VALUE OF WATER

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Peace River Manasota Regional Water Supply Authority
Core Message

The Value of Water Coalition is educated to educating and inspiring the nation about how water is essential, invaluable, and needs investment.

Water is essential.

Logical flow:

Problem
Water infrastructure and resources are at risk and this put the nation at risk.

Solution
Investment in water must be a priority.

Future
Ensure clean, safe water so all communities can thrive.
The Importance of Water to the U.S. Economy

Synthesis Report
I. How is Water Important to the U.S. Economy?

INTRODUCTION

Water is an essential commodity: human life – and indeed all life on earth – depends upon it. Water is also a critical input to production in a number of economic sectors. Water is used to extract energy and mineral resources from the earth, refine petroleum and chemicals, roll steel, mill paper, and produce countless other goods, from semiconductors to the foods and beverages that line supermarket shelves. Water cools the generators that produce electricity, and sustains the habitat and fish stocks that are vital to the commercial fishing industry. Rivers, lakes and oceans provide natural highways for commercial navigation, and provide places to swim, fish, and boat, helping to fuel economic activity in the recreation and tourism industry. Every sector of the U.S. economy is influenced by water.

WATER IS ESSENTIAL TO THE ECONOMY

Because water is essential to life, its total contribution to the U.S. economy cannot be quantified in any meaningful way (Bockstael et al., 2000; Hanemann, 2005). Nonetheless, we can develop a qualitative sense of the dependence of the U.S. economy on the nation’s water resources by considering the sectors that use water and their relationship to the economy as a whole.

To understand how water is used and how it generates value throughout the economy, we can use structural concepts developed by leading economists that provide the framework for our system of national economic accounts (Kenessey, 1987). This framework draws on four major elements of the flow of goods and services through the economy – extraction, processing, delivery, and information – to group economic activity into four major or mega-sectors:
The economic repercussions of a water supply shock are not hypothetical. For example, the U.S. Department of Agriculture estimates that the summer drought of 2012 damaged agricultural productivity in large areas of the Southeast, Midwest, Great Plains, and Southwest (USDA, 2012). The drought also adversely affected commercial navigation on the Mississippi River, forcing barges to operate at reduced capacity to avoid running aground, and causing businesses to rely on alternative means of transport to get their products to market. Similarly, from 2009 to 2012, large parts of west Texas and neighboring states experienced a severe drought. The drought reduced water levels in reservoirs and limited water availability for cotton irrigation and peanut cultivation, livestock operations, and other agricultural activity. Immediate effects on the agricultural sector included failed crops and a sell-off of cattle (Galbraith, 2011). Potential longer-term impacts included increases in the price U.S. consumers might face for wheat and beef, as well as potential erosion in U.S. cotton exports (Hylton, 2011). As these examples illustrate, the impact of a water supply shock can extend well beyond the industries that are immediately affected, with implications for consumers and ripple effects on activity in other areas of the economy. These cases also help to illustrate a fundamental point: protecting and efficiently managing our water resources is essential to maintaining a strong, vibrant economy.
FLORIDA:
Investment in water infrastructure will create jobs

FLORIDA’S 20 YEAR WATER INFRASTRUCTURE NEEDS

Combined Needs

Wastewater: $19.5 Billion

$35.9 Billion

Drinking Water: $16.4 Billion
EPA Drinking Water Needs Survey (2013)

FACT: $1 billion in water infrastructure investment supports 28,500 jobs
Clean Water Council’s Sudan Impact Assessment of Short-Term Economic Impacts of Water and Wastewater Projects in the U.S. (2009)

POTENTIAL FLORIDA JOBS*

1,023,150 Jobs Each Year

20,463,000 Jobs Over 20 Years

*Job estimate derived from combined needs and number of jobs per $1 billion.

The National Association of Water Companies (NAWC) is the voice of the private water industry and the organization exclusively representing this group of quality water service providers, innovation drivers, creative financiers and responsible partners. To learn more about the NAWC, visit nawc.org. To join the conversation about water infrastructure, visit waterisyourbusiness.org.

NAWC
National Association of Water Companies

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THE VALUE OF WATER

IS WATER ESSENTIAL? YES!
Water is essential to our daily lives. Without it, there would be no fire protection, no agriculture, no manufacturing and no power grid. Yet, this precious resource is too easily undervalued, particularly in the U.S., where 300 million Americans are accustomed to paying as little as a penny a gallon to have clean, safe water delivered straight to their tap.

DO AMERICANS VALUE WATER SERVICES? (YES — but we take it for granted.)
- 95% Believe water is the most important service they receive, ahead of electricity, heat, the internet and cell phone service
- 69% Take access to clean water for granted

DO AMERICANS SUPPORT MAKING CHANGES TO ADDRESS INFRASTRUCTURE NEEDS? (YES — and they are willing to pay more.)
Nationwide, water systems and their customers are experiencing the impacts of under investment and poor maintenance. Every two minutes, a significant water line ruptures in the U.S., leading to trillions of gallons of water wasted annually and severe economic losses. The good news: Survey results suggest the public understands the issue.
- 29% Believe the system is approaching crisis stage
- 80% Support water infrastructure policy reform
- 63% Are willing to pay more on their water bills to address the nation’s infrastructure needs

WATER IS A GREAT VALUE!
Your water bill is one of the lowest monthly household bills. It’s well below what customers pay annually for phone and electric service a year, and it’s even below what consumers spend on soft drinks and other beverages a year ($707).

ANNUAL UTILITY EXPENDITURES
(for a four-person household)

- Natural Gas (18% of expenditures) $456
- Fuel Oil and Other (.3% of expenditures) $179
- Electricity (2.7% of expenditures) $1,124
- Telephone (2.2% of expenditures) $1,654
- Water and other public services (.1% of expenditures) $564

Source: Michigan State University Institute of Public Utilities, 2012 data
Americans’ Attitudes About Water: A New Research Approach
November 12, 2015
Through discussion and extensive research, we identified and optimized the most effective message frames as follows:

• **Message #1** – *Water, Water Everywhere*
• **Message #2** – *Quality of Life Provided by Water / Generational Investments*
• **Message #3** – *Public Health (Water is Clean and Safe)*
• **Message #4** – *Water and the Environment*
• **Message #5** – *Conservation*
OPTIMIZED MESSAGES

Optimized versions of these messages appear below:

• **Message #1** – *Water, Water Everywhere*
  
  Water is more a part of our daily lives and businesses than we realize. We all are dependent on a strong and reliable water infrastructure.

• **Message #2** – *Quality of Life Provided by Water/Generational Investments*
  
  It is important that we invest in our water infrastructure not just for me, but for my kids and their kids to ensure their health and safety. We have a responsibility to future generations to ensure that we will continue to deliver clean, safe drinking water to our taps and to collect and treat wastewater from our homes and businesses to protect our lakes and rivers.
OPTIMIZED MESSAGES

• **Message #3** – *Public Health (Water is Clean and Safe)*
  – Our water infrastructure directly impacts the public health of my community. Whether it’s safe drinking water at the tap in my home or clean water coming out of a wastewater treatment plant, a healthy water infrastructure means healthy communities.

• **Message #4** – *Water and the Environment*
  – The water we drink comes from lakes, rivers, and streams, bodies of water that are exposed to pollution from many sources. Our water infrastructure helps ensure the water in our homes and businesses is clean, reliable and readily available. We must work to maintain this infrastructure to ensure this continues.

• **Message #5** – *Conservation*
  – Water is a precious resource. We must begin to take whatever steps are necessary to conserve water, and ensure there is a full supply every single day.
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<thead>
<tr>
<th>WORDS/PHRASES THAT WORK</th>
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<tr>
<td>• Safe/Safety</td>
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<td>• Continue/Continual/Consistent</td>
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<td>• Strong</td>
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<td>• Critical component</td>
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<td>• Daily lives</td>
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<tr>
<th>WORDS/PHRASES THAT ARE LESS COMPELLING</th>
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<td>• Wastewater</td>
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<td>• Treatment plant</td>
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<td>• Raise Costs</td>
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<td>• Unattractive</td>
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<td>• Extreme</td>
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<td>• Leaky</td>
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Example of Coalition of Multiple Interests Partnership [Existing]

- Reservoir
- ASR Wellfield
- Mitigation site/restored lands
- Cattle lease for grazing
- Horse trails/passive recreation
- Model Airplane club
Example of Coalition of Multiple Interests Partnership [In Progress]

- Environmental preservation
- Mitigation site/restored lands for future reservoir
- Stormwater impoundment for downstream flood control
- Water quality enhancement
- Connects habitat corridors
- Recreational opportunities
- Eco-tourism potential

Orange Hammock Ranch
Friends of Peace Water

Friends of Peace Water would like to thank the following organizations for their generous support of this amazing event:

- AECOM
- American Duotile Iron Pipe
- Atkins Global
- Black & Veatch
- CH2M HILL
- Citi Group, Inc.
- DMK Associates, Inc.
- EarthBalance
- E.F. Gaines Surveying
- Hazen & Sawyer
- HDR Engineering, Inc.
- Johnson Engineering
- King Engineering
- Manson Law Group
- MWH Global, Inc.
- Natural Resources, LLC
- Progressive Water Resources
- RBC Capital Markets
- TKW Consulting Engineers, Inc.
OUR VIEW

Local water system a model for Florida

In talks with business leaders in Manatee and Sarasota counties Wednesday, and in an online video with the Herald-Tribune’s Zac Anderson, Florida Agriculture Secretary Adam Putnam called for statewide policies that encourage and invest in water-supply development.

Putnam rightly said Florida needs collaboration to meet a projected 1-billion gallon was struck by Hurricane Charley, North Port moved water to its neighbor via pipeline.

In fact, the entire four-county region is connected in some fashion, fulfilling one of the original goals of the authority, which was formed in 1982. Since the authority acquired the former General Development Utilities plant on the Peace River in