

DOCKETED

Docket Number:	20-LITHIUM-01
Project Title:	Lithium Valley Commission
TN #:	241083
Document Title:	Geothermal Worldwide, Inc Comment following the virtual Lithium Valley Commission Meeting Thursday, Dec 16, 2021
Description:	N/A
Filer:	System
Organization:	Geothermal Worldwide, Inc/Nikola N.Lakic
Submitter Role:	Public
Submission Date:	12/23/2021 10:31:37 PM
Docketed Date:	12/23/2021

*Comment Received From: Nikola N Lakic
Submitted On: 12/23/2021
Docket Number: 20-LITHIUM-01*

**Comment following the virtual Lithium Valley Commission Meeting
conducted on Thursday, December 16, 2021 – Nikola Lakic**

Additional submitted attachment is included below.



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

December 23, 2021

California Energy Commission
Docket: Unit, MS-4
Re: Docket No. 20-LITHIUM-1
715 P Street
Sacramento, CA 95814-5512
LithiumValleyCommission@energy.ca.gov
Cc: docket@energy.ca.gov

Subject: Docket Number: 20-LITHIUM-1

Title: My comment following the virtual Lithium Valley Commission Meeting conducted on Thursday, December 16, 2021 – Nikola Lakic.

Greetings, Chair, Paz, and Commissioners:

Following the virtual meeting on Thursday, December 16, 2021, I am sending my comment to be included in the record.

I would like to point out, again, several noticeable departures (faultiness) from policies of the California State and the original task of the commission.

Firstly, I would like to remind Commissioners about the State's policy supporting a clean environment, renewable energy, 30x30 plan, and most recently outlined by Governor Gavin Newsom - (improvising one part) – "To procure 11,500 megawatts (MW) of new electricity resources before 2026, with at least 1,000 MW coming from "firm resources with zero-onsite emissions" such as geothermal". Also, recently reinstated by Assistant Secretary of CNRA Vade Crowfoot in one of his speeches - (improvising one part) – "Ensuring that California leads the World in combating climate change..... To specifically build our climate resiliency across California..... Combating climate change, transitioning our economy, and protecting our people and nature in the meantime". (For this occasion, this paragraph is referred to – The **first reference**)

Secondly, I would like to remind Commissioners about the commission's main task and duties.



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

“The Lithium Valley Commission was created out of AB 1657, which instructed the California Energy Commission to create the commission with 14 members appointed by a combination of the CEC, other state agencies, Assembly speaker, and Senate Committee, and is charged with the creation of a report that reviews, investigates, and analyzes issues and potential incentives regarding lithium extraction and use in California, which is due to be submitted on or before Oct. 1, 2022” (added underlining). (For this occasion, this paragraph is referred to – The **second reference**).

A few observations:

During previous meetings and the most recent one conducted on December 16, 2021, I noticed a slight polarization among the commissioners. Some commissioners would like the “status quo” - to proceed with the situation as is - and some are open to learning about more possibilities that would be in the interest of everyone.

I am thankful for the opportunity to say a few words during the meeting. I read the transcript of my short comment (I rolled up during the meeting) and was able to understand about 70% of what I stated. Very possible the voice recognition program has difficulties interpreting everyone’s pronunciation. This is one of the reasons for writing this comment - to clarify me, and to write in comfort - without the pressure of being cut-off at any second during my comment.

During previous meetings and the most recent one, commissioner Jonathan Weisgall of Berkshire Hathaway Energy points out how demand for lithium is growing and how we can be leaders in the extraction of lithium from geothermal brine.

Also, Mr. Tom Sephton frequently comments how the public unnecessarily worries about the consequence because the public is not properly informed about the method of how lithium will be extracted – will not be mined on the surface but rather from geothermal brine.

Each meeting has presentations by experts from different laboratories (organizations) providing important and useful information about the extraction of lithium from geothermal brine.

The Lithium Valley Commission is about one year old. I have been present during most of the meetings and submitted substantial material including the link to the recording of my recent short presentation to the California Energy Committee.



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

It is heartbreaking watching the committee making decisions on important subjects without viewing or understanding the complete situation (all options).

During the recent meeting, after my short comment, Chair Silvia Paz commented that the purpose of the commission is to deal with lithium from geothermal brine and that I should contact different committees to review my proposal.

My comment:

Although the statements of commissioner Jonathan Weisgall, and Mr. Tom Sephton mentioned above are truthful, they are short of explaining the complete situation – which is the consequence of the destruction of the Lake if the “current course of action” continues.

By now the commissioners should know about my proposal and its importance to the environment, community, and at large to the State. I think that the schedule (priority) of presentations is not synchronized. My proposal is a uniquely comprehensive design that is easy to understand although for understanding all details engineering background is needed.

Therefore, besides experts' presentations, which cover conventional teaching of known technologies, it would be useful for the Commissioners if the experts could also comment on my system for extraction lithium from salty water from the Salton Sea. But that can be done only if they see and understand my systems and preferably ask me a few clarifying questions.

For example, during the meeting on July 29, 2021, the host of the session Michael Whitaker asked Mr. Alex Grant, Principal at Jade Cove Partners, a question: Paraphrasing - “Can Lithium be produced from the Ocean?” His answer was “yes” but I would not bet on it - because of the low concentration of lithium in seawater. Following that meeting, I submitted my comment clarifying his comment. In my system for the generation of electricity by using geothermal energy, the highly concentrated brine that can be used for the extraction of lithium is a free byproduct. I am bringing this at this point because it explains the problems of someone commenting on something in general without seeing a specific case. It ignores (diminishes) the creativity of someone's work.

In response to Chair Silvia Paz's comment that I should contact different committees to review my proposal. With all due respect, it seems that Chair Silvia Paz did not review or did not understand my proposal. Such comment suits the impression of “kicking the can down the road” or running away from the challenge and shifting responsibility to somebody else. I would not be surprised if the remaining commissioners did not review or did not understand my proposal



too. That is the reason why I am trying to reach them (you) and to explain to you the importance of my proposal for the restoration of the Salton Sea which includes, among other important features, extracting lithium from seawater of the Salton Sea. In my proposal, lithium is a byproduct during the desalinization of the Lake - about 1,000 tons per year. That is in addition to harnessing lithium from geothermal brine.

I am aware of the added change (limitation) to the wording of the policy “extraction of lithium from geothermal brine”. It is important to mention that such a change of wording excludes my proposal that includes the extraction of lithium from the seawater of the Salton Sea. (Note: My proposal for the restoration of the Salton Sea is the only proposal out of 11 presented in 2018, that promotes extraction of lithium from the water of the Salton Sea.) I would not be surprised if that change was initiated by those who oppose my proposal. It is no secret that I am in dispute with the Salton Sea Authority (SSA) because they systematically ignored (suppressed) my proposal from public, state, and federal officials since 2013 because my proposal interfere with a proposal that they initiated, promoted, and supported. I respectfully urge commissioners to consider reinstating original (broad) wording so that my proposal which could extract about 1,000 tons of lithium per year is not excluded.

There is also faultiness (misunderstanding) among leadership towards proper planning and synchronizing project(s). Commissioners must understand that the “current course of action” deals with two separate projects (a) “Harnessing Lithium from Geothermal Brine” and (b) the “Restoration of the Salton Sea, are not cooperative (supportive) projects. The project “Harnessing Lithium from Geothermal Brine” that the “Lithium Valley Commission” supposedly needs to review, investigate, and analyzes (see **second reference** above) is based on a “Smaller Sustainable Lake” or so-called the “Perimeter/Brine Lake” which leads to “destruction” of the Lake. If the “current course of action” is not changed the Lake would be smaller, saltier, smellier, and more polluted every year and would inevitably end up as a “sustainable cesspool” with a serious consequence to the environment, the health of nearby communities, and subsequently economy of the State.

The project “Restoration of the Salton Sea” is based on importing seawater from the Ocean. Those two projects (a) and (b), as they are promoted today, cannot coexist logically. The objective of the concept of a “Smaller Lake” was/is based on a lack of water as a consequence of the Quantification Settlement Agreement (QSA). By importing seawater, we would have plenty of water so the “Smaller Lake” that requires constant dealing with exposed lakebed (playa) to suppress



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

the formation of toxic dust storms would be pointless. There is no logic in Importing seawater and proceeding with Perimeter/Brine Lake project.

Also, the faultiness of the approach of looking at two projects (a) and (b) separately - as independent projects - is because of lack of adequate leadership and/or because my proposal was suppressed (was not on agenda – was not studied properly) or for some “other” reason so that higher officials (policymakers on State level) had not been aware of the existence of my proposal. I was/am disappointed that such manipulative conduct existed, but I hope that it will stop so that we can move forward in the interest of everyone (see the **first reference** above).

My proposal for the restoration of the Salton Sea successfully incorporates those two projects – (a) the “Harnessing Lithium from Geothermal Brine” and (b) the “Restoration of the Salton Sea”.

The essence of my proposal is the architectural design (the solution) that incorporates several breakthrough technologies and local conditions of the Salton Sea area providing a clean environment, refilling the Lake to its original level of the 1950s and 1960s (which was about -220’) providing condition for tourism, providing a substantial wildlife sanctuary, providing recreational parks and fisheries, harnessing prevalent geothermal energy for the generation of electricity, potable water, hydrogen, lithium, and other elements if needed.

I am using the wording “... that incorporates several breakthrough technologies and local conditions of the Salton Sea area” because my proposal is in harmony with the Quantification Settlement Agreement (QSA) that enforces the reduced inflow of water from the Colorado River for about 1/3. I was able to achieve harmony (balance) by dividing the Lake into three sections (North Lake, South Lake, and Large Central Lake) at specific locations to prevent contamination of the Central Lake with runoff waters from nearby farmland which are contaminated with pesticides, fertilizers, and partially treated sewer from Mexicali, and to minimize the use of water from the Colorado River.

Also, I have enclosed a certain area with a system of dikes to secure dry land intended for (geothermal development) for harnessing geothermal energy with conventional geothermal systems. Conventional geothermal systems require a geothermal reservoir, power plant, production well, and injection well.

By enclosing preferred areas with dikes, it provides dry areas for harnessing geothermal energy with conventional geothermal systems and at the same time



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

provides the condition for refilling the central Lake to the original level of the 1950s and 1960s with seawater to reestablish original Marine Bays and beaches. That is also an essential element of my design because it prevents the destruction (drying) of the Lake. The dike has a several-lane road on top so that desired area can be reached. Although in my presentation, I have illustrated only one such dry area enclosed with dikes several such areas can be added if needed.

I am reluctant to use the wording “destruction of the Lake” but the current course of action that promotes and has already started implementing the concept of the “Smaller Sustainable Lake” or so-called “Perimeter/Brine Lake” inevitably leads to “Smaller Sustainable Cesspool” which is the “destruction” of the Lake.

Therefore, I am doing my best - so far unsuccessfully - trying to inform the leadership(s) local and state (SSA, SSMP, CNRA, and EPA) about the existence of my proposal and its importance as a whole, urging them to stop supporting the “current course of action” and not to lose more time and money on nonsensical projects (roughing exposed playa to prevent the formation of toxic dust storms, etc.) that are based on acceptance of shrinkage of the Lake as the only and inevitable course.

I respectfully urge commissioners to engage (see the **first** and **second reference** above) and to pay attention to my proposal, to ask questions to me and to commissioners who oppose the restoration of the Salton Sea.

Based on my experience with the SSA, and recent comments during the proceeding on several meetings, I am aware that commissioners Mr. Ryan E. Kelley and understand that Mr. James C. Hanks opposes my proposal. Understandably, that they want to achieve higher revenue for themselves and the organization that they represent but they are missing a bigger picture. The absurdity of this case is that my proposal does not interfere with their interest – just the opposite it would increase their revenue.

Everyone with common sense knows that with the implementation of the “Perimeter/Brine Lake” the Salton Sea will be smaller, saltier, smellier, and more polluted and will end up as a “Smaller, Sustainable Cesspool”.

I would like to emphasize that avoiding discussion about the consequence of the “current course of action” namely “Perimeter/Brine Lake” is highly irresponsible by anyone involved in this case.



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

When I say - “By implementing my proposal, we can have a functional Salton Sea despite restrictions from the QSA” - you should review such possibility and ask me to explain how is possible?

When I say - “By implementing my proposal, we can have hundreds of million dollars revenue per year “out of blue – literally” - you should review such possibility and ask me to explain how is possible?

When I say – “By implementing my proposal, we can desalinate the Lake, provide a condition for tourism, have exclusive real estate, have huge wildlife sanctuary, generate electricity much more than currently estimated, generate potable water and about 1000 tons of lithium as byproducts” - you should review such possibility and ask me to explain how is possible?

The simple question for those who oppose the restoration of the Salton Sea (my proposal) should be:

“Please explain the reasoning behind your decision to ignore the proposal that would restore the Salton Sea, provide a clean environment, generate revenue in billions of dollars, and does not interfere with the extraction of lithium from geothermal brine?”

A few additional useful information:

I am confident that my proposal will be selected by the Panel of independent reviewers because my concept is the only concept that provides a clean environment and revenue between \$600,000,000 and \$1,000,000,000 per year and also extracts about 1,000 tons of lithium per year in addition to harnessing lithium from geothermal brine. But the results will be announced in mid of next year.

In the meantime, it would be wise if Commissioners are familiar with my concept.

I am not asking for special treatment – I just want them to know about it.

It is mind-boggling that the resistance towards my proposal exists, and I am not sure where it originated. I guess that it is because of conventional thinking that there is no answer to the imminent collapse of the Salton Sea.

There is a video with the title Salton Sea Import/Export, subtitle “Sea to Sea Plans” by Michael Cohen, Senior Associate at Pacific Institute, Boulder Colorado. I am thankful that such a video exists. It helps me to explain the challenges that I faced when I started to work on this project and helps others to understand the



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

importance and the value of my proposal. In his video, Mr. Cohen conveys conventional thinking that has been around last 50 years explaining why importing seawater and saving the Salton Sea is not a feasible idea. Please watch his video – it is only 9 minutes and 27 seconds. Here is the link to his video. <https://www.youtube.com/watch?v=BnRoM22mEZ4>.

To summarize his video (I added question marks (?) after questionable statements). Here is the timeframe:

1:30 -1:40 – shows a diagram of elevation decrease and salinity increase.

1:40 - 2:20 – shows what to expect if nothing is done.

3:31 – 4:29 – Pacific Route Estimate. Would need 16 pipelines (?) Cost at least \$40 billion + annual energy and maintenance cost about \$1 billion per year (?).

4:30 - 5:50 - Gulf of California Rout Estimate. Would need 16 pipelines (?). More than 270 feet elevation to overcome (?). The energy needed: 80 GWh/year per 300,000 AF (acres feet) pipeline (?) Cost \$49 billion but less the \$1 billion per year for maintenance cost (?).

5:50 – 6:48 - Talks about difficulties of adding imported salt to already salty Lake (?).

6:48 - 7:43 - Talks about very expensive Reverse Osmoses plant(s) proposed for desalinization of the Lake costing \$6 billion? It would require 270 MW to operate (almost 50 % of geothermal capacity in Imperial valley) (?).

7:45 – 8:27 - Talks about the timeline from start to finish 30 years(?). (He is right about 10 years for design - It took me about that time).

8:27 - 9:00 - Talk about needed 10 years to stabilize Lake water surface (?). (concluding “we do not have that kind of time”) (?).

9: 00 – 9:26 - Talk about “Sea -to- Sea” problems. High infrastructure and maintenance cost (?). High energy requirements and cost (?). Gulf route would require a new treaty w/ Mexico. Would not stabilize the Salton Sea before 2045 (?). No funding available (?). He is concluding that importing seawater distracts attention from the feasible practical plan as can be built quickly and can show results in near future – we need to support a “plan that can work”. Although importing seawater plans are intuitive and appealing, they are not the answer to



the imminent collapse of the Salton Sea. Mr. Michael Cohen failed to explain in his video what is the “plan that can work”.

Since there is a very slim chance that I would have the opportunity to make a presentation of 2-3 hours to commissioners and since I believe that commissioners did not see video of my short presentation to the CEC (about one hour), I am including the link again. Here’s the link to the recording again: https://energy.zoom.us/rec/share/d4tAFmZFYEqg4_VQzKgnbEbbjsTG-o8xeJX9KRkIp4uLlvOr7dCOz-9zrcMW-tW.JZXVajNyKAb3E9Of

Here is a few information about the Cost Estimate and Revenue of my proposal:

SUMMARY

Importing Seawater and Harnessing Hydropower

Phase II - Dividing the Lake into three sections by building two main dikes (4-lane roads) strategically positioned - One in the northern and one in the southern part of the Salton Sea. The rough cost estimate is around **\$3.0 Billion**. (22 miles + 13 miles) x \$82 Million = \$2.87 Billion). Cost estimate for 6 piers is about \$130 million (6 piers x \$20 Million = \$120 Millions).

Route #1

Pipeline cost estimate: \$1,425,600,000.

Added about 20% for a New Product Development; Permits, Preliminary and Final design; Several Pumping stations; Several freeway Underpasses; Right-Of-Way permits; DELTA hydroelectric power plant.

$1,425,600,000 + (20\% = \$285,120,000) = \$1,700,000,000.$

⇒ Pipeline cost estimate **\$1.7 Billion**.

The volume of water imported: **1,114,261** acre-feet per year.

Kinetic Energy generated: **27.3 MWh**.

Revenue generated: \$14,348,880 per year.

Maintenance Expenses: **-\$2,000,000**.

⇒ Revenue generated: **\$12,348,880**.

Route #2

Pipeline cost estimate:

$\$2,138,400,000 + (20\% = \$427,680,000) = \$2,566,080,000.$

Purchase of Right-of-Way: \$500,000,000.

⇒ Pipeline Cost Estimate: **\$3,066,5080,000**.



The volume of water imported: **2,267,464** acre-feet per year.

Maintenance Expenses: **-\$2,000,000.**

The Hydro energy generated: 710.5 MWh – 994.7 MWh = -275.7 MWh.

(Efficiency factor is used 40% => 710.5 MWh x 1.4 = 994.7 MWh).

⇒ The Hydro energy generated: Deficit **-275.7 MWh.**

Revenue generated: deficit **-\$146,907,920.**

The Cost Estimate for Pipeline System for the Irrigation of the Farmland Southern Area of the Salton Sea:

Length of pipeline system: **870 Miles.**

The cost estimate to build it: **\$2.7 Billion.**

Energy Generated: **2.73 MWh.**

Revenue generated: **\$1,434,888 per year.**

Maintenance: **\$1,000,000.**

Revenue generated: **\$434,888 per year.**

Cost Estimate for Pipeline System for the Irrigation of the Farmland Northern Area of the Salton Sea:

The farmland in the Northern area of the Salton Sea is approximately 50% of the farmland Southern Area of the Salton Sea. Here values are divided by 2. This area does not have enough drop to generate hydropower.

Length of pipeline system: **435 Miles.**

The cost estimate to build the pipeline system: **\$1.3 Billion.**

Maintenance: **\$500,000.**

Harnessing Solar Energy

The Cost of TOC system for Route #1 (160 miles): ~ **\$200,000,000.**

Maintenance of the TOS on Route #1: **\$2.5000,000.**

The Cost of TOC system for Route #2 (200 miles): ~ **\$250,000,000.**

Maintenance of the TOS on Route #2: **\$3.5000,000.**

The Cost of the TOC system South of the Salton Sea (870 miles): ~ **\$1,200,000,000.**

Maintenance of the TOS system South of the Salton Sea (870 miles): **\$12.400,000.**

The Cost of TOC system Northern of Salton Sea (430 miles): ~ **\$580,000,000.**

Maintenance of the TOS system Northern of Salton Sea (430 miles): **\$6,200,000.**

⇒ **\$2,254,600,000**

Energy Generated with TOS on Route #1: **423,52 MWh.**

Energy Generated with TOS on Route #2: 529 MWh – (275.7 MWh) = **253.7 MWh.**

Energy Generated with TOS on Southern of Salton Sea (870 miles): **2,302.29 MWh.**

Energy Generated with TOS on Northern of Salton Sea (430 miles): **1,151.14 MWh.**



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

⇒ **4,405.95 MWh – 275.7 MWh = 4,130.25 MWh.**

Revenue Generated TOC system for Route #1 (160 miles): **\$45,740,160** per year.

Revenue Generated TOC system for Route #2 (200 miles): **\$27,399,600 per year.**

(\$57,175,200 per year - (\$29,775,600 transferred for pumping stations)

Revenue from the TOS on area Southern of Salton Sea (870 miles): **\$248,647,320 per year.**

Revenue from the TOS on area Northern of Salton Sea (430 miles): **\$124,323,660 per year.**

⇒ **\$475,886,340 – (\$29,775,600) = \$446,110,740.**

NOTE: Here are not calculated solar panels and dishes that can be set up on service roads near the pipelines and electric power lines, but that would double or triple the revenue of the area.

Harnessing Geothermal Energy

The Cost of One Geothermal Power Plant: **\$418,000,000.**

The Cost of 3 Power Plant: **\$1,254,000,000.**

(Estimate of Production Capacity of one (1) Geothermal Power Plant is about: **100 MW**).

Estimate of Production Capacity of three (3) Geothermal Power Plant is about: **300 MW**.

(Preliminary Estimate for Revenue of one (1) Geothermal Power Plant: **\$50,457,600** per year).

Preliminary Estimate for Revenue of three (3) Geothermal Power Plants: **\$151,372,800** per year.

Harnessing Lithium

Salton Sea Facts:

Surface: 350 square miles (910 km²).

Inflow: < 1,200,000 acre-feet (1.5km³).

Depth: 43 feet (13 m).

Volume: 6,000,000 acre-feet (74 km³).

Salinity: 56 grams per liter.

[Pacific Ocean is: 35 gm /L].

Salt concentration has been increasing per year by 3%.

About 4,000,000 Tons of salt are deposited in the Valley (Salton Sea) each year with irrigation water.



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

1,000,000 acre-feet = 1,233,481,837.54 Kiloliters (Kl).

1,233,481,837.54 Kiloliters (Kl) = 1,213,746,128 Tons.

1,213,746,128 Tons ÷ 5,000,000 = 242.75 Tons of Lithium.

Import of 1,000,000 acre-feet of seawater from Route #1 (Gulf of California - San Felipe) brings about **242.75 Tons of Lithium per year.**

Import of 2,000,000 acre-feet of seawater from Route # 2 (Pacific Ocean - Long Beach brings about **485 Tons of Lithium per year.**

Import of 242.75 Tons of Lithium from Route #1 (+) 485 Tons of Lithium from Route #2 - it sums up to **727.75 Tons** of Lithium per year.

Since the water of the Salton Sea is about 50% saltier than the water from the Ocean it is realistic to expect that about **1000 Tons of Lithium per year** can be extracted from the Salton Sea.

Estimate for Extraction of Lithium from the water of the Salton Sea: **\$13,000,000** per year as of 2021.

Recreational Parks

By using water from the “All American Canal” and “Coachella Canal” and sprinkler system for irrigation of nearby farmland it would provide conditions for establishing several recreational parks with small circulating Lakes and fish farms with substantial financial benefits. The rough Cost Estimate for 6 Recreational Parks and 6 fish farms is about **\$12 million.** (6 parks x \$1 million = \$6 million) + (6 fish farms x \$1 million = \$6 million). The Recreational Parks should be funded by the State. The fish farms should be for the private sector (investors) to participate.

Surfing Waves Facility

This proposal provides conditions for tourism - exclusive real-estate, beaches, resorts, hotels, etc. The surfing waves facility will be a tourist attraction the whole year-round. The rough Cost Estimate for the Surfing Waves Facility is about **\$15 million.** (See FIG. 8, 10-11). It should be part of the hotel system nearby. Importing seawater provides the condition for tourism and the private sector (investors) to participate.



Summary of the Summary

Cost about \$17.46 B + (\$3.0 B for phase II) = **\$20.5 B.**

Revenue about **\$610,483,540 per year**

The revenue of about \$610,483,540 per year in my rough cost estimate is a very conservative number – the real revenue will be around **\$1 billion per year.** That does not include revenue from other activities such as tourism that will bloom.

Also, I would like to emphasize that I am proposing two corridors for importing seawater – one from San Felipe on the South and one from Long Beach on the North. It is important to have two corridors for several reasons.

- A) We need to get rid of the New River and Alamo River. Instead of just giving it away, would be better to negotiate a corridor for importing seawater through the “International Boundary and Water Commission” and their counterparts team in Mexico. That way we could save 50,000,000 dollars per year. That is how much Mexico charges for importing 1,000,000 acre-feet seawater per year.
- B) We need a second corridor from Long Beach to reduce the risk of having only one corridor from the Sea of Cortez. Having only one corridor increases the potential risk of blackmailing. For example, if Coup D’etat in Mexico happens or a Cartel takes over and asks \$100,000,000 instead of \$50,000,000, for importing seawater, etc. With one corridor we would be vulnerable especially if we invest into infrastructure billions of dollars.
- C) The Salton Sea is 35 miles long – it is much better to have inflows of seawater from both ends of the Central section of the Lake. If there is only one inflow at one side of the Central Lake, the quality of water would gradually decrease as the distance from the inflow entrance increases and on the opposite side would be stagnated.
- D) By having two corridors the Salton Sea would have more water than just for balancing evaporation which is about 1,000,000 acre-feet per year. We would have plenty of water for different usage such as refiling depleting known geothermal reservoirs, increasing the production of potable water that could be used for the production of hydrogen by using prevalent geothermal sources. The extraction of Lithium from imported seawater (about 1,000 tons per year) is in addition to the extraction of Lithium from geothermal brine.



Geothermal Worldwide, Inc.,

78-365 Hwy 111, #402, La Quinta, CA 92201,

Ph: 760-347-1609

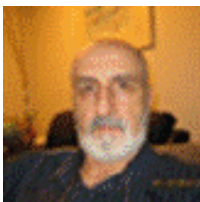
Also, it is important to mention again that with my proposal we would be able to equalize the salinity of the Salton Sea with the salinity of the Ocean in 5-6 years of use of the system by extracting higher salinity water (brine) from the bottom of the Salton Sea and importing less salty water from the Ocean.

For those that argue that the second corridor would increase the cost of the project by several billions of dollars, I would reply that by implementing my proposal the revenue would be in billions of dollars (including tourism) and the project would be paid off in relatively short period. Therefore, an additional investment of several billion dollars for a better final product would be a good investment.

I would like to clarify again that I am not a contractor bidding for a job. I am an architect, the inventor of several breakthrough technologies in the energy industry (Hydro, Solar, and Geothermal), that I have modified to incorporate the local conditions of the Salton Sea in design (the solution) for the restoration of the Salton Sea. My mission is to sell the license of my patented work (methodologies) to capable contractors.

Sincerely,

Nikola N. Lakic
Graduate Eng. Architect / Inventor
CEO / President
Geothermal Worldwide, Inc.
78-365 Hwy 111, #402
La Quinta, CA 92253
01-760-347-1609
01-760-333-3851 cell
www.GeothermalWorldwide.com
nlakic@GeothermalWorldwide.com



Geothermal Worldwide, Inc., Actively and Aggressively Enforces its Intellectual Property Rights to the Fullest Extent of the Law .