


Agenda Report Reviewed by:  
City Manager: 

CITY OF SEBASTOPOL  
CITY COUNCIL  
AGENDA ITEM

Meeting Date: July 6, 2021  
To: Honorable Mayor and City Councilmembers  
From: Public Works Superintendent, Dante Del Prete  
Subject: Discussion of Survey for Cellular Communication Water Meters  
Recommendation: That the Sebastopol City Council Discuss and consider a request for a survey of all water customers regarding their interest in utilizing proven cellular technology to report individual water use data  
Funding: Currently Budgeted:  Yes  No  N/A

Account Code/Costs authorized in City Approved Budget (if applicable) AK (verified by Administrative Services Department)

INTRODUCTION/PURPOSE:

Discussion and Consideration of a request for a survey of all water customers to be a representative tally of desires of the Sebastopol residents. This request, if approved would, initiate a survey of customers to see if they are supportive of using cellular technology to report their water usage with the City’s Billing Department as well as be notified within 24 hours of a leak at their service connection.

BACKGROUND:

City staff regularly receives requests for water usage data from customers who are trying to conserve water and save on water bills. With the current and persistent drought conditions, responsible water customers are interested in a greater level of information than our utility billing can currently provide. The city is presently on a bi-monthly water billing cycle. This means that every water meter box is opened, and each water meter is physically read for half of the city each month. Unfortunately, this equates to consumption data information only being updated every two months for each billing account. Our current water consumption bills are not providing the information customers need to monitor their water usage effectively and could potentially allow a water service leak to go undetected and unrepaired for up to two full months. Also, because the city currently reads and bills in hundred cubic feet (CCF) instead of gallons, customers have a difficult time translating their water usage into the traditional measurement of gallons used. One unit of water does not register on meter until a full 748 gallons of water goes through their meter.

DISCUSSION:

Understanding that there have been individuals with significant concerns regarding radio transmitting meter systems in the past that would have required signal repeaters placed throughout neighborhoods, city staff believes a cellular meter reading solution would provide an excellent tool to provide both the City and its customers with timely usage information and alerts to potential leak situations.

This solution utilizes the public cellular network and requires no proprietary gateways to operate, eliminating infrastructure requirements compared to a traditional fixed network. These cellular endpoints securely transmit metering data in an encrypted format over a private network.

By collecting water usage data four times per day”), city staff will be able to identify leaks and faulty meters much sooner and will also be able to better identify unaccounted for water. Also, because the need for manual readings will be basically eliminated, Public Works personnel can be redirected onto other projects.

AMI (Advanced Metering Interface) cellular meter technology has been successfully implemented in many other municipalities including Alameda County, Suisun City, City of Merced, City of Patterson, City of Ripon, NorthStar CSD, Yuba City and several more with many proven benefits. Also, Sebastopol has already purchased and implemented the Badger Meter Software Program that is ready to interface with this data collection technology.

Specifically, if approved, an AMI (Advanced Metering Interface) cellular upgrade would:

- o Replace approximately 1,500 of Sebastopol's existing water meters (those older than 11 years old) with new meters and cellular transmitters to increase meter accuracy
- o Install a cellular transmitter on all meters less than 11 years old
- o Provides the infrastructure for the Public Works Department to achieve its goal of efficiency and best environmental practices that support programs focused on reducing the consumption of natural resources. These include:
  - o significantly enhancing service to water customers, including faster response and more efficient customer service, as well as on-demand move-in / move-out remote meter reads
  - o allows city staff to accurately report individual and city-wide water usage and configures alerts to potential infrastructure or residential issues (i.e. leaks)
  - o simplify the billing process
- o The AMI (Advanced Metering Interface) system offers a secure, web and mobile Consumer Portal for water customers that has timely and accurate consumption information. This interface allows Customers:
  - o to control water usage, costs, and advance personal “Green” initiatives
  - o to access their own consumption information and billing data
  - o to access usage reports on yearly, monthly, and a daily basis
  - o to set budgets and water conservation goals
  - o to access management tools such as setting usage parameters, either in dollars and/or volumetric units, that trigger email/text alerts when usage exceeds custom parameters, including notifications of potential leaks
- o The Consumer Portal also
  - o correlates consumption data with meteorological local temperature and precipitation
  - o prepares reports in graphical and tabular views for reading consumption and billing approximations coinciding with date ranges selected by users
  - o compares current usage to previous periods

This upgrade has been identified as one of the elements in the current, city-wide Syserco Energy Solutions energy efficiency audit. It will be one of the items brought to Council for consideration to be included in the financing options that will be offset by energy cost savings and revenue recovery.

Once completed, staff will be returning to council at a future date with the results of the survey along with the presentation on the results of the City’s energy audit at which time the council will be asked to discuss and consider potentially implementing this water conservation and energy costs saving technology.

GOALS:

1.3.1, Develop programs (such as CARE) and incentives for conservation and coordinate with/promote ongoing community efforts.

5.3.3, Encourage and increase public awareness of City Policies, decisions, programs, and all public processes and meetings, by investigating effective methods of communication and obtaining feedback from the community.

PUBLIC COMMENT:

As of the writing of this staff report, the city has not received any public comment. However, staff anticipates receiving public comment from interested parties following the publication and distribution of this staff report. Such comments will be provided to the City Council as supplemental materials before or at the meeting. In addition, public comments may be offered during the public comment portion of the agenda item.

PUBLIC NOTICE:

This item was noticed in accordance with the Ralph M. Brown Act and was available for public viewing and review at least 72 hours prior to schedule meeting date.

FISCAL IMPACT:

Cost associated with this request can be accommodated within the current operational budget.

RECOMMENDATION:

Staff recommends that the City Council authorize a survey to all water customers to solicit feedback regarding the potential implementation of cellular communication water meters. This will allow for the collection of public input for future council discussion on the adoption of a cellular communication water meter program.

Attachments:

Draft Survey

# Water Meter Survey



With water conservation a top priority, the City of Sebastopol is exploring ways to give its water customers tools to gain greater control over their own usage and to be alerted to leaks in real time. Many other water providers in our region have found success with cellular water meters and an accompanying app where customers will have instant access to this information.

We are conducting a short survey of water customers to gather input on whether or not they feel that such a program would be of value.

Survey results will be shared with the City Council to help inform their decision-making process about the cellular water meter program.

Here is a link to information about the product that we are looking at:

<https://www.badgermeter.com/products/endpoints/>

Here is a link to EyeOnWater consumer app.:

<https://eyeonwater.com/dashboard/demo>

Please use the demo login information below to view the applications available tools and notifications

**Login**= demo

and

**Password** = demo

This survey will end on [INSERT DATE HERE].

**Are you in favor of the City of Sebastopol adopting a cellular water meter system?**

Yes

No

Use this space to indicate why or why not:

Use this space to ask questions or make any additional comments.

Address where Sebastopol Municipal Water Service provides your water: