



This meeting is not subject to Brown Act noticing requirements. The agenda is subject to change.

**Water Demand Committee Members:**

*Alvin Edwards, Chair  
Amy Anderson  
Karen Paull*

**Alternate:**

*George Riley*

**Staff Contact**

*David J. Stoldt,  
General Manager*

*Stephanie Locke,  
Water Demand  
Manager*

*Sara Reyes,  
Board Clerk*

**Mission Statement**

Sustainably manage and augment the water resources of the Monterey Peninsula to meet the needs of its residents and businesses while protecting, restoring, and enhancing its natural and human environments.

**Vision Statement**

Model ethical, responsible, and responsive governance in pursuit of our mission.

Agenda  
**Water Demand Committee  
of the Monterey Peninsula Water Management District**  
\*\*\*\*\*

Thursday, October 3, 2024 at 1:30 p.m. | *Virtual Meeting*

Join the meeting at:

<https://mpwmd-net.zoom.us/j/81932990063?pwd=RXsHognlRLNVbvJcClJnIynyQBBxUQ.1>

Or join at: <https://zoom.us/>  
Webinar ID No.: 819 3299 0063  
Webinar Password: 100324  
Participate by phone: (669) 900 - 9128

**For detailed instructions on connecting to the Zoom meeting see page 2 of this agenda.**

**Call to Order / Roll Call**

**Comments from Public** - *The public may comment on any item within the District's jurisdiction. Please limit your comments to three minutes in length.*

**Action Items** – *Public comment will be received. Please limit your comments to three (3) minutes per item.*

1. Consider Adoption of Committee Meeting Minutes from August 1, 2024
2. Review Request by Dakotah Bertsch to Reinstate Water Credit for Rainwater/Greywater Systems

*The committee will review previous Board direction regarding installation and credit for alternative source water installations*

3. Discuss and Provide Direction to Staff on Open Water Permits

*The committee will review the history and the proposed enforcement plan for older Water Permits that have not been closed out and provide direction.*

**Discussion Items** – *Public comment will be received. Please limit your comments to three (3) minutes per item.*

4. Update on 2024-2025 Water Allocation Process

**Suggest Items to be Placed on Future Agendas**

**Board's Goals and Objectives** (Online)  
<https://www.mpwmd.net/who-we-are/mission-vision-goals/bod-goals/>

## Adjournment

### Accessibility

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### Provide Public Comment at the Meeting

**Attend via Zoom:** See below "Instructions for Connecting to the **Zoom Meeting**"

#### Submission of Public Comment via E-mail

Send comments to [comments@mpwmd.net](mailto:comments@mpwmd.net) with one of the following subject lines "PUBLIC COMMENT ITEM #" (insert the item number relevant to your comment) or "PUBLIC COMMENT – ORAL COMMUNICATIONS." Staff will forward correspondence received to the Board. Correspondence is not read during public comment portion of the meeting. However, all written public comment received becomes part of the official record of the meeting and placed on the District's website as part of the agenda packet for the meeting.

#### Submission of Written Public Comment

All documents submitted by the public must have no less than one copy to be received and distributed by the **Clerk** prior to the Meeting.

#### Document Distribution

In accordance with Government Code §54957.5, any materials of public record relating to an agenda item for a meeting of the Board of Directors that are provided to a majority of the members less than 72 hours before the meeting will be made available at the **District Office, 5 Harris Court, Building G, Monterey, CA**, during normal business hours. Materials of public record that are distributed during the meeting shall be made available for public inspection at the meeting if prepared by the Board or a member of its legislative/advisory body, or the next business day after the meeting if prepared by some other person.

### Instructions for Connecting to the **Zoom Meeting**

**The public may remotely view and participate in the meeting to make public comment by computer, by phone or smart device.**

Please log on or call in as early as possible to address any technical issues that may occur and ensure you do not miss the time to speak on the desired item. Follow these instructions to log into Zoom from your computer, smart device or telephone. (Your device must have audio capability to participate).

To Join via Zoom- Teleconferencing means, please click the link below:

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<https://mpwmd-net.zoom.us/j/81932990063?pwd=RXsHognlRLNVbvJcClJnIynyQBBxUQ.1>

Or join at: <https://zoom.us/>  
Webinar ID No.: 819 3299 0063  
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Participate by phone: (669) 900 - 9128

1. Use the “raise hand” function to join the queue to speak on the current agenda item when the Chair calls the item for Public Comment.

**COMPUTER / SMART DEVICE USERS:** You can find the raise hand option under your participant name.

**TELEPHONE USERS:** The following commands can be entered using your phone’s dial pad:

- \*6 – Toggle Mute / Unmute
- \*9 – Raise Hand

2. Staff will call your name or the last four digits of your phones number when it is your time to speak.
3. You may state your name at the beginning of your remarks for the meeting minutes.
4. Speakers will have up to three (3) minutes to make their remarks. *The Chair may announce and limit time on public comment.*
5. You may log off or hang up after making your comments.

*Refer to the Meeting Rules to review the complete Rules of Procedure for MPWMD Board and Committee Meetings:*  
<https://www.mpwmd.net/who-we-are/board-of-directors/meeting-rules-of-the-mpwmd/>

**WATER DEMAND COMMITTEE**

**ITEM: ACTION ITEM**

**1. CONSIDER ADOPTION OF COMMITTEE MEETING MINUTES FROM AUGUST 1, 2024**

**Meeting Date: October 3, 2024**

**From: David J. Stoldt,  
General Manager**

**Prepared By: Sara Reyes**

**CEQA Compliance: This action does not constitute a project as defined by the California Environmental Quality Act Guidelines Section 15378.**

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**SUMMARY:** Attached as **Exhibit 1-A** are draft minutes of the August 1, 2024 committee meeting.

**RECOMMENDATION:** The Committee should adopt the minutes by motion.

**EXHIBIT**

**1-A Draft Minutes of the August 1, 2024 Committee Meeting**



## **EXHIBIT 1-A**

### **Draft Minutes Monterey Peninsula Water Management District Water Demand Committee Thursday, August 1, 2024**

#### **Call to Order / Roll Call**

Chair Edwards called the meeting to order at 1:31 p.m.

Committee members present: Alvin Edwards - Chair  
Amy Anderson  
Karen Paull

Committee members absent: None

District staff members present: David J. Stoldt, General Manager  
Stephanie Locke, Water Demand Manager

District staff members absent: Sara Reyes, Board Clerk

District Counsel Present: Fran Farina with DeLay and Laredo

Comments from the Public: Chair Edwards opened public comment; *no comments were directed to the committee.*

#### **Action Item**

##### **1. Consider Adoption of Committee Minutes from April 4, 2024**

Chair Edwards introduced the matter and opened public comment; *no comments were directed to the committee.*

A motion was made by Edwards with a second by Anderson to approve the April 4, 2024, Committee Meeting minutes. The motion passed on a roll-call vote of 2-Ayes (Anderson and Edwards), 0-Noes, and 1-Abstention (Paull).

#### **Discussion Items**

##### **2. Update on 2024 Water Allocation Process**

General Manager Stoldt provide a brief report on this item and discussed:

- Allocation Supply and Demand component
- Supply Analysis
- Demand Analysis
- Allocation Goal

Committee discussion followed. Chair Edwards requested this report be presented to the full Board at the August 19, 2024 Board meeting.

**Suggest Items to be Placed on a Future Agenda**

None

**Adjournment**

There being no further business, Chair Edwards adjourned the meeting at 2:42 p.m.

/s/ Sara Reyes

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Sara Reyes, Board Clerk to the  
*MPWMD Water Demand Committee*

Approved by the MPWMD Water Demand Committee on \_\_\_\_\_, 2024  
Received by the MPWMD Board of Director's on \_\_\_\_\_, 2024

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**ITEM: ACTION ITEM**

**2. REVIEW REQUEST BY DAKOTAH BERTSCH TO REINSTATE WATER CREDIT FOR RAINWATER/GREYWATER SYSTEMS**

<b>Meeting Date:</b>	<b>October 3, 2024</b>	<b>Budgeted:</b>	<b>N/A</b>
<b>From:</b>	<b>David Stoldt General Manager</b>	<b>Program/ Line Item No.:</b>	<b>N/A</b>
<b>Prepared By:</b>	<b>Stephanie Locke</b>	<b>Cost Estimate:</b>	<b>N/A</b>

**General Counsel Review:** N/A

**Committee Recommendation:** N/A

**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines Section 15378.

**SUMMARY:** The Board received a letter on September 9, 2024, from Dakotah Bertsch of Dakotah Bertsch Landscape Architecture, requesting the Board reinstate a Water Use Credit for installation of rainwater or greywater plumbing systems to flush toilets and/or wash laundry (**Exhibit 2-A**). Credit was discontinued at the March 21, 2022, meeting at the request of staff. The staff report from that meeting is shown as **Exhibit 2-B**.

The use of rainwater and greywater is encouraged by the District, and the District offers rebates for greywater irrigation systems and for rainwater storage. The District added a credit in 2019 for use of rainwater or greywater for toilet flushing or clothes washing in multi-family settings where there was a property manager and multiple users generating waste water. The credit was expanded to single-family residences in 2020. Staff recommended discontinuing the credit due to enforcement issues and acknowledgement that the systems could easily be switched to use potable water.

**RECOMMENDATION:** Staff recommends that no action be taken and that the committee consider supporting a new rebate for interior rainwater or greywater systems. Rebates and the resulting lower water bills over time are incentives for installing these systems. Landscapes in new construction that rely entirely on rainwater for irrigation also get an incentive by having a lower amount of potable water needed for the Water Permit. Sustainable landscaping is encouraged by the District.

**EXHIBITS**

**2-A** Letter from Dekotah Bertsch Landscape Architecture

**2-B** Staff Report from March 21, 2022



DAKOTAH BERTSCH LANDSCAPE ARCHITECTURE  
PLACE-BASED LANDSCAPES & WATER HARVESTING SYSTEMS  
www.dbladesign.com | CA LA-6218

## ➤ WATER CREDITS FOR RAINWATER & GREYWATER

Letter to the Board of Directors, MPWMD Re: Resolution 2022-08

Dakotah Bertsch, PLA  
212 Brook Ave  
Santa Cruz, CA 95062  
dak@dbladesign.com  
831-291-5253

Aug 20, 2024

**Board of Directors**  
Monterey Peninsula Water Management District  
5 Harris Court, Building G  
Monterey, CA 93940

Dear Members of the Board,

I am writing to you as a licensed Landscape Architect with extensive experience in sustainable water management, specializing in the design of rainwater and graywater systems, with numerous successfully completed projects throughout the Monterey Bay and San Francisco Bay Areas. Notably, I designed the first rainwater harvesting system in your District to receive water credits. My commitment to advancing sustainable practices motivates me to request a reconsideration of Resolution 2022-08, which currently restricts additional rainwater and graywater projects from achieving water credits in the future.

The project nearing completion at 25965 Junipero Street, Carmel, exemplifies the potential of rainwater harvesting. This system will capture rainwater from both the main house and a newly constructed ADU, storing it in an underground cistern beneath the driveway. The collected water will then be filtered and used indoors for non-potable applications including toilet flushing and clothes washing. To secure the necessary water credits, I provided detailed calculations and projections demonstrating that this system would meet the fixtures' annual demand, even in challenging dry years. This project is intended to be a model of what can be achieved through careful planning and innovative design.

It was disheartening to learn that the Board had decided to discontinue water credits for future rainwater and graywater systems before the Carmel project even commenced, making it potentially the first and last of its kind in your District. Resolution 2022-08, which amended Rule 25.5, Table 4 by removing credits for such systems, appears to have been based on various concerns as recorded in the



minutes of your March 21, 2022 meeting. I would like to address these specific concerns and propose a renewed, more nuanced approach to providing water credits for rainwater and graywater systems.

First, I would like to define rainwater and graywater, and how they are typically used, as many concerns appeared to address them collectively, and perhaps they should be considered individually.

**Rainwater** harvesting systems collect rain runoff only from roofs or other manmade, aboveground, impervious surfaces. Rainwater is a source of relatively clean water suitable for many uses. The California Plumbing Code (CPC) has a chapter dedicated to Non-potable Rainwater Catchment Systems (Chapter 16), which describes allowable uses including toilet flushing and clothes washing, as well as irrigation, fountains, and other uses. I have designed numerous rainwater harvesting systems for indoor non-potable use, such as the one in Carmel, as well as many others for irrigation. Recently, I even encountered a bottled rainwater beverage in the grocery store. Rainwater systems are still most commonly used for irrigation in California, however in many cases, indoor non-potable and even potable rainwater uses make good sense.

**Graywater** systems, on the other hand, reuse wastewater from indoor fixtures such as baths, showers, clothes washing machines, and lavatories. CPC Ch. 15 provides a framework for graywater irrigation use with minimal filtration. However, if graywater is to be used indoors for non-potable uses like toilet flushing, more intensive filtration is needed, and current Code requires the system to achieve certification under NSF 350. While I have designed numerous graywater *irrigation* systems, I have not yet designed a graywater system for indoor use. However, there are a handful of companies that provide pre-certified graywater recycling systems for indoor use.

For any type of non-potable water system, the current California Plumbing Code ensures adherence with building and safety standards that protect the inhabitants, the environment, and the municipal water supply. Rainwater and graywater systems for indoor use are required by Code to be permitted by local jurisdictions, regardless of whether water credits are granted. Now I would like to address each of the concerns from the March 21, 2022 Board Meeting:

**1. System Capacity:** *"There is a requirement that the system "capacity" must be designed to meet 100 percent of the annual demand of the plumbed fixture(s), plus three days. In a small-scale setting such as in an Accessory Dwelling Unit or Single-Family Dwelling, this may not be possible depending on the cleaning habits and number of occupant(s). If the system uses rainwater, dry years such as last year might not provide enough water to meet demand."*

While capacity may sometimes be a design constraint for smaller projects, this problem can often be solved through creative design. The collection area can be expanded by including water from multiple structures, as illustrated in the Carmel project, where *rainwater* caught from both ADU and house roofs supply toilets and laundry, even in drought years. If that approach is unfeasible, a smaller capacity system could provide water to fewer fixtures for fewer credits. Provided it can be demonstrated that the given system will supply the demand of fixtures supplied, design challenges should not preclude the awarding of water credits.

Furthermore, I would encourage a more nuanced wording of this capacity requirement. In the case of *rainwater*, the storage capacity can be smaller than the estimated annual water use of the fixtures supplied, because indoor fixtures use water throughout the year. During the rainy season, the tank can

be filled, then drawn down by use, and refilled again multiple times. Therefore, it is only necessary to size the tank to last through the dry season. For the Carmel project, I projected the cistern's performance based on historical rainfall data and indoor demand to demonstrate that the storage capacity would be sufficient.

In the case of *graywater* systems, much smaller storage tanks are required — only up to 250 gallons for residential projects, per Code. This is because *graywater* becomes anaerobic (smelly) after prolonged storage. Therefore, these systems usually do not store more than the estimated graywater production of 1-2 days, based on the number of occupants. The ability of such systems to meet the demand of the fixtures supplied, in the case of indoor non-potable *graywater* use (which, again, is currently uncommon), should be evaluated based on the balance between production versus demand on a daily basis, not on an annual basis.

Here are some rough numbers for demonstration:

- 1,000 sq. ft. of roof can catch over 7,000 gallons of rainwater with only 12" of rainfall.
- Code estimates that one person produces over 14,000 gallons of graywater per year.
- A low-flow toilet consumes around 3,000 gallons per year, if flushed 5 times per day.

**2. Backup Water Supply:** *"The Monterey County Environmental Health Bureau requires a reliable backup water supply to augment the Graywater system, if needed. The resolutions adopted by the Board specify that this should be done by adding a metered auto-fill Potable water inflow valve to the Graywater storage tank, meaning that there is no Potable water available for use at the fixture. However, if the project involves retrofitting an existing building, the Potable plumbing to the fixtures must be permanently removed and replaced with the Graywater system, requiring a plumbing permit and the potential for cross-connection issues."*

In the Carmel project example, the ADU is new construction, so installing new supply lines to fixtures was not a concern. The house was also remodeled, and replacing bathroom plumbing was no problem. Building permits were obtained, and the building inspector performed a cross-connection test as required by Code. Permitting and testing, and the presence of a backup water system, while adding complexity, should not be grounds for disallowing credits for well-executed projects otherwise approved by local jurisdictions.

**3. Permitting, Testing, and Feasibility:** *"Monterey County Environmental Health Bureau must issue a permit for a Graywater treatment system. As part of their permit process, a backflow survey is required. The Graywater plumbing system must be entirely separate from the Potable system to avoid any potential cross-contamination of the Potable supply within the home(s). It makes sense to install a separate Graywater system during construction of a new building where a building inspector can easily oversee the installation. It does not make sense to replumb an entire existing home to accommodate a Graywater system, especially when it must involve permanent removal of plumbing to toilets and clothes washers to meet the District's definition of "Permanent Abandonment of Use."*

While the permitting process for graywater systems can be rigorous, including backflow prevention and cross-connection testing, per existing Code, these requirements are manageable and necessary for ensuring safety. As with the Carmel project example, projects that involve remodeling or new construction can make re-plumbing more feasible. In other situations, some fixtures may be more accessible than others, and the feasibility should be evaluated by the designer and/or builder on a case-by-case basis. Water credits can be granted on a per-fixture basis, and it is not always necessary to replumb the entire existing home. In any case, while construction projects inevitably involve costs and

challenges, they are voluntary endeavors that should be evaluated on an individual basis rather than face blanket restrictions.

**4. Backflow Preventer Maintenance:** *“Cal-Am is requiring that a backflow preventer be installed on any property that has a Graywater system for flushing toilets or washing laundry. Backflow devices require periodic testing and maintenance and are registered with Cal-Am. Water customers must contract with a licensed professional to perform the required tests and make any necessary repairs.”*

While backflow prevention and maintenance requirements are acknowledged, these measures are standard and manageable. Water customers can be required to agree to take responsibility for these measures, but this should not preclude the awarding of credits.

**5. Metering and Monitoring:** *“If the Board were to allow a credit for a Graywater system, there must be meters on the inflow to the treatment system, outflow to the plumbing system, and a meter on the Cal-Am backup fill. The meters need to measure the amount of inflow into the treatment system, the amount of treated water outflow to the toilets/laundry, and the amount of Cal-Am makeup water that might be needed by the system. This information must be submitted to the District annually for a period of five years, which requires resources to contact the property owner and follow up.”*

Metering and reporting requirements are standard and manageable, and should not preclude the awarding of water credits. It should be noted, however, that metering the inflows of graywater or rainwater to systems would present a technical challenge, as water meters are generally not available for non-pressurized, unfiltered water in large diameter drainage pipes. However, installing meters on the Cal-Am makeup water and the system outflow is standard and will provide all the information needed. By subtracting the makeup water from the outflow, one can calculate the amount of non-potable water that has been used. Regardless, while following up on projects annually may imply a small demand on the District’s time and resources, I would submit that it is worthwhile for the water savings and to advance sustainable systems.

**6. Makeup Water Use:** *“Regular use of Potable makeup water should result in the revocation of a credit and a requirement to permit the water fixtures supplied by the Graywater system at full Capacity.”*

It is reasonable to monitor and potentially revoke credits based on consistent use of potable makeup water. However, a flexible approach that includes a warning system or capacity expansion options could better support property owners in maintaining system efficacy.

**7. Building Inspector Involvement:** *“District staff is reliant on the Jurisdiction’s Building Inspector to verify that the plumbing systems are separate and that there is no Potable plumbing to the fixtures for which credit is being given.”*

The involvement of building inspectors is standard procedure for projects of this type. Building inspectors play a crucial role in verifying system compliance with existing codes governing rainwater and graywater systems. As with all building projects where permitting is required, their involvement should not be a barrier, but rather an integral part of the process to ensure proper installation and function.

**8. Waste Removal:** *“Low flow toilets work best with some flow from showers and sinks to boost the removal of waste from the domestic line into the sewer system. By creating a separate system for supplying the toilets, the flush is not augmented with additional Graywater. This could potentially result in backups.”*

Concerns about low-flow toilets and potential backups relate specifically to *graywater* systems and should not affect *rainwater* systems at all. This potential concern has never been a problem on the dozens of graywater systems I have been involved with, and my experience indicates that this can be managed with proper design.

**9. Maintenance Commitments:** *"Graywater systems require maintenance. There is a long-term property owner commitment associated with installation of a Graywater system. Graywater systems make sense in a Multi-Family Dwelling where management is committed to maintenance and operation of the system, but may be inappropriate for single-family dwellings, especially if the originator of the Graywater system sells and a new owner is less committed to its maintenance."*

While ongoing maintenance is required, detailed operation and maintenance manuals, and owner maintenance agreements, along with deed restrictions where necessary, ensure that property owners remain committed to system upkeep. This should not preclude the granting of credits if the systems are properly maintained.

In light of these considerations, I urge the Board to reconsider the limitations imposed by Resolution 2022-08. By supporting water credits for rainwater and graywater systems, you will foster innovation and sustainability, which are crucial for meeting our long-term water conservation goals. A revised approach can incentivize water conservation while acknowledging the need for permitting where required, compliance with existing codes, and adherence to the District's specific requirements for meeting fixture demand, monitoring makeup water use, and committing to ongoing maintenance.

Additionally, extending credits to irrigation systems could further enhance water savings. As you are probably aware, landscape irrigation systems tend to consume a large percentage of municipal water, and supplying them with non-potable water can have a significant impact. *Greywater* is especially suited for irrigation, even on compact properties, due to being produced daily and requiring minimal storage.

Thank you for your time and consideration. I am available to discuss this further and provide any additional information that may assist in this evaluation.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dakotah Bertsch', written in a cursive style.

**Dakotah Bertsch, PLA**

**EXHIBIT 2-B**

**ITEM: ACTION ITEM**

**14. CONSIDER ADOPTION OF RESOLUTION 2022-08 AMENDING RULE 25.5, TABLE 4: HIGH EFFICIENCY APPLIANCE CREDITS, TO DELETE CREDIT FOR GRAYWATER/RAINWATER TOILET FLUSHING AND CLOTHES WASHING**

<b>Meeting Date:</b>	<b>March 21, 2022</b>	<b>Budgeted:</b>	<b>N/A</b>
<b>From:</b>	<b>David J. Stoldt, General Manager</b>	<b>Program/ Line Item No.:</b>	<b>N/A N/A</b>
<b>Prepared By:</b>	<b>Stephanie Locke</b>	<b>Cost Estimate:</b>	<b>N/A</b>

**Committee Review:** The Water Demand Committee unanimously recommended approval of this action at its March 3, 2022, meeting.

**General Counsel Review:** N/A

**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15378.

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**SUMMARY:** Staff asked for committee review of the water credit for installing a rainwater or Graywater plumbing system to flush toilets and/or wash laundry due to a number of complexities related to approval, installation, and operation of a system. The Technical Advisory Committee (TAC) discussed this on March 2, 2022. The TAC thought that every way to obtain credit should continue to be offered due to the lack of water availability. However, the Water Demand Committee reviewing the same topic the following day was adamant that the credit, due to the many potential problems associated with it, should be discontinued.

The Water Demand Committee recommends that the credit for installing and using a Graywater/rainwater system to flush toilets and/or wash laundry should be eliminated at this time, but the rebate for these systems should remain. The District has not permitted any of these systems for a water credit. Citing concerns about the lack of sufficient data on existing operating systems in Monterey County, as well as the potential for problems related to installation, maintenance, and enforcement, the Committee directed staff to proceed with an amendment to Table 4: High Efficiency Appliance Credits.

**RECOMMENDATION:** Staff recommends the Board approve Resolution 2022-08 amending Rule 25.5, Table 4 to eliminate the credit for installation of a rainwater/Greywater system to flush toilets or wash laundry.

**BACKGROUND:** Rule 25.5 sets forth the process for obtaining a Water Use Credit for a Permanent Abandonment of Use. The permitting of Graywater<sup>[1]</sup> reuse systems to replace the water supply for toilet flushing and washing clothes was approved by the Board in 2019 for Multi-Family Dwellings and for Single Family Dwellings in 2020. However, the realistic application of these systems is more complex than originally thought. To qualify for a credit, the system would be required to be separate from the Potable plumbing system with the only access to back-up Potable water at the system tanks where it can be

metered. Some of the challenges of a Graywater system discussed by the Water Demand Committee and TAC included:

- There is a requirement that the system “capacity” must be designed to meet 100 percent of the annual demand of the plumbed fixture(s), plus three days. In a small-scale setting such as in an Accessory Dwelling Unit or Single-Family Dwelling, this may not be possible depending on the cleaning habits and number of occupant(s). If the system uses rainwater, dry years such as last year might not provide enough water to meet demand.
- The Monterey County Environmental Health Bureau requires a reliable backup water supply to augment the Graywater system, if needed. The resolutions adopted by the Board specify that this should be done by adding a metered auto-fill Potable water inflow valve to the Graywater storage tank, meaning that there is no Potable water available for use at the fixture. However, if the project involves retrofitting an existing building, the Potable plumbing to the fixtures must be permanently removed and replaced with the Graywater system, requiring a plumbing permit and the potential for cross-connection issues.
- Monterey County Environmental Health Bureau must issue a permit for a Graywater treatment system. As part of their permit process, a backflow survey is required. The Graywater plumbing system must be entirely separate from the Potable system to avoid any potential cross-contamination of the Potable supply within the home(s). It makes sense to install a separate Graywater system during construction of a new building where a building inspector can easily oversee the installation. It does not make sense to replumb an entire existing home to accommodate a Graywater system, especially when it must involve permanent removal of plumbing to toilets and clothes washers to meet the District’s definition of “Permanent Abandonment of Use.”
- Cal-Am is requiring that a backflow preventer be installed on any property that has a Graywater system for flushing toilets or washing laundry. Backflow devices require periodic testing and maintenance and are registered with Cal-Am. Water customers must contract with a licensed professional to perform the required tests and make any necessary repairs.
- If the Board were to allow a credit for a Graywater system, there must be meters on the inflow to the treatment system, outflow to the plumbing system, and a meter on the Cal-Am backup fill. The meters need to measure the amount of inflow into the treatment system, the amount of treated water outflow to the toilets/laundry, and the amount of Cal-Am makeup water that might be needed by the system. This information must be submitted to the District annually for a period of five years, which requires resources to contact the property owner and follow up.
- Regular use of Potable makeup water should result in the revocation of a credit and a requirement to permit the water fixtures supplied by the Graywater system at full Capacity.
- District staff is reliant on the Jurisdiction’s Building Inspector to verify that the plumbing systems are separate and that there is no Potable plumbing to the fixtures for which credit is being given.
- Low flow toilets work best with some flow from showers and sinks to boost the removal of waste from the domestic line into the sewer system. By creating a separate system for

supplying the toilets, the flush is not augmented with additional Graywater. This could potentially result in backups.

- Graywater systems require maintenance. There is a long-term property owner commitment associated with installation of a Graywater system. Graywater systems make sense in a Multi-Family Dwelling where management is committed to maintenance and operation of the system, but may be inappropriate for single-family dwellings, especially if the originator of the Graywater system sells and a new owner is less committed to its maintenance.

## **EXHIBIT**

**14-A** Draft Resolution 2022-08, Amending Rule 25.5, Table 4: High Efficiency Appliance Credits to Delete Graywater and Rainwater Reuse Systems



**EXHIBIT 14-A**

**DRAFT  
RESOLUTION NO. 2022-08**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT  
AMENDING RULE 25.5, TABLE 4: HIGH EFFICIENCY APPLIANCE CREDITS  
TO DELETE GRAYWATER AND RAINWATER REUSE SYSTEMS**

**WHEREAS**, District Rule 25.5-G-4-b *Water Use Credits and Water Credits* allows changes to Table 4: High Efficiency Appliance Credits by Board resolution; and

**WHEREAS**, in 2020, the Board adopted Resolution No. 2020-01 an amendment to Table 4 to allow a high efficiency appliance credits for installation of Graywater and rainwater systems for flushing toilets and washing clothes; and

**WHEREAS**, staff has identified a number of complexities and potential issues related to approval, installation, and operation of these systems; and

**WHEREAS**, ensuring that such a system results in quantifiable and permanent water savings is problematic; and

**WHEREAS**, Table 4: High Efficiency Appliance Credits applies to Residential uses and reflects retrofits that result in permanent, quantifiable reductions in water use, and that the rainwater/Graywater systems contemplated by Board Resolution No. 2020-01 did not consider the extent of effort and other factors required to ensure permanent and quantifiable water savings.

**NOW, THEREFORE**, the Board of Directors of the Monterey Peninsula Water Management District resolves that District Rule 25.5-G-4-b, *Water Use Credits and Water Credits*, Table 4: High Efficiency Appliance Credits, shall be amended as shown in bold/italics (added text) and strikethrough (deleted text) on Attachment 1 to eliminate a Water Credit for the installation of a rainwater/Graywater systems that are used for toilet flushing and/or clothes washing in a Residential application. The amendments also include updates to definitions from adoption of Ordinance No. 189 on December 13, 2021.

**PASSED AND ADOPTED** on this XXth day of March 2022 on a motion by Director \_\_\_\_\_ with a second by Director \_\_\_\_\_, by the following vote, to wit:



AYES:

NOES:

ABSENT:

I, David J. Stoldt, Secretary to the Board of Directors of the Monterey Peninsula Water Management District, hereby certify that the foregoing is a resolution duly adopted on the XX day of March 2022.

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David J. Stoldt,  
Secretary to the Board of Directors

**TABLE 4: HIGH EFFICIENCY APPLIANCE CREDITS**

Appliance	Description	Water Use Credit in Fixture Units (FU)
High Efficiency Toilets	A toilet designed to have an average maximum flush of <del>1.3</del> <b>1.28</b> gallons <i>and that is labeled by the U.S. Environmental Protection Agency's WaterSense program.</i>	0.5 FU
Ultra High Efficiency Toilet	A toilet designed and manufactured to flush with a maximum of 0.8 gallon of water and that is labeled by the U.S. Environmental Protection Agency's WaterSense program.	1 FU
Instant-Access Hot Water System	A recirculating hot water system or other device(s) that results in hot water contact at every point of access throughout the Dwelling Unit within ten (10) seconds. Instant-Access Hot Water Systems shall be installed in each auxiliary building plumbed with hot water on a Single-Family Residential Site. There shall be no Water Use Credit for installation of Instant-Access Hot Water Systems for New Structures.	0.5 FU
High Efficiency Dishwasher	A dishwasher designed to use a maximum of <del>5.8</del> <b>3.5</b> gallons per cycle. A High Efficiency Dishwasher shall have Energy Star certification.	0.5 FU
High Efficiency Clothes Washer	A Clothes Washer with a Water Factor of <del>5.0</del> <b>4.3</b> or less <i>that has Energy Star certification.</i>	1 FU
<del>Rainwater/Graywater Toilet Flushing System for Multi-Family Dwellings</del>	<del>A rainwater or Graywater recycling storage system used to flush toilet(s). System capacity shall meet 100% projected annual demand, plus three days.</del>	<del>75% of FU</del>
<del>Rainwater/Graywater Clothes Washing System for Multi-Family Dwellings</del>	<del>A rainwater or Graywater recycling storage system used to wash clothes. System capacity shall meet 100% projected annual demand, plus three days.</del>	<del>75% of FU</del>

Table 4 amended by Resolution 2008-03 (2/28/2008); Resolution 2009-10 (7/20/2009); Ordinance No. 140 (11/16/2009); Resolution 2009-14 (12/14/2009); Ordinance No. 151 (11/19/2012); Ordinance No. 156 (11/18/2013); Resolution 2019-09 (7/15/2019); Resolution 2020-01 (1/23/2020)

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**ITEM: ACTION ITEM**

**3. DISCUSS AND PROVIDE DIRECTION TO STAFF ON OPEN WATER PERMITS**

<b>Meeting Date:</b>	<b>October 3, 2024</b>	<b>Budgeted:</b>	<b>N/A</b>
<b>From:</b>	<b>David Stoldt General Manager</b>	<b>Program/ Line Item No.:</b>	<b>N/A</b>
<b>Prepared By:</b>	<b>Stephanie Kister Campbell, Gabriela Bravo</b>	<b>Cost Estimate:</b>	<b>N/A</b>

**General Counsel Review:** N/A

**Committee Recommendation:**

**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines Section 15378.

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**SUMMARY:** As the District moves toward allocating new water supplies, the Water Demand Division (Permits and Conservation) has been reviewing its property files to locate “open” Water Permits which need to be completed or “closed”. An open permit is one that did not have a final inspection to verify compliance with a Water Permit and its conditions. While staff regularly conducts about 900 final inspections per year, it has been determined that approximately 1,500 Water Permits issued between 1993 and 2017 remain in “open” status.

Over the past 15 years, the District has invested in two large-scale database projects to handle its demand management programs. The most-recent Accela program has the capability to produce the information needed to follow up on the non-compliant permits. Using the Accela program, staff is first focusing on completing the final inspections for open permits. Following this effort, there will need to follow up on non-compliant permits.

Follow up on Water Permits issued after 2017 has been accomplished by the addition of an Administrative Assistant to the division in 2022. Prior to that, there was not sufficient staffing to make a concentrated effort to follow up on all the Water Permits issued. While many permit holders complete the final inspection when the project is complete, final inspections are also triggered when there is a new permit application, a transfer of ownership, or when a rebate application is received. As of September 16, 2024, the District has mailed 146 letters to property owners with open Water Permits to arrange for the final inspection. Staff is currently focusing efforts on “closing” Water Permits from 1993-2017 and seeks direction from the Water Demand Committee on several policy questions listed in the “Discussion” section.

Based on early responses to the letters being sent, some property owners have forgotten they had a permit or, due to a transfer of ownership, are not even aware that a remodel occurred. In most cases, the project received a passing final inspection by the jurisdiction, and the property owner or contractor did not schedule the final inspection by the District. The jurisdictions are much better about requiring a District site inspection prior to final inspection of a project today. As time has

passed, some properties with open permits have transferred ownership several times and information about the Water Permit and its requirements may not have been communicated to the current owners. Post-2000, the District started using Deed Restrictions recorded on the title to communicate Water Permit conditions.

**DISCUSSION:** Most properties (68 percent) have complied with the Water Permit requirements. Failed inspections are the result of either not installing the correct water fixtures or appliances or installing too many or too few water fixtures.

Items to discuss are:

1. **Additional fixtures found on final inspection.** To permit water fixtures installed without a permit, Rule 23 requires water from a credit, an Allocation, or an Entitlement. Otherwise, the water fixtures must be removed, since most of the Jurisdictions do not have water to allocate. Out of approximately 900 Water Permit final inspections conducted in the past year, about 150 of those failed due to additional water fixtures.

**Option 1: Consider allowing an “amnesty” period.** The Water Use Capacity of unpermitted fixtures has been accounted for in actual consumption data for many years, despite a Jurisdiction having never allocated water to such fixtures. One option to close out open water permits for such unpermitted fixtures is to offer a period of time (such as one year) to legalize these fixtures. Property owners would be required to secure authorization from the jurisdiction and the Capacity would be accounted for, but there would not be a debit to an allocation or entitlement. This amnesty process would be the least contentious and would result in the highest compliance rate.

In addition to waiving the requirement to secure water from a jurisdiction, staff requests that an administrative amendment process be allowed during the “amnesty period” to reduce enforcement efforts:

- a. When fewer water fixtures than permitted are found on a final inspection, fees for the Water Permit amendment, Deed Restriction(s), and any fees to file a Notice of Removal should be waived.
- b. Waive fees for missed inspections and reinspection.

**Option 2: Require property owner to secure water from the jurisdiction or complete available retrofits to obtain credit to offset unpermitted fixtures.** As many jurisdictions do not have water available, this option would require a jurisdiction to commit water from a future allocation or force the removal of the unpermitted water fixture(s). The District has not authorized jurisdictions to use future water supplies. Given that the District is presently embarking on an allocation of water from the Pure Water Monterey Expansion project, it may be controversial for the District to take back some allocation to clean up the open permits. Forcing the removal of unpermitted fixtures creates enforcement issues. Removal requires the fixtures be permanently removed and the wall(s)/floor(s) be finished to remove any evidence that the fixtures were installed. Because the open permits in question are older, this approach

is likely to result in unhappy homeowners.

2. **Changes in ownership since Water Permit.** Some of the properties have transferred ownership (some more than once), and the current owners feel that they would be penalized for someone else's mistake or lack of action. Staff's position is that a buyer should do "due diligence" prior to purchase, including checking for open Water Permits or uncorrected violations. District staff regularly communicates with real estate professionals and interested buyers regarding the history of a property. However, this has frequently not occurred.
3. **Next Steps: Enforcement process for non-responsive owners.** The letters being sent to current property owners require a response (schedule an inspection) by a specific date. Some property owners choose not to respond, don't receive the letter for some reason (the District uses the mailing address used for tax statements), or blatantly deny the District access to conduct a final inspection. The normal process is to follow up with a second letter indicating that a Notice of Non-Compliance will be filed and allowing some additional time to contact the District before the notice is filed with the County.

There are many Notices of Non-Compliance recorded on property titles for Water Permit violations. Some are the result of non-responsiveness to requests for an inspection. Some are the result of unpermitted water fixtures found on inspection, and some are due to non-compliance with other permit requirements. The notices that include unpermitted water fixtures also refer to fees owed for the unpermitted fixtures. All notices require compliance and payment of fees (including recording fees) to remove the deed restriction.

After the open permit effort has been completed, staff plans to address the outstanding violations noted on the deed restrictions and violations that were noticed but not recorded. These efforts would also fall into the process noted above, allowing an "amnesty" period to clear the violations. In some cases, there will be fixture violations that may require legal efforts to obtain compliance. Those issues will be the final effort to clear the permit records during this project.

**RECOMMENDATION:** Staff would like the Water Demand Committee to discuss and provide direction on the effort to complete open Water Permits and the follow up enforcement of Water Permit violations, particularly as it relates to allowing for an amnesty period to clear violations.

## **EXHIBIT**

None