Last Updated: July 2017

Colorado Water Conservation Board

Water Plan Grant Application

Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Supply and Demand Gap Projects: Rebecca.Mitchell@state.co.us

Water Storage Projects: Anna.Mauss@state.co.us

Conservation, Land Use Planning: Kevin.Reidy@state.co.us

Education & Innovation Activities: Mara.MacKillop@state.co.us

Agricultural Projects: Gregory.Johnson@state.co.us

Environmental & Recreation Projects: Linda.Bassi@state.co.us

Applicants interested in submitting an 'Intent to Apply' in the future are encouraged to check here ☐ and fill in all sections with the best information available at the time. Exhibits excluded.

This "Intent to Apply" will help CWCB prioritize Projects that are not ready for fully completed Water Plan Grant Application due to the initial timeframe and deadlines required.

Water Project Summary

Name of Applicant	Peak Spatial Enterprises/Chambers Econ and Analytics
Name of Water Project	Water Information / Real Estate Water Disclosure Site

CWP Grant Request Amount	$ 60,000.00
Other Funding Sources WSRF Funds (Metro RT/State)	$ 20,000.00
Other Funding Sources – Water Suppliers (CSU, Arapahoe Water, Denver Water, Pikes Peak Realtors Association)	$ 15,000.00
Applicant Funding Contribution	$ 37,500.00
Total Project Cost	$ 127,500.00

Last Updated: July 2017

Applicant & Grantee Information	
Name of Grantee(s)	Peak Spatial Enterprises/Chambers Econ & Analytics
Mailing Address	20220 Twisted Pine Drive, Colorado Springs CO 80908
FEIN	27-5426675
Organization Contact	Doug Collins
Position/Title	President
Email	doug.collins@peakspatial.com
Phone	719-338-0245
Grant Management Contact	Lori Koepsell
Position/Title	COO
Email	lori.koepsell@peakspatial.com
Phone	719-641-7785
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

Last Updated: July 2017

Description of Grantee/Applicant

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

Peak Spatial Enterprises is joined by Chambers Econ and Analytics linking deep understanding of the challenges water supply, operations, and consumer engagement with world class geospatial systems expertise. Peak was established in 2011 by a team of geospatial, defense, and intelligence professionals dedicated to bringing advanced geospatial systems to the wind, water, energy and infrastructure sectors. We operate systems for the Department of Energy, NOAA, the Colorado State Network, and, over the past year have focused our efforts on supporting a water suppliers/providers within Colorado including water districts and municipalities, ditch and irrigation companies, water engineering and infrastructure firms, and Colorado river basin roundtables.

Last Updated: July 2017

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.
X	**Private Incorporated:** Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes.

Type of Water Project (check all that apply)	
	Study
	Construction
	Identified Process or Program
X	Other

Category of Water Project (check all that apply)		
	Supply and Demand Gap Projects - Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap. (Applicable Exhibit A Task(s) _____)	
	Water Storage Projects - Projects that facilitate the development of additional storage, artificial recharge into aquifers, and dredging existing reservoirs to restore the reservoirs' full decreed storage capacity. (Applicable Exhibit A Task(s) _____)	
X	Conservation and Land Use Planning Projects - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. (Applicable Exhibit A Task(s) _____)	
X	Engagement & Innovation Projects - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application available on the website. (Applicable Exhibit A Task(s) _____)	
	Agricultural Projects - Projects that provide technical assistance and improve agricultural efficiency. (Applicable Exhibit A Task(s) _____)	
	Environmental & Recreation Projects – Projects that promote watershed health, environmental health, and recreation. (Applicable Exhibit A Task(s) _____)	
	Other	Explain:

Last Updated: July 2017

Location of Water Project	
Please provide the general county and coordinates of the proposed project below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Denver, Arapahoe, Douglas, El Paso, Teller, and Pueblo
Latitude	
Longitude	

Water Project Overview
Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. 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, and area of habitat improvements, where applicable. 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, Other Funding Sources/Amounts and Schedule.
Our proposed water information disclosure tool is a free, online, public data aggregation and disclosure tool linking water supplier information with property buyers and real estate MLS to increase property buyer awareness of address specific conservation plans, water planning, and municipal water suppliers. The public's use of the tool directly supports the statewide conservation ethic recognizing the need to work within our arid environment, increases specific understanding of conservation practices, and reduces wasteful behavior. The tool consolidates and communicates water information in a consumer friendly, accessible format allowing users to search by property address. With more than 50K annual real estate transactions from Denver to Pueblo Counties, these typically municipal buyers are closely tuned into water metrics and conservation tools that apply to property transaction in which they have a stake. The real estate community is incentivized to use the tool to inform and serve all types of clients. Water suppliers benefit from consumer understanding of supplier details. Home buyer participation in water understanding and engagement provides the foundation needed to meet the CWP stretch goal. The project serves the mission of the CWP and as a public good; therefore, matching WSRF funds are sought from Statewide and Basin accounts.

Last Updated: July 2017

Measurable Results		
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:		
	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)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
	Quantity of Water Shared through Alternative Transfer Mechanisms	
~52,000 home buyers/year in pilot area	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning	
147	Other	Explain: Water supplier conservation plans directly targeted to a home sale audience

Water Project Justification
Provide a description of how this water project supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. 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). The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)
Our project will: • Disseminate Water District Conservation Plans • Provide nexus between Real Estate buyers and State level, Basin level, and District level Water Information • Provide platform to disseminate other key State metrics of interest • Support the PEPO mission by providing contact with upwards of 45,000 residential real estate buyers/year in the selected counties who otherwise would likely not be water information consumers – this is the time that they would most likely be researching this type of information • Interact with State level Real Estate MLS services to disseminate critical water consumer information Roundtables • Arkansas – Pueblo, Teller and El Paso County real estate transactions ~20,000/year • Metro – Denver, Arapahoe, Douglas County real estate transactions ~35,000/year • Provides an "always on" information platform for real estate buyers to access, by address,

Water Project Justification

water supplier and water conservation information

- Support Water Districts within those counties by disseminating their conservation plans to consumers
- Provides access information for consumers to better understand their water, wastewater, fire, and other critical information during the real estate buying process.
- Expose the water resource mix to consumers so that they better understand where their water comes from

Water Providers

- Get water conservation plans off the shelf of the Districts and in the hands of a consumer when they are most likely to look at that information
- Promote the good works of all districts within the region
- Get ahead of the question about growing municipal populations and the need for more water and whether the providers are really pushing water use understanding
    - Municipal vs Ag/Industry
    - East Slope vs West Slope

Consumers

- An "always on" water resource that can be used during the real estate buying process as well as after a purchase as a water information source

CWP References:

Chapter 1 Page 1-4:

Bullet 4 - Developing a statewide conservation ethic that recognizes the need to work within Colorado's naturally arid environment, increases the understanding of conservation practices, and reduces wasteful behavior.

Bullet 2 - Implementing projects and methods that take into account potential multiple beneficiaries, potential multiple uses, and the effects on river systems on which all Coloradans rely

Chapter 6.3 Water Conservation and Reuse

Page 6-59 Goals

- Promote water efficiency ethic throughout Colorado
- Further integrate land use and water planning

Page 6-65 IBCC Stretch Goal

- Requires "high level of customer participation.."

Page 6-73 Para 6. Water Conservation Education and Outreach and Para 9. Strengthen Partnerships

Proposed effort will move the water discussion into the Real Estate realm and, hopefully, build partnerships with home builder organizations and MLS/real estate entities

Including Water Districts, Regional entities, and non-profits such as Walton Family Foundation to

Water Project Justification

continue to pay for and promote advanced customer knowledge of their conservation plans/efforts and the sources of their water.

Chapter 6.3.3 Land User

The project can include the linkage of Land Use policies along with Water District information.

The real estate disclosure tool sits at the nexus of water supply planning and land-use planning in terms of educating the real estate buyer of the connection between the two.

Arkansas BIP created a policy for integration of land use and water resource planning

*South Platte/Metro BIP "*many water utilities' current roles are generally limited to providing for water needs within their service areas, with little cross-over to land-use authority." The project provides again provides the potential nexus between water provider information and larger land use authority boundaries by informing real estate buyers of the two overlapping issues.

Chapter 6.3.3 page 6-90 – Strengthen Partnerships

First bullet – water providers and municipalities

Fourth bullet – Home building/construction real estate engagement

Fifth bullet – non-governmental organizations such as the Walton Foundation

Related Studies

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

Previous CWCB Grants, Loans or Other Funding

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;

Last Updated: July 2017

Previous CWCB Grants, Loans or Other Funding
5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project.
None

Taxpayer Bill of Rights
The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application.
None

Last Updated: July 2017

Submittal Checklist	
	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.
Exhibit A	
	Statement of Work(1)
	Budget & Schedule(1) *(Spreadsheet)*
	Letters of Matching and/or Pending 3rd Party Commitments(1)
Exhibit C	
	Map(1)
	Photos/Drawings/Reports
	Letters of Support (Support letter from Basin Roundtable encouraged)
	Certificate of Insurance (General, Auto, & Workers' Comp.)
	Certificate of Good Standing with Colorado Secretary of State(2)
	W-9(2)
	Independent Contractor Form(2) (If applicant is individual, not company/organization)
Engagement & Innovation Grant Applicants ONLY	
	Engagement & Innovation Supplemental Application(1)

(1) Required with application.
(2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

Last Updated: July 5, 2017

Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work	
Date:	**August 1, 2017**
Name of Applicant:	**Peak Spatial Enterprises Inc. and Chambers Econ and Analytics, LLC**
Name of Water Project:	**Water Information / Real Estate Disclosure Tool - H2infO**
Funding Source:	**CWP**

Water Project Overview: Please provide a summary of the proposed water project (200 words or less). The same summary can be used from Page 5 of the CWP Grant Application.

Our proposed water information disclosure tool is a free, online, public data aggregation and disclosure tool linking water supplier information with property buyers and real estate MLS to increase property buyer awareness of address specific conservation plans, water planning, and municipal water suppliers. The public's use of the tool directly supports the statewide conservation ethic recognizing the need to work within our arid environment, increases specific understanding of conservation practices, and reduces wasteful behavior.

The tool consolidates and communicates water information in a user friendly, accessible format allowing users to search by property address. With more than 50K annual real estate transactions from Denver to Pueblo Counties, these typically municipal buyers are closely tuned into water metrics and conservation tools that apply to property transaction in which they have a stake.

The real estate community is incentivized to use the tool to inform and serve all types of clients. Water suppliers benefit from consumer understanding of supplier details. Home buyer participation in water understanding and engagement provides the foundation needed to meet the CWP stretch goal.

The project serves the mission of the CWP and as a public good; therefore, matching WSRF funds are sought from Statewide and Basin accounts.

Objectives: List the objectives of the project.

Online information communication tool to provide water supplier, conservation planning, performance metrics and Colorado Water Plan information to Front Range real estate market participants and professions (buyers, sellers, brokers, agents, mortgage bankers, inspectors and more).
Key Objectives include the following:
Water Supplier Transparency; Easy Access to Water Conservation Plans; Increased Real Estate Community and Buyer Awareness of Water Supply Information; Expansion of Front Range Citizens Understanding and Interaction with Water Supply Information; Provision of Easily Accessible and User Friendly Water Information focused on Real Property; Provision of Comparative Water Information based on Addresses; Create a Publicly Available Resource for Dissemination of State Required Water Data; Create "Ripple Effect" of public access to consolidate source of accurate and user friendly data on Front Range municipal water supply.

Last Updated: July 5, 2017

Tasks
Provide a detailed description of each project task using the following format:
Task 1 – <u>Define Water Supplier Attributes/Build GeoDatabase</u>
Description of Task:

The primary objective of this task is to establish the initial list of water supplier attributes to be used in the consumer system. An initial list has been developed and it includes a number of key metrics that we believe will be useful and informative to real estate buyers. The task will determine what State metrics might be accessed as well as metrics that the tech/ops team believes would be most useful to a real estate buyer. The team has already begun this process of identifying and collecting candidate attributes. Possible attributes include:
• Utility Analytical Tools and Performance Metrics
  o Financial position summary including outstanding debt
  o S&P Bond Rating
  o Annual O&M budget per service connection
  o Avg. annual investment in capital projects / resource acquisition
  o % mix renewable water resources vs. non-renewable Denver Basin
  o Avg. annual main breaks per 100 miles of pipe
  o AWWA M36 Water Loss audit calculation
  o Avg. annual budget for water conservation
  o ISO fire protection rating that drives insurance premiums
• Core Infrastructure and Water Resource Mapping
• Proximity to Wells/Aquifers/Ditch/Irrigation Companies
• Overlay of other utility provider service areas for natural gas and electric
• Overlay mapping of Water Conservation Districts, Groundwater Management District's, Fire Protection District's and State & Federal Lands.
• Copy of Water Service Provider's Consumer Confidence Report (CCR)
• Copy of Water Service Providers Water Conservation Plan

Method/Procedure:
Technical development of the geodatabase will be accomplished by the Peak team with discussions and meetings with water suppliers primarily conducted by Chambers Econ and Analytics. The methods will include a combination of searching water supplier sites for publicly supplied information as well as direct interactions with water supplier management to determine the accessibility of this information. The team will also discuss the types of information available and required at the State level for inclusion in the geodatabase. The basic conservation plans required at the State level are of particular interest and may be included by connecting to individual water supplier sites or by accessing them through available State repositories.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
The team will provide a list of attributes and their database structure that will be used to support the water disclosure system. This task will be an iterative task where we propose meeting with the CWCB to coordinate the specific attributes included in the system and any issues that the team might encounter as they develop the database. The team recommends that this task include monthly reviews of the basic database activities up to the point of making the specific determination of included information for the deployed system development and operations.

Last Updated: July 5, 2017

Tasks
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
Monthly meetings to discuss the database process and results. These meetings will be coordinated with the CWCB upon grant initiation.

Last Updated: July 5, 2017

Tasks
Provide a detailed description of each task using the following format:
Task 2 – <u>Build and Test the Water Disclosure System</u>
Description of Task:
This task makes up the bulk of the work associated with system implementation. Once the initial task of defining initial attributes is completed the tech team will build and test the user interfaces and connections needed to provide the baseline water disclosure system for public operations. The "build" component includes: • Populating the geodatabase with selected attributes, • Development of the geospatial retrieval, by address, of the water supplier information, • Development of User Interfaces (mobile/web) to access the information, and • Development of the report(s) that a user might retrieve from the system. Each of these components will be tested by the development team and will be demonstrated to the supporting water grant providers for their input.
Method/Procedure:
The team will build the basic system and will work with the CWCB and river basin leads to demonstrate the basic functionality as the system evolves. This task is projected to last approximately 3 months depending on the input and modifications required or requested by the Grantor.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
The deliverables include the initial tested versions of the production database with water supplier attributes, the geospatial address retrieval geoprocessing services, the User Interfaces linked to the retrieval and database, and the report(s) that can be accessed through the system.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
The online system that includes public access to the retrieval of water supplier information via address selection.

Last Updated: July 5, 2017

Tasks
Provide a detailed description of each task using the following format:
Task 3 – Coordinate with Real Estate MLS and other Beneficiaries
Description of Task:
This task will be conducted concurrently with system development and will continue through the operational implementation of the system. The team will meet with select Colorado MLS sponsors in the County regions of interest to educate them on the availability of the data and use of the system. The team will work with the real estate community to determine the best ways to provide realtors and their customers the information that they might want to include water supply information as part of the buyer's choice.
Method/Procedure:
The team will identify candidate Real Estate MLS organizations and will set up and conduct meetings and demonstrations of the system to get their input and provide them the information that they would need to access the system within their organizations.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
List of Real Estate MLS organizations Meeting notes on specific interactions with these MLS groups including any recommendations received as a result of these meetings.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
List of Real Estate MLS organizations Meeting notes on specific interactions with these MLS groups including any recommendations received as a result of these meetings.

Last Updated: July 5, 2017

Tasks
Provide a detailed description of each task using the following format:
Task 4 – <u>Deploy and Operate the Water Disclosure System</u>
Description of Task:
Following successful testing the system will be migrated to an operational server and the site will be publicly posted for access by the public. The system will operate from the Peak Spatial hosted servers at a secure facility in Colorado Springs. Updates to the database and the system will occur throughout the operational period as new information is identified and added to the system. These updates would include modifications made by water districts as they update their conservation plans and other data that is part of the system.
Method/Procedure:
The system will operate on a 24/7 basis for use by the public and real estate professionals and organizations as they review possible property acquisitions. The system will be online so there will be operational costs of running the system from the hosting facility along with any updates and maintenance mods that might be required after deployment.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
The operational system running online for the duration of the operational 18 month period.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
The operational system running online for the duration of the operational 18 month period.

Last Updated: July 5, 2017

Tasks
Provide a detailed description of each task using the following format:
Task 5 – System Operational Status and Performance Metrics
Description of Task:
During the deployment and operations phase of the task the team will collect metrics on the use of the system to determine the effectiveness and utility of the data provided to the public. This data collection effort will be coordinated during the development phase of the task so that metrics can be collected to determine basic information about the site. The team will prepare quarterly updates on use of the site for the CWCB and will use this information to update and modify the site during the operational period to better serve the information needs of the public and the benefactors of the system
Method/Procedure:
The method used for this particular task will be collection of information via web access metrics associated with the site as they are developed during the system development task. The team will include in the design of the system mechanisms to track access and use. The output of this tracking will be the quarterly reports to the CWCB of use of the system
Grantee Deliverable: Describe the deliverable the grantee expects from this task
Access tracking tools for the system Quarterly reports to the CWCB during the operational period.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
Quarterly reports on access and use of the system.

Last Updated: July 5, 2017

Tasks
Provide a detailed description of each task using the following format:
Task 6 – Update and Maintain System
Description of Task:
The team will update and maintain the system during the period of operations as determined to be necessary. This may include modification to the server operating systems, database updates, and any required updates to the geospatial software components.
Method/Procedure:
The team will make any updates to the system after they coordinate possible activities with the CWCB. Recommendations as to the updates to be made will be accomplished by the tech team and, in coordination with the CWCB, will be made at times that are the least impactful to the public users.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
Updates to the system that allow the system to maintain viability and security through the deployment period.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
A quarterly report on any updates will be included with the basic operational metrics collected as part of Task 5 – System Operational Status

Budget and Schedule
This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

Reporting Requirements
Progress Reports: The applicant 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.

Last Updated: July 5, 2017

Reporting Requirements

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

- Summarizes the project and how the project was completed.
- 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.

The CWCB will withhold disbursement the last 10% of the budget until 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 purchase order or grant will be closed without any further payment.

Last Updated: July 14, 2017

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan Grant - Exhibit A
Budget and Schedule

Date: July 14, 2017

Name of Applicant: Peak Spatial Enterprises Inc. and Chambers Econ & Analytics LLC

Name of Water Project: Water Information - Real Estate Disclosure System H2InfO

Task No.	Task Description	Start Date[1]	End Date	Water Project Funding Category	Grant Funding Request	Match Funding	Total
1	**Define Water Supplier Attributes/Build GeoDatabase** - est. three months	1-Jan-18	15-Apr-18	Conservation/Land Use Engagement	$12,500	$12,500	$25,000
2	**Build and Test Water Disclosure System** - est. three months	1-Jan-18	15-Apr-18	Conservation/Land Use Engagement	$17,500	$15,000	$32,500
3	**Coordinate with Water Supplier / Real Estate Users**- est. three months / ongoing	15-Jan-18	15-Apr-18	Conservation/Land Use Engagement	$15,000	$5,000	$20,000
4	**Deploy and Operate Disclosure System** - ~18 months following publication of site	1-May-18	31-Dec-19	Conservation/Land Use Engagement	$10,000	$11,500	$21,500
5	**System Operations Status** - Quarterly system use updates during Task 4	1-May-18	31-Dec-19	Conservation/Land Use Engagement	$2,000	$3,500	$5,500
6	**Update and Maintain System** - system updates as needed during Task 4	1-May-18	31-Dec-19	Conservation/Land Use Engagement	$3,000	$20,000	$23,000
							$0
							$0
							$0
							$0
							$0
							$0
							$0
				Total	$60,000	$67,500	$127,500

(1) Start Date for funding under $100K, minimum 45 Days from Board Approval; Start Date for funding over $100K, minimum 90 Days from Board Approval.

·Round values up to the nearest hundred dollars.

·Reimbursement eligibility commences upon the grantee's receipt of a Notice to Proceed (NTP)

·NTP will not be accepted as a start date. Project activities may commence as soon as grantee enters contract and receives formal NTP if prior to the listed "Start Date".

·The applicant shall provide a progress repost every 6 months, beginning from the date of contract execution.

·CWCB will withhold disbursement of the last 10% of the total grant amount until a Final Report is completed to the satisfaction of CWCB staff (2017 CWP Grant Guidelines).

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan Grant - Detailed Budget Estimate

Date: 2-Jan-18
Name of Applicant: Peak Spatial Enterprises and Chambers Econ & Analytics
Name of Water Project: Water Information / Real Estate Disclosure Tool - H2infO

Information Systems Implementation and Operations

Task 1 - Define Water Supplier Attributes/Build GeoDatabase					**Job Categories**
Sub-task	Senior Principal Investigator	Senior Water Resources Analyst	Geospatial Systems Specialist	Software and Systems Engineer	
	$ 99	$ 100	$ 84	$ 99	**Subtotal**
	Estimated Hours				
Identify Water Providers	8	8	14	0	**$ 2,766.26**
Refine Provider Attributes	10	10	0	0	**$ 1,987.30**
Create Geodatabase	0	0	40	0	**$ 3,361.20**
Collect and Verify Data	0	24	24	0	**$ 4,416.72**
SubTotals	18	42	78	0	$ 12,531.48

Task 2 - Build and Test Water Disclosure System					**Water Consultants**
Sub-task	Senior Principal Investigator	Senior Water Resources Analyst	Geospatial Systems Specialist	Software and Systems Engineer	
	$ 99	$ 100	$ 84	$ 99	**Subtotal**

	Estimated Hours				
Populate Geodatabase w Attributes	8	0	24	0	$ 2,806.56
Develop Geospatial Retrieval of Info	0	0	20	40	$ 5,629.80
Develop User Interface	4	0	0	40	$ 4,344.12
Develop Report Formats and Connect	8	0	0	40	$ 4,739.04
SubTotal	20	0	44	120	$ 17,519.52
Task 3 - Coordinate with Water Supplier / Real Estate Users		**Water Consultants**			
Sub-task	Senior Principal Investigator	Senior Water Resources Analyst	Geospatial Systems Specialist	Software and Systems Engineer	
	$ 99	$ 100	$ 84	$ 99	**Subtotal**
	Estimated Hours				
	60	90	0	0	$ 14,923.80
SubTotal	60	90	0	0	$ 14,923.80
Task 4 - Deploy and Operate Disclosure System		**Water Consultants**			
Sub-task	Senior Principal Investigator	Senior Water Resources Analyst	Geospatial Systems Specialist	Software and Systems Engineer	
	$ 99	$ 100	$ 84	$ 99	**Subtotal**
	Estimated Hours				
Deploy	8	0	30	30	$ 6,272.64
Operate	1	0	20	20	$ 3,753.93
SubTotal	9	0	50	50	$ 10,026.57
Task 5 - System Operations Status		**Water Consultants**			
Sub-task	Senior Principal Investigator	Senior Water Resources Analyst	Geospatial Systems Specialist	Software and Systems Engineer	
	$ 99	$ 100	$ 84	$ 99	**Subtotal**
	Estimated Hours				
System Operational Status	4	4	4	6	$ 1,723.42
Performance Metrics	1	2	0	0	$ 298.73

SubTotal	5	6	4	6	$ 2,022.15
Task 6 - Update and Maintain System		**Water Consultants**			
Sub-task	**Senior Principal Investigator**	**Senior Water Resources Analyst**	**Geospatial Systems Specialist**	**Software and Systems Engineer**	**Subtotal**
	$ 99	**$ 100**	**$ 84**	**$ 99**	
	Estimated Hours				
System Updates	0	0	9	8	**$ 1,546.11**
Water Provider Data Updates	0	8	8	0	**$ 1,472.24**
SubTotal	0	8	17	8	$ 3,018.35
Subtotal Hours	112	146	193	184	635
Subtotal Labor/ Subcontractor cost	$11,058	$14,600	$16,218	$18,166	$60,042
Subcontractor Administration Fee @ 5%					
Other Direct Costs (see below)					