Tour Narration Outline

May 26th 9am – 4:45 pm

- 1. Intro Narrative
- 2. Site Narratives and Facts
- 3. Sources for Narrative and Facts
- 4. Further readings
- 5. Tour Schedule
- 6. Tour Checklist

Tour Schedule

Friday, May 13th, 9 – 4:45

HARD ROCK

- 8:45 Tourists Meet at UO Onyx Parking Lot
- 9 am Leave UO [use bathrooms before leaving] 50 min drive
- 9:50 Arrive Quarry mine 20 min tour

5 min drive

10:15 - Hills Creek Dam 20 min tour

- 10 min Drive
- 10:45 View of TV Butte 45 min tour

10 min drive

- 12:00 LUNCH @ Fish Hatchery 45 min picnic [bathroom opportunity]
- 12:45 Leave for Eugene 70 min drive to Junction City Pond Park 10 min stop for [coffee opportunity]

SAND AND GRAVEL

2:05 - Delta Sand and Gravel [bathroom opportunity]
40 min tour with Jenna
10 min drive
2:55 - Urban Reserve Site
20 min tour

10 min drive

3:25 - Junction City Ponds [bathroom opportunity]

30 min tour

10 min drive

4:05 - Delta Ponds

30 min tour with Jeff

10 min drive

4:45 - End at UO Onyx Parking Lot

** At Each Site

- A. Relay facts and narrative (roughly 5 minutes) OR Professional Speaks
- B. Tourists walk around and explore site with prospective tools

Intro Narrative

There are thousands of current and former extraction sites in Oregon. These sites on this tour represent larger themes at play in Oregon's aggregate extraction network. As we follow a trail of Oregon aggregate, themes are developed that allow this expansive and complex system to become distilled into a conceptual framework.

Aggregates start with the source material, and for Oregon, that material is almost exclusively Basalt or Sand + Gravel. How these materials differ would become apparent as we move through the tour.

[Pass aggregate around the group]

The aggregate supply chain is relatively simple. Extraction sites most often act as storage and distribution hubs that go directly to development, so it is easily distilled into a line segment with two points – source and destination. It's an easily self-replicating model of material production. The supply chain is almost relatively short – 90% of aggregate comes from within 35 miles of the project site. In a world of hyper-globalization, where precious minerals cross borders easier than humans, benign aggregate remains local. And with it, the problematic reverberations of extraction can't be outsourced either.

The supply chain of source to destination is a simple explanation of aggregate extraction, however it doesn't contain space for memory or projections into the future. Mines are finite - they have skeletons. There are also projections for the next iteration of the segment to begin.

The sites on this tour show sources and destinations, as well as post-use sites and prospective extraction sites. This tour asks the viewer to consider the connection between the rural, exemplified by Oakridge, and the urban, represented by Eugene. As we move between these two regions, it's important to meditate on who benefits from the sites on this tour and where the aggregate materials eventually flow.

As someone on this tour, it's also important to be cognizant of how the urban extends itself into the rural – and of how the urban's extension – done to build its own cultural framework – relates to the shaping of cultural frameworks in rural communities.

We might not own these sites, but these voids, structures, and empty fields are made by us all. As we move through this tour, I ask you to be reflexive - to think about how these sites intertwine with your life, how your dreams of a future necessitate the expansion of this network, and to think about how we can actively shift the processes to better align with how we want to see out world grow.

[I'll be intertwining facts about each site with a broader, connected, narrative about critical tours, aggregate exploration, and meditations on themes larger than the site as we move through the tour.]

Site Narratives and Facts

Basalt Quarry

Facts:

- Extraction at a site could be 25-50 years, or longer (Drew, et al, p. 20)
- More than 90% of aggregate is extracted within an average of 35 miles to development sites. (Drew, et al., p. 24)
- In Lane County alone, The USFS used approximately 85,000 cy of aggregate for assiting timber sale and public works projects in 2021. (Kreidler)
- Roughly 2500 aggregate mine sites are on Oregon USFS lands (Achterman, et al., p. 15)
- Oregon uses roughly 52 million tons of aggregate a year and the demand is projected to grow to 150 million tons by 2050 (Achterman, et al., p. 39)

Narrative:

Basalt – the most common rock in Oregon, was deposited 10-20 million years ago. Essentially, it's hardened lava. The buttes that dot Oregon's landscape are most commonly basalt intrusions – lava that pushed up the earth's crust but didn't break through. These buttes make basalt easily accessible identifiable and create delineations in space for claiming this resource. Unlike S+G deposits, basalt is found in one solid mass and must be drilled and blasted to create usable product.

What we have before us, is an abandoned basalt quarry. Information about where material from individual mines goes is almost impossible to find out – even the amount extracted from each site is required to be recorded and often is not. Likely, the aggregate was used to develop logging roads and local development projects.

As I noted before we embarked on this tour, I'll be intertwining a bit of information about each site with an overarching narrative about aggregate extraction, creative engagements with landscapes, and the importance of critical tours as an appropriate means of exploration.

So to pivot, I'd like to situate aggregate extraction in a larger spatial and theoretical context and introduce how critical tours begins to shape our relationship to, and perspective of, these landscapes.

Extraction is most often a rural process, with rural communities and rural ecology affected significantly. Extraction in these rural landscapes not only takes rocks and minerals, but it also takes the physical foundation of a past and the metaphorical foundation for a future – the control over human and ecological communities to self-determine on that piece of land. Soil that once held life is often left vacant. Land that fostered human and ecological communities is a vestige of its former self.

The land is removed and scarred usually for urban infrastructure and economically urbanrelated needs, like building timber harvesting roads. The urban extends its veins into the rural to build its cultural framework, while taking and shaping the cultural landscape of rural communities.

Voids mean absence – of space, of time, of material. What do we do with that absence? How do we engage with these spaces and the networks that feed extraction? How do we reshape our relationship to these spaces and networks in a way that respects rural communities and is self-reflective of how we reveal narratives on a site?

When asking these questions, critical tours appear to be the most appropriate response for creating new interpretations and perspectives of extractive landscapes.

It's a practice that has flexibility and reflexivity – an inherent growth that built land art and interventions do not have. These tours are open to evolution – they can be tweaked and experimented with to better align with changing values, unveiled histories, or new expanded knowledge. It's only fitting that the means of engaging with these landscapes is as fluid as the possibilities of these sites.

In *Critical Day Trips: Tourism and Land-Based Practice*, Sarah Kanouse expands on this reflexivity of critical tours, writing, "...tours represent collective commitments to self-education, self-governance, and the passionate pursuit of social transformation (p. 53)." Kanouse reminds us that "As tourists and tour guides who aspire to be critical, we should expect nothing less of ourselves (p. 54)." Critical tours are by no means the most perfect way to shift perspectives around extraction, but it presents a conscious process that moves us toward a more nuanced understanding of these landscapes and ourselves simultaneously.

Hills Creek Dam

Facts:

- Aggregate makes up about 85% of large-scale structures, such as roads, bridges, airports, driveways, and canals. (Drew, et al., p. 20)
- Dam info: (https://www.nwp.usace.army.mil/Locations/Willamette-Valley/Hills-Creek/)
 - size: 2,235 ft wide x 304 ft tall
 - 36 MW of power output
 - Started in 1956, completed in 1961
 - When full, reservoir is 2,735 acres
- Typical Oregonian share of aggregate is 10-15 tons of aggregate a year, "or about one dump truck load per person" (Achterman, et al., p. 23)
- By 2040, aggregate demand in Oregon is projected to range from 60 90 million tons per year (Achterman, et al.,p. 29)

Narrative

As we walk across Hills Creek Dam (HCD), you'll see displaced land crushed into aggregate and neatly stacked by the Army Corps of Engineers just over 300 ft tall. To the west, you'll see Oakridge nestled in the small valley. To the east, Hills Creek Reservoir covers 2,735 acres slowly released through the Dam to generate 36 MW of power – or about the energy needed to power 1,200 homes a day. It's more than energy though. HCD prevents significant flooding along the Willamette River and Valley, and retains water needed for productive agriculture throughout the summer. Simply put, HCD, and all similar dams, are crucial to maintain urban and rural stability in the Willamette Valley.

While it's not clear if the basalt quarry we just came from fed the creation of this Dam, we can be certain that similar sites were created to do so. The basalt quarry can be seen as a symbol for how the energy network extends itself into the landscape – showing us that the physical imprint of a structure doesn't tell us the full story of its impact on our landscape.

This is an important point to keep in mind as we think about creative explorations in these complex landscapes full of hidden narratives.

How do we talk about complex spaces in a way that respects the inhabitants without inducing our own biased projection?

Our critical investigative lens needs to extend beyond the tangible. It needs to extend beyond the need of artists', architects', and landscape architects' desire to conjure something physical as a way of telling a story. There is a need for something counter to the story-telling norm for these professions. This critical tour rejects the proclivity of artists and landscape architects to create, and instead asks them to only listen to narratives already present – of both humans and ecological systems.

Land art and physical landscape interventions introduce problematic narratives into the landscape that can further steal these extracted sites from rural communities. By creating

physical interventions on these extracted sites, the narrative is refocused to the art and artist, instead of the land, the inhabitants, or problematic processes that shaped that land. Physical interventions can arrest the landscape, create an emotional attachment meant for urban tourists or mining interests.

Early land artists, and even many of the contemporary practitioners, fail to fully consider the site context their work is placed in. The land art tradition's often lack of critical site context allows the art to act as a form of landscape control, where outside cultural processes are transplanted along with the art to inject new visions about what the land narrative should be. Often, these artists fail to convey the complex histories and narratives at play in the landscape – the artists operate as if these sites are narrative-bare and in need of a new vision, which can be argued is a more modern iteration of the colonial gaze – the gaze behind manifest destiny and the colonization of "empty" lands. We know the reality of these sites are far from that - all landscapes are intricate and full of meaning. Land art, and any physical intervention, can shift the narrative away from that meaning and recenter it on the interpretations of one person or entity. The land becomes an empty vessel for occupation and reconfiguration into something that fits the occupier's world view or dreams.

Land art can control the narrative. It can steal it. It tells us what to look at and carries cultural baggage with it. Through this tradition, the colonial gaze is very much alive, but we can also build on this concept and consider how an urban gaze projects desires of landscape configuration onto extracted rural landscapes

TV Butte

Facts:

- 17 million tons of gravel over the 50 years
- 183-acre quarry
- Foraging, fawning, and overwintering area for deer and elk redistribution of elk would result in some mortality
- Elk roughly 100-150
- Other species will be displaced, and some mortality will occur
- 86 round-trip dump trucks per day would haul gravel through Oakridge
- Oakridge rated in the 20 worst communities for air quality quarry will generate large quantities of silica dust
- Pre-colonial hunting land of the Molalla, Kalapuya, Klamath and Warm Springs indigenous peoples
- Kayla Tufti Godowa, a Molalla native, claims that ancestors have been buried on and around TV Butte
- Economy relies on outdoor recreation tourism for instance, mtn biking brings in roughly \$2.3 \$4.9 million each year
- 400 ft off the top

Narrative:

Confirmed Tour by Kevin Matthews - TV Butte Mine activist - at 10:45 am

Tentative narrative if guest speaker cancels:

In 1994 the timber mill closed in Oakridge, and the city has been searching for a new economic identity ever since. Oakridge is a small rural city of roughly 2,000 people and it's relatively isolated. There isn't much between Eugene and Oakridge, and nothing of major economic impact. Where timber milling left a void, aggregate extraction seemed to fill that void. There are three S+G mines around Oakridge that play a role in shaping the identity of the city. A more recent economic driver has been the outdoor recreation scene – drawing in millions of dollars a year for activities like world-class mountain biking trails. However, this hasn't stopped aggregate extraction from attempting to grow as a local industry.

Currently, TV Butte – a prominent butte in the Oakridge cultural viewshed is under contention. A mining interest has staked the land and is embroiled in a political battle with locals to dismantle the butte in pursuit of aggregates. The mine would take 400 feet off the top of the Butte and over 50 years would produce an estimated 17 million tons of aggregate. What would start small would eventually expand to a 183 acre mine sending 86 round-trip dump trucks through town a day – for all 50 years. An Oakridge resident sitting on their porch could watch about 1,300 tons of their city trucked away every day. And for what? That remains to be fully determined. There is no promise that the proposed jobs are going to be Oakridge citizens. The mine isn't even owned by an Oakridge citizen.

The mine would not only take their land, but also arrest their viewshed – tearing down an iconic mountain border that defines Oakridge.

As the tour made its way into Oakridge you can see mountains and large buttes in the distance defining the viewshed. Which of these are too valuable to dismantle? Who gets to decide?

Delta Sand and Gravel

- "Natural Aggregate production had a greater value than the copper, gold, and silver produced during this same year." (Drew, et al., p. 20)
- 1,209 employed in the nonfuel mineral mines in 2014 (USGS 2014)
- 191 employed in mills and plants in 2014 (USGS 2014)
- 17.3 million tons of quarried aggregate extracted in 2014 with \$134 million in value (USGS 2014)
- 10,900 thousand metric tons of sand and gravel in 2014 with \$94.3 million in value (USGS 2014)

Narrative:

Confirmed tour from Delta Representative at 2:00 pm

[read before we depart for Eugene, at lunch location]

Sand and gravel (S+G) aggregate in Oregon are deposits from the last 10,000 years typically found along rivers, their tributaries, and their floodplains. Essentially all extracted sand and gravel in Willamette Valley comes from alluvial deposits in the 100-year floodplain along Willamette River and tributaries¹. Approximately half of the aggregate extracted in the Willamette Valley are sand and gravel². This means that the Willamette Valley land is cleared to provide S+G aggregate.

Why does this matter? Soil is why. Soil, particularly good agricultural soil, is difficult to build and that's often what's along rivers and floodplains. These soils can be considered a rural resource – something that allows for rural communities to maintain autonomy. It's difficult to find aggregate mines that restore the soil to pre-extraction productivity. Usually, these landscapes are taken out of production permanently.

Then why are we still relying heavily on this type of aggregate? The advantages of S+G are in the process more than the product. S+G aggregate are typically rounded from thousands of years of ancient water movement. This rounded shape is significant as S+G aggregate isn't as strong for load bearing in construction – when significant pressure if applied, the rounded part of S+G aggregate rolls against each other.

Location plays a significant role in Oregon's reliance on S+G aggregate – and it's a complicated affair. Extraction of relatively flat surfaces are much easier than blasting mountains. Transporting the material to development follows the same logic. S+G aggregate were quoted from Khris Jerimiah, President of Aggregate Resource Industries, Inc, to be around \$9/ton. In comparison, crushed quarry aggregate is roughly \$12/ton. This discrepancy becomes noticeable when using thousands of tons.

The depth is also important to note. Where quarried rock can be dug deep, S+G aggregate is relatively shallow, and to extract more means expanding the mine's footprint.

So, what does this mean for the future of aggregate? As Oregon's population increases, there needs to be a focus on retaining good soils to maintain a local agricultural economy and to preserve river-bank systems that have valuable ecological functions. The more we push for quarried aggregate, the more we move extraction away from the Willamette Valley.

^{- 600} acres, started in 1922

Over 5,000 aggregate sites in Oregon – both active and inactive, though not all sites have been mined – some are only designated as potential sources for future extraction (Achterman, et al., p. 13)

⁻ Sand and gravel are typically found along rivers, their tributaries, and their floodplains. Reed states approximately half of the aggregate extracted in the Willamette Valley is sand and gravel (Reed, p. 1).

Urban Reserves

Facts:

- 10% population growth in Oregon from 2010-2020
- 87% of population growth was from net in-migration (https://www.pdx.edu/population-research/ pg. 6)
- Oregon expected to reach 4.744 million by 2030 (https://www.pdx.edu/population-research/ p. 1)
- Consumption of aggregate typically increases with wealth. (Drew, et al., p. 24)
- "The wealthy area may demand more aggregate from a poor area than the poor area demands for its own needs." (Drew, et al., p. 24)
- 90 tons of aggregate are needed to build a typical six-room house (Achterman, et al., p. 23)

Narrative:

This land represents a productive rural resource under the eye of urban expansion. This fence delineates farmland from the current Eugene city boundary and sprawled housing development.

Eugene's Urban Reserves are lands neighboring the city's Urban Growth Boundary (UGB) that have gone through a planning review and sighted for best-case-scenario inclusion into the existing UGB. Much of this prospective land is productive agriculture with class 1 and 2 soils, which are the best classes of agricultural soils.

To access this suspicious gap between homes, we drove through a suburban road network that abruptly stops, as if project money suddenly dried up before completion. As you can see, a sewer cap rises above grade where the asphalt fades into the dirt – a claim that the future is already written for the land ahead. Or maybe it's a symbol of the limits of capital expansion - the exertion of a community's power over how they want to see their world grow, and consequently, themselves grow.

As we look to the future of aggregate networks, research from Portland State University's Population Research Center (PRC) provides solid projections for Oregon's population growth - a major factor in the state's aggregate consumption. The PRC reveals Oregon is projected to see population growth from immigrants for the foreseeable future, where 87% of current population growth is from net in-migration (PSUPRC). Oregon is in a unique position where almost all major population centers are within the Willamette Valley. The state's population is expected to reach 4.744 million by 2030, making the Valley an aggregate magnet (PSUPRC). Due to aggregate mining's unique proximity to development - (90% of mining done within 35 miles of development), the Willamette Valley will bear the brunt of expansion, and thus extraction.

Aggregates compose roughly 85% of large-scale urban structures, such as roads, bridges, and driveways. It can then be said that that approximately 85% of the urban fabric is displaced rural land. As rural land disappears, urban centers rise. Urban connectivity comes at the expense of rural disconnect. As the urban fills itself with possibilities, the rural remove theirs.

This means that the rural cannot be divorced from the urban. The arbitrary line delineating rural from urban on a map doesn't mean that these landscapes are removed from urban decisions. In fact, these rural landscapes respond directly to urban desires.

As you explore this site, keep in mind that aggregate consumption increases with wealth (Drew, et al. p. 24). Areas with higher concentrations of wealth typically have more funding to address environmental problems. These same areas are likely to outsource extraction to another area, and by doing so don't prevent extraction impacts, but instead place the burden on areas with less wealth. Often poorer areas that engage with extraction have fewer resources to combat environmental problems tied to extraction. (Drew, et al., p. 24) As Lawrence Drew and their collaborators note, "The wealthy area may demand more aggregate from a poor area than the poor area demands for its own needs." (Drew, et al., p. 24)

Junction City Ponds

Facts:

- 66% of total aggregate production comes from the Willamette Valley region (Reed, p. 2)
- Essentially all extracted sand and gravel in Willamette Valley comes from alluvial deposits in 100-year floodplain along Willamette River and tributaries (Reed, p. 5)
- Alluvial deposits also provide nutrient rich agricultural soil and rural farmers depend on this for productive farms
- Sand and gravel from here are geologically young and has little weathering, which makes it good quality for concrete, and extraction closely follows these young alluvium deposits (Reed, p. 5)
- "Willamette Valley aggregate can be fully supplied by production from basalt quarried in the Valley and along the Columbia River..." (Reed, p. 9)
- 22% of reclaimed mine sites are returned to agricultural use, though this definition is loose and does not mean the land becomes productive again (Achterman, et al., p. 11)

Narrative:

Junction City Ponds Park (JCP) sits on an abandoned sand and gravel mine just outside Eugene's UGB, so by this definition it's rural. If you didn't notice during the drive in, this site is surrounded by productive agricultural land - Oregon state law permits extraction of S+G aggregates on land zoned for exclusive agricultural use. This aerial picture shows the lasting impacts of excavation on this type of landscape – as the land around it maintains productive agricultural use, JCP has sparse, stunted, and invasive vegetation throughout.

[pass around aerial of site]

Where does the city end? In the neighborhood? At the municipal borders? How do we define urbanism in a world that feels endlessly planetary? One can argue that the resources needed to create stable urban areas are part of the urban fabric. These rural spaces act as the limbs to the urban body and the networks carrying resources to the heart act as veins.

In *Implosions / Explosions: Towards a Study of Planetary Urbanization*, Andy Merrifield writes, "...rural places have become an integral part of the post-industrial production... swallowed up by an "urban fabric" continually extending its borders, ceaselessly corroding the residue of agrarian life... (p. 525)." Rural extraction sites are selected to become extensions of this urban fabric, though since these sites are zoned rural, they're out of regulatory control of urban politics. It's a

process that's kept out of sight and political reach for urban folks, leaving a disassociation between process and participation.

The remnant land is used as an archery range and a stocked pond for recreational fishing. Both programs serve a community function, but at what cost? Are these hobbies more valuable to us than nutrient-rich soil? Does the function provide an adequate reconciliation for what was lost?

In Notes on Art as/and Land Reclamation, Robert Morris takes a deeper look at extractionrelated land art, providing a critical take on the manifestations. While this park isn't "art" in the traditional sense, it's still a planned physical intervention and critiqued under a similar argument. Morris is particularly concerned with the artist acting as a "servant" to mining, government, or private interests, writing "to practice art as land reclamation is to promote the continuing acceleration of the resource-energy-commodity-consumption cycle, since reclamation - defined as aesthetically, economically, geographically - functions to make acceptable original acts of recourse extraction (p. 98)." Land art, and I argue landscape architecture, can act as a mechanism for maintaining the status-quo – of painting a nice picture that obscures and steals the narrative from those most affected. Even if the landscape architect or artist's intention is to critique the mining process – to unveil what's being destroyed – or to provide a space for post-use function, Morris notes that these projects "have no choice but to serve a public-relations function for mining interests... It is an illusion that artists have ever had anything to say about the functions of their work (p. 98)." We need to be more reflexive if we are to adequately reveal unseen narratives, provide new perspectives, or reshape how land can serve ecological and human communities.

This land is irreplaceable. The quality of the soil has been developed over thousands of years and gets scrapped to reveal a material bountiful not far away in the mountains. Reclamation of these sites usually leave the land far from the pre-extraction conditions.

<u>Delta ponds</u>

Facts: (all from Jeff's report)

- Reclaimed sites often improve quality of life and create wealth (Drew, et al., p. 25)
- 20 yrs. of extraction, abandoned in 1960's, reclaimed in 2012
- Critical rearing habitat for threatened Oregon species
- Gravel fed Eugene, Delta Highway, and the Beltline
- Estimated 2 million cubic yards of gravel were extracted
- Several hundred active or former sand and gravel mines in Willamette valley

Narrative:

Confirmed tour from Jeff Krueger at 4:00 pm

Tentative narrative if guest speaker cancels:

As we pass through this site, it's important to remind ourselves that everything has been carefully sculpted. None of this is natural. For over two decades, this site was heavily extracted for sand and gravel aggregate to feed quickly developing Eugene, Delta Highway (the highway that brought us here), and the Beltline. It's estimated that 2 million cubic yards of gravel were extracted from Delta Ponds.

Excavation began in the 1940's and steadily spread to unearth 150 acres of land until it's abandonment in the 1960's. For nearly 50 years this site was isolated from the Willamette River and became heavily colonized with invasive species that thrived in the scalped earth. Stagnant water that filled the extracted voids, reaching a high of 84 degrees. To put this into context, the Willamette reaches a high of 64 degrees. This significant temperature increase had profound implications on native species breeding and survival.

Restoration started in 2004 and was completed in 2012. Restoration connected Delta Ponds back to the Willamette River and create just over two miles of side channel. This project was a massive undertaking and necessitated the collaboration of planners, engineers, and landscape architects. Land was carefully sculpted, and 98,000 plants were placed along with extensive seeding of native species.

Delta Ponds is now a critical rearing habitat for salmon and other native fish. Numerous other species, many of them threatened in Oregon, have been recorded to now be thriving here. For example, the threatened western pond turtle is a common sight and volunteers come out to ensure the turtle eggs are safe every year during breeding season.

There are hundreds of active and former sand and gravel mines in the Willamette Valley. The life they take post-abandonment range greatly. This tour intentionally took the long way to Delta Ponds through the Valley River Center. The massive parking lot where our van stopped was part of the sand and gravel mine – filled with material and aggregate from who-knows-where. It's a stark contrast to alternative future that Delta Ponds took.

Sources for Narrative and Facts

- 1. Achterman, Gail L., Kenneth Williamson, J T Lundy, Peter C. Klingeman, Todd Jarvis and Sam Littlefield. "*Preliminary summary of aggregate mining in Oregon with emphasis in the Willamette River Basin.*" (2005). USGS 2014
- Bates, Doug. "Quarry Critics Deliver Clear Message to Lane County on Proposed Gravel Mining: 'Please Do Not Do This.'" *Highway 58 Herald*. April 20, 2021. <u>https://highway58herald.org/community-of-oakridge-to-lane-county-on-proposed-rock-quarry-please-do-not-do-this/</u>.
- Callaghan, Robert M. "USGS 2014 Minerals Yearbook: Oregon." U.S. Department of the Interior, 2014.
- 4. Drew, Lawrence J., William H. Langer, and Janet S. Sachs. "Environmentalism and Natural Aggregate Mining." *Natural Resources Research* 11, no. 1 (2002): 19–28.
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- 6. Kreidler, Helmut. Aggregate Use by USFS in Lane County, Oregon. Email, 2022.
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- 8. Matthews, Kevin. Stephen Lorber Interviews Kevin Matthews about TV Butte. Phone, April 27, 2022.
- Merrifield, Andy. "The Right to the City and Beyond: Notes on a Lefebvrian Reconceptualization." In *Implosions / Explosions: Towards a Study of Planetary Urbanization*, edited by Neil Brenner, 523–32. Berlin: jovis Verlag GmbH, 2014.
- 10. Morris, Robert. "Notes on Art as/and Land Reclamation." *The MIT Press* 12, no. Spring (1980): 87–102.
- 11. Portland State University Population Research Center, "Population Reports," Accessed 2022, <u>https://www.pdx.edu/population-research/</u>
- 12. Reed, Mark. *Gravel mining on Willamette Valley prime farmland, Testimony to the Oregon House Land Use Committee: Re: HB 2201 and HB2202*, (2013) (Mark H. Reed, Professor of Geology, University of Oregon).
- 13. US Army Corps of Engineers, "Hills Creek Dam & Reservoir," US Army Corps of Engineers Portland District Website, Accessed 2022, <u>https://www.nwp.usace.army.mil/Locations/Willamette-Valley/Hills-Creek/</u>

Further readings

Morris, Robert. "Notes on Art as/and Land Reclamation." The MIT Press 12, no. Spring (1980): 87–102.

A meditation on extraction art and art in extracted landscapes

Bargmann, J. "Project D.I.R.T.: A Landscape Architect's Excavation." *Journal American Society of Mining and Reclamation* 1994, no. 3 (1994): 221–25. <u>https://doi.org/10.21000/JASMR94030221</u>.

An appeal to landscape architects to explore how mines can become a cultural landscape

Kanouse, Sarah. "Critical Day Trips: Tourism and Land-Based Practice," in Critical Landscapes: Art, Space, Politics, eds. Emily Eliza Scott and Kirsten Swenson (Berkeley: Univ. of California Press, 2015), 43-56.

An introduction to critical tours and how others have developed the tradition

Kaiser, Philipp, and Miwon Kwon. "Introduction: Ends of the Earth and Back," in Ends of the Earth: Art of the Land to 1974 (Los Angeles and New York: Museum of Contemporary Art and Prestel, 2012), 17-35.

An introduction to early land art and its influence on expanding art audiences

"Margins in Our Midst: A Journey into Irwindale." *The Center for Land Use Interpretation*, 2003, https://clui.org/newsletter/winter-2003/margins-our-midst-journey-irwindale.

A canonical critical tour by the Center for Land Use Interpretation

The Center for Land Use Interpretation. "About the Center." *The Center for Land Use Interpretation*, <u>https://clui.org/section/about-center</u>.

An influential organization that organizes critical tours and documents unique landscapes

Merrifield, Andy. "The Right to the City and Beyond: Notes on a Lefebvrian Reconceptualization." In Implosions / Explosions: Towards a Study of Planetary Urbanization, edited by Neil Brenner, 523–32. Berlin: jovis Verlag GmbH, 2014.

A mediation on expanding urban influence over landscapes and how to form a new relationship to contributing processes

Favela, Justin, and Emmanuel Ortega, "New Monuments for a Future Generation": <u>https://www.youtube.com/watch?v=Bb6z_Pxd_0o</u>

A discussion about the influence of land art traditions, their connection with colonialism, and thoughts on the future of these installations

Lippard, Lucy. Undermining: A Wild Ride Through Land Use, Politics, and Art in the Changing West. The New Press, 2014.

A mediation, inspired by gravel pits, on the relationships between land and culture in the Southwest

Tour Checklist

- Aggregate Samples
 - o Basalt
 - o S+G
- Money for coffee
- Walkie-talkie
- Reflective Vests + Hard Hats
- Water for vans
 - 2 x 12 packs of bubbly water
- Snacks for Vans
- Guidebooks
- Aerials
 - o Delta Ponds
 - Junction City Ponds to show land-cover degradation
- Cooler for drinks and food
- Ice for cooler
- Garbage bag
- Narrative Script
- Comfy shoes