	Water Supply Reserve Fund Water Activity Summary Sheet March 10-11, 2021 Consent Agenda Item 2(j)
Applicant & Grantee:	Open Water Foundation
Water Activity Name:	River Basin Information Websites
Water Activity Purpose:	Agricultural, Education/Outreach, Municipal/Industrial, Needs Assessment, Nonconsumptive (Environmental & Recreational) - Implementation
County:	Boulder, Larimer, Weld
Drainage Basin:	South Platte
Water Source:	Poudre River
Amount Requested:	\$10,000 Metro Basin Account \$20,000 South Platte Basin Account <u>\$15,000 Statewide Account</u> \$45,000 Total Request
Matching Funds:	 Basin Account Match = \$30,000 200% of statewide request (meets 10% min) Applicant & 3rd Party Match (in-kind) = \$125,000 833% of the statewide request (meets 10% min) Total Match (Basin request & Applicant Match) = \$155,000 1,033% of the statewide request (meets 50% min)

Staff Recommendation:

Staff recommends approval of up to \$10,000 from each of the Metro Basin Account, up to \$20,000 from the South Platte Basin Account and up to \$15,000 from the Statewide Account to help fund the project: River Basin Information Websites

Water Activity Summary: The applicants proposes to utilize WSRF funds to assist in fully implement the "*Poudre Basin Information*" website in order to provide cross-jurisdictional information related to water issues in the basin. The applicant has developed an initial website, (<u>http://poudre.openwaterfoundation.org/latest</u>) which integrates information from many data sources including local up to federal datasets. The information can be used for education and to inform planning and operational decisions.

The applicant states the website will be designed to be a community resource with a scope beyond any single project or organization and can serve many entities. All software, data, analysis workflows, and documentation are open source and support collaboration. The grant funding obtained, including matching funds, will allow full implementation of the Poudre Basin Information website as well as implementing additional websites for basins within the larger South Platte Basin, such as Big Thompson and Saint Vrain. These basins have been impacted by wildfires, floods, and droughts and also involve issues for multiple sectors (municipal, agricultural, environment, recreation, industry). Basin websites will be linked to the South Platte Roundtable website to facilitate use by Roundtable members and the public.

Discussion: According to the Roundtables letter of support for the this project, it has been stated that providing the data and information will inform organizations and individuals about many complex water issues in order to achieve the goals of the South Platte Basin Implementation Plan and Colorado Water Plan. The initial focus on the Poudre Basin will increase the effectiveness and efficiency of implementing multi-purpose water projects that address the water supply gap in the basin. The project will also help with collaboration on important issues such as wildfire mitigation, drought and flood response, sustainable agriculture, and environmental flows. The project will support water education and public engagement on water issues. The results of the project can be scaled to other basins within the South Platte and Metro Roundtable areas and statewide.

Issues/Additional Needs: The applicant will need to secure matching funds for the project prior to contracting. No other issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria	1.
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Funding Sources/Match	Cash	In-Kind	Total	Status
Open Water Foundation	\$0	\$50,000	\$50,000	Secured
GoCode Colorado Business Challenge Award	\$2,000	\$0	\$2,000	Secured
Project Collaborators/Grant Awards	\$48,000	\$0	\$48,000	Pending
CWCB Water Plan Grant	\$25,000	\$0	\$25,000	Pending
Sub-Total Matching Funds	\$75,000	\$50,000	\$125,000	
WSRF Metro Basin Account	\$10,000	\$0	\$10,000	Secured
WSRF South Platte Basin Account	\$20,000	\$0	\$20,000	Secured
WSRF Statewide Account	\$15,000	\$0	\$15,000	
Sub Total	\$45,000	\$0	\$45,000	
Total Project Costs	\$120,000	\$50,000	\$170,000	

CWCB Project Manager: Carolyn Kemp



COLORADO Colorado Water Conservation Board

Department of Natural Resources

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Colorado Water Conservation Board

Water Supply Reserve Fund Grant Application

Instructions

All WSRF grant applications shall conform to the current 2020 WSRF Criteria and Guidelines.

To receive funding from the WSRF, a proposed water activity must be recommended for approval by a Roundtable(s) <u>AND</u> the approved by the Colorado Water Conservation Board (CWCB). The process for roundtable consideration and recommendation is outlined in the 2020 WSRF Criteria and Guidelines. The CWCB meets bimonthly.

If you have questions, please contact the WSRF Grant Program Manager (for all Roundtables) or your Roundtable Liaison:

Ben Wade <u>ben.wade@state.co.us</u> 303-866-3441 x3238 (office)

Sam Stein Sam.stein@state.co.us 303-866-3441(office)

WSRF Submittal Checklist (Required)				
YES⊐ NO□	This request was recommended for CWCB approval by the sponsoring roundtable.			
Yes⊐ no⊐	I have read and understand the 2020 WSRF Criteria and Guidelines.			
YES NO	Grantee will be able to contract with CWCB using the <u>Standard Contract</u> . ¹			
	Application Documents included:			
Yes⊐ no⊐	Exhibit A: Statement of Work ² (Word – see Template)			
YES⊐ NO⊐	Exhibit B: Budget & Schedule ² (Excel Spreadsheet – see Template)			
YES⊐ NO⊐	Letters of Matching and/or Pending 3 rd Party Commitments ²			
YES⊐ NO⊐	Map ²			
YES⊐ NO⊐	Photos/Drawings/Reports – see map			
YES⊐ NO⊐	Letters of Support			
	Contracting Documents ³			
YES NO	Detailed/Itemized Budget ³ (Excel Spreadsheet – see Template)			
YES= NO=	Certificate of Insurance ⁴ (General, Auto, & Workers' Comp.)			
YES NO	Certificate of Good Standing ⁽⁴⁾			
YES NO	W-9 Form ⁴			
YES NO	Independent Contractor Form ⁴ (If applicant is individual, not company/organization)			
	Electronic Funds Transfer (ETF) Form ⁴			
8	ements". For reference only/do not fill out or submit/required for contracting			

³ Additional documentation providing a Detailed/Itemized Budget maybe required for contracting. Applicants are encouraged to coordinate with the

CWCB Project Manager to determine specifics.

⁴ Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.



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Schedule			
CWCB Meeting	Application Submittal Dates	Type of Request	
January	October 1	Basin Account	
March	December 1	Basin/Statewide Account/Water Plan Grant Match ¹	
Мау	February 1	Basin Account	
July	April 1	Basin Account	
September	June 1	Basin/Statewide Account	
November	August 1	Basin Account	

¹ If either the basin or statewide match includes matching funds from a pending Water Plant Grant, both must be submitted by December 1st deadline for March Board meeting review.

Water Activity Summary			
Name of Applicant	Open Water Foundation		
Name of Water Activity	River Basin Information Websites		
Approving Roundtable	(s)	Basin Account Request(s) ¹	
South Platte		\$20,000	
Metro		\$10,000	
Basin Account Request Subtotal		\$30,000	
Basin Account Request Subtotal Approved by Roundtable		\$30,000	
Statewide Account Request ⁽¹⁾		\$15,000	
Total WSRF Funds Requested (Basin & Statewide)		\$45,000	
Total Project Costs		\$170,000	

 $^{1}\,\mbox{Please}$ indicate the amount recommended for approval by the Roundtable(s)

Grantee and Applicant Information		
Name of Grantee(s)	Open Water Foundation	
Mailing Address	320 East Vine Drive, Suite 203	
FEIN	46-2676240	



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	Grantee and Applicant Information
Grantee's Organization Contact ¹	Steve Malers
Position/Title	CEO
Email	steve.malers@openwaterfoundation.org
Phone	970-988-1447
Grant Management Contact ²	Steve Malers
Position/Title	CEO
Email	steve.malers@openwaterfoundation.org
Phone	970-988-1447
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

¹ Person with signatory authority

² Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee

Provide a brief description of the grantee's organization (100 words or less).

The Open Water Foundation (OWF) is a nonprofit social enterprise located in Fort Collins that focuses on open source software and open data solutions to make better water resources decisions. We help improve access to data and technologies and increase transparency on complex water issues.

	Type of Eligible Entity (check one)			
	Public (Government): municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.			
	Public (Districts): authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises			
	Private Incorporated: mutual ditch companies, homeowners associations, corporations			
	Private Individuals, Partnerships, and Sole Proprietors: are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.			
Х	Non-governmental organizations: broadly, any organization that is not part of the government			
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes			



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Type of Water Activity (check one)		
	Study	
Х	Implementation	

	Category of Water Activity (check all that apply)			
Х	Nonconsum	Nonconsumptive (Environmental)		
X	Nonconsum	Nonconsumptive (Recreational)		
Х	Agricultural			
Х	Municipal/Industrial			
Х	Needs Assessment			
Х	Education & Outreach			
	Other	Explain:		

Location of Water Activity		
Please provide the general county and coordinates of the proposed activity below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.		
County/Counties	Larimer, Weld, Boulder, also South Platte Basin including Metro	
Latitude	40.76	
Longitude	105.45	

Water Activity Overview

Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, area of habitat improvements. If this project addresses multiple purposes or spans multiple basins, please explain.

The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, and Schedule.



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Water Activity Overview

The Open Water Foundation (OWF) proposes to fully implement the Poudre Basin Information website in order to provide cross-jurisdictional information related to water issues in the basin. See the initial website (<u>http://poudre.openwaterfoundation.org/latest</u>), which has so far been developed primarily using OWF research and development funding. The website integrates information from many data sources including local up to federal datasets. The information can be used for education and to inform planning and operational decisions. The website is a community resource with a scope beyond any single project or organization and can serve many entities. All software, data, analysis workflows, and documentation are open source and support collaboration.

The amount of funding that is ultimately obtained, including matching funds, will allow full implementation of the Poudre Basin Information website as well as implementing additional websites for basins within the larger South Platte Basin, such as Big Thompson and Saint Vrain. These basins have been impacted by wildfires, floods, and droughts and also involve issues for multiple sectors (municipal, agricultural, environment, recreation, industry). Basin websites will be linked to the South Platte Roundtable website to facilitate use by Roundtable members and the public.

Measurable Results				
To catalog measurable results achieved with WSRF funds please provide any of the following values.				
	New Storage Created (acre-feet)			
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive			
	Existing Storage Preserved or Enhanced (acre-feet)			
	Length of Stream Restored or Protected (linear feet)			
X	Efficiency Savings (indicate acre-feet/year OR dollars/year) – see below			
	Area of Restored or Preserved Habitat (acres)			
	Length of Pipe/Canal Built or Improved (linear feet)			
x	Other	Explain: This project will provide cross-jurisdictional integrated information that helps to achieve all of the above measurable outcomes as well as supporting additional outcomes such as improved water quality, forest health, and open space. The website is a community resource that results in efficiency savings by sharing costs for the website and providing integrated information that helps with other measurable results.		

Water Activity Justification

Provide a description of how this water activity supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the respective <u>roundtable Basin Implementation Plan and Education</u> <u>Action Plan</u> ⁽¹⁾. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in 2020 WSRF Criteria and Guidelines).



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Water Activity Justification

Water touches everything and water planners and decision-makers need to understand many issues while focusing on the mission and operation of each organization, as well as collaborating on regional projects. Specific water projects and uses have broadly been categorized into use types of "agricultural", "municipal", "industrial", "environmental", and "recreational". The South Platte and Metro roundtables have prioritized multi-purpose projects that benefit more than one use category. Projects that provide water supply while minimizing negative impacts to the environment are also desirable. Because of the cross-jurisdictional, interrelated nature of water, there is a need for cross-jurisdictional, integrated information. This information should be context-specific and also emphasize connections. There are many sources of data and information; however, data and information are often difficult to find and integrate to support planning, decisions and actions. This leads to repeated efforts, inefficiencies, incomplete understanding of issues, and wasted funding.

This project will address the need for information, leverage previous work and ongoing projects, and benefit future projects that need information. The results of the project will result in a community information resource that benefits many entities and the public, focusing on basin scale (~DWR water district) websites to allow the issues of the basin to be emphasized. The following are examples of how this project aligns with the goals of CWP, BIP, and WSRF Criteria Guidelines:

- This project addresses the WSRF Criteria Guidelines:
 - Demonstrates a commitment to collaboration by supporting involvement of a large group of stakeholders and the public.
 - Addresses an identified water gap by simplifying access to water demand and use data, population, etc. needed to understand water gap trends, causes, and opportunities.
 - Demonstrates sustainability by providing basin-wide information about trends, critical values, and impacts. An open source approach is also sustainable because it encourages sharing website development and maintenance costs.
- The Colorado Water Plan defines measurable objectives such as water conservation goals, agricultural water sharing, and protecting streams. However, the numerical goals set at a state level lack context at a local level. This project helps connect local data such as water use and conservation to the larger goals by showing trends and integrating data such as population growth and water use. A successful CWP will require actions at the local level that cumulatively achieve statewide goals.
- The "Outreach, Education, and Public Engagement" chapter of the CWP states that "To achieve a sustainable water future, Coloradans must be sophisticated water users". This project helps to achieve that outcome by providing context and information at a basin level so that citizens can be informed and take action. Lacking an integrated information source, people will continue to spend much more time finding and integrating information...time that they often don't have.
- South Platte and Metro Basin Implementation Plan emphasizes the need for multi-purpose projects. However, gaining an understanding of the interconnections between water issues across spatial and temporal scales is difficult. This project will help explain those complexities and identify opportunities for multi-purpose projects.
- Anyone who has worked with water data in Colorado knows that it is complicated. This project provides a simple interface for complex topics, and allows a deep dive in the original source data. The results of the project can be used to onboard and educate Roundtable members and other water leaders in the basin. This will allow those individuals and their organizations to more efficiently and effectively perform their work in support of CWP, BIP, and implementation projects.

¹ Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.



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Matching Requirements: Basin Account Requests

Basin (only) Account grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3rd party and shall be accompanied by a **letter of commitment** as described in the <u>2020 WSRF Criteria and Guidelines</u> (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind)
Open Water Foundation – in kind	\$50,000 (or more)
Project Collaborators (pending)	\$50,000 (or more)
Colorado Water Plan (Engagement and Innovation) (pending)	\$25,000
Total Match	\$125,000
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

Matching Requirements: Statewide Account Requests

Statewide Account grant requests require a 50% match as described in the 2020 WSRF Criteria and Guidelines. At least of 10% of the required Statewide Account Grant request match shall be cash from Basin Account funds whether that is from one or multiple basins; and the remaining 40% of the required match may be provided from any source, including other grants, cash from the Basin Account, or any combination of cash, in-kind services, or in-kind materials.and shall be accompanied by a **letter of commitment**. Attach additional sheet if necessary.

Statewide account request is \$15,000

Contributing Entity	Amount and Form of Match (note cash or in-kind):
South Platte Roundtable	\$20,000 cash
Metro Roundtable	\$10,000 cash
See also other matching funds above, as needed	
Total Match	\$30,000



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Matching Requirements: Statewide Account Requests

If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).

Related Studies

Please provide a list of any related studies, including if the water activity is complimentary to or assists in the implementation of other CWCB programs.

This project leverages many studies and other resources and is complementary to all CWCB programs. In particular, datasets from Colorado's Decision Support Systems (CDSS) are used to create maps and information products. Population data from the State Demographer Office and datasets from Colorado Information Marketplace are also used. Many of the State's datasets, technologies, and reports are complex and difficult for the public and even water professionals to understand. This project provides information so that people of different ages, knowledge, and skills can understand. Information is provided with basin context so that website users can relate the information to their local perspective. Additionally, where appropriate, statewide studies and information are provided to connect basin issues to broader issues, such as for climate change and changing demographics of rural and urban populations.

Previous CWCB Grants

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order

The Open Water Foundation has received multiple grants from the CWCB related to decision support systems, basin implementation plan, and other projects. Some of the most recent and relevant grants are listed below. Most projects for the CWCB did not involve Roundtable approval.

- Open Water Foundation, "StateMod Dataset Cloud Publishing", CWCB, Date?, POGG1, PDAA, 20200002053
- Open Water Foundation, "OpenCDSS (Transfer CDSS to Open Source)", CWCB, Date?, CT PDAA 2017-1401
- Open Water Foundation, "South Platte Roundtable Data Platform" (stories that are now on the Roundtable website), South Platte & Metro RT, Date?, POGG1 2018-451
- Open Water Foundation, "Agricultural Land and Water Buffer Feasibility Analysis", South Platte & Metro RT, March 18, 2015, CTGG1 2015-3419
- Open Water Foundation, subcontractor to West Sage for South Platte and Metro BIP

Tax Payer Bill of Rights

The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

This project does not have any TABOR issues.



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Colorado Water Conservation Board				
Water Supply Reserve Fund Exhibit A - Statement of Work				
				Date:
Water Activity Name:	River Basin Information Websites			
Grant Recipient:	Open Water Foundation			
Funding Source:	South Platte, Metro, Statewide Accounts, matching funds			
than 200 words). Include	rview: (Please provide brief description of the proposed water activity (no more a description of the overall water activity and specifically what the WSRF funding SE DEFINE ALL ACRONYMS).			
Information website issues in the basin. (<u>http://poudre.openw</u> primarily using OWF information from man information can be u The website is a con organization and car	undation (OWF) proposes to fully implement the Poudre Basin in order to provide cross-jurisdictional information related to water See the initial website version <u>vaterfoundation.org/latest</u>), which has so far been developed research and development funding. The website integrates ny data sources including local up to federal datasets. The sed for education and to inform planning and operational decisions. Inmunity resource with a scope beyond any single project or a serve many entities. All software, data, analysis workflows, and open source and support collaboration.			
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Roundtable website to facilitate use by Roundtable members and the public.

Objectives: (List the objectives of the project. (PLEASE DEFINE ACRONYMS).



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Objectives of the project include:

- 1. Demonstrate that integrated data and information for the Poudre (and other basins) as a community resource increases knowledge, collaboration, efficiency, and transparency; reduces costs to organizations and other projects; and leads to solutions for complex water issues.
- 2. Effectively use public datasets, and develop new datasets as necessary, to provide context-specific information products relevant to the river basin, focusing on maps and related data. Datasets from multiple sources will be integrated to provide cross-jurisdictional information.
- Enhance existing (and free to use) open source software tools from Colorado's Decision Support Systems (CDSS) and Open Water Foundation to provide costeffective technology solutions to water organizations and the public.
- 4. Implement automated data processing workflows to create information products, which can be implemented in multiple basins within and outside of this project.
- 5. Establish value and relationships that will encourage ongoing funding by organizations that use the websites for basin-wide education, outreach, planning, and operations.
- 6. An immediate objective is to streamline information access to help with wildfire recovery.

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Tasks

Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)

Task 1 – Software Development

Description of Task:

This task will enhance and support the software used for basin information websites.

The Open Water Foundation (OWF) has already invested significant resources to develop the software tools used for this project, including InfoMapper and GeoProcessor software. Colorado's Decision Support Systems (CDSS) software such as HydroBase and TSTool will also be used. It is expected that additional software enhancements will be needed as websites are implemented and OWF responds to user feedback. Therefore, this task will focus on software development for the open source software products, including implementation of automated tests and creating documentation.

Method/Procedure:

Software is maintained in public GitHub repositories, which provide tools to software changes over time and manage product issues. Software development uses an agile approach where a design roadmap is developed and software enhancements and bug fixes are completed as needed to implement required functionality. This methodology is well established for CDSS and OWF software development.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

The basin information websites will be available to the public (see Task 2).

Open source software, tests, and documentation, will be made available in GitHub repositories including those for OpenCDSS (see: <u>https://github.com/OpenCDSS</u>) and Open Water Foundation (see: <u>https://github.com/OpenWaterFoundation</u>). These deliverables will be publicly available from the first day of the project and will be updated as the project is completed.

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

The CWCB will be able to access deliverables in GitHub repositories, including online documentation of the projects.



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Tasks

Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)

Task 2 – Data Processing, Website Configuration, and Documentation

Description of Task:

Website information products are organized by sector/theme, and timescales, as illustrated by the initial Poudre Basin Information website (<u>http://poudre.openwaterfoundation.org/latest</u>). For example, information products indicate whether the product focuses on agriculture, municipal, environment, recreation, education, or industry. Information is presented with timescale for historical, current conditions, seasonal outlook, and future planning. This task will perform work necessary to create maps and other information products in the websites. Information products that are currently disabled will be fully implemented.

Method/Procedure:

Implementing maps and other information products involves researching data availability, automating data processing to create integrated information products, configuring the website to display the maps and visualizations, and documenting the products for website users. OWF will implement automated workflows using appropriate tools based on data source and format. For example, some maps can directly use data from web services. Other maps require downloading and processing data. The initial Poudre Basin Information website includes approximately 70 maps and information products, many of which need to be completed. All workflows will be documented so that the public can understand data sources and processing. Outreach efforts (see Task 3) will generate feedback resulting in enhancements to the information products.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

The published websites will be available to the public.

Documented workflows and configurations to produce website maps and other information products, available in GitHub repositories.

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

The CWCB will be able to access deliverables in GitHub repositories, including online documentation of the projects. CWCB staff can access the published websites.



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Tasks

Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)

Task 3 – Outreach

Description of Task:

The Open Water Foundation (OWF) will perform outreach activities to entities within and outside of the basins including:

- Poudre Runs Through It work group and its member organizations including Coalition for the Poudre River Watershed
- Roundtables and their member organizations
- Nonprofits
- Organizations that perform water education
- Government including water providers and CWCB
- Others

The goal is to encourage as much use of the websites as possible in order to increase knowledge and effectiveness of organizations and individuals, and respond to feedback from website users.

Method/Procedure:

OWF will engage in Roundtable meetings, conferences, newsletters, social media, basin forums, presentations at board meetings, one-on-one communications, media, and other opportunities to make people aware of the websites. Virtual attendance such as webinars will be prioritized to increase outreach and decrease costs.

Outreach will make entities aware of the websites, encourage members of these organizations to actively use the websites, encourage feedback, and spread the word about the websites. Efforts will ideally result in organizations linking to the websites from their organization websites. OWF will also educate organizations about how they can publish open data so that the datasets can be effectively used by the public.

OWF will also work with the South Platte and Metro Roundtables to use the websites to directly benefit Roundtable members in performing the work of the Roundtables.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

Deliverables will include: tracking information for organizations contacted, attendance at events, social media interactions, and feedback gained from engagements.

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

OWF will document in the project delivery memo a summary of outreach efforts. OWF will also participate in CWCB-sponsored or attended events based on coordination with the CWCB, such as webinars, presentation to CWCB Board, and Water Congress workshops.



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Tasks

Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)

Task 4 – Project Management

Description of Task:

The Open Water Foundation (OWF) will perform project management tasks for the project including reporting and invoicing.

Method/Procedure:

OWF will perform project management activities according to CWCB project guidelines, including submitting invoices and supporting documentation.

OWF will create a 6 month and final project delivery memorandum describing results and lessons learned.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

Project management tasks will result in successful hand-off of final deliverables and payment for work performed. Lessons learned from the project will allow for additional business development to implement similar websites in other basins.

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

Progress reports and invoices, and successful project completion.

Budget and Schedule

Exhibit B - Budget and Schedule: This Statement of Work shall be accompanied by a combined <u>Budget</u> and <u>Schedule</u> that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in <u>excel format</u>. A separate <u>excel formatted</u> Budget is required for engineering costs to include rate and unit costs.

Reporting Requirements

Progress Reports: The grantee shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

Final Report: At completion of the project, the grantee shall provide the CWCB a Final Report on the grantee's letterhead that:

• Summarizes the project and how the project was completed.

WSRF Exhibit A - Statement of Work |6 of _____



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Reporting Requirements

- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

Payments

Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

The CWCB will pay the last 10% of the <u>entire</u> water activity budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or consideration for future funding of any type from CWCB.

Performance Requirements

Performance measures for this contract shall include the following: (a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum inkind contributions (if applicable) per the budget in Exhibit B. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the final deliverable is completed to the satisfaction of CWCB staff. Once the final deliverable has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per the Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per the Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.
(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

Last Update: December 17, 2019



COLORADO Colorado Water Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Supply Reserve Fund

EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs

Date: October 28, 2020

Water Activity Name: River Basin Information Websites

Grantee Name: Open Water Foundation

Task No. ⁽¹⁾	<u>Description</u>	<u>Start Date⁽²⁾</u>	End Date	<u>Matching Funds</u> (cash & in-kind) ⁽³⁾	<u>WSRF Funds</u> (Basin & Statewide combined) ⁽³⁾	<u>Total</u>
<u>1</u>	Software Development	Contract Date	Start + 1 year	\$50,000		\$50,000
2	Data Processing, Website Config., and Doc.	Contract Date	Start + 1 year	\$35,000	\$45,000	\$80,000
3	Outreach	Contract Date	Start + 1 year	\$29,200		\$29,200
4	Project Management	Contract Date	Start + 1 year	\$10,800		\$10,800
			Total	\$125,000	\$45,000	\$170,000

(1) The single task that include costs for Grant Administration must provide a labor breakdown (see Indirect Costs tab below) where the total WSRF Grant contribution towards that task does not exceed 15% of the total WSRF Grant amount.

(2) Round values up to the nearest hundred dollars.

• Additional documentation providing a Detailed/Itemized Budget may be required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of the CWCB staff project manager. Once the Final Report has been accepted, the final payment has been issued, the water activity and purchase order (PO) or contract will be closed without any futher payment. Any entity that fails to complete a satisfactory Final Report and submit to the CWCB with 90 days of the expiration of the PO or contract may be denied consideration for future funding of any type from the CWCB.

• Additonally, the applicant shall provide a progress report every 6 months, beginning from the date of contract execution



Project Map and Additional Figures – see: <u>http://poudre.openwaterfoundation.org/latest</u>

Below are maps of the project area for Open Water Foundation WSRF grant proposal "River Basin Information Websites". The project will initially focus on fully implementing the Poudre Basin Information website (Water District 3), and will then use similar approach for other Northern Colorado basins, and overview maps for the South Platte Basin.







The following is an example of statewide dataset that can be used for roundtable and smaller basin maps.



The following is an example time series graph available for a map layer, in this case the Counties map.



November 25, 2020

Ben Wade Colorado Water Conservation Board 1313 Sherman St. Room 721 Denver, CO 80203

Re: Metro Basin Roundtable support for WSRF Basin and State grants for Open Water Foundation's "River Basin Information Websites" project.

Dear Ben:

At the November 12, 2020 meeting of the Metro Basin Roundtable (MBRT), the MBRT voted unanimously to approve the Open Water Foundation's Metro WSRF Basin Grant of \$10,000 and to support Statewide Basin Grant of \$15,000 and Colorado Water Plan Grant for \$25,000 for "River Basin Information Websites". A summary of the funding request for State grant programs for this project is shown below.

Funding Source	Amount	Status
Metro BRT WSRF	\$10,000	Approved unanimously by MBRT at November 12 th meeting (this letter
		of support is being provided to the CWCB).
South Platte BRT	\$20,000	Approved unanimously by SPBRT at November 10 th meeting (separate
WSRF		letter of support is being provided by SPBRT to the CWCB).
Statewide WSRF	\$15,000	Approved unanimously to support by MBRT at November 12 th
		meeting. OWF is submitting the Statewide WSRF grant application to
		SPBRT for formal approval.
CWP Engage. and	\$25 <i>,</i> 000	Approved unanimously to support by MBRT at November 12 th
Innov. Grant		meeting. OWF is submitting the CWP grant application to SPBRT for
		formal approval.

This project will provide a number of benefits, including providing cross-jurisdictional information as an easily-accessible community resource. Data and information will inform organizations and individuals about many complex water issues in order to achieve the goals of the South Platte and Metro Basin Implementation Plan and Colorado Water Plan. The initial focus on the Poudre Basin will increase the effectiveness and efficiency of implementing multi-purpose water projects that address the water supply gap in the basin. The project will also help with collaboration on important issues such as wildfire mitigation, drought and flood response, sustainable agriculture, and environmental flows. The project will support water education and public engagement on water issues. The results of the project can be scaled to other basins within the South Platte and Metro Roundtable areas and statewide.

The MBRT supports this project.

Sincerely,

Barbara Biggs Chair, Metro Basin Roundtable

Ben Wade Colorado Water Conservation Board 1313 Sherman St. Room 721 Denver, CO 80203

November 27, 2020

Re: South Platte Basin Roundtable support for WSRF Basin and WSRF State grants for Open Water Foundation's "River Basin Information Websites" project.

Dear Ben:

At the November 10, 2020 meeting of the South Platte Roundtable (SPBRT), the SPBRT unanimously voted to recommend approval of the Open Water Foundation's South Platte WSRF Basin Grant of \$20,000 and to support Statewide WSRF Grant of \$15,000 for "River Basin Information Websites". A summary of the funding request for State grant programs for this project is shown below.

Funding Source	Amount	Status
South Platte BRT	\$20,000	Approved unanimously by SPBRT at November 10 th meeting (this letter
WSRF		of support is being provided to the CWCB).
Metro Basin BRT	\$10,000	Approved unanimously by MBRT at November 12 th meeting (separate
WSRF	2.	letter of support is being provided by MBRT to the CWCB).
Statewide WSRF	\$15,000	Approved unanimously to support by SPBRT at November 10 th meeting
		and MBRT at November 12 th meeting
CWP Engage. and	\$25,000	Approved unanimously to support by MBRT at November 12 th meeting.
Innov. Grant		OWF is submitting the CWP application to SPBRT for formal approval.

Due to the timeline necessary to meet the WSRF application deadline, the Open Water Foundation was unaware that the SPBRT required the full Statewide CWP grant application to be able to provide a formal approval of that element of the proposal. The Open Water Foundation is submitting the CWP grant applications to the SPBRT in order to comply with the SPBRT process.

This innovative project will provide a number of benefits, including providing cross-jurisdictional information as an easily-accessible community resource. Data and information will inform organizations and individuals about many complex water issues in order to achieve the goals of the South Platte and Metro Basin Implementation Plan and Colorado Water Plan. The initial focus on the Poudre Basin will increase the effectiveness and efficiency of implementing multi-purpose water projects that address the water supply gap in the basin. The project will also help with collaboration on important issues such as wildfire mitigation, drought and flood response, sustainable agriculture, and environmental flows. The project will support water education and public engagement on water issues. The results of the project can be scaled to other basins within the South Platte and statewide.

Sincerely,

Grant -

Garrett Varra Chair, South Platte Basin Roundtable



February 12, 2021

Ben Wade Colorado Water Conservation Board 1313 Sherman St. Room 721 Denver, CO 80203

Re: Matching Funding Commitment for Open Water Foundation WSRF and CWP Project "River Basin Information Websites" – updated with Addendum section on matching funds

Dear Ben:

As founder and Chief Executive Officer (CEO) of the Open Water Foundation (OWF), I am writing to confirm commitment of in-kind matching funds for OWF's proposed project "River Basin Information Websites". OWF has contributed research and development funding of over \$100,000 to date to develop software tools used in this project and expects to contribute \$50,000 or more additional in-kind match over the project period.

My experience at OWF, as a member of the Fort Collins Water Board, member of the Poudre Runs Through It Work Group, and other experience has pointed out the need for cross-jurisdictional water resources information at river basin scale. The unique mission and capabilities of OWF allow us to implement information technology solutions as a public benefit, which will increase the effectiveness and efficiency of other projects that are implementing water supply solutions. The convergence of COVID-19 pandemic, wildfires, drought, and ongoing water supply issues point out the need for accessible data and information, especially in an age of increased virtual collaboration.

In addition to the Statewide WSRF account request, the proposal requests funding from the Colorado Water Plan (CWP) Engagement & Innovation grant fund. This project is innovative and addresses significant needs in engaging the public, professionals, and decision-makers. The results of this project will form the foundation of a sustainable resource that can be used by South Platte and Metro Basin Roundtable members and citizens of the basins, and can be scaled to other basins.

Due to COVID-19 budget restrictions on State funding, the proposed budget relies on significant matching funds from OWF and other organizations. Unfortunately, the wildfires have added additional demands on organizations and require more time to explore match options beyond the significant OWF in-kind match. The attached letters of support illustrate the support for this project and OWF is continuing to follow up with these and other organizations to secure third-party matching funds (see Addendum below).

I appreciate the opportunity to submit this project and believe that it can greatly contribute to the goals of the WSRF and CWP programs.

Regards,

St. A. m.

Steve Malers, Founder and CEO, Open Water Foundation



Addendum – Matching Funds

As stated in the original proposal and this commitment letter, OWF is prepared to commit matching funds to the project in the form of in-kind labor sufficient to meet the grant requirements. This is consistent with OWF's mission of developing open source and open data solutions and sharing those tools with the public across projects. However, we continue to pursue other funds to leverage any funding provided by the CWCB.

The following are additional funding that have been acquired since the proposal was submitted.

• 2020-12-16, GoCode Colorado Business Opportunities Challenge Award Winner - \$2,000

The following are matching funds sources that are being pursued through various processes and can augment the OWF matching funds.

- 2020 GoCode Colorado Business Solutions Challenge follow up to Business Opportunities Challenge for more funding to implement solutions, final event is May 27.
- Bohemian Foundation Pharos Fund (Fort Collins) \$30,000 OWF has submitted a proposal for funding to support this project. The grant program will make decisions in April.
- Poudre Heritage Alliance \$15,000 (estimated) OWF submitted an initial proposal and was
 informed that the "large grant" program is awaiting information on how much federal funds will
 be committed
- Other opportunities are also being evaluated, such as recent Saint Vrain and Left Hand Creek website.



3264 Larimer Street, Suite D, Denver, CO 80205 Tel: 720.570.2897 | www.coloradowatertrust.org

September 15, 2020

South Platte and Metro Roundtables WSRF Grant Program

To Whom It May Concern:

I am providing this letter to express Colorado Water Trust's (CWT) support for the Open Water Foundation (OWF) project "River Basin Information Websites". OWF Chief Executive Officer Steve Malers provided CWT staff a demonstration of the Poudre Basin Information website, and we think the information on this website can help CWT in its efforts to protect and enhance environmental flows.

CWT has helped implement multiple projects on the Poudre River, including removal of an inactive diversion dam, implementation of fish passage on a diversion dam, and updating Colorado's water laws to allow use of an augmentation plan to provide water for instream flows. We appreciate the opportunity to see this and other work by CWT and our partners highlighted in the Poudre Basin Information website.

Basin information websites for other basins would also inform Colorado's citizens about water issues, and help CWT and others in the field find additional project opportunities. Simplifying access to useful information decreases the cost of projects and increases public outreach.

We recommend proving funding for this project.

Regards,

Andy Schultheiss Executive Director, Colorado Water Trust





September 14, 2020

4745 Wheaton Dr. Fort Collins, CO 80524

South Platte and Metro Roundtables WSRF Grant Program

WSRF Grant Committee,

I am providing this letter to express the Community Foundation of Northern Colorado's (Foundation) support for the Open Water Foundation (OWF) project "River Basin Information Websites". Steve Malers, OWF chief executive officer, demonstrated the Poudre Basin Information website to members of our staff and we quickly found synergies for how it could support the work of the Foundation, in particular given the Foundation's interest in water and the importance of the Poudre River to the lifestyle, economy, and environment of Northern Colorado.

In fall of 2019 the Foundation launched the Hach Center for Regional Engagement which was established to support regional collaboration on complex issues facing Northern Colorado, which includes Larimer and Weld Counties. Key initiatives of the Hach Center focus on leadership, regionalism, and water. Weld and Larimer Counties physically overlap the Poudre Basin and consequently land and water issues in the Poudre Basin are of direct interest to Hach Center programs.

A program of the Hach Center, Water Literate Leaders, educates leaders in the region around the incredibly topic of water so that they can better contribute to solutions surrounding this increasingly complex challenge. The Poudre Basin Information website being developed by OWF can help inform bold leaders and make the process of collaborative innovation more effective and efficient. We are also interested in the implementation of an information website for the Big Thompson basin to support programs in that basin.

Regards,

Ella Fahrlander

Ella Fahrlander Chief Engagement Officer Community Foundation of Northern Colorado

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4745 Wheaton Dr. Fort Collins, CO 80525 (970) 224-3462 info@NoCoFoundation.org www.NoCoFoundation.org October 12, 2020

Ditch and Reservoir Company Alliance 140 W. 29th St. Ste. #339 Pueblo, CO 81008

South Platte and Metro Roundtables WSRF Grant Program

To Whom it May Concern:

DARCA supports the Open Water Foundation (OWF) project, "River Basin Information Websites". OWF Chief Executive Officer Steve Malers provided information regarding the Poudre Basin Information website to the DARCA Board of Directors as an example of a website that can be implemented for South Platte and other basins as an educational tool for a variety of audiences.

There is a basic need to educate the public about the topics that can be displayed in this project for water as a whole and may benefit organizations as well as individuals and each are represented in DARCA's membership. It is also important to provide information about challenges and opportunities for collaboration that can help sustain each water sector while also addressing issues such as increasing urban water demand while maintaining water for agriculture, desire to protect the environment, and economic challenges.

There are many organizations and individuals who may benefit from basin information websites proposed by OWF and we look forward to collaborating in order to emphasize the value of this educational tool.

Regards,

Amber Weber

Amber Weber Executive Director Ditch and Reservoir Company Alliance



Northern Colorado Water Conservancy District 220 Water Avenue • Berthoud, Colorado 80513 800-369-7246 • www.northernwater.org

September 22, 2020

South Platte and Metro Roundtables WSRF Grant Program

Dear Roundtable Members:

I am providing this letter to express our support for the Open Water Foundation (OWF) project "River Basin Information Websites". As an employee of Northern Water, member of a Poudre Runs Through It (PRTI) work group, and a long-time participant in the South Platte and Metro Roundtables, I appreciate the need for easy to understand information about complex water resources. The proposed project would assist meeting the need for cross-jurisdictional information that integrates data from different entities at basin scale. This information can support collaboration on basin water solutions.

My work with PRTI illustrates challenges trying to coordinate conversations among persons from different water organizations and backgrounds. The virtual meetings required by COVID-19 pandemic have introduced additional difficulties in sharing information. The Poudre Basin Information website and other similar websites for other basins, can educate, help coordinate decisions within a basin, and provide a foundation for discussions about complex water issues.

Northern Water supports funding for this project.

Sincerely,

Hall m

Jim Hall, P.E. Senior Water Resources Engineer



ST. VRAIN AND LEFT HAND WATER CONSERVANCY DISTRICT

9595 Nelson Road, Suite 203 • Longmont, CO 80501 • 303-772-4060 • <u>www.svlhwcd.org</u>

September 14, 2020

South Platte and Metro Roundtables

Re: WSRF Grant Program

To Whom it May Concern:

I am providing this letter to express my support for the Open Water Foundation (OWF) project "River Basin Information Websites". OWF Chief Executive Officer Steve Malers demonstrated the Poudre Basin Information website to me and I believe that such a tool implemented for the South Platte Basin would benefit the South Platte and Metro Basin Roundtable members, their organizations, and the public. There is a need to provide access to water resources data in a way that is easy to understand and supports the discussion of many issues in the South Platte and Metro Roundtable geographic areas. Funding this project could also help the Roundtables' education efforts on complex water issues. From my perspective as IBCC representative for the South Platte Roundtable, this project could also help provide information to explain East Slope water issues to West Slope Roundtables.

A similar website implemented at the scale of the Saint Vrain basin would be a useful information resource for my organization and citizens of the basin and I hope that project funding would consider this as a potential outcome. Datasets that have been recently collected for the Stream Management Plan could be made available to the public.

Regards,

Sean T. Cronin Executive Director



Julie Kallenberger Colorado Water Center | Colorado State University E121 Engineering Building | 1033 Campus Delivery Fort Collins, CO 80523-1033 970.491.5124 Julie.Kallenberger@colostate.edu watercenter.colostate.edu/prti

September 14, 2020

South Platte and Metro Basin Roundtables WSRF Grant Program

To Whom it May Concern:

I am providing this letter to express Poudre Runs Through It (PRTI) support for the Open Water Foundation (OWF) project "River Basin Information Website". OWF Chief Executive Officer Steve Malers is a founding member of PRTI and has invested his own time and directed OWF resources to the development a new Poudre Basin Information website. The PRTI membership is now beginning to use this resource for background information and as input to ongoing discussions, including initiatives such as the Committee on Enhancing and Coordinating Poudre River Flows. The recently created map of the Cameron Peak wildfire has also provided useful information to the group. The website can also serve as a resource for those who attend the annual Poudre River Forum, perhaps even more so if a virtual conference is required this year.

In addition to using the Poudre Basin Information website for PRTI, the Colorado Water Center at Colorado State University organizes the Water Literate Leaders of Northern Colorado program. This program can benefit from the Poudre Basin Information website, especially if enhancements can be completed as part of the proposed project. We are also interested in implementing a similar website for the Big Thompson Basin, which is within the Water Literate Leaders program geographic area.

One of PRTI's goals is to act as a catalyst for projects that benefit the Poudre River, and we rely on champions for initiatives and projects. OWF's work on the Poudre Basin Information website and other similar websites demonstrates innovation and we hope that funding will be provided to support the project.

Regards, Julíe Kallenberger

Julie Kallenberger PRTI Facilitator Colorado Water Center