

<b>OFFROAD Emissions (Tons per day)</b>								
	<b>ROG Exhaust</b>	<b>CO Exhaust</b>	<b>NOX Exhaust</b>	<b>SO2 Exhaust</b>	<b>PM Exhaust</b>	<b>CO<sub>2</sub> Exhaust</b>	<b>N<sub>2</sub>O Exhaust</b>	<b>CH<sub>4</sub> Exhaust</b>
2008	2.49E-03	3.75E-03	8.51E-03	5.10E-06	2.13E-04	4.53E-01	0.00E+00	2.25E-04
2014	3.34E-03	5.02E-03	1.14E-02	6.82E-06	2.93E-04	6.06E-01	0.00E+00	3.01E-04
2015	3.44E-03	5.17E-03	1.18E-02	7.03E-06	3.03E-04	6.25E-01	0.00E+00	3.10E-04
2016	3.55E-03	5.33E-03	1.21E-02	7.25E-06	3.14E-04	6.45E-01	0.00E+00	3.20E-04
2017	3.66E-03	5.50E-03	1.25E-02	7.48E-06	3.24E-04	6.65E-01	0.00E+00	3.30E-04
2018	3.77E-03	5.67E-03	1.29E-02	7.71E-06	3.36E-04	6.85E-01	0.00E+00	3.40E-04
2019	3.89E-03	5.84E-03	1.33E-02	7.95E-06	3.47E-04	7.06E-01	0.00E+00	3.51E-04
2020	4.01E-03	6.02E-03	1.37E-02	8.19E-06	3.59E-04	7.28E-01	0.00E+00	3.62E-04
2021	4.13E-03	6.21E-03	1.41E-02	8.45E-06	3.72E-04	7.51E-01	0.00E+00	3.73E-04

Notes

<sup>1</sup> Assumes one diesel powered pleasure craft (max Hp 250) operating during the summer season in the Lake Tahoe portion of Placer County

$$\text{Emission Factor} = (\text{tons/day}) \times (1/P) \times (2000 \text{ lb/ton}) \times (1/\text{Hp}) \times (0.35)$$

Where

Tons/day = Emissions summarized above

HP = 225

<b>Emission Factor (pounds/ break horsepower-hour)</b>								
	<b>ROG Exhaust</b>	<b>CO Exhaust</b>	<b>NOX Exhaust</b>	<b>SO2 Exhaust</b>	<b>PM Exhaust</b>	<b>CO<sub>2</sub> Exhaust</b>	<b>N<sub>2</sub>O Exhaust</b>	<b>CH<sub>4</sub> Exhaust</b>
2008	2.095E-04	3.148E-04	7.149E-04	4.283E-07	1.787E-05	3.807E-02	0.000E+00	1.890E-05
2014	3.416E-04	5.134E-04	1.169E-03	6.985E-07	2.996E-05	6.208E-02	0.000E+00	3.082E-05
2015	3.522E-04	5.293E-04	1.205E-03	7.201E-07	3.101E-05	6.400E-02	0.000E+00	3.178E-05
2016	3.631E-04	5.457E-04	1.243E-03	7.424E-07	3.210E-05	6.598E-02	0.000E+00	3.276E-05
2017	3.743E-04	5.625E-04	1.281E-03	7.653E-07	3.321E-05	6.802E-02	0.000E+00	3.377E-05
2018	3.859E-04	5.799E-04	1.321E-03	7.890E-07	3.435E-05	7.012E-02	0.000E+00	3.482E-05
2019	3.978E-04	5.979E-04	1.362E-03	8.134E-07	3.553E-05	7.229E-02	0.000E+00	3.589E-05
2020	4.101E-04	6.164E-04	1.404E-03	8.386E-07	3.676E-05	7.453E-02	0.000E+00	3.700E-05
2021	4.228E-04	6.354E-04	1.448E-03	8.645E-07	3.803E-05	7.683E-02	0.000E+00	3.815E-05

$$\text{Daily Emissions (pounds per day)} = (\text{Emission Factor}) \times (12 \text{ hours}) \times (450 \text{ Hp})$$

<b>Daily Emissions (pounds per day)</b>								
	<b>ROG Exhaust</b>	<b>CO Exhaust</b>	<b>NOX Exhaust</b>	<b>SO2 Exhaust</b>	<b>PM Exhaust</b>	<b>CO<sub>2</sub> Exhaust</b>	<b>N<sub>2</sub>O Exhaust</b>	<b>CH<sub>4</sub> Exhaust</b>
2008 <sup>2</sup>	2.26	3.40	7.72	0.00	0.19	411	0.00	0.20
2014	1.84	2.77	6.31	0.00	0.16	335	0.00	0.17
2015	1.90	2.86	6.51	0.00	0.17	346	0.00	0.17
2016	1.96	2.95	6.71	0.00	0.17	356	0.00	0.18
2017	2.02	3.04	6.92	0.00	0.18	367	0.00	0.18

2018	2.08	3.13	7.13	0.00	0.19	379	0.00	0.19
2019 <sup>2</sup>	2.15	3.23	7.36	0.00	0.19	390	0.00	0.19
2020 <sup>2</sup>	2.21	3.33	7.58	0.00	0.20	402	0.00	0.20
2021 <sup>2</sup>	2.28	3.43	7.82	0.00	0.21	415	0.00	0.21

Notes

<sup>1</sup> Assumes two engines operating at 225 Hp

<sup>2</sup> Assumes the operation of two water taxis

$$\text{Daily Hybrid Emissions} = (\text{Daily Emissions}) \times 0.42$$

Daily Hybrid Emissions (pounds per day)									
	ROG Exhaust	CO Exhaust	NOX Exhaust	SO2 Exhaust	PM10 Exhaust <sup>1</sup>	PM2.5 Exhuast <sup>2</sup>	CO <sub>2</sub> Exhaust <sup>3</sup>	N <sub>2</sub> O Exhaust <sup>3</sup>	CH <sub>4</sub> Exhaust <sup>3</sup>
2008 <sup>4</sup>	0.95	1.43	3.24	0.00	0.08	0.07	10	0.00	0.00
2014	0.77	1.16	2.65	0.00	0.07	0.06	8	0.00	0.00
2015	0.80	1.20	2.73	0.00	0.07	0.06	8	0.00	0.00
2016	0.82	1.24	2.82	0.00	0.07	0.07	8	0.00	0.00
2017	0.85	1.28	2.91	0.00	0.08	0.07	9	0.00	0.00
2018	0.88	1.32	3.00	0.00	0.08	0.07	9	0.00	0.00
2019 <sup>4</sup>	0.90	1.36	3.09	0.00	0.08	0.07	9	0.00	0.00
2020 <sup>4</sup>	0.93	1.40	3.19	0.00	0.08	0.08	9	0.00	0.00
2021 <sup>4</sup>	0.96	1.44	3.28	0.00	0.09	0.08	10	0.00	0.00

Notes

<sup>1</sup> PM10 assumed to be 100% of total PM

<sup>2</sup> PM2.5 assumed to be 92% of total PM

<sup>3</sup> Presented in metric tons per year (assumed 122 operatoinal days per year)

<sup>4</sup> Assumes the operation of two water taxis