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

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Water Demand Committee Members:
Alvin Edwards, Chair
Gary Hoffmann
George Riley

Alternate:
Molly Evans

Staff Contact
Stephanie Locke
Arlene Tavani

After staff reports have been distributed, if additional documents are produced by the District and provided to the Committee regarding any item on the agenda they will be made available on the District's website prior to the meeting. Documents distributed at the meeting will be made available upon request and posted to the District's website within five days following the meeting.

AGENDA
Water Demand Committee
Of the Monterey Peninsula Water Management District
****
Thursday, April 2, 2020, 3:00 pm
Meeting to be conducted by teleconference via WebEx

Instructions for Connecting to Meeting
Within 5 minutes of the meeting start time from your computer go to:
mpwmd.webex.com
under "Join a Meeting" enter the meeting number 629 211 933 hit the enter key
enter the meeting password h3BX7W2RU6X where shown, click "Join Meeting"
once in the meeting, at the bottom of the meeting box, choose "Call In"
Do not choose "Use Video System"
Click on "Start Meeting"

You will see a toll-free telephone number, access code, and attendee ID # -- use these with your phone. You will communicate by phone and view material on your screen. If you want to join by phone only (no computer) dial 877-668-4493 and use the meeting number above.

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.*

1. Consider Adoption of March 5, 2020 Committee Meeting Minutes

2. Discuss Request from City of Monterey re Allocation for 2000 and 2600 Garden Road, Monterey

3. Consider Recommendation to the Board on First Reading of Ordinance No. 185 – Amending District Rule 24 to Allow Special Fixture Unit Accounting for Second Bathrooms in Existing Dwelling Units and to Permanently Adopt Sub-Metering Requirements and Exemptions for Accessory Dwelling Units

4. Consider Recommendation to the Board to Adopt Final Report *"Supply and Demand for Water on the Monterey Peninsula"*

Discussion Items – *Public comment will be received.*

5. Suggest Items to be Placed on Future Agendas

Adjournment

Upon request, MPWMD will make a reasonable effort to provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. MPWMD will also make a reasonable effort to provide translation services upon request. Submit requests by noon on Wednesday April 1, 2020, to the Board Secretary at arlene@mpwmd.net.

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WATER DEMAND COMMITTEE

ITEM: ACTION ITEM

1. CONSIDER ADOPTION OF MARCH 5, 2020 COMMITTEE MEETING MINUTES

Meeting Date:	**April 2, 2020**	**Budgeted:**	**N/A**
From:	**David J. Stoldt, General Manager**	**Program/ Line Item No.:**	**N/A**
Prepared By:	**Arlene Tavani**	**Cost Estimate:**	**N/A**

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 15301

SUMMARY: Attached as **Exhibit 1-A**, are draft minutes of the March 5, 2020, committee meeting minutes.

RECOMMENDATION: The Water Demand Committee should review the minutes and approve them by motion.

EXHIBIT
1-A Draft minutes of March 5, 2020, committee meeting

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

EXHIBIT 1-A

DRAFT MINUTES
Water Demand Committee of the
Monterey Peninsula Water Management District
March 5, 2020

Call to Order
The meeting was called to order at 4:00 pm in the MPWMD conference room.

Committee members present:	Alvin Edwards, Chair Gary Hoffmann George Riley
Committee members absent:	None
Staff members present:	David Stoldt, General Manager Stephanie Locke, Water Demand Division Manager Arlene Tavani, Executive Assistant
Comments from the Public:	No comments.

Action Items

1. **Consider Adoption of January 16, 2020 Committee Meeting Minutes**
   On a motion by Riley and second of Hoffmann, the minutes were adopted on a vote of 2 – 1 by Riley and Edwards. Hoffmann abstained.

2. **Discuss Request from City of Monterey re Allocation for 2000 and 2600 Garden Road, Monterey**
   On a motion by Riley and second of Hoffmann, the committee voted unanimously to delay consideration of this issue until the April 2, 2020 committee meeting when additional information could be provided, including updated estimates of water needed for the affordable units, and input from the other jurisdictions regarding any construction-ready project that could benefit from the reserve allocation. The motion was approved on a vote of 3 – 0 by Riley, Hoffmann and Edwards.

   Public Comment: Kim Cole, Community Development Director for the City of Monterey, stated that if the City received the requested water, the 20% of affordable units could be incorporated into the projects. Without that water, only the market-rate units could be constructed. The City would meet its RHNA goals only if the affordable units were included. She advised that the projects have been through the City's approval process and need only architectural review, which could not be completed until a decision was made on inclusion of the affordable housing units. A one-month delay would be acceptable to allow time for the District to make a determination on distribution of water for the project. If the decision were delayed further, the projects would move forward without the affordable housing units.

Discussion Items

3. Follow-up on HEART Program

Staff explained that $60,000 of grant funds remained for distribution to disadvantaged communities. However, the State of California will no longer authorize use of the funds for direct-install projects such as installation of low-flow devices at Rippling River. The City of Monterey has proposed a stormwater project in a disadvantaged community that would qualify for grant funding. Chair Edwards requested that the issue be brought forward for consideration by the Board of Directors.

4. Discuss Timeline for Board Consideration of Update to Report: *Supply and Demand for Water on the Monterey Peninsula*

General Manager Stoldt provided information on this item. A final report would be provided at the April 2, 2020 meeting. At that time the committee could make a recommendation as to when the report should be submitted to the Board of Directors for either acceptance or approval.

5. Suggest Items to be Placed on Future Agendas

Topics suggested by committee members. (a) Discuss how water would be allocated when it becomes available. Mr. Stoldt explained that the topic should be deferred until a water supply project is under construction. (b) Discuss methods for implementation of enhanced water conservation measures for non-Cal-Am water users along the Carmel River.

Adjournment: The meeting was adjourned at 5:30 pm.

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WATER DEMAND COMMITTEE

ACTION ITEM

2. DISCUSS REQUEST FROM CITY OF MONTEREY RE ALLOCATION FOR 2000 AND 2600 GARDEN ROAD, MONTEREY

Meeting Date:	**April 2, 2020**	**Budgeted:**	**N/A**
From:	**David J. Stoldt General Manager**	**Program/ Line Item No.:**	**N/A**
Prepared By:	**David J. Stoldt**	**Cost Estimate:**	**N/A**

General Counsel Approval: N/A
Committee Recommendation: N/A
CEQA Compliance: Action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15378.

SUMMARY: At its March 5, 2020 Water Demand Committee meeting, the Committee discussed a letter dated February 18, 2020 from the City of Monterey requesting a water allocation for affordable housing projects on Garden Road. The allocation would come from the District Reserve initially, but shifted to a future District allocation for jurisdictional use based on housing needs.

The allocation would allow 31 additional 100% affordable units at 2000 Garden Road and 35 addition 100% affordable units at 2600 Garden Road.

The special request was timely because the developer is ready to finalize design and begin construction soon.

The day prior to the Committee meeting, the State Water Resources Control Board (SWRCB) submitted an email expressing its concerns (attached as **Exhibit 2-A**.) District staff had been planning to visit SWRCB staff about water for housing needs under the Cease and Desist Order (CDO) once the various jurisdictional needs are known, as an outcome of the Technical Advisory Committee process. The email simply clouds any decision to release water now, prior to having discussion with SWRCB staff once total Peninsula needs are identified.

RECOMMENDATION: The Committee should not recommend this allocation to the Board at this time and direct staff to interact with SWRCB on housing needs and the CDO.

EXHIBIT
2-A March 4, 2020 email from SWRCB

EXHIBIT 2-A

Dave Stoldt

From: Westhoff, Steven@Waterboards <Steven.Westhoff@waterboards.ca.gov>
Sent: Wednesday, March 4, 2020 5:08 PM
To: Arlene Tavani; Stephanie Locke; Dave Stoldt
Cc: dave@laredolaw.net; uslar@monterey.org; donlon@monterey.org; davi@monterey.org; cole@monterey.org; flower@monterey.org; Christopher Cook; Kathryn Horning; Ekdahl, Erik@Waterboards; Rizzardo, Jule@Waterboards; Cervantes, Roberto@Waterboards
Subject: Water Demand Committee - Action Item 2

Ms. Tavani, Ms. Locke, and Mr. Stoldt:

The Monterey Peninsula Water Management District (District) Water Demand Committee's posted agenda for March 5 (https://www.mpwmd.net/wp-content/uploads/March-5-2020-WDC-Agenda.pdf) indicates that the City of Monterey has requested an additional water allocation from the District for 2000 and 2600 Garden Road in the City of Monterey. Based on the description from City Manager Hans Uslar's February 18 letter, both projects appear to be for residential developments (affordable apartments) at current non-residential service addresses (gym and office). Mr. Uslar's letter suggests that these projects would require "additional water allocation," and Mr. Uslar has requested that the District allocate a portion of the 9 acre-feet per year that the District reserved under District Ordinance No. 168.

As both the District and the City of Monterey are aware, condition 2 of State Water Board Order WR 2009-0060 (Condition 2) prohibits California American Water Company (Cal-Am)from serving new service connections and also prohibits "increased use of water at existing service addresses resulting from a change in zoning or use." Changing the service addresses, or parcels or sites in District terminology, from current non-residential uses to residential uses would constitute a change in use under Condition 2. Condition 2 would therefore prohibit increased use of water at the service addresses. As with other projects or credits not specified in State Water Board orders, neither Ordinance No. 168's Local Water Project-related entitlement for the City of Pacific Grove nor the District reserve is exempt from Condition 2. Under Condition 2, increased use of water at the service address could not be avoided, cured, or offset an with such an entitlement or reserve. Permitting and serving the proposed projects as described in Mr. Uslar's letter could therefore lead to a violations of Condition 2, even if they would be allowed under the District's local water permitting system.

Condition 2 and other limiting conditions of the State Water Board's cease and desist order will be in effect until Cal-Am terminates unauthorized diversions from Carmel River and implements an alternative water source to meet existing and reportedly growing demands. Please feel free to contact me if you have additional questions.

Sincerely,

Steven Westhoff
Attorney, Office of Chief Counsel
State Water Resources Control Board
1001 I Street, 22nd Floor
Sacramento, CA 95814-2828

Email: Steven.Westhoff@waterboards.ca.gov
Phone: (916) 327-7295
Fax: (916) 341-5199

WATER DEMAND COMMITTEE

ITEM: ACTION ITEM

3. CONSIDER RECOMMENDATION TO THE BOARD ON FIRST READING OF ORDINANCE NO. 185 - AMENDING DISTRICT RULE 24 TO ALLOW SPECIAL FIXTURE UNIT ACCOUNTING FOR SECOND BATHROOMS IN EXISTING DWELLING UNITS AND TO PERMANENTLY ADOPT SUB-METERING REQUIREMENTS AND EXEMPTIONS FOR ACCESSORY DWELLING UNITS

Meeting Date:	**April 2, 2020**	**Budgeted:**	**N/A**
From:	**David J. Stoldt, General Manager**	**Program/ Line Item No.:**	**N/A**
Prepared By:	**Stephanie Locke**	**Cost Estimate:**	**N/A**

General Counsel Review: Completed.
CEQA Compliance: An Initial Study was prepared, filed, and circulated. The comment period ends April 4, 2020. A Negative Declaration is proposed.

SUMMARY: Rule 24-A-3, Second Bathroom Addition, was adopted to facilitate a full second Bathroom in a Single-Family Residence that has less than two full Bathrooms without requiring a debit to an Allocation, Entitlement, or credit. The protocol was predicated on the CEQA finding that the second Bathroom does not increase water use. As stated in the Ordinance No. 98 findings: "The addition of a second Bathroom to an existing residence is primarily for the purpose of convenience." To prevent the second bathroom from being added in an Accessory Dwelling Unit (ADU), the rule specifies that the second Bathroom must be added within an existing Single-Family Dwelling on a Single-Family Residential Site that existed prior to May 2001 (the date the ordinance was adopted).

An Initial Study for draft Ordinance No. 185 was prepared, filed with the County Recorder, and circulated for comment on March 16, 2020 (**Exhibit 3-A**). The Initial Study includes an environmental checklist and a copy of the ordinance, comments on potential impacts (if any), and a conclusion on the appropriate environmental documentation for consideration by the Board. The comment period runs through Friday, April 4, 2020. Staff will summarize comments in the staff report for first reading.

The following is a summary of Draft Ordinance No. 185:

1. The ordinance expands the second Bathroom protocol to all Dwelling Units that existed when the protocol was adopted in 2001. It is, however, limited to Sites that have less than four Dwelling Units to avoid apartments from using the protocol in line with the direction from the Water Demand Committee at the January meeting.

2. The second Bathroom must still be added within an existing Dwelling Unit. A second Bathroom cannot be installed to create an Accessory Dwelling Unit. If the protocol is used,

that Dwelling Unit is restricted to no more than two Bathrooms unless the second Bathroom is permitted by a debit to an Allocation, Entitlement, or offset by a credit.

3. The rule currently restricts the Site (the entire property) to no more than two Bathrooms. The amendment would allow additional Bathrooms to be added elsewhere on the Site if water from a Jurisdiction's Allocation or Entitlement (or on-Site credit) is available.

4. The ordinance permanently codifies two Rule 23 amendments made by Urgency Ordinance No. 184 in August 2019: (1) ADUs in existing structures are exempt from the requirement to sub-meter; and (2) permanent sub-metering is allowed for one newly constructed detached ADU. Sub-meters are meters in the water line between the main house and the ADU, and they are not monitored by the water supplier. In-line metering is encouraged to provide accountability for individual water use.

RECOMMENDATION: Staff recommends the Water Demand Committee recommend adoption of Ordinance No. 185 to the Board. First reading is scheduled for April 20, 2020.

EXHIBIT

3-A Ordinance 185 Initial Study and Notice of Intent

EXHIBIT 3-A

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

NOTICE OF INTENT TO ADOPT AN INITIAL STUDY AND PROPOSED NEGATIVE DECLARATION

1. **PROJECT TITLE**: Adoption of Ordinance No. 185: "MPWMD Second Bathroom and Accessory Dwelling Unit Sub-Metering Clarification Ordinance"

2. **DESCRIPTION AND LOCATION OF PROJECT**: Ordinance No. 185 (**Attachment 2**) amends the provisions of Rule 24 to allow a second Bathroom for convenience in any Dwelling Unit on Sites with less than four Dwelling Units that existed as of the date the protocol was adopted in 2001. The ordinance clarifies that the second Bathroom protocol is not allowed to be used by a new Accessory Dwelling Unit. This ordinance also permanently amends Rule 23 as adopted by Urgency Ordinance No. 184 to exempt existing Residential space or structures that can be converted to Accessory Dwelling Units from the requirement for permanent sub-metering and grandfathers existing active construction of ADUs from the requirement.

   Ordinance No. 185 applies to Sites within the boundaries of the Monterey Peninsula Water Management District (MPWMD), including the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, Seaside, portions of Monterey County (primarily Carmel Valley, Pebble Beach and the Carmel Highlands), and the Monterey Peninsula Airport District. Each of these Jurisdictions regulates land use within its individual boundaries and is responsible for CEQA review of individual projects that are proposed. The District does not regulate land use.

3. **REVIEW PERIOD**: The Review Period is March 16, 2020, through April 4, 2020.

4. **PUBLIC MEETINGS**: The first reading of the Ordinance is scheduled for public hearing on April 20, 2020. The first reading will be held at 6:00 PM at the MPWMD offices at 5 Harris Court, Bldg G (Ryan Ranch), Monterey, California.

5. **LOCATION OF DOCUMENTS**: The proposed Negative Declaration and Initial Study and copies of proposed Ordinance No. 185, are available for review at the Monterey Peninsula Water Management District office located at 5 Harris Court, Bldg. G, Monterey, CA 93940 (Ryan Ranch) and on the District's website at www.mpwmd.net under "Important

Announcements -- CEQA Notices." **The staff contact is Stephanie Locke at 831/658-5630 or Locke@mpwmd.net.**

6. **PROPOSED FINDING SUPPORTING NEGATIVE DECLARATION**: Based upon completion of an initial study, MPWMD finds that there is no substantial evidence that the project may have a significant effect on the environment.

CEQA Environmental Checklist
MPWMD ORDINANCE NO. 185

PROJECT DESCRIPTION AND BACKGROUND

Project Title:	Adoption of Ordinance No. 185: "MPWMD 2020 Second Bathroom and Accessory Dwelling Unit Sub-Metering Clarification Ordinance."
Lead agency name and address:	Monterey Peninsula Water Management District (MPWMD), P.O. Box 85, Monterey, CA 93942-0085 [Street Address: 5 Harris Court, Bldg. G, Monterey, CA 93940]
Contact person and phone number:	Stephanie Locke, 831/658-5601 or SPintar@mpwmd.net
Project Location:	Monterey Peninsula Water Management District (see **Attachment 1** map)
Project sponsor's name and address:	Monterey Peninsula Water Management District, P.O. Box 85, Monterey, CA 93942-0085 (Street address: 5 Harris Court, Bldg. G, Monterey, CA 93940)
General plan description:	Varies throughout MPWMD
Zoning:	Varies throughout MPWMD
Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation.)	Proposed Ordinance No. 185 (**Attachment 2**) This ordinance amends the provisions of MPWMD Rule 24 to allow a second Bathroom for convenience in any Dwelling Unit on Sites with less than four Dwelling Units that existed as of the date the protocol was adopted in 2001. The ordinance clarifies that the second Bathroom protocol is not allowed to be used by a new Accessory Dwelling Unit. This ordinance also permanently amends Rule 23 as adopted by Urgency Ordinance No. 184 to exempt existing Residential space or structures that can be converted to Accessory Dwelling Units from the requirement for permanent sub-metering and grandfathers existing active construction of ADUs from the requirement.
Surrounding land uses and setting; briefly describe the project's surroundings:	Land uses within the MPWMD range from urban and suburban residential and commercial areas to open space/wilderness. The MPWMD encompasses the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, Seaside, portions of Monterey County (primarily Carmel Valley, Pebble Beach and the Highway 68 corridor), and the Monterey Peninsula Airport District. Each of these jurisdictions regulates land uses within its boundaries. The MPWMD does not regulate land uses. The Monterey Peninsula is dependent on local sources of water supply, which (directly or indirectly) are dependent on local rainfall and runoff. The primary sources of supply include surface and groundwater in the Carmel River basin, and groundwater in the Seaside Basin (Attachment 3). Vegetation communities on the Monterey Peninsula include marine, estuarine, and riverine habitats; fresh emergent and saline emergent (coastal salt marsh) wetland communities; riparian communities, particularly along the Carmel River; a wetland community at the Carmel River lagoon; and upland

	vegetation communities such as coastal scrub, mixed chaparral, mixed hardwood forest, valley oak woodland, and annual grassland. These communities provide habitat for a diverse group of wildlife. The Carmel River supports various fish resources, including federally threatened steelhead fish and California red-legged frog.
Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):	None
Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?	No.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

☐	Aesthetics	☐	Agriculture and Forestry	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Geology/Soils
☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials	☐	Hydrology/Water Quality
☐	Land Use/Planning	☐	Mineral Resources	☐	Noise
☐	Population/Housing	☐	Public Services	☐	Recreation
☐	Transportation/Traffic	☐	Utilities/Service Systems	☐	Mandatory Findings of Significance
☐	Wildfire	☐	Energy	☐	Tribal Cultural Resources

EXHIBIT 3-A

DETERMINATION:

On the basis of this initial evaluation:

☒	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required

Signature: David J Stoldt	**Date:** 3.16.20
Printed Name: **David J. Stoldt, General Manager**	

CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
II. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

EXHIBIT 3-A

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii)Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
VII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

EXHIBIT 3-A

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☐	☒
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒
X. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

EXHIBIT 3-A

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
XII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒
XV. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
XVI. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

EXHIBIT 3-A

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	☐	☐	☐	☒
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k), or	☐	☐	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision © of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒
XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the waste water treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

DISCUSSION OF CHECKLIST ITEMS:
For all categories, "No Impact" was checked. Adoption of Ordinance No. 185 has no measurable physical impact on the environment, as the second Bathroom protocol applies only to existing Dwelling Units built before 2001 that have less than two Bathrooms. The previous CEQA findings noted that the second Bathroom protocol responds to modern quality-of-life standards and recognized that a second Bathroom in a home is primarily for convenience and would not result in significant water use. The addition of a second Bathroom for convenience has been allowed in the Monterey Peninsula Water Management District ("MPWMD") since 2001 and was adopted by Ordinance No. 98 on March 19, 2001.

The second Bathroom protocol has been restricted to Single Family Residences on Single Family Residential Sites. This ordinance expands the protocol to Sites with less than four Dwelling Units. At the request of the District's Water Demand Committee at its January 16, 2020 meeting, the ordinance does not allow the second Bathroom to be added in an apartment situation where there are four or more Dwelling Units. Use of the protocol is voluntary: Any Dwelling Unit installing a second Bathroom pursuant to this provision is limited to two Bathrooms unless the second Bathroom is permitted by debit to a Jurisdiction's Allocation.

This ordinance clarifies the second Bathroom allowed by this special fixture protocol is to be used only for convenience within the existing Dwelling Unit and cannot be used to support a new Accessory Dwelling Unit. Removal or retrofitting of any fixture added pursuant to the second Bathroom protocol does not result in a Water Credit.

Residential water use within the MPWMD has been continuously declining since Ordinance No. 98 (the initial second Bathroom protocol ordinance) was adopted in 2001. In Water Year 2001, average residential water use by separately metered customers in the incorporated areas was 0.17 Acre-Foot per Connection ("AFC") and unincorporated areas averaged 0.281 AFC. By Water Year 2019, consumption had declined to 0.109 AFC (incorporated areas) and 0.167 AFC (unincorporated areas). Reductions can be attributed to numerous water efficiency programs, changes in technology, and expensive water.

Ordinance No. 185 also codifies the Board's adoption of Ordinance No. 184 by urgency in August 2019. The codified action clarifies water submetering requirements for Accessory Dwelling Units ("ADUs"). The ordinance allows permanent submetering of one detached ADU on a Site and exempts from submetering ADUs located within an existing structure.

Ordinance No. 185, as well as supporting materials and documents, may be reviewed at the MPWMD offices, at the address and phone number listed above. These materials include (a) MPWMD Rules and Regulations, (b) MPWMD Ordinance No. 98, and (c) Board agenda information supporting development and adoption of Ordinance No. 98, (d) Ordinance No. 114 including CEQA evaluation. Initial Study conclusions are also based on District staffs' professional assessments, knowledge and experiences, based on data on file at the District office.

Conclusion

Based on this Initial Study, the MPWMD believes that there is an absence of substantial evidence from which a fair argument can be made that adoption of Ordinance No. 185 has measurable and meaningful actual or potential adverse environmental consequences. MPWMD believes that adoption of Ordinance No. 185 would have less than significant environmental impacts. MPWMD is aware that CEQA requires preparation of a negative declaration if there is no substantial evidence that the project may cause a significant effect on the environment (CEQA Guidelines §15063(b)(2).) For these reasons, MPWMD intends to adopt a negative declaration regarding adoption of Ordinance No. 185.

EXHIBIT 3-A

Exhibit 1

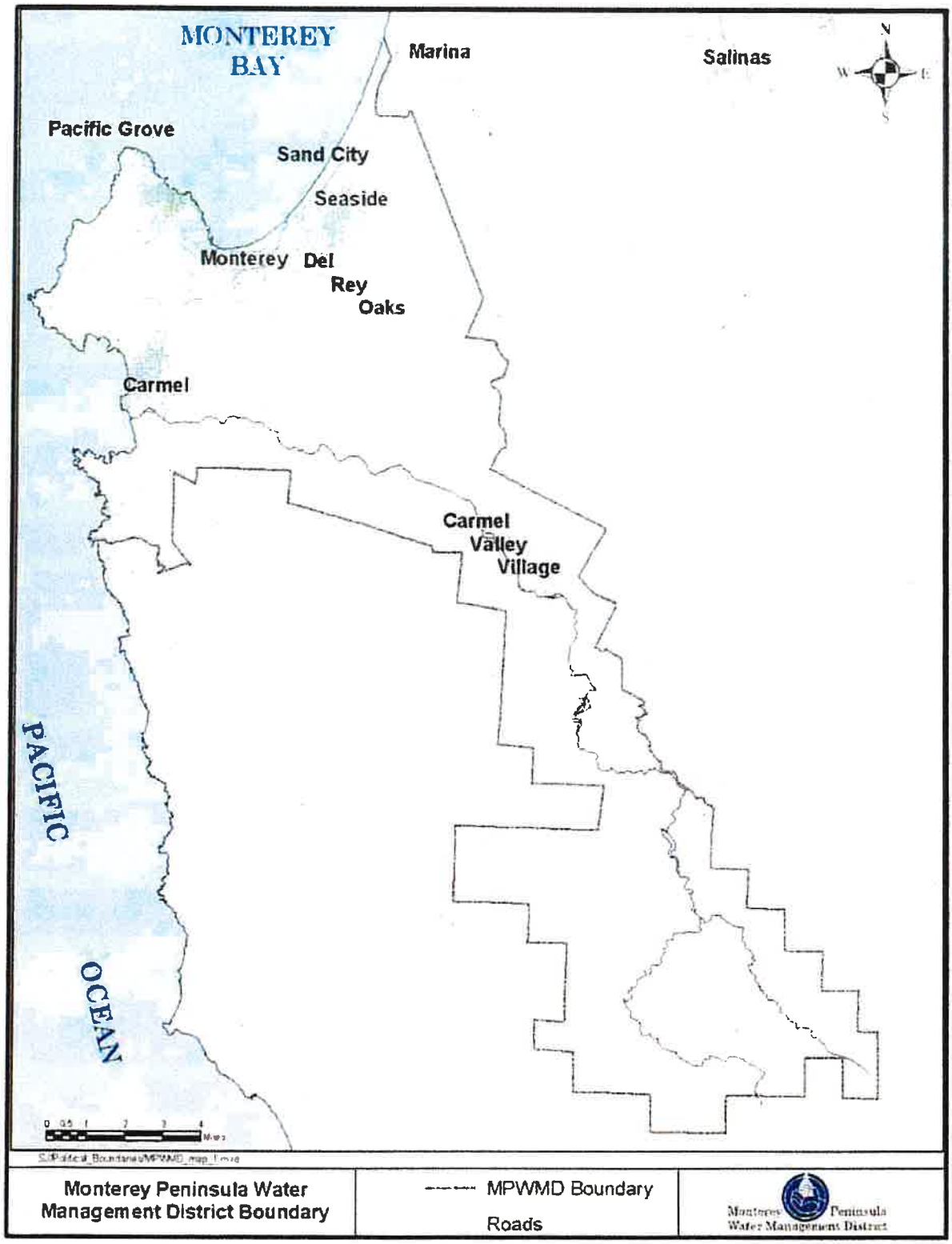

EXHIBIT 3-A

ATTACHMENT 2

DRAFT
ORDINANCE NO. 185

AN ORDINANCE OF THE MONTEREY PENINSULA WATER MANAGEMENT DISTRICT AMENDING DISTRICT RULE 24 TO ALLOW SPECIAL FIXTURE UNIT ACCOUNTING FOR SECOND BATHROOMS IN EXISTING DWELLING UNITS AND TO AMEND RULE 23 TO PERMANENTLY ADOPT SUB-METERING REQUIREMENTS AND EXEMPTIONS FOR ACCESSORY DWELLING UNITS

FINDINGS

1. The Water Management District is charged under the Monterey Peninsula Water Management District Law with the integrated management of the ground and surface water resources in the Monterey Peninsula area.

2. The Water Management District has general and specific power to cause and implement water conservation activities as set forth in Sections 325 and 328 of the Monterey Peninsula Water Management District Law.

3. This ordinance refines the definition of Dwelling Unit to more closely match the California Building Code.

4. This ordinance expands the second bathroom eligibility to Dwelling Units that existed on May 2001, the date of adoption of the second Bathroom addition.

5. This ordinance allows a second Bathroom for convenience on Sites with less than four Dwelling Units. It does not allow second Bathrooms in apartment buildings.

6. This ordinance continues to recognize the findings adopted in Ordinance No. 98 and Ordinance No. 114 that the addition of a second Bathroom within a Dwelling Unit is for convenience and has a de minimis increase in water use.

7. By eliminating the limitation that a second Bathroom addition under Rule 24-A-3 is available only to Single Family Residences on Single Family Residential Sites (as defined by MPWMD Rule 11), this ordinance will facilitate new ADUs on Sites where the second Bathroom protocol has been used. Presently, the Site is restricted to no more than two Bathrooms. The second Bathroom must be permitted by a debit to an Allocation or Entitlement before an ADU can be built.

Bathroom must be permitted by a debit to an Allocation or Entitlement before an ADU can be built.

8. The change to "Dwelling Unit" from "Single Family Dwelling Unit on a Single Family Residential Site" facilitates the ADU by allowing the second Bathroom in the original Dwelling Unit to remain without an additional permit requirement.

9. Removal or retrofitting of the any fixture added pursuant to the second Bathroom protocol does not result in a Water Credit.

10. The District requires separate Water Meters for each User to promote accountability for water use and to enforce water rationing when needed.

11. The Board has previously adopted by urgency ordinance Rule 23-A-1-i-(6) that allows permanent sub-metering of one ADU on a Site, rather than requiring a separate Water Meter by the Water Distribution System Operator. Because this Rule was adopted with urgency in Ordinance No. 184, it will expire after one year unless it is codified through a non-urgency ordinance adopted by the Board of Directors.

12. The requirement for sub-metering an ADU becomes a hardship when an ADU is created within an existing structure where plumbing is not designed to sub-meter hot and cold water. A hardship occurs when the ADU is contained within the existing space of a single-family residence or accessory structure, including, but not limited to, a studio, pool house, or other similar structure. (Finding from Urgency Ordinance No. 184)

13. Allowing a limited exemption from the sub-metering requirements for ADUs would not have an adverse effect on enforcement of water rationing. Rule 165 states: "Where two or more Households are served by a Master Meter, it shall be the responsibility of the Water Users to divide the Water Rations among the Water Users." (Finding from Urgency Ordinance No. 184)

14. Allowing this exemption from the metering requirements encourages additional affordable rental housing stock, a priority of the State of California. (Finding from Urgency Ordinance No. 184)

15. This ordinance shall be reviewed and approved under CEQA (California Environmental Quality Act) based upon a Negative Declaration.

NOW THEREFORE be it ordained as follows:

EXHIBIT 3-A

ORDINANCE

Section One: Short Title

This ordinance shall be known as the "MPWMD 2020 Second Bathroom and Accessory Dwelling Unit Sub-Metering Clarification Ordinance."

Section Two: Purpose

This ordinance amends the provisions of Rule 24 to allow a second Bathroom for convenience in any Dwelling Unit on Sites with less than four Dwelling Units that existed as of the date the protocol was adopted in 2001. The ordinance clarifies that the second Bathroom protocol is not allowed to be used by a new Accessory Dwelling Unit. This ordinance also permanently amends Rule 23 as adopted by Urgency Ordinance No. 184 to exempt existing Residential space or structures that can be converted to Accessory Dwelling Units from the requirement for permanent sub-metering and grandfathers existing active construction of ADUs from the requirement.

Ordinance No. 185 also codifies the Board's adoption of Ordinance No. 184 by urgency in August 2019. The codified action clarifies water submetering requirements for Accessory Dwelling Units ("ADUs"). The ordinance allows permanent submetering of one detached ADU on a Site and exempts from submetering ADUs located within an existing structure.

Section Three: Amendment of Rule 24: Water Permit Process

Rule 11 shall be revised as shown in bold italics (***bold italics***) and strikeout (~~strikethrough~~):

> DWELLING UNIT - "Dwelling Unit" shall mean a ***single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation,*** ~~single or multiple residences suitable for single household occupancy~~ but shall not refer to non-permanent student or transient housing, the occupancy of which is projected to average 24 months or less.

Section Four: Amendment of Rule 24-A-3, Second Bathroom Addition

Rule 24-A-3 shall be revised as shown in bold italics (***bold italics***) and strikeout (~~strikethrough~~):

3. Second Bathroom Addition

A distinctive Water Permit protocol shall apply to any Residential application that proposes to add a second Bathroom to ~~an existing Single-Family~~ ***a*** Dwelling ***Unit built before May 2001*** ~~on a single-family Residential Site~~ that, prior to the application, has less than two Bathrooms.

a. The second Bathroom protocol shall be limited, and shall apply only to the following water appliances if they are installed in a new second Bathroom as an expansion of an existing ~~Single-Family~~ Dwelling ***Unit***: (a) a single toilet, and (b) a single Standard Bathtub, or single Shower Stall, or a single standard tub-shower combination, and (c) one or two Washbasins.

b. The second Bathroom protocol shall further apply ~~on a pro rata basis~~ to any Residential application that proposes to add one or more of the ~~referenced~~ water ***fixtures*** ~~appliances~~ ***referenced above*** to an existing second Bathroom which lacks ~~that same appliance~~ ***a fixture*** within an existing ~~single-family Residential Site~~ ***Dwelling Unit*** and, prior to the application, has less than two full Bathrooms.

c. The second Bathroom protocol shall apply only to a ~~Single-Family~~ Dwelling ***Unit that has less than two Bathrooms and*** ~~on a single-family Residential Site~~ that had a final building permit as of May 16, 2001.

d. The second Bathroom protocol shall not apply to any Multi-Family Dwelling or Multi-Family Residential Site ***with four or more units*** ~~as defined by these Rules and Regulations~~.

~~e. A valid Water Use Credit for the permanent abandonment of a one Bathroom Single-Family Dwelling on a single-family Residential Site issued prior to May 16, 2001 shall be regarded as an existing Single-Family Dwelling for 120 months following demolition and shall allow the reconstruction of a single-family Dwelling with the addition of the water fixtures allowed by this provision as long as the credit is valid.~~

~~f~~***e***. Water fixtures installed pursuant to this provision shall be installed within the existing ~~Single-Family~~ Dwelling ***Unit***. ***The second Bathroom protocol shall not be used to create anew Accessory Dwelling Unit. This includes the addition of a second Bathroom elsewhere in the Dwelling Unit that***

would allow the first Bathroom to be used by an Accessory Dwelling Unit. The protocol was adopted to recognize that a second Bathroom is for convenience. It is not intended to support a new User.

~~g~~***f***. Under this second Bathroom protocol, the General Manager shall not debit the Jurisdiction's Allocation for the installation of ~~select~~ ***the*** water fixtures in the second Bathroom.

~~h~~***g***. Capacity Fees shall nonetheless be collected for the addition of fixture units in the second Bathroom.

~~i~~***h***. No ~~on-site, off-site or transfer of~~ credit shall be granted for removal or retrofit of any fixture added pursuant to this second Bathroom protocol.

~~j~~***i***. Use of the second Bathroom protocol is voluntary. Any ~~property~~ ***Dwelling Unit*** installing a second Bathroom pursuant to this provision shall be limited to two Bathrooms unless the second Bathroom is permitted by debit to a Jurisdiction's Allocation***, an Entitlement, or offset by a credit***. A Notice ***and Deed Restriction Regarding*** ~~The~~ Limitation ~~Of~~ ***on*** Use ~~O~~***o***f Water ~~O~~on ~~A~~a Property shall be recorded on the real property as a condition of the Water Permit.

~~k~~***i***. All Water Permits issued pursuant to this Rule shall include a Notice and Deed Restriction titled "Provide Public Access to Water Use Data" pursuant to Rule 23. In addition, permits utilizing the second Bathroom protocol shall authorize access to water records for the sixty (60) months prior to the date the Water Permit is issued. There shall be no additional charge for this deed restriction.

~~l~~***j***. The provisions of this second Bathroom protocol shall take precedence and supersede any contrary provision of the Water Management District Rules and Regulations.

Section Five: **Amendment of Rule 23-A-1-i-(6)**

Rule 23-A-1-(i)-(6) shall be amended as shown below, with added language as shown in ***bold italic*** type face, and deleted language shown in ~~strikeout~~ type face. The remaining provisions of Rule 23 shall remain unchanged by this ordinance. This amendment was temporarily approved by

adoption of Urgency Ordinance No. 184, the 2019 Accessory Dwelling Unit Ordinance. Adoption of this ordinance will make the changes permanent.

(6) The General Manager shall allow permanent sub-metering of all water use into one Accessory Dwelling Unit~~, including hot and cold water supply. The application for sub-metering an~~ ***An*** Accessory Dwelling Unit ***contained within the existing space of a single-family residence or accessory structure (e.g., studio, pool house, or other similar structure) shall be exempt from the sub-metering requirement. Sub-metering is, however, encouraged as a conservation tool that promotes the efficient use of water. The sub-metering requirement or sub-metering exemption*** will be considered by the General Manager when the Jurisdiction confirms there is no potential that the sub metered User could be located on a separate Site through subdivision or transfer of ownership of a portion of the Site.

Section Six: Accessory Dwelling Units Under Construction

Active Water Permits that require sub-metering of ADUs in existing structures shall be eligible for the exemption adopted by this ordinance. An amended Water Permit shall not be required; however, an amendment is required to remove the requirement from any Limitation on Use (Form 1.1) deed restriction.

Section Seven: Publication and Application

The provisions of this ordinance shall cause the republication and amendment of the permanent Rules and Regulations of the Monterey Peninsula Water Management District.

Section Eight: Effective Date and Sunset

This ordinance shall take effect at 12:01 a.m. thirty days after adoption.

This Ordinance shall not have a sunset date.

Section Nine: Severability

If any subdivision, paragraph, sentence, clause or phrase of this ordinance is, for any reason, held to be invalid or unenforceable by a court of competent jurisdiction, such invalidity shall not affect the validity or enforcement of the remaining portions of this ordinance, or of any other provisions of the Monterey Peninsula Water Management District Rules and Regulations. It is the District's

express intent that each remaining portion would have been adopted irrespective of the fact that one or more subdivisions, paragraphs, sentences, clauses, or phrases be declared invalid or unenforceable.

On motion by Director _____, and second by Director _____, the foregoing ordinance is adopted upon this ____ day of _____ 2020, by the following vote:

AYES:

NAYS:

ABSENT:

I, David J. Stoldt, Secretary to the Board of Directors of the Monterey Peninsula Water Management District, hereby certify the foregoing is a full, true and correct copy of an ordinance duly adopted on the ___ day of _____ 2020.

Witness my hand and seal of the Board of Directors this _____ day of _____ 2020.

_____

David J. Stoldt, Secretary to the Board

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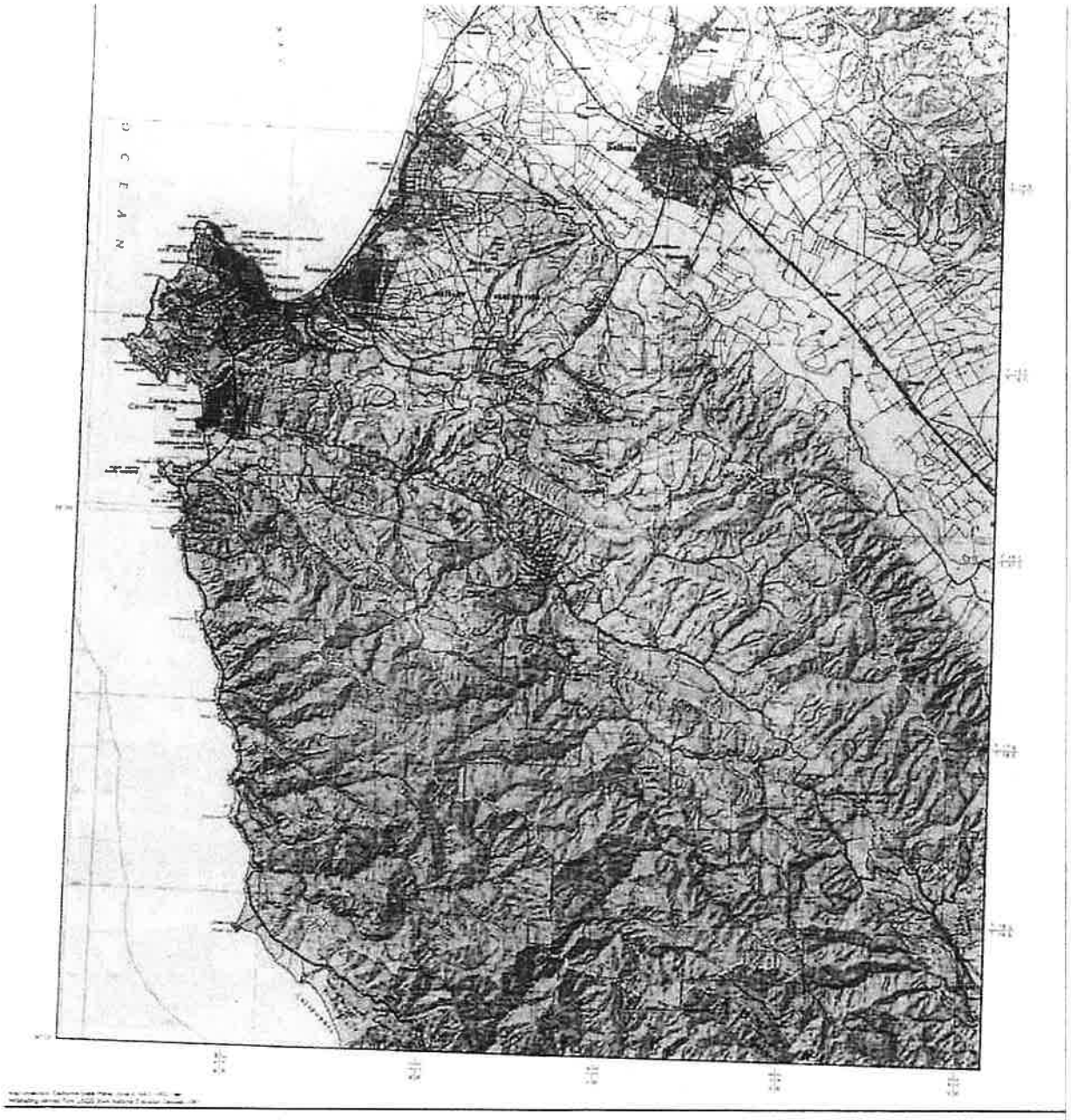
EXHIBIT 3-A

Attachment 3

Monterey Peninsula Water Management District



MAP SHOWING MPWMD BOUNDARY AND CARMEL RIVER WATERSHED BOUNDARY
2002

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MPWMD Boundary

Carmel River Watershed Boundary

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

WATER DEMAND COMMITTEE

ITEM: ACTION ITEM

4. CONSIDER RECOMMENDATION TO THE BOARD TO ADOPT FINAL REPORT *"SUPPLY AND DEMAND FOR WATER ON THE MONTEREY PENINSULA"*

Meeting Date:	**April 2, 2020**	**Budgeted:**	**N/A**
From:	**David J. Stoldt General Manager**	**Program/ Line Item No.:**	**N/A**
Prepared By:	**David J. Stoldt**	**Cost Estimate:**	**N/A**

General Counsel Approval: N/A
Committee Recommendation: N/A
CEQA Compliance: Action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15378.

SUMMARY: At its September 16, 2019 meeting, the District Board accepted a report titled *"Supply and Demand for Water on the Monterey Peninsula"*, which was Exhibit 9-A of that Board packet. The report looked at the changing nature of demand on the Monterey Peninsula, the underlying assumptions in the sizing of the water supply portfolio, and indicators of the market's ability to absorb new demand. The report was reviewed by members of the public, local organizations, and state agencies. Many comment letters argued that the findings in the report contradict those of the California Public Utilities Commission, but the letters did not provide any substantive alternate assumptions or facts.

Subsequent to the release of the initial report the 2019 water year was completed, providing an additional data point on current customer demand. The report was revised December 3, 2019 to address three items: (i) What is average current demand with the additional water year in the data? (ii) What water will be required to meet future housing needs? and (iii) What might be the market absorption of water based on an objective third-party growth forecast – the Association of Monterey Bay Area Governments (AMBAG) 2018 Growth Forecast? The revisions were presented to the District's Water Demand Committee December 17, 2019 and a revised report was distributed to the Peninsula's six city managers in January.

On January 22, 2020 Hazen & Sawyer, a consultant to Cal-Am, issued an analysis of the District's report, to which the District responded on March 6, 2020. This FINAL version of the supply and demand report responds to comments made by the public, the city managers, Hazen & Sawyer, and incorporates an additional growth forecast.

RECOMMENDATION: The Committee should recommend the Board adopt the final report, but not until the May or earliest in-person Board meeting due to the public interest in the report.

EXHIBIT
4-A Supply and Demand for Water on the Monterey Peninsula – Final

EXHIBIT 4-A

Supply and Demand for Water on the Monterey Peninsula

Prepared by David J. Stoldt, General Manager
Monterey Peninsula Water Management District
FINAL
March 13, 2020

Introduction

With the approval of the Monterey Peninsula Water Supply Project (MPWSP) in September 2018 and the continued environmental work on Pure Water Monterey (PWM) expansion as a back-up option, it is an opportune time to examine available supplies and their ability to meet current and long-term demand. This memorandum will also look at the changing nature of demand on the Monterey Peninsula, the underlying assumptions in the sizing of the water supply portfolio, and indicators of the market's ability to absorb new demand.

At its September 16, 2019 meeting, the District Board accepted a report titled *"Supply and Demand for Water on the Monterey Peninsula"*, which was Exhibit 9-A of the Board packet. The report was reviewed by members of the public, local organizations, and state agencies. While publicly vetted, only three sets of comments were received: (a) California American Water provided a comment letter October 15, 2019, and (b) The Coalition of Peninsula Businesses provided letters September 15, 2019 and September 24, 2019. All three comment letters argued that the findings in the report contradict those of the California Public Utilities Commission, but the letters did not provide any substantive alternate assumptions or facts. The District's General Manager has encouraged the parties to provide their own forecast of growth and/or market absorption of water demand, but they have failed to do so.

At the November 14, 2019 Coastal Commission hearing former Pacific Grove mayor Bill Kampe did raise two substantive issues regarding the report: (a) pre-Cease and Desist Order (CDO) market absorption of water demand may have been constrained in some jurisdictions due to a lack of water allocation, and (b) new statewide focus on housing will require water.

Additionally, subsequent to the release of the initial report the 2019 water year was completed, providing an additional data point on current customer demand. The report was revised December 3, 2019 to address three items: (i) What is average current demand with the additional water year in the data? (ii) What water will be required to meet future housing needs? And (iii) What might be the market absorption of water based on an objective third-party growth forecast – the Association of Monterey Bay Area Governments (AMBAG) 2018 Growth Forecast? The revisions were presented to the District's Water Demand Committee December 17, 2019 and a revised report was distributed to the Peninsula's six city managers in January.

On January 22, 2020 Hazen & Sawyer, a consultant to Cal-Am, issued an analysis of the District's report, to which the District responded on March 6, 2020.

This FINAL version of the supply and demand report responds to comments made by the public, the city managers, Hazen & Sawyer, and incorporates an additional growth forecast.

Supply

Available sources of supply are shown in Table 1 below and are described in the discussion that follows. Despite the California Supreme Court's decision to not hear the two petitions for writ of review, there remains the risk of additional legal challenges and not all permits have been issued for California American Water's (Cal-Am) MPWSP desalination plant. For these reasons, supply has been shown with both desalination and with PWM expansion as a back-up.

Table 1
Monterey Peninsula Available Supply
(Acre-Feet Annually)

Supply Source	w/ Desalination	w/ PWM Expansion
MPWSP Desalination Plant	6,252	0
Pure Water Monterey	3,500	3,500
PWM Expansion	0	2,250
Carmel River	3,376	3,376
Seaside Basin	774	774
Aquifer Storage & Recovery (ASR)	1,300	1,300
Sand City Desalination Plant	94	94
Total Available Supply	**15,296**	**11,294**

There also exists approximately 406 additional acre-feet of other available supplies as discussed below.

Desalination: The 6.4 million gallon per day (MGD) MPWSP desalination plant is expected to deliver 6,252 acre-feet annually (AFA).[1] It is likely to begin deliveries in late-2023, considering final permits in mid-2020, a 21-month construction period, and 6-month commissioning and start-up window.[2]

[1] CPUC Decision 18-09-017, September 13, 2018, page 70; Amended Application of California-American Water Company (U210W), Attachment H, March 14, 2016
[2] www.watersupplyproject.org/schedule

Pure Water Monterey: Monterey One Water's (M1W) project came online in February 2020 and should begin deliveries for customer service of 3,500 AFA to Cal-Am in mid-2020.

Pure Water Monterey Expansion: The expansion of Pure Water Monterey is expected to yield 2,250 AFA.[3] The source waters for the expansion are secure: In multiple presentations by the staff of Monterey One Water (M1W)[4] it has been shown that none of the source water for expansion of Pure Water Monterey is speculative, nor comes from Salinas valley sources for which M1W doesn't already have rights. In one example, source water for the expansion would come from ocean discharge from the Regional Treatment Plant (54%), the Reclamation Ditch (5%), Blanco Drain (10%), wastewater outside the prior M1W boundaries (30%), and summer water rights from the County Water Resource Agency (1%). This project could come online by late 2022.

Carmel River: Cal-Am has legal rights to 3,376 AFA from the Carmel River comprised of 2,179 AFA from License 11866, 1,137 AFA of pre-1914 appropriative rights, and 60 AFA of riparian rights. This does not include what is referred to as Table 13 rights, discussed under "*Other Available Supplies*" below.

Seaside Basin: The 2006 Seaside Groundwater Basin adjudication imposed triennial reductions in operating yield for Standard Producers such as Cal-Am until the basin's Natural Safe Yield is achieved. The last reduction will occur in 2021 and Cal-Am will have rights to 1,474 AFA. However, with the delivery of a long-term permanent water supply, the company would like to begin replacing its accumulated deficit of over-pumping through in-lieu recharge by leaving 700 AFA of its production right in the basin for 25 years. Hence, only 774 AFA is reflected as long-term supply available, although the additional 700 AF becomes available again in the future.

Aquifer Storage & Recovery: There are two water rights that support ASR. Permit 20808A allows maximum diversion of 2,426 AFA and Permit 20808C allows up to 2,900 AFA for a total of 5,326 AFA. However, these are maximums that may only be close to being achieved in the wettest of years. Based on long-term historical precipitation and streamflow data, ASR is designed to produce 1,920 AFA on average. The MPWSP assumes a lesser amount of 1,300 AFA to be conservative.

Sand City Desalination Plant: The Sand City plant was designed to produce a nominal 300 AFA, but has failed to achieve more than the 276 AF in 2011. Due to source water quality issues and discharge permit requirements the plant has averaged 188 AFA the past four years including water year 2019. The intakes will likely be augmented and production increased (see "*Other*

[3] Notice of Preparation of a Supplemental Environmental Impact Report and Public Scoping Meeting Notice, page 4, May 15, 2019

[4] For example, November 12, 2019 M1W presentation to the Monterey County Farm Bureau and the Grower-Shipper Association and the September 30-2019 M1W board meeting

Available Supplies", below.) Here only the 94 AFA of long-term production legally committed to offset Carmel River pumping is included.

Other Available Supplies: In 2013, Cal-Am received Permit 21330 from the State Water Board for 1,488 AFA from the Carmel River. However, the permit is seasonally limited to December 1 through May 31 each year and subject to instream flow requirements. As a result, actual production will vary by water year. Here, we have assumed 300 AFA on average. For the Sand City desalination plant the amount produced in excess of 94 AFA is available for general Cal-Am use and eventually to serve growth in Sand City. With new intakes, we have assumed average production of 200 AFA or 106 AFA of other available supply. There is also available unused capacity in the Seaside Basin which annually is reallocated to the Standard Producers such as Cal-Am as "Carryover Credit" under the adjudication decision. Such Carryover capacity has been on the order of 400 AFA recently. While not insignificant, Carryover Credit has not been included in the 406 AFA of "Other Available Supplies" stated earlier.

Historical Water Demand for which MPWSP Desalination Plant is Sized

The MPWSP was initially sized solely as a replacement supply[5] for current customer demand, but this has changed over time as described below. Consideration was also given to peak month and peak day. Additional demand was recognized to accommodate legal lots of record, a request by the hospitality industry to anticipate a return to occupancy rates similar to that which existed prior to the World Trade Center tragedy, and to shift the buildout of Pebble Beach off the river.[6] Table 2 below shows the demand assumptions originally used in sizing the MPWSP in the April 2012 application to the California Public Utilities Commission (CPUC). Each component is discussed below.

Table 2
Water Demand Assumed in Sizing the MPWSP
(Acre-Feet Annually)

Demand Component	Acre-Feet Annually
Average Current Customer Demand	13,290
Legal Lots of Record	1,181
Tourism Bounce-Back	500
Pebble Beach Buildout	325
Total Water Demand	**15,296**

[5] Direct Testimony of Richard C. Svindland, April 23, 2012, pages 4,5,7
[6] Supplemental Testimony of Richard C. Svindland, January 11, 2013, pages 4-5

Average Current Customer Demand: The Application of Cal-Am to the CPUC in April 2012 utilized 13,290 AFA which was the 5-year average demand for 2007-2011.[7] As stated earlier, this was to be replacement supply and the Application stated *"At this point future demands of the Monterey System have not been included in the sizing of the plant."*[8] At that time, the 5-year average maximum month was 1,388 AF and the highest month was 1,532 AF.[9]

In a January 2013 CPUC filing, average demand was reiterated by Cal-Am to be 13,290 AFA but Cal-Am added that the plant would need to be increased larger by approximately 700 acre-feet per year for the in-lieu recharge of the Seaside Basin.[6] However, as can be seen in comparing Tables 1 and 2 above, supply equals demand at 15,296 AFA without changing the size of the plant from the initial Application.

In a 2016 update to the CPUC, Cal-Am recognized that average demand had declined in the intervening three years.[10] The 5-year average had declined to 10,966 AFA and the maximum month declined to 1,250 AF. At the time of the 2016 update, Cal-Am suggested that it should size the plant based on the backward-looking 10-year average demand and maximum month, instead of the 5-year average in the original Application, as well as several alternate assumptions about return of water to the Salinas Valley. They concluded *"we do not believe the size of the plants should be changed."*[11]

In a September 2017 filing to the CPUC, Cal-Am acknowledged continuing declines in demand, but indicated that the plant sizing remained appropriate saying *"We anticipate demand to rebound over time after these new water supplies are available, the drought conditions continue to subside, the moratorium on new service connections is lifted, and strict conservation and water use restrictions are eased."*[12] The company also for the first time introduced the use of future population and demand as a way to "normalize" the average demand used in sizing, a departure from the "replacement supply" basis under the initial Application in 2012.[13] This resulted in their estimate of average "current" system demand of 12,350 AFA. This amount, combined with the same lots of record, tourism bounce-back, and Pebble Beach buildout results in demand of 14,355 AFA – a reduction from the initial Application – but the company asserted that the plant need not be resized because this would allow it to run at 86% capacity, a more reasonable operating rate compared to the 95% posed in the original Application.

[7] Direct Testimony of Richard C. Svindland, April 23, 2012, page 21
[8] Direct Testimony of Richard C. Svindland, April 23, 2012, page 36
[9] Direct Testimony of Richard C. Svindland, April 23, 2012, page 22
[10] Supplemental Testimony of Richard C. Svindland, April 14, 2016 (Errata), pages 7-11
[11] Supplemental Testimony of Richard C. Svindland, April 14, 2016 (Errata), page 9
[12] Direct Testimony of Ian Crooks Errata Version, September 27, 2017, page 10
[13] Direct Testimony of Ian Crooks Errata Version, September 27, 2017, pages 11-13

The CPUC, in its September 2018 Decision, agreed that "current" demand was 12,350 AFA, therefore the 6.4 MGD desalination plant is warranted. In its Decision D.18-09-017 the CPUC stated *"we are convinced that 12,350 afy represents an appropriate estimate of annual demand to use in assessing the adequacy of Cal-Am's water supply…"*[14] It is important to understand that the CPUC did no original analysis, modeling, or projection of its own. It surveyed testimony provided by others and chose one to support its findings and recommendations. It should not be represented that that the CPUC developed demand numbers on its own.

Legal Lots of Record: The 2012 Application to the CPUC also included 1,181 AFA for Legal Lots of Record.[15, 6] Legal lots of record are defined as lots resulting from a subdivision of property in which the final map has been recorded in cities and towns, or in which the parcel map has been recorded in Parcels and Maps or Record of Surveys. Lots of record may include vacant lots on vacant parcels, vacant lots on improved parcels, and also included remodels on existing improved, non-vacant parcels. Ultimately, not all legal lots are buildable. While the District is the source of the 1,181 AFA estimated demands for the lots of record, the number was lifted from the 2009 Coastal Water Project environmental impact report.

Tourism Bounce-Back: The 500 AFA for economic recovery was originally proffered by the hospitality industry to handle a recovery of occupancy rates in the tourist industry in a post-World Trade Center tragedy setting. [16, 6] The industry felt that their most successful occupancy rates were in the three years prior to September 11, 2001 and felt 500 AFA would provide a buffer for a return to that level.

Pebble Beach Buildout: Ever since the State Water Board issued Order 95-10 and the Cease and Desist Order (CDO) it has recognized the Pebble Beach Company's investment in the Reclamation Project and the Company's right to serve its entitlements from the Carmel River. However, the State Water Board has stated a desire to have the Pebble Beach entitlements shifted away from the river and be satisfied by a new supply. At the time of the 2012 Application, the Pebble Beach company had approximately 325 AF of entitlements still available.

Water Demand Assumptions in 2020

The original MPWSP desalination project plant sizing was done eight years ago in 2012. With the passage of time and the opportunity to perform deeper research, it is possible to revisit the assumptions about consumer demand for water in the current context.

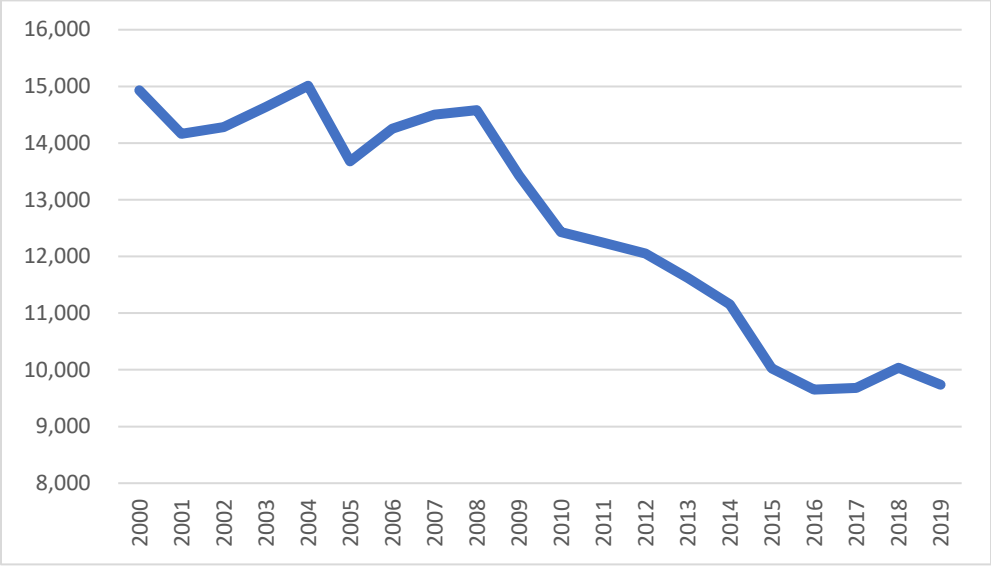
[14] CPUC D.18-09-017, page 49, lines 1-2.
[15] Direct Testimony of Richard C. Svindland, April 23, 2012, pages 22, 37.
[16] Direct Testimony of Richard C. Svindland, April 23, 2012, page 37

It states in Decision 18-09-017 *"The Commission similarly evaluated all of the evidence presented along with arguments of the parties and determines that Cal-Am's future water demand will be approximately 14,000 afy"*[17] However, no evidence was presented to determine if tourism "bounce-back" had already occurred, whether water efficiency gains would reduce the water demand of legal lots of record, or if the Pebble Beach Company could realistically build out its whole entitlement in a reasonable timeframe. Neither the CPUC, Cal-Am, nor Hazen & Sawyer evaluated the market absorption for new demand, which would answer the question: How soon will we get there? This MPWMD report simply takes a deeper look at the data behind these questions: How much will we need in the future? And How soon will we get there?

Average Current Customer Demand: The Cal-Am testimony submitted in support of the 12,350 AFA value used data that ended in 2016 and the company discounted the value of 2016 by incorrectly stating it was a drought year, which it was not on the Monterey Peninsula.[18] Hence, there are now three additional years of data (four if you do not discount 2016) since that used to develop the 12,350 AFA value.

Figure 1 below shows water production for customer service, a proxy for customer demand, for the past twenty-one-year period, updated for 2019 data. As can be seen, demand has been in decline, but somewhat leveled out over the past five years.

Figure 1
Annual Water Production for Customer Service (Demand)
Last 21 Years
(Acre-Feet)



[17] CPUC Decision 18-09-017, page 68, line 1
[18] Direct Testimony of Ian Crooks, Errata Version, in A.12-04-019, September 27, 2107, page 10, at line 22.

Table 3 shows how the 10-, 5-, and 3-year average demand compares to the CPUC and Cal-Am's most recent 12,350 AFA assumption.

Table 3
Alternate Average Current Customer Demand Assumptions
Updated for 2019 Water Year
(Acre-Feet)

Period	Amount	Difference to CPUC/Cal-Am #
CPUC/Cal-Am Assumption	12,350	
10-Year Average - Actual	10,863	1,487
5-Year Average - Actual	9,825	2,525
3-Year Average - Actual	9,817	2,533

Hence, the case could be made that the average customer demand assumption in the sizing of new water supply should be 9,817 to 10,863 AFA.

The trend is similar for peak month demand: 10-year maximum month through 2018 was 1,111 AF, the 5-year max was 966 AF, and the 3-year max was 950 AF. By comparison, the maximum month at the time the plant was first sized was 1,532 AF. The proposed desalination plant, in conjunction with the other production facilities can meet peak month/peak day requirements. Pure Water Monterey expansion adds 4 new extraction wells, two for production and two for redundancy. Preliminary analysis (see Appendix C) shows that peak month/peak day can also be met with Pure Water Monterey expansion.

Cal-Am itself has moved away from the 12,350 AFA number as a measure of current water demand in its current General Rate Case (GRC) application. As shown in the table below, Cal-Am now asserts in the GRC that its total water production for 2021 and 2022 from the Central Division will be 9,789 AFA,[19] which includes the Cal-Am Main System plus its satellites (generally thought to be 4-5% greater in total demand than the Cal-Am Main system.) This validates MPWMD's estimate of current demand. The Cal-Am GRC filing can be seen in Appendix D attached.

In CPUC Decision 16-12-026, the Commission required Class A and B water utilities to propose improved forecast methodologies in their next general rate cases.[20] In the current GRC, Jeffrey Linam, Cal-Am's Vice President of Rates and Regulatory, states in his testimony that Cal-Am *"believes that the testimony demonstrates improved forecasting methodologies that consider*

[19] California-American Water Company's (U-210-W) Update to General Rate Case Application, A.19-07-004, October 14, 2019, Table 3.14 of Results of Operations Model
[20] Direct Testimony of Jeffrey T. Linam (Final Application), in A.19-07-004, July 1, 2019, page 108, at line 14

the consumption trends during and following the drought that began in 2013".[21] Cal-Am *"hired David Mitchell of consulting firm MCubed to provide its sales forecast based on econometric models. The Company believes this is a significant improvement over the prior methods and use of historical averages…"*[22] This augments the testimony of Cal-Am expert witness Bahman Pourtaherian in the GRC who says David Mitchell's company M-Cubed *"has expertise addressing sales forecasting and rate design issues for energy, municipal and investor owned water utilities across the State."*[23]

Mr. Mitchell developed a highly complex econometric model for Cal-Am that in this GRC estimated the following (see Table 4) current demand (2021-2023) for the Cal-Am Main System (which is the system analyzed by MPWMD's supply and demand analysis). His results, presented in the table below, also support MPWMD's estimate of current demand.[24]

Table 4
Cal-Am Estimates of Current Demand
From Current 2019 GRC
(AFA)

	2021	2022	2023
Central Division Forecast Sales Results of Operations Model in A.19-07-004 Table 3.14 (See also Exhibit 2)[19]	9,789	9,789	n/a
Expert Testimony of Cal-Am Witness David Mitchell Cal-Am Main System[24]	9,338	9,478	9,610

The forecasts were created when it was assumed the desalination plant would be online at the end of 2021.

Legal Lots of Record: The 1,181 number is derived from the October 2009 Coastal Water Project Final Environmental Impact Report and references a 2001 District analysis as the source. It was actually sourced from a Land Systems Group Phase II February 2002 interim draft report that used the number 1,181.438 AF. At that time, a calculation error was corrected and the report was subsequently updated in June 2002 and the number was revised to 1,210.964. However, the earlier number seems to have been used going forward. Both versions did not include vacant lots on improved parcels in the unincorporated County. Table 5 shows how the corrected number was calculated.

[21] Direct Testimony of Jeffrey T. Linam (Final Application), in A.19-07-004, July 1, 2019, page 102, at line 25
[22] Direct Testimony of Jeffrey T. Linam (Final Application), in A.19-07-004, July 1, 2019, page 105, at line 6
[23] Direct Testimony of Bahman Pourtaherian (Final Application), in A.19-07-004, July 1, 2019, page 9, at line 21
[24] Direct Testimony of David Mitchell (Final Application), in A.19-07-004, July 1, 2019, Attachment 2, page 32, final line converted to acre-feet from CCF

Table 5
Legal Lots of Record Estimates (2002)
Unincorporated County Not Included
(Acre-Feet)

Type of Parcel	Amount
Vacant Lots on Vacant Parcels	729.9
Vacant Lots on Improved Parcels	288.2
Anticipated Remodels (10 years)	192.8
Total	**1,210.9**

Table 6
Assumptions Driving the Legal Lots of Record Conclusions

Category	Units on Vacant Parcels	Units on Improved Parcels	Estimated Number of Remodels	Water Use Factor	Total Water Usage
Single Family Dwellings	688	152		0.286 AF	240.2
Multi-Family Dwellings	846	204		0.134 AF	140.7
Commercial/Industrial	556	288		0.755 AF	637.2
Residential Remodels			3765	0.029 AF	109.2
Commercial Remodels			513	0.163 AF	83.6
	2,091	**789**	**4,278**		**1,210.9**

However, since the study was done, the District's conservation programs have resulted in reductions in the average water use factors which reduces the water needed for the same lots of record. For example, with single-family water use at 0.2 AFA, multifamily use at 0.12 AFA, and commercial customer connections averaging 0.66 AFA (2016 data), these changes alone would reduce the total above by 167.1 AF. Further, some of these lots may have been built upon, others determined unbuildable. Many of the remodels have likely occurred. General plans have been rewritten and housing elements recalculated. These factors taken together could result in another 150 AF reduction in the assumption.

Compared to the 1,890 units from the 2002 Land Systems Group study shown above, going forward, AMBAG's Regional Housing Needs Allocation (RHNA) Plan: 2014-2023 showed 1,271 additional housing units expected in the 6 cities for a ten-year period. This is shown in Appendix B of this report. Assuming single-family water use at 0.2 AFA and multifamily use at 1.2 AFA, this equates to approximately 395-405 AFA over a 20-year period[25]. Most of AMBAG's

[25] Appendix B of this report

projected growth occurs in Seaside and Monterey, which if slated for the former Fort Ord would not be served by Cal-Am. Unfortunately, it is not possible to accurately distinguish the Cal-Am served housing growth from the non-Cal-Am housing growth, but the 405 AFA likely overstates the Cal-Am growth. The AMBAG assumptions appear consistent with the Land Systems Group estimates. The RHNA is expected to be updated soon and the allocation could change. Instead of focus on a RHNA number, however, the water for housing can be thought of as captured within the population growth component of the third-party growth forecast discussed later in this report and in Appendix A, because houses don't use water – people do.

The case could be made that the legal lots of record demand assumption in the sizing of the MPWSP should be 864 to 1,014 AFA.

Tourism Bounce-Back: As stated earlier, the 500 AFA for economic recovery was originally suggested by the local hospitality industry to account for a recovery of occupancy rates in the tourist industry in a post-World Trade Center tragedy setting.[6, 16] Representatives of the Coalition of Peninsula Businesses indicated in 2017 testimony that the hospitality industry was hurt by the recent recession and that occupancy rates need to increase by 12 to 15 percent to re-attain the levels of decades ago.[26] It is true that the Salinas-Monterey market was one of five California markets, out of 22, to experience significant declines after the events of 2001, from 71.8% in 2000 to 63.0% in 2001.[27] It is also true that the decline persisted and was still down when the MPWSP desalination plant was sized, with occupancy rates of 62.8% in 2011-12 and 64.1% in 2012-13.[28] However, occupancy rates have since recovered with no notable increase in water demand. Hotel occupancy locally is back at approximately 72% and is estimated by Smith Travel Research to be higher for better quality properties on the Monterey Peninsula.[29, 30] The commercial sector water demand is shown below in Table 7 for the year prior to the World Trade Center tragedy, the year of the MPWSP plant sizing, and the most recent year. As can be seen, commercial demand, which is heavily influenced by the hospitality industry remains in decline, despite the already absorbed "bounce-back" in occupancy rates.

Table 7
Commercial Sector Water Demand - Selected Years
(Acre-Feet)

Year	Demand
2001	3,387
2012	2,770
2018	2,442

[26] Testimony of John Narigi (to CPUC), September 29, 2017, page 5
[27] HVS San Francisco, August 19, 2003
[28] Monterey County Convention and Visitors Bureau Annual Report 2012-13, page ii
[29] Fiscal Analysis of the Proposed Hotel Bella Project, Applied Development Economics, April 6, 2016
[30] Cannery Row Company, January 9, 2019

There is a secular change in commercial demand that is due to permanent demand reductions resulting from targeted rebate programs, conservation standards for the visitor-serving sector since 2002, mandatory conservation standards for other commercial businesses instituted in 2013, and commercial inspection/enforcement by the District. A "bounce-back" of 500 AFY would represent an increase in water use demand of 20% in the entire commercial sector, not just the hospitality industry. The District does not view this as likely in the near-term, nor due to a return to higher occupancy rates.

Hence, the case could be made that the tourism bounce-back demand assumption in the sizing of the MPWSP should be 100 to 250 AFA.

Pebble Beach Buildout: As cited earlier, at the time of the 2012 Application, the Pebble Beach company had approximately 325 AF of entitlements still available and that number was added to the MPWSP sizing needs. However, the final environmental impact report certified in 2012 envisioned 145 AFA for the buildout projects and 154 AFA in "other entitlement demand."[31]

However, the "other entitlement demand" is very likely to go away when a new water supply comes online because homeowners will have no reason to pay $250,000 per AF for an entitlement when connecting directly to Cal-Am is possible when the moratorium on new service connections is lifted. In the ten years since the CDO was imposed, Pebble Beach entitlement water demand has averaged 4.9 AF added each year. It is reasonable to assume only another 15 AFA during the next three years before a permanent water supply is online.

The project buildout from the EIR is 145 AFA, not 325 AFA used in MPWSP sizing. Further, the buildout number includes estimated water use that may not materialize in decades, if ever. Table 8 shows the elements that comprise the Pebble Beach buildout.

Table 8
Components of Pebble Beach Buildout in AFA

Project	Demand
Lodge	13.11
Inn at Spanish Bay	12.85
Spyglass Hotel	30.59
Area M Residential	10.00
Other Residential	77.00
Driving Range	0.33
Roundabout	0.70
Total	144.58

[31] Pebble Beach Final Environmental Impact report (FEIR), April 2012, Appendix H "Water Supply and Demand Information for Analysis"

Two elements of the project warrant greater discussion: "Other Residential" includes 66 single family residences at 1.0 AF each and 24 residences at 0.50 AF each (and a decrement of 1 AF in the total calculation for other reasons.) District research in 2006 determined the average large lot Pebble Beach home utilized 0.42 AFA. Building conservation standards have increased since then. Many of the proposed homes are not utilized year-round. Hence, the estimate could be overstated by one-third or more. Spyglass Hotel is not currently being pursued and there are no plans to do so in the near-term. The project could be a decade or two away, if ever.

Hence, the case could be made that the Pebble Beach buildout demand assumption in the sizing of the MPWSP should be 103 to 160 AFA.

Summary of Demand v. Supply

Table 9 shows the range of demand estimates that have been established in the foregoing analysis. These long-term demand estimates can be compared to existing current demand to determine how much water supply is needed.

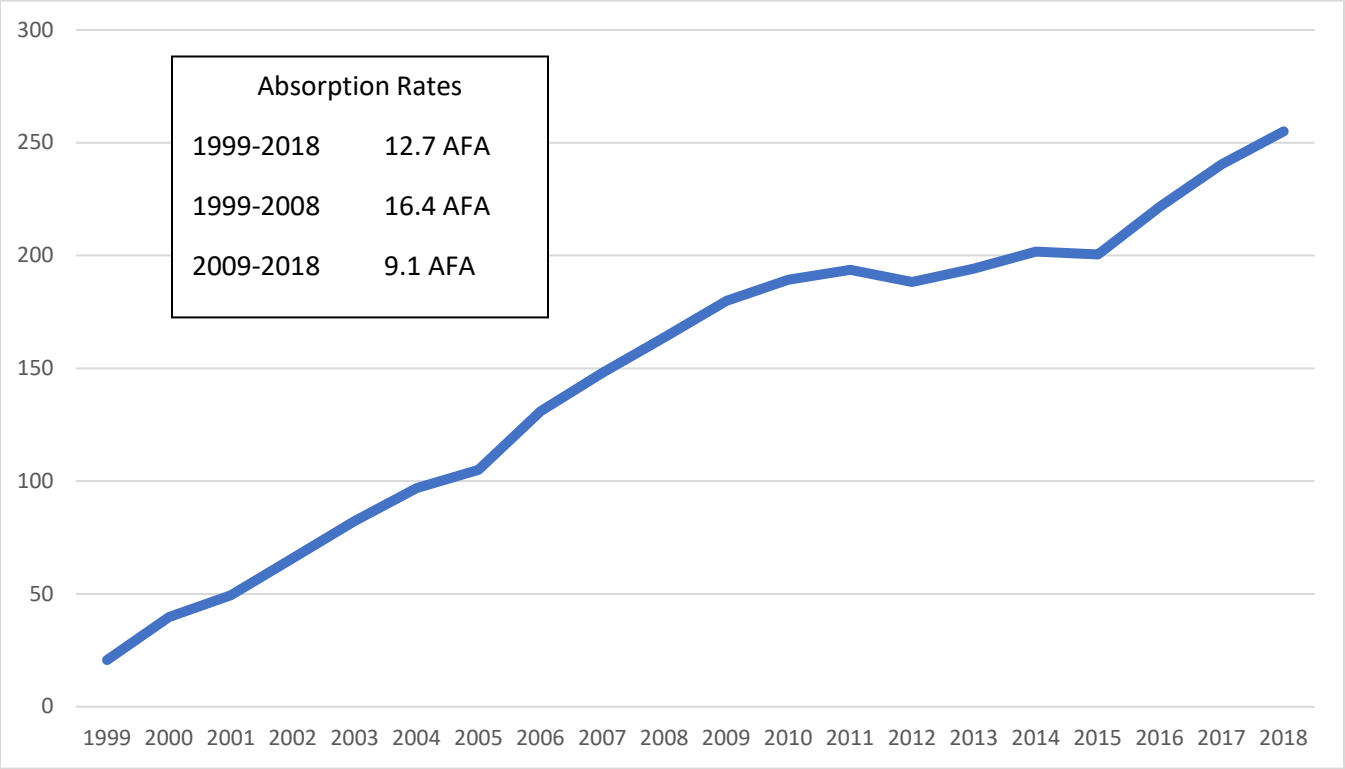
Table 9
Range of Potential Demand Scenarios in MPWSP Sizing
(Acre-Feet)

Demand Component	Current Project	Revised High	Revised Low
Average Current Customer Demand	13,290	10,863	9,817
Legal Lots of Record	1,181	1,014	864
Tourism Bounce-Back	500	250	100
Pebble Beach Buildout	325	160	103
Total Water Demand	**15,296**	**12,287**	**10,884**

However, the ability of the Monterey Peninsula to generate or "absorb" the housing and commercial growth will help determine when such water supply is needed. Figure 2 shows the past 20 years of market absorption of water demand based on water permits issued. The average growth or absorption in water use was 12.7 AF per year. The first decade preceded the CDO and was a period of relative economic stability, available property, no moratorium on new service connections, and lower water rates resulting in 16.4 AF per year of absorption. The second decade was after the CDO and moratorium on service connections and understandably had a lower absorption rate of 9.1 AF per year.

EXHIBIT 4-A

Figure 2
Market Absorption of Water Demand
Last 20 Years
(Acre-Feet)

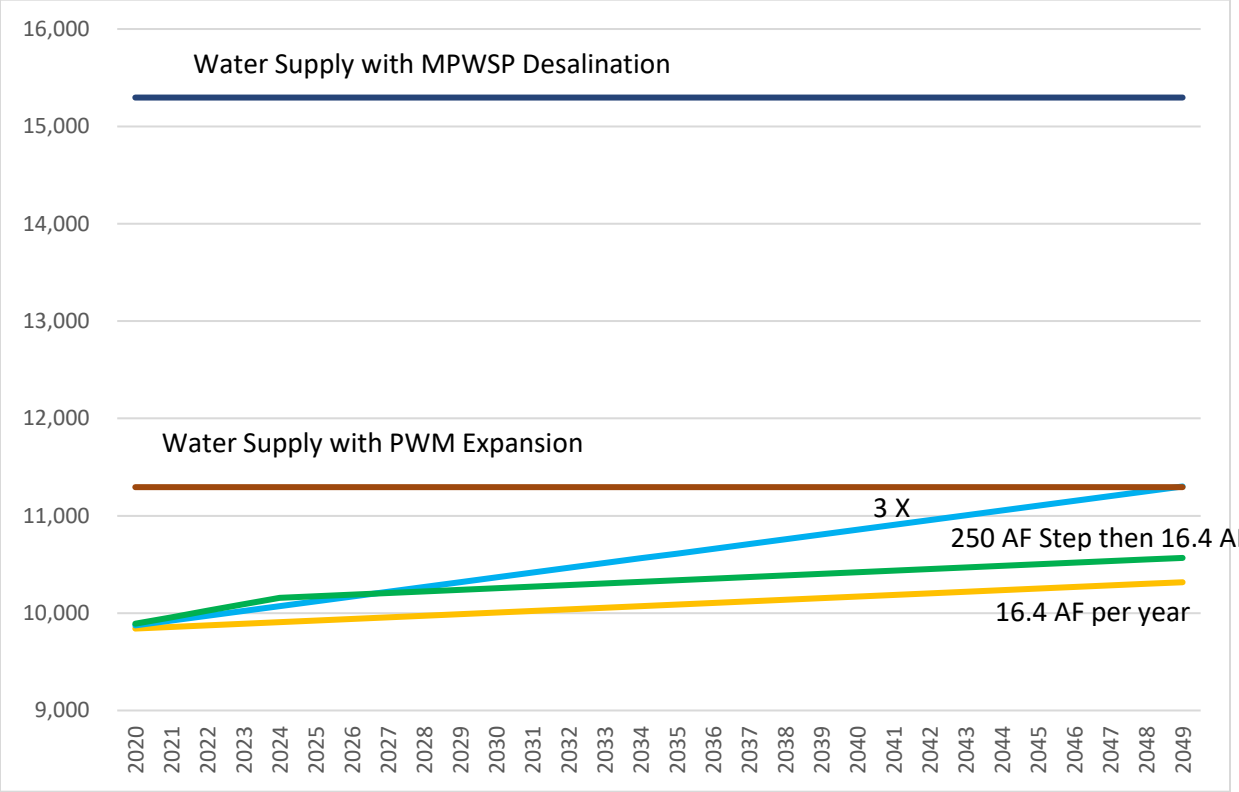


By adopting assumptions about current demand and market absorption rates, it can be determined the sufficiency of certain supply alternatives over time.

Scenario 1: Supply v Demand Using Pre-CDO Absorption Rate Scenarios: In Figure 3, the current demand assumption of 9,825 AF (most recent 5-year average) is shown with three market absorption rates: (a) 16.4 AF per year (pre-CDO decade rate), (b) three times that rate, and (c) 250 AF over the first five years on top of the pre-CDO rate. These are also compared to the two supply alternatives in Table 1.

EXHIBIT 4-A

Figure 3
Market Absorption of Water Demand Compared to Water Supply
Current Demand at 5-Year Average
Pre-CDO Growth Rate Alternatives
(Acre-Feet)



This chart shows that, assuming a starting current demand at the 5-year average, both water supply alternatives meet 30-year market absorption at the historical rate, 250 AF in the first 5 years on top of the historical rate, and at 3-times the historical absorption rate.

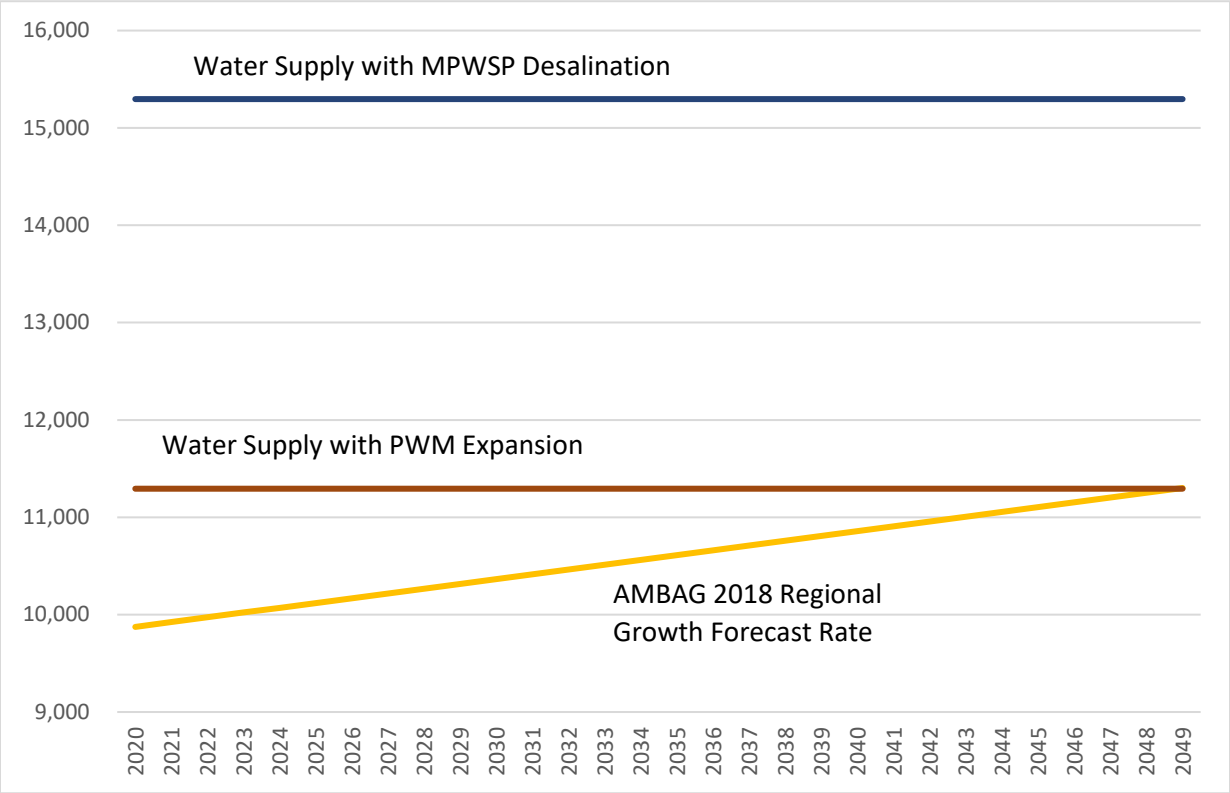
Scenario 2: Supply v Demand Using 3rd-Party Growth Forecast Absorption Rate: Rather than to rely on pre-CDO absorption of water demand or alternative theoretical future demand scenarios, as was done in the September report, it is instructive to instead look at a regional growth forecast by an objective third-party. Here, as shown in Appendix A, we evaluated AMBAG's 2018 Regional Growth Forecast, specifically the subregional population forecast as a proxy for residential water demand, and the subregional employment forecast, using job growth as a proxy for commercial water demand. (Certainly, other factors could be considered.)

AMBAG implemented an employment-driven forecast model for the first time in the 2014 forecast and contracted with the Population Reference Bureau (PRB) to test and apply the

model again for the 2018 Regional Growth Forecast (RGF). To ensure the reliability of the population projections, PRB compared the employment driven model results with results from a cohort-component forecast, a growth trend forecast, and the most recent forecast published by the California Department of Finance (DOF). All four models resulted in similar population growth trends. As a result of these reliability tests, AMBAG and PRB chose to implement the employment-driven model again for the 2018 RGF.[32]

Using this methodology, the total water demand increase in the 20 year study period is 984 AF or 49.2 AFA. Applying the 49.2 AFA linearly across a 30-year horizon results in the demands shown in Figure 4.

Figure 4
Market Absorption of Water Demand Compared to Water Supply
Current Demand at 5-Year Average
AMBAG 2018 Regional Growth Forecast
(Acre-Feet)



This chart shows that, assuming a starting current demand at the 5-year average (inclusive of water year 2019), both water supply alternatives meet 30-year market absorption at the AMBAG 2018 Regional Growth Forecast rate.

[32] 2018 Regional Growth Forecast, Technical Documentation, Association of Monterey Bay Area Governments (AMBAG), June 2018, page 5

Scenario 3: Supply v Demand Using "Pent-Up Demand" Plus AMBAG Growth Forecast Absorption Rate: The Regional Growth Forecast is intended to include new housing starts for increasing population, and new commercial businesses for job formation. However, several cities have approved and unbuilt projects that might happen more quickly once a permanent water supply becomes available and new meters can be set.

Examples of housing projects include Garden Road and Strangio in Monterey, Del Dono in Carmel, South of Tioga in Sand City, and various mixed-use projects and ADUs throughout the service area. Example non-residential projects include almost 120,000 square feet of commercial space at Ocean View Plaza in Monterey, approximately 1,250 rooms across five hotels in Pacific Grove (2) and Sand City (3). Hotels have their own demands and the guests can increase demand at local establishments. There can also be variability in students and service members attending MIIS, MPC, NPS, DLI, or living in the service area attending other institutions.

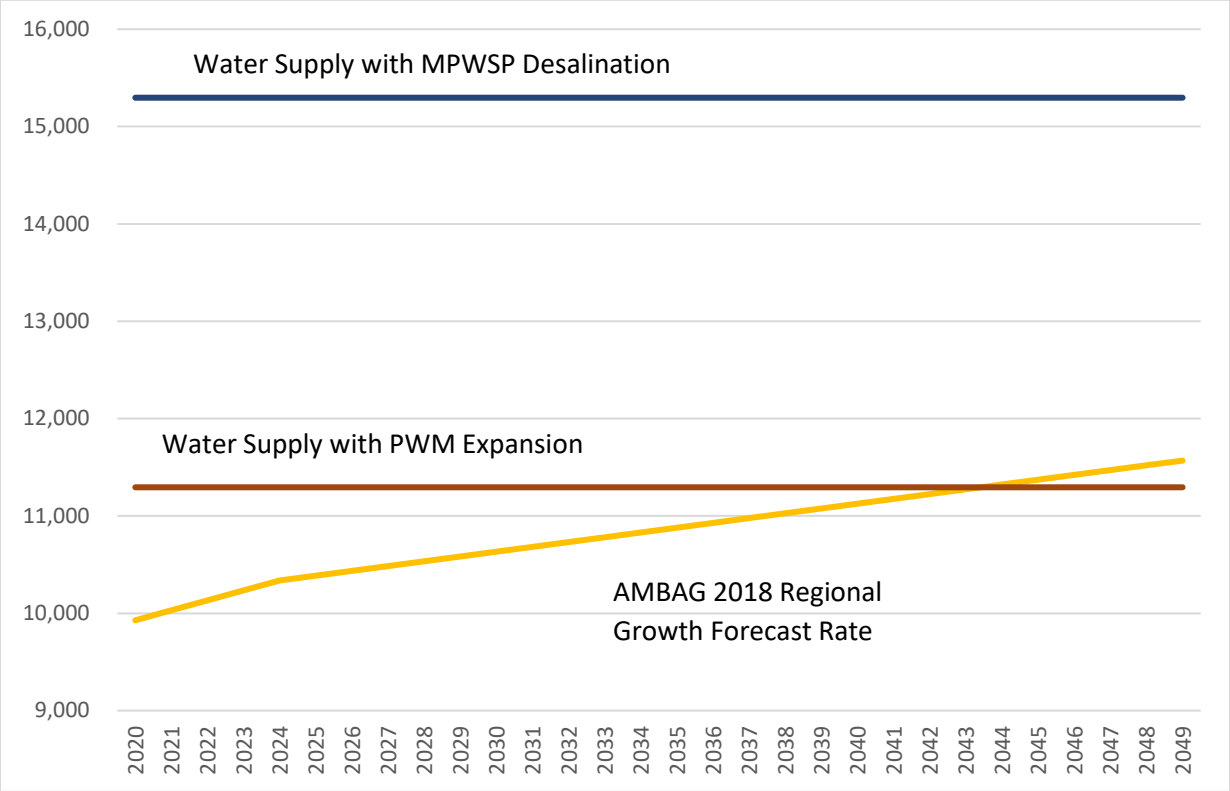
There is little likelihood that the market can absorb all of this quickly, but if it did there might be assumed to be something similar to the following pent-up near-term demand:

Table 10
Potential Near-Term Demand
(Acre-Feet)

Type of Demand	Acre Feet Required
1,250 Hotel Rooms X 0.064 AF/room	80
1.5 guests/room X 1,250 rooms X 75% occupancy X 0.02 AF/restaurant seat	28
200,000 new square feet of commercial space X 0.00007 AF/sq.ft.	14
1,000 new students X 57 gal/day X 260 days/Year	45
Approved but Unbuilt Housing	100
TOTAL Near-Term Demand	267

Figure 5 shows what the supply and demand relationship would be if this 267 AFA is added to the first five years, on top of the AMBAG Growth Forecast. The chart shows that, assuming a starting current demand at the 5-year average (inclusive of water year 2019), Pure Water Monterey Expansion meets 24-year market absorption, and the MPWSP desalination plant exceeds 30-year demands.

Figure 5
Market Absorption of Water Demand Compared to Water Supply
Current Demand at 5-Year Average
"Pent-Up" Demand in first 5 Years plus AMBAG 2018 Regional Growth Forecast
(Acre-Feet)



Additional Factors Affecting Future Demand

Cost: The future water supply will significantly impact rates. It is expected that the combined cost of new water supply and regular annual rate increases will almost double a residential ratepayer's water bill by 2023. Rules of price elasticity suggest the cost of water might dampen demand. The cost of each major component of supply is shown below:

Desalination Plant	$6,094 per acre-foot[33]
Carmel River:	$271 per acre-foot[34]

[33] Attachment C-3 California American Water Company Advice Letter 1220 "Total Yr 1 Cost to Customer" $38.1 million, divided by 6,252 acre-feet per year
[34] MPWSP Model- V 2.1 submitted to CPUC; February 2018 and October 2017 versions, 6.4 MGD scenario, "Avoided Costs" worksheet

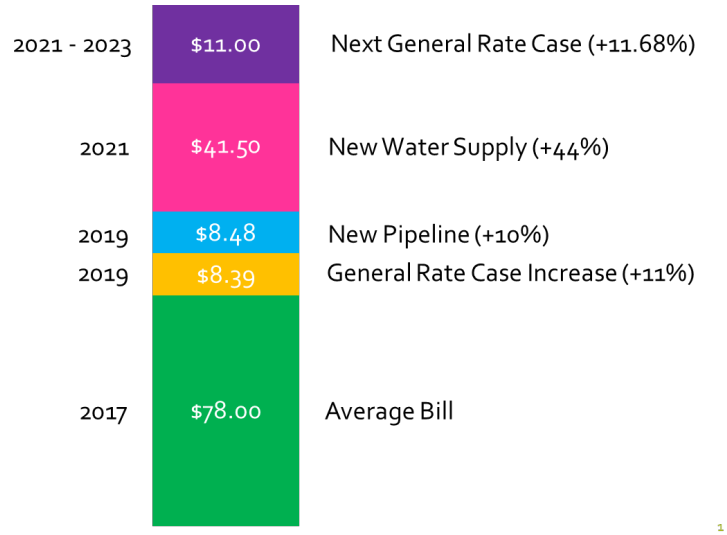
Seaside Basin:	$130 per acre-foot[35]
Pure Water Monterey:	$2,398 per acre-foot[36]
PWM with Expansion:	$2,339 per acre-foot[37]

Further, if the desalination plant capacity is not fully utilized, the cost per acre-foot rises due to the fixed costs, as shown below.

Production by Desal Plant – AF	6,252	5,000	4,300
Variable Cost ($ Million)	7.8	6.2	5.4
Fixed Cost ($ Million)	30.3	30.3	30.3
Total Annual Cost to Customer	38.1	36.5	35.7
Cost per Acre-Foot	$6,094	$7,308	$8,294

The rate impact can be seen in Figure 5 below, which is calculated based on full utilization of the desalination plant.

Figure 5
Ratepayer Impacts of New Water Supply[38]



Legislation: On May 31, 2018, Governor Brown signed two bills which build on the ongoing efforts to "make water conservation a California way of life." SB 606 (Hertzberg) and AB 1668

[35] MPWSP Model- V 2.1 submitted to CPUC; February 2018 and October 2017 versions, 6.4 MGD scenario, "Avoided Costs" worksheet
[36] Recent estimate for 2020-21 fiscal year
[37] Estimate
[38] "Your Rates Are Changing" California American Water mailer, April 2019 and "Notice of General Rate Case Application filed" July 2019

(Friedman) reflect the work of many water suppliers, environmental organizations, and members of the Legislature. The mandates will fall on urban water suppliers – not customers.

Specifically, the bills call for creation of new urban efficiency standards for indoor use, outdoor use, and water lost to leaks, as well as any appropriate variances for unique local conditions. Each urban retail water agency will annually, beginning November 2023, calculate its own *objective*, based on the water needed in its service area for efficient indoor residential water use, outdoor residential water use, commercial, industrial and institutional (CII) irrigation with dedicated meters, and reasonable amounts of system water loss, along with consideration of other unique local uses (i.e., variances) and "bonus incentive," or credit, for potable water reuse, using the standards adopted by the State Water Board.

The indoor water use standard will be 55 gallons per person per day (gallons per capita daily, or GPCD) until January 2025; the standard will become stronger over time, decreasing to 50 GPCD in January 2030. For the water use objective, the indoor use is aggregated across population in an urban water supplier's service area, not each household. Presently, the average June 2014-May 2019 gallons per capita per day for the Cal-Am Monterey system is 57 gpcd. Hence, existing users are unlikely to increase their water consumption with the availability of new water supply.

Principal Conclusions

- Either supply option can meet the long-term needs of the Monterey Peninsula
- Either supply option is sufficient to lift the CDO
- The long-term needs of the Monterey Peninsula may be less than previously thought
- Several factors will contribute to pressure on decreasing per capita water use

EXHIBIT 4-A

Appendix A

Water Required to Meet AMBAG 2018 Regional Growth Forecast

Water Required for Population Growth[39]

	Monterey	Pacific Grove	Carmel-by-the-Sea	Sand City	Seaside	Del Rey Oaks	County[40]	TOTAL
Population in 2020	28,726	15,349	3,833	544	34,301	1,949	7,182	**91,884**
Population in 2040	30,976	16,138	3,876	1,494	37,802	2,987	7,541	**100,814**
Increase	2,250	789	43	950	3,501	1,038	359	**8,930**
GPCD[41]	56.8	56.8	56.8	56.8	56.8	56.8	56.8	**56.8**
Acre-Feet per Year	143 AF	50 AF	3 AF	60 AF	223 AF	66 AF	23 AF	**568 AF**

*: Likely overstates population growth in Cal-Am service area due to some growth attributable to the Fort Ord build-out.

Water Required for Employment Growth[42]

	Monterey	Pacific Grove	Carmel-by-the-Sea	Sand City	Seaside	Del Rey Oaks	County[43]	TOTAL
Jobs in 2020	34,434	5,093	2,998	1,569	10,161	371	4,300	**58,926**
Jobs in 2040	40,173	5,808	3,378	1,810	11,299	432	4,845	**67,745**
Increase	16.7%	14.0%	12.7%	15.4%	11.2%	16.4%	12.7%	
Commercial Consumption In 2019[44]	1,371 AF	248 AF	203 AF	54 AF	282 AF	21 AF	651 AF	**2,830 AF**
Commercial Consumption In 2040[45]	1,600 AF	283 AF	229 AF	62 AF	314 AF	24 AF	734 AF	**3,246 AF**
Increase	229 AF	35 AF	26 AF	8 AF	32 AF	3 AF	83 AF	**416 AF**

Using this methodology, total water demand increase in 20 year period is 984 AF or 49.2 AFY.

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[39] Association of Monterey Bay Area Governments. 2018. "2018 Regional Growth Forecast." Table 8, page 32

[40] Uses Cal-Am service area population reported in SWRCB June 2014 – September 2019 Urban Water Supplier Monthly Reports (Raw Dataset), minus urban areas, escalated at 5%.

[41] SWRCB June 2014 – September 2019 Urban Water Supplier Monthly Reports (Raw Dataset); Average gallons per capita per day for August 2018 – July 2019; www.waterboard.ca.gov

[42] Association of Monterey Bay Area Governments. 2018. "2018 Regional Growth Forecast." Table 7, page 30

[43] California Employment Development Department, Monthly Labor Force Data for Cities and Census Designated Places. November 15, 2019. Sum of Carmel Valley Village CDP and Del Monte Forest CDP. Escalated at same rate as Carmel-by-the-Sea.

[44] Cal-Am. 2019. "Customers and Consumption by Political Jurisdiction"

[45] Assumes escalation at same rate as job growth 2020 to 2040

EXHIBIT 4-A

A Regional Growth Forecast

EXHIBIT 4-A

Table 7: Subregional Employment Forecast

Geography	2015	2020	2025	2030	2035	2040	Change 2015-2040 Numeric	Change 2015-2040 Percent
AMBAG Region	337,600	351,800	363,300	374,100	384,800	395,000	57,400	17%
Monterey County	203,550	211,799	218,203	224,207	230,212	235,822	32,272	16%
Carmel-By-The-Sea	2,935	2,998	3,096	3,195	3,289	3,378	443	15%
Del Rey Oaks	359	371	387	404	418	432	73	20%
Gonzales	4,477	4,963	5,064	5,166	5,278	5,371	894	20%
Greenfield	7,024	7,552	7,729	7,813	7,911	7,982	958	14%
King City	4,441	4,692	4,862	5,013	5,154	5,287	846	19%
Marina	6,340	6,649	6,886	7,140	7,373	7,620	1,280	20%
Monterey	34,030	34,434	35,970	37,405	38,814	40,173	6,143	18%
Pacific Grove	5,000	5,093	5,272	5,466	5,637	5,808	808	16%
Salinas	64,396	67,270	69,660	71,958	74,160	76,294	11,898	18%
Sand City	1,517	1,569	1,633	1,698	1,758	1,810	293	19%
Seaside	9,650	10,161	10,455	10,726	11,020	11,299	1,649	17%
Soledad	3,442	3,584	3,694	3,786	3,885	3,978	536	16%
Balance Of County	59,939	62,503	63,497	64,438	65,516	66,390	6,451	11%
San Benito County	18,000	19,240	19,957	20,617	21,264	21,913	3,913	22%
Hollister	13,082	14,035	14,608	15,132	15,650	16,172	3,090	24%
San Juan Bautista	559	591	615	639	662	685	126	23%
Balance Of County	4,359	4,614	4,734	4,846	4,951	5,056	697	16%
Santa Cruz County	116,050	120,761	125,141	129,275	133,324	137,265	21,215	18%
Capitola	7,062	7,199	7,464	7,727	7,979	8,228	1,166	17%
Santa Cruz	40,986	43,090	44,647	46,153	47,616	49,085	8,099	20%
Scotts Valley	7,475	7,612	7,820	8,004	8,180	8,349	874	12%
Watsonville	22,644	23,482	24,382	25,200	26,008	26,772	4,128	18%
Balance Of County	37,883	39,339	40,826	42,191	43,541	44,831	6,948	18%

Sources: Data for 2015 from InfoUSA and the California Employment Development Department. Forecast years were prepared by AMBAG and PRB.

EXHIBIT 4-A

Table 8: Subregional Population Forecast

Geography	2015	2020	2025	2030	2035	2040	Change 2015-2040 Numeric	Change 2015-2040 Percent
AMBAG Region	762,676	791,600	816,900	840,100	862,200	883,300	120,624	16%
Monterey County	432,637	448,211	462,678	476,588	489,451	501,751	69,114	16%
Carmel-By-The-Sea	3,824	3,833	3,843	3,857	3,869	3,876	52	1%
Del Rey Oaks	1,655	1,949	2,268	2,591	2,835	2,987	1,332	80%
Gonzales	8,411	8,827	10,592	13,006	15,942	18,756	10,345	123%
Greenfield	16,947	18,192	19,425	20,424	21,362	22,327	5,380	32%
King City	14,008	14,957	15,574	15,806	15,959	16,063	2,055	15%
Marina	20,496	23,470	26,188	28,515	29,554	30,510	10,014	49%
Marina balance	19,476	20,957	22,205	22,957	23,621	24,202	4,726	24%
CSUMB (portion)	1,020	2,513	3,983	5,558	5,933	6,308	5,288	518%
Monterey	28,576	28,726	29,328	29,881	30,460	30,976	2,400	8%
Monterey balance	24,572	24,722	25,324	25,877	26,456	26,972	2,400	10%
DLI & Naval Postgrad	4,004	4,004	4,004	4,004	4,004	4,004	0	0%
Pacific Grove	15,251	15,349	15,468	15,598	15,808	16,138	887	6%
Salinas	159,486	166,303	170,824	175,442	180,072	184,599	25,113	16%
Sand City	376	544	710	891	1,190	1,494	1,118	297%
Seaside	34,185	34,301	35,242	36,285	37,056	37,802	3,617	11%
Seaside balance	26,799	27,003	27,264	27,632	28,078	28,529	1,730	6%
Fort Ord (portion)	4,450	4,290	4,340	4,490	4,690	4,860	410	9%
CSUMB (portion)	2,936	3,008	3,638	4,163	4,288	4,413	1,477	86%
Soledad	24,809	26,399	27,534	28,285	29,021	29,805	4,996	20%
Soledad balance	16,510	18,100	19,235	19,986	20,722	21,506	4,996	30%
SVSP & CTF	8,299	8,299	8,299	8,299	8,299	8,299	0	0%
Balance Of County	104,613	105,361	105,682	106,007	106,323	106,418	1,805	2%
San Benito County	56,445	62,242	66,522	69,274	72,064	74,668	18,223	32%
Hollister	36,291	39,862	41,685	43,247	44,747	46,222	9,931	27%
San Juan Bautista	1,846	2,020	2,092	2,148	2,201	2,251	405	22%
Balance Of County	18,308	20,360	22,745	23,879	25,116	26,195	7,887	43%
Santa Cruz County	273,594	281,147	287,700	294,238	300,685	306,881	33,287	12%
Capitola	10,087	10,194	10,312	10,451	10,622	10,809	722	7%
Santa Cruz	63,830	68,381	72,091	75,571	79,027	82,266	18,436	29%
Santa Cruz balance	46,554	49,331	51,091	52,571	54,027	55,266	8,712	19%
UCSC	17,276	19,050	21,000	23,000	25,000	27,000	9,724	56%
Scotts Valley	12,073	12,145	12,214	12,282	12,348	12,418	345	3%
Watsonville	52,562	53,536	55,187	56,829	58,332	59,743	7,181	14%
Balance Of County	135,042	136,891	137,896	139,105	140,356	141,645	6,603	5%

Sources: Data for 2015 are from the U.S. Census Bureau and California Department of Finance. Forecast years were prepared by AMBAG and PRB.

EXHIBIT 4-A

Appendix B
Water Required to Meet
Regional Housing Needs Allocation Plan: 2014-2023

2014-2023 RHNA Goals by Local Jurisdiction[46]

	Monterey	Pacific Grove	Carmel-by-the-Sea	Sand City	Seaside	Del Rey Oaks	TOTAL
Total Allocation	**650**	**115**	**31**	**55**	**393**	**27**	**1,271**
Very Low (24.1%)	157	28	7	13	95	7	**307**
Low (15.7%)	102	18	5	9	62	4	**200**
Moderate (18.2%)	119	21	6	10	72	5	**233**
Above Moderate (42%)	272	48	13	23	164	11	**531**

*: Does not include unincorporated Monterey County, which might be 15-25 additional AFY to full build-out

Estimated Water Required to Meet RHNA Goals on the Monterey Peninsula

	TOTAL RHNA GOAL	Water Required (AFY)[47]	Factor Used
Very Low (24.1%)	307	37	0.12 AFA (multi-family)
Low (15.7%)	200	24	0.12 AFA (multi-family)
Moderate (18.2%)	233	37	0.16 (half single family/half multi-family)
Above Moderate (42%)	531	92	0.173 (2/3 single family/1/3 multi-family)
Total Allocation/Water Required	**1,271**	**190**	

Over two similar 10-year periods, total water required for housing calculated with this methodology is 380 AF over twenty years, or 395 – 405 AF including estimate for unincorporated County (footnote above.)

[46] Association of Monterey Bay Area Governments. ND. "Regional Housing Needs Allocation Plan: 2014-2023." Available at: https://ambag.org/sites/default/files/documents/RHNP%202014-2023_Final_revised.pdf.

[47] Calculated based on the RHNA goals for the six cities in the Monterey Peninsula and MPWMD's water use factors for single family units (0.2 AFA) and multi-family units (0.12 AFA).

EXHIBIT 4-A

REGIONAL HOUSING NEEDS ALLOCATION PLAN: 2014 - 2023

ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS

EXHIBIT 4-A

Regional Housing Needs Allocation Plan: 2014 - 2023

RHNA Allocation

Geography	Total Allocation	Very Low (24.1%)	Low (15.7%)	Moderate (18.2%)	Above Moderate (42.0%)
AMBAG Region	10,430	2,515	1,640	1,900	4,375
Monterey County	**7,386**	**1,781**	**1,160**	**1,346**	**3,099**
Carmel-By-The-Sea	31	7	5	6	13
Del Rey Oaks	27	7	4	5	11
Gonzales	293	71	46	53	123
Greenfield	363	87	57	66	153
King City	180	43	28	33	76
Marina	1,308	315	205	238	550
Monterey	650	157	102	119	272
Pacific Grove	115	28	18	21	48
Salinas	2,229	538	350	406	935
Sand City	55	13	9	10	23
Seaside	393	95	62	72	164
Soledad	191	46	30	35	80
Balance Of County	1,551	374	244	282	651
Santa Cruz County	**3,044**	**734**	**480**	**554**	**1,276**
Capitola	143	34	23	26	60
Santa Cruz	747	180	118	136	313
Scotts Valley	140	34	22	26	58
Watsonville	700	169	110	127	294
Balance Of County	1,314	317	207	239	551

Appendix C

Pure Water Monterey Expansion
Consistency With Planning Criteria

MPWMD has consistently followed state and federal codes, as well as industry standards, in its analysis of the two supply options in the report. Specifically, any MPWMD conclusions in the report are consistent with the following:

- California Code of Regulations (CCR) section 64554
- California Health and Safety Code (CHSC) section 116555
- California Water Code (CWC) sections 10635 and 10631
- CPUC General Order 103A and other rules; and
- American Water Works Association "Water Resource Planning" guidance M50

CCR section 64554: MPWMD meets the requirements of CCR Title 22 section 64554. This was shown in a document produced and available from MPWMD in September 2019 and later publicly filed by the California Coastal Commission demonstrating MPWMD compliance.[48] With the passage of time, that analysis has been updated and is included in this Appendix C, now assuming a new water supply comes online in the year 2023. It shows that Pure Water Monterey expansion can meet the Maximum Day Demand (MDD) and Peak Hourly Demand (PHD) required under this section of the CCR.

There is no standard in 64554 to look back 10 years to ascertain current or projected future average annual demand. Section (k) which says *"The source capacity of a surface water supply or a spring shall be the lowest anticipated daily yield based on adequately supported and documented data"* by citing "daily yield", still goes to MDD and PHD, not long-term average annual demand. This bears repeating: CCR section 64554 has nothing to with estimating current existing consumer demand or future average annual consumer demand for water.

CHSC section 116555: All that is required under this section of the Code is that a water supplier "provides a reliable and adequate supply of pure, wholesome, healthful, and potable water." Nothing more, nothing less. To assert that either Pure Water Monterey expansion or the proposed desalination plant do not do so would be disingenuous.

CWC sections 10635 and 10631: Section 10635 of the CWC requires that *"every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years.*

[48] See California Coastal Commission agenda, November 14, 2019, Application 9-19-0918 / Appeal A-3-MRA-19-0034 (California American Water Co.) Exhibit 9 staff note attachment

This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years." MPWMD has done so with respect to both proposed water supply sources and have concluded that they can each meet the challenges of a normal water year, a single dry water year, and a 5-year drought. Drought resilience of Pure Water Monterey and ASR is discussed in more detail below.

We also recognize section 10631 reiterates the above-said requirement in the plan. Section 10631 also requires analysis by the utility of (i) Water waste prevention ordinances; (ii) Metering; (iii) Conservation pricing; (iv) Public education and outreach; (v) Programs to assess and manage distribution system real loss; (vi) Water conservation program coordination and staffing support; and (vii) Other demand management measures. These programs, many of which have been sponsored by MPWMD, have led to the decline in water demand that sets the baseline for future water supply planning.

CPUC General Order 103A and other rules: MPWMD's analysis has met the requirements of CPUC General Order 103A which states all water supplied shall be *"obtained from a source or sources reasonably adequate to provide a reliable supply of water" and "shall have the capacity to meet the source capacity requirements as defined in CCR Title 22, Section 64554".* This has been addressed above.

The CPUC's "Rate Case Plan and Minimum Data Requirements for Class A Water Utilities General Rate Case (GRC) Applications" states utilities should *"forecast customers using a five-year average of the change in number of customers by customer class"* subject to unusual events (such as a meter moratorium here in Monterey). MPWMD has also recognized this regulatory guidance.

American Water Works Association (AWWA) "Water Resource Planning" guidance M50: AWWA recognizes there are 6 traditional forecasting methods.[49] MPWMD's report has incorporated at least three of the accepted methods: "per capita models", "extrapolation models", "disaggregate water use models", and have checked certain estimates using "land-use models" each recognized by AWWA. Further, to the extent MPWMD has analyzed the AMBAG growth forecast and assigned water usage to the population and job forecasts, "multivariate" modeling has been included, also recognized by AWWA. "Several methods of demand forecasting are often combined, even within a single utility."[50]

[49] AWWA, "Water Resources Panning: Manual of Water Supply Practices M50", 3rd Edition, pages 81-84.
[50] AWWA, "Water Resources Panning: Manual of Water Supply Practices M50", 3rd Edition, page 81, paragraph 2.

The out-of-date second edition of AWWA M50 does cite a period of 10 years of historical data be used to develop future forecasts of demand, but the same section also states *"If a simple per capita approach to forecasting is selected, the data requirements could be as easy as securing historical annual water production or sales for 5 to 10 years"* Hence, MPWMD's use of a 5-year period would have been acceptable.[51] However, that edition of M50 was superseded by the third edition published in 2017. The current M50 edition from AWWA does not reference a specific preferred time period for historical data to be used for a future demand forecast. The MPWMD analysis is consistent with the current section of M50. There is nothing wrong, or outside industry standards, with looking at a 5-year average or some other measure to determine "How much water do we use today?"

[51] AWWA, "Water Resources Panning: Manual of Water Supply Practices M50", 2nd Edition, pages 47-48

EXHIBIT 4-A

Drought Resilience of ASR and Pure Water Monterey

ASR: Based on the Benito/Williams technical memorandum modeling assumptions contained in the Pure Water Monterey SEIR appendices, MPWMD concludes that build-up of ASR storage would be sufficient to meet a 5-year drought. The build-up occurs based on historical data including wet, normal, and dry years. If the data is randomized, the same results will occur – ASR acts like a lake behind a dam, building up supplies for use later during a drought. To remove ASR from the resource planning mix is inappropriate and would be inconsistent with industry practice for estimating water supply availability. Even AWWA recognizes ASR in its reliability assessment: *"ASR wells can improve water basin management by storing water underground from periods of excess supply…, and later allowing a portion of the stored water to be extracted during periods of demand or short supply"*[52]

If the Monterey Peninsula were to experience drought during the "buildup period" following the completion of new water supply and the lifting of the CDO, ASR would arguably be delayed in building up a drought reserve, it should not be overlooked that a Pure Water Monterey expansion is new capacity without an immediate offsetting demand. That is, 2,250 AFA from Pure Water Monterey expansion would provide the necessary approximately 800 AFA to offset unlawful Carmel River diversions and lift the CDO and provide a remaining 1,450 AFA for which there is no immediate present-day demand and can instead be delivered for customer service in the early years if ASR's drought reserve has not yet built-up. Just a few years of Pure Water Monterey expansion water could also provide drought-resilience to the Monterey Peninsula.

The District believes the Benito/Williams memo demonstrates ASR is drought-resilient and Pure Water Monterey expansion provides an additional factor of safety against drought impacts to ASR.

Pure Water Monterey: A memorandum dated November 1, 2019 which appears as Appendix I to the Pure Water Monterey Supplemental Environmental Impact Report titled "Source Water Availability, Yield and Use Technical Memorandum", indicates Pure Water Monterey is resilient to drought, in general. Page 1 of the memorandum states the purpose of the memorandum is to summarize the source water availability and yield estimates for proposed modifications to the approved Pure Water Monterey Groundwater Replenishment Project (as modified, the full project is referenced as the Expanded PWM/GWR Project), to explain the seasonal storage yield estimates, and to provide the proposed maximum and typical (or normal) water use estimates for the Proposed Modifications.

[52] AWWA, "Water Resources Panning: Manual of Water Supply Practices M50", 3rd Edition, page 148

EXHIBIT 4-A

Page 10 of the memorandum says *"In the attached scenario tables (Tables 9 through 11), the use of the various sources is reduced to just meet the demands of the AWPF and offset the current CSIP groundwater use in the wet season (October-March). During the dry season (April-September), surface water diversions are shown meeting the monthly AWPF demands and providing extra flow for the CSIP, such that* ***the annual use of new sources exceeds the annual AWPF demands."*** *(emphasis added by MPWMD)*

"*The demand scenarios considered are:*

Table 9: A normal water year while developing a drought reserve (AWPF producing 6,550 AFY)
Table 10: A normal water year with a full drought reserve (AWPF producing 6,350 AFY)
Table 11: A drought year starting with a full reserve (AWPF producing 5,550 AFY) *(emphasis added by MPWMD)*

In the drought year scenario, the stormwater and wastewater availability were reduced. Urban runoff from Salinas was assumed to be one-third of the historic average. Rainfall on the SIWTF ponds used the 2013 rainfall record (critically dry year). The unused secondary treated effluent values from 2013 were used, also the historic low. The CSIP groundwater well use from OCT 2013 to SEP 2014 was used as the CSIP augmentation target. Under this scenario, surface water diversions were required from the Reclamation Ditch, Blanco Drain and Lake El Estero, and the diversions were needed from March through November."

In MPWMD's opinion, this shows that the drought scenario shows all Advanced Water Purification Facility needs are met and there are still residual new supplies available to CSIP. In other words, Pure Water Monterey expansion is reliable in periods of reduced usage or drought years.

EXHIBIT 4-A

MPWMD Analysis of Available Well Capacity for 10-Year Maximum Daily Demand (MDD) and Peak Hour Demand (PHD)

A) Find maximum month demand for 10-year period 2014-2023
August 2014 = 1,023 AF[53]

B) Convert to average daily demand
1,023 AF / 31 days = 33 AF/day

C) Convert to million gallons per day (MGD)
33 AF/day X 325,851 gal/AF divided by 1,000,000 = 10.753 MGD

D) Gross-up for peaking factor of 1.5
10.753 MGD X 1.5 =16.13 MGD = Maximum Daily Demand (MDD)

E) Average hourly flow during MDD is 10.753 MGD divided by 24 hours = 0.448 MGh

F) Gross-Up for peaking factor of 1.5
0.448 MGh X 1.5 = 0.672 million gallons per hour = Peak Hour Demand (PHD)

Hence, new water supply must support a MDD of 16.13 MGD. Table 1 on the next page shows existing and planned system supply capacities under authorized, desired, and firm capacity scenarios. As can be seen, the lowest available capacity is 19.41 MGD which significantly exceeds MDD.

This assumes additional production well capacity currently being analyzed in the Pure Water Monterey Expansion Supplemental EIR are developed and the Forest Lake Pump Station currently requested under the 2019 General Rate Case filing is built. These two projects markedly remove system capacity constraints.

We also recognize that the Plumas, Luzern, Ord Grove, Paralta, and Playa wells are presently unable to deliver to the Monterey Pipeline, serving only Seaside, Sand City, and Old Monterey. This could potentially reduce available capacity throughout the rest of the system on the order of 2 MGD. Even in this instance, operations are sufficient to meet MDD. This issue goes further away if one or more of the wells are also connected to the pipeline, as well as with the continued reduction in MDD in more recent years.

CONCLUSION: Pure Water Monterey expansion provides sufficient capacity to meet MDD and PHD for the Cal-Am Monterey Main System.

[53] Direct testimony of Ian Crooks, Errata version 9-27-17 in A.12.04.019 at California Public Utilities Commission, page 9, Table 3

EXHIBIT 4-A

TABLE 1

Cal-Am Monterey Main Well Capacity Under Authorized and Desired Operations With New Wells being Analyzed in Pure Water Monterey Expansion SEIR							
	Authorized Operations		**Desired Operations**		**Desired Operations Firm Capacity**	
Upper Carmel Valley Wells	**Capacity (gpm)**	**Capacity (MGD)**	**Capacity (gpm)**	**Capacity (MGD)**	**Capacity (gpm)**	**Capacity (MGD)**
Assume n/a in Summer	-	-	-	-	-	-
Lower Carmel Valley Wells						
Rancho Canada	1,150	1.66	1,200	1.73	1,200	1.73
Cypress	1,500	2.16	-	-	-	-
Pearce	1,500	2.16	-	-	-	-
Schulte	1,250	1.80	-	-	-	-
Manor	125	0.18	-	-	-	-
Berwick No 8.	600	0.86	-	-	-	-
Berwick No. 9	985	1.42	-	-	-	-
Subtotal Lower CV	7,110	10.24	1,200	1.73	1,200	1.73
Seaside Wells						
Plumas	192	0.28	192	0.28	192	0.28
Luzern	640	0.92	640	0.92	640	0.92
Ord Grove	1,000	1.44	1,000	1.44	1,000	1.44
Paralta	1,350	1.94	1,350	1.94	1,350	1.94
Playa	350	0.50	350	0.50	350	0.50
Santa Margarita ASR 1 or 2	1,750	2.52	1,750	2.52	1,750	2.52
Middle School ASR 1 or 2	1,750	2.52	1,750	2.52	1,750	2.52
Subtotal Seaside	7,032	10.13	7,032	10.13	7,032	10.13
4 New Wells in Pure Water Expansion SEIR						
New 1	1,750	2.52	1,750	2.52	1,750	2.52
New 2	1,750	2.52	1,750	2.52	1,750	2.52
New 3	1,750	2.52	1,750	2.52	1,750	2.52
New 4	1,750	2.52	1,750	2.52	-	-
Subtotal New	7,000	10.08	7,000	10.08	5,250	7.56
Total Well Capacity	**21,142**	**30.44**	**15,232**	**21.93**	**13,482**	**19.41**
Notes:						
gpm = Gallons per Minute						
MGD = Million Gallons per Day						
AF = Acre-Feet						
Firm Capacity = Without largest producing well						

CALIFORNIA AMERICAN WATER
Central Division - 2019 GRC
WATER PRODUCTION (KCCF)
AUTHORIZED AND PROPOSED

Filing: 100-Day update

Line No.	Description	Last Authorized Test Year 2018	Estimated 2019	Estimated 2020	Proposed Test Year 2021	Escalation Year 2022
1.	Metered Sales	4,172.6	3,989.7	3,989.7	3,989.7	3,989.7
2.	Other Consumption	0.0	0.0	0.0	0.0	0.0
3.	Total Consumption	4,172.6	3,989.7	3,989.7	3,989.7	3,989.7
4.	Non Revenue	363.6	274.5	274.5	274.5	274.5
5.	Total Water Requirement	4,536.2	4,264.3	4,264.3	4,264.3	4,264.3
6.	Non Revenue Water %	8.0%	6.4%	6.4%	6.4%	6.4%
7.	Equivalent Acre Feet	10,413.6	9,789.4	9,789.4	9,789.4	9,789.4
8.	Total Water Requirement in CCF	4,536,162	4,264,251	4,264,251	4,264,251	4,264,251

References:
Line 1 Metered sales per Table 3.11
Other Consumption per [insert text if applicable]
Line 3 is sum of lines 2 and 3.
Line 4 is based on projection. See REV Wkp [insert reference]
Line 5 is line 3 plus 4
Line 6 is line 4 divided by line 5.
Line 7 is line 5 divided by 435.6 and multiplied by 1,000 to convert to Acre Feet.
Line 8 is line 5 multiplied by 1,000 to convert ot CCF.