

**Creating a Timeline of Chumash Land Management:  
The Effects of Indigenous Land Management on the Environment**

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**Abstract**

Indigenous land management practices shaped the environment over thousands of years and promoted ecosystem health while providing for the Native people. The European colonization of North America and the forced assimilation of the Native people largely erased traditional land management practices, resulting in ecological degradation. There is a significant body of research regarding Indigenous land management practices, but there is a gap in examining how historical, social, and environmental events changed Indigenous land management practices, and how this affected the environment. Thus, the creation of a timeline to examine how these events shaped Chumash people's land management practices from pre-contact to present day is proposed. This timeline would fill this gap in the research, while providing an opportunity for scholars and officials across disciplines to learn from the past to make decisions that benefit Indigenous people and the environment. The knowledge provided by the timeline would offer environmental solutions and highlight Indigenous perspectives. Working closely with the Chumash, the timeline would be created by synthesizing their contemporary perspectives with historical social, political, and environmental context to examine how these factors changed Chumash land management, and the effect this change had on the environment.

### **Introduction**

The Indigenous people of North America actively and intentionally shaped their environments over thousands of years through land management practices (Anderson, 2005); (Spence, 2000). These land management practices included intentional burning, horticulture, and much more. Such strategies increased yields of wild plants, directed animal populations, and improved the biodiversity and productivity of the ecosystem (Anderson, 1997); (Jordan, 2003). As these practices progressed for thousands of years, they shaped the environment and its ecosystem functioning (Anderson & Barbour, 2003). Land management practices provided for the Indigenous people and were crucial to their survival and prosperity (Anderson, 2005). When European colonists arrived, many Native Americans were slaughtered or killed by disease. On the coast of California, many Indigenous nations like the Chumash were forced into servitude at missions, founded by Spanish Catholic missionaries after their arrival beginning in the 16<sup>th</sup> century (Dartt-Newton & Erlandson, 2006). With the mission system came the forced assimilation of the Native peoples who worked and lived at the missions. They were prevented from speaking their traditional language, made to convert to Catholicism, and could not manage the land as they once had (Dartt-Newton & Erlandson, 2006). Indigenous cultural connections with the land and the environment itself suffered due to the large cessation of Indigenous land management practices in America and California. The negative effects of ceasing land management practices persist to this day, in the form of decreased ecosystem diversity and productivity and increased vulnerability to disturbance, particularly wildfires (Anderson & Barbour, 2003).

In recent years, a large body of research has formed that studies traditional Indigenous land management practices and their effects on the environment. The viability of re-

implementing these practices to restore and protect ecosystems has also been researched and tested, providing a clear consensus that Indigenous land management offers a solution to many current environmental issues (Anderson & Barbour, 2003); (Kimmerer & Lake, 2001). There is research that separately examines the historical, social, and environmental effects of colonization on Indigenous peoples and their land management practices (Dartt-Newton & Erlandson, 2006); (Erlandson et al., 2008). However, there is little research that effectively and comprehensively synthesizes all the factors that have influenced Indigenous land management practices over time, and the resulting effect on the environment. Therefore, a question remains. How have historical, political, and environmental factors affected Indigenous land management practices over time, and how, in turn, have these practices or their absence affected the environment?

### **Background and Proposal**

This proposal is based largely off The Karuk Lands Management Historical Timeline, developed by Dr. Sibyl Wentz Diver and the Karuk people (Diver, 2014). The Karuk Lands Management Historical Timeline presents historical, social, and environmental events from pre-contact to present day alongside changes in Karuk land management to understand how these factors influenced land management practices (Diver, 2014). Diver and the students worked closely with the Karuk people, incorporating their historical accounts, perspectives, and current land management practices in the timeline.

Using this timeline and Diver's 2014 paper outlining its creation, *Giving back through time: A collaborative timeline approach to researching Karuk Indigenous land management history* as inspiration and a guideline, it is proposed to create a timeline of the Chumash people's land management that incorporates historical events, environmental changes, public policy, and current Chumash perspectives to demonstrate how these factors interact and effect the

environment. As it would be far too difficult to examine the interactions of these factors with Indigenous land management on a large scale, it is helpful to examine one Indigenous group as a case study and as reflective of the relationships between external factors, land management practices, and the environment. Thus, the Chumash people will be asked for their permission and collaboration to create a timeline of their land management practices. The Chumash were chosen because they are a nation whose presence and tribal headquarters are relatively local to Loyola Marymount University and the home of the researcher. Their ancestral lands stretch from Malibu to Paso Robles, and they were a seafaring as well as inland group of populous villages prior to colonization (Dartt-Newton & Erlandson, 2006). A significant amount of research exists on the Chumash people and their land management practices, but no timeline or otherwise synthesis of so many factors' impacts on land management practices and subsequently the environment exists to the researcher's knowledge. Additionally, there is little research containing modern Chumash perspectives on historical land management, current practices, and modern relationships with the land. By asking to interview the Chumash people and including their perspectives in the timeline, the timeline would fill this gap as well as provide an answer to the primary research question.

### **Significance**

Creating a timeline of Chumash land management would be a significant contribution to the cultural record of the Chumash people and to the field of environmental science. The timeline would contribute to scholarly and scientific understanding of how historical, social, political, and environmental events from pre-contact to the present have changed land management practices, and how in turn these land management practices and their absence affects the environment. Thus, scholars, government officials, and citizens alike can learn from the past to protect Indigenous people and the environment. This knowledge can provide environmental solutions by

re-implementing Chumash practices to enhance biodiversity or protect against disturbance. An example of this would be instituting controlled burns to help prevent against damaging California wildfires. By gaining the Chumash people's permission to create this timeline and include their perspectives, the timeline would help bring awareness to the historical oppression of Indigenous land management practices, as well as Indigenous resilience and relations to the land in the past and present. The timeline would contribute to the body of knowledge that affects future policy and Indigenous rights to their ancestral lands.

### **Methods and Expected Results**

The first step in creating this timeline is to gain the consent and approval of the Chumash Nation, as well as ensure that some members would be willing to provide interviews. This step will require initial email introductions to the Chumash leaders at the Santa Ynez Band of Chumash Indians tribal headquarters. Based off availability and convenience, interviews would be conducted both in-person and over email. A set of relevant questions asking the interviewee's perspective on historical and current land management practices would be used. As these interviews are being planned and conducted, research will begin to form the large body of information presented on the timeline. Historical, anthropological, legal, and scientific sources would be gathered, dating from pre-contact to present day. This will be the most intensive and long step of the process, as large amounts of research across several disciplines will need to be examined for relevant information. The information that will be presented on the timeline will be finalized after research is completed and checked for approval and suggestion with the Chumash. Finally, the editing software Adobe Photoshop will be used to create the timeline and format the information in a visually appealing and engaging way that includes images relevant to the Chumash people and their lands. The timeline will be organized by period and content. Upon the

completion of the timeline, the Chumash would be consulted for final approval. The timeline would then be submitted to journals for dissemination, and collaboration with the Chumash would determine if it were to be printed or posted online at their website for educational and cultural purposes.

It is important to note that the aim of this proposal is to frequently work with the Chumash throughout this process and obtain their consent, approval, and contribution every step of the way. It is also relevant to mention that The Karuk Lands Management Historical Timeline and the process outlined by Diver will serve as the basis and guideline for the creation of this timeline.

In order to conduct the long and intensive process of collecting interviews and research and creating the timeline, funds are needed to supply the necessary resources. This project will require funding for gas to travel to the Chumash, a Photoshop subscription, and compensation for the researcher.

### **Conclusion**

Indigenous people shaped their environments for thousands of years through various land management practices, which they were largely forced to stop with the arrival of European colonizers. The environment has suffered as a result, and to better understand how various factors change land management practices, and how these practices affect the environment, a timeline will be created. The timeline will include historical, social, and environmental events and changes throughout history as well as Chumash land management practices and current perspectives. Understanding the impact of land management on the environment through this timeline provides an opportunity to learn from the past, share Indigenous perspectives, and find environmental solutions.

### References

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**Budget**

<b>Category</b>	<b>Item</b>	<b>Details</b>	<b>Amount</b>
Travel	3 Estimated Trips to the Santa Ynez Band of Chumash Indian headquarters in Santa Ynez, CA	Assuming cost of gas is \$5/gallon. 135-mile round trip from researcher's home. Assuming 28 average mpg.	\$72.32
Materials	Adobe Photoshop	Cost of a subscription for sixteen weeks (four months) at \$20.99/month.	\$83.96
Personnel	Salary for researcher	Sixteen weeks of work at 20 hrs/week. Minimum wage at \$16.08.	\$5,145.60
<b>Total</b>			<b>\$5,301.88</b>



### Timeline

The research and creation of the timeline will take place over Loyola Marymount University's summer break, a sixteen-week period from May 8, 2023 to August 25, 2023.

Week	Task
Week 1: May 8-12	Email Santa Ynez Band of Chumash Indians and Chumash Indian Museum seeking approval and interviewees. Create interview questions and begin reviewing literature to be included in timeline.
Week 2: May 15-19	Travel to the Santa Ynez Band of Chumash Indians headquarters to conduct interviews. Transcribe these interviews and continue research.
Week 3: May 22-26	Research.
Week 4: May 29-June 2	Research.
Week 5: June 5-9	Research.
Week 6: June 12-16	Research.
Week 7: June 19-23	Research.
Week 8: June 26-30	Mid-point check in, travel to the Santa Ynez Band of Chumash Indians to provide an update on my progress and collect any suggestions or additional interviews. Research and begin writing copy for the timeline.
Week 9: July 3-7	Research and write copy for the timeline.
Week 10: July 10-14	Research and write copy for the timeline.
Week 11: July 17-21	Research and write copy for the timeline.
Week 12: July 24-28	Research and write copy for the timeline. Begin creating timeline.
Week 13: July 31-August 4	Create timeline.
Week 14: August 7-11	Create timeline.
Week 15: August 14-18	Travel to the Santa Ynez Band of Chumash Indians to show completed timeline. Implement any critiques they have and edit timeline.
Week 16: August 21-25	Timeline finalized, sent to Chumash as well as submitted to journals for dissemination.