### LINK TO PRESENTATION: [SYN 100 Final Presentation Group Four Section J](https://docs.google.com/presentation/d/1u1Z66XmAiDtg-ClNq9YvQsEglNEz2_5JdIsrLNv_PRg/edit#slide=id.g2187c7bd38861815_9)

### Shining:

1) Please pick up from the presentation/pitch you shared a few weeks back

Lithium Mine projects basic information and its negative impact to local communities, species and environments. Week 5 we did Brainstorming about ideas and concepts we have learned. Week 6 We were Making research about the more specific topic that I want to focus on. I searched for several 3D models and some information. Week 7 I started mapping out the Thacker pass project area and some indigenous lands and put place marks for some key information as well as plugging in some 3D models from Skecthfab. Week 8 I started to add some pictures of indigenous people as well as add another model of local people's water basket with the respect of local water contamination which will be bringed by the Thacker pass mine project . Week 9 I refined some of the work, by doing research about the 1865 massacre and articles reflecting indigenous people struggling for their rights to protect their sacred place and home. I also did research about local people's income level, profession distribution, education level distribution and age distribution.

2) What progress have you made individually and collectively)

I did research on Thacker pass lithium mine concerning pollution of underground water, exploitation of local communities and there is a new version of genocide happening to indigenous people. I worked on our presentation slides and demonstrated my research concerning issues from the Thacker pass Project.

3) Please include elements of the updated proposal - especially showing updated information regarding the issue/problem and solution/s

The solution would be to stop the Thacker pass Lithium mine project. Although the mine project would increase local GDP, the mining process would use chemicals including sulfide and pollute underground water, which is just 10 ft below the surface, and contaminate the water system by a large area, as well as polluting crops that use irrigation. The mine project will also change the indigenous sacred place severely as well as cause other issues like dust to the air.

4) If you/others were going to continue this project - what might the next steps be to take this forward?

Maybe making a website and presenting our research results in a more obvious and easier way so that everyone can have a better understanding and better access to this information.

### Benjamin:

1) Please pick up from the presentation/pitch you shared a few weeks back

The pitch shared a few weeks back mainly focused on the ramifications/negative impacts of lithium mining, without accounting for A. the fact that there is only one active lithium extraction site in the United States, B. the fact that mining is only one of several methods to extract lithium, C. the view that analyzing potential future impacts could be similarly valuable to analyzing present impacts, and D. the view that examining solutions beyond just problems is helpful in many ways. Therefore, we decided to A. (also relevant to C.) focus mostly on sites of potential lithium extraction in the near future (in addition to the currently operating site), B. focus on lithium brine extraction, and D. examine extraction technologies which are much friendlier to the environment.

2) What progress have you made individually and collectively

Individually, I have made progress in terms of deciding a location to map out (Silver Peak), researching the most important issues related to that operation (depleting water levels), and map out variables related to that issue as well as population/agricultural data/information. I have played a large role in shaping the group’s direction in these matters, providing most of the suggestions for what could be mapped, where we should map, how we should split up mamping work, and how we should present our work.

3) Please include elements of the updated proposal - especially showing updated information regarding the issue/problem and solution/s

In terms of updates to the proposal, we have principally made updates to our driving question and our goals. For the driving question, since we found out that there is only one active lithium extraction operation in the Western United States, we are now examining the projected impacts more and mitigating measures that can be taken to reduce or eliminate these impacts. For the goals, we have recentered our goals to involve more of an acknowledgement that we are mapping out projected impacts of lithium extraction and also that we are making all of our research materials and maps available for public use.

4) If you/others were going to continue this project - what might the next steps be to take this forward?

With regards to Silver Peak specifically, more detailed work would be warranted to assess definitively how much water is flowing from Alkali Springs Valley (which supplies water to the largest community in the county which Silver Peak resides) to Clayton Valley (the aquifer which supplies the Silver Peak lithium extraction operation). With regards to the project as a whole, the logical next steps would be to map out similar potential project sites across the western United States, as well as more rigorously studying the viability and scaling potential of solutions we explored such as lithium recycling and direct lithium extraction.

## Alex:

1) Please pick up from the presentation/pitch you shared a few weeks back

2) What progress have you made individually and collectively)

3) Please include elements of the updated proposal - especially showing updated information regarding the issue/problem and solution/s

4) If you/others were going to continue this project - what might the next steps be to take this forward?

### Ashley:

1) Please pick up from the presentation/pitch you shared a few weeks back

Before we only focused on the negative effects of lithium and didn’t have the straight facts about it. Now we know how little this problem is being tackled. There is only one mine extracting lithium when lithium is part of the solution of building more electric vehicles. We also now know how much these places are shrinking water-wise and will leave these regions in a deeper drought than before.

2) What progress have you made individually and collectively)

Individually, ive mapped out areas of lithium and the degradation of the Salton sea and researched how it affects the air and water quality. How indigenous people are opposed to mining because that also damages the environment. I also researched how lithium can help solve greenhouse issues.

3) Please include elements of the updated proposal - especially showing updated information regarding the issue/problem and solution/s

We updated our project proposal with new goals. Solutions for extracting the lithium would be by using new technologies such as geothermal power plants that are used in Germany. They don’t harm the environment as much as mining.

4) If you/others were going to continue this project - what might the next steps be to take this forward?

It would be to make a website to inform more people on the issue and its solutions. It would also be to research how well lithium mining and or using power plants will work.

### GenSheng:

1) Please pick up from the presentation/pitch you shared a few weeks back

Overall my section was divided into two parts, human mining of lithium can have a negative impact on the environment and water resources, and the other was to study lithium recycling. week5 we decided on the direction of each of my sister's group members' research. week6 I based some of my research on these parts and studied on google earth pro and GIS. week7 I used 3D modeling to add to my project and explain the technology of lithium mining. week8 I focused on using polygons in conjunction with sources to explain that the jackpot region is very arid due to the large amount of water consumed by lithium mining. week9 I added lithium recycling to explain the use of lithium by humans and the significance of recycling. This is roughly what my project looks like.

2) What progress have you made individually and collectively)

The subject of my research is jackpot lake and my direction is lithium recycling and pollution of local water resources and the environment. I used 3d models, slides, google earth pro to show my work.

3) Please include elements of the updated proposal - especially showing updated information regarding the issue/problem and solution/s

I think the solution, of course, is to increase the viability of lithium recovery and extraction technology, which will minimize the negative impacts of this project.

4) If you/others were going to continue this project - what might the next steps be to take this forward?

I think news sections or some streaming media could focus more on this part of the story and create a platform so that everyone is properly informed.