

COUNTER-MAPPING THE COOS BAY ESTUARIES:  
AMPLIFYING INDIGENOUS AND ENVIRONMENTAL  
HISTORIES

by

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A THESIS

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## **An Abstract of the Thesis of**

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Primary Thesis Advisor

My research examines the (in)visible histories of the Coos Bay estuaries through creative mapping. Currently, members of the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw (CTCLUSI) reside in Coos Bay and remain traditional stewards. As a recently colonized landscape, Coos Bay is an ideal site to study the urgent issues of indigenous and water justice. Over 150 years of colonial back-filling and diking for farmland has caused massive repercussions for the health of the river and Native ecologies. Critical changes made to this estuary mask the deliberate efforts to eradicate and decimate peoples of the CTCLUSI and neighboring tribes.

I approach this environmental and indigenous history using creative practices of mapping as a form of inquiry. Specifically, I use an ‘overdrawing’ method—a mapping technique developed over the past two decades by Dr. Liska Chan, that allows for integrating many kinds of knowledge into a map. “Overdrawings are layered collages of drawings and photographs about place that allow both the maker and the viewer to apprehend imperceptible features of a place (e.g. moments of change, patterns over long histories, hydrology).”<sup>1</sup> Given the context of this landscape, I ask: what insights and questions might be revealed by these ‘overdrawings’? In

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<sup>1</sup> Liska Chan, personal communication, 2022.

addition, a complementary written narrative about the context of the Coos Bay estuary, including the meanings and questions that arise from the ‘overdrawings,’ accompanies the creative work. I examine the ‘overdrawings’ through a culturally geographic lens, and hypothesize that they will probe and problematize the (in)visibilities of landscapes, investigating how space is politically and culturally created.

I present my work and thoughts as my own perspective on a history diverse in experience and background, and I have found a plethora of ways to interpret and feel this space and history. My identity is non-Native, and therefore I have limited capacity for understanding the indigenous histories and landscapes precisely because, at all times, I can choose my level of engagement with all of these various knowledges and violences. The landscape I studied exists on CTCLUSI and Coquille Indian Tribal lands; a tribe connected to CTCLUSI through generations of intertribal marriage and landscape sharing. I have a unique access to their lands because of their historical displacement. In addition, I want to acknowledge that I currently work and study—and created these cultural maps—on Kalapuya territory, original stewards of the southern Willamette Valley, who were also violently displaced.

## **Acknowledgements**

This thesis could not be completed without the uplifting support of the direct community around me, at the University of Oregon and in my family. I am so grateful for the warm support and guidance I have received from innumerable sources around me.

I am deeply indebted to Jason Younker, my primary advisor. His extension of knowledge and generosity toward me, during a particularly hectic year(s), was perhaps one of the biggest gifts of time and energy I have been given. Besides academic counseling, he has trusted with me sensitive, sad, and unjust family histories—and still showed me immense joys and hope. I aspire to work in the world with the same lens and passion for justice and visibility with which he offers.

I am also particularly grateful to Tom and Diana Younker, for hosting me at their house on South Slough numerous times. Thank you for your willingness to support my work, and for your open-heartedness to having me in your home. Also, to Lambeau, who guided and protected me on all my South Slough adventures.

My project would not be possible without the direction of Dr. Liska Chan, my other main advisor, who ignited my passion for this project in a course on (in)visibility and the art practice of ‘overdrawings’ in 2021. She has been so enthusiastic about my love for cultural mapping, and I am grateful for her direction, counsel, and critical questions about the project as it has unfolded.

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I have received counsel from such a diverse set of perspectives. I am very thankful to Alexander Perigon, for their guidance in counter-mapping resources and their openness to talk about mapping and geography at any time (even at 7 in the morning, stacking cucumbers at the

summer Saturday market!). Thank you to my dear friends for allowing me to process out loud, especially to Zoey Bailey, who helped me kayak as many sloughs as possible in Coos Bay, and who has spent many nights helping me sort out my ideas.

My family has instilled in me a sensitive background to issues of exclusion and violence, which has impacted my undertaking and understanding of this project. My father and his family were forced to flee Iran during the 1979 Iranian Revolution, and the diverse experiences of movement, loss, and exile affect me directly. I originally hoped to examine water sovereignty in Khuzestan, a province in Iran marked by intentional exclusion from water resources. However, I cannot safely visit Iran, so I turned my attention to this local, and equally pressing, case study of environmental (in)justice.

I could not be more grateful for my family support. My Baba, Aria, has given me a foundation for approaching research and art with curiosity and detail. My mom, Karen, has been my ultimate sounding board—embracing my process with grace and wonder, helping me move through confusion and grief in this topic of indigenous (in)visibility, and editing my written work. Finally, my sister, Lily, who shapes my outlook and vision every single day—thank you.

## Table of Contents

Table of Terms	8
Literature Review	9
Cultural geography, cultural mapping, and creative geographies	9
Counter-mapping	15
Methods	21
Site visits and materials—Coos Bay	21
Creative process— ‘overdrawings’	27
Reflecting on the historic background of Coos Bay	30
Native narratives	31
A brief indigenous background	31
Disease & the earliest white colonial contact	33
Encroachment & white colonial settlement	34
Treaties, removal, and indigenous survival	36
Ecological and colonial narratives	39
Cartography	39
The jetty	42
Dredging & land development	43
Timber	44
Dams	50
Diking and agriculture	52
Return to a broader Native narrative	52
‘OVERDRAWINGS’	56
1// Survivance on Coos Bay	56
2// Grief map in trees	64
3// Cutting through your movement with our lines	68
4// South Slough runs	70
5// Ghost tree	74
6// Farming land (shells)	76
Conclusion	79
Appendix	82
Bibliography	83

## List of Figures

Figure 1. Perry Kulper’s ‘Strategic Plot,’ David’s Island, NY, 1996.	11
Figure 2. Meridith McNeal’s work titled ‘Doily Portrait,’ 2004.	12
Figure 3. Susan Stockwell’s work titled “Stitched Subways—London,” 2007.	13
Figure 4. Ethiopian artist Julie Mehretu’s work titled ‘Grey Area,’ held in the Guggenheim Museum, 2010.	15
Figure 5. LaCoste’s maps of bombing points in North Vietnam, 1972.	17
Figure 6. Two examples of counter-mapping titled “Les légendes du voyage” and “From Afghanistan to France,” 2013.	19
Figure 7. LiDAR data used to visualize original streambed flow of Pony Creek.	26
Figure 8. Triangulation of “Coose Bay, Oregon,” published in 1861.	40
Figure 9. “Koos Bay, Oregon.” First complete map of Coos Bay, published in 1867.	42
Figure 10. Photo taken from <i>Coos River Echoes</i> , by Charlotte Mahaffy, page 23.	45
Figure 11. Aerial photo taken of Pony Slough, south of the present-day airport, in 1939.	47
Figure 12. Aerial photo taken of South Slough, Coos Bay, in 1967.	48
Figure 13. Contemporary photo of South Slough (2022).	49
Figure 14. Rebecca R Miller’s map of splash dams across Oregon.	51
Figure 15. Map 1 titled <i>Survivance on Coos Bay</i> , 2023.	56
Figure 16. Map 2 titled <i>Grief map in trees</i> , 2023.	64
Figure 17. U.S. Geological Survey map published in 1900 showing land use.	66
Figure 18. Map 3 titled <i>Cutting through your movement with our lines</i> , 2023.	68
Figure 19. Map 4 titled <i>South Slough runs</i> , 2023.	70
Figure 20. Map 5 titled <i>Ghost tree</i> , 2023.	74
Figure 21. Map 6 titled <i>Farming land (shells)</i> , 2023.	76

## Table of Terms

Term	Definition
Boom	A chain of floating logs, or other long barrier, placed in rivers to catch and hold timber (for transport via waterways).
Brackish water	Mixture of saltwater and freshwater, found in estuaries.
Dikes	Dam-like structure that runs parallel to waterways (i.e. rivers or streams), and controls water flow by preventing water from exiting the main stream.
Shell middens	Locations of piles or heaps of shellfish remains (i.e. shells from oysters or mussels) used by Native peoples, usually around coastal areas.
Splash-dams	Dam-like structures that “would span the width of a river and create an upstream reservoir in which water and logs were stored until the spillway was opened to release a large flood.” <sup>2</sup>

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<sup>2</sup> Rebecca R. Miller and U.S. Forest Service and the Oregon Watershed Enhancement Board (OWEB), *Splash-Dams and Log Drives: The Stream Remembers* (United States Department of Agriculture, n.d.), 1.



## Literature Review

“In our daily movements, we are in a fluid exchange with cartographies of place—we create worlds, and worlds create us.”<sup>3</sup>

My research and practice of cultural mapping weaves together multiple academic fields, which I have broken into multiple categories. In this literature review, I will first introduce cultural and creative geographies as a framework through which cultural mapping takes place, and second, I will discuss the history and present uses of ‘counter-mapping,’ a specific decolonial lens through which I narrow my project. I will then present my creative and analytic methods, which finally lead me to a discussion of the indigenous, environmental, and colonial background of Coos Bay and its surrounding estuaries, the site for my cultural mapping research.

### **Cultural geography, cultural mapping, and creative geographies**

#### *Cultural geography*

In the past several decades, a growing body of literature has investigated the transdisciplinary field of cultural geography. Cultural geography can be hard to define, as interpretations of both geography and culture are constantly in flux.<sup>4</sup> Yet, simply put, a cultural geography framework recognizes that the arts and culture form a part of geographic knowledge (and knowledge-making processes), and so too does geography inform the arts and culture.

As a practice, cultural geography exists within and beyond the bounds of geography and the arts, which makes it difficult to discern. In fact, I find that its strength as a field lies in this

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<sup>3</sup> Nancy Duxbury, W. F. Garrett-Petts, and Alys Longley, eds. *Artistic Approaches to Cultural Mapping: Activating Imaginaries and Means of Knowing*. London, England: Routledge, 2020,

<sup>4</sup> Nigel Thrift and Sarah Whatmore, eds., *Cultural Geography: Critical Concepts in the Social Sciences* (New York: Routledge, 2004), 2.

transience, which allows it to interpret and be interpreted in creative, promotive ways. I consulted *Cultural Geography: Critical Concepts in the Social Sciences* to distill this field into three major pillars.

Human geographers, Nigel Thrift and Sarah Whatmore, claim that cultural geography emphasizes a “politics of representation,” which engages power and capital inequalities, resulting resistance movements, and a sort of deep reflexivity in how cultural and geographical knowledge is created, performed, circulated, and re-made.<sup>5</sup> My creative work uses this principle by, for example, questioning the instability, change, and movement of natural water systems such as estuaries, and asking how colonial practices have created these change.

Emily Scott and Kristen Swenson echo this first foundational pillar of cultural geography. They suggest that “space is political, inseparable from the conflictual and uneven social relations that structure specific societies at specific historical moments.”<sup>6</sup> Comparably, my research reveals that the history of colonial disruption to Native ecologies cannot be separated from the present state of Coos Bay’s environmental and indigenous communities.

Second, Thrift and Nigel also argue that subjectivity defines cultural geography. This theme acknowledges how subjects are produced, and in particular, the identity and difference within and between subjects.<sup>7</sup> ‘Overdrawings’ are well-situated in cultural geography as they pay particular sensitivity to subjectivity. The goal of my project is that it is not replicable—the beauty is that no one can exactly repeat the process of an overdrawing, precisely because it engages many, often invisible, knowledges and understandings of place.

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<sup>5</sup> Thrift and Whatmore, *Cultural Geography*, 5.

<sup>6</sup> Emily Eliza Scott and Kristen Swenson, "Contemporary Art and the Politics of Land Use," introduction to *Critical Landscapes: Art, Space, Politics* (Berkeley, CA: University of California Press, 2015), 2.

<sup>7</sup> Thrift and Whatmore, *Cultural Geography*, 6.

Third, Thrift and Whatmore advocate that a cultural geography framework recognizes geography as an ongoing “practice,” through which our culture(s) flexibly pull in and shape material, subjects, space, and time.<sup>8</sup> My work fits into this idea, as ‘overdrawings’ are fundamentally a practice of movement and mapping that extends into the world as a practice of making. ‘Overdrawings’ continually make, remake, shape, and reshape the space, time, and priorities around it.

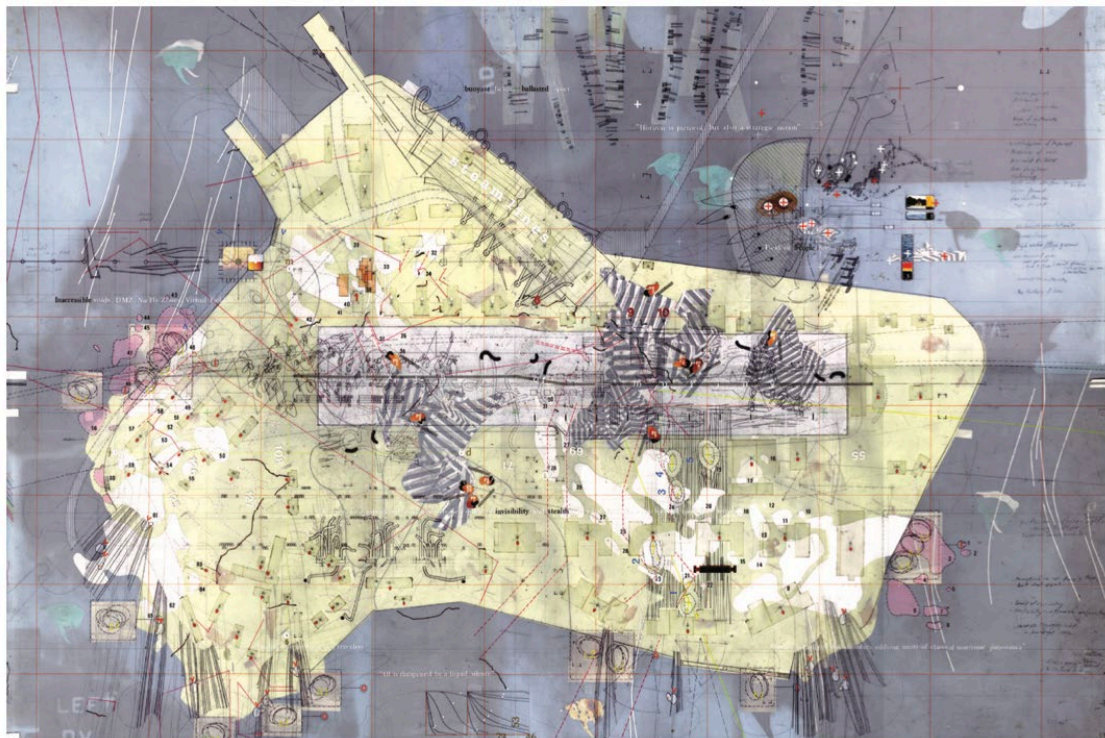


Figure 1. Perry Kulper's 'Strategic Plot,' David's Island, NY, 1996.

He uses a combination of mylar, cut paper, transfer film, x-rays, tape, and graphite. This piece aims to question control/borders versus borderless-ness.

### *Cultural mapping*

*Artistic Approaches to Cultural Mapping: Activating Imaginaries and Means of Knowing* provides examples showing ways cultural geography are performed. Because ‘geography’ can

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<sup>8</sup> Thrift and Whatmore, *Cultural Geography*, 6.

look so diverse, they use the term ‘cultural mapping’ to narrow the parameters of this practice to maps and mapping specifically. Practices of mapping “reflect the exchange where places and inhabitants write each other. The places might be abstract or literal, conceptual or material, political or poetic.”<sup>9</sup> Within a cultural geography framework, I also distinguish my work as cultural mapping. ‘Overdrawings’ function as a culturally and historically-relevant *map*, which holds both site-specific, data-based meaning, and simultaneously social, internal, memory-based, psychological realms of meaning.

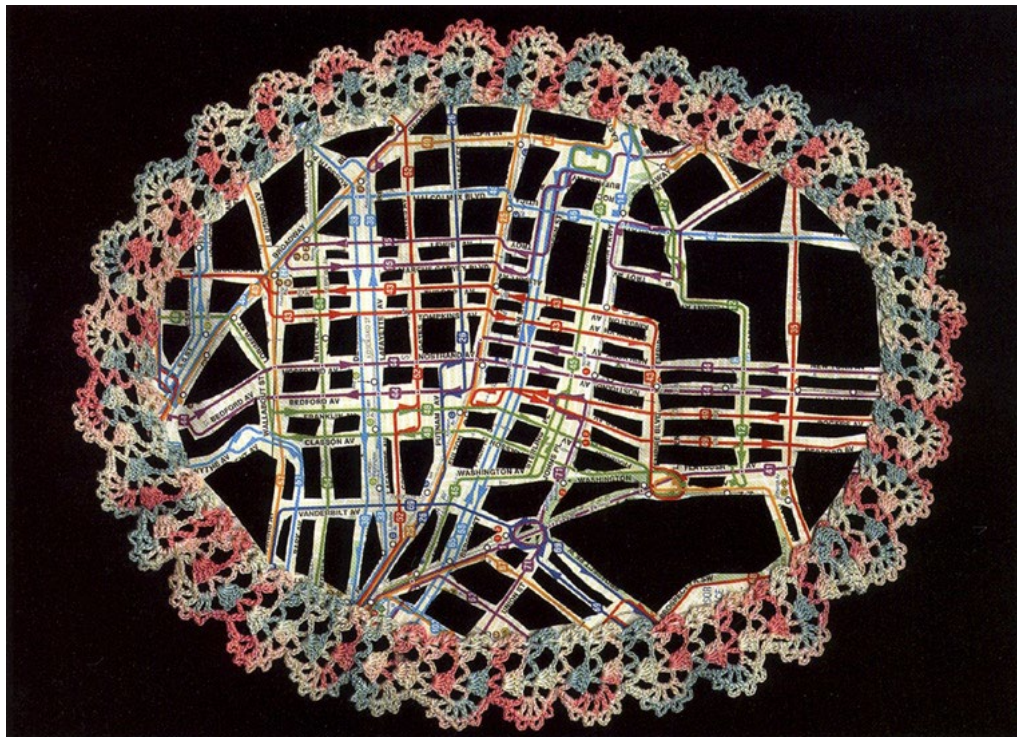


Figure 2. Meredith McNeal’s work titled ‘Doily Portrait,’ 2004.

Made using bus route maps and lace work.

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<sup>9</sup> Duxbury, 1.

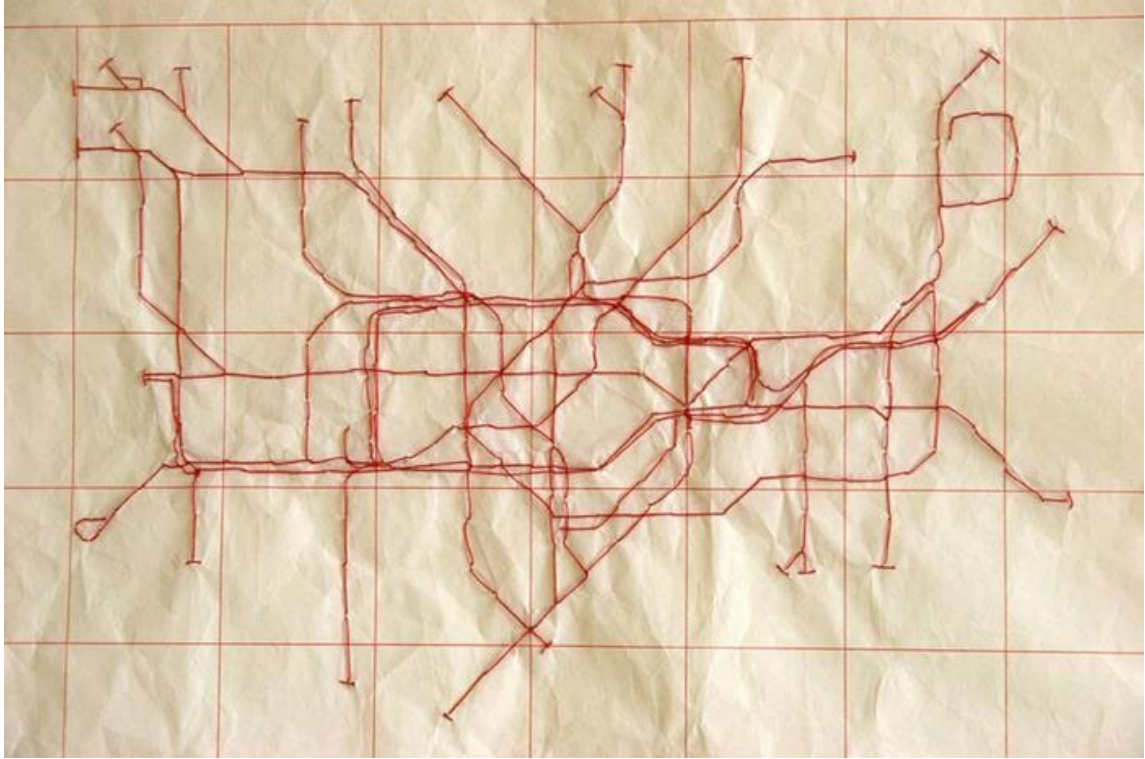


Figure 3. Susan Stockwell's work titled "Stitched Subways—London," 2007.

Transit map of London, made by stitching red cotton thread onto rice paper.

### *Creative geographies*

Cultural and creative geographies are deeply linked, if not the same. Harriet Hawkins, in *For Creative Geographies*, clarifies that creative geographies perhaps just emphasize the artists and art practices behind this interdisciplinary field. Hawkins indicates that we now see "artistic reinterpretations of mapmaking offering the possibilities to reflect anew on cartography, extending its dimensions through explorations of materiality and embodied practices."<sup>10</sup> These ideas echo and affirm the several pillars of cultural geography as described by Thrift and Whatmore. As my project utilizes the specific arts practice of 'overdrawings,' the term *creative*

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<sup>10</sup> Harriet Hawkins, *For Creative Geographies: Geography, Visual Arts and the Making of Worlds* (London: Routledge, 2015), 4.

*geographies* is also useful in describing my project—however, I utilize both cultural and creative geographies interchangeably because of their extensive overlap.

Ultimately, Scott and Swenson clarify that contemporary landscape art has the potential to “emphasize not the visible landscape, but invisibility—that which is not immediately apparent to the eye.”<sup>11</sup> ‘Overdrawings’ perform exactly this artistic task—revealing invisible information across multiple landscapes—the physical, emotional, experienced, or cultural landscapes, to name a few. One strength of artistic approaches to cartography includes this capacity to question how “art and other critical spatial practices stir our sensitivities to human-nature entanglements and imaginaries, thereby opening the way for new modes of response and engagement, new forms of making and marking, new sets of relations, and new ways of being?”<sup>12</sup> These are all questions that ‘overdrawings’ engage as they seek to present (in)visibilities of landscapes.

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<sup>11</sup> Scott and Swenson, 6.

<sup>12</sup> *Ibid.*, 13.



Figure 4. Ethiopian artist Julie Mehretu's work titled 'Grey Area,' held in the Guggenheim Museum, 2010.

## Counter-mapping

Many scholars recognize the power maps yield. French geopolitician and scholar of geographical warfare, Yves LaCoste, described mapping succinctly, saying “the map, perhaps the central referent of geography, is, and has been, fundamentally an instrument of power.”<sup>13</sup> LaCoste instrumentally related this power to the intentions of the State, showing that mapping “actually transposes a little-known piece of concrete reality into an abstraction which serves the practical interests of the State machine; it is a tedious and costly operation done for, and by, the State.”<sup>14</sup>

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<sup>13</sup> Lacoste, Yves. “An Illustration of Geographical Warfare: Bombing of the Dikes on the Red River, North Vietnam.” *Antipode* 5, no. 2 (1973), 620.

<sup>14</sup> *Ibid.*, 620-1.

Relatively recently, in the 1970s, scholars began to formally question how to bring other types of knowledge to the forefront of maps. I am also pursuing this inquiry with one broad goal: to bring indigenous and environmental knowledge to the forefront of maps, focusing primarily on Coos Bay, Oregon.

LaCoste spearheaded this questioning, studying the deliberate military intent to weaponize geographic and mapping knowledge. Here, LaCoste speaks to the US military efforts to bomb dikes in North Vietnam—however, his findings strikingly match the almost exact same efforts to change the environment of Southern Oregon to prevent indigenous survival. While his work demonstrates how destroying key dikes in Northern Vietnam reveals the U.S. military’s understanding of cultural resources—for example, that the dikes “are thus a primordial geographical condition of existence for the people”<sup>15</sup>—a similar pattern holds for the Oregon coast. The construction of dikes (and thus decimation of the health of estuaries) on the Oregon coast shows the same U.S. colonial understanding that the estuaries are the lifeblood (food, resources, water) for the whole area.

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<sup>15</sup> LaCoste 626.



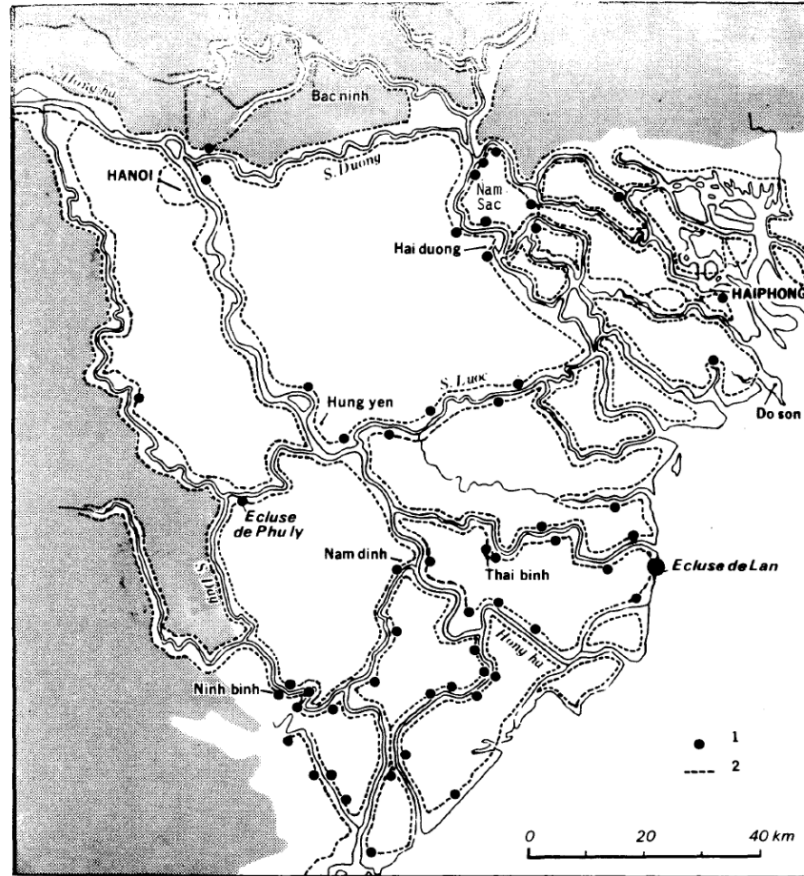


Figure 5. LaCoste's maps of bombing points in North Vietnam, 1972.

LaCoste did not use the term “counter-mapping,” but his work is considered one of the first examples of counter-mapping in the discipline of cultural geographies. The term counter-mapping describes the efforts to decolonize the mapping process—usually by centering new (and often, much older, indigenous) perspectives and experiences of a landscape. My project is congruent with counter-mapping tactics specifically in its effort to make visible the indigenous and environmental histories of the Coos Bay area.

Much literature and creative work has commented on counter-mapping since the 1970s. Following LaCoste, in 1995 rural sociologist Nancy Peluso described counter-mapping efforts of forest territories in Indonesia. In her work, counter-mapping refers to indigenous people themselves co-opting mapping techniques to claim the areas and resources they have historically

and presently stewarded.<sup>16</sup> While this type of mapping works to fortify indigenous claims to resources, Peluso recognizes that counter-maps have other influences, as well. For example, she writes that they “have the potential for challenging the omissions of human settlements from forest maps, for contesting the homogenization of space...and for expressing social relationships in space rather than depicting abstract space in itself.”<sup>17</sup>

My ‘overdrawing’ project uses a counter-mapping framework within the larger field of cultural and creative geography because of its distinct questioning of visibility and invisibility, particularly that relate to indigenous histories, resources (and their extraction) and colonial settlement and re-writing of the landscape.

Many other examples of counter-mapping depict the de-colonial goals of this form of mapping, and the specific focus on indigenous experiences. Examples include Sarah Mekdijian’s work from 2015 in mapping border-crossing stories, and Irène Hirt’s 2012 work in incorporating dreaming practices into indigenous counter-mapping efforts in Chile. Both Mekdijian and Hirt use participatory methods in their counter-mapping. Unlike these scholars, due to the limited size and scope of my project I am not collaboratively working on mapping efforts with the populations I am studying.

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<sup>16</sup> Peluso, Nancy Lee. “Whose Woods Are These? Counter-Mapping Forest Territories in Kalimantan, Indonesia.” *Antipode* 27, no. 4 (1995), 384.

<sup>17</sup> *Ibid.*, 386-7.

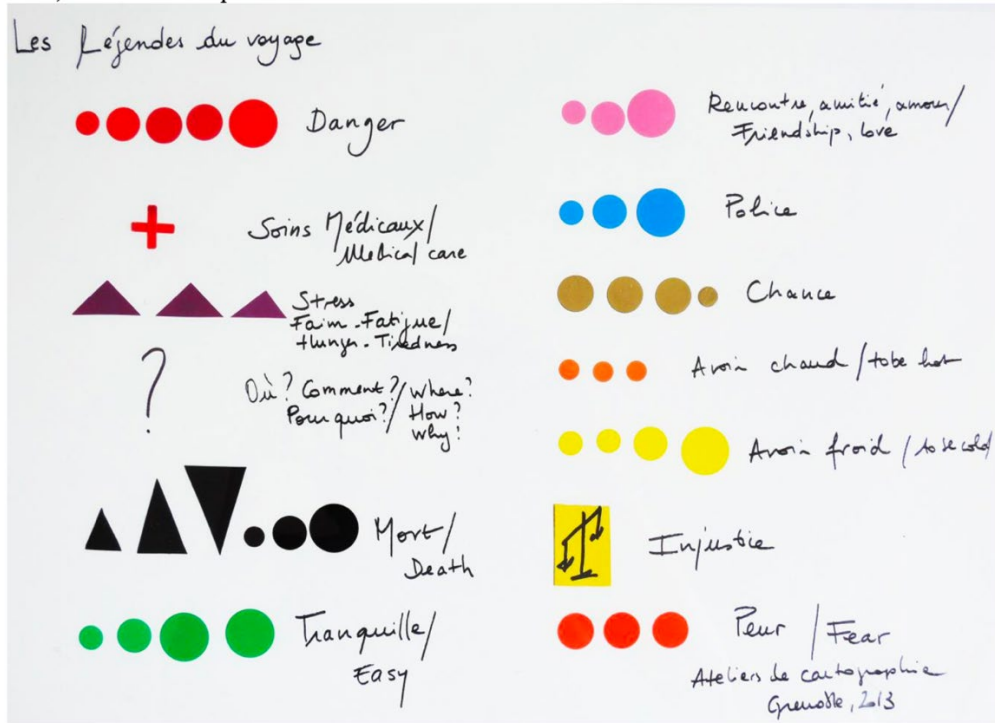


Figure 6. Two examples of counter-mapping titled “Les légendes du voyage” and “From Afghanistan to France,” 2013.

Mekdjijan’s work in mapping border-crossing stories.

Finally, counter-mapping is not isolated from cycles of harm. For instance, even those maps consciously focused on upending colonial values (such as boundaries and borders) often use colonial knowledge and value systems (such as certain forms of GIS technologies) to produce new forms of decolonial mapping. My project is deeply entangled with the colonial systems I am actively working to uncover, including the materials I use, the access I have to different areas of Coos Bay, and even the ways in which my work is presented and distributed.

In a more extreme cases, however, the history of counter-mapping also contains examples of work that explicitly violates the consent and safety of participants or knowledge produced. For example, the Bowman expedition, a collection of cultural geography projects in countries across the world, aimed to create “detailed maps of local communities for the program’s funder: the US Army’s Foreign Military Studies Office.”<sup>18</sup> Geographical knowledge is important to the U.S. Army, and more importantly, to the U.S. National Geospatial-Intelligence Agency (NGA). Thus, these entities manipulatively use cultural mapping as a tool for following human movement.<sup>19</sup>

Therefore, all cultural mapping efforts—particularly those with counter-mapping goals—must grapple with the conflicts of mapping sensitive and protected information. Counter-mapping reveals information that can empower communities and individuals and yet also expose vulnerabilities such as resources and cultural heritage sites. In light of these complications, my research also explores how to present histories and knowledges of indigenous Oregonians in safe and consensual ways (for example, using already published material in my mapping practices).

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<sup>18</sup> Wainwright, Joel. “Geography Insurgent,” in *Geospiracy*. New York, Palgrave McMillan, 1.

<sup>19</sup> *Ibid.*, 2

## Methods

My research is both analytical and creative—it draws together diverse sources to create collage-like maps on translucent paper. The primary theoretical methodology behind my work is called “bricolage,” a term coined by the French anthropologist and ethnographer Claude Levi Strauss. This method can be thought of as a deliberate way of “grabbing what is at hand” or “making-do” with the resources at hand for a specific project, in my case a creative mapping project. In *The Savage Mind*, Strauss writes “the rules of [the] game are always to make do with ‘whatever is at hand’, that is to say with a set of tools and materials which is always finite and is also heterogeneous because what it contains bears no relation to the current project, or indeed to any particular project, but is the contingent result of all the occasions there have been to renew or enrich the stock.”<sup>20</sup> Thus my chosen materials reflect the resources around me—particularly the people (like my advisors) and fields (geography, anthropology, and art and landscape design). I began with a foundation of tools and readings, to which I have added miscellaneous materials, experiences, and technologies.

### Site visits and materials—Coos Bay

I have completed extensive background research on the colonial, cultural/indigenous, and environmental history of Coos Bay and the surrounding estuaries. Using the Southwest Oregon Research Project (SWORP) database at the UO Library, I assessed and scanned geographic data, such as historic maps and indigenous language charts, keenly examining their context and purpose. I sought other cartographic information using advanced online searches and map archives. Largely, I found a dearth of accessible cartographic information by early settlers on this

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<sup>20</sup> Claude Levi-Strauss. *The Savage Mind*. Chicago, IL: University of Chicago Press, 1968.

coast, indicating the absence of much study on the colonial changes made to the Native cultural and alluvial landscapes.

Dr. Younker provided me with several maps and many historic photos, including a set of aerial images from 1967 conducted by the Coquille Indian Tribe. I was also generously given a set of 13 maps of Coos Bay by Mr. Bob Bailey, Board President of Elakha Alliance in Coos Bay. These maps span from 1865-2011, including almost one map per decade.

Next, I analyzed several texts on the early colonial history of Coos Bay, including the book *Oregon and the Collapse of the Illahee*. Other texts provided context on colonial settlement and life, post indigenous removal in the 1850s, which I read to uncover ongoing changes to and erasure of indigenous and environmental landscapes. Other texts have supplemented my understanding of Southwestern Oregon indigenous culture, such as several written by my advisor, Dr. Younker, the Chief of the Coquille Indian Tribe, and another book written in collaboration with the Coquille Indian Tribe Cultural Preservation Efforts. These have helped me understand the cultural practices of indigenous peoples and tribes living in Southwestern Oregon (historically and presently).

My Coos Bay research was fortified by multiple site visits to study and map the estuary myself. During my first stay, I travelled with Dr. Younker and he gave me a broad tour of the entirety of Coos Bay—including several important indigenous cultural sites and environmental landmarks, as well as ongoing signs of environmental change and degradation. I visited 4 other times, during Summer, 2022 and Winter, 2023, and resided with his parents on South Slough, Coos Bay, at the border of the South Slough National Estuarine Reserve.

During the first of these visits, I attempted to retrace most of the main waterways and sloughs by foot or by car. I soon found that the area is widely characterized by private lands, and

I had little access to any waterways that weren't directly adjacent to the roads. Some sloughs intrigued me and I ventured into the private lands to follow them, but I was kicked off a couple times, including at a golf course.

In my second visit, I decided to kayak the three main sloughs—South Slough, Catching Slough, and Isthmus Slough. This provided me a closer connection to the waterways, which allowed me to travel further and study more locations of dams, dikes, and areas that had been dredged and filled in. Among my impressions were fields of cattle, areas where smaller branches of the streams were visibly narrowed to fit through pipes and cross roads, and many, many remnants of dikes. More importantly, I understood the waterways better through an embodied lens, and learned significantly more by being in the site, versus studying it from afar.





In each of these places, I documented the experience with photographs, drawings, and memos. I paid specific attention to environmental changes I had studied, such as finding and documenting places where the estuaries appeared cut off, ongoing logging sites, and Native wildlife/plants.

In the last two trips, I prioritized making ‘overdrawing’ maps in the landscape itself. I primarily interacted with South Slough, Coos Bay. I visited the South Slough National Estuarine Reserve trails, and hiked on and around South Slough.

I also used LiDAR data, collected by the Oregon Department of Geology and Mineral Industries (DOGAMI), to re-create geographic maps of Coos Bay. LiDAR data are based on laser pulse reflections, often (and in my case) taken aerially from airplanes, which are then formatted into point clouds that show elevation change.<sup>21</sup> I selected four quadrants that encompass Coos Bay and the surrounding estuaries—Empire, Coos Bay, Charlestown, and North

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<sup>21</sup> Alexander Perigon, personal communication, 2022.



Bend. With ArcGIS software, I filtered the data for elevations near sea level in order to view the stream beds in a “bare earth” format. This uses the software and the data to approximate where the bare earth would be, and thus where original streambeds would be found. I completed this task in detail for Pony Slough, as well as an entire map of the main Coos Bay inlet. Secondly, I made a map with stream flowlines, using several geoprocessing tools to determine the angle of the earth and how water would flow into and form the estuaries. I use both of these newly created types of maps to demonstrate, geographically, whether the estuaries have been changed at all.

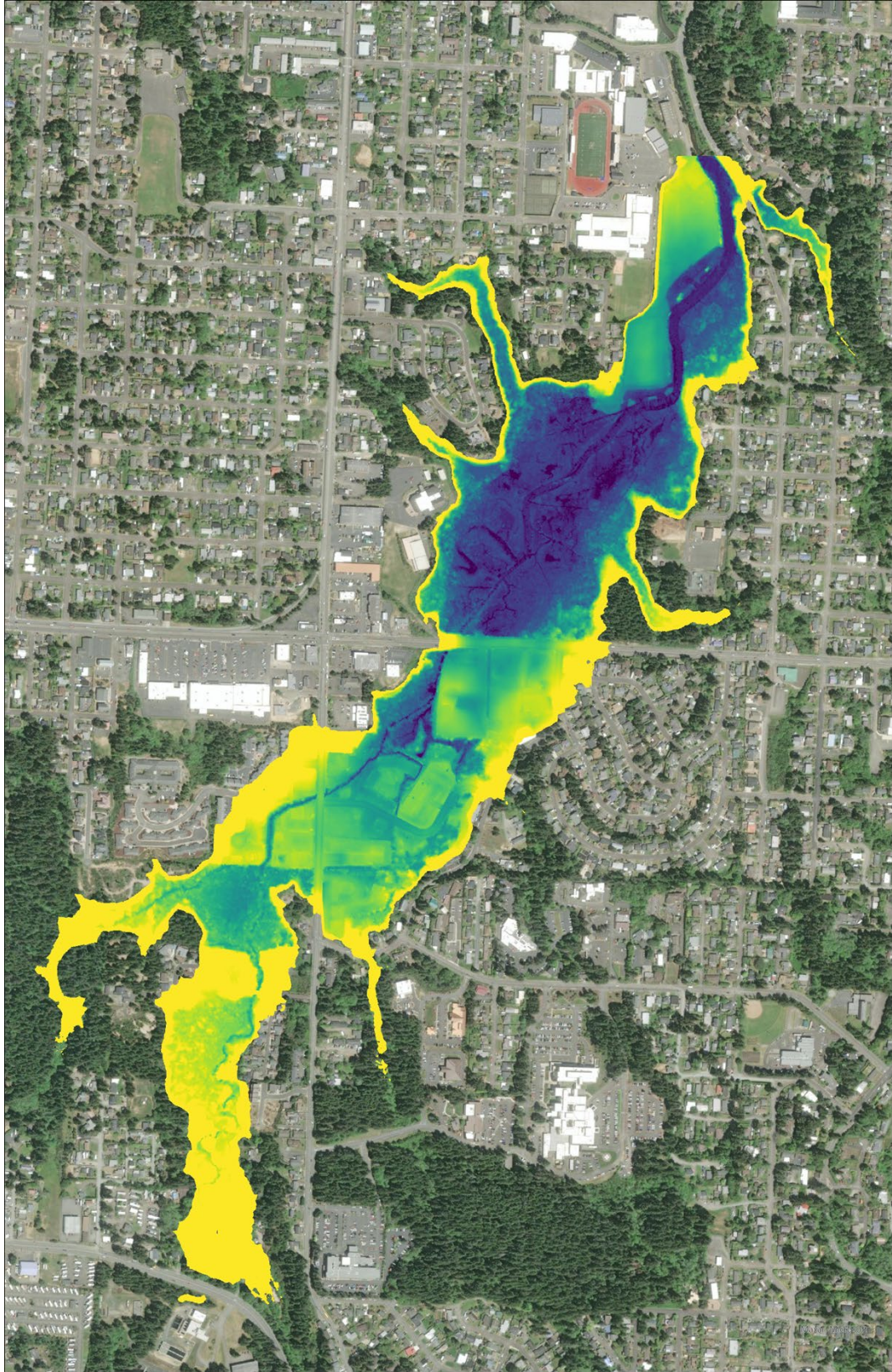


Figure 7. LiDAR data used to visualize original streambed flow of Pony Creek.

These texts, site-visits, and geographic data have all fortified my context of the indigenous and environmental history of the Coos Bay estuaries, and they provide the photographs, language material, maps, and other data that comprise my creative work.

### **Creative process— ‘overdrawings’**

My creative practice is grounded in the ‘overdrawing’ method created<sup>22</sup> and uses the bricolage method to draw together my set of diverse sources and data. ‘Overdrawings’ fuse diverse information into hybrid maps, such as cultural, linguistic, and historic data. The data I have listed above, such as site images, indigenous language and ethnobotany, archival accounts of indigenous Oregonians, and new maps of stream flow will form the overlapping layers. This data will be over-layed and traced onto geographical maps to create culturally and historically-enriched maps.

For the creative work, I used translucent mylar paper to overlay and trace these diverse types of data. I used Micron pens in sizes 005, 01, 02, 03, and 08, as well as pencil, to trace images onto filter paper by overlaying the mylar paper onto digital devices (such as my computer) and printed copies of the data (such as photographs, maps, words, etc.). The process of ‘overdrawings’ is deeply personal and reflective; therefore, I have also woven my own interpretations, background, reflections into the work. This includes my own poetry reflecting on this experience of learning about the indigenous and environmental history, while also pulling in my own family’s history of loss and exile.

This process has roughly the following flow:

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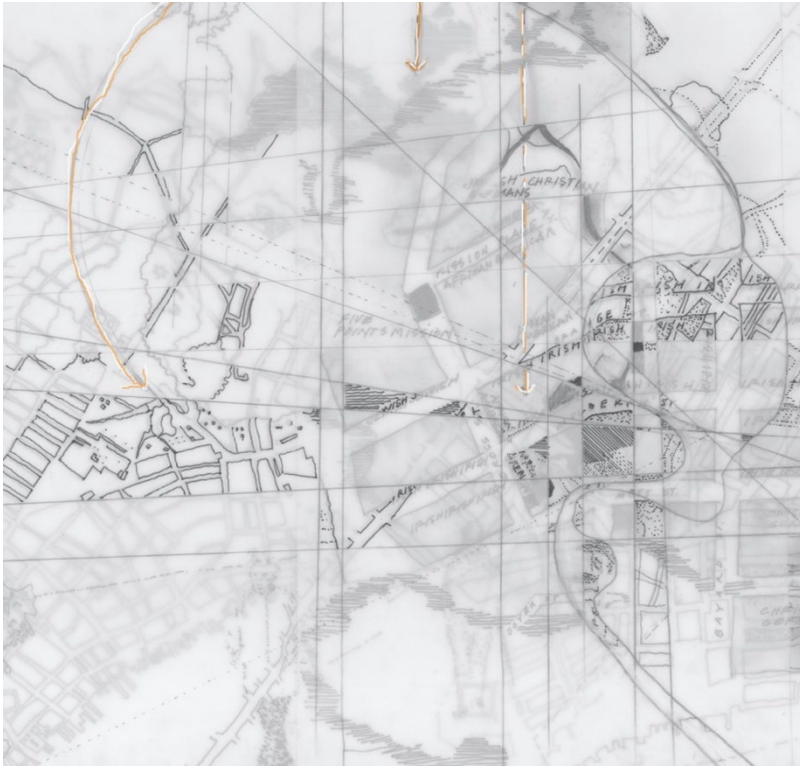
<sup>22</sup> Liska Chan, personal communication, 2022.

1. Gather background materials + attend site visits
2. Draw/trace maps of site
3. Overlay a particular focus (i.e. indigenous histories) over maps and trace
4. Make collage of all elements used, retrace to emphasize certain lines/ideas
5. Pull out themes/lines/ideas and create one overdrawing (often pen)

Below, I provide an example of Chan's work weaving together all these elements into an overdrawing, using New York's Chinatown as the local site:



Initial maps with beginnings of environmental focus. Shaded areas are the original location of the freshwater ponds named "Collect" after the Dutch work for chalk (Kalck), due to the nearby large oyster middens.



Collage of maps with linkages between old and new emphasized.



Final 'overdrawing.' Cumulative work from the other maps and collages, but done as a continual process that is not restricted to materials/lines in previous collage and maps.

## **Reflecting on the historic background of Coos Bay**

I aim to demonstrate the intentional geographic controls/measures that decimated indigenous people and ecologies in the Coos Bay estuary. Their story is not passive, and it certainly has not ended.

I begin by giving a short introduction to the Native landscape prior to colonization and providing an overview of the colonial contacts and violences that affected indigenous and environmental ecologies. This historical background is well-documented (though it does not necessarily reflect the indigenous lived experiences.); what is not well-documented is the cartographical knowledge used to justify the stealing, parceling, and misusing of resources in the area, affecting Native people and ecologies. My specific intent is to shed light on the ways geographic knowledge was used as a tool of coercive power over the past century and a half in Southern Oregon.

In the present-day, at least two federally recognized tribes claim territory in this region: both the Coquille Indian Tribe, and the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw (CTCLUSI). In light of the atrocious violences caused to Native tribes across Oregon, the dual survival and resilience of indigenous people, particularly the Southern Oregon Coast, is remarkable.<sup>23</sup> I will juxtapose an indigenous narrative, which aims to ask how a recovering people can help themselves and others understand the interconnections and delicate balance between their culture and environment.

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<sup>23</sup> Younker, Jason T. "Coquille/Kō'Kwel, a Southern Oregon Coast Indian Tribe: Revisiting History, Ingenuity, and Identity." University of Oregon.

## Native narratives

### *A brief indigenous background*

Coos Bay is the ancestral site for several indigenous groups—the Miluk (in the South Slough region) and the Hanis (primarily in the Northern end of Coos Bay). Mutually unintelligible, the Miluk and Hanis languages come from the Coos language family, which stems from the Penutian phylum of languages.<sup>24</sup> Athabaskan speakers, considered to be part of the upper Coquille watershed, also bordered the Miluk on the south and eastern regions of Coos Bay.<sup>25</sup>

Much of what is known about the pre-colonial and colonial eras in the Southern Oregon Coast come from “salvage ethnographies” of the area, which “sought to record the remnants of “disappearing” Indian cultures from the “last speaker” or the “lone culture-bearer.””<sup>26</sup> These anthropological testimonies of indigenous peoples about their lives, cultures, and languages were taken in the midst of tremendous harm to and displacement from their ancestral lifestyles.<sup>27</sup> For the purposes of my work, these salvage ethnographies are helpful as primary points of knowledge about indigenous peoples who were rapidly decimated. However, they have deeply problematic roots, as these testimonies were often quickly conducted, coercive, and extractive.<sup>28</sup> Culturally-sensitive and de-colonial scholars try to triangulate cultural information from many types of sources, but ultimately, the specific names, locations, cultural backgrounds, and practices of tribes in this area are largely unknown.<sup>29</sup>

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<sup>24</sup> Melody Caldera and The Friends of the South Slough, *South Slough Adventures: Life on a Southern Oregon Estuary* (Coos Bay, Oregon: South Coast Printing Inc., 1995), 1.

<sup>25</sup> Tveskov, 146-147.

<sup>26</sup> Jason T. Younker, “Coquille/Kō’Kwel, a Southern Oregon Coast Indian Tribe: Revisiting History, Ingenuity, and Identity” (University of Oregon, 2023), 1.

<sup>27</sup> Tveskov, 139-40.

<sup>28</sup> Whaley, 9.

<sup>29</sup> Jason Younker, “Revival of a Potlatch Tradition: Coquille Giveaway” (University of Oregon, 1997), 1.

Reconstructed maps, ethnographies, and other cultural-geographic data of the Coos-Coquille tribes on and around Coos Bay demonstrate numerous diverse yet connected tribal villages or “household clusters,”<sup>30</sup> which functioned as unique political and cultural units. Coos-Coquille relationships were maintained and supported by “marriage patterns, kinship, certain economic practices, and other shared cultural features” that each served to connect different villages.<sup>31</sup>

Indigenous communities in the Southern Oregon Coast, much like the Pacific Northwest in general, were matrilineal but followed patrilocal practices: women moved to their husband’s tribal location, but their children followed their ancestry back to their mother’s lineage, also learning the mother’s language.<sup>32</sup> Women held a lot of authority and prestige in their role as preservers of cultural history, memory, and linguistics.<sup>33</sup> Thus, marriages preserved inter-cultural and inter-tribal ties, and connected diverse tribes around Coos Bay—such ties between Coos, Lower Umpqua, Siuslaw, Coquille, Tututni, Shasta Costa, and Tolowa tribes, to name a few.<sup>34</sup>

Coos Bay is a site of immense resource access, “rich with flora and fauna, enough to sustain many people.”<sup>35</sup> Exact numbers of people in this territory prior to white colonial contact are vastly unknown (and likely underreported), but cooperative use and management of resources mark indigenous economic and social practices in this region.

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<sup>30</sup> Mark A. Tveskov, “The Cultural Geography of the Coos and Coquille,” in *Changing Landscapes: “Sustaining Traditions”* Proceedings of the 5th and 6th Annual Coquille Cultural Preservation Conferences, ed. Donald B. Ivy and R. Scott Byram (North Bend, Oregon: Coquille Indian Tribe, 2002), 144.

<sup>31</sup> *Ibid.*, 146.

<sup>32</sup> *Ibid.*, 149; George B. Wasson Jr., “The Coquille Indians and the Cultural ‘Black Hole’ of the Southwest Oregon Coast” (University of Oregon, 1994), 11.

<sup>33</sup> Jason Younker, personal communication, 2022.

<sup>34</sup> Wasson Jr., 5.

<sup>35</sup> Younker, “Revival,” 6.



*Disease & the earliest white colonial contact*

By the early 1700s, archaeological records reveal the sudden abandonment of shell middens, highly likely a result of the “mass devastation of indigenous populations” associated with foreign disease.<sup>36</sup> Spanish colonial explorers had settled in present-day Mexico and southern California, and from them, disease spread rapidly.<sup>37</sup>

The late 1700s and 1800s mark a period of rapid colonial expansion into Oregon.<sup>38</sup> Diverse Native cultural and social ties, as well as trading networks, weaved across the Southern Oregon coast. This backdrop of extensive connection between Native peoples themselves provided the means for significant indigenous and colonial interactions, including trade, marriages, and cultural ties. It also accelerated the extensive coercion of Native peoples’ customs, practices, and landscapes, as well as the spreading of disease.<sup>39</sup>

One of first written accounts of the Southern Oregon coast comes from Captain Robert Gray in 1788, who sought otter pelts along the Oregon coast.<sup>40</sup> He made peaceful contact with Native people in 1792, though from his earliest records it is clear that he held an unfounded fear that the indigenous people were “cannibals.”<sup>41</sup> In this same time period, the Hudson Bay Company established fur trading posts as far south as the Umpqua River, spreading foreign disease and using manipulative power to control the remaining indigenous people.<sup>42</sup>

Disease brought by fur-trappers and explorers decimated Native peoples in this region. The early 1830s were particularly devastating, marked by epidemics of both smallpox and

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<sup>36</sup> Ibid., 7.

<sup>37</sup> Wasson Jr., “The Coquille Indians and the Cultural ‘Black Hole’ of the Southwest Oregon Coast.”

<sup>38</sup> Whaley, Gray H. *Oregon and the Collapse of Illahee: U.S. Empire and the Transformation of an Indigenous World, 1792-1859*. Chapel Hill, NC: University of North Carolina Press, 2014, 3.

<sup>39</sup> Whaley, *Oregon and the Collapse of Illahee*.

<sup>40</sup> Younker, “Revival,” 8.

<sup>41</sup> Ibid., 8.

<sup>42</sup> Whaley, *Oregon and the Collapse of Illahee*.

malaria.<sup>43,44</sup> In 1841, Charles Wilkes, a commander of the United States Exploring Expedition, passed through the Umpqua River (just north of present-day Coos Bay), writing that

the accounts given of the depopulation of this country are not exaggerated; for places have been pointed out to me where dwelt whole tribes, that have been entirely swept off; and during the greatest mortality the shores of the river were strewn with the dead and dying.<sup>45</sup>

By the time the first white settlers entered the mouth and surrounding waterways of Coos Bay in 1850, it is estimated that ninety percent of the indigenous population had already died of foreign diseases.<sup>46</sup>

The early and mid-1800s brought more and more interaction and conflicts between Native people and White settlers.<sup>47</sup> Suffering from immense loss and practicing repeated grieving rituals, indigenous people along the Southern Oregon coast were exceptionally vulnerable to colonial violences. This devastation made it much easier for colonial settlers to “settle and complete the ethnic cleansing of Oregon Territory.”<sup>48</sup>

### *Encroachment & white colonial settlement*

Creating a well-rounded timeline of white settlement into Southern Oregon, particularly Coos Bay, is an extremely cross-disciplinary and nuanced endeavor. Loosely, however, several major events correlate to the increased popularization and incentivization of white movement into Coos Bay.

British and American governments vied for control over the Pacific Northwest, largely in the form of resource control. When Britain recognized that the American government was

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<sup>43</sup> Caldera, 35.

<sup>44</sup> Younker, “Revival,” 9.

<sup>45</sup> Caldera, 36.

<sup>46</sup> Younker, “Coquille/Kō’Kwel,” 54-55.

<sup>47</sup> Younker, “Revival,” 9.

<sup>48</sup> *Ibid.*, 7.

headed toward owning all of the Pacific Northwest, they intended to deplete furs and create a “fur desert.”<sup>49</sup> An 1826 expedition led from the North by British informant Alexander McLeod on the Umpqua River was “without major incident” between white and Native people, demonstrating that white people could use these landscapes for resource extraction.<sup>50</sup> These British fur trappers did not travel all the way to Coos Bay, but the diseases they carried with them spread swiftly through Native networks through trade and contact.

The first American land expedition into the Southern Oregon coast was conducted by a party of men from California led by Jedediah Smith in 1828.<sup>51</sup> On foot, horse, and likely canoe, they arrived in South Slough on a fur trapping and exploration expedition. Native peoples, such as the Miluk on South Slough, were recorded as responding in fear by abandoning their villages, and later by trading with these white men. Typical for white colonial settlers in this area, Jedediah Smith and his party were known to be quite brutal and use violent force such as firearms to demonstrate power upon meeting Native peoples. This party left without settling permanently.<sup>52</sup>

In 1850, the first American ship, the *Kate Heath*, entered Coos Bay having mistaken it for the mouth of the Umpqua river.<sup>53</sup> Most immigrants aboard this ship were part of the “Umpqua Town-site and Colonization Land Company,” and had purchased and been promised plots of land along the Umpqua River. These people were looking to settle on the plots of Oregon land they had purchased while living in California. However, an 1850 Oregon law “prevented

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<sup>49</sup> Younker, “Coquille/Kō’Kwel,” 54.

<sup>50</sup> Younker, “Revival,” 9.

<sup>51</sup> Caldera, 25.

<sup>52</sup> *Ibid.*, 26.

<sup>53</sup> *Ibid.*, 40.

companies from holding lands for speculative purposes,” and so, again, most people returned without creating permanent settlement.<sup>54</sup>

The second American ship to enter Coos Bay was the *Captain Lincoln* in 1852. They also arrived by accident; their ship and crew became stranded in a wreck having misjudged the sandspit at the mouth of the Coos River.<sup>55</sup> Afterwards, these settlers created the first white tent village in Coos Bay, and initiated interaction and trade between white and Native people.<sup>56</sup>

Shortly afterward, gold was first discovered in Coos Bay by the Gros-luis brothers in 1853, on the beaches of South Slough.<sup>57</sup> The white population then increased immediately and dramatically, in a gold rush which pulled people from all areas (but particularly from California) to settle in the area.<sup>58</sup> Early in 1853, the first group of gold miners to enter Coos Bay called it “Empire City,”<sup>59</sup> in order to distinguish it as a place of inspiration and meaning, but also to stake Coos Bay as the trading midpoint between San Francisco and Seattle.<sup>60</sup>

#### *Treaties, removal, and indigenous survival*

Though Native lifestyles had been changed drastically since the first colonist arrival—surviving diseases, encroachment, and violence—the mid-1850s mark an abrupt change in Native lifestyles in Coos Bay. Amid increasing instances of violence, in 1855, Native tribes along the Southwest Oregon Coast were forced to sign the Palmer treaty which ostensibly “removed them from harm’s way,” and relocated almost all Native people to the Siletz

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<sup>54</sup> Ibid., 42.

<sup>55</sup> Ibid., 42.

<sup>56</sup> Ibid., 45.

<sup>57</sup> Ibid., 31.

<sup>58</sup> Younker, “Revival,” 11.

<sup>59</sup> Caldera, 49.

<sup>60</sup> Jason Younker, personal communication, 2022.

Reservation in Yachats, Oregon (over 60 miles north of Coos Bay).<sup>61,62</sup> The United States knowingly used treaties to remove Native people from their resource-rich lands “so that miners and settlers could stake their claims without conflict with them.”<sup>63</sup> By the time the United States moved into the Pacific Northwest, treaties were a prominent tactic to rid Native peoples from the landscape for resources extraction and economic profit, in addition to being a well-versed way to get rid of Indigenous people altogether.<sup>64</sup>

Over 700,000 acres of ancestral homelands around the Coquille watershed, along with innumerable resources and hundreds of thousands of acres of land on the Coos, Lower Umpqua, and Siuslaw Rivers, were ceded in exchange for compensation and a reservation in Northwestern Oregon.<sup>65</sup> Coquille peoples just south of Coos Bay were rounded up in Port Orford, taken by steamboat to Portland, and forcibly marched overland to the Siletz Reservation.<sup>66</sup>

Native peoples on and around Coos Bay, including the Hanis, Miluk, and Coquilles who had resisted removal by steamboat, were forcibly marched from Coos Bay to Fort Umpqua on the Umpqua River, and then again forcibly marched to Yachats, Oregon, to join the southern portion of the Siletz Reservation.<sup>67</sup> Before their forced removal, oral stories indicate that the tribes rounded up all their canoes and buried them someplace along the estuary in Northern Coos Bay.<sup>68</sup> They did so believing they would return. Burying the canoes preserves them—sealing them in water so that no oxygen can degrade the wood.<sup>69</sup>

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<sup>61</sup> Younker, “Revival,” 12.

<sup>62</sup> “History – Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians,” Ctclusi.org, accessed March 5, 2023, <https://ctclusi.org/history/>.

<sup>63</sup> Caldera, 63.

<sup>64</sup> Jason Younker, personal communication, 2022.

<sup>65</sup> David R. M. Beck, *Seeking Recognition: The Termination and Restoration of the Coos, Lower Umpqua, and Siuslaw Indians, 1855-1984* (Lincoln, NE: University of Nebraska Press, 2009).

<sup>66</sup> Younker, “Revival,” 12.

<sup>67</sup> “History – Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians.”

<sup>68</sup> Jason Younker, personal communication, 2022.

<sup>69</sup> *Ibid.*

Native peoples believed their treaties would be recognized, but instead, they were displaced without treaty ratification. Life on the reservation was unjust and horrifying: “many of the Indians starved or died of diseases...[they] were discouraged from speaking their languages and practicing their traditional lifestyles. Their culture was demeaned and described as barbaric and backwards.”<sup>70</sup> The Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw estimate that over fifty percent of their population died on the reservation.<sup>71</sup>

Even in this great period of mourning, depression, starvation, and disease, there are remarkable examples of Native resiliency. Many on the reservation were forced to work in terrible agricultural conditions, but persisted nonetheless, and used that space to connect and foster cultural continuity.<sup>72</sup> Some indigenous people escaped the Siletz reservation. Tarheel, for instance, was recorded to have escaped (and been re-captured and returned to the reservation) multiple times.<sup>73</sup> Gishgui, an Upper Coquille wife of Coos Headman Kitsn-Jin-Jn, is another remarkable example. As an elderly, blind woman, she fled the reservation at night, navigating the coastline in the dark and hiding during the day. She traveled down the rough coastline by foot, and used rivers and estuaries by floating on an old piece of cedar bark. She reached South Slough by floating across the mouth of Coos Bay from the North, landing where the current Dairy Queen is located. She then contacted her daughter, who cohabitated with a white man on South Slough. She lived in a hollow log near her daughter’s home until she was able to move into her daughter’s house. During random, but intentional, raids for Native people by white military members, she was hidden under the floorboards of her daughter’s house.<sup>74,75</sup>

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<sup>70</sup> Younker, “Revival,” 12.

<sup>71</sup> “History – Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians.”

<sup>72</sup> Ibid.

<sup>73</sup> Caldera, 67.

<sup>74</sup> Younker, “Revival,” page 12.

<sup>75</sup> Jason Younker, personal communication, 2022.

This history does not reflect total decimation of Native presence on the Southern Oregon Coast. Removal mostly consisted of all Native men, and the youngest and oldest women in the tribes. Women who cohabitated with white men were allowed to remain on the reservation. It is because of these women that any escaping tribal members were able to return to their homelands, and it is largely because of these women and their children that cultural traditions were preserved and passed down.<sup>76</sup>

Native people on the Siletz reservation were forcibly isolated and held in Yachats for over 20 years. In 1876, Yachats became open for pioneer settlement and the reservation formally released tribal members.<sup>77</sup> Upon returning to Coos Bay, all places and resources held sacred by Native peoples were occupied by white people.<sup>78</sup> Native people became refugees on their own land, and “hid in plain sight” by working menial tasks alongside other unwelcome peoples such as Germans, who were also excluded as a result of political outcomes related to WWI and II.<sup>79</sup>

## **Ecological and colonial narratives**

### *Cartography*

With tribes recently forcibly removed north to reservation, the first step toward white domination was to map the area, important specifically because it allowed people to parcel up the land and sell it.<sup>80</sup>

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<sup>76</sup> Jason Younker, personal communication, 2022.

<sup>77</sup> “History – Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians.”

<sup>78</sup> Jason Younker, personal communication, 2022.

<sup>79</sup> “History – Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians,”; Jason Younker, personal communication, 2023.

<sup>80</sup> Jason Younker, personal communication, 2022.

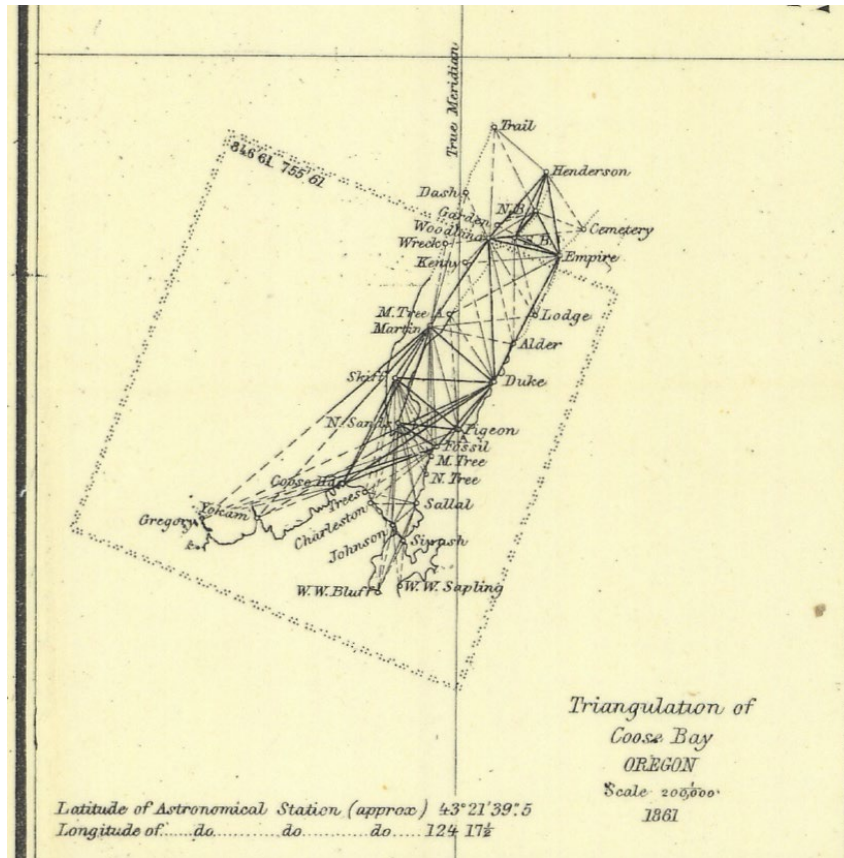


Figure 8. Triangulation of “Coose Bay, Oregon,” published in 1861.

The first triangulation map, from 1861, was produced not long after settlers arrived. The process of triangulation, especially for a bay as cartographically unknown to white settlers as Coos Bay, was a laborious task. The tremendous effort it took to put together this first map, less than a decade after settlement, evinces the colonial desire to control Coos Bay.

In the absence of Native presence, one of the first tasks that colonial settlers undertook was to change place names. Control of the landscape entailed creating new place names to reflect the new population and goals of the colonial society.<sup>81</sup> Removing Native names also normalizes the removal and facilitates the erasure of Native peoples. The first complete map of Coos Bay, published in 1865, along with the first triangulation map, show the immediate creation of

<sup>81</sup> Ibid.



colonial place names like “Charleston,” “Empire,” and “Gregory.” In fact, a comparison of these maps also shows how even lingering Native names were altered. For instance, “Coos” Bay itself comes from the colonial interpretation of verbally-communicated Native tribe names around this region. “Coos” has been recorded in numerous ways, beginning with “Cookooooose” from the journals of Merriweather Lewis and William Clark in 1804-1806,<sup>82</sup> to “Cahouse” in the journals of Alexander McLeod in 1828.<sup>83</sup> Among other names, these versions then became “Ku Kus” or “KaKoosh”<sup>84</sup> in the earliest colonial maps the Pacific Northwest, shortened to “Koos” (as seen in the 1865 map below), to “Coose” (as seen in the 1861 map above), and finally to the contemporary version “Coos.” The facilitation of these changes is not insignificant—it shows how rapidly Native existence was purposefully erased from the Southern Oregon coast.

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<sup>82</sup> Caldera, 1.

<sup>83</sup> *Ibid.*, 2.

<sup>84</sup> Younker, “Coquille/Kō’Kwel,” 365-6.

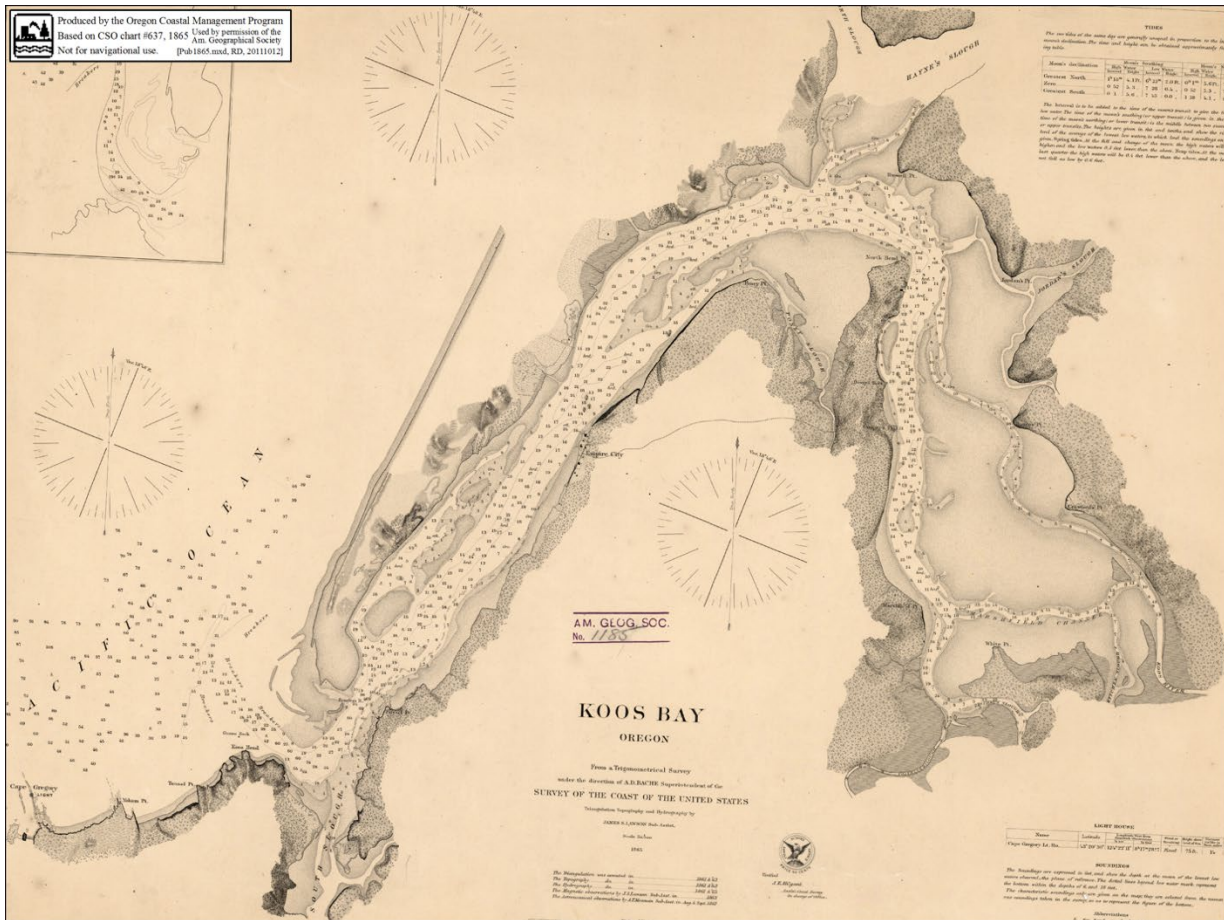


Figure 9. “Coos Bay, Oregon.” First complete map of Coos Bay, published in 1867.

### *The jetty*

Early maps of Coos Bay depict the “natural” shape of the bay, but the shape of the bay, especially the mouth, would have shifted over time. The Coos River is a volatile river. The tides change the water level dramatically, the channel changes based on rainfall, and water shoots out of the mouth to the ocean, much like a garden hose violently shifting under pressure.<sup>85</sup> Therefore, one of the first physical modifications to the bay was to anchor the mouth with a jetty. Colonial communities in on the Pacific coast communicated by sea, as there were no easily navigable roads at this time. A big driver in modifying the bay was to make it a safe harbor for

<sup>85</sup> Jason Younker, personal communication, 2022.

ships entering and leaving in order to partake in national economies of resource extraction—allowing people and commodities to enter or leave Coos Bay.

The plan for the jetty was approved by the Secretary of War in 1879—revealing the entanglement of the use of this coastline with the U.S. Department of Defense.<sup>86</sup> It was a time-consuming and expensive task, but one which was required in order to fulfill the colonial desires of movement of resources.<sup>87</sup> Rock quarries in and around Coos Bay provided most of the boulders.<sup>88</sup>

Adjacent to Coos Bay, at the mouth of the Coquille River, a similar pattern of environmental control arose—exemplifying the general disregard for indigenous cultures and environmental histories. Despite the availability of rocks from quarries, and protests from remaining Native individuals, white settlers around the Coquille River dynamited a culturally and spiritually-significant rock, called Tupper, or Oh-Mash (Grandmother) Rock, for the creation of a jetty.<sup>89</sup>

### *Dredging & land development*

Aside from the securing the jetty to artificially control water flow, the colonial settlers also modified water flow and depth in the main channel of the bay, and the surrounding estuaries. Dredging allowed for the deepening of the main part of the Coos channel. Primary reasons for dredging included creating a natural turn-around spot for ships, as well as allowing for larger ships to enter and leave the bay.<sup>90</sup> Dredging, unfortunately, changes channels used by fish (like salmon) who return each year from the ocean to spawn.<sup>91</sup> Deeper channels speed up

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<sup>86</sup> Charlotte L. Mahaffy, *Coos River Echoes* (Portland, Oregon: Interstate Press, 1965), 25.

<sup>87</sup> Jason Younker, personal communication, 2022.

<sup>88</sup> Mahaffy, 25-27.

<sup>89</sup> Younker, “Coquille/Kō’Kwel,” 107-9.

<sup>90</sup> Jason Younker, personal communication, 2022.

<sup>91</sup> *Ibid.*

water flow in those areas of the bay, and divert water from smaller channels, making it more difficult for salmon to return to their spawning location up the branches of nearby estuaries.

Another main driver to modifying the bay was to create land for development. Hills were steep and covered in trees (some several thousands of years old). Therefore, there was not a lot of land space to build a town for housing or farming. The low-lying estuaries, with tide flats and salt flats, became targets for modification that allowed people to build houses, farms, mills, etc.—in other words, create space for white settlement and cities. Much of these areas were filled in with dredging spoils, material rich in organic material, shells, and other sediment.<sup>92</sup>

### *Timber*

Following the peak gold rush in 1853, gold becomes scarce and no longer a profitable resource around Coos Bay.<sup>93</sup> Americans, instead, “discover” timber as massive resource and global export possibility.<sup>94</sup> It is hard to overstate how immensely logging shaped the structure, community, and environment around Coos Bay. In the 1850s, Coos Bay was covered with trees hundreds to thousands of years old—including Douglas fir, Sitka spruce, and the soon-to-become prized Port Orford white cedar.<sup>95</sup> In fact, it is currently hard to make any mention of trees without using the commodified term ‘timber.’ In our post-colonial time, timber appears synonymous with capital.

From the 1850s and for roughly another 100 years, logging flourished in Coos Bay.<sup>96</sup> Early settlers strategically used waterways, particularly estuaries, to log right down to the edge of the water. Charlotte Mahaffy, author of *Coos River Echoes* from 1965, inadvertently details the

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<sup>92</sup> Ibid.

<sup>93</sup> Caldera, 57.

<sup>94</sup> William Robbins, *Hard Times in Paradise: Coos Bay, Oregon, 1850-1986* (Washington, D.C., DC: University of Washington Press, 1988).

<sup>95</sup> Ibid., 4.

<sup>96</sup> Robbins, *Hard Times in Paradise*.

environmental destruction caused by logging, writing that “After the logs were sawed, they were pulled, usually, by five oxen over skid roads to the river.”<sup>97</sup> These logs were then left in estuaries to “come out with the winter and spring freshets” caught in a boom, and then floated across the bay to a lumber mill.



Figure 10. Photo taken from *Coos River Echoes*, by Charlotte Mahaffy, page 23.

The image above shows the damage caused to forest floors, and the dirt and silt produced (and then dragged into waterways) by skid-road logging. The effects of this silt are ongoing—the silt still sits in estuaries, disrupting habitat for Native species.

All kinds of development—roads, railroads, steam donkey engines, steam-powered piledrivers—were built specifically to facilitate the export of timber.<sup>98</sup> Though Coos Bay has also hosted a range of resource-extraction activities, ranging from fishing, farming, coal mining,

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<sup>97</sup> Mahaffy, 19.

<sup>98</sup> *Ibid.*, 21; Robbins, 82.

shipbuilding, to lumber manufacture, timber had the greatest impact on the colonial development, economy, and vision of Coos Bay.<sup>99</sup> Following World War II, only two years after Japanese surrender, Coos Bay was considered the “lumber capital of the world.”<sup>100</sup>

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<sup>99</sup> Robbins, 5.

<sup>100</sup> *Ibid.*, 107.



Figure 11. Aerial photo taken of Pony Slough, south of the present-day airport, in 1939.

This photo is part of the first collection of aerial photos ever taken of Coos Bay. Less than 100 years after the first colonial settlement in Coos Bay, it shows the immense logging needed to clear this area for colonial city development.



Figure 12. Aerial photo taken of South Slough, Coos Bay, in 1967.

Shows wide network of logging trails.





Figure 13. Contemporary photo of South Slough (2022).

Demonstrates silt leftover from more than a century of logging.

Over the course of over a hundred years of logging, this machinery, of course, has had massive environmental impacts. Very slowly, areas like South Slough, Coos Bay (which are now protected), are beginning to see the slow movement of silt out of the estuary. The photos above demonstrate the impacts of logging on this area, from logging for land development (1939 photo), to the logging trails around South Slough (1967 photo), and the current impacts of silt runoff in South Slough (2022 photo), even 50 years after logging stopped in this region.

## *Dams*

The ramifications of massive timber export included the need for log storage and transportation, and this occurred via the waterways. As timber was harvested, it was dragged or carried—first by animals, and then transitioning to faster, steam-powered machinery like steam-donkeys—into waterways.<sup>101</sup> By the early to mid-1900s, splash-dams dominated Coos River and estuaries systems. Mahaffy and others suggest that mass logging was a response to a variety of factors, including connections to the global economy and preparation for wartimes. For instance, she writes that “the franchise for splashing logs was an emergency measure for obtaining logs during the war years,” as there weren’t sufficient roads connecting to the main bay, and logging moved farther and farther from the main channel.<sup>102</sup>

Though Mahaffy mentions only two splash-dams in the entirety of her book, an article published in 2010 shows that the Coos waterway system, along with the Coquille watershed, were the hardest hit by splash-dams.<sup>103</sup> Because splash-dams facilitated mass movement of logs, they consequently altered streams and streambeds, and historical photos show “long stretches scoured to bedrock and little habitat complexity for salmon.”<sup>104</sup> To assist the splash-dams, loggers would also remove or dynamite downstream logjams or boulders, which further reduces salmon spawning habitat, as well as habitat for other key Native species.<sup>105</sup>

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<sup>101</sup> Robbins, 56.

<sup>102</sup> Mahaffy, 20.

<sup>103</sup> Rebecca R. Miller, “Is the Past Present? Historical Splash-Dam Mapping and Stream Disturbance Detection in the Oregon Coastal Province” (Oregon State University, 2010), 43.

<sup>104</sup> Rebecca R. Miller and U.S. Forest Service and the Oregon Watershed Enhancement Board (OWEB), *Splash-Dams and Log Drives: The Stream Remembers* (United States Department of Agriculture, n.d.), 2.

<sup>105</sup> Miller, “Splash-Dams and Log Drives,” 2-3.

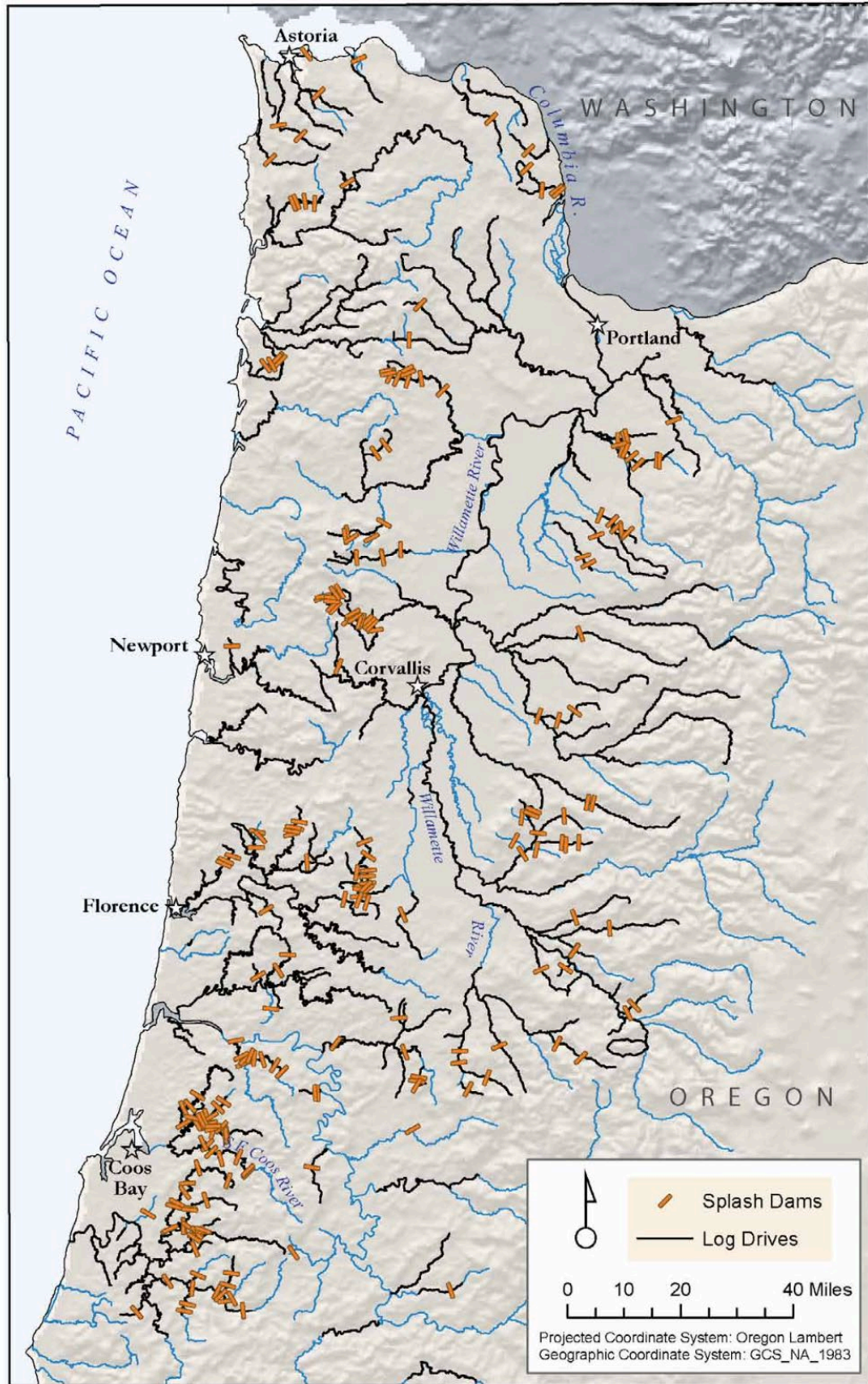


Figure 14. Rebecca R Miller's map of splash dams across Oregon.

Clearly, splash-dams were widely used resource for timber transport, and they had terrible effects on the estuaries.

### *Diking and agriculture*

In addition to damming, the waterways were physically altered by a process of diking and back-filling the estuary beds in order to facilitate farming practices.<sup>106</sup> The data on diking and back-filling is largely absent from literature about early agriculture and city development but played a key role in altering estuarine habitats. Dikes were placed in branches of estuaries to control the flow of water, allowing for back-filling of these low-lying areas for cattle grazing pastures.

Even if not targeting the actual estuary streambed, all surrounding areas filled in and estuaries would be shaped to flow around and through farmland. These strategies cut off Native species ecologies, and also damage the health of water in general, as estuaries filter water and provide areas for salt and freshwater mixing. Without the unobstructed flow of estuaries, there is no filtration system for water mixing, and therefore these critical areas have become endangered.<sup>107</sup>

### **Return to a broader Native narrative**

After Native people of the Southern Oregon coast were free to leave the Yachats reservation in 1874, they dissolved into their ancestral landscapes. It was not safe to be Native. Native people experienced heightened discrimination, isolation, and practices of assimilation.<sup>108</sup>

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<sup>106</sup> Jason Younker, personal communication, 2022.

<sup>107</sup> Ibid.

<sup>108</sup> Younker, “Coquille/Kō’Kwel.”

One of the first tactics to complete the erasure of Native peoples on this coast, and across the United States, was the establishment of Indian boarding schools in 1888, created to separate children from parents or to “kill the Indian, save the man.” While Chemawa Indian School in contemporary Salem, Oregon was only about 200 miles away, most Oregon Coast Native Children were sent to Carlisle, Pennsylvania.<sup>109</sup>

Then, in 1924, the Indian Citizenship Act declared Native people citizens. Though this appears to be a movement toward justice, it actually stripped Native people of their inherent right to self-determine, and subjected them to culturally-irrelevant laws. For instance, because citizens must pay taxes, most Native people in Coos Bay lost any parcels of land they had somehow retained during removal to back-taxes.<sup>110</sup>

Not long after, in 1934, the Indian Reorganization Act intended to “replace traditional ways of governance with a tribal council model—a model still used today and considered by the U.S. government as a more “democratic” model.”<sup>111</sup> This act, however, allowed the Coos, Lower Umpqua, and Siuslaw tribes to defend their status and pursue land claims as an Indian Tribe against the U.S. government—but also caused these tribes to fracture.

After much concerted effort, in the later 1930s, the Coos, Lower Umpqua, and Siuslaw defended themselves in court with testimonies of many elders about who they were and where they were from. The Court rejected their testimony as “hearsay,” and denied their status as an Indian Tribe.<sup>112</sup> Coquille tribal members, who had been included in the Coos, Lower Umpqua, and Siuslaw claims but hadn’t actually testified as Coquille in federal court, rallied to “collect

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<sup>109</sup> Ibid., 214.

<sup>110</sup> Jason Younker, personal communication, 2022.

<sup>111</sup> Younker, “Coquille/Kō’Kwel,” 72.

<sup>112</sup> Ibid., 73.

every possible historical document from primarily non-Indian sources.”<sup>113</sup> In 1943, due to the approval of Coquille people and territories by a white linguist from the Smithsonian Museum, J.P. Harrington, the Court ruled favorably for the Coquille Indian Tribe. This signified a tremendous feat, but an event which was also “bittersweet and exacerbated growing tensions” between Coquilles and members of the Coos, Lower Umpqua, and Siuslaw, who had just been rejected.<sup>114</sup>

One decade later, in 1954, the Indian Termination Act was passed. The Coquille Indian Tribe was effectively terminated, along with 61 other Western Oregon Indian Tribes and 109 tribes nationwide.<sup>115</sup> At a similar time, in 1952, the Indian Relocation Program forced assimilation of Native peoples. It offered “relocation and vocational training services... to participating Indians in exchange for agreeing to never return to their reservations,” and by 1980, more than half of the 1.6 million recognized Native people in the U.S. had been relocated.<sup>116</sup> This series of assimilation events undeniably tried to expunge the U.S. of all Native cultures, backgrounds, and existence.

Native tribes did not resign their identities. In Coos Bay, both the Coquille and Coos Tribes continued to meet and hold council meetings. In 1984, after a long legal battle, federal status was restored the Coos, Lower Umpqua, and Siuslaw tribes.<sup>117</sup> Finally, the Coquille Restoration Act passed in 1989, granting the Coquille Tribe federal recognition.<sup>118</sup>

In the aftermath of these events, it is crucial to return to a Native narrative, which celebrates how Native people have retained cultural memory, and probes how Native people

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<sup>113</sup> Ibid., 75.

<sup>114</sup> Ibid., 76-77.

<sup>115</sup> Younker, Ibid., 78; Wasson Jr., 23.

<sup>116</sup> Younker, “Coquille/Kō’Kwel,” 80.

<sup>117</sup> “History – Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians.”

<sup>118</sup> Wasson Jr., 14.

continue to practice cultural knowledges in the face of such extreme, legalized erasure. Because Native tribal cultures revolve around their environment, the heavy changing of their landscape by colonial settlers only further alienated them from their ancestral cultures and practices.

Nonetheless, their resistance and resilience originate from their capacity to grow and shift, which Native tribes in Coos Bay have done and continue to do. This historical research underscores that Native cultures, just as landscapes, are organic entities.





chronological separation to emphasize the extent of change occurring in this landscape, but placed them adjacent to one another to weave together these blocks of time and space.

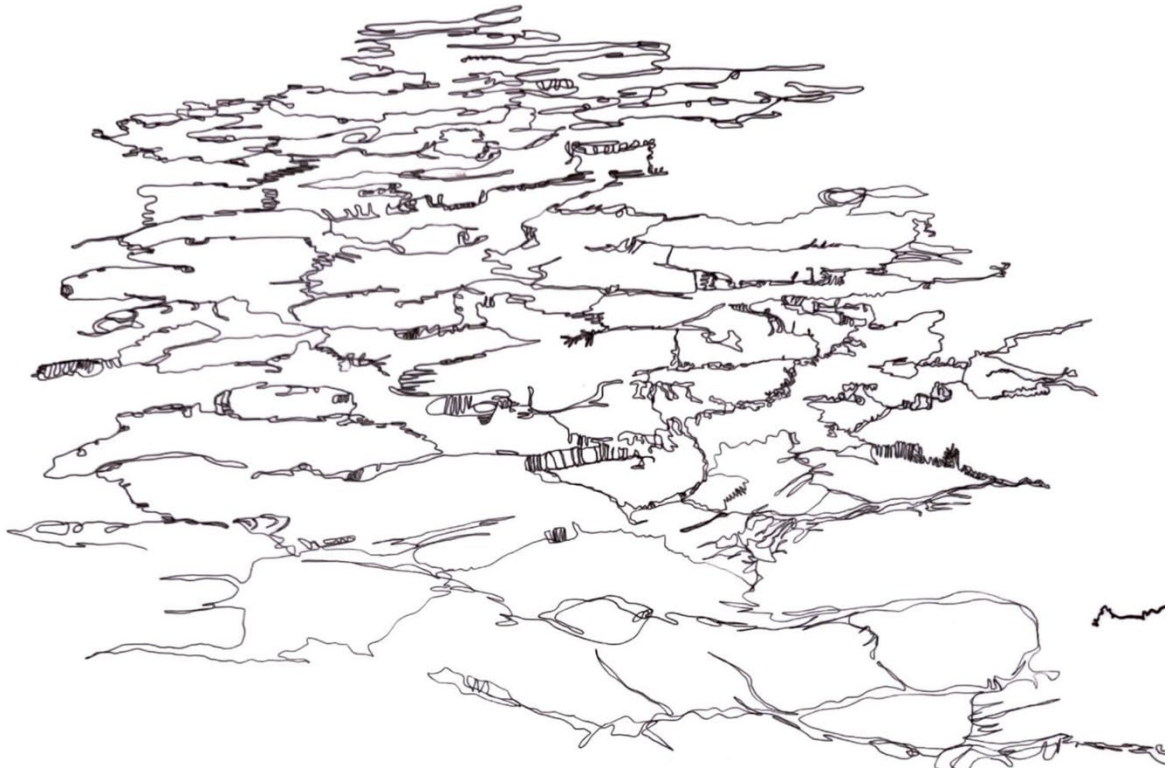
This overall ‘overdrawing’ map is a reflection on “survivance,” a term created by Gerald Vizenor, which blends the words survival and resistance specifically within a Native context.<sup>119</sup> ‘Overdrawings’ strive to “integrate and interpret the subtexts of a place,”<sup>120</sup> and after having examined the history of colonial and indigenous studies in Coos Bay, I hoped to create a map that holds a plethora of realities and timeframes including colonial cartography and violence, and Native removal, survival, and flourishing. I also engaged with the subtexts of Coos Bay’s history by pulling through motifs of water and poetry describing Native experiences of isolation and joy.

I find that maps often create static representation of landscapes, fixed to a certain time that data for the map was collected. In this ‘overdrawing,’ I generated a map that defies the rigidness of typical maps. The first quadrant is a speculative map, in which I drew together images of water I have taken on South Slough to create an understanding of the landscape pre-colonial contact. I traced these images following the lines of light reflecting off the water, without picking up my pen, in order to create a fluid 2-D experience of the water.

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<sup>119</sup> Gerald Vizenor, ed., *Survivance: Narratives of Native Presence* (Lincoln, NE: University of Nebraska Press, 2008).

<sup>120</sup> Liska Chan, “Overdrawing” in *Active Landscape Photography: Diverse Practices*, edited by Anne Godfrey (Routledge Press, forthcoming June 2023).



Quadrant 1 of map titled *Survivance on Coos Bay*.

My intention with this portion is to be specifically speculative. There are no maps of Native understandings of Coos Bay prior to colonial contact. Native individuals did not create maps of their geographies in the material (often paper) way we currently conceive of maps. Native understandings of their geographies may have been relatively divergent from our current conceptualization of this landscape—they likely understood their geographies as entwined with their experience of time, of resources, of language, or of cultural sites.<sup>121</sup> All maps created were from the explicit perspective of colonial settlers. Mapping water allowed me to counter the inflexibility of colonial maps.

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<sup>121</sup> Whaley, 5-6.



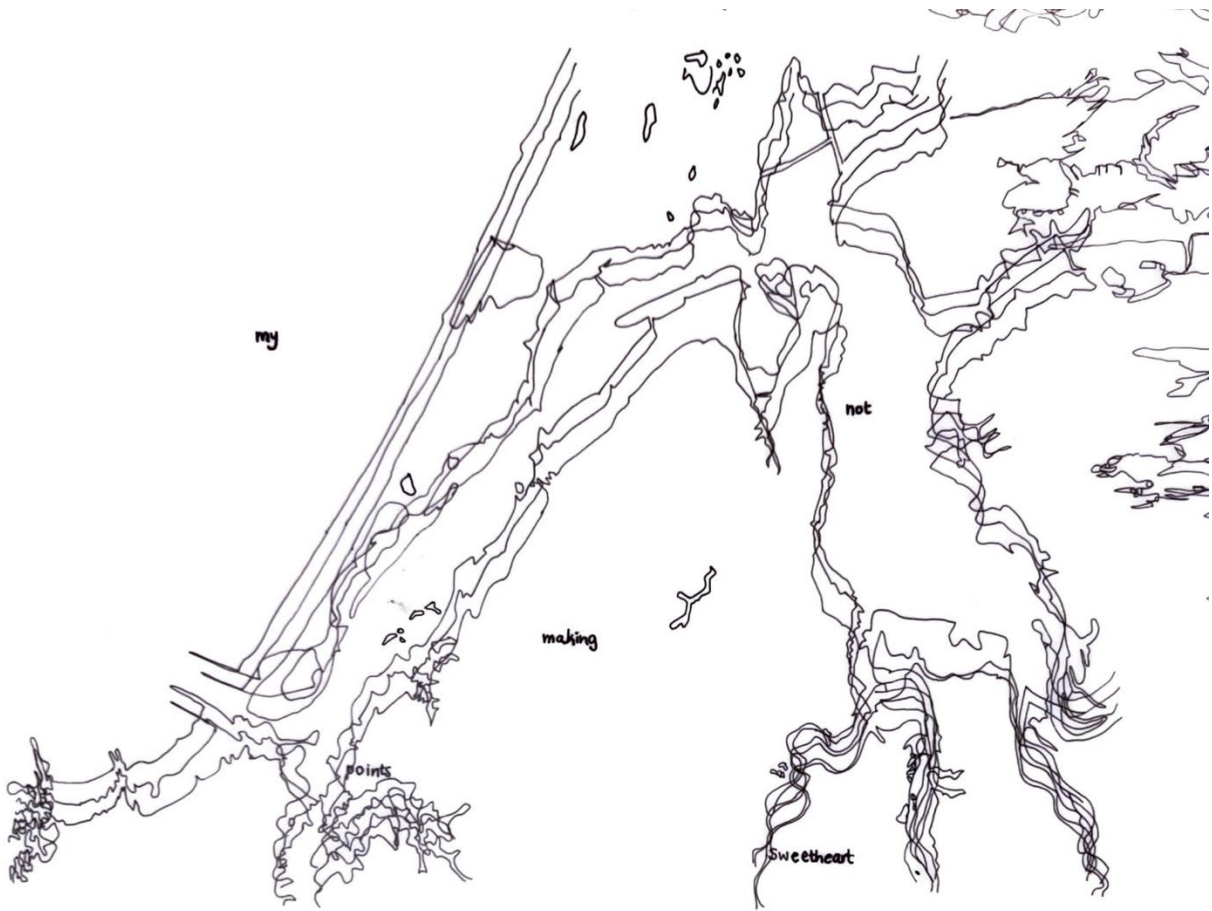
Quadrant 2 of map titled *Survivance on Coos Bay*.

The top right corner is a tracing of the earliest formal and detailed map of Coos Bay, created in 1861,<sup>122</sup> which I have bolded to mark the piece more sharply. From the onset of colonial contact with Native peoples, and due to the extensive trading networks between Native peoples, disease spread rapidly. Ninety percent of the Native population had passed from the spread of European diseases before any white settlers entered Coos Bay in 1850.<sup>123</sup> In this map, I included 10 percent of Sherman Alexie’s poem “Exact Drums,” writing one out of every ten words over the map. Alexie is a Native Spokane and Cœur d’Alene poet, and does not share the specific historical and geographical background as the Native people living in and around Coos

<sup>122</sup> A. D. Bache and James S. Lawson, *Koos Bay Oregon* (American Geographical Society No. 1185, 1865).

<sup>123</sup> Younker, “Coquille/Kō’Kwel,” 54-55.

Bay. From my perspective, though, I found immense overlaps in emotional and embodied experiences—particularly of loss (of home and language), longing, shame, and belonging—between his work and the tribes in my study site. Using only 10 percent of his words allowed me to better understand the significance of disease on a cultural and linguistic landscape. The reduced poem is beautiful and highly meaningful, but not a comprehensive representation of Alexie’s original poem.



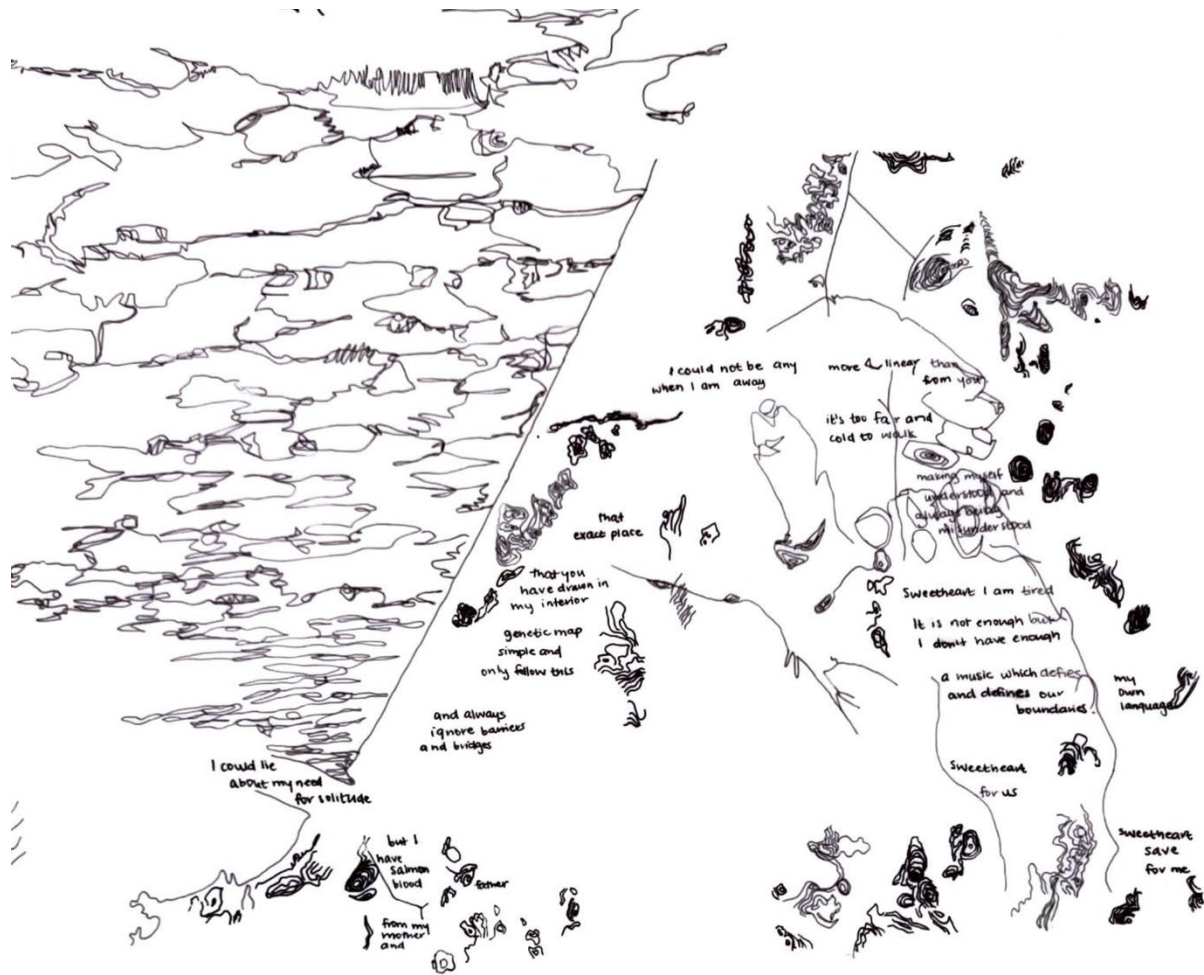
Quadrant 3 of map titled *Survivance on Coos Bay*.

The bottom left quadrant has a series of slightly adjacent maps from 1908, 1953, and 2011,<sup>124</sup> giving a blurry and almost dizzying impression of the landscape. These maps illustrate how the landscape has changed as a direct result of colonial contact. For instance, the 1908 map does not include a jetty, but both the 1953 and 2011 maps do. The latter two maps also reveal the airport created at the bend in the main channel of Coos Bay, again a product of dredging and back-filling. Over this quadrant, I have added one tenth of the words in the previous quadrant, equaling one percent of the words overall. This practice helped me visualize the few Native

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<sup>124</sup> O. H. Pitterson, Coos Bay Oregon (Washington, D.C.: National Oceanic and Atmospheric Administration historical chart and Coast and Geodetic Survey No. 5984, August 1908); Coos Bay (National Oceanic and Atmospheric Association and U.S. Department of Commerce No. 5984, 1953); Coos Bay (National Oceanic and Atmospheric Administration nautical chart and Coast and Geodetic Survey No. 18587, 2011).

people allowed to remain in Coos Bay—primarily, if not only, indigenous women cohabitating with white men, and the erasure of all other Native individuals who were forcibly removed to Yachats in 1855.<sup>125</sup>



Quadrant 4 of map titled *Survivance on Coos Bay*.

The bottom right map contains elements of recent maps, images of water, and lines pulled from drawings I completed while kayaking the sloughs. I also included lines drawn of my own hands, which serve to explicitly show my subjectivity in the understanding of this landscape. In this quadrant, I did not draw all the borders of land and water, but instead focused on areas of

<sup>125</sup> Wasson Jr., 10.

elevation change. In the waterways, I re-drew Sherman Alexie's poem a third time; however, this time, I chose passages specifically. The poem is still not "whole," meaning that it does not include every original word in the poem or the right spacing, but choosing key passages allowed me to represent the dedication of the CTCLUSI and Coquille Tribe's cultural restoration efforts.

This overdrawing enabled me to clearly see the multiplicities of place,<sup>126</sup> and the inability to fully grasp the fluidity of a landscape on a map. Most importantly, these maps immersed me, and hopefully viewers, "into the landscape as an experience and [showed] a story of landscape constantly undergoing change." Through exploring "survivance," I was able to reframe the history of the Native and ecological histories of Coos Bay through not just a survival lens, but one which also prioritizes resiliency, hope, and growth.

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<sup>126</sup> Chan, "Overdrawings."

**2// Grief map in trees**

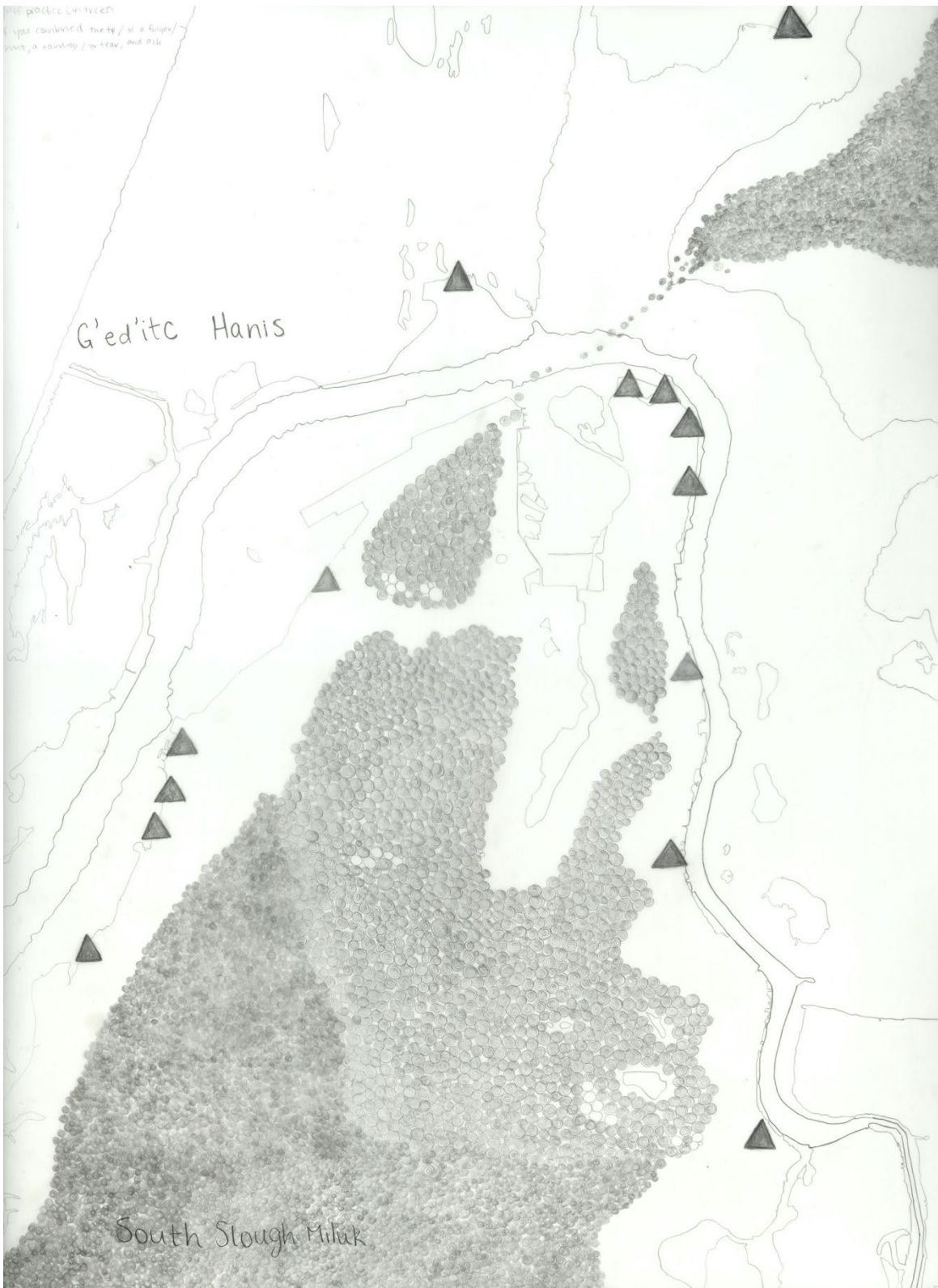


Figure 16. Map 2 titled *Grief map in trees*, 2023.



In this second ‘overdrawing,’ I used a printed map of Coos Bay from survey data conducted in the 1980s that Younker gave me as the base layer outline of Coos Bay.<sup>127</sup> I lightly sketched the perimeter of the waterway and bolded the deep center channel in pencil. I included cultural data taken from several maps in *Changing Landscapes: “Sustaining Traditions” Proceedings of the 5th and 6th Annual Coquille Cultural Preservation Conferences,*” including several names of tribal sites in their respective areas on the map, and village sites, which I overlaid and marked with triangles.

I then examined and overlaid a U.S. Geological Survey map published in 1900 (using survey data from 1895-6), intended to show “Land Classification and Density of Standing Timber.”<sup>128</sup> From this map, I marked all areas that had been logged or burned by 1895, and left the “cultivable land” areas clear.

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<sup>127</sup> *Coos Bay Oregon* (Washington, D.C.: National Oceanic and Atmospheric Association and Coast and Geodetic Survey No. 18587, 1993).

<sup>128</sup> Charles D. Walcott et al., *Twenty-First Annual Report Part V: Land Classification and Density of Standing Timber* (U.S. Geological Survey, 1900).



Figure 17. U.S. Geological Survey map published in 1900 showing land use.

I filled in the logged areas with many circles, mimicking the cross-sections of tree trunks, in order to tangibly show the impact of logging such a large quantity of trees near the tribal villages. I filled the burned areas with shaded circles, trailing a bit to demonstrate ash and the effects of mass burning on the ecology of the area. In light of Native uses of controlled and

cultural burns to cultivate balanced growth on the Southern Oregon coast,<sup>129</sup> this mass burning emphasizes the colonial desire to create an entirely different landscape—a capitalistic lens for profit, resource extraction, monopoly of lands, ultimately only serving white lifestyles.

Several reflections arose from this process. Namely, the map makes clear the immediacy with which white settlers grasped and changed the landscape. Native individuals had been forcibly removed in 1855, and less than 50 years later, a vast quantity of land had been stripped of trees. In forty years, the ecosystem of the area was fundamentally disrupted, and removal of Native tribes was the first step which allowed these changes to take place.

Aesthetically, this map has not come together quite as fluidly as I imagined it, though I am very interested in the patterns of lines in the tree trunks and see their texture adding depth to the experience of the ‘overdrawing’ and the landscape. Through making, I learned that the process of ‘overdrawings’ is not always tidy or beautiful, and I tried not to further hide the violence this landscape has endured in my work. I spent most of the making of this map in tears.

The tree trunk cross-sections also resemble fingertips. Throughout this process, I thought and grieved often about how many trees and hands were lost in the colonial pursuit of resources. The process gave me a bodily sense (ache) for the violence that occurred to Native people and trees, especially in relation to indigenous people’s relationship to the natural world—which appears to be everything, a fluidity, a recognition of themselves *in* nature and not *outside* nature. This reflection allowed me to see trees as sacred, ancestors, family, or guides, and then see a dual loss of hands and trees as one. I suspect that my vulnerabilities in this area are reflective of my own past, and family experience of home and community loss.

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<sup>129</sup> Wasson Jr., 15.

3// Cutting through your movement with our lines



Figure 18. Map 3 titled *Cutting through your movement with our lines*, 2023.

A second overdrawing accompanies the previous overdrawing (titled “Grief map in trees”). I used the same 1980s base layer map, in the same area, and pulled forward only the streets in pen. Then, I re-traced the tribal village site locations onto this map and used another map from the book *Changing Landscapes* to show a speculative flow of resources between tribal sites. This map is a juxtaposition of movement, and I created it, partly, to demonstrate the effects of the logging and burning.

The streets are the voices of white colonizers, following the edges of the water and cutting across tribal sites. This overdrawing indicates to me that movement tends to follow water. Water is central to both a colonial and indigenous perspective because it is not only the most essential resource, but also the medium for movement. Here, my map also indicates the importance of water for colonial settlers because it is the medium for resource (i.e. timber) transportation.

Further, the streets are all linear. Colonial settlers used straight lines, with boxes and grids, to organize land. The roots of this organization are partly military-based,<sup>130</sup> and they provide a clear way to monitor, survey, parcel up, and sell land. On the other hand, cultural data overwhelmingly shows that Native tribes didn’t have distinct territories of land, but were rather stewards of land, and were highly mobile across land and water.<sup>131</sup> I have included their movement together with colonial movement to a) point out, once again, the speed with which white settlers removed and disregarded indigenous histories, and massively altered the physical landscape and b) to place indigenous life firmly into the map, particularly over routes of transit. The map asks me: what kind of travel, what kind of movement (and thus what kind of life) do we

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<sup>130</sup> Liska Chan, personal communication, 2023.

<sup>131</sup> Tveskov, 152; Whaley, 10.

value? How can we reconcile with this data, with erasure of Native lives, and meet it with affirmation that Native lives and places exist, matter, and are seen?

#### 4// South Slough runs



Figure 19. Map 4 titled *South Slough runs*, 2023.

South Slough is a large network of estuaries branching off the southernmost arm of the bay. The importance of estuaries in coastal ecologies cannot be over-stated: estuaries are some of the most critical ecosystems, coalescing nutrients and sediments from rivers and the sea,

providing habitat to diverse species at the interface of freshwater and seawater, and serving to filter water.<sup>132</sup>

South Slough serves as a remarkable case study of the persisting colonial effects on estuaries and indigenous peoples around Coos Bay. Colonial settlers used South Slough for timber production and transportation as well as for agricultural use. In the immediate aftermath of colonial settlement, South Slough, like much of Coos Bay, was logged down to the edge of the waterway.<sup>133</sup> The long history of private timber production eroded forest lands and filled the estuary beds with debris and silt.

In conjunction with timber harvest, agricultural use around estuary stream legitimized “channelizing the stream and removing trees from the stream bed,” the effects of which include exposing streams to more sunlight and faster water, thereby raising the water temperature.<sup>134</sup> Both timber and agricultural practices, thus, reduced habitat for numerous Native species—including salmon, a keystone species for both ecological balance and Native tribes’ subsistence and culture, and other streambed species such as needle grass and salt grass, which facilitate salmonid species spawning and habitat for Native species at large.<sup>135</sup>

In 1974, South Slough became the first National Estuarine Reserve, largely due to the efforts of Native tribal advocates such as Robert Younker for estuary rehabilitation.<sup>136</sup> Both the Coquille Indian Tribe and the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw partner in estuary rehabilitation and research. South Slough is an excellent example of the resiliency of the natural world, which takes in what has been harmed, creates, sustains, and

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<sup>132</sup> Patricia Wheareat Phillips, *Ethnobotany of the Coos, Lower Umpqua, and Siuslaw Indians* (Corvallis, OR: Oregon State University Press, 2016).

<sup>133</sup> Robbins, “Hard Times in Paradise.”

<sup>134</sup> Coos Watershed Association, “Willanch Creek - An Economic and Environmental Success,” January 17, 2020, [https://www.youtube.com/watch?v=sizU0\\_ODqrc](https://www.youtube.com/watch?v=sizU0_ODqrc).

<sup>135</sup> Jason Younker, personal communication, 2022.

<sup>136</sup> *Ibid.*

decomposes life. In a sense, South Slough holds many truths—the cycles of life and death, harm and regeneration—at the same time. Though a slow process, in the past 50 years of preservation, this area exemplifies the capacity for healing Native ecologies.

South Slough also bear witness to a deep entwinement of Native histories and culture, particularly with colonial settlement. Native life flourished along this slough before colonial contact. After forced removal, however, South Slough became one of the only safe areas for indigenous existence, particularly for Native women cohabitating with white men. Many “undesirable” peoples found refuge on South Slough, such as Germans and Native peoples. Those who fled the reservation, too, had significantly easier times concealing themselves in the terrain on and around South Slough.<sup>137</sup>

The antithesis to this colonial method of extraction is Native use of resources. It is exemplified by a powerful and illustrative story of the first salmon run in Coquille history—a practice that spans pre and post-colonial settlement. After often a long, cold, and wet winter, when salmon would first return to the estuary, each family or tribal location would catch, cook, and eat only one salmon, burning a fire at the water’s edge. The families and villages upstream could see the light illuminated, and know that the salmon had returned, and it was their turn to catch one salmon. Not until all villages and tribes had eaten, and more salmon returned, would all people on the river catch more fish for storage. This practice ensured the survival of both the people and the salmon—these early salmon were welcomed and allowed to spawn, ensuring more early returning salmon for the following year. This demonstrates the tribes’ network of shared agreements between tribes, spaces, and resources, as well as practice of gratitude and recognition of resource balance and stewardship.

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<sup>137</sup> Jason Younker, personal communication, 2023; Caldera, 65.



My overdrawing of South Slough emerged organically as a reflective map. The base of this map was taken from my direct view of the waterway, created as a blind contour drawing. The tides along Coos Bay, and particularly in South Slough, change the water level drastically, and I showed this by highlighting the curvature of the low-tide stream with words. Echoing the sliver of river left in the slough at low tide, I filled in the innermost curve of the water with a poem I wrote about the slough and the first salmon run, reflecting on the colonial damage to the streambed in front of me, over-fishing of salmon in the area, and the diminishing numbers of salmon able to return to spawn:

I couldn't tell you enough times  
in the way you would hear me. I am trying  
to tell you they would only take one salmon. Now  
there are no salmon. How can there be  
more when you stripped the slough bed and salt grass;  
only silt. When women are in crisis  
they choose not to have children. No eggs  
no more eggs. How can they return  
the bones where there are no  
bones left to return? I couldn't tell you  
in enough times  
in one way you would hear me. I couldn't

This overdrawing also serves as a speculative map of the area. My location, at the crisscrossing of the slough and higher in elevation, is an example of critical areas along the slough where Native people would have resided because they could see from many directions. In effect, I might be seeing a mirror image of what someone saw 150 years ago, or longer. The tides and water move in the same way, and Valino Island in front of the Younker's house was still there.

Though all the trees have been replaced due to logging, new ones are growing slowly back and exist in the landscape.

## 5// Ghost tree



Figure 20. Map 5 titled *Ghost tree*, 2023.

I am very curious about how to map trees, especially that have been harvested. I am curious about how to remember them, how to include them in the landscape, and how to keep them alive in our cultural memory.

I created this ‘overdrawing’ as an exploration of these questions. According to Chan, ‘overdrawings’ seek to “encourage ghosts of the place to emerge,” particularly for the maker. In reflection of these lost trees, and the history of timber in Coos Bay, I made a map of a “ghost

tree” by drawing lines, in circles, to create a tree trunk. Each time I finished 20 lines, I filled in the last outer edge with a story or information that resonated with me as I drew the lines.

Earlier trees in Coos Bay may have been up to 2,000 years old, or older!<sup>138</sup> Now, none of these old-growth trees remain. For me, my ‘ghost tree’ is in honor of these trees and their history of decimation, and the decimation of indigenous stories, sacred places, and ancestors. It is a way of seeing them again—I drew to put them back into our memory. I drew it to remind me individually, and hopefully us, collectively, that healing and restoration take a long time. It will take a millennia before we have 2,000-year-old trees this old again. We must take steps to support this the restoration of forest and estuarine habitats, teach our future generations about the destructive colonial history, and atone for our actions by prioritizing traditional ecological knowledges.

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<sup>138</sup> Robbins, “Hard Times in Paradise.”

## 6// Farming land (shells)



Figure 21. Map 6 titled *Farming land (shells)*, 2023.

In this map, I examine farmland around Coos Bay. Similar to the overdrawing “Grief map in trees,” I used the 1900 U.S. Geological Survey map to mark all areas designated as “cultivable land.”<sup>139</sup> The original 1900s map is a story of power and resource extraction. It

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<sup>139</sup> Walcott et. al.

normalizes the division of land for capital production—namely timber and agriculture. I am working to untangle this map, and show how land use revolves around water.

In this map, and my resulting overdrawing, it is clear that all land designated for farming specifically follows the curves of estuaries. Because Coos Bay, and much of the Southern Oregon coastline, has significant elevation ranges, estuaries were immediately targeted by colonial settlers as the only flat areas suitable for farmland. Dredging remains from deepening the main bay were used to fill in estuaries and low-lying areas. Often, dredging brought up massive amounts of shells, which were then used to fill in the sprawling branches of estuaries. Shells, full of minerals, expedited the creation of new soils that supported grassland and cattle-farming. Diking and damming also aided in back-filling estuarine areas for grassland, and allowed farmers to direct and shape the main estuary channel through their farmland. Cattle, thus, also became a significant part of the colonial landscape of Coos Bay, specifically on filled-in estuary beds.<sup>140</sup>

To this day, remnants of dredging, diking, and damming are present around Coos Bay. The effects are significant: not only have estuaries been narrowed and filled in, but large swaths of land are despoiled by cattle feces, the runoff choking streams and rivers of their oxygen, as they contain harmful and corrosive elements like nitrates. Examples of opening dikes or dams, in an effort to flush out these landscapes and allow estuarine branches to reestablish themselves, have largely failed because the quantity of cattle-based nitrates released into waterways causes vast die-offs of already-endangered species.<sup>141</sup>

My overdrawing probes this history by asking: What remains of estuaries? Who is included in their history? And how can we protect Native ecologies in the future? It

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<sup>140</sup> Jason Younker, personal communication, 2022.

<sup>141</sup> Ibid.

holds this history by “filling in” all lands designated for farming with a pattern similar to coastal shells. For me, the pattern solidifies the entangled history of land and water manipulation. It shows how these critical habitats, stewarded by Native peoples, were made invisible. Finally, it suggests that colonial people changed the landscape so that when Native people returned, their landscape was unrecognizable, and didn’t include them anymore.

## Conclusion

...modern anthropology needs to be about continuity, change, resiliency, and the present as well as about the past. Anthropologists must strive to avoid disenfranchising treatments that separate the living from their heritage... our cultures are under a constant “process of change and negotiation,” and this continues today.<sup>142</sup>

In this thesis, I offered new insights into the indigenous and colonial history of Coos Bay through counter-mapping. Clearly, white settlements entered this landscape with a keen eye toward resource extraction. Displacing Native peoples from this region was the first step in creating an ideal white society. Native lives did not have a place in the white vision of Coos Bay. Following removal, white settlers completed the domination of Coos Bay, staking out land claims and monopolizing resources for local and global economies.

In the face of the upmost vulnerabilities, surviving disease, violence, removal, depression, and later, termination, and assimilation, Native people of the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw and the Coquille Indian Tribe have never been more resilient and resourceful. They continue to practice Native traditions, engage deeply in their history and contemporary culture, and steward their landscapes.<sup>143</sup>

With this historical context in mind, I created novel maps of Coos Bay which problematized this environmental and indigenous invisibility. My ‘overdrawings’ reveal to me that no one map, no one landscape, is a complete picture. Each map intends on showing a different facet of meaning. These ‘overdrawings,’ in collaboration with the study of colonial maps from Coos Bay, are important because they question what information, and which perspectives, have been included or excluded from cartography. The practice of ‘overdrawing’

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<sup>142</sup> Younker, “Coquille/Kō’Kwel,” 6.

<sup>143</sup> Younker, “Coquille/Kō’Kwel.”

also reveals that it is perhaps impossible to draw a landscape in its wholeness. Landscapes are never complete, they are always changing. White settlers have decided to create rigid definitions of space, and my ‘overdrawings’ act as counter-maps by attempting to show more fluid and culturally-relevant experiences of landscape.

My ‘overdrawings’ represent my personal reaction to this history of colonial violence. One generative task of ‘overdrawings’ is to explicitly acknowledge personal and subjective understandings of place, “[fostering] access to the maker’s internal dialog and relationship to the complexities of place.” Though in no way equal, my ‘overdrawings’ allowed me to draw on my own familial background of forced displacement to view the complex history of Coos Bay with more care, and witness, describe, and make visible Native experiences of forced home and culture loss and Native strength.

There are many ways I gained knowledge and meaning in my study of this site, but ultimately, I saw firsthand that “knowledge... is not built up but grows along the paths [people] take, both on the ground and in the air.” I made the most intense connections to the landscape and to people when I was physically in Coos Bay, and when I was making the ‘overdrawings.’

Similarly, I learned that many Native peoples of the Coquille and CTCLUSI tribes situate their knowledge in their landscape. Outside of their landscape, many Native peoples express that they don’t know their cultural practices. However, upon engaging with their landscape (for example, clamming or fishing), they can speak to a breadth of cultural knowledge.<sup>144</sup> Younker, Chief of the Coquille Indian Tribe, has interacted deeply with his ancestral landscape throughout his childhood and adult life, and holds a wealth of place-based knowledge which was incorporated throughout this project.

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<sup>144</sup> Ibid., 52; Jason Younker, personal communication, 2023.



Place-based, embodied, and emotional knowledges aren't widely accepted in academia, but these forms of meaning making are critical to Native cultures and peoples.

## Appendix

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Minu-Sepehr, Ava. 3// Cutting through your movement with our lines. Eugene, OR, 2023.

Minu-Sepehr, Ava. 4// South Slough runs. Eugene, OR, 2023.

Minu-Sepehr, Ava. 5// Ghost tree. Eugene, OR, 2023.

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