

Sacramento Municipal Utility District Solano 4 Wind Project

Addendum No. 1 To Solano 4 Wind Project Environmental Impact Report •
July 2022

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Lead Agency:

SMUD–Environmental Services
6201 S Street, MS B209
Sacramento, CA 95817-1899

or

P.O. Box 15830 MS B209
Sacramento, CA 95852-1830
Ammon Rice, Supervisor, Environmental Services
916-732-7466
email: ammon.rice@smud.org

Prepared by:

AECOM
2020 L Street, Suite 300
Sacramento, CA 95811
Contact: Petra Unger
(916) 414-5800 or petra.unger@aecom.com



ADDENDUM No. 1 TO SOLANO 4 WIND PROJECT ENVIRONMENTAL IMPACT REPORT

Project Title: Solano 4 Wind Project Environmental Impact Report (EIR),
State Clearinghouse No. 2019012016

Responsible Agency: Sacramento Municipal Utility District (SMUD)

1.0 Project Location

The project site is located within the Solano County Wind Resource Area (WRA) in southern Solano County north of the confluence of the Sacramento and San Joaquin rivers and southwest of the city of Rio Vista. The project site comprises two geographically distinct areas owned by SMUD, Solano 4 East and Solano 4 West, and the collection and home run lines, which total 2,549 acres. State Route (SR) 12 provides regional access to the project area. Montezuma Hills Road and Birds Landing Road provide local access to Solano 4 East, while Collinsville Road and Shiloh Road provide local access to Solano 4 West (see Figures 1 and 2).

2.0 Introduction

This addendum to the SMUD Solano 4 Wind Project EIR analyzes the environmental effects of installing two new wells to provide water for construction activities (e.g., dust control, compaction, etc.) to determine whether the proposed change would result in new or substantially more severe environmental impacts than those previously described in the EIR. The subject areas being analyzed in this addendum are hydrology and water quality, and utilities and service systems.

The Solano 4 Wind Project EIR was certified by SMUD on August 20, 2021. The EIR examined the environmental impacts of the proposed project and serves as a project EIR. Based on the results of the subsequent environmental analysis provided herein, in accordance with Section 15164 of the State California Environmental Quality Act (CEQA) Guidelines, SMUD has determined that preparation of an addendum describing the proposed modifications/changes to the previously approved Solano 4 Wind Project and certified EIR would be appropriate.

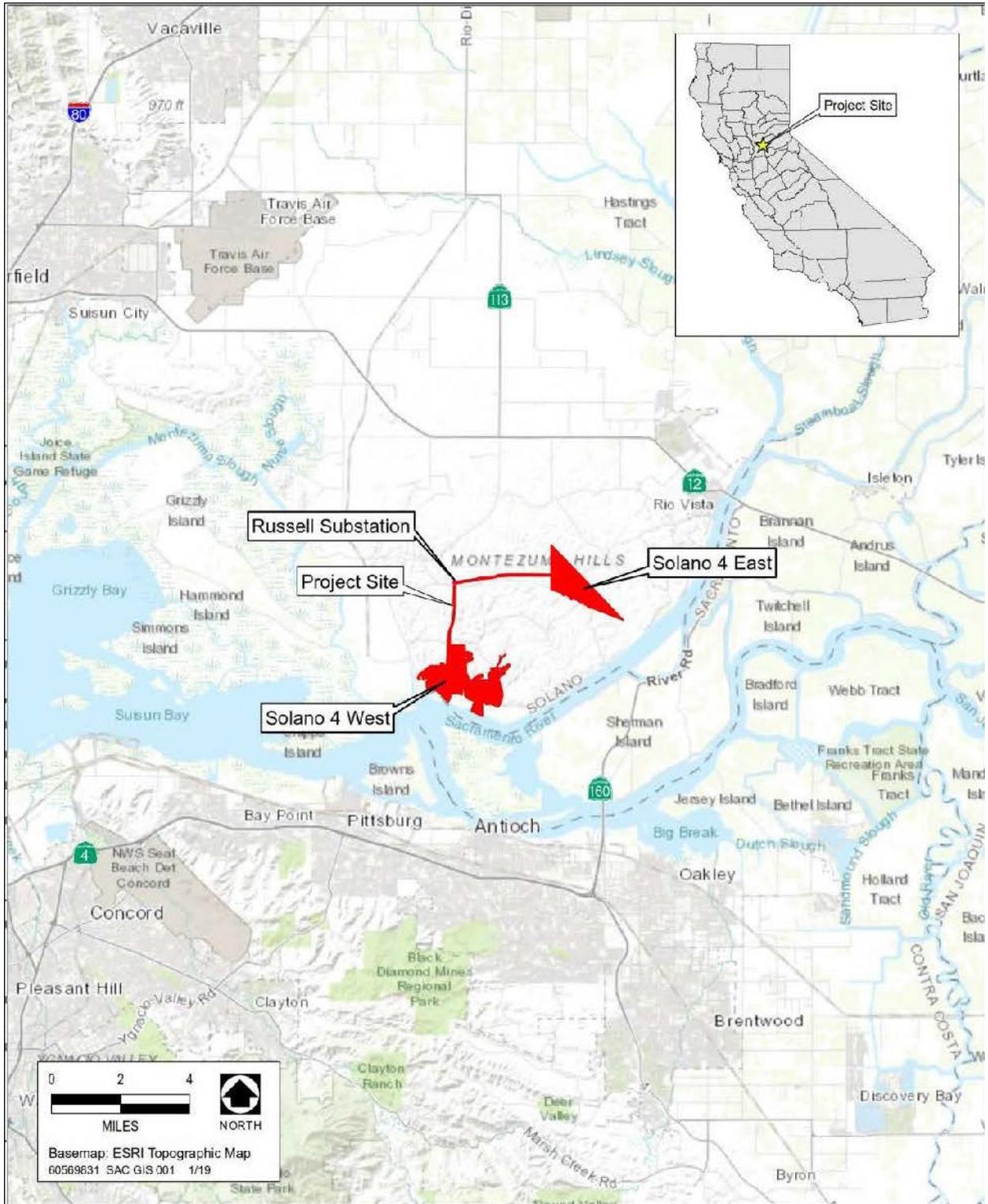


Figure 1. Regional Location Map

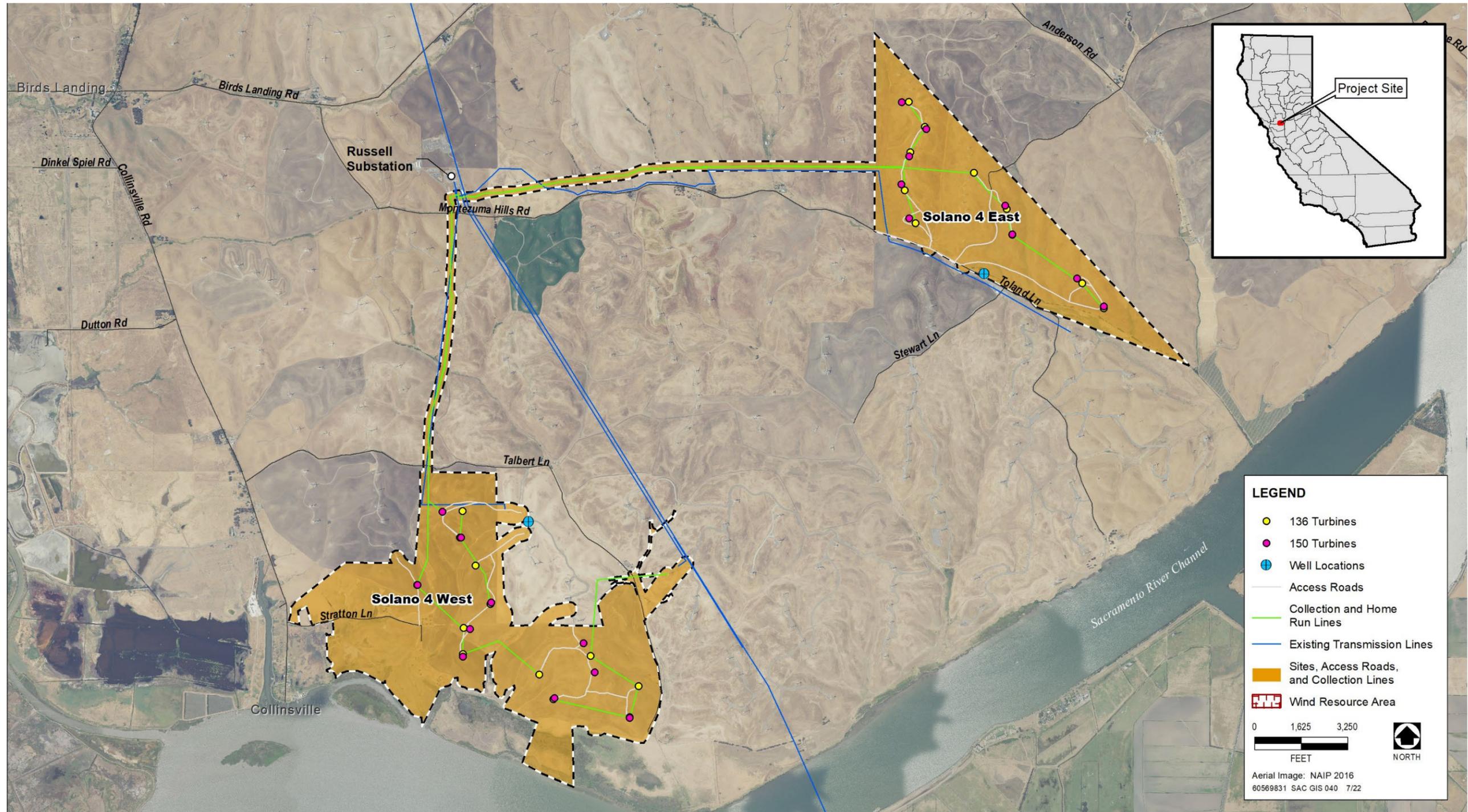


Figure 2. Project Site Map

As a lead agency under the CEQA, SMUD has reviewed the determinations made in this addendum and in the EIR and found that the potential environmental impacts of the SMUD Solano 4 Wind Project have been adequately addressed pursuant to CEQA.

3.0 Previous Environmental Analyses

The environmental process for the Solano Wind Project EIR involved the preparation of the following documents that are relevant to the consideration of the project:

- Draft Solano 4 Wind Project EIR, July 2019, State Clearinghouse No. 2019012016
- Final Solano 4 Wind Project EIR, July 2021, State Clearinghouse No. 2019012016

4.0 CEQA Guidelines Regarding an Addendum to an EIR:

Altered conditions, changes, or additions to the description of a project that occur after certification of an EIR may require additional analysis under CEQA. The legal principles that guide decisions regarding whether additional environmental documentation is required are provided in the State CEQA Guidelines, which establish three mechanisms to address these changes: a subsequent environmental impact report (SEIR), a supplement to an EIR, and an addendum to an EIR.

Section 15162 of the State CEQA Guidelines describes the conditions under which a SEIR would be prepared. In summary, when an EIR has been certified for a project, no Subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

- (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or
- (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Section 15163 of the State CEQA Guidelines states that a lead or responsible agency may choose to prepare a supplement to an EIR rather than a Subsequent EIR if:

- (1) any of the conditions described above for Section 15162 would require the preparation of a SEIR; and
- (2) only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

An addendum is appropriate where a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in significant new or substantially more severe environmental impacts, consistent with CEQA Section 21166 and State CEQA Guidelines Sections 15162, 15163, and 15164.

5.0 Decision to Prepare an Addendum

SMUD staff evaluated the EIR adopted by SMUD Board of Directors on August 20, 2021 and found that the potentially significant effects of the project have been analyzed adequately and have been avoided or mitigated. However, because SMUD's proposed water supply for construction and other activities has been modified since certification of the EIR, SMUD staff evaluated the modifications in reference to CEQA Sections 15162-15164, the standard for assessing when project changes require supplemental CEQA analysis. Neither the proposed revisions nor the circumstances under which they are being undertaken would result in any new significant impacts not discussed in the EIR, or any substantial increase in the severity of impacts identified by the EIR. In addition, no new information of substantial importance has become available since the EIR was prepared regarding new significant impacts or feasibility of mitigation measures or alternatives. Therefore, no supplemental analysis is required for the addition of two new wells for construction water and other activities. This addendum sets forth the analysis in support of that conclusion.

This addendum is intended to evaluate and confirm CEQA compliance for the proposed well installations for the Solano 4 Wind Project, which would be a change relative to what is described and evaluated in the Solano 4 Wind Project EIR. The addendum is intended

to evaluate all environmental topic areas for any changes in circumstances or the project description, as compared to the certified Solano 4 Wind Project EIR and determine whether such changes were or were not adequately covered in the certified environmental documents. This addendum is not a traditional CEQA Environmental Checklist, per Appendix G of the CEQA Guidelines. The purpose of this addendum is to evaluate the checklist categories in terms of any “changed condition” (i.e., changed circumstances, project changes, or new information of substantial importance) that may result in a different environmental impact significance conclusion from the Solano 4 Wind Project EIR, taking into consideration current regulatory requirements and implementing procedures. This addendum has been modified from the Appendix G presentation to focus on the pertinent issue areas and help answer the questions to be addressed pursuant to CEQA Section 21166 and State CEQA Guidelines Section 15162, 15163, and 15164. SMUD staff evaluated the CEQA Appendix G Environmental Checklist and found the following environmental topic areas to be pertinent to this addendum: hydrology and water quality, and utilities and service systems. No other resource areas result in the need for additional detailed consideration.

6.0 Minor Modification to the Solano 4 Wind Project

The EIR described that the project is expected to use up to several million gallons of water during construction for dust control and other activities and that SMUD or its contractor plans to obtain construction water from the City of Rio Vista. SMUD is now proposing to obtain water for construction and other activities from two new wells that will be drilled and constructed at the project site (see Figure 2). The new wells will be drilled in areas that do not contain any sensitive biological, cultural, or Tribal cultural resources.

7.0 Regulatory Setting

7.1 Solano Subbasin Groundwater Sustainability Plan

The Sustainable Groundwater Management Act (SGMA) requires Groundwater Sustainability Agencies (GSAs) to develop, implement, and enforce a Groundwater Sustainability Plan (GSP) for groundwater basins or subbasins that are medium or high priority. The Solano Subbasin is a medium priority groundwater subbasin subject to SGMA. The Solano Subbasin GSP was developed by the local GSAs and submitted to the California Department of Water Resources (DWR) on Jan. 31, 2022. The GSP Plan Area is comprised of areas managed by the Solano Subbasin GSA, City of Vacaville GSA, Solano Irrigation District GSA, Sacramento County GSA, Northern Delta GSA, and GSAs for Reclamation Districts (RD) 3, 349, 554, 556, and 2111 (LSCE Team 2021).

7.2 Groundwater Well Standards

Solano County requires a permit to construct, modify, repair, or destroy a water supply well, monitoring well, or cathodic protection well. Permit applications are submitted to the

Solano County Department of Resource Management (Environmental Health Division). Compliance with DWR's California Well Standards and Chapter 13.10 of the Solano County Code is evaluated as part of the review process.

8.0 Environmental Setting

Proposed well locations are located within the Montezuma Hills, east of Suisun Marsh and southeast of Rio Vista, CA. Well No. 1 (W#1) is located near the intersection of Toland Lane and Montezuma Hills Road and Well No. 2 (W#2) is located off of Talbert Road (see Figure 2). Land use in the vicinity includes open space and agricultural use for grain, hay, and pasture. Surface runoff from Montezuma Hills is conveyed by hillside drainages which discharge to the Sacramento River. Within the vicinity of W#1, drainage flows to the southeast and discharges to the river north of Toland Landing. In the vicinity of W#2, drainage flows to the south and discharges to the river east of Collinsville.

The proposed well locations lie within the Solano Subbasin, the southernmost portion of the Sacramento Valley Groundwater Basin. The Solano Subbasin is a large groundwater basin that occupies 354,600 acres and includes the northern portion of the Delta. Its boundaries are defined by Putah Creek to the north, the Yolo County line and the Sacramento River to the east, the North Mokelumne River to the southeast, the San Joaquin River to the south, the non-water bearing geologic units to the southwest.

The primary aquifer zones within the Solano Subbasin include: (1) the Alluvial Aquifer and Upper Tehama Zone and (2) the Basal Tehama Zone. These water-bearing units are Late Tertiary (Pliocene) to Quaternary (Recent) in age and consist of sedimentary continental deposits. Most of the groundwater pumping in the subbasin occurs from the Alluvial Aquifer and the Upper Tehama Zone. Average annual groundwater extraction in the Solano Subbasin is estimated to have been approximately 181 thousand-acre feet (TAF) per year between 1991 and 2018 with about 167 TAF per year of the total being private groundwater pumping. Private groundwater pumping includes agricultural pumping and some relatively smaller amounts of urban pumping for areas not served by the larger water providers in the subbasin. Private groundwater extractions are unmetered pumping by private wells including those used for small public water systems and domestic, agricultural, and industrial uses (LSCE Team 2021).

According to the recent groundwater modeling presented in the Solano Subbasin GSP, there is an overall, long-term trend of increasing groundwater storage within the groundwater system. The estimated increase in groundwater storage within the Alluvial Aquifer and Upper Tehama zone of the Solano Subbasin was equal to 55,000 to 89,000 acre-feet over the period of 1988 through 2018 (an increase of approximately 1,800 to 3,000 acre-feet per year [AFY]). In addition, the historical and projected water budgets developed for the subbasin indicates surplus groundwater conditions (LSCE Team 2021). The historical water budget was estimated based on the use of historical hydrologic, climate, water supply, and land use data for water years 1991 to 2018. Projected water

budgets were developed for current and anticipated future practices with and without climate change. Future projections include estimates of future hydrology, water supply availability, and water demand with consideration of changes in land use, population trends, water demands, and water supply availability (including State Water Project and Solano Project water). Table 1 summarizes the results of the groundwater modeling.

Table 1. Solano Subbasin Groundwater System Water Budget

Aquifer	Annual Change in Groundwater Storage (AFY)				
	Historical	Projected (Current Land Use)		Projected (Future Land Use)	
		No Climate Adjustment	Climate Change (2030)	No Climate Adjustment	Climate Change (2030)
Alluvial Aquifer/Upper Tehama Zone	-110	1,200	1,300	1,100	1,100
Basal Tehama Zone	3,000	150	130	-79	-100
Entire Groundwater System	2,900	1,400	1,400	990	1,000

Source: LSCE Team 2021

Note: AFY = acre-feet per year

9.0 Significance Criteria

The criteria used for determining the significance of an impact on hydrology and water quality for the proposed construction and use of two groundwater wells for non-potable construction water are based on the updated CEQA Guidelines, listed below.

Based on Appendix G of the CEQA Guidelines, impacts would result in a potentially significant impact related to hydrology and water quality if it would:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. result in a substantial erosion or siltation on- or off-site;

- ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - iv. impede or redirect flood flows.
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The Solano 4 Wind Project EIR (2019) evaluated the potential for short-term degradation of water quality, alteration of the site's existing drainage pattern, long-term degradation of water quality, and the substantial decrease in groundwater supplies and provided project-specific mitigation for potentially significant impacts to hydrology and water quality. Impacts associated with the construction of new groundwater wells with respect to ground disturbance, stormwater runoff from construction areas, and changes to existing drainage patterns are similar in nature to those previously discussed in the Solano 4 Wind Project EIR. As such, the analysis below is focused on potential impacts associated with decreased groundwater supplies that may impede sustainable groundwater management of the basin.

10.0 Analysis

The EIR evaluated two potential resource areas with the potential to be affected by water use: hydrology and water quality, and utilities and service systems.

10.1 Hydrology and Water Quality

Impact 10.1-1: Substantial decrease in groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

This analysis of the potential impacts on hydrology and water quality is based on physical changes to the environment that modify existing baseline conditions. SMUD proposes to construct and operate two new groundwater wells during the 18-month project construction period. There is an existing well that serves on-site offices. The new wells would only be used for construction water. Total groundwater use for construction is estimated at 280 acre-feet. Groundwater would be used for dust control, grading

compaction, roadway compaction, collection trench compaction, foundation backfill, hydroseed mixtures, and for miscellaneous site grading.

As discussed in the environmental setting, the groundwater subbasin is currently within balance and there is an overall, long-term trend of increasing groundwater storage within the groundwater system. Projected conditions with climate change are also expected to be in balance (see Table 1). The addition of two new groundwater wells that have the combined effect of extracting an additional 280 acre-feet of water over an 18-month period (estimated at approximately 187 acre-feet in the first year) would not cause a substantial decrease in groundwater supplies that impedes sustainable groundwater management of the basin. Excess groundwater conditions are expected with or without the project.

As discussed in the Solano 4 Wind Project EIR, groundwater conditions in the City of Rio Vista's well system are stable and Rio Vista is expected to have excess groundwater during the project's construction period. Adequate groundwater supplies to support the project would be available in the groundwater basin. In addition, the development of two new groundwater wells would require only a small area to be developed with impervious surfaces. As such, the project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede the sustainable groundwater management of the basin. This impact would be **less than significant**.

10.2 Utilities and Service Systems

Impact 10.2-1 – Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

As discussed above in Section 10.1 Hydrology and Water Quality, average annual groundwater extraction in the Solano Subbasin is estimated to have been approximately 181 TAF per year between 1991 and 2018 with about 167 TAF per year of the total being private groundwater pumping.¹ The groundwater subbasin is currently within balance and there is an overall, long-term trend of increasing groundwater storage within the groundwater system. Projected conditions with climate change are also expected to be in balance (see Table 1). The addition of two new groundwater wells that have the combined effect of extracting an additional 280 acre-feet of water over an 18-month period (estimated at approximately 187 acre-feet in the first year) would not cause a substantial decrease in groundwater supplies available to meet existing and future demands. As discussed in the Solano 4 Wind Project EIR, groundwater conditions in the City of Rio Vista's well system are stable and Rio Vista is expected to have excess groundwater

¹ Private groundwater pumping includes agricultural pumping and some relatively smaller amounts of urban pumping for areas not served by the larger water providers in the subbasin. Private groundwater extractions are unmetered pumping by private wells including those used for small public water systems and domestic, agricultural, and industrial uses.

during the project's construction period. Adequate groundwater supplies to support the project would be available in the groundwater basin under normal, single dry, and multiple dry water years and this impact would be **less than significant**. Therefore, the modifications related to water use for construction as analyzed in utilities and service systems will not involve any new environmental effects than those addressed in the 2021 EIR.

11.0 Explanation of Addendum for the Project

The modifications related to water use for construction as analyzed in hydrology and water quality, and utilities and service systems, do not constitute a substantial change to the original project description, will not involve any new environmental effects than those addressed in the 2021 EIR, and will not result in any significant environmental effects.

Therefore, none of the provisions of Section 15162 that would necessitate the preparation of a subsequent environmental document apply to the proposed changes to the water supply during construction of the project. Based on the scope of the proposed action, SMUD determined that the preparation of this addendum would properly address potential impacts associated with the project, in accordance with CEQA.

All CEQA documents prepared by SMUD are available for review at the SMUD Headquarters, 6201 S Street, Sacramento, California 95817. Pursuant to CEQA Guidelines (Section 15164(c)), "An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration."

12.0 References

LSCE Team, 2021. Solano Subbasin Groundwater Sustainability Plan, Volume 1 - Main Report. November 30, 2021. <https://www.solanogsp.com/>.

SMUD, 2021, Solano 4 Wind Project Environmental Impact Report....

Responsible Agency Contact Person:

Ammon Rice
Supervisor, Environmental Services
SMUD Environmental Services
6201 S Street, Mailstop B209, Sacramento, CA 95817
916-732-7466
email: ammon.rice@smud.org

Acronyms

AFY	acre-feet per year
CEQA	California Environmental Quality Act
DWR	California Department of Water Resources
EIR	Environmental Impact Report
GSAs	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plan
RD	Reclamation Districts
SEIR	subsequent environmental impact report
SGMA	Sustainable Groundwater Management Act
SMUD	Sacramento Municipal Utility District
SR	State Route
TAF	thousand-acre feet
TW#1	Test Well No. 1
TW#2	Test Well No. 2
WRA	Wind Resource Area