



Developing a Framework for an

# Alliance for Water Efficiency **Issues & Options**

December 31, 2005 Report to the U.S. Environmental Protection Agency



### **TABLE OF CONTENTS**

Introduction	3
History of Water Efficiency	3
Efficiency Trends and Issues	8
Plumbing Standards	8
Plumbing Codes	9
Product Labeling	11
Green Building	12
Waterwiser	14
Why a National Water Efficiency Organization?	18
The Need for a National Platform	18
EPA Grant	19
Project Tasks	20
Research on Efficiency Organization Structures	21
Water Efficiency Organizations	21
Energy efficiency Organizations	27
Green Building and Other Relevant Organizations	31
Observations on Organizational Structure and Mission	32
Stakeholder Input	35
Stakeholder Recruitment	35
Workshops and Survey Results	36
Regional Workshops	37
Regional Workshop and Web Survey Results Summary	38
Conclusions and Recommendations	42
Focus Group Results	44
Key Focus Group Findings	45
Additional Observations	45
Findings on Core Mission	47
Findings on Function	47



# Alliance for Water Efficiency: Issues & Options DRAFT Report to the U.S. Environmental Protection Agency

Sister" Organization Interviews	. 55
tructure and Governance for A National Organization	.59
hoosing the Structure	. 59
hoosing the Name	. 60
hoosing the Mission Statement	. 62
hoosing the Location	. 63
hoosing the Board of Directors	. 65
ecruiting Membership	. 66
aking Decisions	. 67
ecommendations for Organization Functions	.69
. Clearinghouse/Network	. 70
Plumbing and Standards	. 77
Product Investigation, Testing, and Classification	. 79
Green Building Coordination	. 81
Training for Conservation Professionals	. 83
Consumer Education	. 85
. Market Transformation and Labeling	. 87
Advocacy and Legislative Action	. 88
ecommendations for a Five Year Plan and Budget	.91

#### **Appendix**

- 1. Acknowledgements
- 2. Project Contract
- 3. Project Budget and Expenditures
- 4. Web Site Pages
- 5. Stakeholder Lists
- 6. Workshop and Survey Report
- 7. Focus Group Summary
- 8. Legal Analysis
- 9. Stakeholder Research Funding List



#### INTRODUCTION

#### History of Water Efficiency

During the last half of the twentieth century, robust economic growth and population expansion led US cities and towns to triple the amount of water withdrawn from natural sources such as rivers, lakes, and groundwater aguifers for public water supplies. From 1950 to 1980, the rate of these withdrawals increased more rapidly than population growth, resulting in substantially higher per capita consumption. Since 1980, however, the US has enjoyed stable to slightly declining per capita consumption of public supplies. These last two decades have seen urban water use become *more efficient*.

Water use efficiency is no accident, and the scope and pace of efficiency improvements are the result of both economic and social factors as well as public policy. As the cost of public water and wastewater infrastructure has increasingly shifted back to states and localities, virtually every state in the nation has a stake in seeing water used more efficiently. Important federal goals -- including the provision of safe drinking water, the maintenance of economic competitiveness, and the protection of endangered species -- are also advanced by cost-effective improvements in water use efficiency.

#### Efficiency in Response to Drought

Although conditions during the Dust Bowl years of the 1930s remain the drought of record for many parts of the country, the last 50 years have seen severe multi-year droughts reoccur in many states. Northeastern states were struck by severe drought The rapid depletion of water supplies for major urban centers was especially worrisome, and resulted in massive public education appeals to reduce water consumption. Unwashed New York City transit buses served as rolling billboards for the water conservation message. Such curtailment of water use, however, does not necessarily lead to long-term gains in water use efficiency.

California experienced severe drought conditions during 1976-77. In addition to utility appeals for consumer conservation, this drought encouraged the reconsideration of the water consumption of household plumbing products. At the urging of water utilities, the American Society of Mechanical Engineers established a performance standard of 3.5 gallons per flush for a so-called "water saver" toilet in 1978. Over the next decade, this metric was incorporated into most state plumbing codes, gradually eliminating from the market the earlier designs using 5 to 7 gallons California also acted at this time to set a flow rate standard for per flush.

showerheads of 2.75 gallons per minute, in the interest of saving both energy and water.

Technology did not remain static, however. Sensing an emerging demand for water-saving products, by the mid 1980s several US plumbing manufacturers introduced new models of toilets designed to operate with 6 liters, or 1.6 gallons, per flush. These products were designed to compete for efficiency-oriented customers in a market niche once occupied solely by European imports.

Serious drought returned during 1987-93. Beginning on the West Coast, drought spread across much of the eastern half of the US by 1988. Severe drought conditions persisted in California and the Southeast well into the early 1990s. In 1988, Massachusetts became the first state to adopt a further tightening of water use standards for plumbing products, including a 1.6 gallon per flush standard for toilets, and this action was quickly followed by Connecticut, New York, California, Georgia, Texas, and a dozen other states. Facing a balkanized national market, US plumbing manufacturers and distributors joined with water utilities and environmental groups in supporting uniform national standards for new toilets, urinals, showerheads, faucets, and faucet aerators as part of the Energy Policy Act of 1992. Most of these standards took effect by 1994.

Some members of the House of Representatives later advocated a repeal of these standards, but in April of 2000 a repeal bill was rejected by the Energy & Commerce Committee. An *ad hoc* coalition of water utilities, environmental groups, and plumbing manufacturers -- essentially the same coalition that supported enactment of the original standards -- worked diligently together for at least four years to help turn back this threat to water efficiency gains.

#### Water Efficiency Co-Benefits with Energy Efficiency

Oil supply disruptions and price spikes during the 1970s and 80s encouraged greater attention to the benefits of energy efficiency. One result was the enactment of the National Appliance Energy Conservation Act in 1987, which set specific energy efficiency standards for most major household appliances, as well as a framework for revising standards further. Residential dishwashers and residential clothes washers, which together account for about 25% of residential indoor water use, were both included in this program.

A large portion of the energy use of clothes washers and dishwashers is derived from their use of hot water. Consequently, improvements in their water efficiency can contribute to reductions in energy consumption. In the case of new dishwashers, water consumption for all machines shipped from 1993 to 2004 declined in rough proportion to reductions in energy consumption. In the case of clothes washers, however, there are more paths to energy efficiency than simply water efficiency, and

early energy efficiency standards left many models on the market with little improvement in water efficiency. More recently, however, significantly improved energy efficiency standards were adopted in 2000 and scheduled to take effect in stages in 2004 and 2007. These standards, which were anticipated by the industry as early as 1994, are encouraging a resurgence of interest in horizontal axis washers and the development of more efficient agitation for top-loading vertical axis washers. Significant water savings will be achieved by most washers meeting the 2007 standards.

The *Energy Star* program of voluntary labeling of energy efficient products has provided an additional incentive for manufacturers to produce products that are significantly more efficient than meeting the minimum standards. As of this writing, the Department of Energy has already approved incorporation of water efficiency criteria for Energy Star clothes washers, and is still actively considering eligibility criteria for Energy Star dishwashers. If approved, highly water efficient dishwashers are likely to join efficient clothes washers in gaining additional market share in the near future.

#### Regulatory Drivers for Broader Efficiency Programs

As water-efficient technology has improved and become more widely available, environmental problems exacerbated by high levels of water consumption or wastewater discharge have caught the attention of regulatory agencies. The water quality and wastewater treatment objectives of the Clean Water Act have been linked across the country to improved water use efficiency, and these linkages have led to pioneering water efficiency programs that have received national attention. Examples of these efforts are the cities of New York, San Diego, Los Angeles and San Jose: cities where wastewater treatment and water quality crises were resolved through implementation of water efficiency programs.

During the postwar period, New York City saw three decades of steady growth in water consumption. By 1990, five of the city's 14 wastewater treatment plants were exceeding the discharge volumes specified in state permits. New York State began to insist that proven water efficiency measures be written into permit extensions and consent decrees. The result has been an ambitious series of measures, including the elimination of unmetered service connections, the adoption of plumbing efficiency standards, an increased program for utility distribution system leak detection and repair, the installation of 30,000 hydrant locks, and a \$300 million customer rebate program responsible for replacing 1.3 million inefficient toilets with efficient new models. From its peak in 1988 through 2003, New York City's per capita water consumption has declined by 34% and its total water consumption by 26%. Wastewater discharges have been similarly reduced.

Wastewater treatment issues also lead to early water conservation programs in California, including San Jose, San Diego, and Los Angeles. The need to reduce excessive discharges led San Jose to pioneering work with residential water audits and plumbing retrofit kits in the mid 1980s. Los Angeles faced similar regulatory concerns over excessive discharges at the city-run Hyperion Wastewater Treatment Plant, one of the largest in the United States. In addition, a long-running challenge to the amount of water taken by the city from the Mono Lake basin was resolved by state regulators in 1995, increasing the need for the city to make more efficient use of its remaining water supplies. San Diego faced litigation to reduce ocean discharge of partially treated wastewater. Both cities developed comprehensive programs involving conservation pricing, separate metering for large landscape irrigation, and substantial customer rebates for water efficient products. San Diego undertook a complete plumbing retrofit of all city-owned facilities, from neighborhood centers to Qualcomm (Jack Murphy) Stadium.

State regulatory proceedings concerning water quality in California's Bay-Delta System led directly to a negotiated agreement on water conservation between major water utilities and environmental groups in 1991. The resulting "Memorandum of Understanding Regarding Urban Water Conservation in California" contains an enumerated list of Best Management Practices that all signatory water agencies -- now numbering over 200 -- agree to implement to the extent cost-effective on the utility system. Over \$100 million per year is currently being spent by signatory agencies to implement these cost-effective BMPs.

Elsewhere, the imperatives of interstate river basin allocations have encouraged local water efficiency programs in Virginia, Georgia, Illinois, Nevada, and Utah. The Delaware River Basin Commission, an interstate compact commission, was an early adopter of water conservation requirements for water suppliers under its jurisdiction in Delaware, New Jersey, New York, and Pennsylvania.

#### Infrastructure Needs Encourage Greater Investments in Efficiency

Perhaps the most forceful factor to emerge in recent years to encourage an expansion in water use efficiency is the growing awareness of the cost of maintaining the current level of water consumption. In 1997, the first national assessment of investment needs for drinking water infrastructure, along with an updated wastewater investment needs survey, were presented to Congress by the EPA. Taken together, these two reports identified measures costing nearly \$280 billion that would be needed to protect public health and accommodate growth over the next 20 years. A significant portion of this investment -- over \$200 billion of it -- would be for

facilities and equipment where the volume of water or wastewater flow affects their required size and cost.1\*

Subsequent needs surveys and additional analyses have validated these findings. In 2002, EPA's landmark Gap Analysis report, using less limiting -- and more realistic -- criteria than previous needs surveys, found that drinking water and wastewater utilities are expected to face capital requirements of some \$274 billion and \$388 billion, respectively, through 2019. According to the EPA, the gap between necessary investments and current levels of revenue may reach \$102 billion and \$122 billion respectively.

EPA has recognized that reductions in water demand can lead to the deferral or downsizing of water and wastewater capital projects. In a widely noticed speech to the water industry in January 2003, then Assistant Administrator Tracy Mehan referred to water efficiency as one of the "four pillars" of sustainable water infrastructure. Mehan spoke approvingly of cities that had reduced their water use by as much as 20% and not yet exhausted all their options.

New policies have been put in place that underscore the importance of water use efficiency for managing infrastructure needs. In 2000, the Office of Water issued policy guidance clarifying that funds from the Clean Water State Revolving Funds may be used for water efficiency measures, including investments on the customer's side of the water meter, as well as reasonable administrative costs. In 2003, this policy was reaffirmed and extended to the Drinking Water State Revolving Fund. Together, these two funds are the main source of ongoing capital assistance to the nation's water and wastewater utilities.

<sup>&</sup>lt;sup>1</sup> For drinking water utilities, capital improvements pertaining to transmission, treatment, storage, and source waters are positively related to water demand, either average demand, peak demand, or both. For wastewater utilities, expenditures for secondary treatment, advanced treatment, interceptor sewers, and combined sewer overflow are positively related to the volume of wastewater flows. These relationships are not linear, but reduced demands will tend to reduce the capital costs of these types of works.

#### **Efficiency Trends and Issues**

#### **Plumbing Standards**

Plumbing Standards are a key avenue to advancing water efficiency in plumbing fixtures. The National Energy Policy Act sets maximum flow standards for showerheads, faucets, urinals, and toilets, but how those standards are manifested in fixtures is a function of standard setting. Since 1994, water utilities are increasingly becoming more aware of and involved in this standard setting process, but overall the water efficiency community needs a better understanding of how and why these standards function if they are to have an impact on improving water efficiency in the affected fixtures.

The standards are developed and administered in a complex process. The American Society of Mechanical Engineers (ASME) and the International Association of Plumbing and Mechanical Officials (IAPMO) are both accredited by the American National Standards Institute (ANSI) to develop U.S. standards for plumbing fixtures and fittings. Within these organizations, the ASME A112 and IAPMO Z124 committees are developing and maintaining standards related to toilets, urinals, showerheads, faucets, pre-rinse spray valves, and other fixtures and fittings used in indoor plumbing systems.

Standards committees and project teams are comprised of a variety of stakeholder interests, and are required by ANSI to maintain a "balance" of those interests. As such, these groups include representatives of manufacturers, laboratories, government, private sector consultants, and others. Unfortunately, with the exception of California's water conservation interests, the water utility sector nationally has generally not been able to represent itself at the "standards table," thus leaving these discussions largely to the manufacturers themselves.

With more proactive involvement of water conservation interests, plumbing fixture standards could evolve toward more efficient products. Examples include reducing the urinal flush volume maximum from 1.0-gallons to 0.5-gallons, modifying the standard to enable the introduction of 1.0-liter flushing urinals, and refining the standard for pre-rinse spray valves. If implemented, each of these actions could significantly affect indoor water consumption throughout the country. In order to achieve such successes, however, the water conservation community would need to significantly increase its role in the national standards setting process.

There are numerous committees that develop plumbing fixture standards, such as the following:



- ASME/ANSI A112.19.2 Vitreous China Plumbing Fixtures
- ASME/ANSI A112.19.5 Trim For Water Closet Bowls, Tanks, and Urinals
- ASME/ANSI A112.19.14 Dual Flush for 6-liter Water Closets
- ASME/ANSI A112.4.7 Point of Use and Branch Water Sub-Metering Systems
- ASME/ANSI A112.19.19 Vitreous China Non-Water Urinals
- ASME/ANSI A112.18.1 Plumbing Supply Fittings
- IAPMO/ANSI Z124 Plastic Plumbing Fixtures

#### **Plumbing Codes**

In addition to Plumbing Standards, Plumbing and Building Codes play an important role in governing water efficient products. Codes are promulgated by code authorities and adopted by jurisdictions in order to protect the health and safety of the citizens. Whereas the national standards approved by the American National Standards Institute are voluntary consensus-based standards, the codes (which may or may not adopt the national standards by reference) are mandatory within the jurisdiction that adopts them.

Several areas are of current interest to water-efficiency practitioners. For example, research is underway to investigate hot water distribution systems within residential dwellings. The ultimate goal is to amend the building codes to require that certain innovative design and construction practices be used in new residences in order to reduce the amount of energy lost (and water lost) currently being experienced with existing construction practices. A second area of current interest is that of non-water urinals, where language and technical provisions effectively prohibit their installation in many municipalities and areas.

The process of amending plumbing codes to achieve resource efficiencies is laborious, usually contentious, and in need of support from the water stakeholders. Representation by the water utility interests in the plumbing code development process is necessary to ensure that water efficiency is considered a priority and to offset a trade reluctance to make any change that does not deal only with the health or safety of citizenry. Examples of past debates during the codes process include amendments that would allow for non-water consuming urinals, or that would provide for changes to construction practices relating to hot water piping in residential dwellings. Becoming engaged in the code development process is a necessary first step to addressing some of the inherent inefficiencies in existing water delivery systems and the code language itself.

Like the standards process, the codes process is complex. There once were five different plumbing code development organizations in the U.S.; mergers have thankfully reduced this to only two organizations. The International Association of

Plumbing and Mechanical Officials (IAPMO) produces the Uniform Plumbing Code (UPC). The International Code Council (ICC) produces the International Plumbing Code (IPC). In general, the IPC is more prevalent in the eastern part of the US, and the UPC is more prevalent in the west. Both codes are a result of constant amendments of plumbing codes written in early part of the 1900s. Usually the authoring organizations have a 3-year development cycle to update their respective codes. When the new updated version of the code is published, IAPMO and ICC encourage all of the jurisdictions to adopt the newest version of the code.

The plumbing codes themselves have no legal status until adopted by jurisdictions such as cities, counties and states. Where adopted, the codes become as local ordinances and laws. All jurisdictions can amend the code before and after adoption, and some do this to better suit local conditions. For example: a city in a Montana would probably amend the code to increase measures to protect pipes in buildings from freezing in harsh winters, while a city in Florida might require measures to resist the corrosive conditions of brackish water prevalent in the area. Except for these special conditions, jurisdictions usually adopt the code of choice (UPC or IPC) as it is written. Each of the codes contains more than 400 pages of complex requirements; unfortunately, few jurisdictions have the ability to review and analyze every single provision before adopting the code as law.

The basis of the codes dates back to the early 1900s when water was plentiful in high population areas. The lack of proper sanitation was of greater concern, as disease was rampant in large cities. Water was needed to move the waste out of the cities -- and water was considered a cheap and plentiful resource. While the codes have been updated through the years to reflect federal laws (such as the National Energy Policy Act), the codes have never implemented measures solely to ensure water efficiency. In the past, sanitation and safety was the primary directive of the IAPMO and ICC, not water efficiency. In fact, many code provisions aid and abet excessive water use. In a few cases, provisions in the code have been included to purposefully deter the advent of water conserving plumbing products and appliances. A few examples include:

- The Federal Energy Policy Act (EPAct) of 1992 sets maximum flow rates for single showerheads, but a new trend of multiple showerheads is growing. Most large home centers now sell shower neck adapters that allow multiple showerheads to be installed in a single shower. Another new trend is "home spas"; entire shower stalls designed with multiple showerheads throughout. There are no current code provisions to prevent this alarming trend. More importantly, code requirements for minimum pipe sizing and drain line sizing are being intentionally oversized to allow showers to be retrofitted with multiple showerheads.
- The UPC does not adequately allow non-water using urinals. It is understandable the code did not originally anticipate non-water urinals; it is regrettable, however, that the UPC has declined petitions to incorporate this technology through two revision cycles when



non-water urinals have proven to be safe and sanitary plumbing fixtures in use throughout the nation. Recently, special interest groups have succeeded in adding provisions to completely eliminate the allowance of non-water urinals, despite petitions and protests from numerous water agencies.

#### **Product Labeling**

The extraordinary success of the ENERGY STAR® labeling program has led numerous water efficiency stakeholders to yearn for a similar water efficiency labeling and market transformation program that would provide consumers a guide to purchasing the most water-efficient products and appliances available. This desire became strong during the national standard setting for clothes washers, where it became clear that setting a modified energy factor standard in no way guaranteed water efficiency in those same energy-efficient machines. To their surprise and embarrassment, water utilities that provide rebates to customers purchasing energy star washers learned quickly enough that clothes washers with an ENERGY STAR® rating could have a water factor of as high as 13.2 As a result, efforts were made to develop water factor standards for clothes washers in individual states such as California, and water factor standards for clothes washers in the ENERGY STAR® label itself. Both of these efforts were successful.

This experience only served to further encourage the consideration of a possible companion water efficiency label to the highly recognizable ENERGY STAR® label. Discussions began in earnest in 2002-2003 among various water and environmental stakeholders. Concurrent with these discussions was an analysis within the EPA Office of Water to investigate ways to enhance the market for water-efficient products, including considering a product labeling program. The concept quickly gained momentum, as demonstrated by the following chronology of events:

- July 22, 2003: Mayor of Seattle, President of Friends of the Earth and over 100 organizations sent letter of support for a national water-efficient product labeling program.
- September 4, 2003: In a press release, EPA announced plans to develop a national, voluntary market-based program for promoting water-efficient products, with a strong consideration of labeling.
- October 2003 April 2004: EPA held four stakeholder meetings to get input on program feasibility, design, and focus. EPA also solicited comments from stakeholders.
- April 2004: EPA began market and technical research to begin developing a framework for the program and to identify categories of water-using products with a high potential for inclusion in this program.

<sup>&</sup>lt;sup>2</sup> A water factor is the number of gallons required to wash one cubic foot of clothing. Water Factors can range from a low of 5 to a high of 13.

Work on the "Water efficiency market enhancement program" is well underway. To identify water-efficient products that are suitable for a market enhancement program, EPA is focusing on the following:

- Understanding the products and their performance;
- Understanding how consumers use these products;
- Developing methodologies for estimating expected water savings and environmental benefits associated with these savings;
- Demonstrating the sustainability of the water savings; and
- Determining whether the product will benefit from a market enhancement program.

To accomplish these tasks, EPA has evaluated a list of potential products, identified 14 high-priority product categories, and conducted an evaluation of the market conditions for each of the high-priority products. EPA is currently as of this writing developing a process for selecting and evaluating products under this program and for each product selected, identify appropriate testing protocols. A *Voluntary Product Labeling Program Report*, posted on EPA's web site, was prepared in July, 2004 summarizing relevant information from EPA's and the Department of Energy's ENERGY STAR® program and Australia's Water Conservation Rating and Labeling Scheme and other key factors, which stakeholders identified through a series of meetings, that EPA should consider in designing this program to promote water-efficient products and systems.

EPA also conducted a series of 10 focus groups across five cities and rural areas throughout the United States to gather qualitative information to assist in developing program and brand labels that would encourage people to purchase more water-efficient products. Interestingly, these focus groups recommended a water label as a "sister brand" to the ENERGY STAR® label and could correspondingly be called "Water Star." The Focus Group Findings Report is posted on the EPA web site.

#### **Green Building**

There is a clear link between the efforts of the water efficiency community and the burgeoning green building movement. Particularly in residential green building programs, a significant opportunity exists for partnership in areas of hot water plumbing design, ultra-high efficiency plumbing fixtures and appliances, and outdoor landscaping design. Unfortunately, this partnership has not yet been successfully explored. Most green building initiatives focus on energy efficiency and sustainable materials construction. Water efficiency is not yet a prominent piece of any existing green building program, although that is thankfully beginning to change.

The United States Green Building Council (USGBC) has been a leader in the green building movement. Their LEED program (Leadership in Energy and



Environmental Design) is the most prominent and well-known of the green building programs. There are, however, a number of other green building standards either extant or emerging. These include those supported by well-known organizations such as the American Institute of Architects (AIA) and the National Association of Homebuilders (NAHB), as well as those by lesser-known organizations such as the Building Industry Professionals for Environmental Responsibility (BIPER).

The issues surrounding water efficiency in the LEED program are typical of all prominent green building programs. The LEED scoring system uses 34 performance-based credits worth up to 69 points, as well as seven prerequisite criteria divided into six categories:

- 1. Sustainable Sites
- 2. Water Efficiency
- 3. Energy and atmosphere
- 4. Materials and resources
- 5. Indoor Environmental Quality
- 6. Innovation & Design Process

Although the second category, Water Efficiency, is specifically dedicated to water resources, it only represents eight of the possible sixty-nine points. Other categories do include considerations for water usage, but not from a pure water efficiency perspective. For example, category one, Sustainable Sites, includes points for Storm Water Rates and Treatment as well as Natural Habitat.

Green building water conservation strategies under LEED and other similar programs typically fall into four categories:

- Efficiency of potable water through better design/technology.
- Capture of gray water non-fecal waste water form bathroom sinks, bathtubs, showers, washing machines, etc. and use for irrigation.
- On-site storm water capture for use or groundwater recharge.
- Recycled/reclaimed water use.

The U.S. Green Building Council estimates that a 30% indoor and a 50% outdoor water savings is possible and commonly achieved. Irrigation and Water Use Reduction are two of the most common "points" earned by LEED aspirants. However, as the recognized leader in the green building movement, the USGBC program seems to be most often criticized for its lengthy and bureaucratic revision process, which takes years for changes to be made in the LEED criteria. A workgroup has been formed to

<sup>&</sup>lt;sup>3</sup> Costing Green: A Comprehensive Cost Database and Budgeting Methodology; Lisa Fay Matthiessen and Peter Morris; Davis Langdon; July 2004.

recommend changes to the points awarded for water efficiency, and a new revised set of LEED criteria may have water efficiency changes sometime in 2007.

#### <u>Waterwiser</u>

The internet and the World Wide Web have helped to make the concept of a central clearinghouse and water efficiency network attractive, feasible, and accessible to people from across the country and around the world. Similar resource efficiency organizations such as the Consortium for Energy Efficiency (CEE) and the California Urban Water Conservation Council (CUWCC) have a prominent web presence and use the internet as an integral communication tool.

As such, the idea of a central clearinghouse for water efficiency - particularly an electronic one -- is not a new idea. *WaterWiser*, a water efficiency clearinghouse web site (www.waterwiser.org), has been in existence for more than 10 years. However, *WaterWiser* as it now exists would not likely meet the needs or the promise of the national water efficiency organization, although it may be desirable to build upon its foundation.

Created with a federal grant awarded in early 1993, *WaterWiser* (<a href="www.waterwiser.org">www.waterwiser.org</a> or <a href="www.awwa.org/waterwiser">www.awwa.org/waterwiser</a>) was designed as a national water efficiency clearinghouse, and has been housed since its inception in the offices of the American Water Works Association (AWWA) as a resource for the AWWA Water Conservation Division. The site was created and went live in 1995, with one permanent staff person to manage the information and maintain the site. As a result of its history, *WaterWiser* has a long standing intimate relationship with the AWWA and the Water Conservation Division. The *WaterWiser* trademark and URL are owned by AWWA; the web site architecture and content are maintained by the AWWA web team in close coordination with the *WaterWiser* Steering Committee, a working committee of the Water Conservation Division.

The original vision for *WaterWiser* was of a self-supporting clearinghouse to meet the needs of the rapidly growing water conservation profession. The founders hoped that *WaterWiser* would at least partially support itself through advertising, sales of reference documents, and membership dues. In reality, the web site generated little revenue aside from the large establishment grants it received. Were it not for the beneficence of AWWA, *WaterWise*r would have remained virtually static or disappeared from the World Wide Web after only a few years.



Figure 1: WaterWiser homepage, 10-5-2005

In 2001, AWWA began the process of formally integrating *WaterWiser* into its larger family of web sites. The integration process wasn't fully completed until 2003. During the integration, the *WaterWiser* site was completely redesigned and modeled on the newly redesigned AWWA home page. As shown in Figure 1, the *WaterWiser* home page now appears under the AWWA banner, and links to the AWWA web site are featured prominently across the top of the page. The entire look and feel of the site is designed to fit in with the AWWA family of web sites.

Through this process of integrating *WaterWiser* into the AWWA family of web sites, the role of the *WaterWiser* Steering Committee evolved from that of perfunctory advisory group to active editorial board with full responsibility for content generation. The steering committee still meets bi-monthly and plays an active role in the development of content and features for the web site. The AWWA web team does not make any changes to the *WaterWiser* site without first consulting the steering committee. Almost all modifications to the *WaterWiser* site since the integration have been initiated at the steering committee level.

Integration within the AWWA site enabled easier and more frequent updates to the content on the *WaterWiser* home page. In November 2001, the *WiserWatch* newsletter debuted on *WaterWiser*. Since then, *WiserWatch* has appeared 6-8 times per year offering current news and information to the users of *WaterWiser*. This newsletter is currently produced with the volunteer labor of the *WaterWiser* Steering Committee, but is implemented on the web site by the AWWA web team.

WaterWiser is one of the most visited areas of the AWWA web site, ranking only behind the main AWWA home page content and the QualServe section. WaterWiser typically has about 6,000 unique visitors per month (200 per day). Usage statistics from September 2005 are as follows:

- 6,073 unique visitors
- 7,471 visits
- 28.54% international visits
- 14,054 page views
- Average visit duration 00:05:37

Table 1 shows a list of possible clearinghouse and networking site features and indicates which of these is currently implemented on *WaterWiser*. Of the 20 possible content areas in the list, 11 are currently implemented (at least in some way) on *WaterWiser*. Particular areas of weakness for the current *WaterWiser* site include information for consumers, landscape professionals, manufacturers, information on products, and an advocacy center. The searchable reference section of *WaterWiser* is strong as it relates to AWWA publications and conferences, but rather weak and out of date when it comes to non-AWWA sources. The steering committee is working to improve the reference section in 2005-06.

# **Table 1: WaterWiser Site Features and Missing Elements**

Site Features	Currently on	Comments
	WaterWiser?	
Searchable References	Yes	Good reference of AWWA related materials. Weak for other sources. Many documents must be purchased. Limited free or fee download availability.
Water Efficiency Information for:		
• Consumers	Yes	Very limited information in the "Consumer Water Center" section of AWWA site. Prominent links to www.h2ouse.org.
<ul> <li>Landscape professionals</li> </ul>	No	5
<ul> <li>Conservation professionals</li> </ul>	Yes	This is the target audience for WaterWiser.
<ul> <li>Water industry</li> </ul>	Yes	Water loss pages, other info.
<ul> <li>Manufacturers</li> </ul>	No	
• Others	No	
News	Yes	Bi-monthly WiserWatch newsletter, homepage
Calendar	Yes	
Links	Yes	
Standards reference	No	
Green building	No	
Product information	No	
Consulting services	No	
Drought preparedness and response	Yes	Very limited information found on AWWA site. Links to other more extensive drought sites available.
Water efficiency search functions	No	
Networking tools	Yes	Relate specifically to AWWA Water Conservation Division
On-line discussion forum	Yes	
E-commerce portal	Yes	Portal to the AWWA bookstore
Advocacy center	No	

#### Why a National Water Efficiency Organization?

#### The Need for a National Platform

This report and the project it describes sprang from a central premise -- that most communities across the country would benefit from higher levels of investment in water efficiency. Over the long run, water and wastewater utilities and their customers will face lower total costs and pay lower total bills if cost-effective opportunities to improve water use efficiency are fully explored. If this is true, or even partially true, then there is a need for a national water efficiency organization.

Water efficiency can be as simple as a child learning to turn off the tap while brushing her teeth and as complicated as the real-time chemical, biological, and hydrological balancing act that goes on in a cooling tower sump being optimized for water efficiency by maximizing its cycles of concentration. Fully exploring water efficiency opportunities involves identifying, evaluating, financing, implementing, and monitoring a broad array of conservation measures and practices. Many professional disciplines must contribute, and collaboration across jurisdictions is often critical for economies of scale. The water supply may be local, but the water discharge regional, the building products national, the ornamental plants from Mexico, and the appliances increasingly from China. No one locality is likely to generate sufficient expertise to capture all its conservation opportunities without tapping outside assistance. And to the extent that the market for efficient products and services expands, the costs of efficient goods and services delivered in higher volume are likely to decline, thus opening up further opportunities for cost-effective investment in water efficiency.

Public policies are both part of the problem and part of the solution. Water efficiency programs today benefit from policy choices of a decade ago, and yet are hobbled by still other choices made 40 years ago. Stakeholders surveyed for this report expressed a strong interest in technology and public policy, in public information and in professional development. If those who share the goal of improving their community's water efficiency are willing to collaborate, their local goals will merge into improving the water efficiency of the nation. This whole may not be greater than the sum of its parts, but a nationwide collaboration on water efficiency programs and policies will surely strengthen many existing local programs and open opportunities for new ones. A national water efficiency organization can institutionalize that collaboration on projects that include water use data collection, efficiency research and development, product specification and promotion, efficiency standards, building code upgrades, water system accountability, distribution system enhancements, improved billing and consumer education, and new analytical tools for evaluating all of these measures.



The simple reality is that there is no organizational structure currently in place that is "home" to all water efficiency activities and to all the stakeholders that might otherwise contribute to their accomplishment. Many local efficiency practitioners, having initiated a few basic programs, want to ratchet up their efficiency gains to the "next level." For them, and for the nation, there is a need for a national water efficiency organization, similar to the national organizations that exist for energy and other resource areas.

#### **EPA Grant**

During the Spring of 2004, discussions began to crystallize around the idea of creating a national water efficiency organization. Similar to the Consortium for Energy Efficiency, a "Consortium for Water Efficiency" was thought a viable and desirable partner. A number of national initiatives were already underway: the US Environmental Protection Agency (EPA) was considering a water products labeling and market enhancement program for water fixtures and appliances; several states were funding national research studies on water efficiency program and product performance and savings; efforts were well underway to participate in national standards setting and codes development; and a national consumer education web site on conservation had been built. All of these programs could function under the umbrella of a national water efficiency organization. Although the American Water Works Association Water Conservation Division has served in a temporary capacity for this purpose, it could not engage in the broad array of functions that might be envisioned as necessary. What was needed was a nation-wide organization which could develop cross-state initiatives, conduct needed water efficiency research, coordinate water efficiency project partners, and in general serve as a clearinghouse for water efficiency progress and cutting-edge change.

When it appeared that there might be funding at US EPA under the Water Quality Cooperative Agreement Program, the California Urban Water Conservation Council put together a proposal. In its application, the Council proposed to inventory what organizational structures would be most effective, what missions and initiatives would be desirable to the water stakeholders, and how an organization could be made self-sustaining over time through the contributions of partner members. Industry interviews would be conducted to ensure that a working relationship could be developed. Framework governance documents would be prepared. And finally, solicitation of member partners could begin as soon as the stakeholders ratified a governance structure, with marketing beginning through a preliminary web page which the Council would develop, maintain and host as part of its cost-share contribution.

The proposal was approved and funding for the project began in February, 2005.

#### **Project Tasks**

The project consisted of the following specific tasks:

- Conduct interviews with existing organizations that have a similar mission (both energy and water).
- Identify stakeholders in various interest groups and develop a mailing list.
- Conduct a minimum of six stakeholder workshops to gather information and opinions from the water efficiency community, with a final workshop in Washington, DC to present the project results.
- Conduct additional stakeholder research to obtain input from those organizations unable to attend the workshops or participate in direct interviews.
- Define a Scope and mission for the potential new organization.
- Define and prepare a governance framework, complete with legal recommendations.
- Develop a marketing plan to evaluate potential partnerships and members and identify a core group of "charter" members and project revenues for the first five year period.
- Create a web page on the Council's web site to announce the creation of the organization, to solicit involvement in projects and partnerships, to record activities and comments, and stimulate stakeholder discussion until a permanent web site is developed.

The work for each of the project tasks is described in the sections that follow.

# RESEARCH ON EFFICIENCY ORGANIZATION STRUCTURES

In creating a new national organization of any kind, much can be learned by looking at existing models. During this research, organizations in a number of related fields were examined to assess the scope of their missions and their organizational structure. The purpose was twofold: first, to discern useful models for the form and mission of a new national organization devoted to water efficiency; and second, to verify that such an organization, if established, would address needs not currently met and avoid unnecessary duplication of effort.

Approximately two dozen organizations were reviewed for this project, including twenty that were contacted and interviewed. Several of them are leading state and regional organizations in their respective fields. While not national in their mission, these organizations have goals and characteristics that are useful to consider for possible extrapolation to a new national organization. The water and energy organizations discussed here offer a diverse set of perspectives and are considered generally representative of similar organizations throughout the country, varying in size, structure, and purpose.

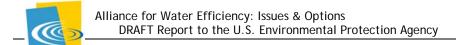
#### Water Efficiency Organizations

The sixteen water efficiency organizations assessed here fell into four distinct categories as shown below: Non-profits; professional associations; inter-agency associations; and ad-hoc coalitions.

#### Water Conservation Non-profit 501(c)(3) Organizations

These organizations are individually incorporated non-profit, non-governmental 501(c)(3) organizations. Contributions to such organizations are tax deductible for the donor, and charitable foundations may make grants to such organizations as well. The groups assessed here each serve as a network for professionals in the water conservation field, and most offer public information to some degree. Additional activities for some include the production of educational materials and public advocacy on state (and occasionally national) water conservation issues.

- California Urban Water Conservation Council
- Colorado WaterWise Council
- Georgia Conservancy/Georgia Water Coalition (policy setting, lobbying)
- New Mexico Water Conservation Alliance



- Partnership for Water Conservation, Washington
- Utah Water Conservation Forum
- Water Conservation Alliance of Southern Arizona
- Water Conservation Coalition, Washington (volume purchasing)
- WaterWise Council of Texas

#### **Professional Associations**

Three closely related professional associations were identified. Each exists as a division of a larger not-for-profit organization.

- Water Conservation Division, American Water Works Association
- Pacific Northwest Conservation Committee, Pacific Northwest Section, AWWA
- Texas Conservation Committee, Texas Section, AWWA

The American Water Works Association has recognized the importance of water conservation by creating a national Water Conservation Division within the organization. The Water Conservation Division offers members and consumers *WaterWiser*, a website that is intended to serve as a national clearinghouse for water efficiency. The water professional can learn about conferences, reference materials, and job opportunities as well.

Despite the division's national scope, it maintains a modest budget of less than \$50,000 and is predominantly a networking group for water agencies and professionals. The division periodically publishes position papers stating AWWA's stance on technologies and programs, but it has undertaken little advocacy work on its own, opting instead to call upon other elements of AWWA to perform the outreach for their causes.

Additionally, AWWA state chapters, or "sections," maintain two regional conservation groups with very limited funding. The Pacific Northwest Conservation Committee and the Texas Conservation Committee were designed to create an informational exchange and network opportunity for members. Some in-state advocacy work is performed as well.

#### **Inter-agency Associations**

These associations consist of public water suppliers and water management agencies. The goals of each of these governmental organizations vary, with one group conducting conservation planning, one supply planning and education, and the third offering services through its retail water agencies.



- Conserve Florida (conservation planning, tracking, reporting and pilot implementation)
- Regional Water Providers Consortium, Oregon (regional supply planning, regional consumer education and outreach)
- Saving Water Partnership, Washington (regional program implementation through wholesaler)

#### **Ad Hoc Coalitions**

The Steering Committee for Water Efficient Products is an unincorporated coalition established in 2003. Its 24 committee members work together for the primary purpose of encouraging the establishment of a national voluntary water efficient product labeling program modeled after the *Energy Star* program. Committee members have also sought the addition of water efficiency to the eligibility criteria for certain *Energy Star* products that use water, most notably clothes washers and dishwashers. Membership is drawn from water utilities, environmental organizations, and product manufacturers. Members pay dues to support the minimal costs of coordination and a non-profit committee member -- the California Urban Water Conservation Council -- serves as the fiscal agent for the Steering Committee.

In summary, these sixteen water conservation organizations tend to be professional associations supporting the agenda of water supply and management agencies. Nearly all of them have water supply and management agencies as the predominant category of membership.

As shown in the accompanying tables, the services and budgets of these sixteen organizations are broadly varied. Some organizations operate on a budget of less than \$2,000 per year, while another has a budget of over \$2,000,000. As one would expect, the services expand as the available budget increases. The organization providing the widest spectrum of services is the California Urban Water Conservation Council, a 350 member partnership of water suppliers, environmental advocates, and other organizations. Participants are assessed dues, and the Council solicits grants and other contract work to help augment program activities. With a permanent staff of nine, the organization is able to provide technical personnel, an in-depth resource library, a comprehensive web site for customers and professionals, advocacy support, training, and conservation retrofit programs.

Regardless of this wide range in budgets and services, none of the water conservation groups were designed to be the "one stop source" of information and services for national water efficiency issues. Most of the organizations' main service is to provide a network for industry professionals to share information. Nearly all the organizations provided consumer information and periodic meetings but they carried a narrow scope of services beyond that.

On the following pages are two tables containing summary information for each water conservation organization. The first table provides information about the organizations' membership, main services, funding sources, and budgets. The second table provides a checklist of services offered to members and to the public.

#### **Snapshot of Water Conservation Organizations**

Agency	Local, Regional, State or Federal	Member Types	No. of Members	Main Service	Funding	Annual Budget
Water Conservation 501(	c)(3) Organizat	ions				
California Urban Water Conservation Council	State	Water agencies     Environmental groups     Businesses	328	BMP implementation     Technical support     Comprehensive clearinghouse website	Membership dues     Grants     Contracted services	\$2.2 M
Colorado WaterWise Council	Intra-State	Open to All     Mostly water supply and management	63	Networking     Information     dissemination	Membership dues	In flux, losing USBR grant
Georgia Conservancy/Georgia Water Coalition	State	Open to All	118	<ul><li>Legislation information</li><li>Lobbying</li></ul>	Membership dues	Part of
Partnership for Water Conservation, Washington	Regional	<ul><li>Water supply and management agencies</li><li>Businesses</li></ul>	10	Networking     Education and     Outreach	Membership dues	\$200,000
New Mexico Water Conservation Alliance	State	Water supply and management agencies     Businesses	32	Networking     Information     dissemination	Membership dues	\$15,000
Water Conservation Alliance of Southern Arizona	Regional	Water supply and management agencies	7	<ul> <li>Education material development</li> <li>Volume purchasing</li> <li>Lobbying</li> <li>Research</li> </ul>	Membership dues     Grants     Fees for services	\$200,000
Water Conservation Coalition, Washington	Regional	Water supply agencies	65	Volume purchasing of materials and activities, mostly consumer education	Membership dues	\$70,000
WaterWise Council of Texas	State	Water supply and management agencies     Businesses	38	Networking     Consumer     landscape     efficiency     education	Membership dues	\$5,000
Utah Water Conservation Forum	State	Open to All	150	<ul><li>Networking</li><li>Trainings</li></ul>	Membership dues	



# Alliance for Water Efficiency: Issues & Options DRAFT Report to the U.S. Environmental Protection Agency

Agency	Local, Regional, State or Federal	Member Types	No. of Members	Main Service	Funding	Annual Budget
				Education materials	Conference fees	
Water Industry Profession	nal Association	S				
Water Conservation Division of AWWA	National	Members of AWWA  • Water supply and management agencies Businesses	150-175	Networking     Website	Part of AWWA dues	\$50,000
Pacific Northwest Conservation Committee, AWWA	Intra-State	Members of AWWA  Water supply and management agencies  Businesses	37	Networking     Education     Materials	Part of AWWA dues     Committee receives annual budget	\$1,900
Texas Conservation Committee, AWWA	State	Members of AWWA  Water supply and management agencies  Businesses	116	Networking     Lobbying     Education     materials	Part of AWWA dues     Committee receives annual budget	
Water Agency Intra-agen	cy Agreements					
Conserve Florida	State	Water supply and management agencies	10 agencies	Conservation planning & reporting	DEP and agency budgets	\$350,000
Regional Water Providers Consortium, Oregon	Regional	Water supply and management agencies	24 agencies	Supply planning     Education and outreach	Agency fees	\$600,000
Saving Water Partnership, Washington	Regional	Water supply agencies (wholesale customers of Seattle)	18 agencies	Regional program implementation	Through rates	NA



# Alliance for Water Efficiency: Issues & Options DRAFT Report to the U.S. Environmental Protection Agency

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Agency	Consumer Literature	Consumer Outreach	Consumer Website	Water Professional	Water Professional	Periodic Meetings	Periodic Newsletter	Research & Evaluation	Broad Library of	Lobbying for	Technical Assistance	Customer Retrofit	Planning
	Litoraturo	Gandadii	Wobolio	Website	Technical	Mootingo	1 to word to	of Products	Technical	Minimum	710010101100	Programs	
					Training			& Savings	Documents	Standards			
Water Conservation 501	1 (c)(3) Organ	izations			Ī	ī		1	Ī	Ī		T	
California Urban	,		_	,	,		,		,	,			
Water Conservation Council	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	✓
Colorado WaterWise													
Council	✓				✓	✓	✓						
Conservation Alliance													
of Southern Arizona			1.2							More			
Georgia Conservancy/Georgia			Limited							Policy			
Water Coalition										1 Olicy			
Partnership for Water													
Conservation,	✓	✓			✓	✓							
Washington		(training											
		also)											
National Alliance for Water Efficiency													
New Mexico Alliance													
	✓	✓			✓	✓							
Water Conservation													
Coalition, Washington	✓	✓											
WaterWise Council of Texas	✓	✓	Limited			✓							
Utah Water													
Conservation Forum	✓	✓			✓	✓	✓						
Water Industry Professi	onal Associati	ons			T	T		1	T	T		T	
Pacific Northwest	<b>√</b>				✓	<b>√</b>							
Conservation Committee, AWWA	· ·				<b>V</b>	<b>Y</b>							
Texas Conservation													
Committee, AWWA					✓	✓				✓			
Water Agency Intra-agency Agreements													
Conserve Florida											Will have	Will	
											tech asst	implement pilots	✓
Regional Water													
Providers Consortium, Oregon	<b>√</b>	✓											<b>√</b>
Saving Water													
Partnership, Washington													✓

#### **Energy Efficiency Organizations**

Research was conducted on energy efficiency and renewable energy organizations as well as water associations. Both have key commonalities. Both industries were created to reduce demand for natural resources. Both engage the utility as a major delivery system for efficiency improvements. Both encourage technical innovation.

The energy efficiency industry is about fifteen years senior to the water efficiency industry due to the energy crises of the 1970s. As a result, conservation programs were established at an earlier stage, requiring gas and electric utilities to support audit and retrofit programs for their customers. Investor-owned utilities have committed billions of dollars of ratepayer funds to implement energy efficiency programs, and public agencies have committed millions more, including funds directed to low-income households. In response, numerous non-profit organizations stepped forward to offer oversight, advocacy, and analysis.

Five national energy efficiency organizations and three prominent regional organizations were assessed for this report. The national organizations are:

- Alliance to Save Energy
- American Council for an Energy-Efficient Economy
- Consortium for Energy Efficiency
- Efficiency Valuation Organization
- National Association of Energy Service Companies

These organizations each have distinctive characteristics that are useful to examine. ACEEE is a prototypical think tank -- an organization without membership that performs leading edge policy analysis on most facets of energy efficiency. It sponsors the premier national conference of energy efficiency professionals, generating a substantial body of peer reviewed papers every two years, and also produces guides to energy efficient products and vehicles geared toward individual consumers. Funding comes from foundations, government and corporate grants, national laboratories, other non-profits, and the proceeds of publications and conferences.

The Alliance to Save Energy is a somewhat larger non-profit that draws support from public agencies, utilities, environmental organizations, and businesses with an interest in energy efficiency. The Alliance was founded by US Senators Charles Percy and Hubert Humphrey in 1977, and the board continues to be chaired today by a US Senator, with other sitting members of Congress serving as Vice Chairs as well. Other board members are drawn from business, environmental groups, national labs, and law firms. Over 90 companies and business trade associations participate as "Alliance"

Associates," a form of corporate membership. The Alliance has a long-standing interest in delivering energy efficiency messages to the public, and has produced public service announcements for radio and television for the past 25 years. Its professional staff maintains a diverse portfolio of advocacy and analysis of issues such as federal energy management, energy codes and standards, and energy-efficient schools. The Alliance has recently worked to establish itself as a clearinghouse for information on state energy efficiency policies.

The Consortium for Energy Efficiency occupies a specific, important niche in the world of energy efficiency. This non-profit serves as a point of collaboration for utilities and environmental groups to establish performance targets for appliances and equipment that can serve as a basis for promotion in the energy efficiency programs operated by states and utilities. Manufacturers, retailers, distributors, and energy service firms are excluded from membership. Other stakeholders may become voting members only if less than 15 percent of their revenue comes from energy efficiency programs. CEE is a critical cog in the process of "market transformation," whereby efficiency innovations move from the periphery to the mainstream of the marketplace. CEE activities serve as important advance work for the federal *Energy Star* voluntary labeling program for products with premium efficiency performance.

Another niche player in the energy field is the Efficiency Valuation Organization. This small, technically-oriented organization is the owner and overseer of the International Performance Measurement and Verification Protocol. The IPMVP is the recognized framework for validating energy efficiency performance undertaken by performance contractors -- those who install energy saving measures and negotiate the timing and amount of their compensation based upon energy saving results. Performance contracting can be a highly efficient mechanism for delivering energy savings, and the Protocol is crucial to establishing consumer confidence and professional accountability for the industry. Of note, the IPMVP is intended for use in performance contracting for water efficiency as well.

Finally, the National Association of Energy Service Companies is a trade association of energy service providers - those who implement public or privately-funded energy efficiency projects. NAESCO offers a typical array of services for a trade association, such as networking, marketing, and accreditation. In addition, NAESCO plays an active role in state and federal policy, encouraging the establishment of energy efficiency programs and workable rules and procedures for performance contracting.

Three regional energy organizations were also assessed:

- Northeast Energy Efficiency Partnerships
- Northwest Energy Coalition
- Northwest Energy Efficiency Alliance

Northeast Energy Efficiency Partnerships, Inc., is a non-profit founded in 1996 with the help of a two-year grant from the EPA to assist with market transformation activities in the region. NEEP currently offers a suite of programs that include planning and facilitating regional energy efficiency initiatives; training and education in building energy efficiency; and public policy outreach, including support for state efficiency standards across New England and the Mid-Atlantic states. Funding has broadened to include support from foundations and from utilities and state agencies charged with implementing energy efficiency programs. NEEP has a staff of 20 and a board drawn from utilities, environmental groups, and local public agencies.

The Northwest Energy Coalition was established shortly after the enactment of the Pacific Northwest Power Act in 1980. The act set up new regional structures for the planning of electric supplies and the consideration of energy efficiency and environmental remediation. Today, the NW Energy Coalition is an alliance of over 100 dues-paying organizations, including environmental, civic, and business groups supporting the development of renewable energy and the expansion of energy efficiency in the region. Individuals may join as well. Each organizational member is represented on the Coalition's board of directors. Utilities may become members, but utilities cannot cast more than 25 % of the votes on any substantive matter before the board. The Coalition has a staff of 11 and undertakes a full range of advocacy on regional energy issues, and encourages members to participate in state caucuses of Coalition members.

The Northwest Energy Efficiency Alliance is a non-profit organization started in 1996 and funded by the Bonneville Power Administration, local public utilities, and state public benefit funds. Financial contributions to the Alliance are pooled and used to fund energy-saving projects across all customer sectors. \$165 million was committed to Alliance programs through 2004. Pledges of \$20 million per year will fund the program through 2009. The 28-member board of directors is drawn from utilities, state agencies, environmental organizations, and consumer representatives.

These eight energy organizations differ significantly from their water counterparts in several aspects. While professional networking continues to be important, these energy efficiency organizations appear somewhat more task-oriented in their mission and approach. The maturity of energy efficiency issues and the larger slice of the economic pie devoted to electricity and natural gas, as compared with drinking water and wastewater, have resulted in more structure and more policy-making "levers" to advance energy efficiency than currently exist with regard to water efficiency. This separation of energy and water efficiency issues in time and scale is likely to continue, but the result is a well-marked trail of energy policy options and lessons learned for water efficiency advocates to sift through and consider for adoption to their own purposes.

The energy efficiency organizations assessed here are not, by and large, organizations where individual membership plays a significant role. Coalitions of participating organizations and various funding entities support these activities. Technical analyses are produced along with educational material for the general public. Technically oriented staff is needed to support these functions.

Finally, the annual budget dollars for these energy organizations are simply larger. They greatly exceed those of the water efficiency organizations, and are funded predominantly through foundation and government grants. Perhaps this is not surprising, since there is perceived to be more money at stake in the development and conservation of energy resources than in the analogous aspects of water management. Nevertheless, the economic implications of water and wastewater infrastructure development are far from trivial. The opportunities for larger budgets for water efficiency should improve with greater pubic understanding of the costs of inaction. And as shown here by the energy groups, with more budget comes more programmatic capability.

Agency	Local, Regional, State or Federal	Member Types	No. of Members	Main Service	Funding	Annual Budget
Energy Efficiency Organ	nizations					
Alliance to Save Energy	National	No formal membership	NA	<ul> <li>Promote energy efficiency policy, standards, codes, technologies through many programs</li> <li>Technical assistance</li> <li>Business and industry liaison activities</li> </ul>	<ul> <li>Government grants</li> <li>Federal grants</li> <li>Membership contributions</li> <li>Special events</li> </ul>	\$8 – 9 million
American Council for an Energy Efficient Economy (ACEEE)	National	No formal membership	NA	Develop, analyze and advocate energy efficiency policy     Promote standards, codes and new technologies     Assist utilities and gov't in design and implementation of energy efficiency policies and programs	<ul> <li>Foundation grants</li> <li>Contracts</li> <li>Conferences</li> <li>Federal grants</li> <li>Publications</li> </ul>	\$3.4 million
Consortium for Energy Efficiency (CEE)	National	All organizations that have a regulatory or legislative mandate to administer energy efficiency programs as well as other public stakeholders in such programs	78	Coordination and promotion of voluntary adoption of common program and efficiency standards	Membership dues	
Flex your Power Campaign in	State	No formal membership	NA	Statewide energy efficiency marketing	Contracted services through	\$14 million

Agency	Local, Regional, State or Federal	Member Types	No. of Members	Main Service	Funding	Annual Budget
California				and outreach  Comprehensive clearinghouse website	California Public Goods Funds	

#### Green Building and Other Relevant Organizations

The US Green Buildings Council is a non-profit organization that has pioneered the development of sustainable building practices for commercial buildings, including the publication of the LEED Green Building rating system and associated accreditation and certification. Green building criteria cover energy efficiency, indoor air quality, recycled material content and collection, indoor water use, and site preparation, among others. These factors are arrayed in a point system that allows for design flexibility. The organization has seen explosive growth over the last five years, and now includes thousands of members, 45 chapters, and 6 affiliated regional green building associations. USGBC will continue to revise the LEED rating system and extend the concept further to commercial interiors, existing commercial building renovation, and single-family home construction. Unlike other code bodies, USGBC has always made the LEED rating system available for free download, reserving fee generation to certain ancillary materials and software.

The sole national organization dedicated to water recycling, reclamation, and reuse is the WateReuse Association (WateReuse). It was established in 1989 as a non-profit organization whose mission is "to advance the beneficial and efficient use of water resources through education, sound science, and technology using reclamation, recycling, reuse and desalination for the benefit of members, the public, and the environment."

WateReuse currently maintains a membership of more than 300 members in the U.S. and abroad including more than 135 water and wastewater agencies. In addition to local utilities, the membership includes Federal and state agencies, health officials, consultants, and prominent researchers from the academic community. The association maintains three geographic sections; California, Nevada, and Texas.

Originally a California-only organization, WateReuse took on its current national focus five years ago, and is now based in Arlington, Virginia. The organization has an annual budget of \$750,000 and is predominantly a lobbying group, although there is some sponsorship of water reuse research. To date, WateReuse attributes 39 pieces of legislation being passed as a result of its efforts.

#### Observations on Organizational Structure and Mission

Several of the organizations assessed for this report offer useful models for the organizational structure of a national water efficiency organization. Most of these organizations have been up and running for at least 10 years and thus demonstrated some degree of stability and staying power. Successful organizations share several attributes:

- Dues-paying participants (may or may not be called "members");
- Receipt of foundation, government, or corporate grants;
- Production of vendible products (conferences, publications, codes and manuals, other services); and
- Paid professional staff.

The ability to consistently raise funds implies that each of these organizations has developed a "value proposition" that is satisfactory for those paying the bills.

With regard to board structure, organizations with a broad mission tend to have more diverse boards, while those with a narrower focus tend to have a less diverse board. If the mission involves issues with significant policy or financial implications, greater attention is paid to membership eligibility and voting rules. "Balance" is important on some of these boards, in recognition of the diverse interests even among those dedicated to promoting energy or water efficiency.

It is also worth noting that of the several organizations involved in public policy and advocacy, the prevailing approach is to seek to influence decision makers with technical expertise, rather than other forms of political influence. This drives the mission toward the development and use of analytical tools and presents the continual challenge of translating technical expertise into usable information for lay audiences and decision makers.

The other purpose of this assessment of organizations was to verify that a new national organization could address substantial needs and/or opportunities in the water conservation field without risk of undue duplication. It is evident that there are significant gaps in funding, structure, and services for the national water efficiency industry when compared to the energy industry. On a national level, the water efficiency industry lacks the following:

- A research program to systematically explore new technologies and practices for water efficiency
- An organization that provides utilities with technical support and design assistance for water efficiency programs



# Alliance for Water Efficiency: Issues & Options DRAFT Report to the U.S. Environmental Protection Agency

- Regional or national institutions or incentives dedicated to upgrading the water efficiency of existing buildings
- An advocacy group for national policy on water efficiency, including stronger codes and standards
- An organization to develop uniform product specifications for premium water efficient performance
- A trade association for companies providing water efficiency services

Any combination of these listed objectives would appear to be open to a new organization with little risk of duplicative effort. While there are several regional and state water conservation organizations in existence, their scope does not extend to these purposes.

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#### STAKEHOLDER INPUT

#### Stakeholder Recruitment

One of the first tasks undertaken in the research project was to assemble a master database list of interest groups and individuals in a wide variety of sectors: water utilities; municipal and governmental agencies and officials; water planning agencies; environmental and other non-profit organizations; energy organizations; plumbing manufacturers; irrigation manufacturers; and builders. This master list was assembled by seeking interest and soliciting stakeholders in a wide variety of places: the WaterWiser listsery; the California Urban Water Conservation Council web site; publication in newsletters; solicitation by email and telephone; and review of existing mailing lists of various organizations. All individuals in the database have expressed and confirmed their interest in being there; no random names have been included.

A Microsoft Access database was built which now houses 665 individuals from 479 different agencies or organizations, broken out into the following 6 categories:

##	DATABASE CATEGORIES
142	Water Supplier
39	Water Planning Agency or Non-Profit Organization
176	Product Manufacturer, Distributor or Service Provider
64	Environmental, Educational or Energy Organization
51	Governmental
7	Builder or Developer
479	TOTAL

A detailed list of the stakeholder participants is included in Appendix 5.

A larger group of stakeholders still needs to be recruited. Missing from the list so far are representatives of the tribes. Also being recruited are additional environmental groups. Both of these interest areas were underrepresented during the research and public comment phases of the project. Additional work is already underway.

## **Workshops and Survey Results**

In order to obtain meaningful stakeholder input, various methods were used to seek the views of involved professionals in the water efficiency community. The project tasks required that regional workshops be held. But for those stakeholders not able to travel to a workshop, another method was needed to obtain their views which could be consistently compiled together with the input from the workshops.

A standardized set of questions was developed that was used in both the workshops and in an on-line survey tool that was posted on the California Urban Water Conservation Council website on a special "National Water Efficiency Organization" web page. That survey tool was live for a full two month period, and stakeholders nationwide were encouraged to go on-line and fill it out, especially if they had not been able to attend one of the regional workshops in person. Comments were also solicited by letter or email, live telephone interviews, and in-person meetings. Where possible, those additional views were incorporated into the questionnaire results.

The questionnaire itself is included in Appendix 6. The type of questions asked on the questionnaire asked for input in the following areas:

- Most important issues facing water efficiency today
- Benefits/concerns of a national organization
- Core mission and functions
- Organizational and governance structure
- Funding and membership

Other questions included: Should water recycling be included in the definition of water efficiency? Should the organization be purely research-oriented, or should it also focus on project implementation? What kind of relationship should it have with the manufacturers? Should it be an advocacy organization? What types of water efficiency initiatives should be conducted? Does location of the organization make a difference? Should it be an educational mechanism for the public?

The research questions differed only slightly when answered in person at the workshops or online. The web survey was compiled by Hardwick Research, and the six regional stakeholder workshops were facilitated by Thornhill Associates. Hardwick Research then conducted an analysis of all research obtained in both of these efforts and a combined report of findings was prepared, which is attached in Appendix 6.



## **Regional Workshops**

Six regional stakeholder workshops were held in May, 2005 to gather information and opinions from the water efficiency community. The workshops were held in the following regions of the US: Northeast, Southeast, Middle Southwest, Southwest, California, Pacific Northwest. A final workshop will be held in Washington, DC to present the project results.

Workshop Location	Date Held in 2005	Attendance
Atlanta, GA	5/24	54
Austin, TX	5/25	33
Boston, MA	5/23	36
Irvine, CA	5/18	52
Phoenix, AZ	5/19	37
Seattle, WA	5/17	33



Participants in the Seattle Workshop on May 17, 2005





Participants in the Atlanta Workshop on May 24, 2005

Following the six regional workshops, a summary of the input received was compiled and sent to the extensive stakeholder email list. A comment opportunity was offered. A few additional comments were received, and the results were then folded into the workshop and survey data for the total stakeholder response.

## Regional Workshop and Web Survey Results Summary

The stakeholder input regarding a proposed national water efficiency organization -- from both the workshops and the surveys received -- is summarized below. A total of 383 stakeholders participated in this research between May and August 2005. Some of the participants (183) completed the surveys on paper at workshops in several different cities, and the remainder (199) completed the survey online.

#### **Stakeholder Characteristics**

Stakeholders were given a list of categories and asked to choose the category from the list that best described their organization. The four most common types of organizations represented in this research were: Water Suppliers; Product



Manufacturers, Distributors, and Service Providers; Government Stakeholders; and Environmental, Educational, and Energy Organizations.

More than half of all respondents came from organizations with at least 100 employees, while stakeholders from organizations with 51-100 people were much less common. In terms of region, nearly two-thirds of all participants were either from the California / Hawaii or Southwest regions.

Stakeholder Type	Total (N=374)
Water Supplier (retail or wholesale)	26%
Product Manufacturer, Distributor, or Service Provider	25%
Government (federal, state or municipal)	20%
Environmental, Educational, or Energy Organization	13%
Water Planning Agency or Non- Profit Organization	7%
Builder or Developer	2%
Other	7%

Q22. Please select the one category that best describes your organization.

#### Most Important Issues Facing Water Efficiency

Generally, stakeholders reported that the following matters were the most important issues facing water efficiency today:

- "Need for better and more comprehensive efficiency standards"
- "Lack of reliable information on efficient products and programs"
- "Lack of sufficient research of products and conservation savings"

Notably, two issues that were not perceived as important to participants in general were of greater concern to stakeholders in Environmental, Educational, and Energy Organizations. This group was more likely to say that "Lack of general public support of increased levels of water efficiency" and "Need for a place for organized stakeholder discussions" were among the most important issues facing water efficiency today.

#### **Core Mission and Functions**

Stakeholders were provided with a list of options from which to choose one core mission for the proposed national water efficiency organization. The most-often selected mission (chosen by 26% of all stakeholders) was "Information sharing on products, practices, programs, and legislation nationwide."

When choosing from a list of functions that would be subsumed under the organization's core mission, 90% of stakeholders shared that a "centralized source of information on water efficiency programs, practices and products" should be included as a function and should also be a high priority for this organization.

The stakeholders commented on the specific areas that they believed a national water efficiency organization should cover. The top three areas mentioned were "commercial and industrial efficiency," "indoor plumbing products and appliances," and "water products labeling."

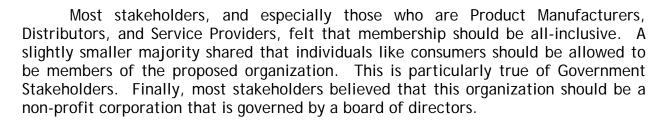
Lastly, there was one noteworthy regional difference in stakeholders' opinions about a core mission of "developing, by consensus, efficiency standards for water efficient products." Specifically, stakeholders in California / Hawaii were significantly more likely than those in the Southwest to report that this should be the core mission of the proposed organization.

#### Services Being Received from Other Organizations

In an effort to understand how a national water efficiency organization could best serve its stakeholders, participants were asked to report what services they were currently receiving from other organizations. A majority of stakeholders were currently receiving "information on existing and pending legislation and regulations," and approximately half already had access to a "centralized source of information on water efficiency programs, practices and products", and "consumer education", materials and programs. Interestingly, stakeholders reported that in many cases they were unsatisfied with the services that they were receiving from their current sources.

#### **Composition of Organization**

A large majority of stakeholders (74%) would prefer to receive services from BOTH state and national levels. Stakeholders sharing that "lack of general public support for increased levels of water efficiency" is a key issue are significantly more likely than all other stakeholders to say that they prefer the organization to operate both on state and national levels.



#### Support

Nearly half of all stakeholders, and a significantly higher proportion of Government Stakeholders, were unsure if their organizations would provide financial support for a national water efficiency organization. Thirty-six percent of participants reported that their associations would provide financial backing, although Water Suppliers and Environmental, Educational, and Energy Stakeholders were more likely than the other groups to say that their organizations would provide monetary support. Of those stakeholders presuming that their companies would provide financial support for the proposed organization, the most common estimate of dues willing to be paid fell into the \$500 - \$999 range.

All stakeholders were asked how much they thought their organizations would pay on a fee-for-service basis, with most participants estimating \$500 or less. The majority of participants felt that their organizations would provide *non*-financial support, and most stakeholders also indicated that they would be extremely interested in becoming members of a national organization for water efficiency.

#### Manufacturers / Distributors / Service Providers / Builders / Developers

Separate questions were created for stakeholders who categorized themselves as "Product Manufacturers, Distributors or Service Providers" or "Builders / Developers" in an effort to explore any special concerns for these groups of stakeholders. Almost all of them reported being members of a trade organization, and most attended trade shows and conferences. Additionally, the majority of these stakeholders said that they were marketing and selling to the water conservation sector, which they considered to be a target market. Finally, even though they already reported receiving marketing and outreach support from a variety of sources, they indicated that they would like a national organization for water efficiency to provide these services as well.

#### **Conclusions and Recommendations**

1. Standardized efficiency standards and a centralized source for information are requirements for the creation of a successful National Organization for Water Efficiency.

In order to be of value to its members, a national organization for water efficiency must furnish comprehensive water efficiency standards. It needs to be a centralized source for information and provide specific details on products, services, programs, and legislation nationwide. This overarching description and outline of responsibilities should serve as a foundation for developing the organization's mission and goals.

Even though some stakeholders report that they already receive similar services elsewhere, they are not all satisfied with those services. It is obvious from stakeholders' responses that a national organization is desired.

#### 2. Membership in a National Organization for Water Efficiency would be high.

Overall, stakeholders are very (30%) or extremely (47%) interested in membership in a national organization for water efficiency that provides the function and services they desire. With 77% of those surveyed interested in membership, there is definite support for this organization. Support is strongest among Product Manufacturer, Distributor and Services Providers, and Government Stakeholders. On the other hand, Environmental, Education or Energy Organizations tend to be the least supportive of a potential national organization.

#### 3. State and national needs must be taken into consideration.

Stakeholders overwhelmingly support an organization that addresses state, regional and national concerns. A national organization must also take into consideration state and regional needs, since they may be very different. However, the advantage of a national presence for consistency and efficiency of resources, as well as the convenience of a one-stop clearinghouse for information, made a difference to stakeholders. Some even noted a national organization is better positioned to develop and implement a water labeling program similar to Energy Star.

### 4. Forming a non-profit, all-inclusive organization is the way to go.

A vast majority of stakeholders prefer that the proposed National Organization for Water Efficiency be structured as a 501(c)(3) or similar non-profit corporation. This format would deter any inferences that the organization is



playing favorites, or profiting from any decisions made. Furthermore, a national not-for-profit organization adds legitimacy in the minds of the general public, and will therefore have more success educating the public and promoting water conservation.

In addition, this non-profit national organization needs to be all-inclusive, accepting any members interested in water conservation. Stakeholders would like to see both companies/organizations and individuals have the opportunity to join.

#### 5. Take into consideration that the diverse group of stakeholders will have a variety of needs.

Keep in mind that with a diverse group of stakeholders it will be necessary to consider a wide range of needs and opinions. Although this research has shown that stakeholders agree on the mission, function and direction of this proposed National Organization for Water Efficiency, once the general framework is in place, it is important to balance the sometimes-competing needs of stakeholders.

For example, stakeholders from the Product Manufacturers, Distributors, Service Providers, Builders and Developers groups represent companies that vary greatly in size and products/services provided; therefore, their needs would differ. However, they are similar in that most are involved in trade shows/conferences and marketing to the water conservation sector. addition to differences across stakeholder type, differences will also occur by the geographic region they serve.

#### 6. The level of financial support is still questionable.

With almost half (46%) of the stakeholders surveyed reporting they "don't know" if they will provide any financial support to the proposed national organization, the level of financial support is still uncertain. Those most likely to indicate they would provide financial support represent Water Suppliers and Product Manufacturers, Distributors, Service Providers.

When considering annual dues, the amount stakeholders are willing to pay varies. Specifically, 21% would pay under \$500 annually; 33% between \$500-\$999; 24% ranging from \$1,000-\$2,499; and finally 23% are willing to pay \$2,500 or more. Interestingly, Government Stakeholders are more likely than all other stakeholders to be willing to pay \$10,000 annually.

Not surprisingly, stakeholders are much more likely to commit to providing some type of non-financial support. Although a guarter of them indicate that they don't know if they will be able to provide such assistance, only a handful say they would not.

The full research report on the workshop and survey findings is contained in Appendix 6.

## **Focus Group Results**

After the six regional workshops were held and the survey completed, it appeared to the Project Team that several sets of Focus Groups were needed. The reasons for this were several. First, it appeared that we needed more complete input on specific issues from the manufacturers and service providers; and second, there was a need to clarify some of the funding and advocacy questions asked of water utilities. It was also decided to present four different structural options for the organization -- options chosen based on the survey results -- to see if any of the four structural options had more support among these stakeholders.

To gain a much more in-depth understanding of these two specific key stakeholder segments -- manufacturers and water utilities -- four two-hour focus groups were conducted by Thornhill Associates. Two manufacturing focus groups were conducted with representatives from the indoor plumbing and appliance sector in Chicago, Illinois and the irrigation sector in Costa Mesa, California. Two water supplier focus groups were conducted in the Eastern and Western Regions of the United States in Berkeley, California and in Tampa, Florida. Additional telephone interviews were conducted in both the manufacturing and water utilities sectors.

Focus Group Location	Date Held in 2005	Stakeholder Type
Chicago, IL	7/21	Plumbing
		Manufacturers
Costa Mesa, CA	7/25	Irrigation
		Manufacturers
Berkley, CA	8/1	Water Supplier
Tampa, FL	8/3	Water Supplier

While the focus groups garnered much greater in-depth insights from both indoor and outdoor manufacturers and water utilities, the spirit of the findings of the focus groups, web survey and stakeholder workshops were all quite similar. The

following highlights from the focus groups show the trends of the comments made by the participants. The full focus Group summary prepared by Thornhill Associates is contained in Appendix 7.

## **Key Focus Group Findings**

- Create a needed national organization for water efficiency.
- Engage and effectively involve all water efficiency stakeholder groups and related organizations in the quest for water efficiency.
- Conduct public outreach to educate and create a greater social consciousness and acceptance regarding water use.
- Establish and promote a national centralized clearinghouse of water efficiency related research, information and best practices and facilitate idea sharing.
- Promote, oversee, and coordinate research, testing and voluntary standards and labeling of products, programs, systems and technologies that can quantify water savings and help achieve a market transformation to greater water use efficiency.
- Serve as a voice and voluntary advocate for water efficiency.

#### **Additional Observations**

- Research participants feel there is tremendous value in establishing a national organization for water efficiency with a core mission that accelerates a public awareness and culture shift, promotes a national dialogue, and serves as a centralized clearinghouse for information sharing and education on the critical issue of water use efficiency.
- Other areas of great interest are promotion and coordination of research and testing efforts, establishment of voluntary product specifications and product labeling.
- It is felt, to be effective, that this organization needs to attract and engage all
  key related stakeholder groups, and should serve as a central voice in helping
  to coalesce water efficiency efforts being pursued by related organizations and
  policy makers/regulatory agencies.



- Stakeholder groups essential to this effort were defined as:
  - water utilities
  - manufacturers and trades (contractors, distributors, designers, plumbers, engineering consultants)
  - o builders and developers
  - o municipalities
  - o state and federal agencies
  - energy groups
  - o environmental groups
  - o *academic institution*s
  - When asked the primary reasons they would support this organization participants cited:
    - Enhanced public education, awareness and acceptance of the need for water efficiency
    - o Opportunity to "have a voice" in determining the industry direction
    - o Opportunity to be at the forefront of transforming the market
    - o Specific "tools" i.e. research, best practices, product labeling
    - o Participating in the development of any product requirements (MFG)
  - As groundwork in determining the areas of focus for this organization, the most important issues facing water efficiency today were discussed. Those that distilled out as being most critical to research participants include a lack of the following:
    - Public awareness, education and buy-in (social acceptance)
    - o Information, education and training for consumers, public agencies, trades people, and regulators/policy makers
    - o Common voice, message or central source of information
    - o Information on the true value of water
    - Sufficient research and quantification of products and conservation cost savings/benefits
    - o Standardization for product performance and efficiency
    - National uniformity of testing protocols
    - o Consistency due to fragmentation and/or duplication of efforts
  - When asked to share the primary benefits as seen specifically for their own industry as well as generally for the stakeholder groups as a whole, the participants of both the manufacturing and water supplier focus groups cited the following activities as the primary benefits:
    - Develop a national dialogue and create awareness
    - o Involve all stakeholder groups



- Provide a central information source and credible voice/authority on water efficiency
- o Benchmark with other water utilities
- o Educate consumers, policy makers, regulators and trades people
- o Develop an easily recognizable national labeling system (like Energy Star™) to highlight and differentiate water efficient products
- Coordinate and partner with other entities
- o Transform and accelerate the marketplace
- Manufacturers would be concerned if they were not involved in the process of determining safe, effective and consumer-friendly product requirements.
- Water utilities desire manufacturing involvement, but are concerned with ensuring that a high standard for water efficiency is not diluted due to involvement of manufacturing marketing interests.
- Water utilities would like to see independent verification of product testing to ensure data validity.

## **Findings on Core Mission**

- Analysis of this focus group study indicates the overarching mission of this
  national water efficiency organization should be to promote and facilitate a
  market transformation to achieve greater water efficiency and resource
  sustainability, and should also be to raise awareness, create a national
  dialogue, educate and consolidate efforts.
- To be successful, it is agreed this national organization must identify, embrace, engage and represent all stakeholder groups, with a specific focus on meeting member needs. It must also work to coordinate activities with related organizations in the water and energy efficiency arena.

## Findings on Functions

#### **Consumer Outreach**

- A consumer outreach program and access to easy-to-understand water efficiency product and system information (such as product ratings) will help to positively influence consumer buying decisions.
- Creating an awareness of the "value" of water is critical in consumer buy-in for efficient products and appliances.



- Appliance manufacturers see consumers wasting water due to a lack of education regarding proper use of their products.
- Manufacturers would like this national organization to conduct attitude and behavioral research with consumers and trades people to better understand perceptions and preferences regarding water efficiency and water efficiency products/programs and messages.
- Water efficiency research should be conducted with consumers to understand their perceptions, attitudes, motivations for buying decisions, and communication messages that most resonate.

#### Centralized source of information

- A key element of the core mission and an effort that all participants agree should commence at the onset is the establishment of this organization as a centralized, national clearinghouse for all information related to water efficiency -- including research, programs, practices, best practices, technologies, etc. This will be a non-controversial first step to lay the foundation and gain credibility.
- The clearinghouse was described as being a "data repository" as well as a venue where all stakeholders can easily search out information based on desired criteria and subsequently have the opportunity to directly network with others.
- As a national clearinghouse, this entity would also serve as a "centralized voice" in the water-related arena providing consistency in the message and water efficiency advocacy to the general public, regulators and all stakeholder groups. Providing water supply utilities with "tools" that can help them quantify savings and help them design and implement programs will be of great value.
- An information source that allows water supply utilities to benchmark and learn from best practices (varying from incentive programs to billing systems, etc.) will not only help water supply utilities but can provide more standardization among water supplier programs which, in turn, will benefit manufacturers.
- Highlighting water efficient products and technologies is an important part of the centralized source of information and should be done appropriately.



 The implementation of a user-friendly national web site similar to the one being maintained by the California Urban Water Conservation Council is crucial to information sharing.

#### Research and Testing

- This national organization should solicit funding for, promote, oversee, coordinate, and compile research on products, programs, systems, technologies, etc. using existing independent research consultants and testing facilities and working with manufacturing testing initiatives.
- Rather than conducting actual research and testing, participants feel this
  organization would be involved in establishing research and testing
  protocols or rating systems to ensure reliability and objectivity.
- Manufacturers understand water supplier sensitivities regarding the need for unbiased independent testing, but wish nonetheless to play a role.
   Particularly appliance manufacturers feel their testing methods are heavily regulated and effective and that experience should be shared.
- Providing a nationally recognized system of quantifying, validating and communicating water consumption, conservation savings, and savings durability would help water supply utilities, municipalities, and manufacturers in more standardized rebate programs and focused product development efforts.
- This organization should have as one of its core missions a focus on research, testing protocols, and the validation of actual conservation savings. Activities would encompass initiating, promoting, overseeing and coordinating with others the water efficiency performance research and independent testing related to products, programs, practices, technologies, etc.
- Water supply utilities suggested providing awards and recognitions to highlight top initiatives and providing professional contributions to help stimulate product development.

#### **Product performance requirements**

 Focus group participants want this organization to promote the development of requirements or voluntary standards of products, systems and practices that ensure quantifiable levels of water efficiency.



- It is felt this organization should be involved in establishing consensus-based voluntary performance levels to ensure the advancement of water efficiency. Participants envision that the national organization will be well positioned to provide education and influence to regulators; however, the organization should not pursue lobbying for performance mandates at this time.
- There is some concern regarding the "regional appropriateness" of national standards.
- In the case of water efficiency efforts being pursued by other entities such as the American Water Works Association, the Irrigation Association, the Plumbing Manufacturers Institute etc. their collective belief was that a new national organization should provide a 'seat at the table' in an effort to coordinate (and not duplicate) efforts.
- Participants want to be part of the evolutionary process of changing efficiency standards and technologies for the future.
- Achieving water efficiency in irrigation relies on many variables beyond effective products. Proper installation, programming and use of all components are critical to conservation. The industry lacks quantification of performance levels of products and practices and lacks education of contractors, installers and end users and feels a national organization could play a valuable role in achieving both.
- Lack of product performance requirements is a hindrance to achieving consumer acceptance and ultimate market transformation.

#### Product rating system/labeling

- Most research participants expressed a high interest in pursuing product labeling (similar to Energy Star™), citing it is a very visible means of providing a clear tool for measuring product capability and makes it very easy for consumers to consider water efficient buying decisions.
- In the event that the US EPA does not pursue water efficient product rating and labeling in the near future, it is the desire of the focus group participants (both manufacturers and water utilities) that this organization should ultimately spearhead and pursue this effort.

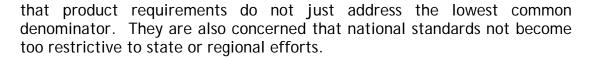


#### <u>Advocacy</u>

- Stakeholder participants feel voluntary advocacy of water efficiency should be a part of the mission of this organization.
- It is felt the organization should not be involved in legislative lobbying at least at this stage, due to the twin concerns of the sensitivity of public funding as well as the difficulty of taking a lobbying position that would be representative of all stakeholder views and not disenfranchise some of the membership. Many stakeholder groups have their own lobbyists.
- To facilitate a culture shift and stimulate the marketplace, a marketing and outreach program should be launched to establish a national presence and a strong "brand" for water efficiency with an emphasis on educating consumers, municipalities, regulators and policy makers.

#### Market transformation

- Many feel strongly that the consumer awareness and influence on buying habits achieved by Energy Star<sup>™</sup> have been very positive, and would like to see this organization pursue product labeling for water efficiency products and appliances.
- This organization needs to be involved in raising the social consciousness regarding the need for water efficiency by proactively conducting consumer outreach and general marketplace education.
- Moving goods and services to a higher level of water use efficiency should be a primary goal of this organization. Efficient market acceleration will allow for technologies to get to market quicker.
- To transform the market, all stakeholders need to be engaged and products need to exist that can achieve sustainable water savings and meet customer expectations. Gaining the buy-in and participation of manufacturers is critical to the success of a market transformation.
- Consumer outreach is critical as education and buy-in of consumers on the value of water and opportunities for efficiency are essential in achieving a market transformation.
- Water supply utilities especially want to ensure that product performance requirements/ specifications help accelerate a market transformation to greater water efficiency, and are concerned that this organization ensure



#### **Recommendations for Governance**

- The participants in this research study, both water utilities and manufacturers, clearly support the need for a national organization for water efficiency and are interested in participating and having a voice in this effort.
- It is felt that this organization should work to overcome the greatest barriers to achieving water use efficiency, which participants believe include:
  - o consumer apathy
  - o lack of understanding of the true cost of water
  - o fragmentation and lack of uniformity in the industry
- Most agree that the organization should begin by identifying and attracting a breadth of targeted, committed stakeholders and develop an interim leadership structure, mission and policy plan.
- This preliminary organization should plan to transition quickly to a memberelected Board of Directors and governance structure. The industry Board designee should work to obtain consensus within their own stakeholder group and bring those consensus stakeholder views to the Board.
- It is essential that all stakeholders of the national organization for water efficiency understand, support and work toward the overarching mission of saving water through greater water efficiency and ensuring that water efficiency is quantifiable and sustainable.
- Consideration needs to be given regarding the best manner to accomplish stakeholder unity on this mission, especially as many are skeptical due to prior experiences with organizations unable to develop a meaningful consensus.
- This organization needs to stay focused on continuing to provide value to its stakeholder groups and not become bureaucratic or captivated by special interests.



- The organization should promote a national dialogue and facilitate and encourage accessibility, communication, networking and information exchange among all stakeholders.
- The national organization should be positioned as the central "voice" and advocate for water use efficiency. Lobbying should not be part of this organization's initial mission due, in part, to the difficulty of meeting broad based stakeholder needs.
- The national organization should develop a proactive plan to identify funding, initiate, oversee, manage and provide uniformity to research and testing efforts on:
  - o products and voluntary product standards
  - o systems
  - technologies
- Manufacturers/trades people need to play a role in the development of research and testing criteria to provide their expertise, to ensure products are safe and meet the needs of water users, and to ensure that water efficiency is effective and sustainable.
- Less fragmentation and greater national uniformity of performance and testing standards and incentive programs provides benefits to manufacturers in streamlining their product development efforts and costs.
- Most manufacturers want uniformity of testing so product performance ratings are meaningful, but are concerned about objectivity in this process.
- This preliminary research explored the general attitudes and perceptions of potential stakeholders on the benefits, concerns, core mission and functions of a national organization for water efficiency.
- Further research needs to be conducted to explore the best organizational structure and marketing messages to ensure responsiveness to member needs and the organizations ultimate success.
- Investigation should be conducted to identify and better understand funding sources to ensure this organization can achieve its mission and will be sustainable.
- Additional research can be conducted with stakeholder groups to better understand 'gaps' and opportunities not being met by existing trade



organizations and associations to identify opportunities for this national organization to provide additional value.

This research has confirmed a high degree of interest in the development of a national organization for water efficiency. Steps should be taken to conduct further research to ensure this newly-created entity can accomplish its mission, can provide value for stakeholders and financial supporters, and is structured for success.

## "Sister" Organization Interviews

Five in-depth interviews were separately conducted with organizations that were likely to become partners in some way with a national water efficiency organization. Not only was it important to determine the level of interest on the part of the CEO's of these organizations for water efficiency partnerships, but it was also useful to ask them questions concerning location, staffing, and their own organizational structure, as well as what recommendations they might have for a new national water efficiency organization. The interviews covered standardized questions, the answers to which are summarized below.

The organizations interviewed during the period of this project were as follows:

- American Water Works Association
- American Water Resources Association
- Consortium for Energy Efficiency
- Irrigation Association
- Plumbing Manufacturers Institute

#### **American Water Works Association**

Interviewee:	Jack Hoffbuhr, Executive Director Ed Baruth, Volunteer and Technical Support Manager
Date of Meeting:	• June 27, 2005
Membership Interest:	<ul> <li>Yes. AWWA Water Conservation Division members will likely all want to participate.</li> <li>AWWA also is interested in getting involved with the irrigation and environmental community.</li> </ul>
Location Recommendation:	Denver, co-housed with AWWA.
Governance Recommendation:	<ul> <li>501(c)(3) non-profit hosted within AWWA and managed by AWWA but with its own governance.</li> <li>Also recommended an AWWA Council structure.</li> </ul>
Partnership Interest:	<ul> <li>Offering to host the organization at AWWA and run it similar to the Partnership for Safe Water.</li> <li>Specific Project partnerships desired: Waterwiser, Water Sources and Annual Conferences, Journal, Standards, Advocacy.</li> </ul>
Other Recommendations:	<ul> <li>Sustainability a key trend for water utility industry; water efficiency will be a big piece of the solution.</li> <li>Should seek Dept of Agriculture funding for efficiency programs.</li> </ul>

#### **American Water Resources Association**

Interviewee:	Kenneth Reid, Executive Vice-President	
Date of Meeting:	• August 12, 2005	
Membership Interest:	<ul> <li>Yes. AWRA is multi-disciplinary, with many members that are water resource planners and watershed managers with a need to learn about water efficiency.</li> </ul>	
Location Recommendation:	<ul> <li>Washington, DC area for proximity to federal agencies, and high quality staffing options.</li> </ul>	
Governance Recommendation:	<ul><li>501(c)(3) non-profit.</li><li>No lobbying.</li></ul>	
Partnership Interest:	<ul> <li>AWRA does not do research, projects, advocacy, or certification.</li> <li>Possible conference partnership.</li> </ul>	
Other Recommendations:	AWRA originally located within the University of Minnesota. Does not recommend co-housing with an academic institution.	

## Consortium for Energy Efficiency

Interviewees:	Marc Hoffman, Executive Director Bruce Johnson, Board Chair	
Date of Meeting:	• September 17, 2004	
Membership Interest:	<ul> <li>Yes. CEE could be a true "sister" agency.</li> <li>Would be willing to be "incubator" for national water efficiency organization to help get it started.</li> </ul>	
	<ul> <li>Might be willing to house water efficiency and make a "Consortium for Energy and Water Efficiency."</li> </ul>	
Location Recommendation:	Be centrally located to the stakeholders.	
Governance Recommendation:	• 501(c)(3) non-profit.	
Partnership Interest:	Combined water/energy efficiency programs, research, benefit-cost analyses, LEED initiatives, exploration of "super efficient" technologies.	
Other Recommendations:	<ul> <li>Minimum standards are difficult politically. CEE does not get involved with minimum standard setting.</li> <li>Be wary of funding from industry because of</li> </ul>	
	conflicts of interest. CEE funding comes only from grants and the utility industry.	

## Irrigation Association

Interviewee:	Tom Kimmel, Executive Director		
Date of Meeting:	• August 4, 2005		
Membership Interest:	<ul> <li>Yes. IA very interested in water efficiency; already has MOU with EPA on Smart controllers program, education, and certification.</li> </ul>		
Location Recommendation:	<ul> <li>Washington, DC area for proximity to federal agencies and other organizations. If not in DC, then should located be in the water-short West. Would oppose co-locating with AWWA.</li> </ul>		
Governance Recommendation:	<ul> <li>501(c)(3) non-profit. Wants a Board seat.</li> <li>Consider creating am additional 501(c)(6) for any advocacy work that the national organization might do - IA has both a c3 and a c6 for this reason.</li> </ul>		
Partnership Interest:	<ul> <li>IA to remain the lead on irrigation efficiency issues.</li> <li>Possible projects: Education, Professional Certification, Smart Technology for irrigation, labeling - especially to avoid overlap with IA.</li> </ul>		
Other Recommendations:	<ul> <li>Why isn't agricultural water efficiency part of this project? A national organization should do both.</li> <li>Would urge consideration of graywater and recycled water initiatives for this organization.</li> <li>Get funding from "Bridging the Headgate" program.</li> </ul>		

## **Plumbing Manufacturers Institute**

Interviewee:	Barb Higgens, Executive Director Dave Viola, Technical Director
Date of Meeting:	August 15, 2005
Membership Interest:	<ul> <li>Yes. PMI members are all very interested.</li> <li>Do not compete with PMI as trade voice for plumbing manufacturers. Have PMI choose the Board participant.</li> </ul>
Location Recommendation:	<ul> <li>DC would be great, but area suffers from high turnover in staff.</li> <li>Chicago is now second location after DC for trade associations because of its central location and affordable lease rate.</li> <li>PMI often in DC for meetings; only 1½ hour flight.</li> </ul>



# Alliance for Water Efficiency: Issues & Options DRAFT Report to the U.S. Environmental Protection Agency

Governance Recommendation:	• 501(c)(3) non-profit. Wants a Board seat.	
	If planning to lobby should be a 501(c)(6) instead.	
Partnership Interest:	<ul> <li>Very interested in partnerships on product performance testing, specifications, education, and product labeling.</li> <li>Interested in pursuing the definition of "efficiency" for the industry.</li> <li>PMI currently provides many of the same services to members being considered for the national efficiency organization:         <ul> <li>Codes and standards</li> <li>Technical documents and bulletins</li> <li>Legislative advocacy</li> <li>Harmonizing requirements across US</li> <li>Member newsletters, education</li> </ul> </li> </ul>	
	o Conferences and trade shows	
Other Recommendations:	<ul> <li>Mission of the organization should be the "central forum and network."</li> <li>"Science before Standards"</li> </ul>	
	<ul> <li>Ensure that another product testing and research process is not created which duplicates ASME/ANSI.</li> <li>Important to form relationship with building industry.</li> </ul>	



## **Choosing the Structure**

After the workshop and survey results were compiled, four options were developed by the Project Team for a possible governance structure in a national water efficiency organization. A legal analysis, contained in Appendix 8, provided the necessary background for considering a non-profit corporate structure as opposed to other forms of governance. The four governance options were discussed and vetted during the Focus Groups held in August, 2005. Each option was put on a separate piece of paper and shuffled so that there was no perceived priority order to the focus group participant, who was then asked to rank each one in order, 1-4, based on their preference.

A clear favorite emerged during the focus group discussions, which has now become the recommendation in this report: A national water efficiency organization should be created as a new, stand-alone 501(c)(3) non-profit organization with an elected stakeholder Board.

The four options discussed during the focus groups were as follows:

#### 1. New Council within the American Water Works Association (AWWA).

Create a high-level Council within the American Water Works Association to take advantage of the conservation expertise of the Water Conservation Division and other programmatic benefits of AWWA, such as *Waterwiser*. The Council would include membership by all stakeholders, including non-AWWA members, with full voting rights except on standards and research issues, where manufacturer input would be advisory only. All functions and staffing would be housed within AWWA.

## 2. New 501(c)(3)Organization with elected Stakeholder Board staffed by AWWA.

Create a new non-profit organization, which will be housed at AWWA in Denver. The Board would be initially appointed by a preliminary taskforce, but will eventually be elected on a rotating basis by the stakeholder membership. All stakeholders are to be represented on the Board, with full voting rights except on standards and research issues, where manufacturer input would be advisory only. All functions and staffing would be housed

within AWWA, but the organization would have an identity separate from AWWA, similar to the arrangement already in place for the *Partnership for Safe Water*.

## 3. New 501(c)(3)Organization with elected stakeholder Board located within an academic research institution.

Create a new non-profit organization, which will be separately located somewhere within the US at an academic institution. The Board would be initially appointed by a preliminary taskforce, but will eventually be elected by the stakeholder membership. All stakeholders to be represented on the Board, with full voting rights except on standards and research issues, where manufacturer input would be advisory only. All functions and staffing would be housed within the university, but the organization would have a separate identity.

## 4. <u>RECOMMENDATION: New stand-alone 501(c)(3) Organization with elected stakeholder Board.</u>

Create a new non-profit organization, which will be separately located somewhere within the United States. The Board would be initially appointed by a preliminary taskforce, but will eventually be elected on a rotating basis by the stakeholder membership. All stakeholders are to be represented on the Board, with full voting rights except on standards and research issues, where manufacturer input would be advisory only.

## Choosing the Name

From the very beginning of the project, the project team began discussing names with the stakeholders. At the regional workshops, a list of possible names was distributed near the end of the workshop, always with entertaining results. Participants were encouraged to look at the names list, choose one that seemed to fit, or give us one of their own. The beginning names were deliberately designed to obtain input on national versus international, active versus passive, conservation versus efficiency. Names of similar organizations elsewhere were tweaked to give a water efficiency spin, to see if familiar combinations of words would be appealing to the stakeholders. "Consortium for Water Efficiency" received a great deal of discussion because of its obvious parallel with the Consortium for Energy Efficiency.

Here was the potential names list:

☐ Alliance for Water Efficiency	North American Water Efficiency
☐ Association for Water Efficiency	Council
☐ Consortium for Water Efficiency	International Association for
☐ National Water Conservation	Water Efficiency
Association	☐ North American Partnership on
☐ National Water Efficiency	Water Efficiency
Council	☐ World Council on Water
☐ Partnership for Water Efficiency	Efficiency
☐ US Water Efficiency Council	•

#### During the process, distinct themes emerged from the stakeholders:

- 1. The organization should not say "US" or "National" as there is a desire to include our Canadian efficiency partners and the name should not serve to automatically exclude them. "North American" was rejected for the same reason -- it may prove too restricting later. And it was clearly premature to assume "International" at the start.
- The chosen name should use the term "efficiency" and not "conservation" as conservation was perceived as having a more negative connotation for the consumer.
- "Council" sounded too formal; "Consortium" sounded too academic.
- 4. "Alliance" sounded action-oriented, better than "association", "consortium" or even "partnership."

#### Recommendation:

Based on the workshop feedback, the survey results, and the focus group discussions, *Alliance for Water Efficiency* was the clear winner.

## **Choosing a Mission Statement**

The research results of the combined regional workshop surveys and the online surveys showed strong support for a general mission statement that emphasized education and understanding, research and evaluation, and promotion and leadership. The stakeholders were clear that they wanted programs and practices researched as well as products and technologies.

Here is a draft mission statement from those results, which also emphasizes the advocacy role:

Serve as a strong voice to further the universal understanding and acceptance of the need for water use efficiency, and holistically research, evaluate, and promote effective water efficient products, standards, best practices, and programs.

However, the subsequent focus groups came up with a different mission statement, likely due to the fact that they were a subset of the stakeholders -- product manufacturers and water suppliers. This mission statement is based on an extensive discussion of the benefits of market transformation that occurred during the focus group sessions:

To promote, facilitate, and achieve a market transformation to greater water efficiency and resource sustainability by raising awareness, creating a national dialogue, educating and consolidating efficiency efforts.

## **Choosing a Location**

Stakeholder discussions on the permanent location were lively. Each workshop had a favorite city -- usually their own! Several regions and locations were expressly supported or discarded by the stakeholders. Preference was uniformly expressed for a location with the following characteristics:

- An airport hub
- A centrally location within the country
- Not located in the Washington, D.C. beltway
- Close commuting proximity to Washington, D.C. for meetings
- Accessibility for our Canadian partners accessibility

Stakeholders expressed a distinct preference to **not** locate the organization in Washington, D.C, although most of the professional managers in the sister energy and water resources organizations disagreed with that recommendation. Stakeholders also seemed to prefer locating the organization in regions outside of California. Chicago, Atlanta, New York, and Denver were choices actively considered because of their airport hub status.

After considerable discussion with all the stakeholders, Chicago emerged as a logical choice. Not only does it have a major airport hub, is centrally located in the country, is proximate to our Canadian partners, but also is only a one and a half hour flight away from Washington, DC.

Chicago as a location also brings other opportunities. Not having been formerly very active in water conservation issues, the Great Lakes States now need targeted assistance in designing water efficiency programs in order to meet the requirements outlined in the recently signed International Great Lakes Regional Collaboration Strategy. Locating a new national water efficiency organization in Chicago would provide a needed boost to an entirely new group of stakeholders. In addition, Mayor Richard M. Daley of Chicago has been keen to locate the new organization in his city, to dovetail with his city-wide green building and sustainability initiatives. The Midwest had historically been an area of minimal conservation activity; that is now rapidly changing, and locating a national water efficiency organization in Chicago seems to be optimal for helping neighboring Midwestern states just beginning their water efficiency program planning.

## **Interim Organization Option**

Although the long term home for the national water efficiency organization is recommended in this report to be in Chicago, there is a compelling argument that

initially the organization should be hosted within another existing organization until it can be formally created, incorporated, funded, and ready to be spun off into its own permanent headquarters and staffed. For this reason, the California Urban Water Conservation Council has offered and is willing to host the organization for its first six months to a year to assist in getting the new efficiency organization incorporated, the non-profit tax status (501c3) paperwork filed, a Board of Directors chosen, a funding plan developed, and permanent staffing hired.

A web site domain name has already been reserved for the new national organization:

### www.allianceforwaterefficiency.org

which also includes the reservation of the same URL under the dot com and dot net domain names.

We're ready to go!

## Choosing the Board of Directors

The clear choice of the stakeholder participants in this process was that the new national organization NOT be a consensus organization, but instead one governed by a decision-making board, one composed of a diverse mix of the stakeholder groups. Such a board should have the following characteristics:

- Representative of all the regions of the country
- Reflective of the private /public/water supplier sector perspectives
- Staggered Board terms of three years, with a 1/3 board turnover annually
- Non-compensatory for time, but compensatory for all travel expenses
- Appointed initially, but designated from their stakeholder group thereafter

# Recommendation: A governance board composed of 21 members from the following stakeholder groups:

- 1. Water Supplier (East)
- 2. Water Supplier (Midwest or Southwest)
- 3. Water Supplier (West)
- 4. Water Supplier (Northwest)
- 5. Plumbing Manufacturer
- 6. Plumbing Manufacturer or Association
- 7. Appliance Manufacturer
- 8. Appliance Manufacturer or Association
- 9. Irrigation Manufacturer
- 10. Irrigation Consultant or Association
- 11. Builder/Developer
- 12. Water Planning Government Agency (State, Regional or Local)
- 13. Water Planning Government Agency (State, Regional or Local)
- 14. Regional Efficiency Organization
- 15. Regional Efficiency Organization
- 16. Environmental organization
- 17. Environmental organization
- 18. Energy organization
- 19. Education organization
- 20. Academic Institution
- 21. Tribal representative
- 22. Ex officio: EPA, CEE, CUWCC

## **Recruiting Membership**

The national water efficiency organization must be capable of soliciting its own funds from a variety of sources: government grants, stakeholder donations for research, and membership dues. Although it is unlikely that a new organization can be immediately solvent, it is indeed probable that the organization can be responsible for a good portion of its revenue within a five-year period.

In order to achieve this goal, a broad net must be cast to recruit prospective members to the organization. The early projects undertaken must provide sufficient member benefit to serve as a recruitment tool. By funding programs at the outset that provide efficiency training on programs, savings evaluation, and practical field experience, the national organization will prove its worth to the membership and in return be able to solicit memberships in categories befitting the program needs.

We learned during this project that interest in a national water efficiency organization is very high. Between 77-85% of our respondents, depending upon their affiliation, were extremely interested or very interested in joining or otherwise participating in the organization -- an extraordinary response, we believe. We then asked the stakeholder participants further questions relating to perceived benefit and the range of likely monetary contributions to the organization. The workshop/survey report shows the following:

Percent	Stakeholder Type	Would	Amount of \$ Range
(or subset %)		Contribute?	
53%	Water Supplier	yes	
(26%)	Water Supplier		\$500 - \$999
(26%)	Water Supplier		\$1,000 - \$2,500
52%	Product Manufacturer	yes	
(45%)	Product Manufacturer		\$500 - \$999

These statistics show a definite propensity for membership in this organization, and despite the conclusion by Hardwick Research that funding seemed questionable, the project team had the opposite reaction to the data on financial support of the organization's programs. Having half of the participants ready to make a commitment is a high probability for success in membership recruitment. Consequently, during the first two years of the new organization's existence, it must begin to recruit these willing participants into the membership fold. Based on the above highly preliminary estimates, it could very well be that by the end of the third or fourth year the new national water efficiency organization should be bringing in between \$200,000 to \$350,000 in member contributions just from these two stakeholder groups.

## **Making Decisions**

During the workshops, considerable time was spent discussing the merits of consensus decision-making. A large number of the workshop participants were fully familiar with the benefits and drawbacks that a consensus process brings. Two of the drawbacks are long delays in decision-making while all the parties come to agreement, and the ultimate possibility of no decision if consensus is not reached. Because the California Urban Water Conservation Council is organized and managed as a consensus-decision-making body, a number of the participants in each of the regional workshops -- not just in the Irvine, California one -- knew of the issues involved.

While the participants all clearly valued the consensus process, there appeared to be no support for importing that process into the new national water efficiency organization board. It was firmly stated that the organization should have a board of directors that would be fully prepared to make the necessary decisions amongst themselves. Since the board would be composed of a correct mix of those stakeholders, it was suggested that the board be empowered to come to decisions on items such as positions on policy and technical matters, research funding, new program directions, and other organizational issues. It was further suggested that on sticky issues where a decision would be difficult, that each board member seek a consensus direction from their own stakeholder group, and thus have a full voting process of majority rules once at the board table.

At no time during the year's duration of the project did we ever hear contrary advice or comment. It was obvious to the project team that the stakeholder participants wanted an organization that could act quickly, decisively, and with expertise on all matters before it. There did not appear to be significant interest in involving the organization membership in a separate voting process.

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## RECOMMENDATIONS FOR ORGANIZATION FUNCTIONS

The stakeholders identified clear priority functions for a new national water efficiency organization. These functions are extensive, not provided uniformly anywhere else. Providing all of these functions will be expensive, and not easily within the realm of the beginning relatively lean organization. Thus, the early years will have to prioritize the most important functions for immediate benefit and impact.

#### The functions identified by the stakeholders are as follows:

- 1. Create a national water efficiency clearinghouse and network for program information sharing.
- 2. Advocate and research plumbing and code standard setting.
- 3. Independently research and test new products and programs for reliable water savings.
- 4. Coordinate with green building programs.
- 5. Train water conservation professionals.
- 6. Develop consumer education programs.
- 7. Assist with market transformation for high efficiency products.
- 8. Advocate strongly for water efficiency overall.

Each of these functions is described in the sections that follow. With each description is a proposed timetable for action in the five year time frame.

## 1. Clearinghouse/Network

Proposed Program Start Date:	July, 2006
Proposed Budget:	
<ul> <li>2006 (Year One)</li> </ul>	\$105,000
<ul> <li>2007 (Year Two)</li> </ul>	\$75,000
<ul><li>2008 (Year Three)</li></ul>	\$75,000
<ul> <li>2009 (Year Four)</li> </ul>	\$75,000
<ul> <li>2010 (Year Five)</li> </ul>	\$75,000

One of the central areas of agreement from a broad base of stakeholders interested in a national water efficiency organization was the creation of a clearinghouse for water efficiency information and research, and for a networking portal. In the survey, the idea of creating a central clearinghouse and professional network was identified as a core function for the proposed organization by more stakeholders than any other item. Such clearinghouses currently exist only in partial form on a state level: the California Urban Water Conservation Council maintains active information on California programs; a second statewide clearinghouse is being initiated in May, 2006 in Florida as part of the *ConserveFlorida* program, operated out of the Florida State University system. Both of these efforts offer coordination possibilities with a national clearinghouse program.

It is important to note that this clearinghouse concept is not just a web site program; it is an active technical assistance outreach, fully staffed, in the following areas:

- Improving the overall knowledge base of individuals and organizations related to water-efficiency products and practices;
- Creating a broad-based platform for the development of cost-effective outreach and implementation of water-efficiency programs in the U.S.;
- Acting as the focal point for technical exchanges on the topic of waterefficiency with organizations inside and outside of the U.S.; and
- Fostering the research, development, and manufacture of water-efficient products for U.S. applications.

There is a clear and compelling need for a national water efficiency information clearinghouse and a web network portal to serve a diverse community of users. A national water efficiency organization has the potential to bridge the gap



between consumers seeking information on efficient products and fixtures, to resource planners looking for end-use consumption data to help size a new water treatment plant. The water efficiency clearinghouse can offer information ranging from product standards and testing to resources for integrating efficiency into long range utility planning to drought preparedness and response. No such complete resource currently exists on the web or any other place.

- 1. <u>Technical assistance</u> should be part of the services offered through this central clearinghouse. As water providers move beyond simple program initiatives for residential customers, and more focus is placed upon commercial and industrial processes, the level of technical expertise required increases significantly. Most water providers do not possess the experience, technical capability, or marketing know-how to deal with specialized processes or industries. As such, assistance should be provided by the national organization staff and consultants to those requiring these resources.
- 2. Program Development Assistance should also be part of the services offered. Using the technical skills and experience of the national organization staff and consultants, provide assistance to water providers of all sizes in developing strategies and designing water-efficiency programs. Using the model currently employed by the California Urban Water Conservation Council, technical assistance should be available (upon request) to member water providers both small and large, particularly for those providers that have neither the experience nor the skills to design or implement. The informational clearinghouse (discussed below) will be a significant benefit to this element. Many of the assistance tasks to be undertaken are issues (and their solutions) common to all water-efficiency programs, such as:
  - Market research
  - Marketing materials development and selection
  - Product specification development and efficiency thresholds
  - Product selection
  - Establishment of trade ally relationships
  - Development of measurement and verification protocols
- 3. An Informational Clearinghouse for Water-Efficiency Initiatives was a clear request from the stakeholders during the research phase. The national organization should develop and maintain an informational database on water-efficiency initiatives undertaken by water providers in the U.S. (and elsewhere as deemed important). Such a database would describe the program structure and document the results of past and current programs. It would be accessible by and be of benefit to



manufacturers and water providers. No such database exists today and, as a result, only fragmented information is readily available, thereby hampering effective communication and product marketing. Further, the cost for water providers to research and implement successful water-efficiency programs in their respective service areas would be reduced through the exchange of information. This could also encourage the development of region-wide programs involving a partnership of water providers, and discourage the fragmentation that exists today.

4. <u>A Contractor-Consultant Registry</u> could be maintained by a national efficiency organization which would be a voluntary registry for water-efficiency program contractors and consultants. The registry could thereby furnish water providers and others with access to the information and/or services needed during program design and implementation.

### A Clearinghouse Web Site?

A national water efficiency clearinghouse and networking portal would be a dynamic web presence offering a potentially huge array of features and information. The beauty of an on-line clearinghouse is that it is dynamic, flexible, and adaptable to changing requirements and circumstances. Useful existing web resources such as <a href="https://www.h2ouse.org">www.h2ouse.org</a> and <a href="https://www.waterwiser.org">www.waterwiser.org</a> could be leveraged to create a substantial web presence for the clearinghouse immediately upon launch.

A national water efficiency clearinghouse web site and networking portal could have some or all of the following elements:

- References. A searchable database of water efficiency reference materials, case studies, program descriptions, research studies, standards documents, usage information, regulations, consumer information, etc. Many documents could be offered for free or fee download.
- Information on water use and efficiency for consumers, landscape professionals, conservation professionals, journalists, teachers, students, researchers, the water industry, decision makers, etc.
- Updated News on water efficiency, new products, research, regulations, programs, standards, legislation, etc. List service and headline clipping service could also be offered.
- Calendar of upcoming events and deadlines.
- Links to water efficiency resources across the web.
- On Line Standards reference on plumbing codes and standards
- On Line Green building reference on green building in general and green building programs across the nation.



- Water efficiency planning. Resources for integrating water efficiency into long range planning including sample conservation plans, forecasting tools, etc.
- Product information. A searchable database of water efficient products including specifications, prices, available testing and performance data, procurement information, etc.
- Consulting services. Information on consulting services available by or through the national water efficiency organization.
- **Drought preparedness and response**. Information and tools on drought and drought response and the relationship of water efficiency to drought preparedness and response.
- Search functions specifically for water conservation and efficiency related topics.
- Networking tools for organization members including membership list and contact information, committee rosters, meeting agendas and minutes, strategic planning documents, etc.
- On-line discussion forum allowing immediate interaction between members and opportunities for questions to be answered by experts from across the country.
- E-commerce portal for purchasing approved products and services related to water efficiency.
- Advocacy center to mobilize organization members to advocate for water efficiency in a variety of forums at the local, state, and national level.

This is not an exhaustive list by any means. Numerous other functions for the clearinghouse and networking portal are possible. The *WaterWiser* web site already has implemented some of the elements listed above, but as already discussed, in its current incarnation *WaterWiser* is unlikely to meet the needs of an active and aggressive national water efficiency organization.

### Potential Collaboration with WaterWiser?

A national water efficiency organization has two fundamental choices with regard to *WaterWiser*:

- a) Create a separate and distinct clearinghouse and networking portal with no association with *WaterWiser*; or
- b) Collaborate with AWWA to expand and improve WaterWiser.

The first option remains a fall-back position if developing a satisfactory collaboration with AWWA and *WaterWiser* proves unworkable. The advantages of building from the foundation established by *WaterWiser* are obvious, but a on the

downside a collaboration that keeps *WaterWiser* housed within the AWWA family of web sites may not be a satisfactory solution. AWWA Executive Director Jack Hoffbuhr has expressed a desire to work with the new national water efficiency organization regardless of its ultimate affiliation with AWWA. The AWWA web team has indicated that they would welcome a collaboration that would help develop and improve the *WaterWiser* site. These are positive signals.

### a. Potentially Acquiring WaterWiser from AWWA

Since *WaterWiser* was founded and established within AWWA over 10 years ago, much work has been done on the *WaterWiser* site by AWWA staff and volunteers. Given the investment that AWWA has put into *WaterWiser*, any consideration of partnering or separating *WaterWiser* from AWWA should include a negotiation process with AWWA management.

It is possible to envision a collaborative arrangement where the national water efficiency organization could take over responsibility for maintaining and updating *WaterWiser* while the AWWA Water Conservation Division maintains an advisory committee to provide input. *WaterWiser* would become the official web site for the national efficiency organization and developing and expanding *WaterWiser*'s features to meet the needs of the members would be a primary goal. Another variation of this option is a co-located Waterwiser web site on both the AWWA platform and the national organization platform. The web logistics of this, however, have not been explored.

Separating *WaterWiser* from the AWWA web site group has some inherent problems. The site would need to be completely redesigned to distinguish it from the AWWA "look and feel". The on-line conference/forum software must be changed, links to the AWWA e-commerce portal must be altered, and the search functionality would need substantial restructuring. The current reference search functions on *WaterWiser* are built to take advantage or the AWWA WaterNet abstracting service that references all AWWA journals and conferences as well as a number of other publications. Separating *WaterWiser* from AWWA would probably mean losing free access to the WaterNet resources, although it might be possible to license them for the new site.

### The Advantages of acquiring WaterWiser from AWWA are:

- There is an existing foundation of resources and content to build on.
- WaterWiser is a known brand on the internet getting 6,000 unique visits per month.
- The water conservation community is familiar with WaterWiser and supports its goal.



- A user base already exists for WaterWiser along with a network of linked sites that give it high standing with key search engines like Google.
- Separating WaterWiser gives it autonomy to develop in any way desired by the national efficiency organization without possible interference from AWWA.
- New features (such as product listing and advocacy) that are difficult to include on an AWWA site could be added.

### The Disadvantages of acquiring WaterWiser from AWWA are:

- The site will lose the backing and support and technical expertise of AWWA, the organization that has fully supported it for more than 10 years.
- The ability to search through AWWA related references via WaterNet could be lost.
- The site will require substantial redesign and redevelopment including the forum, which currently uses the AWWA's forum software.
- WaterWiser's association with AWWA may make it difficult for others to accept it as separate and independent.

### b. Expanding WaterWiser on the AWWA Web Site

An option for the short or even long term could be to work closely with the AWWA web team to expand and improve WaterWiser to meet the needs of the new national water efficiency organization. This would reduce the level of technical effort and redesign work shouldered by the new organization and would focus their role on developing new content and features. AWWA has expressed interest in this option and appears open to this sort of collaboration.

The national water efficiency organization would certainly still want to have its own informational web site, but the clearinghouse and networking portal could be handled through *WaterWiser*. This option could particularly make sense for the first few years as the national efficiency organization gets established and if the start-up budget is not substantial enough to dedicate to web site re-development.

To make this option viable, negotiation with AWWA will be required regarding potential content areas and governance for *WaterWiser*. AWWA has shied away from product reviews and advocacy, but these appear likely to be desired new elements for *WaterWiser*. The national efficiency organization must be able to make content decisions independent from AWWA and AWWA staff. Agreements must be reached regarding ownership of content developed by the efficiency organization should they decide to establish a separate clearinghouse web site at a future date.

The advantages of expanding the existing WaterWiser site within the AWWA structure are:

• Low start-up costs. Maximum content return for minimum investment.



- Quick start. Project could be up and running quickly, developing and posting new content to WaterWiser.
- Efficiency organization staff would not need to have (or contract out) web programming expertise.
- Closely links the new organization to AWWA.

# The disadvantages of expanding the existing WaterWiser site within the AWWA structure are:

- Does not create distinctive branding for the new organization.
- Relies on busy AWWA web team to make technical changes to the site. WaterWiser is not their top priority.
- What happens to all of the content developed for the site if after a few years the national organization decides it wants to have its own separate clearinghouse site?
- Closely links the new organization to AWWA.

### Recommendation

A key stakeholder finding was that a national water efficiency organization should be responsible for assembling and maintaining a comprehensive collection of research related to water conservation. The impact of numerous water conservation studies, products, and programs has been limited by the lack of means to distribute this knowledge to the practicing professional. Thus, the national water efficiency organization should have its own independent information clearinghouse and networking portal web site. The extent this site can be leveraged from what has been created for *WaterWiser* is unclear. For the first year of the organization when budgets are limited and there are many important structural planning goals to accomplish it may make sense to work with AWWA to expand and develop WaterWiser. As soon as possible, the efficiency organization should negotiate with AWWA for a potential collaboration or acquisition of *WaterWiser*. If *WaterWiser* can not be acquired or a meaningful partnership created, a new clearinghouse website should be built from the ground up.

# 2. Plumbing Standards and Codes

Proposed Program Start Date:	July, 2006
Proposed Budget:	
<ul> <li>2006 (Year One)</li> </ul>	\$50,000
<ul><li>2007 (Year Two)</li></ul>	\$50,000
<ul><li>2008 (Year Three)</li></ul>	\$50,000
<ul> <li>2009 (Year Four)</li> </ul>	\$50,000
<ul> <li>2010 (Year Five)</li> </ul>	\$50,000

One of the central areas of agreement from a broad base of stakeholders was that the national water efficiency organization needs to <u>actively</u> participate in the plumbing code revision process of both IAPMO and ICC. It is not enough to simply monitor and review proposed code amendments on a piecemeal or part-time basis. Recent experience has proven that water agency appeals for water efficient code provisions need serious attention and follow-up to ensure adoption. Thus, a large and active presence from the water efficiency community must be integrated into the code-writing process. A national water efficiency organization is the best means to manage an organized and effective campaign to assure that the plumbing codes parallel water efficiency initiatives.

Because of the national scope and influence of standards and codes, the national water efficiency organization should seek to be represented on the various non-governmental bodies that develop ANSI standards and building and plumbing codes, where the interests of water-efficiency can frequently be integrated into the documents authored by such organizations. One or more of the national organization's staff or technical advisors should be assigned to the ASME and IAPMO organizations as a participant member in the relevant project teams and committees including, but not limited to, the following:

ASME/ANSI A112.19.2	Vitreous China Plumbing Fixtures
ASME/ANSI A112.19.5	Trim For Water Closet Bowls, Tanks, and Urinals
ASME/ANSI A112.19.14	Dual Flush for 6-liter Water Closets
ASME/ANSI A112.4.7	Point of Use and Branch Water Sub-Metering Systems
ASME/ANSI A112.19.19	Vitreous China Non-Water Urinals
ASME/ANSI A112.18.1	Plumbing Supply Fittings
IAPMO/ANSI Z124	Plastic Plumbing Fixtures

Another area of liaison and involvement is that of regulatory proposals with respect to appliances, equipment, devices, and other products of a non-plumbing nature. A national water efficiency organization should be equipped to speak for the



water efficiency community and water providers in particular, regarding Federal and state proposals for regulating the performance and resource efficiency of these types of water-using products. In some cases, the products and specifications for energy-efficiency initiatives are not water-efficient; similarly, the reverse is true as well.

A good example of the standards setting process in motion is the pre-rinse spray valve. Originally tested as an innovative promising technology, the 1.6 gallon-per minute pre-rinse spray valve was brand new in 2003, used in restaurants to pre-wash dishes before they are stacked in a commercial dishwasher. It was half the flow



of the regular in-service models, and since the valves often run constantly with hot water, reducing the volume of flow saves both water and energy. After its preliminary tests looked excellent, both from a water and energy savings perspective as well as from a performance perspective, the California Urban Water Conservation Council applied for statewide energy efficiency funding to conduct a door to door direct installation program throughout California on behalf of its member water suppliers. \$2.3 million was awarded, and in 2003 the program began its first Phase of 16,900 valves. After the second Phase (another 14,000 valves) was underway, it became clear that since these valves had a useful life of only 5-6 years, it was prudent to look at a standard change to ensure that the replacement for

the used low-flow valve would be low-flow as well. A proposal for standard setting was brought to the California Energy Commission, which in quick order in 2004 adopted a statewide point of purchase and installation standard of 1.6 gpm at 60 psi, along with a companion performance cleanability standard which was carefully worked out with the users as well as the manufacturers. The standard caught the attention of the national energy groups, who then proceeded to embed the same flow standard in the 2005 Energy Policy Act.

In only three years a complete market transformation was made. The manufacturers were in support, the savings were automatic, and ironically the performance was improved (particularly in California where the cleanability standard is also in effect). No single story so clearly shows how quickly a standard change can occur with diligence and planning. For this reason, plumbing and appliance standards and codes must be an early priority of the national water efficiency organization to ensure that no opportunities are lost.

## 3. Product Investigation, Testing, and Classification

Proposed Program Start Date:	July, 2007
Proposed Budget:	
<ul> <li>2006 (Year One)</li> </ul>	\$0
<ul><li>2007 (Year Two)</li></ul>	\$25,000
<ul><li>2008 (Year Three)</li></ul>	\$50,000
<ul> <li>2009 (Year Four)</li> </ul>	\$75,000
<ul> <li>2010 (Year Five)</li> </ul>	\$75,000

This function was highly rated with the stakeholders, who desired that a national water efficiency organization be involved in separate verification of product performance, testing, and analysis for savings. The results of services provided here would, in many cases, be used by manufacturers to refine prototype product designs and/or correct problems, and by the water authorities to develop programs, and by the public to evaluate water-efficiency options. Such services or functions would include:

- 1. Prototype Product Beta Testing: These tests would continue the current practice of assisting manufacturers with prototype product evaluation through field testing in end-use applications or through independent laboratory testing. In some cases, at the discretion of the manufacturer or other funding authority, the test results would be considered proprietary and of a non-disclosure nature while other activities would be open and available for participation by all national organization members.
- 2. <u>Customer Satisfaction Surveys</u>: At the request of manufacturers and others, these surveys of end-use customers are performed to determine their satisfaction with specific water-efficient products (prototype and production) that they have installed and used. This category includes both technical and non-technical survey feedback for the benefit of manufacturers and/or water providers and program implementers.
- 3. Development of Product Performance Metrics and Thresholds: Through a consensus process that represents the interests of water providers and the industries producing water-efficient products, the national organization would develop performance and durability protocols and metrics that can be used to establish minimum requirements for water-efficiency initiatives by public agencies. This includes such ongoing consensus efforts as the Uniform North American Requirements (UNAR) for toilet fixtures, which will be expanded into other product areas.



- 4. Product Databases: The product databases would be developed for the various water-efficient product categories -- including appliances, irrigation equipment, plumbing products, food service equipment, and others. The database will be of primary benefit to program implementers and to manufacturers and will include the important publicly available performance and other specifications and thresholds, and information on water savings (and energy savings, where available from authoritative sources), product performance, useful life, and identification of water-efficiency programs that are promoting the use of these products.
- 5. <u>Promote New Research</u>: The national organization should aggressively promote research on new products and technologies by industry and will work with its industry members and associations to secure resources, and legislative and regulatory changes where feasible.

At present, all of these research and testing programs are conducted on an adhoc basis as funds become available. Some of the studies are undertaken by the California Urban Water Conservation Council with the funding assistance of water suppliers throughout the US. Others are funded directly by water supply utilities within their own districts. Appendix 9 shows an ongoing list of research projects which have either been funded and are underway, or are still awaiting funding contributions from interested parties. A list such as that in Appendix 9 is the type of research project list that would come under the jurisdiction of the national water efficiency organization. However, because the startup funding for the national organization is not expected to be robust enough to fund all desired functions, this work will likely not occur during the first two years.

## 4. Green Building Coordination

Proposed Program Start Date:	July, 2008
Proposed Budget:	
<ul> <li>2006 (Year One)</li> </ul>	\$0
<ul><li>2007 (Year Two)</li></ul>	\$0
<ul><li>2008 (Year Three)</li></ul>	\$10,000
<ul> <li>2009 (Year Four)</li> </ul>	\$30,000
<ul> <li>2010 (Year Five)</li> </ul>	\$50,000

A national water efficiency organization will eventually have many opportunities to partner on new building initiatives nationwide, and there are many organizations now involved in sustainable green building programs. Water efficiency technical information, because it is not readily available to most green building organizations, will soon be in high demand, particularly since the US Green Building Council (LEED) and other green building groups have historically not spent much time or attention on water efficiency issues, in either residential or non-residential development.

Across the country there are water supply agencies working on green building programs in order to incorporate their message. Metropolitan Water District in southern California has their "California-Friendly" green building program; Las Vegas has their "Water Smart" green building program; the City of Austin, Texas as a green building effort; and Florida (City of Tampa and others in the state) have similar incentive programs for new development. The point is that none of these efforts are well coordinated, and we continue to build homes in most areas of the country that will have to be retrofitted for better irrigation technology and more advanced hot water distribution systems within the next 10 years. It is a perfect role for a national water efficiency organization: to help define the problem and research solutions to today's current water inefficiencies in the new construction market.

Here are some examples of possible projects that the national organization could undertake on the green building issue, particularly if funding from the building community is available:

- Help homebuilders with corporate strategy and market positioning strategy related to water conserving homes.
- Help homebuilders with specific community development. (Water modeling.)



# Alliance for Water Efficiency: Issues & Options DRAFT Report to the U.S. Environmental Protection Agency

- Help water agencies work with homebuilders and landscape professionals to incorporate water conservation and detailed water use measurement.
- Help water agencies mathematically model incentive structures.
- Help regional planners establish water use ordinances.
- Help regional planners manage growth by understanding water resources.

Again, because of funding constraints, this function will need to be deferred for a few years during organization startup, unless supplemental stakeholder funding is received.

## 5. Training for Conservation Professionals

Proposed Program Start Date:	July, 2007
Proposed Budget:	
<ul> <li>2006 (Year One)</li> </ul>	\$15,000
<ul><li>2007 (Year Two)</li></ul>	\$30,000
<ul><li>2008 (Year Three)</li></ul>	\$30,000
<ul> <li>2009 (Year Four)</li> </ul>	\$30,000
<ul> <li>2010 (Year Five)</li> </ul>	\$30,000

Education and training are essential elements of changing the status quo in water usage. Historically, water conservation education and training have been fragmented, incomplete, and redundant. The national water efficiency organization should leverage the existing body of water conservation educational materials to produce appropriate materials for training its conservation professionals and for providing quality information for construction-related constituencies. Modern DVD technology offers sophisticated options for creating self-guided training modules in various water efficiency programmatic areas.

Formalization and elevation of the training program is best accomplished through some form of certification. At this stage, it is unclear whether the national organization should be directly responsible for professional certification, although it should likely develop the framework and tools for it in the long run. It may be more prudent to have the water conservation certification accomplished at a State or federal level in combination with licensure.

- 1. <u>Technical Workshops</u> should be sponsored by the national organization for water providers and manufacturers in order to foster both technical and non-technical exchanges between the two constituencies. It is important that those individuals designing and implementing water efficiency programs for the water providers are fully acquainted with the measures and products that they are including within their program. Similarly, it is also important that the manufacturers have knowledge of the goals and strategic directions of the water industry as they implement efficiency programs.
- Regular Technical Bulletins could be distributed by email or posted on the national organization's web site for continuing updates on new issues and technologies. Similar to the Product News page of the CUWCC web site and the WaterLogue newsletter, these bulletins can bring the very latest



information to a wide audience in the water efficiency community for a very small cost.

3. <u>Interactive DVD Training Materials</u> for conservation professionals could easily be developed and distributed through the national organization. The videotaping of specialty workshops and field demonstrations can easily be packaged on an interactive "scene selection" format to enable large amounts of visual water efficiency information to be handily accessed. Each year the national organization could tackle a particular subject: one year it could be reducing outdoor irrigation, then a subsequent year commercial and industrial water efficiency. The third year it could be minimizing utility system water losses. The value of recording these training modules is that the DVDs could also be a revenue source for the national organization if done on a high-quality basis.



### 6. Consumer Education

Proposed Program Start Date:	July, 2006
Proposed Budget:	
<ul> <li>2006 (Year One)</li> </ul>	\$10,000
<ul><li>2007 (Year Two)</li></ul>	\$20,000
<ul><li>2008 (Year Three)</li></ul>	\$50,000
<ul> <li>2009 (Year Four)</li> </ul>	\$50,000
<ul> <li>2010 (Year Five)</li> </ul>	\$50,000

Consumer indifferent to water efficiency and the need for public education was the #1 problem issue according to the stakeholder participants. Thus, it emerged as a function for the national organization on a high priority basis, to better educate the consumer, not only on the benefits of water conservation and how to find efficient products in the marketplace, but also on the true price of delivering potable water to the tap. Here are some ideas for promoting better consumer awareness:

- Public Educational Materials: While most water utilities provide information materials to the customers, there is a need for generic materials on the value of water efficiency. The national organization could develop a uniform message that would have high recognition and could be used virtually anywhere in the country. Materials could include print media, radio spots, billboard designs, posters, and the like.
- 2. Water Efficiency Newsletter: A quarterly newsletter could be published detailing the latest initiatives in water conservation programs and water-efficient products. The primary purpose of the newsletter will be to encourage and enable the exchange of information and foster communication among water providers and the industries supporting water-efficiency initiatives; the public will, however, have access to the newsletter.
- 3. Alliance Home Website: A significant amount of the communications on water-efficiency programs, practices, and products will occur through the national organization's website once it is built. Included will be status updates on all of the technical services and technical assistance initiatives identified above. Members of the organization should have access to both the Product Database and the Informational Clearinghouse (as discussed above) through the website. The CUWCC has already reserved the domain name <a href="www.allianceforwaterefficiency.org">www.allianceforwaterefficiency.org</a> for future use of the organization.



The public section of the national organization's website will include the existing H2ouse web site information pages, which will be transferred to the national organization by the California Urban Water Conservation Council. As such, maintenance and updating of the H2ouse pages will be an important and ongoing task. The public will also have access through the website to published reports and other documents that might aid them in purchasing and maintaining water-efficient products. This is a project that could start right away, as the H2ouse web site is completely built and only needs minor updating in 2006.

4. Public Technical Assistance: We expect that if designed well, the general public will avail itself of the national organization website, including both the H2ouse section and those public sections on products and performance. In addition, however, a large number of "real-time" public inquiries (telephone and email inquiries) are expected as well. As such, we anticipate needing to provide a level of personal assistance to consumers as might be required, similar to that currently provided in California and elsewhere.

## 7. Market Transformation and Labeling

Proposed Program Start Date:	July, 2008
Proposed Budget:	
<ul> <li>2006 (Year One)</li> </ul>	\$0
<ul> <li>2007 (Year Two)</li> </ul>	\$0
<ul><li>2008 (Year Three)</li></ul>	\$75,000
<ul> <li>2009 (Year Four)</li> </ul>	\$75,000
<ul> <li>2010 (Year Five)</li> </ul>	\$75,000

During the regional workshops there was much confusion about the term "market transformation." Similarly, as participants were filling out the on-line survey we received a number of email inquiries as to what we meant by our question. The survey asked "If a national organization for water efficiency was created, what should its core mission be (please choose only one)." One of the choices was "Creating a leveraged national market transformation." No participant was choosing it as their one choice because they didn't understand the term.

When it was explained that "national market transformation" meant making an efficient product the most available product in the store, rather than the least available product in the store, then people understood. Transforming the market means changing the customer's choices in the stores and slowly turning the tide on the quantity of products available for the customer to purchase so that the efficient product becomes eventually the most prevalent one. We transform the market by incentivizing the more efficient product with rebates for the customer, or by developing new product standards that eliminate the older, less efficient products from the marketplace. The consumer buys efficient products because eventually that's what there is on the store floor.

Once the participants understood the concept, many endorsed it, although less than 20% ever chose it as their #1 issue. Where this issue came to the fore, however, was in the focus groups, where the subject received much discussion and support. As a result, market transformation activity is a function that stakeholders are interested in the national organization undertaking. The focus group discussion centered on efficient product labeling as one obvious method for transforming the market, and suggestions were made at three of the four focus groups that the national organization get involved in the national EPA water product labeling program to help it progress in what ever way would be possible. One focus group even suggested that the national organization run the water efficiency labeling program for EPA under a contract.

# 8. Advocacy and Legislative Action

Proposed Program Start Date:	July, 2008
Proposed Budget:	
<ul> <li>2006 (Year One)</li> </ul>	\$0
<ul> <li>2007 (Year Two)</li> </ul>	\$0
<ul><li>2008 (Year Three)</li></ul>	\$10,000
<ul> <li>2009 (Year Four)</li> </ul>	\$15,000
<ul> <li>2010 (Year Five)</li> </ul>	\$15,000

It was a matter of considerable discussion among the stakeholders as to how to handle advocacy and legislative action. Although every stakeholder seemed to support a general advocacy role, many public sector participants worried that their participation would be curtailed if the Alliance became a lobbying organization. It is also clear that federal funding can not be used for this purpose, and if such activity occurs the funds must come from a separate source and not be co-mingled. Some of the "sister" organizations interviewed during this project suggested that it might be prudent to create a separate 501(c)(6) organization for that purpose.

Eventually it will be important that the new national water efficiency organization be diligent in maintaining an awareness of the legislative and regulatory proposals before the U.S. Congress and other entities that might affect water efficiency. A "presence" in Washington D.C. can be achieved through a variety of avenues, including staff or contract personnel located in the capitol.

- 1. <u>Liaison with Governmental Authorities</u>: The national organization should have a formal liaison with those Federal state, regional, local, and other governmental and regulatory bodies on issues of importance to its members. While not engaging in lobbying activities, the organization could play a vital informational role on water-efficient products and practices where required and/or requested. This includes responding to inquiries from such organizations, providing comment on proposed actions where requested, and tracking progress on water-efficiency initiatives by the organizations.
- 2. <u>Allied Organizations</u>: The national organization should participate with and, to the extent possible, influence those organizations whose mission is to achieve energy efficiency, environmental sustainability, or related goals. This includes the U.S. Green Building Council (USGBC), National Association of Home Builders (NAHB), Green Building Initiative (GBI), the American Council for an Energy Efficient Economy (ACEEE), Consortium for Energy Efficiency (CEE), and various other organizations, both national and



regional. As water-efficiency gains attention from these organizations, it is important that the correct technical requirements and metrics be incorporated into their guidelines and other work.

A role of advocacy, although important, cannot fully develop until the organization is settled, has developed expertise of its own, and is ready for that major arena. General advocacy, however, can occur from the start. By general advocacy we mean enthusiasm for water efficiency, promotion of its many benefits, and education of the wary and doubting. That, per se, is not lobbying, and should be an acceptable activity for nearly all stakeholders. However, it is recommended that no funding be allotted to it at this time until more the legal issues surrounding its implementation are resolved.

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The following spreadsheet outlines a potential budget scenario for the functions listed in the previous sections. The budget estimates are preliminary and are based on rough approximations of work products and tasks. Also incorporated into the budget spreadsheets are the administrative costs of running and staffing the organization, first on a "virtual" basis at a "birthing" organization such as the California Urban Water Conservation Council, and then at its ultimate location in the Chicago area.

FIVE YEAR PLAN AND BUDGET

The creation of the organization and its incorporation and non-profit filing will be taken care of by the Council. It is expected that by May 1, 2006, the Alliance for Water Efficiency will be fully created. A temporary web site could be ready as early as July, built initially on the Council's web server but later able to spring off on its own. Similarly, when project funding is available a number of the 2006 functions can begin with temporary consulting assistance. No permanent staffing need be hired until the Alliance finds its permanent berth in Chicago.



# Five Year Budget

REVENUES	1st YEAR	2nd YEAR	3rd YEAR	4th YEAR	5th YEAR
Membership					
Dues	\$ -	\$ (30,000)	\$ (50,000)	\$ (90,000)	\$ (150,000)
Product Revenues					
DVD Revenues	\$ -	\$ (500)	\$ (1,000)	\$ (1,500)	\$ (2,000)
EXPENDITURES	1st YEAR	2nd YEAR	3rd YEAR	4th YEAR	5th YEAR
Administrative			l .	1 .	<u> </u>
Office Rent	\$ 3,000	\$ 10,000	\$ 15,000	\$ 20,000	\$ 20,000
Office Furniture	Φ 050	<b>.</b> 500	\$ 5,000	\$ 6,000	<b>*</b> 0.000
Office Supplies	\$ 250	\$ 500 \$ 3,000	\$ 1,000	\$ 1,000	\$ 2,000
Copying and Printing Postage	\$ 2,000 \$ 500	\$ 3,000 \$ 600	\$ 5,000 \$ 1,000	\$ 5,000 \$ 1,000	\$ 5,000 \$ 3,000
Telephone	\$ 500	\$ 750	\$ 1,000	\$ 1,500	\$ 3,000
Computers and printers	\$ 500 \$ -	\$ 5,000	\$ 1,000	\$ 1,500	\$ 1,300
Computers and printers	Ψ -	3,000	ψ 250	\$ 3,000	ψ 250
Board Expenses					
Board Member Travel	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000
Meeting Expenses	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Personnel					
Interim Staffing and Consulting	\$ 40,000	\$ 40,000	\$ 40,000	\$ 20,000	\$ 20,000
Permanent Staffing			\$ 80,000	\$ 100,000	\$ 120,000
Web Site					
Web Site development	\$ 15,000	\$ 15,000	\$ 15,000	\$ 25,000	\$ 25,000
Conversion of H2ouse	\$ 5,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Web Site Hosting	\$ 4,000	\$ 4,000	\$ 6,000	\$ 6,000	\$ 6,000
Program Functions			<u> </u>	1	
Water Efficiency Clearinghouse	\$ 105,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
Plumbing Standards and Codes	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Testing and Research	\$ -	\$ 25,000	\$ 50,000	\$ 75,000	\$ 75,000
Green Building	\$ -	\$ -	\$ 10,000	\$ 30,000	\$ 50,000
Training Conservation Professionals	\$ 15,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Consumer Education	\$ 10,000	\$ 20,000	\$ 50,000	\$ 50,000	\$ 50,000
Market Transformation	\$ -	\$ -	\$ 75,000	\$ 75,000	\$ 75,000
Advocacy			\$ 10,000	\$ 15,000	\$ 15,000
TOTALS	\$ 288,250	\$ 288,350	\$ 508,250	\$ 539,000	\$ 510,750

# APPENDIX 1 ACKNOWLEDGEMENTS

This Report would not have been possible without the spirited dedication and extraordinary competence of the Project Team who helped conduct research, compile data, write report sections, create web site functionality, organize workshops, focus groups and meetings, field phone calls and emails, and provide overall support for the project effort well above and beyond the call of duty.

Our thanks also go to John Flowers and Jim Hanlon of the U.S. Environmental Protection Agency, who gave funding and encouragement.

Mary Ann Dickinson
California Urban Water Conservation Council

Maureen Erbeznik
Maureen Erbeznik & Associates

Beth Ernsberger California Urban Water Conservation Council

> Nancy Hardwick Hardwick Research

Jeffrey Hughes
California Urban Water Conservation Council

John Koeller Koeller & Company

Peter Mayer Aquacraft, Inc.

Edward Osann Potomac Resources, Inc.

Thomas Pape Best Management Partners

Betsy Reifsnider Environmental Resource Consultant

> Kevin Rumon Copper Beech

Susan Thornhill Thornhill Associates

# APPENDIX 2 PROJECT CONTRACT

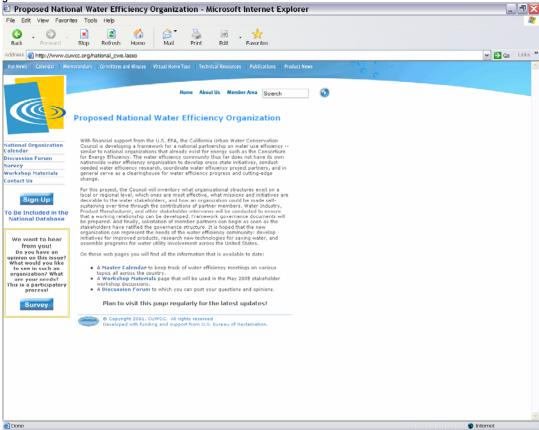
TO BE INCLUDED IN FINAL REPORT

# APPENDIX 3 PROJECT BUDGET AND EXPENDITURES

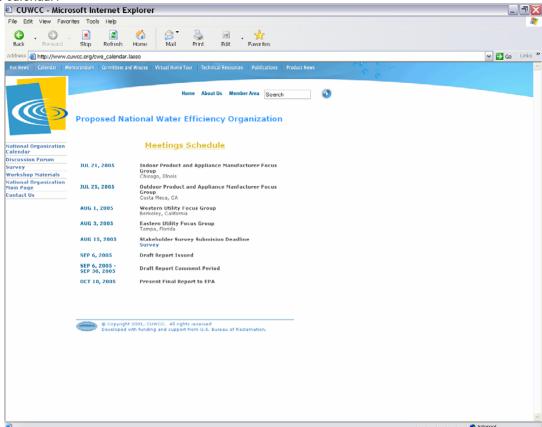
TO BE INCLUDED IN FINAL REPORT

# APPENDIX 4 WEB SITE PAGES

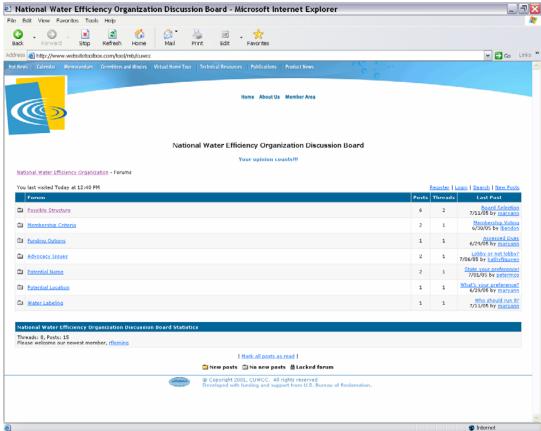
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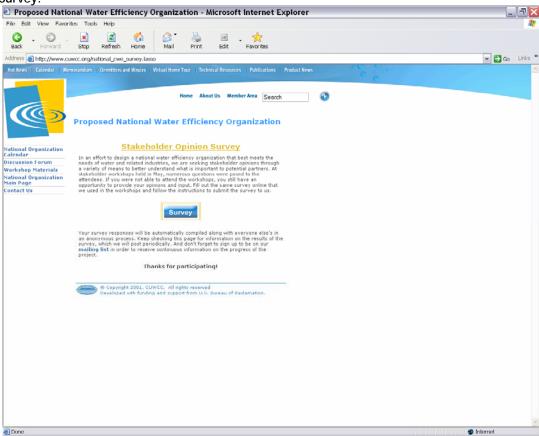
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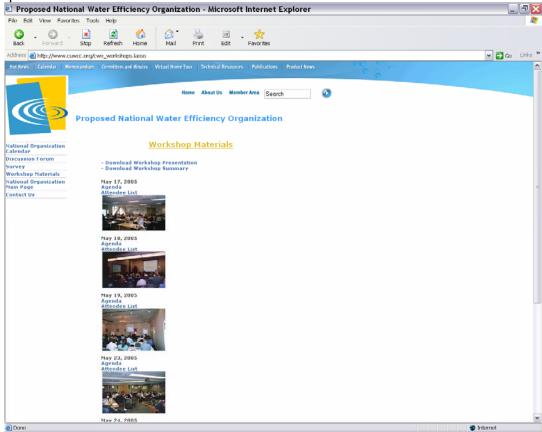
#### **Discussion Forum:**



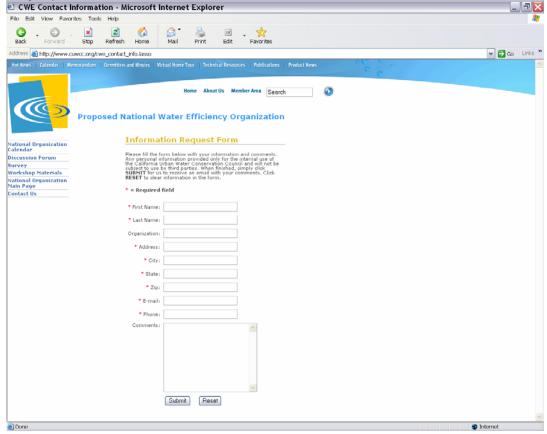
#### Online Survey:



#### Workshop Materials:



Database Sign-up & E-mail Comments/Questions:



# APPENDIX 5 STAKEHOLDER LISTS

# **Builder or Developer**

### **Interested Parties**

Name	Organization

Alexander Duran National Association of Home Builders

Christopher S. Galik National Association of Home Builders

Judy Gignac Bella Vista Ranches

Steve LaMar LegiSight, LLC

Tyler Newman Home Builders Association of Georgia

Pam Sessions Hedgewood Properties, Inc.

Amy Timko Johnson & Johnson

Sandy Yee Johnson & Johnson

Peter Yost 3-D Building Solutions, LLC

# Environmental, Educational or Energy Organization

### **Interested Parties**

Name	Organization
Ken Bradshaw	Trout Unlimited
Gwen Bridge	Makah Tribe
Neil Clark	The Writing Company
Tova Cochrane	Underwood Conservation District
Ronnie Cohen	Natural Resources Defense Council
Marina D'Abreau-Pryce	Hillsborough County Extension
Cado Daily	University of Arizona Cochise County Cooperative Extension
Alisha Deen	Environmental Justice Coalition for Water
Rebecca Drayse	TreePeople
Tom Duckwall	Friends of the Deep River
Don Elder	River Metwork
Steve Evans	Friends of the River
William Evans	Georgia Power Company
Conner Everts	Southern California Watershed Alliance
Orin Gelderloos	Environmental Interpretive Center
Kathryn Hatcher	Institute of Ecology
Roger D. Havlak	Texas A&M University
Jeannie Hayes	University of Florida, Cooperative Extension
James P. Heaney	University of Florida, Dept. of Env. Engineering Sciences
Megan Hearne	Connecticut River Watershed Council
Dana Heil	Georgia Transmission Corporation
Aung Hla	University of Nebraska - Lincoln

Marc Hoffman

Norman Johns

Park Howell

Jo Jones

Nancy Jones

Consortium for Energy Efficiency, Inc.

Water-Use It Wisely c/o Park & Co

National Wildlife Federation

Arizona State University

Sierra Club

Page 1 of 3

Name Organization

Jackie Joseph Lake Lanier Association

Kelly L. Kopp Utah State University

Pat Lupo Earth Force, Lake Erie-Allegheny

Carolyn Martus Carlsbad Watershed Network

Rob Masonis American Rivers

Kirt Mayland Trout Unlimited

Mike Mecke Texas Water Resources Institute

Leslie Mink Feather River Coordinated Resource Management Group

Kenneth W. Mirvis The Writing Company

Michelle Moore National Environmental Services Center

Elizabeth Morris Lake Lanier Association

Evan Moss Charles River Conservancy

Gary Mulcahy Winnemem Wintu Tribe

Valerie Nelson Coalition for Alternative Wastewater Treatment

Beverly Nicholls Lake Lanier Association

Einan Ofir Hebrew University

Lorence R. Oki University of California, Davis

Lawrence O'Leary Cuyamaca Community College

Dale Olen Sierra Club

Betsy Otto American Rivers

Dennis Pittenger University of California Cooperative Extension

Betsy Reifsnider Friends of the River

Gil Rogers Southern Environmental Law Center

Kristin Rowles Georgia State University

Denise Rue-Pastin Environmental Dimensions

Mike Sandler Community Clean Water Institute

Roger Schenk Camp Dresser & McKee, Inc.

Rose Mary Seymour University of Georgia - Griffin

Valeen Silvy Texas A&M University

Name Organization

Eileen Simonson Water Supply Citizens Advisory Committee

Daniel Smeal New Mexico State University

Fraces Spivy-Weber Mono Lake Committee

Candace Stoughton The Nature Conservancy, Georgia Operating Unit

Roy Taylor Cherokee Homeowners

William L. Tietjen Georgia Southwestern State University

Craig Tucker Karuk Tribe

Shana Udvardy Georgia Conservancy

K. Uhlman University of Arizona Cochise County Cooperative Extension

Mary Clare Van Dyke Eagle River Watershed Council

Susan Varlamoff University of Georgia

Teresa Watkins University of Florida, Institute of Food & Agricultural Sciences

Vicki Watson Watershed Health Clinic

John White New Mexico State University

Tom Wilson Salt River Project Ag Improvement & Power District

Robert Wood Albuquerque Public Schools

Steven Zien Biological Urban Gardening Services

Bob Zimmerman Charles River Conservancy

## Governmental

## **Interested Parties**

Name	Organization
Blake L. Atkins	U.S. EPA
Thomas Babcock	City of Phoenix
Carole Baker	The Subsidence District
Elizabeth Barriga	Gallup Joint Utilities Administration
Sarah Beazley	City of Chicago, Dept of Environment
Marcia W. Beck	Lawrence Berkeley National Laboratory
William Bennett	California Department of Water Resources
Christina Bickelmann	Arizona Department of Water Resources
Peter Biermayer	Lawrence Berkeley National Laboratory
Arnold Bierschenk	U.S. EPA
Lucille Billingsley	U.S. Bureau of Reclamation
Shahid Chaudhry	California Energy Commission
Joyce Coffee	City of Chicago, Dept of Environment
Russ Cohen	Massachusetts Riverways Program
Sara Cohen	Massachusetts Department of Conservation & Recreation
Lynn Coleman	Washington Department of Ecology
Glen Dake	Office of Los Angeles City Councilmember Eric Garcetti
Joseph Deal	City of Chicago, Dept of Environment
Ken Decio	Integrated Waste Management Board
Camilla Dunham Whitehead	Lawrence Berkeley National Laboratory
David Eigenberg	Georgia Soil & Water Conservation Commission
Julia Fanning	U.S. Geological Survey
Shahla Farahnak	California State Water Resources Control Board
Sergio Fierro	California Department of Water Resources
Lynne Fisher	U.S. Bureau of Reclamation
Leonard Fleckenstein	U.S. EPA
John Flowers	U.S. EPA

Name Organization Sheila E. Frace U.S. EPA Hawaii Department of Land and Natural Resources Neal Fujii Jim Gross St. John's River Water Mgmt District Representative Pricey Harrison North Carolina, General Assembly Cynthia Havstad StopWaste.Org William T. Hetland El Dorado County Water Agency Fric Holler U.S. Bureau of Reclamation Jane Horton Centers for Disease Control & Prevention Gary Hudiburgh U.S. EPA David Inouye California Department of Water Resources David Jacobs U.S. Department of Housing and Urban Development Kira Jacobs U.S. EPA Brenton Johnson U.S. Bureau of Reclamation Margaret Kearns Massachusetts Riverways Program Gary Klein California Energy Commission Sarah Koppel U.S. EPA Washington Department of Health Jennifer Kropack California State Water Resources Control Board Patrick Lam Great Lakes Commission Becky Lameka Paul Lauenstein Sharon Water Management Advisory Committee Eric Law Vermont Department of Conservation Jim Lutz Lawrence Berkeley National Laboratory Suzanne E. Malec City of Chicago, Dept of Environment Mark Mathis **Texas Water Development Board** Barbara McGonagle U.S. EPA Sally McIntyre City of Ottawa Kate McMordie Stoughton Pacific Northwest National Lab

Georgia Environmental Protection Division

El Dorado County Water Agency

Alice Miller Keyes

Cathy Monaghan

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Tina Mullis U.S. Bureau of Reclamation

Stacy Pandey Texas Water Development Board

Ron Pate Sandia National Laboratories

Glen Pleasance Region of Durham

Vandana Rao Massachusetts State, Executive Office of Env. Affairs

Mary Reece U.S. Bureau of Reclamation

Marjie Risk Arizona Department of Water Resources

Byron Rushing Georgia Environmental Protection Division

Carol Salisbury Ontario Ministry of the Environment

David Sayers Delaware River Basin Commission

Karen Schneider U.S. EPA

Danielle Smith New Mexico Interstate Stream Commission

Sam Spiller U.S. Fish & Wildlife Service

Christopher Stevens California State Water Resources Control Board

Adolph Stickelbault Texas Water Development Board

Paula J. Sunde U.S. Bureau of Reclamation

Paula Sunde U.S. Bureau of Reclamation

John Sutton Texas Water Development Board

E. Scott Swanson Texas Commission of Env Quality

Thomas Swihart Florida Department of Environmental Protection

Deana Taylor Washington Department of Health

Rick Templeton City of Phoenix

Dave Todd California Department of Water Resources

Comer Tuck Texas Water Development Board

Sandy Tucker U.S. Fish & Wildlife Service

David A. Ullrich Great Lakes and St. Lawrence Cities Initiative

Cheri Vogel New Mexico Office of the State Engineer

Ken Vonderscher City of Phoenix

Name	Organization
Bryan Wagoner	Georgia Water & Pollution Control Assoc.
Catherine Walker	St. John's River Water Mgmt District
Kristin Wang	Texas Commission of Env Quality
Molly Waters	Utah Division of Water Resources
Anne Watkins	New Mexico Office of the State Engineer
Meena Westford	U.S. Bureau of Reclamation
Wil Wyman	Texas Commission of Env Quality
Ken Zarker	Texas Commission of Env Quality

# Product Manufacturer, Distributor or Service Provider

# **Interested Parties**

Name	Organization
Larry Acker	ACT Inc. Metlund Systems
Brad Adams	Irrometer Co., Inc.
Ade Adeniji	ADRO Environmental, Inc.
Kris Alderson	Bradley Corporation
George Alexanian	Alex-Tronix Controls
James Allen	Sloan Flushmate
Edgar Aranda	Centaur North Strategic Communications
Tom Ash	HydroPoint Data Systems, Inc.
Kimberly Balcerzak	The Boeing Company
Jeff Baldwin	T&S Brass and Bronze Works
Gunnar Baldwin	TOTO USA, Inc.
Gene Barnes	Gallion Irrigation Inc.
Thomas Behn	Coin Meter Company
Lou Bendon	Planned Marketing Solutions Int'l
JR Bergantino	Rain Bird Corporation
Olivier Blanchard	T&S Brass and Bronze Works
Liz Block	Ecotech Resource Inc.
Tracy Bouvette	Tracy Bouvette, Consultant
Scott Bower	DMB/Highlands Group. LLC
Ron Bradford	Signature Sales, Inc.
Ryan Bradshaw	Ryan Bradshaw
Allan Bronsro	Kerr Wood Leidal Consulting Engineers
Michael Brousseau	Michael Brousseau
Chris Brown	Chris Brown Consulting
Patrick Brown	Sonora Pacific Group, Inc.
Laurence Budd	Nelson Irrigation
Laurence Budd	Walla Walla Sprinkler Company

Laurence Budd Allison Irrigation

Lonnie Burke Resource Wise

Phil Burkhart The Toro Company

David Calabrese Association of Home Appliance Manufacturers

Tom Campbell Waterscout

Tom Campbell Landscape Water Management

Rick Capitanio Calsense

Jeff Carowitz Hunter Industries

Jenny Carritt Todd Valley Farms, Inc.

Tom Catania Whirlpool Corporation

Pat Caughey Wimmer Yamada & Caughey

Richard Chapman Smart Use, LLC

Michael Chenard Lowe's Companies, Inc.

Colleen Clifford Aquatrols Corporation of America, Inc.

Julie Colehour PRR

Claude Corcos The Toro Company

Alicia Cropper Malcolm Pirnie

Alice Darilek, Consultant

Andrew Davis Accurate WeatherSet

Paul DeBoo Sloan Flushmate

Robert DeCoster HydroTechnologies, Inc.

David Del Porto Ecological Engineering Group, Inc.

Pete DeMarco American Standard

Kelly Duncan United Pipe & Supply

Mary Elfner Mary A. Elfner Environmental Consulting Services

Mick Fiato Pencibrook, LLC

Rick Fields Wilkins, a Zurn Company

Ray Fisher Fisher Manufacturing Company

Fred Fraisee NEOPERL, Inc.

Mica Franklin Aquatrols Corporation of America, Inc.

Dieter Franz Brown and Caldwell

David Frashier Cost Containment Engineering, Inc.

George Freitag GDS Associates, Inc.

Mike Frisch Advanced Micro Devices, Inc.

Bill Gauley Veritec Consulting, Inc.

Gary Gelinas Water2Save, LLC

Danny Gleiberman Falcon Waterfree Technologies, LLC

Warren Gorowitz Ewing Irrigation Products, Inc.

Vicki Grover Penhallegon Associates Consulting Engineers

Vicki Grover PACE Engineers

David Guth Stormwater Solutions
Larry Haley ECO Research, LLC

Mark Hall Netafim Irrigation, Inc.

Dale Hansen Acclima, Inc.

Luke Harms Maytag Corporation

Kevin Harper Roth Hill Engineering Parnters, LLC

Lorne Haveruk Water Management Services, Inc.

Rick Heenan DIG Irrigation Products

Gary R. Higgins WDI International, Inc.

Dale Hitt Digital Sun

Steve Hohl Water Concern Ltd.

Kevin Holderness Acclima, Inc.

Russ Horner Water Management, Inc.

David House Village Nurseries Wholesale, LLC

Mike Huck Irrigation & Turfgrass Services

Nicky Hughes Gold Rush Nursery

Ted Hunt Jardinier Corp.

Von Isaman QA Consulting and Testing, LLC

Randall Ismay Water and Landscape Consultants

Maritza Jackson Badger Meter, Inc.

Terry Janssen Ecotech Resource Inc.

William Jernigan Georgia-Pacific Corporation

Shane Judd Kohler Company

Mert Karasu Vitra USA

Larry Keesen Water Management, Inc.

Timothy J. Kilbane Symmons Industries, Inc.

Christopher Kim California Water Conservation Company

Wayne King ERTH Products, LLC

Mark D. Kinter Elgin Sweeper Co.

Delmar A. Kirby Consultant

Derek Kirkpatrick Caroma U.S.A.

Diana Kirshen Pape ICF Consulting

Edward Klaas II Southern Sprinkler Systems, LLC

John Koeller Koeller and Company

Kerwin Kolinek E. Kerwin Kolinek Consulting, LLC

Stanley Kostka Aquatrols Corporation of America, Inc.

Greg Kozykoski Honeywell Utility Solutions

Chip Krug Turner Fine Gardens

Michael Laurie Watershed L.L.C.

Deborah Lema Racine Industries, Inc.

Samantha Lieu Perceptive Enterprises, Inc.

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Kurt Maloney Netafim Irrigation, Inc.

Chris Manchuck HydroPoint Data Systems, Inc.

Muriel Manning Water2Save, LLC

R.B. Martin Intertech Corporation

Peter Mayer Aquacraft, Inc.

G. Tracy Mehan The Cadmus Group, Inc.

Lee A. Mercer Moen Incorporated

Joseph Miller RightThere Software

Ken Mills Rain Bird Corporation

Dave Moe The Toro Company

Andy Moore Aquatrols Corporation of America, Inc.

Demie Moore Aquatrols Corporation of America, Inc.

Greg Morris Certified Water Auditors of Arizona

Dave Munk Resource Action Programs

Jerry Murray Crane Plumbing Corp.

Gene Nalbandian Jardinier Corp.

Alex Nathanson Rain Bird Corporation

Cindy Nelson Cindy Nelson, Consultant

John Netherwood The Boeing Company

Richard Nielsen Temtrol Delta T. Corporation

Diane Noecker Hunter Industries

John Olaf Nelson Water Resources Management

Zethur Omar Zethur Omar

Ed Osann Potomac Resources, Inc.

Val Pape Best Management Partners

Thomas Pape Best Management Partners

Tom Penning Irrometer Co., Inc.

Rhianna Pensa Malcolm Pirnie

Lauren Perez HydroPoint Data Systems, Inc.

Marie-Helene Pernin NEOPERL, Inc.

Mike Personett Halliburton

John E. Petrovic Alsons Corporation

Becky Piel TOTO USA, Inc.

Charlie Pike Charlie Pike

John Piper Golden Bear Irrigation Services

Steve Polinski Miele, Inc.

Dan Pope Dan Pope, Irrigation Consultant

Laura Poston Lopez The Toro Company

Michael Prevost American Society of Landscape Architects

Val Prince No-Dig, LLC
Russel Prophit Big Tree, Inc.

Shabbir Rawalpindiwala Kohler Company

Robert Raymer California Building Industry Association

Robert Reaves The Toro Company

Philip Regli HydroEarth

Klaus Reichardt Waterless Co., LLC

Philip C. Reidy Rainwater Recovery Systems, LLC

Tom Reynolds Barnacle Water Saver, LLC

James Richardson Niagara Conservation Corp.

Sheri Rivera Drought Be Gone Irrigation Services

John Roberts Roberts Irrigation Products, Inc.

David Roberts David Roberts

Andrew Roberts Allstate Resource Management

Kerstin Rock Quantec, LLC

Mike Rosen PRR

Eric Rothstein CH2M Hill

Anthony Roy Ecos Consulting

David F. Russell Consulting

Julio Sánchez ConserVision Consulting

Mark G. Sanders Barnacle Water Saver, LLC

Jennifer M. Schlissel Spiegel & McDiarmid

Kathy Schommer Watermiser

John Schommer Watermiser

Paul Schultz Cagwin & Dorward Landscape Contractors

Justin Scott-Coe Integrated Resource Management, LLC

Akgün Seckiner Vitra USA

Craig Selover MASCO Corporation R&D

Hal W. Senke Resource Wise

Tom Shannon Ewing Irrigation Products, Inc.

Leon Shapiro VRTX Technologies

Ken Sharratt, Consultant

Brian Skeens CH2M Hill

Andy Slack Spot Water Management, Inc.

David Smith Texas Water Audits

Michael Smith The Toro Company

Christy Smith CH2M Hill

Stephen A. Snow ET Water Systems, LLC

Dominic Solis Symmons Industries, Inc.

Chris Spain HydroPoint Data Systems, Inc.

Steve Springer Rain Master Irrigation Systems, Inc.

David P. Steiner Maytag Corporation

Howard Stenn Design

Steve Stephens The Toro Company
Alison ten Cate D&R International

Susan Thayer Mister Landscaper, Inc.

Susan Thayer Maxijet, Inc.

Colin Thielmann Delta Faucet Company

Adrienne Thorpe P2 Engineer

Wayne Thorson Todd Valley Farms, Inc.

Mike Toomey SCT Group

Bing Tso SBW Consulting, Inc.

Robert vanCreveld Edgewater NW

Amy Vickers & Associates

David Viola Plumbing Manufacturers Institute

Don Vollmar Kohler Company

Luke von Oldenburg Shaw Environmental

Ed Waas Spears Manufacturing Co.

Daniel Waldman Forester Communications, Inc.

Newbold Warden Mansfield Plumbing Products, LLC

Carl Wehmeyer Niagara Conservation Corp.

Jim White Ewing Irrigation Products, Inc.

Louis Willhoit Water2Save, LLC

Lizanne Wheeler

Tim Wilson The Irrigation Water Management Society

Sonora Pacific Group, Inc.

Ron Wolfarth Rain Bird Corporation

Christopher Woodcock Woodcock & Associates, Inc.

Azita Yazdani Pollution Prevention Int'l, Inc.

Doug York Ewing Irrigation Products, Inc.

Timothy Young The Toro Company

Jim Zimmerman The Toro Company

Robert Zimmerman Kohler Company

# Water Planning Agency or Non-Profit Organization

#### **Interested Parties**

Name	Organization
------	--------------

Richard Ali Irrigation Association

Rick Brownlow Atlanta Regional Commission

Dore Burry Koreatown Youth and Community Center

Peter J. Censky Water Quality Association

Kathryn M. Charlton Agricultural Water Management Council

Cindy Daniel Atlanta Regional Commission

V.C. Danos Arizona Municipal Water Users Association

Mary Ann Dickinson California Urban Water Conservation Council

Mark Esoda Atlanta Country Club

Sarah Foley Water Forum

Deborah Green Water Authority of Volusia

Julia Hillegass Hampton Roads Planning District Commission

Bobbie Hinde Florida Section American Water Works Association

Joy Hinkle Atlanta Regional Commission

Mike Huck California Alliance for Golf

Jeffrey Hughes California Urban Water Conservation Council

Michelle Kaszuba Metropolitan Washington Council of Governments

Michael Kenna U.S. Golf Association

Kirsten King New England Water Works Association

Val Little Water Conservation Alliance of Southern Arizona

Gregory Lyman Golf Course Superintendents Assoc of America

Maureen Lynch Tri Community Watershed Initiative

Lisa Maddaus Regional Water Authority

Mike McCullough Northern California Golf Association

Julia E. McHugh Spokane Aquifer Joint Board

Erica Michaels Brown Association of Metropolitan Water Agencies

Bart Miller Western Resource Advocates

Name	Organization
Toni Monzon	Bilingual Training Institute
Janet Nazy	Partnership for Water Conservation
Charlene Orszag	Tierra Miguel Foundation
Edward Osann	Steering Committee for Water Efficient Products
Michael P. Osley	Golf Course Superintendents Assoc of America
Jennifer Platt	WaterPartners International
John Ramey	Irrigation Association
Carrie Riordan	Golf Course Superintendents Assoc of America
Hal Senke	New Mexico Water Conservation Alliance
Jim Shell	Metropolitan Washington Council of Governments

Glenda Single Houston Gulf Coast Irrigation Association

Brian Vinchesi Irrigation Consulting, Inc.

Marianna Vulli New England Interstate Water Pollution Control Commission

Dan Woltering Water Environment Research Foundation

Tenia Workman Georgia Golf Course Superintendents Assoc.

# Water Supplier

#### Interested Parties

Name	Organization
------	--------------

Bruce Adams South Florida Water Management District

Larry Alexander Boring Water District

Tina Alexander Tualatin Valley Water District

Kirk Allen Los Angeles County Waterworks Districts

Nancy B.P. Andrews City of Durango

Hossein Ashktorab Santa Clara Valley Water District

Darcy Aston Santa Barbara County Water Agency

Lucia Athens Seattle Public Utilties

Richard Atwater Inland Empire Utilities Agency

Thomas Babcock City of Phoenix
Chris Bailey City of Albany

Andrea Balazs East Bay Municipal Utility District

Keith Bancroft Marin Municipal Water District

Elizabeth Barriga City of Gallup

Doug Bennett Southern Nevada Water Authority

Joe Berg Municipal Water District of Orange County

Patty Bevers Ramona Municipal Water District

Joanne Bissetta Town of Concord

Tim Blair Metropolitan Water District of Southern California

Jonathan Block City of Gladstone

Charles Bohlig East Bay Municipal Utility District

Barbara Born Pinellas County Utilities

John Bowman Lakehaven Utility District

David Bracciano Tampa Bay Water

Brian Brady Rancho California Water District

Michael Brent Cascade Water Alliance

Tim Brick Metropolitan Water District of Southern California

Alys Brockway Hernando County Utilities Department

Mark Broder City of San Diego

David Broustis Seattle Public Utilties

Kim Brown City of Palo Alto Utilities

Patricia Burgess City of Bellevue

Jennifer Burke City of Santa Rosa, Utilities Dept.

Kathleen Cahall City of Bremerton

Bruce Carleton City of Irvine

Malcolm O. Castor Southwest Florida Water Management District

Sally Ceccarelli-Wolf Arizona American Water Company

Jane Ceraso Acton Water District

Teresa Chase Olivenhain Municipal Water District

Christine Claus City of St. Petersburg

Robert Cline Monterey Peninsula Water Management District

Ipek Connolly City of Palo Alto Utilities

Doris Cook Etowah Water & Sewer Authority

Patrick Costello City of Napa

Mary Lou Cotton Castaic Lake Water Agency
Carole Davis City of Dallas, Water Utilities

Jerry De La Piedra Santa Clara Valley Water District

Ken Decio Sacramento Suburban Water District

Al Dietemann Seattle Public Utilties

Stephanie Duer Salt Lake City

Chris Dundon Contra Costa Water District

Chris Ehlers City of Brentwood

Stephen Estes-Smargiassi Massachusetts Water Resources Authority

Jane Evancho City of Tacoma Water

Stu Feinglas City of Westminster, Water Resources

Calvin R. Finch, PhD San Antonio Water System

Rick Fink City of Bozeman

Rene Fleming City of St. George

Lynn Florey Sonoma County Water Agency

Vestina Ford Pinellas County Utilities

Rob Foster City of Forest Grove

Colleen Fowle City of Peoria

A. Roy Fowler, III Cobb County-Marietta Water Authority

Tom Fox King County

Robert Freeland Valley of the Moon Water District

Larry Fregin South Coast Water District

Susan Fry City of Denver

David Fujimoto City of Issaquah
Elaine Fuller City of Anaheim

Joy Gaines City of Glendale

Bob Galbreath City of Santa Monica

Liz V. Gardener Denver Water

Richard Gardner South Coast Water District

Luis S. Generoso City of San Diego

Misty Gonzales Goleta Water District

Frank Gradilone United Water Resources

Tony Gregg City of Austin

Ryan Grisso Sonoma County Water Agency

Rich Gustav Seattle Public Utilties

Rhonda Gutierrez Carpinteria Valley Water District

Karen Guz San Antonio Water System

Dana Haasz San Francisco Public Utilities Commission

Kristen Hall Massachusetts Water Resources Authority

Arece Hampton Seattle Public Utilties

Norman Harcourt Davis Hillsborough County Water Department

Ted Haring Eastern Municipal Water District

Richard Harris East Bay Municipal Utility District

Corianne Hart City of Tigard

Lloyd Hathcock City of North Miami Beach

Michael Hazinski East Bay Municipal Utility District

Denis Hernandez Walnut Valley Water District

Laura Hodnett Medford Water Commission

Bill Hoffman City of Austin

Jill M. Hoyenga Eugene Water & Electric Board

Roger Hulbert Clackamas River Water

Gina Hungerford Covington Water District

David M. Hunt Southern Nevada Water Authority

Carolyn Johnson Seattle Public Utilties
Alison W. Jordan City of Santa Barbara
Mialee Jose Seattle Public Utilties

Dale Jutila City of Gresham

Duane Karstens Clackamas River Water

Dennis Kessler Portland Water Bureau

Michael King El Toro Water District

Elisa Klein City of Scottsdale

Jan Klein City of San Marcos

Christina Klien City of Peoria

Pam Konoval City of American Canyon

George Kunkel City of Philadelphia

Paul Lander City of Boulder

Rory Lang Santa Barbara County Water Agency

Keith Larson Arizona American Water Company

Jeff Lee City of Mesa

Brian Lee Sonoma County Water Agency

Warren Liebold New York City Dept. of Environmental Protection

James Lim City of Durham

Kevin McCaleb Town of Oro Valley, Water Utility

Bill P. McDonnell Metropolitan Water District of Southern California

Mary Ann Melleby Monte Vista Water District

Ron Merckling Casitas Municipal Water District

Gus Meza Central/West Basin Municipal Water Dist.

Jo Miller City of Glendale

Adam Miller City of Flagstaff

Debra Mills South Adams County Water & Sanitation District

Mary Jo Mitchell Camrosa Water District

Kathleen Moore City of Chandler

Marilyn Mosher City of Hayward

Daniel L. Muir City of Tacoma Water

Nora Mullarkey Lower Colorado River Authority

Ron Munds City of San Luis Obispo

Bill Neelans City of Upland

Kathy Nguyen Cobb County Water System

Kimberly O'Cain City of Santa Monica

Stefanie Olson Dublin San Ramon Services District

Rusty Osborne University of Texas at Austin

Richard S. Owen Southwest Florida Water Management District

Ron Partch City of Gladstone

Philip Paschke Seattle Public Utilties

Robbin Pearce City of Ashland

Carrie Pollard Sonoma County Water Agency

Paul Raczkowski City of Flagstaff

Jane Raftis Pasadena Water & Power

J.R. Ranells City of La Verne

Deborah Rannfeldt Woodinville Water District

Portland Water Bureau Judi Ranton

**Kevin Reidy** Aurora Water

**Bruce Rhodes** Melbourne Water

R.A. (Tony) Rojas Macon Water Authority

Joshua Rosenblatt City of Las Cruses

Cucamonga Valley Water District Jo Lynne Russo-Pereyra

Janet Sailer Sammamish Plateau Water and Sewer District

Fiona Sánchez Irvine Ranch Water District

Jeff Sandberg Portland Water Bureau

Dan Santantonio, Ph.D. City of Las Cruses

Jonathan T. Schieman American States Utility Services, Inc. **Christy Schwartz** City of Moscow, Water Department

Nancy Scott Water District No. 1 of Johnson County

Kathy F. Scott Southwest Florida Water Management District Northern Colorado Water conservancy District

Randall Shymko Province of Manitoba

Dan Smith City of Tumwater

Nicole Seltzer

City of Forest Grove Randy Smith

Jenna Smith Seattle Public Utilties

Rose Smutko San Diego County Water Authority

Lois Ann Sorensen Southwest Florida Water Management District

Kent Sovocool Southern Nevada Water Authority

Barbara Sullivan City of Redmond

Jane Tallman Florida Keys Aqueduct Authority

Mark Taratoot City of Corvallis Rick Templeton City of Phoenix Cathy Templeton City of Anaheim

Mark Tettemer Irvine Ranch Water District

Anna Thurston

Renee Theriault Webber Sonoma County Water Agency

Crystal Thompson Central Arizona Project

Jean Van Pelt Southeastern Colorado Water Conservancy District

City of Tacoma Water

Mike Vernon Memphis Light, Gas and Water Division

Ken Vonderscher City of Phoenix
Terry Waldele City of Beaverton

Karen Warner City of Scottsdale

Brian L. Wheeler Toho Water Authority

David Wheelock Brazos River Authority

Deb Whitney Eastern Municipal Water District

Mark Wieland City of Austin

Brian Wiley City of Gainesville

Diana Williford City of Brentwood

David Winship City of Beaverton

Dave Witter El Dorado Irrigation District

Karen Young Town of Gilbert

Richard Youngblook Marina Coast Water District

Katherine Yuhas Albuquerque Bernalillo County Water Utility

# APPENDIX 6 WORKSHOP AND SURVEY REPORT

# Stakeholder Workshops

# To Consider a National Water Efficiency Organization

Seattle: May 17
Irvine: May 18
Phoenix: May 19
Boston: May 23
Atlanta: May 24
Austin: May 25

For location specifics and directions, visit <a href="http://www.cuwcc.org/national\_cwe.lasso">http://www.cuwcc.org/national\_cwe.lasso</a>

### **AGENDA**

- 1. Welcome and Introductions
- 2. Presentation on the Goals of the Stakeholder Workshop and the Components of the Research
- 3. Group Discussion of Stakeholder Questionnaire and the Following Issues:
  - Most important issues facing water efficiency today
  - Preferences on the core mission of a national organization for water efficiency
  - Possible services/functions for this organization and determine those most valuable to workshop attendees
  - Water-efficiency subject areas that should be covered by a national organization for water efficiency
  - Services currently being received through other means by attendees and their satisfaction levels with those services
  - Preferences regarding membership makeup and organization structure
     [e.g. 501(c)(3) or for-profit]
  - Funding possibilities and potential fee-for-service opportunities
  - Non-financial support such as in-kind or volunteer services
  - Location and name options
- 4. Next Steps
- 5. Adjourn

# California Urban Water Conservation Council Stakeholder Opinion Research

Conducted July - August 2005

## Prepared for:

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#### Prepared by:

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# **Table of Contents**

Introdu	ıctio	n/Methodology	1
Summa	ry o	f Results	5
Conclus	sions	and Recommendations	)
Detailed	d An	alysis of Findings1	1
]	[.	Stakeholder Characteristics	1
]	II.	Most Important Issues Facing Water Efficiency	5
]	III.	Core Mission and Functions	7
]	IV.	Services Being Received from Other Organizations	7
•	V.	Composition of Organization	1
•	VI.	Support33	5
•	VII.	Manufacturers / Distributors / Service Providers / Builders / Developers4	1
Append	lix	4	5
1	List o	of Participating Organizations4	7
(	Ques	tionnaire5	5
(	Cross	stabulated Database (found under separate cover)64	1

# **Introduction/Methodology**

This report summarizes the results of stakeholder research that was conducted by the California Urban Water Conservation Council (CUWCC). Hardwick Research assisted the CUWCC with research tool design, online data collection, analysis and report writing.

#### **Research Goals**

The California Urban Water Conservation Council engaged in this research as a means to gather feedback from stakeholders (water suppliers, government agencies, product manufacturers/distributors and environmental/educational organizations) concerning the creation of a national organization for water efficiency.

The goals of this research included: understanding what stakeholders feel would be the most appropriate role for such an organization, evaluating support for the creation of this water efficiency organization, determining how it should be governed, and exploring membership.

The CUWCC also wanted to understand the needs and interests of stakeholders from various types of organizations. Finally, potential differences based on geographic region were considered.

#### **Research Process**

This research was collected from participants in two ways: one group of stakeholders completed a paper and pencil form, and the other group completed it online. The questions differed slightly between the workshop and online versions.

One hundred eighty-three (183) stakeholders completed the paper and pencil version of this research tool. These forms were completed during CUWCC workshops in the following cities: Atlanta (n = 43), Austin (n = 29), Boston (n = 27), Irvine (n = 38), Phoenix (n = 28) and Seattle (n = 18).

The online version of the research tool was made available to stakeholders on CUWCC's website. Stakeholders were directed to the website, which contained a link to the form. One hundred ninety-nine (199) stakeholders from a variety of states completed this survey. The survey was available online from June 2 – August 25, 2005.

At the conclusion of data collection, responses from the workshop and online participants were entered into a cross-tabulated database, the results of which have been analyzed and presented in this report.

#### **Report Annotations**

Throughout the report, significant differences have been highlighted and discussed. All statistical testing for this study has been done at the 95% confidence level.

Where applicable, significant differences have been indicated. Any statistically significant differences have been noted in appropriate tables in the following manner:

Service Origins	Total (N=369)	Water Suppliers (N=93)	Govnm't (N=75)	Product Man, Dist, Svc Prv (N=89)	Environ, Edu, or Ener Org (N=47)
State or regional	8%	6%	12%	4%	13%
National	17%	<u>15%</u>	<u>13%</u>	27%	13%
Both places (state and national)	74%	78%	75%	69%	74%

Q9. Where would you prefer to get these services: from a state or regional organization or from a newly-created national organization?

This table should be read in the following manner: the **bolded number** is significantly different than the underlined number.

#### Example:

It is interesting to note that Product Manufacturers / Distributors / and Service Providers (27%) are significantly more likely than Water Suppliers (15%) and Government Stakeholders (13%) to prefer a national model for the proposed organization.

In some cases percentages may not total to 100%. This may be due to the fact that some survey questions allow respondents to select more than one answer. These multiple response questions will be identified when they occur.

CUWCC definitions were used to identify the different stakeholder regions.

Pacific	California /			Northeast /	
Northwest	Hawaii	Southwest	Southeast	Mid Atlantic	Midwest
Alaska	California	Nevada	Mississippi	Virginia	Ohio
Washington	Hawaii	Utah	Missouri	W Virginia	Indiana
Oregon		Arizona	Arkansas	Maryland	Illinois
Idaho		New Mexico	Louisiana	Delaware	Michigan
Montana		Texas	Tennessee	New Jersey	Wisconsin
		Colorado	Alabama	New York	Minnesota
		Wyoming	Kentucky	Washington DC	Iowa
			Florida	Connecticut	Nebraska
			Georgia	Massachusetts	N Dakota
			N Carolina	Pennsylvania	S Dakota
			S Carolina	New Hampshire	Kansas
				Rhode Island	Oklahoma
				Vermont	
				Maine	

# **Summary of Results**

The California Urban Water Conservation explored stakeholders' interest in a national organization to oversee water efficiency. Their input regarding this proposed organization is summarized below.

#### I. Stakeholder Characteristics

A total of 383 stakeholders participated in this research in July and August 2005. Some of the participants (183) completed the surveys on paper at workshops in several different cities, and the remainder (199) completed the survey online. Stakeholders were given a list and asked to choose the category from this list that best describes their organization. The four most common types of organizations represented in this research are: Water Suppliers; Product Manufacturers, Distributors, and Service Providers; Government Stakeholders; and Environmental, Educational, and Energy Organizations.

More than half of all respondents come from organizations with at least 100 employees, while stakeholders from organizations with 51-100 people are much less common. In terms of region, nearly two-thirds of all participants are either from the California / Hawaii or Southwest regions.

#### **II. Most Important Issues Facing Water Efficiency**

Generally, stakeholders report that the following matters are the most important issues facing water efficiency today: "Need for better and more comprehensive efficiency standards;" "Lack of reliable information on efficient products and programs;" and "Lack of sufficient research of products and conservation savings."

Notably, two issues that were not perceived as important to participants in general are of greater concern to stakeholders in Environmental, Educational, and Energy Organizations. This group is more likely to say that "Lack of general public support of increased levels of water efficiency" and "Need for a place for organized stakeholder discussions" are among the most important issues facing water efficiency.

#### **III. Core Mission and Functions**

Stakeholders were provided with a list of options from which to choose one core mission for the proposed national water efficiency organization. The most-selected mission (chosen by 26% of all stakeholders) is "Information sharing on products, practices, programs, and legislation nationwide."

When choosing from a list of functions that would be subsumed under the organization's core mission, 90% of stakeholders share that "Centralized source of information on water efficiency programs, practices and products" should be included as a function and should also be a high priority for this organization.

The stakeholders commented on the specific areas that they believe a national water efficiency organization should cover. The top three areas mentioned are "commercial and industrial efficiency," "indoor plumbing products and appliances," and "water products labeling."

Lastly, there is one regional noteworthy regional difference in stakeholders' opinions about a core mission of "developing, by consensus, efficiency standards for water efficient products." Specifically, stakeholders in California / Hawaii are significantly more likely than those in the Southwest to report that this should be the core mission of the proposed organization.

#### IV. Services Being Received from Other Organizations

In an effort to understand how a national water efficiency organization could best serve its stakeholders, participants were asked to report what services they are currently receiving from other organizations. A majority of stakeholders are currently receiving "information on existing and pending legislation and regulations," and approximately half already have access to a "centralized source of information on water efficiency programs, practices and products", and "consumer education", materials and programs. Interestingly, stakeholders report that in many cases they are unsatisfied with the services that they are receiving from their current sources.

#### V. Composition of Organization

A large majority of stakeholders (74%) would prefer to receive services from both state and national levels. Stakeholders sharing that "lack of general public support for increased levels of water efficiency" is a key issue are significantly more likely than all other stakeholders to say that they prefer the organization to operate both on state and national levels.

Most stakeholders, and especially those who are Product Manufacturers, Distributors, and Service Providers, feel that membership should be all-inclusive. A slightly smaller majority share that individuals should be allowed to be members of the proposed organization. This is particularly true of Government Stakeholders. Finally, most stakeholders feel that this association should be a non-profit organization that is governed by a board of directors.

#### VI. Support

Nearly half of all stakeholders, and a significantly higher proportion of Government Stakeholders, are unsure if their organizations would provide financial support for a national water efficiency association. Thirty-six percent of participants report that their associations would provide financial backing, although Water Suppliers and Environmental, Educational, and Energy Stakeholders are more likely than the other groups to say that their organizations would provide monetary support. Of those stakeholders presuming that their companies would provide financial support for the proposed organization, the most common estimate of dues willing to be paid falls into the \$500 – \$999 range.

All stakeholders were asked how much they thought their organizations would pay on a fee-for-service basis, with most participants estimating \$500 or less. The majority of participants felt that their organizations would provide *non*-financial support, and most stakeholders also indicated that they would be extremely interested in becoming members of a national association for water efficiency.

#### VII. Manufacturers / Distributors / Service Providers / Builders / Developers

A separate set of questions was created for stakeholders who categorized themselves as "Product Manufacturers, Distributors or Service Providers" or "Builders / Developers" in an effort to explore any special concerns for these groups of stakeholders. Almost all of them report being

members of a trade organization, and most attend trade shows and conferences. Additionally, the majority of these stakeholders say that they are marketing and selling to the water conservation sector, which they consider to be a target market. Finally, even though they already report receiving marketing and outreach support from a variety of sources, they would like a national organization for water efficiency to provide these services as well.

#### **Conclusions and Recommendations**

• Standardized efficiency standards and a centralized source for information are requirements for the creation of a successful National Association for Water Efficiency.

In order to be of value to its members, a national organization for water efficiency must furnish comprehensive water efficiency standards. It needs to be a centralized source for information and provide specific details on products, services, programs, and legislation nationwide. This overarching description and outline of responsibilities should serve as a foundation for developing the organization's mission and goals.

Even though some stakeholders report they already receive similar services elsewhere, they are not all satisfied with those services. It is obvious from stakeholders' responses that a national organization is desired.

#### • Membership in a National Association for Water Efficiency would be high.

Overall stakeholders are very (30%) or extremely (47%) interested in membership in a national organization for water efficiency that provides the function and services they desire. With 77% of those surveyed interested in membership, there is definite support for this organization. Support is strongest among Product Manufacturer, Distributor and Services Providers and Government Stakeholders. On the other hand, Environmental, Education or Energy Organizations tend to be the least supportive of a potential national association.

#### State and national needs must be taken into consideration.

Stakeholders overwhelmingly support an organization that addresses state, regional and national concerns. They expressed the need for this national organization to also take into consideration state and regional needs, since they may have different needs. However, the advantage of a national presence for consistency and efficiency of resources as well as the convenience of a one-stop clearinghouse for information made a difference to stakeholders. Some even noted a national organization is better positioned to develop and implement a program similar to Energy Star.

#### • Forming a non-profit, all-inclusive association is the way to go.

A vast majority of stakeholders prefer that the proposed National Association for Water Efficiency be structured as a 501(c)(3) or similar non-profit organization. This format would deter any inferences that the association is playing favorites or profiting from any decisions made. Furthermore a national not-for-profit association adds legitimacy in the minds of the general public, and will therefore have more success educating the public and promoting water conservation.

In addition, this non-profit national association needs to be all-inclusive, accepting any members interested in water conservation. Stakeholders would like to see both companies/organizations and individuals have the opportunity to join.

# • Take into consideration that the diverse group of stakeholders will have a variety of needs.

Keep in mind that with a diverse group of stakeholders it will be necessary to consider their wide range of needs and opinions. Although this research has shown that stakeholders agree on the mission, function and direction of this proposed National Association for Water Efficiency, once the general framework is in place, it is important to balance the sometimescompeting needs of stakeholders.

For example, stakeholders from the Product Manufacturers, Distributors, Service Providers, Builders and Developers groups represent companies that vary greatly in size and products/services provided, therefore their needs would differ. However, they are similar in that most are involved in trade shows/conferences and marketing to the water conservation sector. In addition to differences across stakeholder type, differences will also occur by the geographic region they serve.

#### • The level of financial support is still questionable.

With almost half (46%) of the stakeholders surveyed reporting they "don't know" if they will provide any financial support to the proposed national association, the level of financial support is still uncertain. Those most likely to indicate they would provide financial support represent Water Suppliers and Product Manufacturers, Distributors, Service Providers.

When considering annual dues, the amount stakeholders are willing to pay varies. Specifically 21% would pay under \$500 annually, 33% between \$500-\$999, 24% ranging from \$1,000-\$2,499 and finally 23% are willing to pay \$2,500 or more. Interestingly, Government Stakeholders are more likely than all other stakeholders to be willing to pay \$10,000 annually.

Not surprisingly, stakeholders are much more likely to commit to providing some type of non-financial support. Although a quarter of them indicate that they don't know if they will be able to provide such assistance, only a handful say they would not.

# **Detailed Analysis of Findings**

#### I. Stakeholder Characteristics

The CUWCC is conducting this research to gather feedback from stakeholders on the value of creating a national organization to oversee water efficiency issues. In particular, the Commission wishes to understand the opinions and interests of clients from the following types of organizations: Water Suppliers, Government Stakeholders, Product Manufacturers / Distributors and Environmental / Educational and Energy Organizations. Results from these four stakeholder categories are compared. Please note some stakeholders are members of other categories as well (see table below), but only the findings from the top four categories are compared in the analyses.

A complete list of all the organizations represented in the survey can be found in the Appendix Section at the end of this report.

#### A. Stakeholder type

Stakeholders were presented with a list and asked to choose which item on the list best described their organization. The breakdown of stakeholder type is presented in the following table.

Stakeholder Type	<b>Total</b> (N=374)
Water Supplier (retail or wholesale)	26%
Product Manufacturer, Distributor, or Service Provider	25%
Government (federal, state or municipal)	20%
Environmental, Educational, or Energy Organization	13%
Water Planning Agency or Non- Profit Organization	7%
Builder or Developer	2%
Other	7%

Q22. Please select the one category that best describes your organization.

As seen in the above table, Water Suppliers (26%) and Product Manufacturers, Distributors and Service Providers (25%) are the most common type of stakeholders to complete the survey. Government stakeholders (including federal, state or municipal employees) also represented a sizeable portion of the participants (20%). Stakeholders from Environmental, Educational or Energy Organizations (13%), Water Planning Agencies or Non-Profits (7%) and Builders / Developers (2%) also took part in this research.

Notably, 7% of respondents selected the "other" category when asked to describe their type of organization, and a few patterns emerged. For example, a small percentage of these respondents (2% of the entire sample) share that they were part of a consulting organization. Additionally, a small minority of stakeholders (1 % of all participants) indicates that their organization specialized in irrigation.

#### **B.** Size of organization

All participants were asked to report the number of employees that are in their organization. Overall results and findings for the top four stakeholder types are presented below.

Number of employees	Total (N=362)	Water Suppliers (N=92)	Govnm't (N=76)	Product Man, Dist, Svc Prv (N=91)	Environ, Edu, or Ener Org (N=46)
1 – 5	15%	<u>1%</u>	<u>1%</u>	18%*	33%
6-20	13%	<u>4%</u>	<u>8%</u>	21%	17%
21-50	12%	12%	9%	12%	15%
51-100	7%	10%	7%	8%	2%
More than 100	53%	73%	75%	<u>42%</u>	<u>33%</u>

Q23. How many employees are there in your organization?

The majority of stakeholders (53%) report that there were more than 100 employees in their organization. Other stakeholders share that their organizations are smaller. For instance, 15% of the participants indicate that they have only 1-5 employees in their organization, and 13% say that there are 6-20 employees at their workplace. Twelve percent of respondents share that there are 21-50 employees in their organization. Finally, only 7% of stakeholders report that their organization houses 51-100 employees.

When organization size is compared across the four primary stakeholder categories, some differences emerge. Environmental, Educational or Energy Organizations (33%) are significantly more likely than Product Manufacturers, Distribution and Service Providers (18%) to have only 1-5 employees. Additionally, Environmental, Educational or Energy Organizations (33%) along with Product Manufacturers, Distributors and Service Providers (18%) are significantly more likely to have 1-5 employees compared to Water Suppliers and Government stakeholders (1% each).

In the category of organizations with 6-20 employees, Product Manufacturers, Distributors and Service Providers (21%) are significantly more likely than Water Suppliers (4%) and Government Stakeholders (8%) to come from an organization of this size. Another difference is that Environmental, Educational and Energy Organizations (17%) are significantly more likely than Water Suppliers (4%) to report that their organization has 6-20 employees.

There are also several notable differences across stakeholder categories when it comes to organizations with 100 or more employees. In this case, Water Suppliers (73%) and Government

Employees (75%) are significantly more likely than Product Manufacturers, Distributors and Service Providers (42%) and Environmental, Educational, and Energy Organizations (33%) to have more than 100 employees.

#### C. Region

Participants were asked to share the state in which their organization is located. These states were then categorized into regions (for a review of the states included in each category, see introduction). The following table shows the breakdown of stakeholders by region and by the four major organization categories.

Region	Total (N=332)	Water Suppliers (N=88)	Govnm't (N=69	Product Man, Dist, Svc Prv (N=81)	Environ, Edu, or Ener Org (N=40)
Pacific Northwest	13%	22%	12%	<u>9%</u>	<u>3%</u>
California / Hawaii	30%	38%	<u>19%</u>	41%	<u>15%</u>
Southwest	28%	<u>31%</u>	46%	<u>20%</u>	<u>18%</u>
Southeast	16%	<u>7%</u>	<u>16%</u>	<u>7%</u>	50%
Northeast / Mid Atlantic	11%	<u>3%</u>	7%	17%	15%
Midwest	2%			6%	

Q32. In what sate is your organization located?

The region with the greatest percentage of stakeholders completing the survey was California / Hawaii (30%). The findings from this region actually reflect those for the State of California because there was only a single participant from Hawaii who completed the survey. The next largest contingent is comprised of stakeholders living in the Southwest, followed by the Southeast, the Pacific Northwest, the Northeast / Mid Atlantic, and the Midwest.

There are some markedly different proportions of the four main stakeholder categories based on region. For instance, there are significantly more Water Suppliers than Product Manufacturers, Distributors and Service Providers as well as Environmental, Educational or Energy Organizations. In California there are significantly more Water Suppliers and Product Manufacturers, Distributors and Service Providers than there are Government and Environmental, Educational or Energy Stakeholders.

In the Southwest, there is a significantly higher proportion of Government Workers than any other type of Stakeholder. On the other hand, the Southeast has significantly more Environmental, Educational, or Energy Stakeholders than any other category. The Northeast / Mid Atlantic region has significantly more Product Manufacturers, Distributors and Service Providers as well as Environmental, Educational or Energy Organizations compared to Water Suppliers. Finally, all of the Midwest respondents who completed this survey are Product Manufacturers, Distributors and Service Providers.

There are a few regional differences in stakeholders' ideas about the most important issues facing water efficiency today. Southwest stakeholders, particularly those in Texas, are more likely to view the lack of public support for water efficiency issues as a key concern compared to the need for better and more comprehensive efficiency standards. In contrast, Pacific Northwest Stakeholders are significantly less likely to see lack of public support for water efficiency issues as important compared to most of the other issues on the list.

#### D. Online versus Paper

As outlined in the methodology section of this report, participants either completed this survey online or on paper. A comparison of online and paper survey responses is presented in the following table.

Survey Format	Total (N=382)	Water Suppliers (N=96)	Govnm't (N=76)	Product Man, Dist, Svc Prv (N=95)	Environ, Edu, or Ener Org (N= 47)
Online	52%	49%	61%	<u>45%</u>	51%
Paper and pencil	48%	51%	<u>39%</u>	55%	49%

A slightly higher percentage of participants (52%) completed the survey online compared to the percentage of participants who completed it on paper (48%). Among the online participants, there are significantly more Government Stakeholders (61%) than Product Managers, Distributors and Service Providers (45%). This pattern is reversed when participates who completed the paper survey are explored; there are significantly more Product Managers, Distributors and Service Providers (55%) than Government Stakeholders (39%) who completed the survey on paper.

Participants who completed the survey online and those who did so on paper advocate varying ideas about what the core mission of a national water efficiency organization should be. Stakeholders completing the survey online indicate that transforming the national water efficiency market for consumers is a key issue, while paper and pencil participants see all other issues as more important than transforming the national market for water efficiency issues.

Another difference between stakeholders who completed the survey online or on paper is organization size. Online participants are significantly more likely to come from organizations with 50 or fewer people than organizations with 51 or more employees. On the other hand, the paper and pencil participants are significantly more likely to be part of organizations with at least 51 people than smaller organizations.

Lastly, stakeholders' regional backgrounds fall out differently in the online and paper versions of the survey. Online participants are particularly likely to be from the Pacific Northwest and California / Hawaii regions compared to the other regions. The stakeholders who completed the paper survey are especially likely to be from the Southwest, Southeast and Northeast / Mid Atlantic regions.

#### **II. Most Important Issues Facing Water Efficiency**

The first set of questions on both the paper survey distributed at stakeholder meetings throughout the country and the online information-gathering tool, asked stakeholders to indicate what they believe are the most important issues facing water efficiency today.

#### A. Issues facing water efficiency

Stakeholder participants were asked to rank-order a list of five issues facing water efficiency in order of importance. Although not all stakeholders who completed the paper version did so correctly (e.g. some ranked multiple items as "1"), the results of both tools have been combined and reported below.

No matter how the data is combined, three issues surface as the most important: "Need for better and more comprehensive efficiency standards;" "Lack of reliable information on efficient products and programs;" and "Lack of sufficient research of products and conservation savings."

The table below shows the issue stakeholders chose as the most important concern facing water efficiency today (that which received a rating of "1").

Most important issues facing water efficiency today (#1 Ranking)	<b>Total</b> (N=369)	Water Suppliers (N=92)	Govnm't (N=75)	Product Man, Dist, Svc Prov (N=93)	Environ, Edu, or Ener Org (N=44)
Need for better and more comprehensive efficiency standards	27%	32%	29%	23%	23%
Lack of sufficient research of products and conservation savings	18%	24%	16%	20%	<u>9%</u>
Lack of reliable information on efficient products and programs	18%	20%	19%	19%	9%
Lack of general public support of increased levels of water efficiency	15%	<u>8%</u>	16%	16%	23%
Need for a place for organized stakeholder discussions	6%	7%	4%	<u>4%</u>	14%

Q1. What do you believe are the most important issues facing water efficiency today? (Please choose all that you feel apply and rank them with 1 being the most important.)

Stakeholders were provided the opportunity to add their own issue not included in the list. Twenty-two percent (22%) of the stakeholders chose to write in their own issue and rate it a one for most important. These written-in issues are quite varied, with only two being shared by a significant percent of stakeholders (public education, 6%, and economic incentives, 5%).

Interestingly the four major types of stakeholders feel equally strongly about the "need for better and more comprehensive efficiency standards" with one group not being any more likely than another to choose it as the most important issue facing water efficiency today. Water Suppliers (retail and wholesale) are significantly more likely than Environmental, Educational and Energy Organizations to say that the "lack of sufficient research of products and conservation savings" is

the most important issue facing water efficiency today. On the other hand Environmental, Educational and Energy Organizations are more likely (23%) than Water Suppliers (8%) to say that the "lack of general public support of increased levels of water efficiency is the most important issue.

Those in the Pacific Northwest are significantly more likely (31%) than those in California/Hawaii (15%) to believe that the "lack of reliable information on efficient products and programs" is the most important issue facing water efficiency today. Stakeholders from the South West, South East and Northeast are significantly more likely than those in the Pacific Northwest and California/Hawaii to say that the "lack of general public support for increase levels of water efficiency" is the number one problem.

Stakeholders willing to provide financial support to a national water efficiency organization are significantly more likely (21%) than those who are not (9%) to feel that the "lack of reliable information on efficient products and programs" is the number one issue facing water efficiency today.

Up to this point, only issues that were ranked first by stakeholders have been discussed. Overall, stakeholders raised "other" issues not on the provided list. Although most of these issues did not make it to the top of the importance list, they are still worth reviewing. The following table contains those "other" issues and includes the percent of all stakeholders surveyed who mentioned each issue.

"Other" Issue Facing Water Efficiency Today	Total (N=371)
Public education	12%
Economic incentives	6%
Conservation	4%
Need national program	4%
Standardize methodologies	4%
Landscape irrigation	2%
Politics	2%
Funding for programs	2%
R&D	1%
Infrastructure planning	1%
Lack of water supplier support	1%
All of the above	1%
Agricultural water issues	1%
Industry water use	1%
Waste leakage	1%
Lobbying	0%
Product labeling	0%
Other	5%

### **III. Core Mission and Functions**

All 383 stakeholders were asked to consider if a national organization for water efficiency existed, what would be its core mission and functions.

#### A. Core mission

Core mission	Total (N=372)	Water Suppliers (N=93)	Govnm't (N=76)	Product Man, Dist, Svc Prov (N=92)	Environ, Edu, or Ener Org (N=47)
Information sharing on products, practices, programs, and legislation nationwide	26%	24%	29%	22%	26%
Developing, by consensus, efficiency standards for water efficient products	20%	22%	18%	20%	21%
Research and evaluation of products and conservation savings	19%	24%	14%	17%	15%
Promotion of water-efficient products and technologies	18%	<u>14%</u>	17%	27%	19%
Transforming the national market to make more water-efficient products available to the buying consumer (online version)  Creating a leveraged national market transformation (paper version)	11%	12%	16%	9%	6%

Q3. If a national organization for water efficiency existed, what should its core mission be? (Please choose only one.)

With the ability to only identify one core mission, 26% of stakeholders agree that "information sharing on products, practices, programs and legislation nationwide" should be the core mission of this potential national organization for water efficiency.

A few stakeholders (6%) who completed the paper version of this survey chose to add their own core mission. The missions shared were quite varied, with none of the responses mentioned by 5% or more of the stakeholders. For example, only 4% (or 15 people) shared that "Education / Advocacy" should be the organization's core mission. The remaining suggestions for core mission were only shared by one or two individuals at most.

The last potential core mission listed in the chart above was reworded to add clarification for those who shared their thoughts via the online tool. (Both wordings have been provided.) Interestingly this new wording actually receives a significantly higher percent of stakeholders choosing it as the core mission. Specifically 16% chose the online version of this statement as the core mission while only 5% chose the paper version. This statement is currently the least

chosen mission. Even if the clarified wording had been provided to those who shared their thoughts on paper, the mission would not have risen high enough to become one of the top three.

Stakeholders are very consistent in their attitudes toward a potential national organization for water efficiency. For example, those who indicate that the most important issue facing water efficiency today is the "need for better and more comprehensive efficiency standards" are significantly more likely than most of their counterparts to say the core mission should be "developing, by consensus, efficiency standards for water efficient products." Additionally, those who indicate that "lack of sufficient research of products and conservation savings" is the most important issue facing water efficiency today are significantly more likely than all other stakeholders to say that "research and evaluation of products and conservation savings" should be the core mission.

There is one notable regional difference in stakeholders' opinions about the proposed association's core mission. Specifically, stakeholders in California / Hawaii are significantly more likely than their counterparts in the Southwest to advocate a core mission of "developing, by consensus, efficiency standards for water efficient products."

Finally, those willing to financially support this potential national water efficiency organization are significantly more likely (24%) to indicate that the "promotion of water efficient products and technologies" should be the core mission than those who will not financially support the organization (12%).

## B. Functions that should be part of core mission

After choosing a core mission for a potential national organization for water efficiency, stakeholders were asked to review some potential functions and indicated which they feel should be part of the organization's mission.

Functions	Total (N=375)	Water Suppliers (N=94)	Govnm't (N=74)	Product Man, Dist, Svc Prv (N=95)	Environ, Edu, or Ener Org (N=47)
Centralized source of information on water efficiency programs, practices and products	90%	91%	88%	94%	<u>83%</u>
Information on existing and pending legislation and regulations	75%	78%	78%	77%	70%
Research on efficiency program savings, new technologies, and new products	75%	88%	82%	<u>67%</u>	<u>60%</u>
National forum for water conservation idea sharing and problem solving	74%	76%	76%	69%	70%
Consumer education	69%	63%	72%	74%	66%
Developing, by consensus, efficiency standards for water- efficient products	67%	80%	68%	<u>59%</u>	<u>60%</u>
Information on each state's product standards and programs	66%	64%	74%	68%	62%
Evaluation and testing of water- efficient products and programs	61%	85%	<u>57%</u>	<u>57%</u>	<u>45%</u>
Promotion of water efficient products and programs	33%	37%	27%	38%	40%
Special contractual services on water efficiency, available for a separate fee, such as conservation program design	25%	31%	28%	<u>18%</u>	23%

Q4. If this national organization for water efficiency existed, which of the following functions do you feel should be part of its mission? (Please check all that apply.)

Ninety percent (90%) of those queried believe the national organization should be a "centralized source of information on water efficiency programs, practices and products." As a matter of fact, most of the functions included for the stakeholders to consider are thought by many (at least 6 out of 10 stakeholders) to be an integral part of this potential organization's mission. Only two of the proposed functions were considered by most as not very important to the mission of the proposed national water efficiency organization.

Stakeholders representing Water Suppliers and the Government are significantly more likely than those representing Product Manufacturers/Distributors and Environmental/Educational /Energy Organizations to feel "research on efficiency program savings, new technologies and new products" should be part of the mission.

Water Suppliers are more likely than all other types of stakeholders to say that "evaluation and testing of water efficient products" should be part of this potential national organization's mission. Interestingly those from the Pacific Northwest, California/Hawaii and the Southwest are also significantly more likely than their Southeast and Midwest counterparts to feel "evaluation and testing of water efficient products" should be a part of the mission.

Notably, those willing to financially support this potential national water efficiency organization are significantly more likely than those who are currently unwilling to do so to believe the following functions should be part of the mission: "centralized source of information on water efficiency, programs and products," "information on existing and pending legislation and regulations" and "developing, by consensus, efficiency standards for water efficient products."

Finally, those who completed the survey online and on paper were provided the opportunity to include a function that they felt should be included in the mission. For information purposes, all of the "other" functions shared are listed below. However "Educational outreach" (17 people or 5%) is the only suggested function shared by a significant percent of stakeholders.

"Other" Functions that Should be Part of the Mission	Total (N=375)
Education outreach	5%
Measurement and benchmarking / uniform methodology	2%
Utilities	2%
Grant information / grants	1%
Policy development	1%
Industry	1%
Legislative lobby	1%
Economic incentives	1%
Supply / demand management	1%
National building standards	1%
Funding for research	0%
Water re-use	0%
Specifications	0%
Tracking of success	0%
Other	2%

### C. Priority level assigned to each function

Once stakeholders had the chance to indicate which functions should be included in the potential national water efficiency organizations' mission, stakeholders were then asked to prioritize the importance of each function.

This particular question was handled differently depending on whether the stakeholder completed the survey while attending a workshop (on paper), or completed it via the Internet (online). Additionally, attendees at the workshops were asked to rank the four most important features, however some of them incorrectly completed the task (e.g. ranked more than one item a "1"). To compensate for these inconsistencies, the results below report the percent of stakeholders who indicated functions were a "1" (paper) or of "high priority" (online).

Functions (N=Rated as "1" or "high priority")	Paper	Online
Centralized source of information water efficiency programs, practices and products	67%	69%
Research on efficiency program savings, new technologies, and new products	52%	47%
Developing, by consensus, efficiency standards for water efficient products	47%	39%
Consumer education	46%	47%
Promotion of water-efficient products and programs	41%	45%
National forum for water conservation idea sharing and problem solving	37%	42%
Information on existing and pending legislation and regulations	33%	37%
Evaluation and testing of water-efficient products	32%	41%
Information on each state's product standards, practices and programs	20%	18%
Special contractual services on water efficiency, available for a separate fee, such as conservation program design	6%	7%

Q5. A national organization for water efficiency can have many functions, but some need to be assigned a higher priority level than others. As you review the list below, please indicate what priority level you think each function should be assigned.

The results above indicate no significant differences between the way those at the workshops and those online feel about the priority of these various functions. As a matter of fact, the results are very similar, even when considering how different stakeholder organization types responded. Specifically, Water Suppliers are more likely than most other types of stakeholders to assign a

high level of priority to the functions of "research on efficiency program savings, new technologies, and new products" as well as "evaluation and testing of water efficient products." On the other hand, Water Supplies are less likely than most other stakeholder organizations to feel "consumer education" is a critical function of the proposed nation organization for water efficiency.

Stakeholders were provided the opportunity to add a function they felt was missing from the list and prioritize it. Although a very small percent of stakeholders wrote an "other" function and prioritized it as either a "1" or "high priority," their responses have been included for informational purposes.

"Other" Functions (N=Rated as "1" or "high priority")	Paper	Online
Training / education	6%	2%
Uniform methodology	4%	
Incentive programs	3%	
Grant information / grants	3%	
Utilities	3%	
National building standards	1%	
Standards / benchmarks	1%	1%
Help local agencies	1%	

## D. Specific subject areas that should be covered

In addition to asking stakeholders about the core mission, the functions that are part of the mission and the importance of each function, stakeholders had the opportunity to share specific subject areas in water efficiency that should be covered by a national organization. Stakeholders were provided a list of potential subject areas and asked to indicate which should be covered by a national organization for water efficiency.

Specific areas that should be covered	Total (N=374)	Water Suppliers (N=96)	Govnm't (N=74)	Product Man, Dist, Svc Prv (N=91)	Environ, Edu, or Ener Org (N=46)
Commercial and industry efficiency	76%	82%	78%	<u>64%</u>	83%
Indoor plumbing products and appliances	72%	85%	<u>66%</u>	<u>64%</u>	74%
Water product labeling	71%	84%	<u>72%</u>	<u>67%</u>	<u>63%</u>
Public information	67%	60%	65%	71%	63%
New building efficiency standards	66%	75%	74%	<u>59%</u>	<u>57%</u>
Outdoor landscape irrigation and plant selection	64%	65%	<u>57%</u>	73%	65%
Environmental sustainability and Green building (LEED, etc.)	61%	59%	68%	56%	61%
Water recycling	59%	<u>44%</u>	64%	66%	67%
Ordinances and legislation	58%	55%	69%	<u>54%</u>	59%
Metering and utility / distribution system, water loss management	55%	<u>50%</u>	66%	<u>49%</u>	57%
Conservation rate structures	53%	46%	58%	52%	57%
Gray water	50%	<u>40%</u>	53%	54%	57%
School information	49%	45%	47%	48%	54%
Rainwater catchment systems	47%	44%	46%	45%	57%
Stormwater management	42%	32%	42%	43%	46%
Residential home audits	40%	46%	46%	36%	35%
Waste water (sewage)	30%	<u>24%</u>	39%	30%	28%
Other	10%	10%	5%	14%	15%

Q11. What specific subject areas in water efficiency should be covered by a national organization? (Please check all that apply.)

Of the 375 stakeholders who chose to answer this question, more than seven in ten agree that "commercial and industrial efficiency" (76%), "indoor plumbing products and appliances" (72%) and "water products labeling" (71%) should be covered by a national organization. Stakeholders feel many other areas also fall within the responsibility of a national organization

including "public information" (67%), "new building efficiency standards" (66%) and "outdoor landscape irrigation and plant selection" (64%).

Not surprisingly, the type of organization a stakeholder represents has an influence on the specific subjects they feel should be covered by a national organization. For example, Water Suppliers are much more likely than their counterparts to consider "indoor plumbing products and appliances" and "water products labeling" an area to be covered by a national organization. On the other hand, these Water Suppliers are significantly less likely than other types of organizations to say that "water recycling" should be covered by this organization.

Stakeholders representing Water Suppliers and Government organizations are significantly more likely than those from Product Manufacturers/Distributors and Environmental /Educational/Energy organizations to agree that "new building efficiency standards" are the responsibility of the proposed national organization.

The region of the country a stakeholder is from does, in fact, influence the subject areas the stakeholder feels should be covered by the national organization. Specifically, those from the Pacific Northwest and the Southeast are significantly more likely than those from California/Hawaii and the Southwest to feel that "commercial and industrial efficiency" is an area that should be covered by the proposed nation organization for water efficiency.

Stakeholders from the Southeast are significantly more likely than those from any other region to declare that "water recycling" is a subject that the national organization for water efficiency should address. However, those from the Midwest are much less likely than stakeholders from other regions to say "new building efficiency standards" should be part of what this national organization's responsibilities.

Those willing to provide financial support to this national organization are significantly more likely (77%) than their unwilling counterparts (62%) to state that "water products labeling" should be part of the organization's responsibility. Additionally, those currently agreeing to provide financial support are significantly more likely to believe "environmental sustainability and green building" and "indoor plumbing products and appliances" are important subject areas for the national organization.

Those willing to provide \$1,000 or more to the national organization, assuming it's formed, are significantly more likely to indicate that "commercial and industrial efficiency" and "public information" are key subject areas that should be covered by the organization.

Finally, organizations with fewer than 50 employees are significantly more likely than their larger counterparts to suggest "grey water," "stormwater management" and "water recycling" as specific areas for the proposed national organization to address.

### E. Other Suggestions for the Proposed National Organization

Respondents were given the opportunity to share any ideas or suggestions that they had regarding the proposed National Water Efficiency Organization. Results are described in the following table.

Other Ideas and Suggestions for this Proposed Organization	Total (N=103)
Interface / collaborate with other water use organizations	15%
Focus on education /advocacy / consumer information / "Alliance for Water Efficiency"	10%
Define audience, scope, mission – do not duplicate efforts of existing organizations	9%
Have regional offices and representation – not just one national or state office	7%
Be impartial – avoid being overly political	6%
Membership should have varying categories and be affordable and open to all	6%
Emulate "Energy Star Model with water use ratings	5%
Work with agricultural users / irrigation association	5%
Organizational structure should not be a single organization	5%
Do sustainability and consumer behavior research	5%
Start small	4%
Word toward development of national standards	4%
Work with academia	3%

Most of the "other" ideas that stakeholders shared regarding the proposed organization were quite varied. However, at least one-tenth of respondents answering this question offered suggestions to "Interface / collaborate with other water use organizations" and to "Focus on education / advocacy / consumer information / 'Alliance for Water Efficiency;" (15% and 10%, respectively). Additional thoughts are included in the above table if they were mentioned by at least 3% of stakeholders who answered this question. The remaining responses were shared quite inconsistently (with only one or two respondents mentioning them) and are therefore excluded from the above table.

When stakeholders' responses were analyzed according to the core mission they desired for the proposed organization, an unexpected difference was found. Participants are more likely to state

that a national organization should collaborate with other organizations when they advocate a core mission of transforming the national market for the buying consumer compared to those desiring a core mission of information sharing on a nationwide basis. This finding is counterintuitive, but it could be due to the fact that a small number of stakeholders (only 15 individuals) were included in this analysis.

Lastly, there are two suggestions that vary according to region. Stakeholders in the Pacific Northwest are significantly more likely than those is California/Hawaii to suggest that the proposed organization should model itself after existing organizations and that it should it should initially establish small goals before trying to accomplish larger ones. Although statistically significant, these findings are based on responses from four individuals and should therefore be interpreted cautiously.

# IV. Services Being Received from Other Organizations

As part of the assessment for creating a new national organization for water efficiency, stakeholders were asked to share what services they currently receive from other organizations. This information will not only let those developing the organization know what types of information are currently available, but more importantly, it will provide insight into the areas where information is lacking or of poor quality.

## A. Services currently receiving from other organizations

	Total (N=280)	Water Suppliers (N=75)	Govnm't (N=58	Prod Man, Dist, Svc Prv (N=74	Environ, Edu, or Ener Org (N=29)
Information on existing and pending legislation and regulations	65%	71%	55%	72%	66%
Centralized source of information on water efficiency programs, practices and products	53%	69%	<u>45%</u>	<u>45%</u>	59%
Consumer education	49%	60%	<u>41%</u>	<u>41%</u>	59%
Research on efficiency program savings, new technologies, and new products	44%	53%	40%	39%	45%
Promotion of water-efficient products and programs	43%	51%	43%	<u>30%</u>	48%
Evaluation and testing of water- efficient products	41%	40%	31%	54%	34%
National forum for water conservation idea sharing and problem solving	35%	41%	38%	27%	<u>21%</u>
Information on each state's product standards, practices, and programs	21%	23%	<u>9%</u>	32%	14%
Developing, by consensus, efficiency standards for water- efficient products	21%	29%	<u>9%</u>	23%	24%
Special contractual services on water efficiency, available for a separate fee, such as conservation program design	15%	24%	<u>3%</u>	14%	14%
Other	6%	7%	2%	3%	10%

Q7. Check any of the following services that you currently receive from another organization. Please also indicate if you are satisfied or dissatisfied with those services that you are receiving.

Many (65%) stakeholders are currently receiving "information on existing and pending legislation and regulations" from another organization. About half (53%) acknowledge they already have a "centralized source of information on water efficiency programs, practices and products" and have access to "consumer education" materials and programs (49%).

Stakeholders were provided with the opportunity to share "other" areas in which they are receiving services/information from other organizations. Only 6% of the stakeholders shared another area. The "other" function areas shared by these 17 people include: advocacy/education, irrigation information, job standardization/network/training, low water use plants/landscape, program evaluation, data on flow, work on utilities and promote legislation.

When looking at the various stakeholder groups, it is amazing to see that generally Water Suppliers have access to many more services than other types of stakeholders, especially Government.

Stakeholders from various regions of the country are more likely than others to have been receiving information from other organizations. Specifically, those from the Pacific Northwest and California/Hawaii are more likely than stakeholders from the other regions to report they receive "centralized source of information on water efficiency programs and products" from other organizations. As a matter of fact, stakeholders from California/Hawaii are more likely than those from other regions to acknowledge receiving many of the listed functions from other organizations.

It is important to note that many stakeholders are not getting the information they would like to have from other organizations. Many of the areas where other organizations are lacking happen to be the same ones that stakeholders feel need to be a priority of a potential national organization. These include "developing, by consensus, efficiency standards for water efficient products," "information on each state's product standards and programs" as well as a "national forum for water conservation idea sharing and problem solving."

As a follow-up, stakeholders were asked to indicate their level of satisfaction with the various types of information they obtain from other organizations. Below is a list of each function, the percent of those who currently receive each function and whether or not they are satisfied with what they are receiving.

Function Received from Other Organization	Percent of Total Currently Receiving the Function	Percent of those Receiving Function who are Satisfied with it
Information on existing and pending legislation and regulations	65%	59%
Centralized source of information on water efficiency programs, practices and products	53%	49%
Consumer education	49%	42%
Research on efficiency program savings, new technologies, and new products	44%	44%
Promotion of water-efficient products and programs	43%	48%
Evaluation and testing of water- efficient products	41%	52%
National forum for water conservation idea sharing and problem solving	35%	53%
Information on each state's product standards, practices, and programs	21%	41%
Developing, by consensus, efficiency standards for water- efficient products	21%	36%
Special contractual services on water efficiency, available for a separate fee, such as conservation program design	15%	65%
Other	6%	31%

Q7b. Please indicate if you are satisfied or dissatisfied with those services that you are receiving.

As can be seen in the table above, many of the functions are not currently available to stakeholders. Additionally, those receiving the functions are not always satisfied with the services. In most cases, less than half of those currently receiving a function are satisfied with it. This leaves a great opportunity for the proposed national water efficiency organization to step in and take up the slack.

Interestingly, there is a regional difference in satisfaction with the function "Developing, by consensus, efficiency standards for water-efficient products;" California/Hawaii stakeholders are significantly more likely than respondents in the Southwest to be satisfied with this service.

Finally, stakeholders indicting that their organization would contribute less than \$1,000 in annual dues are more likely be report satisfaction with having a "centralized source of information on water efficiency programs, practices and products" compared to stakeholders who anticipate donating \$1,000 or more in dues each year.

# V. Composition of Organization

In addition to obtaining direction about the proposed organizations mission, function and areas of emphasis, stakeholders were also asked to consider how the organization would be governed.

## A. Where prefer to get services

First, it is important to understand if Stakeholders would prefer the potential water efficiency organization's services to come from a state/regional level or a national level.

Service Origins	Total (N=369)	Water Suppliers (N=93)	Govnm't (N=75)	Product Man, Dist, Svc Prv (N=89)	Environ, Edu, or Ener Org (N=47)
State or regional	8%	6%	12%	4%	13%
National	17%	<u>15%</u>	<u>13%</u>	27%	13%
Both places (state and national)	74%	78%	75%	69%	74%

Q9. Where would you prefer to get these services: from a state or regional organization or from a newly-created national organization?

The majority of stakeholders (74%) would prefer to receive services from both a state and national level. The type of stakeholder does not influence a stakeholders preference for receiving services from both places. Interestingly those stakeholders who report that "lack of general public support for increased levels of water efficiency" as an important issue are significantly more likely than all other stakeholders to say that they prefer the organization provide services from both the state and national level.

Although only 17% indicated they prefer to receive services from only the national level, it is interesting to note that Product Manufacturers / Distributors / and Service Providers are more likely than other stakeholders to prefer the national model.

All respondents were asked to indicate why they chose the answer they did. Of those who explained their reasoning for choosing the state/regional option, 19 wrote, "regions/states have different needs." The remaining stakeholders suggest "national with regional focus" (6), and "keep local" (4).

Those interested in receiving services from a national organization explain that such an organization would be more efficient (31 stakeholders). Some add that a "national organization with a regional focus" would be a good approach (6). A "clearing house/one stop" (5), the suggestion that "regions/states have different needs" (1), the desire for "programs like energy star" (1), and "better research" (1) are also given as reasons for preferring a nationally run organization.

Finally, the majority (74% or 274 stakeholders) who prefer receiving services from both a state/regional organization shared the following reasons for their choice (please see table below).

Reasons for preferring both state and national organization	Total (N=209)
National with regional focus	41%
Need both / both state and national	16%
Regions / states have different needs	14%
National is more efficient	12%
Quality control / national standards	7%
Trade associations	2%
Clearinghouse / one stop	1%
Think globally / act locally	1%
Need programs like Energy Star	0%
Keep local	0%

Those willing to provide financial support for this proposed water efficiency organization are significantly more likely (44%) to have explained their preference for both a state and national organization by saying "national with regional focus" than those unwilling to provide financial support (12%).

## **B.** Membership makeup

Stakeholders were asked two questions concerning who they feel should make up the membership if this national organization for water efficiency is formed.

Membership	Total (N=374)	Water Suppliers (N=95)	Govnm't (N=74)	Product Man, Dist, Svc Prv (N=95)	Environ, Edu, or Ener Org (N=46)
Yes, membership should be all inclusive	80%	<u>73%</u>	<u>78%</u>	91%	<u>70%</u>
No, membership should be confined to water suppliers and non-profit organizations	11%	16%	15%	<u>6%</u>	9%
Doesn't matter to me	9%	12%	<u>7%</u>	<u>3%</u>	22%

Q16. Should a national organization for water efficiency include membership and funding from other sectors such as builders, plumbers, manufacturers developing and selling water-efficient products (plumbing, appliance, and irrigation), etc?

The majority of stakeholders (80%) declare that the proposed organization's membership should be all-inclusive.

Not surprisingly, Product Manufacturers / Distributors and Service Providers are significantly more likely than all other stakeholder types to maintain that membership should be open to everyone. More importantly, those willing to provide financial support are significantly more likely (90%) than non-financial supporters (72%) to say that membership should be all inclusive.

Stakeholders were also asked to consider the option of memberships for private individuals.

Membership	Total (N=377)	Water Suppliers (N=95)	Govnm't (N=76)	Product Man, Dist, Svc Prv (N=95)	Environ, Edu, or Ener Org (N=47)
Yes, membership should allow individuals	68%	63%	76%	<u>62%</u>	64%
No, membership should be confined to organizational memberships	15%	20%	14%	19%	<u>6%</u>
Doesn't matter to me	17%	17%	<u>9%</u>	19%	30%

Q17. Should a national organization for water efficiency allow membership and funding from private individuals?

Stakeholders continue to believe that the proposed water efficiency organization's membership should be open to everyone. When asked if private individuals should be allowed to have a membership, the majority (68%) of stakeholders agree.

Although Product Manufacturers / Distributors and Service Providers would like to see the organization open it's membership to organizations other than water suppliers and non-profit agencies, they are one of the groups less likely to support memberships for private individuals. Additionally, stakeholders from California/Hawaii are significantly more likely than those from the Southwest and Southeast to express that individual memberships should not be allowed.

## C. How governed

How governed	Total (N=373)	Water Suppliers (N=92)	Govnm't (N=76)	Product Man, Dist, Svc Prv (N=94)	Environ, Edu, or Ener Org (N=47)
Governed by a board of directors elected from the stakeholders	61%	60%	50%	64%	60%
Governed by its membership on a consensus agreement basis	20%	18%	28%	17%	13%
Doesn't matter to me	8%	9%	12%	7%	9%
Other (please specify)	12%	13%	11%	12%	19%

Q18. Should a national organization for water efficiency be... (Please choose one)

Sixty-one percent (61%) of stakeholders agree that a board of directors elected from the stakeholders should govern the proposed national water efficiency organization. This agreement is consistent across all stakeholder types. Interestingly, stakeholders from the Northeast are significantly more likely to support the "board of directors" option (80%) than those from California/Hawaii (54%) and the Southeast (51%).

Those stakeholders who shared their thoughts online are significantly more likely (25%) than those who completed the paper survey (14%) to prefer the national organization be governed by its membership on a consensus basis.

Stakeholders were provided the opportunity to suggest an alternative governing method. Only 12% (45 people) chose to do so. Most of the suggestions were quite varied. Of those responses, 15 stakeholders recommended using both methods (governed by board of directors and by the membership on consensus agreement). Another 15 shared options for electing directors, while the third large group (10 stakeholders) suggested that regional reps are incorporated into the governing process.

## D. Type of organization

Type of organization	Total (N=370)	Water Suppliers (N=95)	Govnm't (N=74)	Product Man, Dist, Svc Prv (N=95)	Environ, Edu, or Ener Org (N=46)
501(c)(3) or similar non-profit organization	81%	81%	81%	81%	80%
For-profit corporation	1%	1%	1%	1%	2%
Don't know	18%	18%	18%	18%	17%

Q19. Should a national organization for water efficiency be created as... (Please choose one)

The majority of stakeholders (81%) declare this national organization for water efficiency should be created as a 501(c)(3) or similar non-profit organization. This agreement can be seen across stakeholder types and regions of the country.

## VI. Support

Participants were asked to share their opinions regarding the likelihood that their organization would provide support to a national water efficiency organization. The stakeholders provided insight about financial and non-financial sources of support. Results are presented in the following tables.

## A. Financial support

Likely to provide financial support?	Total (N=380)	Water Suppliers (N=96)	Govnm't (N=75)	Product Man, Dist, Svc Prv (N=95)	Environ, Edu, or Ener Org (N=47)
Yes	36%	53%	<u>16%</u>	52%	<u>19%</u>
No	18%	<u>3%</u>	<u>24%</u>	<u>15%</u>	43%*
Don't know	46%	44%	60%	<u>34%</u>	<u>38%</u>

Q12. Is your organization likely to provide financial support to a national water efficiency organization, assuming that such an organization was providing relevant services to you?

Nearly half of all stakeholders (46%) shared that they are unsure if their organization would be willing to provide financial support for a national water efficiency association. This is a critical issue to consider in the planning process of this potential organization; it is uncertain whether stakeholders would be able or willing to provide enough financial support to maintain such an association.

Slightly more than one-third of participants (36%) reported that their organization would be likely to provide financial support to a national water efficiency organization, while 18% of respondents shared that their organization would not do so.

When the four major stakeholder categories are compared, some interesting findings emerge. For example, Water Suppliers (53%) and Product Manufacturers, Distributors and Service Providers (52%) are significantly more likely than Government Stakeholders (16%) and Environmental, Educational or Energy Organizations (19%) to report that their organization would give financial backing to a national water efficiency organization.

Respondents who report that their organization would not offer financial support to a national organization for water efficiency were compared across stakeholder categories. Participants from Environmental, Educational or Energy Organizations (43%) are significantly more likely than all other groups to indicate their associations would offer financial support. In addition, Government Stakeholders (24%) and Product Manufacturers, Distributors and Service Providers (15%) are significantly more likely than Water Suppliers (3%) to share that their organizations would not support a national association for water efficiency.

Finally, Government Stakeholders (60%) are significantly more likely than Water Suppliers (44%), Environmental, Educational or Energy Organizations (38%) and Product Manufacturers,

Distributors or Service Providers (34%) to report not knowing whether their associations would provide financial backing for national organization for water efficiency.

There were also some differences in opinion regarding financial support based on stakeholders' ideas about the core mission that a national organization for water efficiency should have. Specifically, participants who think the core mission should be to promote water efficient products and technologies are significantly more likely to say that their associations would provide financial support than those who say that the core mission is to share information. Additionally, those stakeholders who advocate a core mission of promoting water efficient technologies are significantly more likely than those who desire a mission of information sharing or research and evaluation to report that their organizations would financially support a national organization for water efficiency.

Stakeholders purporting that the core mission for a national water association should be to share information are significantly more likely than those whose primary concern is to develop efficiency standards for water efficient products to say they are uncertain if their association would offer financial support. Finally, those who desire a core mission of transforming the national market are more likely not to know if there organizations would fund this proposed national association compared to those who espouse a core mission of promoting water efficient products and technologies or developing efficiency standard for water efficient products.

There was one significant difference in the willingness to provide financial support depending on organization size. Stakeholders from organizations with 50 or fewer employees are significantly more likely to say that they would support this proposed association compared to participants form organization with 51 or more people.

Participants who indicated that their organization would be likely to provide financial support to a national organization for water efficiency were asked to estimate the membership dues that their organization would be willing to pay.

Annual dues willing to pay	Total (N=126)	Water Suppliers (N=46)	<b>Govnm't</b> (N =11)	Produc Man, Dist, Svc Prv ( N=47)	Environ, Edu, or Ener Org (N=7)
Under \$500	21%	15%	18%	21%	
\$500 - \$999	33%	26%	18%	45%	29%
\$1,000 - \$2,499	24%	26%	27%	23%	43%
\$2,500 - \$4,999	13%	17%	18%	9%	14%
\$5,000 - \$10,000	6%	11%		2%	14%
Greater than \$10,000	4%	<u>4%</u>	18%		

Q13. Imagine this organization were to provide you with the top services you expressed interest in. Please check the estimated dollar range that your own organization might be willing to contribute as <u>annual dues</u> for a national water efficiency organization.

Participants indicating that their organization would be willing to provide financial support for a national water efficiency organization were asked to estimate the annual dues that their organization would be willing to pay. One-third of participants selected the \$500 - \$999 range from the list of choices. The "Under \$500" and \$1,000 - \$2,499 options are also common choices.

Generally, stakeholders are less likely to report that their organizations would pay dues in the higher ranges of \$5,000 - \$10,000 and "Greater than \$10,000." However, Government Stakeholders are much more likely than their counterparts to share that there organizations would pay annual dues of \$10,000 or more.

Fee-for-service willing to pay	Total (N=239)	Water Suppliers (N= 61)	Govnm't (N=41)	Product Man, Dist, Svc Prv (N=73)	Environ, Edu, or Ener Org (N=30)
Under \$500	41%	<u>28%</u>	<u>34%</u>	<u>42%</u>	67%
\$500 - \$999	18%	16%	17%	21%	7%
\$1,000 - \$2,499	17%	23%	20%	21%	7%
\$2,500 - \$4,999	8%	10%	5%	8%	7%
\$5,000 - \$10,000	11%	14%	20%	5%	7%
Greater than \$10,000	5%	10%	5%	3%	7%

Q14. Please check the estimated dollar amount that your own organization might be willing to contribute as a <u>fee-for service</u> for a specific program (examples might include turnkey consumer education programs, legislative information, services, etc.)

All stakeholders were asked to estimate what their companies might be willing to contribute on a fee-for-service basis. The most popular selection among those who answered this question is the "Under \$500" option (41%). It should be noted, however, that this option is significantly more popular among Environmental, Educational or Energy Organization Stakeholders compared to the other stakeholder categories.

Some differences in willingness to pay a fee for service can be found across regions. Stakeholders in the Pacific Northwest are more likely to fall into the category of "Under \$500" compared to their colleagues in the Northeast and California/Hawaii regions. Midwest participants are significantly more likely than those in the Southeast to report that their organizations would pay a fee-for-service charge in the range of \$1,000 - \$5,000.

Differences in the fee-for-service amounts willing to pay also emerge when "core mission" is taken into consideration. Specifically, advocates of a core mission to transform the national market for the buying consumer are particularly likely to report that their organization would pay \$500 or less. Stakeholders who espouse a core mission of providing research and evaluation of products and conservation savings are especially to fall into the range of \$500 - \$999 for the fee-for service question.

Not surprisingly, those stakeholders who had indicated that their organization would be unlikely to support a national organization for water efficiency are significantly more likely than their counterparts to say that their organization would contribute less than \$500 to a fee-for-service program. It is also not unexpected that stakeholders in larger organizations (at least 51 people) are generally more likely to report that their companies would pay large fee-for service amounts compared to stakeholders in smaller organizations (50 or fewer people).

## **B.** Non-financial support

Likely to provide non-financial support?	Total (N=375)	Water Suppliers (N = 96)	<b>Govnm't</b> (N = 76)	Product Man, Dist, Svc Prv (N =95)	Environ, Edu, or Ener Org (N = 44)
Yes	69%	69%	63%	74%	61%
No	6%	3%	7%	8%	9%
Don't know	25%	28%	30%	18%	30%

Q15. Is your organization likely to provide <u>non-financial support</u> such as volunteer services and / or in-kind support to a national water efficiency organization for services that you find important?

A sizeable majority of stakeholders (69%) indicate that they believe their organizations would provide non-financial support to a national water efficiency association, although 25% of participants remain unsure about this issue. Only 6% of the stakeholders surveyed report that their organizations would be unlikely to provide non-financial support.

A comparison of results across regions shows that stakeholders in the Pacific Northwest are somewhat less likely than their colleagues in other regions to share that their organizations are unlikely to provide non-financial support.

As might be expected, stakeholders reporting that their company would financially support a national water efficiency association are also likely to share that their organizations would provide non-financial support to the proposed organization (85%). Those stakeholders indicating that their organizations would not provide financial backing are also fairly likely to be uncertain if their associations would provide non-financial support (34%).

Finally, online participants who are "extremely interested" in becoming a member of the proposed national water efficiency organization are significantly more likely than those who are somewhat interested to report that their companies would furnish non-financial support (75% and 59%, respectively).

## C. Willingness to support with membership

Stakeholders who completed the survey online asked if they would be interested in becoming a member of the proposed national water efficiency organization. It should be noted that this question was only asked in the online survey; the workshop attendees were not presented with this question. Results are shown in the following table.

Interest in membership	<b>Total</b> (N=194)	Water Suppliers (N = 47)	<b>Govnm't</b> (N = 46)	Product Man, Dist, Svc Prv (N =43)	Environ, Edu, or Ener Org (N = 23)
5 Extremely interested	47%	47%	52%	53%	<u>26%</u>
4	30%	30%	33%	26%	43%
3	16%	19%	13%	16%	17%
2	4%	2%	2%	2%	4%
1 Not at all interested	2%	2%		2%	9%
Mean	4.2	4.2	4.3	4.3	<u>3.7</u>

Q21. If a national organization for water efficiency provided the functions and services you desire, how interested would you be in membership?

The mean rating among the online participants who answered this question is 4.2, suggesting very high interest in becoming members of a national association for water efficiency issues. Government Stakeholders' mean rating is the highest of all stakeholder categories, and is significantly higher than that provided by stakeholders for Environmental, Educational, and Energy Organizations (3.7). This difference is largely due to the percentage of stakeholders who shared a rating of "5," or "extremely interested," on this item. As seen in the above table, Environmental, Educational and Energy Organization Stakeholders are significantly less likely to provide this top rating compared to Product Manufacturers, Distributors, Service Providers and Government Stakeholders.

When taking into consideration stakeholders' desired core mission for a national water efficiency organization, a difference in mean interest ratings is revealed. Stakeholders promoting a core mission of transforming the water efficiency market for consumers have a significantly higher mean interest rating compared to those supporting a core mission of developing efficiency standards for water efficiency products (4.5 and 3.9, respectively).

Interest ratings also vary somewhat according to the likelihood of stakeholders' organizations to offer financial backing to a national organization for water efficiency. Participants sharing that their organizations are likely to provide monetary support share significantly higher mean interest ratings compared to their colleagues whose companies are unlikely to furnish financial support (4.5 and 3.5, respectively).

# VII. Manufacturers / Distributors / Service Providers / Builders / Developers

A special set of questions was created for stakeholders who categorized themselves as "Product Manufacturers, Distributors or Service Providers" or "Builders / Developers" in order to understand special issues surrounding these two groups. The following set of 8 questions was created to better understand what these services these types of stakeholders provide and how a national organization for water efficiency might assist them.

## A. Association membership

Member of an industry association or trade group	Manufacturers, Distrib, Serv Providers, Builders, Developers (N=77)	
Yes	94%	
No	6%	

Q24. Are you currently a member of an industry association or trade group?

Of the Product Manufacturers, Distributors, Service Providers, Builders and Developers surveyed, 94% indicate they are currently members of an industry association or trade group. As a follow-up question each respondent was then asked to which industry associations or trade groups they belong. The following is a list of the most prevalent associations.

Industry association or trade group	Manufacturers, Distrib, Serv Providers, Builders, Developers (N=70)
IA / Irrigation Association	43%
AWWA / American Waste Water Association	19%
GCSAA/ Gold Courses Superintendents Association of America	14%
CLCA / California Landscape Contractors Association	11%
ASLA / American Society of Landscape Architects	9%
CUWCC / California Urban Water Conservation Council	9%
NAHB / National Association of Home Builders	7%
PMI	7%
ARCSA / American Rainwater Catchment Systems Association	6%
ASIC / American Society of Irrigation Consultants	6%
ASPE / American Society of Plumbing Engineers	6%
ATMA / Sports Turf Managers Association	6%
TTIA	6%

Q25. Which one?

Just over 4 in 10 of the Product Manufacturers, Distributors, Service Providers, Builders and Developers (43%) belong to the Irrigation Association. The American Waste Water Association is another organization garnering members (19%) from this group of stakeholders.

Interestingly, stakeholders who are willing to provide financial support are significantly more likely (47%) than their unwilling counterparts (10%) to be members of the Irrigation Association.

The list of associations Product Manufacturers, Distributors, Service Providers, Builders and Developers belong to is quite varied. In addition to those listed above, another 43 industry associations or trade groups are mentioned. However, in most cases, only one Product Manufacturer, Distributor, Service Provider, Builders or Developer mentioned it. This extensive list is included below.

ABPA	ASIG	FNGA	NKBA
ACS	ASME	GAHB	NSAA
AEE	ASTM	GEMI	PHCC
AFO	BAN	GGIA	PLCAA
ALCA	CACM	GRA	SAE
ANA	CBIA	GREEN HOTELS	SAHB
ANLA	CBPA	HBAG	TTA
ANSI	CPRS	HGCIA	USCC
APLD	CSI	IAPMO	USGBC
APWA	EIFG	ISSA	WEF
ASAE	ETIA	NGA	WWCT

#### B. Manufacturer / Builder Stakeholder Activities

To better understand what types of activities Product Manufacturers, Distributors, Service Providers, Builders and Developers are involved in the next three questions were asked.

Marketing / selling to water conservation sector	Manufacturers, Distrib, Serv Providers, Builders, Developers (N=78)
Yes	82%
No	18%

Q26. Are you actively marketing and selling to the "water conservation" sector of the marketplace?

The majority of Product Manufacturers, Distributors, Service Providers, Builders and Developers (82%) acknowledge that they are actively marketing and selling to the water conservation sector of the marketplace.

Product Manufacturers, Distributors, Service Providers, Builders and Developers who indicate they would likely donate under \$1,000 are significantly more likely (96%) than those willing to

donate \$1,000 or more to report they are actively marketing and selling to the water conservation sector.

Exhibit at water-efficiency trade shows or conferences	Manufacturers, Distrib, Serv Providers, Builders, Developers (N=77)
Yes	61%
No	39%

Q27. Does your company (or do your representatives) exhibit at water-efficiency trade shows or conferences?

Six in ten (61%) Product Manufacturers, Distributors, Service Providers, Builders and Developers exhibit at water-efficiency trade shows or conferences.

Interestingly, companies from California/Hawaii are significantly more likely than those from the Southwest to actively market and sell to the water conservation sector as well as exhibit at water-efficiency trade shows or conferences.

Consider water conservation sector a target market	Manufacturers, Distrib, Serv Providers, Builders, Developers (N=78)
Yes	87%
No	13%

Q28. Do you consider the "water conservation" sector to be a specific target market for your company's products?

Most (87%) Product Manufacturers, Distributors, Service Providers, Builders and Developers consider the water conservation sector to be a specific target market for their company.

Finally, all (100%) Product Manufacturers, Distributors, Service Providers, Builders and Developers who are potential donors of under \$1,000 are significantly more likely than those considering a larger donation (80%) to report that the water conservation sector is their target market.

#### C. Water efficiency organization could provide

This same group of stakeholders was also asked how a potential national water efficiency organization could assist them. Three areas were presented to this group and stakeholders chose which specific function(s) would be of value.

Areas in which a water efficiency organization could assist you	Manufacturers, Distrib, Serv Providers, Builders, Developers (N=67)
Making your marketing and outreach to the water sector more effective	88%
Providing market research information that you do not already gather or possess	37%
Acting as a clearinghouse for market studies and technical information	37%

Q29. Please check all the areas where you feel a water efficiency organization could assist your organization.

Product Manufacturers, Distributors, Service Providers, Builders and Developers obviously feel very strongly that this potential organization could best assist them with making their marketing and outreach to the water sector more effective. The other two areas would be of help to over a third (37%) of the stakeholders, so they would obviously also provide value to some.

## D. Other organizations already provide...

Although 88% of these stakeholders would like to see this new water efficiency organization help them make their marketing to the water sector more effective, it is important to note that many of them are already receiving these services from their industry or trade association.

Activities already provided by your industry or association	Manufacturers, Distrib, Serv Providers, Builders, Developers (N=35)
Making your marketing and outreach to the water sector more effective	74%
Acting as a clearinghouse for market studies and technical information	43%
Providing market research information that you do not already gather or possess	34%

Q30. Please check all of the following activities that are already being provided by your industry or trade association.

### E. Ideal areas for focus

Finally, Product Manufacturers, Distributors, Service Providers, Builders and Developers were asked to convey specific ways in which this proposed organization can provide them value. Disappointingly, only 25 of the potential 101 stakeholders shared their thoughts.

Specific areas that would make participation or membership more attractive	Manufacturers, Distrib, Serv Providers, Builders, Developers (N=25)
Consumer focus / focus on convincing consumers of importance of conservation / PSA ads / create consumer demand for efficient products / services	20%
Cooperation with federal / state agencies / legislation promoting efficiency / conservation / national efficiency standards	20%
Development of water conservation certification / similar to Energy Star program	12%
Financial incentives / rebate programs promoting efficiency	8%
Trade show participation	8%
Trade organization membership / participation	4%
Focus efforts on smaller businesses / cities / less efficient users	4%
Specific target market data	4%
Focus on efficiency standards for agriculture / irrigation	4%
Focus on water management (general)	4%
Stormwater / runoff / wastewater management	4%
Relationship between water and energy	4%
Encourage technology / new product development	4%

Q31. Thinking about this new national water efficiency organization, what other specific areas of focus would make participation or membership more attractive? (Multiple mentions allowed.)

Appendix

**List of Participating Organizations** 

The following is an alphabetized list of the organizations that participated in this research. A total of 275 organizations are represented. In some cases, more than one stakeholder from a particular organization completed the survey. If this occurred, the actual number of participants from the organization is indicated within parentheses.

3-D Building Solutions

Acclima, Inc. (2)

Accurate WeatherSet

ACT Inc. Metlund Systems (2)

Advanced Micro Devices, Inc.

**AECOM** 

Albuquerque Public Schools

**Allison Irrigation** 

Allstate Resource Management

American Rivers (2)

American Standard, Inc.

**AMWA** 

Aquacraft (2)

Aquatrols (4)

Arizona American Water Company (2)

Arizona Department of Water Resources (2)

Arizona Municipal Water User Association

Arizona State University

Arizona State University/IIS

Atascadero Mutual Water Company

Bella Vista Ranches

**Best Management Partners** 

Boeing (2)

Brown & Caldwell

Bureau of Reclamation (2)

C.B.C.

CA Native Plant Society, San Diego Chapter

California Alliance for Golf (2)

**CALSENSE** 

Camrosa Water District

Cascade Water Alliance (2)

Casitas MWD

**CBC** 

CBIA/NAHB

CDM [Camp Dresser & McKee Inc.] (2)

CEC

Certified Water Auditors of Arizona

CH2M HILL (3)

Cherokee Homeowners

City of American Canyon

City of Anaheim

City of Ashland

City of Avondale

City of Bend

City of Bozeman

City of Bremerton

City of Chandler

City of Dallas

City of Flagstaff Water Services Department

City of Gainesville

City of Gallup

City of Glendale, Water & Power (3)

City of La Verne

City of Las Cruces

City of Mesa Utilities (2)

City of Moscow Water Department

City of Ottawa

City of Peoria Utilities Department Water Resources and Conservation Division (2)

City of Phoenix (3)

City of Redmond

City of San Diego (2)

City of San Marcos

City of Santa Barbara

City of Santa Monica

City of Santa Rosa

City of Scottsdale (2)

City of St. George Water Services Department

City of St. Petersburg Water Resources Department

City of Westminster

Clackamas River Water

Clark

**CLWA** 

**CMHC** 

Coalition for Alternative Wastewater Treatment

Cobb County Water System

Commission on Water Resource Management

Concord Water and Sewer

Consulting Engineer

Contra Costa Water District

Corvallis Public Works

Cost Containment Engineering, Inc.

Crane Plumbing Co.

D&R International

Dan Pope, Irrigation Consultant (2)

Delaware River Basin Commission

Delta Faucet (2)

Denver Water

Digital Sun

Drought Be Gone Irrigation Services

**Dublin San Ramon Services District** 

East Texas Irrigation Association

Eastern Municipal Water District

**EBMUD** 

EcoLandscape Working Group

**Ecological Engineering** 

El Toro Water District

Elgin Sweeper Co

**EMWD** 

Environmental Dimensions/PAWSD/WIP

EPA, Region 1

**EPD** 

**ERS** 

ET Water, LLC (2)

Etia

Eugene Water and Electric Board

Ewing Irrigation Products (3)

Florida Yards & Neighborhoods

**GA Environmental Protection Division** 

GA Sierra Club

GDS Associates, Inc.

Georgia Allied Golf

Georgia Conservancy

Georgia Golf Course Superintendents Assoc.

Georgia Green Industry Assn.

Georgia Lakes Society, Inc.

Georgia Power Company

Georgia Soil & Water Conservation Commission

Georgia Water Planning & Policy Center

Georgia Water Wise Council

Goleta Water District

Hebrew University

Hedgewood Properties, Inc.

Hillsborough County Water Dept.

Honeywell

**Houston Gulf Coast** 

Hydro Technologies, Inc.

Integrated Resource Management, LLC

Irrigation Association (6)

Irvine Ranch Water District

**Jardinier Corporation** 

Johnson & Johnson (2)

Keesen Water Management, Inc.

King Co

Kohler Co.

LA County Waterworks Districts

Lake Lanier Association (3)

Lakehaven Utility District

Lawrence Berkeley Nat Lab

Long Island Creek Watershed Preservation Association

Lower Colorado River Authority (2)

Malcolm Pirnie (2)

Malcolm Pirnie McGuire, Inc.

Margiloff & Associates

Marin Municipal Water District

Marina Coast Water District

Mary Elfner Envornmental Consulting Services

Mass. Riverways Program (MA Dept of F & G)

Memphis Light, Gas and Water

Metropolitan North Georgia Water Planning District (2)

Mister Landscaper, Inc. & Maxijet, Inc.

Mono Lake Committee

Monte Vista Water District

Monterey Peninsula Water Management District

Multi-housing Laundry Association

**MWDSC** 

MWRA (2)

N. Colorado Water Conservancy District

National Environmental Services Center

National Wildlife Federation

Netafim USA (2)

New England Water Works Association

New Mexico Office of the State Engineer

New Mexico State University Cooperative Extension Service (2)

Niagara Corp

Northern California Golf Association

Oak Lodge Water District

Office of the State Engineer/Interstate Stream Commission

Olivenhain MWD

Open-Ended Response

Oro Valley Water Utility

Otay Water District

PACE Engineers (2)

Pacific NW National Lab

Palm Beach Soil and Water Conservation District

Park & Co.

Partnership for Water Conservation

Pasadena Water & Power (2)

Perceptive Enterprises, Inc.

Personal

Plumbing Manufacturers Inst.

**PMSI (2)** 

Pollution Prevention, Assistance Division

Portland Water Bureau (3)

**POWER** 

QA Consulting and Testing, LLC

Quantec (2)

Rain Bird Corporation (3)

Rainwater Recovery Inc.

Region of Durham

Resource Recovery Inc.

Roth Hill Engineering Partners, LLC

Russ Ayers

Russell Consulting (2)

Salem

Salt River Project (SRP)

San Antonio Water System (2)

San Diego Chapter, CNPS

San Francisco Public Utilities Commission

San Juan Water District

Santa Clara Valley Water District

**SAWS** 

SBW Consulting, Inc.

**SDCWA** 

Seattle Public Utilities (2)

**SFWMD** 

Sharon Water Management Advisory Committee

Sierra Club (2)

**SK** Associates

Sonoma County Water Agency (3)

Sonora Pacific Group, Inc. (2)

South Adams County Water & Sanitation District

South Fork Water Board

Southeastern Colorado Water Conservancy District

Southern Environmental Law Center

Southern Nevada Water Authority (2)

Southwest Florida Water Management District (3)

Spears Mfg. Co. (2)

St. Johns River Water Management District (2)

St. John's River Water Management District

State of New Mexico

Steering Committee for Water Efficient Products

**Stormwater Solutions** 

Sudbury Valley Trustees

Sunrise Water Authority

**SWRCB** 

Tacoma Water (2)

Tampa Bay Water

TCEQ (2)

Texas A&M University

Texas Commission on Environmental Quality

Texas Cooperative Extension (2)

**Texas Water Audits** 

Texas Water Development Board (5)

The City of Irvine

The Lake Lanier Association

The Regional Municipality of Halton

The Toro Company (5)

The Writing Company

Todd Valley Farms, Inc.

Toto USA

Town of Gilbert

Tri Community Watershed Initiative

**Trout Unlimited** 

Tualatin Valley Water District (2)

U of A Cooperative Extension NEMO Program

University of Florida

U.S. EPA (2)

U.S. Fish & Wildlife

U.S. FW Service, Ecological Services Program

**United Water Resources** 

University of Georgia

University of Texas at Austin

US Geological Survey, Water Science Ctr/

USBR (2)

USEPA (2)

USFWS, Ecological Services FO

Utah Division of Water Resources

Valmont Industries

Vitra USA (2)

Walnut Valley Water District

Washington State, Dept. of Health, Office of Drinking Water

Water & Landscape Consultants Xeriscape

Water CASA

Water Environment Federation

Water Quality Laboratory

Water Supply Citizens Advisory Committee

Water Use it Wisely Campaign

Water Wise Council

Water2Save, LLC (2)

Waterless Co

Watermiser (2)

Waterscout WERF Wilkins Woodinville Water Questionnaire



### **National Organization Survey Questions**

The California Urban Water Conservation Council is researching the feasibility of developing a national partnership on water use efficiency similar to the Consortium for Energy Efficiency. It is recognized that there is a great need for a nationwide organization that can develop cross-state initiatives, conduct needed water efficiency research, coordinate water efficiency project partners, and in general serve as a clearinghouse for water efficiency progress and cutting-edge change.

In an effort to design a program that best meets the needs of the water and related industries, we are seeking stakeholder opinions through workshops, meetings, and this web survey to better understand what is important to potential partners. We would appreciate hearing your views on the following issues.

1. What do you believe are the most important issues facing water efficiency

	today? (Please choose all that you feel apply and <u>rank</u> them with 1 being the most important.)
	1. Lack of reliable information on efficient products and programs
	2. Lack of sufficient research of products and conservation savings
	3. Need for better and more comprehensive efficiency standards
	4. Need for a place for organized stakeholder discussions
	5. Lack of general public support for increased levels of water efficiency
	6. Other (Specify)
2.	If a national organization for water efficiency was created, what should its core mission be? (Please choose only one.)
2.	core mission be? (Please choose only one.)  1. Information sharing on products, programs, and legislation nationwide
2.	core mission be? (Please choose only one.)
2.	core mission be? (Please choose only one.)  1. Information sharing on products, programs, and legislation nationwide
2.	core mission be? (Please choose only one.)  1. Information sharing on products, programs, and legislation nationwide 2. Research and evaluation of products and conservation savings
2.	core mission be? (Please choose only one.) 1. Information sharing on products, programs, and legislation nationwide2. Research and evaluation of products and conservation savings3. Promotion of water efficient products and technologies

follo	nis national organization for water efficiency existed, which of the owing functions do you feel should be part of its mission? (Please check hat apply.)
	1.Centralized source of information on water efficiency programs and products
	2. Information on existing and pending legislation and regulations
	3. Information on each state's product standards and programs
	4. National forum for water conservation idea sharing and problem solving
	<ol><li>Research on efficiency program savings, new technologies and new products</li></ol>
	6. Evaluation and testing of water-efficient products
	7. Promotion of water-efficient products and programs
	8. Developing, by consensus, efficiency standards for water efficient products
	9. Consumer education
	10. Special contractual services on water efficiency
	10. Openia certification for vices on water emeloney
Plea	11. Other (Specify)
Pleamp	11. Other (Specify)  see rank in numerical order the four functions that you feel are most ortant in a national organization. (1 being the most important.)  1. Centralized source of information on water efficiency programs and products 2. Information on existing and pending legislation and regulations 3. Information on each state's product standards and programs 4. National forum for water conservation idea sharing and problem solving 5. Research on efficiency program savings, new technologies and new
Pleamp	11. Other (Specify)  see rank in numerical order the four functions that you feel are most ortant in a national organization. (1 being the most important.)  1. Centralized source of information on water efficiency programs and products 2. Information on existing and pending legislation and regulations 3. Information on each state's product standards and programs 4. National forum for water conservation idea sharing and problem solving 5. Research on efficiency program savings, new technologies and new products
Pleamp	11. Other (Specify)  see rank in numerical order the four functions that you feel are most ortant in a national organization. (1 being the most important.)  1. Centralized source of information on water efficiency programs and products 2. Information on existing and pending legislation and regulations 3. Information on each state's product standards and programs 4. National forum for water conservation idea sharing and problem solving 5. Research on efficiency program savings, new technologies and new products 6. Evaluation and testing of water-efficient products
Plea imp	11. Other (Specify)  see rank in numerical order the four functions that you feel are most ortant in a national organization. (1 being the most important.)  1. Centralized source of information on water efficiency programs and products  2. Information on existing and pending legislation and regulations  3. Information on each state's product standards and programs  4. National forum for water conservation idea sharing and problem solving  5. Research on efficiency program savings, new technologies and new products  6. Evaluation and testing of water-efficient products  7. Promotion of water-efficient products and programs
Plea	11. Other (Specify)  see rank in numerical order the four functions that you feel are most ortant in a national organization. (1 being the most important.)  1. Centralized source of information on water efficiency programs and products  2. Information on existing and pending legislation and regulations  3. Information on each state's product standards and programs  4. National forum for water conservation idea sharing and problem solving  5. Research on efficiency program savings, new technologies and new products  6. Evaluation and testing of water-efficient products  7. Promotion of water-efficient products and programs  8. Developing, by consensus, efficiency standards for water efficient products

5. Check the following functions that you are currently receiving from other organizations? Please also indicate if you are satisfied or dissatisfied with those functions.

Functions	Check any of the following functions that you presently receive from another organization?	Are you satisfied or dissatisfied with the functions you are receiving?	
Centralized source of information on water efficiency programs and products		☐ Satisfied	☐ Dissatisfied
2. Information on existing and pending legislation and regulations		☐ Satisfied	☐ Dissatisfied
3. Information on each state's product standards and programs		☐ Satisfied	☐ Dissatisfied
4. National forum for water conservation idea sharing and problem solving		☐ Satisfied	☐ Dissatisfied
5. Research on efficiency program savings, new technologies and new products		☐ Satisfied	☐ Dissatisfied
6. Evaluation and testing of water-efficient products		☐ Satisfied	☐ Dissatisfied
7. Promotion of water- efficient products and programs		☐ Satisfied	☐ Dissatisfied
8. Developing, by consensus, efficiency standards for water efficient products		☐ Satisfied	☐ Dissatisfied
9. Consumer Education		□ Satisfied	☐ Dissatisfied
Special contractual services on water efficiency		☐ Satisfied	☐ Dissatisfied
11. Other (specify):		☐ Satisfied	☐ Dissatisfied

-	1. State or Regional (Please explain)
	2. National (Please explain)
	3. Both places (Please explain)
	What specific subject areas in water-efficiency should be covered by a national organization? (Please check all that apply.)
	1. Residential home audits
	2. Indoor plumbing products and appliances
	3. Outdoor landscape irrigation and plant selection
	4. Commercial and industrial efficiency
	5. Conservation rate structures
	6. Metering and utility distribution system water loss management
	7. Public information
	8. School education
	9. New building efficiency standards
	10. Ordinances and legislation
	11. Water product labeling
	12. Water recycling
	13. Gray water
	14. Stormwater management
	15. Rainwater catchment systems
	16. Environmental sustainability and Green building (LEED, etc)
	17. Other (Specify)

		r range that your own organization might be <u>al dues</u> for a national water efficiency			
	1. Under \$500	4. \$2,500 - \$4,999			
	2. \$500 - \$999	5. \$5,000 - \$10,000			
	3. \$1,000 - \$2,499	6. Greater than \$10,000			
10.	willing to contribute as a fee-fo	r range that your own organization might be <a href="r-service">r-service</a> for a specific program (examples education programs, legislative information			
	1. Under \$500	4. \$2,500 - \$4,999			
	2. \$500 - \$999	5. \$5,000 - \$10,000			
	3. \$1,000 - \$2,499	6. Greater than \$10,000			
11.	Is your organization likely to provide <u>non-financial support</u> such as volunteer services and/or in-kind support to a national water efficiency organization for services that you find important?				
11.	services and/or in-kind support t	o a national water efficiency organization for			
11.	services and/or in-kind support t	o a national water efficiency organization for			
11.	services and/or in-kind support t services that you find important?	o a national water efficiency organization for			
11.	services and/or in-kind support to services that you find important? 1. Yes	o a national water efficiency organization for			
	services and/or in-kind support to services that you find important?  1. Yes 2. No 3. Don't know  Should a national organization for funding from other sectors such	o a national water efficiency organization for			
	services and/or in-kind support to services that you find important?  1. Yes 2. No 3. Don't know  Should a national organization for funding from other sectors such	o a national water efficiency organization for or water efficiency include membership and as: builders, manufacturers developing and plumbing, appliance and irrigation), etc.?			
	services and/or in-kind support to services that you find important?  1. Yes 2. No 3. Don't know  Should a national organization of funding from other sectors such selling water-efficient products (in the selling water) in the selling water of se	o a national water efficiency organization for or water efficiency include membership and as: builders, manufacturers developing and plumbing, appliance and irrigation), etc.?			

13.	Should a national organization for water efficiency allow membership and funding from private individuals?
	1. Yes, membership should allow individuals
	2. No, membership should be confined to organizational memberships
	3. Doesn't matter to me
14.	Should a national organization for water efficiency be (Please choose one)
	1. Governed by its membership on a consensus agreement basis
	2. Governed by a board of directors elected from the stakeholders
	3. Other
	4. Doesn't matter to me
15.	Should a national organization for water efficiency be created as (Please choose one)
	1. 501(c)(3) or similar non-profit organization
	2. For-profit corporation
	3. Don't know
16.	What other, if any, ideas or suggestions do you have regarding this national organization?
17.	Please select the one category that best describes your organization?  1. Water supplier (retail or wholesale)
	2. Water planning agency or non-profit organization
	3. Product manufacturer, distributor, or service provider
	4. Environmental, educational, or energy organization
	5. Government (federal, state or municipal)
	6. Builder or developer
	7. Other (Specify)

18.	How many employees a	e there in your organizatior	1?
	1. 1-5	3. 21-50	5. More than 100
	2. 6-20	4. 51-100	
	stions for Product Manuf others please skip to Que	acturers and Builders/Deve estion 27)	lopers only:
19.	Are you currently a me	mber of an industry associa	ation or trade group?
	1. Yes		
	2. No (Skip to Ques	tion 21)	
20.	Which one?		_
21.	Are you actively mark of the marketplace?	eting and selling to the "w	ater conservation" sector
	1. Yes		
	2. No		
22.	Does your company (contrade shows or conference	or do your representatives) ences?	exhibit at water-efficiency
	1. Yes		
	2. No		
23.	Do you consider the market for your compa	"water conservation" sectony's products?	or to be a specific target
	1. Yes		
	2. No		
24.	Please check all the a could assist your orga	reas where you feel a watenization.	er efficiency organization
	1. Making your m	arketing and outreach to the v	vater sector more effective
	2. Providing mark possess	et research information that y	ou do not already gather or
	3. Acting as a cle	aringhouse for market studies	and technical information

25.	Please check all of the following activities that are already being provided by your industry or trade association?			
	1. N	laking your marketing and outreach to the water sector more effective		
		roviding market research information that you do not already gather or ossess		
	3. A	cting as a clearinghouse for market studies and technical information		
26.	-	about this new national water efficiency organization, what other reas of focus would make participation or membership more		
	Please des	scribe:		
End	d of questions	s for Product Manufacturers and Builders/Developers only		
27.	In what state	e is your organization located?		
28.	Please prov	ide your organization's name:		

#### Crosstabulated database

\* \* \* \* Can be found under separate cover \* \* \* \*

# APPENDIX 7 FOCUS GROUP SUMMARY

# MANUFACTURING AND WATER UTILITY PERCEPTIONS AND ATTITUDES ON NATIONAL ORGANIZATION FOR WATER EFFICIENCY

#### Prepared by:

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# **TABLE OF CONTENTS**

Background	Page 1
Objectives	Page 2
Methodology	Page 3
Key Findings	Page 4
Detailed Findings  Issues Benefits Concerns Core Mission Functions Organizational Structure Funding and Membership	Page 11 Page 15 Page 20 Page 25 Page 29 Page 51 Page 56
Conclusions and Recommendations	Page 60
Key Takeaways	Page 67

# **Background**

- On behalf of the EPA, the California Urban Water Conservation Council is conducting an important research study to investigate the feasibility of developing a national partnership on water use efficiency similar to the Consortium for Energy Efficiency.
- A broad range of research is being conducted to learn stakeholder opinions, attitudes and preferences by way of stakeholder workshops, meetings, focus groups, telephone interviews, a web survey and a webbased discussion forum.
- Thornhill Associates has been retained to conduct research and analyses as part of this multi-faceted evaluation and organization development effort.

# **Objectives**

- This research phase encompassed conducting qualitative research to specifically explore perspectives within the 1) water utility and 2) manufacturing stakeholder groups.
- Information objectives encompassed:
  - Most important issues facing water efficiency today
  - Benefits/concerns of a national organization
  - Core mission and functions
  - Organizational and governance structure
  - Funding and membership

# Methodology

3

- Four two-hour focus groups were conducted including representatives from the following stakeholder sectors:
  - Manufacturing (MFG)
    - Indoor plumbing and appliance sector Chicago, July 21
    - Irrigation sector Costa Mesa, July 25
- Water Utilities (WU)
  - Western United States Berkeley, August 1
  - Eastern United States Tampa, August 3
- Additional telephone interviews were conducted in both the manufacturing and water utility sectors.

#### - Cautions and Limitations

As with all qualitative projects, the reader is cautioned that these findings are based on small samples of individuals interacting in a highly dynamic environment. While the focus group methodology can provide rich insights and guidance, broad generalizations to entire populations or any type of statistical inferences are inappropriate.

# **Key Findings**

- Research participants feel there is tremendous value in establishing a national organization for water efficiency with a core mission that accelerates a public awareness and culture shift, promotes a national dialogue, and serves as a centralized clearinghouse for information sharing and education on the critical issue of water use efficiency.
- Other areas of great interest are promotion and coordination of research and testing efforts, establishment of voluntary product requirements and product labeling.
- It is felt, to be effective, this organization needs to attract and engage all key related stakeholder groups, and should serve as a central voice in helping to coalesce water efficiency efforts being pursued by related organizations and policy makers/regulatory agencies.

- Stakeholder groups essential to this effort were defined as:
  - water utilities
  - manufacturers and trades persons (contractors, distributors, designers, plumbers, engineering consultants)
  - builders and developers
  - municipalities
  - state and federal agencies
  - energy groups
  - environmental groups
  - academic institutions

Participants shared the key stakeholder groups should each be represented in the leadership of the organization that would be comprised of a Board of Directors. Each Board Member should facilitate a member-consensus process within their stakeholder group.

- When asked the primary reasons they would support this organization participants cited:
  - Enhanced public education, awareness and acceptance of the need for water efficiency
  - Opportunity to "have a voice" in determining the industry direction
  - Opportunity to be at the forefront of transforming the market
  - Specific "tools" i.e. research, best practices, product labeling
  - Participating in the development of any product requirements (MFG)
- As groundwork in determining the areas of focus for this organization, the most important issues facing water efficiency today were discussed.
   Those that distilled out as being most critical to research participants include a lack of the following:
  - Public awareness, education and buy-in (social acceptance)
  - Information, education and training for consumers, public agencies, trades people, and regulators/policy makers
  - Common voice, message or central source of information
  - Information on the true value of water

- Sufficient research and quantification of products and conservation cost savings/benefits
- Standardization for product performance and efficiency
- National uniformity of testing protocols
- Consistency due to fragmentation and/or duplication of efforts
- When asked to share the **primary benefits** as seen specifically for their own industry as well as generally for the stakeholder groups as a whole, the participants of both the manufacturing and water utility focus groups cited the following as the primary benefits:
  - Develop a national <u>dialogue</u> and create <u>awareness</u>
  - <u>Involvement</u> of all stakeholder groups
  - Provide a central <u>information source</u> and credible <u>voice/authority</u> on water efficiency
  - Opportunity to benchmark with other water utilities
  - <u>Education</u> of consumers, policy makers, regulators and trades people
  - Develop an easily recognizable national <u>labeling</u> system (like Energy Star) to highlight and differentiate water efficient products

- <u>Coordination</u> and partnering with other entities
- Opportunity to <u>transform</u> and accelerate the <u>marketplace</u>
- Manufacturers, in particular, feel key components in affecting a market transformation include 1) "branding" water efficiency and 2) a consumer outreach program to elevate awareness and acceptance of the need to conserve water. This will help create incentives in the marketplace to develop efficient products and provide the perception of a payback.
- Manufacturers also feel by having more standardized education for policy makers, and greater national uniformity of product performance requirements, this will allow for product development efforts to be more focused and provide cost reductions when they not working to meet varying standards throughout the country.
- It is felt by both water utilities and most manufacturers that some uniformity and/or independence of testing procedures would be beneficial. Appliance manufacturers, however, indicated they feel the nature of their internal testing is sufficient.

- Irrigation manufacturers feel education and training of consumers as to irrigation installation, product and system benefits will minimize the swings such as "drought impact" experienced by the industry.
- Water Utilities especially feel a need for a common voice to build awareness and to share information on a national basis, along with having a consistent and <u>reliable quantification of water savings and cost.</u>
- Areas expressed as <u>concerns</u> include:
  - Difficulty of developing a viable, equitable working relationship with all critical stakeholder groups and trade organizations
  - Potential implications/challenges of determining product standards/requirements
  - Consistent funding for the organization
  - Membership cost of belonging to multiple organizations
  - Fear of an overzealous mission, e.g. overreaching and becoming ineffective
  - Becoming too bureaucratic and stifling innovation

- Manufacturers would have concern if they were not involved in the process of determining safe, effective and consumer friendly product requirements.
- Water utilities desire manufacturing involvement but are concerned with ensuring a high standard for water efficiency is not diluted due to manufacturing marketing interests.
- Water utilities would like to see independent/verification of product testing to ensure validity.

## **Detailed Findings**

#### **ISSUES:**

• The lack of public awareness and concern, is considered to be the primary barrier to the success of water efficiency and one of the key issues this national organization should address.

"social acceptance and the lack of importance to the end user homeowner is a key issue" MFG

"we have an impasse coming up – we are going to be X amount short of water ... similar to electricity, 30 years ago we realized it is a finite resource" MFG

"need to elevate the value of water in today's society by a) promoting its cultural appreciation ... we shouldn't take it for granted and b) promoting the full cost pricing of water" WU

"just like when Energy Star started ...we need to build recognition ... share why its important and what are the benefits to consumer" MFG

• It is felt a national consumer outreach campaign addressing: water as a finite resource, the benefits of water efficiency, and describing the full cost of water (including wastewater costs) is important.

"There is no quantification of savings and costs, both for products and programs" WU

"No quantification of national benefits ... energy people can see national benefits of energy ... water side is pieced together ... it is a hodge podge ... not coordinated nationally, so there is no national perspective" WU

■ The price of water was cited as a key barrier in the ability to drive water efficiency.

"the commodity pricing of water is not high enough for a payback" MFG

"if people pay for a commodity, they are much more likely to appreciate it ... we should consider a national water tax to fund an organization like this" WU

• The industry fragmentation and a lack of centralized research and quantification of products, programs and cost savings/benefits is a barrier

to achieving results in water efficiency. These need to be shared with consumers, public agencies, regulators and trades people.

"need 'knowledge banking' ... research and programs... plenty of it out there but there is no way to share it" WU

"there is no consistency on how water conservation data is collected and reported ... no uniformity" WU

"utility perception is also a problem ... most utilities do not perceive it as a scientific quantifiable area ... same perception exists with elected officials" WU

"regulatory expectations are a problem ... drought issues ... regulators often give percent demand reductions on demand that has already been cut" WU

"need to build these programs into long-term demand forecast and IRP (Integrated Resource Plan)" WU

"there is a lack of sufficient research on products and conservation savings ... also need information on product performance and expected outcomes" WU

Having no centralized repository for existing data (research, programs, best practices, etc.) there is much unnecessary redundancy of effort and cost incurred by water utilities.

"I think when people realize they don't have to chase down data on their own ... they would pay for this ... they don't quantify what they are spending in doing that" WU

With no national focus/voice on water efficiency, and no cohesive efforts by all stakeholders, manufacturers are frustrated with the need to meet multiple standards.

#### **BENEFITS:**

With the low cost of water and the fragmentation of water efficiency efforts, the greatest perceived benefits of a national organization would be the opportunity to raise the awareness of the importance of water efficiency and to create a national dialogue and central clearinghouse for information.

"give information to consumer to enable intelligent purchases which deliver the intended savings, which perform reliably, and which are sustainable efficiency options" MFG

"it expands the audience more than any one manufacturer could do" MFG

"with a national organization, everyone knows what is being done ... one stop shopping ... one place to seek information ... analogous to CEE on energy side ... can pull out a fact sheet and say here is what you do with this technology ... clearinghouse is the right term WU

"Could provide better coordination of stakeholder studies and research to enable national study sharing" WU

 A greater consumer awareness, acceptance and demand will create incentives in the marketplace and a perception of payback for manufacturers.

"every manufacturer looks for a marketing angle and efficiency is an important angle for investment in technology" MFG

"helping to shape and define water efficiency will eliminate confusion for the consumer as well as manufacturers as CEE has done on the energy side" MFG

- The opportunity for water utilities to benchmark nationally is seen as a great benefit in cost savings on research and non-duplication of effort.
- Standardization of water savings messages to regulators should allow for more standardized requirements and more efficient and focused new product development efforts by manufacturers.
- Inviting all stakeholders and allowing them to have a voice encourages manufacturers to help drive innovation instead of being forced by the government due to a crisis.

"would provide more clout with manufacturers ... more legitimacy" WU

"with as fragmented as the industry is today ... national scope provides such an opportunity ... manufacturers have the responsibility to do these kinds of things and to have someone tackle it on a national level is extremely beneficial" MFG

• Involving all stakeholders provides a central focus and source of authority to highlight water issues and to serve as credible source and influence for legislators.

"would provide a defined place ... we would no longer be "unwanted children" like we are at AWWA" WU

"could be legislatively powerful" WU

"would lend credibility to legislators and government officials as well as builders ... could be a central place in the nation that we could point to ... not just saying CA is doing this or FL is doing this ... for the legislature that would be a lot of credibility" WU

"legislators go by the headline of the day ... a national organization would raise visibility of the conservation issue ... also would allow for coordination in other

countries ... would be comparable to benchmarking that Energy Star does for energy" WU

This entity could provide a watchdog function on legislation and new products.

"an organization can tackle that a lot more easily than a collection of individuals" WU

- Building "green" allows for development growth and avoided infrastructure costs for water utilities, and manufacturers feel new construction builders strongly desire efficient product information.
- "this is a source of real pain for them ... Arizona and Maryland ... this is happening at a grass roots level... builders are saying to us we need these products and we need to prove that they can deliver because then instead of building 350, I can build 400 which is what I assumed I could do when I bought the land 10 yeas ago" MFG
- "a benefit for the water purveyor is getting a new source of supply that is less expensive than building infrastructure" MFG

- If adequately funded, this national organization could provide the standardization needed for product performance.
- An effective national organization could help develop the professional field by encouraging water efficiency academic emphasis for students as well as job and credential alignment.
- The visibility of a national organization would allow for greater centralized funding opportunities in the study of water efficiency as well as partnering opportunities with existing efforts.

#### **CONCERNS:**

■ If the newly-created national organization does not have buy-in from all key stakeholder groups, it is felt efforts will be diluted and it will not achieve its mission of a market transformation.

"Need buy-in from all ... if we cannot get buy in from enough sectors, it might be selfserving to a very limited group ... need active participation from all stakeholders" MFG

Participants feel due to other negative experiences they have had with attempts to bring competitors, stakeholder groups, or related entities together and get them to agree on common goals, this organization will face challenges in this regard.

"even with the very successful marketing transformation LEED has done, water is still a minute issue for them" MFG

"still struggle hardest to get competitors to agree" MFG

"when you have competitors in room ... infighting that goes on ... they get watered down ... I have a technology that none of my competitors could meet ... don't want

to create as spec because no one will support it ... can really drag the process down" MFG

"(irrigation) we have seen so many attempted organizations where they have meetings to get all stakeholders involved, it is hard to envision this being effective" MFG

"on EPA steering committee ... still talking about pre-rinse spray heads and dishwashers ... process takes so long for anything to happen ... fighting with Energy Star ... feel this is another thing we could spend time on and maybe we would just be better off spending our time on trying to sell our product" MFG

"it would be great it if happened but when you put all those stakeholders together that we have all now been around the track with - and you do need those stakeholders involved to get traction – it is very difficult to see that group coming together and taking effect quickly" MFG

• Manufacturers are concerned they may not have enough voice in the process and indicated this is a particular problem in the Energy Star and water labeling program issues. It is felt a lack of participation on their part will inhibit market transformation.

- Appliance manufacturers are concerned about having duplication of efforts or different guidelines than already exist or that might conflict with others such as DOE or CEE.
- Although this is a national organization, it is felt by water utilities and manufacturers that there will need to be regional messaging due to unique differences throughout the country.

"a national organization would need to have regional messaging ... every region believes that they are unique" MFG

• Comments were made by both manufacturers and water utilities that there is some concern regarding coming up with "one national standard that fits all" feeling that this might be too restrictive.

"regionalization ... try to come up with one standard that fits all ... concern if a standard will be too restrictive (irrigation)" MFG

"I am concerned the national organization may slow down some things we want to do in California ... maybe a deal is struck at national ... a level that can't be done by the state ... has been done in energy efficiency standards ... controlled by more

conservative states on setting standards ... then we couldn't set state standards that are higher" WU

■ To be a respected, viable, long-term entity, the national organization for water efficiency needs to identify sources for long term funding and to ensure members receive "value" to justify membership financial support.

"competing with existing organizations with multiple members ... which dilutes resources ... have overlap ... each one costs several thousand dollars a year ... an issue for water utilities" WU

"concern ... obvious practical one ... matching the (organization) mandate with the available resources" WU

 As this organization is crafted, it is important that the structure and goals are realistic and allow for progress without being burdened by unnecessary bureaucracy.

"Needs to be nimble enough to make decisions and get things done ... am involved in US Green Building Council ... great but so much bureaucracy to get anything accomplished ... is very slow" MFG

 Water utilities cited it can become an issue for them when they experience unanticipated revenue loss due to water efficiency.

"Creates the atmosphere for market transformation ... if we get all information together maybe we could predict costs of conservation and revenue reduction and give our Board of Directors more of an idea" WU

 Needing to be addressed is the perceived instability of revenue when conservation programs are implemented.

"there is an issue when unanticipated revenue loss starts creeping in"

### **CORE MISSION:**

- Analysis of this focus group study indicates the overarching mission of this organization should be to promote, facilitate and achieve a market transformation to greater water efficiency and resource sustainability by raising awareness, creating a national dialogue, educating and consolidating efforts
- To be successful, it is agreed this organization must identify, embrace, engage and **represent all stakeholder groups** with a focus on meeting member needs. It must also work to coordinate activities with related organizations
- Gaining the buy-in and participation of manufacturers is critical to the success of a market transformation.
- Consumer Outreach is critical as education and buy-in of consumers on the value of water and opportunities for efficiency is essential in achieving a market transformation.

■ A key element of the core mission and an effort that all participants agree should commence at the onset is the establishment of this organization as a **centralized**, **national clearinghouse** for all information related to water efficiency – including research, programs, practices, best practices, technologies, etc. This will be a non-controversial first step to lay the foundation and gain credibility.

"maybe start out simple, gain credibility and grow ... (pursue) clearinghouse and unbiased work ... get recognition to have validity ... will develop a lot of gaps then focus on the gaps" MFG

■ The clearinghouse was described as being a "data repository" as well as a venue where all stakeholders can easily search out information based on desired criteria and subsequently have the opportunity to directly network with others.

"must effectively collect and disseminate information on water efficiency programs" WU

"could set up a query function that could match similar organizations and their needs" WU

"biggest problem is everyone comes up with their own scheme ... people don't have the opportunity to know what works and what doesn't work, what has been tried ... doing new spins on old products" MFG

- As a national clearinghouse, this entity would also serve as a "centralized voice" in the water-related arena providing consistency in the message and water efficiency advocacy to the general public, regulators and all stakeholder groups.
- This organization should have as one of its core missions a focus on research and research and testing protocols and the validation of actual conservation savings. Activities would encompass initiating, promoting, overseeing and coordinating with others, the water efficiency/performance research and independent testing related to products, programs, practices, technologies, etc.

"Individual organizations are already doing this for "silos" of stakeholders with no coordination" MFG

- Focus group participants want this organization to promote the development of **requirements or voluntary standards** of products, systems and practices that ensure quantifiable levels of water efficiency.
- Many feel strongly that the consumer awareness and influence on buying habits achieved by Energy Star have been very positive and would like to see this organization pursue **product labeling** for water efficiency

### **FUNCTIONS:**

## **Consumer Outreach**

 A <u>consumer</u> outreach program and accessibility to easy-to-understand water efficiency product and system information (such as product ratings) will help positively influence consumer buying decisions.

"one of biggest competitions we have is people's mindshare ... they don't have enough hours in the day to absorb all the information already ... so education and raising awareness of potential customers would be one of the most attractive benefits" MFG (put in market transformation section later – leave something here)

 Creating an awareness of the "value" of water is critical in consumer buyin.

# **Centralized source of information**

• Providing <u>water utilities</u> "tools" that can help them quantify savings and help them design and implement programs will be of great value.

"develop lists of available incentives or propose product super efficiency lists which could be tied to utility incentives" WU

"provide a set of model language for codes and ordinances ... think of the hours that could save us!" WUB

"a monthly newsletter which has components that relate to different things ... educational pamphlets ... can help especially smaller agencies with the PR part of it... tell them here is how you create this program ... those are things beyond standards where utilities would gain value" WU

"promote standardization of terms, measures, bmps, methods, programs, best management practices" WU

 An information source that allows water utilities to benchmark and learn from best practices (varying from incentive programs, to billing systems,

etc.) will not only help water utilities but can provide more standardization among water utility programs which, in turn, will benefit manufacturers.

"incentive programs ... find really difficult ... finding out if someone has spent time working on it ... if it worked or didn't work ... consideration is cost of reinventing wheel especially in small jurisdictions ... people call us up all the time ... the randomness is really difficult" WU

"there is a lack of standardization among water agency programs which makes it difficult for manufacturers and suppliers ... so many different programs out there (SD Voucher and EBay Mud) ... go from one county to the next county – different stories ... constant learning curve for business to homeowners to contractors" MFG

• Highlighting water efficient products and technologies is an important part of the centralized source of information and should be done appropriately.

"need to be careful highlighting new products vs. being in the marketing business for a particular business ... in the context of information sharing it is great ... may have one list by alpha and another list by gallons output" WU

■ <u>Irrigation manufacturers</u> are especially concerned with the education of consumers and trades people on all aspects of a watering "system" as one ineffective or improperly used component will negatively impact water efficiency. Beyond assisting with buying decisions, education should encompass the proper "use" of watering systems and the benefits of irrigation vs. for example, the promotion of hose dragging.

"here are the products that are more efficient ... if you use them on a system that was designed properly and installed by a contractor who is qualified to put it in, you are going to save water ... promote system long before drill down to how does this one work opposed to this one" MFG

"need a buyers resource guide to help guide consumer in irrigation purchases" MFG

"need to make sure decisions are based on educated knowledge ... policy makers and public ... for example, drought restrictions on watering and promotion of "hose dragging" ... we would like to be a part of this because rather than taking that extreme approach we can educate regarding using irrigation systems" MFG

- Irrigation participants also see an opportunity that this organization can help promote the benefits of certification of irrigation trades people through IA (Irrigation Association) programs.
- Appliance manufacturers see consumers wasting water due to lack of education regarding proper use of their products.

"education of the consumer is the most important thing that we can do ... people don't realize washing or rinsing dishes uses 1 gallon per dish where an entire wash cycle for 16 place settings of dishes and cutlery may take 4-5 gallons total" MFG

 <u>Toilet/plumbing manufacturers</u> experience consumers making buying decisions on aesthetics and need to highlight specific information on water consumption

"education is absolutely key for consumers ... need guidelines for which to compare products ... relating to some kind of standards and tests ... consumer looks at shape, color, style ... water consumption is the least of the concerns with toilets" MFG

"specific thing most needed is information on actual costs ... actual consumptions ... in every different product, use and building type ... lot of cost data may be gathered in form of sub-metering" MFG

It is felt this centralized organization could play a key role in the education of regulators.

"influence the regulatory arena ... at the very beginning we could enact some ways of standard reporting ... even to get a baseline of data right now is very difficult ... think initially to standardize the reporting, then to set best practices" WU

■ The implementation of a user-friendly national web site similar to the one being maintained by CUWCC is crucial to information sharing.

"national website ... CUWCC has sort of taken on that role so far in our industry and it is unfair to S. Cal to be paying the bill for that ... ought be a nationwide and more credible and more universal sounding body" MFG

"maintain an omni-directional database for querying to enable those writing in to be matched up with each other based on criteria ... make members accessible" WU

- This organization will have a unique ability to facilitate networking among stakeholders on a national basis through information sharing.
- Water utilities suggested providing awards and recognitions to highlight top initiatives and professional contributions will help stimulate product development

# **Research and Testing**

This national organization should solicit funding for, promote, oversee, coordinate and compile research on products, programs, systems, technologies, etc. using existing independent research consultants and testing facilities and working with manufacturing testing initiatives.

"pulling together research needs and prioritizing them ... get funding and ensure completion ... research includes product testing and development of appropriate test methods" WU

■ Rather than conducting actual research and testing, participants feel this organization would be involved in establishing research and testing protocols or rating systems to ensure reliability and objectivity.

"do not need redundant test facilities but have some national uniformity of testing and testing protocol" WU

"toilets have whole different kinds of testing methods ... manufacturers are not very reliable on sticking to sworn promises to do this kind of testing ... there are some vast discrepancies in studies that have been done" MFG

• Manufacturers understand water utility sensitivities regarding the need for unbiased independent testing but wish to play a role. Particularly appliance manufacturers feel their testing methods are heavily regulated and effective.

"engineers who develop systems, manufacturers who develop products, trades people like plumbers, builders and utilities all have a vested interest ... they will want to have a voice or understanding of how the research is set up ... research will validate 'safe' water efficiency ... exactly why we have to all be there together... want to make sure it brings benefits and not problems" MFG

"would work best when there is as much input as possible from all the stakeholders to develop the research properly" MFG

"testing is done as a whole of the manufacturing process ... method of water usage is monitored electronically ... don't need more stand along water testing (appliance)" MFG

 Providing a nationally recognized system of quantifying, validating and communicating water consumption, conservation savings and savings durability would help water utilities, municipalities and manufacturers in

more standardized rebate programs and focused product development efforts.

"Need to be able to measure water savings with same metrics and also savings durability" WU

"if it is done by state-to-state or municipal-to-municipal as some of our rebate programs going now ... we would have to potentially come up with an infinite amount of machines to be compliant with an infinite amount of requirements ... a national level would keep things in line and pre-empt individual municipalities from imposing unattainable results through reduce of water consumption" MFG

"that's one of the reasons I am on a number of committees... trying to fight for uniform requirements so we don't have different requirements in Austin, San Francisco, etc." MFG

• Research efforts additionally need to ensure <u>performance levels</u> meet customer needs/expectations.

"concept of wise use ... find those places where they can improve efficiency but not impose draconian changes in their lifestyles" WU

"we have water bodies coming in with stricter regulations without taking performance into account" MFG

"efficiency means different things to different people ... baseline definition when we talk about efficient products ... how do standards interface with product performance? ... how does product performance interface with what the public does or doesn't come to expect from a product? ... we all have different unique examples with our products" MFG

■ Both plumbing and irrigation participants shared the need to have a focus on <u>systems research</u> and research that most closely replicates water use.

"more than individual products, we need systemic research ... how to affect the entire plumbing systems ... we really having an ongoing need here ... we can get a toilet to flush on half a gallon ... the problem is you get to a point that the waste will not travel in the pipes ... get to a point where there is more risk than benefit" MFG

"need consistent way to measure and test products ... third party validation (like Center for Irrigation Technology) but testing that reproduces REAL field conditions ... outside you can get completely different results due to temperature, wind, humidity, etc. ... misleading to draw conclusions from some tests" MFG

- Manufacturers would like this national organization to conduct attitude and behavioral <u>research</u> with <u>consumers</u> and <u>trades people</u> to better understand perceptions and preferences regarding water efficiency and water efficiency products/programs and messages.
- It was mentioned this organization should also be concerned with the message of sewage avoidance and quantifying the overall infrastructure costs of moving and treating water.

# **Product performance requirements**

■ It is felt this organization should be involved in establishing <u>consensus</u> <u>based voluntary performance levels</u> to ensure the advancement of water efficiency. Participants envision the national organization will be well positioned to provide education and influence to regulators, however will not pursue lobbying for performance mandates at this time.

"there may be a regulatory floor but standards are things that enable you to go above or get better than the regulatory floor" WU

"to the extent we can succeed at creating nomenclature and efficiency, this may forestall inadvertent or harmful regulation ... if we can create a situation where people agree to do stuff in a measured way on their own, it avoids potential for market disruption" WU

"performance standards are absolutely necessary for any program like this ... should be quantifiable ... see scores on a test ... from a third party testing agency" MFG

"is a benefit to all stakeholders as it helps drives manufacturers to constantly improve products and processes ... the benefit is long term and the risk is short term – and the risk is business" MFG

"need for performance standards has been fought by some manufacturers ... ANSI standard committee ... describes poorest performing products at time standard is passed ... needs to be changed ... have water utilities involved in performance standards" MFG

"standards committees have not done their job because they have not had the representation of consumers and utilities ... utilities are the biggest consumers ... the only manufacturers who object are those trying to get away with something in my opinion" MFG

- There is some concern regarding the "regional appropriateness" of national standards.
- In the case of water efficiency efforts being pursued by other entities such as AWWA, IA, PMI etc. it is felt this national organization may have a 'seat at the table' in an effort to coordinate (and not duplicate) efforts.

 Participants want to be part of the evolutionary process of changing efficiency standards and technologies for the future.

"want to be part of the evolution of requirements ... you know what you are developing today as a voluntary requirement will be tomorrow's minimum requirement ... having that assurance you are working toward the future" MFG

"this organization needs to be involved in the acceleration and advancement of water efficiency" MFG

"no question, to have a national dialogue on developing standards or products or methodologies is a huge benefit because it used to be CA set the standards for the rest of the country ... not the case anymore... now everyone has their own way of doing things ... an organization that could bring people together would be of great benefit" MFG

Achieving water efficiency in irrigation relies on many variables beyond effective products. Proper installation, programming and use of all components are critical to conservation. The industry lacks quantification of performance levels of products and practices and lacks education of contractors, installers and end users and feels a national organization could play a valuable role in achieving both.

"issue is also how the customer uses it ... lot more variability in our industry than other industries like toilets" MFG

"no standardization as to how irrigation systems are implemented – only as good as all parts combined ... real problem is human intervention ... without training and education you can't invent something that will be good enough ... also depends on time or year, environment ... so many variables" MFG

 A lack of product performance requirements is a hindrance to achieving consumer acceptance and ultimate market transformation.

"there is a lack of performance specifications (e.g. showerheads) to help purchasers choose better products" MFG

"need a list of efficiency products that goes beyond the legal standard" MFG

"want a public acceptance of good quality in efficiency as opposed to adequate performance under legal standards" MFG

"key is to learn from the past and not adopt a specification that doesn't address performance and consumer safety ... this body should be addressing performance not just some kind of min/max" MFG

"specs or standards should be performance-based and not proprietary to any patent or manufacturer so universal products have an equal goal to reach towards" MFG

# **Product rating system/ labeling**

• Most research participants expressed a high interest in pursuing product labeling (similar to Energy Star) citing it is a very visible means of providing a clear tool for measuring product capability and makes it very easy for consumers to consider water efficient buying decisions.

"it is very easy to confuse end users and buyers when not having a real standard or rating system saying this product can do this" MFG

"a big part of the success of Energy Star is that highly recognizable logo ... need to get DOE to quit fighting among themselves" MFG

"best chance of success is if we have something like Energy Star ... where consumer doesn't have to think a lot" MFG

"will drive consumer to choose models that do comply ... and drive manufacturers to take non-compliant machines and re-design them so they will be compliant (appliance)" MFG

"this organization could provide water labeling functions if EPA falters on this assignment" WU

"the problem with a rating system is manufacturers always know they are at risk if they are not Number #1 or 2" MFG

## **Advocacy**

 Stakeholder participants feel voluntary advocacy of water efficiency should be a part of the mission of this organization.

"creates a lot of problem having no single advocacy voice out there ... that can be done without necessarily taking a policy and political stand" WU

• It is felt the organization should *not* be involved in lobbying at least at this stage due to the concern when taking a lobbying position it will be difficult to be representative of all stakeholder views and could disenfranchise some of the membership. Many stakeholder groups have their own lobbyists.

"with a broader group it is harder to do specific lobbying ... advocacy can work way back to the least common denominator that everyone can buy in to" WU

"when you become a lobbyist you develop an agenda and the agenda becomes political and you begin to split" WU

"should be an advocate for water efficiency (not lobbying, though) through education of policy makers and customers" MFG

## **Market transformation**

■ This organization needs to be involved in raising the social consciousness regarding the need for water efficiency by proactively conducting consumer outreach and general marketplace education.

"there are benefits to the market if you have standards and testing beyond the base ... but nothing will happen with this unless you do the other part ... have a powerful brand and powerful marketing" MFG

"one of the first goals of a national organization should be the branding of water efficiency" MFG

• Moving goods and services to a higher level of water use efficiency should be a primary goal of this organization. Efficient market acceleration will allow for technologies to get to market quicker.

"we are an industry leader in the performance area ... it would help our company to have encouragement applied to the whole industry to improve performance and efficiency" MFG

To transform the market, all stakeholders need to be engaged and products need to exist that can achieve sustainable water savings and meet customer expectations.

"we are firm believers if what people are offered to buy is more efficient, we will see savings over the long haul ... coupled with information for the consumer" WU

• This organization should serve as a leader and a "bridge" for continuity with water efficiency activities being pursued by <u>related entities</u> rather than competing or duplicating efforts.

"don't want to alienate other critical stakeholders and their organizations ... IA, AWWA, etc. ... all those who have a piece of the pie ... take all the pieces and make the pie" WU

"we need to organize these issues for the builders ... need to make water efficiency a bigger issue in LEED and NAHB ... NAHB is never going to get on board with LEED" MFG

"should coordinate closely with the existing efforts of IA and Landscape Contractor Associations ... need holistic approach of working with other entities" MFG

"research is driven by people on the ground trying to push through AWWA instead of AWWA having a grand plan to do research ,,, do some vital research with their name on it but don't think it is their idea ... AWWA has so many other initiatives" WU

Some felt this organization could encourage training and certification of both water utility employees and industry trades people.

"training and certification of employees may be something to consider" WU

"the IA certification is not effective thus far because there is not much incentive for a contractor to get certified ...program like this could encourage participation ... no incentive for customers to seek out certified contractors ... this may be a huge opportunity ... there are no EPA label water star contractors out there" MFG

## **ORGANIZATIONAL STRUCTURE:**

- Discussion was held regarding the initial formation of this organization and the concept of the EPA identifying an interim leadership. It was felt this might be the most expeditious method to begin as long as all key stakeholder groups were represented.
- There should, however, be a fairly short transition (possibly 6 months to a year) to a member-elected Board of Directors.
- Most felt somewhere in the range 10 to 12 Board Members would be appropriate and cited a larger Board would be too cumbersome and could impede progress.
- Board Members representing stakeholder groups would represent a member consensus and Technical Committees might be considered.
- An Executive Director would manage the organization.

- Discussion was held with both manufacturer and water utility stakeholder groups regarding the issue of manufacturers having an equal vote on specific topics related to product standards and mixed thoughts were cited in each group.
- Manufacturers would like a seat at the table and an equal vote while some indicated they respect the fact water utilities have water efficiency as their primary goal. Water utilities feel both that all members committed to water efficiency should have a seat at the table but are concerned that the manufacturer vote not dilute the opportunity for greater water efficiency.

"need to figure a structure where they(mfg)can meaningfully participate and have ownership without giving them the opportunity to stop progress" WU

"their involvement is important but giving them a vote (on these issues) may bring us down to the lowest common denominator ... what they are willing to build a consensus around ... which will drag down the process" WU

"if you have a diversity that represents the stakeholders, one group will never rule the whole crowd" WU

- "I don't think there has to be an equal voice (on standards) ... water utilities can have a bigger say as long as manufacturers have a very strong voice in the development of the criteria on the technical aspects... its more important for us to be involved in creating what they will be voting on than the actual vote" MFG
- "as long as people defining the standards include all of the stakeholders ... not just the manufacturers, I think it is fine ... my concern is when manufacturing gets together and says ... let's make sure everyone in the room is satisfied, the consumer isn't represented" MFG
- "the vote should not be based on who has the most money to pay the most dues ... when that is the case, the whole thing is suspect ... it is a way of buying influence" MFG
- "manufacturers should definitely have an equal vote" MFG
- There was some discussion of a regional roll out such as having regional Chapters or working through existing organizations (such as CUWCC) but as this was not explored in depth, more research and investigation on this topic needs to occur.

- Some participants had a difficult time envisioning how this organization could effectively work with the varying stakeholder groups and outside organizations.
- Discussion was held regarding preferences on the location of this organization based on the following four suggested samples:
  - Stand alone 501 (c) (3) Organization with elected Board
  - 501(c) (3) Organization with elected Board located within Academic Research institution
  - 501(c) (3) Organization with elected Board staffed by AWWA
  - New Council within the AWWA
- Most desired by participants was a stand alone 501 (c) (3) due to the preference for this organization to "stand alone" and not have outside influences. Some felt being housed within an academic institution might lend prestige and have benefits due to research facilities while others viewed academic as "ivory tower" and might weaken the brand. There were mixed reviews related to an AWWA affiliation with some saying it

might bring initial credibility and others feeling AWWA might bring undue control.

"need to establish own brand and identity ... academic would weaken the brand immediately" MFG

"AWWA tries to dominate programs ... could slow everything down" WU

"getting involved with AWWA or even worse academic tends to skew the direction of the organization" MFG

"academic ... too research oriented and slow ... don't get anything done" WU

### **FUNDING AND MEMBERSHIP:**

■ It is felt contributions to this organization will depend on perceived value. Actual water savings and direct benefits to utilities and manufacturers will be a key consideration to the level of involvement and funding by water utilities and manufacturers.

"it is important members feel they are getting VALUE for their membership" WU

"I am judged by my savings ... I want that translated to what amount of water is this saving us" WU

"contributions to the CWE will depend on Utility perceived value ... sometimes the willingness to pay will depend on perceived water saved or direct benefits to the utility ... no sliding scale based on utility size .. .but instead see a scale based on benefit" WU

"I would see a lack of value if this organization just existed to exchange information" WU

- Research participants were asked the primary reasons they would join this organization and the value propositions they felt their organizations would "pay" for.
- Manufacturers would be likely to support this organization if:
  - they can have a "say" in the future of the industry
  - it would increase exposure to new customers and stimulate the market
  - they would have the ability to participate in standards development
  - a national organization could address the current fragmentation in the industry
  - this organization could bring to fruition a water labeling program

"want to be part of the process – you want to be involved – you don't want to be outside and looking in ... want to make sure the decisions being made are the right decisions" MFG

"self preservation ... many water districts promote hose dragging and not irrigation systems ... very inefficient ... or they want to eliminate turf ... we don't want to go down that road" MFG

"tangible type of branding or labeling that is beneficial ... that is something I would be willing to pay for... how we get there is not easy ... would be happy if at the end our product could carry some type of label that distinguishes it from everything else and lets the public know how efficient it is" MFG

- Water Utilities would be likely to join and fund this if it:
  - provides a clearinghouse of research and information on best practices
  - provides tangible "tools" for them to function more efficiently
  - provides an opportunity for them to have a "say" in the direction of the industry
  - works towards a market transformation of greater water efficiency through enhancing products in the marketplace and creating an awareness, acceptance and culture shift
  - considers a water labeling program
  - can quantify water savings

"for me product labeling and rating ... efficiency standards ... should fund that right now" WU

"long term focus on efficiency and wise use ... need to help facilitate a cultural change" WU

"my mission is to be one of the top leaders ... can't do that without participating in premier organization ... affecting policy... that is part of being on the forefront" WU

- Especially water utilities see independently conducting product research and developing rebate programs is a significant investment for them that could be mitigated by a national clearinghouse.
- Some concern was expressed regarding the membership affordability for all stakeholders and it was cited this could be an issue for water utilities.

### **Conclusions and Recommendations**

- The participants in this research study, both water utilities and manufacturers, clearly support the need for a national organization for water efficiency and are interested in participating and having a voice in this effort.
- It is felt this organization should work to overcome the greatest **barriers** to achieving water use efficiency which participants believe include:
  - consumer apathy
  - lack of understanding of the true cost of water
  - fragmentation and lack of uniformity in the industry
- Most agree the organization should begin by identifying and attracting a breadth of targeted, committed **stakeholders** and develop an interim leadership structure, mission and policy plan.
- This preliminary organization should plan to transition quickly to a member-elected Board of Directors and **governance** structure. The

industry Board designee should work to obtain consensus within their stakeholder group and bring those views to the Board.

- It is essential all stakeholders of the national organization for water efficiency understand, support and work toward the overarching **mission** of saving water through greater **water efficiency** and ensuring water efficiency is **quantifiable and sustainable**.
- Consideration needs to be given regarding the best manner to accomplish stakeholder unity on this mission especially as many are skeptical due to prior experiences with organizations unable to develop a meaningful consensus.
- This organization needs to stay focused on continuing to provide value to its stakeholder groups and not become bureaucratic or captivated by special interests.
- Initiating and compiling a national **information clearinghouse** for existing data including research and analysis on water efficient products, programs, technologies, metrics, utility incentive programs, legislation, etc. and

delivering this in a user-friendly manner such as a comprehensive website should be a first step to gaining legitimacy, credibility and showing "value" to stakeholders.

- The organization should promote a national dialogue and facilitate and encourage accessibility, communication, networking and information exchange among all stakeholders.
- To facilitate a culture shift and stimulate the marketplace, a **marketing** and outreach program should be launched to establish a national presence and a strong "brand" for water efficiency with an emphasis on educating consumers, municipalities, regulators and policy makers.
- Education should address the need for water efficiency and information sharing of the best products, systems, programs and processes available.
- The national organization should be positioned as the central "voice" and advocate for water use efficiency. Lobbying should not be part of this organization's initial mission due, in part, to the difficulty of meeting broad based stakeholder needs.

- Water efficiency research should be conducted with consumers to understand their perceptions, attitudes, motivations for buying decisions, and communication messages that most resonate.
- The national organization should develop a proactive plan to identify funding, initiate, oversee, manage and provide uniformity to **research and testing** efforts on:
  - products and voluntary product standards
  - systems
  - technologies
- Participants do not envision this organization will have a testing lab, but rather will effectively work through and with existing independent research and testing facilities, processes, consultants and will coordinate with research efforts being conducted by related organizations.
- Manufacturers/trades people need to play a role in the development of research and testing criteria to provide their expertise, to ensure products

are safe and meet the needs of water users, and to ensure that water efficiency is effective and sustainable.

- Less fragmentation and greater national uniformity of performance and testing standards, and incentive programs provides benefits to manufacturers in streamlining their product development efforts and costs.
- Most manufacturers want uniformity of testing so product performance ratings are meaningful but are concerned about objectivity in this process.
- Water utilities especially want to ensure performance requirements/ specifications help accelerate a market transformation to greater water efficiency and are concerned this organization ensure product requirements do not just address the lowest common denominator. They are also concerned that national standards are not too restrictive to state or regional efforts.
- Water utilities see great value and efficiencies in the ability to share knowledge and specific tools.

- In the event the EPA does not pursue water efficient **product rating and labeling**, it is the desire of the focus group participants (both manufacturers and water utilities) that this organization will ultimately spearhead and pursue this effort.
- This preliminary research explored the general attitudes and perceptions of potential stakeholders on the benefits, concerns, core mission and functions of a national organization for water efficiency.
- Further research needs to be conducted to explore the best organizational structure and marketing messages to ensure responsiveness to member needs and the organizations ultimate success.
- Investigation should be conducted to identify and better understand funding sources to ensure this organization can achieve its mission and will be sustainable.
- Additional research can be conducted with stakeholder groups to better understand 'gaps' and opportunities not being met by existing trade

organizations and associations to identify opportunities for this national organization to provide additional value.

■ This research has confirmed a high degree of interest in the development of a national organization for water efficiency. Steps should be taken to conduct further research to ensure this newly-created entity can accomplish its mission, can provide value for stakeholders and financial supporters, and is structured for success.

### **Key Takeaways**

- A national organization for water efficiency is needed
- Engage and effectively involve all water efficiency stakeholder groups and related organizations in the quest for water efficiency
- Conduct public outreach to educate and create a greater social consciousness and acceptance regarding water use
- Establish and promote a national centralized clearinghouse of water efficiency related research, information and best practices and facilitate idea sharing
- Promote, oversee, and coordinate research, testing and voluntary standards and labeling of products, programs, systems and technologies that can quantify water savings and help achieve a market transformation to greater water use efficiency
- Serve as a voice and voluntary advocate for water efficiency

# APPENDIX 8 LEGAL ANALYSIS

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September 5, 2005

Via email to maryann@cuwcc.org

Mary Ann Dickinson Executive Director California Urban Water Conservation Council 455 Capitol Mall, Suite 703 Sacramento, California 95814

Re: Formation of the Alliance for Water Efficiency

Dear Mary Ann:

It was a pleasure to meet with you to discuss the formation of a nonprofit entity, comprised of entitles similar to the California Urban Water Conservation Council and other organizations throughout the United States that share an interest in promoting water conservation, the preservation of water quality, and water efficient utilities and appliances. For purposes of this letter I have called that proposed national organization the "Alliance for Water Efficiency" or the "Alliance", although I appreciate that a final decision on the name of the entity has not been made.

The California Urban Water Conservation Council (the "Council") has been working on this project under contract with the Environmental Protection Agency. To date the Council has organized workshops throughout the Nation and has interviewed fifteen water conservation organizations, four emergency efficiency organizations, and one water reuse organization. The summary you prepared following these interviews indicates that the organizations interviewed varied significantly in their size, funding base, scope of mission and organization. Some of the entities were structured with a membership base, while others were not. In addition to simply getting a dialogue started among these stakeholders concerning water issues, the principal purposes of the interviews and workshops were to begin to establish a mission for the Alliance organization, identify sources of funding, and to determine the optimum management

structure and venue for the new organization. You have asked me to offer some preliminary comments and counsel on the structural and venue planning issues.

#### Tax Exemption Issues.

Because the Alliance organization is not intended to operate a business for purposes of making a profit or benefiting its members exclusively, the Alliance will no doubt be formed as a nonprofit organization. Being formed as a nonprofit organization in any state has both a state corporate law aspect as well as a taxation aspect. In other words, merely filing articles of incorporation or articles of association as a nonprofit organization does not, in and of itself, confer any particular tax exempt status on the entity. Instead, under the Internal Revenue Code and corresponding state tax statutes, an entity's tax exempt status is determined by filing an application with the Internal Revenue Service and the taxing authority in the state of the entity's organization (here, the California Franchise Tax Board) that provides sufficient information regarding the organization, its purposes, and intended sources of funding to enable the taxing authorities to determine what sort of exempt organization is available to the organization.

There are numerous categories of exempt organizations on both the state and federal level, but the categories that are most likely to be available for the Alliance are the categories for charities (IRC §501(c)(3)), social welfare organizations (IRC §501(c)(4)) or business leagues and trade associations (501(c)(6)). Social welfare organizations and charities have very similar scopes of permitted missions and restrictions under the tax laws, the principal distinction between the two being that contributions made to a charitable organization are tax deductible to the donor and, for that reason, the IRS is more strict in the granting of charitable status to nonprofit organizations that may come within either exemption. Here, the tax deductibility of contributions seems to be less of a driving factor, since the participating organizations are likely to be either quasi-governmental agencies or nonprofit entities, themselves. The universe of IRC §501(c)(6) organizations is comprised of entities that are not organized for profit or for the benefit of any private individual and which have as their mission the promotion of a common business interest. Because the promotion of common business interests often involves legislative advocacy, the Internal Revenue Code permits IRC §501(c)(6) organizations to engage in lobbying and other political activities germane top the common business interest without limitation and without placing the organization's tax exempt status in jeopardy.

It is my recommendation that the Alliance entity seek tax exemption as an IRC §501(c)(3) charity because that is the exemption that offers the optimum tax planning possibilities and I see nothing in the anticipated mission of the organization that would bring the Alliance outside of the universe of charitable, scientific and educational organizations that are eligible for IRC §501(c)(3) tax exempt status. Charities are the most restricted nonprofits with respect to their lobbying and legislative advocacy

activities, and yet many sorts of political activities are permissible for charitable organizations, as summarized in Attachment "A" to this letter.

NOTE: Before an application for tax exemption can be filed at either the state or federal level, the other matters discussed in this letter as to organization, membership classifications, mission and sources of funding need to be clearly resolved. The application for tax exemption document requires the applicant to provide the IRS and the state taxing authority with a budget, copies of organizational documents, and a clear statement of the organization's intended purposes and management structure.

#### Should the Alliance be Incorporated or Unincorporated?

Another threshold organizational issue is whether the new Alliance entity should be incorporated or unincorporated. As you noted in your summary of the workshops and interviews the Council has conducted, several of the organizations that were interviewed are not incorporated. However it is my recommendation that the Alliance incorporate in some jurisdiction as a nonprofit corporation. Incorporation provides member organizations with some liability protection should claims be asserted against the Alliance, as an organization, and state corporate laws relating to nonprofit corporations are often much more refined than the laws relating to unincorporated associations. The greater sophistication found in nonprofit corporate law statutes provides better guidance to the organization in terms of internal management, the rights and powers of the governing board and the corresponding rights and powers of the organization's members. Under California's Nonprofit Corporation Law, nonprofit corporations are categorized as being either "mutual benefit corporations" (typically nonprofit organizations that are formed to pursue some activity on behalf of an identifiable group of individuals or groups), "religious corporations", or "public benefit corporations" (the statutory category applicable to charities, social welfare, and civic organizations.

#### Is There Any Particular State That is Most Desirable as an Organizational Venue?

Generally speaking, the answer to this question is "YES". As noted in the preceding section of this letter, by and large, nonprofit corporation statutes are much more sophisticated and provide much more management guidance than corresponding state statutes relating to unincorporated associations. In the same vein, some states have adopted nonprofit corporation laws that are more sophisticated and better organized than the nonprofit corporation laws in other states. In this regard, California's Nonprofit Corporation Law is considered one of the models of good organization and has been followed in other states and by the Commission on Uniform Laws. Because many of the most important issues for nonprofit charitable, and social welfare and civic organizations are federal tax issues, the venue of the new Alliance, for corporate law purposes, is less important, so long as the state that is selected as the base of operations has a modern nonprofit corporation law.

#### Should the New Alliance Be Organized as a Membership Organization?

In my opinion the answer to this question is also "YES". Under California law, a public benefit corporation is not required to have a class of members, separate and apart from its governing board (Cal Corp. Cd. §5310). In the absence of one or more classes of members, any action that is required by the Corporations Code to be approved by the members may be approved solely by action of the Board of Directors. Conversely, if the entity's Articles and Bylaws provide for one or more classes of members, there are certain significant actions involving the entity that can only be taken or initiated by the Board with the prior approval of the members. Under the California Nonprofit Corporation law, a "member" means any person who, pursuant to the organization's Articles of Incorporation or Bylaws has the right to vote for the election of a director or directors or on a disposition of all or substantially all of the assets of the corporation or on a merger or a dissolution of the organization. "Members" also include any other person who is designated as such in either the Articles or Bylaws and who has a right to vote on changes to the Articles or Bylaws (Cal. Corp. Cd. §5056).

Because of those member approval requirements under state corporate laws, defining the universe of an organization's base of members too broadly can be problematic. A large membership base makes it more costly to communicate with members, to achieve minimum quorums required for valid action, and to solicit and receive approvals on matters requiring member consent or approval. For that reason it would be my recommendation here, that the base of members be limited to state and local entities that support the Alliance financially or, if exempt from the obligation to provide financial support, are active in its activities and programs. Those member organizations could either have equal votes on matters requiring member approval or weighted voting on some or all matters, based on the size of the member organization or the amount of funding the organization is providing to the Alliance. For example, if weighted voting is determined to be desirable, the voting formula could apply to all matters requiring member approval, including the election of directors, or only to matters where size or funding is a material factor (with votes on other matters being equal).

It will also be important to decide how the organization's members are to be organized geographically. Are classes of members to be determined (i) by type of organization; (ii) by size; (iii) by geographic region; (iv) by funding levels; or (v) by a combination of these criteria?

#### Composition of the Board of Directors.

If the preliminary determination is made that the new Alliance should have a base of members, comprised of participating and/or supporting state and local organizations, the next question becomes how the organization's governing board should be selected. This issue is closely tied to the questions posed in the immediately preceding paragraph

relating to the classification of members. Issues that need to be resolved with respect to Board composition include: (i) the size of the Board; (ii) the manner in which seats on the Board are filled (by at large voting? class voting? designation by particular member organizations or classes of member organizations? etc).

Mary Ann, I appreciate that many of the topics discussed in this letter are simply outlines that will need considerably more refinement. Nevertheless, I hope that the letter will service your purposes as being a basis for more substantive discussions and decision-making as we proceed with this important project.

Sincerely,

**Sproul • Trost LLP** 

By: Curtis C. Sproul

## ATTACHMENT "A" Summary of Permitted Legislative and Lobbying Activities for Charitable Organizations

#### D. What is Lobbying?

Direct Lobbying and Grass Roots Lobbying; the Importance

of the Distinction. For purposes of section 501(h) lobbying expenditures are defined as expenditures to influence legislation (§ M(h)(2)(A)) and IRC §4911(d) defines the term "influencing legislation" to include any attempt to mold the opinions of any segment of the general public (this is what is referred to as "grass roots lobbying") or any attempt to affect legislation by contacting legislators, legislative employees or any government employee involved in the formulation of legislation (this is "direct lobbying") (see also Treas. Reg §56.4911-2(b)(1)). Direct lobbying only occurs when the communication refers to specific legislation and reflects a view on that legislation. The term "legislation" does not include actions undertaken by the executive branch of government, so it is permissible for a charitable organization to comment on regulations. However, the term "legislation" does include referendums, initiatives and constitutional amendments.

The Regulations establish a three-part test for what constitutes grass roots lobbying, namely that (i) the communication refer to specific legislation; (ii) reflect a particular view on that legislation; and (iii) encourage the recipient of the communication to take action. A call to action includes any call for the recipient to contact a legislator directly, presentation of the legislator's address or telephone number, providing a petition or tear-off post card that the recipient can use to communicate with the legislator, or identifying legislators who are undecided or opposed to the legislation. See Treas. Regs. 56.4911-2(b)(2). The Service considers this definition of grass roots lobbying to be very lenient because it will permit many clear. advocacy communications to be classified as non-lobbying. See 55 Fed. Reg. 35580 (Aug. 31, 1990).

Rules Applicable to Activities Related to Ballot Measures. A

special rule is also contained in the Regulations for efforts by tax exempt charitable organizations to influence the outcome of ballot measures, referenda and initiatives. In the context of such measures, the "legislators" are the general public in the area where the vote will occur. Thus, any communication to the general public that refers to and reflects a view on the ballot measure, referendum or initiative constitutes "direct lobbying" (see Treas. Regs. 56.4911-2(b)(1)(iii)).

**Rules For Mass Media Communications.** Special rules are also established for mass media advertising as a subset of grass roots lobbying. Normally, any communications made through mass media will be judged by the

three part test. However, any use of the mass media to communicate to the public within two weeks prior to a vote by a legislative body regarding highly publicized legislation will be grass roots lobbying if the advertising by the organization (i) expresses an opinion on the general subject of the legislation and (ii) either refers specifically to the legislation or urges recipients to contact legislators concerning the subject of the legislation. Exempt organizations can rebut the presumption that the mass media communication (within two weeks prior to the vote) is not grass roots lobbying by showing that the organization customarily makes such communications regardless of the timing of legislative activity or that the timing is otherwise unrelated to the legislative activity. See Treas. Regs. 56.4911-2(b)(5).

#### E. Activities Which are Not Considered Lobbying:

In addition to defining what constitutes attempts to influence legislation, the section (h) Regulations also carve out several activities that charities are free to pursue without having expenditures in support of those activities counted in the lobbying expenditure tests. Those activities include:

**Non-Partisan Study or Analysis.** Any independent or objective study of a particular subject noes not constitute lobbying. Included in this exception is an exposition voicing a position if sufficient viewpoints and information are included to enable a recipient of the study to form an independent opinion. See IRC §4911(d)(2)(A); Treas Regs §56.4911-2(c)(1).

**Examinations** of **Broad Social Issues.** These communications are excepted even if their subject matter is also the subject of legislation, as long as the organization does not express a particular viewpoint or include a call to action in the communication. See Treas. Reg §56.4911-2(c)(2).

**Technical Assistance to Governmental Bodies.** Providing advice, research or assistance to a governmental body at the body's written request is not lobbying. See IRC §4911(d) (2)(B) and Treas Regs. 56.4911-2(c)(3). Not covered by this exception are communications responding to requests from individual legislators.

**Self Defense Communications.** These include communications concerning legislation which may effect the existence of the organization, its powers or duties, or its tax-exempt status. Not included in this exception are appropriations bills which may effect the scope of the organization's future activities. See IRC

§4911 (d)(2)(C); Treas Regs §56.4911-2(c)(4).

## Communications with Bona fide Members of the Organization.

Also excluded are communications with bona fide members of the organization concerning legislation affecting the organization. Not included are communications to persons that are merely on a mailing list or communications to persons who have not been recent contributors. See IRC §4911 (d)(2)(D). Also excluded are communications

between a tax-exempt organization and a bona fide member which directly encourage the member to engage in direct lobbying (this is classified as "direct lobbying") or which encourage the member to urge others to engage in direct or grass roots lobbying (this is considered "grass roots lobbying"). See IRC §4911(d)(3)(A)&(B).

**Non-legislative Contacts with Elected Officials. Any contact** with a legislative member or employee of a legislative member that is unrelated to affecting legislation. See IRC §4911(d)(2)(E).

**Activities by Members.** For an organization to be denied or lose its tax-exempt status because of lobbying activities, the legislative activities must be undertaken as an act of the organization. The most interesting cases on this issue are those involving student activities which the IRS tried to attribute to the University, itself. See Rev. Rul. 72-513, 1972-2 C.B. 246.

**Activities Not Involving Expenditures.** Another significant difference between the section (c)(3) "substantial part" test and the section (h) and 4911 safe harbor provisions is that under the latter provisions activities not involving expenditures, such as work of unpaid volunteers, are not taken into account at all. See Treas. Regs. §1.'(h)-3(e), example 5.

#### F. Allocation of Expenditures That Are Only Partially Lobbying.

The Regulations also allocate expenditures for communications that are part lobbying and part non-lobbying or that are part direct lobbying and part grass roots lobbying. See Treas. Reg §56.4911-3. The costs of a communication to non-members that also has a bona fide non-lobbying purpose may be divided between the lobbying and the non-lobbying parts of the communication. Any part of the communication discussing the same specific subject of the lobbying portion must be included in the lobbying amount. In communications sent primarily to members, the organization may make a similar allocation. However, the

regulations expressly reject a method of allocation based on the number of sentences that are utilized to encourage members to take action. See generally Treas. Regs. §56.4911-3(a)(2).

As to a communication that is made up of direct lobbying and grass roots lobbying elements, the entire communication is presumed to be a grass roots communication unless the tax-exempt organization can prove that the communication was primarily direct lobbying, in which case the organization can make a reasonable allocation between the two. See Treas. Reg §56.491 I-3(a)(3).

## APPENDIX 9 STAKEHOLDER RESEARCH FUNDING LIST

Vater	Efficiency Research F	und	Funding Sources & Committed Amounts																
				U.S. \$ - Held and/or managed by CUWCC									CDN \$ - Held and/or managed by CWWA						
WETC No.	Name		San Diego CWA	EBMUD	Marin Municipal WD	Tampa Bay Water	Eugene Water & Electric	LADWP	Hills- borough County	Seattle Public Utilities	Total from U.S. Supporters	Toronto	Durham	Waterloo	Calgary	Peel	CRD - Victoria BC	British Columbia Bldgs Corp	
1	Plumbing Standards		\$2,500							\$5,000	\$7,500								
2	Plumbing & Bldg Codes										\$0								
3	UNAR Development		\$2,500	\$4,000		\$5,000		\$10,900			\$22,400		\$25,000						
4	Flushometer Testing - PROJECT COMPLETED										\$0	\$32,000	\$5,000	\$5,000					
5	Sensor Operated Faucets & Toilets								\$25,000		\$25,000								
6	Urinal Testing				\$5,000					\$32,000	\$37,000				\$5,000		\$5,000	\$4,000	
7	Flapper Identification/Listing					\$15,000					\$15,000								
8	Ice Maker Study (water portion only - PG&E contributes another \$40,000 for energy portion)			\$20,000			\$1,000			\$20,000	\$41,000								
9	Commercial Dishwasher Study										\$0								
10	Toilet Certification Media										\$0		\$5,000						
	Ice Cream Soft-Serve Machine Study										\$0								
	Combination Oven Water Savings Study										\$0								
	Showerhead Study									\$7,500	\$7,500								
	Green Building Support (LEED, NAHB, other)										\$0								

Updated: March 2, 2006 Total from U.S. Supporters (through CUWCC) = \$155,400 TOTAL: ALL SOURCES =

Funds received
Funds promised but not yet received
Future funds promised but not invoiced nor received
Purchase order received authorizing go-ahead
Funds received by CUWCC and paid to LBNL
Funds to be paid directly to the FSTC under a separate contract
Funds to flow through EBMUD to the FSTC



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