



# DEED Final Project Summary Abstract

American Public Power Association  
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202/467-2960

## Project Title

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**Water and Wastewater Energy Efficiency Assistance.**

## Status

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The project objectives have been completed and resource materials and workshop details are provided in a binder that was provided to all workshop attendees.

## Dates

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October 1, 2003 – September 30, 2004

## Purpose

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To assist small municipal water and wastewater utilities in their use of energy efficiency and demand site management approaches and technology, via printed and electronic resource materials presented at a workshop.

## Utility Name and Address

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Iowa Association of Municipal Utilities (IAMU)  
1735 NE 70<sup>th</sup> Avenue  
Ankeny, Iowa 50021

## Utility Description

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The Iowa Association of Municipal Utilities (IAMU) is a nonprofit organization that consists of 550 member utilities. IAMU provides technical, legal and training services for its electric, gas, telecom and water utilities. The Association also provides technical service and training to wastewater and stormwater system managers in Iowa.

## Key Personnel and Contact information

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Anne Kimber, P.E., Director Energy Services  
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Patricia Sauer, Environmental Scientist  
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Iowa Association of Municipal Utilities  
Phone: (515) 289-1999  
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## Results to Date

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Case studies  
Fact sheets and on-line links  
Calculator tool  
Manual  
Workshop

## Description

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The following are resource materials and activities that were completed for this project:

1. **Case studies of five water and wastewater treatment systems in Iowa to document their energy efficiency methods.**

*Denver Municipal Building* - uses municipal water in their geothermal heating and cooling system for their new city center and public library.

*City of North Liberty Water Plant* - utilizes off peak pumping and filling of the water towers to take advantage of cost and energy savings.

*Clear Lake Sanitary District* - updated their system in response to the cooling water needs of a new electric generating facility in the area.

*Cedar Rapids Water Treatment Facility* – maintains a well developed energy management program.

*Cedar Rapids Wastewater Treatment Facility* – biogas generated from an anaerobic reactor that treats high BOD wastewater generated at several local industries is used as fuel for a sludge incinerator.

2. **Fact sheets with on-line links were obtained for resource materials.**
3. **WW-ESAT (Water-Wastewater Energy Self Audit Tool) was developed to calculate energy and cost analysis.**
4. **Manual containing case studies, fact sheets, WW-ESAT and other materials was assembled and distributed to workshop attendees.**
5. **“Saving Energy=Saving Money: The Energy-Municipal Water/Wastewater Treatment Connection” workshop was held on September 28th in the Des Metro area.**

## Background

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The project was intended to gather energy efficiency resource materials and develop a self-audit calculator tool for small water and wastewater treatment systems.

## Applicability

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All small water and wastewater utilities will benefit from using the energy efficiency resource materials that are provided in the manual.

## Alternatives

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Not Applicable

## Diagram

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Not Applicable

**Equipment**


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 Not Applicable
**Performance**


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 Not Applicable
**Future Plans**


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 Continued presentation of this information at regional workshops. Relevant material will be placed on IAMU's website: [www.iamu.org](http://www.iamu.org). The calculator tool WW-ESAT will be made available for a minimal fee to interested groups.
**Budget****Funding**


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Iowa Association of Municipal Utilities	\$5,548
Iowa Energy Center	\$7,000
<u>DEED</u>	<u>\$10,000</u>
<b>TOTAL FUNDING</b>	<b>\$22,548</b>

**Costs**


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Salaries/Benefits for Program Coordination	\$8,280
Subcontractor-Kelly Needles-WW-ESAT	\$2,900
Travel/Training/Speaker Costs	\$3,834
Supplies/Printing/Postage	\$1,985
Workshop Expenses-Meals	\$898
<u>Grant Administration</u>	<u>\$4,651</u>
<b>TOTAL COSTS</b>	<b>\$22,548</b>

**Additional Notes**


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 A plan should be developed to further disseminate and present the above resource materials that were created from the funding provided by this grant, for small-to-medium water and wastewater treatment systems.
**References**


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 Bibliographic references were not used for this project. Website links to relevant sites that address energy efficiency in water and wastewater treatment are provided in the attached 3-ring binder.