



July 28, 2008 – Status Report for GreenCO BMP Expansion Project

A meeting was conducted at CWCB with Veva Deheza, Brenda O'Brien, GreenCO Project Manager, and Jane Clary, Senior Water Resources Scientist and Technical Consultant with Wright Water Engineers, Inc. to discuss the project status at 50% of completion.

The project scope of work as outlined in the original grant includes seven tasks that build upon GreenCO's commitment to promote landscape water conservation and water resources protection. The July 2008 status of these tasks follows.

Task 1 - Convene industry-based task force to review existing BMP Manual to identify areas in need of expansion or revision.

- A group of diverse experts was convened to revise the content contained in the 2004 GreenCO BMP manual.

Task 2 – Revise BMP Manual and distribute the manuals on CD and in hard copy.

- A “Draft Final” version of manual was posted to GreenCO website (www.greenco.org/bmp) and includes the following BMPs:

Status	Description	Status	Description
New	Sustainable Landscaping	2004	Mulching
2004	Xeriscape	2004	Drought and General Water Conservation Practices for Landscapes
2004	Water Budgeting	New	Snow Removal
Sig. Rev.	Landscape Design (including Plant Selection & Placement and Hardscapes)	2004	Production Practices for Nurseries, Greenhouses, and Sod Growers
2004	Landscape Installation/Erosion and Sediment Control	2004	Water Management Practices for Nurseries, Greenhouses, Sod Growers and Holding Yards
Sig. Rev.	Soil Amendment/Ground Preparation	2004	Retail Practices for Nurseries, Greenhouses and Garden Centers
New	Tree Protection	2004	Park, Golf Course and Other Large Landscape Design and Management
New	Tree Placement in Urban Landscapes	New	Landscape Features in Low Impact Development
New	Tree Planting	2004	Revegetation of Drainageways

Sig. Rev.	Irrigation Efficiency	2004	Riparian Buffer Preservation
Sig. Rev.	Irrigation System Design	2004	Employee Education
Sig. Rev.	Irrigation System Installation	2004	Public Education
Sig. Rev.	Irrigation System Maintenance	2004	Regulatory Awareness
New	Irrigation Efficiency Audits	Sig. Rev.	References
New	Irrigation Technology and Scheduling	New	Glossary
New	Irrigation Using Nonpotable Sources	2004	Appendix A Basic Erosion Sediment Control
2004	Landscape Maintenance	2004	Appendix B Basic Stormwater BMPs
Sig. Rev.	Tree and Other Woody Plant Care	2004	Appendix C Potentially Applicable Regulations
2004	Herbaceous Plant Care	2004	Appendix D Water Budget Calculator
2004	Turf Management	2004	Appendix E Plant Water Requirements (Kc/ET)
2004	Fertilizer Application	New	Appendix F Historical Grass Reference ET Tables
2004	Pesticide and Herbicide Application	New	Appendix G Irrigation Efficiency Audit--Pre-audit Checklist
2004	Pesticide, Fertilizer & Other Chemical Storage, Handling & Disposal	New	Appendix H Salt Tolerant Plants
2004	Lawn Aeration	New	Appendix I Continuing Education
2004	Lawn Waste Disposal/Composting	New	Appendix J Industry Checklists
2004	Mowing		

- CDs and hard copy manuals will be distributed to target audiences upon completion.
- Matching hour requirements for grant have been met through significant involvement from advisory committee and reviewers.
- Reproduction will begin later in August; the document review schedules was extended to provide a final opportunity for advisory committee to comment on the manual before reproducing, as well as to allow industry members to develop industry-specific checklists based on the BMPs.

Task 3 - Package revised GreenCO BMPs in a manner that will enable direct insertion into CWCB Water Conservation Plans and assist CWCB in outreach/education related to the BMPs.

- The key focus of this meeting was to obtain input from CWCB on how to “package” GreenCO BMPs for utility use in preparing CWCB water conservation plans.
- The need to quantify the expected range of water conservation associated with various outdoor water conservation BMPs was identified as being important with

regard to water conservation planning. Quantifying these savings is currently out of scope for the GreenCO project, but was identified as important based on conversations with several people including Paul Lander, Donna Pacetti, Tracy Bouvette and the GreenCO Board. Quantification of these savings would involve several steps: a literature review to see what is available, identification of data gaps, and development of quantitative estimates based on the literature and scientific data.

- Veva, Brenda and Jane discussed whether this “quantification project” was needed prior to wrapping up the current grant and decided that it would be better to complete the current grant and then pursue the quantification project. The need to discuss the quantification project with Paul Lander was also identified as important to ensure no “double” effort being completed—verify what is and isn’t covered in the CWWC BMP Manual effort.
- In terms of packaging the GreenCO BMPs for use by utilities, general agreement was:
 - A relatively short (4-pages or so) description of how the GreenCO BMP training program and manual can be used to fulfill the CWWC objectives specified in the conservation plan development guidance. ***Jane will work on a draft over the next few weeks for feedback***
 - Brenda suggested possibly using the Town of Castle Rock’s Landscape Registration Program data as a case study in the packaging.
 - The short description would be accompanied by either the manual itself or a CD of the manual. (Probably other materials related to the training program, too.) Veva will provide a database of covered entities that we can use (she is in the process of reviewing); the information will be distributed to at least 150 utilities.
 - Veva concurred that condensing the manual itself down to be inserted into conservation plans was not the way to go. The focus should really be the training program that needs to be marketed following the Castle Rock model.

Task 4 - Revise BMP training program materials to include additional example slides and other updated information.

- Training program revision/update is nearly complete.

Task 5 - Coordinate with GreenCO members, water utilities, and local governments to facilitate broader awareness of and potential adoption of the BMP training program.

- The group brainstormed on how to roll-out and showcase the GreenCO manual/project included these ideas:
 - Colorado Water Congress in Vail in August

- Water Wise Council conference in April and/or a pre-conference workshop
- The need for something on the West Slope was also identified.
- GreenCO's ProGreen EXPO in January.
- Note: several articles have already been published in several newsletters and Brenda spoke at the last Water Conservation Plan training class hosted by Tracy Bouvette.

Task 6 - Publicize project goals and accomplishments to increase awareness of landscape water conservation tools available to the green industry, local governments and water providers.

- Other opportunities to connect with utilities doing water conservation plans:
 - Douglas County is pursuing preparation of a water conservation plan.
 - ACWWA water conservation efforts are underway.
 - Glenwood Springs/Rifle are preparing water conservation plans.
 - In general, CWCB would like to see more integration of GreenCO BMPs into these plans.
- Quantification Project discussion:
 - Paul Lander indicated that he was supportive of GreenCO taking the lead on this effort (Veva wants to discuss this further with Paul).
 - GreenCO/WWE to scope out the project. A strong, diverse advisory committee would be critical. Veva suggested possibly including some out-of-state folks, too. Basic idea for the project could be something along the lines of:

Task 1. Literature Review (*what's out there*).

Task 2. Assess Data/Identify Data Gaps (*what does it tell us, what are the data gaps, what is the quality of the data, what could potentially be calculated even without study data*).

Task 3. Develop Water Savings Quantification Strategy (*e.g., how can water saving estimates be developed in a meaningful way given multiple variables*).

Task 4. Estimate Ranges of Water Saving Associated with Various Practices (*apply the data to outdoor water conservation practices/GreenCO BMPs and tie in to Water Conservation Plans*).

- Idea (*not discussed at meeting*): perhaps this should be two grants: with Phase I including Tasks 1 and 2 and Phase II including Tasks 3 and 4. This would create clear end products that would allow for more accurate budgeting for Tasks 3 and 4 and keep each budget phase <\$50,000.
- Build upon existing work:
 - Western Resource Advocates research
 - RTI database of conservation practices being developed for CWCB
 - Various known data sources: NCWCD, Slow the Flow, Irrigation Association, Nevada, California, Smart Water, etc.

Task 7 - Translation of BMP Manual and Training Materials to Spanish.

- Spanish translation is beginning.

Overall project is on track and within budget.