

50% Completion Report CWCB Green Legacies Grant PO # OE PDA14000000106 Landscape/Irrigation Evaluation and Reporting December 31, 2014

Work on the Landscape and Irrigation Evaluation and Reporting Project is 50% complete.

Task 1 has been accomplished. Although two CSU Master Gardeners were recruited and prepared to assist in evaluating the landscapes, scheduling and weather constraints were such that consultations were handled by Moorhead and Firth in all cases, with the assistance of one of Water Returns' Service Partners on irrigation consultations

Task 2 has been accomplished for the Spring 2014 and Fall 2014 training classes. Attendance at all classes for Spring and Fall was good. Our landscape training reached nearly 145 customers of Security Water District, Donala Water District and the Town of Fountain. Tasks 3 and 4 are complete (see copies of survey and consultation worksheet attached). All attendees who completed surveys and consultations were screened for Further Assistance. Task 5 has been accomplished for the Spring and Fall 2014 training classes. This 50% completion report fulfills Task 6. In regards to Task 7, most of the Further Assistance services for selected 2014 candidates are scheduled for 2015. However, a landscape plan was completed for a homeowner in Donala Water District, and another project is underway for one of Fountain's participants, consisting of a landscape and irrigation system renovation, with financial assistance provided by the Town of Fountain and in-kind services donated by Water Returns Service Partners

Our hypothesis had been that we would be able to generate sufficient number of qualified candidates for substantial landscape improvements to warrant extensive Further Assistance , by virtue of irrigation system improvements, landscape design and improvements or both, which would qualify for long term monitoring. This monitoring would then provide on the ground, real time comparisons between preand post-improvement water use. Both types of improvements would conform to Water Returns' specifications (which are based on CWW's Best Management Practices). As explained further below, however, we encountered several challenges acquiring the number of qualified candidates hoped for.

We have found the following during our 2014 work:

 Although the classes have been well-attended (ranging from 15 to 45), qualification for assistance with actual landscape or irrigation changes has been disappointing. Interest in landscape or irrigation system consultations was high, as was completion of the screening survey. But interest in and/or financial ability to implement the actual improvements has been low to date, even with the probability of water provider financial assistance. Thus far, this

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appears to be somewhat consistent across varying demographics in different neighborhoods. The project underway in Fountain, mentioned above, is located in a somewhat less affluent area. In Donala Water District, having generally higher income neighborhoods, we have received a financial commitment from a patio home community to assist them with assessment and planning services, commencing shortly, and we have two other possible residential irrigation assessments this spring.

- 2. Interest in having a consultation performed to check soil type, irrigation system efficiency, watering schedules, plantings appropriate for existing microclimates, etc. remains high. Unfortunately, these advice-giving consultations have not yielded a framework for robust monitoring of behavioral changes. At a minimum, the consultations appear to be well suited to public outreach and education monitored by HB 1051 reporting, which may produce a larger pool of qualified candidates for actual water-saving improvements over time.
- 3. Our partner water providers and their customers are enthusiastic about the training we provide, which centers on landscape and irrigation system design, maintenance, winterization and assessment, planning and implementation steps for improvement projects. We believe this is a valuable service to water providers that are too small to sustain full time water conservation personnel.
- 4. As a result of the upcoming Spring training, we hope to secure another 3 or 4 projects where irrigation system and landscape improvements can be made with assistance from the water provider. Combined with the Further Assistance services/projects already completed, underway or scheduled for this Spring, we conservatively expect to deliver 6 to 10 projects that have either been completed or are positioned for implementation, in accordance with Water Returns' standards (and CWW's Best Management Practice standards) by the end of 2015, which will then be positioned for monitoring water use on an ongoing basis.

Lessons learned:

The current economy may have an effect on customers' ability to move forward with landscape projects that would save them money long term; such projects may have a lower priority when compared with more pressing living expenses. This appears to be the case, as large numbers of participants are interested in the free advice-giving consultations, but few are able or willing to implement costly changes, even with the offer of assistance. If this observation is proven true across the range of our participating communities, the resulting conclusion will likely be that programs providing training and on-site advice offer the greatest benefit for the least cost, especially to smaller water providers. However, this should not exclude the offer of Further Assistance to those customers who are qualified to implement significant improvements to their landscape.

Especially in lower income areas since the drought of 2002-2003, many customers are considering or have already chosen to simply let their landscapes die. It is too costly for them to replace large areas of their grass, and without being informed of better alternatives these owners are choosing to live without any landscape, much less grass; essentially throwing the baby out with the bath water. Once this decision is made, it creates an even more formidable obstacle when considering bringing the landscape back to life, both in terms of the cost to make such renovations as well as resuming paying for irrigation.

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These customers are encouraged and interested when they learn about the cost effective use of mulches and affordable plants they can install themselves to cover areas that have become dirt and weeds, as well as simple repairs and adjustments to their irrigation system that enable them to have an affordable and attractive yard. Although some of these homes will provide little/no usable data for our current case study, the on-site consultations are helpful to the residents, thereby creating informed advocates for sustainable landscape practices.

Respectfully submitted,

Linda J. Firth



On-Site Consultation Worksheet

Address: Evaluation Date: Evaluator(s):

Owner Info		General Property Info		
Name		Date of Install/Modif		
Phone Number		Restrictions/Regulations		
Email		Adjacent Property Issues		
Knowledge		Maintenance; Contractor/Self		
Survey Answer Follow-Up:		Grade By Area (F, B, LS, RS)		
		Exposure By Area (F, B, LS, RS)		
Landscape			Irrigation	
Soil Type / Root Depth		Automated System	Yes / No	
General Overall Condition	needs help / fair / good	Backflow Type / Pressure		
		Controller Model		
	Issues By Area (F, B, LS, RS)		Issues By Area (F, B, LS, RS)	
Turf		Valve Box		
Trees		Controller Program		
Shrubs		Sprinkler Uniformity		
Ground Cover		Sprinkler Heads		
Compaction/Thatch		Leaks		
Drainage		Deflection		
Microclimates		Coverage Gaps / Overspray		
Hydrozones				



CWCB Case Study Survey

(Revised September 10, 2014)

Date: _____

Name: _____

Water Provider: _____

Water Returns has been awarded a grant by the Colorado Water Conservation Board (CWCB) to conduct a case study that will track and report the benefits of sustainable landscape practices implemented on single family homes. If you are interested in making such changes to your landscape and being part of this study, please complete this short survey to help us determine your qualification for participation and potential financial assistance by your water provider.

1. Why are you interested in having an onsite consultation? (Just a short answer will do)

2. About how much time do you currently spend on your landscape per week during the spring and summer?

3. How much time would you LIKE to spend on your landscape per week during spring and summer?

4. If your utility provider offers to pay a portion of the cost for a detailed irrigation evaluation, small group coaching session or landscape plan for your home, would you be willing to pay between \$75 and \$200 for your share of the cost for one of these services? (circle one)

YesNot Right NowNeed More Info5. Would you be willing to let us check up on how you've implemented our recommendations?YesNo6. Would you be willing to let us review your actual water use over several irrigation seasons?

Yes No

7. How long do you expect to live in your current home?