Identifying Least-Conflict Solar PV Development In California's San Joaquin Valley



Dustin Pearce Carrizo Colloquium Friday November 4th, 2016



A PATH FORWARD

BerkeleyLaw UNIVERSITY OF CALIFORNIA

Center for Law, Energy & the Environment





RELEVANCE AND SIGNIFICANCE OF THE PROJECT

- Accessibility of the platform and spatial data for all users
 - Public, Stakeholder Groups, Local Government
- > Functionality and ability to overlay data layers in real time, and to move from a regional to a local perspective
- Current data that can be easily updated
- ► Inclusive process and platform that can be expanded for other groups, other geographies, and other questions



THE SINGLE QUESTION THIS PROCESS SOUGHT TO ANSWER: Where are least-conflict lands in the San Joaquin Valley for Solar PV Development?



THE PROCESS

- and transparent platform
 - San Joaquin Valley Gateway
- the region
- Stakeholder driven mapping and criteria development

> A <u>non-binding and non-regulatory planning</u> effort developed through an open

High level resource planning (Planning 101) made to <u>identify opportunities</u> within

Creating a snapshot of resource value using best available data and information







DENTER CATON

Individual stakeholder groups identified least conflict areas through their respective resource lenses. These outputs were then combined, with areas of agreement representing places where there will likely be fewer obstacles to solar development.



STAKEHOLDER GROUPS, PARTICIPANT GROUPS AND ADVISORY GROUPS

- Solar Industry Stakeholders
- Agricultural Rangeland Stakeholders
- Environmental Conservation Stakeholders
- Agricultural Farmland Stakeholders
- Solar Transmission Stakeholders
- ► Tribal Governments
- Military Stakeholders
- County, State, and Federal Agency Staff Advisors



San Joaquin Valley Gateway

powered by DATA BASIN Get Started Explore Create Community **My Workspace** What is the San Joaquin Valley The San Joaquin Gateway has **Gateway?** been created to support a multi-stakeholder effort to identify least conflict lands for What can I do? solar development in the San Joaquin Valley in Central California. How do I start exploring?

Get started quickly with the San Joaquin Valley Gateway

Take a Tour



Featured Items



San Joaquin Valley Least Conflict Solar



Least Conflict Solar Least Conflict Solar Rangeland



San Joaquin Valley Least Conflict Solar



Industry Presentation Aug 28 Presentation Aug 28





contains the least conflict areas as determined by the farmland conservation group and environmental conservation group for the San Joaquin Valley, California. Map also includes known brownfields, existing solar facilities by county, and transmission lines in the region.

Presentations and Organizational Materials from the August and Nov

Search by keyword or location



San Joaquin Valley - Farmland









DATABASIN: SAN JOAQUIN VALLEY GATEWAY

- Transparent and public mapping platform
- Durable and permanent repository for all data related to the planning process
 - Provides a resource for future planning in the region with data that has been vetted by stakeholders and agencies
- Allows for private and public groups, data/content sharing, and user controlled access
- https://sjvp.databasin.org/











DATA 🔊 BASIN

STUDY AREA – SAN JOAQUIN VALLEY

- ► 8 San Joaquin Valley Counties
- ► Kern, Kings, Tulare, Fresno, Madera, Merced, Stanislaus, San Joaquin
- DRECP Planning Area Removed
- ► 17,500,000 Acres







SOLAR INDUSTRY STAKEHOLDERS

- Solar "Opportunity Area" encompassing the majority of the SJV floor
 - ► Elevation cutoff (220m)
 - ► 5km buffer around cutoff
 - Removed protected areas (Gap 1 & 2), conservation easements, and designated critical habitat from opportunity area
 - Clipped to the SJV county boundaries





AGRICULTURAL FARMLAND Stakeholders – Mapping

- Created a model to identify:
 - Long term productive agricultural areas
 - Areas containing microclimates and groundwater recharge areas
 - Statewide and local agricultural priorities
 - Areas of impaired soils or impaired drainage



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ENVIRONMENTAL CONSERVATION Stakeholders – Mapping

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 - Conservation priorities
 - Conservation lands that restrict development(critical habitat, recovery units)





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COMPOSITE – LEAST CONFLICT

- Intersection of the mapping exercises least conflict lands
- Total Least Conflict Acreage: 471,495 Acres
- ► Potential Least Conflict: 117,263 Acres
- ► Least Conflict: 151,901 Acres
- Priority Least Conflict: 202,330 Acres





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WHAT CAN BE LEARNED FROM THE SJV EFFORT?

- Decision making lead by <u>collaboration</u>, sharing, and ease of access
 - Lower the barriers to participation
 - Engaged stakeholders that promote the process
 - Durable outcomes

"We set out to show that multiple and disparate parties could identify least conflict areas for siting of solar projects in the San Joaquin Valley in a matter of months rather than years, for a reasonable cost, and that the maps could help streamline siting of projects. This approach works. It is now incumbent upon us to take advantage of it."

- Ken Alex

Director, Governor's Office of Planning and Research





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QUESTIONS?



DATA BASIN GATEWAY

► The Data Basin SJV Gateway and Report can be found at this url:

https://sjvp.databasin.org/



