COLORADO
Colorado Water Conservation Board
Department of Natural Resources
1313 Sherman Street, Room 718
Denver, CO 80203

November 7, 2017

Open Water Foundation
Attn: Steve Malers, Chief Technology Officer
320 E. Vine Drive, Suite 203
Fort Collins, CO 80524

RE: Notice to Proceed – WSRF Grant – POGG1 2018-451 Open Water Foundation - South Platte Basin Roundtable Data Platform

Dear Steve,

This letter is to inform you that the grant request to assist in the above WSRF grant project has been approved. The attachments serve as your original contracting documents.

With the executed agreement, you are now able to proceed with the project and invoice the State of Colorado for costs incurred through November 7, 2022. Please note that we have modified the original schedule expiration date to a 5-year maximum grant term. This will allow you the additional time to complete the project if needed, but also avoids the amendment process any time during the project. Although it is extremely helpful for both parties, it is encouraged that the grantee follows the original schedule set forth before the Board upon its original approval. You can refer to the WSRF Criteria & Guidelines located on our website for the updated invoice request requirement instructions prior to submitting your request(s).

The WSRF Criteria & Guidelines also provide instructions for the six month progress reports and final deliverable procedures in order to avoid a delay in payment requests.

If you have any questions or concerns regarding the project, please contact Craig Godbout, Project Manager at 303-866-3441 ext. 3210 or at Craig.Godbout@state.co.us. Please send the 6 month progress reports and invoices directly to Craig and cc me at Dori.vigil@state.co.us.

You can contact me at 303-866-3441 ext. 3250 for additional invoicing, payment and contracting inquires.

Thank you.

Sincerely,

//s//

Doriann Vigil
Program Assistant II
O 303-866-3441 ext. 3250
1313 Sherman Street, Rm. 719, Denver, CO 80203
Dori.vigil@state.co.us / cwcb.state.co.com

STATE OF COLORADO
Department of Natural Resources

ORDER
Number: POGG1 PDAA 201800000451
Date: 11/07/17
Description:
PDA 2500 Open water foundation
Effective Date: 11/07/17 Expiration Date: 11/07/22

BUYER
Buyer:
Email:

VENDOR
OPEN WATER FOUNDATION
320 E VINE DR STE 203
FORT COLLINS, CO 80524-2313

Contact: VSS Contact
Phone: .

**** IMPORTANT ****
The order number and line number must appear on all invoices, packing slips, cartons and correspondence

BILL TO
COLORADO WATER BOARD CONSERVATION
1313 SHERMAN STREET, ROOM 718
DENVER, CO 80203

SHIP TO
COLORADO WATER BOARD CONSERVATION
1313 SHERMAN STREET, ROOM 718
DENVER, CO 80203

SHIPPING INSTRUCTIONS
Delivery/Install Date:
F.O.B: FOB Dest, Freight Allowed
VENDOR INSTRUCTIONS:

Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	$40,000.00	☐
Description: PDAA 2500 Open Water Foundation South Platte Basin Data Plat						
Service From: 11/07/17 Service To: 11/07/22						

Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
2	G1000		0	0.00	$60,000.00	☐
Description: PDAA 2500 Open Water Foundation South Platte Basin Data Plat						
Service From: 11/07/17 Service To: 11/07/22						

TERMS AND CONDITIONS
https://www.colorado.gov/osc/purchase-order-terms-conditions

DOCUMENT TOTAL = $100,000.00

Exhibit A

Statement of Work
Date: April 30, 2017 (amended July 21, 2017)

Note: The original Statement of Work submitted to the South Platte Roundtable has been updated to reflect their request to include the Metro in the basin funding request.

WATER ACTIVITY NAME – South Platte Basin Data Platform

GRANT RECIPIENT – Open Water Foundation (OWF)

FUNDING SOURCE – South Platte Basin Water Supply Reserve Fund; Metro Basin Water Supply Reserve Fund; Statewide Water Supply Reserve Fund

INTRODUCTION AND BACKGROUND

The purpose of this project is to implement a web-accessible data platform that can be used by South Platte and Metro Roundtable members to facilitate the work of the Roundtables. This platform will utilize existing datasets and open technologies to implement processes to integrate datasets from multiple original sources. Data products and visualizations will provide context and explain water resources issues in the South Platte. The project will focus on fundamental datasets such as lists of municipalities, water providers, ditch companies, and large industries in the basin, and datasets that provide insight on multi-faceted water issues that evolve over time. The datasets will be made available in forms usable by Statewide Water Supply Initiative (SWSI) Update, Basin Implementation Plan (BIP), and other projects. Visualizations will be implemented to emphasize important issues for each sector (agriculture, recreation, environment, municipal and industrial). The project will leverage previous and ongoing work from OWF and its collaborators and will be coordinated with other projects. The project will enhance the ability of the Roundtable to tell its story to other roundtables and the public through the use of data-driven stories. The project will result in an open platform that can be evaluated by the Roundtable and enhanced.

OBJECTIVES

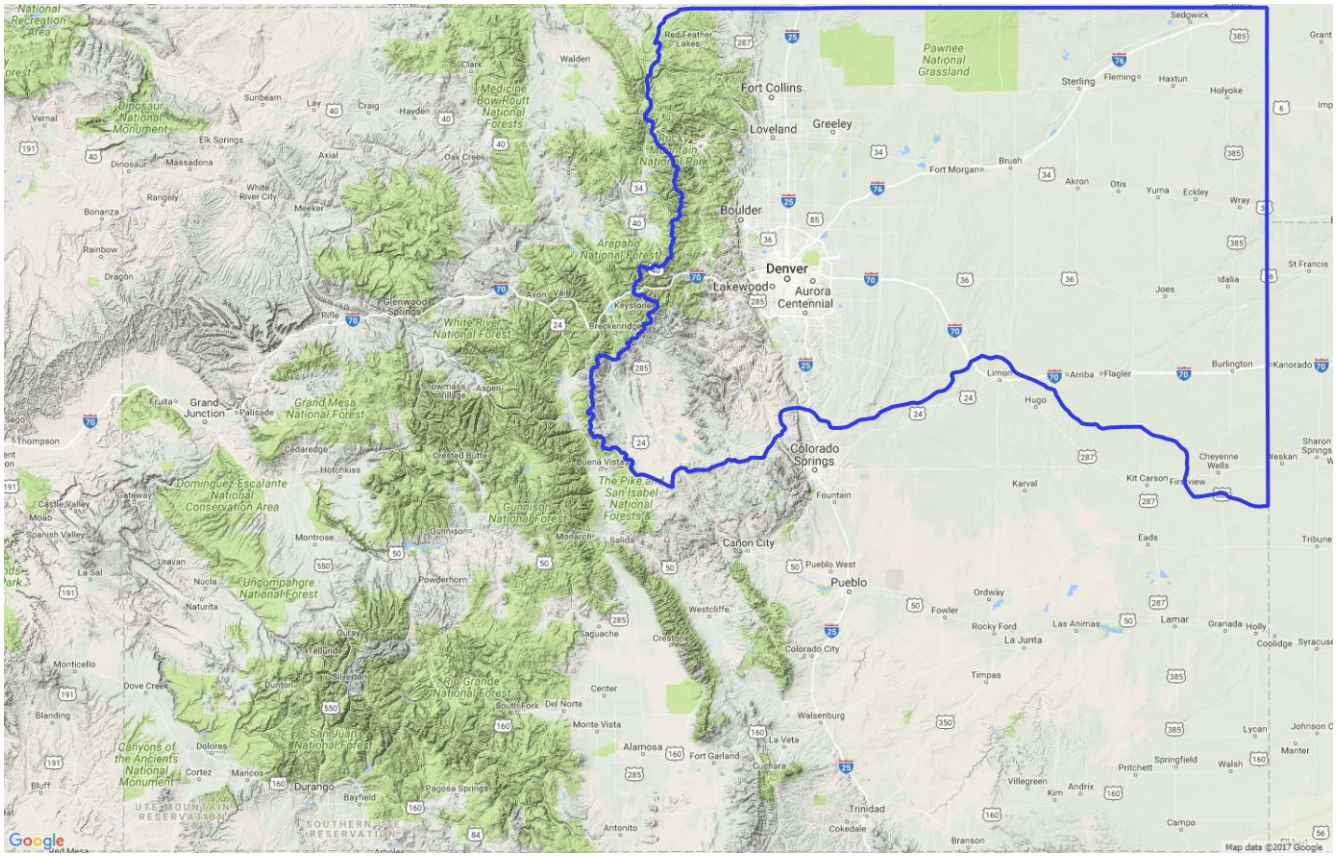
The objectives of the project are as follows:

1. Provide web access to standard datasets that facilitate the work of the Roundtables and tell the story of the Roundtables.
2. Provide datasets that provide context and frame of reference for basin issues.
3. Provide data visualizations that illustrate important water resources issues in ways that the public can understand.
4. Establish data workflow processes to automate dataset updates, so that the Data Platform can reflect current data.
5. Establish working examples of “democratized datasets” whereby the water resources community regularly contributes to datasets that benefit the community.
6. Demonstrate use of commonly-available open technologies that result in a sustainable data platform.
7. Identify data gaps and opportunities for additional collaboration.
8. Coordinate with various entities to make progress on data exchange standards.

9. Determine sustainable approach to maintaining and enhancing the platform.

PROJECT MAP

This project will benefit the entire South Platte Basin, which has the extent shown in the following map. The initial focus will be on the South Platte Roundtable extent. However, many datasets also cover the Metro Roundtable area (or full State) and will be included where possible. Many processes described below can be applied statewide.



Project Area Map

APPROACH

The following tasks will be performed. Some tasks will be performed concurrently and in some cases iteration will be necessary. It is OWF's experience that technology and data projects can be costly due to the number of hours necessary to perform the work. However, OWF has been successful utilizing student interns that we train to utilize Colorado's Decision Support Systems (CDSS) and other technologies. Consequently, the following tasks will utilize a combination of senior staff and student interns to be cost-effective. The focus of the project will be to increase accessibility to datasets that can be used in various studies and by the Roundtable in its work. This will help to minimize costs for future Roundtable projects.

TASK 1 – Create Initial Inventory of Key Datasets, Source Entity, Data Format, and Accessibility

Description of Task: OWF has previously and is currently working with a wide variety of datasets related to water resources, including datasets identified in a previous review of the Colorado Water Plan (CWP) and South Platte BIP. These efforts will be leveraged to create an inventory of existing and desirable datasets for the South Platte, which will serve as the input to following tasks. In some cases datasets are independent of State projects and will be new to the Roundtable members.

Method/Procedure: OWF will update previous dataset inventories to focus on the Roundtables. The inventory will include dataset name, summary, source, format, whether spatial data are available, general availability, and other useful information. Datasets will benefit from work that OWF has performed in creating a map of water assets in Colorado. Examples of datasets that may be included are:

- List of all municipalities in the basin (cross-referenced with Colorado Municipal League, Secretary of State, and federal lists to establish unique identifiers)
- List of all water providers in the basin (from previous gap analysis work)
- List of all covered entities (water providers supplying at least 2000 acre-feet of water annually)
- List of all ditch and reservoir companies (from South Platte Decision Support System datasets and other sources)
- List of all watershed coalition and environmental non-governmental organizations (NGOs)
- List of major industries in the basin
- List of substitute water supply plans
- List of CWCB Alternative Transfer Method (ATM) projects
- List of streams (from Division of Water Resources [DWR] Source Water Route Framework)
- List of stream gages
- List of instream flows
- List of reservoirs
- Irrigated lands from CDSS
- Municipal growth boundaries (for example from data.colorado.gov)

Deliverables: Inventory of datasets that are candidates for the South Platte Basin Data Platform, with initial level of review for data availability. Some datasets will receive active attention in later tasks and others will remain in the inventory but will not be included in the project until the dataset is deemed more important and resources are available.

TASK 2 – Create Initial Prototype Website

Description of Task: A prototype website will be created in order to quickly provide a framework for accessing and viewing the datasets. The intent of this effort is not to create a complex technology solution that will be difficult to maintain. Instead, commonly available cloud technologies will be utilized to provide access to datasets and visualizations. This initial prototype will be updated as additional tasks are completed. The website will be publicly-accessible and allow Roundtable members to review and use datasets. The datasets will also be available for various studies.

Method/Procedure: OWF will select a cloud-hosted platform and will configure to receive datasets and visualizations. This platform will be selected with an emphasis on sustainability and accessibility and compatibility with current State of Colorado technologies. It is expected that users will want to download simple data representations such as comma-separated-value, Excel, and map layers and that the data and visualizations may be integrated in other websites. Consequently the platform will be required to support these formats. Some custom development may occur but the intent is to leverage existing technologies as much as possible. An example of a recent project that used this approach is the enhanced snowpack data products for water supply (http://projects.openwaterfoundation.org/owf-proj-co-cwcb-2016-snodas/prototype). The solution can be integrated with existing CWCB South Platte Roundtable website and South Platte BIP website, as appropriate.

Deliverables: Cloud-hosted public website that provides access to South Platte Basin datasets and visualizations.

TASK 3 – Implement Processes to Transfer Data from Original Source to South Platte Roundtable Data Platform

Description of Task: This task will be applied for each dataset that is included in the platform. Automated processes will be implemented to transfer data from the original source and into a format that is compatible with the platform. In some cases the original format can be used directly. In other cases the original format will need to be converted and/or enhanced. Through this process OWF will document challenges in using the data so that improvements can be implemented. Much of this work can be leveraged in future projects to minimize the amount of data work that the State and its consultants will need to do.

Method/Procedure: OWF has developed open source tools for CDSS and other projects that can be utilized to translate data formats. These tools will be enhanced as needed and used to define transparent conversion processes as needed for each dataset. Appropriate metadata will be created to describe each dataset. Additional data will be joined to datasets as appropriate. For example, links to municipal and water provider websites will be added. Automation will be used as much as possible to allow the processes to be applied throughout the basin.

Deliverables: The process tools will be saved in a repository hosted in the cloud to allow others to understand the processes and contribute changes if appropriate. The processes can also be used to extract original data for other purposes independent of the Roundtable Data Platform. Each process will be documented so it can be used on other projects and in other basins. The datasets will be accessible in the cloud platform. Examples of standard processes that are envisioned to be implemented include:

- Extract data from complex Excel workbooks in order to simplify formatting.
- Extract data from CDSS model datasets, such as StateCU and StateMod and ensure that identifiers can relate to other data.

- Extract data from HydroBase, such as lists of structures and water rights.
- Extract data from web services such as data.colorado.gov.
- Extract data from SWSI Update work products.
- Extract data from spatial data layers and geodatabases.
- Join tabular data with additional data to provide unique identifiers that allow datasets to be related to each other. For example, water providers have been assigned unique identifiers as part of the Basin Needs Decision Support System (BNDSS) project; municipalities utilize unique identifiers from State and federal datasets.
- Join data to baseline spatial data layers such as Source Water Route Framework layer from DWR to enable stream mile searches. This will allow integration with additional data analysis and modeling tools.

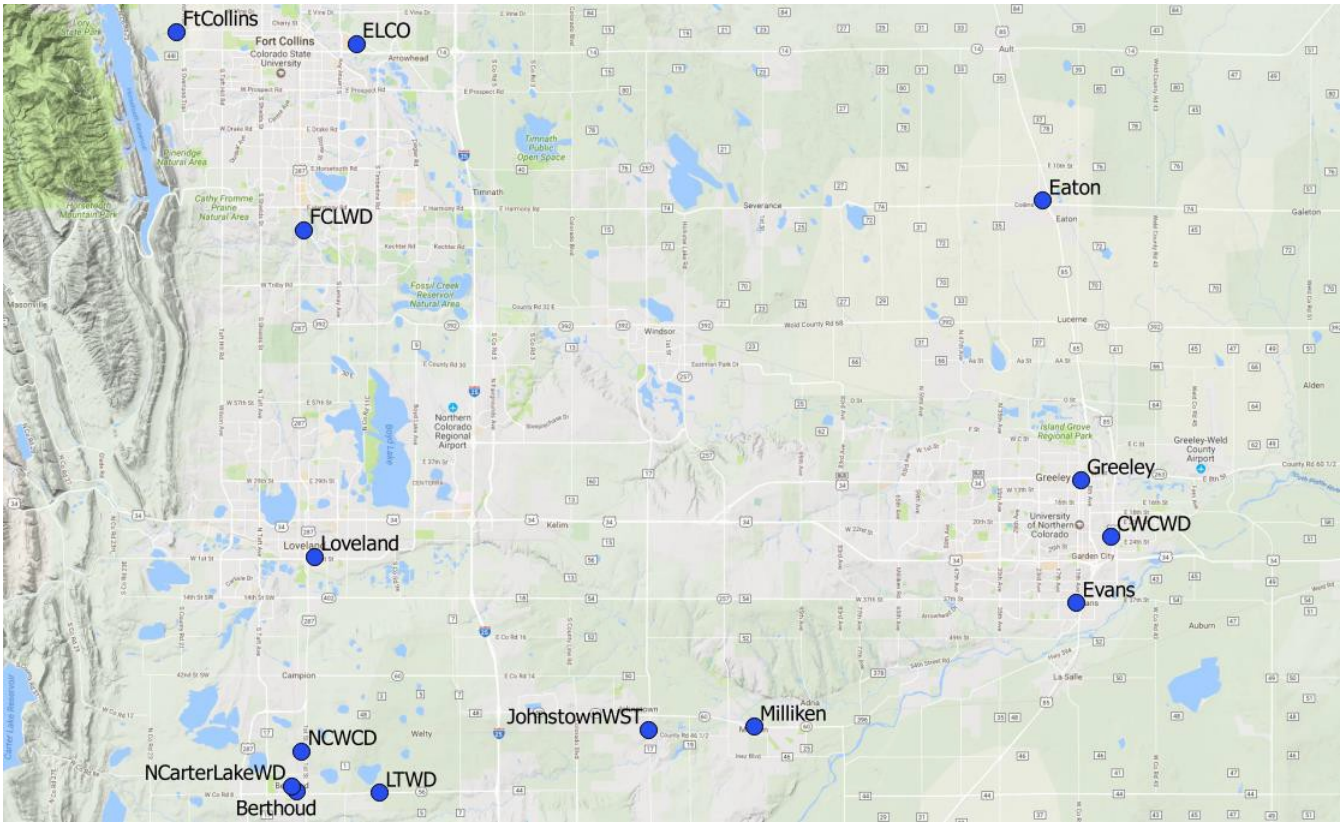
TASK 4 – Implement Visualizations for Datasets

Description of Task: One or more data visualizations will be implemented for each dataset in order to provide context and tell a story that is of interest to the Roundtable. These visualizations can be used to highlight challenges and opportunities for Roundtable members, stakeholders, and the public. The input data for each visualization will be indicated and can be downloaded. This will provide transparency.

Method/Procedure: OWF has developed visualizations for water data on other projects and this work will be leveraged for the South Platte Roundtable Data Platform. Visualizations will be implemented in the South Platte Basin Data Platform and code made available in a cloud repository. This will allow others to utilize the tools, for example in other basins.

Deliverables: Web visualizations in the form of tables, graphs, map layers, maps, animations, etc. Example visualizations include:

- Maps and tables of municipalities in the basin, with links to web resources for the municipality (conservation programs, water supply programs, etc.). For example, the map below shows some of the water providers in the South Platte Basin; a table of the data also provides the BNDSS identifier and the URL for the provider's water efficiency plan, if available. This emphasizes water providers' efforts to promote water conservation and increased efficiency.

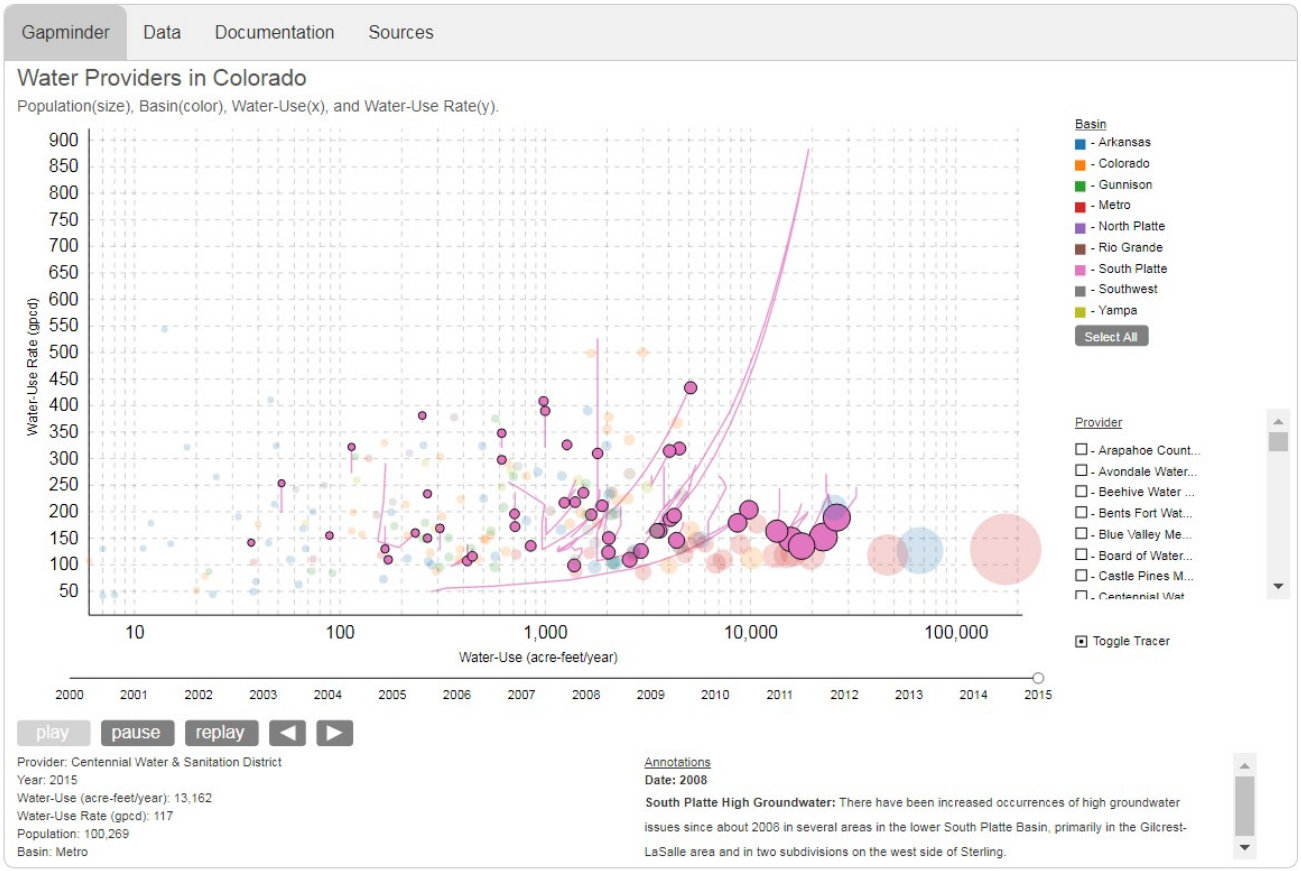


Water_Provider	BNDSS_ID	Water_Efficiency_Plan_URL
Town of Berthoud	Berthoud	None
Central Weld County Water District (CWCWD	CWCWD	None
East Boulder County Water District	EBoulderCoWD	None
East Larimer County Water District	ELCO	https://media.wix.com/ugd/242076_aa94c977f0894656a98e5f8865256bd8.pdf
Fort Collins-Loveland Water District (FCLWD)	FCLWD	https://dta0yqvfnusiq.cloudfront.net/fclwd/2015/08/FCLWD-2015-Municipal-Water-Efficiency-Plan-161
Town of Frederick	Frederick	http://www.frederickco.gov/DocumentCenter/View/533
City of Fort Collins	FtCollins	http://www.fcgov.com/utilities/img/site_specific/uploads/WEP_2015-17_FullDraft_NoWaterMark_v9.p
City of Greeley	Greeley	http://cwcbweblink.state.co.us/WebLink/ElectronicFile.aspx?docid=131791&&&dbid=0
Town of Kersey	Kersey	None
Town of Milliken	Milliken	None
North Carter Lake Water District	NCarterLakeWD	None
Northern Colorado Water Conservancy Distric	NCWCD	None
Town of Severance	Severance	None
Town of Wellington Public Works	Wellington	None
West Fort Collins Water District	WFtCollinsWD	None
Town of Windsor	Windsor	https://www.windsorgov.com/DocumentCenter/View/14582

Map of Example South Platte Water Providers and Table Indicating Water Efficiency Plans

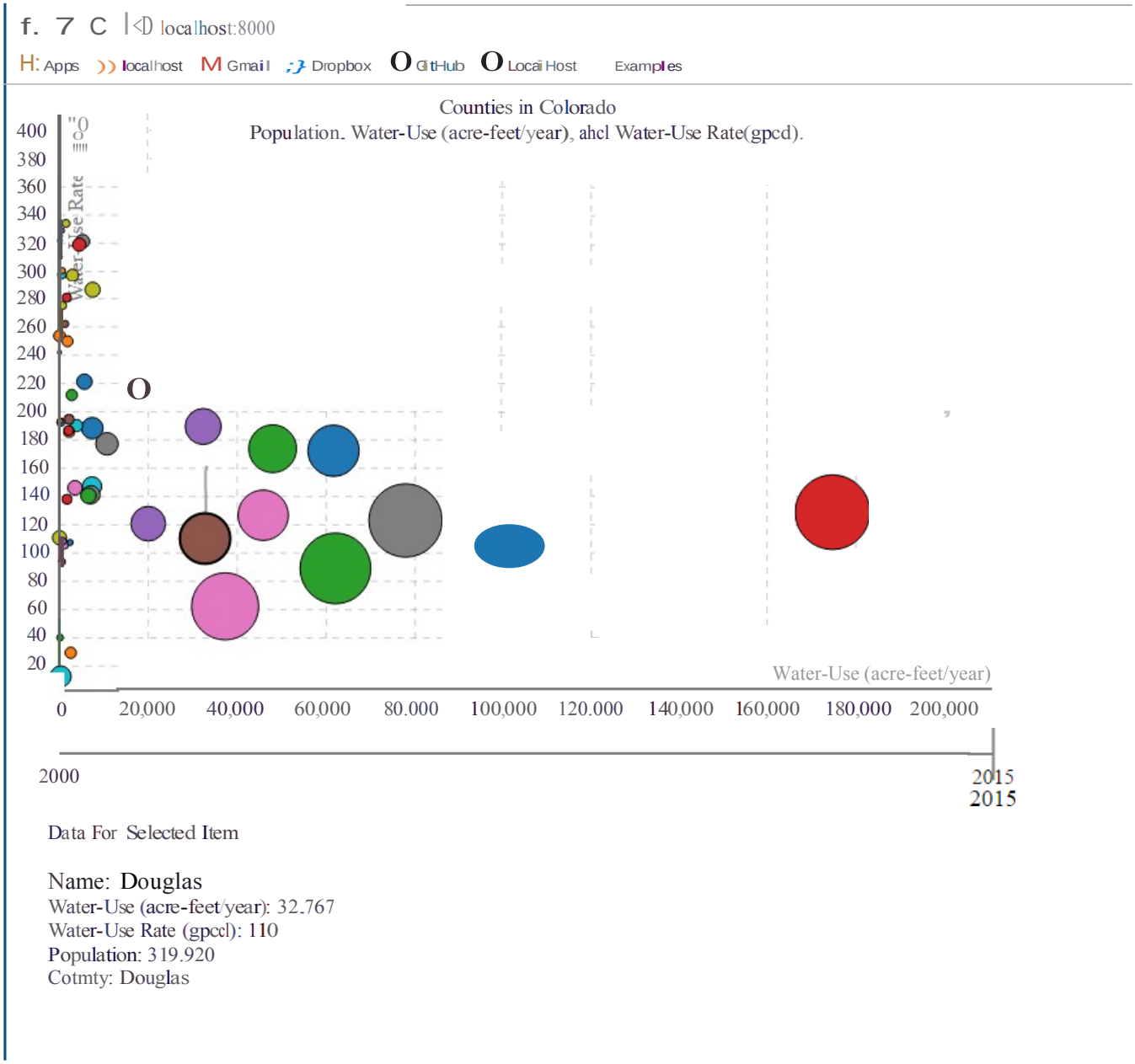
- Network diagram showing relationship of municipalities and water providers. For example, this diagram would show that the City of Fort Collins receives treated water from Fort Collins Utilities as well as several special districts. This visualization will help illustrate the complexity of water operations and agreements.

- Municipal population, water use, and water demand from HB 1051, water efficiency plans, etc. The example visualization below shows population, water use (volume), and water use rate (gallons per capita per day) for water providers in the South Platte Basin, where each provider is represented as a bubble and each bubble is sized and colored based on water use rate. While the image here shows the final year of data, this type of visualization is able to cycle through all years of available data so that the visualization is animated. With this type of visualization, it is possible to represent four different variables over time, showing trends such as water conservation. The tool can be configured with other suitable datasets.

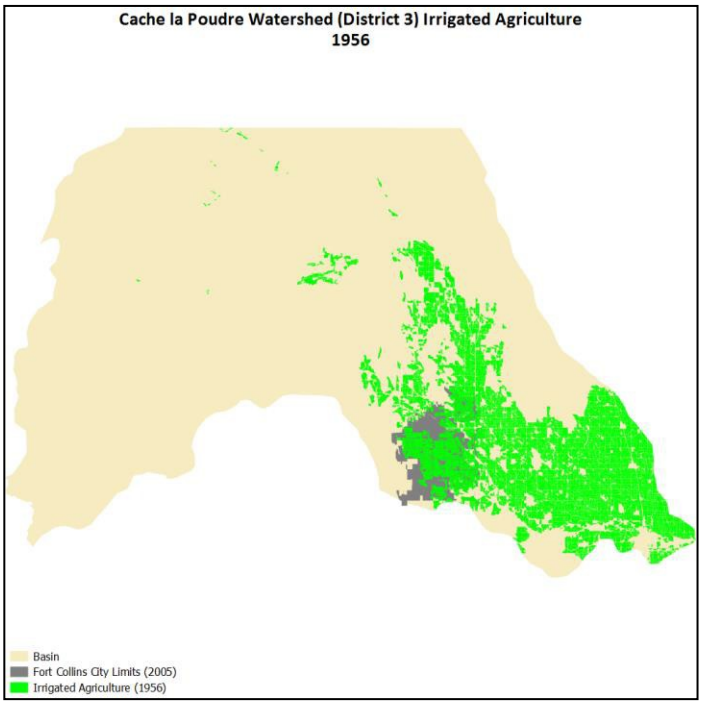


Provider Annual Water Use

- County water use. The above technique can also be used to visualize county water use for the entire state, using data from SWSI and other sources such as water efficiency plans. The following image uses an open source tool developed by OWF for the CWCB. High-population Front Range counties have the lowest per capita water use and continue to be more efficient. The brown circle and associated trend "tail" shown below shows that the trend for Douglas County has been to reduce per capita water use while serving a larger population with the same supply. The visualization is animated and the year slider can be positioned at any year. Access to data for the visualization is provided via a "Data" link.

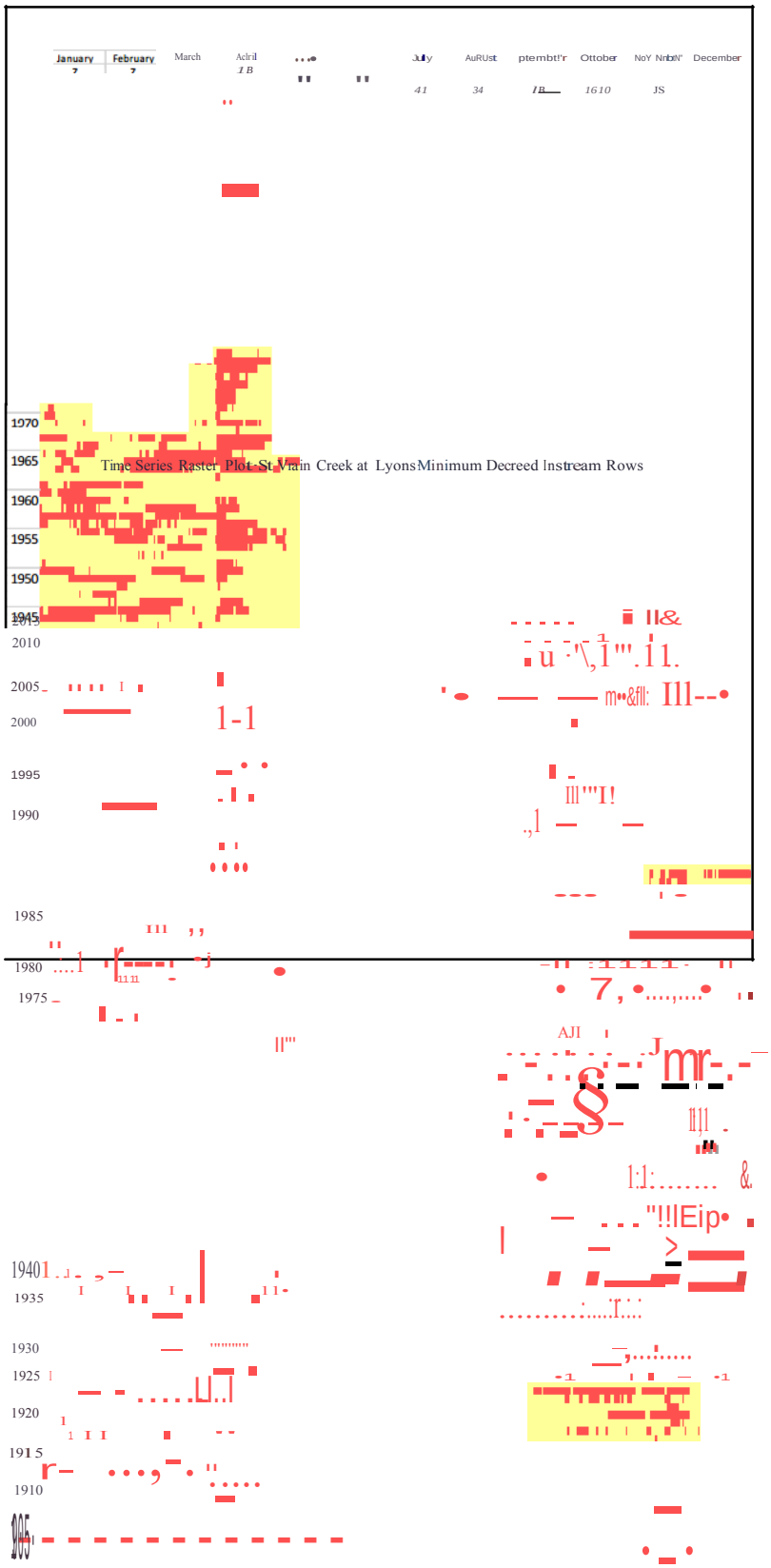


- Change in irrigated lands over time. The example visualization below shows irrigated agriculture in the Cache la Poudre watershed in 1956. This image is part of an animated gif image that shows irrigated agriculture from 1956 to 2010. OWF is in the process of developing an enhanced tool that shows more data layers and processes all water districts in the state.

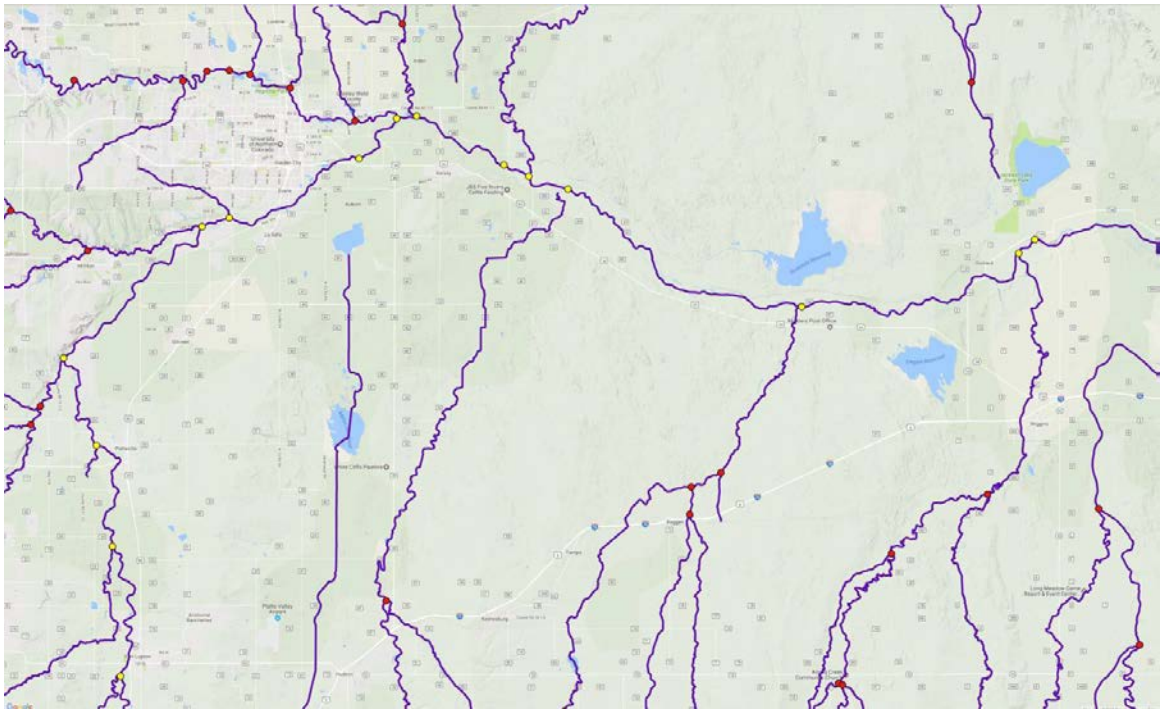


- Map of diversion dams and whether fish passage exists
- Occurrence of drought in the basin over time
- Storage status over time, including surface reservoirs, snowpack, groundwater

- Raster plots that show when minimum instream flows are either met or not met by available streamflow. In the example visualization below for St. Vrain Creek (from South Platte BIP), days when the minimum instream flow decreed right were not met are shown in red.



- Map of streams from the Source Water Route Framework (SWRF) within the South Platte Basin and datasets linked to the map. The example map below shows streams (purple) that are part of the SWRF, including the South Platte River. Each stream has its own identifier (federal GNIS_ID; see first table below map). The points on the map represent stream confluences. This stream layer facilitates use of other data such as diversion structures from HydroBase and data could be linked to other datasets, such as instream flow rights or locations of State species of concern. OWF helped use this data in the South Platte BIP and could make the data more accessible.



Source Water Route Framework Stream Layer from DWR

OBJECTID	GNIS_ID	GNIS_Name	L_Miles	SHAPE_Length	District
26	00169581	Crow Creek	83.76880470345...	134814.4625805...	1
129	00171049	Geary Creek	10.06347731196...	16195.79377199...	1
130	00171056	West Fork Willow...	7.72432969357533	12431.25481043...	1
131	00171057	North Fork Geary...	6.036996452518...	9715.722162063...	1
132	00171058	Little Simpson Cr...	1.4781613510948	2378.8990288285	1
133	00171065	Cow Creek	13.69795722694...	22044.99334256...	1
134	00171066	Eastman Creek	17.906506422485	28818.07909982...	1
135	00171067	Little Owl Creek	23.59613924304...	37974.76688712...	1
137	00171089	Spotwood Creek	13.09638991390...	21076.85282414...	1
139	00171091	Graves Creek	6.115689073153...	9842.367198929...	1
152	00171160	Willow Creek	34.35068013423...	55282.73320798...	1

Source Water Route Framework Stream Attributes Showing Unique Identifier and Stream Name

OBJECTID	Con_ID	M_Str_Name	M_Str_ID	T_Str_Name	T_Str_ID	Type	Str_Mile
1	1	South Platte River	00201759	Saint Vrain Creek	00205012	Confluence	191.9843934498...
2	2	South Platte River	00201759	Graflin Slough	00020003	Confluence	197.316914367227
3	3	South Platte River	00201759	Big Dry Creek	00181264	Confluence	210.9801549250...
4	4	South Platte River	00201759	Third Creek	00184607	Confluence	217.876066518818
5	5	South Platte River	00201759	Second Creek	00184606	Confluence	221.8153146282...
6	6	South Platte River	00201759	Grange Hall Creek...	00020001	Confluence	228.6037014195...
7	7	South Platte River	00201759	Clear Creek	00181805	Confluence	234.4981663979...
8	8	South Platte River	00201759	Sand Creek	00184740	Confluence	235.6216200002...
9	9	South Platte River	00201759	Cherry Creek	00181657	Confluence	241.225907974
10	10	South Platte River	00201759	Dry Gulch	00182351	Confluence	242.4677509841...
11	11	South Platte River	00201759	Weir Gulch	00182350	Confluence	243.0319812283...

Source Water Route Framework Stream Confluence Attributes Showing Stream Mile for Confluence

TASK 5 – Develop Integrated Stories

Description of Task: Individual datasets and visualizations can stand alone and provide value. However, more complex issues and messages such as understanding multi-purpose projects require linking datasets and visualizations to provide context and tell stories. These stories will parallel key points in SWSI, BIP, and CWP. A primary purpose of this task is to demonstrate how data-driven stories can be implemented, so that additional stories can be added in the future.

Method/Procedure: OWF will utilize web technologies to implement stories using the individual datasets and visualizations. This task will require an additional level of coordination with the Roundtable. Examples of stories that could be told with data and visualizations include:

- Agriculture:
  - show relative amount of water used by agriculture, demand pattern over year, and impact of weather and hydrologic variability from year to year
  - changes in irrigated agriculture due to urban growth and water transfers
  - despite fact that water sales are occurring, emphasize that water rental programs are regularly used and efforts to implement alternative transfer methods (ATMs) are occurring
  - challenges to agriculture due to labor shortages (show trend of switching to center pivots)
  - change in ownership of Colorado Big Thompson units from agriculture to municipal and deliveries shifting south to municipal areas
- Municipal water providers:
  - show relative amount of water used by urban areas, demand pattern over year, indoor and outdoor use
  - water use changes over time due to conservation
  - implementation of metering, rate structures, and more recently water budgets
  - water reuse and sharing projects
  - illustrate challenges faced by smaller municipalities
- Environment and recreation:
  - show demand pattern over year, especially compared to agricultural and municipal demand timing
  - summarize key points related to wet water needs for environment and recreation
  - show areas where river restoration and greenways are being implemented

- illustrate economic benefits of environment and recreation
- illustrate interdependence of sectors, for example use of irrigation return flows and wastewater effluent to increase streamflow
- success stories of agriculture and municipal working with E&R

Deliverables: Web story visualizations, which integrate with datasets. Consumers of the stories will be able to access the datasets to perform their own evaluation.

TASK 6 – Public Involvement and Outreach

Description of Task: This project will primarily focus on the Roundtable members and related stakeholders, in order to meet the needs of the Roundtable and provide opportunities to present Roundtable messages to the public. Consequently, outreach will consist of coordination with the Roundtables, providing opportunities to engage with the public to use the new web resources, and responding to feedback. It is envisioned that the new web resources will be used by the Roundtable Education Coordinator to provide information beneficial within the Roundtables, with the CWCB, with other roundtables, and the public.

OWF is also working on similar but more geographically-focused data and visualization resources for the Poudre Basin, in support of the Poudre Runs Through It Study/Action Work Group. It is envisioned that a cross-connect can occur whereby the Poudre effort utilizes the South Platte Roundtable Data Platform and the South Platte effort references the Poudre resources. The difference is that the Poudre effort will focus on more specific concerns of the basin whereas the South Platte effort will focus on broader issues across the whole basin.

Method/Procedure: OWF staff will coordinate with the Roundtable via normal communication channels and will provide updates to Roundtable members during Roundtable meetings and committee meetings, as appropriate.

Deliverable: Presentations to the Roundtable

TASK 7 – Reporting and Final Deliverable

OWF will provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion 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. At completion of the project, OWF will provide the CWCB a final report that summarizes the project and documents how the project was completed.

Final deliverables will consist of the following and will be delivered via an open cloud-hosted repository that can be accessed by the public:

1. Data set inventory
2. Documented and transparent procedures to transform data from source form to the form used in the data platform. Manual tasks such as harvesting data from water efficiency plans will be documented.
3. Cloud-hosted datasets using technologies compatible with State systems.
4. Cloud-hosted visualizations with configurations being openly available to facilitate enhancements and application on other projects.

BUDGET – Exhibit B

The budget for the project is detailed in the table below. Mileage and other direct costs are expected to be relatively small and will be included in the following tasks as needed. OWF uses GoToMeeting, conference calls, and other tools to minimize the need for travel.

Project Budget for South Platte Basin Roundtable Data Platform							
Personnel	**Project Manager & Systems Engineer**	**Biologist**	**GIS Developer**	**Web Developer**	**2 Student Interns**	**Subtotal Hours**	**Subtotal Cost**
Rate	$170	$85	$50	$100	$40		
Task 1 - Create Initial Inventory of Key Datasets, Source Entity, Data Format, and Accessibility	10	40	40		120	210	$11,900
Task 2 - Create Initial Prototype Website	40	40	80	40	160	360	$24,600
Task 3 - Implement Processes to Transfer Data from Original Source to South Platte Roundtable Data Platform	60	60	60		320	500	$31,100
Task 4 - Implement Visualizations for Dataset	40	60	100		360	560	$31,300
Task 5 - Develop Integrated Stories		80	120		320	520	$25,600
Task 6 - Public Involvement and Outreach	20	20				40	$5,100
Task 7 – Reporting and Final Deliverable		100				100	$8,500
Subtotal Hours	**170**	**400**	**400**	**40**	**1280**	**2290**	
Subtotal Labor	**$28,900**	**$34,000**	**$20,000**	**$4,000**	**$51,200**		**$138,100**
Administrative Costs							**$ 8,286**
Project Total							**$ 146,386**

The budget summary is as follows:

Budget Summary			
Task	**Cost**	**Allocation of Private Funds**	**Allocation of WSRF Funds**
Task 1 - Create Initial Inventory of Key Datasets, Source Entity, Data Format, and Accessibility	$11,900	$11,900	
Task 2 - Create Initial Prototype Website	$24,600	$24,600	
Task 3 - Implement Processes to Transfer Data from Original Source to South Platte Roundtable Data Platform	$31,100	$9,886	$21,214
Task 4 - Implement Visualizations for Dataset	$31,300		$31,300
Task 5 - Develop Integrated Stories	$25,600		$25,600
Task 6 - Public Involvement and Outreach	$5,100		$5,100
Task 7 – Reporting and Final Deliverable	$8,500		$8,500
Subtotal	$138,100		
Administrative Costs	$8,286		$8,286
Project Total	$146,386		
		Total WSRF Funds:	$100,000

SCHEDULE

It is estimated that the project will take approximately one year to complete from the Notice to Proceed (NTP).

Project Schedule for South Platte Basin Roundtable Data Platform													
Task	10/2017												10/2022
Task 1 - Create Initial Inventory of Key Datasets, Source Entity, Data Format, and Accessibility													
Task 2 - Create Initial Prototype Website													
Task 3 - Implement Processes to Transfer Data from Original Source to South Platte Roundtable Data													
Task 4 - Implement Visualizations for Dataset													
Task 5 - Develop Integrated Stories													
Task 6 - Public Involvement and Outreach													
Task 7 – Reporting and Final Deliverable													

FINAL REPORTING & DELIVERABLE (5 YEAR TERM) 10/2022

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.