

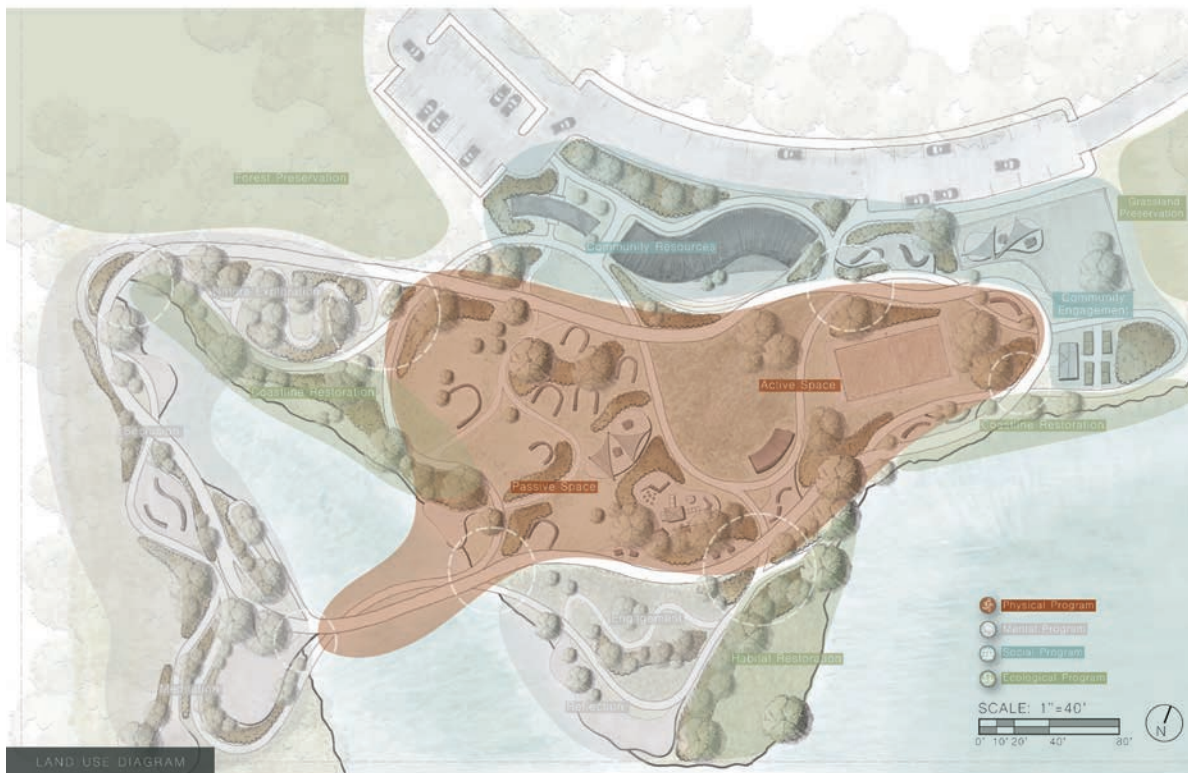


LAKE ISSAQUEENA A SPACE FOR HEALTH AND WELLNESS

Hannah Smith | 8630 Interdisciplinary Design | Prof. Nicolette

- MISSION**
Lake Issaqueena will encourage Wellness through program nodes that enhance elements of physical, mental, social and ecological health.
- VISION**
Lake Issaqueena serve as a resource for healing and encourage health lifestyles for various user groups throughout the Upstate.
- PARAMETERS**
1- Square footage of active versus passive space on site that support respected program nodes.
2- Number of provided zones for interactive and social engagement.
3- Quality and character of available on site resources that support the mission and vision.









USER GROUPS

SITE FURNISHINGS



CHARACTER IMAGERY

MATERIALITY



CHARACTER IMAGERY

PROGRAM ELEMENTS



CHARACTER IMAGERY







WIND RIVER LEGACY PARK

M. A. K. E.
O L L Y L E X I N Z E R M I L Y



FALL 2023 | INTERDISCIPLINARY RESEARCH AND DESIGN | M.A.K.E.



WIND RIVER LEGACY PARK

RESEARCH, PRECEDENT, AND STRATEGIC PLAN

STRATEGIC PLAN

CONCEPT

LEGACY

VISION

To become a major destination in the greater Portland area that contributes to Skamania County's economy and culture

MISSION

To be a sustainable site that invites locals and visitors to experience and engage local culture and ecology through education and recreation

GOALS

Create profitable programming of all activity levels for a diverse population of visitors

Preserve the existing character of the site to showcase local vernacular and promote community history

METRICS



130+ Acres of Accessible Nature Areas



17,000 sqft of Commercial Space



15,000 sqft of Event Space



13+ Acres of Demonstration Nursery



1.6 Miles (2.5km) Outer Loop Trail



15,000 sqft VC



1.4 Miles to the Pacific Crest Trail

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WIND RIVER LEGACY PARK
RESEARCH, PRECEDENT, AND STRATEGIC PLAN

PRECEDENT

Lady Bird Johnson Wildflower Center: Luci and Ian Family Garden

Designed by: TBG Partners
Completion Date: 2014
Location: Austin, TX
Size: 4.5 Acres

This SUSTAINABLE SPES project features interactive learning exhibits, including nature play, native plant collections, and water features.



Native Flora And Fauna



Water Conservation



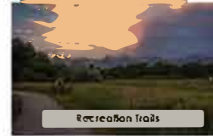
Sacajawea State Park

Designed by: National Park Service
Completed Date: 2003
Location: Salmon, Idaho
Size: 71 Acres

Honors the importance of Soquel in the growth of the US territory. Features trails, picnic areas, rolling hills, and artifacts of the Lewis and Clark expedition.



Historical Museum



Native American Landmarks



Atlanta-Dolies Courtyard

Designed by: Perkins+Will
Completion Date: 2019
Location: Atlanta, GA
Size: 16,000 sqft courtyard

Programs: Brewery, restaurants, maker space, music venue



Mixed Use

CC1=CC=CC=C1

WIND RIVER LEGACY PARK
RESEARCH, PRECEDENT, AND STRATEGIC PLAN

RESEARCH

NURSERY PRODUCTION

- On site nursery production reduces cost, travel impacts, and increases forest revitalization
- Natural seed collection promotes and ensures native plantings and **increased survival rates**
- Nurseries often pair production facilities with public organization for research, enhancing and protecting operations with public funding

Chesapeake Bay Foundation
<https://www.cbf.org/blogs/love-the-bay/2020/04/free-nurseries-an-essential-bay-business.html>



SUSTAINABLE LOGGING

- The best way to achieve sustainable wood resources is to copy the natural methods of forest succession
- Commercial logging in Washington accounts for 25% of United States wood products
- The average rate of harvest for all the state's commercial forestland is 1.1%, which means for every acre harvested, there are nearly 97 acres of new forest growing
- Forest thinning is a practice to promote health of growing forests. Thinning reduces competition, protects old growth, and allows for forest succession
- Thinning also reduces the amount of dead material or undergrowth, decreasing the spread and intensity of forest fires
- Thinning can be done manually, adjacent to logging practices, or with controlled burns

US Forest Service
<http://www.fs.fed.us/forest/management/working/working.asp>
<http://www.fs.fed.us/forest/management/working/working.asp>
<http://www.fs.fed.us/forest/management/working/working.asp>
<http://www.fs.fed.us/forest/management/working/working.asp>



Fire-suppressed Forest



Ecologically managed Forest



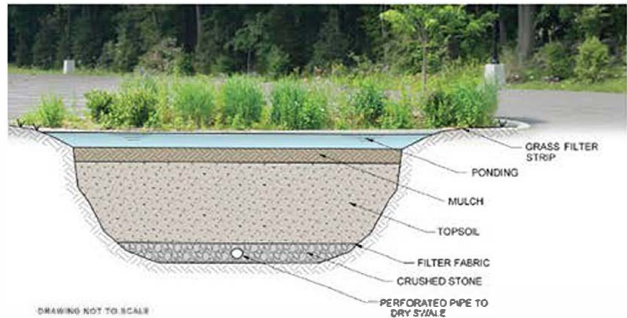
WIND RIVER LEGACY PARK

RESEARCH, PRECEDENT, AND STRATEGIC PLAN

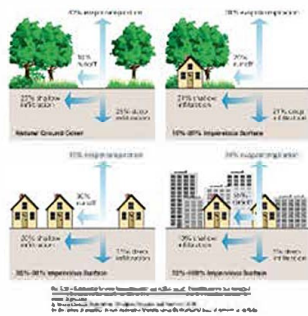
RESEARCH

WATER MANAGEMENT

- EPA Approved techniques:
- Meter/measure/manage
- Recover rainwater
- Recover air conditioning condensate
- Plant native and drought-tolerant plant species
- Use weather-based irrigation controllers
- Use water-efficient utilities and appliances



DRAWING NOT TO SCALE

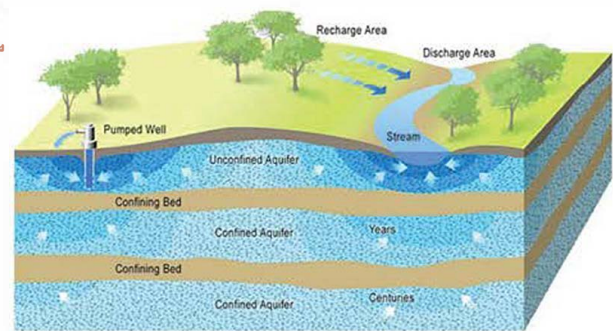


Aquifer recharging is a significant issue on the East side of the Cascades and Rocky Mountains.

Over 60% of drinking water in Washington is supplied from groundwater aquifers.

Washington DNR
<https://www.dnr.wa.gov/legislation/groundwater>

1. Precipitation falls to the ground or is intercepted by trees, roofs, or other structures
2. Catch basins capture sediment before it discharges into streams
3. Bare soil and bare rocks collect and infiltrate runoff
4. Infiltration isolates pollutants and recharges groundwater



FALL 2023 | INTERDISCIPLINARY RESEARCH AND DESIGN | M.A.K.E.

WIND RIVER LEGACY PARK

RESEARCH, PRECEDENT, AND STRATEGIC PLAN

RESEARCH

WILDFIRE PREVENTION

In 2022, fire numbers in Washington are at its lowest count in a decade.

As of August 2023, around 103,000 acres have burned in Washington.

(koin.com, Department of Natural Resources)

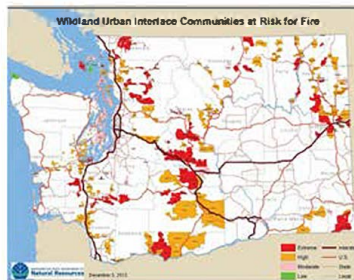
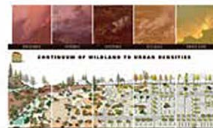


WILDLAND URBAN INTERFACE

The WUI is a transition area where human settlement and vegetative fuels intermingle, representing a risk for the origination and spreading of fires.

"Between 2002 and 2016, an average of over 3,000 structures per year were lost to WUI fires"

(United States Fire Administration)



HOW TO PREPARE YOUR HOME FOR WILDFIRES

Wildfire is a leading cause of property loss in the United States. This guide provides information on how to prepare your home for wildfire.

1. VEGETATION MANAGEMENT

Remove dead and dying plants, trim trees and shrubs, and clear brush. Create defensible space around your home.

2. BE PREPARED

Develop a wildfire escape plan. Have a fire extinguisher. Know the location of your fire alarm pull station.

3. FIRE RESISTANT CONSTRUCTION

Use fire-resistant materials for roofs, walls, and decks. Seal gaps around windows and doors.

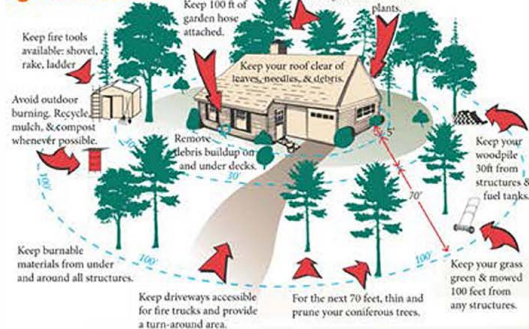
4. FIREWISE LANDSCAPE

Plant fire-resistant plants. Use mulch made of stone or gravel. Avoid flammable liquids.

5. FIREWISE US

Visit www.firewiseus.org for more information.

Firewise® Home Ignition Zone

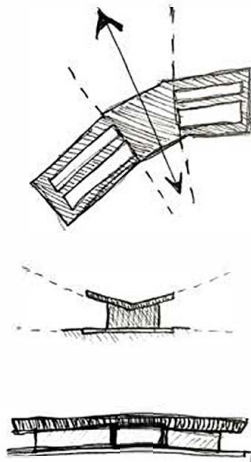


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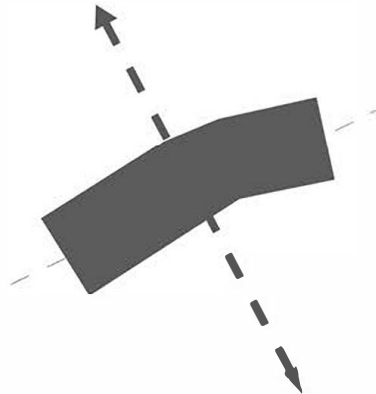




WIND RIVER LEGACY PARK

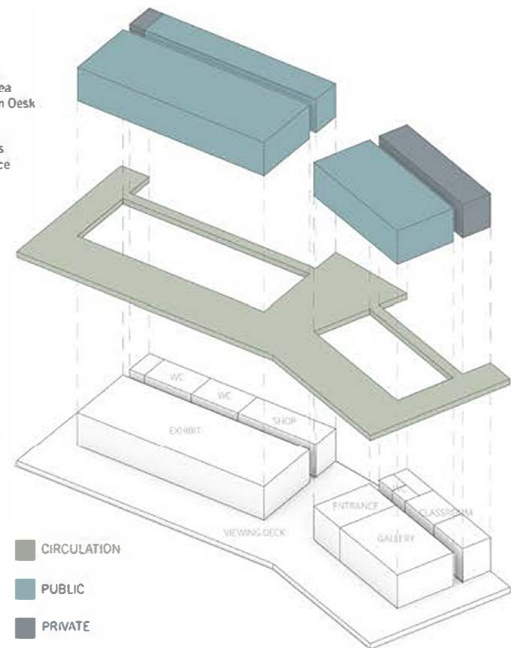


One main axis is established that extends from Bunker Hill to the scenic mountain views in the distance. By establishing this axial line of sight, it became a way of connection to the past, present, and future facets in the master plan. Additionally, it became a way to inform design decisions. When thinking about massing and orientation of a visitor's center, using the perpendicular line of the axis creates the connection back to the main goals of the design, and allows for a purposeful framing of specific areas of the site.



Public
Giftshop
Exhibits
Art Gallery
Viewing Area
Information Desk

Private
Classrooms
Admin office



■ CIRCULATION
■ PUBLIC
■ PRIVATE

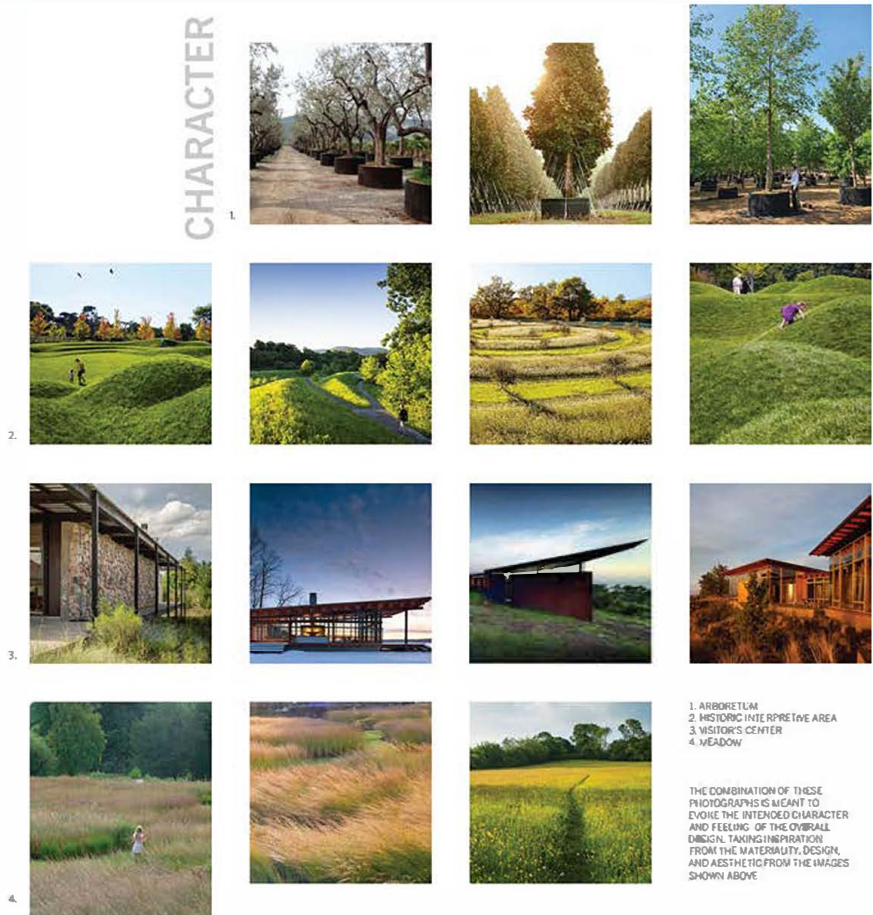
FALL 2023 | INTERDISCIPLINARY RESEARCH AND DESIGN | M.A.K.E.



1. GLULAM
2. NATURAL STONE
3. GLASS
4. STEEL

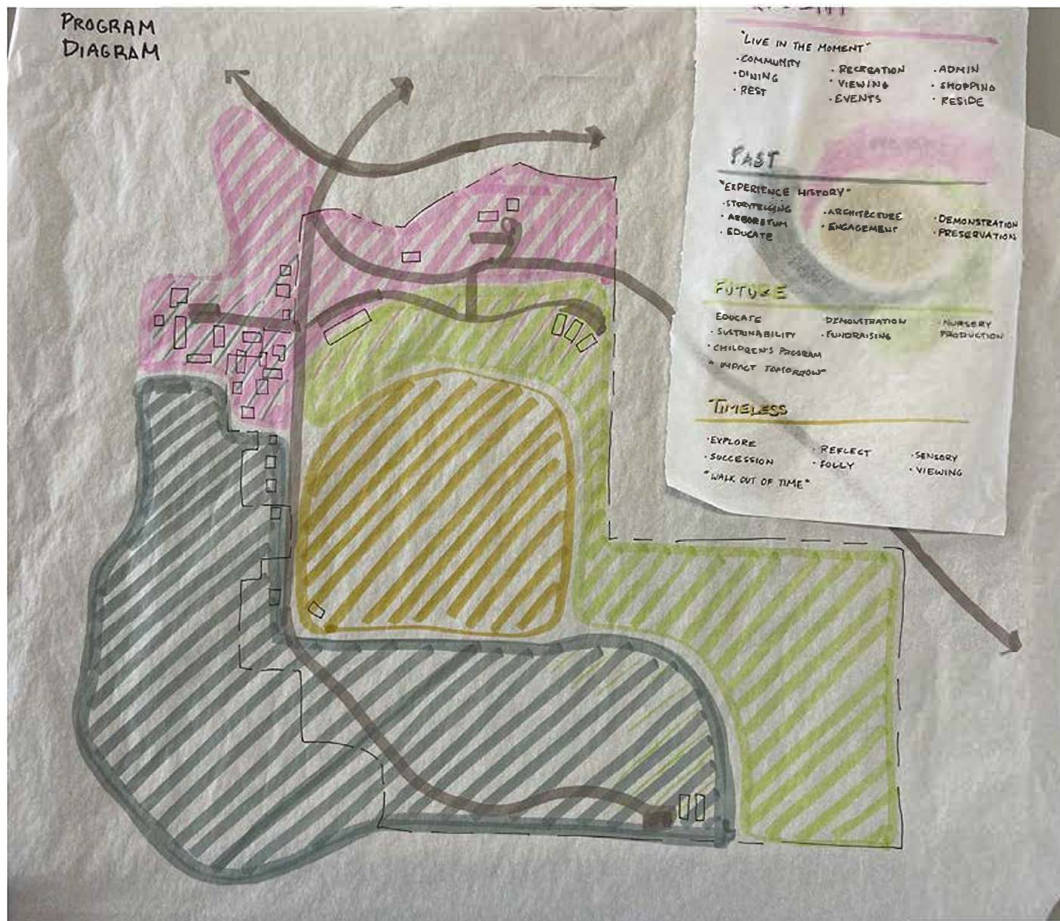
MATERIALITY

CHARACTER



1. ARBORETUM
2. HISTORIC INTERPRETIVE AREA
3. WISTARIA CENTER
4. MEADOW

THE COMBINATION OF THESE PHOTOGRAPHS IS MEANT TO EVOKE THE INTENDED CHARACTER AND FEELING OF THE OVERALL DESIGN, TAKING INSPIRATION FROM THE MATERIALITY, DESIGN, AND AESTHETIC FROM THE IMAGES SHOWN ABOVE.

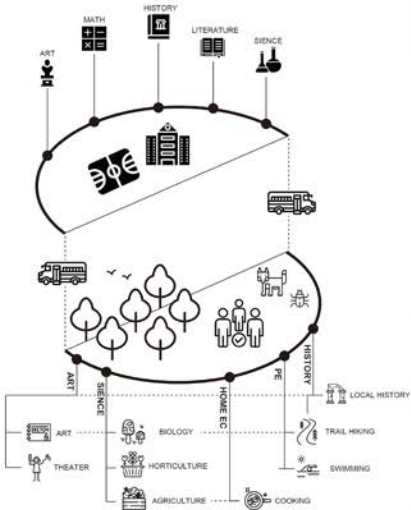
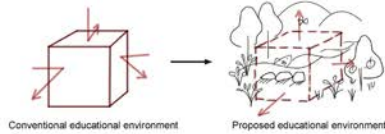


LEARNING IN/WITH LANDSCAPE**BASIC INFORMATION**

LOCATION | Isaqueena Lake, Central, SC TYPE | Environmental Education

MISSION / WHAT IS THE PROJECT GOAL?

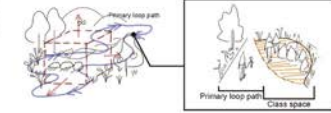
This project aims to provide an educational environment closer to what we've learned by expanding the conventional classrooms into nature, which is to create a unique educational system in the community. This site is open to local educational institutions, homeschooling students who have difficulty in their educational environment, and local people who want to learn something from the site.

**ANALYSIS / HOW ACHIEVE THE MISSION?**

In order to achieve the mission, I approached the design in two ways.

(1) **Subject - Space Relation Diagram:** I analyzed the relationship between subject and space to create the best educational environment that appreciates existing site conditions.

(2) **Loop Corrido and Class Space:** Students can learn several subjects while turning the main primary loop path, which is "corrido." Unlike the ordinary classroom, the learning material is right in front of them, or the environment provides an excellent education. Design the appropriate spaces(spot) related to the subjects to make students focus on the environment.

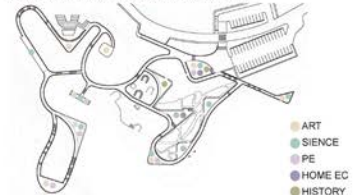
**PARAMETERS / HOW EVALUATE THE DESIGN IDEA?**

(1) **Special Capacity** - number of students

Size	Area (ft)	Capacity (n)
SMALL	500	14
MEDIUM	650	18
LARGE	1100	30
X-LARGE	1800	50

100 of per student

(2) **Subject Approach** - five subjects/programs offer



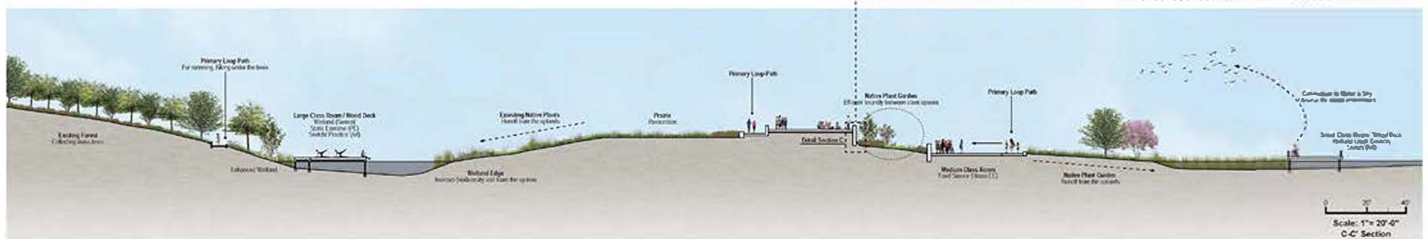
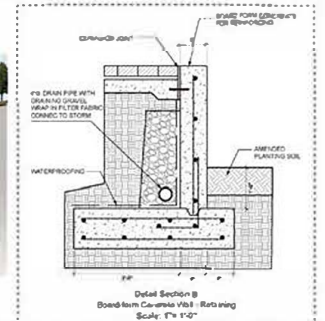
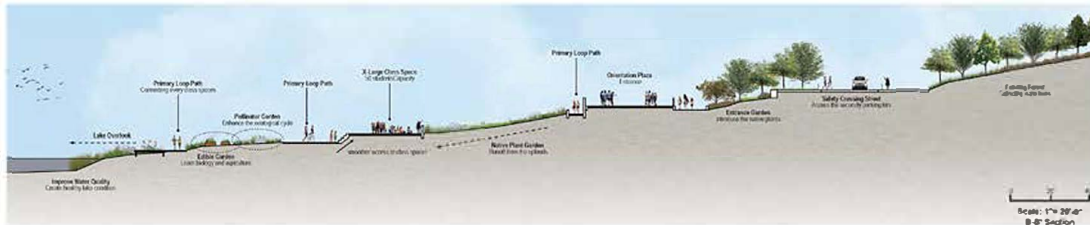
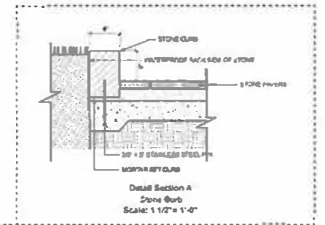
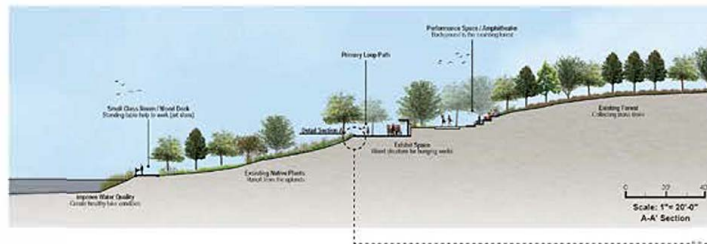
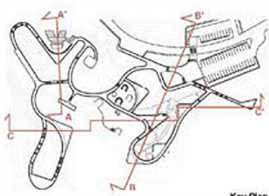
(3) **Community Epicenter** - to enhance the community



	1	2	3	Subject - Space Relation Diagram
ART	Sketch + drawing, illustration, collage, clay work, paper / fabric, sculpture, mixed media	Performance + dramatic, theatrical, puppet, dance, music, song, play, etc.	Craft + clay, wood, metal, paper, fabric, etc.	Practice Stage Exhibit Presentation
SCIENCE	Biology + study and learning, research, observation, field work, etc.	Horticulture + plant, garden, etc.	Agriculture + food, etc.	Observation Lecture Sketch Riparian Zone Grass Forest Aquatic Zone Uplands
PE	Running + track, etc.	Swimming + pool, etc.	Yoga/Stretch + yoga, etc.	Static exercise Dynamic exercise
HOME EC	Cooking + food, etc.	Nutrition + food, etc.		Home EC subject Science
HISTORY	Lecture + lecture, etc.	Discussion + discussion, etc.		

**VISION / WHAT IS THE FURTHER GOAL OF THE PROJECT?**

The vision of this project is to enhance the community through interacting with the natural environment and collaborating with the local educational institution, which makes the site the regional epicenter. Furthermore, the project will be one of the typologies in landscape architecture to expand the role of landscape professionals.

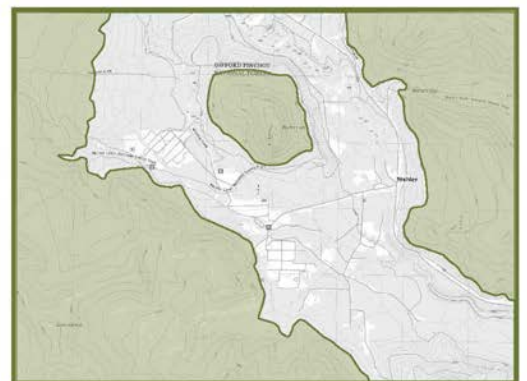


ITERATIONS, PROCESS SKETCH





Interdisciplinary Research and Design Studio
Merideth Bendl, Tyler Bentley, Reddek Kelley, Jaiden Shea
Wind River Trust Site
Fall 2023

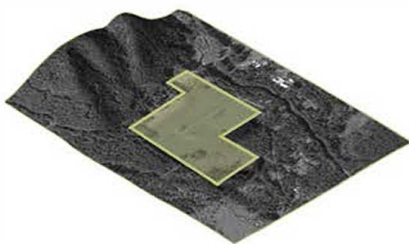


Mission:

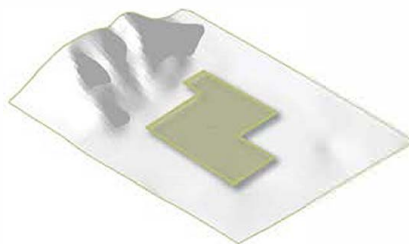
Revitalize and maintain Historic Wind River to economically sustain the local community through plant production, research, and education while engaging visitors

Vision:

By restoring the historic character of Wind River, we want to provide regenerative revenue for Skamania County while creating an immersive experience of the native PNW environment



Aerial



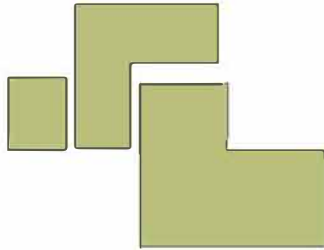
Mass



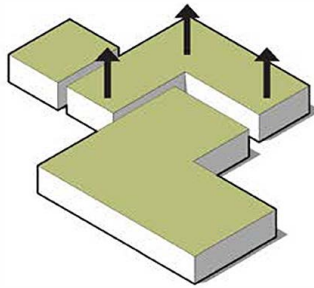
Topography

AWAKEN

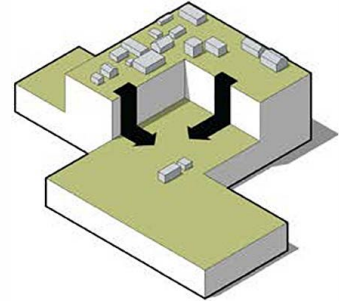
Local community, economy, and environment



Site



Expand



High/Low

Exposure

Cultivate awareness of the site and its mission with the surrounding communities to increase revenue and support educational endeavors.

SF of revenue space

LF of pedestrian path

Restoration

Restore arboretum, buildings and ecosystems to original character.

Quantity of restored buildings

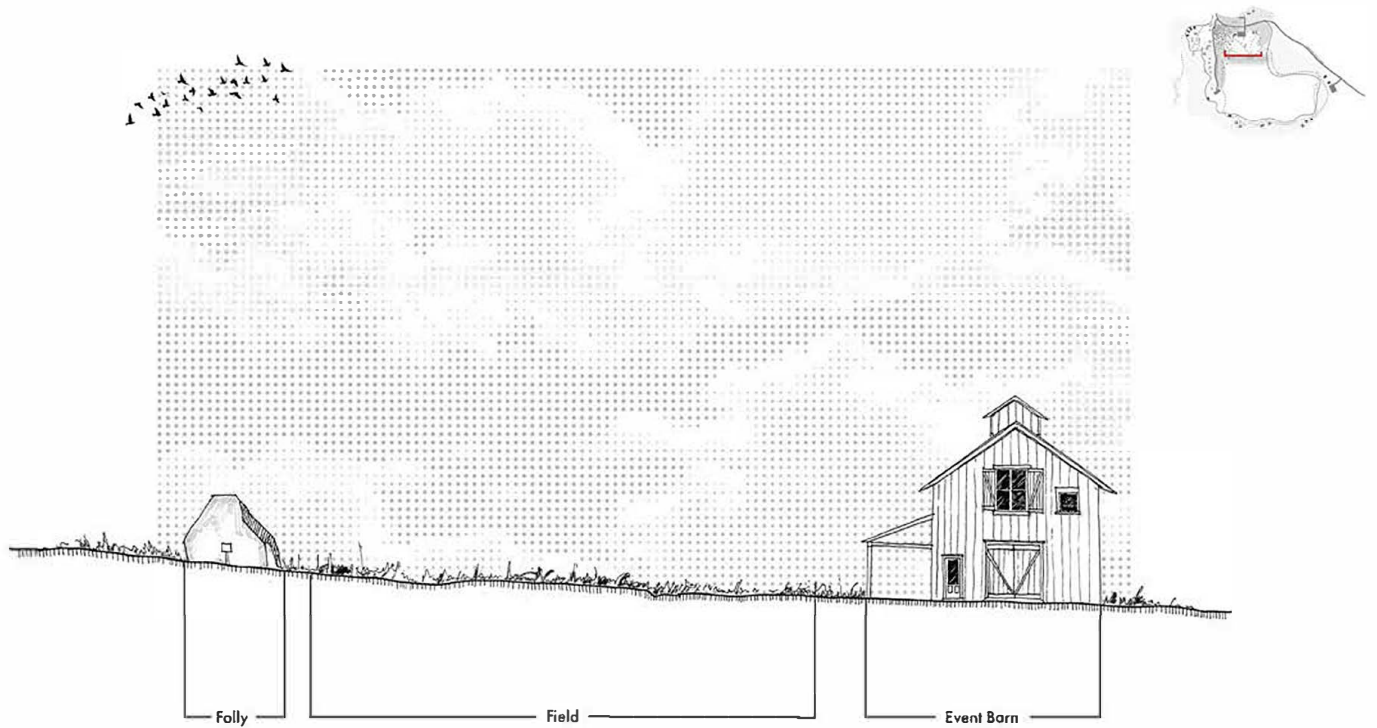
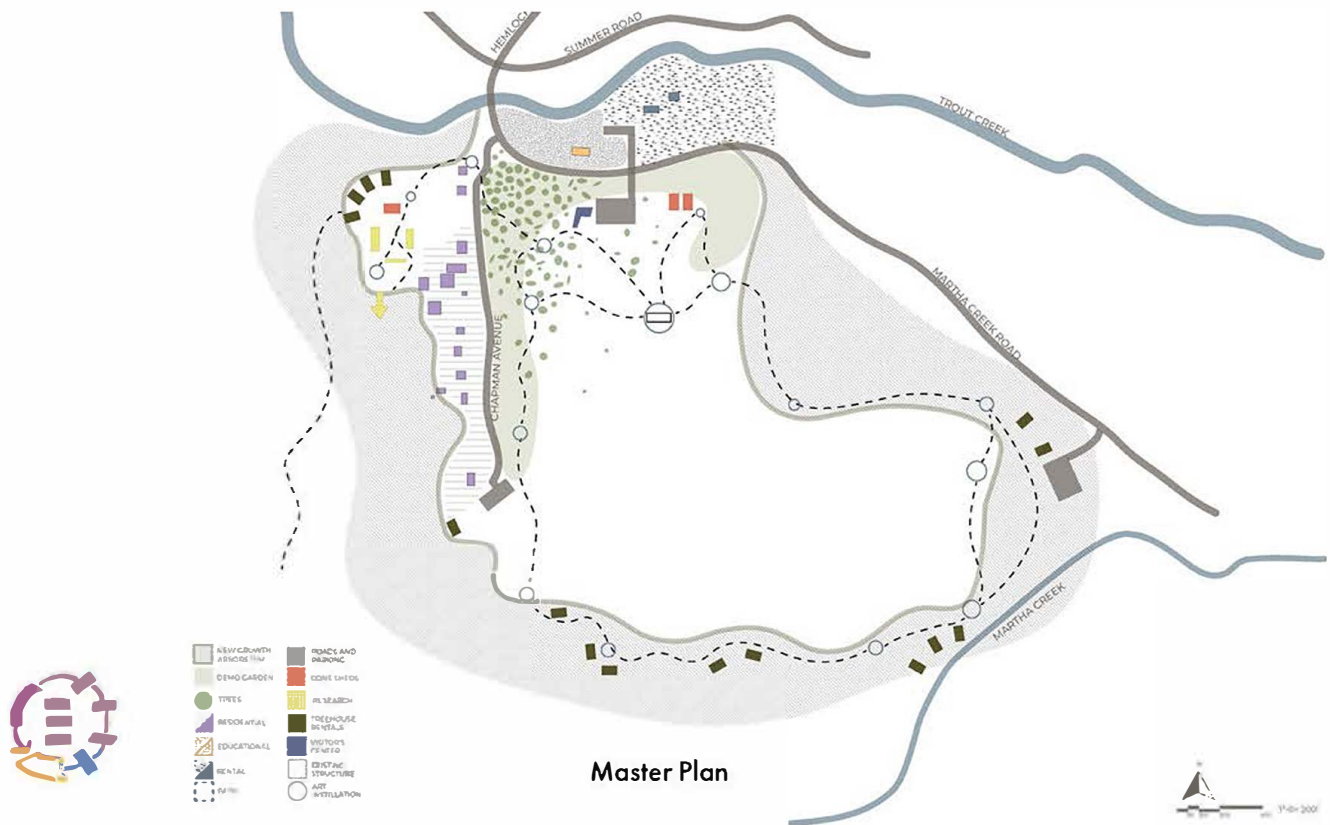
SF of restored ecosystem

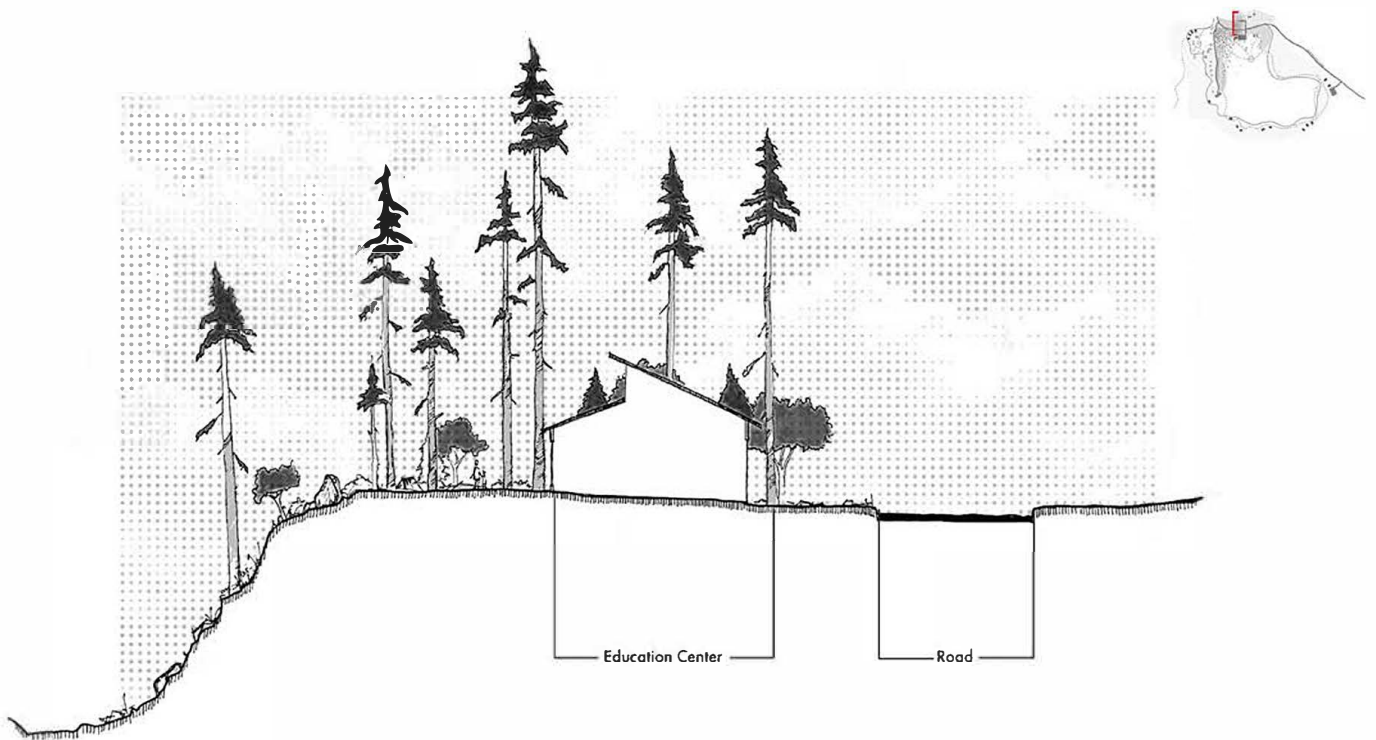
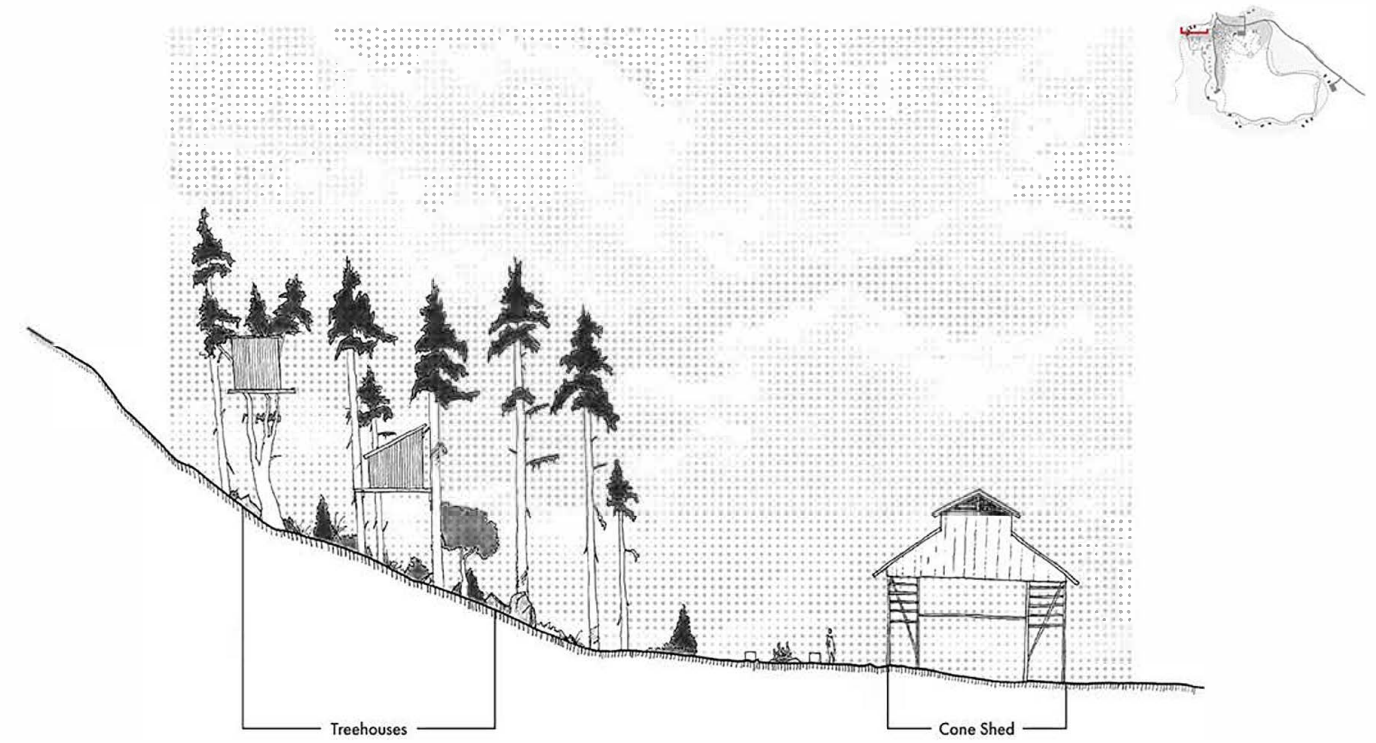
Education

Teach the community about the architecture and history of the site, as well as native plantings and ecosystems.

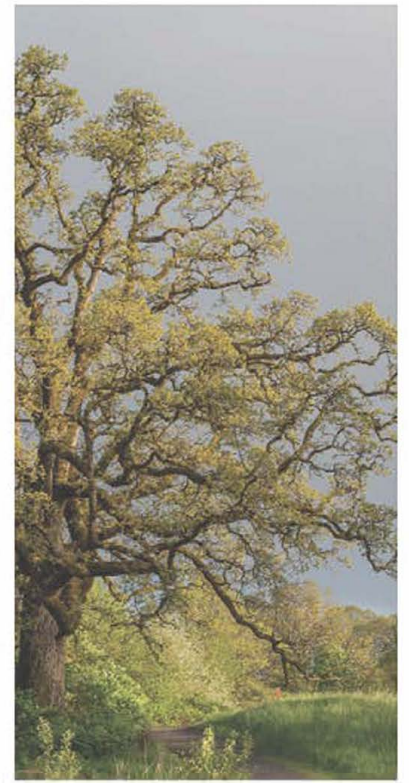
SF of education building space

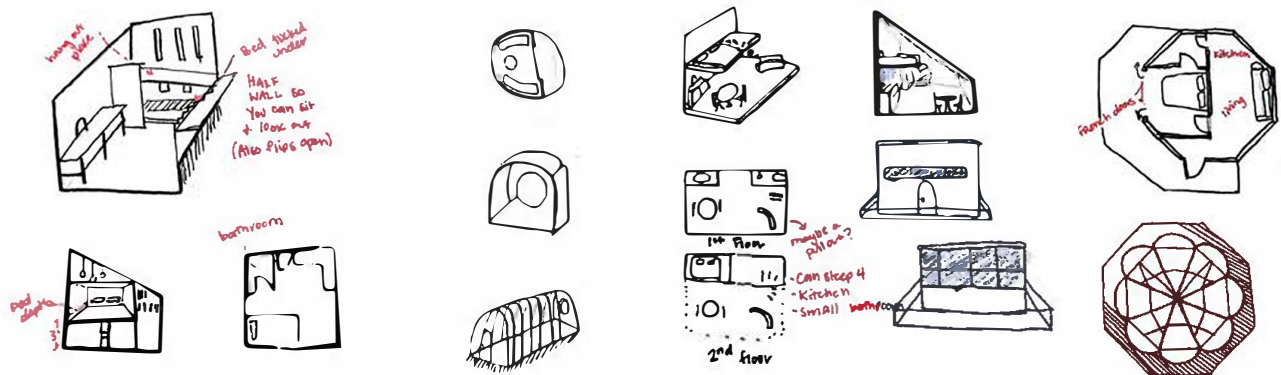
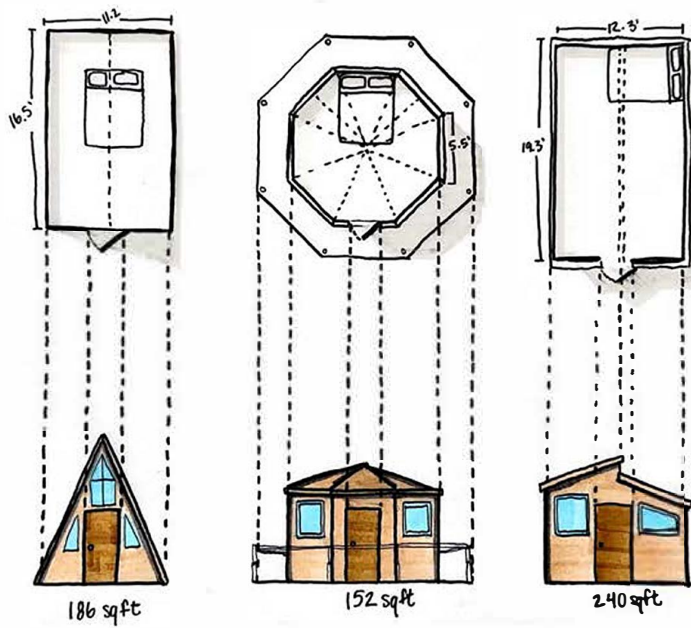
SF of demonstration gardens



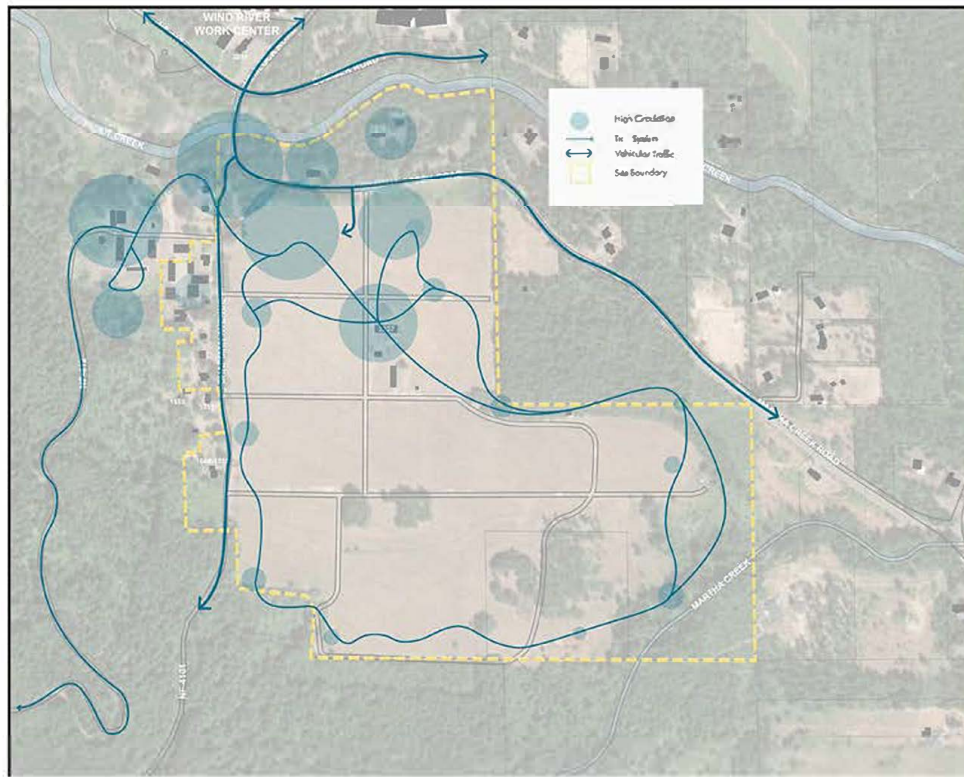


Redefining Wind River Arboretum

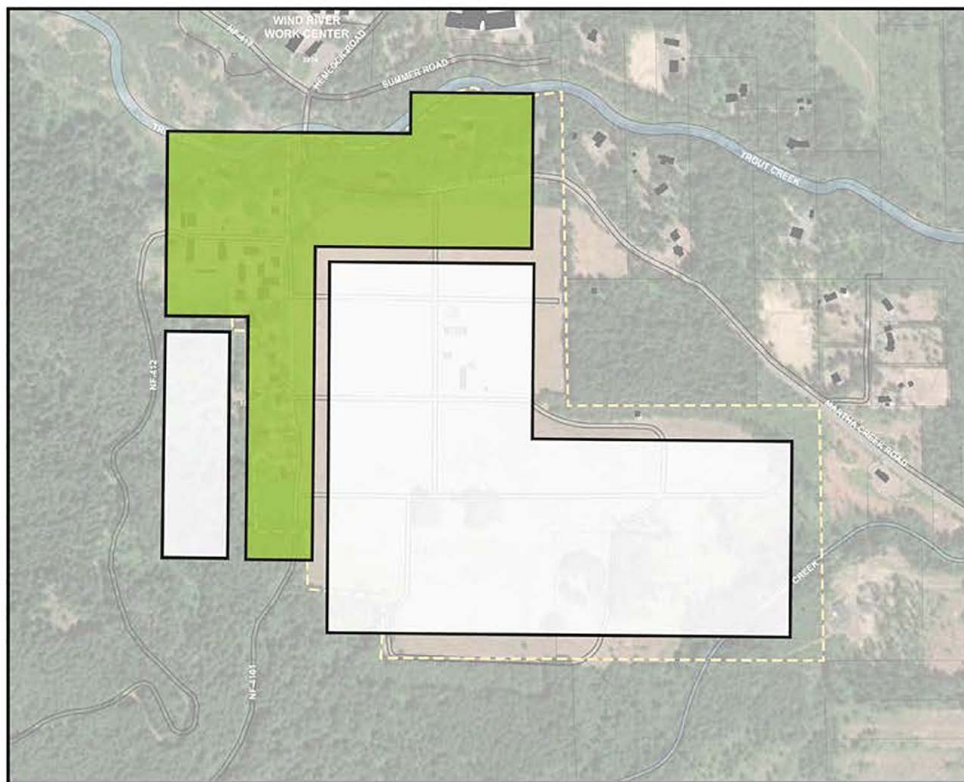




CIRCU LATION



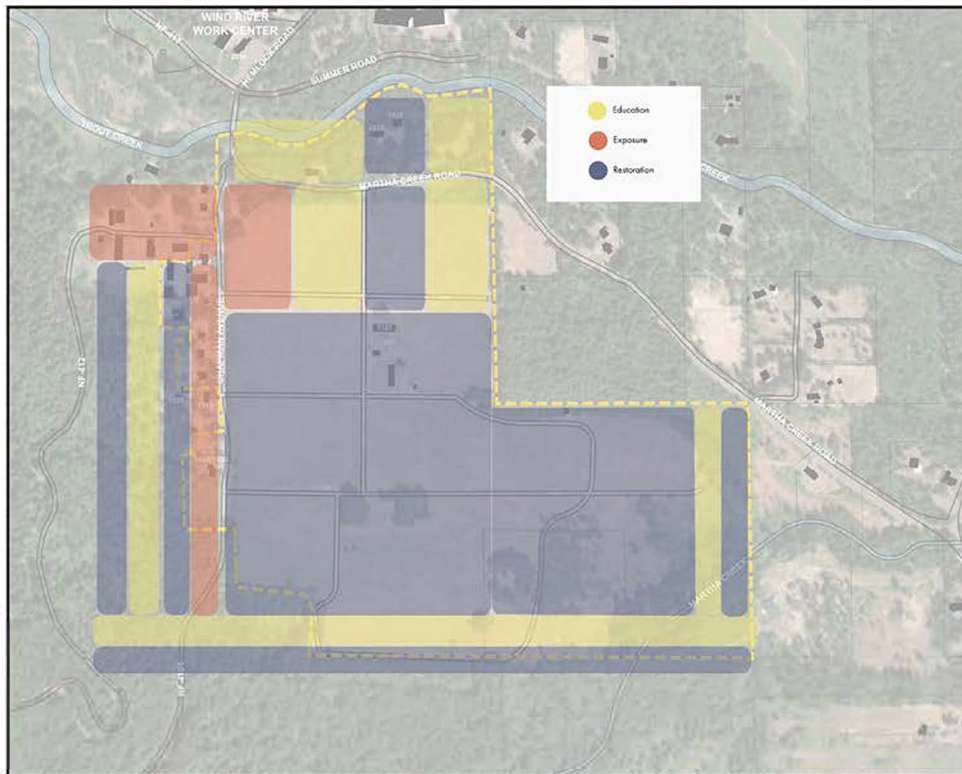
DENSITY

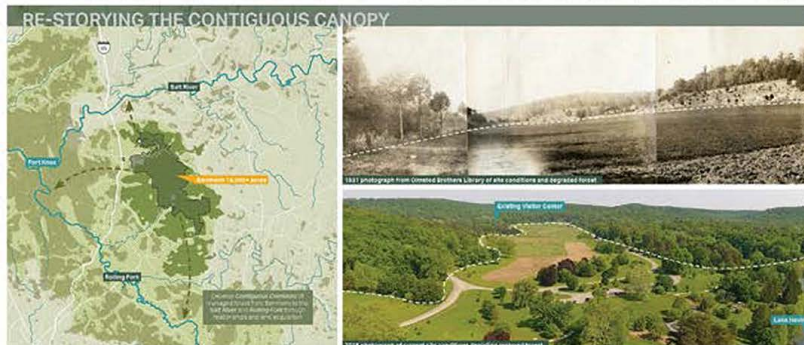
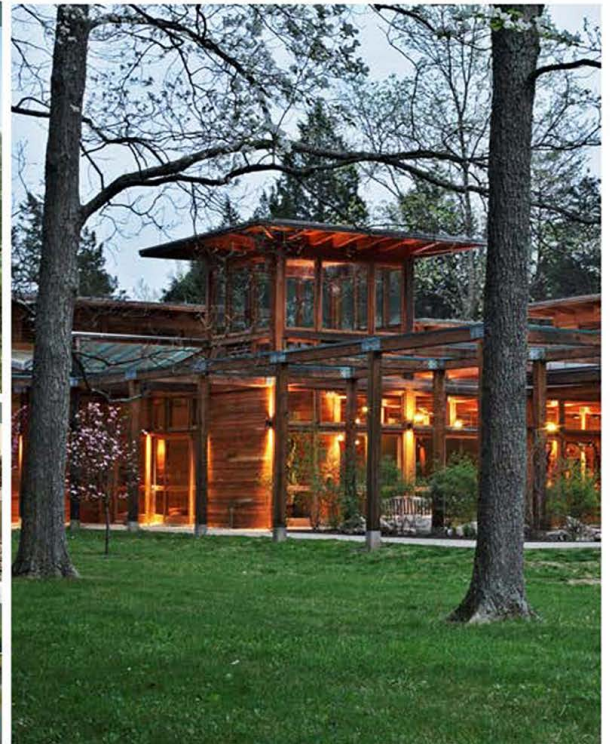


VEGETATION



PROGRAM







Mission

Contribute to Skamania County's conservation initiatives while educating the community on stewardship and the historic value of the Wind River Arboretum



Vision

To create a destination that allows locals and tourists to be immersed in the history, and culture of Skamania County, while showcasing the natural ecology of the Pacific Northwest



Goals

1. Economic Revitalization
2. Create a Destination
3. Showcase the history, ecology, and culture of Wind River



Metrics

1. Increase revenue and community engagement with events, local markets, opportunities for small businesses, and plant sales
2. Create a destination through rental properties, camping amenities, and PCT access
3. Showcase the culture by creating a nursery, program gardens, and an education center



Theme

A Retreat from Urban Life

