

COLORADO CLEAN ENERGY CLUSTER (CCEC) 50% Progress Report

Colorado Water Conservation Board Water Resource Conservation Public Education and Outreach Grant

Purchase Order #: POGG1 PDAA 20150000000000000185 January 30, 2015

Introduction

The Net Zero Water Planning Toolkit is an initiative of the Colorado Water Innovation Cluster (CWIC), sponsored by the Colorado Clean Energy Cluster (CCEC). The toolkit includes guidelines for identifying the water quantity and quality impacts within a defined boundary and tools for analyzing opportunities to reduce those impacts, laying the groundwork for a roadmap to water neutrality. The toolkit is intended to help users:

- Determine a company or organization's baseline and forecasted water footprint based on existing and future activities
- Identify strategies to reduce water consumption and impacts on water quality
- Analyze strategies and aggregating into scenarios for water planning
- Set milestones on the path to neutrality based on scenario modeling
- Measure and monitor progress during implementation

As shown in the figure to the right, the NZW Planning Toolkit includes a user-friendly, Excel-based analysis tool and companion guidebook designed to help people define their water footprint, and identify and test water quantity and quality management strategies that will help them move towards the goal of Net Zero Water.

The toolkit includes seven different modules intended to walk the toolkit user through the water action planning process. The modules include:



- MODULE 1: Water Footprint
- MODULE 2: Vision & Goals
- MODULE 3: Footprint Reduction Strategies
- MODULE 4: Plan Implementation
- MODULE 5: Tracking & Reporting
- MODULE 6: Plan Documentation
- MODULE 7: Stakeholder Engagement

This 50 percent progress report is intended to provide a review of the activities completed, and other information that is relevant to the Board's record of the Project and future use of the Project outcomes.

Project Budget and Current Expenditures

The table below provides a summary of the project budget and expenditures to date. For both grant funded scope and in-kind hours, spending is behind the 50 percent mark. Details for this are included below.

Task Description	Budget	Invoiced to	In-kind	In-kind to Date
		date	Budget	
Task 1: Water Footprint Methodology	\$3,421	\$0	\$0	\$0
Task 2: Water Footprint Reduction Strategies	\$13,645	\$2,453	\$0	\$0
Task 3: Water Planning Guidance	\$2,036	\$134	\$0	\$0
Task 4: NZW Analysis Tool	\$14,028	\$4,000	\$0	\$0
Task 5: NZW Planning Guidebook	\$10,117	\$3,749	\$0	\$0
Task 6: Stakeholder Engagement	\$0	\$0	\$6,500	\$1,586
Task 7: Pilot Support	\$6,152	\$1,064	\$0	\$0
Task 8: Grant Reporting/Documentation	\$0	\$0	\$4,843	\$0
Total	\$49,399	\$11,399	\$11,343	\$1,586

Success of Meeting Previously Identified Goals and Objectives

The project team has made great progress to this point. A complete toolkit has been developed at the building scale and is available for review by CWCB. Below is a summary of the major milestones achieved to date:

- 1. A draft version of the toolkit was developed and shared with the Technical Advisory Group (TAG) in October/November 2014.
- 2. Comments and feedback from the TAG were incorporated during winter 2014/15.
- 3. A webinar was conducted in February 2015 to share the draft toolkit with a broader group of stakeholders.
- 4. The project team has attended various conferences and events to share information on the toolkit to gather input and feedback from a broader audience.

During the month of February, the project team will be gathering stakeholder input on the draft building scale toolkit and also providing a more in-depth review of the materials with program sponsors. Spring 2015 will be dedicated to incorporating this feedback and also further developing the Net Zero Water Guidebook at the building portfolio, campus, and eco-district scales, piloting the toolkit with program

sponsors. The aim is to release a final version of the building scale toolkit sometime in Spring/Summer 2015.

Obstacles Encountered

The main obstacle that has been encountered to date has been keeping to the originally proposed project schedule. Because of the innovative nature of this work and the level of stakeholder feedback we are trying to achieve, it has taken longer than originally projected to accomplish various tasks within the project scope. The project team feels it is important to maintain this level of engagement and feedback to ensure a strong product at the end and for these reasons are proposing a revision to the project schedule, as outlined below.

Because of the schedule delays, the project team has also realized the stepwise process required to develop a clear and comprehensive toolkit. For these reasons to this point all focus has been targeted towards developing a complete draft toolkit for just the building scale rather than also trying to address the building portfolio, campus, and eco-district scales. The Spring/Summer 2015 time will be taken to focus on and develop the methodology for these other scales. As will be outlined in more detail below, we are also proposing that this time be used to focus on the methodology and Net Zero Water Guidebook development only, and that the analysis tool be focused on the building scale at this time.

Potential Need for Revisions to the Scope of Work and Timelines

Based on the schedule obstacle noted above, the project team is proposing the following revision to the schedule. This schedule also includes the following revisions to the due dates for the two progress reports intended to share progress with the CWCB Board:

Progress Report 1 (50% Completion): February 15th

Progress Report 2 (75% Completion): May 15th

Task/Action	2014			2015					
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1. Water Footprint Methodology									
2. Water Footprint Reduction Strategies									
3. Water Planning Guidance									
4. NZW Analysis Tool									
5. NZW Planning Guidebook									
6. Stakeholder Engagement									
7. Pilot Support									
8. Grant Reporting/ Documentation									

As noted above, the project team is also proposing a slight revision to the scope of work by focusing development of the analysis tool at the building scale and further developing the Planning Guidebook and net zero water planning methodology for the other three scales included in the original proposal. The reason for this proposed change is due to the complexities of the methodology and tool

development for these larger scales. The project team has observed that it is likely more customized approaches would be required for the larger scales, requiring customized tools, whereas the building scales allows for a more standard approach and simplified analysis tool. This slight change in scope will also allow the team to more clearly focus on the methodology for these larger scales which is the core of initiative.