What’s the Cost

EPA estimates 3-4 percent of national electricity consumption. Water and wastewater utilities are typically the largest consumers of energy, accounting for 30-40 percent of total energy consumed.

Energy costs make up the majority of an annual operating budget, typically second only to labor costs.

Energy costs have a direct impact on an area’s economic health through inefficient energy use and high utility rates.
Water & Energy Efficiency

Becoming water and energy efficient provides a wide range of benefits—for utilities, consumers, businesses and the community as a whole.

*Using less water means moving and treating less water, reducing the strain on our water supplies, drinking water and wastewater infrastructure.*
Future Energy Demand

- Energy demand increase » 20% - 30% in 15 years
  - In water and wastewater
- Population & more stringent regulations
  - Aging infrastructure
  - Increasing threats to watersheds and aquifers
  - Changing compliance and public health standards
  - “Rising cost” industry
  - Higher customer expectations
  - Emerging contaminants (pharmaceuticals)
  - Increasing competition for raw water sources
Grant History

In February 2012 the U.S. Department of Energy (DOE) issued a competitive funding opportunity announcement (FOA) to state energy offices to advance policies, programs, and market strategies that accelerate job creation and reduce energy bills while achieving energy and climate security for the nation.

Water Energy Partnership in AZ:

• Benchmark 100 facilities into EPA Portfolio Manager
• Identify Energy Efficiency Opportunities and match facilities with funding
• Conduct Energy Efficiency Training
Develop A Strategy

Develop a successful strategy that utilizes planning, development incentives, and other tools to leverage limited funding. Create goals that build upon and maintain current assets before building new facilities.

Develop an approach to focus on:
1) efficiency;
2) economic & community development potential &;
3) quality of life
Arizona Facts

- 6th Largest State
- 15 Counties
- 30 State Parks
- 20 Native American Tribes
Arizona Utility Map
Coordination and Collaboration

Energy issues are here to stay and will only get more serious—no quick fixes!

- Individual projects and technologies are fine, but something is needed to pull it all together (a process)
  A Process to provide relevant information to those impacted by energy efficiency improvements.

- We (Energy Office) are not the experts!
WEPA Arizona Activities

INVESTIGATION
- Facility Identification
- Benchmarking
- Education/Training

TECHNICAL ASSISTANCE
- Needs Assessment
- Funding Options
- Education/Training

IMPLEMENTATION
- Project Upgrades
- Education/Training

Coordination/Collaboration
Grant Application Partners

State:
- Arizona Department of Environmental Quality
- Water Infrastructure Finance Authority

Federal:
- U.S. Department of Agriculture Rural Development

Private:
- Arizona Public Service
- Honeywell
- Lincus Energy
- Rural Community Assistance Corporation
Partners Market Network
Current Partners

State: AZ Department of Environmental Quality, Water Infrastructure Finance Authority, AZ Department of Water Resources, AZ State Parks, AZ Department of Transportation, Arizona Corporation Commission

Federal: USDA Rural Development, EPA, U.S. Bureau of Reclamation


Private: Honeywell, Lincus Energy, AMERSCO, TRANE, NCS Engineering, Chelsea Group, Border Environment Cooperation Commission (BECC)

Professional Organizations: AZ Water Association, Rural Water Association, AZ Co-op Association
Partners Market Network

[Diagram showing various organizations and their relationships, such as ACC, Utility Companies, Consultant, Technical Partners, Professional Organizations, Professional Organization, BECC, WWF Staff, Implementation Team, Project Managers, Installer, Retailer, Lenders, Manufacturer, Financial Partners, Designer, Communities, GOEP, DOE, EPA, BOR,Private Partners, Government Partners, USDA, RWIC, ADWR, ADEQ, WIFA, BOR, DOE, EPA, GOEP, associated with, provide training, works with, services, part of, will be part of, need credibility, associated with, works for, select, are part of, works with, provides financing, provide support]
Water Infrastructure Finance Authority

What does WIFA offer?
- Low-interest loans
- Planning and design grants, up to $35K

Who is eligible?
- Cities and towns
- Private water companies (ACC)
- Special districts
- Tribal entities

What types of projects are eligible?
- Planning, design (1% interest rate)
- Improvement, construction
- Acquisition
- Green projects (incentives)
Benefits of going with WIFA:

- Low interest rates
  - Average last year for public entities = 2.74% (20-year term)
- Financing available year-round
- No application deadlines
- No application fees or closing costs
- No minimum or maximum loan amount

Recycle $$$ in Arizona
- Create attractive/livable communities
- Increase property values
- Preserve quality of life
Water Pricing: A Hot Topic in Arizona

Where Does Your Community Stand?
Annual Water and Wastewater Rates Survey

- WIFA survey of water and wastewater utilities conducted each year
- Goal – provide data and information to help utilities set appropriate rates
- Outcome – Survey report with lots of data

Appropriate water pricing is key to managing our water resources and the infrastructure we need to transport, treat and distribute it.

Does this picture make you excited to dive into a rates analysis?
Interactive rates and financial benchmarking dashboard

- Created by Environmental Finance Center at UNC
- Designed for utility managers, finance directors, board members, elected officials
- Allows comparison of rates with other utilities of similar size, water source, area, etc.
- And much more...

How about this one?
AZ Water and Wastewater Rates Dashboard

- Conservation signal - are rates promoting conservation?
- Affordability – what is the financial burden on customers in relation to the MHI of the community?
- Cost recovery – do rates support the cost of operations and capital?

NEW!
Water Energy Partnership in AZ

Status:

• 72 WWTP Benchmarked into Portfolio Manager
• Preliminary Analysis
  ✓ Visits to 6 facilities and 3 EPA Energy Audit
  ✓ Technical Assistance to 15 facilities
• Developed WWTP Benchmarking curriculum and presented 10 energy education trainings
• Developing resource guide for facilities
Keys to Successful Communication
Challenge

PICK UP THE PHONE AND MAKE SOMETHING HAPPEN

Get Out of the Office
Thank You

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