOSAL AND EVALUATION CRITERIA

#### 1.0 EXECUTIVE SUMMARY

Project Name: Upper Platte River Drought Contingency Plan Applicant Name: Nebraska Department of Natural Resources

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#### **Project Summary:**

The Nebraska Department of Natural Resources has prepared this grant application on behalf of the Platte Basin Coalition (Coalition). The Coalition, comprised of the Nebraska Department of Natural Resources (NeDNR), the Central Platte Natural Resources District (NRD), the North Platte NRD, the South Platte NRD, the Tri-Basin NRD, and the Twin Platte NRD, is embarking on this effort to develop a drought contingency plan for the Upper Platte River in Nebraska (Plan). These six water management agencies have organized the Platte Basin Coalition and through an Interlocal Cooperative Agreement (ILCA) will work together to develop regional solutions to improve the water supply reliability and drought resiliency of the Upper Platte River Basin. The Upper Platte River planning area includes more than 15,000 square miles, extending from near Columbus, Nebraska to the western borders of Nebraska, and contains a diverse range of water uses, including over 8 million irrigated acres and 250,000 Nebraskans within the basin dependent on the Upper Platte River, The drought-driven risks are diverse and alternatives for resolving them will be developed through this planning effort. By taking a multi-agency regional approach to drought contingency planning, the Coalition will be able to enhance water supply reliability for all users, leverage existing infrastructure investments, coordinate regional solutions, facilitate emergency actions during critical shortages, and improve the area's resiliency to future droughts.

## **Project Timeline:**

Development of the Upper Platte River Basin Drought Contingency Plan is anticipated to be accomplished over an approximate twenty-month period. Assuming an April 2021 notice of award, estimated completion is December 2022.

# Bureau of Reclamation Projects and Initiatives in the Project Area:

- North Platte and Kendrick Projects
- Kortes and Glendo Units
- Platte River Recovery and Implementation Program

Congressional Districts in the Project Area: Nebraska District 3

# 2.0 BACKGROUND DATA AND PROJECT LOCATION

The Platte River forms the backbone of Nebraska - geographically, economically, and culturally – extending west to east across the center of the state. The Platte River is a key source of water supply for over 85 percent of Nebraska's population, thousands of businesses and industries, and millions of irrigated acres. It also provides recreation opportunities and supports valuable habitat for numerous species, including threatened and endangered species. Advanced planning for drought extremes is critical to reduce the vulnerability of these diverse water uses.

The focus of this Drought
Contingency Plan is the Upper
Platte Basin, which includes the
South Platte River, the North
Platte River, and the Platte River,
extending from the western
borders of Nebraska to the
confluence of the Loup And Platte
Rivers near Columbus, Nebraska.
The Upper Platte River basin is
illustrated in Figure 1.

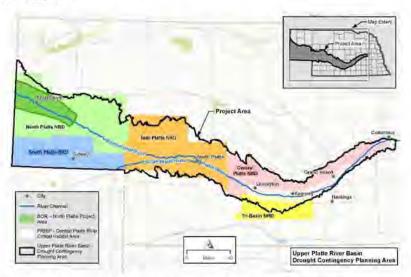


Figure 1. Drought Contingency Planning Area

# 2.1 Water Supplies

The primary source of water in the Upper Platte River Basin is precipitation, which varies spatially and temporally across the region. In the mountains of Wyoming and Colorado, much of the precipitation falls as snow, which serves as a seasonal, natural reservoir, releasing water when snow melts in the late spring and summer. This natural, seasonal reservoir is supplemented across the Basin with human-made structures, such as Pathfinder Reservoir and Lake McConaughy.

In addition to surface water runoff, precipitation also infiltrates and recharges the aquifers that provide baseflow to the Platte River. Within the Platte River valley in Nebraska, the Platte River has a close hydrologic connection to the alluvial and underlying aquifers, with groundwater baseflow depletions and accretions playing a significant role in the available water supply. Aquifer recharge has also been enhanced due to the development and use of surface water canals throughout the Platte River valley, where a portion of flows conveyed through the canals seep into the aquifer. Through a combination of natural and human-made influences, three distinct time scales exist for precipitation contributions to the Platte River. Natural runoff from rainfall feeds river flows in a matter of hours to days. Runoff from snowfall and storage/releases from human-made surface water reservoirs typically occur on a seasonal scale. Finally, aquifer recharge and baseflow accretions to the Platte River occur over a period of months to years.

Water supplies of the Upper Platte River basin are highly variable, with annual streamflows ranging from 200,000 acre-feet per year to nearly 4 million acre-feet per year. Recent data indicates that this variability is becoming more extreme due to greater extremes in the intensity and duration of precipitation events in the basin, and shifts in precipitation patterns that have resulted in a greater proportion of precipitation in the upper portion of the basin occurring as rainfall, negating the beneficial impacts of natural snowpack storage on basin water supplies. **Figure 2** illustrates the variability in water supplies in the Upper Platte River basin, as well as the proclivity of extended drought periods (2002-2006).

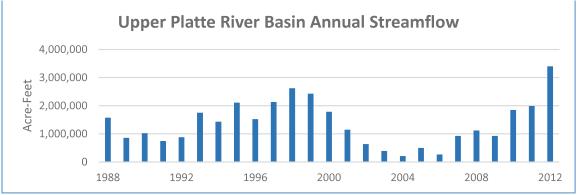


Figure 2. Annual streamflow for the Upper Platte River above Duncan, NE. (Source: NeDNR INSIGHT database)

#### 2.2 Water Demands and Uses

The water demands and uses in the Upper Platte River are diverse and variable in timing and amount. Major water uses within the basin include municipal/domestic, agriculture, instream flows, recreation, powerplant cooling water, and hydropower. Communities throughout the basin rely upon the Platte River and its underlying aquifers as the source for meeting municipal and industrial needs, serving over 250,000 Nebraskans. The basin includes nearly 8 million acres of irrigated agriculture from both surface water and hydrologically connected groundwater sources. Instream flow appropriations are in place throughout the critical habitat area of the central Platte River valley to maintain historic flow patterns and preserve native habitats. Recreation usage of the Platte River, its tributaries and the many multi-purpose reservoirs, including Nebraska's largest reservoir – Central Nebraska Public Power and Irrigation District's (CNPPID) Lake McConaughy - are a primary economic driver throughout the basin and Nebraska. Platte River flows provide the cooling water source for Nebraska Public Power District's (NPPD) Gerald Gentleman Station near Sutherland, which is Nebraska's largest electric generation facility, supplying enough electricity to serve 600,000 Nebraskans. Finally, both CNPPID and NPPD have multiple hydropower generation facilities reliant upon Platte River flows.

# 2.3 Water Supply Risks

As noted, both supplies and uses within basin vary temporally and spatially. Storage within the basin, whether from human-made reservoirs or the natural aquifer, has provided a means to better sync these elements and reduce risks of water shortage. Despite the substantial basin water storage capacity, during drought periods -

particularly those that span multiple years as is typical in this area - storage supplies are placed under significant stress due to reduced runoff and depletion of storage. In addition, demands that support of irrigated agricultural production are typically increased during drought conditions, further amplifying drought impacts.

#### 2.4 Previous Working Relationships with the Bureau of Reclamation

The NeDNR has successfully worked with the United States Bureau of Reclamation (USBR) on previous efforts in Nebraska. Specifically, NeDNR has worked with USBR under the WaterSMART Basin Studies Initiative in the Niobrara River Basin (published 2015) and Republican River Basin (published 2016). These efforts were successful in identifying and evaluating various alternatives that may balance water supplies with water demands and assess potential vulnerabilities under a range of climate change scenarios. In addition, NeDNR and its partners worked with USBR under the WaterSMART Drought Response Program in the development of the Lower Platte River Drought Contingency Plan (published 2019). This planning effort was completed in accordance with the requirements of the USBR drought planning process.

NeDNR has and continues to work with USBR and the United States Fish and Wildlife Service (USFWS) through implementation of the Platte River Recovery and Implementation Program (PRRIP). This Department of Interior initiative is an interstate agreement with key governance members from Colorado, Wyoming, Nebraska, USFWS, and USBR. The goals of the PRRIP support the recovery of endangered species in the Central Platte River valley, while also ensuring the downstream habitat (Lower Platte River) for pallid sturgeon is not negatively impacted.

## 3.0 PROJECT DESCRIPTION

The Coalition is embarking on this study to develop a Drought Contingency Plan for the Upper Platte River Basin in Nebraska (Task A). These six agencies have regulatory authority over the surface (NeDNR) and groundwater (NRDs) resources of the basin and will to work together to develop regional solutions to improve the water supply reliability and drought resiliency of the Upper Platte River Basin through the development of a Drought Contingency Plan.

The members of the Coalition recently completed an extensive planning and stakeholder engagement effort in developing a Basin-Wide Integrated Management Plan (Basin-Wide Plan). NeDNR and the NRDs have implemented an incremental approach to integrated water planning in the overappropriated area of the Upper Platte River Basin to sustain a balance between basin water uses and water supplies. The recently completed Basin-Wide Plan addresses activities for the second increment, which extends from 2019 through 2029, and was developed utilizing the consultative and collaborative process described in Neb. Rev. Stat. §46-715(5)(b), and included extensive stakeholder engagement from a diverse group of stakeholders from the basin. The culmination of the Basin-Wide planning effort was unanimous consensus on the goals, objectives, and action items that will guide water management activities in the Upper Platte River basin for the next ten-year increment.

Through the Basin-Wide Plan development, stakeholders clearly indicated that the most significant impact on the water resources, water uses, and economic viability of the basin occurs during times of drought. Therefore, the Basin-Wide Plan provides an emphasis on drought planning and mitigating effects of drought as an important step toward consistently achieving a fully appropriated condition (Action Items 1.3.4.1 through 1.3.4.5 under Objective 1.3). The development of the Upper Platte River Drought Contingency Plan aligns with the objectives of the recent Basin-Wide Plan.

The description of project activities to support this plan development has been broken into two phases. Phase I focuses on identifying stakeholders and development of a detailed work plan, while Phase II focuses on elements of plan development.

#### 3.1 Phase I

#### 3.1.1 Establish Drought Planning Task Force

To establish a Drought Planning Task Force consisting of a diverse group of interested stakeholders, the Coalition proposes to build upon the stakeholder engagement effort utilized for the recently completed Basin-Wide Plan. Primary stakeholders for that effort were made up of representatives from a diverse group of interests and affiliations within the Basin, including agriculture, environment/wildlife, financial, groundwater irrigators, groundwater users, irrigation districts, municipalities, public power districts, surface water users, and recreation users.

The identified interest groups will be reviewed with USBR during work plan development and underrepresented groups will be identified. Coalition members will be responsible for identifying, extending invitations, and obtaining commitments from identified Task Force members. Participant interest has typically not been an issue.

#### 3.1.2 Development of a Detailed Work Plan

The Detailed Work Plan will serve as the guide for plan development, outlining how the identified tasks will be accomplished, schedules for completion, and roles and responsibilities in plan development. The work plan will be developed in coordination with USBR and expand upon the Phase II task descriptions included in this proposal.

Also included as part of the work plan is a Communication and Outreach Plan which will be developed by Coalition members in coordination with USBR. The Communication and Outreach Plan will outline a robust, understandable, transparent approach for the drought mitigation planning effort. Beyond providing the framework for the identification and formation of the Task Force, it will describe the planning process and timelines, communication strategies, meeting protocols, and logistical responsibilities.

#### 3.2 Phase II

The following tasks for Phase II describe how each of the required six elements of the drought contingency plan will be addressed.

#### 3.2.1 Drought Monitoring

Drought monitoring will be based on key hydrologic factors used to establish a baseline forecast for water supply conditions and provide ongoing drought condition information used to trigger response actions. Drought monitoring tools will build on tools developed

and information disseminated by the National Drought Mitigation Center, such as the Palmer Drought Severity Index (PDSI) and the Standard Precipitation Index (SPI). In addition, drought forecasting and monitoring and water supply forecasting information is available from publicly available sources such as NOAA, USGS, NRCS, and USBR. Global weather indices, such as the El Nino/Southern Oscillation, will also be evaluated for use in long-term (decadal) forecasting potential.

The drought monitoring protocols and tools must provide: 1) a means of monitoring near and long-term water supplies, 2) predictive capabilities for future droughts, and 3) triggers or indicators for confirming the beginning and end of existing droughts.

Quantification of the surface water and groundwater resources will be reviewed to develop a thorough understanding of the key hydrologic factors that determine when drought conditions are beginning and the severity of ongoing drought conditions. The temporal scales of basin water supplies, such as mountain snowpack (short term), precipitation (short term), streamflow (short term), reservoir storage (short-term and long-term carryover storage), and groundwater (long-term) must be considered and incorporated into the monitoring protocols. Several previously developed key datasets and tools specific to the Upper Platte River basin will be utilized in estimating available water supplies, including:

- Groundwater and surface water data being collected in support of water management efforts
- Existing numerical models which encompass the basin and provide an understanding of the underlying hydrogeology and its connection to the surface water.
- Man-made facilities (reservoirs, canals, etc.) their operations, and their impact on the water resources in the basin.
- Specific knowledge and understanding of significant water users and their impact on basin water resources and opportunities for conjunctive management.

The drought indices and forecasting tools will be evaluated using historic observations from throughout the basin to identify, validate, and prioritize the appropriate tool or tools for drought monitoring in the Upper Platte River Basin. In addition to the annual variations in hydrological conditions, seasonal variations also exist and may result in a combination of indices and data be used.

#### 3.2.2 Vulnerability Assessment

A vulnerability assessment will be conducted that identifies risks and impacts of droughts on key sectors throughout the basin. The Drought Planning Task Force will be instrumental in identifying those sectors most vulnerable to drought impacts. An assessment of the risks to critical water resources for each of the identified vulnerable sectors in the basin, and the factors contributing to those risks, will be evaluated. Coalition members and basin stakeholders have previously developed water supply and demand projections for the future under a range of conditions. These projections will also be reviewed with newly available information on climate variability to further expand the range of vulnerabilities and risks that may exist under future drought conditions. Clearly identifying sectors vulnerable to drought and the risk posed under current, future, and uncertainty in hydrological conditions in this task will guide the mitigation and response actions development.

#### 3.2.3 Mitigation Actions

The Coalition will identify, evaluate, and prioritize mitigation actions and activities that work to build long-term resiliency to vulnerable sectors and mitigate the risks posed by current and future droughts. These actions may be on a basin-wide scale, sub-basin (NRD) scale, or individual project scale. Mitigation measures that are expected to be reviewed through the planning process include:

- Development of new supplies through repurposed reservoir storage, new reservoir storage, and groundwater augmentation
- Forecast-informed reservoir operations
- Assessment of conjunctive use opportunities through coordination and agreements between surface and groundwater users
- Development of markets, exchanges, and water sharing agreements
- Water conservation and water use reduction
- Communication and educational efforts

As discussed with BOR program staff during the technical consultation, the Coalition's intent is to develop regional-scale solutions at a minimum, pending the final budget determined in the Phase I workplan and available funding under this grant. Sub-basin and project scale mitigation measures (and action items) will largely be implemented at the individual NRD level and an additional grant from BOR may be pursued in the future to fully develop those individual NRD elements to complement this overall plan.

The aim of these mitigation actions will be to decrease future vulnerabilities and reduce the need for critical response actions during drought. Each of these mitigation strategies will be assessed for likely benefits as well as potential regulatory and legal constraints, inclusive of likely permitting requirements, environmental constraints, third party impacts, and cost and feasibility of implementation. Additionally, specific roles and responsibilities of Coalition members in dissemination of public information prior to and during drought conditions to raise awareness of the need for effective mitigation strategies will be identified.

#### 3.2.4 Response Actions

The Coalition will identify, evaluate, and prioritize response actions and activities that can be implemented quickly during a drought. These response actions will be evaluated for their effectiveness during specific stages of a drought to manage limited supplies and decrease the severity of drought impacts. The assessment of response actions will include timeframes required to implement the action and the likely benefits that may result from actions. Potential scenarios that will be evaluated include:

- Release of surplus water supplies held in storage
- Reduced alluvial groundwater pumping
- Groundwater augmentation pumping
- Switching from surface to groundwater sources during droughts
- Water use restrictions

Identified response actions will be assessed for constraints that may exist due to the reliability and temporal variability in available water supplies, physical limitations on infrastructure capacity, maximum delivery rates, and the likely range of benefits that would be derived under a range of drought conditions. The Coalition will then focus on evaluating the associated legal constraints, inclusive of likely permitting requirements,

environmental constraints, third party impacts, and cost of implementation. Like mitigation actions, the scale of response actions may be at the basin, sub-basin (NRD), or project level.

Finally, as part of the Drought Contingency Plan development, the Coalition proposes to conduct a drought simulation workshop based on historic drought occurrences to assist in assessing the monitoring and communication protocols and test potential mitigation and response actions. The workshop exercise will identify areas of the Plan that need refining and assist in prioritizing mitigation and response actions.

#### 3.2.5 Operational and Administrative Framework

The operational, institutional and regulatory processes associated with implementing and operating each of the mitigation and response measures will be identified. The framework will clearly define roles for continuous drought monitoring and communication, development and implementation of mitigation measures, initiation of response actions, including emergency response actions, and updates to the Plan. The Coalition members have proven ability to implement and achieving results through similar efforts in support of the first increment of the Basin-Wide Plan.

#### 3.2.6 Plan Development and Update Process

The final Plan document will be prepared that tells the story of the planning process undertaken, stakeholder engagement efforts and consideration of public input, as well as the Phase II efforts, considerations, and analyses, including development of mitigation and response actions, and results of the drought simulation workshop.

The Coalition will develop a schedule for Plan review and updates that will integrate with current ongoing planning efforts. The Drought Contingency Plan update may be combined, or completed in parallel, with future updates to the Basin-Wide Integrated Management Plan.

# 4.0 EVALUATION CRITERIA

# **4.1 Evaluation Criterion A – Need for a Drought Contingency Plan (45 points)**

#### 4.1.1 Severity of Risks to Water Supplies

Drought conditions pose a real and serious threat to the water supplies of many diverse, vulnerable sectors in the Upper Platte River Basin, including:

<u>Domestic, commercial, and industrial users:</u> During the drought conditions of 2012, 81 municipal water systems across Nebraska – the majority communities within the Platte River basin - reported supply issues. Individual domestic well interference was widespread, requiring alternative and in some cases, emergency water supplies or redrilling of wells. Water quality for municipal providers in the Upper Platte River basin became an issue as flows diminished. In addition, lack of streamflow for diversion into irrigation canal systems removed a key source of aquifer recharge to domestic wells, resulting in elevated nitrate and arsenic levels, impacting domestic and livestock users throughout the Upper Platte River valley, with the North Platte NRD severely impacted.

Agricultural production: The agricultural sector may be the most vulnerable to drought as rainfall during the growing season is insufficient to sustain agricultural production within the basin, requiring additional irrigation for viability. Shortages in water supply pose a risk of catastrophic crop failure. In 2012, the economic loss due to lost corn production alone in Nebraska was \$240,000,000<sup>1</sup>, with the Platte River valley bearing the heavy brunt of the losses. Impacts to the agricultural sector are particularly important to this basin, Nebraska, and the surrounding region that rely on it as the economic driver. The economic losses to Nebraska of the 2002 drought was \$1.2 billion<sup>1</sup>, 2002 was followed by 4 additional years of drought conditions in the Upper Platte basin with similar economic effects and widespread bankruptcy, population loss, etc. from rural areas. The extended drought period of 2002-2006 in the Upper Platte River basin impacted groundwater users as well. Increased pumping to offset lack of surface water sources and precipitation supplies resulted in significant aquifer storage depletions throughout the Upper Platte River valley posing quantity and quality issues to all users – impacts that take years, if not decades, for recovery<sup>1</sup>. Power and energy: Hydropower generation is solely dependent on a reliable supply of water, and production is directly related to the quantity of water available. In addition, Gerald Gentlemen Station (GGS) is dependent on Upper Platte River flows for cooling powerplant effluent discharge. Insufficient water supply results in direct impacts to hydropower generation and could result in shutdown of GGS if effluent temperature standards can no longer be met. The loss of these generation sources has substantial regional economic effects, requiring temporary outages to reduce demand, or purchase of power off the grid at a time when rates are likely the highest, with significant economic harm to the region. During the 2012 drought, temporary outages were implemented throughout the Upper Platte River valley and northern Nebraska due to power shortages and high demands<sup>1</sup>. In addition, tied to the lost corn production, 7 of 24 ethanol plants in Nebraska closed as a result of the 2012 drought conditions<sup>1</sup>. Recreation/Habitat: Recreational uses and natural habitat throughout the basin also become vulnerable during drought periods, resulting in economic impacts to the basin from reduced recreation opportunities, as well as habitat loss, fish kills, and increased susceptibility to invasive species, such as phragmites. During the extended drought of 2002-2006, the Platte River became a dry river extending 60 miles and more upstream of Duncan, for weeks at a time resulting in repeated fish kills. In addition, during the 2012 drought, record wildfires throughout Nebraska burned over 400,000 acres<sup>1</sup>. Threatened and Endangered Species: The Critical Habitat Reach which represents the centerpiece of the PRRIP recovery efforts is in the middle of the Plan area. The PRRIP has established goals related to enhancing stream flow through the critical reach. Actions identified to enhance water supplies during drought conditions will consider how changes in water management could affect threatened and endangered species (pallid sturgeon, interior least tern, piping plover, whooping crane) and their associated habitat. Outcomes are likely that would support PRRIP efforts to enhance habitat for the species through drought periods, as mitigation and responsive actions to support increased supply during drought periods will be more protective than current conditions. Water Quality: Recent experience indicates that drought conditions that result in significant declines in ground water elevations and removal of canal recharge as a source have the potential to impact water quality; specifically related to iron, manganese and arsenic levels in the water supplies. These water quality impacts can result in the

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<sup>&</sup>lt;sup>1</sup> National Drought Mitigation Center – Drought Impact Reporter

need to modify treatment of the water prior to using it for drinking water purposes in the best case, and alternative or emergency water supply needs in the worst case. Fully appropriated status: As mandated by Nebraska statute, the over-appropriated area of the Upper Platte Basin has taken an incremental approach to achieve fully appropriated status. The collaborative planning process for the second increment of the Basin-Wide identified a drought contingency plan as a critical element to achieving fully appropriated status. Coalition members expended over \$100 million during implementation of the first increment of the Basin-wide Plan. Similar or greater costs are expected to be incurred during the second increment to achieve plan goals, in the absence of a drought contingency plan. The Upper Platte River Drought Contingency Plan is the most cost-effective approach to meet second increment plan goals.

# 4.1.2 Existing or Potential Drought Conditions

The Upper Platte River basin is historically prone to periods of extended drought conditions. The most recent extended drought period was 2002-2006, where annual streamflows in the basin were below 30% of normal, and much lower than that during the peak demand months of the later summer. 2002 was the 3<sup>rd</sup> driest year on record at the time and was subsequently followed by four additional years of significantly reduced snowpack and precipitation runoff conditions. The extended drought poses the most severe impacts, as the basin's surface water reservoirs and natural aquifer storage that are capable of mitigating short-term impacts become depleted and lack runoff to replenish supplies in preparation for the following year's peak demands. This leaves the basin increasingly vulnerable as the drought continues. Aquifer water levels and Lake McConaughy storage reached historic lows during this extended drought.

The state of Nebraska and the Upper Platte River basin experienced wide-spread drought during 2012 and into 2013 after a three-month period of little or no precipitation across the state. This drought was the result of the hottest and driest year on record in the state. In addition, this drought followed on the heels of an extremely wet period and the abrupt turn-around in water supply conditions was unprecedented. While not an extended duration, the severity of this 'flash drought' has significant effects on both surface and groundwater storage in the basin. Fortunately, surface water conditions were favorable in late 2013 to replenish surface water storage in the basin. Groundwater storage was slower to recover, and in some cases, has yet to recover.

**Figure 3** illustrates current drought conditions in Nebraska – with most of the Upper Platte River basin experiencing Severe to Extreme drought conditions. Water supplies of the Upper Platte River have historically been highly variable, but recent data indicates this variability may be becoming more extreme. The amount, intensity, and timing of precipitation coupled with rising temperatures is expected to aggravate drought conditions, including the occurrences of 'flash droughts' such as that observed in 2012<sup>2</sup>.

13

<sup>&</sup>lt;sup>2</sup> Bathke, Deborah J., Robert J. Oglesby, Clinton M. Rowe, and Donald A. Wilhite. 2014. Understanding and Assessing Climate Change: Implications for Nebraska. University of Nebraska–Lincoln.

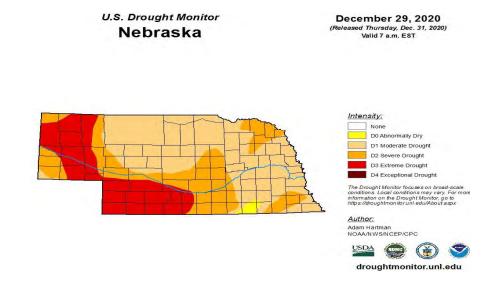


Figure 3. Wide-spread drought impacts during the recent 2012 drought.

#### 4.1.3 Status of Existing Plans

The State of Nebraska's Drought Mitigation and Response Plan (Attachment A) was developed in response to severe droughts. It highlights the need to create continuity between water administration agencies and places greater emphasis on mitigating drought impacts. As noted in the attached plan, a diverse group of Stakeholders from across the State was involved in the development of the plan.

Each of the Coalition members has undertaken planning efforts that have some of the elements of a drought contingency plan already in place. Only the North Platte NRD has completed all six required elements combined into a comprehensive Drought Contingency Plan. **Table 1** summarizes the existing plans to address water management and drought planning, along with the periodic scheduled updates and/or reviews of those plans. The Upper Platte River Drought Contingency Plan will address all six required elements in one document and significantly expand the mitigation and response actions available to the Coalition. The Plan will be different from prior planning efforts, because it will focus specifically on drought conditions in the context of the broader regional framework and collective authorities of the Coalition, integrating all six of the required elements into one document.

Table 1. Water planning and drought planning efforts of Coalition members.

Name of Plan	Most Recent Update	Frequency of Reviews
State of Nebraska Drought Mitigation and Response Plan	2000	Annual Meeting
Upper Platte River Basin-Wide Integrated Management Plan (IMP)	2019	Annually
Central Platte NRD IMP	2019	Annually
Twin Platte NRD IMP	2019	Annually
Tri-Basin NRD IMP	2019	Annually
North Platte NRD IMP	2019	Annually
South Platte NRD IMP	2019	Annually
North Platte NRD Drought Contingency Plan	2017	Annually

<sup>\*</sup>Individual Plans are in additional to the Basin-Wide Plan completed by Coalition in 2019

Finally, as a participant in the Lower Platte River Drought Contingency Plan development and implementation, NeDNR provides an informal liaison for coordinating efforts between Upper and Lower Platte River basin drought planning and actions.

## 4.2 Evaluation Criterion B – Inclusion of Stakeholders (25 Points)

Stakeholder participation will occur at multiple levels during plan development. Primary stakeholders consisting of members from each of the Coalition members will be the primary point of contact for the consultant and guide the plan development. This group will also include the designated representative from USBR. These stakeholders represent a wide range of constituencies, including municipal/domestic waters, irrigation, environmental, recreational, business and industries. The primary stakeholder group members have the appropriate expertise and authority to provide guidance and oversight in plan development, background information, review and the staff to support analyses developed as part of the Plan. Table 2 lists the staff from each agency that will comprise this primary stakeholder group.

Table 2. List of key members of the Platte Basin Coalition.

Agency	Name of Stakeholder	Title of Stakeholder
NeDNR	Jennifer Schellpeper	Division Head, Integrated Water Management Planning Division
Central Platte NRD	Lyndon Vogt	General Manager
Twin Platte NRD	Kent Miller	General Manager
Tri-Basin NRD	John Thorburn	General Manager
North Platte NRD	John Berge	General Manager
South Platte NRD	Rod Horn	General Manager

A Drought Task Force will be formed to provide focused input to the plan development team, representing their specific area of interest and experiences. Assembly of the Drought Task Force will build upon the recently completed Basin-Wide planning effort. This effort engaged members from a diverse group of water-related interests, including those from agriculture, environment/wildlife, financial, groundwater irrigators, groundwater users, irrigation districts, municipalities, public power districts, surface water users, and recreation users. During development of the work plan, additional interest groups within the basin may be identified. Coalition members will identify, extend invitations and secure commitments for participating in the planning effort.

Engagement of the general public during plan development will occur in multiple formats during the study. Three public meetings (open house format) are anticipated through the planning process that will be forums to solicit public feedback. Each of the Natural Resource Districts have monthly board meetings open to the public. Primary stakeholder members are responsible for keeping their board and constituents of the NRD updated on the planning process through regular updates in this public forum. A website will also be developed and maintained through the planning process to provide information on the Plan and a forum for the public to comment on-line.

Formal engagement of the Drought Task Force and general public are anticipated at 3 milestones in plan development, including during the identification of vulnerable sectors and risks of drought; during the development of potential mitigation and action items; and during the drafting of the final plan document, prior to finalizing the plan.

## 4.3 Evaluation Criterion C - Project Implementation (10 Points)

#### 4.3.1 Six Required Elements of Drought Contingency Plan

Developing the Upper Platte River Drought Contingency Plan (Plan) will consist of the major tasks shown in **Table 3.** 

Table 3. Key tasks and milestone schedule.

Task	Deliverables	Milestone Dates
1.1 – Drought Task Force	Identify Task Force Members	June 2021
1.1 - Diought Task Force	Secure Member Commitment	July 2021
1.2 – Work Plan	Draft Work Plan	August 2021
1.2 — VVOIK FIAIT	Final Work Plan	September 2021
	<ul> <li>Monitoring tools and indicators</li> </ul>	January 2022
2.1 – Drought Monitoring	Triggers for action	April 2022
	Monitoring protocols	April 2022
	<ul> <li>Drought Task Force/Public Meeting</li> </ul>	November 2021
2.2 – Vulnerability Assessment	Vulnerable Sectors	January 2022
	<ul> <li>Drought Risks and Impacts</li> </ul>	March 2022
2.3 – Mitigation Actions	<ul> <li>Identification of potential actions</li> </ul>	May 2022
2.5 – Willigation Actions	<ul> <li>Analysis and prioritization of actions</li> </ul>	August 2022
	<ul> <li>Identification of potential actions</li> </ul>	May 2022
2.4 – Response Actions	<ul> <li>Drought Task Force/Public Meeting</li> </ul>	June 2022
2.4 - Response Actions	<ul> <li>Analysis and prioritization of actions</li> </ul>	August 2022
	<ul> <li>Drought Simulation Workshop</li> </ul>	August 2022
2.5 – Operational and	Operational Framework	August 2022
Administrative Framework	<ul> <li>Define roles/responsibilities</li> </ul>	August 2022
	<ul> <li>Draft Plan Document with Update Process</li> </ul>	September 2022
2.6 – Plan Development and	<ul> <li>Drought Task Force/Public Meeting</li> </ul>	September 2022
Update Process	<ul> <li>Draft Plan submittal to BOR</li> </ul>	October 2022
	<ul> <li>Final Plan submittal to BOR</li> </ul>	December 2022

<sup>\*</sup>Milestone dates based on May 2021 project start

Project administration will be ongoing through the project duration and includes executing the financial assistance agreement with Reclamation, contracting for consulting services to develop the Plan, and grant reporting consistent with the terms of the financial assistance agreement.

Coalition members will seek comments from the public to finalize the draft Plan. Once the Plan has been finalized, the Coalition will promote the final report through annual planning meetings and other member public meetings. Additional public outreach will include preparation of fact sheets, joint press releases, postings on social media, and other website updates to keep the public informed. The final report will be posted to a public website and will be available on each of the member's websites.

#### 4.3.2 Schedule

Table 3 outlines the anticipated project stages and key milestones of the planning process. A more detailed schedule will be developed in Phase I. The development of the Plan is expected to take twenty months from the grant execution date. It is anticipated that the financial assistance agreement will be executed by May 2021. Task Force interest groups will be identified, potential members contacted, and commitments secured. The detailed work plan and communication and outreach plan

will be developed in coordination with USBR, with formation of the Drought Task Force and USBR approval of the Detailed Work Plan by September 2021.

Phase II activities will initiate with the development of monitoring protocols and tools, review of data sources and preparation for the initial Drought Task Force and public open house meetings focusing on the identification of vulnerabilities and risks of impacts, anticipated to be held in the November 2021. The winter of 2021-2022 will be focused on development of draft mitigation and response actions and completion of the monitoring protocols. The second Drought Task Force and public open house would be held June 2022. The drought simulation workshop would be held in August 2022. The reminder of the summer would be focused on developing the operational and administrative framework and the draft plan document. The third and final Drought Task Force and public open house would be held in September 2022 to present the draft plan and provide opportunity for comment. The draft plan document would be submitted to USBR October 2022. Following review and comment by USBR, the Plan would be finalized and submitted in December 2022.

#### 4.3.3 Existing Data and Technical Resources

The Coalition (and others) have developed an extensive database of land use; ground and surface water supplies, climatic data, socio-economic data and water quality data from throughout the basin that is available to support the planning effort. In addition, a suite of modeling tools (COHYST and WWUM) have been developed for the basin that can simulate the complex surface/groundwater interaction and the operational intricacies of the Upper Platte River system through model representation of each element of the hydrologic cycle. These tools are uniquely suited for the purpose of this plan development as they can be used to evaluate scenarios involve climatic changes, hypothetical drought conditions, and potential mitigation and response action impacts on water supplies available to vulnerable sectors.

Technical staff of Coalition members, and the consultant contracted for the plan development effort, are intimately familiar with the system, it's unique hydrologic characteristics and responses to drought conditions, and modeling tools available through past involvement in studies, projects, and planning efforts in the Upper Platte Basin over the last 15 years. Individual resumes of technical staff are available upon request. No technical services requests of BOR are anticipated at this time.

# **4.4 Evaluation Criterion D - Nexus to Bureau of Reclamation (10 points)**The planning area associated with the Upper Platte River Drought Contingency Plan

The planning area associated with the Upper Platte River Drought Contingency Plan contains several USBR facilities and project initiatives of the Department of Interior. As noted earlier, the PRRIP Critical Habitat Area lies entirely within the Upper Platte River Basin planning area. The PRRIP is a Department of Interior initiative that is an interstate agreement with key governance members from CO/WY/NE, USFWS, and Bureau of Reclamation, as the co-lead federal agency. The efforts of the Coalition will improve flow conditions within the Upper Platte River and address recent concerns by USFWS and others about the drought resiliency of PRRIP's water portfolio.

Several USBR projects and facilities are in the North Platte River basin, either within the Upper Platte River basin planning area, or immediately upstream and will directly or indirectly benefit from this Plan's activity:

- The USBR's **North Platte Project** extends 111 miles along the North Platte River from Guernsey, Wyoming to Bridgeport, Nebraska, providing irrigation for about 335,000 acres, including five storage reservoirs, four diversion dams, one pumping plant, one powerplant, and 2000 miles of canals, laterals, and drains.
- The USBR's **Kendrick Project** uses North Platte River flows for irrigation and hydropower development, providing irrigation for approximately 24,000 acres between Alcova and Casper, Wyoming; including Seminoe and Alcova Dams and powerplants and canals, laterals, drainage and power distribution systems.
- The USBR's <u>Kortes Unit</u> consists of the Kortes Dam, Reservoir, and Powerplant in central Wyoming, two miles below Seminoe Dam.
- The USBR's <u>Glendo Unit</u> consists of Glendo Dam, Reservoir, and Powerplant; Fremont Canyon Powerplant, and Gray Reef Dam and its reregulating reservoir. The project provides 40,000 AF of water annually for irrigation in Wyoming and Nebraska, as well as hydropower, flood control, fish and wildlife enhancement, recreation, sediment retention, pollution abatement and improves the water quality for municipal and industrial water supply in the North Platte River valley.

In addition, the Plan actions will continue support for the groundwater mound under CNPPID's system that supplies water to the Republican River basin and its USBR projects.

**4.5 Evaluation Criterion E - Bureau of Reclamation Priorities (10 points)**Given the diversity of challenges posed by drought conditions in the Upper Platte Basin, this Drought Contingency Plan addresses, in part or wholly, most of the identified priorities. A summary of several key priorities:

BOR Priority #1. Increase Water Supplies, Storage, and Reliability: The sole purpose of this Drought Contingency Planning effort is to enhance the availability and reliability of water supplies for the diverse users in the Upper Platte River basin. Through this planning effort the Coalition will be able to mitigate water-related risks, leverage existing infrastructure investments, coordinate regional solutions, facilitate emergency actions during critical shortages, and improve the area's resiliency to future droughts.

BOR Priority #3. Leverage Science and Technology to Improve Water Supply Reliability to Communities: A fundamental tenet of the Coalition is the use of the best available science and technology in addressing its water-related challenges. This effort will further that charge by: 1)utilizing the most current weather and climate forecasting tools for drought monitoring, 2) through application of the best available modeling tools to assess impacts of drought and the actions proposed to mitigate drought, 3) and applying innovative approaches and technology in developing potential mitigation and response actions – such as Forecast Informed Reservoir Operations (FIRO), approaches to water conservation, and advances in agricultural technology – that improve water availability and system resiliency.

BOR Priority #6. Improve Water Supplies for Tribal and Rural Communities: The Upper Platte River planning area includes more than 15,000 square miles of rural Nebraska. The 250,000 Nebraskans within the basin are scattered in smaller communities, towns, villages, and independent farmsteads, all dependent on the Platte River as their water source. Through this planning effort the Coalition will be able to provide resiliency to that water supply for these communities - and to the agricultural, recreation, industrial, and others uses that sustain them economically.

## 5.0 APPENDIX

# A. Project Budget

#### **Funding Plan and Letters of Commitment**

The total proposal budget is \$400,000 (see Attachment D, SF-424A). The Platte Basin Coalition will be providing the \$200,000 of cash cost-share to support this proposal (see Attachment C for letter of commitment). These funds are currently available and have been set aside to support the project if the proposal is successful. While additional inkind services are likely to be performed, they have not been quantified and will not be relied upon for supporting the local match for the proposal. Cash commitments will be utilized to pay for consulting services in performance of this grant proposal.

#### **Budget Proposal**

**Table 4 Total Project Cost Table** 

Funding Sources	Amount
Costs to be reimbursed with requested Federal funding	\$200,000
Costs to be paid by application	\$200,000
Value of third-party contributions	N/A
Total Project Funding	\$400,000

Table 5 Summary of Non-Federal and Federal Funding Sources

Funding Sources		Amount
Non-Federal Entities		
1. Platte Basin Coalition		\$200,000
Non-Federal Sub-Total		\$200,000
Requested Reclamation Funding		\$200,000
_	Total Project Funding	\$400,000

#### **Budget Narrative**

The proposed project scope consists of developing a drought contingency plan for the Upper Platte River in Nebraska. Funding would be used for supporting services that will be performed by a contractor to develop the Plan consistent with Phase I and Phase II requirements and the six key drought planning principles. An estimated breakdown of costs associated with each of the key tasks in Phase I is provided in **Table 6** below. The Phase II detailed budget will be developed during Phase I.

**Table 6. Budget Summary** 

TASK	Labor Hours	Lab	or Cost	Dire	t Expense	Total	Cost
PHASE I							
1.1 Drought Planning Task Force	20	\$	2,000	\$	500	\$	2,500
1.2 Work Plan Development	100	\$	14,000	\$	500	\$	14,500
PHASE II							
2.1 Drought Monitoring							
2.2 Vulnerability Assessment							
2.3 Mitigation Actions							
2.4 Response Actions							
2.5 Operational and Admin. Framework							
2.6 Plan Development and Update Process							
TOTAL							

<sup>\*</sup>As noted in FOA - Budget Summary for Phase I provided. Phase II to be finalized during Work Plan development

## **B.** Required Permits or Approvals

No permits or additional approvals will be required to complete the Upper Platte River Drought Contingency Plan. Individual water agencies responsible for implementing projects or programs considered through the Plan will be responsible for obtaining all necessary permits and approvals.

# C. Existing Drought Contingency Plan (Not Applicable)

# **D.** Letters of Project Support

Letters of support from the Central Platte Natural Resources District, the Twin Platte Natural Resources District, the Tri-Basin Natural Resources District, the North Platte Natural Resources District, and the South Platte Natural Resources District are included in Attachment B.

#### E. Official Resolution

The Nebraska Department of Natural Resources (NeDNR) will be the agency responsible for administering the grant award on behalf of the Coalition. The Platte Basin Coalition has committed existing budget resources to ensure the financial and legal obligations associated with receiving Federal financial assistance through the Drought Contingency Planning Grants FY20 will be met. The Chairperson of the Platte Basin Coalition has provided a signed letter to indicate this commitment (see Attachment C).

# F. Cost-Share Reduction or Waiver (Not Applicable)



December 29, 2020

Mr. Ned Weakland Bureau of Reclamation Financial Assistance Operations Denver Federal Center 6<sup>th</sup> Avenue and Kipling Street P.O. Box 25007, MS 84-27815 Denver, CO 80225

Dear Mr. Weakland and Application Review Committee Members:

This letter is to document our support for the development of the Upper Platte River Drought Contingency Plan. The Nebraska Department of Natural Resources, together with five other Upper Platte River water management agencies (Natural Resource Districts), have organized the Platte Basin Coalition (Coalition) and through an Inter-local Cooperative Agreement (ILCA) these agencies will work together to develop regional solutions to improve the water supply reliability and drought resiliency of the Upper Platte River Basin.

The Upper Platte River planning area includes more than 15,000 square miles, extending from near Columbus, Nebraska to the western borders of Nebraska, and contains a diverse range of water uses, including over 250,000 Nebraskans, 8 million irrigated acres, hundreds of businesses and industries, and provides streamflow critical for threatened and endangered species. Advanced planning for drought extremes is critical to avoid a number of water-related risks identified in the WaterSMART grant application.

The Coalition will be a major part of the administrative framework needed for the planning effort and will provide critical coordination between state and local water managers. As a member of the Coalition, our Natural Resource District will also actively participate in the development and implementation of the plan, as well as assist with public outreach throughout planning and implementation.

The drought driven risks are diverse and alternatives for resolving them will be developed through this planning effort. We fully support the Nebraska Department of Natural Resources WaterSMART application on behalf of the Coalition and urge the Bureau of Reclamation to recognize the importance and need for its support and funding.

Sincerely,

Lyndon Vogt General Manager

Central Platte Natural Resources District

215 Kaufman Avenue Grand Island, NE 68803



# NORTH PLATTE

# Natural Resources District

P.O. Box 280 • 100547 Airport Rd. • Scottsbluff, NE 69363-0280 • Phone: 308 632-2749 • Fax: 308 632-4346

December 29, 2020

Mr. Ned Weakland Bureau of Reclamation Financial Assistance Operations Denver Federal Center 6<sup>th</sup> Avenue and Kipling Street P.O. Box 25007, MS 84-27815 Denver, CO 80225

Dear Mr. Weakland and Application Review Committee Members:

This letter is to document the support of the Board of Directors of the North Platte Natural Resources District (NPNRD) for the development of the Upper Platte River Drought Contingency Plan. The Nebraska Department of Natural Resources, together with five other Upper Platte River water management agencies (Natural Resource Districts), have organized the Platte Basin Coalition (Coalition) and through an Inter-local Cooperative Agreement (ILCA) these agencies will work together to develop regional solutions to improve the water supply reliability and drought resiliency of the Upper Platte River Basin.

The Upper Platte River planning area includes more than 15,000 square miles, extending from near Columbus, Nebraska to the western borders of Nebraska, and contains a diverse range of water uses, including over 250,000 Nebraskans, 8 million irrigated acres, hundreds of businesses, and industries, and provides streamflow critical for threatened and endangered species. Advanced planning for drought extremes is critical to avoid several water-related risks identified in the WaterSMART grant application.

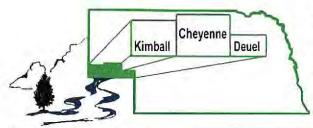
The Coalition will be a major part of the administrative framework needed for the planning effort and will provide critical coordination between state and local water managers. As a member of the Coalition, our Natural Resource District will also actively participate in the development and implementation of the plan, as well as assist with public outreach throughout planning and implementation.

The drought-driven risks are diverse and alternatives for resolving them will be developed through this planning effort. While the North Platte NPNRD adopted a drought contingency plan in 2017 that relies heavily on drought monitoring, public engagement, and education, we see great value in basin-wide contingency planning to ensure an aligned response that includes these important components. Additionally, we believe a vigorous discussion amongst stakeholders across the basin to identify vulnerabilities and responses to those vulnerabilities will help us to achieve a balanced approach. We believe this application shares that common goal with the Bureau of Reclamation. We fully support the Nebraska Department of Natural Resources WaterSMART application on behalf of the Coalition and urge the Bureau of Reclamation to recognize the importance and need for its support and funding.

Sincerel

John Berge

General Manager



# South Platte Natural Resources District

551 Parkland Drive, PO Box 294 Sidney, Nebraska 69162 (308) 254-2377 FAX (308) 254-2783 www.spnrd.org

December 30, 2020

Mr. Ned Weakland Bureau of Reclamation Financial Assistance Operations Denver Federal Center 6<sup>th</sup> Avenue and Kipling Street P.O. Box 25007, MS 84-27815 Denver, CO 80225

Dear Mr. Weakland and Application Review Committee Members:

This letter is to document our support for the development of the Upper Platte River Drought Contingency Plan. The Nebraska Department of Natural Resources, together with five other Upper Platte River water management agencies (Natural Resources Districts), have organized the Platte Basin Coalition (Coalition) and through an Inter-local Cooperative Agreement (ILCA) these agencies will work together to develop regional solutions to improve the water supply reliability and drought resiliency of the Upper Platte River Basin.

The Upper Platte River planning area includes more than 15,000 square miles, extending from near Columbus, Nebraska to the western borders of Nebraska, and contains a diverse range of water uses, including over 250,000 Nebraskans, 8 million irrigated acres, hundreds of businesses and industries, and provides streamflow critical for threatened and endangered species. Advanced planning for drought extremes is critical to avoid several water-related risks identified in the WaterSMART grant application.

The Coalition will be a major part of the administrative framework needed for the planning effort and will provide critical coordination between state and local water managers. As a member of the Coalition, our Natural Resources District will also actively participate in the development and implementation of the plan, as well as assist with public outreach throughout planning and implementation.

The drought-driven risks are diverse and alternatives for resolving them will be developed through this planning effort. We fully support the Nebraska Department of Natural Resources WaterSMART application on behalf of the Coalition and urge the Bureau of Reclamation to recognize the importance and need for its support and funding.

Sincerely,

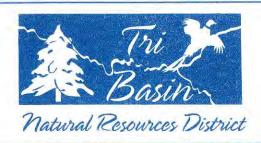
Rod L. Horn, General Manager

South Platte Natural Resources District

P.O. Box 294

Sidney, Nebraska, 69162-0294

Tri-Basin NRD 1723 Burlington Holdrege, NE 68949



Phone: (308) 995-6688 Toll Free: 1-877-995-6688

Fax: (308) 995-6992 Email: tribasin@tribasinnrd.org

General Manager
JOHN THORBURN

Chairman BRAD LUNDEEN Wilcox, Nebraska

Vice Chairman TODD GARRELTS Holdrege, Nebraska

Treasurer ROB HINRICHS Axtell, Nebraska

Secretary JOE BILKA Holdrege, Nebraska

BRIAN BERGSTROM Axtell, Nebraska

MIKE CAVANAUGH Minden, Nebraska

ED HARRIS Loomis, Nebraska

PHYLLIS JOHNSON Bertrand, Nebraska

JOE LARSON Loomis, Nebraska

DAVID RAFFETY Kearney, Nebraska

LARRY REYNOLDS Lexington, Nebraska

GREG JORGENSEN Minden, Nebraska

DAVID OLSEN Minden, Nebraska December 29, 2020

Mr. Ned Weakland US Bureau of Reclamation-Financial Assistance Operations P.O. Box 25007, MS 84-27815 Denver, CO 80225

Dear Mr. Weakland and Application Review Committee Members:

The purpose of this letter is to document our support for the development of the Upper Platte River Drought Contingency Plan. The Nebraska Department of Natural Resources, together with five regional Upper Platte River basin water management agencies (Natural Resources Districts, or NRDs), have organized the Platte Basin Coalition (Coalition). Through an Inter-local Cooperative Agreement (ILCA) these agencies work together to develop regional solutions to improve the water supply reliability and drought resiliency of the Upper Platte River Basin.

The Upper Platte River planning area includes more than 15,000 square miles, extending from near Columbus, Nebraska to the western borders of Nebraska, and contains a diverse range of water uses, including over 250,000 Nebraskans, 8 million irrigated acres, hundreds of businesses and industries, and provides streamflow critical for threatened and endangered species. Advanced planning for drought extremes is critical to avoid water-related risks identified in the WaterSMART grant application.

The Coalition will be a major part of the administrative framework needed for the planning effort and will provide critical coordination between state and local water managers. As a member of the Coalition, Tri-Basin NRD will actively participate in development and implementation of the plan, as well as assist with public outreach throughout planning and implementation.

The drought-driven risks are diverse and alternatives for resolving them will be developed through this planning effort. We fully support the Nebraska Department of Natural Resources WaterSMART application on behalf of the Coalition and urge the Bureau of Reclamation to recognize the importance and need for its support and funding.

Sincerely,

John Thorburn

Manager



December 29, 2020

Mr. Ned Weakland
Bureau of Reclamation
Financial Assistance Operations
Denver Federal Center
6th Avenue and Kipling Street
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Dear Mr. Weakland and Application Review Committee Members:

This letter is to document the Twin Platte Natural Resource District (TPNRD) support for the development of the Upper Platte River Drought Contingency Plan. The Nebraska Department of Natural Resources (NE DNR), together with five other Upper Platte River water management agencies (Natural Resource Districts), have organized the Platte Basin Coalition (Coalition) and through an Inter-local Cooperative Agreement (ILCA) these agencies will work together to develop regional solutions to improve the water supply reliability and drought resiliency of the Upper Platte River Basin.

The Upper Platte River planning area includes more than 15,000 square miles, extending from near Columbus, Nebraska to the western borders of Nebraska, and contains a diverse range of water uses, including over 250,000 Nebraskans, 8 million irrigated acres, hundreds of businesses and industries, and provides streamflow critical for threatened and endangered species. Advanced planning for drought extremes is critical to avoid a number of water-related risks identified in the WaterSMART grant application.

The Coalition will be a major part of the administrative framework needed for the planning effort and will provide critical coordination between state and local water managers. As a member of the Coalition, the TPNRD will also actively participate in the development and implementation of the plan, as well as assist with public outreach throughout planning and implementation.

The drought-driven risks are diverse and alternatives for resolving them will be developed through this planning effort. The TPNRD fully supports the NE DNR WaterSMART application on behalf of the Coalition and urge the Bureau of Reclamation to recognize the importance and need for its support and funding.

Sincerely,

Kent O. Miller, P.E. General Manager



**DEPT. OF NATURAL RESOURCES** 

January 5, 2021

Mr. Ned Weakland Bureau of Reclamation Financial Assistance Operations, DFC 6<sup>th</sup> Avenue and Kipling Street P.O. Box 25007, MS 84-27815 Denver, CO 80225



Pete Ricketts, Governor

Dear Mr. Weakland and Application Review Committee Members:

This letter is to document our support and financial commitment for the development of the Upper Platte River Drought Contingency Plan. Our agency along with five other Upper Platte River water management agencies, have organized the Platte Basin Coalition (PBC) and through an Inter-local Cooperative Agreement (ILCA) our agencies will to work together to develop regional solutions to improve the water supply reliability and drought resiliency of the area.

The Upper Platte River planning area includes more than 15,000 square miles, extending from near Columbus, Nebraska to the western borders of Nebraska, and contains a diverse range of water uses, over 250,000 Nebraskans, 8 million irrigated acres, hundreds of businesses and industries, and provides streamflow critical for threatened and endangered species. Advanced planning for drought extremes is critical to avoid many of the water-related risks identified in this WaterSMART grant application.

As Director of the Nebraska Department of Natural Resources, I am authorized to commit financial resources in support of this application. Our agency will commit \$100,000 in financial support via our membership in the PBC. These dollars, combined with the \$100,000 commitment from the five Natural Resources District members of the PBC, will provide a total local cost-share of \$200,000 for the application.

The drought-driven risk in the Upper Platte River is diverse and alternatives for resolving them will be developed through this planning effort. As members of the PBC and applicant for the Upper Platte River Drought Contingency Plan we urge the Bureau of Reclamation to recognize the importance and need for support and funding of this effort.

Sincerely,

Thomas E. Riley, P.E., Director

Thomas & Riley

cc: Kent Miller TPNRD

Thomas E. Riley, P.E., Director

**Department of Natural Resources** 

301 Centennial Mall South P.O. Box 94676 Lincoln, Nebraska 68509 **OFFICE** 402-471-2363 **FAX** 402-471-2900

dnr.nebraska.gov

Mr. Ned Weakland Bureau of Reclamation Financial Assistance Operations Denver Federal Center 6<sup>th</sup> Avenue and Kipling Street P.O. Box 25007, MS 84-27815 Denver, CO 80225

Dear Mr. Weakland and Application Review Committee Members:

This letter is to document our support and financial commitment for the development of the Upper Platte River Drought Contingency Plan. The Nebraska Department of Natural Resources, together with five other Upper Platte River water management agencies (Natural Resource Districts), have organized the Platte Basin Coalition (Coalition) and through an Inter-local Cooperative Agreement (ILCA) these agencies will work together to develop regional solutions to improve the water supply reliability and drought resiliency of the Upper Platte River Basin.

The Upper Platte River planning area includes more than 15,000 square miles, extending from near Columbus, Nebraska to the western borders of Nebraska, and contains a diverse range of water uses, including over 250,000 Nebraskans, 8 million irrigated acres, hundreds of businesses and industries, and provides streamflow critical for threatened and endangered species. Advanced planning for drought extremes is critical to avoid a number of water-related risks identified in the WaterSMART grant application.

As Chair of the Platte Basin Coalition, I am authorized to commit financial resources in support of this application. The Platte Basin Coalition will commit \$200,000 in local financial support for the proposal submitted by the Nebraska Department of Natural Resources on behalf of the Coalition.

We fully support the Nebraska Department of Natural Resources WaterSMART application on behalf of the Coalition and ask the Bureau of Reclamation to recognize the importance and need for its support and funding. We look forward to partnering with the Bureau of Reclamation on this planning effort.

Sincerely,

Kent O. Miller, Chair

Platte Basin Coalition

111 South Dewey Street, 2nd Floor

PO Box 1347

North Platte, Nebraska 69103-1347