

C/CAG

CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY

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Meeting Minutes

Resource Management and Climate Protection Committee (RMCP)

Date: Wednesday, April 21, 2021

1. Roll Call – Introductions

Staff completed the roll call of Committee Members (*) with the following quorum:

Committee Members in Attendance:

Maryann Moise Derwin - Portola Valley*
Diane Papan – San Mateo*
Tom Francis – BAWSCA*
Donna Colson – Burlingame*
Christine Kohl-Zaugg – Sustainable San Mateo County*
Jeff Smith – Sares Regis Group*
Doug Silverstein – Thrive Alliance*
Deborah Ruddock – Half Moon Bay*
Rick DeGolia, Atherton*

Not in Attendance

Don Horsley - San Mateo County Supervisor*
Drew Combs - Menlo Park*
Bill Chiang - PG&E*
Ortensia Lopez - El Concilio*

Additional Attendees

Janet Borgens – former RWC Councilmember
Nicole Sandkulla - BAWSCA
Nico Bouwkamp – CAFCP
Keith Malone – CAFCP
Sandy Wong – C/CAG
Kim Springer – C/CAG
Kim Wever – C/CAG
Matt Fabry – C/CAG
Charles Ice – County Environmental Health
Carol Steinfeld – Sierra Club, Loma Prieta Chapter
Robert Cormia – Foothill College
Susan Wright – Office of Sustainability
John Allan – Office of Sustainability
Alexandria Gallizioli – Office of Sustainability
Drew

2. Public Comment

There was no Public Comment at the meeting nor email to staff prior to the meeting.

3. Approval of Minutes from March 21, 2021 RMCP Committee meeting.

Minutes were approved as written:

Motion: Ruddock

Second: Colson

Vote unanimous among Committee members in attendance.

4. Update on water supply availability estimates and request for voluntary rationing.

Tom Francis, Committee member and Water Resource Manager with Bay Area Water Supply and Conservation Agency (BAWSCA) provided a presentation on water supply estimates and potential rationing.

The State provides a drought map update weekly. To find it you can simply google California drought map. Most all of the State is in drought, ranging from abnormally dry to extreme or exceptional drought. For supply to the Hetch Hetchy, the system is at about one half of “normal” rainfall (refer to presentation posted on C/CAG RMCP website). Snowpack storage is also low and is dropping already from warmer weather. All the maps and numbers indicate 2020-21 is a dry water year.

Francis shared the content of the SFPUC letter to BAWSCA and other agencies. Because it has been a dry year the SFPUC is considering its system to be in the second year of a drought and is asking for a voluntary water use reduction goal. BAWSCA is planning to implement advertising and social media to share the voluntary water use reduction goals. Governor Gavin Newsom will probably be looking at the overall state of drought conditions in California and made to decide to ask for greater water use reductions.

Francis is available by email should any committee members or other members of the public have questions.

Steinfeld: expressed her interest in there being some form of water committee in San Mateo County.

5. Presentation on the basics of One Water, existing projects, and staff thoughts on further integration in San Mateo County.

Kim Springer provided a presentation on the basics of One Water for the committee. Springer covered the basics of One Water existing efforts in the county and region, background on discussions with BAWSCA, and leaving time for committee discussion at the end of the presentation.

Discussions with BAWSCA have included that there are a few projects in development in San Mateo County that will increase recycled water as an alternative source, that drought, especially with the current Bay Delta Plan could mean significant additional conservation requirements, and that additional coordination at the technical staff level across agencies would be worthwhile. The committee then moved to discussion.

Tom Francis added bet BAWSCA is aware of other water reuse projects namely potable reuse in the northern part of the County, including the regional groundwater recovery and storage project. Francis also shared that BAWSCA feels that there is a good technical connection between staff of BAWSCA and C/CAG.

Carol Steinfeld shared that she thinks it's important for San Mateo County to explore supply diversification, and that it's important to explore bringing agencies together to look at coordination and funding opportunities.

Donna Colson asked about how the policy's and the numbers come together considering the fact of the pressure on development of housing including SP 9 which would allow properties to be split to increase density. Where would that water supply come from?

Francis responded that BAWSCA has heard similar concerns from their member agencies, and that BAWSCA will be engaged in planned Bay Area 2050 because clearly there are supply limitations.

Nicole Sandkulla added that the current legislation of the Bay Delta Plan could have significant supply challenges associated with it for San Mateo County in multiple drought years, potentially requiring up to 50% reductions.

At the Chair's request, Springer suggested that discussions from a forum led by BAWSCA that met quarterly could be reported back to the RMCP committee, and that staff could invite BAWSCA back to share their concerns about the Bay Delta Plan at a following meeting.

Steinfeld responded that some say the Bay Delta Plan would allow for seven years of water supply versus the three years that's been mentioned, but in either case it's important to explore new supply opportunities now.

In response to a question from the Chair regarding the makeup of the forum, Francis responded that it would have technical staff from around the County, environmental groups, the business community, and advocacy participants and that perhaps annually there could be a public outreach event, but that the group would meet quarterly. BAWSCA is still working with Carol Steinfeld to address her vision of the effort.

Diane Papan expressed that there is a real need to use the forum to address cyclical drought cycles, alternative water sources, and capacity for housing.

Francis and Sandkulla responded that bringing together agencies and stakeholders to project concepts creates an opportunity to expand alternative supply opportunities and collaboration and even funding sources.

Jeff Smith shared that, from a developer's perspective, there could be a lot of interest to explore these kinds of projects since a lot of private money is already being spent on the infrastructure. Smith shared that he would love to be at the table and that higher density housing has benefits related to lower water usage than urban build out.

6. Presentation on development of State and regional Hydrogen infrastructure, and opportunities for use in heavy-duty vehicle applications.

Kim Springer introduced Niko Bouwkamp from Frontier Energy and Keith Malone from the California Fuel Cell Partnership. Bouwkamp presented that the California Fuel Cell Partnership is made up of private and public entities infrastructure providers in both the light-duty and heavy-duty sectors.

Bouwkamp mentioned Governor Newsom's executive orders for zero-emission vehicle sales after 2035, and SB 8 goals for deployment of zero emission electric vehicles. Referring to the PowerPoint presented (posted on the C/CAG RMCP website), there are about 50 fuel cell transit buses in operation in California, with about half of those operating in the San Francisco Bay Area. The presentation also

included the number of hydrogen fueling stations and locations in California.

Diane Papan: There are very few stations it appears and what is the cost of a hydrogen fueling station and who is installing them?

Bouwkamp: It's a combination of conventional industries That supply hydrogen gas and station operators such as first fuel who are good at building fueling infrastructure sites. In addition, there are a growing number of other stakeholders who have been focused on electric vehicles or are looking at it from a standpoint of business interest who are also getting involved.

Springer: How many gas stations are there in California?

Bouwkamp: There are about 8,000 across California so the California goal would be about one in eight fueling stations for hydrogen.

Keith Malone: About 20% of the stations provide 50% of the gasoline fuel in California.

In the future we will see not only more light-duty passenger vehicles but also medium-duty delivery vans. Both Ford and Fiat Chrysler are working on hydrogen fuel cell vans. There are also motorcycle hydrogen fuel cell developments and even a bicycle design for greater range using hydrogen electric. In addition, in auto racing, Michael Andretti has switched to hydrogen and he owns several gasoline stations in California as well.

Rick Degolia: Where does the hydrogen come from? (to be responded to later in the presentation)

In terms of adoption rate, hydrogen fuel cell vehicles are ramping up at the same rate as electric vehicles did, only they are approximately seven years behind. The cost per station for installation and equipment has come down over the last five to six years to almost half the cost, and it is expected to continue to decrease. The state estimates that the need for additional funding two hydrogen fuel cell industry developers will sunset in approximately 2030 at which point the industry and profitability will stand on its own. Both Hydrogen and electricity as a fuel source, needs to scale up both in the California and across the country. There are also advanced clean fuel and advanced clean fleet rules that will be enforced on manufacturers and fleet operators, respectively, starting in 2024.

In terms of heavier duty vehicles, transit agencies are evaluating their choices between electric buses and hydrogen fuel cell buses. Several transit agencies have placed orders four hydrogen fuel cell buses, which may be better applied to routed that require longer range or more steep terrains.

At this time hydrogen fuel mostly comes from reclamation of natural gas but has always needed to be at least 33% renewable in total supply in California. Since 2019, the mix of renewable hydrogen from stations in California has exceeded 40%. The hydrogen industry is aiming for 100% renewable by 2030.

DeGolia: Can you explain how the hydrogen is derived from natural gas and where the renewable hydrogen is coming from?

Bouwkamp: The non-renewable hydrogen is coming from steam reformation of natural gas and from electrolysis which is splitting hydrogen and oxygen from water using electricity, and the renewable natural gas is mostly coming from dairy farms.

Christin Zaugg: Can you explain the sources of hydrogen and the environmental impacts?

Bouwkamp: It depends where the source of hydrogen is coming from and whether it is renewable hydrogen or non-renewable hydrogen. In some cases, renewable hydrogen is coming from landfill gas, in which case it is prevented from entering the atmosphere which is a positive environmental impact. In other cases, the renewable hydrogen is coming from electrolysis from electricity that is produced from non-renewable sources, in which case it has a negative environmental impact. However, overall, the suppliers of hydrogen for vehicle fuels are far surpassing the renewable requirements in the state of California.

7. Presentation on RICAPS countywide greenhouse gas emissions inventories, data sources and challenges.

John Allen, Resource Conservation Specialist from the County Office of Sustainability provided a presentation on RICAPS community-scale greenhouse gas emission inventories, the data needed, and the sources. The presentation focused on community-scale emission inventories as opposed to government operations inventories, which follows an adopted protocol for completing inventories. Over time, the RICAPS process strives to maintain consistency of inventory methods so that results can be compared.

The RICAPS program provides emission inventories to all the local governments in San Mateo County, With a baseline inventory for 2005 and then annual inventories from 2010 through 2017. The program is currently working on emission inventories for 2018 and 2019.

To help demonstrate the complexity, Allan shared the spreadsheet used to collect the data and calculate the emission inventory. There are 40 different data sources that go into the emission inventories. Allan shared various emissions sources that are evaluated and the multiple local and regional agencies whose data is necessary in order to complete the emission inventories.

There are a few concerns that need to be addressed for each year of emission inventories. They include updating of models by regional or state agencies, timing of availability of data, and especially availability of data to complete the emission inventories. In order to ensure consistency when methodologies change, it's important to look back to prior years and decide whether the new inventory is consistent enough with past inventories to show a trend.

The biggest challenge in terms of data availability has been energy data from PG and E and the CPUC, because of privacy rules called the 15/15 rule. The rule was put in place by the CPUC to protect individual customer usage. To comply with the rule, the data set must have at least 15 customers. And no single customer can account for more than 15% of the usage in the data set. This is further complicated by the fact that energy is being supplied by both PCE and PG&E because both entities are screening for the 15/15 rule. Allan shared a summary slide demonstrating the issue. No local government in San Mateo County has a complete data set for 2018 and 2019. The County and C/CAG are working together to come up with a solution to this issue. Options could include creating a proceeding with the CPUC or working through the legislature to get an exemption to the privacy rule for local governments.

8. Committee Member Updates

Christine Zaugg reminded the Committee of the SSMC Sustainability Awards and auction.

9. Next Scheduled Meeting Date: May 19, 2021