DRAFT
LONG-TERM PLAN

CONSERVE FLORIDA WATER CLEARINGHOUSE

March 25, 2009

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INTRODUCTION

A dynamic five-year plan has been developed for the Conserve Florida Water Clearinghouse (http://www.conservefloridawater.org/) to focus activities in support of the six core service areas and ten objectives defined below. This plan builds upon the foundation of previous work over the past five years, including the following:

- The February 2004 "Joint Statement of Commitment for the Development and Implementation of a Statewide Comprehensive Water Conservation Program for Public Water Supply."
- Section 373.227, Florida Statutes, enacted in 2004, which directed the establishment of a comprehensive statewide water conservation program for public water supply.
- The December 2004 "Work Plan to Implement Section 373.227, F.S.,"
- The August 2005 draft "Business Plan for the Conserve Florida Water Conservation Clearinghouse for Public Water Supply."
- Progress of the Clearinghouse at the University of Florida since commencing work on April 25, 2006.

This five-year plan will help achieve key Clearinghouse Goals and Objectives, including hosting and refining the water conservation Initial Guide and EZ Guide, development and maintenance of a web-based water conservation digital library and an integrated database on water conservation, providing technical assistance in using the Initial Guide and EZ Guide, establishing and managing an active research program, and providing outreach for users. Activities for each Core Service will be defined through a task basis with corresponding budget requirements. Staffing options to ensure continued management and service support will also be presented. This information will assist in defining the Statement of Work for the Clearinghouse for future years.

This five-year plan will be updated each year, in coordination with an annual progress report.

MISSION STATEMENT

The mission of the Conserve Florida Water Clearinghouse is to develop collaborative relationships with related programs, and to collect, analyze, and make available reliable information and technical assistance to public water supply utilities and water managers for use in developing effective and efficient water conservation programs.

GOALS

The goals of the Clearinghouse are to:

- Be the premier source in Florida of water conservation information for public water supply, drawing upon information and expertise from throughout the utility sector, the water management districts, the state university system, and other sources.
- Help Florida become a national leader in water use efficiency.

- Focus directly on Florida's needs and users, but take advantage of opportunities to build on expertise and resources outside of Florida.
- Serve public water supply utilities, water management districts, and other stakeholders in improving water use efficiency.

OBJECTIVES

The Clearinghouse, when fully implemented, will satisfy the following ten objectives:

1. Host and refine an interactive, web-based, water conservation Guide to assist public water supply utilities in developing goal-based water conservation plans which are tailored to their specific service areas and meet permitting requirements.
2. Host and develop an integrated statewide database with infrastructure for the collection, evaluation, and dissemination of quantitative and qualitative information on public water supply conservation programs and practices and their effectiveness.
3. Host and develop a searchable web-accessible library of historic and current water conservation studies and reports.
4. Provide a mechanism for benchmarking water conservation practices among utilities to determine and compare their effectiveness.
5. Provide a means for water conservation professionals to obtain technical assistance for understanding, developing, and implementing effective and efficient water conservation projects or programs that will meet water management district regulatory requirements.
6. Make available analytical tools to allow the evaluation of water conservation programs and practices as an aid to selecting the best management practices. Incorporate these tools into the Guide.
7. Coordinate and maintain oversight of an applied research agenda to help develop innovative water conservation programs and practices.
8. Evaluate and enhance the water conservation Guide to improve results.
9. Publicize the importance of water conservation and the availability of Clearinghouse services to the water utility community
10. Establish and grow collaborative relationships with related programs to enhance the effectiveness of the Clearinghouse to achieve its goals and objectives.

CLEARINGHOUSE PERFORMANCE TARGETS FOR 2010

1. The Clearinghouse will seek to achieve the goal of having at least five utilities per district in the South Florida, St. Johns River, and Southwest Florida water management districts and one utility per district in the Suwannee River and Northwest Florida water management districts use the Initial Guide or EZ Guide to develop a conservation plan, or make substantial use of Guide Modules, by the end of 2008.
2. The Clearinghouse will continue development of independent or semi-independent modules for the EZ Guide with input from the water management districts and utilities on module design.

3. Refine the water audit section to include a more complete historical water use practices and a calibrated end use model of how water is being used. This model would include a macro level planning evaluation and the existing water audit.
4. Add a tracking component to the guide that compares projected and actual performance of the implemented conservation plan.
5. Have a complete version of EZ Guide that can be used for planning, cup, and tracking.

CORE SERVICES

Six services will be provided by the Clearinghouse to achieve these ten Objectives:

1. Host and refine the on-line water conservation program tool known as the Guide.
2. Continue development of a water conservation Library.
3. Continue development of an integrated Data Infrastructure.
4. Provide Technical Assistance.
5. Update and Maintain a Research Agenda/Program.
6. Provide Outreach to users.

The relationship between the ten Objectives and the six Core Services is shown below.

Core Service 1: A water conservation program tool known as the Guide.

Objective 1: Host and refine an interactive, water conservation Guide to assist public water supply utilities in developing goal-based water conservation plans which are tailored to their specific service areas and meet permitting requirements.
Objective 4: Provide a mechanism for benchmarking water conservation practices among utilities to determine and compare their effectiveness.
Objective 6: Make available analytical tools to allow the evaluation of water conservation programs and practices as an aid to selecting the best management practices. Incorporate these tools into the Guide.
Objective 8: Evaluate and enhance the water conservation Guide to improve results.

Core Service 2: A water conservation Library.

Objective 3: Host and support a searchable web-based library of historic and current water conservation studies, reports, models, and decision support tools.
Objective 10: Establish and grow collaborative relationships with related programs to enhance the effectiveness of the Clearinghouse to achieve its goals and objectives.

Core Service 3: An integrated Data Infrastructure

Objective 2: Host and support an integrated statewide database with infrastructure for the collection, evaluation, and dissemination of quantitative and qualitative information on public water supply conservation programs and practices and their effectiveness.
Objective 10: Establish and grow collaborative relationships with related programs to enhance the effectiveness of the Clearinghouse to achieve its goals and objectives.

Core Service 4: Technical assistance.

Objective 5: Provide a means for water conservation professionals to access technical assistance for understanding, developing, and implementing effective and efficient water conservation projects or programs that will meet water management district regulatory requirements.
Objective 10: Establish and grow collaborative relationships with related programs to enhance the effectiveness of the Clearinghouse to achieve its goals and objectives.

Core Service 5: Research agenda/program.

Objective 7: Coordinate and maintain oversight of an applied research agenda to help develop innovative water conservation programs and practices.
Objective 8: Evaluate and enhance the water conservation Guide to improve results.

Core Service 6: Outreach to the water utility community.

Objective 9: Publicize the importance of water conservation to and the availability of Clearinghouse services to the water utility community
Objective 10: Establish and grow collaborative relationships with related programs to enhance the effectiveness of the Clearinghouse to achieve its goals and objectives.

Brief descriptions of each of these Core Services areas are provided below.

Core Service 1: Guide

The water conservation Initial Guide was developed to aid utilities in developing goal-based water conservation programs that conserve water at least as effectively as traditional regulatory requirements. The Initial Guide includes a simple methodology for developing a utility water use profile, and for developing utility-specific conservation goals, cost-effective conservation measures and best management practices based on utility size. Based on the profile and goals, it recommends specific measures and practices for a comprehensive water conservation program. The Initial Guide also includes a standardized process for measuring and reporting results, evaluating effectiveness, and refining the program if goals are not met. The Clearinghouse has hosted the Initial Guide, including operation and maintenance of the software and database, providing access and technical assistance to users, and modifying the Guide as needed to improve its operability and content. The Initial Guide has very limited capabilities to do more in-depth analyses of water conservation components such as conducting a calibrated water budget of existing water use practices including water loss estimates, evaluating the effectiveness and expected penetration of control measures,

forecasting future demands with and without conservation, tracking the performance of implemented conservation practices, and the impact of reuse systems. These features are being added within the Initial Guide and as stand alone options for utilities. Other changes include:

- Adding a link to the AWWA Water Audit Spreadsheet as an option;
- Including procedures for calculating gpcd and other metrics that are based on the recent work of the DEP and water management districts to develop consistent methodologies;
- Adding procedures for evaluating the financial implications of various conservation rate structures; and
- Adding procedures for using customer billing data to evaluate the effeciveness of conservation practices by classifying customers.
- Commencing the development of an energy analysis procedure that will become part of the overall evaluation of the best mix of BMPs and measures.

In addition to the Master Guide, the development of the EZ Guide has provided users with a simplified option to create a goal-based water conservation plan. Data required includes historical water supplied and billed, population and potable water use projections, and a description of the study area and the customers. Features of the EZ Guide include:

- a link to the FRWA Water Audit
- streamlined data input
- simplification of Measure data input
- graphical representations of results

The EZ Guide also provides a way to identify cost-effective BMPs for implementation, track annual water use by sector, capture water loss through an audit, maintain a list of water conservation measures, track BMP implementation, and develop conservation scenarios based on a mix of BMPs.

Future work includes refining EZ Guide to facilitate its use for water supply assessments, consumptive use permitting, and tracking the performance of conservation plans..

Core Service 2: Library

The web-accessible water conservation library has been established and will continue to be enhanced over the next few years. It will continue to track water conservation programs and specific water conservation measures/practices, as well as be expanded using data collected from existing water conservation programs and practices, results of utility case studies using the water conservation Initial Guide and EZ Guide, new research conducted or supported by the Clearinghouse, and information obtained from other programs within the state university system, state agencies, the private sector, and non-governmental organizations. The library is searchable by topic, region, results, and other views. The library continues to work with other entities to expand its content, working with water management districts, utilities, the American Water Works Association WaterWiser program, the California Urban Water Conservation Council, and the National Alliance for Water Efficiency.

Core Service 3: Integrated Database with Infrastructure

An integrated database framework has been established with an infrastructure that encompasses accessibility, flexibility (accommodation of various data types and formats), reliability, and security. The data infrastructure includes a variety of databases to be accessed as part of the Clearinghouse activities. The number of databases is large, and the following are or may be included, subject to funding levels and identified needs. The Clearinghouse will work with utilities and water management districts to determine which of the following databases would be most useful in the near term and which need not be included.

- Water Use Databases from Retrofit Studies. A critical element in the Guide is the quality of the estimates of BMP effectiveness in terms of water savings and associated costs. Databases on measured water use patterns will be established, maintained, and evaluated in order to provide the most current information and guidance on BMP effectiveness. The water management districts and utilities are investing significant resources in water conservation retrofit programs. It is important to design these programs to provided definitive information on the actual effectiveness of these retrofits. This requires a careful experimental design that measures water use prior to and following the intervention so that the savings can be calculated accurately. Sub-metering may be necessary where the retrofit is a relatively small portion of the total metered water use at this site.

- Florida Department of Revenue Database. The Florida DOR database contains valuable information for every parcel in Florida. Key information includes the total parcel and developed area sizes, assessed valuations, year built, and associated GIS parcel boundaries.

- County Tax Assessors' Databases. Tax assessor databases provide information on housing including age of house, number of bathrooms and lot sizes for estimating indoor and outdoor water use. It also includes information on whether the house has a swimming pool and the assessed valuation of the house. Information in the County Tax Assessors' databases varies from county to county but they can be linked to the DOR database using a common parcel ID.

- Census Databases. Census data provide useful information on the population and economic activities in the study areas. This information is useful in estimating the number of people per house at the block level.

- Consumptive Use Permits (CUP) Databases. Summary information from these databases is available from the water management districts at http://www.floridawaterpermits.com. SJRWMD has established an e-permit system that provides a wealth of information regarding the status of permit applications including technical staff reports, conservation and reuse plans and historical water use information.

- Special Studies Databases. These databases have been developed as part of end use studies of water uses at the individual customer level, studies of the efficiency of specific water use BMPs, and profile information for selected utilities.

- Water Use Database: FDEP publishes monthly water use data for utilities in Florida going back to 1999. It is available at http://www.dep.state.fl.us/water/drinkingwater/flow.htm

- Florida Automatic Weather Network (FAWN) Database: FAWN is a useful database for estimating evapotranspiration and rainfall. It has 15 minute data starting in 1998. This information is available at http://fawn.ifas.ufl.edu/

The Library and Data Infrastructure Core Service areas will be combined in the future in recognition of the need to integrate the historical separation of text and qualitative information that is typically stored in libraries with numerical and quantitative information stored in conventional databases.

Core Service 4: Technical Assistance

The Technical Assistance function has several elements. Help desk support for people using the Initial Guide and EZ Guide has been established, with internal tracking systems in place to ensure all requests are responded to in a timely manner. This support includes providing information about Signatory agencies (such as water management district staff contacts and website links), providing personal assistance to Guide users on matters such as utility profile data collection, review of implementation results, and presentation to utility decision makers. Technical assistance also includes providing information about specific evaluation methodologies such as water audit studies. This type of technical assistance will be expanded as new evaluation modules are completed. Technical assistance will include development of training programs in the use of the EZ Guide and Guide modules. Training programs will target utilities, water management district staff, Florida Rural Water Association Circuit Riders, and consultants.

Core Service 5: Applied Research Agenda/Program

The Clearinghouse will coordinate and maintain an applied research agenda that identifies and prioritizes applied research needed to further the state of knowledge regarding effective water conservation programs and practices in Florida. The research agenda will be developed, and periodically updated, in coordination with the Conserve Florida Water participants, with input from appropriate sources including related UF programs.

To further the research agenda, and focus resources on priority areas, the Clearinghouse will provide further synthesis to document state of the art research, research gaps, and recommended studies for key priority areas identified by Conserve Florida Water.

The priority research identified in the agenda may be funded in a variety of ways. If sufficient funding is available from Conserve Florida, researchers may be funded to conduct specific

research within the annual Clearinghouse budget. In addition, the Clearinghouse team and other researchers will proactively solicit funding from other sources and coordinate proposal preparation to conduct priority research. These activities will be conducted in close coordination with ongoing national programs such as AWWARF, the California Urban Water Conservation Council, and the Alliance for Water Efficiency.

Core Service 6: Outreach

In order for the Clearinghouse to be successful, potential users and beneficiaries, including utilities, water management district staff, Florida Rural Water Association Circuit Riders, and consultants, must be made aware of its existence and the availability of the services it offers. In addition, these users also need to be consulted to assure that the Clearinghouse is providing the right mix of products and services to meet their current and anticipated needs. In coordination with the Conserve Florida participants, an outreach plan was developed that identifies, prioritizes, and implements a full range of strategies that include marketing and branding activities for Conserve Florida, recruiting strategies for Guide users, and educational outreach programs for public utilities, water management district staff, Florida Rural Water Association Circuit Riders, and consultants. Some of the avenues used to market the Clearinghouse have included booths at professional meetings, conference presentations, articles in professional journals, individual meetings with potential partners, brochures, direct mailings, workshops, and website development. The Outreach Plan will guide future activities.

COLLABORATION

The Clearinghouse will actively seek the participation and synergy of other centers, departments, and staff within the entire state university system and elsewhere to help achieve the goals and objectives of the Clearinghouse, including directly undertaking some tasks in the long-range plan, and the research agenda where appropriate and where funding is available. This could include such things as BMP evaluation and development, research, technical assistance to utilities, outreach, and benchmarking. Close links with national organizations such as Awwa and AwwaRF, CUWCC, and AWE are important to maximize the utilization of available information and data.

PLANNED ACTIVITIES

The activities associated with project management and each of the Core Service areas will be expanded over the next five years. A detailed approach for each area will be defined through a prioritized and sequential tasking plan with a corresponding budget estimate. This approach establishes the required base funding for management services, and also allows for flexibility in defining which compliment of Core Services and their corresponding tasks will be accomplished each year as funding becomes available. The cost estimates in $1,000 for the current year are indicated below.

Required Service-$70K
Certain basic functions and activities must be supported financially regardless of which Core Service areas and tasks are funded. These activities include project management oversight, project accounting, meeting support and travel, Long-Term Plan update, and maintenance of the website.

The proposed activities concerning the six core service areas are described below. Each area has defined tasks that are intended to support the mission of the Clearinghouse.

Core Service 1: Guide-$195K
The following fourteen tasks are proposed under the Guide activities, and are pertinent to both the Initial Guide and EZ Guide:

1.1 Implement and Test Priority Software Modifications-$40K
The Mantis bug tracking software is being used to prioritize software modifications. These changes will be implemented based on the priorities as determined by input from users, Clearinghouse members and staff, and the contract monitor. The Mantis list includes fixes, and adding features to the Guide. The transition to EZ Guide has reduced the level of effort needed to debug software in the Initial Guide. Accordingly, some of the programming effort can be redirected to higher priority technical improvements in EZ Guide.

1.2 Develop Guide BMP Quick Reference-$0K
Develop a document for each Guide BMP, Measure, and/or product that gives detailed background information about it and how it is currently depicted in the Guide. The product descriptions are fact sheets that describe how the product works. Much of this information is available by linking to other web sites.

1.3 Develop Performance Benchmarks-$10K
A variety of performance metrics will be evaluated, such as changes in per capita usage, penetration rates, cost effectiveness, community achievements, and volume of water saved for BMPs and measures in the Guide. Performance measures need to address the efficiency of a practice as measured in terms of water use per unit use, e.g., gallons per flush, and the conservation potential in terms of the utilization of this device, e.g., flushes per day.

1.35 Develop EZ Guide for Water Supply Assessments by Utilities and Water Management Districts-$20K
Utilities and water management districts seek to more fully integrate conservation planning into their mandated water supply assessments. The Profile section of EZ Guide needs to be extended to provide planning level estimates of current and project water use based on gpcd for residential users and gallons per square foot per month for other users. Work will continue towards a standard methodology for calculating gpcd for the Guide, based on The "uniform method" developed by DEP and the districts for calculating average gpcd has been included in EZ Guide. Gpcd works well for residential parcels. Using the DOR, Tax Assessors, and U.S. Census databases linked with billing data, it is possible to develop water use rates in terms of the size of the developed area for all non-residential users. This result is expressed as monthly gallons/square foot. Prototypes of this method have been developed and will be expanded during this year. The database activities previously

shown in Section 3 are being moved to Section 1.35 in order to better integrate the data gathering and analysis activities.

1.4 Improve Supporting Information for Measures and BMPs in the Guide -$25K
Additional work will be pursued to strengthen the substance of the Guide by quantifying cost-effectiveness and water savings for unquantified measures in the Guide and for quantified BMPs where the supporting data is weak. Significant effort is planned in providing more substantive information about the measures and BMPs, including their energy impacts, and their expected performance.

1.45 Green Lodging Program Collaboration-$20K
The Green Lodging Program has information related to designated hotels that have implemented conservation practices and fixtures. The Clearinghouse will engage this group to better quantify the effects of conservation efforts so that they may be applied against similar non-participating sized properties to evaluate potential savings opportunities. A database on water use in hotels will be developed using Florida hotels for which customer billing data have been linked with DOR and Tax Assessors databases. This will allow comparisons of water use per square foot of occupied space and how it varies based on participation in the Green Lodging Program. The method for doing this evaluation has already been developed for a test DOR category using available parcel level data from the Tampa Bay area. Initial results are very promising.

1.5 Develop a BMP/Measure Development and Certification Process-$0K
As BMPs and Measures are refined and new ones developed, a process needs to be established to incorporate them into the Guide. This process will encompass an evaluation of the new results and the benefit to the conservation program. The Clearinghouse will make recommendations for approval and implementation of new or modified BMPs. EPA WaterSense and other groups have established procedures for certifying the performance of BMPs. We anticipate relying on these efforts in the near term.

1.55 Integrate EZ Guide within the CUP Process-$25K

1.6 Develop and Implement Improved Methods for Doing Cost-Effectiveness Evaluations-$0K
The CUWCC has developed cost-effectiveness calculations for several BMPs. The City of Seattle has developed a cost-effectiveness methodology for comparing BMPs and Measures. The experience gleaned from these other efforts will be very helpful in conducting these cost-effectiveness studies. In addition, the Clearinghouse will provide recommendations on an appropriate role in addressing water conservation issues related to climate change, energy use, and GHG emissions.

1.65 Reclaimed Water and Private Well Issues-$20K
Public water use can be divided into seasonal and non-seasonal categories. Non-seasonal use is primarily indoor water use and is relatively constant over the year. Seasonal use is primarily for irrigation. An inspection of the total water use pattern over the year for a water utility shows the relative importance of these two primary end use categories. Seasonal use for a utility is heavily dependent on the proportion of the customers who rely on reclaimed water and private wells for their outdoor water use. Unfortunately, it is often difficult to get data on reuse customers. It is virtually impossible to estimate the number of customers on private wells since permits are not required for them. A good estimate of customers who are using alternative sources for outdoor water can be

obtained by careful inspection of customer billing records. Customers with lower monthly water use, e.g., less than 8,000 gallons per month, having little monthly variability in their water use, and having irrigated area can be assumed to be using other sources of irrigation water. We have developed methods for doing this evaluation for a small utility. Additional work is needed to better integrate these estimates with verification that the customers are using alternative sources. Rembold, Heaney and Koopman (2007) have refined Florida DEP's Reuse Evaluation Methodology. We propose to adapt this method to the needs of evaluating the relative cost-effectiveness of conservation practices. Reuse that is efficient and effective will increase potable quality water offset or recharge fraction. A recommendation on an appropriate role for the Clearinghouse in addressing reclaimed water issues, as proposed by the Florida Water Environment Association Utility Council, will be developed.

1.7 Modify the Guide to Distinguish Level of Detail Needed for Small, Medium, and Large Users-$25K

The data input requirements for using the Initial Guide have been identified as a challenge for some small and medium utilities. As a result, the EZ Guide was developed in cooperation with the Water Management Districts and the Florida Rural Water Association to better accommodate these utilities. The EZ Guide provides a simplified version of the Initial Guide that assists in the development of a goal-based water conservation plan. Development will continue on the EZ Guide to provide more enhancements, ease of use, and independent or semi-independent modules that smaller utilities can use without having to go through the entire Guide to assist in decision making. This will help smaller utilities evaluate conservation options and develop plans that are cost-effective and appropriate to their service area. Preliminary testing of these ideas has been done in collaboration with Florida Rural Water Association.

1.8 Develop Links to Related Topics in the Digital Library-$0K

To support users in completing the Guide, an on-line option will be developed to allow real-time access to the digital library to search for relevant data, definitions, and results on various topics. No work is planned on this topic during the coming year.

1.9 Maintain Guide Software and Host Site-$0K

The Guide software will be maintained to ensure all operations and features are active and responsive as required. This will assist in reducing unexpected downtime in daily use. The host site will also be maintained to ensure the Guide is available at all times. This item has been combined with Item 1.1.

1.95 Future Plan for Master Guide-$10K

Based on input from Conserve Florida participants and Guide users, a report recommending a plan for the Initial Guide will be developed. This plan will consider either continued improvement and support; gradual phasing out of the Guide; an expedited switchover to the EZ guide; a "hybrid" Guide; or some other option.

Core Service 2: Library- $20K

The following four tasks are proposed under the Library Core Service Category

2.1 Assess all Water Management District Libraries for Inclusion in the Clearinghouse Library-$0K
Appropriate materials from the WMD libraries have been transferred to the Clearinghouse and updates will follow. Work has been completed.

2.2 Add High Priority Reports to the Library-$10K
A wealth of other information is available, most notably from studies that have included extensive data gathering and analysis. The Clearinghouse will make recommendations for adding reports to the library and will add those desired by the Conserve Florida participants.

2.3 UF Digital Library to Facilitate Metadata Creation and Convert Key Documents into Searchable Format-$5K
The current documents in the SWFWMD and other WMD libraries are being evaluated and, when appropriate, converted to a text-based digital form using optical character recognition technology. Key publications will also need to be converted into a format for decision support systems to extract appropriate data such as pertinent equations.

2.4 Establish Links to Other Water Conservation Libraries-$5K
We are working with the UF Digital Library staff to make direct links to other libraries where feasible.

Core Service 3: Integrated Data Infrastructure-$10K
Some of the items in the Core Service 3 have been integrated with other core service activities.

3.1 Guide Users Database-$5K
The current Guide is structured to capture the data entered by utilities that use the Guide. These data can be used by others to compare their assumptions with previous users. Databases for case studies on how to use the Guide will be made available for users.

3.2 Spatial Databases-$5K
The Florida DOR GIS database is being accessed as part of the use of the DOR data. This GIS information can be combined with utility GIS databases developed by the WMDs to generate parcel level GIS coverage at the individual parcel level.

3.3 Department of Revenue and Tax Assessors Databases-$0K
The Department of Revenue and the Tax Assessors databases are a valuable source of demographic data for conservation studies. Procedures for accessing the DOR data have been developed. This database is being linked with county level Tax Assessors databases as studies are conducted. This effort has been combined with Item 1.35.

3.4 Census Database-$0K
Census data are another valuable source of information for water use studies. This effort has been combined with Item 1.35.

3.5 Consumptive Use E-Permits Database-$0K

The developing WMD e-permitting system provides an invaluable source of information for conservation studies. Exploratory studies are underway with SJRWMD on how this information can be more fully integrated into conservation studies. This effort has been combined with Item 1.55.

3.6 Special Studies Databases-$0K
Several high quality studies of water use have been done in Florida. Some of these studies have water use measurements every 10 seconds for selected households. This information has been obtained.

3.7 Develop Decision Models-$0K
Decision models are being developed as part of the EZ Guide activities. This effort is being integrated into Core Service 1.

3.8 Link Library and Database Files-$0K
Historically, paper reports were stored in libraries and the supporting data were stored in separate databases. With current technology it is possible to store disparate types of data such as text, graphic, and numerical data using common methods. No activity is planned for this year.

Core Service 4: Technical Assistance-$75K
Two Technical Assistance tasks are proposed:

4.1 Help Desk-$20K
A "help desk" has been established to assist users in completing the Master Guide or EZ Guide, answer water conservation questions, provide pertinent contact information on Signatory agencies and others, and provide relevant publications/documents per request. This includes a toll free telephone number: 866-640-9732, and an email address: info@conservefloridawater.org.

4.2 Individual Assistance for Utilities and Water Management Districts-$55K
Individual assistance will be provided to utilities and their consultants to help them prepare a goal-based water conservation plan using the Initial Guide or EZ Guide, or with interpretation and modification of goal-based water conservation programs developed through use of the Guide. This technical assistance will include providing advice on additional features that are being added within the Guide or as stand-alone modules.

Core Service 5: Research Program-$15K
The following four tasks will be performed as part of the Research Program.

5.1 Maintain/Update Applied Research Agenda-$5K
The Clearinghouse is coordinating the development of an applied research agenda to help develop innovative water conservation programs and practices. The research agenda is based on review of key documents, task group discussions, and the results of a collaborative workshop. The research agenda will be periodically updated in coordination with the Conserve Florida Water participants and input from appropriate sources including related UF programs. Activities will include maintaining an itemized list of prioritized applied research topics, a web-searchable database of on-going research that is related to designated priority areas, and links, as appropriate, with national research efforts.

5.2 Conduct Synthesis and Assessment for Priority Research Areas -$10K
As a result of the process noted in 5.1, we have initially identified and prioritized applied research needed to further the state of knowledge regarding effective water conservation programs and practices in Florida. Several theme areas were addressed:

- Water Efficient Landscapes – Residential Irrigation
- Water Efficient Landscapes – Sustainable Building/New Development
- Residential Indoor Use
- Industrial-Commercial-Institutional Use
- Utility Management Efficiency and Optimization

These themes are being addressed as part of ongoing Core Service Area 2 activities. More intensified efforts will be initiated if research funding is available.

5.3 Solicit External Sources of Support and Coordinate Proposal Preparation and Submission-$0K
Based on the identified priorities and synthesis efforts, the Clearinghouse will proactively search for and provide information on relevant funding opportunities. In addition, and as appropriate, assist with development of joint proposal to seek external funds supporting studies addressing research priorities.

5.4 Implement Priority Research-$0K
The Clearinghouse will develop a mechanism to ensure that key studies are initiated that will address the priority research areas.

6.0 Outreach-$40K
Six Outreach tasks are proposed:

6.1 Coordinate Implementation of the Outreach Plan-$$0K
An outreach plan has been developed which identifies target audiences, relevant information, communication practices, and timelines. It is anticipated that several utilities will be using the Initial Guide or EZ Guide to develop goal-based water conservation plans and will need the services of the Clearinghouse for training. In addition, educational topics will also be addressed where appropriate to support the conservation effort. This plan will be revisited on a yearly basis to ensure the appropriate audiences are reached and that the promotional materials remain relevant and effective.

6.2 Develop Promotional Materials-$5K
The Clearinghouse will develop a variety of materials to promote the Clearinghouse activities and available services. This includes an on-line brochure in a printable format, fact sheets on BMPs and measures, water conservation tips, posters, etc. Pertinent information will also be updated and available on the ConserveFloridaWater.org website.

6.3 Publicize Clearinghouse at Professional Meetings-$10K
Display materials and handouts have been developed for professional meetings in Florida and at key national meetings. We have partnered with the TREEO Center to jointly man displays that publicize the activities of the Clearinghouse. Workshops on the Conserve Florida Water program have been and will continue to be conducted at these meetings.

6.4 Recruit New Guide Users-$5K

Develop a recruiting strategy which will define the purpose, goals and tasks of recruiting. Some of those will include but are not limited to:

- Identifying the audience to recruit (large or small utilities, conservation managers, how many groups to target initially, etc)
- Recruiting methods; Phone calls, email, personal visits, distribute online or snail mail surveys, hold 'recruiting meetings or workshops'
- Develop a reporting mechanism, this could be a system which would allow communication and feedback to be disseminated to and from the Clearinghouse to the recruited groups
- Add a 'recruiting form' on the web for interested utilities to complete and submit if they are interested in using the EZ Guide

6.5 Develop Educational Materials for Utilities-$0K
Online as well as print-based materials are available from the Clearinghouse. These materials will be utilized in conjunction with the training and workshops and may serve as a reference guide once the training has been completed.

6.6 Provide In-depth Workshops/Training and Online Tutorials-$20K
Designated workshops will be established to provide in-depth training on Clearinghouse related topics. The first effort will be devoted to use of the EZ Guide. Pertinent materials have been developed with qualified instructors presenting the program. .

PROJECT BUDGET OPTIONS

A detailed breakdown of the proposed project activities for FY 2009-10 with required services and the six major service areas broken down by detailed tasks is shown in Appendix 1. The total cost for carrying out this plan is $425,000. The largest single category of expenditures of $195,000 is for Guide related activities. The majority of this funding is to improve the substantive elements of the Guide. Some of the Library ($20,000) and Data Infrastructure ($10,000) activities have been integrated with Guide activities to better link these program areas. Technical Assistance ($75,000) will focus on the Guide user community. The expenditures for Research ($15,000) allow us to continue to promote the need for additional research funding. The Outreach activities ($40,000) are a combination of web-based and in-person activities. The budget numbers in the table include the university overhead rate of 25%.

PROJECT TEAM/STAFFING

The implementation of this five-year plan will require the project team to address the diverse mix of activities shown above. The current Clearinghouse team will continue to take lead responsibility for the operation of the Clearinghouse, with assistance from TREEO, the UF Digital Library Center, and the Florida Water Institute (http://waterinstitute.ufl.edu/) The Clearinghouse team will add staff as needed to perform the various tasks.

For 2009-2010, a scope of work will be developed to implement the third year activities detailed in this Long-term Plan. The proposed six core service areas and multiple tasks will be assigned to specific individuals and groups who will be responsible for conducting the work. The Florida DEP

contract manager will have overall responsibility for coordinating Conserve Florida stakeholder input on Clearinghouse activities and conveying this information to the UF Principal Investigator. All of the UF project team will coordinate their efforts through the UF Principal Investigator.

Wherever possible, the University will seek to use university resources to leverage the Conserve Florida funds. Over time, the Clearinghouse will engage water conservation expertise at other universities, such as the Stormwater Academy at UCF and the Center for Environmental Studies at FAU.

Appendix 1

Budget Projection for FY 09-10

	Required Service	Year FY 09-10
0	**Project Management Activities**	**$ 70**
0.1	Project Management Oversight	$ 50
0.2	Current and Future Plans	$ 5
0.3	Meeting and Conference Attendance	$ 10
0.4	Maintain Website	$ 5
Item	**Core Service**	
1	**Guide**	**$ 195**
1.1	Implement and Test Priority Software Modifications	$ 40
1.2	Develop Guide BMP Quick Reference	$ -
1.3	Develop Performance Benchmarks	$ 10
1.35	Develop EZ Guide for Water Supply Assessments by Utilities and Water Management Districts	$ 20
1.4	Improve Supporting Information for Measures and BMPs in the Guide	$ 25
1.45	Green Lodging Program Collaboration	$ 20
1.5	Develop a BMP/Measure Certification Process	$ -
1.55	Integrate EZ Guide within the CUP Process	$ 25
1.6	Develop and Incorporate Improved Methods for Doing Cost-Effectiveness Evaluations	$ -
1.65	Reclaimed Water and Private Well Issues	$ 20
1.7	Modify the Guide to Distinguish Level of Detail Needed for Small, Medium, and Large Users	$ 25
1.8	Develop Links to Related Topics in the Digital Library	$ -
1.9	Maintain Guide Software and Host Site-combined with 1.1	$ -
1.95	Future Plan for Master Guide	$ 10
2	**Library**	**$ 20**
2.1	Assess all Water WMD Libraries for Inclusion in the Clearinghouse Library	$ -
2.2	Add High Priority Reports to the Library	$ 10
2.3	UF Digital Library to Convert Key Document Meta Data into Searchable Format	$ 5
2.4	Establish Links to Other Conservation Libraries	$ 5
3	**Data Infrastructure**	**$ 10**
3.1	Guide Users Database	$ 5
3.2	Spatial Databases	$ 5
3.3	Florida DOR and County Tax Assessors Databases-moved to 1.35	$ -
3.4	Census Database-moved to 1.35	$ -
3.5	Consumptive Use E-Permits Databases-moved to 1.55	$ -
3.6	Special Studies Databases	$ -
3.7	Develop Decision Models-moved to Core Service 1.	$ -
3.8	Link Library and Database Files	$ -
4	**Technical Assistance**	**$ 75**
4.1	Help desk	$ 20
4.2	Individual Assistance for Utilities and Water Management Districts	$ 55
5	**Research**	**$ 15**
5.1	Maintain/Update Applied Research Agenda	$ 5
5.2	Conduct Synthesis and Assessment for Priority Areas	$ 10
5.3	Solicit External Sources of Support and Coordinate Proposal Preparation and Submission	$ -
5.4	Implement Priority Research	$ -
6	**Outreach**	**$ 40**
6.1	Coordinate Implementation of the Outreach Plan	
6.2	Develop Promotional Materials	$ 5
6.3	Publicize Clearinghouse Activities at Professional Meetings	$ 10
6.4	Recruit New Guide Users	$ 5
6.5	Develop Educational Materials for Utilities	$ -
6.6	Provide In-Depth Workshops/Training and Online Tutorials	$ 20
	Yearly Total	$ 425