



**AGGREGATES IN OREGON:
A CRITICAL EXPLORATION**



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PRESENTATION SCOPE

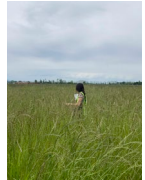
- + Project Scope**
- + Overview of what aggregates are in this research context**
- + Importance of aggregate exploration**
- + Gap in knowledge and addressing it**
- + Critical tour overview and Precedents**
- + Site Selection Reasoning**
- + Tools for exploring the sites**
- + Tour Overview**
- + Concluding thoughts**

PROJECT SCOPE

+ Research aggregate networks in Lane County, OR

+ Development of way to reveal networks to public

+ Implementing critical tour



AGGREGATES ON TOUR

HARD ROCK AGGREGATE



- + In Lane County, usually from basalt outcrops, formed 15-20 million years ago
- + Angular shape
- + Deep mines
- + Solid mass before extraction
- + Drilled and blasted to extract
- + Processing needed for use

AGGREGATES ON TOUR

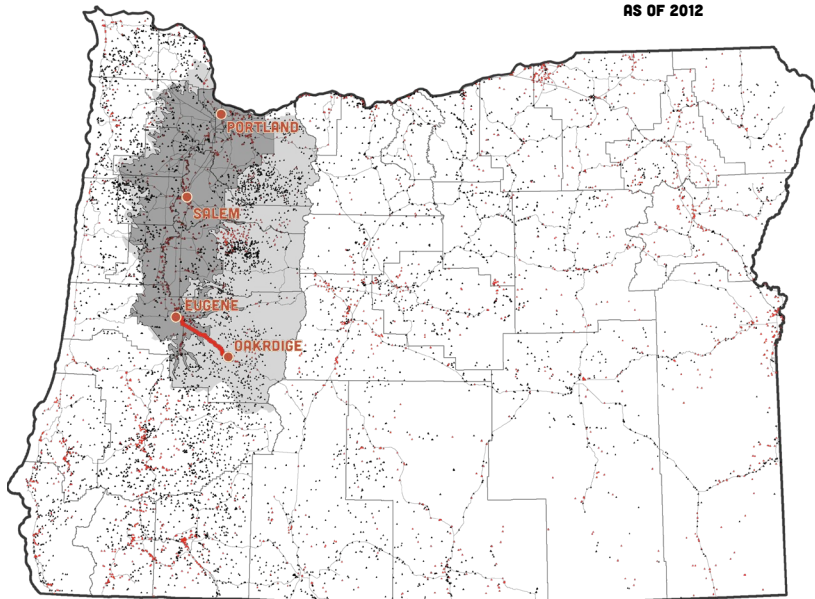
SAND AND GRAVEL AGGREGATE



- + Glacial and alluvial deposits 10,000 years ago
- + Rounded shape
- + Shallow and wide mines
- + Found loose under soil
- + Scooped and scraped to extract
- + Mix of petrologies

AGGREGATE EXTRACTION IN OREGON

AS OF 2012



ACTIVE AND INACTIVE MINES

- SAND AND GRAVEL
- HARD ROCK

- TOUR ROUTE MAP
- TOUR ROUTE

- COUNTY LINES
- HIGHWAYS

- WILLAMETTE VALLEY
- WILLAMETTE RIVER BASIN

SELECTING TOUR SITES

SOURCE



DESTINATION



Basalt Quarry

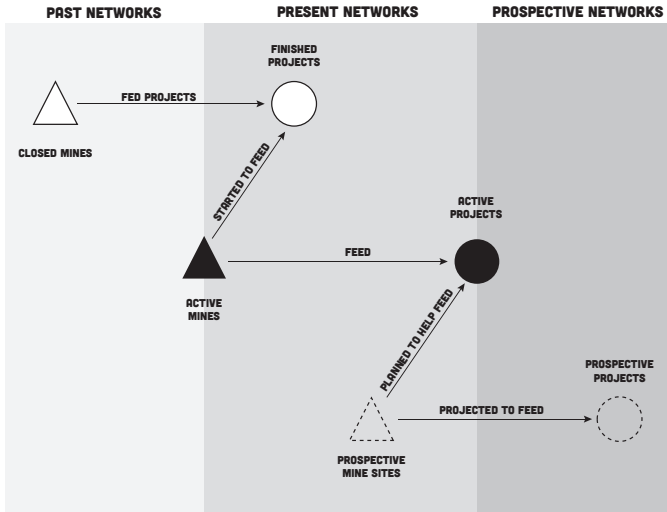


Hills Creek Dam

SOURCE



DESTINATION



IMPORTANCE

- + Extraction impacts the landscape forever**
- + Aggregate is the foundation of the modern world**
- + Impacts of this material use are local**
- + Urban consumption has profound impacts on rural communities**
- + Landscape Architecture frequently uses aggregate**

GAP IN KNOWLEDGE

+ Invisibility of aggregate networks to the general public

+ Data

+ Locations

+ Politics

+ Reverberations

+ Lack of process to engage with the material network in Oregon

FILLING THE KNOWLEDGE GAP

+ Understanding these networks through language

Project Manifestation: Narration Script

+ A critical tour to illuminate these networks and foster discussion about these networks

Project Manifestation: Guidebook

+ A tool for exploring aggregate networks in Oregon

Project Manifestation: Narrative Tools

CRITICAL TOURS – AN OVERVIEW

- + Intentionality and reflexivity distinguish critical from conventional tours**
- + Intentional of the process, narrative, locations, and dissemination of information**
- + Highlight unseen intersections in the landscape**
- + Reveal new ways of seeing what is present instead of what to see**
- + Emphasize the multiplicity of points of view**
- + About value finding - Rooted in cultural and institutional critique with potential for disrupting conception of reality**
- + Flexibility for growth - tours meant to be tweaked and experimented with**

CRITICAL TOURS – PRECEDENTS

Margins in our Midst

- + Explored quarries just outside LA
- + Integrated guest speakers at each site
- + Explored other cultural sites



Rowell, Steve. "Tour group members spill down the Santa Fe Dam, a pile of rock built to hold back other piles of rock." The Center for Land Use Interpretation, Winter 2003, <https://clu.org/newsletter/winter-2003/margins-our-midst-journey-irwindale>.

Silicon Monuments

- + Sites polluted by tech industries
- + "Mundane" landscapes
- + Intersections invisible to passerby



Anderson, Elliot. "Silicon Monuments: The Reflecting Pool Monument." Silicon Monuments: An Augmented Reality Tour of Silicon Valley Superfund Sites, 2012, <http://siliconmonuments.org/>.

AGGREGATE NETWORK IN OREGON

SOURCE



DESTINATION



Basalt Quarry



Hills Creek Dam

COMMON NARRATIVES IN THE NETWORK

Future Projections

Sites and entities under the prospective eye of miners and development

Material Flow

The process and manifestations of mobilizing aggregate material

Displacement

The processes of displacing entities currently inhabiting extraction sites

TOUR SITES



Basalt Quarry

Abandoned Source



Hills Creek Dam

Finished Project



TV Butte

Prospective Source



Delta S+G

Active Source



JC Ponds

Reclaimed Source



Urban Reserve

Prospective Destination



Delta Ponds





Restored Source

SITE CONTEXT

ACTIVE AND INACTIVE MINES

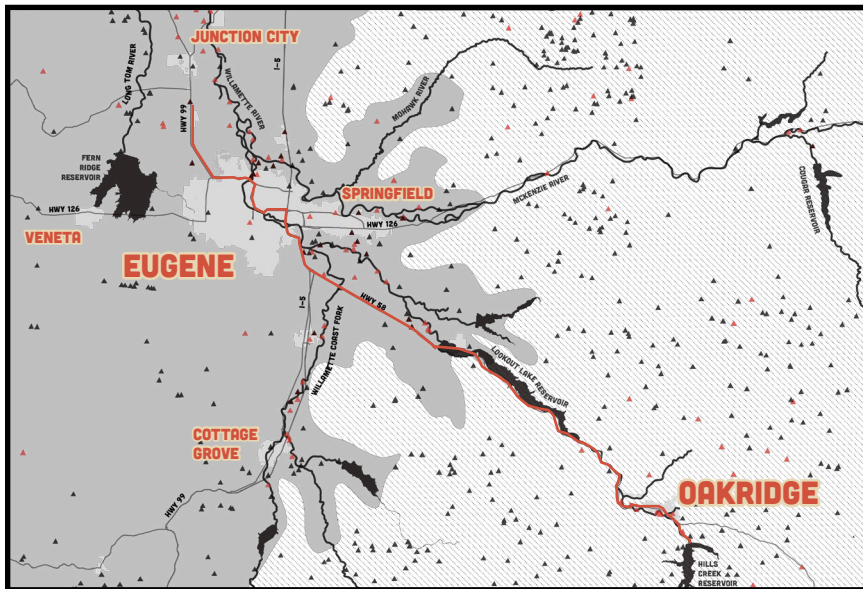
-  SAND AND GRAVEL
-  HARD ROCK

RESERVOIRS

-  RESERVOIRS
-  URBAN GROWTH BOUNDARY
-  WILLAMETTE VALLEY
-  CASCADE MOUNTAINS

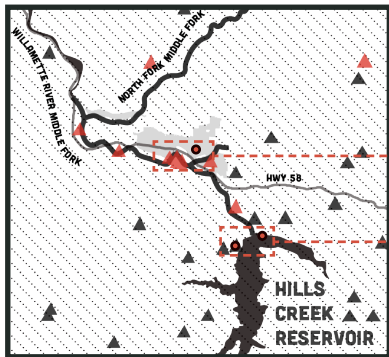
RIVERS

-  TOUR ROUTE
-  ROADS
-  SITE MAPS



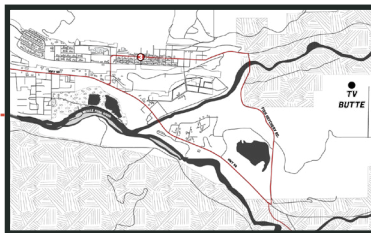
TOUR SITES - OAKRIDGE

OAKRIDGE URBAN GROWTH BOUNDARY

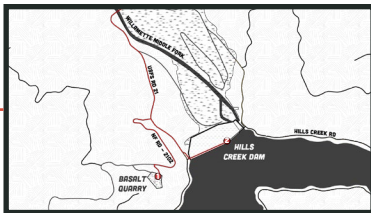













OAKRIDGE URBAN GROWTH BOUNDARY

VIEW OF TV BUTTE AND TV BUTTE

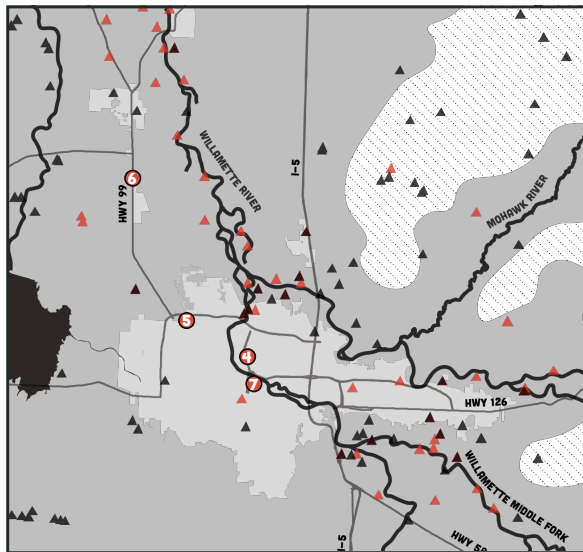


HILLS CREEK DAM AND BASALT QUARRY



- | | | | |
|--|-----------------------|---|---------------|
|  | STOP ON TOUR |  | FOREST |
|  | CASCADES |  | RIPARIAN ZONE |
|  | RESERVOIR |  | RIVERS |
|  | URBAN GROWTH BOUNDARY |  | TOUR ROUTE |
|  | BUILDINGS |  | ROADS |
| | |  | DAM BOUNDARY |

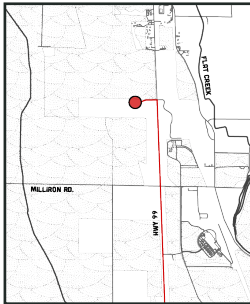
TOUR SITES - EUGENE



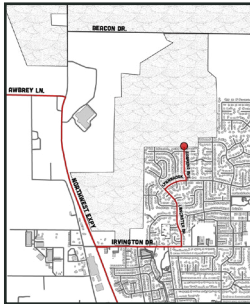
- STOP ON TOUR
- WATER
- URBAN GROWTH BOUNDARY
- WILLAMETTE VALLEY
- RIVERS
- TOUR ROUTE
- ROADS

EUGENE/ SPRINGFIELD METRO URBAN GROWTH BOUNDARY

TOUR SITES - EUGENE



JUNCTION CITY PONDS PARK














URBAN RESERVES



DELTA PONDS



DELTA SAND AND GRAVEL

-  STOP ON TOUR
-  MINED LAND
-  RIPARIAN ZONE
-  FARM LAND
-  WATER
-  URBAN GROWTH BOUNDARY
-  WILLAMETTE VALLEY
-  RIVERS
-  TOUR ROUTE
-  ROADS
-  BUILDINGS

TOOLS TO SUPPORT SITE EXPLORATION

Guidebook



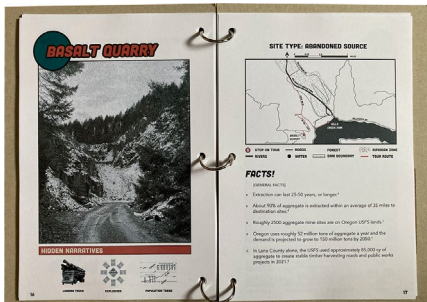
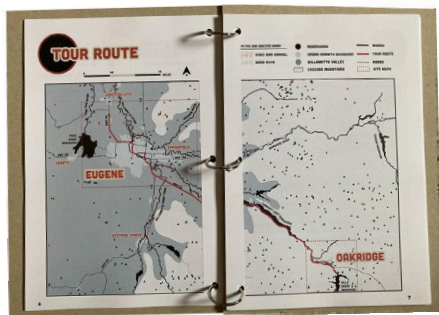
Narration



Narrative Tools



GUIDEBOOK



NARRATIVE TOOLS TO EXPRESS THEMES

FUTURE PROJECTION NARRATIVES



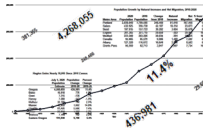
HOUSING DEVELOPMENT



URBAN RESERVES



TV BUTTE



POPULATION GROWTH

DISPLACEMENT NARRATIVES



ELK HERD



FARMERS



SHEEP



NATIVE TURTLES

MATERIAL FLOW NARRATIVES



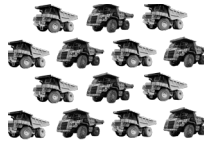
PROTEST



LOGGING TRUCKS



EXPLOSIVES



AGGREGATE TRUCKS

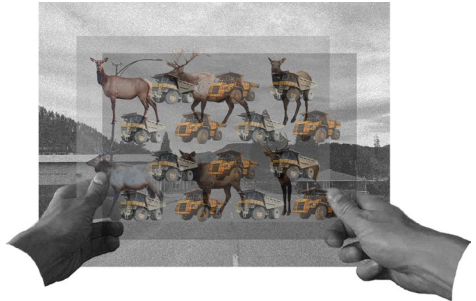
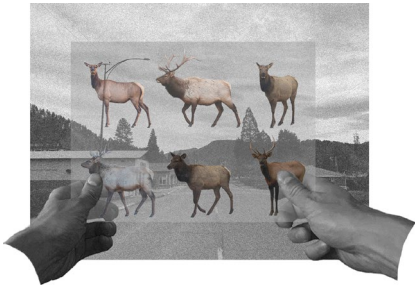
NARRATIVE TOOLS – HOW TO



ELK HERD AT TV BUTTE



AGGREGATE TRUCKS OVERLAID



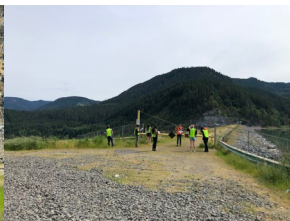
HOW IT ALL CAME TOGETHER



HOW IT ALL CAME TOGETHER



Basalt Quarry 1



Hills Creek Dam 2



Fish Hatchery 3



Tv Butte 4



Urban Reserve 5



Delta Ponds 6

HOW IT ALL CAME TOGETHER



Sheep at the Urban Reserve



Explosives at Basalt Quarry



Logging Trucks at Basalt Quarry

TOUR REFLECTIONS

- + Site exploration reveals new questions about network
- + The more voices present, the more dynamic the network becomes
- + Reverberations of the network become apparent as we intentionally travel with it
- + The material network, and its reverberations, need facilitation to be revealed

NEXT STEPS

- + The tour is fluid - as designed**
- + Incorporating more guest speakers will add value**
- + Tour can be more focused within network**
- + Easily replicated for specific or more general groups**
- + Applicable to other material networks**
- + A web application could facilitate asynchronous tours**

