

**2012
Capital Budget
Project Request Form**

Project Title: Meter Program

Agency Name: Water Utility
Project No: 1

Agency Number: 64
Category: 3 & 4

Section 1

Is this the project's first year? No

If yes, skip to Section 2.
If no, fill in the following:

Amount spent on this project in previous years: Ongoing

Fund # EW01 Water Utility h20
Agency # 810454 Meter Program-Water Utili

Section 2 Describe the impact of this project upon the operating budget.

Little or no affect on the Operating Budget as the program costs are capitalized. Additional revenue is generated as the number of meters in service increases.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

Growth drives the need for new meters and older meters need replacement.

**2012
Capital Budget
Project Request Form**

Project Title: Water Mains - Replacements

Agency Name: Water Utility
Project No: 2

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: Ongoing

Fund # EW01 Water Utility h20
Agency # 810455 Water Mains-Water Utility

Section 2 Describe the impact of this project upon the operating budget.

Decreased repair costs and fewer main breaks, improved pumping hydraulics, fire hydrant flow, and customer service. There would be a reduction in unaccounted for water and at the same time, this will help in our water conservation goals.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)? Please quantify the potential impacts to the extent possible.

Main Replacements - The Utility is requesting \$7,816,000 in funding that will allow for the replacement of approximately seven (7) miles of main.

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

Replacing our infrastructure in a timely manner is critical to maintaining the current level of service to our customers. Older mains require replacement and taking advantage of street reconstruction projects reduces inconveniences to customers and reduces the cost of the project through the shared effort. If we reduce the amount of replacement work, we would only be delaying the needed infrastructure replacement and we would see increasing cost due to inflation.

**2012
Capital Budget
Project Request Form**

Project Title: Water Mains - New

Agency Name: Water Utility
Project No: 3

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: Ongoing

Fund # EW01 Water Utility h20
Agency # 810455 Water Mains-Water Utility

Section 2 Describe the impact of this project upon the operating budget.

No anticipated impact on operating budget. Costs are capitalized. There may be increased revenue from new customers served.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

New mains will correct deficiencies, improve service and reduce complaints about water pressure, improve fire protection and provide service to growing areas of the City.

**2012
Capital Budget
Project Request Form**

Project Title: SCADA System

Agency Name: Water Utility
Project No: 4

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: Ongoing

Fund # EW01 Water Utility h20
Agency # 810459 Unit Wells-Water Utility

Section 2 Describe the impact of this project upon the operating budget.

An updated SCADA system continues to improve operational efficiency and reduce labor costs.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

Having the ability to monitor and control the system remotely is critical to the Utility's operational efficiency and system security.

**2012
Capital Budget
Project Request Form**

Project Title: Zone 4 Fire Flow Supply Augmentation

Agency Name: Water Utility
Project No: 5

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: \$ 113,696

Fund # EW01 Water Utility h20
Agency # 810517 New Wells/Water

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the operating budget until this well is placed into service in year 2014. At that time we could see an increase in power, chemicals, and maintenance costs of approximately \$125,000. The increase in operating costs will be offset by additional water sales from our expanded customer base in the expanding southeast service area.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)? Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The Zone 4 Fire Flow Supply Augmentation project will correct a significant system deficiency identified by the Water Master Plan in the southeast corner of the system. Due to significant expansion to the south over the years, the hydraulics of the system will not adequately serve this area for fire flow supply or system reliability and redundancy. There is also significant development pressure in the southeast and this project will support further development of the area. Adding a second source of supply to the area will improve fire flow capacity and bring

**2012
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Project Request Form**

Project Title: Arbor Hills Supp. Fire Flow Supply

Agency Name: Water Utility
Project No: 6

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: \$ 72,105

Fund # EW01 Water Utility h20
Agency # 810516 Booster Station/Water

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget. Once the booster station is in operation, we anticipate an additional \$10,000 per year in operating expenses.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The Arbor Hills Supplemental Fire Flow Supply will correct a significant system deficiency identified by the Water Master Plan. Due to the fact that the area is fed by a single 8-inch main on the Beltline Highway frontage road, the area is vulnerable to water outages and there is a significant restriction in fire flow capacity. This project will provide the ability to transfer water from Well #18 in Pressure Zone 6. The Project includes a pipeline on the Cannonball Run Bike Trail that will link the area to the Verona Road Area.

**2012
Capital Budget
Project Request Form**

Project Title: East Side Water Supply Project

Agency Name: Water Utility
Project No: 7

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: \$ 209,840

Fund # EW01 Water Utility h20
Agency # 810517 New Wells/Water

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the operating budget in 2012. The effects on the operating budgets in future years are unclear until the East Side Water Supply Project study has been completed.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

Water Quality - Turbidity, Manganese, and Iron
This project continues funding for solutions to the Iron and Manganese issues at unit wells #7 and 8. Filters - whether individual or a central filtration plant - will help the Utility toward its goal of turbidity at 1 ntu, manganese less than 50 ppb and iron less than 300 ppb.

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

This project addresses the East Side Water Supply issues and is necessary to continue to supply water to the east side that is high quality and sufficient in quantity.

**2012
Capital Budget
Project Request Form**

Project Title: **Pressure Zone 9 Storage**

Agency Name: Water Utility
Project No: 8

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? Yes

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget. Once the reservoir is in operation, we anticipate an additional \$10,000 per year in operating expenses.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)? Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The Pressure Zone 9 Storage project will correct a significant system storage deficiency in the Pressure Zone 9 area identified by the Water Utility Master Plan. Pressure Zone 9 has developed significantly with not only residential, but commercial and institutional facilities. The fire flow requirements have increased due to this development to the point that current facilities do not meet minimum standards. The Master Plan proposes to construct storage on the west side of the zone to hydraulically balance the system.

**2012
Capital Budget
Project Request Form**

Project Title: Pressure Zones 7 & 8 Supp. Supply

Agency Name: Water Utility
Project No: 9

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: \$ 52,211

Fund # EW01 Water Utility h20
Agency # 810517 New Wells/Water

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the operating budget until this well is placed into service in year 2015. At that time, we could see an increase in power, chemicals, and maintenance costs of approximately \$120,000.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)? Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

This Supplemental Supply project will provide additional water supply capacity to both Pressure Zones 7 & 8. This well was identified in the Water Master Plan to address system supply issues projected in the future.

**2012
Capital Budget
Project Request Form**

Project Title: Pump Station 220

Agency Name: Water Utility
Project No: 10

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? Yes

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget. Once the booster station is in operation, we anticipate an additional \$10,000 per year in operating expenses.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The Pump Station 220 - Raymond Road Pump Station project will set up operational flexibility within Pressure Zones 9 and 10. The station will transfer water from Pressure Zone 9 to Pressure Zone 10 and back again through a PRV (Pressure Reducing Valve). This operation will provide the ability to share water supply resources between zones and fully use existing facilities.

**2012
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Project Request Form**

Project Title: Lakeview Reservoir - Reconstruction

Agency Name: Water Utility
Project No: 11

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? Yes

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund #	EW01	Water Utility	h20
Agency #	810516	Booster Station/Water	

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget. As this is a replacement of an existing reservoir, there should be little impact on the operating budget.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)? Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

Reconstructing the Lakeview Reservoir will replace an aging storage tank and provide needed water storage in Pressure Zone 6 on the north side of the City. This project is justified in the Water Utility Master Plan and would improve fire fighting capability within the system.

**2012
Capital Budget
Project Request Form**

Project Title: **Booster Pump Station 114**

Agency Name: Water Utility
Project No: 12

Agency Number: 64
Category: 3

Section 1

Is this the project's first year?

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget. Once the booster station is in operation, we anticipate an additional \$10,000 per year in operating expenses.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)? Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The Booster Pump Station 114 project will provide the Utility with operational flexibility on the west side. The station will transfer water from Pressure Zone 6 to Pressure Zones 7 and 8 and back again through a PRV (Pressure Reducing Valve). This operation will provide flexibility in source of supply to the west side of the system. It will benefit customers through increased system reliability.

**2012
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Project Request Form**

Project Title: North End Supplemental Supply

Agency Name: Water Utility
Project No: 13

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? Yes

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the operating budget until this well is placed into service in year 2017. At that time, we could see an increase in power, chemicals, and maintenance costs of approximately \$120,000.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The North End Supplemental Water Supply - Hoepker Rd project will provide additional water supply capacity to the north end of Pressure Zone 6. This well was identified in the Water Utility Master Plan to address system supply issues projected in the future.

**2012
Capital Budget
Project Request Form**

Project Title: Security Upgrades

Agency Name: Water Utility
Project No: 14

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: Ongoing

Fund # EW01 Water Utility h20
Agency # 810458 Misc Water Utility Capita

Section 2 Describe the impact of this project upon the operating budget.

Anticipated improvement in efficiency and operation that has the potential to reduce costs.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

Maintaining the safety and security of the water system is vital to the public. It is critical to have the ability to monitor and secure all of our remote facilities.

**2012
Capital Budget
Project Request Form**

Project Title: System Wide Miscellaneous Projects

Agency Name: Water Utility
Project No: 15

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: Ongoing

Fund # EW01 Water Utility h20
Agency # 810458 Misc Water Utility Capita

Section 2 Describe the impact of this project upon the operating budget.

Anticipated improvement in efficiency and operation that has the potential to reduce costs.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

Routine maintenance and improvement projects are required to sustain the facilities for the long term.

**2012
Capital Budget
Project Request Form**

Project Title: Paterson Street Building Remodel

Agency Name: Water Utility
Project No: 16

Agency Number: 64
Category: 1 & 2

Section 1

Is this the project's first year? Yes

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

Slight increase due to larger work area.
New HVAC may have lower operating costs.
Properly sized work area should increase efficiency.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The Utility's fleet maintenance facility has served its useful life. The repair bays do not provide a safe working environment for employees and large trucks can not be easily handled with the low ceiling height. This facility is in need of major renovation to bring it up to current code and to increase its functionality to the Utility for efficiency and safety purposes.

**2012
Capital Budget
Project Request Form**

Project Title: **Advanced Metering Infrastructure (AMI)**

Agency Name: Water Utility
Project No: 17

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? **No**

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: **\$ 2,000,000**

Fund # **EW01** Water Utility h20
Agency # **810664** Automated Metering System

Section 2 Describe the impact of this project upon the operating budget.

Reduction of meter reading workforce.
Increased cash flow due to more frequent billing.
Increased bill printing and mailing costs
Increased clerical costs
Increased payment processing costs.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The project would provide the Utility with the following benefits:
The ability to do monthly billing.
The ability to implement a water conservation (inclining block) rate structure and receive PSCW approval of such.
The pulse style meter used may be discontinued by the manufacturer; we are currently sole sourced in our meter purchases.

**2012
Capital Budget
Project Request Form**

Project Title: **Booster Station 106 - Rebuild**

Agency Name: Water Utility
Project No: 18

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? **Yes**

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget, as this is a replacement project. Operation costs may go down due to improved equipment efficiencies.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)? Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The Rebuilt Booster Pump Station #106 project is necessary to bring the pump station up to current safety standards and codes, and to improve reliability of operation by the station. This facility allows the Utility to transfer water from Pressure Zone 6 to Pressure Zone 7.

**2012
Capital Budget
Project Request Form**

Project Title: Zone 11 - Blackhawk Elevated Storage

Agency Name: Water Utility
Project No: 19

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? Yes

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget. Once the reservoir is in operation, we anticipate an additional \$10,000 per year in operating expenses.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The Blackhawk Elevated Reservoir project will provide the planned water storage capacity to Pressure Zone 11 and upgrade the service from pumped to gravity. This project will provide reliable service and minimum fire flow to Pressure Zone 11. This project is identified in the Master Plan.

**2012
Capital Budget
Project Request Form**

Project Title: Misc. Pump Station/PRV/Facility Projs.

Agency Name: Water Utility
Project No: 20

Agency Number: 64
Category: 3 & 4

Section 1

Is this the project's first year? No

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years: Ongoing

Fund # EW01 Water Utility h20
Agency # 810458 Misc Water Utility Capita

Section 2 Describe the impact of this project upon the operating budget.

Anticipated improvement in efficiency and operation that has the potential to reduce costs.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

All of the recommended projects will improve system reliability, redundancy and efficiency. This will maintain or improve the level of service to Utility customers and provide necessary emergency supply and fire fighting capability.

**2012
Capital Budget
Project Request Form**

Project Title: **Booster Pump Station 129 Reconstruction**

Agency Name: Water Utility
Project No: 21

Agency Number: 64
Category: 4

Section 1

Is this the project's first year? **Yes**

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

This project will replace the temporary pump station constructed on the Well #29 site back in 1990. The operation will provide supply and fire flow capability to the far east side of the system. It will benefit customers through increased reliability and flexibility of operations.

**2012
Capital Budget
Project Request Form**

Project Title: Iron & Manganese Filter at Well 19

Agency Name: Water Utility
Project No: 22

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? Yes

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

This project will address the water quality issues and resulting customer complaints about colored water that exist at Well 19. The accumulation of iron and manganese solids in the system results in additional flushing being required to minimize the risk of colored water reaching customers. The project will benefit existing customers in the west campus area.

**2012
Capital Budget
Project Request Form**

Project Title: Iron & Manganese Filter at Well 30

Agency Name: Water Utility
Project No: 23

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? Yes

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

This project will address the water quality issues and resulting customer complaints about colored water that exist at Well 30. The accumulation of iron and manganese solids in the system results in additional flushing being required to minimize the risk of colored water reaching customers. A filter would improve finished water quality and reduce the need for additional flushing in the Well 30 service area.

**2012
Capital Budget
Project Request Form**

Project Title: Near West Side Water Supply Project

Agency Name: Water Utility
Project No: 24

Agency Number: 64
Category: 3

Section 1

Is this the project's first year? Yes

If yes, skip to Section 2
If no, fill in the following:

Amount spent on this project in previous years:

Fund # No Specified Fund
Agency # No Specified Agency

Section 2 Describe the impact of this project upon the operating budget.

There will be no impact on the 2012 operating budget.

Section 3 Does this project impact any results tracked by Madison Measures? If so, which measure(s)?
Please quantify the potential impacts to the extent possible.

No

Section 4 Justification. Why is this project important? What is the impact of not including it in the Budget?

The Water Master Plan has identified this well project to mitigate a supply deficiency in Pressure Zones 6 and 7. The project will provide additional water supply capacity to both Zones 6 and 7.