

Date of Hearing: April 20, 2022

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

AB 2851 (Eduardo Garcia) – As Amended March 24, 2022

**SUBJECT:** Salton Sea geothermal resource area: Lithium Valley Office of Development

**SUMMARY:** Establishes the Lithium Valley Office of Development within the Natural Resources Agency and requires the office to, in consultation with relevant state and local agencies, coordinate activities related to funding, economic development, construction, manufacturing, technical development, and reclamation of lithium located in the Salton Sea geothermal resource area.

**EXISTING LAW:**

- 1) Establishes in the Natural Resources Agency the State Energy Resources Conservation and Development Commission (also known as the California Energy Commission (CEC)), consisting of five members appointed by the governor, as specified. (Public Resources Code §25200.)
- 2) Requires the CEC to establish the Blue Ribbon Commission on Lithium Extraction in California to review, investigate and analyze specified issues relating to lithium extraction and use in California including market opportunities for lithium, methods of overcoming technical and economic challenges, potential economic and environmental impacts, and opportunities for incentives and investments. (Public Resources Code § 25232)

**FISCAL EFFECT:** Unknown. The bill is keyed fiscal and will be referred to the Assembly Committee on Appropriations for their review.

**BACKGROUND:**

*Lithium Valley and the Blue Ribbon Commission* – Global demand for lithium is expected to grow as much as ten-fold over the next decade, particularly with the increasing use of lithium in batteries for multiple energy and transportation applications. Currently, virtually all of the lithium used in the United States is produced outside the country and most is mined in Argentina, Chile, China, and Australia. However, uniquely high concentrations of dissolved lithium are found in the brine produced by California’s geothermal hotspots. Most of these brine resources are located in, and around, the Salton Sea in the Imperial Valley in an area commonly referred to as “Lithium Valley.” As part of state efforts to incorporate these geothermal brine resources into a new domestic lithium supply chain, the Lithium Valley Commission (LVC) was convened in 2021 as a result of AB 1657 (E. Garcia, Chapter 271, Statutes of 2020). Since its inception, the LVC has worked to identify ways to resolve barriers to development and support opportunities for lithium recovery from geothermal brine within California.

*Geothermal energy resources.* California is home to some of the world’s most abundant geothermal energy resources. The more than 40 geothermal power plants operating in the state tap into naturally-occurring superheated underground reservoirs providing more than 2,700 megawatts of renewable energy capacity, about six percent of the overall energy produced in

the state. The Salton Sea presents a unique opportunity to extract lithium from the brine that is already being produced by geothermal power plants around the Salton Sea. According to some estimates, the Salton Sea is capable of producing 600 kilotons of lithium per year and those resources could be extracted in a more environmentally-friendly manner than in other lithium-producing countries. The opportunity to sell lithium from the brine as a byproduct of geothermal production could help reduce the cost of geothermal power and help make it more cost-competitive with other renewable energy resources, such as wind and solar.

*Activities Surrounding Lithium Valley* – Multiple state and local agencies, as well as private businesses and community stakeholders, are actively engaging in funding, economic development, construction, manufacturing, technical development, and reclamation of lithium in the Salton Sea geothermal resource area. In addition to the LVC, the CEC itself has held workshops, tours, and funded projects to advance lithium recovery efforts. The Governor’s Office of Business and Economic Development (GO-Biz) manages a variety of investments, grants, and tax benefits to financially support projects that advance California’s climate and sustainability goals. The Imperial County Board of Supervisors authorized the County CEO to begin implementing the Lithium Valley Economic Opportunity Investment Plan (LVIP) in February of 2022. And three combined geothermal energy + lithium recovery projects are currently underway, including Berkshire Hathaway Energy Renewables which has a demonstration project currently under construction. There is also federal interest in development of a domestic lithium supply chain in Lithium Valley, including a Department of Energy project to “map” Lithium Valley by quantifying the lithium in geothermal brines.

#### COMMENTS:

- 1) *Author’s Statement.* According to the author, “The world demand for Lithium is expected to grow as much as ten-fold in the next decade, but virtually none is produced in the United States; instead, almost all of the global supply today comes from Argentina, Chile, China and Australia. Lithium Valley is positioned to unleash billions of dollars of new economic infrastructure development to Imperial County, a region that is considered disadvantaged. AB 2851 complements Governor Newsom’s critical efforts in building a coordinated world-class battery manufacturing ecosystem along with Lithium production and processing right here in our backyard.”
- 2) *Authority of the Office.* As described in the bill, the authority of this office is vague. In terms of specificity, some possible contributions an Office of Development could offer include the following:
  - Developing metrics to evaluate the progress and measure the success of current and future incentive programs.
  - Streamlining permitting.
  - Assisting with state-level aspects of implementation of Imperial County’s LVIP.
  - Developing and supporting community development agreements.
  - Managing appropriations that have been proposed in the Governor’s January 2022 budget.

There are many activities to coordinate around the Salton Sea geothermal area so under the current language, the newly established Office of Development may have its hands

full, but it may also lack direction. The author may wish to consider clarifying amendments as to the purpose and purview of the Office.

3) *Related Legislation.*

AB 2929 (E. Garcia) requires the Legislative Analyst's Office (LAO) to annually submit a report to the legislature on the health, environmental, and economic impacts and benefits of producing lithium from geothermal brines located in Imperial County in the area commonly referred to as Lithium Valley. Status: *set for hearing* on April 20<sup>th</sup>, 2022 in the Assembly Committee on Utilities and Energy.

4) *Prior Legislation.*

AB 1657 (E. Garcia) established the LVC to review, investigate and analyze specified issues relating to lithium extraction and use in California and to submit a report to the legislature documenting its findings and recommendations, as specified. Status – Chapter 271, Statutes of 2020.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

None on file.

**Opposition**

None on file.

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