

C/CAG

CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY

*Atherton • Belmont • Brisbane • Burlingame • Colma • Daly City • East Palo Alto • Foster City • Half Moon Bay • Hillsborough • Menlo Park
Millbrae • Pacifica • Portola Valley • Redwood City • San Bruno • San Carlos • San Mateo • San Mateo County • South San Francisco • Woodside*

Agenda

Resource Management and Climate Protection Committee (RMCP)

Date: Wednesday, May 20, 2020

Time: 2:00 p.m. to 4:00 p.m.

Location: Remote meeting via Zoom link below

On March 17, 2020, the Governor issued Executive Order N-29-20 suspending certain provisions of the Ralph M. Brown Act in order to allow for local legislative bodies to conduct their meetings telephonically or by other electronic means. Pursuant to the Shelter-in-Place Order issued by the San Mateo County Health Officer on March 16, 2020, the statewide Shelter-in-Place Order issued by the Governor in Executive Order N-33-20 on March 19, 2020, and the CDC's social distancing guidelines, which discourage large public gatherings, C/CAG meetings will be conducted via remote conferencing. Members of the public may observe or participate in the meeting remotely via one of the options below.

Join Zoom Meeting

<https://us02web.zoom.us/j/81036106947?pwd=UjlmXd0YnJzSk9RQk1ReGtNNU1odz09>

Meeting ID: 810 3610 6947

Password: 578222

To join by phone: find your local number: <https://us02web.zoom.us/j/81036106947>

Persons who wish to address the RMCP Committee on an item to be considered at this meeting, or on items not on this agenda, are asked to submit comments in writing to kspringer@smcgov.org by 4:00 PM on Tuesday, May 19, 2020, by the guidelines below.

Emailed public comments should note the specific agenda item on which you are commenting, note that your comment concerns an item that is not on the agenda, or note that it is on the consent agenda. Members of the public are limited to one comment per agenda item. The length of the emailed comment should be commensurate with the two minutes customarily allowed for verbal comments, which is approximately 250-300 words. Staff will read the public comments addressing matters on this agenda received before the deadline of 4:00 PM on May 19, 2020 at the time the matter is called. Staff will read the public comments addressing items not on this agenda received before the deadline of 4:00 PM on May 19, 2020 during agenda item 1 "Public comments." Comments received after the deadline but before the end of the meeting will be provided to the RMCP Committee after the meeting.

Agenda Items

1. Introductions
2. Public Comment
3. Approval of Minutes from February 19, 2020 RMCP Committee meeting
(Kim Springer – Committee Staff) Action
4. Election of RMCP Committee Co-Chair
(Kim Springer – Committee Staff) Action
5. Update from Bay Area Water Supply and Conservation Agency
(Tom Francis - BAWSCA) Information/ Discussion
6. Presentation on Equity Tools and Resources for Climate-related Programs
(Kim Springer – Committee Staff) Information/ Discussion
7. Presentation on Convergence of Regional Efforts on Existing Building Electrification
(Susan Wright – County OOS Staff) Information/ Discussion
8. Committee Member Updates
9. Next Scheduled Meeting Date: June 17, 2020

PUBLIC NOTICING: Due to the impact of the Coronavirus (COVID-19), All notices of C/CAG regular Board meetings, standing committee meetings, and special meetings will be posted at C/CAG's website at: <http://www.ccag.ca.gov>.

All notices of C/CAG regular Board meetings, standing committee meetings, and special meetings will be posted at the San Mateo County Transit District Office, 1250 San Carlos Ave., San Carlos, CA, and on C/CAG's website at: <http://www.ccag.ca.gov>.

PUBLIC RECORDS: Public records that relate to any item on the open session agenda for a regular Board meeting, standing committee meeting, or special meeting are available for public inspection. Those public records that are distributed less than 72 hours prior to a regular Board meeting are available for public inspection at the same time they are distributed to all members, or a majority of the members, of the Board. The Board has designated the City/County Association of Governments of San Mateo County (C/CAG), located at 555 County Center, 5th Floor, Redwood City, CA 94063, for the purpose of making public records available for inspection. Such public records are also available on C/CAG's website at: <http://www.ccag.ca.gov>.

PUBLIC PARTICIPATION: Public comment is limited to two minutes per speaker. Persons with disabilities who require auxiliary aids or services in attending and participating in this meeting should contact Mima Guilles at (650) 599-1406, five working days prior to the meeting date.

*If you have any questions about this agenda, please contact C/CAG staff:
Executive Director: Sandy Wong (650) 599-1409
RMCP Committee Staff: Kim Springer (650) 599-1412*

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Minutes of

Resource Management and Climate Protection Committee (RMCP)

Date: Wednesday, February 19, 2020

Time: 2:00 p.m. to 4:00 p.m.

In Attendance:

Doug Silverstein*
Maryann Moise Derwin*
Ortensia Lopez*
Janet Borgens*
Diane Papan*
Rick DeGolia*
Donna Colson*
Tom Francis*
Christine Zaugg*
Kim Springer
John Allan
Charles Ice
Dario Presezzi
Phil Scott – West Bay Sanitary
Hilary Ganz – Rethink Waste

Not in Attendance:

Don Horsley*
Drew Combs*
Ortensia Lopez*
Bill Chiang*
Kristin Jensen*

*Indicates Committee Member

1. Introductions

2. Public Comment

No public comment

3. Approval of Minutes from January 15, 2019 RMCP Committee meeting

- Janet Borgens- Motion to approve
- Diane Papan - Second

None opposed, minutes approved

4. Presentation by Bioforcetech on conversion of wastewater biosolids to energy and biochar

Valentino Villa provided an overview of Bioforcetech's business and their technology. In 2013 they developed their first U.S. pilot to turn sewage waste into usable resources such as energy and fertilizer through natural processes. SVCW partnered with them to pilot their technology. They built their first full scale system in 2014. Their technology is designed to be as energy efficient as possible and includes a Biodryer which uses heat from bacteria decomposition to remove water from the input sludge. Next, pyrolysis removes bio gas which is used for bioreactor and the remaining two thirds is used for heating water to run the rest of the system.

- Donna Colson: This system runs off natural gas so we wouldn't be able to run this machine if we pass reach codes.
 - Doug Silverstein: Can the system run off electricity?
 - Villa - Yes, but we'd have to redesign some parts

The pyrolysis produces biochar which can be used for a variety of purposes. This process removes pollutants such as PFAs and heavy metals like mercury. These pollutants are captured in activated charcoal and results in approx. 250 lbs. of waste per 5000 tons of sludge.

- Colson – How many people is that?
 - Villa - 100k ppl/yr.
- Tom Francis: Where does this fit in the WWTP process?
 - Villa - This replaces a digester
- Papan: How many machines are needed?
 - We'll be replacing 3 digesters at SVCW with 10 machines at a significantly reduced cost

The system functions on digested or undigested sludge but there is more energy in undigested. The biochar that Bioforcetech produces at SVCW is sold back to RWC which uses it in their parks as a soil amendment. The machines are designed to be low maintenance.

- Colson: Question about cost comparison for construction and operation
 - Villa: This method cuts the cost of construction in half, operations are even less.
- Christine Zaugg: How is quality of the biochar ensured?
 - Villa: Pyrolysis prevents the formation of tars.
- Francis: How is this regulated? BAAQMD regulates and CDFA has approved this to be sold
- Charles Ice: How do you deal with quality when you're adding different sources of waste?
 - Villa: We aren't doing this yet but we're thinking about it.

After approving the technology, Bioforcetech is now focusing on new types of uses including cement and plastic. By using this in place of black plastic, GHG emissions can be reduced by 5 tons per ton of biosolids. Packaging foams are another example of this where the biochar can offset use of plastics.

5. Presentation by Fluence on application of MABR wastewater treatment technology

Ronan Barkan was invited back after the January meeting and presented more details on the application of the Fluence system. This system reduces energy use by up to 90% and can be used in any WWT applications, not just municipal WWTPs, but also greenhouses, packaging centers and processing facilities. MABR also can help decentralize WWTPs which helps reduce energy used for transportation and pumping. The MABR component as well as improved telecommunications has driven the cost down enough to make decentralization cost-effective. The MABR is designed to be a modular plug and play system that reduces the cost of installing civil infrastructure and allows for faster commissioning.

In Oregon, an MABR has been installed at a RV resort to replace 7 septic systems which allowed for treatment that was low-cost, odorless, quiet and minimally impactful. Ronan also presented on a project in the US Virgin Islands which reduced energy consumption for wastewater treatment which is very important due to the high cost of energy. The effluent was also reused for crops which is important for an area with little fresh water

In Israel, Fluence has a project treating wastewater from a dairy farm and a municipal water authority. Again, this reduced energy consumption by 90% and improved the effluent quality overall by partially treating 25% of flow and blending with the remaining flow.

- Papan – How much space is needed for an MABR system?
 - Barkan – Footprint doesn't matter too much; the system can fit into a 40-foot and 20-foot container (8x8x60) to fit a system that can treat 35,000 gallons. If footprint isn't the constraint, the systems can be installed below ground level, and you can have systems that are more energy efficient or require less maintenance.
- Francis – Does the system need continuous flow, or can it be shut down?
 - Barkan – Constant flow is ideal but not for the reason you're thinking. A reduction in flow won't hurt the membrane but it will affect the food supply for the biological element. In order to keep plants at schools running, they recirculate wastewater during the summer since the bugs don't need too much to stay alive.

6. Presentation by West Bay Sanitary District on water recycling for Sharon Heights Golf Course

Phil Scott provided an update on the recycled water project at Sharon Heights. A partnership with the Sharon Heights Country Club. Phil gave an overview of the project, the treatment system and how they finance the project. Some funding was received from the State Revolving Fund. The system is sized to treat 0.5 MGD.

The project should be operational by 3/31/20. Caltrans required a benefit to the state in order to grant longitudinal variance for easement. This came in the form of a fill station that Caltrans can use to pick up water for road maintenance projects. The system itself was designed to be sensitive to nearby uses. Visibility, noise, and odor were minimized. Future expansions can provide recycled water to SLAC. This was a public-private partnership. The golf course is paying for all the capital costs (\$22.5m) as well as ongoing O&M but they don't have to pay for water. Water comes from West Menlo, Portola Valley.

- Maryann Moise Derwin: What would happen if Portola Valley wanted to put in a decentralized treatment system?
 - Scott – That would require going to LAFCO and having West Bay Sanitary District broken up.
- Rick DeGolia – What happens with removed solids?
 - Scott – This goes back into sewer system and flows to redwood city
 - DeGolia – Will that create flow issues?
 - Scott – No, we have a large 30-inch pipe that should not have flow issues.

Scott showed a time-lapse of construction as well as drone footage of the facility. The project stayed within the contingency (\$19.5M plus a \$1M contingency).

7. Committee Member Updates

- Tom Francis – Provided an update on drought conditions. The supply from Hetch Hetchy is still fine but we've been experiencing dry conditions. We likely won't see an official report showing extent of the drought condition until next season, but it's likely if it stays this dry.

- Christine Zaugg SSMC - Annual Awards Ceremony is happening on April 2nd

8. Next Scheduled Meeting Date: March 18, 2020

C/CAG AGENDA REPORT

Date: May 20, 2020
To: Resource Management and Climate Protection Committee
From: Kim Springer, County Staff
Subject: Election of RMCP Committee Co-Chair

(For further information contact Kim Springer at 599-1412)

RECOMMENDATION

Participate in election of RMCP Committee Co-Chair.

FISCAL IMPACT

None.

BACKGROUND/DISCUSSION

Two seats on the RMCP Committee were recently filled, based on a C/CAG recruitment letter that was issued by C/CAG on January 10, 2020. One open seat was for Water, which was vacated by Adrienne Carr, formerly of BAWSCA, and one for Business/Chamber of Commerce; as seat which had been vacant for some time. Adrienne Carr was the former CO-Chair of the Committee.

The C/CAG Board appointed Tom Francis, Water Resource Manager at BAWSCA, and Kristin Jensen, Senior Vice President at Community Bank of the Bay, to fill the Water and Business/Chamber of Commerce seats, respectively. These appointments filled all vacant seat on the RMCP Committee. The current RMCP roster is attached to this staff report.

The RMCP Committee has been without a Co-Chair since mid-2019. The committee attempted to elect a CO-Chair at the May 19, 2019 Committee meeting.

Staff recommends that RMCP Committee members provide nominations and elect a Co-Chair for the Committee at this meeting.

ATTACHMENT

RMCP Roster, May 2020

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Resource Management and Climate Protection Committee (May 2020)	
Elected Officials (7)	
Maryann Moise Derwin – <u>Committee Chair</u> Councilmember Portola Valley mderwin@portolavalley.net	
Don Horsley Vice President County of San Mateo – District 3 dhorsley@smcgov.org	Drew Combs Councilmember Menlo Park dcombs@menlopark.org
Rick DeGolia Councilmember Atherton rdegolia@ci.atherton.ca.us	Diane Papan Councilmember San Mateo Dpapan@cityofsanmateo.org
Janet Borgens Councilmember Redwood City jborgens@redwoodcity.org	Donna Colson Mayor Burlingame dcolson@burlingame.org
<u>Stakeholder Representatives (5)</u>	
<u>Energy</u>	Ortensia Lopez – Executive Director El Concilio of San Mateo County or10sie@el-concilio.com
<u>Water</u>	Tom Francis Water Resources Manager Bay Area Water Supply and Conservation Agency tfrancis@bawsca.org

Resource Management and Climate Protection Committee

(May 2020)

<u>Utility</u>	Bill Chiang Government Relations Pacific Gas and Electric Company william.chiang@pge.com
<u>Nonprofit</u>	Doug Silverstein Leader Green County San Mateo doug@greensmc.org
<u>Business/Chamber of Commerce</u>	Kristen Jensen Senior Vice President Community Bank of the Bay kjensen@bankcbb.com
<u>Environmental</u>	Christine Zaugg Executive Director Sustainable San Mateo County christine@sustainableanmateo.org

RMCP Committee Staff

<u>C/CAG:</u>	Sandy Wong Executive Director slwong@smgov.org (650) 599-1409
<u>County of San Mateo Office of Sustainability:</u>	Kim Springer Resource Conservation Programs Manager Energy-Water Programs kspringer@smgov.org (650) 599-1412

C/CAG AGENDA REPORT

Date: May 20, 2020
To: Resource Management and Climate Protection Committee
From: Tom Francis, BAWSCA
Subject: Update from Bay Area Water Supply and Conservation Agency

(For further information contact Kim Springer at 650-599-1412)

RECOMMENDATION

Receive an update from Bay Area Water Supply and Conservation Agency.

FISCAL IMPACT

None

BACKGROUND/DISCUSSION

The Bay Area Water Supply and Conservation Agency (BAWSCA), which represents the 26 wholesale customers of the San Francisco Regional Water System, continues to work with its member agencies to use water wisely and plan for future water supply reliability.

BAWSCA staff provides short updates on water supply conditions to the RCMP Committee a few times per year. At this meeting, Tom Francis, Water Resource Manager, will provide a presentation on current water year conditions for water supply for San Mateo County. He will also discuss way in which the SFPUC is being impacted by COVID-19.

The following is a link to the BAWSCA website: <https://bawasca.org/>

ATTACHMENTS

None

C/CAG AGENDA REPORT

Date: May 20, 2020
To: Resource Management and Climate Protection Committee
From: Kim Springer, Committee Staff
Subject: Presentation on Equity Tools and Resources for Climate-related Programs

(For further information contact Kim Springer at 650-599-1412)

RECOMMENDATION

Receive a presentation on equity tools and resources for climate-related programs and discuss how best to equitably provide energy and water programs in San Mateo County.

FISCAL IMPACT

None

BACKGROUND/DISCUSSION

RMCP Committee members showed a strong interest in integrating equity in the San Mateo County Energy and Water Strategy 2025 document and other programs related to energy and water in San Mateo County.

There are several state and local tools that have been developed that allow agencies to find disadvantages communities in San Mateo County. Most of these tool work geographically. Additional sources of data, some confidential, provide specific information on customer vulnerabilities.

The County of San Mateo Office of Sustainability has been both using (and collecting information about) these resources. Staff will provide a presentation on some of the resources available and recommends that the Committee discuss additional options, and how they could be applied to help ensure energy, water, and climate-related services and resource are delivered equitably.

ATTACHMENTS

None

C/CAG AGENDA REPORT

Date: May 20, 2020
To: Resource Management and Climate Protection Committee
From: Susan Wright, County OOS Staff
Subject: Presentation on Convergence of Regional Efforts on Existing Building Electrification

(For further information contact Kim Springer at 650-599-1412)

RECOMMENDATION

Receive a presentation on convergence of regional efforts on existing building electrification.

FISCAL IMPACT

None

BACKGROUND/DISCUSSION

Agencies, businesses, community groups, and other consumers are working to reduce greenhouse gas emissions in San Mateo County. Some agencies have declared climate emergencies. Various approaches to reducing emissions include: behavior change, policy development, education, workforce development, and others.

As is well known, two large sources of emissions in the countywide GHG emissions profile are transportation fuel use and building energy use. The two major approaches are fuel switching, which means electrification of buildings and transportation.

Susan Wright, Senior Sustainability Specialist, will provide a presentation to update the Committee on the convergence of multiple regional approaches, efforts, and tools to address the challenge of electrification.

ATTACHMENTS

None