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Item No.: 5.2.

BOARD AGENDA MEMORANDUM

SUBJECT:

District Untreated Surface Water Service - Consideration for Revisions to the July 1974 Rules and Regulations for the Service of Surface Water (Res. 74-28).

RECOMMENDATION:

- A. Receive information on the issues and concerns related to the District's service of untreated surface water; and
- B. Direct staff that revisions to the Rules and Regulations for the Service of Surface Water should solicit input from stakeholders, including current district surface water users, and support the proposed Principles:
 - 1. Align with current Board Policies, CEO Strategies and CEO Direction;
 - 2. Support water conservation;
 - 3. Improve administration and cost management;
 - 4. Better reflect the interruptible nature of untreated surface water service;
 - 5. When possible, facilitate conversion or convert untreated water service to recycled water service;
 - 6. Avoid duplicative water service when there is water retailer service available;
 - 7. Avoid committing supplies for fire suppression; and
 - 8. Avoid impacts to District's environmental obligations.

SUMMARY:

Since July 1, 1974, the District has offered untreated surface deliveries through Resolution No. 74-28, "Rules and Regulations for the Service of Surface Water" (Rules). Under these Rules the District currently has 99 active permits; 73 for parties who divert water from the District's large diameter, raw water pipeline system; and 26 users who divert District surface water (as opposed to their own riparian rights water) from local creeks, canals, or reservoirs. The combined water usage from these deliveries range from about 2,000-5,000 AF annually.

The District's primary purpose for providing untreated surface water to qualified users is to reduce groundwater pumping, thereby conserving water in the groundwater basins for the benefit of all users of the basins. Thus, when surface water supplies are limited, such as during the current drought, groundwater storage can be drawn upon by those who have producing wells.

District operations have changed greatly over the past 40 years since the Rules were last adopted,

and revisions to the Rules are now being considered to reflect those changes. While the District's primary objective of protecting the groundwater basins remains unchanged; it is necessary to revise the Rules to reflect the complexity of the District's untreated water operations, the impacts of urbanization, environmental considerations, and the District's role as a water wholesaler and the service to its primary customers, the water retailers. The Rules also need to reflect changes in County imported water supplies, recycled water, and water conservation.

For these reasons, and for improvement in water supply management and operations, staff recommends that the Rules be revised in ways that support the proposed Principles.

Background:

As the number of untreated surface water permits has grown by about 20% over the past 20 years, and as the operation of the untreated water system has become more complex, diversions from the system are having greater impacts on the District's ability to manage water efficiently and effectively. This has been most evident during the current drought when surface water supplies have been severely limited; during San Luis Reservoir "low point" events that can impair San Felipe Division deliveries; and during unplanned pipeline or pumping plant outages that impact deliveries to the pipeline surface water customers.

In addition, the staff time and resources required to administer the increased number of untreated water accounts is disproportionate to the contribution of untreated surface water deliveries to overall County water needs. Increasingly, the District finds itself acting in a "retailer role" through these accounts, rather than as the County's water wholesaler, impacting our ability to effectively and efficiently manage the District's water supply system.

An increased number of accounts results in increased administration costs as well. While the Water Master charge has been increased in recent years, it still does not recoup the revenue necessary to offset the costs related to managing, operating, and billing the surface water diversion accounts. The Water Master Charge pays for the costs that are specific to surface water users only, including the work to operate the surface water accounts, and maintain surface water accounts.

Delivering water to the 99 surface water customers is a fairly small part of the District's business in comparison to the District's primary role as a water wholesaler to retailers who serve approximately two million residents in the County. Of the total County pre-drought water use of about 371,000 AF per year, District untreated surface water deliveries range from about 2,000-5,000 AF annually. Untreated water deliveries currently meet approximately one percent of the municipal and industrial water demands and five percent of the agricultural water demands in Santa Clara County. For the 73 permit holders that can divert from the District's large diameter, raw water pipeline system, these deliveries provide a relatively inexpensive source of water supply at a desirable pressure range of 25 to 60 pounds per square inch.

Another 26 users have permits to divert District surface water (as opposed to their own riparian rights water) from local creeks, canals, or reservoirs. Many of these users are land owners who are able to take diversions of riparian supply as well. The in-stream diversions of District supplies can have

environmental consequences and make it more challenging, especially in dry years, for the District to manage in-stream flow requirements for fish habitat.

As a result of the drought and limited imported and local surface water supplies in 2014, the District notified the untreated surface water customers to cease diversion of surface water deliveries by May 1, 2014 unless an extension of time was issued. In February, 2015, the District notified the customers that due to continuing shortages, District surface water would not be available for diversion in 2015. These customers have the ability under the Rules to appeal curtailment of supply, and fourteen commercial and agricultural customers appealed in the spring and summer of 2015. District staff spent considerable time administering the surface water curtailments in 2014 and 2015, as well as on the curtailment appeal process in 2015. This effort diverted staff resources away from other critical drought-related activities.

Principles for Considering Changes to Rules

As staff has managed the surface water program and adhered to the Rules over the years, areas for possible revisions to the Rules have been identified. Any changes to the Rules should be driven by the following proposed Principles as listed and described below:

1. Align with current Board Policies, CEO Strategies and CEO Direction
2. Support water conservation
3. Improve administration and cost management
4. Better reflect the interruptible nature of untreated surface water service
5. When possible, facilitate conversion or convert untreated water service to recycled water service
6. Avoid duplicative water service when there is water retailer service available
7. Avoid committing supplies for fire suppression.
8. Avoid impacts to District's environmental obligations

1. Align with current Board Policies, CEO Strategies and CEO Direction

The current Board Governance Policy and CEO Strategy and CEO Directions for management of the raw water system reflect the ongoing concerns with untreated surface water diversions:

Board Ends Policy E-2. There is a reliable, clean water supply for current and future generations.

Board Objective 2.2.1. Raw water transmission and distribution assets are managed to ensure efficiency and reliability.

CEO Strategies:

S 2.2.1.1. Manage, operate and maintain raw water transmission and distribution assets to maximize reliability, to minimize life-cycle costs and to minimize impacts to the environment.

S2.2.1.3. Develop and implement updated “Rules and Regulations for Service of Surface Water.”

CEO Direction:

D2.2.1.3.a. Due to potential negative environmental and operational impacts of surface water usage, no new turnouts on District raw water transmission pipelines will be permitted unless determined by the District to have a positive impact on overall system operations or water supply reliability.

D2.2.1.3.b. Due to potential negative environmental and operational impacts of surface water usage, any expansion of surface water use at existing District raw water turnouts will not be permitted unless determined by the District to have a positive impact on overall system operations or water supply reliability.

The current Rules allow for new “Qualified Users” to divert District water from a District conduit with an approved permit. However, new turnouts have been found to have an increasingly negative impact on the District’s ability to manage its primary operations of untreated water deliveries to the District’s treatment plants and recharge facilities. Each turnout connection off of the District’s large distribution lines creates additional locations requiring maintenance. As the turnout flows are operated by the customers, the District doesn’t control their timing or flowrate, which can have increasing operational impacts.

The District has recognized these impacts in the current policy and CEO direction. Therefore, staff recommends that the Rules be modified to align with Board Governance Policy, CEO Strategy and CEO Directions.

2. Support water conservation

The current Rules do not address water conservation efforts or requirements for the several classes of customers that exist.

Supplying untreated water service for residential landscapes has proved to be a disincentive to outdoor water conservation. Over 25% of these residential landscape customers use 2 to 4 times more water than what the District’s Table of Average Uses shows they should be using. In other words, some customers are using from 7 to 13 acre-feet per acre per year when the District’s Table of Average Uses indicates that the typical use should be 3.5 acre-feet per acre per year. All District M&I surface water customers using untreated water for residential landscaping ultimately had diversions suspended in 2014. Those customers have irrigated with alternate supplies since then, or discontinued irrigation.

The District’s efforts to meter the untreated surface water accounts supports water conservation goals as well as meeting federal metering requirements. Much of the surface water delivered to these customers is sourced from the federal Central Valley Project, pursuant to the Districts’ contract with the Bureau of Reclamation, which includes metering requirements.

Given the importance of water conservation, staff recommends that proposed revisions to the Rules support water conservation.

3. Improve administration and cost management

Additional turnouts draw upon the time and resources of District's personnel who operate and maintain the raw water facilities delivering untreated water to the District's treatment plants and recharge facilities, as well as the staff that administer each customer account. As the current surface water permits do not have a term, they can be more difficult to administer due to outdated contact information and change of ownership of the properties served

Staff recommends revisions to the Rules that improve administration and cost management of the surface water program.

4. Better reflect the interruptible nature of untreated surface water service

Although the current Rules (Section 18.2) state that all water furnished is subject to "... shortage, fluctuation in flow, and interruption in service," many untreated surface water users have become highly reliant on this supply due to its low cost and convenience. Some surface water users who have groundwater wells have failed to keep their wells in operating condition. In general, the surface water customers have foregone the development of other supplies that may have been available.

The prospect of causing impacts to untreated surface water customers, and the labor-intensive, time-consuming process of implementing curtailments, has limited the District's actions to effectively and efficiently carry out our annual operations and water management efforts. As some of the surface water customers have not developed alternate supplies, curtailments of surface water deliveries may have impacts on these customers. Consideration of untreated surface water deliveries, and possible alternate supplies, or minimization of shutdown periods, has also been an issue for the planning and coordination of Water Utility capital and maintenance projects, such as the upcoming Anderson Dam seismic retrofit project, when operation of the District's untreated water system will be more constrained. In addition, planned pipeline maintenance projects can require pipeline shutdowns from 4 to 16 weeks, interrupting surface water deliveries to customers.

Staff recommends that proposed revisions to the Rules better emphasize the interruptible nature of surface water deliveries to the customers.

5. When possible, facilitate conversion or convert untreated water service to recycled water service

Since the current Rules were written over 40 years ago, they do not address and support the District's recycled water goals. Recycled water goals can be supported by requiring a conversion from untreated surface water use to recycled water when available and suitable for the proposed use. A few of the golf course irrigation customers, recognizing the interruptible nature of untreated surface water, have requested or are supporting efforts for recycled water service in the future instead of untreated surface water.

6. Avoid duplicative water service when there is water retailer service available

County urbanization has resulted in some situations where untreated surface water is delivered for municipal and industrial purposes to customers located within a retailer's service area, or to properties that are also served potable water by a retailer's distribution system. For the District to provide water service in the service area of a private utility can entail a potential legal risk (Public Utilities Code Sec. 1503); it is a situation that should be remedied in revisions to the Rules.

The current Rules do not limit the type of use allowed for surface water diversions. While the program was originally established primarily for agricultural water users, the program now includes commercial users as well as many residential M&I customers who use the untreated surface water to irrigate landscape at their homes. As those customers rely on either a well or a retailer connection for their potable needs, there is a potential health risk due to cross-connection of the supplies.

Supplying untreated surface water for residential landscape purposes generates other concerns as well. It has led to disparity in the type and cost of water service for neighboring properties within a retailer's service area.

7. Avoid committing supplies for fire suppression

During the efforts to curtail water deliveries to surface water customers due to the drought, staff discovered that some accounts have connected fire suppression systems to the District's untreated water system without the District's knowledge. As water deliveries from the District's raw water pipelines are subject to service interruption due to maintenance outages, lack of water during droughts, or emergencies (for example, as occurred with the Santa Clara Pipeline failure in August 2015), these deliveries are not suitable for fire protection. Connections of such supplies to fire hydrants and fire suppression systems could cause human safety issues and potential property loss. District staff is working with County Fire officials to address these situations.

As an interruptible supply, the District's untreated surface water is not generally suitable as a source that meets the public's health and safety needs. Staff recommends that this aspect of untreated water service should be reflected in proposed revisions to the Rules.

8. Avoid impacts to District's environmental obligations

As the surface water diversions from streams are controlled by the customers, and not District staff, it can be challenging to operate District reservoir releases to efficiently maintain necessary streamflow for recharge and the environment. District in-stream flows released to meet recharge needs and regulatory flow requirements that support fish habitat and life cycles, can be suddenly diminished by customer's surface diversions, resulting in environmental consequences.

Staff recommends that proposed revisions to the Rules support avoiding impacts to the District's environmental obligations.

Next Steps:

Staff will engage surface water customers and other stakeholders in a public input process this spring and summer. Staff will then bring proposed revised Rules, reviewed under CEQA, to the Board for approval in the fall of 2016.

FINANCIAL IMPACT:

There is no financial impact associated with this item.

CEQA:

The recommended action does not constitute a project under California Environmental Quality Act (CEQA) because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment.

ATTACHMENTS:

Attachment 1: Rules and Regulations

Attachment 2: PowerPoint

UNCLASSIFIED MANAGER:

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