



**CITY OF MORRO BAY  
PUBLIC WORKS ADVISORY BOARD  
NOTICE OF SPECIAL MEETING**

---

*The City of Morro Bay provides essential public services and infrastructure to maintain a safe, clean and healthy place for residents and visitors to live, work and play.*

**SPECIAL MEETING AGENDA  
Wednesday, September 26, 2018  
Veterans Memorial Building - 5:30 P.M.  
209 Surf Street, Morro Bay, CA**

ESTABLISH QUORUM AND CALL TO ORDER

PUBLIC COMMENT PERIOD FOR ITEMS ON THE AGENDA

I. CONSENT CALENDAR

- I-1 Approval of Minutes of August 15, 2018 Regular Meeting  
**Recommendation:** Approve minutes.

II. BUSINESS ITEMS

- II-1 Directors Report - Informational summary of current Public Works Activities  
**Recommendation:** Information item for discussion, no action needed.
- II-2 Review of Draft OneWater Plan Chapters 1, 2, 3, 4, and 7  
**Recommendation:** Review and provide comments as necessary.

ADJOURN

DATED: September 20, 2018

---

Ric Deschler, PWAB Chair

---

This agenda is subject to amendment up to 24 hours prior to the date and time set for the meeting. Please refer to the agenda posted at the Public Works Department, 955 Shasta Avenue, or Recreation Services, 1001 Kennedy Way, for any revisions, or call (805) 772-6261 for further information.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in a City meeting, please contact the Public Works Department at (805) 772-6261 or the Recreation Services at (805) 772-6278 at least 24 hours prior to the meeting to insure reasonable arrangements can be made to provide accessibility to the meeting.

- |          |  |   |
|----------|--|---|
| PRESENT: | Ric Deschler<br>Chris Parker<br>Janith Goldman<br>Stewart Skiff<br>John Erwin<br>Christian Erlendson | Chairman<br>Board Member<br>Board Member<br>Board Member<br>Board Member  |
| ABSENT:  | Steve Shively  | Vice Chairman   |
| STAFF:   | Rob Livick<br>Janeen Burlingame<br>Damaris Hanson<br>Joe Mueller<br>Gina Gregory                     | Public Works Director<br>Management Analyst<br>Environmental Programs Manager<br>Utilities Division Manager<br>Office Assistant |

ESTABLISH QUORUM, CALL TO ORDER AND MOMENT OF SILENCE

The meeting was called to order at 5:30 p.m. A quorum was present.

ANNOUNCEMENTS - None

PRESENTATIONS – None

PUBLIC COMMENT PERIOD

The public comment period was opened, seeing none, the public comment period was closed.

A. CONSENT AGENDA  
<https://youtu.be/RiRwH6-0f7I?t=56s>

A-1 APPROVAL OF MINUTES OF MAY 16, 2018 MEETING

MOTION: John Erwin moved to approve Item A-1. The motion was seconded by Janith Goldman and carried 5-0-0 unanimously.

A-2 APPROVAL OF MINUTES OF JUNE 25, 2018 SPECIAL JOINT MEETING WITH CITIZEN FINANCE ADVISORY COMMITTEE

MOTION: Chris Parker moved to approve Item A-1 with the correction as stated by Janith Goldman of a 5:30 meeting start time. The motion was seconded by Stewart Skiff and carried 6-0-0 unanimously.

A-3 APPROVAL OF MINUTES OF JULY 18, 2018 SPECIAL JOINT MEETING WITH RECREATION & PARKS COMMISSION

MOTION: John Erwin moved to approve Item A-1. The motion was seconded by Janith Goldman carried 5-0-0 unanimously.

B. BUSINESS ITEMS

B-1 Directors Report – Informational summary of current Public Works Activities  
<https://youtu.be/RiRwH6-0f7I?t=3m34s>

Rob Livick presented the staff report.

The Board asked questions of staff and commented on the Director's Report.

C. POTENTIAL FUTURE AGENDA ITEMS  
<https://youtu.be/RiRwH6-Of7I?t=1h20m8s>

D. ADJOURNMENT

The meeting adjourned at 6:50 P.M. to a regular Public Works Advisory Board meeting at the Veteran's Memorial Building, 209 Surf Street, September 19, 2018.

Recorded by:

Gina Gregory  
Office Assistant



AGENDA NO: II-1

MEETING DATE: September 19, 2018

## MEMORANDUM

**TO:** Public Works Advisory Board  
**DATE:** September 19, 2018  
**FROM:** Rob Livick, PE/PLS - Public Works Director/City Engineer  
**SUBJECT:** Director's Report / Information Items

Please contact the individual staff members prior to the meeting, if possible, for more detailed information.

**Notify Me:** Sign up for Notify Me on the City's Website [www.morrobayca.gov/notifyme](http://www.morrobayca.gov/notifyme) to be notified by email when Council, Board's and Commission's agendas and minutes are posted on the website.

**Service Requests:** Citizens can report a concern to the City for predetermined issues without the need to phone the City during business hours (for example: reporting a pothole) by using a feature on the City's website, Service Requests [www.morrobayca.gov/905/Service-Requests](http://www.morrobayca.gov/905/Service-Requests), or the mobile App "My Morro Bay" (available on both Android and IOS operating systems).

Staff can also add Service Requests for someone over the phone or in the office if they do not have access to a computer. Each category in Service Requests is assigned to the appropriate staff member to handle so citizens don't have to figure out what department to contact for an issue they need to report on.

# CONSOLIDATED MAINTENANCE PERFORMED SEVERAL NOTABLE TASKS OVER THE PAST 2 WEEKS.

Staff Contact: Mike Wilcox

1. **Streets:** Several Hot Mix Asphalt skin patch repairs on Juniper between Avalon and Paula, 3300 Blk. of Beachcomber, 100 Blk. of Anchor, intersection of Shasta/Driftwood, 8 tons on failed utility trench on Juniper from San Juan to Paula, 7 tons on West St. from Beach to Surf St., 700 Blk. of Kern, Dogwood, 1 ton in parking lot at 1000 Blk. of the Embarcadero.
2. **Streets:** Saw cut, dig out old AC and sub grade, install geogrid, base back, compact, pave back and finish HM Asphalt on 300 Blk. of Rennell. Also installed new HMA berm.
3. **Sidewalks:** Demo and remove bad lifted section of sidewalk, form, base and concrete finish new panel on 200 Blk. of Beach.
4. **Trees:** Raised canopies and trimmed trees at 830, 890, 895 and 897 Monterey St., 600 Blk. of Main, Cypress trees at Monte Young Park, Bus Stop on Harbor.
5. **Trees:** Cut/haul large fallen limbs at City Park, Main/Pacific, 300 Blk. of MB Blvd., 800 Blk. of Main.
6. **Coleman:** Removed toilet and replaced wax ring, repaired flush valve, new vacuum breaker and seals.
7. **Harbor:** Repaired flush valve, new control stop and diaphragm.
8. **Rock RR:** Installed new slurry seal on asphalt parking area, new thermal ADA striping for parking and loading with symbol.
9. **MBFD:** Removed broken dishwasher, installed new one, ran for proper operation.
10. **City Hall:** Installed large aluminum framed kiosk on front of building.
11. **Public Works:** Diagnosed irrigation, repaired drip line, planted Birds of Paradise.
12. **MBCC:** Repaired exhaust fan assembly and check for proper operation.
13. **Facilities:** Cleaned off roof, gutters and downspouts at MBPD and City Hall.

# CONSOLIDATED MAINTENANCE STAFF CLEAR A FIRE BREAK AND DRAINAGE SWALE BEHIND HOMES AT THE CLOISTERS.

Staff Contact: Mike Wilcox



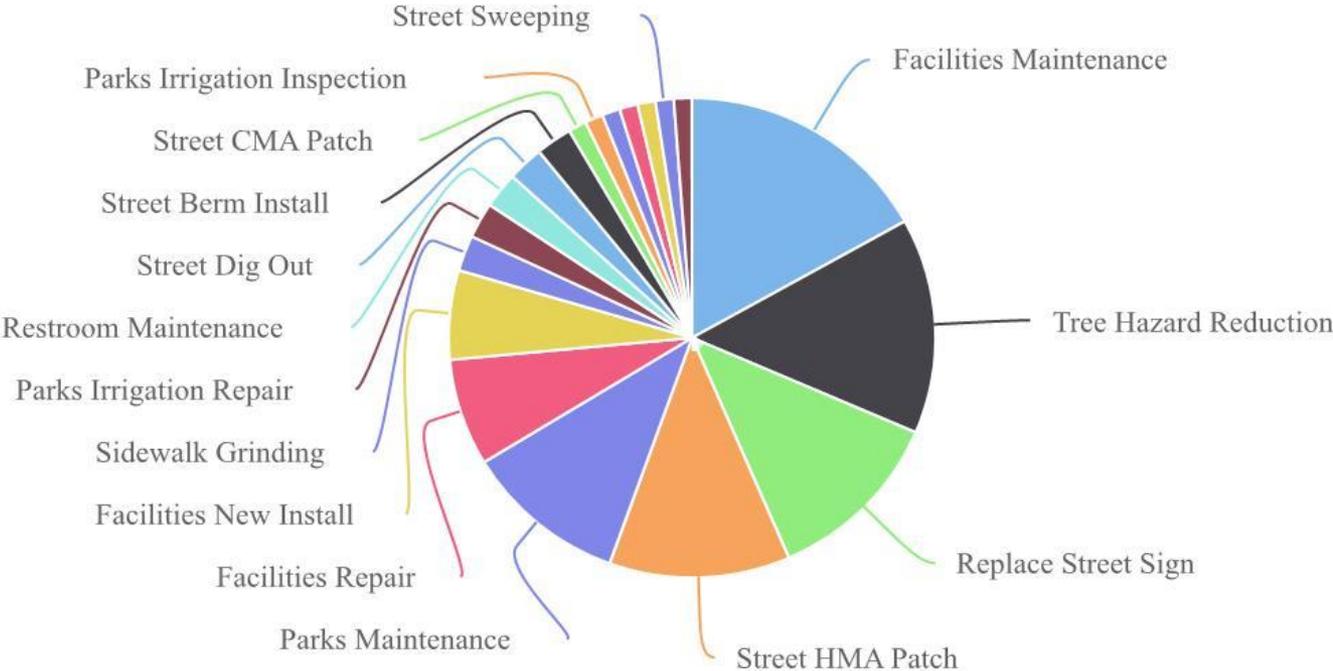
- Staff is working with Engineering to finalize all the street repairs required on the 2018/2019 streets preservation list prior to the Contractor start date.
- Staff has installed 228 tons of Hot Mix Asphalt since Council approval of this street list.
- Staff expects to be completed with these repairs on schedule.
- Following this, staff will scale back on street repairs and gear up on the many other general fund tasks that Consolidated Maintenance oversees.

# CONSOLIDATED MAINTENANCE STAFF CLEAR A FIRE BREAK AND DRAINAGE SWALE BEHIND HOMES AT THE CLOISTERS.

Staff Contact: Mike Wilcox



CONSOLIDATED MAINTENANCE WORK ORDER ACTIVITY SINCE IMPLEMENTING CITY WORKS SOFTWARE, 83 WORK ORDERS COMPLETED.  
Staff Contact: Mike Wilcox



# TRANSIT

Staff Contact: Janeen Burlingame

## Short Range Transit Plan

The SRTP consultant and staff continued work on the alternatives analysis. The consultant also began work on the financial, capital, and marketing sections of the plan. It is anticipated that a draft of the full plan will be completed for staff to begin review by the last week of September.

## Morro Bay Trolley

### Harbor Festival Trolley Service

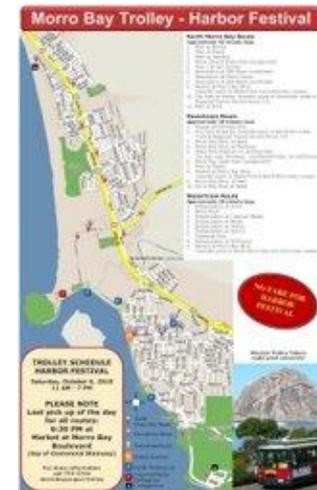
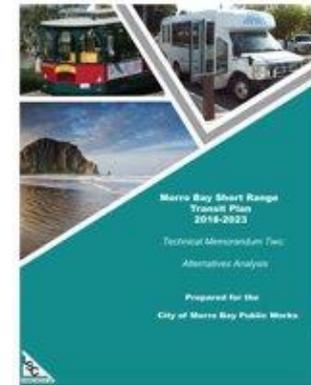
The Morro Bay Trolley will be closing out the 2018 season on Saturday, October 6, and the trolleys will be FREE for the Harbor Festival.

Please visit the Trolley website operating hours and route information, <http://www.morrobayca.gov/trolleyharborfestival2018>.

### Trolley Vehicle Purchase

Work is underway for the procurement of a replacement trolley. The vehicle purchase was approved in the City's FY18/19 Operating and Capital budget and the City will piggyback on the CalACT/Morongo Basin Transit Authority (CalACT/MBTA) Purchasing Cooperative Agreement. CalACT/MBTA went through a Request for Proposals (RFP) process for the procurement of various vehicles types and assignment options so other agencies could piggyback on this contract for a variety of vehicle needs. This will save the City time and money as it will not have to do its own RFP process.

At its September 25th meeting, the City Council will adopt Resolution No. 78-18 providing the final authorization for the City Manager to purchase the Trolley replacement vehicle per the City's Purchasing Policy.



# WATER – OPERATIONS

Staff contacts: Joe Mueller  
Damaris Hanson

## Reports completed: (No Issue to report)

- Monthly water report to State Water Resources Control Board (Extraction Report)
- Monthly water report to Division of Drinking water
- Water conservation report
- 2017 Annual Water Quality Report (CCR) Submitted to Division of Drinking Water, see report attached at the end of the directors' report

## Water Conservation:

- For the month of August water conservation was 25% lower compared to July 2013

## **Please remember to make water conservation a way of life!**

City water conservation rebates available; Cash for grass, rain barrel, irrigation retrofit, SMART irrigation controller, toilet retrofit and Energy star washing machine. State rebates now available for removing grass, and replacing a toilet that flushed more than 1.6 gallons per flush (\$100).

## **Welcome New Staff**

The Utilities Department welcomed aboard two new operations staff, Paul Valley and Grant Garcia. Both Paul and Grant live in Morro Bay and are long term residents of the area.



Blanca Tank top screen replacement



Elena Booster pump station roof replacement



New Staff - Paul and Grant

# WASTEWATER – COLLECTIONS

Staff Contacts: Joe Mueller

John Gunderlock

In August, Wastewater Collections Staff:

- Cleaned approximately 32,000 feet of sewer mainline.
- Responded to 1 after-hour callout at Lift Station 2 for a pump current-overload alarm.
- Tailored Cityworks workorders and templates for wastewater collections.
- Trained staff on recording work activities on Cityworks via phones and tablets.
- Reported no mainline overflows for the month.
- Responded to one customer sewer lateral backup that remained inside the buildings at 360/362 Shasta Street.
- Conducted pH sampling at Mission Linen to monitor the facilities pretreatment control processes and industrial discharges to the collection system.
- Performed routine lift station maintenance.
- Meet with the contractor at 450 Piney on sewer lateral tie-in locations and procedures for new construction.
- Conducted 3 source-control inspections at industrial and commercial facilities around town.
- Performed sewer mainline cleaning of root-treated lines, routine lines and enhanced lines.
- Conducted safety meetings on hydro-excavation equipment
- Trained with the City Fire Department staff (second shift) on confined space rescue and practiced various rescue techniques along with the use of confined space equipment.



# WASTEWATER – TREATMENT

Staff Contacts: Joe Mueller

John Gunderlock

## Operation & Maintenance

- Flow for the month of August averaged 0.908 Million Gallons per Day (MGD) and totaled 28.148 million gallons.
- Recorded <0.01 inches of rain during the month of August.
- Responded to (4) after hour callouts for plant chlorine adjustments.
- Dave Zevely received his State Water Resources Control Board Wastewater Treatment Grade IV license.
- Replacing scum and sludge pump run timeclocks.
- Sampled facility biosolids for annual laboratory analysis.
- Performed weed abatement throughout the facility grounds.
- Inspecting the gas pressure and mixing system on digester #3 for possible broken sparger tubes inside the sealed digester causing a gas mixing failure. Staff has limited the digester's intake and are working on a solution to provide mixing while keeping the digester online.
- Replaced failed shower and eyewash in the laboratory.
- Built two new outfall buoys to be replaced this year.
- Replaced a waste activated sludge pump with one that staff recently rebuilt.
- Replaced boiler #1 recirculation motor and pump connector.
- Installed a new sump pump, piping and screening system in preparation for pilot testing a loaner HACH CL-10 total chlorine analyzer.
- Installed a new air supply line to scum pump #3 due to a failure .
- Replaced one of the three bisulfite pumps and replaced all priming hoses.
- Staff noticed water coming up through the concrete in the digester area. Staff cut concrete, exposed and repaired the leak.
- PG&E was onsite to perform main transformer maintenance.
- Cleaned, painted and replaced the main seal on influent pump #1.
- Inspected all confined space safety equipment and calibrated air monitors.
- Staff drained, cleaned and inspected the grit chamber. Removed corrosion and repaired four air leaks near the waterline.

## Wastewater Treatment – Operation & Maintenance Continued

- Staff attended the following training:

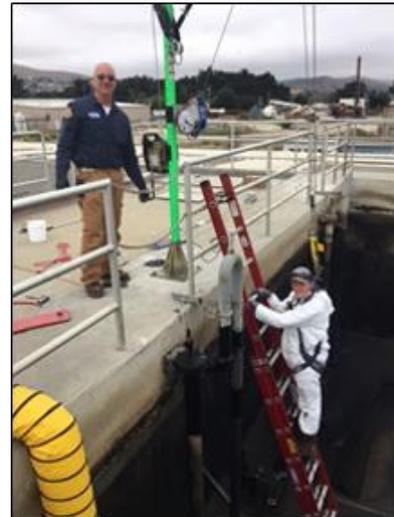
- Onsite confined space rescue training with the MB Fire Department Rescue Team
- CWEA training event at the City of San Luis Obispo Corporation Yard
- VACALL vacuum/hydro-jet truck safety training
- Bearing Basics, Handling and Installation training

- Submitted reports:

- July 2018 Monthly Self-Monitoring Report (eSMR)
- July 2018 Monthly Discharge-Monitoring Report (eDMR)
- July 2018 Semi-annual Self-Monitoring Report (eSMR)
- July 2018 Semi-annual Discharge-Monitoring Report (eDMR)



Influent Pump #1 Seal replacement



Grit Chamber Repair work

# STORMWATER Management Program

Staff Contact: Damaris Hanson

## San Luis Obispo County Stormwater Resource Plan



### Public Draft Release

September 10, 2018

### Public Comment Period

September 10, 2018 - October 10, 2018 at 5:00 PM PST

### About the Stormwater Resource Plan (SWRP)

- **Voluntary** plan that makes public agencies and 501(c)(3) non-profits within the County eligible for grant funding
- A plan focused on **regional efforts** to use stormwater as a resource
- Identifies and prioritizes **multi-benefit** stormwater capture and dry weather runoff capture projects
- Will be incorporated into the County's **Integrated Regional Water Management (IRWM) Plan**
- **Final SWRP** to be submitted to the State Water Resources Control Board in November 2018
- **Final opportunity to review and comment** on the SWRP occurring from September 10 through October 10, 2018

Find the Public Draft at: <https://www.slocounty.ca.gov/PW/SWRP>

### Submit Comments by October 10 at 5:00 PM PST:

#### ONLINE:

Use the public comment form at  
[https://www.slocounty.ca.gov/  
PW/SWRP](https://www.slocounty.ca.gov/PW/SWRP)

#### EMAIL:

Larissa Clarke  
lclarke@coastalrcd.org  
(805) 772-4391

#### MAIL:

Larissa Clarke, SWRP Project Manager  
1203 Main St. Suite B  
Morro Bay, CA 93442

### Upcoming Public and Stakeholder Meeting:

**Thursday September 20** 9 AM – 11 AM San Luis Obispo City/County Library Community Room,  
995 Palm St., San Luis Obispo

For those who cannot attend, view the meeting at: <https://global.gotomeeting.com/join/984305653>

# ENGINEERING/CAPITAL PROJECTS

Staff contact: Rob Livick

## **New Assistant Engineer**

- Herb Edwards
- 28 Years Experience, 4 in SLO County
- Licensed Engineer – AZ
- Relevant Experience: Project Management, Pavement Management, Grading and Drainage, General Civil Works

## **Highway 41/Main/Highway 1**

- No change in status
- CalTrans Reviewing Environmental and Preliminary Design Information, held an Intersection Control Evaluation- Technical Advisory Panel (ICETAP) in May, to look at penitential changes in project to reduce costs. Due to traffic volumes and existing constraints there are limited options available. The design engineer is reviewing the retaining wall, truck turning movements and other project components based on Federal Highways Administration (FHWA) comments.
- SLOCOG Increased Construction funding for Project to \$3.1 M (Still Requires 50% match by City)
- Project update to PWAB anticipated in October 2018

## **Pavement Management**

- List of streets has been sent to Pavement Coatings Inc for updated prices and scheduling

## **Nutmeg Tank Replacement**

- No change in status
- Addressed in the OneWater – Water System Capital Improvement Plan

## **Chorro Stream Gages**

No change in status. To be addressed in water supply options of the OneWater Plan, Water Supply section.

Continue to monitor stream flow temporary gaging locations.

- Chorro Creek stream flow on August 22, 2018:
  - The flow at Canet was 1.08 cfs at 11:10 AM. The gage reading on the County website at this time was 4.40 feet.
  - The flow at the Chorro Creek Road crossing was 1.16 cfs at 10:15 AM, which correlates to a gage height of 4.40 feet.

# ENGINEERING/CAPITAL PROJECTS

Staff contact: Rob Livick

## **Development Review**

- Staff is working on the following projects:
  - Morro Mist 23 Lot Subdivision-Bonita and Main: Under Construction – Frontage Improvements Substantially complete
  - Sonic Restaurant – Main and Highway 41: In Plan Check – Waiting for resubmittal from applicant
  - Other Commercial Developments
    - Front Street (North) Hotel: Under Construction
    - Morro Bay Landing: In plancheck
    - Harbor Hut Docks: In Plancheck
    - Otter Rock/Boatyard Remodel: In Plancheck
    - Harborview Hotel/Commercial: Planning Review
- Hotel Development – NW corner Atascadero Road West and Highway 1: Concept Review

# WASTEWATER – NEW WRF

Staff contact: Rob Livick

## **Final Environmental Report Certified**

The City released the Final Environmental Impact Report (FEIR). On July 3, 2018, the City's Planning Commission and WRFCAC reviewed the FEIR and recommended the City Council certify it as being in compliance with the California Environmental Quality Act (California Public Resources Code, section 21000 et seq. and State CEQA Guidelines (14 California Code Regulations, section 15000 et seq.) (collectively, CEQA). Prior to considering approval of the proposed WRF Project, the City, as Lead Agency, and more specifically the City Council, must review and certify the FEIR. Once the Final EIR is certified, the City Council may consider project approval. **The City Council certified the EIR at their August 14, 2018 regular meeting.** The Certified EIR may be reviewed at: <http://www.morrobayca.gov/DocumentCenter/Index/659>

## **Proposition 218 Process**

the Public Hearing for the Proposition 218 protest process was held on September 11, 2018. City Council deemed there were insufficient protests and approved the rate charges to fund the WRF project.

See <http://www.morrobayca.gov/DocumentCenter/View/12102/New-Water-Reclamation-Facility-Project-Overview> for additional rate surcharge information.

## **WIFIA Loan**

The City's WRF project reached another major milestone with the recent submission of a complete application for a low-interest loan through the Environmental Protection Agency's (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) program. The loan will fund 49% of the total project cost of \$126 million. Securing the EPA WIFIA low-interest loan will save the Morro Bay residents nearly \$20 million. The pursuit of the WIFIA loan is an example of the City's continued efforts to minimize any proposed rate increases. The City's current proposed rate increase is \$41 per month for the average single-family household. The full press release is located at:

<http://www.morrobayca.gov/DocumentCenter/View/12162/Press-Release---WIFIA-Carbajal-Supports-080218>

# ANNUAL WATER QUALITY REPORT 2017



Photo Credit: Ray Bruno



City of Morro Bay  
WATER TESTING PERFORMED IN 2017  
PWS ID# CA4010011

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.



## Basic Information About Drinking

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the layers of the ground it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals and human activity.

**Contaminants that may be present in source water include:**

**Microbial Contaminants:** such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic Contaminants:** such as salts and metals that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and Herbicides:** that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Organic Chemical Contaminants:** including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems.

**Radioactive Contaminants:** that can be naturally occurring or be the result of oil and gas production and mining activities.

# Your 2017 Water Quality Report

## Delivering Excellence

The City of Morro Bay Water System met all Federal and State standards for drinking water during 2017

The City of Morro Bay is proud to present our annual water quality report. This report shows the results from all of our water quality testing completed from **January 1 through December 31, 2017**. Morro Bay's highly competent staff is constantly seeking the best approaches to delivering to you the highest quality water possible and is dedicated to producing drinking water that meets all State and Federal standards. We remain committed to meeting the State's water source protection, water conservation and community education goals, and serving the needs of all our water users.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board's (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at: 1-800-426-4791.

## Community Participation

The Public Works Advisory Board (PWAB) meets the third Wednesday of the month at the Veterans Hall located at 209 Surf Street at 5:30 p.m. If you have concerns you wish to express about your drinking water, time is set aside at the beginning of each meeting.

**To view a copy of this report or get more information regarding the City of Morro Bay Water Division visit [www.morrobayca.gov/313/Water-Division](http://www.morrobayca.gov/313/Water-Division)**

## DEFINITIONS

**Average Amount:** The amount detected; or when a range of values is shown, the average detected.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual

**Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Million Fibers per Liter (MFL):** EPA has established a maximum contaminant level (MCL) for asbestos in drinking water: 7 MFL (million fibers per liter).

**Nephelometric Turbidity Units (NTU):** Measurement of the clarity, or turbidity, of water.

**Parts per billion (ppb):** One part substance per billion parts water (or micrograms per liter).

**Parts per million (ppm):** One part substance per million parts water (or milligrams per liter).

**Parts per million (ppm):** One part substance per million parts water (or milligrams per liter).

**Picocuries per liter (pCi/L):** A measure of radioactivity.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**NA:** Not applicable    **ND:** Not detected

**NS:** No standard    **NC:** Not collected

## Where Does My Water Come From?

The City of Morro Bay's primary source of water is surface water from the State Water Project. The State Water Project is administered locally by the Central Coast Water Authority ([www.ccwa.com](http://www.ccwa.com)). The water is treated at the Polonio Pass Water Treatment Plant, which is near the junction of Highways 41 and 46 and water is then pumped to Morro Bay. The State Water supply can be augmented by and blended with water pumped from wells located near Lila Keiser Park (Morro Basin) and Chorro Creek Road (Chorro Basin). Some of the well water has nitrate contaminant levels that require treatment through either blending or filtration. All well water has a disinfectant added prior to use. During 2017 State Water provided 88% of the City's drinking water and the wells provided the remaining 12%, with all of this well water being treated by the Brackish Water Reverse Osmosis plant.



## Sampling Results

Over the past years we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. We are happy to report that for 2017 we were not in violation at any time. While the range of contamination in the raw well water may have exceeded the drinking water standards, all of the water delivered to your home had contaminant levels reduced through either blending or treatment. The table below lists all of the drinking water contaminants that were detected during the most recent sampling for the constituent. If a contaminant was tested for and not found in the system or source water, it is not included in this report. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

**PRIMARY DRINKING WATER STANDARD (Regulated In Order To Protect Against Possible Adverse Health Effects)**

SUBSTANCE (UNITS)	*YEAR SAMPLED	MCL	PHG (MCLG)	State Water		*Well Water <sup>4</sup>		VIOLATION	TYPICAL SOURCE
				AVERAGE AMOUNT	RANGE LOW-HIGH	AVERAGE AMOUNT	RANGE LOW-HIGH		
Aluminum (ppm)	2017	1	0.6	0.05	ND - 0.11	0.0017	ND - .01	No	Erosion of natural deposits; residue from water treatment processes
Arsenic (ppb)	2015	10	0.004	ND	ND	2	ND-5	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2015	1	2	ND	ND	0.147	.077 - 3.24	No	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2015	2	1	ND	ND	0.2	0 - 0.3	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel (ppb)	2015	100	12	ND	ND	4.2	2 - 8	No	Erosion of natural deposits; discharge from metal factories
Nitrate (as Nitrogen) (ppm)	2017	10 (as N)	10 (as N)	0.4	0.44	7	0.4 - 23	No <sup>4</sup>	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2015	50	30	ND	ND	10.1	4 - 19	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)

\* sampling year for well water was in 2015; well water is sampled every three years; sampling will occur again in 2018

**PRIMARY DRINKING WATER STANDARD (Regulated In Order To Protect Against Possible Adverse Health Effects)**

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	PHG (MCLG)	STATE DLR	RANGE AVERAGE	STATE WATER
<b>RADIONUCLIDES</b>						
Gross Beta Particle (pCi/L)	2016	50	0	4	Range Average	5.7 5.7
<b>CLARITY (NTU)</b>						
Combined Filter Effluent Turbidity	2017		TT=<1 NTU every 4 hours TT=95% of samples <0.3 NTU		Range %	0.04-0.18 100%

**SECONDARY DRINKING WATER STANDARD (Regulated In Order To Protect The Odor, Taste And Appearance Of Drinking Water)**

SUBSTANCE (UNITS)	*YEAR SAMPLED	State MCL	State Water		*Well Water <sup>4</sup>		VIOLATION	TYPICAL SOURCE
			AVERAGE AMOUNT	RANGE LOW-HIGH	AVERAGE AMOUNT	RANGE LOW-HIGH		
Chloride (ppm)	2017	500	39	8-145	290.9	94 - 1480	No	Runoff/leaching from natural deposits; seawater influence
Iron (ppb)	2017	300	ND	ND	190.8	ND - 2040 <sup>4</sup>	No	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance (umhos/cm)	2017	1600	306	148-758	1705	1040 - 5050	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2017	500	30	30	96.6	66 - 149	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm) (TDS)	2017	1000	165	77-395	989.2	620 - 2870	No	Runoff/leaching from natural deposits
Turbidity <sup>3</sup> (NTU)	2017	5	0.05	0.04-0.09	1.3	ND - 11.7	No	Soil runoff

\* sampling year for well water was in 2015; well water is sampled every three years; sampling will occur again in 2018

## Water Distribution System

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	State Water		Morro Bay		VIOLATION	TYPICAL SOURCE
				AVERAGE AMOUNT	RANGE LOW-HIGH	AVERAGE AMOUNT	RANGE LOW-HIGH		
<b>Haloacetic Acids</b> (ppb)	2017	60	NA	14.2	6.22 - 22	13.6	2-22	No	By-product of drinking water disinfection
<b>TTHMs</b> (ppb) (Total Trihalomethanes)	2017	80	NA	36	26 - 55	32.8	15-69.2	No	By-product of drinking water disinfection
<b>Total Chlorine Residual</b> (ppm)	2017	4	4	2.2	1.9-2.7	1.2	0.25–2.2	No	Measurement of the disinfectant used in the production of drinking water
<b>Total Coliform Bacteria</b> (# of positive samples)	2017	0	0	0	0	0	0	No	Naturally present in the environment

### Tap water samples were collected for Lead and Copper analyses from 30 homes throughout the distribution system

SUBSTANCE (UNITS)	YEAR SAMPLED	ACTION LEVEL	PHG (MCLG)	AMOUNT DETECTED (90th%Tile)	HOMES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
<b>Copper</b> (ppm)	2015	1.3	0.3	0.12	0	No	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Lead</b> (ppb) <sup>2</sup>	2015	15	0.2	6.7	0	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturer; erosion of natural deposits

### DISTRIBUTION SYSTEM MICROBIOLOGICAL CONTAMINANTS

CONTAMINANT	YEAR SAMPLED	MCL	HIGHEST NO. OF DETECTIONS IN ONE MONTH	No. of months in violation	Major Sources in drinking water
<b>Total Coliform Bacteria</b> (# of positive samples)	2017	0	0	0	Naturally present in the environment
<b>Fecal Coliform or E.coli</b> (# of positive samples)	2017	0	0	0	Human or animal fecal waste

#### Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at: 1-800-426-4791 or [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

The City of Morro Bay is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.



## UNREGULATED AND OTHER SUBSTANCES (Used To Monitor Certain Contaminant Occurrences)

SUBSTANCE (UNITS)	YEAR SAM- PLED	State Water		*Well Water <sup>4</sup>		TYPICAL SOURCE
		AVERAGE AMOUNT	RANGE LOW-HIGH	AVERAGE AMOUNT	RANGE LOW-HIGH	
<b>Aggressive Index</b> (Corrosivity)	2017	11	11	12.1	12 - 12.5	Balance of hydrogen, carbon & oxygen in water, affected by temperature & other factors
<b>Alkalinity</b> (ppm)	2017	44	24 - 74	365	310 - 500	Runoff/leaching from natural deposits; seawater influence
<b>Boron</b> (ppm)	2015	ND	ND	0.1	ND - 0.2	Runoff/leaching from natural deposits
<b>Calcium</b> (ppm)	2017	34	18 - 62	96.4	34 - 278	Runoff/leaching from natural deposits; seawater influence
<b>Chromium</b> Hexavalent (ppb)	2017	0.05	0-0.050	ND	ND	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
<b>Hardness</b> (ppm)	2017	67	32 - 140	669.8	369 - 1800	Runoff/leaching from natural deposits
<b>Heterotrophic Plate Count</b> (HPC) (cfu/ml)	2017	0.8	0 - 22	6.6	1 - 47	HPC has no health effects; it is an analytic method used to measure the variety of bacteria that are common in water
<b>Potassium</b> (ppm)	2017	1.7	1.7	1	ND - 4	Runoff/leaching from natural deposits; seawater influence
<b>pH</b> (units)	2017	8.3	8.0-8.5	7.2	5.79 - 7.7	Runoff/leaching from natural deposits
<b>Potassium</b> (ppm)	2017	1.7	1.7	1	ND - 4	Runoff/leaching from natural deposits; seawater influence
<b>Sodium</b> (ppm)	2017	24	24	87.9	45 - 317	Runoff/leaching from natural deposits; seawater influence
<b>Total Organic Carbon</b> (ppm)	2017	2	1.6 - 2.7	NA	NA	Various natural and man made sources
<b>Vanadium</b> (ppb)	2015	ND	ND	6.2	2-15	Vanadium is a naturally occurring "rare earth" element that is found ubiquitously in the earth's crust.

\* sampling year for well water was in 2015; well water is sampled every three years; sampling will occur again in 2018

## Questions?

For more information about this report, or any questions relating to your drinking water, please contact Damaris Hanson, at (805) 772-6265 or [dhanson@morrobayca.gov](mailto:dhanson@morrobayca.gov)



## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at: 1-800-426-4791.

### Footnotes:

<sup>1</sup> HPC results are reported from the distribution system not from the raw well water.

<sup>2</sup> Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the U.S. EPA Safe Drinking Water Hotline at 1-800-426-4791.

<sup>3</sup> Turbidity (NTU) is a measure of the cloudiness of the water and it is a good indicator of the effectiveness of a treatment plant's filtration system.

<sup>4</sup> Sampling from well water is for raw water results. Samples are taken prior to either treatment or blending.

<sup>5</sup> Sampling year for well water is 2015; well water is sampled every three years, with 2015 the most recent year. Sampling will be conducted again in 2018.



AGENDA NO: II-2

MEETING DATE: September 26, 2018

## Staff Report

TO: Public Works Advisory Board

DATE: September 21, 2018

FROM: Rob Livick, PE/PLS - Public Works Director/City Engineer  
Damaris Hanson – Environmental Programs Manager

SUBJECT: OneWater Plan update

### **RECOMMENDATION**

Review draft OneWater Plan Chapters 1, 2, 3, 4, and 7 and provide any comments to staff.

### **FISCAL IMPACT**

Work on the OneWater Plan is proceeding in accordance with the City Council authorized budget. The results of the plan will be used in the development of future operational and capital budgets; and will be used as one of the inputs in the City's water and Sewer rate analysis.

### **BACKGROUND/ DISCUSSION**

The OneWater Planning effort has continued as a City Goal since 2016 and the following was included in the 2018 Council Goal document:

*Goal 2: Water Reclamation Facility (WRF) and OneWater Review and Implementation... The City is also working on a comprehensive plan looking at all the city's systems that address water, from sewer to potable water to stormwater. The OneWater Plan establishes a plan to secure our water future and establish a long-term capital improvement plan to improve water and sewer infrastructure.*

Specific components of the OneWater plan have been reviewed by the Board in November 2017 and May 2018 and the Capital Improvement Costs were reviewed as part of the Water and Sewer Rate study during the joint meeting with CFAC and WRFCAC.

The attached document represents an interim deliverable of the final report. The Final report is scheduled to be approved by Council before the end of 2018 and the final draft will be presented to PWAB at their November 2018 meeting.

Prepared By: \_\_\_dh\_\_\_

Dept Review: \_\_\_RL\_\_\_

## **CONCLUSION**

When completed, the OneWater Plan will be critical in determining the necessary capital and maintenance improvements for the water and wastewater systems, along with recommending the make-up of the City's future water supply portfolio to meet goals adopted by City Council since 2016. Additionally, the OneWater Plan will inform the General Plan and Local Coastal Plan update regarding water and wastewater resources to accommodate future growth. Finally, the costs in the water and collection system CIP have been incorporated into the [rate study](#) that was presented to the City Council at their July 10, 2018 meeting.

## **ATTACHMENT (LINK)**

[Draft ONEWATER MORRO BAY PLAN, Chapters 1,2,3,4 and 7, Carollo Engineers, August 2018](#)