

ORDINANCE NO. 183

AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE MONTEREY PENINSULA WATER MANAGEMENT DISTRICT ADDING RULE 20-E ESTABLISHING A ZONE OF CONTROLLED DRINKING WATER WELL CONSTRUCTION AND A ZONE OF POTENTIAL CONTROLLED DRINKING WATER WELL CONSTRUCTION RELATED TO PURE WATER MONTEREY INJECTION OF HIGHLY PURIFIED WATER

Enacted July 15, 2019 – Effective on the first day Pure Water Monterey begins injecting advanced treated water.

FINDINGS

- 1. The Monterey Peninsula Water Management District (MPWMD) was created to address ground and surface water resources in the Monterey Peninsula area, which the Legislature found required integrated management, and was endowed with the powers set forth in the Monterey Peninsula Water Management District Law (Chapter 527 of the Statutes of 1977, found at West's Water Code, Appendix, Section 118-1, et seq.).
- 2. Monterey One Water (M1W) was formed in 1972 to regionalize wastewater treatment on the Monterey Peninsula and became a Joint Powers Authority in the late 1980's. M1W operates a regional waste water plant north of the City of Marina and has been supplying the Castroville Seawater Intrusion Project treated water for irrigation since 1998.
- 3. Marina Coast Water District (MCWD) was formed in 1960 and currently operates the water and wastewater systems for the City of Marina, California State University of Monterey Bay and the former Fort Ord. MCWD is the future water purveyor for the former Fort Ord referenced in the MCWD 5-year plan as the Ord Community (Exhibit 1).
- 4. MPWMD is partnered with M1W in the construction and operation of the Pure Water Monterey (PWM), a water resources project that will produce 100% recycled water in compliance with Title 22 Section 60320.216 requirements lain out in the California Code of Regulations.

- 5. PWM will bring 3,500 Acre Feet per year of advanced treated water from the Advanced Water Purification Facility (AWPF) and inject it into the Paso Robles Aquifer and the Santa Margarita Sandstone in the Seaside Groundwater Basin (SGB). The injected water will be recovered through the California American Water and MPWMD wells in the SGB.
- 6. Title 22 Section 60320.200 (e) Part 2 requires, "a boundary representing a zone of controlled drinking water well construction, the greatest of the horizontal and vertical distances reflecting the retention times required pursuant to sections 60320.208 and 60320.224." A zone of moratorium on installing drinking water wells shall be established around the PWM injection well field.
- 7. Title 22 Section 60320.200 (e) Part 3 also requires, "a secondary boundary representing a zone of potential controlled drinking water well construction, depicting the zone within which a well would extend the boundary in Part 2 to include existing or potential future drinking water wells, thereby requiring further study and potential mitigating activities prior to drinking water well construction." A zone shall be established where proposed installation of drinking water wells are required to undergo further study prior to installation.
- 8. Agreement No. A-06181 between MPWMD, Monterey County Water Resources Agency (MCWRA), and Pajaro Valley Water Management Agency signed in 1993 gives MPWMD, "exclusive authority to regulate the management of the Seaside Groundwater Basin within the present Fort Ord boundaries, and MCWRA will comply with any such ordinance enacted by MPWMD."
- 9. For establishment of the zone of controlled drinking water well construction, an area representing the 180 day travel time of injected water is required to be identified. This prevents wells from being installed inside the zone where groundwater has not achieved full Logarithmic Virus Removal Credits under Title 22 Section 60320.200 (e) Part 2. An area representing a 2 year travel time of injected water is required to establish the secondary zone of potential controlled drinking water well construction as required in Title 22 Section 60320.200 (e) Part 3. Figures 5-2 and 5-3 from the Title 22 Engineering report prepared for PWM show the modeled particle paths for water injected into the Paso Robles Aquifer and the Santa Margarita Sandstone respectively. These figures are included as **Exhibit 2** and **Exhibit 3** of Ordinance 183.
- 10. **Exhibit 4** shows the zones of controlled drinking water well construction for both aquifer units representing 180 day travel times as well as the secondary zone of potential controlled drinking water construction representing a 2 year travel time required by Title 22

- regulations. As a component of PWM startup a tracer test will be conducted. If the results of the tracer test are different than the modeled groundwater travel times, **Exhibit 4** will be revised by MPWMD Board resolution.
- 11. Establishment of the control zones will not have adverse effects on the ability of water purveyors to provide water to the communities. The area inside of the control zones will be incorporated into the City of Seaside upon the transfer of land from Fort Ord Reuse Authority and will be developed according to the City's General Plan. Agreement No. A-06181 gives MCWRA the authority to regulate water delivery systems that deliver water to the area within the Fort Ord Boundaries and the MPWMD Boundary.
- 12. MCWRA recognizes MCWD as the water purveyor to serve the Ord Community development and MCWD cannot drill wells in the Seaside Groundwater Basin as they are not a named producer in the Seaside Groundwater Basin Adjudication Decision.
- 13. It is recognized that the Title 22 regulations are currently being reviewed by the State of California and in the future direct potable use (raw water augmentation) of highly treated water may be permitted. If PWM were to pursue and obtain permits for raw water augmentation, the control zones will sunset. The sunset of the control zones will be conducted by MPWMD.
- 14. This ordinance adds Rule 20-E to establish the injection control zones for PWM highly purified water.
- 15. This Ordinance is exempt from review under the California Environmental Quality Act ("CEQA") (California Public Resources Code Section 21000 et seq.). Pursuant to State CEQA Guidelines section 15307 (14 Cal. Code Regs.,§ 15307), this Ordinance is covered by the CEQA Categorical Exemption for actions taken to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment.

NOW THEREFORE be it ordained as follows:

ORDINANCE

Section One: Short Title

This ordinance shall be known as the Pure Water Monterey control zone for construction of drinking water Wells.

Section Two: Purpose

The Monterey Peninsula Water Management District (MPWMD) enacts this ordinance to comply with the Title 22 requirements establishing a control zone for drinking water Well construction and a secondary control zone requiring further study near the Pure Water Monterey (PWM) injection well field in the Paso Robles Formation and the Santa Margarita Sandstone.

Section Three: Addition of Rule 20-E, Zones of Controlled Drinking Water

The following text shall be added as Rule 20-E – Zones of Controlled Drinking Water

RULE 20-E – ZONES OF CONTROLLED DRINKING WATER

- A. Figure 10-1 from Todd Groundwater is a map showing the zones of controlled drinking water and is included as **Exhibit 4** in Rule 20-E. If the map needs to be updated in the future it will be done through MPWMD Board Resolution.
- B. Prohibition of installation of drinking water Wells within the control zones in the Paso Robles Aquifer and the Santa Margarita Sandstone shall be enacted once Pure Water Monterey (PWM) begins injecting as required by Title 22 Regulations. Maps identifying the control zones are included with this Rule. The process shall be as follows:
 - 1. Monterey County Environmental Health (MCEH) requires MPWMD review and comment on all proposed well construction permits prior to the approval of a well construction permit if the proposed Well site is within the MPWMD boundaries.
 - 2. At the time of permit review, if the Well is determined to be inside the control zone, the permit will be denied.
- C. An elevated level of study is required prior to MPWMD approving the permit in the MCEH review process in accordance with Title 22 Regulations. The study must demonstrate that

Wells proposed to be installed in the secondary control zone will not capture water injected into the PWM injection wells that have had travel time shorter than 180 days from the injection well. The process shall be as follows:

- 1. MCEH requires MPWMD review and comment on all proposed well construction permits prior to the approval of a well construction permit if the proposed Well site is within the MPWMD boundaries.
- 2. At the time of permit review, if the Well is determined to be inside the secondary control zone, MPWMD will work with MCEH and the Applicant to demonstrate appropriate travel time to the proposed Well.
- 3. The cost of this study will be borne by the Applicant.
- D. The term "drinking water well" as used in these Regulations refers to any Well proposed to be used as a Potable supply of water for any reasonable and beneficial use.
- E. Title 22 Regulations are under review at the State level. Direct potable use of advanced treated water (raw water augmentation) may be permitted in the future. If PWM obtains permits for raw water augmentation, MPWMD will repeal Rule 20-E.

Section-Four: -- Effective-Date-and-Sunset-

Ordinance 183 shall take effect on the first day PWM begins injecting advanced treated water. MPWMD shall sunset Ordinance 183 if PWM obtains permits for raw water augmentation.

Section Five: 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.

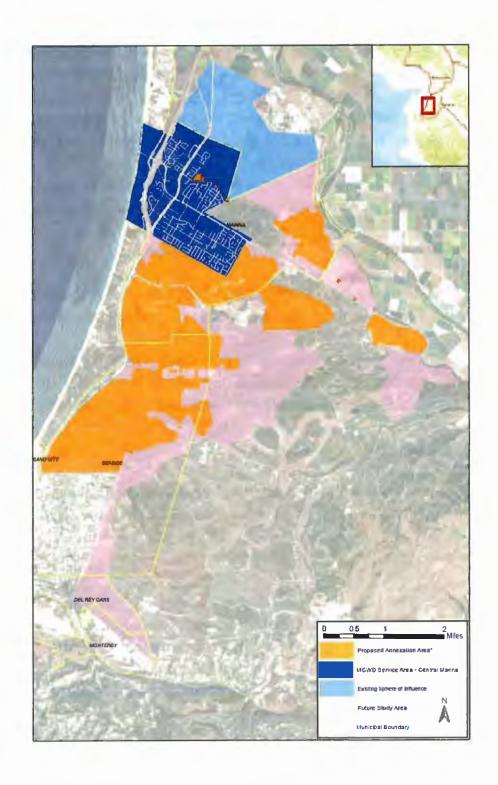


EXHIBIT 1 – Area of Ord Community Proposed to be Served by MCWD

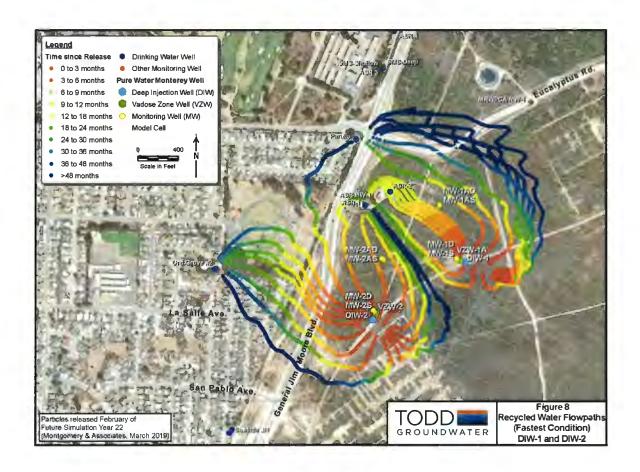


EXHIBIT 2 -Particle Paths for Water Injected into the Santa Margarita Sandstone

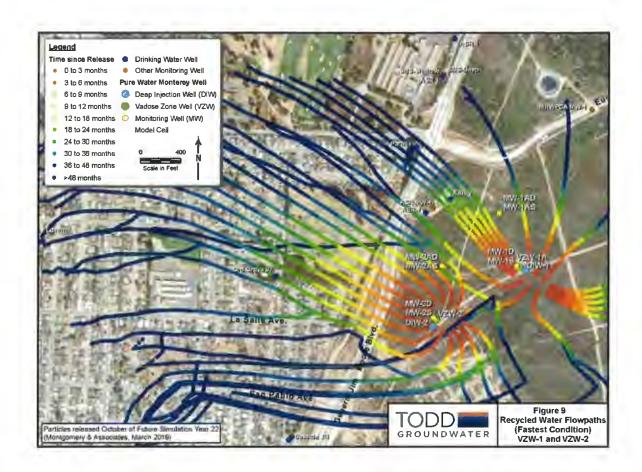


EXHIBIT 3 -Particle Paths for Water Injected into the Paso Robles Aquifer

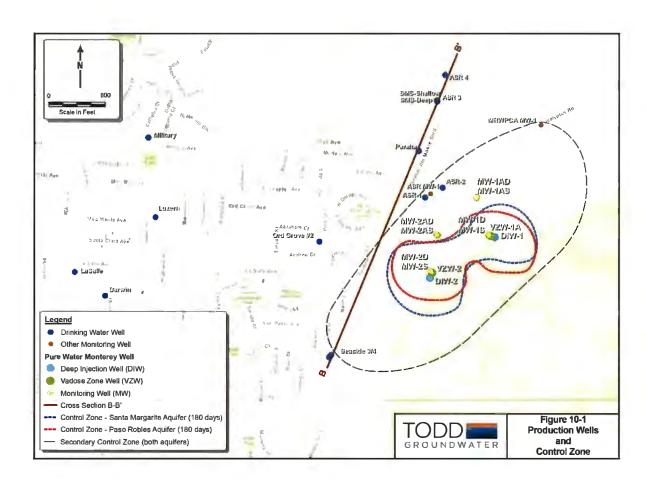


EXHIBIT 4 – Control Zone for the Paso Robles Aquifer and Santa Margarita Sandstone and Secondary Control Zone for both Geologic Units

On motion of Director Byme, and second by Director Edwards, the foregoing ordinance is adopted upon this 15th day of July, 2019, by the following vote:

AYES: Directors Byrne, Edwards, Adams, Evans, Hoffmann, Potter and Riley

NAYS: None ABSENT: None

I, David J. Stoldt, Secretary to the Board of Directors of the Monterey Peninsula Water Management District, hereby certify the foregoing ordinance was duly adopted on the 15th day of July, 2019.

Witness my hand and seal of the Board of Directors this 23rd day of July, 2019.

David J. Stoldt, Secretary to the Board

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ATTACHMENT 1

Table XV-1
Regulatory Water Production Targets
for All California American Water Systems from Sources
Within the Monterey Peninsula Water Resource System

(All Values in Acre-Feet)

Month	Monthly Target	Year-to-Date at Month-End Target
October	443	443
November	363	806
December	335	1,141
January	366	1,507
February	328	1,835
March	383	2,218
April	385	2,603
May	438	3,041
June	437	3,478
July	468	3,946
August	470	4,416
September	434	4,850
TOTAL	4,850	

Notes:

Monthly and year-to-date at month-end production targets are based on the annual production limit specified for the California American Water (Cal-Am) systems for Water Year (WY) 2026 from Carmel River sources per State Water Resources Control Board Order WR 2016-0016 (3,376 acre-feet) and adjusted annual production limits specified for the Cal-Am satellite systems from its Coastal Subarea sources (1,474 acre-feet) and Laguna Seca Subarea sources (0 acre-feet) of the Seaside Groundwater Basin per the Seaside Basin adjudication decision. These values do not include consideration of any carryover credit in the Seaside Basin for WY 2025. This combined total (4,850 acre-feet) was distributed monthly based on Cal-Am's reported monthly average production for its main and satellite systems during the 2013 through 2018 period.

Table XV-2 Regulatory Water Production Targets for California American Water Satellite Systems from Sources Within the Monterey Peninsula Water Resource System

(All Values in Acre-Feet)

Month	Monthly Target	Year-to-Date at Month-End Target
October	0	0
November	0	0
December	0	0
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
TOTAL	0	

Notes:

Monthly and year-to-date at month-end production targets are based on the adjusted annual production limit specified for the California American Water (Cal-Am) satellite systems for Water Year 2026 from its sources in the Laguna Seca Subarea of the Seaside Groundwater Basin per the Seaside Basin adjudication decision. This Laguna Seca Subarea total (0 acre-feet) was distributed monthly based on Cal-Am's reported monthly average production for its satellite systems during the 2013 through 2018 period.

Table XV-3
Regulatory Water Production Targets
for California American Water Systems from Carmel River Sources
Within the Monterey Peninsula Water Resource System

(All Values in Acre-Feet)

Month	Monthly Target	Year-to-Date at Month-End Target
October	308	308
November	252	560
December	234	794
January	256	1,049
February	228	1,277
March	266	1,544
April	268	1,812
May	305	2,116
June	304	2,421
July	326	2,747
August	327	3,074
September	302	3,376
TOTAL	3,376	

Notes:

Monthly and year-to-date at month-end production targets are based on the annual production limit specified for California American Water (Cal-Am) for Water Year (WY) 2026 from its Carmel River system sources per State Water Resources Control Board Order WR 2016-0016 (3,376 acre-feet). This amount was distributed monthly based on Cal-Am's reported monthly average production for its Main system sources during the 2013 through 2018 period. These values incorporate consideration of thetriennial reductions specified for the Cal-Am systems in the Seaside Basin adjudication decision, in setting the monthly maximum production targets from each source as part of the MPWMD Quarterly Water Supply Budget Strategy.