### Grant Application to the Colorado Water Conservation Board Water Efficiency Grant Program

#### Applicant: Colorado WaterWise

Project Name: Smart Phone Application for Utility Codes, Ordinances and Procedures

**Total Project Cost: \$37,695** 

Partner Matching Donation: \$13,450 (Cash: \$8,680 / In-kind: \$4,770)

CWCB Funds Requested: \$24,245

**Contact:** Brenda O'Brien, 303-973-4026, <u>brenda.obrien@comcast.net</u> 9367 W. Vandeventor Drive, Littleton, CO 80128

### **Project Goal**

Colorado WaterWise (CWW), a non-profit 501(c)3, whose mission is connecting stakeholders, providing resources, and serving as the collaborative leader in the efficient use of urban water in Colorado, has developed a framework for a tool that will help connect water providers with the contractors and landscape professionals that work within their jurisdictions and will ultimately promote outdoor water efficiency.

The project goal is to develop a Smartphone and desktop application (App) to consolidate and house a considerable amount of utility code, ordinance and procedural information into a single application to display the most current information regarding outdoor water-use for both landscape construction and maintenance practices in a few simple clicks.

The App will provide an informational vehicle for utilities to communicate with landscape field professionals in need of code, ordinance, or policy and procedure information. The App will provide a convenient one-stop shop for people who need mobile or desktop access to this information.

## **Project Overview and Background**

Each year, the green industry manually creates an Excel spreadsheet (Exhibit A) to convey current outdoor watering guidelines, by water supplier, to its members. To populate the spreadsheet, each utility's website must be researched to extract the necessary information and add it to the Excel spreadsheet. The spreadsheet is informative but not always complete. Also, viewing the content is best reserved for a desktop computer, which is almost always not practical for the landscape professional out in the field. The development of the App will take a manually intensive process, and transform into an electronic easy-to-use application that is available to anyone with a smart phone. The App will provide timely information, thus

minimizing unnecessary phone calls and emails to utility personnel. This App will be available in a desktop version as well which will provide even more detailed information for contractors and companies when not in the field. A rough overview of the type of information to be included (pending CWCB approval) is in Exhibit B.

## Collaborators

CWW has partnered with the Associated Landscape Contractors of Colorado (ALCC) and the Colorado Association of Lawn Care Professionals (CALCP) to sponsor the development of the App to help both water suppliers, landscape professionals and homeowners alike in supplying and receiving timely and important outdoor water use information. The Colorado Water Conservation Board (CWCB) has also helped to guide and develop the project.

## **Problem Statement**

Every water supplier in Colorado has different watering guidelines making it cumbersome to locate the information needed in a timely manner. Today, this information is obtained by visiting the water supplier's website, or placing a phone call or email to the respective water supplier which can often take a lot of time. It is also not always clear to both professionals and customers who or where to call with questions.

## **Project Objective**

In today's tech savvy world, people seek a faster and smarter approach to gathering information. Time is money for the water supplier and the contractors in the field. The development of this App will permit water suppliers in Colorado to upload their codes, ordinance and procedures, thus providing the user with unique guidelines for their respective service area. Updates or changes to utility guidelines will send a "notification push" to alert the user that a change has been made. Both supplier and user will benefit from increased productivity due to the quick and easy delivery of pertinent outdoor water use information. Several utilities have expressed the need to better communicate with the professionals working in their jurisdictions and those same professionals have expressed a need for the tool when CWW discussed the idea with them. The App is a tool that utilities want and is a tool that the landscaping industry needs. It's a win-win for both sides of the equation.

Colorado WaterWise will take the lead on the project development and conduct discovery phases with partners and the consultant to:

- 1. Brand the application;
- 2. Create a name and logo;
- 3. Secure a domain site;
- 4. Brainstorm content;
- 5. Design and develop the App;
- 6. Beta test the App;
- 7. Develop marketing and training materials; and
- 8. Establish guidelines for implementation

In providing this App, the project will directly meet Water Conservation Best Practices # 6 (public information and education) and #9 (water efficient design, installation, and

maintenance practices for new and existing landscapes). Although the Colorado Water Plan is not complete yet, this App should also meet goals in Chapter 5, Sections 6.1 and 6.3 - M&I Conservation and Land Use as well as in Chapter 7 – Outreach, Education and Public Engagement.

The goal of this project is to get as many utilities in Colorado as possible to buy into the project and promote their expectations and requirements through this App. CWW will ask for \$100 from each utility to pay for ongoing network costs, but once a login/password is received, each utility can update their information as often as they feel the need. They will also be able to send out targeted alerts as needed.

## **Target Audience**

The primary audience will be green industry professionals, utility personnel and other stakeholders seeking outdoor water use code, ordinance, and procedural information.

## Funding / Budget

Colorado WaterWise has received a Scope of Work from Halperin Creative to develop the App. The maximum cost of development is \$37,695. Exhibit D illustrates the details of the budget needed to complete of the project. Collaborators are:

#### Halperin Creative, Inc.

*Frani Halperin*, Chief eMagination Officer (\$95/hr) – Develop app, artwork, focus groups and marketing plan

*Adam Eberling*, Chief Technical Geek (\$95/hr) – Develop programming for app structure and functionality, create training videos, development of app structure

Maribeth Neelis, Marketing Genius (\$95/hr) – Develop marketing plan, prep for and run focus groups

#### Colorado WaterWise

*Brenda O'Brien*, Contract Staff (\$55/hr) – Support development of app, collaborate with Halperin Creative, ALCC and CALCP on design and testing of app, support focus groups, provide write-up reports for 50%, 75% and final reports

*Lyle Whitney*, CWW Co-Chair (\$40/hr) – Oversee app development and collaboration efforts, provide feedback as needed to Halperin Creative, test app, help run focus groups

*Frank Kinder*, CWW Co-Chair (\$40/hr) – Oversee app development and collaboration efforts, provide feedback as needed to Halperin Creative, test app, help run focus groups *Various*, CWW Board Members (\$40/hr) – Test app, review designs, provide feedback as needed.

## **Project Scope of Work**

The scope of work involves the creation and marketing of the App ending in the implementation of the App, which involves water providers to enroll in the app to enter their information so contractors and customers can easily see what guidelines and requirements they need to follow when doing landscaping work within a provider's jurisdiction in regards to water use, limitations, code and permitting.

Exhibit C shows in detail the proposed scope of work for the creation of the App. Once the App is created, CWW will implement the marketing plan and work with utilities to get their information uploaded into the App.

### Timeline and Phasing (estimated pending final grant approval)

Below is the basic timeline of the project. Exhibit E illustrates a more detailed timeline.

- 1. Discovery and Identity: September 2014
  - a. Hold discovery sessions
  - b. Develop logo
  - c. Create name
  - d. Secure domain
- 2. App Design and Development: September 2014 January 2015
  - a. App development
  - b. Alerts development
  - c. Administration site setup
- 3. Create User Profiles: September 2014 January 2015
  - a. Development of Structure
- 4. Develop Training Materials: November 2014 January 2015
  - a. Develop videos and icons
- 5. Marketing and Implementation: October 2014 March 2015
  - a. Develop marketing plan
  - b. Conduct focus groups
  - c. Collect information
  - d. Develop strategic marketing based on feedback
  - e. Finalize plan
  - f. Implement plan This will involve educating utilities on how to keep their data up-to-date and relevant.
- 6. Reporting and Analysis: November 2014 March 2015
  - a. 50% Report
  - b. 75% Report
  - c. Final Report

## **Estimated Timeline for Interim and Final Grant Reporting**

Two interim and one final report will be completed as part of the grant requirements. They will be completed in the following weeks of the project:

50% Report – November 16<sup>th</sup> – November 22<sup>nd</sup> 2014 75% Report – January 11<sup>th</sup> – January 17<sup>th</sup> 2015 Final Report – March 8<sup>th</sup> – March 21<sup>st</sup> 2015

## **Supporting Exhibits**

- Exhibit A Sample of GreenCO Watering Guidelines
- Exhibit B Outline of information to be included
- Exhibit C Scope of Work, Halperin Creative, Inc.
- Exhibit D Detailed Project Budget
- Exhibit E Detailed Project Timeline
- Exhibit F Letters of Support

## **Financial Summary for Grant**

Total CWCB Contribution: \$24,245 Total Colorado WaterWise / Sponsor Contribution: \$13,450 Total Project Cost: \$37,695

## **Authorized Signature**

The undersigned acknowledges that the above information is accurate to the greatest extent possible.

frinda O'frien

Brenda O'Brien Project Manager Colorado WaterWise 303-973-4026 Brenda.obrien@comcast.net

Lyle Whitney Co-Chair Colorado WaterWise 720-859-4372 gwhitney@auroragov.org

ronk Levide

Frank Kinder Co-Chair Colorado WaterWise 719-668-3818 <u>fkinder@csu.org</u>

## Exhibit A – Sample of GreenCO Watering Guidelines

#### 2013 Summer Watering Guidelines (as of July 7, 2013)

If you have any questions regarding this information, please contact Brenda O'Brien at 303.973-4026 or brenda.obrien@comast.net.

Disclaimer: Information is in summary form and for informational purposes only. Information contained herein is subject to change due to varying weather/water conditions. For detailed information, please visit the city website.

www.greenco.org	2013				-			IRR			_					
City	Restrict ions	Residential	Commercial	No H2O Hours	Zone Time	Start Date	Sod Permit	System Permit	Hand Water	Fines	Tier Rates	Water Feature	Rebates	More info		
Arvada	Yes	Follow De	nver Water	10 to 6	Varies	Apr 1 - Sept 30							Yes	htto://arvada.org/about-arvada/2012-voluntarv- summer-lawn-watering-guidelings/		
Aspen	No	Volu	intary	10 to 6										htto://www.aspenpitkin.com/Departments/Utilitj es/Water		
Aurora	No	Recomme	end 3 days	10 to 6	Varies	May 1 - Sept. 30	Yes	Yes	Yes	Yes	Yes	Yes	Yes	https://www.auroragov.org/LivingHere/Water/C onservation/WateringRestrictions/index.htm		
Avon	Yes	3 days	3 days	10 to 4	Yes	Year Round	Yes	Permit	Yes	Yes	Yes	Pools 1x per year		htto://www.enwsd.org/wise-use/normal-water- use-regulations		
Berthoud	Yes	Volu	intary	10 to 6		1-Jun			Yes					http://berthoud.org/Town/nrutilities.php		
Boulder	No	Water	Budget	10 to 6		Annual			Yes		WB		Yes	http://www.bouldercolorado.gov/index.php?opti on=com_content&view=article&id=12698&Item id=3604		
Breckenridge	Yes	3 Days		not to exceed 3 9 to 6 hours per		May 1 - Sept. 30					Yes			http://www.townofbreckenridge.com/index.asp x?page=1300		
Brighton	Yes	Circle Diam	ond Square	10 to 6		April 2 - Oct 31	Yes	Yes	Yes	Yes	Yes			http://www.brightonco.gov/department/division, php?fDD=38-160		
Broomfield	No	Volu	intary	10 to 6	Varies								Yes	http://www.broomfield.org/environment/water% 20conservation/WC_voluntary_fallwinter.shtml		
Castle Rock	Yes	Circle Diamond Square	Circle Diamond Square	10 to 6		June 1 - Sept 30	Permit	Yes	Yes	Yes	Yes	Yes	Yes	http://www.croov.com/index.aspx?NID=922		
Cherry Hills Village	Yes	Follow De	nver Water	10 to 6		April 1 - Sept 30							Yes	www.cherryhillsvillage.com		
Cheyenne, Wyoming		3 days	3 days	10 to 6		1-Apr	Permit		Yes		Yes			http://www.chevennecity.org/		
Colorado Springs	Yes	2 days	2 days	10 to 6		May 1 - Oct. 1	Permit		Yes		Yes		Yes	https://www.csu.org/pages/restrictions-r.aspx		
Commerce City (South Adams County Water and Sanitation)	Yes	2 days	3 days	10 to 6		Apr 1 - Aug 31	Permit	Permit	Yes		Yes			http://www.sacwsd.org/CivicAlerts.aspx?AID=1 01		
Consolidated Mutual (Lakewood/Golden)	Yes	Follow De	nver Water	10 to 6		April 1 - Oct 1							Yes	www.cmwc.net		

Exhibit B – Outline of information to be included in App

Proposed Content (Colorado WaterWise)
Watering guidelines (days/times for drought and non-drought years)
Watering genterines (days) times for drought and non-drought years) Watering restrictions (incl start and end dates)
Water mg restrictions (incl start and end dates) Water waste ordinance
Recommended watering times
Seed/sod permits, duration of exemption, cost of permits. Are seed/sod amendments the same or different?
<ul> <li>Non Irrigated Seed – either no prep required or 2 CY per 1000 SF</li> </ul>
<ul> <li>Irrigated Seed – 2 or 4 CY Per 1000 SF</li> </ul>
• Sod – 4CY per 1000 SF
Seed/sod inspection / validation process
Do load tickets need to be supplied?
• Does the amendment need to be placed & inspected prior to the irrigation system being installed?
• Does the utility or municipality have approved suppliers that a contractor can purchase the amendments from?
• If an inspection fails, are there any fees associated with having the property re-inspected?
Irrigations permits, requirements for residential and commercial
There is mention of a pressure loss chart.
• Is a pressure test required?
Rotor heads w/ Check Valves or internal pressure regulators included?
• If a permit is required – what is the type of permit a contractor needs to pull?
• Non-Potable System - special requirements? Purple Pipe, Regular White PVC w/ Non-Potable Detectable tape, scrubber valves (Rainbird PESB),
purple valve box lids vs purple boxes & lids. This may actually fall under a design requirement.
• Is a backflow test required?
• The 2 lines about spray heads (w/internal check valves & w/ internal pressure regulators) can be combined.
Landscape construction review process
Hand watering
Water features
Rebate program
Fines
Water monitors
Utility codes, ordinances, procedures
Other drought related information (mandatory/voluntary including drought stages)
Soil amendment requirements
Landscape modification procedures (permits, retrofits, pressure, etc for all customer segments
Single family/multi-family irrigation system requirements
Environmental requirements (stockpiling, etc)
Planning codes for water consumption (turf restrictions – front and back yards, mulch types, rock, water budgets, drought factor percentages, etc)
Rate structure for residential, commercial, multi-family, irrigation only

Rebates

Registration / certification requirements

Pressure requirements

Performance audits for new construction, maintenance retrofits, etc.

Equipments specifications (irrigation products, smart controllers, rain sensors, master valves, backflow)

Additional Content Requested (ALCC/CALCP)
Existing codes (rules and regulations for residential and commercial)
Building permitting process/requirements/approval to do work
Zoning requirements per city (pull from existing regs)
Stormwater requirements & regulations
Historic district regulations and requirements
Fencing regulations requirements by city
Requirements for pools/firepits/energy issues
Walls
Lighting
Irrigation
Backflow
Taps/meters
Professional requirements (engineer aprvl, BMP certificate, landscape industry certifications, IA certifications, LA liscense, etc.)
Web links to information
Contact information
Pesticide parameters
Clearinghouse database related to constuction and landscaping
Stormwater Management – Rules and Regulations
Add other water providers not currently listed on Google docs (Parker, Parker W&S, Pinery, Cottonwood, Stonegate, SACWSD, etc.)
Add other counties not currently listed on Google Docs (Brighton, Adams, CO Springs, Arvada, Broomfield, Consolidated Mutual, Greeley, Thornton,
etc.)
Environmental Compliance:
• Do stockpiles need to be contained? If so, what is the proper requirement of containment? Example:
Straw Wattles or Rock Socks and/or plastic over the pile
• Stockpile containment – does rock need to be contained as well or is it only for dirt, compost, wood mulch etc.?
• Is site stabilization required in the winter months? If so, what is the requirement? For example:

• Temp Seeding – is Hydromulching/Hydroseeding acceptable or does it need to be drill seeded and straw crimped?

- Is Erosion Control blanket accepted w/o temp seeding?
- Stormwater Management plan required and has it been approved by the municipality and/or state?
- Does the plan, inspection reports, and permits (both city & state) need to be left on site in a safe area so the municipality or state can verify that the contractor is in compliance.
- What inspection reports does the municipality require to be filled out? Do they have their own or are the CDOT forms acceptable?

#### Certifications & Registrations:

• Is the contractor required to have a CLT, CLIA, etc. on staff?

#### Retaining walls -

- What is the maximum height requirement that a wall can be built w/o engineered stamped drawings?
- If the wall does need to be engineered, is a permit required to build it?
- What are the requirements from the municipality to obtain the permit? Example:
- Is the contractor licensed (C&C of Denver requires you to be licensed with them to build retaining walls in order to get said permit)
- How many copies of the drawings are required?
- Do the drawings that are submitted need to be originals or copies acceptable? (Can they be emailed to the proper department w/in the municipality?)

Exhibit C – Scope of Work, Halperin Creative, Inc.



2288 S. Olive Street Denver, Colorado 80224 303.691.8838 vox 303.691.8878 fax HalperinCreative.com

To:	Lyle Whitney, Co-Chair	Date: 28 April 2014
Company:	Colorado WaterWise	
Address:	P.O. Box 40202 Denver, CO 80204-0202	
Project:	Ordinance App	
Enclosed:	Revised Proposal	

Lyle:

I'm providing a revised estimate to follow up on the feedback you received from the partnering organizations. This proposal reflects a larger scope of work including expanded categories in the app, added features and marketing services.

Please call me with any questions.

Best Regards,

Frani Halperin CEO— Chief eMagination Officer Halperin Creative, LLC

#### Ordinance App — Revised Proposal by Halperin Creative, LLC

#### OVERVIEW

Colorado WaterWise (CWW) along with Associated Landscape Contractors of Colorado (ALCC) and Colorado Association of Lawn Care Professionals (CALCP) would like to sponsor and develop a mobile app to help contractors, landscapers, and others working in the field to look up utility codes, ordinances and procedures. An online tool would provide convenience for people who need mobile access to this information, and likely raise awareness for others such as homeowners who would benefit from knowing the rules as they discuss improvement projects with consultants or take on work themselves.

#### **SCOPE OF WORK**

#### **Discovery and Identity**

We would begin by conducting a discovery session with the three sponsors. Our goal would be to brand the app, name it, secure a domain and get input toward a simple logo treatment and message that would be on all screens and marketing materials.

Estimate for Discovery, Branding, Naming and Logo Development

\$3,800

#### App Design and Development— How It Will Work

In general, the app design will be very clean and simple with a goal to deliver ordinance information quickly and easily.

Upon launching the app, an initial screen branded with the new logo will give simple instructions, plus display the sponsors' logos.

The user will begin by entering the work area zip code. Given that some zip codes are serviced by more than one provider, the user will be shown a list of corresponding water providers from which to select the desired provider. Once correctly located, the user will be directed to a screen branded with that provider's logo. At this juncture, the user will see icons reflecting the "main areas" of information in the app, e.g. watering times/days, drought restrictions, soil amendment requirements, etc. Tapping on any one of these main areas will display provider-specific ordinance information.

Because of the large quantity of information to be conveyed, navigation icons will be created for each main area. The navigation icons will remain visible at all times to allow for easy maneuvering between areas. We will work with CWW to determine the hierarchy of information and identify the top-level areas that should have icons, (e.g. watering times, seed/sod permits, irrigation, etc.).

The app would also have general content pages such as a screen that lists participating water providers. Contact information for providers will be at the provider-specific ordinance level to encourage users to look for answers first before contacting a provider by phone or eMail.

#### Alerts

Push notifications will be a prominent feature of the app. Alerts will notify app users of news, changes to rules, new providers joining the app, promotions, etc. Administrators will have the ability to customize their messages with text and photos. Alerts will automatically send when providers update ordinance information.

#### Administration

Each provider will be given login credentials to makes updates and/or changes to their ordinances as well as upload their logo. They will have the ability to update a specific field or upload all their data at once in a file saved in .CSV format. A sample spreadsheet will be provided with the correct formatting so that a water provider representative can open the file in Excel, enter the data, and save the file to be uploaded into the administration area.

CWW will have master administrative control over the app and manage all of the water provider's information, as well as provision new login credentials for additional providers.

#### <u>Views</u>

This estimate covers building a smartphone app for iOS and Android as well as a mobile website. For tablet/desktop resolutions, the layout will include side navigation for easier viewing.

Estimate for App Design and Development (including alerts)

\$15,600 - 17,000 >> Continued

PO Box 221282 Denver, Colorado 80222 Vox: 303/691.8838 Fax: 303/691.8878 www.halperincreative.com

<i><b>J</b>1,000</i>

<u>Training Materials</u> A training area will be created to help Administrators to manage and update app information. This will include 3-4 videos with screen sharing and voice over to explain how to make updates and manage the app. The videos will be 2-5 minutes in length.

"Help" and "Tips" icons will be added to the admin area to assist the users in navigating the system and making updates. The tips will show additional information when the user mouses over the icon.

Estimate for Training Materials Marketina & Implementation

A marketing plan will be developed that will use goals and objectives identified in the initial discovery work, plus use input from a focus group led by Halperin Creative. The focus group will be composed of the sponsors, as well as (up to 20) water providers who are part of the initial launch. The intention is to gather information about target audiences, messaging, budgetary constraints, etc., that will generate a set of strategies and recommendations for implementation. The plan will also identify potential marketing, cross-marketing, online and point-of-purchase opportunities and develop appropriate messaging (in industry vernacular) to address pain points.

Estimate for Marketing Plan and Focus Group

#### PROJECT NOTES & TIMELINE

### Notes

This proposed is based on the following assumptions:

- 1. Administrators will not add additional categories or expand the ordinance fields. (Additions can be made in a later phase.)
- 2. Ordinance details will be plain text rather than drop-down selections, radio buttons, etc. and have no equations or two-part questions. The ordinance content will be similar to the spreadsheet ("Outline of Utility Ordinances and Codes 9\_12\_12")
- A section of "non-water" content will be included provided it follows the same format as original content, i.e. text only, no "if/then" statements or equations.

#### <u>Maintenance</u>

Four hours of training time for the Administrators is included. The training materials should reduce the need for additional instruction. Additional training beyond the four hours will be billed at an hourly rate of \$95/hour.

#### <u>Timeline & Phasing</u>

The proposed timeline for the scope of work is estimated to be 15 - 20 weeks and includes review/approval time. Final testing and delivery includes review time by Apple. The phasing would be as follows:

Discovery: 1 week

App Identity, Message and Naming: 2 - 3 weeks

Wireframes and Design Work: 2 - 4 weeks

App Production: 8-10 weeks

Final testing and delivery: 2 weeks

Marketing (started during production phase): 4 weeks

#### Hosting

The mobile app and promo page will need to be hosted on our server. The hosting charge (with alerts) will be \$30/month.

#### HALPERIN<u>CREA</u>TIVE, LL

#### **OPTIONS**

#### <u>User Profiles</u>

App users will have the ability to create and manage their profiles (name, eMail, password, address, company, phone) as well as manage alert settings. The alert settings will include a list of participating water providers with a checkbox next to each. Users can subscribe to receive alerts from specific water providers, all providers, or select none to opt out.

Administrators will have the ability to target alerts to specific water providers, which in turn will send alerts to subscribing users.

#### Estimate for User Profiles

\$1,800

\$1.250

С

\$3,200 - 4,800

## Exhibit D – Detailed Project Budget

# Colorado WaterWise - Landscape Requirements Smartphone App Grant Budget

					Creative, In	IC.			Colorad	o Waterwise (C	CWW)				Total P	roject (	Costs		
	Staff Type	Chief eMagina	ation Cl	hief Technica					Staff	Doord Stoff	Total Labo	or			ALCC Cash	CAL	.CP Cash	CWW In-kind	CWCB Grant
Task	(tasks may be concurrent)	Oncer	5.00 \$	Geek		ng Genius 95.00	Tota	al Labor (\$)		Board Staff 45.00	(\$)		Total (\$)	CWW Cash (\$)	(\$)		(\$)	(for Board Time)	(\$)
	Discovery and Identity	φ 9 9	5.00 \$	95.0	0 \$	95.00			\$ 55.00 \$	9 4 <u>5</u> .00									
	Prep for and conduct discovery session with partners		10		0	10	\$	1,900	10	0	\$ 55	50 \$	\$ 2,450	\$ 1,000	\$ 500	\$	500	\$ -	\$ 450
	Develop logo		10		0		\$	950	3			00 \$				\$		\$ 135	
	Create name		5		0		\$	475	2			10 \$				\$		\$ -	\$ 365
	Secure domain		5		0	0	\$	475	0	0	\$ -	\$	§ 475		\$-	\$	-	\$ -	\$ 475
	Task Total		30		0	10	\$	3,800	15		\$ 96	50 \$	<b>4,350</b>	\$ 1,275	\$ 500	\$	500	\$ 135	\$ 1,940
2	App Design and Development																		
	App Development	ļ.	53.95		85	0	\$	13,200	7	31	\$ 1.78	30 \$	§ 14,980	\$ 385	\$ 500	\$	500	\$ 1,395	\$ 12,200
	Design creation		27		10	0	Ψ	10,200	5	3		10 \$	-	\$ 275		\$	-	\$ 135	
	Develop app structure		11		25	0			2	3	\$ 24	45 \$	-	\$ 110	\$-	\$	-	\$ 135	
	Create app Review app structure with partners		0 15.95		50 0	0			0	0 25	<u>\$</u> - <u>\$</u> 11	\$ 25 \$		<u> </u>	<del>\$</del> -	\$	-	<u> </u>	
	Alerts Development		8		12	0	\$	1,900	0	20	1 /	90 \$	\$	\$-	\$-	\$	-	\$ 90	
2.2.1	Structure design		5		8	0	-		0	0	\$ -	\$	-	\$ -	\$ -	\$	-	\$ -	
	Alerts testing		3		4	0	¢	4 000	0	2	Ψ	90 \$		<u>\$</u> -	\$- •	\$ ¢	-	\$ 90 • 190	
	Administration Setup Develop admin site structure		8		<u>12</u> 8	0	\$	1,900	0	4	\$ 18	30 \$	\$ 2,080	<del>5</del> - 5-	<b>&gt;</b> -	\$	-	\$ 180 \$ -	\$ 1,900
	Test usability		3		4	0			0	4	\$ 1	80 \$	-	\$ -	\$-	\$	-	\$ 180	
	Task Total	6	9.95	10	09	0	\$	17,000	7		\$ 2,05	50 \$	5 19,050	\$ 385	\$ 500	\$	500	\$ 1,665	\$ 16,000
3	Create User Profiles																		
	Development of structure		5	13.	95	0	\$	1,800	0	4	\$ 18	30 \$	\$ 1,980	\$-	\$-	\$	-	\$ 225	\$ 1,755
	Create user profile structure		2		9.5	0			0	0	\$ -	\$	-	\$-	\$-	\$	-	\$ -	
	Test site		3		.45	0	•	4 000	0	4	Ŧ	80 \$	; -	<u>\$</u> -	\$ -	\$	-	\$ 225	
	Task Total		5	13.9	95	0	\$	1,800	0	4	\$ 18	80 \$	\$ 1,980	\$ -	\$-	\$	-	\$ 225	\$ 1,755
4	Develop Training Materials																		
	Develop Training Videos and Icons		3	10.	16	0	\$	1,250	0	10	\$ 45	50 \$	\$ 1,700	\$-	\$-	\$	-	\$ 450	\$ 1,250
4.1.1	Create videos		0		.16	0		,	0	0	\$ -	\$	-	\$ -	\$-	\$	-	\$-	
	Create "Help" and "Tips" Icons Test videos and icons		2		0	0			0	5		25 \$ 25 \$	-	<del>\$</del> -	\$ - \$	\$	-	\$ 225 \$ 225	
	Task Total		3	10.1	•	0	\$	1,250	0	10		50 \$	\$ 1,700	\$ -	\$ -	\$	-	\$ 450	
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	Marketing and Implementation																		
	Develop marketing plan		4		0	16	\$	1,900	5			55 \$			\$ 500	\$	500		
	Prep for and conduct focus groups		2		0	8	\$	950	0	5		25 \$	\$ 1,175	\$ -	\$ -	\$	-	\$ 225	
	Prep for focus groups		1		0	6			0	3		35 \$	-	<u>\$</u> -	\$-	\$	-	\$ 135	
	Conduct focus groups Collect information		1		0	2	¢	475	0	2	¢	90 <b>\$</b> \$	5 - 5 475	<u>\$</u> - •	\$- \$-	¢	-	\$ 90 \$ -	\$ 475
	Develop strategic marketing based on feedback		2		0	4 8.52	φ ¢	475 999	5	1	т	3 20 \$			Ŧ	<del>ر</del> ۲	-	Ŧ	\$         475           \$         999
	Finalize marketing plan		1		0	4	\$	999 475	<u></u>	1		20 \$				\$	-	•	\$ 939 \$ 475
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	Task Total		0		0		\$	-	48		\$ 4,44					\$	-	\$ 1,800	
	PROJECT TOTAL		118	13	33		\$	28,650	86		\$ 9,45	5   9	\$ 37,695	\$ 5,680	\$ 1,500	\$	1,500	\$ 4,770	\$ 24,245

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## Exhibit E – Detailed Project Timeline

			Augus	t	S	Septe	mber			Octo	ober		Nc	ovemeb			ecemb			Ja	nuary	/		Febru	lary	Ν	<i>l</i> arch
	Smartphone Application for Utility Codes, Ordinance and Procedures	3rd - 9th	10th - 16th 17th - 23rd	24th - 30th	31st - 6th	7th - 13th	14th - 20th	21st - 27th	28th - 4th	5th - 11th 12th 10th	1.2th - 1.8th 1.9th - 2.5th	26th - 1st	2nd - 8th	9th - 15th 16th - 22nd	23rd - 29th	30th - 6th	7th - 13th 14th - 20th	21st - 27th	28th - 3rd	4th - 10th	11th - 17th	18th - 24th 25th - 31st	1st - 7th	8th - 14th	15th - 21st 22nd - 28th	ے	8th - 14th 15th - 21st
1	Discovery and Identity				.,	1 -											-		T								
	Prep for and conduct discovery session with partners																										
1.2	Develop logo														1												
1.3	Create name														1												
1.4	Secure domain																										
2	App Design and Development																										
2.1	App Development																										
2.1.1	Design creation																										
2.1.2	Develop app structure																										
2.1.3	Create app																										
2.1.4	Review app structure with partners																										
2.2	Alerts Development																										
2.2.1	Structure design																										
2.2.2	Alerts testing																										
2.3	Administration Setup																										
2.3.1	Develop admin site structure																										
2.3.2	Test usability														Week			¥	× 종								
3	Create User Profiles														Š			Week	Week								
3.1	Development of structure														Holiday												-
3.1.1	Create user profile structure														ojio			lida	lid								-
3.1.2	Test site														ВH			문	ピ								
4	Develop Training Materials														Thanksgiving			Christmas Holiday	Years Holiday								
4.1	Develop Training Videos and Icons														sgi			stm	, Š								
4.1.1	Create videos														ank			hris	New								-
4.1.2	Create "Help" and "Tips" Icons														ЦЦ			U U	Ž								-
4.1.3																											
5	Marketing and Implementation																										
5.1	Develop marketing plan																										
5.2	Prep for and conduct focus groups																										
5.2.1	Prep for focus groups																										
5.2.2	Conduct focus groups																										
	Collect information																										
	Develop strategic marketing based on feedback																										
	Finalize marketing plan																										
	Implement plan																										
6	Reporting and Analysis																										
6.1	Progress Reports																										
	50% Report																										
6.1.2	75% Report																										
	Final Report																										
6.3	Project Analysis																										

## Exhibit F – Letters of Support



August 13, 2014

Colorado Water Conservation Board Attn: Ben Wade 1313 Sherman Street, Suite 721 Denver, CO 80203

Dear Mr. Wade,

This letter is to inform the Colorado Water Conservation Board of our support from the Colorado Arborists and Lawn Care Professionals for Colorado WaterWise's grant request to develop a Smartphone Application for Utility Codes, Ordinances, and Procedures. We have voted to send \$1500 when the project is approved.

The App, created in partnership with Colorado WaterWise, will be helpful and useful to the members of our organization in consolidating and housing a considerable amount of utility code, ordinance and procedural information. Time is money for water suppliers and landscape professionals. The development of the App will provide access to timely information, thus minimizing unnecessary phone calls and email to utility personnel. The App will provide a convenient one-stop shop for both the water user and the supplier. It's a win-win for both sides of the "information" equation.

As a long-time partner of Colorado WaterWise, our organization fully supports the development of the Smartphone Application and will utilize the information and help to promote it to our members.

Sincerely,

Donna Ralator

Donna Ralston Exec. Director of CALCP calcp@lawncarecolorado.org