WATER EFFICIENCY GRANT PROGRAM

WATER CONSERVATION PLANNING GRANT APPLICATION

June 1, 2010

Submitted to:

Colorado Water Conservation Board

Office of Water Conservation and Drought Planning

Submitted by:

City of Westminster, Colorado

WESTMINSTER

Summary

This is a water conservation planning grant application submitted by the City of Westminster, Colorado to the Colorado Water Conservation Board, Office of Water Conservation and Drought Planning. The City of Westminster (City) wishes to prepare a water conservation plan that meets all state planning requirements. The City has contracted with Aquacraft, Inc. Water Engineering and Management to help prepare the water conservation plan.

The City has a long history of support for water conservation. City Council in the past has provided direction to Staff to implement effective inclining block water rates as well as a progressive tap fee structure designed to promote conservation by developers and builders. Rebate incentives for conservation measures are used to promote installation and retrofit of water efficient appliances. Education of students through Water Festivals and other means helps ensure that future generations maintain the focus on water conservation. The City looks forward to developing an updated water conservation plan to provide a roadmap to water efficiency.

The total budget for preparing the water conservation plan is $38,130. The proposed budget does not include any time or money for preparing this grant application. This proposal requests a planning grant from the CWCB in the amount of $38,130 which is 100% of the total budget. The City will contribute in excess of $22,486 in in-kind services (37% of total plan development budget) through the entire plan preparation and approval process. In addition, the City has committed $46,950 in cash and more than $20,000 in in-kind services to conduct a water demand verification study that will measure the residential end uses of water and penetration rates of conserving fixtures and appliances. The information gathered from the demand verification study will feed directly into the water conservation plan. With the inclusion of this research effort, the City's total combined cash and in-kind contribution for this project is in excess of $80,000.

Assuming that grant funding can be provided in a timely manner, the water conservation plan will be submitted for approval to the CWCB by April 2011.

CWCB Water Conservation Planning Grant Application Submittal Requirements

1. Name and contact information of entity seeking grant:

City of Westminster
Attn: Stu Feinglas, Water Resources Analyst
4800 W 92nd Ave.
Westminster, CO 80031
T: (303) 658-2386, F: (303) 706-3927
Email: SFeingla@cityofwestminster.us

2. Selected firm and individuals to assist in development of the Water Conservation Plan:

The City of Westminster (City) has selected Aquacraft, Inc. Water Engineering and Management to assist in the development of the water conservation plan. The individuals listed below will assist in the preparation of the water conservation plan. The role of each individual is briefly described.

Individual, Title, and Organization	**Role**
Stu Feinglas, Water Resources Analyst, City of Westminster	Project manager and primary point of contact for the City.
Peter Mayer, P.E., Partner, Aquacraft, Inc.	Project manager for Aquacraft and primary author of water conservation plan.
William DeOreo, P.E., President, Aquacraft, Inc.	Co-author of water conservation plan.
Matt Hayden, Aquacraft, Inc.	Statistical analysis and modeling support
Leslie Martien, Aquacraft, Inc.	Report preparation, data analysis, editing
Mike Smith, P.E., Director of Public Works and Utilities, City of Westminster	Project oversight and supervision, conservation plan review.
Mike Happe, P.E., Utilities Planning and Engineering Division Manager, City of Westminster	Conservation plan development including water supply and infrastructure descriptions, financial impacts and requirements, water conservation measures and programs, demand forecasting, plan review.
Josh Nims, Water Resources Engineering Coordinator, City of Westminster	Conservation plan development including water supply and infrastructure descriptions, financial impacts and requirements, water conservation measures and programs, demand forecasting, plan review.
Mary Jay Vestal, Water Resources Engineer, City of Westminster	Conservation plan development including water supply and infrastructure descriptions, financial impacts and requirements, water conservation measures and programs, demand forecasting, plan review.

3. Identification of retail water delivery and sources of water of the covered entity for past five years

Retail Water Deliveries by the City of Westminster, 2005 – 2009 (acre-feet)

	2004	2005	2006	2007	2008	2009
Residential	11,592	12,544	13,522	12,705	13,060	11,343
Commercial	1,922	2,013	2,148	2,147	2,140	2,002
Industrial	80	82	105	96	69	63
Wholesale	1,305	1,309	1,405	1,359	1,343	1,288
Municipal/Public	892	1,063	951	906	705	461
Potable Irrigation	1,221	1,444	1,997	1,877	2,329	1,651
Reclaimed	679	753	1,263	1,130	1,430	1,155
Total	**17,691**	**19,208**	**21,390**	**20,220**	**21,076**	**17,963**

The City's water supply consists of surface water from Clear Creek delivered to Standley Lake. The City also receives a portion of its water as an annual delivery of raw water from Denver Water through the Moffat water delivery system. The City provides a number of irrigation customers with reclaimed water which is wastewater effluent that has been further treated and disinfected to provide a non-potable supply.

It is anticipated that, at buildout, 87% of the City's water supply will come from the South Platte River Basin which has been identified as water short in the Statewide Water Supply Initiative (SWSI) recommendations and findings.

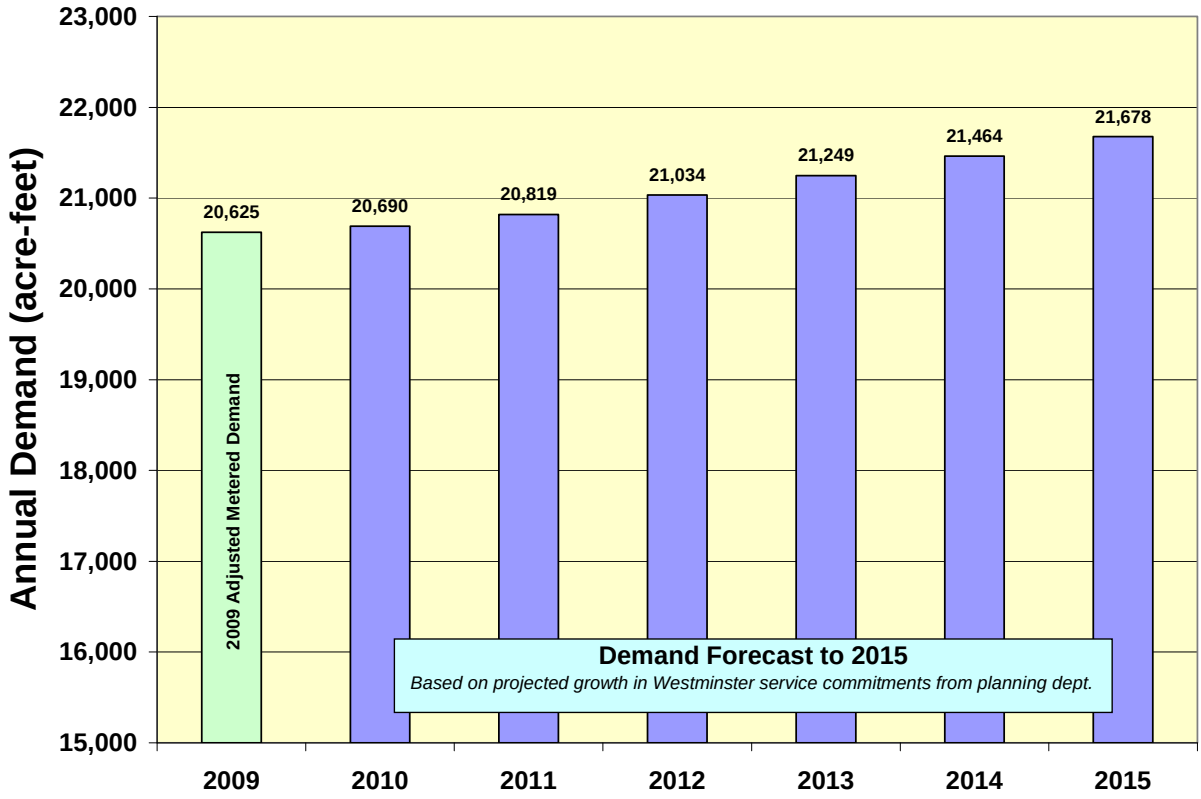
4. Reasonable engineering estimate of future annual retail demand for the next five years

The City's 2009 total water use (total of potable water produced, reclaimed water produced, raw water delivered) is 19,091 acre-feet. Per capita water consumption in the pre-drought years of 2000 and 2001 averaged 167. City Staff are working to maintain the post-drought water use reduction, but believe the implementation of water conservation programs will be required.

The City experienced a low water use year in 2009 due to below average irrigation demands resulting from a cooler than normal spring and summer with higher than normal precipitation. To be able to use 2009 consumption data in long term forecasts, the City used base 2007 consumption per account (2007 is the year closest to normal since the drought and post drought periods of 2002 – 2005) and added projected use from all water taps sold 2007 through 2009. The resulting adjusted annual water consumption for 2009 totals 20,625 acre-feet.

To forecast demand over the next five years through 2015, the City's Planning Division provided an estimate of the number of additional acres that will be developed and will require water service. Using land use and water demand data, the City then estimated the number of service commitments (140,000 gallons of annual water use per 1 service commitment) that will be required to provide to these new customers over the next five years. The bar chart figure below

shows the forecasted future water demand for the City starting from the adjusted metered demands in 2009.



City of Westminster demand forecast to 2015

The City's demand forecasting methodology is based on developable land and water use characteristics. The City is approaching the limit of land available for future development. The City's Comprehensive Land Use Plan (Comp Plan) identifies specific land uses for 3,300 acres of undeveloped land and existing developed land planned for redevelopment. The City has calculated water use per acre for all land types within the Comp Plan based on developed areas (developed after low volume plumbing fixtures were required in 1994) which are similar to types of development planned for the future.

5. Background characterizing the water system, potential growth and any other pertinent issues that relate to the stated evaluation criteria

The City maintains thorough historic demand and demographic data going back to the 1980s. The table below shows the City's population, system-wide per capita use, and single-family residential per capita use from 2003 – 2009. These data come from the City's Planning Division, the Finance Department's Treasury Division (water utility billing group), and from the Denver Regional Council of Governments (DRCOG) as described below.

City of Westminster population, system per capita, and single-family residential per capita demands

Year	2003	2004	2005	2006	2007	2008	2009
Population	105,900	107,400	108,900	109,500	110,400	110,938	*109,353
System per capita water use	146	135	148	168	154	157	135
Single-family per capita water use	98	93	99	110	98	103	88

* The City adjusted the reported population to reflect DRCOG calculated population.

a) Current and Past Per Capita Demand. The population was calculated using at the 2000 census as a base. As additional living units were added to the City's inventory, the population added was at the rate of occupancy from the 2000 census (single family units = 3.02 people per household, multifamily units = 1.89 people per household). Population listed is for the beginning of each year.

Per capita water use was calculated two ways. The first method divided the total water produced by the total population of the area served. In this method, the population of the Cities of Federal Heights and Shaw Heights, served by Westminster, and unincorporated units served by the City were added to the City's population.

The second method divided the water sold to single family accounts within the City by the calculated single family population of the City.

While 71% of the 2008 water use within the City went to the residential sector, only 53% of future water demand until build out is anticipated to be within the residential sector. The remainder is expected to be within the commercial, industrial and institutional (CII) sector.

b) Past and Present Population and Forecast. The population in the City from 2003 through 2009 is presented in the table above. The City population is expected to reach 124,100 at build out, which represents an additional 14,747 people. This is a 13.5% increase in population over 2009.

c) Estimated Water Savings Goal. The City recognizes the value of water conservation within the comprehensive water supply plan for the City. Currently, a water conservation goal of 1,550 acre-feet of new build out demand has been established for the City. This goal will be revised based on the findings of the water demand verification study being conducted and through the results of the conservation planning analysis that will be undertaken as part of developing the City's water conservation plan.

d) Adequacy, Stability, and Reliability of Water System. The City has invested considerable resources to develop a stable water supply system designed to provide water to the City under a variety of "worst case" scenarios. The implementation of the comprehensive water supply plan,

including water conservation programs, will be required to maintain the reliability of the water supply system at build out.

The City currently owns and operates a water supply system centered on Standley Lake. Standley Lake receives water from a number of different sources including irrigation ditches that divert water from Clear Creek near Golden, water from Coal Creek, and water from Denver Water that is delivered from the West Slope through Denver's system into the City's water supply. The City's raw water system is designed to meet the full demand of the City in a drought equal to the major drought that occurred during the years 1953 through 1956. This drought is estimated to have a recurrence interval of 75 - 100 years.

The City maintains two water treatment facilities designed to produce a total of 59 million gallons per day. This capacity should be sufficient to meet current build out projections. The Semper Water Treatment Facility is capable of treating 44 million gallons per day using conventional filtration technology. The Northwest Water Treatment Facility is capable of treating up to 15 million gallons per day using state-of-the-art membrane micro-filtration. Average daily water consumption for the City is currently 18 million gallons per day with a peak day of up to 44 million gallons per day.

The City's Reclaimed Water Treatment Facility provides secondary treatment to wastewater treated at the Big Dry Creek Wastewater Treatment Facility. Up to 6 million gallons per day can be treated and distributed to reclaimed customers through separate reclaimed water distribution mains. At build out, 25% of the irrigated area within the City will be irrigated using reclaimed water. The City, being a summer peaking utility, directly benefits in a reduction of peak potable water demand by supplying reclaimed water for irrigation to approved customers.

6. Water conservation plan scope of work

The City has contracted with Aquacraft, Inc. Water Engineering and Management to prepare the water conservation plan and to conduct a water demand verification study in conjunction with the planning effort. The approved scope of work for preparing the conservation plan is provided below.

Task 1.1 – Apply for CWCB Water Conservation Planning Grant ***(completed)***
Task 1.2 – Profile City of Westminster Water System, Current Demand, Growth Estimates, Demand Projections, Conservation Program, and Proposed Facilities
Task 1.3 – Integrate Results from Water Conservation Verification Study (Project 2)
Task 1.4 – Develop Water Conservation Implementation Scenario
Task 1.5 – Model Conservation Scenarios and Develop Benefit-Cost Analysis
Task 1.6 – Revise Demand Forecasts to Incorporate Selected Water Conservation Program
Task 1.7 – Finalize Draft Conservation Plan with City Staff
Task 1.8 – Project Coordination – Project Meetings, Plan Presentation, Public Review Process, Submission of Plan to CWCB, and On-Going Technical Support

Task 1.2 – Profile City of Westminster Water System, Current Demand, Growth Estimates, Demand Projections, Conservation Program, and Proposed Facilities

City Staff have already spent considerable time and effort developing profiles of the City's water system, demands, future projections, water cost, pricing, planning initiatives, and current conservation activities and goals. Much of this information is required for the Task 1.1 grant application.

At the start of this project, the Aquacraft team will meet with City Staff in order to review water demand, weather, and population data that are available for the study. As there is significant overlap with the Water Conservation Verification Study (Project 2), details of this data request are provided in Task 2.2.1.

In addition to billing and other data discussed, Aquacraft will obtain electronic copies of relevant information and analysis that has been completed so far as well as recent annual reports. Aquacraft will also obtain the City planning growth estimates (population, housing, business, etc.) as well as future water demand projections, and detailed information about any proposed water infrastructure upgrades, improvements, and facilities. This information will be used as fundamental input for the integrated conservation model (Task 1.5) and for the conservation plan preparation (Task 1.7).

The Aquacraft team will prepare a detailed profile of the City's water system that will be an important part of the water conservation plan. The profile will summarize the water delivery service area, existing facilities, and current demand.[1] The profile includes the following elements:

- Identification and description of all water sources including attributes, ages, seniority, and conditions of use.
- Identification of water supply system limitations.
- Description of the City's water rate structure and water pricing for all customer classes.
- Review of City planning initiatives and policies and any proposed new infrastructure, upgrades, or improvements.
- Description of planned growth in the City over the next 40 years including population projections and estimates of future commercial and institutional growth.
- Historical review of the City's water conservation program and activities.
- Detailed description of the City's current water conservation program and activities.

The profile of the City's water system, growth plans, conservation program, and proposed facilities will set the context and form the foundation of the water conservation plan.

Task 1.3 – Integrate Results from Water Conservation Verification Study (Project 2)

The water conservation verification study (Project 2 in this proposal) will provide key inputs to the water conservation plan. These inputs include:

[1] The water system profile Aquacraft prepared for the Fort Collins Water Conservation Plan was described by a water board member as the "best concise description" of the City's water system he had ever seen.

- An assessment of the current penetration rates of conserving fixtures and measures in the City.
- A realistic future demand and savings estimates for the City based on anticipated natural replacement rates and utility sponsored conservation efforts.

This information from the water conservation verification study will strengthen *all* subsequent analysis developed for the water conservation plan.

Task 1.4 – Develop Water Conservation Goals and Implementation Scenarios

The purpose of this task is to develop a water conservation future scenario that can be implemented in the City. Several scenarios can be developed and compared, but ultimately the City will choose one to include in the plan and present to the public and decision makers. In Task 1.5, the selected conservation scenario will be compared against the baseline scenario of no conservation program implementation. This will show the savings and benefits that can be achieved in the City through natural replacement of fixtures and appliances and through implementation of the proposed water conservation measures.

The first step in developing the final water conservation planning scenario will be to meet with City Staff to establish ***realistic goals*** for the water conservation program. These goals will depend on an assessment (using the best available information gathered in Task 1.2 and 1.3) of the current efficiency performance of the customers and what we know are reasonable efficiency benchmarks. By basing our analysis on performance standards we can avoid the pitfall of assuming that every conservation measure implementation gets reflected in lower water use. These water conservation goals will take the form of so many gallons per account per year. Next, it will be necessary to examine available water conservation and efficiency measures and programs that could be feasibly implemented to reach these goals. Starting from a list that includes both active and passive conservation practices, programs, policies, and measures that target indoor and outdoor use in all customer classes (residential, multi-family, commercial, institutional, industrial, and urban irrigation), a specific menu of measures will be selected for modeling.[2]

Only proven, cost-effective conservation measures will be included in the initial list, so the water conservation program will be built from a foundation of demonstrated techniques and technologies. Aquacraft has specialized in evaluating the impact of water conservation programs and measures for more than 14 years so we will begin this task equipped with substantial technical knowledge.

Three water conservation future scenarios will be developed, with each successive scenario, building and expanding upon the previous one. Aquacraft will develop a list of potential conservation measures for inclusion including their implementation cost, estimated water savings, required Staff time to implement, and other relevant selection criteria. Water

[2] The City may wish to model additional conservation scenarios in Task 5. Some of the conservation plans Aquacraft has prepared included multiple scenarios (with one chosen for implementation), but this can be confusing for decision makers. Including only the final chosen scenario in the conservation plan document is our recommended approach. Additional scenarios can be presented as background information. Aquacraft is happy to work with City Staff to determine what will work best.

conservation scenarios will also be evaluated for their ability to work in conjunction with planned water supply additions to ensure system reliability goals are met.

Task 1.5 – Model Conservation Scenarios and Develop Benefit-Cost Analysis

This task takes fundamental information from Project 2 – the Water Conservation Verification Study and models the probable impact of water conservation program measures.

Using the City's preferred demand projection, Aquacraft will model the 25-30 year impacts of the selected water conservation scenarios using an integrated conservation model such as the AWE conservation tracking tool or the spreadsheet model Aquacraft has developed over the past 15 years. These modeling tools allow Aquacraft to easily and efficiently determine the impact of each conservation scenario in terms of future water demands and the relative benefits and costs. The Aquacraft ICM model takes into consideration population changes as well as growth in the CII and municipal sectors. At the conclusion of the project, Aquacraft will provide the City with an electronic copy of the model.

This modeling task will provide the City with an analysis of the annual impact of each water conservation scenario by customer class. The expected water savings from each water conservation scenario will be clearly shown and the value of these savings will be calculated based on the projected avoided costs to the City for purchase, treatment, and delivery of water. It is understood that many of the City's costs are fixed and the Aquacraft team will work closely with City Staff to ensure that system cost savings are accurately represented. Benefits to the customers will be calculated based on savings in water and sewer charges.

Costs and benefits to the City and to the customers will be calculated over the 25-year modeling period and a present worth analysis will be performed so that benefit-cost ratios (from the utility and customer perspective) can be calculated. Where intangible external benefits (or costs) exist, these will be described so that the City can include these factors in the decision making process.

Task 1.6 – Revise Demand Forecasts to Incorporate Selected Water Conservation Program

This task overlaps with Project 2. The goal is to include a demand forecast in the City's water conservation plan that includes the anticipated impacts of the water conservation program selected for implementation. If the City opts to continue their program at the current level of implementation, revisions to the demand forecast may not be required. Task 2.1 of the water conservation verification study is to review current City water demand projections and methodology. Once Task 2.1 of Project 2 is complete, Aquacraft will understand how best to implement this current task.

Regardless of the outcome of the Task 2.1, the result of Task 1.6 will be a demand forecast for the City that incorporates the anticipated population growth, anticipated new demands, and estimated water savings that will be achieved in the coming years.

Task 1.7 – Finalize Draft Water Conservation Plan with City Staff

Aquacraft will work closely with City Staff to write the water conservation plan. This plan will be a blueprint for water conservation activities in the City in the coming years and will be designed to meet the requirements of the CWCB.

The plan will cover all of the topics discussed in this proposal including:

- Baseline water use in the City
- Demand projections based on future growth projections
- Demand projections under the proposed conservation scenario
- Selection of water conservation measures and programs
- Benefit-cost analysis, including the risks in delays in water acquisition and development
- Water conservation, system reliability, and drought response – understanding the linkages
- Other topics

The water conservation plan will describe the conservation program development process and will explain why certain measures were selected for inclusion in the plan. The benefits and costs of each scenario will be discussed along with information about program "intangibles" such as drought preparedness and response.

The plan will make recommendations for the most appropriate water conservation program based on input from City Staff, City government, and other interested stakeholders. These will not be consultant recommendations, but instead will reflect the consideration and input from Staff and stakeholders. The plan will also suggest reasonable and realistic demand reduction targets that could be achieved through implementation of the plan. Aquacraft will also assist in developing recommendations for ongoing monitoring of the impacts of the water conservation program once it is in place. Monitoring and verifying savings are crucial components of reliable conservation planning. The AWE Water Conservation Tracking Tool, which Aquacraft proposes to set up as part of this project, will be beneficial in the monitoring and verification effort.

Task 1.8 – Project Coordination – Project Meetings, Plan Presentation, Public Review Process, Submission of Plan to CWCB, and On-Going Technical Support

Aquacraft has extensive experience working with water utilities on research and planning projects. We will meet with the City on a monthly basis (if not more frequently) either in person or via telephone for the duration of the project. Aquacraft will attend public meetings upon request and will present findings and results.

Aquacraft proposes to include the following project meetings:

- Kick-off meeting – immediately following contract approval
- Monthly update/coordination meetings – in person when possible or via telephone
- Presentation of verification study results – upon completion of Project 2
- Presentation of draft water conservation plan – upon completion of Project 1

Aquacraft will provide on-going technical support to City Staff as the water conservation plan moves through the review process. The CWCB requires a 60 day public review period unless local ordinance specifies a different requirement. Aquacraft is happy to participate in public meetings or any other element of the review process where Staff determines our expertise might be helpful. Aquacraft is also available to assist with incorporating any recommended changes into the plan as deemed appropriate by staff.

7. Detailed Budget

A detailed budget for preparation of the water conservation plan for the City is provided in the tables below. The first table presents the hourly billing rates for all people expected to spend

time on this project. Next the total cost by task is presented. The third table presents an estimate of the hours that will be spent by each person on the project. The total cash budget for the project is $38,130 (63%). The total in-kind budget for the project is $22,486 (37%). The combined total budget is $60,616.

Hourly billing rates of Aquacraft and City of Westminster Staff

Name	Billing Rate ($/hour)
Aquacraft Staff	
Peter Mayer, P.E.	$150
William DeOreo, P.E.	$195
Leslie Martien	$90
Matt Hayden	$90
Field Technician	$55
City of Westminster Staff	
Mike Smith, Director of Public Works and Utilities	$185
Mike Happe, Utilities Planning and Engineering Division Manager	$148
Josh Nims, Water Resources Engineering Coordinator	$115
Stu Feinglas, Water Resources Analyst	$93

Estimated task and project costs for Aquacraft and City of Westminster

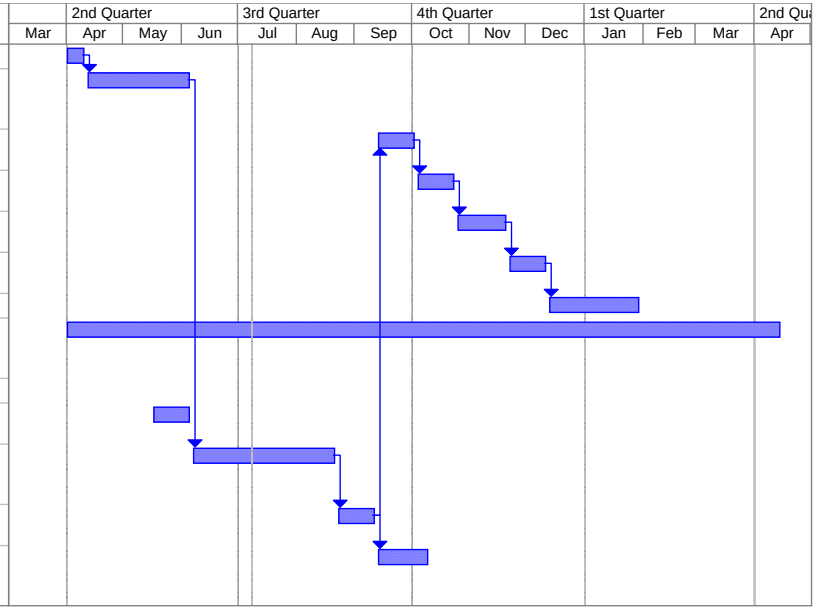
Task	Description	Aquacraft Labor	City In-Kind	Total
1.1	Apply for CWCB Water Conservation Planning Grant	NA	NA	NA
1.2	Profile City of Westminster Water System, Current Demand, Growth Estimates, Demand Projections, Conservation Program, and Proposed Facilities	$7,470	$5,657	$13,127
1.3	Integrate Results from Water Demand Verification Study (Project 2)	$1,920		$1,920
1.4	Develop Water Conservation Implementation Scenario	$4,380	$3,487	$7,867
1.5	Model Conservation Scenarios and Develop Benefit-Cost Analysis*	$10,380	$5,204	$15,584
1.6	Revise Demand Forecasts to Incorporate Selected Water Conservation Program	$2,220	$3,645	$5,865
1.7	Finalize Draft Conservation Plan with City Staff	$4,380	$2,419	$6,799

1.8	Project Coordination – Project Meetings, Plan Presentation, Public Review Process, Submission of Plan to CWCB, and On-Going Technical Support	$7,380	$2,074	$9,454
	TOTAL FOR PROJECT	**$38,130**	**$22,486**	**$60,616**

Estimated hours for Aquacraft and City of Westminster Staff

TASK	DESCRIPTION	Aquacraft Staff				City of Westminster Staff				TOTAL
		William DeOreo	Peter Mayer	Leslie Martien	Matt Hayden	Stu Feinglas	Josh Nims	Mike Happe	Mike Smith	
		(Hrs)	(Hrs)	(Hrs)	(Hrs)	(Hrs)	(Hrs)	(Hrs)	(Hrs)	(Hrs)
1.2	Profile City of Westminster Water System, Current Demand, Growth Estimates, Demand Projections, Conservation Program, and Proposed Facilities	6	30	20		18.5	22	7	2	105.5
1.3	Integrate Results from Water Demand Verification Study (Project 2)		8		8					16
1.4	Develop Water Conservation Implementation Scenario	4	24			20	9	4		61
1.5	Model Conservation Scenarios and Develop Benefit-Cost Analysis*	4	40		40	26	12	7	2	131
1.6	Revise Demand Forecasts to Incorporate Selected Water Conservation Program		10		8	19	7	6	1	51
1.7	Finalize Draft Conservation Plan with City Staff	4	24			9	7	4	1	49
1.8	Project Coordination – Project Meetings, Plan Presentation, Public Review Process, Submission of Plan to CWCB, and On-Going Technical Support	4	44			9	4	4	1	66
	Total Hours Estimated	22	180	20	56	101.5	61	32	7	479.5

ID	Task Name	Duration	Start	Finish
1	Task 1.1 – Apply for CWCB Water Conservation Planning Grant	7 days	Thu 4/1/10	Fri 4/9/10
2	Task 1.2 – Profile City of Westminster Water System, Current Demand, Growth Estimates, Demand Projections, Conservation Program, and Proposed Facilities	40 days	Mon 4/12/10	Fri 6/4/10
3	Task 1.3 – Integrate Results from Water Demand Verification Study (Projec 2)	15 days	Mon 9/13/10	Fri 10/1/10
4	Task 1.4 – Develop Water Conservation Implementation Scenario	15 days	Mon 10/4/10	Fri 10/22/10
5	Task 1.5 – Model Conservation Scenarios and Develop Benefit-Cost Analysis	20 days	Mon 10/25/10	Fri 11/19/10
6	Task 1.6 – Revise Demand Forecasts to Incorporate Selected Water Conservation Program	15 days	Mon 11/22/10	Fri 12/10/10
7	Task 1.7 – Finalize Draft Conservation Plan with City Staff	35 days	Mon 12/13/10	Fri 1/28/11
8	Task 1.8 – Project Coordination – Project Meetings, Plan Presentation, Pub Review Process, Submission of Plan to CWCB, and On-Going Technical Support	270 days	Thu 4/1/10	Wed 4/13/11
9				
10	Task 2.1 – Review Current Westminster Water Demand Projections and Methodology	15 days	Mon 5/17/10	Fri 6/4/10
11	Task 2.2 – Assess Current Customer Demand Levels and Estimate Penetration Rate of Efficient Fixtures, Appliances, and Practices	55 days	Mon 6/7/10	Fri 8/20/10
12	Task 2.3 – Assess Water Conservation Potential in Westminster and Integrate Results Into Water Conservation Plan	15 days	Mon 8/23/10	Fri 9/10/10
13	Task 2.4 – Prepare Final Report on Water Demand Verification Study	20 days	Mon 9/13/10	Fri 10/8/10



Estimated project timelines – Conservation Plan and Demand Verification Study

8. Signature with authority to commit resources for the City of Westminster

This grant application is approved and submitted by the City of Westminster by

Name, Title