

RE-Powering America's Land: Evaluating the Feasibility of Siting Renewable Energy Production on Potentially Contaminated Land

Brisbane, California

Feasibility Studies to RE-Power Communities

The U.S. Environmental Protection Agency's RE-Powering America's Land initiative encourages renewable energy development on current and formerly contaminated land and mine sites when it is aligned with the community's vision for the site. EPA and the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) are collaborating on a project to evaluate the feasibility of siting renewable energy production on potentially contaminated sites. This effort pairs EPA's expertise on contaminated sites with NREL's expertise in renewable energy. The feasibility studies will provide site owners and communities with a realistic and achievable plan for putting renewable energy on a given site.

Site Description

The Brisbane Baylands Site consists of approximately 684 acres in the western part of San Francisco Bay. The Baylands Site is divided into two distinct areas: the west side was used for railroad freight operations from 1914 to 1960, while the east side was used as a municipal landfill for household waste. The majority of the former rail yard area is currently vacant with remnant buildings, while the former landfill site is used for soil and construction material recycling. The site is recognized by the State of California Department of Toxic Substance Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) as a contaminated brownfield site.

Community Goals

The 684-acre area provides one of the largest and most underdeveloped spaces in the west San Francisco Bay Peninsula, and its expansive open space lends itself to renewable energy generation. The City of Brisbane and the land-owner/developer are planning to develop a new transit-oriented, mixed-use community on the site, which includes deploying onsite renewable energy generation. The project is designed to be a model of socially, economically, and ecologically sustainable redevelopment that aims to substantially reduce its carbon footprint. The city and the local electric utility also have developed preliminary land use plans that include approximate acreages and locations for solar photovoltaic and wind energy facilities.

Feasibility Study: Solar

EPA and NREL are collaborating to conduct a study on the potential for solar power generation on the Brisbane Baylands site. The feasibility study will evaluate the technical and economic opportunities and challenges at the site. It will:

- Provide a preliminary analysis of the viability of the site;
- Assess solar resource availability;
- Identify possible system size, design and location; and
- Review the economics of the proposed system.

Brisbane Baylands Site

Brisbane, California

Site Facts:

Site type: Brownfield
Renewable technology: Solar

Contacts:

EPA Region 9

Cara Peck
peck.cara@epa.gov
(415) 972-3382

EPA Headquarters

Lura Matthews
matthews.lura@epa.gov
(202) 566-2539
www.epa.gov/renewableenergyland

National Renewable Energy Lab

Gail Mosey
gail.mosey@nrel.gov
(303) 384-7356
www.nrel.gov

The information presented in this fact sheet comes from the proposal; EPA cannot attest to the accuracy of this information. Therefore, activities described in this fact sheet are subject to change.

For more information, visit www.epa.gov/renewableenergyland or contact cleanenergy@epa.gov

