



## CITY OF MORRO BAY PUBLIC WORKS ADVISORY BOARD AGENDA

*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.*

**Wednesday, May 16, 2018**  
**Veterans Memorial Building - 5:30 P.M.**  
**209 Surf Street, Morro Bay, CA**

Ric Deschler, Chair  
John Erwin

Steven Shively, Vice-Chair  
Janith Goldman  
Stewart Skiff

Christian Erlendson  
Christopher Parker

ESTABLISH QUORUM AND CALL TO ORDER  
MOMENT OF SILENCE/PLEDGE OF ALLEGIANCE  
ANNOUNCEMENTS  
PRESENTATIONS – None

### PUBLIC COMMENT PERIOD

Members of the audience wishing to address the Board on City business matters not on the agenda may do so at this time. To increase the effectiveness of the Public Comment Period, the following rules shall be followed:

- When recognized by the Chair, please come forward to the podium and state your name and city of residence for the record.
- Comments are to be limited to three minutes.
- All remarks shall be addressed to the Board, as a whole, and not to any individual member thereof.
- The Board respectfully requests that you refrain from making slanderous, profane or personal remarks against any elected official, commission and/or staff.
- Please refrain from public displays or outbursts such as unsolicited applause, comments or cheering.
- Any disruptive activities that substantially interfere with the ability of the Board to carry out its meeting will not be permitted, and offenders will be requested to leave the meeting.
- Your participation in Board meetings is welcome and your courtesy will be appreciated.

### A. CONSENT CALENDAR

- A-1 Approval of Minutes of April 18, 2018 Regular Meeting  
**Recommendation:** Approve minutes.

### B. BUSINESS ITEMS

- B-1 Directors Report - Informational summary of current Public Works Activities  
**Recommendation:** Information item for discussion, no action needed.

- B-2 OneWater Update

**Recommendation:** Review and provide any comments to staff regarding the results as presented in the OneWater update.

### C. POTENTIAL FUTURE AGENDA ITEMS

### D. ADJOURNMENT

Adjourn to the Public Works Advisory Board meeting at the Veteran's Memorial Building, 209 Surf Street, on June 20, 2018 at 5:30 p.m.

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This agenda is subject to amendment up to 72 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, for any revisions or call the department at 772-6263 for further information.

Materials related to an item on this Agenda are available for public inspection during normal business hours in the Public Works Department at 955 Shasta, City Hall at 595 Harbor, Mill's/ASAP at 495 Morro Bay Boulevard, or the Morro Bay Library at 695 Harbor, Morro Bay, CA 93442. Materials related to an item on this agenda submitted to the Board after publication of the agenda packet are available for inspection at the Public Works Department during normal business hours or at the scheduled meeting.

This agenda may be found on the Internet at: [www.morrobayca.gov/pwab](http://www.morrobayca.gov/pwab) or you can subscribe to Notify Me for email notification when the Agenda is posted on the City's website. To subscribe, go to [www.morrobayca.gov/notifyme](http://www.morrobayca.gov/notifyme) and follow the instructions.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Public Works Department at (805) 772-6263. Notification 24 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

MINUTES - PUBLIC WORKS ADVISORY BOARD (PWAB)  
REGULAR MEETING – April 18, 2018  
VETERANS MEMORIAL HALL – 5:31P.M.

AGENDA ITEM: A-1  
DATE: May 16, 2018  
ACTION: \_\_\_\_\_

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

ESTABLISH QUORUM, CALL TO ORDER AND MOMENT OF SILENCE

The meeting was called to order at 5:31 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/3GLAeNk5euY?t=1m47s>

A-1 APPROVAL OF MINUTES OF MARCH 21, 2018 MEETING.

MOTION: Chris Parker moved to approve Item A-1. The motion was seconded by Stewart Skiff and carried 6-0-0 unanimously.

B. BUSINESS ITEMS

B-1 Directors Report – Informational summary of current Public Works Activities

<https://youtu.be/3GLAeNk5euY?t=2m18s>

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/3GLAeNk5euY?t=52m3s>

Rob Livick stated that there will be a joint WRFAC & PWAB meeting to discuss the Rate Study.

D. ADJOURNMENT

The meeting adjourned at 6:27 P.M. to a regular Public Works Advisory Board meeting at the Veteran's Memorial Building, 209 Surf Street, May 16, 2018.

Recorded by:

Gina Gregory  
Office Assistant



AGENDA NO: B-1

MEETING DATE: May 16, 2018

## Staff Report

**TO:** Public Works Advisory Board  
**DATE:** May 11, 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 RECENT SERVICE REQUESTS & REPAIRS

Staff Contact: Mike Wilcox

The following accomplishments are in addition the core duties and broken down by category below. Staff is ramping up street work with the dryer weather.

1. City Park: Grind trip hazards in concrete walkways.
2. Centennial Park: Installed fish art bicycle rack.
3. Streets: Re-stripe Tidelands parking lot. Re-paint red curb along Beachcomber/ Morro Strand.
4. Streets: Replace “No parking this side” signs on Conejo, 2560 Koa, 774 Cuesta, 2555 Nutmeg.
5. Trees: Planted 3 trees; front of MBFD, Bella Vista/Quintana, 780 Quintana. Re-staked several others.
6. Trees: Cut and haul large fallen branches at 1206 Main and 258 Barlow.
7. MBFD: Repaired a second fire engine exhaust system assembly.
8. Visitor Center: Repaired ramp handrail.
9. MBPD: Installed “Safe Exchange” signs on poles.
10. Facilities: Replaced all HVAC filters in City Buildings.

# CONSOLIDATED MAINTENANCE RECENT PROJECTS

The restroom facilities at Del Mar Park are finished, functioning, and open for business. The facilities include a private ADA compliant stall with a baby changing table, and brand new drinking fountain.



# CONSOLIDATED MAINTENANCE RECENT PROJECTS

Staff facilitated the installation of the first of two very colorful bike racks on the Embarcadero. This one is located near the Trolley stop and Centennial Parkway. The second will be installed near the Maritime Museum. Staff is also refurbishing a wooden slat bench to be installed near the bike rack at Centennial Parkway.



# TRANSIT

Staff Contact: Janeen Burlingame

## Short Range Transit Plan

Morro Bay Transit will be holding a Community Forum on Wednesday, May 30 at 3:30 PM in the Veterans Memorial Building to present:

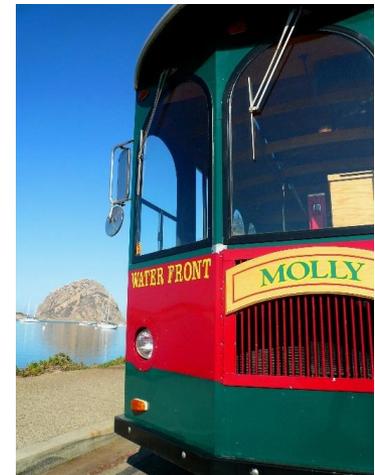
- An overview of transit services
- A summary of recent surveys
- A list of transit service alternatives being considered for potential changes

After the presentation, there will be a Q&A session to get additional input from the community. MB Transit will be providing free rides to the forum and individuals should call 772-2744 to reserve a ride.



## Morro Bay Trolley

The Morro Bay Trolley 2018 Season will begin Memorial Day weekend. For information on routes, operating days and times, please visit the City's website at [www.morrobayca.gov/Trolley](http://www.morrobayca.gov/Trolley)



# WATER – OPERATIONS

Staff contacts: Rob Livick

Joe Mueller

Damaris Hanson

Jamie James

Water staff completed various work orders:

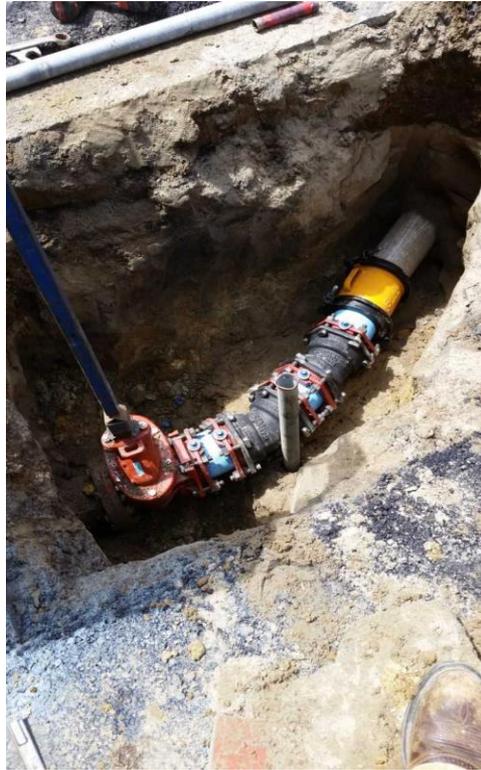
- Exercised Valves (66)
- turn off/on services (24/47)
- Re-read meters (67)
- Customer requests (16)
- Water samples (93) Tri-annual testing conducted this month
- USA service line locations (35)
- Assisted with the installation and inspection of 23 new townhome water services at Main and Bonita. Inspections included the install of one new fire hydrant, and the moving of another.
- Conducted the water supply wells tri-annual water sampling.
- Changed out a water system shut off valve at Yerba Buena St. and Tide Ave. The job was complicated by the large irregular angle offset between the two pipes. Through the use of multiple differing angle connectors, staff was able to make a safe and secure connection helping to insure years of trouble free operation.

Reports completed:

- Annual water extraction report for Chorro and Morro Water rights
- Monthly water reports to State Water Resources Control Board
- Annual Water Quality report – Consumer Confidence Report 2017 - [www.morrobayca.gov/CCR2017](http://www.morrobayca.gov/CCR2017)



Valve replacement at Yerba Buena and Tuscan



Valve replacement at Yerba Buena and Tide Ave.



Operator cross Training on the Brackish water treatment plant

# WATER – WATER CONSERVATION

Staff Contact: Damaris Hanson

For the Month of April water conservation was only 18.6% lower compared to April 2013.

Please remember to make water conservation a way of life!

State Water Resources Control Board may be adopting more permanent water conservation measures. If adopted in April the proposed regulations will go into effect 7/1/18 The permanent regulations may include:

- Over watering lawns in which water flows into the street
- Washing down driveways and sidewalks
- Washing your car using a hose without an automatic shutoff nozzle
- Running an ornamental fountain without a recirculating system
- Watering lawns and landscapes within 48 hours of one-fourth of an inch or more of rainfall
- Hotels not asking guests to skip laundering of towels and linens daily
- Watering turf a street median that has no community recreational or civic function.

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 (up to \$2 per sq. ft.) and replacing a toilet that flushed more than 1.6 gallons per flush (\$100).

# WASTEWATER– COLLECTIONS

Staff Contacts: Joe Mueller

John Gunderlock

In April wastewater collections staff:

- Cleaned approximately 11,000 feet of sewer mainline.
- Responded to 1 after-hour callout at Lift Station 2 pump overload alarm due to rags.
- Responded to 4 online customer service requests: 1) to investigate Possible sewer stoppage, no stoppage discovered; 2) inspect dip in pavement over newly installed sewer lateral, 3) revisit pavement area over new lateral because it wasn't repaired by contractor in a timely manner, and 4) to inspect new asphalt paving to repair dip in road over previously mentioned sewer lateral.
- Reported no mainline overflows for the month.
- Conducted pH sampling at Mission Linen to evaluate facility pretreatment control processes and associated industrial discharge to the city collection system.
- Conducted 5 source control inspections at industrial and commercial facilities.
- Collected hydrogen sulfide data to evaluate hydrogen sulfide concentration at a point in the collection system along Main Street where Staff received sewer odor complaints.
- Continued routine and enhanced line cleaning throughout the City
- Conducted safety meeting on Trench Safety
- Chad Rocha, City Wastewater Systems Operator, coordinated a sewer system maintenance and repair workshop conducted by Kent Carlson- Collections Operations Manager from the City of Los Angeles, Jeremy Haskins from Mission Clay Products, and John Pouge from Advanced Nozzles. The class was certified by CJPIA and well attended by the our neighboring agencies of Atascadero, Cayucos, San Luis Obispo, and Paso Robles.



# WASTEWATER– TREATMENT

Staff Contacts: Joe Mueller

John Gunderlock

## Operation & Maintenance

- Flow for the month of April averaged 0.931 Million Gallons per Day (MGD) and totaled 27.923 million gallons for the month.
- Staff recorded 0.8 inches of rain during the month of April.
- Staff responded to (7) after hour callouts in April for plant chlorine adjustments.
- Replace a failed chlorine residual meter pump control board and test probe.
- The emergency backup generator and switchgear where tested under load.
- Replaced the two primary scum air-actuated diaphragm pumps and related pressure regulating equipment.
- Replaced a flanged rubber hose on the digester #3 gas system due to corrosion.

### Staff attended the following training:

- CWEA Wastewater/Collections/Laboratory annual conference in Sacramento.
- City hosted Collections System maintenance training with Kent Carlson.
- Safety meeting on confined space.

### Submitted reports:

- March 2018 Monthly Self-Monitoring Report (eSMR)
- March 2018 Monthly Discharge-Monitoring Report (eDMR)
- 2018 First Quarter Receiving-Water Report (eSMR)
- 2018 First Quarter Effluent-Bacteria Report (eSMR)



Rust removal and painting of influent piping.



Digester hose replacement

## Wastewater Treatment - Operation & Maintenance continued

- Replaced the digester gas system inches of water column pressure gauges with highly-accurate and long-lasting manometer type gauges.
- Sampled storm water outfalls for pH, TSS, Oil & Grease.
- Repaired sight lighting installing new photo sensors.
- Laboratory staff performed and passed annual proficiency testing Study WP279.
- The facility laboratory received its annual certification from the Environmental Laboratory Accreditation Program valid through May 31<sup>st</sup>, 2019.
- Coastline Equipment replaced the front-end loader hydraulic manifold.
- Alpha Electric installed surge protectors and heater relays on the headworks and interstage motor controls.
- Cayucos CSD starting using Magnesium Hydroxide for odor/corrosion control in their collections system.



Primary scum pump replacement

# URBAN FOREST MANAGEMENT

Staff Contacts: Damaris Hanson  
Mike Wilcox



- Nesting Season – no trimming or tree removal of Public trees February 1st - June 30th
- Customer service requests for tree trimming and removals are not conducted unless it is determined to be an emergency during nesting season.
- Three more trees were planted

# ENGINEERING/CAPITAL PROJECTS

Staff contact: Rob Livick

## Highway 41/Main/Highway 1

- CalTrans Reviewing Environmental and Preliminary Design Information, Caltrans is holding an Intersection Control Evaluation-Technical Advisory Panel (ICETAP) on May
- SLOCOG Increased Construction funding for Project to \$3.1 M (Still Requires 50% match by City)
- Project update to PWAB anticipated in June 2018

## Pavement Management

- Annual Completion Report approved by Council on April 24, 2018
- List of potential street maintenance projects using \$191,000 in SB1 funding to California Transportation Commission on April 30, 2018
- Proposed preliminary list for Pavement Management Maintenance Attached

## Sidewalk Gap Closures

- Work Complete
- Council requested additional sidewalk work in the draft FY2018/2019 Budget.

## Nutmeg Tank Replacement

- Addressed in the OneWater – Water System Capital Improvement Plan

## Chorro Stream Gages

Continue to monitor stream flow temporary gaging locations.

- Chorro Creek stream flow on Monday May 7, 2018.
  - The flow at Canet was 4.79 cfs at 10:59 AM, the gage reading on the County website was 4.60 feet.
  - The flow at the Chorro Creek Road crossing was 5.64 cfs at 9:55 AM, the gage reading on the County website was also 4.60 feet at this time.

# ENGINEERING/CAPITAL PROJECTS

Staff contact: Rob Livick

## **Flood Protection**

- Due to the diligent work of Pamela Newman, Assistant Engineer, Morro Bay was awarded an increase to our Community Rating (in FEMA's National Flood Insurance Program, NFIP). This will now offer our residents the ability to purchase flood insurance at a higher discount rate. Public Works, Engineering went through a 5- year cycle audit for the Community Rating System (a voluntary incentive program that recognizes community floodplain management ordinances and activities). The NFIP is managed by The Federal Emergency Management Agency (FEMA), within The Department of Homeland Security. Floods are the nation's most common and costly natural disasters and we strive to provide disaster resistant procedures and documentation for our community. We are also one out of only two Cities and Communities within SLO County to participate and be acknowledged.

## **Development Review**

- Staff is working on the following major projects:
  - Morro Mist 23 Lot Subdivision-Bonita and Main: Under Construction
  - Black Hills Villas – Quintana and South Bay: Under Construction
  - Sonic Restaurant – Main and Highway 41: In Plan Check
  - Commercial Development – Sunset and Highway 41: In discretionary permit review
  - Hotel Development – Atascadero Road West of Highway 1: Concept Review

# WASTEWATER– NEW WRF

Staff contact: Rob Livick

## **Draft Environmental Report Released**

The City released the draft Environmental Impact Report (EIR) at the end of March. The Draft EIR provides the public and pertinent agencies with information about the potential effects on the local and regional environment associated with the proposed WRF project. Community members are encouraged to read the report, which can be found online on the WRF website at <http://morrobaywrf.com>. The City is soliciting comments from the public about the Draft EIR, which will be received through May 18th, 2018. Written comments should be sent to:

Rob Livick, P.E. Public Works Director City of Morro Bay  
955 Shasta Avenue,  
Morro Bay, CA 93442  
[rlivick@morrobayca.gov](mailto:rlivick@morrobayca.gov)

## **Design Build Proposals**

- The City received a total of two proposals for the WRF design-build today from Black and Veatch/Filanc and AECOM/WM Lyles. The proposals were publicly opened and recorded and will be evaluated by City staff, the program team, and WRFCAC subcommittee then WRFCAC for conformance with the requirements of the RFP. The “Preferred Proposer” will be determined using the selection criteria in Section 2.7 of the RFP. The “Preferred Proposer” will be the one that the team determines achieves the apparent best value to the City. The evaluation process will start immediately and an update of the process will be provided during a WRF update presented at the City Council meeting on May 22.

## **Blue Ribbon Commission**

- Morro Bay City Manager, Scott Collins, formed a Blue Ribbon Commission to evaluate the costs and potential rate increases associated with the Water Reclamation Facility (WRF). The Commission will be charged with providing an independent review and recommendation to the various advisory committees and City Council. See <https://tinyurl.com/y9xzwqsz> for additional information.

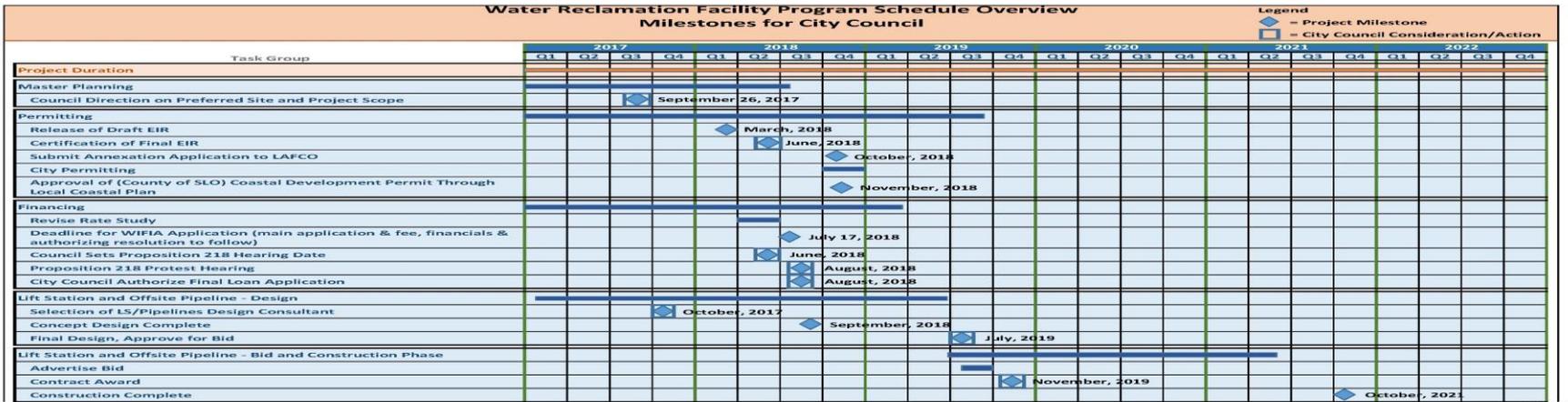
# WASTEWATER– NEW WRF

Staff contact: Rob Livick

## Upcoming WRF public meetings and other important dates:

- May 16, 2018 – Project Information Meeting, Morro Bay Public Library @ 3 pm
- May 18, 2018 – Public comments due on the Draft EIR.

For more information about the WRF project, please visit: <http://morrobaywrf.com>.



Attachment: Proposed preliminary list for Pavement Management Maintenance

**CITY OF MORRO BAY**  
**2-Year Prospective Street List**

Pavement							
Street ID	Condition Index	Start	End	Region	Street Type	Area	Treatment
2018-19							
Barlow	44	Main Street	End	Zone 4	R - Residential/Local	22860	CS
Beachcombe	15	Yerba Buena Street	North End	Zone 1	R - Residential/Local	21420	DCS
Carmel	64	Kings Avenue	Arbutus Avenue	Zone 4	R - Residential/Local	23,660	CS
Coral	19	Paul Creek	Java Street	Zone 1	R - Residential/Local	22680	DCS
Coral	50	Indigo Cir	San Jacinto St	Zone 1	C - Collector	40320	M2
Elm	60	Bonita Street	Pico St (North End)	Zone 2	R - Residential/Local	31,100	CS
Emerald Circle	59	Coral Avenue	Coral Avenue	Zone 1	R - Residential/Local	86,760	CS
Hemlock	64	San Joaquin	Elena Street	Zone 2	R - Residential/Local	15,360	CS
Juniper	43	North End	Elena Street	Zone 2	R - Residential/Local	14690	CS
Juniper	27	Elena St	Avalon St	Zone 2	R - Residential/Local	21390	3CS
LittleMorr	29	Raddcliff Street	City Limits	Zone 3	R - Residential/Local	4840	3CS
Main	37	Zanzibar	Yerba Buena	Zone 1	R - Residential/Local	22320	3CS
Maple Avenue	64	Cuesta Street	End	Zone 2	R - Residential/Local	11,600	CS
Morro	48	Pacific Street	Marina Street	Zone 3	R - Residential/Local	23560	M2
Morro	50	Morro Bay Blvd	Pacific Street	Zone 3	R - Residential/Local	22320	M2
MorroBayAl	8	Piney Way	Bernardo Ave	Zone 3	R - Residential/Local	18290	CS
Morro Bay Blvd.	87	Round-About	Round-About	Zone 3	MiA - Minor Arterial (4)	7,250	M2
Panay	44	Beachcomber Drive	End	Zone 1	R - Residential/Local	22500	3CS
Panorama	75	Blanca Street	Zanzibar Street	Zone 1	R - Residential/Local	7,500	M2
Piney Lane	60	Piney Way	End	Zone 4	R - Residential/Local	7,665	CS
Preston	17	Main Street	End	Zone 3	R - Residential/Local	4860	DCS
Rennell Street	57	Panorama Drive	Main St	Zone 1	R - Residential/Local	20,725	CS
San Jacinto	65	Main St	COP at Alder	Zone 2	C - Collector	6,900	CS
Tahiti	32	Beachcomber Drive	End	Zone 1	R - Residential/Local	11900	3CS
Tide	45	Nevis	Vashon	Zone 1	R - Residential/Local	20700	3CS
Tulare	62	South End	Carmel Street	Zone 4	R - Residential/Local	31,200	CS
Vashon	16	Beachcomber Drive	End	Zone 1	R - Residential/Local	66780	3CS
Verdon	32	Sandalwood Avenue	Coral Avenue	Zone 1	R - Residential/Local	29580	3CS
West	42	Beach	Surf Street	Zone 3	R - Residential/Local	7000	CS

Pavement		Street ID	Condition Index	Start	End	Region	Street Type	Area	Treatment
<b>2019-20</b>									
Azure	57	Coral Street	Sandalwood	Zone 1	R - Residential/Local	19190	CS		
Bay	80	Marina Street	Pacific Street	Zone 4	R - Residential/Local	10,125	M2		
Coral	57	Indigo Ave	Emerald Cir	Zone 1	R - Residential/Local	35,700	CS		
Cuesta	59	Laurel Avenue	Nutmeg	Zone 2	R - Residential/Local	9,200	CS		
Ironwood Ct.	58	Ironwood Avenue	End	Zone 2	R - Residential/Local	10,725	CS		
Kings	67	Las Tunas	Balboa Street	Zone 4	C - Collector	10,545	CS		
La Jolla	61	Main Street	Greenwood	Zone 2	R - Residential/Local	32,980	CS		
Marina	68	Main Street	Embarcadero	Zone 3	C - Collector	33,750	CS		
Monterey	58	Marina Street	Olive Street	Zone 4	R - Residential/Local	49,525	CS		
Napa	57	Morro Bay Blvd	Pacific Street	Zone 3	R - Residential/Local	12,095	CS		
Olive	59	Kern Avenue	Piney Way	Zone 4	R - Residential/Local	22,200	CS		
Pacific	64	Kern Avenue	Piney Way	Zone 4	C - Collector	36,160	CS		
Pacific	70	Piney Way	Main Street	Zone 3	C - Collector	59,400	CS		
Pacific	68	Main Street	Embarcadero	Zone 3	C - Collector	37,800	CS		
Pelican	59	Market Avenue	Dunes Street	Zone 3	R - Residential/Local	6,720	CS		
Shasta	65	Acacia St	Olive St	Zone 4	C - Collector	23,360	CS		
Shasta	71	Harbor Street	Dunes Street	Zone 3	C - Collector	13,865	CS		
Yerba Buena	69	Highway 1	Beachcomber	Zone 1	C - Collector	8,000	CS		
Zanzibar	80	Tuscan Avenue	Pacific Street	Zone 1	R - Residential/Local	10,800	M2		

1 This budget is based on current funding availability. Approval of new funding sources would significantly expedite reconstruction

2 PMP Street priorities are reevaluated annually during project design to utilize the most appropriate repair method.

3 Final street selection will occur after Council approval of award considering current pavement condition & fund availability



AGENDA NO: B-2

MEETING DATE: May 16, 2018

## Staff Report

**TO: Public Works Advisory Board**

**DATE: May 11, 2018**

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

**SUBJECT: OneWater Plan update**

### **RECOMMENDATION**

Review and provide any comments to staff regarding the results as presented in the OneWater update.

### **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**

#### **Work Completed to Date - Water Supply Options**

Carollo began the water supply evaluation task for the OneWater Plan with a site evaluation of the City's existing desalination and brackish water reverse osmosis (BWRO) facility to determine its ability to play a role in the City's regular supply. The site evaluation found the BWRO facility was in good condition and the RO racks and recently upgraded electrical components could continue to be used. However, due to the age and condition of the existing ocean water desalination facility components, many, if not all, of those components would likely need to be replaced if that supply option were to play a role in the City's future supply.

Using growth assumptions from the City's new General Plan that is currently under development, future water demands for the 20-year planning horizon were determined. Based on the information from the site visits and future demands, five (5) water supply

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

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

options have been developed. Those options are summarized in the following table:

No.	OPTION	WATER SUPPLY AVAILABILITY
1	Maintain some or all of State Water Allocation	1,313 AFY <sup>1</sup>
2	Full utilization of the Morro Basin wells	581 AFY
3	Stream flow augmentation in Chorro Creek to allow for utilization of the Chorro Basin wells	1,142 AFY
4	Groundwater Injection of treated advanced treated (purified) wastewater and IPR	943 or 1,200 AFY
5	Ocean desalination	645 AFY
6	Direct potable reuse (DPR)	923 AFY

Due to the parallel efforts of the OneWater and Water Reclamation Facility (WRF) Project, it is still unknown whether the purified water that will be injected as part of the WRF Project will require additional treatment for nitrates or salinity at the Morro Basin wells due to existing groundwater characteristics and non-point source contamination. The OneWater Plan includes evaluation of three water treatment for IPR scenarios:

- No additional treatment required;
- Filtration Treatment for salinity/nitrates (existing BWRO); and
- Biological Treatment for nitrates (Biottra® or similar).

Evaluation of that range of IPR options will allow the City to understand the total cost of groundwater and potable reuse. However, this evaluation and outcomes of the evaluation will not impact the capital nor operational costs of the WRF project.

Along with those options, Carollo and City staff have developed a set of evaluation criteria that will be used to screen those options and determine the optimal water supply make-up for the City. The evaluation criteria categories include:

- Economic
- Natural Hazards
- Resiliency
- Environmental
- Implementation

To solicit public input into the evaluation process, Carollo developed a questionnaire that was distributed to members of the City Council, Public Works Advisory Board (PWAB), and staff

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<sup>1</sup> One Acre-Foot per Year (AFY) = 893 Gallons per Day

asked participants to assign a value of 1 to 10 for each of the evaluation criteria. The scoring for all participants was normalized and used to weight the evaluation criteria.

Carollo has also developed planning-level cost estimates for each alternative.

### **Next Steps - Water Supply**

Following presentations to both the PWAB and the City Council, Carollo will complete the water supply evaluation chapters of the OneWater Plan.

### **Work Completed to Date - Master Planning**

Like the water supply evaluation task, Carollo began the master planning process by performing site visits of all the City's water, collection system, and stormwater infrastructure including wells, tanks, lift stations, reservoirs, and flood-prone areas throughout the City. That information, combined with the City's GIS and as-built drawings, were used to develop dynamic hydraulic (water and sewer) and hydrologic (stormwater) models for those systems. Historical water production and consumption data along with information obtained from third-party flow monitoring in the collection system will be used to calibrate those models. The calibrated models were used to evaluate each system under both current and future scenarios. Based on this evaluation, deficiencies were determined and the associated improvements necessary to eliminate these deficiencies were determined. Planning-level costs for these deficiencies were developed and the assortment of projects was organized into a 20-year capital improvement program (CIP). To date, final CIPs have been developed for the water distribution and sewer collection systems and deficiencies under both current and future conditions have been identified for the stormwater system.

### **Next Steps - Master Planning**

Following completion of the CIP for the stormwater system, Carollo will complete the individual chapters of the OneWater Plan.

### **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 collection system CIP will be incorporated into the rate study that is current being developed the includes the components of the WRF Program.