

<b>DOCKETED</b>	
<b>Docket Number:</b>	23-AFC-01
<b>Project Title:</b>	Morton Bay Geothermal Project (MBGP)
<b>TN #:</b>	259966
<b>Document Title:</b>	Michael McKibben Comments - Are the Salton Sea mud pots and volcanic domes a tribal cultural resource that is truly threatened by geothermal development
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Michael McKibben
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	11/8/2024 10:56:26 PM
<b>Docketed Date:</b>	11/8/2024

*Comment Received From: Michael McKibben  
Submitted On: 11/8/2024  
Docket Number: 23-AFC-01*

**Are the Salton Sea mud pots and volcanic domes a tribal cultural resource that is truly threatened by geothermal development**

*Additional submitted attachment is included below.*

**Eric W. Veerkamp**

Project Manager

STEP Division

California Energy Commission

916-661-8458

[Eric.Veerkamp@energy.ca.gov](mailto:Eric.Veerkamp@energy.ca.gov)

[www.energy.ca.gov](http://www.energy.ca.gov)

**Are the Salton Sea mud pots and volcanic domes a tribal cultural resource that is truly threatened by geothermal development? a reality check.**

[Follow Up from Workshop Discussion, 3rd Request](#)

Recently (see link immediately above) the California Energy Commission (CEC) asked Berkshire Hathaway Energy Renewables (BHER) to respond to claims by tribal representatives that “the proposed location of the Morton Bay Geothermal Project (MBGP) is too close to a newly-proposed Southeast Lake Cahuilla Active Volcanic Cultural District and that its proximity to the Old Mud Pots and Mud Volcanoes *could alter their functioning and damage them by drawing more non-Indian visitors and traffic to this contributor.*”

As a long-time observer (40+ years) of the Old Mud Pots, it is my opinion that the claim that



Jeremy Snyder

proposed geothermal development will result in a visitation increase and accelerated degradation of the mud pots is without merit, because public (non-Indian) visitation and disturbance of the mud pots has been occurring already for a very long time.

If you Google "Salton Sea mud pots" you come up with over 10 pages listing links to hundreds of public images, videos and documented visits to the mud pots:

[https://www.google.com/search?q=Salton+Sea+Mud+Pots&sc\\_esv=a84d165212cbafbb&source=hp&ei=6jQtZ7D0H7DOKPIP1dKt-QI&iflsig=AL9hbdgAAAAZy1C-rJCxOR-fmLnFbVE8G6u9SqneXEE&ved=0ahUKEwiwkb7lmMuJAXUwJ0QIHVVpKy8Q4dUDCA8&uact=5&oq=Salton+Sea+Mud+Pots&gs\\_lp=Egdnd3Mtd2l6lhNTYWx0b24gU2VhIE11ZCBQb3RzMgsQLhiABBjHARivATIGEAAyFhgeMggQABgWGB4YDzILEAAyGAQYhgMYigUyCxAAGIAEGIYDGIoFMggQABiiBBiJBTIIEAAyGAQYogQyCBAAGIAEGKIESNRUUABY3zZwAHgAkAEAmAF9oAHhCaoBBDE4LjG4AQPIAQD4AQGYAhOgAqEKwgIREC4YgAQYsQMY0QMYgwEYxwHCAGsQABiABBixAxiDAcICBRAAGIAEwgIIEC4YgAQYsQPCAg4QLhiABBixAxiDARIKBcICBRAuGIAEwgIIEAAyGAQYsQPCAg4QLhiABBixAxjRAXjHAcICCAuGIAEGNEDGMcBwglLEC4YgAQYsQMYgwHCAGsQLhiABBixAxjUAsICCAuGIAEGOUeWglOEC4YgAQYxwEYjgUYrwGYAwCSBwQxOC4xoAfQ8AE&scclient=gws-wiz](https://www.google.com/search?q=Salton+Sea+Mud+Pots&sc_esv=a84d165212cbafbb&source=hp&ei=6jQtZ7D0H7DOKPIP1dKt-QI&iflsig=AL9hbdgAAAAZy1C-rJCxOR-fmLnFbVE8G6u9SqneXEE&ved=0ahUKEwiwkb7lmMuJAXUwJ0QIHVVpKy8Q4dUDCA8&uact=5&oq=Salton+Sea+Mud+Pots&gs_lp=Egdnd3Mtd2l6lhNTYWx0b24gU2VhIE11ZCBQb3RzMgsQLhiABBjHARivATIGEAAyFhgeMggQABgWGB4YDzILEAAyGAQYhgMYigUyCxAAGIAEGIYDGIoFMggQABiiBBiJBTIIEAAyGAQYogQyCBAAGIAEGKIESNRUUABY3zZwAHgAkAEAmAF9oAHhCaoBBDE4LjG4AQPIAQD4AQGYAhOgAqEKwgIREC4YgAQYsQMY0QMYgwEYxwHCAGsQABiABBixAxiDAcICBRAAGIAEwgIIEC4YgAQYsQPCAg4QLhiABBixAxiDARIKBcICBRAuGIAEwgIIEAAyGAQYsQPCAg4QLhiABBixAxjRAXjHAcICCAuGIAEGNEDGMcBwglLEC4YgAQYsQMYgwHCAGsQLhiABBixAxjUAsICCAuGIAEGOUeWglOEC4YgAQYxwEYjgUYrwGYAwCSBwQxOC4xoAfQ8AE&scclient=gws-wiz)

Footprints, trails, tire tracks and trash and other public litter are abundant in and around them, resulting in obvious degradation and visual decline caused by many decades of visitation traffic.



Weebly.com

Moreover, the private non-tribal property is clearly flagged by River Ranch Inc. as being closed and off limits to the public, but there is no County enforcement of this private signage occurring.

Everyone who visits the mud pots seems to pretty much ignore these warnings in routine acts of “civil disobedience”. In order for the site to be truly protected, it would have to be securely fenced off and routinely patrolled.



thehotflashpacker.com

In addition, IID, FWS and other local agencies appear to have been routinely bulldozing and modifying some of the active volcanic domes (especially Obsidian Butte) for generations, in order to generate road bed and other construction materials.

The volcanic cultural district was proposed only very recently, in spite of a long-standing history of cultural significance to the local tribal groups (e.g., Gates and Crawford, 2010; Shackley, 2019). The argument that placing limits on geothermal development will enable these features to remain as pristine, undisturbed cultural resources is unsupported and misconstrues the true local long-standing threats to their existence: decades of unconstrained public access. The only way to preserve them from further degradation is by fencing off the domes and mud pots and proactively enforcing access limitations.

A CEC-filed report that I recently completed (McKibben, 2024) argues that geothermal development has had no significant impact on the activity or locations of the Old Mud Pots, with climate change and seismic events instead being mainly responsible for any changes in their hydrology and activity. The only local mud pot that has had its hydrologic activity markedly affected by recent surface

activities was the famous "moving mud pot" north of Niland, which seems to have been set into motion by the installation of several nearby surface water storage ponds in 2014-2015, according to Google Earth image archives. It is located far away from any geothermal development. In fact the Old Mud Pots, located right next to Cyrq's Hudson Ranch power plant, have seen no significant activity or location impacts since that plant was commissioned in 2012.

So while no one can argue against the fact that that the volcanic domes and related thermal features associated with the geothermal field (including mud pots) have had historical cultural significance to tribal communities, making an accompanying argument that recent or new geothermal development is going to significantly drive up visitation and significantly degrade or alter these features further is not supported by any firm evidence. This tact unfortunately masks the true threat to the continued existence of these cultural resources: uncontrolled public access. CEC efforts would be better focused on solving that issue.

References cited:

Gates, T. and Crawford, K, (2010) Ethnographic Assessment of the Importance of Obsidian Butte to the Native American Community, Imperial County, California, California Energy Commission Report 02-AFC-2C, North State Resources Project # 29411, 35 pp.

<https://efiling.energy.ca.gov/GetDocument.aspx?tn=55719&DocumentContentId=50356>

McKibben, M. A. (2024) Potential for impact of new geothermal developments on southeast Salton Sea mud pots, Report to Berkshire Hathaway Energy Renewables, 31 pp. Appendix C in [Morton Bay Geothermal LLC Comments on the Preliminary Staff Assessment](#)

M. Steven Shackley (2019) Natural and Cultural History of the Obsidian Butte Source, Imperial County, California, California Archaeology, 11:1, 21-43.

<https://doi.org/10.1080/1947461X.2019.1581977>

Sincerely,

Michael A. McKibben, Ph.D.

Research Professor

Dept. of Earth & Planetary Sciences

University of California, Riverside CA 92521

(951) 581-5459 (mobile)

LinkedIn: <https://www.linkedin.com/in/michael-mckibben-1012b69/>