

# **Employee Commuting**

Sustainability/Energy Committee

April 24, 2018

# Agenda



- Background
- District programs
- Barriers to participation
- Next steps

# Background



- Vehicle transportation largest source of air pollution in the Bay Area
- 1,330 employees drive 68,000 miles/day
- 6,034 MT CO<sub>2</sub>
  - Equal to annual Fleet emissions
  - 14% of District's total 2016 GHG emissions

# Impacts of Commuting



- Air pollution
- Traffic congestion
- Quality of life
- Attracting and retaining employees

# District Programs



- Alternative Commute Program
- Telecommuting
- Parking for carpools

# Alternative Commute Program



- Monthly subsidy to employees who
  - Commute on public transit
  - Ride a bike
  - Walk to work
- Current subsidy \$105 (increases to \$145 in 3 years)
- Other Bay Area utilities allow pre-tax dollars

# Transit Subsidy Usage



Mode	Transit	Walk	Bike	Total
AB	390	17	14	421
AMC	34	2	4	40
MWWTP	15	1	1	17
North	0	1	0	1
Castenada	0	1	0	1
WC WTP	1	1	0	2
Watershed	1	0	0	1
Sacramento	1	0	0	1

- 1,696 MT GHG CO2 saved

# Telecommuting



- Program developed in 1990s
- 65 participants
  - 14 full-time
  - 51 part-time
- Must benefit the District and employee and be manageable by the supervisor



- Challenges
  - Nature of work
  - Measuring productivity
- Survey of departments
- Limited additional opportunities

# Carpool Program



- Parking in Administration Building
- Carpool guidelines
  - At least two District employees
  - May include a non-District person
  - At least three days per week
- 12 employees participate



# 511 RideMatch Service

## RideMatch Login

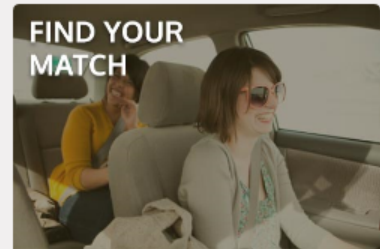
Welcome to 511 RideMatch Services — an interactive Trip Diary and on-demand system that helps you find carpools, vanpools or bicycle partners.

Email

Password

[Forgot your password?](#)

or



[Sign Up >](#)

### Rideshare Contact

Monday - Friday, 8am to 6pm

Phone: Call 511 and say "Carpool" (or press 6)

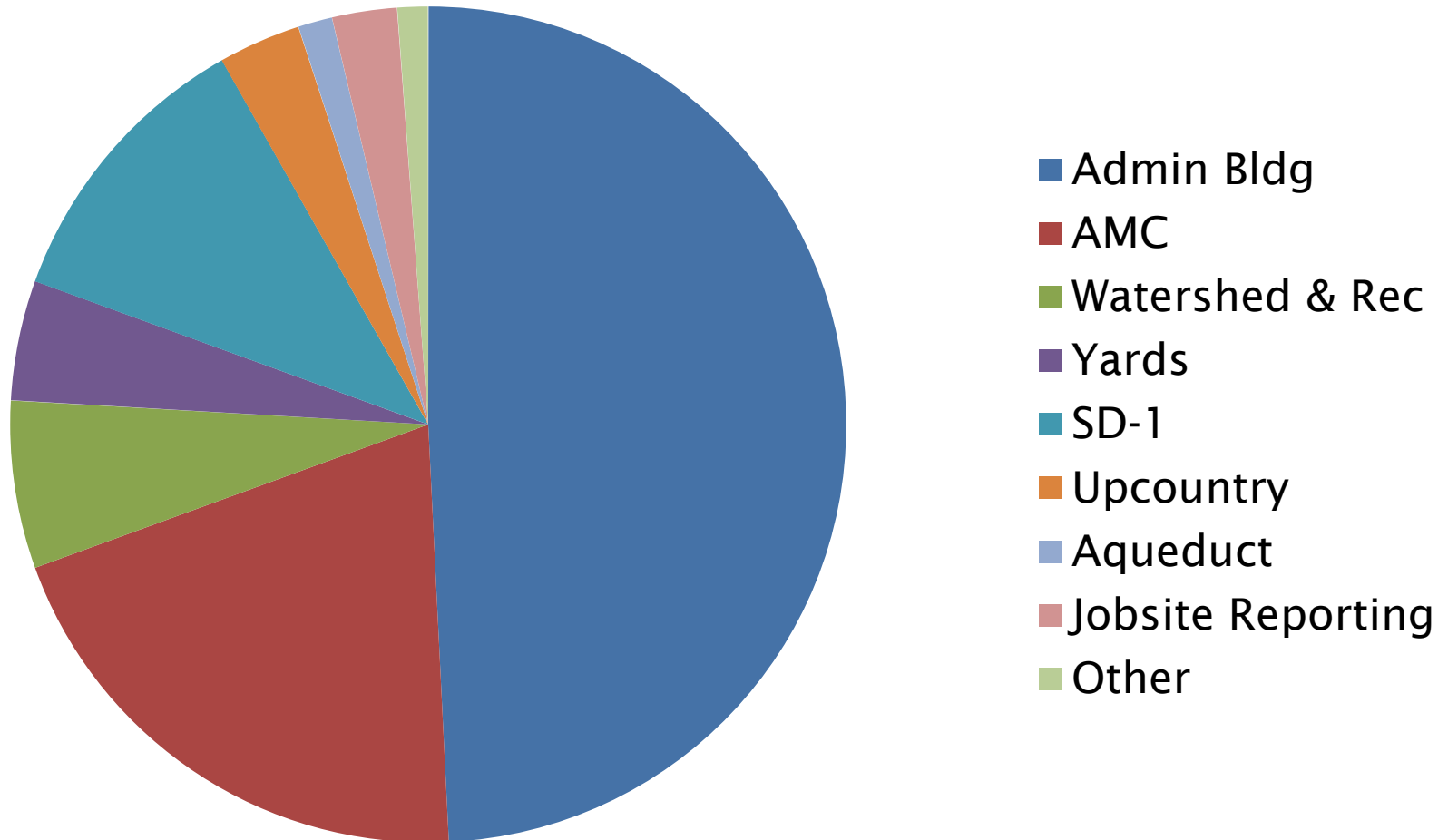
Email:

[rideshare@rideshare.511.org](mailto:rideshare@rideshare.511.org)

# Employee Commuter Survey



## Respondent Location



# Employee Commuter Survey



- Over 800 responses
- 58% commute door-to-door because
  - No easy access to transit from home
  - Transit stop too far from workplace
  - Transit takes too long or requires more than one transfer
  - Need vehicle for personal obligations

# Shuttle Option



- Primary Location: AB, AMC, SD-1 Route
- 79 interested per survey
  - (49 at AMC & 30 at MWWTP)
- City of Oakland shuttle from West Oakland BART to MacArthur BART

# Next Steps



- Educate employees
  - Splashes
  - New employee orientation
  - Brown bags
- Promote and educate staff on carpooling options
- Continue discussions with Oakland regarding a shuttle

# Questions?





# **Renewable Energy Update**

April 24, 2018

Sustainability/Energy Committee

# Overview



- Update on existing PV Power Purchase Agreements
  - North Richmond WRP
  - Camanche Dam
- Update on Large-Scale PV Projects (RES-BCT)
- Staff recommendations for latest CCA options

# Power Purchase Agreements



- Executed PPAs with SolarCity (Tesla)
  - 325 kW at North Richmond WRP
  - 380 kW at Camanche Dam
- PPA Terms
  - 15-year term at a fixed purchase price
  - Purchase options at 5-year increments
  - Extension options: three 5-year terms
  - Production performance guarantee, 15-yrs

# Combined Project Statistics



- Capacity: 705 kW
- First year generation: 1,320 MWh
- Total PV capacity: 1,951 kW
- Total annual production: 3,170 MWh
  - Two and half percent of District's annual energy use

# Large PV Project (RES-BCT Tariff)



- Available to local governments and special districts
- Renewable generation- PV, wind or hydroelectric
- Maximum size of 5 MW
- Limited opportunity:  
Cap of 105 MW
- Maximum of 50 benefitting accounts
  - Located with the “Geographical Boundary”



# RES-BCT Cap Status

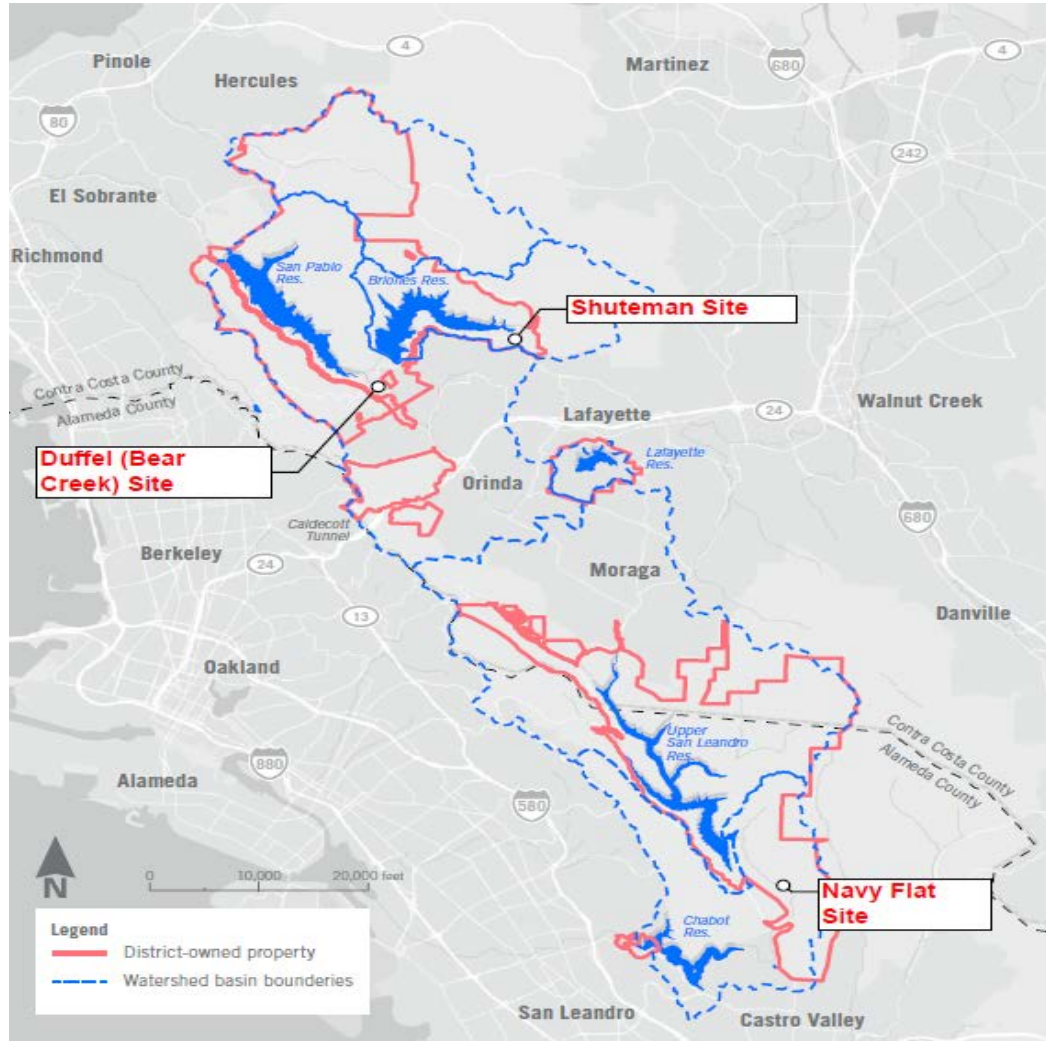


RES-BCT Program Status	Project Capacity*
Projects complete and admitted into RES-BCT	23.5 MW
Projects in the IC process	41.4 MW**
Unassigned Capacity	30.1 MW
RES-BCT Program Cap	105 MW

\* PG&E published data as of April 17, 2018.

\*\*Includes the three of the District's three PV projects included (15 MW )

# Potential District Sites



# Development Costs



- PG&E interconnection studies: \$150,000
  - Execute contract for CEQA: \$650,000
- Initial development costs:* \$800,000

Cost to interconnect with PG&E (estimated)			
	Duffel	Shuteman	Navy Flat
Grid Upgrades	\$282K	\$1,289K	<b>\$4,300K</b>
Interconnection	\$140K	\$145K	<b>\$150K</b>
Sub Total	\$422K	\$1,434K	<b>\$4,450K</b>
Tax & maintenance	\$482K	\$1,783K	<b>\$5,600K</b>
TOTAL	\$904K	\$3,216K	<b>\$10,150K</b>
Estimated NPV	>\$10 M	\$8 M	<b>\$1M</b>

Navy Flat Interconnection costs estimated by EBMUD staff, based on PG&E's cost estimates for Duffel and Shuteman  
NPV based on a fixed PPA price of \$0.065/kWh over a 30-year project life



# Development Approach / Costs



- Summer 2018
  - Complete initial environmental assessment (3 sites)
  - PG&E final interconnection costs
  - Status of RES-BCT Cap
  - Updated PPA pricing
- Discuss/recommend next steps to Sustainability Committee (fall 2018)
  - Select preferred site(s)
  - Execute PG&E agreements and pay Interconnect fees
  - Begin CEQA and permitting

# Marin Clean Energy CCA



- Began operation in 2010
- Serves: Marin and Napa Counties, portions of Contra Costa County
- Two products presently offered:
  - Light Green (equal to PG&E emissions)
  - Deep Green (zero emissions)
- District's default provider (must opt out)
- Presently serving 46 District accounts

# Marin Clean Energy Expansion



- Expanded service area (April 2018): all of Contra Costa County (except Orinda, Pleasant Hill, Clayton, Antioch and Brentwood)



# MCE - Recommendations



- Default most accounts to Light Green
- Opt out: Peak Day Pricing accounts
- Not recommending “Deep Green”
  - 10x more costly than RECs purchases
  - Indirect GHG emissions goals met

Annual Cost Difference Between MCE and PG&E Service			
Service Areas	# of Accounts	Light Green ~ 3% savings	Deep Green ~ 1.5% cost
Existing Accounts	46	(\$21,000)	\$20,000
New Accounts	129	(\$87,000)	\$40,000
TOTALS	175	(\$108,000)	\$60,000

- Periodic re-evaluation

# East Bay Community Energy



- Begin service June 1, 2018
- Serves all of Alameda County except Pleasanton, Newark and Alameda
- Two products presently offered:
  - Bright Choice (equal to PG&E emissions)
  - Brilliant 100 (zero emissions)
- Default electric provider (opt out)

# EBCE - Recommendations



- Default larger accounts to Bright Choice
- Opt out Peak Day Pricing accounts
- Not Recommending “Brilliant 100”
  - Slightly more costly than RECs purchases
  - Indirect GHG emissions goals met

Annual Cost Difference Between EBCE and PG&E Service			
Service Areas	# of Accounts	Bright Choice ~ 0.7% savings	Brilliant 100
Larger Accounts	62	(\$26,000)	\$0
Very Small Accounts	131	(\$163)	\$0
TOTALS	193	(\$26,163)	\$0

- Routine Re-evaluation

# QUESTIONS



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