


Internal Monitoring Report

Policy #: EL-2G Infrastructure
Frequency: Annual

Date: March 25, 2013

I certify that the following information is true.

Signed , General Manager

Policy Language:

The General Manager shall not cause or allow conditions, procedures, or decisions that prevent the Madison Water Utility from meeting its obligation to serve current and future generations of customers within the City of Madison and its authorized service areas.

Accordingly, the General Manager shall not cause or allow conditions, procedures, or decisions that:

1. Fail to assure that required rates fund all expenditures for timely and prudent capital improvements to existing utility systems, and that those capital improvements are driven by reliability, operational or regulatory requirements, replacement of aging infrastructure, utility relocations for public works and road projects, or extension of the life of existing systems.
2. Fail to identify and plan for resource and infrastructure needs for the provision of water service to customers consistent with a reasonable planning period for that service.
3. Fail to coordinate Madison Water Utility activities and policies with the City of Madison's Comprehensive Plan and other relevant guidelines for community development.
4. Fail to consider participation with other governmental or private entities on regional major water infrastructure or water supply planning projects.

General Manager's interpretation and its justification:

This Executive Limitations policy requires that the Utility budget for, fund, prioritize, plan for, and construct the necessary system improvements to replace and sustain the Utility infrastructure for current and future generations. This policy recognizes that any and all long term planning shall be consistent with and comply with any and all City and regional plans. The Utility has the responsibility to establish, manage, and plan for the necessary water rates to fund all expenditures to meet identified capital and operational requirements. The Utility shall administer and conduct long term facility and system wide comprehensive planning to identify system needs and funding priorities. The Utility shall also maintain routine regular condition assessments of all facilities to allow for the planned upgrade and replacement of facilities to assure the long term capacity of the system to meet established levels of service. The Board has identified four specific areas: financial planning, asset management, long term planning and City and Regional planning as key components of this policy.

Data directly addressing the General Manager's interpretation:

1. *Assure that required rates fund the full cost of utility system capital improvements, and that those capital improvements are prioritized by reliability, operational or regulatory requirements, replacement of aging infrastructure, utility relocations for public works and road projects, or extension of the life of existing systems.*

Madison Water Utility develops an annual capital budget based on the Utility's Water Master Plan, Infrastructure Management Plan, and planned maintenance of the system. Based on the needs of the system, identified deficiencies, and planned replacements, projects are prioritized, budgeted, and scheduled.

As a part of the 2005 Infrastructure Management Plan every facility in the system was surveyed and its condition assessed and rated. Piping system condition was determined by computer modeling, performance history, age, size, and leak records. Recommendations for upgrades and renewals were made and are being implemented as a part of the Utility's Capital Improvement Program (CIP). Planning level CIP Budget projections are made for 5 to 10 years into the future. In June and July each year, the next year's capital budget is refined based on need, current conditions, public feedback, and staff availability. The proposed capital budget is submitted to the Mayor and the Common Council for approval.

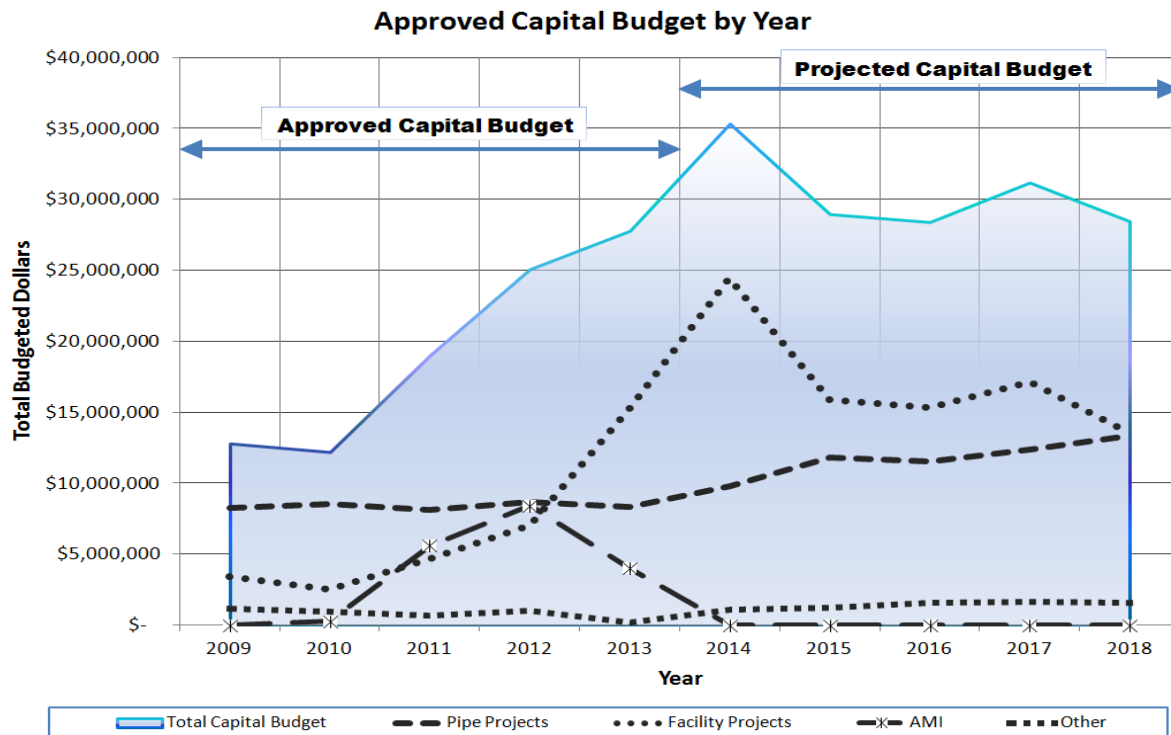
The East Side Water Supply project updated the CIP for the water service area of the City east of the Yahara River including the north side and the southeast corner of the City. Updating the CIP for the balance of the system is budgeted to start in 2013. An update of the 2005 Infrastructure Management Plan has also been budgeted to start in 2013 and is scheduled to be completed in 2014.

A copy of the approved 2013 Capital Budget is attached for information and use. The 2013 capital budget indicates authorized projects for 2013 and provides projections to the year 2018. A graph of the approved capital budget from 2009 to 2013 and a graph of the projections to the year 2018 is included below. The graph shows the total capital budget by year and also the breakdown by 1) pipe projects; 2) facility projects; 3) AMI; and 4) other.

The graph indicates a steady increase in the capital budget to the year 2013. There is a significant increase in the projected budget in 2014 due to a backlog of projects resulting from the implementation of the AMI project. For the upcoming 2014 capital budget, this peak will be reduced to less than \$25 million to be in line with bonding, staff, and planning capacities. As we move forward, the projected annual capital budget will be in the \$22 to \$25 million range.

The graph below illustrates the Utility dedication to increasing spending on pipeline and facility replacement and upgrades. A steady increase in pipeline budget throughout the projected planning period indicates an increase from just over \$8 million to over \$13 million per year in the 10 year period. Facility spending is also showing a significant upward trend, moving from \$4 million to over \$15 million per year.

Capital budget projects currently underway for 2013 include over 8 miles of water main replacement, upgrade of the pump station at Well 20, addition of a generator at Well 26, reconstruction of Booster Station 106, addition of an air stripper at Well 15, reconstruction and addition of filters at Well 7, and drilling new Well 31.



To manage rates and ensure that the rate structure will cover anticipated capital expenditures, the Utility has developed and uses a financial planning model to evaluate and project funding needed. Through the use of this model, bond sales are planned and rate increases are developed.

I report compliance.

2. *Identify and plan for resource and infrastructure needs for the provision of water service to customers consistent with a reasonable planning period for that service.*

A Water Master Plan has been used by Madison Water Utility for long term system planning since 1964. The plan is routinely updated every 5 to 8 years and outlines the needed improvements to facilities and the piping systems. The latest version of the Master Plan was developed from 2004 to 2006 and approved by the Water Utility Board in December 2006. During 2012 the area east of the Yahara River including the north side and the southeast corner of the City, was evaluated for long term water demand needs. This project was titled the “East Side Water Supply Project”. The balance of the system is budgeted to be evaluated and updated beginning in 2013 with a projected completion date of 2014. These two reports will constitute the Utility’s updated Water Master Plan.

An Infrastructure Management Plan for the Madison water system was developed and approved by the Water Utility Board in November 2005. The plan assessed the condition of system facilities and piping systems and established a replacement and renewal schedule complete with projected budgets. An update of the Infrastructure Management Plan is budgeted to start in 2013 and should be completed by 2014.

Since completion of the 2005 Infrastructure Management Plan, the pipe replacement budget has increased by over 100% and projects have been completed to upgrade existing facilities. As noted in the Capital Budget 10 year plot included above, the replacement piping budget continues to grow every year. Work on wells, pump stations, and reservoirs is starting to ramp up and will continue to do so over the next 5 to 8 years. Routine inspections and facility assessments are continuing and work is planned and prioritized as recommended by the inspections.

I report compliance.

3. *Coordinate Madison Water Utility activities and policies with the City of Madison's Comprehensive Plan and other relevant guidelines for community development.*

Madison Water Utility works closely with City Planning in the long term planning process for the Utility. Since 1964 the Utility has used a Water Master Plan to guide the development and expansion of the system. The Master Plan is updated every 5 to 10 years to bring it into conformance with current development conditions. The most recent version of the Water Master Plan was completed and approved in 2006. Population estimates, development patterns and neighborhood plans were all drawn from the City of Madison Planning Department's Comprehensive Plan. Utility staff rely on the Planning Department to revise and update the City Comprehensive Plan with any updates to community development guidelines, changes in Zoning codes and revisions to economic development projections within the planning area.

I report compliance.

4. *Participate with other governmental or private entities on regional major water infrastructure or water supply planning projects.*

No major water infrastructure or water supply planning projects are currently under way. Madison Water Utility participates in regional water groups as they come up and is an advocate of regional planning. The Utility has facilitated preliminary discussions within Dane County regarding regional groundwater management. Utility employees participate on water policy committees facilitated by Wisconsin Water Association.

I report compliance.

Attachments:

2013 Capital Budget