

## Overview of the Geothermal Grant Opportunity through a Partnership with the South Bay Cities Council of Governments (SBCCOG) and University of California-Davis' California Geothermal Energy Collaborative (CGEC)

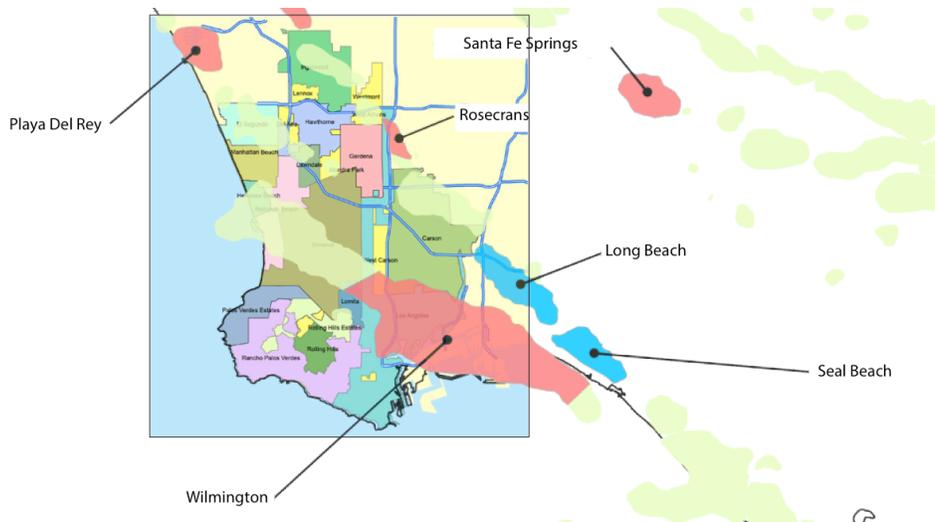
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The CGEC proposes to collaborate with the SBCCOG to develop a Geothermal<sup>1</sup> Resources Development Account (GRDA) proposal for conducting a geothermal resource assessment and constructing a preliminary use plan for the region. This proposal would leverage the work completed by the CGEC.

The CEC recently released this funding opportunity announcement for GRDA. Proposals are due by July 15, 2014. GRDA funds support grants related to, among other things, assessing geothermal resource potential and development of plans for implementing geothermal uses. Total funding requested would be between \$500,000 and \$1,000,000, which would require a match share of \$100,000 to \$200,000. The match share could be readily obtained via in-kind support through a variety of sources, such as SBCCOG volunteers, graduate student work, and city staff interns.

The California Geothermal Energy Collaborative (CGEC)<sup>2</sup> has undertaken an assessment of geothermal opportunities within the Greater Los Angeles Basin. This effort, funded by the California Energy Commission (CEC), is focusing on evaluating the energy content of oil fields in this area. Geothermal energy is virtually a zero emissions, renewable energy technology, with its development and use in the South Bay Cities region directly supporting efforts to satisfy the requirements of AB 32<sup>3</sup>. In addition, the California Loading Order stipulates geothermal energy as one of the renewable energy options of choice for power generation development.

The map below shows the locations of oil fields that were evaluated, superimposed on a map of the South Bay Cities region. Fields in light green have sufficient thermal energy to support direct-use applications (such as district heating systems or industrial applications requiring temperatures up to about 200°F, such as biomass digesters, food processing, aqua culture, drying, etc.). The fields in red and blue contain sufficiently high temperatures to support power generation. Preliminary results of the assessment suggest that the power generation potential is significant, perhaps exceeding hundreds of megawatts (MW).



Additionally, development and use of geothermal energy for direct-use applications has the benefit of displacing natural gas and oil as a fuel for heating applications and space conditioning. Additional benefits of this effort would include student experience and education at high school and college/university levels, and identification of business opportunities that are not currently evident.

<sup>1</sup> Geothermal energy is heat from the Earth, with California producing the vast majority of geothermal energy.

<sup>2</sup> The CGEC is part of the University of California-Davis' Energy Institute and funded by the Public Interest Energy Research (PIER) program through the California Energy Commission.

<sup>3</sup> AB 32 is the California law to reduce greenhouse gas emissions (GHG). Local governments are encouraged to reduce greenhouse gas emissions by 15 percent from current levels by 2020.