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MEMORANDUM

To:	Jessica Lovecchio, Sr. Environmental Project manager
From:	Ian McIntire, Dudek
Subject:	East Highline Reservoir Project Air Quality and Greenhouse Gas Emissions Assessment
Date:	April 16, 2019
Attachment A:	Air Quality and Greenhouse Gas Emissions Calculations

Dudek is pleased to submit this air quality and greenhouse gas (GHG) emissions assessment to assist Imperial Irrigation District (IID) with initial environmental planning requirements for the proposed East Highline (EHL) Reservoir Project (proposed project) located in Imperial County (County), California.

This memorandum estimates criteria air pollutant and GHG emissions from construction of the proposed project and evaluates potential air quality and GHG emissions impacts resulting from project construction.

The contents and organization of this memorandum are as follows: project description; general analysis and methodology; threshold of significance and an impact analysis for the air quality assessment and GHG emissions assessment; conclusions; and references cited.

1 Project Description

The proposed project consists of a main canal off-line reservoir storage project and related infrastructure. The reservoir would be a single 2,500 to 3,400 acre-foot (AF) capacity reservoir on a parcel of farm ground located approximately 1.25 miles north of the All-American Canal (AAC) and on the east side of the EHL Canal at Verde School Road, in Imperial County, California. A proposed intake structure off the north side of the AAC would direct Colorado River flows along a proposed intake canal to the reservoir at up to approximately 1,500 cubic feet per second (cfs). The construction and use of this large operational reservoir is a planned strategy to manage reduced downstream demands due to increase in grower requests for 12-hour deliveries or any reduction to a 24-hour order. Stored water would be delivered through an automated gate outlet and structure with a gravity flow capacity of approximately 1,500 cfs for delivery into the EHL Canal.

Construction of the reservoir would occur over an approximately 15-month construction period and involve the following components: construction of the reservoir; canal and measurement flume; sedimentation basin; construction of the Highway 98 crossing, canal inlet structure, reservoir outlet structure, meter vault, and EHL Canal outfall structure; construction of the AAC and EHL Canal tie-ins; and construction of the Highway 98 detour roadway.

2 General Analysis and Methodology

The project is located within the Imperial County portion of the Salton Sea Air Basin (SSAB). The SSAB includes all of Imperial County and the central portion of Riverside County (Coachella Valley). The Imperial County portion is under the jurisdiction of the Imperial County Air Pollution Control District (ICAPCD). Project-generated criteria air pollutant and GHG emissions are estimated using the most recent version of the California Emissions Estimator Model (CalEEMod Version 2016.3.1). Emission calculations were based on assumptions provided by IID and/or CalEEMod default values.

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants that are evaluated include volatile organic compounds (VOCs; also referred to as reactive organic gases (ROGs)), oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (PM_{10}), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in size ($PM_{2.5}$). VOCs and NO_x are important because they are precursors to ozone (O_3). Criteria air pollutant emissions associated with construction of the proposed project were estimated for the following emission sources: operation of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles.

GHGs are gases that absorb infrared radiation in the atmosphere. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect. Principal GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, and water vapor. If the atmospheric concentrations of GHGs rise, the average temperature of the lower atmosphere will gradually increase. Globally, climate change has the potential to impact numerous environmental resources though uncertain impacts related to future air temperatures and precipitation patterns. Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. Climate change is already affecting California: average temperatures have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP), which varies among GHGs. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG emissions are typically measured in terms of pounds or tons of CO_2 equivalent (CO_2e). The CO_2E for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons (MT) of CO_2e = (MT of a GHG) × (GWP of the GHG). CalEEMod assumes that the GWP for CH_4 is 25, which means that emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2, and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report.

GHG emissions associated with construction of the proposed project were estimated for the following emission sources: operation of off-road construction equipment, on-road hauling and vendor trucks, and worker vehicles. The detailed project construction assumptions are included in Attachment A for the proposed project.

2.1 Construction Assumptions

Criteria air pollutants and GHG emissions associated with construction of the proposed project were estimated for the following emission sources: operation of off-road construction equipment, on-road vendor and haul trucks, and worker vehicles.

CalEEMod was used to estimate project-generated construction emissions. For purposes of estimating project emissions, and based on information provided by the applicant and CalEEMod default values. Construction is expected to begin October 2019, and would last approximately 15 months, ending in late 2020. Because CalEEMod uses real dates (e.g., January 1, 2018) to calculate construction emissions, assumptions were made as to key dates for each phase. However, the analysis presented herein assumes a construction start date of October 2018, which was the original earliest date at which construction would initiate per the project's preliminary construction schedule. Assuming an earlier start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. Thus, by assuming an earlier construction date of October 2019, this technical memorandum's estimated emissions would likely overstate the actual emission levels. In summary, construction phasing would consist of the following (duration of phases is approximate):

- Reservoir – 15 months (October 2019– December 2020)
- Highway 98 Detour Roadway – 1 month (October 2019)
- Sedimentation Basin – 3 months (October 2019 – December 2019)
- Canal and Measurement Flume – 3 months (October 2019 – December 2019)
- Canal Tie-Ins – 3 months (November 2019 – January 2020)
- Structures (Highway 98 Crossing Meter Vault, and EHL Canal Outfall Structure), Canal Inlet Structure, Reservoir Outlet Structure – 3 months (February 2020 – April 2020)

The construction equipment mix used for estimating the construction emissions of the proposed project in addition to worker and vendor truck assumptions are based on information provided by the applicant and are included in Attachment A of this memorandum.

3 Air Quality Assessment

3.1 Thresholds of Significance

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). In addition, Appendix G of the CEQA Guidelines indicates that where available, the significance criteria established by the applicable air district may be relied upon to determine whether the proposed project would have a significant impact on air quality. This analysis focuses on addressing the potential for the project to violate any air quality standard or contribute substantially to an existing or projected air

quality violation, which is determined by comparing estimated project-generated construction emissions to numeric thresholds established by the ICAPCD.

The ICAPCD has established significance thresholds in the 2007 ICAPCD CEQA Air Quality Handbook for the preparation of air quality impact assessments. The screening criteria within this handbook can be used to determine whether a project's total emissions would result in a significant impact as defined by CEQA. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the project's total air quality impacts are below the state and federal ambient air quality standards. Table 1 below shows the screening thresholds for construction and daily operations.

Table 1. ICAPCD Air Quality Significance Thresholds

Pollutant	Construction Criteria Pollutants Mass Daily Thresholds (pounds per day)
ROG	75
NO_x	100
CO	550
PM_{10}	150

Source: ICAPCD 2007.
Notes: CO = carbon monoxide; ICAPCD = Imperial County Air Pollution Control District, NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; ROG = reactive organic gases

Pursuant to the ICAPCD CEQA Air Quality Handbook, regardless of the size of the project, standard mitigation measures for construction equipment and fugitive PM_{10} must be implemented at all construction sites. The implementation of discretionary mitigation measures, as listed in Section 7.1 of the handbook, apply to those construction sites that are 5 acres or more for non-residential developments.

3.2 Imperial County Attainment Classification and De Minimis Thresholds

Pursuant to the 1990 federal Clean Air Act amendments, the Environmental Protection Agency classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the standards. Table 2 shows that the proposed project is located in an area that is nonattainment for ozone and PM_{10}.

Table 2. Imperial County Attainment Classification

Pollutant	Federal Attainment Status	De Minimis Thresholds (tpy)
Ozone (O_3) – 1 hour	Attainment[a]	N/A
O_3 (8-hour – 1997) (8-hour – 2015)	Attainment (maintenance) **Nonattainment (marginal)**	100 [b] (VOC or NO_x)
Nitrogen Dioxide (NO_2)	Unclassifiable/attainment	N/A
Carbon Monoxide (CO)	Unclassifiable/attainment	N/A
Sulfur Dioxide (SO_2)	Unclassifiable/attainment	N/A
Coarse Particulate Matter (PM_{10})	**Nonattainment (serious)**	70
Fine Particulate Matter ($PM_{2.5}$)	Unclassifiable/attainment	N/A
Lead (Pb)	Unclassifiable/attainment	N/A
Hydrogen Sulfide	No federal standard	N/A
Sulfates	No federal standard	N/A
Visibility-Reducing Particles	No federal standard	N/A
Vinyl Chloride	No federal standard	N/A

Sources: EPA 2018 (federal attainment status); EPA 2017 (de minimis thresholds).
Notes:
Attainment = meets the standards; Attainment/Maintenance = achieve the standards after a nonattainment designation; N/A = not applicable; Nonattainment = does not meet the standards; tpy = tons per year; Unclassified or Unclassifiable = insufficient data to classify; Unclassifiable/Attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.
[a] The federal 1-hour standard of 0.12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in SIPs.
[b] The applicable de minimis threshold applies equally to each ozone precursor (VOC and NO_x)

3.3 Impact Analysis

Construction Emissions

Construction of the project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts. Table 2 presents the estimated maximum daily construction emissions generated during construction of the proposed project. Details of the emission calculations are provided in Attachment A.

Notably, as discussed previously, the estimated commencement date for project construction is now going to occur at a later date compared to the construction schedule assumed at the time of modeling. However, for the purposes of construction modeling, the models do not need to use the exact commencement and completion dates to accurately represent the project construction emissions. This is because state and local regulations, restrictions, and increased market penetration of cleaner construction equipment are anticipated to continue to reduce emissions in the future. In other words, because California's construction related emission sources are regulated and will foreseeably continue to be more strictly regulated in the future, project emissions are reasonably expected

to continue to decline. Thus, by utilizing an earlier start date of October 2018, estimated emissions likely overstate actual emission levels. Therefore, the analysis and modeling included herein continue to provide an accurate and conservative assessment of the project's construction-related air pollutant emissions.

Table 3 presents the estimated maximum daily construction emissions generated during construction of the proposed project.

Table 3. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Project Component	ROG	NOx	CO	PM10
	pounds per day			
Year 2018				
Reservoir	3.54	36.22	16.35	55.07
Highway 98 Detour	4.06	46.97	28.46	66.68
Canal Tie-Ins	2.68	21.92	20.12	49.00
Sedimentation Basin	11.72	115.34	70.03	76.29
Canal and Measurement Flumes	8.97	87.84	63.31	78.68
Year 2019				
Reservoir	4.83	44.07	34.77	102.58
Canal Tie-Ins	3.05	25.29	22.01	54.24
Structures	10.71	102.75	67.93	75.93
Maximum Daily	**11.72**	**115.34**	**70.03**	**102.58**
ICAPCD Threshold	*75*	*100*	*550*	*150*
Threshold Exceeded?	No	**Yes**	No	No

Notes: CO = carbon monoxide; ICAPCD = Imperial County Air Pollution Control District; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; ROG = reactive organic gasses.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These estimates reflect control of fugitive dust required by ICAPCD including watering of active sites at least three times per day and limiting vehicle speeds to 15 miles per hour on unpaved roads.
See Attachment A for complete results.

Table 3 presents a worst-case scenario for construction activities. Construction of the structures and sedimentation are estimated to generate the greatest daily NO_x emissions. Construction activities could result in some overlap with other project components, because the reservoir construction would occur over a 15-month period and construction of the Highway 98 detour, canal tie-ins, structures, sedimentation basin, and canal and measurement flume would range from a construction period of up to 3 months within the same 15-month duration as the reservoir. Because the IID is limited in construction equipment and staffing, it is assumed that equipment and staff would move accordingly so that the maximum emissions which a project component could produce as shown in Table 2, would not overlap with another construction component. Therefore, the total daily maximum emissions presented in Table 2 would present a worst-case scenario. As shown in Table 2, the proposed project would likely exceed the NO_x ICAPCD significance thresholds and therefore would have a potentially significant impact and thus mitigation is required.

While construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions with construction of the reservoir and other project components would occur over a 15-month period, the ICAPCD's CEQA Air Quality Handbook recommends that projects comply with Regulation VIII - Fugitive Dust Control Measures, to reduce the amount of fugitive dust generated during construction. The proposed project would be required as conditions of approval to implement the following measures that are required of all projects:

Discretionary Mitigation Measures for Fugitive PM_{10} Control

1. Water exposed soil with adequate frequency for continued moist soil.
2. Replace ground cover in disturbed areas as quickly as possible.
3. Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site.

Standard Mitigation Measures for Construction Combustion Equipment

1. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment.
2. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
3. Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use.
4. Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Clean Air Act

Regarding if the proposed project would conflict with the applicable de minimis thresholds, estimated project construction emissions (in tons per year) are shown in Table 4. As previously discussed, construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts. Refer to Attachment A of this document for the complete air quality modeling assumptions and outputs.

Table 4. Estimated Annual Construction Criteria Air Pollutant Emissions

Year	ROG	NOx	PM10
	tons per year		
2018	0.63	5.93	6.45
2019	0.72	6.96	10.70
Maximum Annual Emissions	**0.72**	**6.96**	**10.70**
De Minimis Threshold	*100*	*100*	*70*
Threshold Exceeded?	No	No	No

Notes: NO_x = oxides of nitrogen; PM_{10} = fine particulate matter; $PM_{2.5}$ = fine particulate matter; ROG = reactive organic gasses.
See Attachment A for detailed results.

As provided in Table 4, the proposed project would not exceed any of the applicable federal de minimis thresholds during construction activities in 2018 or 2019. Therefore, additional conformity analysis is not required; the proposed project would conform to the applicable implementation plan for the project area.

4 Greenhouse Gas Emissions Assessment

4.1 Thresholds of Significance

The California Natural Resources Agency (CNRA) adopted amendments to the CEQA Guidelines on December 30, 2009, which became effective on March 18, 2010. With respect to GHG emissions, the amended CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4(a)). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

- The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." Similarly, the revisions to Appendix G, Environmental Checklist Form, which is often used as a basis for lead agencies' selection of significance thresholds, do not prescribe specific thresholds.

Rather, the CEQA Guidelines establish the following CEQA threshold related to GHGs which has been established to discuss the significance of project impacts (14 CCR 15000 et seq.):

1. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?

Accordingly, the CEQA Guidelines do not prescribe specific methodologies for performing an assessment, establish specific thresholds of significance, or mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance that are consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009).

The ICAPCD has not adopted GHG thresholds for projects. While GHG emissions were quantified for construction activities for informational purposes, to determine the proposed project's significance, a discussion has been included pertaining to how the proposed project would not conflict with applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

4.2 Impact Analysis

Construction Emissions

Construction of the project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor and haul trucks, and worker vehicles. As stated above, the ICAPCD does not have adopted GHG thresholds however; total construction emissions of the proposed project were calculated.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Attachment A. Construction of the proposed project is anticipated to commence in October 2019, lasting a total of approximately fifteen months. However, the analysis presented herein assumes a construction start date of October 2018, which was the original earliest date at which construction would initiate per the project's preliminary construction schedule. On-site sources of GHG emissions include off-road equipment and off-site sources include on-road vehicles (haul trucks, vendor trucks, and worker vehicles). Table 5 presents construction GHG emissions for the proposed project from on-site and off-site emission sources.

Table 5. Estimated Annual Construction GHG Emissions

Project Component	CO_2	CH_4	N_2O	CO_2e
	metric tons per year			
Year 2018				
Reservoir	99.78	0.03	0.00	100.50
Highway 98 Detour	46.79	0.01	0.00	47.14
Canal Tie-Ins	50.92	0.01	0.00	51.17
Sedimentation Basin	300.46	0.06	0.00	301.91
Canal and Measurement Flumes	220.69	0.03	0.00	221.53
Year 2019				
Reservoir	506.24	0.11	0.00	509.02
Canal Tie-Ins	38.65	0.00	0.00	38.75
Structures	282.13	0.05	0.00	283.43
Total	**1,545.66**	**0.30**	**0.00**	**1,553.45**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Attachment A for complete results.

As shown in Table 5, the estimated total GHG emissions during construction of would be approximately 1,553 MT CO_2e over the entire construction period. As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the proposed project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. To evaluate whether the proposed project would generate GHG emissions that are cumulatively considerable, a discussion is provided below discussing if the proposed project would conflict with the state's GHG reduction goals.

Consistency with CARB's Scoping Plan

The Climate Change Scoping Plan, approved by California Air Resources Board (CARB) in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Moreover, the Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others. While state regulatory measures would ultimately reduce GHG emissions associated with the proposed project through their effect on these sources, no statewide plan, policy, or regulation would be specifically applicable to reductions in GHG emissions from the proposed project.

Consistency with SCAG 2016–2040 RTP/SCS

At the regional level, SCAG has adopted the 2016–2040 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) for the purpose of reducing GHG emissions attributable to passenger vehicles in Imperial County and surrounding areas. The RTP/SCS quantified an 8% reduction in emissions per capita by 2020, an 18% reduction by 2035, and a 21% reduction by 2040 (SCAG 2016). Although the RTP/SCS does not regulate land use or supersede the exercise of land use authority by SCAG's member jurisdictions (i.e., the County), the RTP/SCS is a relevant regional reference document for purposes of evaluating the connection of land use and transportation patterns and the corresponding GHG emissions. The RTP/SCS is not directly applicable to the proposed program because the underlying purpose of the RTP/SCS is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout the region, as stipulated under SB 375. The proposed project involves construction of a main canal off-line reservoir storage project and related infrastructure, which entails short-term use of construction equipment and worker vehicle trips. As such, the proposed project would not conflict with the goals and policies of the RTP/SCS.

Consistency with EO S-3-05 and SB 32

Executive Order (EO) S-3-05. This executive order establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

Senate Bill (SB) 32. This bill establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030.

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the Scoping Plan First Update that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the Scoping Plan First Update (CARB 2014) states the following:

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and EO S-3-05. This is confirmed in the Second Update, which states, "[t]his Plan draws from the experiences in developing and implementing previous plans to present a path to reaching California's 2030 GHG reduction target. The Plan is a package of economically viable and technologically feasible actions to not just keep California on track to achieve its 2030 target, but stay on track for a low- to zero-carbon economy by

involving every part of the state" (CARB 2017). The Second Update also states that although "the Scoping Plan charts the path to achieving the 2030 GHG emissions reduction target, we also need momentum to propel us to the 2050 statewide GHG target (80% below 1990 levels). In developing this Scoping Plan, we considered what policies are needed to meet our mid-term and long-term goals" (CARB 2017).

The proposed project would not interfere with implementation of any of the previously described GHG reduction goals for 2030 or 2050 because, as evidenced previously, the proposed project's GHG emissions would cease after construction activities have been completed. Therefore, the proposed project would not conflict with the state's trajectory toward future GHG reductions, and the proposed project's impacts on GHG emissions in the 2030 and 2050 horizon years would be less than significant.

Based on the preceding considerations, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, the proposed project would result in a less than significant impact.

5 Conclusions

Emissions generated during construction of the proposed project would exceed the ICAPCD's significance thresholds for NO_x resulting in a significant impact. The proposed project would also not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

6 References

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Attachment A

Air Quality and Greenhouse Gas Emissions Calculations