

## **APPENDIX D**

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Bradmoor Island and Arnold Slough Restoration Projects

D.1 Air Quality and Greenhouse Gas Emissions Estimates

D.2 California Emissions Estimator Model (CalEEMod) Output Files

## **D.1 AIR QUALITY AND GREENHOUSE GAS EMISSIONS ESTIMATES**

**Table D-1. Summary of Modeled Annual Construction-Related Emissions of Criteria Air Pollutants and Precursors**

Construction Year	ROG (tons)	NOX (tons)	CO (tons)	PM10a (tons)	PM2.5a (tons)
2022	0.627	5.382	5.423	0.247	0.239
2023	0.327	2.784	2.686	0.122	0.115
Total Construction Duration	0.955	8.166	8.110	0.369	0.354

Notes:

- 1) PM10 and PM2.5 emissions shown are for exhaust only, per Bay Area Air Quality Management District recommended emissions thresholds for construction activities.
- 2) Acronyms: ROG = reactive organic gases; NOX = oxides of nitrogen; CO = carbon monoxide; PM10 = respirable particulate matter with a diameter of 10 micrometers or less; PM2.5 = respirable particulate matter with a diameter of 2.5 micrometers or less; BAAQMD = Bay Area Air Quality Management District.

Source: Modeled by AECOM

**Table D-2. Summary of Modeled Average Daily Construction-Related Emissions of Criteria Air Pollutants and Precursors:**

Emissions Scenario	ROG (pounds per day)	NO <sub>x</sub> (pounds per day)	CO (pounds per day)	PM <sub>10</sub> <sup>a</sup> (pounds per day)	PM <sub>2.5</sub> <sup>a</sup> (pounds per day)
Average Daily Construction Emissions	5.0	43.1	42.8	1.9	1.9
BAAQMD Construction Significance Threshold	54	54	-	82	54
Do Project Average Daily Construction Emissions Exceed BAAQMD Threshold?	No	No	No	No	No

Notes:

- 1) PM10 and PM2.5 emissions shown are for exhaust only, per Bay Area Air Quality Management District recommended emissions thresholds for construction activities
- 2) Average daily emissions based on total construction-related emissions divided by number of construction work days
- 3) Acronyms: ROG = reactive organic gases; NOX = oxides of nitrogen; CO = carbon monoxide; PM10 = respirable particulate matter with a diameter of 10 micrometers or less; PM2.5 = respirable particulate matter with a diameter of 2.5 micrometers or less; BAAQMD = Bay Area Air Quality Management District.

Source: Modeled by AECOM

**Table D-3. Summary of Modeled Annual Operational Maintenance Emissions of Criteria Air Pollutants and Precursors:**

Emissions Scenario	ROG (tpy)	NO <sub>x</sub> (tpy)	CO (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)
Annual Operational Maintenance	0.000	0.001	0.002	0.001	0.000
BAAQMD Annual Operational Significance Threshold	10	10	-	15	10
Do Project Annual Operational Emissions Exceed BAAQMD Threshold?	No	No	No	No	No

Notes:

Acronyms: ROG = reactive organic gases; CO = carbon monoxide; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = respirable particulate matter with a diameter of 10 micrometers or less; PM<sub>2.5</sub> = respirable particulate matter with a diameter of 2.5 micrometers or less; BAAQMD = Bay Area Air Quality Management District; tpy = tons per year.

Source: Modeled by AECOM

**Table D-4. Summary of Modeled Average Daily Operational Maintenance Emissions of Criteria Air Pollutants and Precursors:**

Emissions Scenario	ROG (pounds per day)	NO <sub>x</sub> (pounds per day)	CO (pounds per day)	PM <sub>10</sub> (pounds per day)	PM <sub>2.5</sub> (pounds per day)
Average Daily Emissions	0.01	0.09	0.12	0.06	0.02
BAAQMD Daily Operational Significance Threshold	54	54	-	82	54
Do Project Daily Operational Emissions Exceed BAAQMD Threshold?	No	No	No	No	No

Notes:

1) Acronyms: ROG = reactive organic gases; CO = carbon monoxide; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = respirable particulate matter with a diameter of 10 micrometers or less; PM<sub>2.5</sub> = respirable particulate matter with a diameter of 2.5 micrometers or less; BAAQMD = Bay Area Air Quality Management District.

2) Average daily operational emissions calculated based upon 32 total operational days per year, consisting of anticipated maintenance occurring, on average, one day per quarter.

Source: Modeled by AECOM

**Table D-5. Summary of Modeled Annual Construction-Related Greenhouse Gas Emissions:**

Construction Year	CO2e (Metric Tons)
2022	1090.137
2023	582.432
Total Construction Duration	1672.570
Average Annual	836.285

Notes:

Acronyms: CO2e = carbon dioxide equivalents.

Source: Modeled by AECOM

**Table D-6. Summary of Modeled Annual Operational Maintenance-Related Emissions of Greenhouse Gas Emissions:**

Emissions Scenario	CO2e per Year (Metric Tons)
Annual Operational Maintenance Emissions	1.230
BAAQMD Operational Significance Threshold	1,100
Do Project Operational Maintenance Emissions Exceed BAAQMD Threshold?	No

Notes:

Acronyms: CO2e = carbon dioxide equivalents; BAAQMD = Bay Area Air Quality Management District.

Source: Modeled by AECOM

**Table D-7. Construction Emissions (CalEEMod outputs):**

Year	ROG (tons per year)	NOX (tons per year)	CO (tons per year)	PM10 Exhaust (tons per year)	PM2.5 Exhaust (tons per year)	Greenhouse Gases (Metric tons CO2e Per Year)
2022	0.63	5.38	5.42	0.25	0.24	1090.14
2023	0.33	2.78	2.69	0.12	0.12	582.43

Notes:

Acronyms: ROG = reactive organic gases; CO = carbon monoxide; NOX = oxides of nitrogen; PM10 = respirable particulate matter with a diameter of 10 micrometers or less;

PM2.5 = respirable particulate matter with a diameter of 2.5 micrometers or less; CO2e = carbon dioxide equivalents.

Source: Modeled by AECOM using CalEEMod Version 2016.3.2.

**Table D-8. Operational Vehicle Emission Factors:**

Vehicle Type	ROG (grams per mile)	NO <sub>x</sub> (grams per mile)	CO (grams per mile)	PM <sub>10</sub> (grams per mile)	PM <sub>2.5</sub> (grams per mile)	CO <sub>2</sub> (grams per mile)	CH <sub>4</sub> (grams per mile)	N <sub>2</sub> O (grams per mile)
Truck - Gas	0.085	0.664	0.845	0.105	0.075	447.325	0.004	0.070

Notes:

- 1) Operational emission factors are from the California Air Resource Board EMFAC2017 emissions inventory database for the year 2024.
  - 2) PM emissions factors include running exhaust emissions, tire wear and brake wear.
- Acronyms: ROG = reactive organic gases; CO = carbon monoxide; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = respirable particulate matter with a diameter of 10 micrometers or less; PM<sub>2.5</sub> = respirable particulate matter with a diameter of 2.5 micrometers or less; CO<sub>2</sub> = carbon dioxide; CH<sub>4</sub> = methane; N<sub>2</sub>O = Nitrous oxide.

**Table D-9. Operational Maintenance Mobile-source Emissions:**

Trips per year	Trip Distance (miles)	ROG (tons per year)	NO <sub>x</sub> (tons per year)	CO (tons per year)	PM <sub>10</sub> (tons per year)	PM <sub>2.5</sub> (tons per year)	CO <sub>2</sub> e (metric tons per year)
40	50	0.0002	0.0015	0.0019	0.0002	0.0002	1.2300

Notes:

- 1) Trips per year based up 2 Vehicles 4 times per year, and another 1 vehicle once per month.
- 2) Trip distance based upon vehicle travel from Sacramento, approximately 50 miles from project area.
- 3) Acronyms: ROG = reactive organic gases; CO = carbon monoxide; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = respirable particulate matter with a diameter of 10 micrometers or less; PM<sub>2.5</sub> = respirable particulate matter with a diameter of 2.5 micrometers or less; CO<sub>2</sub>e = carbon dioxide equivalents.

**Table D-10. Conversion Factors for Carbon Dioxide Equivalents:**

Greenhouse Gas	Global Warming Potential
CO <sub>2</sub>	1
CH <sub>4</sub>	28
N <sub>2</sub> O	265

Notes:

Global Warming Potential based upon IPCC 5<sup>th</sup> Assessment Report.

**Table D-11. Units Conversion Factors**

Units	Conversion Factors
grams per pound:	453.59
pounds per ton:	2000.00
pounds per metric ton:	2204.62

**Table D-12. Paved Roads Fugitive Dust Emissions**

Activity	Vehicle Type	Trips per Year	Miles Per Trip Per Vehicle	PM10 (pounds per trip)	PM2.5 (pounds per trip)	PM10 (tons per year)	PM2.5 (tons per year)
Operational Maintenance	Worker Pickup / Car	40	50	0.04	0.01	0.00075	0.00018

Notes:

Acronyms: PM10 = respirable particulate matter with a diameter of 10 micrometers or less; PM2.5 = respirable particulate matter with a diameter of 2.5 micrometers or less.

**Table D-13. Paved Road Dust Variables**

Variable	Value	Description
k (PM10)	0.0022	particle size multiplier for particle size range and units of interest (pounds per vehicle mile traveled)
k (PM2.5)	0.00054	particle size multiplier for particle size range and units of interest (pounds per vehicle mile traveled)
sL	0.12	road surface silt loading (g/m <sup>2</sup> )
W	2.4	average weight (tons) of pickup truck
W	14.75	haul truck tons
P	60	number of "wet" days with at least 0.254 mm of precipitation during the averaging period ( <a href="https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3650">https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3650</a> )
N	365	number of days in averaging period

Notes:

1) Formula: EFDUST = [(k(sL)0.91 x (W)1.02)(1 - P/4N))

Source: AP-42 Section 13.2.1 (Paved Roads) - <http://www.epa.gov/ttnchie1/ap42/ch13/final/c13s0201.pdf>

**Table D-14. Paved Roadway Rentrained Dust Emission Factors:**

Emissions Category	Emissions Factors (pounds per vehicle mile traveled)
Pickup and Worker Vehicle PM10	0.000748287
Pickup and Worker Vehicle PM2.5	0.000183670
Haul Truck PM10	0.004768927
Haul Truck PM2.5	0.001170555

Notes:

Acronyms: PM10 = respirable particulate matter with a diameter of 10 micrometers or less; PM2.5 = respirable particulate matter with a diameter of 2.5 micrometers or less.

Source: Estimated by AECOM based upon Table D-13 variables.

Table D-15. EMFAC2017 version 1.0.2 Emission Rates

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	ROG_RUN EX	ROG_IDLE X	ROG_STR EX	ROG_HOT SOAK	ROG_RUN LOSS	ROG_RES TLOSS	ROG_DIURN	TOG_RUN EX	TOG_IDLE X	TOG_STRE X	TOG_HOT SOAK	TOG_RUN LOSS
SOLANO	2024	LDA	Aggregated	Aggregated	GAS	196063.726	7854259.5	918403.477	0.007558633	0	0.218268396	0.10112141	0.220156955	0.171678142	0.204240468	0.01102954	0	0.23897642	0.10112141	0.220156955
SOLANO	2024	LDA	Aggregated	Aggregated	DSL	2091.38416	86480.3596	9849.46286	0.012135265	0	0	0	0	0	0	0.013815193	0	0	0	0
SOLANO	2024	LDA	Aggregated	Aggregated	ELEC	4501.27797	200371.725	22391.5416	0	0	0	0.004888026	0	0.005017459	0.018214537	0	0	0	0.004888026	0
SOLANO	2024	LDT1	Aggregated	Aggregated	GAS	19272.0608	677517.257	87914.0758	0.016935692	0	0.340055637	0.19477757	0.700317952	0.359757462	0.470388549	0.024710539	0	0.372317797	0.19477757	0.700317952
SOLANO	2024	LDT1	Aggregated	Aggregated	DSL	11.7638108	243.308022	43.6436763	0.085403353	0	0	0	0	0	0	0.09722604	0	0	0	0
SOLANO	2024	LDT1	Aggregated	Aggregated	ELEC	183.794404	8422.64961	920.793687	0	0	0	0.004888026	0	0.005072575	0.018275773	0	0	0	0.004888026	0
SOLANO	2024	LDT2	Aggregated	Aggregated	GAS	58831.4028	2138514.86	272620.39	0.011843997	0	0.308032612	0.130894275	0.459108173	0.285178684	0.316726545	0.01728228	0	0.337256869	0.130894275	0.459108173
SOLANO	2024	LDT2	Aggregated	Aggregated	DSL	379.621785	15852.6746	1850.60001	0.013503653	0	0	0	0	0	0	0.015373011	0	0	0	0
SOLANO	2024	LDT2	Aggregated	Aggregated	ELEC	741.292499	24510.794	3732.08751	0	0	0	0.004888026	0	0.005038119	0.018237491	0	0	0	0.004888026	0
SOLANO	2024	MDV	Aggregated	Aggregated	GAS	45309.802	1521483.61	205430.06	0.015275789	0	0.417062865	0.167968155	0.540514584	0.369927425	0.39687678	0.022283323	0	0.45663022	0.167968155	0.540514584
SOLANO	2024	MDV	Aggregated	Aggregated	DSL	1045.48136	42100.4194	4998.58615	0.010077796	0	0	0	0	0	0	0.011472901	0	0	0	0
SOLANO	2024	MDV	Aggregated	Aggregated	ELEC	455.368071	15346.0815	2305.95436	0	0	0	0.004888026	0	0.005050538	0.018251289	0	0	0	0.004888026	0
SOLANO	2024	Calculated Maximum Possible Emission Factor of Potential Vehicle Category:	Aggregated	Aggregated	NA	Not Applicable	Not Applicable	Not Applicable	0.085403353	0	0.417062865	0.19477757	0.700317952	0.369927425	0.470388549	0.09722604	0	0.45663022	0.19477757	0.700317952

Notes:

1) Acronyms: VMT = vehicle miles traveled; ROG = Reactive Organic Gases; RUNEX = running exhaust; STREX = starting exhaust; RUNLOSS = running loss; DIURN = diurnal emissions; TOG = Total Organic Gases

2) Units: miles per day for VMT; trips per day for Trips; grams per mile for RUNEX; grams per trip for STREX, HTSK and RUNLS; grams per vehicle per day for IDLEX, RESTL and DIURN

Source: EMFAC 2017 for Region Type = County; Season = Annual; Vehicle Classification = EMFAC2011 Categories.



Table D-15 (continued). EMFAC2017 version 1.0.2 Emission Rates

Vehicle Category	Fuel	TOG_RESTLOSS	TOG_DIURN	CO_RUNEX	CO_IDLEX	CO_STREX	NOx_RUNEX	NOx_IDLEX	NOx_STREX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	PM10_RUNEX	PM10_IDLEX
LDA	GAS	0.171678142	0.204240468	0.532519997	0	2.240856154	0.033394487	0	0.182460547	257.385792	0	53.06986762	0.00204466	0	0.049674598	0.001373261	0
LDA	DSL	0	0	0.199550486	0	0	0.060271677	0	0	205.8053738	0	0	0.00056366	0	0	0.005856244	0
LDA	ELEC	0.005017459	0.018214537	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT1	GAS	0.359757462	0.470388549	0.844795681	0	2.38973114	0.074179554	0	0.24917593	301.8256247	0	62.820363	0.003979599	0	0.068427851	0.001698664	0
LDT1	DSL	0	0	0.737839419	0	0	0.664470203	0	0	447.3252186	0	0	0.003966823	0	0	0.060165866	0
LDT1	ELEC	0.005072575	0.018275773	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDT2	GAS	0.285178684	0.316726545	0.690913238	0	2.811115836	0.060590216	0	0.269522448	321.2049241	0	67.7682845	0.003026622	0	0.066622661	0.001375128	0
LDT2	DSL	0	0	0.123829115	0	0	0.034570302	0	0	273.6835388	0	0	0.000627219	0	0	0.00431641	0
LDT2	ELEC	0.005038119	0.018237491	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MDV	GAS	0.369927425	0.39687678	0.77124123	0	3.283643381	0.077554418	0	0.35323673	395.4826245	0	85.41601951	0.003752978	0	0.083495157	0.001398984	0
MDV	DSL	0	0	0.193106216	0	0	0.043279523	0	0	368.4972423	0	0	0.000468094	0	0	0.004157371	0
MDV	ELEC	0.005050538	0.018251289	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calculated Maximum Possible Emission Factor of Potential Vehicle Category:	Not Applicable	0.369927425	0.470388549	0.844795681	0	3.283643381	0.664470203	0	0.35323673	447.3252186	0	85.41601951	0.003979599	0	0.083495157	0.060165866	0

Notes:

1) Acronyms: TOG = Total Organic Gases; CO = Carbon Monoxide; CO2 = Carbon Dioxide; CH4 = Methane; PM10 = respirable particulate matter with a diameter of 10 micrometers or less; RUNEX = running exhaust; STREX = starting exhaust; RUNLOSS = running loss; DIURN = diurnal emissions;

2) Units: miles per day for VMT; trips per day for Trips; grams per mile for RUNEX; grams per trip for STREX, HTSK and RUNLS; grams per vehicle per day for IDLEX, RESTL and DIURN

Source: EMFAC 2017 for Region Type = County; Season = Annual; Vehicle Classification = EMFAC2011 Categories.

Table D-15 (continued). EMFAC2017 version 1.0.2 Emission Rates

Vehicle Category	Fuel	PM10_STREX	PM10_PMTW	PM10_PMBW	PM2_5_RUNEX	PM2_5_IDLEX	PM2_5_STREX	PM2_5_PMTW	PM2_5_PMBW	SOx_RUNEX	SOx_IDLEX	SOx_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX
LDA	GAS	0.001792533	0.008000002	0.036750011	0.001262663	0	0.001648168	0.002000001	0.015750005	0.002547041	0	0.000525169	0.00413368	0	0.025666713
LDA	DSL	0	0.008000002	0.036750011	0.005602906	0	0	0.002000001	0.015750005	0.001945601	0	0	0.032349739	0	0
LDA	ELEC	0	0.008000002	0.036750011	0	0	0	0.002000001	0.015750005	0	0	0	0	0	0
LDT1	GAS	0.002310539	0.008000002	0.036750011	0.001561872	0	0.002124492	0.002000001	0.015750005	0.002986809	0	0.000621658	0.006338003	0	0.028414586
LDT1	DSL	0	0.008000002	0.036750011	0.057563118	0	0	0.002000001	0.015750005	0.004228832	0	0	0.070313295	0	0
LDT1	ELEC	0	0.008000002	0.036750011	0	0	0	0.002000001	0.015750005	0	0	0	0	0	0
LDT2	GAS	0.001762224	0.008000002	0.036750011	0.001264382	0	0.001620306	0.002000001	0.015750005	0.003178583	0	0.000670622	0.005547228	0	0.031227718
LDT2	DSL	0	0.008000002	0.036750011	0.004129684	0	0	0.002000001	0.015750005	0.002587294	0	0	0.043019241	0	0
LDT2	ELEC	0	0.008000002	0.036750011	0	0	0	0.002000001	0.015750005	0	0	0	0	0	0
MDV	GAS	0.001882549	0.008000002	0.036750011	0.001286331	0	0.001730984	0.002000001	0.015750005	0.003913621	0	0.000845261	0.006640912	0	0.035024358
MDV	DSL	0	0.008000002	0.036750011	0.003977525	0	0	0.002000001	0.015750005	0.003483624	0	0	0.057922635	0	0
MDV	ELEC	0	0.008000002	0.036750011	0	0	0	0.002000001	0.015750005	0	0	0	0	0	0
Calculated Maximum Possible Emission Factor of Potential Vehicle Category:	Not Applicable	0.002310539	0.008000002	0.036750011	0.057563118	0	0.002124492	0.002000001	0.015750005	0.004228832	0	0.000845261	0.070313295	0	0.035024358

Notes:

- 1) Acronyms: PM10 = respirable particulate matter with a diameter of 10 micrometers or less; PM2.5 = respirable particulate matter with a diameter of 2.5 micrometers or less; Sox = sulfur oxides; N2O = Nitrous Oxides; RUNEX = running exhaust; STREX = starting exhaust; RUNLOSS = running loss; DIURN = diurnal emissions;
- 2) Units: miles per day for VMT; trips per day for Trips; grams per mile for RUNEX, PMBW, and PMTW; grams per trip for STREX, HTSK and RUNLS; grams per vehicle per day for IDLEX, RESTL and DIURN

Source: EMFAC 2017 for Region Type = County; Season = Annual; Vehicle Classification = EMFAC2011 Categories.

## **D.2 CALIFORNIA EMISSIONS ESTIMATOR MODEL (CALEEMOD) OUTPUT FILES**

Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction**  
**Solano-San Francisco County, Annual****1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	47,088.00	1000sqft	1,080.99	47,088,000.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	56
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

**1.3 User Entered Comments & Non-Default Data**

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

## Project Characteristics -

Land Use - Modeling construction emissions only. Entire project site is 1,081 acres.

Construction Phase - Project-specific construction schedule. Modeled maximum number of work days for each activity.

Off-road Equipment - Construction equipment per project description.

Trips and VMT - Worker and vendor trips based on project description. Haul trips based on quantity of debris. Debris taken to facility 10 to 15 miles away.

Vehicle Trips - Zeroed out operational vehicle trips. Modeling construction only.

Consumer Products - Zeroed out operational consumer product emission factors. Modeling construction only.

Landscape Equipment - Zeroed out operational landscape equipment use days. Modeling construction only.

Energy Use - Zeroed out operational energy use. Modeling construction only.

Water And Wastewater - Zeroed out operational water use. Modeling construction only.

Solid Waste - Zeroed out operational solid waste generation. Modeling construction only.

Area Coating - Construction model only, no operations.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	23544000	0
tblAreaCoating	Area_Nonresidential_Interior	70632000	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	10,000.00	60.00
tblConstructionPhase	NumDays	10,000.00	5.00
tblConstructionPhase	NumDays	6,000.00	20.00
tblConstructionPhase	NumDays	15,500.00	15.00

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

tblConstructionPhase	NumDays	15,500.00	10.00
tblConstructionPhase	NumDays	155,000.00	30.00
tblConstructionPhase	NumDays	10,000.00	20.00
tblConstructionPhase	NumDays	6,000.00	15.00
tblConstructionPhase	NumDays	10,000.00	14.00
tblConstructionPhase	NumDays	6,000.00	15.00
tblConstructionPhase	NumDays	15,500.00	60.00
tblConstructionPhase	NumDays	6,000.00	15.00
tblConstructionPhase	NumDays	10,000.00	80.00
tblConstructionPhase	PhaseEndDate	6/28/2060	5/23/2022
tblConstructionPhase	PhaseEndDate	10/27/2098	3/7/2022
tblConstructionPhase	PhaseEndDate	2/25/2160	3/28/2022
tblConstructionPhase	PhaseEndDate	7/26/2219	3/21/2022
tblConstructionPhase	PhaseEndDate	12/23/2278	3/14/2022
tblConstructionPhase	PhaseEndDate	2/6/2873	7/4/2022
tblConstructionPhase	PhaseEndDate	2/25/2137	6/20/2022
tblConstructionPhase	PhaseStartDate	6/29/2060	3/1/2022
tblConstructionPhase	PhaseStartDate	2/26/2137	3/1/2022
tblConstructionPhase	PhaseStartDate	2/26/2160	3/1/2022
tblConstructionPhase	PhaseStartDate	7/27/2219	3/1/2022
tblConstructionPhase	PhaseStartDate	12/24/2278	5/24/2022
tblConstructionPhase	PhaseStartDate	10/28/2098	5/24/2022
tblDemolition	PhaseName	PhaseIB-Remove duckblinds, debris	Remove duckblinds, debris (1)
tblDemolition	PhaseName	PhaseIA-Deconstruct water well	Deconstruct water well
tblDemolition	PhaseName	PhaseIA-Remove duckblinds, debris	Remove duckblinds, debris (2)
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	NT24E	3.70	0.00

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24NG	19.71	0.00
tblGrading	PhaseName	PhaseIB-Grading	Grading (1)
tblGrading	PhaseName	PhaseIA-Grading	Grading (2)
tblGrading	PhaseName	PhaseIA-Establish staging area 1	Establish staging area (1)
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers

Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

[illegible]



## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

tblOffRoadEquipment	PhaseName		Grading (3)
tblOffRoadEquipment	PhaseName		Grading (3)
tblOffRoadEquipment	PhaseName		Grading (3)
tblOffRoadEquipment	PhaseName		Grading (3)
tblOffRoadEquipment	PhaseName		Grading (3)
tblOffRoadEquipment	PhaseName		Grading (3)
tblOffRoadEquipment	PhaseName		Culverts and Grade
tblOffRoadEquipment	PhaseName		Culverts and Grade
tblOffRoadEquipment	PhaseName		Culverts and Grade
tblOffRoadEquipment	PhaseName		Culverts and Grade
tblOffRoadEquipment	PhaseName		Culverts and Grade
tblOffRoadEquipment	PhaseName		Culverts and Grade
tblOffRoadEquipment	PhaseName		Culverts and Grade
tblOffRoadEquipment	PhaseName		Establish staging area (3)
tblOffRoadEquipment	PhaseName		Establish staging area (3)
tblOffRoadEquipment	PhaseName		Establish staging area (3)
tblOffRoadEquipment	PhaseName		Excavate
tblOffRoadEquipment	PhaseName		Excavate
tblOffRoadEquipment	PhaseName		Excavate
tblOffRoadEquipment	PhaseName		Excavate
tblOffRoadEquipment	PhaseName		Excavate
tblOffRoadEquipment	PhaseName		Excavate
tblOnRoadDust	PhaseName	PhaseIB-Remove duckblinds, debris	Remove duckblinds, debris (1)
tblOnRoadDust	PhaseName	PhaseIA-Deconstruct water well	Deconstruct water well
tblOnRoadDust	PhaseName	PhaseIA-Establish staging area 1	Establish staging area (1)
tblOnRoadDust	PhaseName	PhaseIB-Grading	Grading (1)
tblOnRoadDust	PhaseName	PhaseIA-Grading	Grading (2)

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

tblOnRoadDust	PhaseName	PhaseIA-Relocate monitoring station	Relocate monitoring station
tblOnRoadDust	PhaseName	PhaseIA-Remove duckblinds, debris	Remove duckblinds, debris (2)
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	58,389.12	0.00
tblTripsAndVMT	HaulingTripNumber	40.00	76.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	7,718.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	WorkerTripNumber	65.00	16.00
tblTripsAndVMT	WorkerTripNumber	38.00	20.00
tblTripsAndVMT	WorkerTripNumber	45.00	10.00
tblTripsAndVMT	WorkerTripNumber	10.00	14.00
tblTripsAndVMT	WorkerTripNumber	48.00	28.00
tblTripsAndVMT	WorkerTripNumber	8.00	4.00
tblTripsAndVMT	WorkerTripNumber	20.00	22.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	38.00	12.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	10.00	14.00
tblTripsAndVMT	WorkerTripNumber	33.00	12.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

tblWater	IndoorWaterUseRate	10,889,100,000.00	0.00
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## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.6272	5.3810	5.4215	0.0125	0.1361	0.2470	0.3831	0.0700	0.2385	0.3085	0.0000	1,085.0711	1,085.0711	0.2027	0.0000	1,090.1374
2023	0.3273	2.7840	2.6864	6.6500e-003	1.4800e-003	0.1216	0.1231	5.9000e-004	0.1152	0.1158	0.0000	579.0442	579.0442	0.1355	0.0000	582.4323
Maximum	0.6272	5.3810	5.4215	0.0125	0.1361	0.2470	0.3831	0.0700	0.2385	0.3085	0.0000	1,085.0711	1,085.0711	0.2027	0.0000	1,090.1374

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.6272	5.3791	5.4215	0.0125	0.1361	0.2470	0.3831	0.0700	0.2385	0.3085	0.0000	1,085.0698	1,085.0698	0.2027	0.0000	1,090.1361
2023	0.3273	2.7821	2.6864	6.6500e-003	1.4800e-003	0.1216	0.1231	5.9000e-004	0.1152	0.1158	0.0000	579.0435	579.0435	0.1355	0.0000	582.4316
Maximum	0.6272	5.3791	5.4215	0.0125	0.1361	0.2470	0.3831	0.0700	0.2385	0.3085	0.0000	1,085.0698	1,085.0698	0.2027	0.0000	1,090.1361

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2022	5-31-2022	3.3957	3.3957
2	6-1-2022	8-31-2022	0.5267	0.5248
3	9-1-2022	11-30-2022	2.0935	2.0935
6	6-1-2023	8-31-2023	0.5185	0.5166
7	9-1-2023	9-30-2023	0.6945	0.6945
		Highest	3.3957	3.3957

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0399	3.9200e-003	0.4320	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	0.8414	0.8414	2.2000e-003	0.0000	0.8963
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0399	3.9200e-003	0.4320	3.0000e-005	0.0000	1.5400e-003	1.5400e-003	0.0000	1.5400e-003	1.5400e-003	0.0000	0.8414	0.8414	2.2000e-003	0.0000	0.8963

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0399	3.9200e-003	0.4320	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	0.8414	0.8414	2.2000e-003	0.0000	0.8963
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0399</b>	<b>3.9200e-003</b>	<b>0.4320</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.5400e-003</b>	<b>1.5400e-003</b>	<b>0.0000</b>	<b>1.5400e-003</b>	<b>1.5400e-003</b>	<b>0.0000</b>	<b>0.8414</b>	<b>0.8414</b>	<b>2.2000e-003</b>	<b>0.0000</b>	<b>0.8963</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Remove duckblinds, debris (1)	Demolition	3/1/2022	5/23/2022	5	60	
2	Deconstruct water well	Demolition	3/1/2022	3/7/2022	5	5	
3	Establish staging area (1)	Site Preparation	3/1/2022	3/28/2022	5	20	
4	Grading (1)	Grading	3/1/2022	3/21/2022	5	15	
5	Grading (2)	Grading	3/1/2022	3/14/2022	5	10	
6	Remove duckblinds, debris (2)	Demolition	5/24/2022	6/20/2022	5	20	
7	Relocate monitoring station	Building Construction	5/24/2022	7/4/2022	5	30	
8	Establish staging area (2)	Site Preparation	7/5/2022	7/25/2022	5	15	
9	Remove WCSs	Demolition	9/1/2022	9/20/2022	5	14	
10	Grading (3)	Grading	9/1/2022	11/23/2022	5	60	
11	Culverts and Grade	Site Preparation	6/1/2023	6/21/2023	5	15	
12	Establish staging area (3)	Site Preparation	6/1/2023	6/21/2023	5	15	
13	Excavate	Demolition	9/1/2023	12/21/2023	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating - sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Remove duckblinds, debris (1)	Dumpers/Tenders	2	8.00	16	0.38
Remove duckblinds, debris (1)	Generator Sets	10	8.00	84	0.74
Remove duckblinds, debris (1)	Off-Highway Trucks	2	8.00	402	0.38

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

Remove duckblinds, debris (1)	Pumps	10	8.00	84	0.74
Remove duckblinds, debris (1)	Rubber Tired Loaders	2	8.00	203	0.36
Deconstruct water well	Bore/Drill Rigs	1	8.00	221	0.50
Deconstruct water well	Off-Highway Trucks	2	8.00	402	0.38
Establish staging area (1)	Off-Highway Trucks	6	8.00	402	0.38
Establish staging area (1)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading (1)	Dumpers/Tenders	2	8.00	16	0.38
Grading (1)	Excavators	2	8.00	158	0.38
Grading (1)	Off-Highway Trucks	3	8.00	402	0.38
Grading (1)	Rubber Tired Dozers	2	8.00	247	0.40
Grading (2)	Dumpers/Tenders	1	8.00	16	0.38
Grading (2)	Excavators	1	8.00	158	0.38
Grading (2)	Off-Highway Trucks	2	8.00	402	0.38
Grading (2)	Rollers	1	8.00	80	0.38
Grading (2)	Rubber Tired Dozers	1	8.00	247	0.40
Relocate monitoring station	Excavators	1	8.00	158	0.38
Relocate monitoring station	Off-Highway Trucks	2	8.00	402	0.38
Remove duckblinds, debris (2)	Dumpers/Tenders	2	8.00	16	0.38
Remove duckblinds, debris (2)	Generator Sets	5	8.00	84	0.74
Remove duckblinds, debris (2)	Off-Highway Trucks	1	8.00	402	0.38
Remove duckblinds, debris (2)	Pumps	5	8.00	84	0.74
Remove duckblinds, debris (2)	Rubber Tired Loaders	2	8.00	203	0.36
Establish staging area (2)	Off-Highway Trucks	1	8.00	402	0.38
Establish staging area (2)	Plate Compactors	1	8.00	8	0.43
Establish staging area (2)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Remove WCSs	Dumpers/Tenders	2	8.00	16	0.38
Remove WCSs	Excavators	2	8.00	158	0.38

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

Remove WCSs	Generator Sets	2	8.00	84	0.74
Remove WCSs	Off-Highway Trucks	3	8.00	402	0.38
Remove WCSs	Pumps	2	8.00	84	0.74
Remove WCSs	Rubber Tired Dozers	2	8.00	247	0.40
Grading (3)	Dumpers/Tenders	2	8.00	16	0.38
Grading (3)	Excavators	2	8.00	158	0.38
Grading (3)	Generator Sets	3	8.00	84	0.74
Grading (3)	Off-Highway Trucks	3	8.00	402	0.38
Grading (3)	Pumps	3	8.00	84	0.74
Grading (3)	Rubber Tired Dozers	2	8.00	247	0.40
Culverts and Grade	Dumpers/Tenders	2	8.00	16	0.38
Culverts and Grade	Excavators	1	8.00	158	0.38
Culverts and Grade	Generator Sets	4	8.00	84	0.74
Culverts and Grade	Off-Highway Trucks	3	8.00	402	0.38
Culverts and Grade	Pumps	4	8.00	84	0.74
Culverts and Grade	Rubber Tired Dozers	2	8.00	247	0.40
Culverts and Grade	Rubber Tired Loaders	2	8.00	203	0.36
Establish staging area (3)	Off-Highway Trucks	1	8.00	402	0.38
Establish staging area (3)	Plate Compactors	1	8.00	8	0.43
Establish staging area (3)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Excavate	Dumpers/Tenders	3	8.00	16	0.38
Excavate	Excavators	3	8.00	158	0.38
Excavate	Generator Sets	3	8.00	84	0.74
Excavate	Off-Highway Trucks	4	8.00	402	0.38
Excavate	Pumps	3	8.00	84	0.74
Excavate	Rubber Tired Dozers	3	8.00	247	0.40



## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Remove duckblinds, debris (1)	26	16.00	0.00	76.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading (3)	15	20.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Culverts and Grade	18	10.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Establish staging area (2)	4	14.00	6.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Excavate	19	28.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Deconstruct water well	3	4.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Establish staging area (1)	8	22.00	4.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading (1)	9	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading (2)	6	16.00	2.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Remove duckblinds, debris (2)	15	12.00	0.00	2.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Relocate monitoring station	3	8.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Establish staging area (2)	4	14.00	6.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Remove WCSs	13	12.00	0.00	2.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.2 Remove duckblinds, debris (1) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.3000e-003	0.0000	4.3000e-003	6.5000e-004	0.0000	6.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2582	2.2193	2.5308	5.1600e-003		0.1067	0.1067		0.1055	0.1055	0.0000	445.0250	445.0250	0.0502	0.0000	446.2811
<b>Total</b>	<b>0.2582</b>	<b>2.2193</b>	<b>2.5308</b>	<b>5.1600e-003</b>	<b>4.3000e-003</b>	<b>0.1067</b>	<b>0.1110</b>	<b>6.5000e-004</b>	<b>0.1055</b>	<b>0.1061</b>	<b>0.0000</b>	<b>445.0250</b>	<b>445.0250</b>	<b>0.0502</b>	<b>0.0000</b>	<b>446.2811</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	8.8400e-003	1.6800e-003	3.0000e-005	6.5000e-004	3.0000e-005	6.7000e-004	1.8000e-004	3.0000e-005	2.0000e-004	0.0000	2.8427	2.8427	1.1000e-004	0.0000	2.8454
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	9.8000e-004	0.0101	4.0000e-005	3.8100e-003	3.0000e-005	3.8400e-003	1.0100e-003	2.0000e-005	1.0400e-003	0.0000	3.2211	3.2211	7.0000e-005	0.0000	3.2228
<b>Total</b>	<b>1.7800e-003</b>	<b>9.8200e-003</b>	<b>0.0117</b>	<b>7.0000e-005</b>	<b>4.4600e-003</b>	<b>6.0000e-005</b>	<b>4.5100e-003</b>	<b>1.1900e-003</b>	<b>5.0000e-005</b>	<b>1.2400e-003</b>	<b>0.0000</b>	<b>6.0638</b>	<b>6.0638</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>6.0682</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.2 Remove duckblinds, debris (1) - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.3000e-003	0.0000	4.3000e-003	6.5000e-004	0.0000	6.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2582	2.2193	2.5308	5.1600e-003		0.1067	0.1067		0.1055	0.1055	0.0000	445.0245	445.0245	0.0502	0.0000	446.2806
<b>Total</b>	<b>0.2582</b>	<b>2.2193</b>	<b>2.5308</b>	<b>5.1600e-003</b>	<b>4.3000e-003</b>	<b>0.1067</b>	<b>0.1110</b>	<b>6.5000e-004</b>	<b>0.1055</b>	<b>0.1061</b>	<b>0.0000</b>	<b>445.0245</b>	<b>445.0245</b>	<b>0.0502</b>	<b>0.0000</b>	<b>446.2806</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	8.8400e-003	1.6800e-003	3.0000e-005	6.5000e-004	3.0000e-005	6.7000e-004	1.8000e-004	3.0000e-005	2.0000e-004	0.0000	2.8427	2.8427	1.1000e-004	0.0000	2.8454
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	9.8000e-004	0.0101	4.0000e-005	3.8100e-003	3.0000e-005	3.8400e-003	1.0100e-003	2.0000e-005	1.0400e-003	0.0000	3.2211	3.2211	7.0000e-005	0.0000	3.2228
<b>Total</b>	<b>1.7800e-003</b>	<b>9.8200e-003</b>	<b>0.0117</b>	<b>7.0000e-005</b>	<b>4.4600e-003</b>	<b>6.0000e-005</b>	<b>4.5100e-003</b>	<b>1.1900e-003</b>	<b>5.0000e-005</b>	<b>1.2400e-003</b>	<b>0.0000</b>	<b>6.0638</b>	<b>6.0638</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>6.0682</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.3 Deconstruct water well - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-003	0.0257	0.0219	9.0000e-005		9.1000e-004	9.1000e-004		8.4000e-004	8.4000e-004	0.0000	7.8733	7.8733	2.5500e-003	0.0000	7.9370
<b>Total</b>	<b>3.2000e-003</b>	<b>0.0257</b>	<b>0.0219</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.1000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>7.8733</b>	<b>7.8733</b>	<b>2.5500e-003</b>	<b>0.0000</b>	<b>7.9370</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.1000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0671	0.0671	0.0000	0.0000	0.0671
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0671</b>	<b>0.0671</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0671</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.3 Deconstruct water well - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-003	0.0257	0.0219	9.0000e-005		9.1000e-004	9.1000e-004		8.4000e-004	8.4000e-004	0.0000	7.8733	7.8733	2.5500e-003	0.0000	7.9370
<b>Total</b>	<b>3.2000e-003</b>	<b>0.0257</b>	<b>0.0219</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.1000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>7.8733</b>	<b>7.8733</b>	<b>2.5500e-003</b>	<b>0.0000</b>	<b>7.9370</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.1000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0671	0.0671	0.0000	0.0000	0.0671
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0671</b>	<b>0.0671</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0671</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.4 Establish staging area (1) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0350	0.2743	0.2463	8.6000e-004		0.0106	0.0106		9.7100e-003	9.7100e-003	0.0000	75.0821	75.0821	0.0243	0.0000	75.6892
<b>Total</b>	<b>0.0350</b>	<b>0.2743</b>	<b>0.2463</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>0.0106</b>	<b>0.0106</b>	<b>0.0000</b>	<b>9.7100e-003</b>	<b>9.7100e-003</b>	<b>0.0000</b>	<b>75.0821</b>	<b>75.0821</b>	<b>0.0243</b>	<b>0.0000</b>	<b>75.6892</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	3.7200e-003	9.9000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.9922	0.9922	5.0000e-005	0.0000	0.9934
Worker	6.9000e-004	4.5000e-004	4.6100e-003	2.0000e-005	1.7500e-003	1.0000e-005	1.7600e-003	4.6000e-004	1.0000e-005	4.8000e-004	0.0000	1.4763	1.4763	3.0000e-005	0.0000	1.4771
<b>Total</b>	<b>8.2000e-004</b>	<b>4.1700e-003</b>	<b>5.6000e-003</b>	<b>3.0000e-005</b>	<b>1.9900e-003</b>	<b>2.0000e-005</b>	<b>2.0100e-003</b>	<b>5.3000e-004</b>	<b>2.0000e-005</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>2.4685</b>	<b>2.4685</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>2.4706</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.4 Establish staging area (1) - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0350	0.2743	0.2463	8.6000e-004		0.0106	0.0106		9.7100e-003	9.7100e-003	0.0000	75.0821	75.0821	0.0243	0.0000	75.6891
<b>Total</b>	<b>0.0350</b>	<b>0.2743</b>	<b>0.2463</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>0.0106</b>	<b>0.0106</b>	<b>0.0000</b>	<b>9.7100e-003</b>	<b>9.7100e-003</b>	<b>0.0000</b>	<b>75.0821</b>	<b>75.0821</b>	<b>0.0243</b>	<b>0.0000</b>	<b>75.6891</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	3.7200e-003	9.9000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.9922	0.9922	5.0000e-005	0.0000	0.9934
Worker	6.9000e-004	4.5000e-004	4.6100e-003	2.0000e-005	1.7500e-003	1.0000e-005	1.7600e-003	4.6000e-004	1.0000e-005	4.8000e-004	0.0000	1.4763	1.4763	3.0000e-005	0.0000	1.4771
<b>Total</b>	<b>8.2000e-004</b>	<b>4.1700e-003</b>	<b>5.6000e-003</b>	<b>3.0000e-005</b>	<b>1.9900e-003</b>	<b>2.0000e-005</b>	<b>2.0100e-003</b>	<b>5.3000e-004</b>	<b>2.0000e-005</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>2.4685</b>	<b>2.4685</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>2.4706</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.5 Grading (1) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.2558	0.1819	5.1000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	44.9937	44.9937	0.0144	0.0000	45.3530
<b>Total</b>	<b>0.0286</b>	<b>0.2558</b>	<b>0.1819</b>	<b>5.1000e-004</b>	<b>0.0903</b>	<b>0.0111</b>	<b>0.1014</b>	<b>0.0497</b>	<b>0.0102</b>	<b>0.0599</b>	<b>0.0000</b>	<b>44.9937</b>	<b>44.9937</b>	<b>0.0144</b>	<b>0.0000</b>	<b>45.3530</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.8000e-004	2.8300e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.9000e-004	1.0000e-005	2.9000e-004	0.0000	0.9059	0.9059	2.0000e-005	0.0000	0.9064
<b>Total</b>	<b>4.2000e-004</b>	<b>2.8000e-004</b>	<b>2.8300e-003</b>	<b>1.0000e-005</b>	<b>1.0700e-003</b>	<b>1.0000e-005</b>	<b>1.0800e-003</b>	<b>2.9000e-004</b>	<b>1.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>0.9059</b>	<b>0.9059</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.9064</b>



## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.5 Grading (1) - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.2558	0.1819	5.1000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	44.9936	44.9936	0.0144	0.0000	45.3529
<b>Total</b>	<b>0.0286</b>	<b>0.2558</b>	<b>0.1819</b>	<b>5.1000e-004</b>	<b>0.0903</b>	<b>0.0111</b>	<b>0.1014</b>	<b>0.0497</b>	<b>0.0102</b>	<b>0.0599</b>	<b>0.0000</b>	<b>44.9936</b>	<b>44.9936</b>	<b>0.0144</b>	<b>0.0000</b>	<b>45.3529</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.8000e-004	2.8300e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.9000e-004	1.0000e-005	2.9000e-004	0.0000	0.9059	0.9059	2.0000e-005	0.0000	0.9064
<b>Total</b>	<b>4.2000e-004</b>	<b>2.8000e-004</b>	<b>2.8300e-003</b>	<b>1.0000e-005</b>	<b>1.0700e-003</b>	<b>1.0000e-005</b>	<b>1.0800e-003</b>	<b>2.9000e-004</b>	<b>1.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>0.9059</b>	<b>0.9059</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.9064</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.6 Grading (2) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0301	0.0000	0.0301	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0117	0.1039	0.0783	2.2000e-004		4.5600e-003	4.5600e-003		4.2000e-003	4.2000e-003	0.0000	19.0512	19.0512	6.1000e-003	0.0000	19.2037
<b>Total</b>	<b>0.0117</b>	<b>0.1039</b>	<b>0.0783</b>	<b>2.2000e-004</b>	<b>0.0301</b>	<b>4.5600e-003</b>	<b>0.0347</b>	<b>0.0166</b>	<b>4.2000e-003</b>	<b>0.0208</b>	<b>0.0000</b>	<b>19.0512</b>	<b>19.0512</b>	<b>6.1000e-003</b>	<b>0.0000</b>	<b>19.2037</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	9.3000e-004	2.5000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2480	0.2480	1.0000e-005	0.0000	0.2484
Worker	2.5000e-004	1.6000e-004	1.6800e-003	1.0000e-005	6.4000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5368	0.5368	1.0000e-005	0.0000	0.5371
<b>Total</b>	<b>2.8000e-004</b>	<b>1.0900e-003</b>	<b>1.9300e-003</b>	<b>1.0000e-005</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>7.0000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.7849</b>	<b>0.7849</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.7855</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.6 Grading (2) - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0301	0.0000	0.0301	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0117	0.1039	0.0783	2.2000e-004		4.5600e-003	4.5600e-003		4.2000e-003	4.2000e-003	0.0000	19.0512	19.0512	6.1000e-003	0.0000	19.2037
<b>Total</b>	<b>0.0117</b>	<b>0.1039</b>	<b>0.0783</b>	<b>2.2000e-004</b>	<b>0.0301</b>	<b>4.5600e-003</b>	<b>0.0347</b>	<b>0.0166</b>	<b>4.2000e-003</b>	<b>0.0208</b>	<b>0.0000</b>	<b>19.0512</b>	<b>19.0512</b>	<b>6.1000e-003</b>	<b>0.0000</b>	<b>19.2037</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	9.3000e-004	2.5000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2480	0.2480	1.0000e-005	0.0000	0.2484
Worker	2.5000e-004	1.6000e-004	1.6800e-003	1.0000e-005	6.4000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5368	0.5368	1.0000e-005	0.0000	0.5371
<b>Total</b>	<b>2.8000e-004</b>	<b>1.0900e-003</b>	<b>1.9300e-003</b>	<b>1.0000e-005</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>7.0000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.7849</b>	<b>0.7849</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.7855</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.7 Remove duckblinds, debris (2) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1000e-004	0.0000	2.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0467	0.4048	0.4396	9.3000e-004		0.0190	0.0190		0.0187	0.0187	0.0000	80.2182	80.2182	0.0102	0.0000	80.4734
<b>Total</b>	<b>0.0467</b>	<b>0.4048</b>	<b>0.4396</b>	<b>9.3000e-004</b>	<b>2.1000e-004</b>	<b>0.0190</b>	<b>0.0192</b>	<b>3.0000e-005</b>	<b>0.0187</b>	<b>0.0187</b>	<b>0.0000</b>	<b>80.2182</b>	<b>80.2182</b>	<b>0.0102</b>	<b>0.0000</b>	<b>80.4734</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.3000e-004	4.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0748	0.0748	0.0000	0.0000	0.0749
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.5100e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8053	0.8053	2.0000e-005	0.0000	0.8057
<b>Total</b>	<b>3.9000e-004</b>	<b>4.8000e-004</b>	<b>2.5500e-003</b>	<b>1.0000e-005</b>	<b>9.7000e-004</b>	<b>1.0000e-005</b>	<b>9.8000e-004</b>	<b>2.5000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.8801</b>	<b>0.8801</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.8806</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.7 Remove duckblinds, debris (2) - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1000e-004	0.0000	2.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0467	0.4048	0.4396	9.3000e-004		0.0190	0.0190		0.0187	0.0187	0.0000	80.2181	80.2181	0.0102	0.0000	80.4733
<b>Total</b>	<b>0.0467</b>	<b>0.4048</b>	<b>0.4396</b>	<b>9.3000e-004</b>	<b>2.1000e-004</b>	<b>0.0190</b>	<b>0.0192</b>	<b>3.0000e-005</b>	<b>0.0187</b>	<b>0.0187</b>	<b>0.0000</b>	<b>80.2181</b>	<b>80.2181</b>	<b>0.0102</b>	<b>0.0000</b>	<b>80.4733</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.3000e-004	4.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0748	0.0748	0.0000	0.0000	0.0749
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.5100e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8053	0.8053	2.0000e-005	0.0000	0.8057
<b>Total</b>	<b>3.9000e-004</b>	<b>4.8000e-004</b>	<b>2.5500e-003</b>	<b>1.0000e-005</b>	<b>9.7000e-004</b>	<b>1.0000e-005</b>	<b>9.8000e-004</b>	<b>2.5000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.8801</b>	<b>0.8801</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.8806</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.8 Relocate monitoring station - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0189	0.1471	0.1496	4.7000e-004		5.6700e-003	5.6700e-003		5.2100e-003	5.2100e-003	0.0000	41.6124	41.6124	0.0135	0.0000	41.9488
<b>Total</b>	<b>0.0189</b>	<b>0.1471</b>	<b>0.1496</b>	<b>4.7000e-004</b>		<b>5.6700e-003</b>	<b>5.6700e-003</b>		<b>5.2100e-003</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>41.6124</b>	<b>41.6124</b>	<b>0.0135</b>	<b>0.0000</b>	<b>41.9488</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.5100e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8053	0.8053	2.0000e-005	0.0000	0.8057
<b>Total</b>	<b>3.8000e-004</b>	<b>2.5000e-004</b>	<b>2.5100e-003</b>	<b>1.0000e-005</b>	<b>9.5000e-004</b>	<b>1.0000e-005</b>	<b>9.6000e-004</b>	<b>2.5000e-004</b>	<b>1.0000e-005</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>0.8053</b>	<b>0.8053</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.8057</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.8 Relocate monitoring station - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0189	0.1471	0.1496	4.7000e-004		5.6700e-003	5.6700e-003		5.2100e-003	5.2100e-003	0.0000	41.6123	41.6123	0.0135	0.0000	41.9488
<b>Total</b>	<b>0.0189</b>	<b>0.1471</b>	<b>0.1496</b>	<b>4.7000e-004</b>		<b>5.6700e-003</b>	<b>5.6700e-003</b>		<b>5.2100e-003</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>41.6123</b>	<b>41.6123</b>	<b>0.0135</b>	<b>0.0000</b>	<b>41.9488</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.5100e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8053	0.8053	2.0000e-005	0.0000	0.8057
<b>Total</b>	<b>3.8000e-004</b>	<b>2.5000e-004</b>	<b>2.5100e-003</b>	<b>1.0000e-005</b>	<b>9.5000e-004</b>	<b>1.0000e-005</b>	<b>9.6000e-004</b>	<b>2.5000e-004</b>	<b>1.0000e-005</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>0.8053</b>	<b>0.8053</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.8057</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.9 Establish staging area (2) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7400e-003	0.0572	0.0603	1.5000e-004		2.5200e-003	2.5200e-003		2.3200e-003	2.3200e-003	0.0000	13.0628	13.0628	4.1700e-003	0.0000	13.1671
<b>Total</b>	<b>6.7400e-003</b>	<b>0.0572</b>	<b>0.0603</b>	<b>1.5000e-004</b>		<b>2.5200e-003</b>	<b>2.5200e-003</b>		<b>2.3200e-003</b>	<b>2.3200e-003</b>	<b>0.0000</b>	<b>13.0628</b>	<b>13.0628</b>	<b>4.1700e-003</b>	<b>0.0000</b>	<b>13.1671</b>

**Unmitigated Construction Off-Site**

blank	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	4.1900e-003	1.1200e-003	1.0000e-005	8.0000e-005	1.0000e-005	9.0000e-005	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	1.1162	1.1162	6.0000e-005	0.0000	1.1176
Worker	3.3000e-004	2.1000e-004	2.2000e-003	1.0000e-005	1.1000e-004	1.0000e-005	1.2000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.7046	0.7046	2.0000e-005	0.0000	0.7050
<b>Total</b>	<b>4.8000e-004</b>	<b>4.4000e-003</b>	<b>3.3200e-003</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>2.0000e-005</b>	<b>2.1000e-004</b>	<b>7.0000e-005</b>	<b>2.0000e-005</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.8208</b>	<b>1.8208</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.8226</b>



## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.9 Establish staging area (2) - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7400e-003	0.0553	0.0603	1.5000e-004		2.5200e-003	2.5200e-003		2.3200e-003	2.3200e-003	0.0000	13.0627	13.0627	4.1700e-003	0.0000	13.1671
<b>Total</b>	<b>6.7400e-003</b>	<b>0.0553</b>	<b>0.0603</b>	<b>1.5000e-004</b>		<b>2.5200e-003</b>	<b>2.5200e-003</b>		<b>2.3200e-003</b>	<b>2.3200e-003</b>	<b>0.0000</b>	<b>13.0627</b>	<b>13.0627</b>	<b>4.1700e-003</b>	<b>0.0000</b>	<b>13.1671</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	4.1900e-003	1.1200e-003	1.0000e-005	8.0000e-005	1.0000e-005	9.0000e-005	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	1.1162	1.1162	6.0000e-005	0.0000	1.1176
Worker	3.3000e-004	2.1000e-004	2.2000e-003	1.0000e-005	1.1000e-004	1.0000e-005	1.2000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.7046	0.7046	2.0000e-005	0.0000	0.7050
<b>Total</b>	<b>4.8000e-004</b>	<b>4.4000e-003</b>	<b>3.3200e-003</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>2.0000e-005</b>	<b>2.1000e-004</b>	<b>7.0000e-005</b>	<b>2.0000e-005</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.8208</b>	<b>1.8208</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.8226</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.10 Remove WCSs - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0362	0.3204	0.2735	6.6000e-004		0.0145	0.0145		0.0137	0.0137	0.0000	57.8501	57.8501	0.0142	0.0000	58.2052
<b>Total</b>	<b>0.0362</b>	<b>0.3204</b>	<b>0.2735</b>	<b>6.6000e-004</b>		<b>0.0145</b>	<b>0.0145</b>		<b>0.0137</b>	<b>0.0137</b>	<b>0.0000</b>	<b>57.8501</b>	<b>57.8501</b>	<b>0.0142</b>	<b>0.0000</b>	<b>58.2052</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.3000e-004	4.0000e-005	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0748	0.0748	0.0000	0.0000	0.0749
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	1.7600e-003	1.0000e-005	9.0000e-005	0.0000	9.0000e-005	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5637	0.5637	1.0000e-005	0.0000	0.5640
<b>Total</b>	<b>2.7000e-004</b>	<b>4.0000e-004</b>	<b>1.8000e-003</b>	<b>1.0000e-005</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.6385</b>	<b>0.6385</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.10 Remove WCSs - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0362	0.3204	0.2735	6.6000e-004		0.0145	0.0145		0.0137	0.0137	0.0000	57.8500	57.8500	0.0142	0.0000	58.2051
<b>Total</b>	<b>0.0362</b>	<b>0.3204</b>	<b>0.2735</b>	<b>6.6000e-004</b>		<b>0.0145</b>	<b>0.0145</b>		<b>0.0137</b>	<b>0.0137</b>	<b>0.0000</b>	<b>57.8500</b>	<b>57.8500</b>	<b>0.0142</b>	<b>0.0000</b>	<b>58.2051</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.3000e-004	4.0000e-005	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0748	0.0748	0.0000	0.0000	0.0749
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	1.7600e-003	1.0000e-005	9.0000e-005	0.0000	9.0000e-005	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5637	0.5637	1.0000e-005	0.0000	0.5640
<b>Total</b>	<b>2.7000e-004</b>	<b>4.0000e-004</b>	<b>1.8000e-003</b>	<b>1.0000e-005</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.6385</b>	<b>0.6385</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.6389</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.11 Grading (3) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1754	1.5502	1.3942	3.2400e-003		0.0714	0.0714		0.0680	0.0680	0.0000	281.8413	281.8413	0.0626	0.0000	283.4049
<b>Total</b>	<b>0.1754</b>	<b>1.5502</b>	<b>1.3942</b>	<b>3.2400e-003</b>		<b>0.0714</b>	<b>0.0714</b>		<b>0.0680</b>	<b>0.0680</b>	<b>0.0000</b>	<b>281.8413</b>	<b>281.8413</b>	<b>0.0626</b>	<b>0.0000</b>	<b>283.4049</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.2300e-003	0.0126	4.0000e-005	6.5000e-004	3.0000e-005	6.8000e-004	2.6000e-004	3.0000e-005	2.8000e-004	0.0000	4.0263	4.0263	9.0000e-005	0.0000	4.0285
<b>Total</b>	<b>1.8800e-003</b>	<b>1.2300e-003</b>	<b>0.0126</b>	<b>4.0000e-005</b>	<b>6.5000e-004</b>	<b>3.0000e-005</b>	<b>6.8000e-004</b>	<b>2.6000e-004</b>	<b>3.0000e-005</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>4.0263</b>	<b>4.0263</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>4.0285</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.11 Grading (3) - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1754	1.5502	1.3942	3.2400e-003		0.0714	0.0714		0.0680	0.0680	0.0000	281.8410	281.8410	0.0626	0.0000	283.4046
<b>Total</b>	<b>0.1754</b>	<b>1.5502</b>	<b>1.3942</b>	<b>3.2400e-003</b>		<b>0.0714</b>	<b>0.0714</b>		<b>0.0680</b>	<b>0.0680</b>	<b>0.0000</b>	<b>281.8410</b>	<b>281.8410</b>	<b>0.0626</b>	<b>0.0000</b>	<b>283.4046</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.2300e-003	0.0126	4.0000e-005	6.5000e-004	3.0000e-005	6.8000e-004	2.6000e-004	3.0000e-005	2.8000e-004	0.0000	4.0263	4.0263	9.0000e-005	0.0000	4.0285
<b>Total</b>	<b>1.8800e-003</b>	<b>1.2300e-003</b>	<b>0.0126</b>	<b>4.0000e-005</b>	<b>6.5000e-004</b>	<b>3.0000e-005</b>	<b>6.8000e-004</b>	<b>2.6000e-004</b>	<b>3.0000e-005</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>4.0263</b>	<b>4.0263</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>4.0285</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.12 Culverts and Grade - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0472	0.4090	0.3933	9.6000e-004		0.0177	0.0177		0.0170	0.0170	0.0000	83.8196	83.8196	0.0175	0.0000	84.2567
<b>Total</b>	<b>0.0472</b>	<b>0.4090</b>	<b>0.3933</b>	<b>9.6000e-004</b>		<b>0.0177</b>	<b>0.0177</b>		<b>0.0170</b>	<b>0.0170</b>	<b>0.0000</b>	<b>83.8196</b>	<b>83.8196</b>	<b>0.0175</b>	<b>0.0000</b>	<b>84.2567</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.4000e-004	1.4400e-003	1.0000e-005	8.0000e-005	0.0000	8.0000e-005	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4839	0.4839	1.0000e-005	0.0000	0.4841
<b>Total</b>	<b>2.2000e-004</b>	<b>1.4000e-004</b>	<b>1.4400e-003</b>	<b>1.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.4839</b>	<b>0.4839</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4841</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.12 Culverts and Grade - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0472	0.4090	0.3933	9.6000e-004		0.0177	0.0177		0.0170	0.0170	0.0000	83.8195	83.8195	0.0175	0.0000	84.2566
<b>Total</b>	<b>0.0472</b>	<b>0.4090</b>	<b>0.3933</b>	<b>9.6000e-004</b>		<b>0.0177</b>	<b>0.0177</b>		<b>0.0170</b>	<b>0.0170</b>	<b>0.0000</b>	<b>83.8195</b>	<b>83.8195</b>	<b>0.0175</b>	<b>0.0000</b>	<b>84.2566</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.4000e-004	1.4400e-003	1.0000e-005	8.0000e-005	0.0000	8.0000e-005	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4839	0.4839	1.0000e-005	0.0000	0.4841
<b>Total</b>	<b>2.2000e-004</b>	<b>1.4000e-004</b>	<b>1.4400e-003</b>	<b>1.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.4839</b>	<b>0.4839</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4841</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.13 Establish staging area (3) - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3600e-003	0.0517	0.0597	1.5000e-004		2.1800e-003	2.1800e-003		2.0100e-003	2.0100e-003	0.0000	13.0735	13.0735	4.1800e-003	0.0000	13.1779
<b>Total</b>	<b>6.3600e-003</b>	<b>0.0517</b>	<b>0.0597</b>	<b>1.5000e-004</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>2.0100e-003</b>	<b>2.0100e-003</b>	<b>0.0000</b>	<b>13.0735</b>	<b>13.0735</b>	<b>4.1800e-003</b>	<b>0.0000</b>	<b>13.1779</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	3.2300e-003	9.7000e-004	1.0000e-005	8.0000e-005	0.0000	8.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	1.0898	1.0898	4.0000e-005	0.0000	1.0908
Worker	3.1000e-004	1.9000e-004	2.0100e-003	1.0000e-005	1.1000e-004	1.0000e-005	1.2000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.6774	0.6774	1.0000e-005	0.0000	0.6778
<b>Total</b>	<b>4.2000e-004</b>	<b>3.4200e-003</b>	<b>2.9800e-003</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.7672</b>	<b>1.7672</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.7686</b>



## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.13 Establish staging area (3) - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3600e-003	0.0498	0.0597	1.5000e-004		2.1800e-003	2.1800e-003		2.0100e-003	2.0100e-003	0.0000	13.0735	13.0735	4.1800e-003	0.0000	13.1779
<b>Total</b>	<b>6.3600e-003</b>	<b>0.0498</b>	<b>0.0597</b>	<b>1.5000e-004</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>2.0100e-003</b>	<b>2.0100e-003</b>	<b>0.0000</b>	<b>13.0735</b>	<b>13.0735</b>	<b>4.1800e-003</b>	<b>0.0000</b>	<b>13.1779</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	3.2300e-003	9.7000e-004	1.0000e-005	8.0000e-005	0.0000	8.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	1.0898	1.0898	4.0000e-005	0.0000	1.0908
Worker	3.1000e-004	1.9000e-004	2.0100e-003	1.0000e-005	1.1000e-004	1.0000e-005	1.2000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.6774	0.6774	1.0000e-005	0.0000	0.6778
<b>Total</b>	<b>4.2000e-004</b>	<b>3.4200e-003</b>	<b>2.9800e-003</b>	<b>2.0000e-005</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.7672</b>	<b>1.7672</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.7686</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.14 Excavate - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2698	2.3176	2.2075	5.4300e-003		0.1016	0.1016		0.0962	0.0962	0.0000	472.6741	472.6741	0.1137	0.0000	475.5154
<b>Total</b>	<b>0.2698</b>	<b>2.3176</b>	<b>2.2075</b>	<b>5.4300e-003</b>		<b>0.1016</b>	<b>0.1016</b>		<b>0.0962</b>	<b>0.0962</b>	<b>0.0000</b>	<b>472.6741</b>	<b>472.6741</b>	<b>0.1137</b>	<b>0.0000</b>	<b>475.5154</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2700e-003	2.0500e-003	0.0215	8.0000e-005	1.2000e-003	6.0000e-005	1.2600e-003	4.8000e-004	5.0000e-005	5.3000e-004	0.0000	7.2260	7.2260	1.5000e-004	0.0000	7.2296
<b>Total</b>	<b>3.2700e-003</b>	<b>2.0500e-003</b>	<b>0.0215</b>	<b>8.0000e-005</b>	<b>1.2000e-003</b>	<b>6.0000e-005</b>	<b>1.2600e-003</b>	<b>4.8000e-004</b>	<b>5.0000e-005</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>7.2260</b>	<b>7.2260</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>7.2296</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**3.14 Excavate - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2698	2.3176	2.2075	5.4300e-003		0.1016	0.1016		0.0962	0.0962	0.0000	472.6735	472.6735	0.1137	0.0000	475.5148
<b>Total</b>	<b>0.2698</b>	<b>2.3176</b>	<b>2.2075</b>	<b>5.4300e-003</b>		<b>0.1016</b>	<b>0.1016</b>		<b>0.0962</b>	<b>0.0962</b>	<b>0.0000</b>	<b>472.6735</b>	<b>472.6735</b>	<b>0.1137</b>	<b>0.0000</b>	<b>475.5148</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2700e-003	2.0500e-003	0.0215	8.0000e-005	1.2000e-003	6.0000e-005	1.2600e-003	4.8000e-004	5.0000e-005	5.3000e-004	0.0000	7.2260	7.2260	1.5000e-004	0.0000	7.2296
<b>Total</b>	<b>3.2700e-003</b>	<b>2.0500e-003</b>	<b>0.0215</b>	<b>8.0000e-005</b>	<b>1.2000e-003</b>	<b>6.0000e-005</b>	<b>1.2600e-003</b>	<b>4.8000e-004</b>	<b>5.0000e-005</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>7.2260</b>	<b>7.2260</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>7.2296</b>

**4.0 Operational Detail - Mobile**

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.595870	0.034811	0.174745	0.105612	0.016131	0.005123	0.009324	0.045418	0.003272	0.002038	0.006158	0.000613	0.000885

Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

[illegible]

Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

[illegible]

**Mitigated**

[illegible]

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0399	3.9200e-003	0.4320	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	0.8414	0.8414	2.2000e-003	0.0000	0.8963
Unmitigated	0.0399	3.9200e-003	0.4320	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	0.8414	0.8414	2.2000e-003	0.0000	0.8963

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0399	3.9200e-003	0.4320	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	0.8414	0.8414	2.2000e-003	0.0000	0.8963
<b>Total</b>	<b>0.0399</b>	<b>3.9200e-003</b>	<b>0.4320</b>	<b>3.0000e-005</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>	<b>0.0000</b>	<b>0.8414</b>	<b>0.8414</b>	<b>2.2000e-003</b>	<b>0.0000</b>	<b>0.8963</b>



## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0399	3.9200e-003	0.4320	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	0.8414	0.8414	2.2000e-003	0.0000	0.8963
<b>Total</b>	<b>0.0399</b>	<b>3.9200e-003</b>	<b>0.4320</b>	<b>3.0000e-005</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>	<b>0.0000</b>	<b>0.8414</b>	<b>0.8414</b>	<b>2.2000e-003</b>	<b>0.0000</b>	<b>0.8963</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

## Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

Bradmoor, Arnold, and Blacklock Tidal Restoration Project - Construction - Solano-San Francisco County, Annual

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