BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT

375 - 11th Street, Oakland, CA 94607 Office of the Secretary: (510) 287-0440

Notice of Time and Location Change

PLANNING COMMITTEE MEETING
Tuesday, July 13, 2021
9:00 a.m.
*****Virtual*****

Notice is hereby given that the Tuesday, July 13, 2021 Planning Committee Meeting of the Board of Directors has been rescheduled from 9:15 a.m. to 9:00 a.m.

In accordance with the Governor's Executive Order N-08-21 which suspends portions of the Brown Act, **this meeting will be conducted by webinar and teleconference only.** A physical location will not be provided for this meeting.

Dated: July 8, 2021

Rischa S. Cole

Rischa S. Cole
Secretary of the District

W:\Board of Directors - Meeting Related Docs\Notices\Notices 2021\071321_planning_time and location change.docx

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BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT

375 - 11th Street, Oakland, CA 94607 Office of the Secretary: (510) 287-0440

AGENDA
Planning Committee
Tuesday, July 13, 2021
9:00 a.m.
Virtual

Location

In accordance with the Governor's Executive Order N-08-21 which suspends portions of the Brown Act, **this meeting will be conducted by webinar and teleconference only.** A physical location will not be provided for this meeting.

Committee Members: Marguerite Young {Chair}, Lesa R. McIntosh and Frank Mellon

***** Please see appendix for public participation instructions*****

PUBLIC COMMENT: The Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

DETERMINATION AND DISCUSSION:

1. Pipeline Rebuild Program Update (Yoloye)
2. Trail User Permit Review (Tognolini)
3. Research and Innovation at EBMUD (Yoloye)
4. Excessive Water Use Penalty Ordinance Amendment (Lee)

ADJOURNMENT:

Disability Notice

If you require a disability-related modification or accommodation to participate in an EBMUD public meeting, please call the Office of the Secretary (510) 287-0404. We will make reasonable arrangements to ensure accessibility. Some special equipment arrangements may require 48 hours advance notice.

Document Availability

Materials related to an item on this agenda that have been submitted to the EBMUD Board of Directors within 72 hours prior to this meeting are available for public inspection in EBMUD's Office of the Secretary at 375 11th Street, Oakland, California, during normal business hours, and can be viewed on our website at www.ebmud.com.

APPENDIX

Planning Committee Meeting
Tuesday, July 13, 2021
9:00 a.m.

EBMUD public Board meetings will be conducted via Zoom.
Board committee meetings are recorded, and live-streamed on the District's website.

Please visit this page beforehand to familiarize yourself with Zoom.
https://support.zoom.us/hc/en-us/articles/201362193-Joining-a-Meeting

Online
https://ebmud.zoom.us/j/94576194030?pwd=dWZlc3hNU3JNUVBQYmNKWjJSNVZQdz09
Webinar ID: 945 7619 4030
Passcode: 925293

By Phone
Telephone: 1 669 900 6833
Webinar ID: 945 7619 4030
Passcode: 925293
International numbers available: https://ebmud.zoom.us/u/agkOoY9Nt

Providing public comment
The EBMUD Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

If you wish to provide public comment please:

- Use the raise hand feature in Zoom to indicate you wish to make a public comment https://support.zoom.us/hc/en-us/articles/205566129-Raising-your-hand-in-a-webinar
    - If you participate by phone, press *9 to raise your hand
- When prompted by the Secretary, please state your name, affiliation if applicable, and topic
- The Secretary will call each speaker in the order received
- Comments on **non-agenda items** will be heard at the beginning of the meeting
- Comments on **agenda items** will be heard when the item is up for consideration
- Each speaker is allotted 3 minutes to speak; the Committee Chair has the discretion to amend this time based on the number of speakers
- The Secretary will keep track of time and inform each speaker when his/her allotted time has concluded

To *observe* the Planning Committee Meeting,
please visit: https://www.ebmud.com/about-us/board-directors/board-meetings/

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: July 8, 2021

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager

FROM: Olujimi O. Yoloye, Director of Engineering and Construction

SUBJECT: Pipeline Rebuild Program Update

SUMMARY

The Pipeline Rebuild Program continues to make good progress on pipeline replacements, scale-up process improvements, and improve business practices. This memorandum provides an update on Fiscal Year 2021 (FY21) accomplishments and a discussion of research and innovations underway to enhance efficiencies and cost savings and to build a more resilient water distribution system. Staff will provide the annual update on the Pipeline Rebuild Program at the July 13, 2021 Planning Committee meeting.

DISCUSSION

Pipeline Rebuild is a multi-department initiative to innovate and improve the District's distribution pipeline replacement and renewal work. Since completion of the pilot program in FY19, staff have scaled up recommendations to build a sustainable long-term pipeline replacement program. In FY21, the District added a twelfth pipeline crew and increased its pipeline replacement goal from 17.5 miles to 20 miles. Staff further refined the pipeline selection process to identify and replace the poorest performing pipes, began using ductile iron pipe for replacement projects, made advancements in researching hazard resilient materials, and successfully managed construction challenges due to the COVID-19 pandemic.

Highlights and accomplishments are summarized below.

- Replaced approximately 25 miles of pipe vs. the FY21 goal of 20 miles.
- Completed pilots to improve efficiencies with saw cutting methods, trench soils hauling, and flushing and chlorination practices of newly installed water mains.
- Prioritized selection of the poorest performing pipes to maximize the effectiveness of the pipeline replacement work utilizing a risk-based approach and integrating machine learning analytics.
- Completed a satellite leak detection pilot to assess the water loss vulnerability of distribution pipes and completed a study that documents estimated earthquake-induced likelihood of failure scores for pipelines.

- Implemented ductile iron pipe as a standard replacement material in distribution pipeline replacement projects. Choosing ductile iron pipe was a result of a three-year multi-department effort that evaluated design criteria, construction practices, and maintenance methods and determined ductile iron pipe is a reliable, robust, and resilient material.
- Continued research on new hazard-resilient materials. Planning for projects designed with earthquake resistant ductile iron pipe (ERDIP) was completed and installation is planned for FY22.
- Worked with the University of Colorado Boulder to test and evaluate an improved self-locking restraining gasket for ductile polyvinyl chloride (iPVC) pipe. This new gasket will allow for faster installation and a hazard-resilient iPVC pipe network.

Staff evaluates all completed pipeline replacement projects with performance metrics related to cost, production, community impacts, and safety. The results show clear gains in efficiency through a reduction in time and labor to produce design plans and increases in installation productivity related to improvements in design, construction staff collaboration, clustering pipeline replacement selections, use of new and improved materials, and flexible crew configurations that match the specific requirements for each project.

NEXT STEPS

In FY22, the District will maintain the goal of replacing 20 miles of pipe and increase the goal to 22.5 miles in FY23/24 and 25 miles in FY25. Staff will continue to identify and implement process improvements, pilot test innovative methods to gain further efficiencies and reduce costs, support other water loss strategies such as leak detection and pressure management, and strengthen teamwork and collaboration across departments and divisions. The District will continue to collaborate with academic institutions such as the University of Colorado Boulder and University of California Berkeley's proposed Smart Infrastructure Center to test new and improved pipeline materials.

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: July 8, 2021

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager CCC

FROM: Michael T. Tognolini, Director of Water and Natural Resources MTT

SUBJECT: Trail User Permit Review

SUMMARY

In response to a public inquiry at the March 23, 2021 Board meeting, staff conducted a review of the District's Trail Use Permit (TUP) Program that allows for public access to designated recreational trails on watershed land. Staff analyzed the necessity and function of the permit program, revenue, and administration costs, and the equity and availability of trail permits to underserved and low-income trail users. As a result of the review, staff is recommending a one-year pilot program offering free TUPs to Customer Assistance Program (CAP) participants. This item was held over from the June 8, 2021 Planning Committee meeting due to time constraints. The TUP review and proposed pilot program will be presented at the July 13, 2021 Planning Committee meeting.

DISCUSSION

The TUP program was implemented in 1973 to monitor recreational trail use on the watershed and ensure visitors follow the District's rules and regulations related to trail use. Customers who purchase a TUP, agree to follow the District's rules and regulations that are intended to protect natural resources, watershed integrity, and water quality. TUPs are also valuable during emergency response as they provide first responders with contact information that can aid in search and rescue operations.

In addition to its functional uses, the District committed in the East Bay Low Effect Habitat Conservation Plan (U.S. Fish and Wildlife Service) to administer a permit-based trail program. The District is also entrusted to protect the watershed lands for Pardee and Camanche reservoirs, and as allowed under its Federal Energy Regulatory Commission (FERC) license, the District elected to provide, through a permit-based trail program, limited revokable privilege of access to watershed lands. A modification or elimination of the TUP program would require the District to notify U.S. Fish and Wildlife Service.

TUP Cost and Revenue

Current fees for TUPs are as follows:

- Single day permit for one person, plus family members and up to three guests: $3.00
- One-year permit for one person plus family members and up to three guests: $10.00
- Three-year permit for one person plus family members and up to three guests: $20.00
- Five-year permit for one person plus family members and up to three guests: $30.00

The following table shows the annual administration cost and revenue generated by TUP sales. The administration costs do not include trail maintenance or patrol. TUP sales in 2020 saw an unprecedented increase, likely due to COVID-19.

Year	Total Annual TUP Administrative Hours	Total Annual TUP Administrative Cost	Annual TUP Sales
2020	540	$40,663	$170,965
2019	485	$36,210	$75,394
2018	497	$37,625	$79,139

TUP Program Equity

Staff reviewed the TUP database to assess the extent District trails are being used by customers from disadvantaged communities. Since data collected to date is limited to zip codes, additional data and further analysis is needed before conclusive findings can be reached.

Trail Access for CAP Participants Pilot Program

The CAP offers a direct way to extend trail access to customers from disadvantaged communities. Since CAP participation is income-based, the District can leverage the CAP enrollment process to improve TUP accessibility to eligible households. Using this approach, modifications to the existing TUP application will not be required. The pilot program would offer a one-year TUP, free of charge, to EBMUD customers enrolled in CAP. The pilot program will include monitoring criteria to help the District better understand how TUPs are utilized by CAP customers. After the pilot, the District will evaluate whether to continue or change the program to ensure District trails are equitably accessed by users from all income levels.

One-day TUP

Free, one-day TUPs are being considered as an option to expand trail access to disadvantaged communities including users who do not have an account with the District. Implementation of a free one-day TUP will require changes to the online portal. An evaluation of this concept will occur concurrently with the one-year CAP pilot.

Quick Response (QR) Codes at Staging Areas

Staff has developed a plan to place QR codes at District staging areas and trail access points. The QR code will direct visitors to the District's trail permit web page and information regarding trail permits, frequently asked questions, and online trail maps. Staff will continue to develop the trail permit web page to include customer feedback surveys.

NEXT STEPS

The District will begin to distribute applications for free TUPs to customers enrolled in CAP beginning Fiscal Year 2022 for one year. During the one-year pilot, staff will collect and review data to evaluate more substantive changes to the TUP to expand trail usage by bill- and non-bill paying customers from disadvantaged communities. These evaluations will include:

- Using census data, zip codes, and survey information to understand trail usage patterns.
- Focused outreach and advertising including possible free trail days to raise awareness.
- Explore options to reach non-bill paying low-income customers, including renters and those living outside the District's service area.
- Consider additional changes to the TUP fee structure including upgrades to the TUP online portal and evaluating the potential cost and resource impacts. A free, one-day TUP is an example of the changes to be considered under this item.

Staff will provide the Board with findings and additional recommendations in fall 2022.

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: July 8, 2021

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager

FROM: Olujimi O. Yoloye, Director of Engineering and Construction

SUBJECT: Research and Innovation at EBMUD

SUMMARY

The challenges facing the water and wastewater industry require continued investment in research and innovation. The District is a leader in the industry in large part due to its past and ongoing research and innovation efforts related to infrastructure, utility operations, environmental systems, financial planning, and community engagement. This memorandum provides an overview of current research and innovation efforts at the District, a plan to create a structured research and innovation program, and a proposal to partner with the University of California at Berkeley (UC Berkeley) on a Center for Smart Infrastructure. This item will be presented at the July 13, 2021 Planning Committee meeting.

DISCUSSION

The District has embarked on many innovation efforts and led or participated in research activities over its entire history. Most recently, the District led an effort with the American Water Works Association's (AWWA) to develop the publication "Guidance for Developing a Water Utility Innovation Program." The AWWA publication highlighted that "innovation is essential for utilities to meet increasingly stringent regulatory requirements, improve efficiency and effectiveness, reduce costs, meet increasing customer expectations and workforce needs, and attract future talent." Examples of areas where the District has innovated include the following:

- Pipeline Rebuild Program: In 2015, the District started the program to innovate and research new ways to plan, design, and renew its water distribution pipelines. Since then, pipeline replacement has increased from 10 miles per year to over 25 miles in Fiscal Year 2021, while reducing the unit cost for installation.
- Building Information Modeling (BIM): To further improve design efficiency and quality, the District is piloting BIM technologies to create 3D models of facilities, which can be used to create visualizations for better client department and community review.
- Water Loss: The District's water loss control program has guided the development of innovative products and methodologies, including satellite leak detection, hydrant-

mounted leak detection and pressure monitoring devices, and a pressure management system that generates electricity from a pressure regulating facility.

- Wastewater Renewable Energy Program: Over the past fifteen years, the District has worked with various partners, including food waste haulers, municipalities, and technology providers, to test and assess different approaches to cost-effectively treat food waste to produce biogas and renewable energy. The Main Wastewater Treatment Plant was one of the first wastewater treatment plants to be a net-energy producer.
- Wastewater Use of Surplus Biogas: The District is exploring the best use of surplus biogas and is evaluating emerging technologies, such as the production of bioplastics, energy storage, and hydrogen production.
- COVID-19 Wastewater Epidemiology: Since March 2020, the District has been supporting local, state, and national efforts to advance the use of wastewater as a tool to track COVID-19 rates in the community. The District work has been instrumental in helping leading researchers develop ground-breaking detection methods.
- Climate Change: The District has participated in studies regarding carbon sequestration via land application of biosolids, which may lead to marketing of carbon credits to potentially offset the District's greenhouse gas emissions.

In addition to internal research and innovation efforts, the District strategically participates with professional organizations, other agencies, and technology groups to have a greater impact on setting the direction of technology in the water industry and to pool funding resources. The District actively participates with AWWA, California Water Environmental Association, the Coalition of Leaders in Engineering, Asset management, and New capital delivery (CLEAN-17), and other organizations to advance research such as the Water Research Foundation.

Strategic Research and Innovation

The District's research and innovation efforts have led to many improvements. However, the District could realize even greater benefits by taking a more strategic approach with a structured program and action plan that prioritizes needs and implements efforts in a coordinated fashion. Ultimately this may be formalized into an Office of Research and Innovation, with a team of District staff to collaborate, provide leadership and support, and assist with strategies for effective deployment.

A successful program also requires partnerships and collaborations between utility owners, academia, private consultants, regulators, and information and technology experts. By bringing together parties with different expertise, an innovation ecosystem can be created that not only finds the right innovations to pilot but yields valuable results and influences market creation. The District is proposing a collaboration with UC Berkeley and other water utilities to create a Center for Smart Infrastructure, which builds on the District's tradition of forging academic partnerships.

Center for Smart Infrastructure (Center)

The Center will be an academic partnership to develop and test emerging technologies such as intelligent systems and networks, remote sensing and monitoring, and data analytics for decision-making. It will house a large-scale testing facility to develop intelligent water infrastructure system components and trial smart construction and maintenance methods using remote monitoring and robotics technologies. The Center will also have a computer simulation and data analytics facility to examine the resiliency of water networks in terms of aging, energy management, climate change and cascading failures using state-of-the art big data and artificial intelligence (AI) tools. Researchers in the Center will also investigate the potential contribution of smart roads (with intelligent underground utilities) as part of the smart city initiatives.

The first phase of the proposed Center is to work closely with the District and other utilities to create a holistic collaboration environment in the areas of: infrastructure maintenance, renewal, and replacement; water and wastewater systems operations; water supply and natural resources; emergency/community preparedness; and sustainability and resilience. The Center will be part of a collaboration at UC Berkeley among members of the Civil and Environmental Engineering Department, Pacific Earthquake Engineering Research Center, Simcenter, Lawrence Berkeley National Laboratory, Berkeley Water Center, and Global Metropolitan Studies.

The first phase of creating the Center involves developing the following:

- Large-scale pipeline testing facility
- Smart construction process testing
- Health assessment of water distribution systems including water network analysis coupled with AI as well as the use of drones and robotics
- Emergency preparedness (e.g., earthquakes and wildfires) to examine cascading failures, utility and community resilience, and communication to the community
- Implementation of smart roads
- Opportunities using renewable technologies
- Development of a sponsored undergraduate course

Subsequent phases involve engagement with other infrastructure sectors such as tunnels, roads, flood defense, and power.

FISCAL IMPACT

The total estimated cost to complete the planning and delivery of the first phase of creating the Center is $1.5 million. The District is working collaboratively with other California water utilities to develop a larger partnership to assist with funding startup costs.

NEXT STEPS

The first step in establishing the partnership between the District and UC Berkeley is to formalize an agreement that outlines specific tasks and deliverables in creating the Center. Following this, UC Berkeley will begin to develop and assemble multiple pipeline testing apparatuses as part of building their large-scale pipeline testing facility. Integral to development of this facility will be relocating an existing split-basin large-scale fault rupture testing apparatus at Cornell University to the UC Berkeley Richmond Field Station. In addition, key next steps include scheduling and holding workshops with other water utilities and UC Berkeley staff to discuss, align, and prioritize a business plan for future research and innovation, begin curriculum development for an undergraduate course in collaboration with District staff, and to develop community engagement opportunities that are consistent with the District's Diversity, Equity and Inclusion Strategic Plan.

The District is also exploring a more formalized program for evaluating, deploying, and funding research and innovation activities, and will update the Board on these efforts.

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: July 8, 2021

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager CCC

FROM: Andrew L. Lee, Manager of Customer and Community Services

SUBJECT: Excessive Water Use Penalty Ordinance Amendment

SUMMARY

The District is amending the Excessive Water Use Penalty Ordinance to conform with changes to state law and to update specific provisions. The amendment will prohibit excessive water use during Stage 2 to 4 droughts when mandatory rationing is in effect and when the District is affected by a drought emergency declared by the Governor based on local conditions. The amendment will also authorize an associated penalty, provide customers an opportunity to correct an apparent violation before a financial penalty is imposed, and revise how the fee is determined. This item will be presented at the July 13, 2021 Planning Committee meeting.

DISCUSSION

In response to the 2015 drought, the Board enacted an Excessive Water Use Penalty Ordinance (Ordinance) on April 28, 2015. The Ordinance allowed the District to levy a financial penalty for single-family residential (SFR) customers that use excessive amounts of water during Stage 3 or 4 droughts. The Ordinance was enacted to ensure adequate water supply is maintained should drought conditions worsen. The Ordinance only applies to SFR customers because this customer class uses a larger amount of water for irrigation and landscaping, which is considered discretionary and potentially wasteful during severe drought conditions. The penalty threshold was established at 120 hundred cubic feet (CCF) of potable water per bi-monthly billing cycle for Stage 3 and 80 CCF per bi-monthly billing cycle for Stage 4.

The current Ordinance also sets a penalty of two dollars for each CCF used above the threshold (either 120 or 80 CCF, depending on drought stage). The penalty is applied directly to the SFR customer's water bill, with the water bill serving as the notice of violation. Under the current Ordinance, SFR customers may appeal the penalty, and the District may grant exemptions in cases of water leaks, meter read error, or special health and safety needs. During the Stage 4 drought in 2015-2016, approximately 5,600 SFR accounts were assessed a penalty. Under the law, the District was required to release the name, address, and water usage information for violators in response to Public Records Act requests. The District received several such requests in 2015 from the media.

Need for Amendment

On August 30, 2016, the Governor signed into law SB 814, adding language to the Water Code (commencing with section 365) that prohibits "excessive water use" by SFR customers whenever mandatory rationing is in effect, or when the Governor has declared a drought emergency based on local conditions. The excessive water use prohibition also applies to customers in multi-family residences if each unit is individually metered or sub-metered by the urban retail water supplier. Each urban retail water supplier is required to define "excessive water use" within its own boundaries in terms of either gallons or CCF. The law also requires urban retail water suppliers to establish a method of identifying and discouraging such excessive water use.

The District's existing Ordinance predates SB 814 but complies with its requirements in most respects, particularly during Stages 3 and 4. However, the new Water Shortage Contingency Plan adopted by the Board on June 22, 2021 revised the District's Drought Management Program guidelines to include mandatory rationing as part of Stage 2 droughts, where before rationing at this stage was voluntary. To comply with state law, the Ordinance must be amended to define and prohibit excessive water use, and provide for an associated penalty, during Stage 2 droughts when mandatory rationing is in effect.

Under Water Code section 366, there are two options for urban water agencies to identify and discourage excessive water use: through the establishment of a rate structure including block tiers, water budgets, or rate surcharges above base rates; or through the establishment or amendment of an ordinance, rule, or tariff which defines, prohibits, and penalizes excessive water use.

RECOMMENDED AMENDMENTS

Recommended amendments to the Ordinance include incorporating Stage 2 and Governor-declared droughts based on local conditions, and revising the Ordinance to clarify that the District's legal authority to implement it derives from SB 814, which is codified at Water Code section 365 et seq. As part of this process, staff has reviewed the penalty thresholds, fee, and process and are recommending the updates below.

Authority

The Ordinance currently cites Water Code section 377 and California Government Code section 53069.4 as the source of the District's authority to prohibit and penalize excessive water use during droughts. After the Ordinance was adopted, the Legislature amended the Water Code to expressly authorize each urban retail water supplier to define, prohibit, and penalize excessive water use during certain drought conditions. Staff recommends amending the Ordinance to cite and rely on the new authority provided by Water Code sections 365-367. This would provide a clear, readily defensible source of authority for any penalties imposed. One effect of this change is that excessive water use would no longer be a misdemeanor; rather, a violation would result in an infraction or administrative civil penalty consistent with Water Code section 366.

Penalty Thresholds

The existing excessive water use thresholds are 60 CCF/monthly billing period for Stage 3 and 40 CCF/monthly billing period for Stage 4. These thresholds were set in 2015 based on an analysis of the monthly water use for all SFR customers in FY13. At that time, the 60 CCF/month threshold represented six times the average SFR water use at the District or a customer in the top 1 percent of District SFR water use. A review of 2020 billing data shows that this threshold is 6.6 times the current average SFR water use at the District. For a Stage 4 drought, the Board established 40 CCF/month as the threshold to further encourage water conservation during severe water shortage conditions. A review of 2020 billing data shows that this threshold is 4.4 times the current average SFR water use at the District.

Table 1 summarizes the current and recommended thresholds for Stages 2-4 droughts. An approximate gallons per day is also provided, although it is important to note that the Ordinance is based on the total use during a billing cycle, and the exact number of days in a customer's billing cycle might vary slightly.

Because the established Stage 3 and 4 thresholds successfully achieved and exceeded the water saving goals during the previous drought, staff is recommending the District keep the Stage 3 and 4 thresholds at their current levels. For Stage 2 droughts when mandatory rationing is in effect, staff recommends a penalty threshold of 140 CCF of potable water per bi-monthly billing cycle (equating to 70 CCF per month), or approximately 1,745 gallons per day of water use. Looking at normalized monthly data on customer water use in 2019, approximately 1.2 percent of customers had one billing period that exceeded this threshold.

Penalties	**Recommended Stage 2**	**Stage 3**	**Stage 4**
Penalty Threshold, 55 day to 68-day billing cycle	140 CCF	120 CCF	80 CCF
Penalty Threshold, 25 to 38-day billing cycle	70 CCF	60 CCF	40 CCF
Approximate gallons per day	*1,745*	*1,496*	*997*

Staff reviewed water consumption and billing data for SFR customers from 2019 and 2020. Average SFR customer water use during the summer of 2020 was approximately 292 gallons per day. Staff calculated the average water use for a SFR household that was inefficient but not excessive. Assuming a household of four people using 100 gallons per person indoor and irrigating ten zones for ten minutes each at a 10 gallon per minute flow rate every day, the household's water use would be 1,400 gallons per day. Under the recommended thresholds, this household would not be in violation during a Stage 2 drought.

Penalty

Water Code section 366 authorizes the District to impose a maximum administrative civil penalty up to $500 per CCF of excessive water use. The Ordinance's existing penalty of $2 per CCF was established in 2015 and did not include any adjustments for inflation. Recognizing the need to adjust the fee over time and respond to the specific circumstances of each drought, staff

is recommending the Ordinance be amended to remove a specific dollar amount, and instead establish a maximum penalty only at the level authorized by statute and authorize the Board to set the penalty during a given drought. The Board would have discretion to set the penalty at a different amount at each drought stage.

Governor-Declared Local Drought Emergencies

State law requires the District to have a system to discourage excessive water use any time the District is affected by a drought emergency declared by the Governor based on local conditions. If the District has already declared a Stage 2-4 drought before such a drought emergency is declared, staff recommends applying the thresholds for those drought stages; however, the Ordinance needs to address the specific scenario where the Governor has declared a local drought emergency affecting the District before the District's Board has declared a Stage 2-4 drought based on its Drought Management Program. In that event, staff is recommending the Board set the excessive water use threshold and associated penalty that are appropriate for the current conditions.

Process

Staff is recommending the Ordinance be amended to provide for a warning on the first offense. As currently written, a customer is in violation the first time their use exceeds the threshold, and a penalty is imposed on their next bill (which also serves as the notice of violation). Customers can then submit an appeal if they believe there was a meter error, they have a health or safety need for the water, or they have a leak. Staff is recommending the Ordinance be amended to treat a customer's first incident of excessive water use during a drought cycle as a non-violation. The District would provide a warning notification after the customer's first billing cycle that exceeds the penalty threshold. This "warning-first" approach is expressly authorized by Water Code section 366 and will serve the Ordinance's purposes by allowing customers to promptly learn of and address their excessive water use. The customer would be in violation of the Ordinance only if, after receiving the warning, the excessive water use reoccurs during a subsequent billing cycle during the same drought. Only after a violation would the customer become subject to financial penalties or to Public Records Act disclosure.

NEXT STEPS

Staff will provide an update on the Ordinance and recommended amendments at the August 10, 2021 Board meeting to receive additional Board input. The first reading of the amended Ordinance would then be conducted at the September 14, 2021 Board meeting, and the second reading and Board consideration of adoption is scheduled for September 28, 2021. If the Board adopts the amended Ordinance, it will become effective 30 days later.

CCC:ALL:dlb