## Proposed Project Total Construction-Related Fuel Usage

## Construction

Table 1. Construction Year One (2022)										
Action	Carbon Dioxide Equivalents (CO <sub>2</sub> e) in Metric Tons <sup>1</sup>	Conversion of Metric Tons to Kilograms <sup>2</sup>	Construction Equipment Emission Factor <sup>2</sup>							
Project Construction	127	127,000	10.15							
Total Gallons Consumed During Construction Year One: 12,512										

Table 2. Construction Year Two (2023)										
Action	Carbon Dioxide Equivalents (CO <sub>2</sub> e) in Metric Tons <sup>1</sup>	Conversion of Metric Tons to Kilograms <sup>2</sup>	Construction Equipment Emission Factor <sup>2</sup>							
Project Construction	193	193,000	10.15							
Total Gallons Consumed During Construction Year Two:										

Table 2. Construction Year Three (2024)									
Action	Carbon Dioxide Equivalents (CO <sub>2</sub> e) in Metric Tons <sup>1</sup>	Conversion of Metric Tons to Kilograms <sup>2</sup>	Construction Equipment Emission Factor <sup>2</sup>						
Project Construction	125	125,000	10.15						
Total Gallons Consumed During Construction Year Three: 12,315									

## Sources:

<sup>1</sup>ECORP Consulting. 2022. Air Quality and Greenhouse Gas Emissions Assessment: Saxon Reservoir and Replacement Well Project

<sup>2</sup>Climate Registry. 2016. *General Reporting Protocol for the Voluntary Reporting Program version 2.1.* January 2016.

http://www.theclimateregistry.org/wp-content/uploads/2014/11/General-Reporting-Protocol-Version-2.1.pdf

## Initial Storage Tank Filling - Energy Consumption and GHG Calculations

Booster Water Pumping				Energy Cor	Energy Consumption			SCE Intensity Factors <sup>4</sup>		Estimated Emissions		CO2e			
Storage	Pumping	Pump				Storage		Pump Energy		'	GHG				
Capacity	city rate <sup>1</sup> Size <sup>2</sup> Pumping Duration		Capacity Use Rate Total Energ		nergy	Pollutant (lb/MWh)		(lb) (tonne)		(tonne)					
	(gpm)	(hp)	(min)	(hr)	(days)		(ac/ft) <sup>3</sup>	(kWhr/ac/ft)	(kWhr)	(MWh)	CO2	702.44	623.44	0.28	0.28
750000	450	40	1,667	28	1.16	750000	2.32	383.0	888	0.89	CH4	0.029	0.03	0.000012	
											N2O	0.006	0.01	0.0000024	

<sup>&</sup>lt;sup>1</sup> Per design specifications provided by applicant, 11/8/18

<sup>&</sup>lt;sup>2</sup> Pump size assumed based on previous projects

<sup>&</sup>lt;sup>3</sup> Based on 323,650.8 gallons per ac. ft.

<sup>&</sup>lt;sup>4</sup> Based on CalEEMod Utility Intensity Factors for Southern California Edison