



**MONTEREY BAY AIR RESOURCES DISTRICT  
ADVISORY COMMITTEE MEETING  
THURSDAY, NOVEMBER 5, 2020 – 1:30 P.M.**

**REMOTE MEETING ONLY**

*On March 12, 2020, Governor Newsom issued Executive Order N-29-20, which enhances State and Local Governments' ability to respond to COVID-19 Pandemic based on Guidance for Gatherings issued by the California Department of Public Health. The Executive Order specifically allows local legislative bodies to hold meetings via teleconference and to make meetings accessible electronically, in order to protect public health. In light of this, the November 5, 2020 meeting of the MBARD Advisory Committee was held via Zoom webinar.*

**Summary of Actions**

1. Call to Order – **The meeting was called to order by Chair Brennan at 1:35 p.m.**
2. Roll Call  
**Present:** Allen Stroh, Bob Smith, Janet Brennan, Sandy Coplin, Spencer Critchley, Scott Storm.  
**Absent:** David Mack, Jeff Davis, Sandy Swint.  
**Excused:** Jay Tufano, Scott Soares.
3. Changes to the Agenda – **None.**
4. Recognition of Tom Brokaw for Eighteen Years of Service on the Advisory Committee
5. Public Comment Period – **None.**
6. **Accepted and Filed** Summary of Actions for Advisory Committee Meeting of September 3, 2020  
**Accepted and filed by consensus.**
7. **Received** a Presentation on a Proposed Change to the Designation for the State Ozone Standard in the North Central Coast Air Basin  
**No action required or taken.**
8. **Received** Report and Provide Comments on Evaluation of Best Available Retrofit Control Technology (BARCT) Rule for Internal Combustion Engines  
**No action required or taken.**
9. **Received** a Presentation on an Update to the Diesel Engine and Equipment Replacement Program Guidelines  
**Motion:** *Recommend approval of update of guidelines to the Board of Directors.*

**Action:** Approve. **Moved by Sandy Coplin, Seconded by Allen Stroh.** Motion passed unanimously.  
**Vote:** Motion carried by unanimous roll call vote (summary: Yes = 6).  
**Yes:** Allen Stroh, Bob Smith, Janet Brennan, Sandy Coplin, Spencer Critchley, Scott Storm.

10. **Received** Monthly Oral Report from Air Pollution Control Officer

**Richard Stedman, APCO, reported on the following:**

Engineering

- Engineering staff is very busy. One engineering position has not been replaced due to a hiring freeze and there are at least as many applications for permits as last year.
- Continued progress with implementation of new permit database Accela. Working with the consultant to create reports and specifications to allow monthly permit billing to come from the Accela database rather than accounting software.
- District issued a 30-day public notice to cancel Title V permit for Trical, Inc. for agricultural chemical and receiving, storage, and packaging facility located in Hollister. The facility installed both a closed loop piping system for the receiving and packaging operations and a carbon adsorption system for the cylinder filling. These actions reduced the facility's emissions of hazardous air pollutants below the major source threshold requirements for a federal Title V permit. The District intends to cancel the Title V permit on November 9, 2020.

Planning and Air Monitoring

- Two electric vehicle DC fast charge stations have been installed by Chargepoint as part of the Plug-In Monterey Bay Grant and are available at Target stores in Marina and Hollister.
- Monterey Bay Electric Vehicle Incentive Program has received 101 applications, 6 of them are low income. \$184,900 is obligated and \$265,450, or 59%, is remaining.
- Woodstove Change Out Program launched on October 13. The program offers up to \$1,500 to replace a non-EPA certified woodstove or open hearth fireplace with a new natural gas, propane, pellet, EPA certified woodstove or insert or an electric heater or ductless mini-split heat pump.
- San Lorenzo Valley seasonal monitoring network is being installed to measure elevated wintertime concentrations of wood smoke from fireplaces and chimneys.
- Seasonal monitoring network supports the District's Spare the Air program in SLV which will be launched in November. When a Spare the Air alert has been declared, residents of SLV are asked to voluntarily use a heat source other than wood. The program runs from late Fall through the Winter.
- Zero Emission School Bus Program has received 26 applications. Ten all-electric school buses have been delivered.

Outreach

- District now has a channel on YouTube – Monterey Bay Air Resources District
- District staff produced two informational videos: AQI Spanish and English
- New Electronic Newsletter
- Signed on with Entravision for Spanish ads. They are affiliated with
  - KSMS Univision 67 TV
  - KDJT UniMass 33 TV

- KLOK Radio Tricolor 99.5FM
- KSES La Suavecita Radio 107.1FM
- KLOK Radio for Wood Stove Change Out Program
- Outreach materials shared with Breathe California for Breath of Life Walk
- A 30 second informational AQI video was produced for MBARD by KSBW and is currently running on that station.

11. Future Agenda Items – **None.**

12. Chairman’s Comments – **None.**

13. Comments from Committee Members – **None.**

14. Order for Adjournment

*Ann O’Rourke*  
*Executive Assistant*

# BARCT Rule for Internal Combustion Engines

SEONG KIM  
AIR QUALITY ENGINEER II  
NOVEMBER 5, 2020



## Outline

- Background Information
- Rule Schedule
- BARCT and BACT Definition
- Recommendation



## Background

•AB617 added language to the Health & Safety Code which requires an air district that is nonattainment for one or more criteria pollutants to adopt an expedited rule development schedule that implements Best Available Retrofit Control Technology (BARCT).

•BARCT requirements only apply to industrial sources subject to the State Cap & Trade program as of January 1, 2017.

◦ There are four industrial sources located in Monterey County.



## BARCT IMPLEMENTATION SCHEDULE

Rule Development Sources	2019	2020	2021	2022	2023
Steam Generators/ Boilers/Process Heaters	█				
Internal Combustion Engines		█			
Steam Driven Oil Production Wells (revise Rule 427)			█	█	
Lime Kiln				█	█

Schedule approved by the Board of Directors on November 14, 2018.



## BARCT DEFINITION

Emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source.

(Health and Safety Code Section 40406)



## BACT DEFINITION

Means an emission limitation that will achieve the lowest achievable emission rate for the source to which it is applied.

(Health and Safety Code Section 40405)



### Internal Combustion Engines

Stationary - designed to stay in one location or remains in one location



Portable - designed and capable of being carried or moved from one location to another



### Engine Requirements

- Portable diesel engines subject to state regulation and phase-out schedule
- Stationary engines subject to New Source Review Rule 207
  - Best available control technology
  - Offsets
- Stationary diesel engines subject to Toxics Rule 1010
  - Engine tier requirements based on use; emergency or prime
- Subject to the Air Toxics "Hot Spots" Information and Assessment Act (AB2588)
  - Identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels.



### Permitted Engines

- Eight diesel engines at the four applicable industrial sources
  - Two stationary emergency engines
    - One meets existing Tier 3 requirements
    - One has an application in to update engine to Tier 3 and portable use
  - Six portable engines



### Average Engine Emissions (2017-2019)

Engine Description	NO <sub>x</sub> (tons/yr)	VOC (tons/yr)
Emergency IC Engine #1 (Tier 3)	0.35	0.03
Emergency IC Engine #2 (Tier 0)	0.01	0.003
Portable IC Engine-Pump (Tier 3)	0.17	0.11
Portable Abrasive Blasting With IC Engine	0	0
Portable IC Engine-Workover Rig #1	0	0
Portable IC Engine-Workover Rig #2	0	0
Portable IC Engine-Workover Rig #3	0	0
Portable IC Engine (Tier 3 or higher)	0	0
<b>3-Year Average</b>	<b>0.53</b>	<b>0.13</b>



### Conclusions

- The majority of the permitted engines at the subject industrial sources are portable engines subject to phase-out by state law.
- A new rule would only apply to one stationary emergency engine which already meets the Best Available Control Technology (BACT) permitting requirement for NO<sub>x</sub> and did not trigger BACT for VOC when permitted.
- The California Air Resources Board is proposing to re-designate MBARD to attainment for the state 8-hour ozone standard based on monitoring data for years when the engines operated.
  - Emission reductions from these engines are not needed to attain or maintain the 8-hour ozone standard.



### Recommendation

A BARCT rule for Internal Combustion Engines is not necessary and MBARD proposes not moving forward with rule development activities.







# DEERP Guidelines Update +

ADVISORY COMMITTEE, NOVEMBER 5, 2020  
PLANNING DIVISION, MBARD


## Carl Moyer Program (CMP)



Established 1998 -- MBARD has participated since 2001



Cost-Effectively reducing smog-forming and toxic emissions



Statewide: \$ 1 billion to date, \$ 60 million per year

## Outline



**Program Changes for a Cost-Effective & Innovative Future**



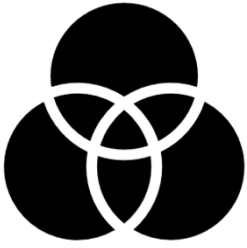
**Community Air Protection Program (CAPP)**

## Carl Moyer Program (CMP)

- Funds **cleaner-than-required** engines and equipment
- Emission reductions – NOx, ROG, and PM
- Program funding sources:
  - Smog Abatement Fee (SB 1107)** – \$6 from the DMV per newly registered vehicle
  - Tire Fee (AB 923)** – \$0.75 per tire, received from the Board of Equalization
  - AB 923 (Match Funds)** additional surcharge of \$2 to pay for specific clean air incentives

## DEERP Guideline Changes

2020	2021
<p>ALL DEERP Projects (CAPP, FARMER, MOYER, etc.)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Priority Ranking:                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Disadvantaged Communities (DACs)</li> <li><input type="checkbox"/> Low-Income Communities (LIs)</li> <li><input type="checkbox"/> ½ Mile Buffer Areas</li> <li><input type="checkbox"/> Zero-Emission Replacement Projects</li> <li><input type="checkbox"/> Annual Emissions Reduced</li> </ul> </li> <li><input type="checkbox"/> Maximum funding <b>\$300,000</b> or 65%</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Carl Moyer &amp; FARMER:                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Rank by Cost-Effectiveness (\$/tons of emissions)</li> <li><input type="checkbox"/> Zero-emission projects</li> <li><input type="checkbox"/> Maximum funding <b>\$150,000</b> or 50%</li> </ul> </li> <li><input type="checkbox"/> CAPP projects will focus on electrifying Class 6 – Class 8 fleets in DACs and LIs</li> </ul>



## CMP & Other Funding Sources


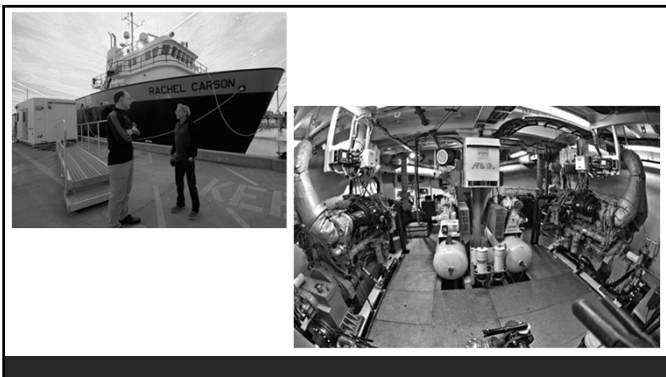
- Ability to co-fund Moyer Projects with other public funds
- Must meet the requirements of each funding source
- FARMER & CAPP – Cap & Trade dollars

AGENDA ITEM NO. 6

Project Types

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-  Marine Projects
-  Zero-emission Ag Pumps
-  Diesel-Diesel & Zero-emission Off-Road
-  Zero-emission School buses
-  Infrastructure
-  Zero-emission On-Road



Guideline Updates

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### 2020 DEERP RANKING LIST

RANK	APPLICANT	POTENTIAL GRANT	COST-EFFECTIVENESS (\$/ton)	ANNUAL EMISSIONS REDUCED (ton/yr)	Low-Income Area	1/2 Mile Buffer
1	Ki Farms	\$297,331	\$58,054	5,047	Y	N
2	Stratus Leasing	\$279,789	\$21,750	3,975	Y	N
3	Stratus Leasing	\$279,789	\$20,814	3,516	Y	N
4	Routinier Farms	\$274,242	\$26,109	3,509	Y	N
5	Wooler and Bonesteel (Q)	\$265,446	\$20,698	7,997	Y	N
6	Henry Mirano Farms	\$143,329	\$38,823	2,216	N	Y
7	JF Farms Organic (Q)	\$139,704	\$20,266	3,813	N	Y
8	Steinbeck County Produce	\$139,686	\$10,209	8,362	N	Y
9	Neri Bassett Farms	\$100,000	\$18,229	3,074	N	Y
10	Steinbeck County Produce	\$79,879	\$18,843	3,411	N	Y
11	Invest Grow Management	\$74,106	\$14,058	5,342	N	Y
12	Christensen & Giannini	\$73,789	\$14,464	4,955	N	Y
13	3 Generaciones LLC	\$679,704	\$20,472	1,665	N	Y
14	JF Farms Organic (Q)	\$244,448	\$19,560	4,400	N	Y
15	Marc Pura Ranch	\$208,382	\$18,764	4,138	N	Y
16	Invest Grow Management	\$14,308	\$9,432	4,111	N	Y
17	Frish Foods (Q)	\$137,681	\$18,376	3,506	N	Y
18	Fuji Brothers	\$101,119	\$21,961	3,847	N	Y
19	Braga Farms (Q)	\$147,421	\$23,499	3,734	N	Y
20	Borlino Farms (Q)	\$208,382	\$19,051	3,488	N	Y
21	Frish Foods	\$147,239	\$24,708	3,408	N	Y
22	Marc Pura Ranch	\$78,142	\$8,188	3,318	N	Y
23	Windsor-Jackson (Q)	\$100,000	\$25,206	2,504	N	Y
24	Windsor-Jackson (Q)	\$29,544	\$26,054	2,275	N	Y
25	Queen Victoria Farms	\$100,000	\$27,987	2,211	N	Y
26	Queen Victoria Farms	\$100,000	\$29,189	2,113	N	Y
27	Braga Farms	\$147,421	\$25,929	2,122	N	Y
28	Delicato Family Vineyards	\$100,000	\$25,989	2,109	N	Y
29	Delicato Family Vineyards	\$100,000	\$26,239	1,999	N	Y
30	Kendall-Jackson	\$100,000	\$27,931	1,848	N	Y

Ranked by Annual Emissions (tons/yr) and DAC/LI's

Cancelled due to COVID

Funding limit

- 14 projects funded
- 68.52 tons/year of emissions reduced
- Total Funds Disbursed: \$3,296,419.00

## Priority Areas

### DISADVANTAGED COMMUNITIES (DACs)

Top 25 % most impacted census tracts in the CalEnviroScreen 3.0

### LOW-INCOME AREAS (LIs)

Census tracts & households

At or below 80% of the statewide median income

At or below the threshold designated as low-income by the CA Dept. of Housing and Community Development 2016 State Income Limits

### 2020 DEERP RANKING LIST

RANK	APPLICANT	POTENTIAL GRANT	COST-EFFECTIVENESS (\$/ton)	ANNUAL EMISSIONS REDUCED (ton/yr)	Low-Income Area	1/2 Mile Buffer
11	Invest Grow Management	\$54,106	\$14,058	3,810	N	N
16	Invest Grow Management	\$54,106	\$14,058	3,810	N	N
18	Central Coast Citrus GP	\$51,114	\$4,206	4,009	N	N
38	Robbin Farms (Q)	\$150,190	\$14,240	4,111	N	N
46	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
48	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
49	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
50	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
51	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
52	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
53	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
54	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
55	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
56	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
57	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
58	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
59	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
60	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
61	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
62	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
63	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
64	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
65	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
66	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
67	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
68	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
69	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
70	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
71	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
72	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
73	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
74	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
75	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
76	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
77	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
78	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
79	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
80	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
81	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
82	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
83	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
84	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
85	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
86	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
87	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
88	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
89	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
90	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
91	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
92	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
93	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
94	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
95	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
96	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
97	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
98	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
99	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N
100	Frish Foods (Q)	\$46,181	\$1,780	2,906	N	N

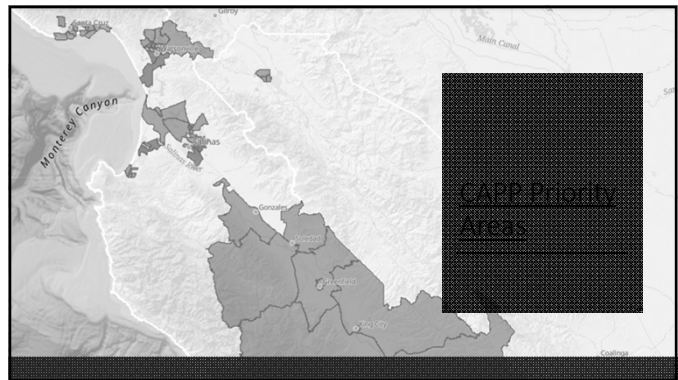
Ranked by Cost-Effectiveness (\$/ton)

Applying the ranking based on CE & funding cap of \$150K on this year's eligible applications.

Potential Projects funded: 29  
 Potential Emissions reduced: 122.49 ton/year

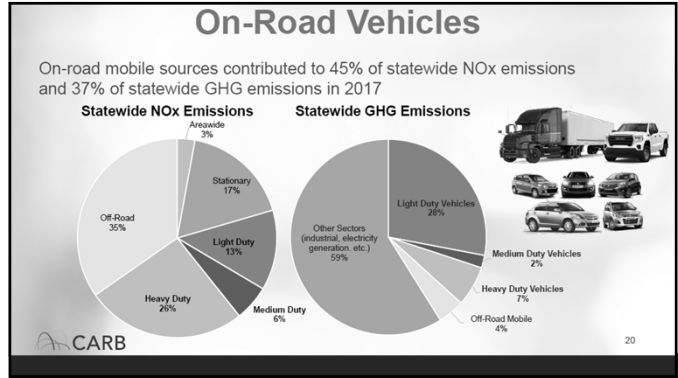
Total Funds Needed: \$3,286,683.00  
 +15 extra projects with less \$\$

Similar funding limit



## Community Air Protection Program (CAPP)

- Focus on Disadvantaged Communities (DAC) and Low-Income areas (LI)
- Engage DAC and LI areas through outreach and support
- Prioritize Zero-Emission Technology and Infrastructure
  - Replace diesel medium to heavy duty vehicles with all electric
  - Install fleet electric charging stations



AGENDA ITEM NO. 6

### Health Cost of Pollution


Annually, PM<sub>2.5</sub> exposure results in:

- 5,400 premature deaths due to cardiopulmonary causes\*
- 2,800 hospitalizations for cardiovascular and respiratory diseases\*
- 6,700 emergency room visits for asthma\*


Diesel PM also increases cancer risk

\*Based on California 2014-2016 air quality data

Oakland Railyard Cancer Risk



CARB, 2008



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#### Product Offerings - compatible with the Ford E Series

Shuttle Bus



Flatbed Truck



Utility Truck




Box Truck



Walk-in Cargo Truck

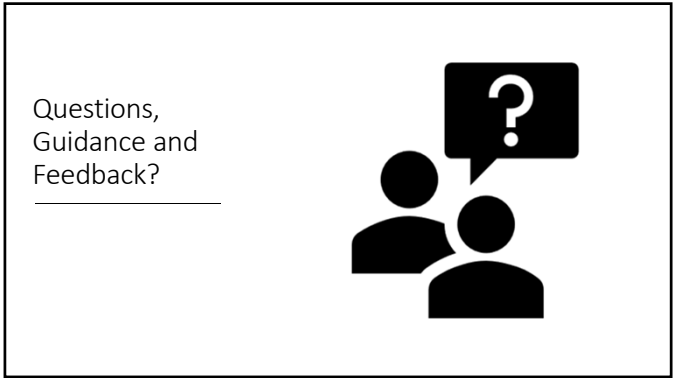
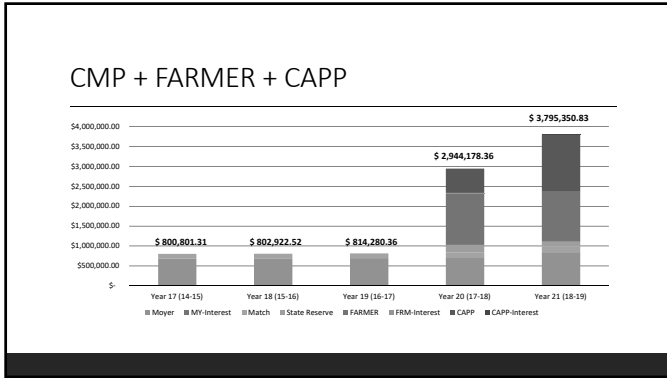






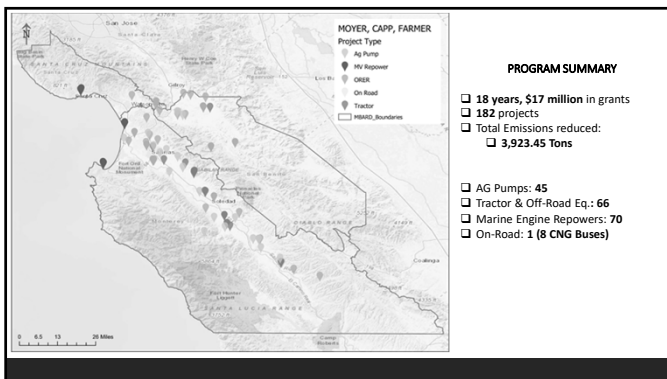
## Program Performance & Statistics

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### CMP + FARMER + CAPP

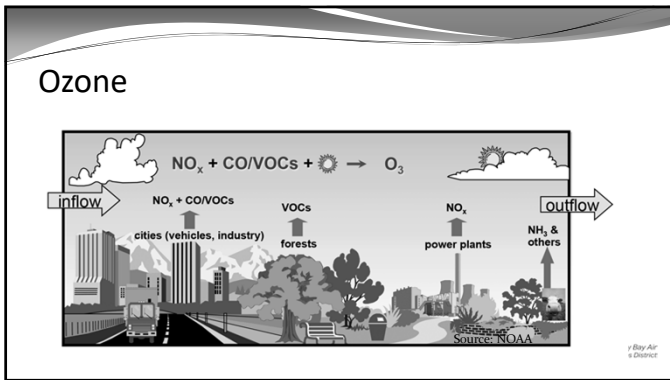
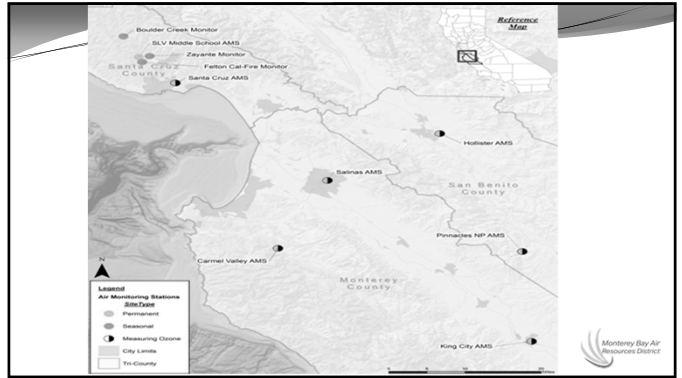
Funding Source	Fiscal Year				
	2014-15	2015-16	2016-17	2017-18	2018-19
Moyer	\$ 684,044.00	\$ 683,863.00	\$ 684,218.00	\$ 711,861.00	\$ 832,777.00
MY-Interest	\$ 2,750.31	\$ 1,825.52	\$ 12,767.36	\$ 8,151.48	\$ 13,988.77
Match	\$ 114,007.00	\$ 117,234.00	\$ 117,295.00	\$ 122,033.00	\$ 142,762.00
State Reserve				\$ 181,933.00	\$ 114,989.73
FARMER				\$ 1,298,200.00	\$ 1,253,735.00
FM-Interest				\$ 7,936.88	
CAPP				\$ 614,063.00	\$ 1,433,304.25
CAPP-Interest					\$ 3,794.08
<b>TOTAL FUNDING:</b>	<b>\$ 800,801.31</b>	<b>\$ 802,922.52</b>	<b>\$ 814,280.36</b>	<b>\$ 2,944,178.36</b>	<b>\$ 3,795,350.83</b>



# Proposed Attainment Designation for the State Ozone Standard



David Frisbey  
Planning and Air Monitoring Manager  
November 5, 2020



## Ambient Air Quality (Daily) Standards

Pollutant	Averaging Time	California Standards		
		Concentration	Primary Concentration <sup>3</sup>	Secondary Concentration <sup>4</sup>
Ozone	1 hour	0.090 ppm	--	--
	8 hour	0.070 ppm	0.070 ppm	0.070 ppm



- ## Designation Categories
- Nonattainment = 1 or more violations in last 3 years
  - Attainment = No violations in last 3 years
  - Unclassified = Insufficient data, but not expected to be nonattainment


### Exceedance vs. Violation

**Exceedance**

- Concentration higher than standard
- Qualifying exceedances are excluded as Highly Irregular or Infrequent Events
  - Exceptional events. (e.g. Wildfires)


**Violation**

- Exceedance not excluded as a Highly Irregular or Infrequent Event
- Not all exceedances are violations




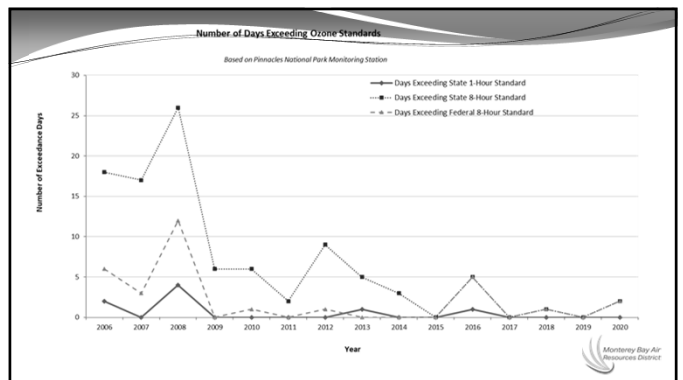
### Proposed Designation Change to Attainment

- Highest site is Pinnacles National Monument
- 8-hour designation value (highest value excluding extreme concentration events)= 0.070 ppm
- 1-hour designation value = 0.080 ppm
- No violations of the standards for 3 year period: 2017-2019




### Current Designation: Nonattainment-Transitional

- Subcategory of Nonattainment
- By operation of law
- 3 or fewer exceedances in last year
- Highly irregular or infrequent events are not excluded


### Attainment Designation

- 8-hour = 0.070 ppm
- 1-hour = 0.090 ppm
- Both standards are not to be exceeded
- Most recent 3 calendar years
- Current review: 2017-2019



### What's Next?

- CARB posts staff report on January 5, 2021
- 45-day public comment period opens on January 8, 2021
- California Air Resources Board Hearing is on February 25 and 26, 2021
- If Adopted
  - District grant programs will continue to be funded
  - Requirement for Air Quality Management Plans is suspended



**Discussion and Questions....**

