

# **SOITEC SOLAR DEVELOPMENT PROJECT**

## **LARA Model Results Report Environmental Review Project Number 3910-120005**

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*Tierra del Sol Solar Farm*



# Soitec Solar Development Project Lara Model Results Report

## WATER

**Table A-1**  
**TDS Site: Water Rating**

County Water Authority (CWA) Service Status	Groundwater Aquifer Type and Well Presence	Rating
Inside CWA service area with existing water infrastructure connections and a meter	Any groundwater aquifer type	High
Inside CWA service area with infrastructure connections to the site, but no meter has been installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	High*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Moderate*
	The site is located on Fractured Crystalline Rock and has an existing well	Moderate*
	The site is located on Fractured Crystalline Rock, but has no existing well	Low*
Outside CWA or inside CWA but infrastructure connections are not available at the site and no meter is installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	Moderate*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Low*
	The site is located on Fractured Crystalline Rock (with or without a well)	Low*
	The site is located in a Desert Basin (with or without a well)	Low*

## CLIMATE

**Table A-2**  
**TDS Site: Climate Rating**

<p><b>Zone 13</b> covers low elevation desert areas (considered subtropical) and is the most extensive of the County's desert Plantclimate zones. Zone 13 includes the extensive agricultural uses in the Borrego Valley.</p>	<p><b>Moderate</b></p>	<p>Zone 13 is assigned a moderate rating due to the temperature extremes characteristic of this zone. These temperature extremes exclude some of the subtropicals grown in Zones 22 to 24, however numerous subtropicals with high heat requirements thrive in this climate such as dates, grapefruit, and beaumontia and thevetia (ornamentals).</p>
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## Soitec Solar Development Project LARA Model Results Report

### SOIL QUALITY

**Table A-3**  
**TDS Site: Soil Quality Matrix**

Row	Column A <i>Soil Type</i>	Column B <i>Size of Project Site (acres)</i>	Column C <i>Unavailable for Agricultural Use (acres)</i>	Column D <i>Available for Agricultural Use (acres)</i>	Column E <i>Proportion of Project Site</i>	Column F <i>Is Soil Candidate for Prime Farmland or Farmland of Statewide Significance? (Yes = 1, No = 0)</i>	Column G <i>Multiply Column E × Column F</i>
Row 1	Kitchen Creek	396.32	21.85	374.47	0.94	1 (FSS)	0.94
Row 2	La Posta	3.03	0	3.03	0.01	0	0
Row 3	Mottsville	20.18	0.15	20.03	0.05	1 (FSS)	0.05
Row 4							
Row 5							
Row 6							
Row 7							
Row 8							
Row 9							
Row 10							
Row 11							
Row 12							
Row 13							
<b>Row 14</b>	<b>Total:</b>	<b>419.53</b>	<b>Total:</b>	<b>397.53</b>			
<b>Row 15</b>						<b>Soil Quality Matrix Score:</b>	<b>0.99 (High)</b>

FSS = Farmland of Statewide Significance

# Soitec Solar Development Project LARA Model Results Report

## RESULTS

**Table A-4**  
**TDS Site: Interpretation of LARA Model Results**

LARA Model Results			LARA Model Interpretation
<i>Possible Scenarios</i>	<i>Required Factors</i>	<i>Complementary Factors</i>	
Scenario 1	All three factors <sup>1</sup> rated high	At least one factor rated high or moderate	The site is an important agricultural resource.
Scenario 2	Two factors rated high, one factor rated moderate	At least two factors rated high or moderate	
Scenario 3	One factor rated high, two factors rated moderate	At least two factors rated high	
Scenario 4	All factors rated moderate	All factors rated high	
Scenario 5	At least one factor rated low importance	N/A	The site is not an important agricultural resource.
Scenario 6	All other model results		

N/A = not applicable

<sup>1</sup>The three required factors rated by the LARA Model include Water Availability, Soil Quality, and Climate Zone.

# Soitec Solar Development Project LARA Model Results Report

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*Tierra del Sol Gen-Tie*



# Soitec Solar Development Project LARA Model Results Report

## WATER

**Table A-5**  
**TDS Gen-Tie Site: Water Rating**

County Water Authority (CWA) Service Status	Groundwater Aquifer Type and Well Presence	Rating
Inside CWA service area with existing water infrastructure connections and a meter	Any groundwater aquifer type	High
Inside CWA service area with infrastructure connections to the site, but no meter has been installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	High*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Moderate*
	The site is located on Fractured Crystalline Rock and has an existing well	Moderate*
	The site is located on Fractured Crystalline Rock, but has no existing well	Low*
Outside CWA or inside CWA but infrastructure connections are not available at the site and no meter is installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	Moderate*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Low*
	The site is located on Fractured Crystalline Rock (with or without a well)	Low*
	The site is located in a Desert Basin (with or without a well)	Low*

## CLIMATE

**Table A-6**  
**TDS Gen-Tie Site: Climate Rating**

<p><b>Zone 13</b> covers low elevation desert areas (considered subtropical) and is the most extensive of the County's desert Plantclimate zones. Zone 13 includes the extensive agricultural uses in the Borrego Valley.</p>	<p><b>Moderate</b></p>	<p>Zone 13 is assigned a moderate rating due to the temperature extremes characteristic of this zone. These temperature extremes exclude some of the subtropicals grown in Zones 22 to 24, however numerous subtropicals with high heat requirements thrive in this climate such as dates, grapefruit, and beaumontia and thevetia (ornamentals).</p>
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## Soitec Solar Development Project LARA Model Results Report

### SOIL QUALITY

**Table A-7**  
**TDS Gen-Tie Site: Soil Quality Matrix**

Row	Column A	Column B	Column C	Column D	Column E	Column F	Column G
	Soil Type	Size of Project Site (acres)	Unavailable for Agricultural Use (acres)	Available for Agricultural Use (acres)	Proportion of Project Site	Is Soil Candidate for Prime Farmland or Farmland of Statewide Significance? (Yes = 1, No = 0)	Multiply Column E × Column F
Row 1	Kitchen Creek 5–9	5.9	1	4.9	0.02	1 (FSS)	0.02
Row 2	La Posta 5–30	83.8	6.3	77.4	0.26	0	0
Row 3	La Posta 5–30	158.4	6.8	151.6	0.52	0	0
Row 4	Mottsville 2–9	35.2	4.6	30.6	0.10	1 (FSS)	0.10
Row 5	Tollhouse 5–30	29.6	0.4	29.3	0.10	0	0
Row 6							
Row 7							
Row 8							
Row 9							
Row 10							
Row 11							
Row 12							
Row 13							
<b>Row 14</b>	<b>Total:</b>	<b>312.9</b>	<b>Total:</b>	<b>293.8</b>			
<b>Row 15</b>						<b>Soil Quality Matrix Score:</b>	<b>0.12 (Moderate)*</b>

FSS = Farmland of Statewide Significance

\*Soil quality would be rated "low," except for the presence of > 10 contiguous acres of Mottsville; therefore, soil is rated "moderate."

# Soitec Solar Development Project LARA Model Results Report

## RESULTS

**Table A-8**  
**TDS Gen-Tie Site: Interpretation of LARA Model Results**

LARA Model Results			LARA Model Interpretation
<i>Possible Scenarios</i>	<i>Required Factors</i>	<i>Complementary Factors</i>	
Scenario 1	All three factors <sup>1</sup> rated high	At least one factor rated high or moderate	The site is an important agricultural resource.
Scenario 2	Two factors rated high, one factor rated moderate	At least two factors rated high or moderate	
Scenario 3	One factor rated high, two factors rated moderate	At least two factors rated high	
Scenario 4	All factors rated moderate	All factors rated high	
Scenario 5	At least one factor rated low importance	N/A	The site is not an important agricultural resource.
Scenario 6	All other model results		

N/A = not applicable

<sup>1</sup>The three required factors rated by the LARA Model include Water Availability, Soil Quality, and Climate Zone.

# **Soitec Solar Development Project LARA Model Results Report**

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# *Rugged Solar Farm*



# Soitec Solar Development Project LARA Model Results Report

## WATER

**Table A-9**  
**Rugged Site: Water Rating**

County Water Authority (CWA) Service Status	Groundwater Aquifer Type and Well Presence	Rating
Inside CWA service area with existing water infrastructure connections and a meter	Any groundwater aquifer type	High
Inside CWA service area with infrastructure connections to the site, but no meter has been installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	High*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Moderate*
	The site is located on Fractured Crystalline Rock and has an existing well	Moderate*
	The site is located on Fractured Crystalline Rock, but has no existing well	Low*
Outside CWA or inside CWA but infrastructure connections are not available at the site and no meter is installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	Moderate*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Low*
	The site is located on Fractured Crystalline Rock (with or without a well)	Low*
	The site is located in a Desert Basin (with or without a well)	Low*

## CLIMATE

**Table A-10**  
**Rugged Site: Climate Rating**

<p><b>Zone 13</b> covers low elevation desert areas (considered subtropical) and is the most extensive of the County's desert Plantclimate zones. Zone 13 includes the extensive agricultural uses in the Borrego Valley.</p>	<p><b>Moderate</b></p>	<p>Zone 13 is assigned a moderate rating due to the temperature extremes characteristic of this zone. These temperature extremes exclude some of the subtropicals grown in Zones 22 to 24, however numerous subtropicals with high heat requirements thrive in this climate such as dates, grapefruit, and beaumontia and thevetia (ornamentals).</p>
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## Soitec Solar Development Project LARA Model Results Report

### SOIL QUALITY

**Table A-11**  
**Rugged Site: Soil Quality Matrix**

Row	Column A	Column B	Column C	Column D	Column E	Column F	Column G
	Soil Type	Size of Project Site (acres)	Unavailable for Agricultural Use (acres)	Available for Agricultural Use (acres)	Proportion of Project Site	Is Soil Candidate for Prime Farmland or Farmland of Statewide Significance? (Yes = 1, No = 0)	Multiply Column E × Column F
Row 1	Acid igneous rock	5.38	0	5.38	0.01	0	0
Row 2	Calpine coarse sandy loam	11.49	0.1	11.39	0.02	1 (FSS)	0.02
Row 3	Kitchen Creek loamy coarse	15.34	0.2	15.1	0.02	1 (FSS)	0.02
Row 4	La Posta loamy coarse	4.9	1.1	3.8	0.01	0	0
Row 5	La Posta rocky loamy	526.4	63	463.4	0.65	0	0
Row 6	Loamy alluvial land	102.7	1.5	101.1	0.14	1 (PF)	0.14
Row 7	Mottsville loamy coarse	97.5	4.8	92.7	0.13	1 (FSS)	0.13
Row 8	Tollhouse rocky coarse	14.7	0.2	14.5	0.02	0	0
Row 9	Calpine 5–9	2.68	0.08	2.6	0	1 (PF)	0
Row 10							
Row 11							
Row 12							
Row 13							
<b>Row 14</b>	<b>Total:</b>	<b>781.09</b>	<b>Total:</b>	<b>709.97</b>			
<b>Row 15</b>						<b>Soil Quality Matrix Score:</b>	<b>0.31 (Moderate)*</b>

FSS = Farmland of Statewide Significance; PF = Prime Farmland

\*Soil quality would be rated "low," except for the presence of > 10 contiguous acres of Calpine, loamy, and Mottsville; therefore, soil is rated "moderate."

# Soitec Solar Development Project LARA Model Results Report

## RESULTS

**Table A-12**  
**Rugged Site: Interpretation of LARA Model Results**

LARA Model Results			LARA Model Interpretation
<i>Possible Scenarios</i>	<i>Required Factors</i>	<i>Complementary Factors</i>	
Scenario 1	All three factors <sup>1</sup> rated high	At least one factor rated high or moderate	The site is an important agricultural resource.
Scenario 2	Two factors rated high, one factor rated moderate	At least two factors rated high or moderate	
Scenario 3	One factor rated high, two factors rated moderate	At least two factors rated high	
Scenario 4	All factors rated moderate	All factors rated high	
Scenario 5	At least one factor rated low importance	N/A	The site is not an important agricultural resource.
Scenario 6	All other model results		

N/A = not applicable

<sup>1</sup>The three required factors rated by the LARA Model include Water Availability, Soil Quality, and Climate Zone.

# Soitec Solar Development Project LARA Model Results Report

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*LanEast Solar Farm*



# Soitec Solar Development Project LARA Model Results Report

## WATER

**Table A-13  
LanEast Site: Water Rating**

County Water Authority (CWA) Service Status	Groundwater Aquifer Type and Well Presence	Rating
Inside CWA service area with existing water infrastructure connections and a meter	Any groundwater aquifer type	High
Inside CWA service area with infrastructure connections to the site, but no meter has been installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	High*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Moderate*
	The site is located on Fractured Crystalline Rock and has an existing well	Moderate*
	The site is located on Fractured Crystalline Rock, but has no existing well	Low*
Outside CWA or inside CWA but infrastructure connections are not available at the site and no meter is installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	Moderate*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Low*
	The site is located on Fractured Crystalline Rock (with or without a well)	Low*
	The site is located in a Desert Basin (with or without a well)	Low*

## CLIMATE

**Table A-14  
LanEast Site: Climate Rating**

<p><b>Zone 13</b> covers low elevation desert areas (considered subtropical) and is the most extensive of the County's desert Plantclimate zones. Zone 13 includes the extensive agricultural uses in the Borrego Valley.</p>	<p><b>Moderate</b></p>	<p>Zone 13 is assigned a moderate rating due to the temperature extremes characteristic of this zone. These temperature extremes exclude some of the subtropicals grown in Zones 22 to 24, however numerous subtropicals with high heat requirements thrive in this climate such as dates, grapefruit, and beaumontia and thevetia (ornamentals).</p>
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## Soitec Solar Development Project LARA Model Results Report

### SOIL QUALITY

**Table A-15**  
**LanEast Site: Soil Quality Matrix**

Row	Column A	Column B	Column C	Column D	Column E	Column F	Column G
	Soil Type	Size of Project Site (acres)	Unavailable for Agricultural Use (acres)	Available for Agricultural Use (acres)	Proportion of Project Site	Is Soil Candidate for Prime Farmland or Farmland of Statewide Significance? (Yes = 1, No = 0)	Multiply Column E × Column F
Row 1	La Posta 5–30	50	10.1	39.9	0.19	0	0
Row 2	Loamy alluvial land	85.7	7.1	78.7	0.37	1 (PF)	0.37
Row 3	Mottsville loamy 2–9	71.9	3.1	68.9	0.32	1 (FSS)	0.32
Row 4	Mottsville 9–15	2.2	0	2.2	0.01	1 (FSS)	0.01
Row 5	Tollhouse 5–30	23.2	0.7	22.6	0.11	0	0
Row 6							
Row 7							
Row 8							
Row 9							
Row 10							
Row 11							
Row 12							
Row 13							
<b>Row 14</b>	<b>Total:</b>	<b>233</b>	<b>Total:</b>	<b>212.3</b>			
<b>Row 15</b>						<b>Soil Quality Matrix Score:</b>	<b>0.7 (High)</b>

PF = Prime Farmland; FSS = Farmland of Statewide Significance

# Soitec Solar Development Project LARA Model Results Report

## RESULTS

**Table A-16**  
**LanEast Site: Interpretation of LARA Model Results**

LARA Model Results			LARA Model Interpretation
<i>Possible Scenarios</i>	<i>Required Factors</i>	<i>Complementary Factors</i>	
Scenario 1	All three factors <sup>1</sup> rated high	At least one factor rated high or moderate	The site is an important agricultural resource.
Scenario 2	Two factors rated high, one factor rated moderate	At least two factors rated high or moderate	
Scenario 3	One factor rated high, two factors rated moderate	At least two factors rated high	
Scenario 4	All factors rated moderate	All factors rated high	
Scenario 5	At least one factor rated low importance	N/A	The site is not an important agricultural resource.
Scenario 6	All other model results		

N/A = not applicable

<sup>1</sup>The three required factors rated by the LARA Model include Water Availability, Soil Quality, and Climate Zone.

# Soitec Solar Development Project LARA Model Results Report

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*LanWest Solar Farm*



# Soitec Solar Development Project LARA Model Results Report

## WATER

**Table A-17  
LanWest Site: Water Rating**

County Water Authority (CWA) Service Status	Groundwater Aquifer Type and Well Presence	Rating
Inside CWA service area with existing water infrastructure connections and a meter	Any groundwater aquifer type	High
Inside CWA service area with infrastructure connections to the site, but no meter has been installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	High*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Moderate*
	The site is located on Fractured Crystalline Rock and has an existing well	Moderate*
	The site is located on Fractured Crystalline Rock, but has no existing well	Low*
Outside CWA or inside CWA but infrastructure connections are not available at the site and no meter is installed	The site is located in an Alluvial or Sedimentary Aquifer <i>and</i> has an existing well	Moderate*
	The site is located in an Alluvial or Sedimentary Aquifer, but has no existing well	Low*
	The site is located on Fractured Crystalline Rock (with or without a well)	Low*
	The site is located in a Desert Basin (with or without a well)	Low*

## CLIMATE

**Table A-18  
LanWest Site: Climate Rating**

<p><b>Zone 13</b> covers low elevation desert areas (considered subtropical) and is the most extensive of the County's desert Plantclimate zones. Zone 13 includes the extensive agricultural uses in the Borrego Valley.</p>	<p><b>Moderate</b></p>	<p>Zone 13 is assigned a moderate rating due to the temperature extremes characteristic of this zone. These temperature extremes exclude some of the subtropicals grown in Zones 22 to 24, however numerous subtropicals with high heat requirements thrive in this climate such as dates, grapefruit, and beaumontia and thevetia (ornamentals).</p>
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## Soitec Solar Development Project LARA Model Results Report

### SOIL QUALITY

**Table A-19**  
**LanWest: Soil Quality Matrix**

Row	Column A	Column B	Column C	Column D	Column E	Column F	Column G
	Soil Type	Size of Project Site (acres)	Unavailable for Agricultural Use (acres)	Available for Agricultural Use (acres)	Proportion of Project Site	Is Soil Candidate for Prime Farmland or Farmland of Statewide Significance? (Yes = 1, No = 0)	Multiply Column E × Column F
Row 1	La Posta 5–30	27.4	1.0	26.3	0.50	0	0
Row 2	Mottsville 2–9	26.7	0.7	26.1	0.49	1 (FSS)	0.49
Row 3	Tollhouse 5–30	0.5	0	0.5	0.01	0	0
Row 4							
Row 5							
Row 6							
Row 7							
Row 8							
Row 9							
Row 10							
Row 11							
Row 12							
Row 13							
<b>Row 14</b>	<b>Total:</b>	<b>54.6</b>	<b>Total:</b>	<b>52.9</b>			
<b>Row 15</b>						<b>Soil Quality Matrix Score:</b>	<b>0.49 (Moderate)</b>

FSS = Farmland of Statewide Significance

# Soitec Solar Development Project LARA Model Results Report

## RESULTS

**Table A-20**  
**LanWest Site: Interpretation of LARA Model Results**

LARA Model Results			LARA Model Interpretation
<i>Possible Scenarios</i>	<i>Required Factors</i>	<i>Complementary Factors</i>	
Scenario 1	All three factors <sup>1</sup> rated high	At least one factor rated high or moderate	The site is an important agricultural resource.
Scenario 2	Two factors rated high, one factor rated moderate	At least two factors rated high or moderate	
Scenario 3	One factor rated high, two factors rated moderate	At least two factors rated high	
Scenario 4	All factors rated moderate	All factors rated high	
Scenario 5	At least one factor rated low importance	N/A	The site is not an important agricultural resource.
Scenario 6	All other model results		

N/A = not applicable

<sup>1</sup>The three required factors rated by the LARA Model include Water Availability, Soil Quality, and Climate Zone.

# Soitec Solar Development Project LARA Model Results Report

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