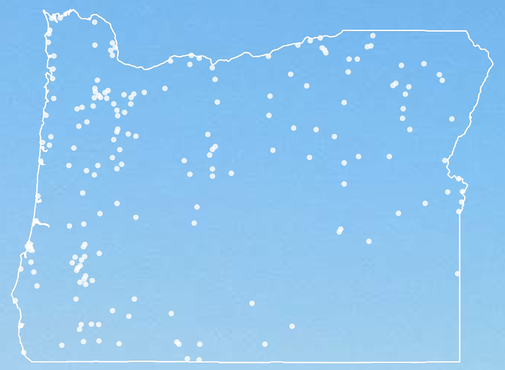


OREGON RURAL COMMUNITY SCHOOLYARDS

Building community, health, climate resilience and education in Oregon's schoolyards

TRANSFORMING RURAL SCHOOLYARDS INTO PUBLIC GREEN SPACES THAT ARE...

Outside of school hours, the community schoolyard can be a space for a rural community to gather, play, and socialize. More green space means more opportunities for social cohesion, which is essential in rural areas without robust park systems.

...BY COMMUNITY, FOR COMMUNITY

Community schoolyards promote more physical activity in children, reducing health risks associated with lack of exercise. Community schoolyards are good for mental health, too, leading to better stress management, improved behavior, and increased social relationships.

...HEALTHY FOR ALL AGES + ABILITIES

As rural communities face a range of climate threats, from wildfires and droughts to heavy rains and flooding, resilient schoolyards can provide places to play in all weather.

...CLIMATE RESILIENT FOR FUTURE GENERATIONS

Access to green space in school can lead to better grades, higher test scores, improved graduation rates, and reduced absenteeism. Native ecologies in the community schoolyard provide a learning laboratory for students to understand the world around them.

...LEARNING LANDSCAPES ROOTED IN THEIR CONTEXT

While each schoolyard is tailored to its context, all share a set of key priorities: community, climate resilience, health, and land-based education.

WHY RURAL SCHOOLYARDS? EQUITY IN OREGON'S RURAL COMMUNITIES

MAPPING RURAL INEQUALITY

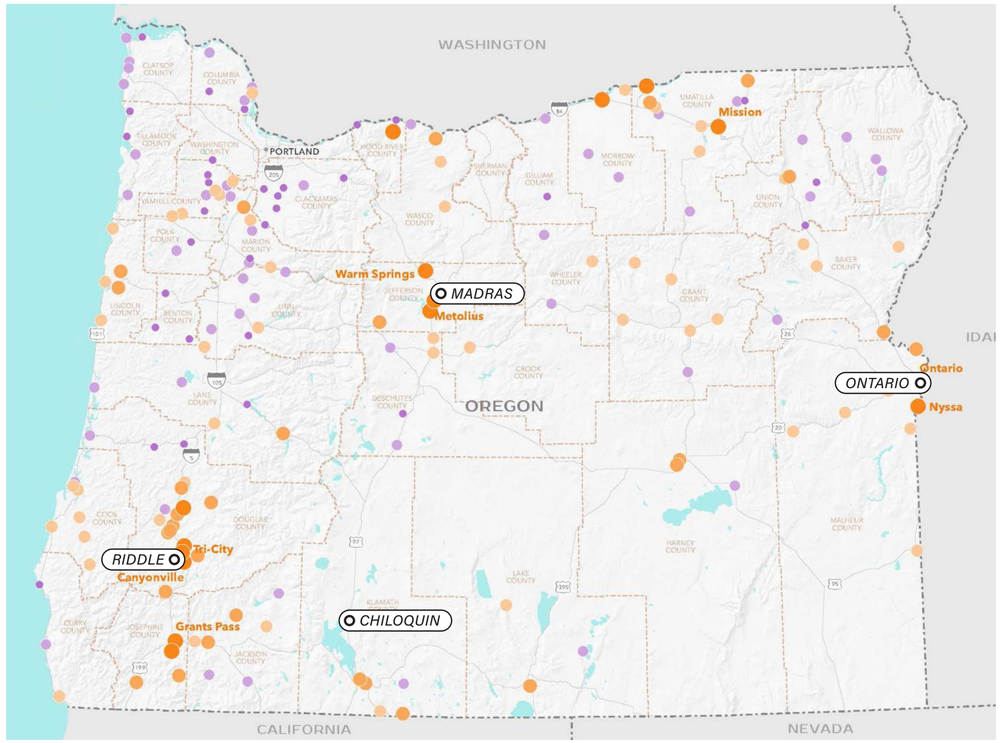
The Trust for Public Land analyzed 140 rural communities in Oregon. Across the state, they found that in rural towns...

70% OF STUDENTS ARE ELIGIBLE FOR FREE & REDUCED MEALS

20% OF STUDENTS MISS AT LEAST 10% OF SCHOOL DAYS

1 in 3 RURAL TOWNS FACES HIGH WILDFIRE RISK

40% OF THE POPULATION IS LOW-INCOME



LEGACIES OF COLONIZATION + DISPLACEMENT: 150 YEARS OF NATIVE LAND LOSS

Native people in Oregon face challenges from the loss of land and resources caused by colonialism. In the mid 20th century, the federal government terminated many Oregon tribes, denying them access to the reservation lands they had been promised in treaties. Tribes today continue to repair the deep losses caused by these dispossessions.

PRE-CONTACT | 1855 | 1864 | PRESENT DAY

WHICH COMMUNITIES COULD BENEFIT MOST FROM A NEW SCHOOLYARD?

Factors evaluated to determine potential community impact include:

HEALTH
- lack of physical activity
- poor mental health
- health outcomes
- unmet healthcare needs

EQUITY
- Indigenous residents
- residents of color
- income
- educational attainment
- linguistic isolation
- English language learner students
- free & reduced lunch students
- chronically absent students

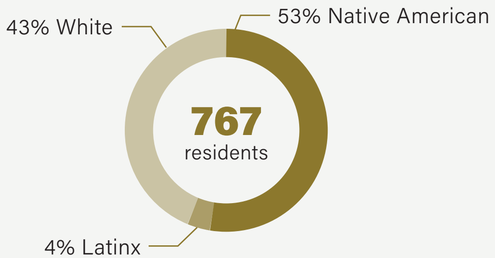
CLIMATE
- walking distance to parks
- wildfire risk
- water protection needs

Rigorous data analysis found that rural communities across the state face significant health, equity, and climate challenges.

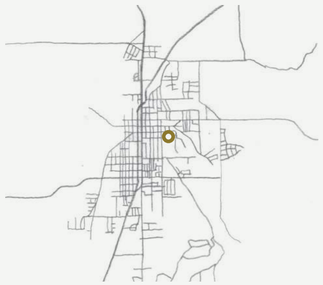
FOUR TOWNS SELECTED FOR SCHOOLYARD TRANSFORMATION

0.8
square miles

CHILOQUIN

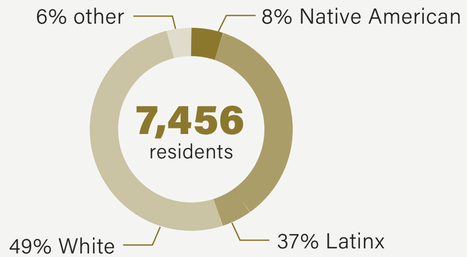


Chiloquin Elementary School



8.1
square miles

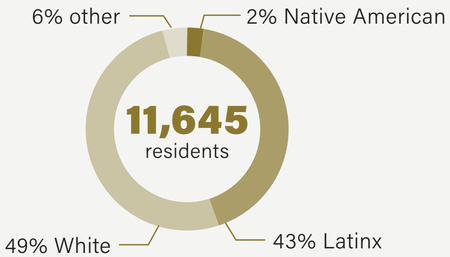
MADRAS



Madras Elementary School

5.2
square miles

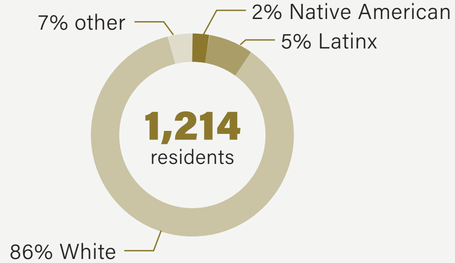
ONTARIO



Alameda Elementary School

0.6
square miles

RIDDLE



Riddle Elementary School

Located across the state, these diverse towns demonstrated both high need and great potential for a community-led schoolyard project.

PRIORITY 1: BUILDING COMMUNITY

	PRE-PROJECT	CO-DESIGN	IMPLEMENTATION	POST-INSTALL
School Students + Staff		In-Class Workshops Open Houses Teacher Lunches Site Walks with Staff	Participatory Builds Fundraising Drives	Daily Use Maintenance
Community Organizations + Nonprofits		Project Partner Meetings	In-Kind Donations Grants	Volunteer Maintenance Community Programming
Local + Tribal Governments		Project Partner Meetings Indigenous Consultation	Grants	Community Programming
Town Residents		Public Meetings Tables at Community Events	Fundraising Drives Community Plant Sourcing	Community Use
Local Businesses		Project Partner Meetings	In-Kind Donations Contracts w Local Businesses	
	Every project begins with relationship building. A local community coordinator is hired to welcome in project partners.	Through many different touchpoints, community priorities and feedback guide the design process. Iterative engagement brings local voices into each stage.	Community support is key to making the project happen; grassroots donations demonstrate local investment for outside funders.	The relationships built throughout the process ensure that the space is well used, programmed, and cared for after installation.

CENTERING THE VISION OF YOUTH

In-class workshops teach students to be "junior landscape architects," imagining their new schoolyard through collaborative mapping and collage. Meetings with ESL and special education classes ensure that the design meets all students' unique needs. The program involves high school students with skills from early childhood education and FFA to help engage students.

The project is anchored in a deep process of relationship-building, developing a shared vision, and fostering long-term investment and stewardship.

FEEDBACK LOOPS: HOW COMMUNITY GUIDES DESIGN

ITERATIVE ENGAGEMENT PROCESS

#1 LISTENING & UNDERSTANDING

- WHAT WOULD MAKE THIS THE BEST SCHOOLYARD EVER?
- WHAT DO YOU LOVE ABOUT YOUR COMMUNITY?

#2 VISIONING & INTERPRETING

- WHAT ARE YOU MOST EXCITED ABOUT?
- WOULD MAKE SENSE FOR YOUR SCHOOL?

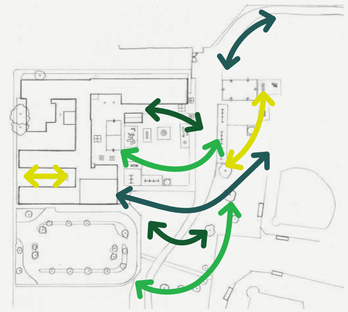
#3 CONFIRMING & REFINING

- DID WE HEAR YOU RIGHT? DID WE MISS ANYTHING?
- DO YOU THINK YOU COULD HELP US MAKE THIS HAPPEN?

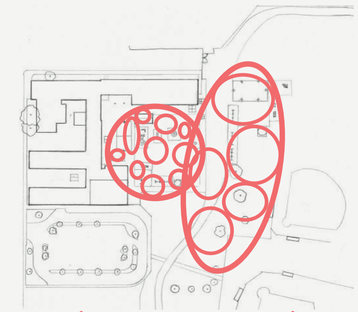
KEY TAKEAWAYS FROM STUDENT + COMMUNITY ENGAGEMENT IN MADRAS, OR

SPATIAL MOVES FROM STUDENTS' SITE MAPS

INTEGRATE NATURE WITH PLAY

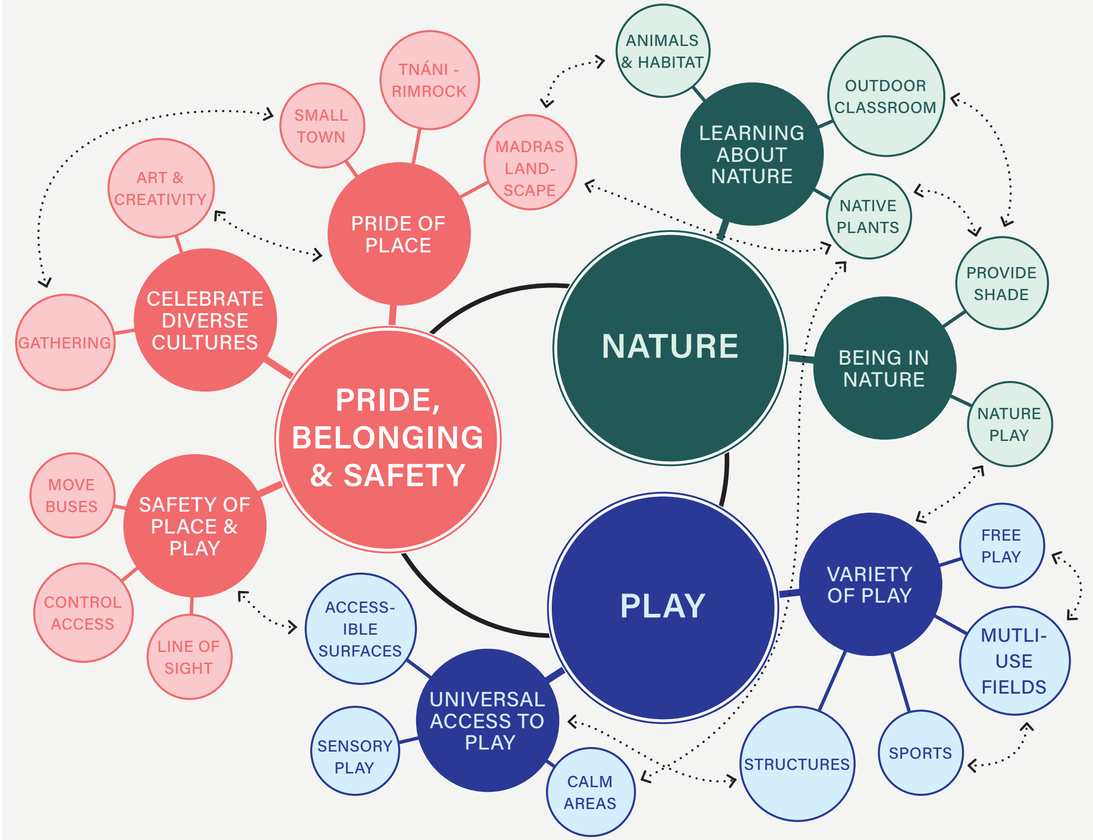


CLARIFY & UNITE PLAY AREAS



SMALLER, YOUNGER, MORE ELEMENTS — *BIGGER, OLDER, FEWER ELEMENTS*

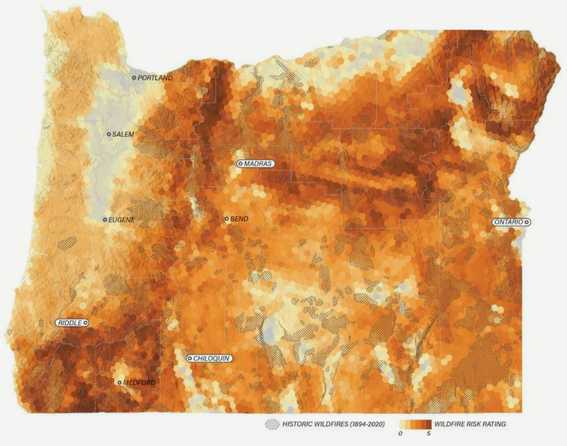
PRIORITIES FROM ENGAGEMENT PROCESS WITH COMMUNITY



Between designers, clients, and community coordinators, the program team visits each town regularly throughout the design and implementation process.

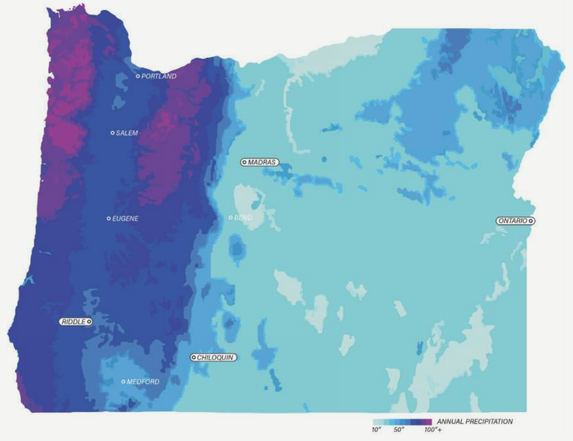
PRIORITY 2: CLIMATE RESILIENT SPACES FOR FUTURE GENERATIONS

CLIMATE THREATS IN OREGON



INCREASED HEAT + WILDFIRE RISK

Rising global temperatures will lead to hotter conditions, more frequent hot days, and higher average temperatures in Oregon. Children are particularly vulnerable to the health impacts of extreme heat. More frequent wildfires pose a health risk due to particulate matter, which can worsen existing health conditions like asthma.



PRECIPITATION EXTREMES + SNOW PACK LOSS

Oregon will see more extreme fluctuations in precipitation; dry areas will experience increased drought, while wetter areas will see more rain events, particularly in winter. Warmer temperatures will cause declines in snow pack, earlier runoff, and lower summer stream levels.

DESIGN STRATEGIES FOR HEAT + SMOKE

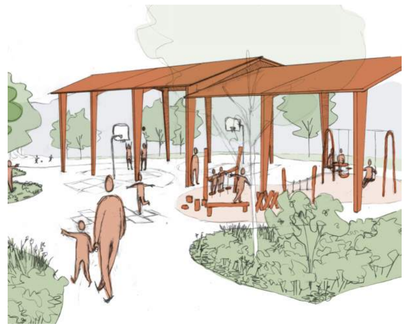
Use resilient paving materials that don't crack and fade from UV exposure

Increase tree canopy cover to create shade and capture particulate matter

Provide shaded spaces using rural vernacular building typologies

DESIGN STRATEGIES FOR PRECIPITATION EXTREMES

Select drought-tolerant native plants to reduce water demand



Promote year-round and all-weather activity for children with covered play

Reduce asphalt and plant stormwater gardens to increase water storage

Strategic design solutions support human and nonhuman resilience in the face of increasing wildfire risk, rising temperatures, and drought.

COMMUNITY GARDEN + ORCHARD

Shared long-term stewardship and increased access to healthy food

SHADED SEATING + PLAY

Comfortable micro-climates for school-goers and neighbors alike

STORMWATER PLANTING

Robust plant species to support critters and a healthy water system

COVERED OUTDOOR CLASSROOMS

Varied learning environments that support mental health and shelter from heat and rain

COVERED PLAY STRUCTURE

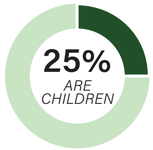
All-weather opportunities to stay active

With limited budgets in mind, a focus on low-cost, high-impact resilience tools helps ensure longevity in a changing climate.

PRIORITY 3: HEALTHY COMMUNITIES WHERE PEOPLE OF ALL BACKGROUNDS CAN THRIVE

RIDDLE

17% LIVE BELOW THE POVERTY LINE



>95% STUDENTS ON FREE/REDUCED SCHOOL MEALS

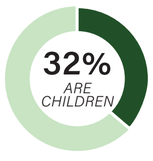
29/35 COUNTY HEALTH RANKING

50% LACK ACCESS TO SPACES TO EXERCISE

(4X THE STATEWIDE AVERAGE)

CHILOQUIN

27% LIVE BELOW THE POVERTY LINE

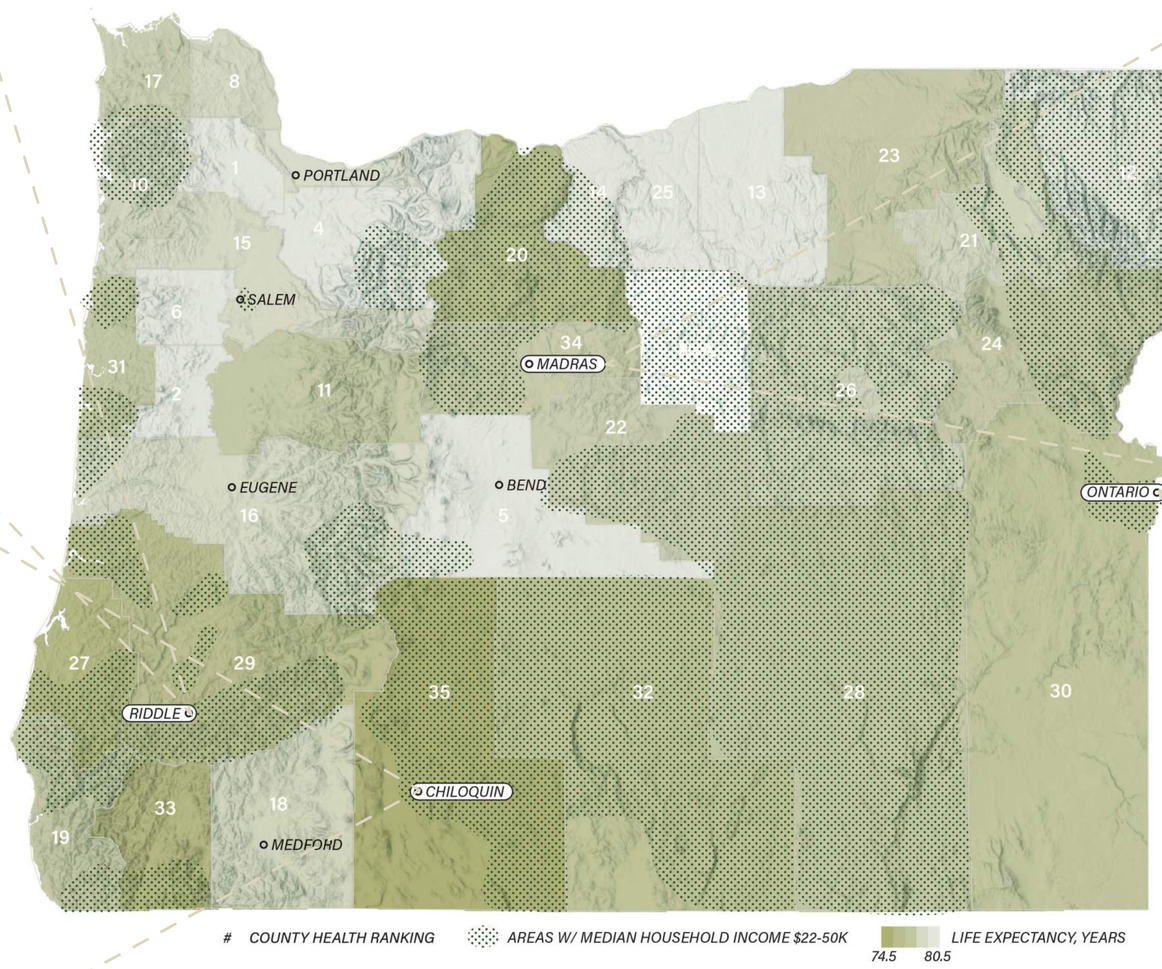


>95% STUDENTS ON FREE/REDUCED SCHOOL MEALS

35/35 COUNTY HEALTH RANKING

36% LACK ACCESS TO SPACES TO EXERCISE

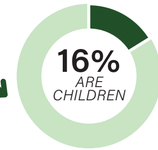
(3X THE STATEWIDE AVERAGE)



ALL FOUR COMMUNITIES FACE BARRIERS TO HEALTH

MADRAS

18% LIVE BELOW THE POVERTY LINE



>95% STUDENTS ON FREE/REDUCED SCHOOL MEALS

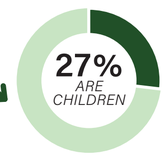
34/35 COUNTY HEALTH RANKING

40% LACK ACCESS TO SPACES TO EXERCISE

(3X THE STATEWIDE AVERAGE)

ONTARIO

21% LIVE BELOW THE POVERTY LINE



>95% STUDENTS ON FREE/REDUCED SCHOOL MEALS

30/35 COUNTY HEALTH RANKING

60% LACK ACCESS TO SPACES TO EXERCISE

(5X THE STATEWIDE AVERAGE)

The program tackles rural health barriers by connecting users with public, high-quality outdoor spaces to enjoy nature and get active.

ON THE GROUND: AFFORDABLE HEALTH SOLUTIONS

HEALTH BARRIERS IN EXISTING SCHOOLYARD

ADDRESSING HEALTH THROUGH DIVERSE PLANTING, THOUGHTFUL MATERIALS, AND PROGRAMMING OPPORTUNITIES

With a goal to get kids moving, the design removes barriers to healthy play and adds accessible surfacing, shade trees and dynamic play equipment.

PRIORITY 4: LEARNING LANDSCAPES ROOTED IN THEIR ECOLOGICAL + CULTURAL CONTEXT

RIDDLE

MOUNTAINOUS
MIXED CONIFER-
DECIDUOUS
FORESTS WITH
MANY CREEKS

WE WANT TO CELEBRATE...

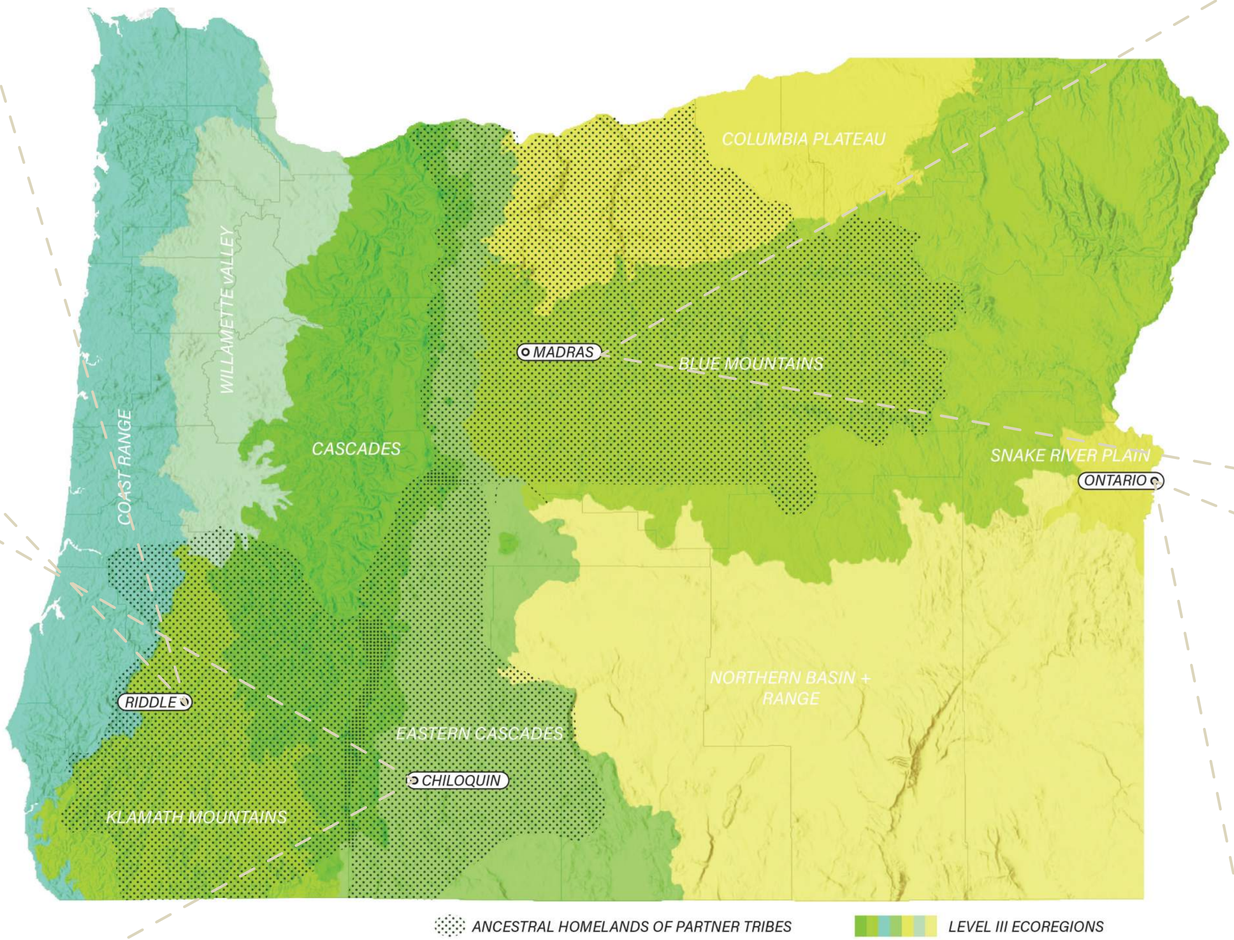
TIMBER INDUSTRY HISTORY
COW CREEK BAND OF UMPQUA TRIBE OF INDIANS HERITAGE
MOUNTAIN VISTAS

CHILOQUIN

MOUNTAINOUS
PINE FORESTS
WITH SAGEBRUSH +
QUAKING ASPEN

WE WANT TO CELEBRATE...

KLAMATH TRIBAL HERITAGE
TIMBER INDUSTRY HISTORY
ABUNDANT MARSHES + WATERWAYS



FINDING UNIQUE CHARACTER + ASSETS OF EACH COMMUNITY

MADRAS

SAGEBRUSH STEPPE
WITH DRAMATIC
RIVER CANYONS

WE WANT TO CELEBRATE...

DIVERSE COMMUNITIES
CONFEDERATED TRIBES OF THE WARM SPRINGS HERITAGE
TIGHT-KNIT SMALL TOWN

ONTARIO

SAGEBRUSH
GRASSLAND
WITH EXTENSIVE
AGRICULTURE

WE WANT TO CELEBRATE...

DIVERSE IMMIGRANT COMMUNITIES
MANY LANGUAGES SPOKEN
AGRICULTURAL HERITAGE

In response to expressed desires to feel more connected to nature, designs celebrate local identity while offering immersive learning opportunities.

COMMUNITY PRIORITIES: CELEBRATING WHAT MAKES ONTARIO SPECIAL

MANY LANGUAGES + CULTURES COME TOGETHER HERE

Ontario's diverse population includes Basque, Japanese, Latin American, and Somali communities. Students speak 17 languages at schools in Ontario.

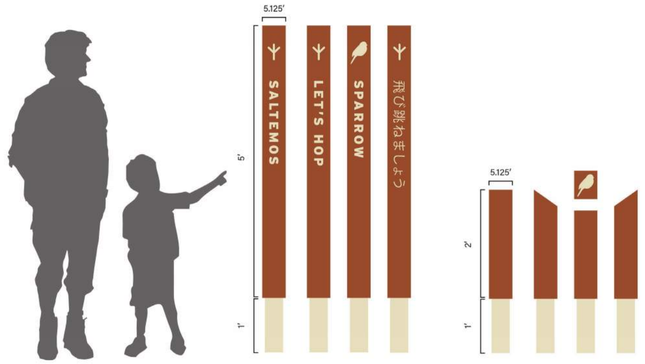
AGRICULTURAL HERITAGE

The tater tot was invented in Ontario, which is still home to Ore-Ida's primary plant. Local agriculture includes potato and onion production.

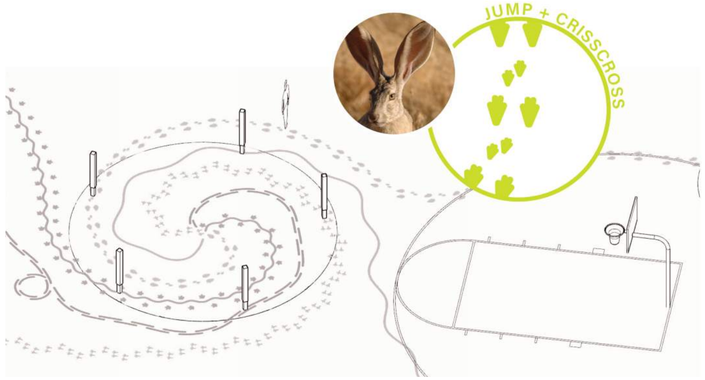
RICH SAGEBRUSH ECOLOGY

Outside of riparian and agricultural areas, the sagebrush steppe is home to a diverse community of high desert flora and fauna.

INCORPORATING COMMUNITY IDENTITY THROUGHOUT THE SCHOOLYARD



MULTI-LINGUAL SIGNAGE IN ENGLISH, SPANISH + JAPANESE



ANIMAL TRACK PLAY PATHS

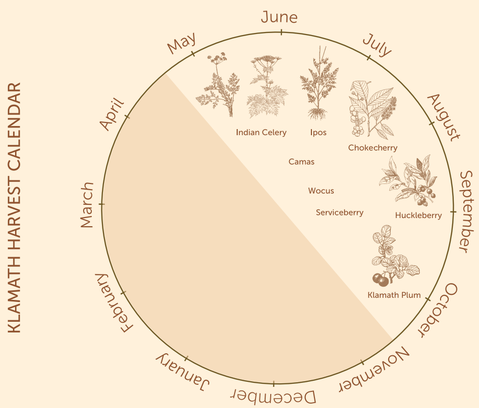
NATIVE PLANTS OF SAGEBRUSH DESERT ECOLOGY

CUSTOM ONION-SHAPED PLAY EQUIPMENT

Rigorous site analysis zooms into particularities of each locale, finding their way into manifestations large and small throughout the schoolyards.

?EWKSIKNII MAQLAQS, SAT'WAAYA DMOOYEEGA T'EYNNI STAPGA

'PEOPLE FROM THE LAKES, PONDS, AND MARSHES, HELP START NEW PLANT GROWTH'



The Klamath Tribes have relied on a variety of plants for survival since time immemorial. The Klamath culture and way of life is based upon hunting, fishing, gathering, and trapping.

The culture of the Klamath Tribes was based on a yearly cycle of travel from different villages and gathering spots. They depended on foods such as salmon, roots, berries, deer, and elk. Year after year the seasonal pattern of resources was followed.

In spring, the Tribes would fish for salmon, trout, and sucker fish along the banks of the rivers. In the late spring and early summer, the women would go out to gather roots such as ipos (Gees) and camas (boqs). In summer, wocus (wokas) was harvested. In the late summer months, the women would pick a variety of berries in the mountains including huckleberries (?iwam), chokecherries (doycq'as), and wild plum (dmolo). For the men the late summer was a time to hunt for deer and elk. By late fall, they would return to their winter villages. In the winter months, the cambium layer of Ponderosa Pine trees (Go.s) between the bark and the tree could be used as a food source.

Prunus subcordata
Klamath plum is a deciduous shrub or small tree growing up to 24' tall. The bark is gray with horizontal brown lenticels, similar to that of the cherry tree. The leaves are 2.5-5cm long and dark green, turning red in the fall. The flowers are pink or white, appearing in the spring in clusters of one to seven together. The fruit is a small plum-like drupe and may be red, orange or yellow; they are mature in late summer.

Vaccinium membranaceum
Huckleberry is an understory shrub that grows 1–4' tall. It has thin leaves with finely toothed margins that are pointed at the tips. Flowers are urn-shaped and creamy-pink. The berries are purplish or red-dish-black.

Heracleum maximum
Indian celery is a tall herbaceous perennial plant, reaching heights of over 7' tall. The stems are hollow and densely hairy. The leaves are lobed and very large, up to 16" across. Indian celery has the characteristic flower umbels that are about 8" across, flat-topped or rounded, and composed of small white flowers.

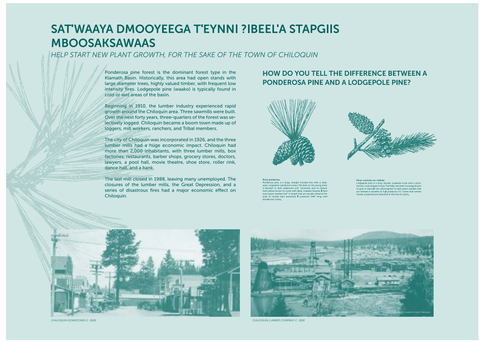
Lomatium nudicaule
Indian celery is a perennial from a taproot up to 2 ft. tall. Leaves are all basal and 1–3 times alternately-pinnately compound with ovate leaflets. Flowers are yellow in ball-like compound umbels with long, uneven rays. Fruits are flat, narrowly oblong, and up to ½ in. long, with narrow wings. Flowers June–July.

Prunus virginiana
Chokecherry is a small deciduous tree typically growing to 20–30' tall with an irregular, oval-rounded crown. Fragrant, cup-shaped, 5-lobed, white flowers (each to 1/2" across) in elongated clusters to 3–6" long bloom in mid-spring. Flowers give way to clusters of globular, pea-sized berries that ripen to dark purple/black in August.

Peridertidia oregana
Ipos is a perennial herb 10–90cm tall, its green to waxy-grayish erect stem growing from a cluster of small tubers. Leaves near the base of the plant have blades 3–30cm long divided into a variable number of leaflets, which may be subdivided into smaller segments. The inflorescence is a compound umbel of many spherical clusters of small white flowers.

PASSING DOWN TRADITIONAL ECOLOGICAL KNOWLEDGE

Conversations with Klamath Tribal elders highlighted the importance of sharing both traditional plant knowledge and language. Through collaboration with tribal knowledge keepers, bilingual signage was designed to share this knowledge in both text and audio.



KEYSTONE SPECIES FOR ECOLOGY + CULTURE

Developed collaboratively with Tribal elders, featured species such as Prunus virginiana (doycq'as, chokecherry) and Prunus subcordata (dmolo, Klamath plum) both support tribal cultural heritage and provide habitat for native pollinators. Community members offered plants to transplant.

By finding tangible ways to celebrate local Indigenous cultures, the deep power of naming and language are shared through interactions with the land.

RELY ON LOCAL FUNDING TO SHOW COMMUNITY INVESTMENT

Small donations from local residents demonstrate community support for the project to larger donors.

TARGET LARGE FUNDING FROM OUTSIDE SOURCES

Large funding comes from federal or state grants, Tribal grants, and philanthropic sources supporting health, education, the environment, and the arts.

GET LOCAL VOLUNTEERS INVOLVED

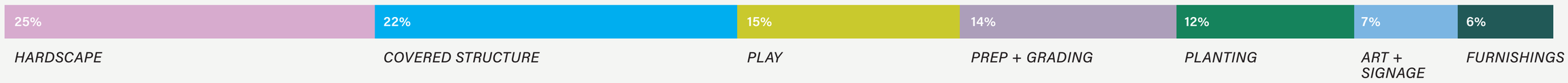
Project partners offer their time for everything from grant writing to watering to building raised bed planters and supplying manure for compost.

SPEND MONEY LOCALLY TO SUPPORT RURAL ECONOMIES

The program prioritizes sourcing materials locally and hiring local consultants, artists, and contractors to contribute to the local economy.

TAKING CARE WITH LIMITED RESOURCES

CHILOQUIN COST BREAKDOWN



Meaningful participation is instrumental for success of the schoolyards at all stages, from early decision-making to construction and ongoing care.

COMMUNITY PRIDE + WELL-BEING

"I want to thank the generous way that you all have honored the Klamath Tribes, with our language on this new facility, the plants, the traditional plants. I know that all the folks that are here regularly know that we are engaged in a daily, seemingly never ending battle for the recovery and ecological health of our homeland. I see all those plants that we're going to have and the names that we have up there for our plants as validating, validating that for our kids and validating that for our community, so thank you for that. And very last, I want to say that I see this as a great example of cross-cultural collaboration, of cross-cultural shared vision, that the larger society with all its problems could learn a lot from, so I'm proud of you, I'm proud of us."

-Clayton Dumont, Chairman, Klamath Tribes

ONE SCHOOLYARD SPURS FURTHER INVESTMENT

The project has galvanized new investments in Chiloquin's public realm:

- High School Track & Field Facility
- Chiloquin Parks Master Plan
- Safe Routes to Schools Improvements

STUDENT OUTCOMES AFTER INSTALLATION

- **50%** fewer behavior incidents
- **20%** less chronic absenteeism
- **15%** fewer suspensions

From design through occupancy, the schoolyards give young people the capacity to dream expansively and experience the impact of investment.