

Volkswagen Environmental Mitigation Trust for California

Public Workshop on Developing a Beneficiary Mitigation Plan

Sacramento, California | October 9, 2017



Overview

- Background
- Potential eligible mitigation action categories
- Process for Beneficiary Mitigation Plan approval and implementation
- Timeline, next steps, and contacts
- Open discussion

Background

CARB Heavy-Duty Funding Portfolio

VW Mitigation Trust

NOx mitigation

\$423M for 2017+

- Heavy-duty vehicle and equipment replacements
- Vessel shorepower

1/3 funded now; remaining funded end of 2018; 10 years to spend

Low Carbon Transportation

GHG reductions

\$330M for FY 17-18

- Zero- and near zero-emission freight facilities
- Zero-emission off-road freight vouchers
- HVIP and low NOx engine incentives
- School buses for rural districts

Annual appropriation needed but not guaranteed

Zero-Emission Warehouse Program

Criteria pollutant, toxics, and GHG reductions

\$50M for FY 17-18

- Zero-/near zero-emission on-road and off-road vehicles, equipment, and infrastructure
- Facility efficiency improvements

One-time funding

AQIP

Criteria pollutant and toxics reductions

\$28M for FY 17-18

- Truck loan assistance
- Low NOx engine incentives

Sunsets in 2023

AB 617

Criteria/toxics reductions to support community action goals

\$250M for FY 17-18

- Support community emission reduction plans in South Coast, San Joaquin, Bay Area, **incl. stationary sources**
- Implement consistent with Carl Moyer and Prop 1B
- Process post FY 17-18 to be determined

Annual appropriation needed but not guaranteed

Carl Moyer

SIP emission reductions

\$69M for FY 17-18

- Replacements/retrofits for on-road, off-road, locomotive, agriculture, marine, and infrastructure
- Funds expected to double for FY 18-19

1/3 of funding expires in 2023

Prop 1B

PM and NOx reductions in goods movement corridors

\$267M for 2015+

- Truck, TRU, and cargo handling equipment replacements
- Ship shore power
- Locomotive upgrades
- Harbor craft upgrades
- PM filter retrofits

Final CARB disbursement 2015

Funding for Agriculture

Criteria pollutant, toxics, and GHG reductions

\$135M for FY 17-18

- ag harvesting equipment, heavy-duty trucks, ag pump engines, tractors, and other equipment used in ag operations

Annual appropriation needed but not guaranteed

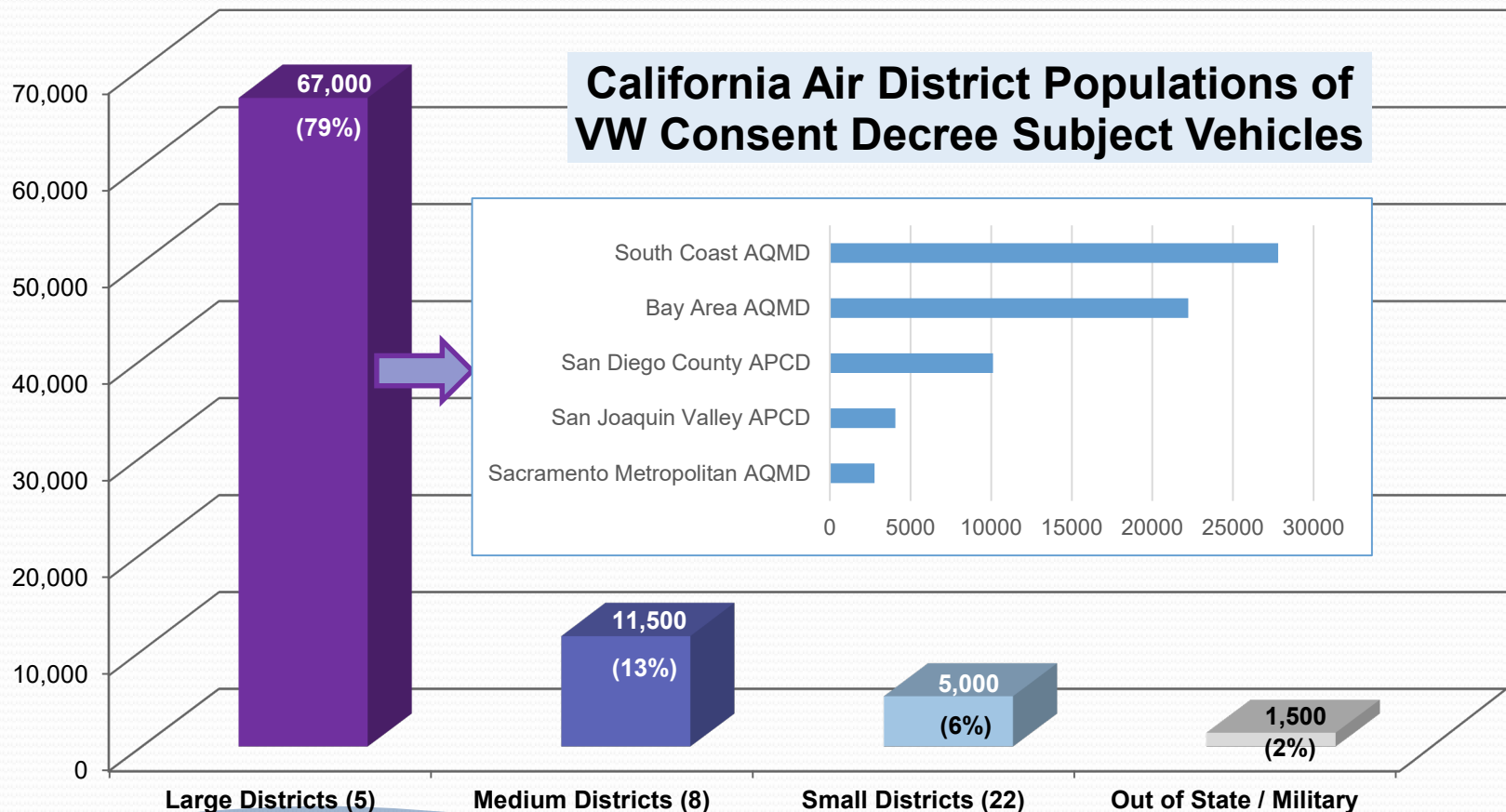
Volkswagen (VW) Settlement

- 1st Partial Consent Decree (VW 2.0-liter diesel engines) approved October 2016; 2nd Consent Decree (VW 3.0-liter diesel engines) approved May 2017
- Applies to entire United States
- Consists of main body & Appendices A, B, C, and D
- Civil penalties addressed in 3rd consent decree



Subject Vehicle Population

- Approximately 85,000 2.0L and 3.0L vehicles statewide



Consent Decree Appendices

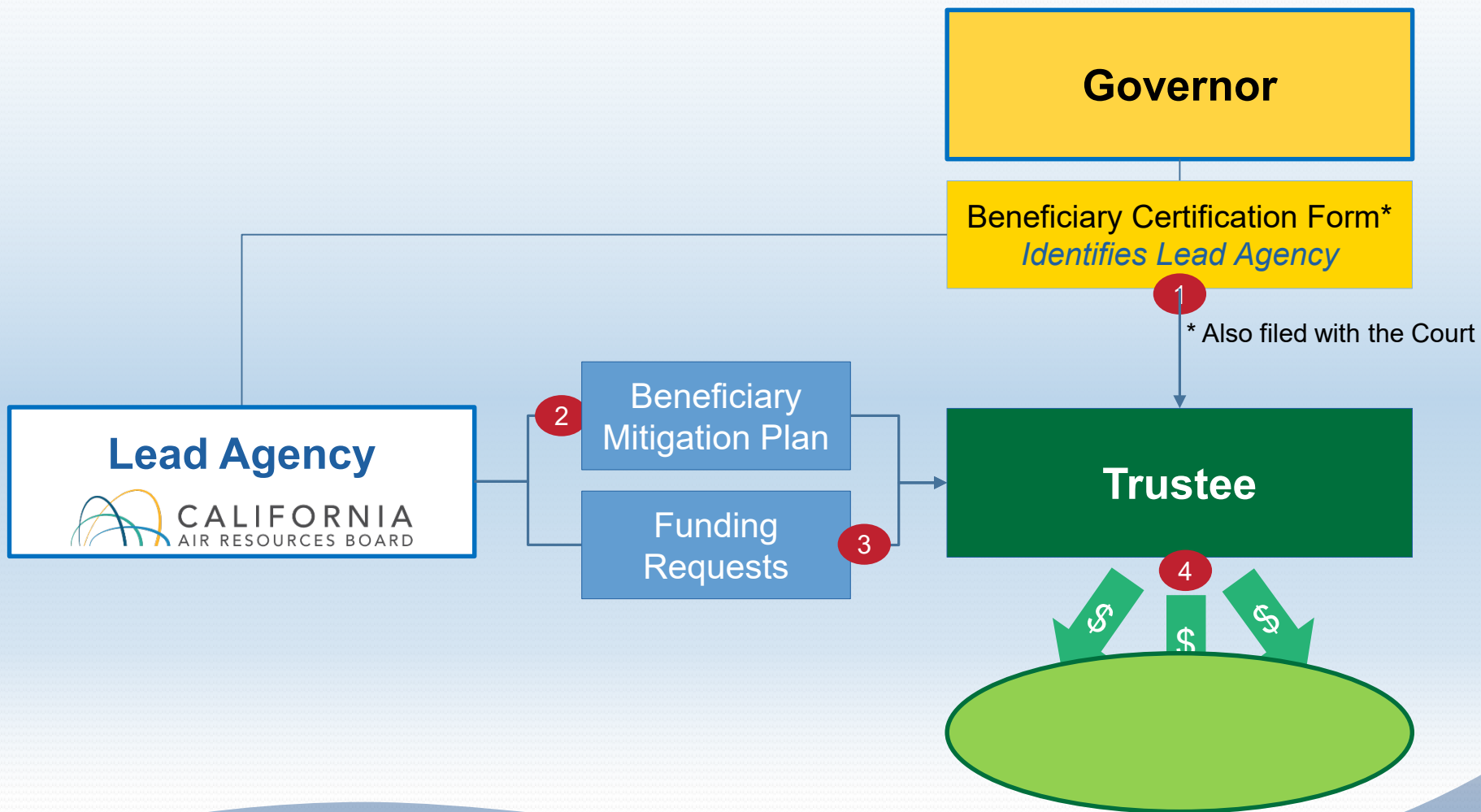
- Appendices A and B
 - Applies to VW 2.0-liter and 3.0-liter subject vehicles already sold
 - Specifies buyback, lease termination, and potential vehicle modification terms
- Appendix C
 - Specifies VW's ZEV Investment Commitment
- **Appendix D – Today's Topic**
 - **Specifies Mitigation Trust to address past and future excess emissions of Nitrogen Oxides (NOx)**

Appendix D:

Environmental Mitigation Trust

- ~\$3 billion nationally; ~\$423 million for California to fund eligible mitigation actions
 - Replace older heavy-duty vehicles and equipment in California with cleaner vehicles and equipment
 - Fund light-duty electric vehicle infrastructure ($\leq 15\%$)
 - Option to provide matching funds for Diesel Emission Reduction Act (DERA) projects

How the Trust Works



Lead Agency (CARB) Responsibilities

- Develop Beneficiary Mitigation Plan through a public process
- Manage all interactions with the Trustee
- Provide transparency and oversight
 - Publicly post approved funding requests
 - Audit expenditures
 - Report to the Trustee semi-annually

Beneficiary Mitigation Plan

- Summarizes how California plans to use its Trust mitigation allocation
 - Overall goal for the use of the funds
 - Categories of eligible mitigation actions to be funded and the corresponding allocations for each
 - Consideration of potential air quality benefits on areas disproportionately impacted by air pollution
 - Expected emission reductions
- May be updated as necessary

Legislative Direction: Senate Bill 92

- Passed in June 2017
- Directs the Lead Agency to strive to ensure that:
 - 35 percent of California's allocation benefit low-income or disadvantaged communities
 - The expenditures align with the state's priorities and provide for public transparency before approval
- Annual report to the Legislature



Potential Eligible Mitigation Action Categories



Class 8 Local Freight Trucks & Port Drayage Trucks

- 1992-2012 engine model year
- Gross Vehicle Weight Rating (GVWR) >33,000 lbs used for port drayage and/or freight/cargo delivery
“(including waste haulers, dump trucks, concrete mixers)”
- Repowers and replacements
- Existing truck/engine must be scrapped



Class 4-7 Freight Trucks

- 1992-2012 engine model year
- GVWR 14,001-33,000 lbs used to deliver cargo and freight “(e.g., courier services, delivery trucks, box trucks moving freight, waste haulers, dump trucks, concrete mixers)”
- Repowers and replacements
- Existing truck/engine must be scrapped



Transit, Shuttle, and School Buses

- 1992-2012 engine model year
- Class 4-8 (GVWR > 14,000 lbs); school buses may be Type A-D
- Repowers and replacements
- Existing bus/engine must be scrapped



Freight Switcher Locomotives

- Pre-Tier 4 engines operating at least 1,000 hours/year
- “Locomotive that moves rail cars around a rail yard as compared to a line-haul engine that move [sic] freight long distances”
- Repowers and replacements
- Existing switcher/engine must be scrapped



Ferries and Tugs

- Pre-Tier 3 engines
- Repowers only
- Existing engine must be scrapped



Forklifts & Port Cargo Handling Equipment

- Forklifts: >8,000 lb. lift capacity. “Eligible types of forklifts include reach stackers, side loaders, and top loaders.”
- Port cargo handling equipment: “rubber-tired gantry cranes, straddle carriers, shuttle carriers, and terminal tractors, including yard hostlers and yard tractors that operate within ports”
- Repower or replacement to all-electric only
- Existing vehicle/engine must be scrapped



Airport Ground Support Equipment (GSE)

- Pre-Tier 3 diesel GSE and uncertified or certified spark-ignition GSE ≥ 3.0 g/bhp-hr
- Repower or replacement to all-electric only
- Existing vehicle/engine must be scrapped



Ocean-Going Vessel Shorepower

- “Systems that enable a compatible vessel’s main and auxiliary engines to remain off while the vessel is at berth”
- Marine systems “must comply with international shore power design standards” and “should be supplied with power sourced from the local utility grid”



Light-Duty Electric Vehicle Supply Equipment (EVSE)

- “Level 1, Level 2, or fast charging equipment (or analogous successor technologies) that is located in a public place, workplace, or multi-unit dwelling”
- “Hydrogen dispensing equipment capable of dispensing hydrogen at a pressure of 70 megapascals (MPa) (or analogous successor technologies) that is located in a public place”
- Limited to no more than 15% of the State’s Trust allocation



Diesel Emission Reduction Act (DERA) Option

- Can fund the non-federal voluntary match for State DERA projects
- Less than \$500,000 annually (not including voluntary match)
- State DERA currently funds school bus projects

Maximum Funding Amounts

Eligible Mitigation Actions	Gov Owned		Non-Gov Owned			
	Repower	Replace-ment	Diesel or Alt Fuel Repower	Diesel or Alt Fuel Replace-ment	All-Electric Repower	All-Electric Replace-ment
Class 8 Local Freight Trucks	100%	100%	40%	25%	75%	75%
Class 8 Drayage Trucks	100%	100%	40%	50%	75%	75%
Class 4-8 School, Shuttle, and Transit Buses	100%	100%	40%	25%	75%	75%
Freight Switchers	100%	100%	40%	25%	75%	75%
Ferries/Tugs	100%	0%	40%	0%	75%	0%
Class 4-7 Local Freight Trucks	100%	100%	40%	25%	75%	75%
Airport GSE (electric replacements only)	100%	100%	0%	0%	75%	75%
Forklifts & Port CHE (electric replacements only)	100%	100%	0%	0%	75%	75%
OGV Shorepower	100% Gov Owned; 25% Non-Gov Owned					
Light-Duty ZEV Charging/Fueling Equip*	100% if avail to public at gov owned property					
	80% if avail to public at non-gov owned property					
	60% if avail at workplace or multi-unit dwelling not open to public					
	60% if avail at workplace not open to public					
	33% for hydrogen fueling at least 250 kg/day avail to public					
	25% for hydrogen fueling at least 100 kg/day avail to public					

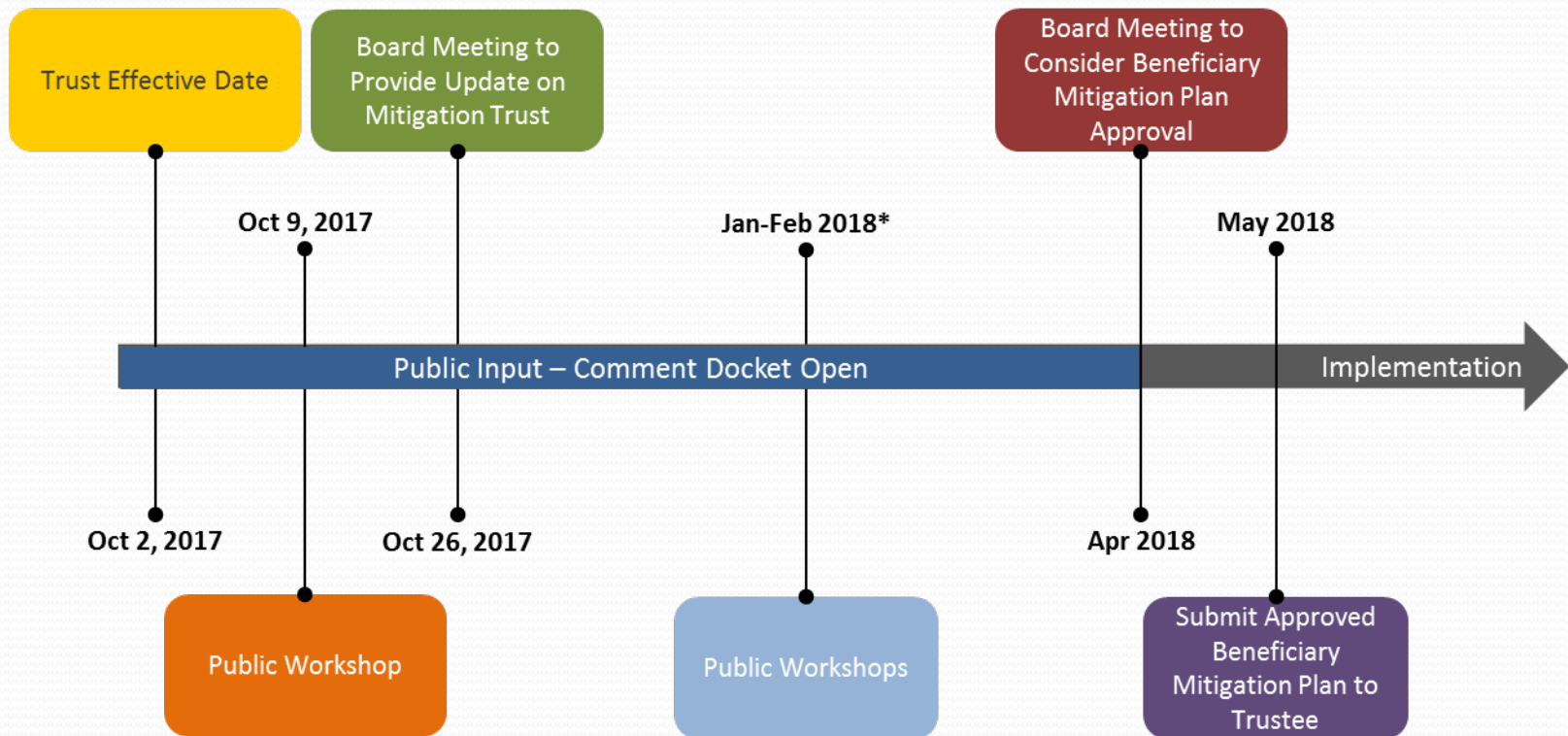
* Limited to ≤ 15% of total Trust allocation

Process for Beneficiary Mitigation Plan Approval & Implementation

Process for Plan Approval

- Public input is critical
- Consult with State Legislature
- Develop guiding principles
 - Fully mitigate NOx impacts of the subject VW cars
 - Consistent with State priorities
- Consider input from other State agencies
- Present Beneficiary Mitigation Plan to the Board for approval (tentatively spring 2018)

Beneficiary Mitigation Plan Public Process



* Estimated

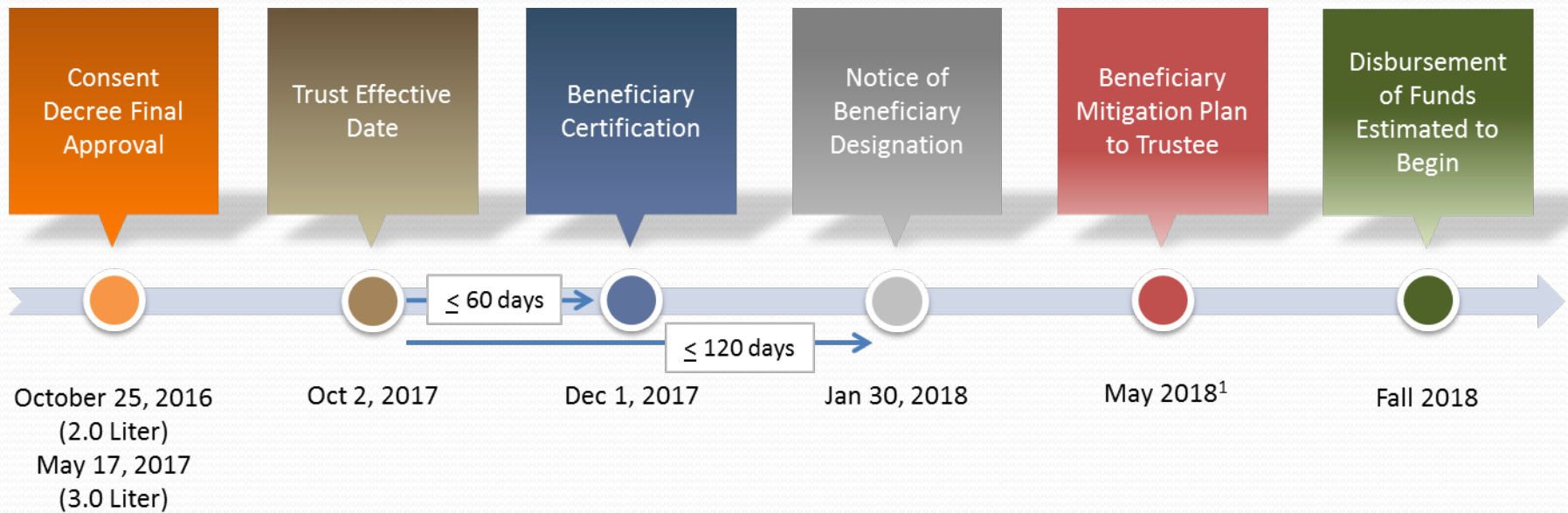
Options for Plan Implementation

- Project administration approach can include:
 - Competitive solicitations; or
 - First-come/first-served
- Consider third-party implementation
- Outreach to increase participation
- CARB must ensure reviews



Timeline, Next Steps, and Contacts

California's Mitigation Trust Timeline



¹ There is no specific deadline for the Beneficiary Mitigation Plan; however, it is required to be submitted at least 30 days before any funding request.

Next Steps



- Continue to solicit comments
- Provide update to the Board on October 26, 2017
- Develop and refine guiding principles and process, narrow project categories, and draft Plan
- Additional public workshops planned for early 2018
- Final proposal to the Board expected in spring 2018

Contacts for the Environmental Mitigation Trust for California

Website: www.arb.ca.gov/msprog/vw_info/vsi/vw-mititrust/vw-mititrust.htm

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Other Resources

- National Association of State Energy Officials (NASEO) and National Association of Clean Air Agencies (NACAA): VW Settlement Clearinghouse
 - <http://vwclearinghouse.org/>
- National Tribal Air Association: Tribal Work Group
 - <http://www7.nau.edu/itep/main/ntaa/Resources/Volkswagen/>
- U.S. EPA: VW Settlement Page
 - <https://www.epa.gov/enforcement/volkswagen-clean-air-act-civil-settlement>

Open Discussion