WaterSMART Cooperative Watershed Management Program Phase I
Columbia Basin Sustainable Water Coalition Development:
Protecting and maintaining groundwater

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Submitted on Behalf Of: Columbia Basin Sustainable Water Coalition

Submitted To:
WaterSMART Cooperative Watershed Management Program Phase I
CFDA Number: 15.554 -- Cooperative Watershed Management
Funding Opportunity Announcement Number:
BOR-DO-21-F003

WaterSMART Cooperative Watershed Management Program Phase I Grants
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Technical Proposal
Date: January 19, 2021
Applicant: Lincoln County Conservation District
City and State: Davenport, WA
County: Lincoln/Grant County
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EXECUTIVE SUMMARY

Project Name: Columbia Basin Sustainable Water Coalition

Application Date: January 19, 2021

Applicant: Lincoln County Conservation District

Applicant Location: Davenport, Lincoln County, Washington

Project Summary: The Lincoln County Conservation District, in cooperation with the Grant County Conservation District and other stakeholders, will formally establish the Columbia Basin Sustainable Water Coalition (Coalition). The purpose of the Coalition is to unite a diverse set of stakeholders and to promote sustainable water use in the Mid-Columbia Basin (project area), an area in eastern Washington State that has experienced significant groundwater level declines over the past several decades. The Coalition is currently a loosely organized partnership consisting of participation from: local conservation districts, counties, municipalities, utility districts, irrigators, state and federal agency staff, elected officials, and others. Funding from the Cooperative Watershed Management Program (Phase I) will allow the Coalition to formalize its organizational charter and bylaws (foundational documents), support a watershed group coordinator/facilitator, hold and facilitate regular planning meetings, and generate a watershed management plan. It is anticipated that at least one component of the watershed management plan will include a recommendation to develop a regional groundwater monitoring network to better understand the extent of groundwater declines in the project area. It is envisioned that the Coalition will serve as a model of community interests coming together to achieve the common objective of sustainable water resources.

Time period: The establishment of the Coalition is expected to take two years and be completed by the end of 2023, assuming a funding contract is awarded by the end of 2021.

Federal facility: The proposed Coalition project area includes land that is within the boundaries of the U.S. Bureau of Reclamation (BOR) Columbia Basin Project (CBP), a federal irrigation project. Some land, including CBP infrastructure rights-of-way, are federally owned. Groundwater beneath the proposed project area is affected by CBP infrastructure and operations.
TECHNICAL PROJECT DESCRIPTION

This section describes the technical details of the proposed project.

Project Location

The location of the project area is generally the Mid-Columbia Basin and includes the Counties of Lincoln, Grant, Adams, and Franklin in eastern Washington. A map of the project area, including counties and communities within the project area, is provided on Figure 1. A map showing the Hydrologic Unit Codes (HUCs) of the primary hydrologic units within the project area is provided on Figure 2.

Introduction

The Mid-Columbia Basin (project area) lies within the larger Columbia Plateau. The Columbia Plateau occupies the entire south-central portion of Washington. It is a wide, arid lowland area between the Okanogan Highlands, the southern Cascade Range and the Idaho Rockies that extends from Washington to cover much of eastern Oregon and northern Nevada. The Columbia Plateau is characterized by steep river canyons, extensive plateaus and, in places, tall and sinuous ridges. The region is overlain with windblown loess deposits and material deposited from cataclysmic glacial floods. The dominant land use within the project area is commercial agriculture; the CBP has transformed much of what was once a high desert plain into a productive crop-producing region. A representation of land use within the project area is depicted on Figure 3.

The underlying geologic formations consist of thousands of feet of Columbia River Basalt Group (CRBGs) lava flows on top of a basement of granitic bedrock. The CRBG in the project area consists of three primary formations, from youngest (shallowest) to oldest (deepest): Saddle Mountains Formation, Wanapum Formation, and Grande Ronde Formation. Each formation consists of multiple individual CRBG flows (or layers). Groundwater occurs within the CRBG flows and is commonly available at relatively high yields from the basalt interflow zones, which occur between individual CRBG flows and can include permeable fractured, weathered, and/or vesciculated basalt along with unconsolidated or semi-consolidated material. Some interflow zones, particularly those between the major basalt formations, are low permeability and are considered confining units. The approximate geographical extent of each of the primary CRBG formations relative to the project area is depicted on Figure 4.

The Grande Ronde Formation is the deepest and most extensive basalt formation that underlies the Columbia Plateau and project area. The Grande Ronde, along with the overlying
Wanapum and Saddle Mountains Basalt Formations, compose most of the aquifer system within the project area. The basalt rock aquifers are as much as 15,000 feet thick in places and are overlain by unconsolidated deposit (e.g., sand and gravel) aquifers that are also part of the aquifer system. Geologic structures control groundwater occurrence and movement. The general movement of water in the aquifer system is from recharge areas near the edges of the plateau toward regional drains such as the Columbia River.

The hydrologic units within the project area, shown on Figure 2, exhibit a variable degree of interconnectivity with each other in terms of surface water flows and with the underlying groundwater system. For example, surface water flows in the Upper Crab-Wilson watershed (HUC 17020013), originating in a series of lakes and creek beds, flow south, then west, and discharge into the northern portion of the Lower Crab watershed (HUC 17020015). Surface water flows in the Lower Crab watershed have a high degree of hydraulic connection with the shallow groundwater system, as flows in Crab Creek are in places lost to groundwater and in other places gained from groundwater. Crab Creek flows southward to Moses Lake, where it historically (or naturally) would subsequently flow west along the southern margins of the Lower Crab watershed and discharge to the Columbia River.

In contrast, the Grand Coulee watershed (HUC 17020014) is considered a ‘closed basin’ in terms of surface water. Natural surface water and interconnected shallow groundwater in this watershed makes its way to a series of lakes in the southern portion of the watershed. Soap Lake, which has no surface water inlets or outlet (its only recharge source is groundwater and its only discharge is through evaporation) is the natural hydraulic terminus of the Grand Coulee watershed – it is largely isolated, in terms of natural surface water flows, from adjacent watersheds.

The construction and operation of the Columbia Basin Project (CBP), however, has significantly altered the natural surface water flows within the project area. Surface water is now pumped from the Lake Roosevelt reservoir on the Columbia River into Banks Lake within the Grand Coulee watershed. From Banks Lake, water is diverted in a series of irrigation canals to irrigate agricultural land within the central and western portions of the Lower Crab watershed. Natural flows to Moses Lake and irrigation drainage from much of the irrigated land within the Lower Crab watershed are collected and impounded in Potholes Reservoir. From Potholes Reservoir, surface water is diverted further southward to irrigate lands within the Esquatzel Coulee watershed (HUC 17020016) in the southern portion of the project area. From the Esquatzel Coulee, natural groundwater and artificial irrigation return flows eventually drain to the Columbia River.
While the interconnectivity of the surface water features and flow regimes within the project area are variable, the groundwater system is generally more regional in scale and does not necessarily follow the flow patterns delineated by the HUCs. Because the Palouse watershed (HUC 17060108) is underlain by upgradient portions of the aquifer system where recharge occurs, it has been included for consideration in this project.

A generalized cross section of the aquifer system and the conceptual flow of groundwater and interconnection between surface water and groundwater, provided on Figure 5, further illustrates the general pattern of water movement within the project area. Of particular note is that the basalt aquifer units are thinner (related to shallower bedrock) toward the north (i.e., in Lincoln County) and get thicker (related to deeper bedrock) as you move to the south and west toward the center of the Grande Ronde in the vicinity of the border of Washington and Oregon.

The groundwater system of the project area is complex, occurs in a number of aquifer units, and is variably affected by surface water and recharge. While some locations of the project area – particularly those where agricultural irrigation surface water deliveries have occurred as part of the CBP – have seen water level increases over the last several decades, a large portion of the project area – particularly where CBP surface water deliveries were not completed – has experienced significant groundwater level declines. The groundwater level declines are primarily attributed to groundwater pumping for large-scale agricultural irrigation and a lack of recharge.

Groundwater declines have been particularly pronounced in the Odessa subarea, where CBP surface water deliveries were planned but never realized. The boundaries of the CBP and the Odessa subarea are shown on Figure 1, for reference. The majority of the agricultural wells in the Odessa subarea are authorized by water rights dating back to the 1960s that were meant to be a temporary stopgap until the CBP was completed. Two of the major CBP water delivery canals (Main and East Low Canals) and the Potholes Reservoir were built out in the 1950s and 1960s to serve the northwest and southern portions of the CBP. However, build-out of the CBP stalled in the 1970s due to lack of funding and, later, endangered species issues. Consequently, the third planned major canal (East High Canal) was never completed. Instead of phasing out temporary groundwater usage in the Odessa subarea as planned, pumping of the aquifers has been on an increasing trend for almost 50 years, resulting in groundwater declines of more than 200 feet in some areas.

There are approximately 137 groundwater-reliant Group A community water systems providing drinking water to over 90,000 residents in the Mid-Columbia Basin. The locations of
supply wells serving these community water systems are depicted in relation to the project area on Figure 4. Many of these municipal/community water systems in the region are facing challenges to meet their demand and some are being forced to lower their pumps as water levels fall, switch to shallow sources that require costly treatment, or develop aquifer storage and recovery projects. Some systems have no clear alternatives for obtaining potable water in their areas. While planning and construction are underway to expand the capacity of, and add lateral pump stations to, the East Low Canal to provide surface water deliveries for agricultural irrigation to some of the land in the Odessa subarea currently being irrigated with groundwater, those improvements will take some time to show a significant effect on groundwater levels important to municipalities and other community groundwater users.

**Applicant Category**

The Coalition is applying for funding as a New Watershed Group. While the Coalition has been in loose existence since 2018, when the Washington Department of Health (WDOH) formed a partnership with the Washington Department of Commerce (Commerce) to work with water systems on groundwater depletion in the Mid-Columbia Basin, the Coalition lacks a formal charter and regular coordination. Funding assistance will allow the Coalition to formalize its organizational charter, support a watershed group coordinator, hold and facilitate regular planning meetings, and generate a watershed management plan to develop a regional groundwater monitoring network to better understand the extent of groundwater declines in the project area. Entities and individuals that have participated in the Coalition in the past – and are expected to continue to participate in the future – include a broad range of stakeholders of the Mid-Columbia Basin, including cities, county commissioners, mayors, public and private utility staff, conservation district officials, members of the Warden Hutterian Brethren, state and federal agency staff, and state and federal elected officials, among others. In 2019, Commerce produced the Mid-Columbia Resiliency Coordination Report, which summarized widespread outreach and data collection activities performed by Commerce and WDOH with Mid-Columbia Basin municipalities and other community water systems. The Commerce report concluded that the Mid-Columbia Basin has a need for: stronger coordination between all water users; a more robust network of groundwater monitoring wells; public education on groundwater declines; and a plan for achieving long-term sustainable potable water supplies.

Prior cooperative planning and technical efforts performed within a previously established groundwater management area (GWMA) formed within the project area laid the foundation for relationships and future work by the Coalition. The previous GWMA efforts ceased in approximately 2015 and the project area has been without a consistent and coordinated
water resources planning effort since that time. It is the Coalition’s intent to build and improve upon those previous efforts.

**Eligibility of Applicant**

The applicant is the Lincoln County Conservation District in cooperation with the Grant County Conservation District, both of which are located in Washington State. The applicant and other participants of the Coalition are significantly affected by declining groundwater quantities, as described above. The applicant and other participants of the Coalition provide services to promote the sustainable use of water resources to a large audience (e.g., water utility customers) within the project area.

**Goals and Objectives**

With funding through this grant opportunity, the Coalition seeks to build upon collaborative work to date and formalize the watershed group. Short term goals include: (1) create foundational documents (2) establish an authorized workgroup/leadership body based on the foundational bylaws (3) develop a communication and outreach plan to effectively communicate proposed work, while continuing to build a diverse and inclusive stakeholder group (4) inventory and prioritize projects collaboratively that reflect the group’s mission, and (5) initiate a small-scale groundwater monitoring network in the project area and develop proposals to implement projects, including an expansion of this monitoring to a long-term regional groundwater monitoring program.

**Vision, Mission Statement, and Approach**

The vision of the Coalition is to protect and maintain a water supply for present and future generations of the Mid-Columbia Basin. To realize this vision, the mission of the Coalition is to address groundwater supply with the active support and involvement of diverse stakeholders, creating locally-driven recommendations that influence water delivery methods and policy to direct resources for long-term groundwater solutions.

**Scope of Work**

The Coalition’s approach for completing the project includes a 4-task scope of work, as described below.

**Task 1 – Coalition Formalization**

The first task of the project will include creating foundational documents and continuing to expand the Coalition membership group. A steering committee has already been formed that
includes Conservation District staff, a County Commissioner, a City Engineer, a municipal Water Quality Specialist, the manager of a faith-based Colony (which is also a large-scale irrigator in the Mid-Columbia Basin), and a Town Council Member. Coalition members have already chosen a name (Columbia Basin Sustainable Water Coalition) and adopted a preliminary mission statement and vision. A diverse contact list and designated points of contact were established to work toward the execution of the Coalition’s mission and vision. Task 1 will take that preliminary work further, establishing a formal process and structure for the Coalition, including the establishment of a board of representatives (possibly converted from the current steering committee), committees, and foundational documents, including bylaws and a charter, and completing required project documentation (e.g., annual report of activities). Included in Task 1 is the contracting with a third-party coordinator/facilitator to assist the Coalition complete the scope of work. The primary deliverables of Task 1 will include the foundational documents for the Coalition.

Milestones and anticipated schedule, assuming a financial assistance (funding) agreement is in place by the end of December 2021, for the individual items under Task 1 include:

- Board of Representatives to be established within six months of funding agreement execution, or by the end of June 2022.
- Foundational documents completed within twelve months of funding agreement execution, or by the end of December 2022.
- Third-party project facilitator contracted within nine months of funding agreement execution, or by the end of September 2022.
- Regular bi-monthly (i.e., every other month) Coalition meetings to begin within two months of funding agreement and continue throughout the duration of the funding period.
- Annual reports of activities prepared 12 months and 24 months following funding agreement execution, by December of 2022 and 2023.

The anticipated cost for Task 1 is $25,000 (over two years).

**Task 2 – Outreach and Education**

The second task of the project will include the formation of an outreach and education plan. The goals of Task 2 will be two-fold: first, to distribute Coalition-developed educational materials regarding observed groundwater level declines in the project area as well as the purpose and mission of the Coalition (i.e., informing the public); and second, to continue
building upon the list of diverse participants within the Coalition and include more perspectives going forward (i.e., recruiting). Educational materials will be distributed through newsletters, press releases, participation in regional events, and social media posts to individuals and groups within the designated project area but who may not be active participants in the Coalition. The primary deliverables of Task 2 will include educational outreach material and an expanded list of Coalition participation. An example of a previously completed outreach material previously completed by the Coalition is included as Attachment 1.

Milestones and anticipated schedule, assuming a funding agreement is in place by the end of December 2021, for the individual items under Task 2 include:

- Press release prepared within two weeks following any event that the Coalition Board of Representatives determines to be a major accomplishment. The first major accomplishment is expected to be the execution of the project funding agreement.
- Newsletter prepared and distributed twice per year (or every 6 months) for two years following funding agreement execution, including one each in approximately: June 2021, December 2022, June 2023, and December 2023.
- Other outreach material produced and distributed as appropriate throughout the funding period
- Recruitment of additional Coalition stakeholders to be completed throughout the funding period.

The anticipated cost for Task 2 is $25,000 (over two years).

**Task 3- Identifying Project Proposals**

The third task of the project will include reviewing project alternatives that, if implemented, would advance the mission of the Coalition. The project alternatives will be developed based on previous efforts completed within the project area (e.g., those of WDOH, Commerce, the GWMA, etc.) and input from Coalition stakeholders. Part of reviewing project alternatives will include coordination with the Washington State University’s (WSU’s) Quantifying the state of groundwater in the Columbia Basin project that was recently funded through a BOR Applied Sciences WaterSMART Grant in order to leverage data collected through that project and avoid duplication of efforts. A subcommittee will be tasked with review of existing/historical data and proposing project alternatives for inclusion into the watershed management plan.
Previous work (Commerce 2019) has identified a primary goal of establishing a groundwater monitoring network in the project area to inform decision makers about existing groundwater supplies, identify areas of investment for water infrastructure projects and the possible development of alternative water supplies, and to improve public awareness about water use in the Mid-Columbia Basin. Phase I funding is not meant to implement a large-scale groundwater monitoring network, though some limited groundwater level monitoring is proposed for Task 3. Limited groundwater monitoring will include pressure transducer installation for semi-continuous (e.g., hourly or daily) water level data collection and periodic manual water level measurements in four to six existing wells. Included in Task 3 is the contracting with a third-party groundwater monitoring consultant to assist the Coalition complete the scope of work. The data collected for Task 3 will inform the design of any future large-scale groundwater monitoring network.

Once established (Task 1) and with educational materials being distributed (Task 2), the Coalition will shift focus to Task 3 and work collectively to identify a range of project alternatives from which to assess suitability to advance the Coalition’s mission. The primary deliverable of Task 3 will be an informal database of project alternatives, a map of select groundwater monitoring wells, and water level timeseries data.

Milestones and anticipated schedule, assuming a funding agreement is in place by the end of December 2021, for the individual items under Task 3 include:

- Third-party groundwater monitoring consultant contracted within nine months of funding agreement execution, or by the end of September 2022.
- Identify select monitoring wells for groundwater level monitoring within twelve months of funding agreement execution (December 2022) and collect water level data throughout remaining funding period (until December 2023).
- Produce map of monitoring well locations and water level hydrographs, draft by September 2023 and final by December 2023.
- Identify possible watershed management project alternatives throughout the first 18 months following funding agreement execution, or until June 2023.

The anticipated cost for Task 3 is $30,000 (over two years), which includes $10,000 for both years ($20,000 total) toward groundwater level data collection and analysis and $10,000 for project alternatives identification.
Task 4 – Project Selection

Task 4 will include the preparation of a watershed management plan document, which will describe the critical water supply issue in the project area and summarize conceptual project alternatives that will be under consideration by the Coalition. The watershed management plan will also document the Coalition’s prioritizations for implementation of one or multiple project alternatives to support the Coalition’s mission and to strive toward sustainable groundwater resources in the project area. Task 4 will include the process of selecting a priority project (or projects) through a robust evaluation ranking system. The targeted projects will directly relate to those identified in Task 3 and will be proposed for implementation by the leadership body of the group. Individual committees may be formed to apply for funding, administer, and implement these projects. It is anticipated that one or multiple of the selected projects may be the subject of a future Cooperative Watershed Management Program Phase II funding opportunity proposal. The primary deliverable of Task 4 will be a preliminary watershed management plan for the Mid-Columbia Basin.

Milestones and anticipated schedule, assuming a funding agreement is in place by the end of December 2021, for the individual items under Task 4 include:

- Develop draft watershed management plan by September 2023.
- Finalize watershed management plan by December 2023.

The anticipated cost for Task 4 is $20,000 (over two years).

Evaluation Criteria

This section includes a description of how the proposed project is expected to fit within the four major evaluation criteria of the Phase I Cooperative Watershed Management Program funding opportunity, which are addressed in the following order: (A) Watershed Group Diversity and Geographic Scope, (B) Addressing Critical Watershed Needs, (C) Implementation and Results, and (D) Department of the Interior and Bureau of Reclamation Priorities.

Criterion A. Watershed Group Diversity and Geographic Scope

Sub-criterion A1. Watershed Group Diversity:

The Coalition was formed in 2018 by a diverse group of stakeholders. The stakeholder group includes: farmers/irrigators, municipalities, County commissioners, state and county natural resource agencies (e.g., Lincoln and Grant County Conservation Districts, WDOH, Commerce), federal agency representatives, industry representatives, and concerned community
members. Many of these stakeholders have since actively participated in preliminary Coalition efforts. A list of Coalition meeting participation is provided in Attachment 2. The Coalition and its mission have broad support from this wide range of stakeholders. Included as an attachment (Attachment 3) to this application are letters of support from the varied stakeholders in and around the project area.

All Coalition stakeholders in the project area are affected by declining groundwater levels in the Mid-Columbia Basin. Irrigators depend on a reliable source of water to maintain economically viable crop production. Municipalities depend on reliable and high-quality groundwater for the drinking water supplies of their citizens. Counties depend on a vibrant community of economic and residential development, which are in turn dependent on a reliable water supply. State and local natural resources agencies have an obligation to protect and conserve the limited natural resources throughout the project area and beyond. Federal agencies have invested immense federal resources into water, energy, and transportation infrastructure projects within the project area. Industry stakeholders (including irrigation system suppliers, agricultural and water resources consultants, and engineers) are reliant on the long-term sustainable use of water in order to contribute continuing value to water users within the project area. And community members are counting on sustainable water supplies for the future of their families and communities. All of these Coalition stakeholders bring a unique perspective and expertise to the issue of sustainable water use within the project area.

The Coalition will leverage the existing diversity of the group and continue to recruit a broad range of additional Coalition participants, including state and federal agency personnel [from WDOH, Washington State Department of Ecology (Ecology), U.S. Bureau of Reclamation (BOR), etc.]; County Health Districts; County Conservation Districts; local and regional decision-makers (county commissioners and city representatives); individual ranchers, irrigators, and landowners; conservation organizations; and, industry representatives.

Additional Coalition participants will be targeted with a combination of broad outreach material (e.g., newsletters, public meetings, social media) as well as focused recruiting (e.g., intentional invitations and meetings with key local and state agency staff and other decision-makers). The strength of the Coalition and its recruiting efforts lies within its diverse set of stakeholders in both participation and leadership. Nothing attracts a crowd like a crowd; and funding through the Cooperative Watershed Management Program will allow the Coalition to accelerate its crowd-building momentum.
Sub-criterion A2. Geographic Scope:
The Coalition project area covers all or portions of five major hydrologic units (or watersheds) defined by the U.S. Geological Survey. The hydrologic unit codes (HUCs) of the project area watersheds [with the name of the corresponding watershed name based on Washington State Department of Ecology’s Water Resource Inventory Area (WRIA) delineations] include: 17020013 (Upper Crab-Wilson WRIA 43), 17020014 (Grand Coulee WRIA 42), 17020015 (Lower Crab WRIA 41), 17020016 (Esquatzel Coulee WRIA 36), and 17060108 (Palouse WRIA 34). The major watersheds within the project area are presented on Figure 2.

The Coalition currently works in partnership with individuals and organizations throughout the entire geographic project area. The locations or boundaries of many, but not all, Coalition stakeholders are shown on Figure 1, including: Lincoln County Conservation District (Applicant; headquarters in Davenport), Grant County Conservation District (Cooperating Applicant, headquarters in Moses Lake), Lincoln County, Grant County, Adams, County, Franklin County, and the Cities of Connell, Eltopia, Ephrata, Lind, Moses Lake, Odessa, Othello, Quincy, Warden, Wilbur. Other stakeholders are either located throughout the project area (e.g., irrigators and community members) or are located outside of the project area but regularly work within the project area (e.g., state/federal agency staff).

With funding from the Cooperative Watershed Management Program, the Coalition will continue to recruit a diverse and wide-ranging group of individuals and organizations to participate in the Coalition’s objectives of ensuring the development of viable, long-term strategies for sustainable water supplies that meet the needs of all stakeholders in the region.

Criterion B. Addressing Critical Watershed Needs
Sub-criterion B1. Critical Watershed Needs or Issues:
The project area is located within Adams, Franklin, Grant and Lincoln Counties. These counties face a number of critical watershed needs and issues; however, the most crucial of these critical needs and issues, proposed to be addressed by the Coalition, is water supply and storage. The project area has more than 137 Group A community water systems that rely on groundwater to provide drinking water to over 90,000 residents. These drinking water needs are, in places, pulling from the same sources of supply (i.e., aquifers) as a large number of high-capacity agricultural irrigation supply wells. The project area is underlain by two primary aquifers that supply drinking and irrigation water: the Wanapum and Grande Ronde Basalt Formations (the Saddle Mountains formation is limited in extent and the unconsolidated overburden material present throughout much of the project area is generally

Cooperative Watershed Management Program Phase I
Columbia Basin Sustainable Water Coalition
12 January 19, 2021
not considered suitable to supply drinking water without significant treatment technology applied).

Documentation by the United States Geological Survey (USGS), studies by the Columbia Basin Ground Water Management Area (GWMA), and review by Ecology has revealed the declining groundwater in these critical aquifers. In the Odessa subarea, in particular, groundwater levels have fallen on the order of 200 feet since approximately 1970. Some portions of these aquifers contain ancient water that is not readily recharged; pumping water from these portions has been compared to resource mining.

There is a history of well monitoring efforts across the Columbia Basin by various organizations for various periods of time. However, these efforts have not been consistent nor sufficient for the majority of water systems needing to know water level elevations in their area. Many of the systems in the basin are small and lack the resources, tools, or expertise to monitor their wells. Without outside help (e.g., from a Coalition-led effort), these systems remain uncertain as to the reliability of their water supplies. Not every water system is experiencing water level declines in their wells but because the geology and recharge mechanisms in the project area are varied and complex, additional data are needed to assess the full scale of the risk of dwindling water resources to municipalities and other groundwater users in the project area. Future work of the Coalition is envisioned to include a large-scale groundwater monitoring network to more fully assess—and track over time—the sustainability of the project area groundwater resources. The scope of work proposed for this current application includes the foundational groundwork for development of the Coalition and a watershed management plan, which will include detailed considerations for implementation of a large-scale groundwater monitoring network (and possibly other project alternatives). However, to begin collecting some amount of valuable groundwater level data as soon as possible, the current proposed scope of work also includes the monitoring of a select number of (i.e., four to six) existing groundwater wells. Monitoring will include the installation of semi-continuous (e.g., hourly or daily) recording water level pressure transducers plus occasional manual water level measurements. This preliminary small-scale dataset will provide a foundation for the development of the large-scale groundwater monitoring network and associated database.

A comprehensive water level monitoring program and a pathway to infrastructure monetary support and related outreach efforts have been identified as a critical need for the Coalition in order to achieve the vision of protecting and maintaining a water supply for present and future generations for the communities of the Mid-Columbia Basin.
Sub-criterion B2. Developing Strategies to Address Critical Watershed Needs or Issues:

The Coalition is a large, diverse group of stakeholders, including water users or those whose work involves water resources, within the Mid-Columbia Basin. The strategies employed by the Coalition will build upon previous and existing efforts of bringing together sometimes disparate groundwater users and collectively moving forward toward a common goal of conserving and protecting the groundwater supply in the project area. The first step is to formalize and solidify the Coalition membership and organizational documents, followed by education and outreach with a concurrent program of limited groundwater level data collection. By the end of the two-year funding period of this opportunity, the Coalition expects to have completed a basic watershed management plan, which will guide the Coalition’s selection of future projects with the intention of addressing the critical watershed needs and issues within the project area.

Task A – Water Group Development

The Coalition has taken advantage of previous partnership building efforts and the more recent Coalition activities to establish a broad stakeholder group in the Mid-Columbia Basin. Previous planning efforts go back to the four-County GWMA, which began in 1998 with efforts to address shallow groundwater nitrate contamination and actively collected groundwater data. This stakeholder group was active until approximately 2015. Lessons learned from the successes and challenges of the GWMA will be incorporated into the strategic planning of the Coalition. Most importantly, the Coalition will lean heavily on collaboration amongst our diverse stakeholders, from project area municipalities, irrigators, and decision-makers to state and federal agencies with an interest in the project area. Data and information gathered by WDOH and Commerce – including the 2019 Commerce study entitled Mid-Columbia Resiliency Coordination: Final Report – will be incorporated into Coalition planning efforts.

The project area is relatively large in geographic extent, but the community of people and organizations concerned with water resources within the project area is close-knit. Existing relationships of the Coalition stakeholders will be leveraged to bring the right people and the right kind of planning to advance the Coalition’s mission. To the extent possible, the Coalition intends to coordinate with other groups working on water issues within the project area. One such group is the Moses Lake Watershed Council (MLWC), which is also seeking funding through the Cooperative Watershed Management Program to address the specific issue of surface water quality in Moses Lake. The Coalition is in communication with MLWC and they participate as a stakeholder in the Coalition.
To facilitate Coalition development, meetings, and planning activities, the Coalition intends to contract with a third-party facilitator. Contracting with a facilitator will provide a mechanism of accountability to keep the Coalition on-mission and on-schedule. The facilitator will be responsible for the agendas, facilitation, and minutes of regular (e.g., semi-monthly) Coalition meetings, producing outreach documents and materials, and drafting a Coalition watershed restoration plan. Ideally, the facilitator would be a person or organization that is already familiar with the critical water supply issues – and is well-connected with a broad range of stakeholders – in the project area. It is anticipated that contracting with a facilitator will represent a relatively large share of the funding received (e.g., $40,000 per year for both years or $80,000 total).

**Task B – Watershed Restoration Planning**

The Coalition’s watershed management plan will describe the critical water supply issue in the project area and summarize conceptual project alternatives under consideration by the Coalition. The watershed management plan will also document the Coalition’s prioritizations for implementation of one or multiple project alternatives to support the Coalition’s mission and to strive toward sustainable groundwater resources in the project area. The watershed management plan will be developed based on previous efforts completed within the project area (e.g., those of WDOH, Commerce, the GWMA, etc.) and input from current Coalition stakeholders. A subcommittee will be tasked with review of existing/historical data and proposing project alternatives for inclusion into the watershed restoration plan.

Project alternatives will be recommended for implementation based on funding availability and project prioritization. Basic conceptual design considerations of the recommended project alternative(s) may be included, to the extent practicable, in the watershed management plan. It is anticipated that full project design would be developed under a separate funding mechanism or opportunity.

**Task C – Watershed Management Project Design**

Full-scale watershed management project design will be addressed under future funding opportunities (e.g., Cooperative Watershed Management Program Phase II). However, under this Phase I funding opportunity, the Coalition will perform limited groundwater level data collection to support the future design of a large-scale groundwater monitoring network. Based on previous planning efforts in the project area, a large-scale monitoring network is already known to be of great importance for sustainable water project design and implementation. Therefore, the Coalition intends to start gathering groundwater data – even if in a limited way – as soon as possible. The Coalition will contract with a qualified
hydrogeologic consulting firm to provide equipment for and perform the limited groundwater monitoring program proposed under this funding proposal. It is anticipated that the proposed limited groundwater monitoring efforts will represent a relatively small share of the funding received (e.g., $10,000 per year for both years or $20,000 total). Limited groundwater monitoring will include the monitoring of a select number of (i.e., four to six) existing groundwater wells with the installation of semi-continuous (e.g., hourly or daily) recording water level pressure transducers and occasional manual water level measurements. Monitoring wells will be selected to be representative of the primary aquifers within the project area. Selection of monitoring wells will be completed in coordination with the WSU project funded by an Applied Sciences WaterSMART Grant in order to avoid duplication of efforts and filling of data gaps particularly relevant to Coalition stakeholders. Groundwater level data collected throughout the funding period will be summarized by the contracted consultant in a brief technical memorandum including figures showing the monitoring well locations and water level hydrographs.

Criterion C. Implementation and Results

Sub-criterion C1. Project Implementation

The Coalition expects to implement this Phase I project via the four-task scope of work described – with anticipated milestones, schedule, and costs – in the Technical Project Description section of this proposal. That four-task scope of work is included, by reference, in this description of the Coalition’s planned Project Implementation.

Sub-criterion C2. Building on Relevant Federal, State, or Regional Planning Efforts

Other on-going planning work in the project area and vicinity include the following efforts:

- WDOH requires water systems that serve 1,000 or more connections to complete a Water System Plan. The goal of water system planning is to identify future needs and apply available resources most efficiently in order to provide high-quality service at the lowest cost while protecting the health of the community. WDOH planning personnel participate in Coalition meetings and will assist communities in their planning efforts as well as share community concerns with the Coalition.

- Commerce administers the Washington State Growth Management Act (GMA), which was adopted to address various ways to accommodate population growth. Under the GMA, fast-growing cities and counties complete comprehensive plans and development regulations to guide future growth. All jurisdictions are required to
protect critical environmental areas and conserve natural resource lands, such as farms, forests, and aquifer recharge areas. The GMA calls for communities to review and, if necessary, revise their plans and regulations every eight years to ensure they remain current. Commerce personnel participate in Coalition meetings and will assist communities in their planning efforts as well as share community concerns with the Coalition.

- Ecology, in partnership with the federal BOR, is implementing the Odessa Groundwater Replacement Program, which has expanded the hydraulic capacity of the existing East Low Canal of the CBP and will include installation of lateral pump stations to bring surface water deliveries to agricultural fields that have been pumping groundwater on temporary authorization for the last several decades. OGWRP is focused on reducing irrigation groundwater withdrawals in the Odessa subarea, where declining groundwater levels have been particularly severe. Completion of OGWRP will significantly reduce demand for critical groundwater supplies in the project area.

- Lincoln County Conservation District (LCCD, Applicant), with grant funding from Ecology, has been studying the feasibility of recharging the CRBG aquifers within the project area via conveyance and passive infiltration of Columbia River surface water to mostly dry lakebeds and creeks in the northern portion of the Upper Crab-Wilson watershed (HUC 17020013). A prefeasibility study completed by LCCD has recommended a pilot study to assess the actual potential to recharge the deep Grande Ronde Formation aquifers in the Odessa subarea – which have shown the largest declines in groundwater levels – from these proposed surface water infiltration plans. Funding is currently being sought by LCCD for a full-scale feasibility study for this passive rehydration project.

- Washington State University (WSU; Principal Investigator: Sasha McLarty) received a 2020 Applied Sciences WaterSMART Grant from BOR for a project entitled Quantifying the State of Groundwater in the Columbia Basin with Stakeholder-Driven Monitoring (WSU project). The WSU project intends to monitor up to 100 wells throughout eastern Washington for groundwater level trends over time. The data collected through the WSU project will be potentially important for Coalition stakeholders and for project alternatives evaluation. The Coalition will coordinate its work with that of the WSU project in order to leverage data collected from both projects and to avoid duplication of efforts. It is expected that some Coalition stakeholders will participate in the WSU project. However, because the WSU project includes a much larger study area than the Coalition’s project area (i.e., the WSU project covers all of eastern
Washington), the Coalition expects a need to fill some data gaps that will be particularly relevant to Coalition stakeholders. The WSU project Principal Investigator has provided a letter of support for the Coalition’s application (see Attachment 3).

- Columbia Basin Development League (CBDL) is working to advocate for the full build-out of the planned surface water deliveries of the CBP and is active in promoting sustainable groundwater supplies within the project area. CBDL is a participant of the Coalition.

**Criterion D. Department of the Interior and Bureau of Reclamation Priorities**

Multiple ways in which the work proposed by the Coalition as part of this project aligns with both Department of Interior (DOI) and BOR priorities are described below.

**DOI Priority #1: Creating a conservation stewardship legacy second only to Teddy Roosevelt** and **BOR Priority #3: Leverage Science and Technology to Improve Water Supply Reliability to Communities.**

The mission of the Coalition and the plans for this project align with DOI Priority #1 and BOR Priority #3, in that it:

- Fosters relationships with conservation organizations advocating for balanced stewardship and use of our lands. The applicant and cooperating applicant for this project are the Lincoln and Grant County Conservation Districts, which both strive to preserve and protect natural resources.

- Will utilize science to identify best practices to manage water resources and adapt to changes in the environment. Task 3 of the project includes groundwater monitoring in select wells to provide initial groundwater level data from the project area and a blueprint for design of a future large-scale groundwater monitoring network. The Coalition already recognizes that groundwater level data will be a key to determining a path forward toward sustainable groundwater supplies in the future and providing flexibility under changing conditions.

- Is concerned with groundwater supplies of the Mid-Columbia Basin, which is directly and indirectly affected by the federal CBP. In some portions of the project area (e.g., the western half of the Lower Crab and Esquatzel Coulee watersheds), percolation of irrigation return flows have directly increased groundwater levels and supplies, though with other side effects related to water quality (e.g., nitrate contamination). In other areas of the project area (e.g., Odessa subarea), lack of construction of planned CBP
surface water delivery infrastructure has indirectly led to significant declines in groundwater levels and supplies, due to widespread temporary permitted groundwater withdrawals for irrigation.

**DOI Priority #3: Restoring trust with local communities and BOR Priority #6: Improve Water Supplies for Tribal and Rural Communities.**

The work proposed by the Coalition aligns with DOI Priority #3 and BOR Priority #6 in that it:

- Directly involves community and municipal neighbors of the federal CBP. The CBP is a hugely important infrastructure project within the Mid-Columbia Basin. Its operations have direct and indirect benefits and consequences for the mostly rural communities which the Coalition is intended to serve.
- Will allow for easier lines of communication – through project documentation and status reports – between the DOI and local communities, county commissioners, water authorities, and state agency staff, all of whom are stakeholders in the Coalition.
PROJECT BUDGET
This section includes a discussion of the budget proposal and a budget narrative.

Budget Proposal
The total project cost is summarized in Table 1. A detailed estimated project budget proposal is summarized in Table 1. Additional budgetary details are provided on federal form SF-424A, which is included in Attachment 4.

Table 1. Total Project Cost

<table>
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Table 2. Budget Proposal

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Groundwater Monitoring Consultant  | $20,000 | 1 | Lump Sum | $20,000

Indirect Costs

| Office rent, utilities, etc. | $5,000 | 1 | Lump Sum | $5,000

**Total Direct Costs**  | $95,000

**Total Estimated Project Costs**  | $100,000

**Budget Narrative**

This funding will be utilized for two years at a cost of $50,000 per year for a total budget of $100,000. Monies will be used to pay a part-time staff salary and/or retain a contractor (or contractors) to generally assist the Coalition with the completion of the proposed 4-task scope of work described above by providing the following services:

- **Part-time staff (or contracted services) to assist with:**
  - Managing the project
  - Meeting coordination
  - Printing and distribution of education and outreach materials
  - Progress reports

- **Contracted services for:**
  - Coordinator/Facilitator to assist the Coalition with:
    - Development of organization of a charter
    - Preparation of education and outreach materials
    - Meeting coordination
    - Watershed management plan draft and finalization
  - Groundwater monitoring consultant to assist the Coalition with:
    - Monitoring well selection
    - Limited groundwater level data collection
    - Groundwater level data analysis.

Additional details regarding the planned use of grant funds is included on Form SF-424A (Attachment 4). No project costs are expected to be incurred prior to award of funding.
OTHER APPLICATION MATERIALS

This section includes discussion and responses for other relevant application materials requested in the funding opportunity announcement, including environmental and cultural resources compliance, required permits and approvals, letters of support, and official resolution from the applicant.

Environmental and Cultural Resources Compliance

This section includes responses to questions in Section H.1 of the Funding Opportunity Announcement, which are addressed in order.

• Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.
  
  o The project will not impact the surrounding environment. The majority of the project is focused on Coalition development and planning. A small portion of the project includes limited groundwater level data collection from existing wells. Any equipment that comes into contact with groundwater (e.g., pressure transducer or manual water level meter) will be decontaminated with an Alconox (or similar) solution and rinsed with di-ionized water prior to each use. No new monitoring wells are proposed as part of the project.

• Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?
  
  o There are a number of threatened or endangered species as well as critical habitat in the project area. Species identified by the U.S. Fish and Wildlife Service’s Environmental Conservation Online System as threatened or endangered within the four counties of the project area are listed in Attachment 5. The proposed project activities (Coalition development and planning and limited groundwater monitoring in existing wells) are not expected to affect any of the threatened or endangered species or critical habitat within the project area.
• Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as “Waters of the United States”? If so, please describe and estimate any impacts the proposed project may have.
  o The project is not expected to have any impacts on wetlands or surface water bodies within the project area.

• When was the water delivery system constructed?
  o This question is not applicable to the proposed project.

• Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.
  o The proposed project will not result in modification or effects to features of any irrigation system.

• Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.
  o The proposed project is not anticipated to impact or affect any cultural resources features within the project area.

• Are there any known archeological sites in the proposed project area?
  o There are likely archeological sites within the project area, though the proposed project is not expected to have any impact on such sites.

• Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?
  o The proposed project will not have a disproportionately high and adverse effect on low income or minority populations.

• Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on Tribal land?
  o The proposed project will not limit access to any sites or land, Tribal or otherwise.
• Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?
  o The proposed project is not expected to contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species within the project area.

Project implementation requiring environmental compliance is beyond the scope of this proposal because the intent of the project is mainly to formalize the existing coalition with this grant. It is not anticipated that the limited groundwater monitoring in existing wells will require environmental compliance beyond basic best practices regarding decontamination of monitoring equipment before each use. However, it is understood that possible future projects of the Coalition may be required – depending on the scope of the project – to follow more formal environmental compliance requirements established through local, state and federal agencies.

**Required Permits and Approvals**

The Coalition has yet to identify which projects and sites will take priority over others and be proposed for implementation. These decisions will come from the Coalition members after an evaluation of project alternatives that meet the priorities and needs of the stakeholders. After project alternatives are ranked, specific permitting may be required depending on the proposed project needs. At the appropriate time, all required permitting and approval will be sought before any projects are undertaken. The scope of work included in this proposal – including development of the Coalition and limited groundwater monitoring in existing wells – will require any permits. Any access agreements for accessing existing wells for groundwater monitoring purposes will be obtained in writing from the owner of each well.

**Required Permits and Approvals**

Letters of support for the Coalition and/or the proposed project from the following individuals and entities are provided in Attachment 3:

- Lincoln County Conservation District
- Grant County Conservation District
- City of Othello
- City of Ephrata
- City of Quincy
Official Resolution

An official resolution from the Coalition steering committee (governing body) verifying the following items is provided in Attachment 6 (or will be provided within 30 days of the application deadline):

- The identity of the official with legal authority to enter into an agreement.
- The board of directors, governing body, or appropriate official who has reviewed and supports the application submitted.
- That the applicant will work with BOR to meet established deadlines for entering into a grant or cooperative agreement.
Legend
- Project Area
- Columbia Basin Project Boundary
- Odesa Subarea Groundwater Management Boundary
- Other Counties
- Columbia River

Note
1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Data Sources: WADNR, Esri World Imagery.

Project Area
Columbia Basin Sustainable Water Coalition
Eastern Washington

Figure 1
Note
1) This figure was prepared for the Coalition application by Washington State Department of Agriculture staff.
Notes
1) This figure is adapted from the Washington Department of Commerce’s 2019 Mid-Columbia Resiliency Coordination: Final Report (Commerce 2019).
2) Wells shown on this figure represent the supply wells of the 137 Group A community water systems reliant on groundwater within the project area.
3) The basalt aquifers depicted on this figure overlie each other. The vertical relationship between the aquifers is depicted conceptually on Figure 4. The aquifer tapped by each well depends on the construction specifications and depth of the well at its location.
Note
1) This figure is adapted from the United States Geological Survey Professional Paper 1413-B.
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Stakeholder Recruitment Outreach Material Examples
SAVE THE DATES!

Please join us

**March 15th, 1-4pm**
**April 12th, 1-5pm**
**May 10th, 1-4pm**

Moses Lake Fire Station 1
Multi Purpose Room
701 E. 3rd Avenue
Moses Lake, WA 98837

Groundwater supports the people and economy of the Mid-Columbia basin. Drinking water, agriculture, and businesses are reliant on groundwater in Adams, Franklin, Grant and Lincoln counties, and it is running out in some areas.

The Department of Commerce is holding a series of three meetings that will build, one upon the next, to support the formation of a coalition of water purveyors and other stakeholders. Locally driven recommendations are needed for addressing water supply issues and to help satisfy regulatory drinking water monitoring requirements.

The work from this group is expected to influence and inform decision makers so that they may create policies and direct resources for long-term groundwater solutions.

Groundwater has allowed people to live and farm in the basin for generations. Please attend this meeting to learn how you can help future generations do the same.

More than 130 water systems in the Columbia Basin take their water from underground water sources. Some of these sources are thousands of years old and do not refill by rain or streams. Others contain younger water, but refill so slowly that water is used faster than it is replaced. Demand for groundwater has caused the water table to drop significantly in some areas of the Columbia Basin.

The Department of Health, Office of Drinking Water formed a partnership with the Department of Commerce to work with water systems on issues related to groundwater depletion in Adams, Franklin, Grant, and Lincoln counties.

**Please RSVP to:**
Benjamin Serr
benjamin.serr@commerce.wa.gov
509-724-1699

Department of Commerce
PROBLEM STATEMENT:
Groundwater levels in areas of the Columbia Basin have been declining for decades and now impact almost all water wells. It is critically important that water systems have a reliable water source. A broad stakeholder coalition was initiated to develop locally and regionally implementable activities to address the issue.

VISION-Why we exist:
To protect and maintain a water supply for present and future generations of the Columbia Basin

MISSION-What we do:
Address groundwater supply with active support and involvement of stakeholders creating locally-driven recommendations that influence water delivery methods and policy that will direct resources for long-term groundwater solutions.

STAKEHOLDERS-Who is affected:

SHORT-TERM PRIORITIES:
- Build diverse and inclusive stakeholder group
- Identify/implement/support projects that can be done now that will have a positive effect
- Gather aquifer data for decision-making including past groundwater studies
- Develop budget and seek funding through grant applications and other funding sources
- Set monthly meetings
- Consensus to address groundwater decline based on localized conditions
- Create foundational documents including a comprehensive communication/outreach plan

LONG-TERM PRIORITIES:
- Support the development of a regional groundwater recharge plan including the consolidation, evaluation, and implementation of existing plans by stakeholders
- Water/wastewater viewed as commodity and water converted back into system
- General public understand gravity of water situation--support Coalition efforts
- Promote recycling and re-use of water
- Preserve drinking water sources by supporting transition of deep-well irrigation to CBP water or other sustainable sources of water
- State and federal agencies actively work to build out Columbia Basin Project
- Completion of Odessa Ground Water Replacement Program and east high canal

STEERING COMMITTEE:
Marie Lotz/Conservation District-Grant Co.
Paul Wollman/Warden Hutterian Brethren
Shawn O’Brien/City of Othello
Mark Stedman/Commissioner-Lincoln/CBDL
Judi Ellis/City of Moses Lake
David Wells/Town of Wilbur
Coalition Stakeholders and Participants
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Letters of Support
December 4, 2020

Bureau of Reclamation
Robin Graber
Denver Federal Center
PO Box 25007
Denver, CO 8025-0007

Dear Ms. Graber:

On behalf of the Lincoln County Conservation District, I fully support the Columbia Basin Sustainable Groundwater Coalition and their application for a Cooperative Watershed Management Grant through the USBOR.

The proposed Columbia Basin Sustainable Groundwater Coalition is well positioned to achieve their vision of establishing locally-derived recommendations that will identify long term groundwater solutions to protect and maintain a water supply within the Columbia Basin for present and future generations.

This group is a model on community interests joining to achieve a common objective. This objective aligns with the mission of the Lincoln County Conservation District to protect, conserve, and enhance natural resources.

We ask that you fund this proposal in its entirety to protect this valuable natural resource.

Sincerely,

[Signature]

Elsa Bowen, Manager
Lincoln County Conservation District
December 28, 2020

Bureau of Reclamation  
Robin Graber  
Denver Federal Center  
PO Box 25007  
Denver, CO 80225-0007

Dear Ms. Graber:

The Columbia Basin Sustainable Water Coalition is applying for a Bureau of Reclamation WaterSMART Cooperative Watershed Management Program Phase I grant to form a watershed group. The watershed group would include Adams, Franklin, Grant and Lincoln Counties. This stakeholder group shares a common objective – to protect and maintain a water supply for present and future generations of the Columbia Basin.

The Columbia Basin Sustainable Water Coalition is well positioned to achieve their vision of establishing a water level monitoring program due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

Currently the Grant County Conservation District is working with several entities, including the Columbia Basin Sustainable Watershed Coalition, on the declining aquifers. The Columbia Basin is a Sole Source aquifer – meaning every bit of drinking water comes from the ground. Groundwater depletion has been a concern in the Columbia Basin for many years, but increased demands on our groundwater resources have overstressed aquifers in our area.

The Grant County Conservation District Board of Supervisors support the efforts to create a locally-derived recommendations that will identify long term groundwater solutions for the Columbia Basin.

Sincerely,

[Signature]
Harold Crose  
GCCD Resource Conservationist
The City of Othello

Dear Bureau of Reclamation,

The Columbia Basin Sustainable Groundwater Coalition has applied for a Cooperative Watershed Management Grant through BOR to form a watershed group to build a diverse and inclusive stakeholder group. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations of the Columbia Basin.

The Columbia Basin Sustainable Groundwater Coalition is well positioned to achieve their vision of establishing a water level monitoring program due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

Currently, the City of Othello’s entire potable water supply is reliant on the declining and unsustainable groundwater source. Even though the City is exploring other sources of water to reduce our dependency on the groundwater, it will always be a necessary resource. Any effort to improve, coordinate, and document the monitoring of the aquifers will improve the ability of everyone to manage this vital commodity.

I support the Columbia Basin Sustainable Groundwater Coalition and their efforts to create locally derived recommendations that will identify long term groundwater solutions for the residents of the mid-Columbia.

Sincerely,

Shawn R. Logan

Nov 13, 2020

Shawn Logan
November 16, 2020

Robin Graber
UNITED STATES BUREAU OF RECLAMATION
DENVER FEDERAL CENTER
POST OFFICE BOX 25007
DENVER CO. 80225-0007

RE: LETTER OF SUPPORT

Dear Ms. Graber:

The Columbia Basin Sustainable Groundwater Coalition has applied for Cooperative Watershed Management Grant through BOR to form a watershed group to build a diverse and inclusive stakeholder group. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations of the Columbia Basin.

The Columbia Basin Sustainable Groundwater Coalition is well positioned to achieve their vision of establishing a water level monitoring program due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

Our community of Ephrata would benefit from this coalition.

I support the Columbia Basin Sustainable Groundwater Coalition and their efforts to create locally derived recommendations that will identify long term groundwater solutions for the residents of the mid-Columbia.

If you need anything else or have any questions, call anytime.

Sincerely,

Mike Warren
Ephrata City Administrator
December 2, 2020

Robin Graber  
United States Bureau of Reclamation  
Denver Federal Center  
PO Box 25007  
Denver, CO 80225-0007

Dear Ms. Graber:

The Columbia Basin Sustainable Groundwater Coalition (CBSGC) has applied for a Cooperative Watershed Management Grant through USBR to form a watershed group of diverse and inclusive stakeholder members. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations.

The CBSGC is well-positioned to achieve their vision of establishing a water level monitoring program due to the diversity and strength of the group. This group is a model of community-minded citizens joining to achieve a common objective.

As residential and industrial growth continues to put pressure on potable water supplies from Columbia Basin aquifers, the City Of Quincy is earnestly pursuing options for water re-use and reclaiming treated water for irrigation and other uses. This coalition is a partnership with other entities who are pursuing the same goals in an alliance that provides a cross-pollination of ideas to share innovative solutions within their jurisdictions. In other words, what is good for one is essentially good for the whole.

We support the CBSGC and their efforts to create locally derived recommendations that will identify long-term groundwater solutions for the residences and industries of the mid-Columbia.

Yours in public service,

CITY OF QUINCY

Pat Haley  
City Administrator

Mayor  
Paul Worley  
Mayor Pro Tempore  
Tom Harris

Councilmembers  
Josiey Ferguson  
Luke Garrison  
Tom Harris  
Andrew Royer  
David Day  
Sonia Padron  
Dylan Kling
January 4, 2021

Bureau of Reclamation
Robin Graber
Denver Federal Center
P.O. Box 25007
Denver CO 80225-0007

Dear Ms. Graber:

The Columbia Basin Sustainable Groundwater Coalition is applying for a Bureau of Reclamation Cooperative Watershed Management Program grant to form a watershed group to build a diverse and inclusive stakeholder group. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations of the Columbia Basin.

The Columbia Basin Sustainable Groundwater Coalition is well positioned to achieve their vision of establishing a water level monitoring program due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

For several years Lincoln County Commissioners have worked with many of the group’s other elected officials, state and federal agencies, municipalities, conservation districts, irrigators, water purveyors, economic development councils, and the Columbia Basin Development League to actively address groundwater management because the risk of groundwater depletion in Lincoln County is very real.

It is critically important that Lincoln County’s communities and farms have reliable water systems. We support the Columbia Basin Sustainable Groundwater Coalition and their efforts to create locally-derived recommendations that will identify long term groundwater solutions for the residents of the mid-Columbia. We urge you to award the Coalition a Cooperative Watershed Management Program grant.

Scott M. Hutsell
Chairman

Rob Coffman
Vice Chairman

Mark Stedman
Member
Dear Ms. Graber,

The Columbia Basin Sustainable Groundwater Coalition has applied for a Bureau of Reclamation Cooperative Watershed Management Grant to form a four-county watershed group. This stakeholder group has a common objective – to protect and maintain a water supply for present and future generations of the Columbia Basin.

The Columbia Basin Sustainable Groundwater Coalition is well-positioned to achieve its objective due to the diversity and potency of the group. Many of the group’s elected officials, state and federal agencies, municipalities, conservation districts, irrigators, water purveyors, and county economic development councils have been working on the groundwater management issue for years because the risk of groundwater depletion in their counties is very real.

This WaterSMART Cooperative Watershed Management Program Phase I grant would allow the Columbia Basin Sustainable Water Coalition to formalize their group, grow its membership, and develop an outreach plan that begins with, and builds on, existing and ongoing aquifer data. Once formalized, the coalition is prepared to make an impact by developing locally-driven recommendations that influence water delivery methods and also by creating policy to direct resources for long term groundwater solutions.

It is critically important that these four counties have reliable water systems. They have come together in cooperation and collaboration to apply for this grant. We strongly support the groundwater management efforts of the Columbia Basin Sustainable Groundwater Coalition and we urge you to award them with a Cooperative Watershed Management Program Phase I grant.

Sincerely,

Senator Judy Warnick
13th Legislative District

Representative Tom Dent
13th Legislative District

Representative Alex Ybarra
13th Legislative District
Dear Ms. Graber:

The Columbia Basin Sustainable Groundwater Coalition has applied for a Cooperative Watershed Management Grant through BOR to form a watershed group to build a diverse and inclusive stakeholder group. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations of the Columbia Basin.

The Columbia Basin Sustainable Groundwater Coalition is well positioned to achieve their vision of establishing a water level monitoring program due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

Further, this group of Conservation districts, water purveyors and irrigated agriculture organizations is uniquely positioned to develop solutions to the region’s aquifer depletion and move needed resources toward the development of surface water delivery through new irrigation infrastructure. Funding for the development of a robust organization will benefit water users across the Odessa Aquifer, and provide our region with the organizational strength necessary to address the region’s water supply resiliency.

I support the Columbia Basin Sustainable Groundwater Coalition and their efforts to create locally-derived recommendations that will identify long term groundwater solutions for the residents of the mid-Columbia.

Kind regards,

Mary Dye
December 3, 2020

Bureau of Reclamation
Robin Graber
Denver Federal Center
P.O. Box 25007
Denver CO 80225-0007

Dear Ms. Graber:

The Columbia Basin Sustainable Water Coalition has applied for a Cooperative Watershed Management Grant through Bureau of Reclamation to form a watershed group to build a diverse and inclusive stakeholder group. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations of the Columbia Basin.

The Columbia Basin Sustainable Water Coalition is well positioned to achieve their vision of establishing a water level monitoring program due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

Warden Hutterian Brethren is a religious community located north of Warden, Washington. Due to the number of water connections supplying our domestic water needs for our community, we operate a Class 1 municipal water system, supplied by two deep wells.

We also operate an irrigated farm growing row crops and grain, supplied by more than fifty deep wells. As irrigation is our livelihood, we are particularly interested in the sustainability of groundwater, and the transition of the deep wells to surface water in the Columbia Basin Project. We believe that the Columbia Basin Sustainable Water Coalition is a step in the right direction in achieving these goals.

We support the Columbia Basin Sustainable Water Coalition and their efforts to create locally derived recommendations that will identify long term groundwater solutions for the residents of the mid-Columbia.

Sincerely yours,

Paul Wollman
Dear Ms. Graber:

The Columbia Basin Sustainable Water Coalition is applying for a Bureau of Reclamation WaterSMART Cooperative Watershed Management Program Phase I grant to form a watershed group. The watershed group would include Lincoln, Grant, Adams, and Franklin counties. This stakeholder group shares a common objective – to protect and maintain a water supply for present and future generations of the Columbia Basin.

This WaterSMART Cooperative Watershed Management Program Phase I grant would allow the Columbia Basin Sustainable Water Coalition to formalize, grow its membership, and develop an outreach plan. Once formalized, the coalition members are prepared to develop locally-driven recommendations that influence water delivery methods and also to create policy to direct resources for long term solutions.

The Columbia Basin Sustainable Water Coalition is well positioned to achieve its objective due to the diversity, depth, and commitment of the group’s membership. As the Executive Director of Lincoln County’s Economic Development Council and on behalf of the Board of Directors, our council pledges their support of the Coalition as access to water is vital to a healthy community and a healthy community is vital to economic growth.

Together as a formalized watershed group, the Coalition has a stronger voice to protect and maintain our groundwater. We urge you to award the Coalition a Cooperative Watershed Management Program Phase I grant.

Sincerely,

Margie Hall

Margie Hall
Executive Director
January 4, 2021

Mr. Mike Means  
Office Director  
Washington State Department of Health, Office of Drinking Water  
PO Box 47822  
Olympia, WA 98504-7822

Dear Mr. Mike Means:

We, the undersigned, support the outreach efforts conducted by the Washington State Department of Commerce and funded by the Washington State Department of Health, Office of Drinking Water, under the Mid-Columbia Resiliency Coordination project (DOH Contract: GVS23068).

Groundwater levels in areas of the Columbia Basin have been declining for decades. These declines have begun to impact water systems’ wells. More needs to be done to address the problem so that drinking water wells will not be adversely impacted into the future. It is critically important that the water systems in this area continue to have a reliable water source.

We support the formation of a broad stakeholder coalition to work together towards developing locally and regionally implementable activities to address this issue.

We thank the Office of Drinking Water for the resources committed to this work, and hope the department will consider additional support in the future.

Sincerely,

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<tr>
<td>Ken Caylor</td>
<td>Board Chairman</td>
<td>Adams County Development Council</td>
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<tr>
<td>Janis Rountree</td>
<td>Manager</td>
<td>Adams County Development Council</td>
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</table>
December 9, 2020

Robin Graber  
Bureau of Reclamation  
Denver Federal Center  
Post Office Box 25007  
Denver, Colorado 80225-0007

Dear Ms. Graber:

Subject: Cooperative Watershed Management Grant

The Columbia Basin Sustainable Groundwater Coalition has applied for a Cooperative Watershed Management Grant through the Bureau of Reclamation to form a watershed group to build a diverse and inclusive stakeholder group. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations of the Columbia Basin.

Groundwater levels in parts of the Columbia Basin have been declining for decades and some drinking water systems have already felt the effects of these declines. Towns are facing serious long-term challenges to meet the needs of their communities; it is critically important that water systems have a reliable water source. The formation of this broad stakeholder coalition to develop locally and regionally implementable activities to address groundwater declines is the necessary first step to developing strategies to meet the needs of the citizens.

The Columbia Basin Sustainable Groundwater Coalition is well positioned to achieve their vision of forming a cohesive group due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

I support the Columbia Basin Sustainable Groundwater Coalition and their efforts to create locally derived recommendations that will identify long term groundwater solutions for the residents of the mid-Columbia.

Sincerely,

Emily Sanford  
Office of Drinking Water, Acting Director
January 11, 2021

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

Dear Mr. Weakland

The Columbia Basin Sustainable Water Coalition, supported by the Lincoln County Conservation District, has applied for a Cooperative Watershed Management Grant through the USBR to form a watershed group to build a diverse and inclusive group of stakeholders. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations.

The Columbia Basin Sustainable Water Coalition is well positioned to achieve their mission of addressing groundwater supply with active support and involvement of stakeholders creating locally-driven recommendations that influence water delivery methods and policy that will direct resources for long-term groundwater solutions. This group is a model of community interests joining together to achieve a common objective.

I support the Columbia Basin Sustainable Water Coalition and their efforts to create locally-derived recommendations that will identify long-term groundwater solutions for the residents of the mid-Columbia region. The Washington State Department of Commerce recognizes the importance of managing groundwater resources in the Columbia Basin. The availability of groundwater for drinking water systems is critically important for local governments and residents alike. Commerce also supports the agricultural sector and the marketing of products both domestically and overseas. Availability of water is necessary to support the current farming practices in the basin. Many of the irrigated acres are utilizing groundwater while waiting for the completion of the East High Canal, a long-ago proposed expansion of the U.S. Bureau of Reclamation’s Columbia Basin Project. The use of groundwater for crop irrigation in this area is unsustainable and is depleting the aquifers. Understanding the availability of groundwater and the effect that irrigation has is very important for continuing to support this economic sector and maintaining the availability of drinking water. The coalition will work to build on this needed information and help inform policy decisions.

On behalf of the Local Government Division, Department of Commerce, I strongly support the Columbia Basin Sustainable Water Coalition and their efforts. Understanding and supporting local solutions is critical to the overall success of these efforts.

My contact information is 360-725-3003 or mark.barkley@commerce.wa.gov.
Sincerely,

Mark K. Barkley
Assistant Director
Local Government Division
January 4, 2021

Robin Graber, Program Manager  
Bureau of Reclamation  
Denver Federal Center  
P.O. Box 25007  
Denver CO 80225-0007

Dear Ms. Graber:

The Columbia Basin Sustainable Groundwater Coalition has applied for a Cooperative Watershed Management Grant through Bureau of Reclamation to form a watershed group to build a diverse and inclusive stakeholder group. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations.

The Columbia Basin Sustainable Groundwater Coalition is well positioned to achieve their vision of establishing a water level monitoring program due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

The Washington State Department of Agriculture supports efforts to develop a plan that includes a strong focus on further development of water in the Odessa Ground Water Replacement Program. It is imperative that this process include active participation by the four counties (Lincoln, Adams, Grant, and Franklin) and their governments.

I support the Columbia Basin Sustainable Groundwater Coalition and their efforts to create locally-derived recommendations that will identify long term groundwater solutions for the residents of the mid-Columbia.

Sincerely,

Derek I. Sandison  
Director
Dear Robin Graber:

The Columbia Basin Sustainable Groundwater Coalition (CBSGC) has applied for a Cooperative Watershed Management Grant through BOR to form a watershed group to build a diverse and inclusive stakeholder group. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations of the Columbia Basin.

The CBSGC is well positioned to achieve their vision of establishing a water level monitoring program due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

The CBSGC’s proposed work closely aligns with my own Bureau of Reclamation WaterSMART: Applied Sciences Grant entitled, “Quantifying the State of Groundwater in the Columbia Basin with Stakeholder-Driven Monitoring,” to initiate groundwater monitoring in the same study area. I am partnering with local Conservation Districts, including the Lincoln County Conservation District, on training and equipment provisioning for the conservation districts to conduct their own groundwater monitoring. The CBSGC is exactly the type of entity that is needed to continue stakeholder driven monitoring to support sustainable groundwater use and management.

I wholeheartedly support the Columbia Basin Sustainable Groundwater Coalition and their efforts to create locally-derived recommendations that will identify long term groundwater solutions for the residents of the mid-Columbia.

Sincerely,

Alexandra (Sasha) Richey McLarty
Assistant Professor
Civil and Environmental Engineering
Washington State University
Dear Bureau of Reclamation Review Panel:

The Columbia Basin Sustainable Groundwater Coalition has applied for a Cooperative Watershed Management Grant through BOR to form a watershed group to build a diverse and inclusive stakeholder group. This stakeholder group will develop and implement activities to protect and maintain a water supply within the Columbia Basin for present and future generations of the Columbia Basin.

The Columbia Basin Sustainable Groundwater Coalition is well positioned to achieve their vision of establishing a water level monitoring program due to the diversity and potency of the group. This group is a model of community interests joining together to achieve a common objective.

The State of Washington Water Research Center serves a mission to connect academics; local, state, and federal government; and the private sector to address Washington's water issues and link the water community. Recognizing the serious challenges this region faces, and the substantial benefits a coalition like the one proposed could have in coordinating groundwater management efforts, we are happy to see this team emerge with clear goals for understanding and addressing water needs for their region.

We strongly support the Columbia Basin Sustainable Groundwater Coalition and their efforts to create locally-derived recommendations that will identify long term groundwater solutions for the residents of the mid-Columbia.

Sincerely,

Julie C. Padowski
Research Associate Professor
State of Washington Water Research Center
Washington State University
Pullman, WA 99164