



# I Want to Live Together: I Want to Hear You Even as Extinction Tears You Away

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**I Want to Live Together  
I Want to Hear You Even as Extinction Tears You Away**

**A Thesis Submitted to the Department of Landscape Architecture,  
Harvard University Graduate School of Design**

*by*

**Kanchan Wali-Richardson**

**In Partial Fulfillment of the Requirements for the Degree of**

**MASTER IN LANDSCAPE ARCHITECTURE**

**May 19<sup>th</sup>, 2021**

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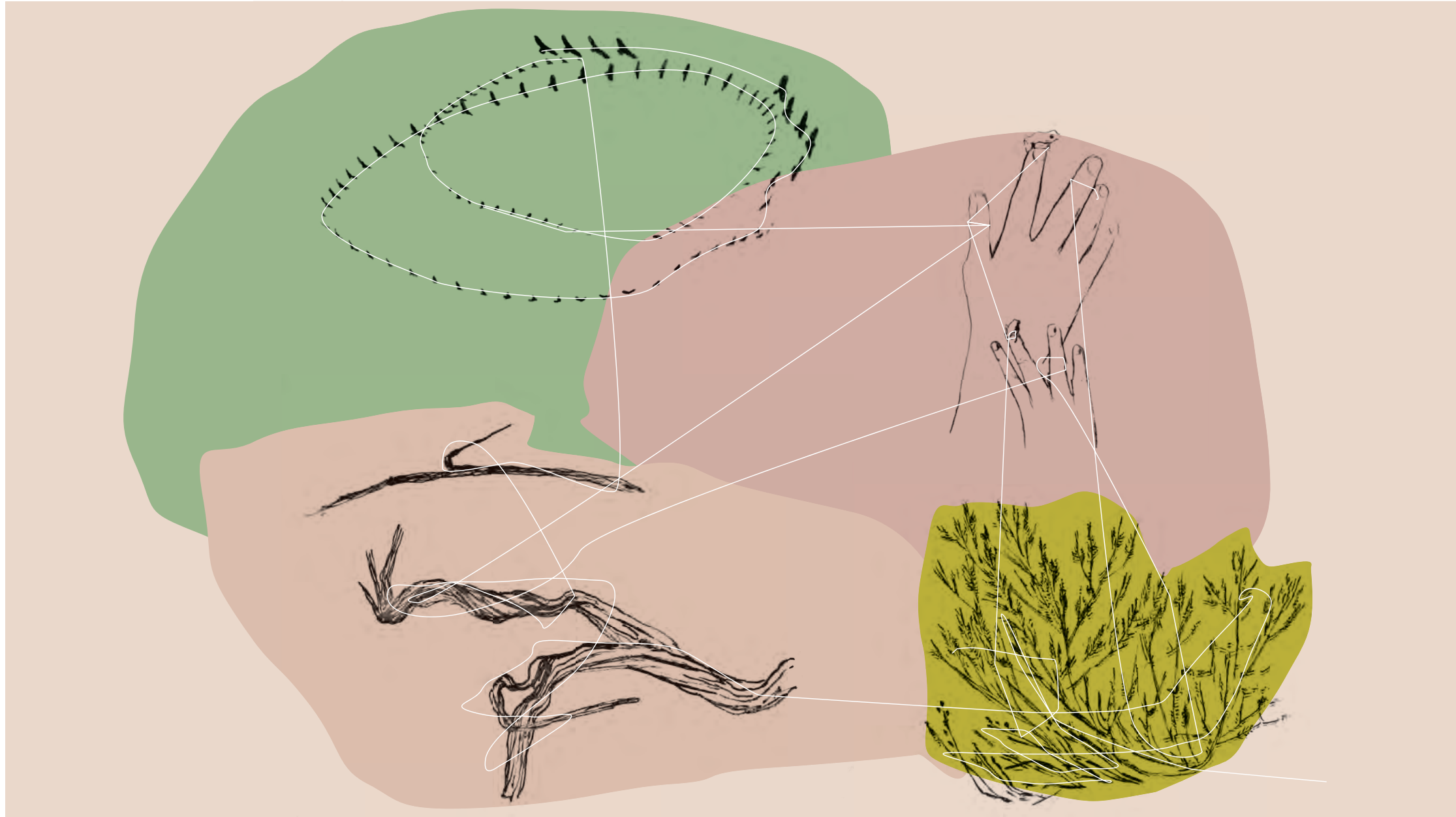
*Kanchan Wali Richardson*

**Student**



**Thesis Advisor**





i want to live together

kanchan wali-richardson  
advised by malkit shoshan

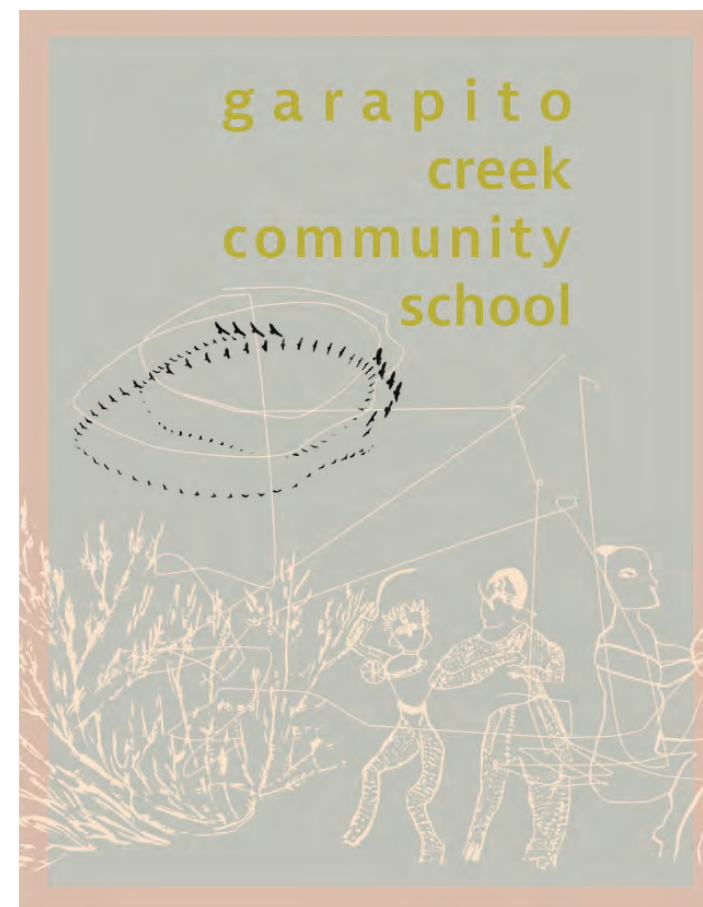
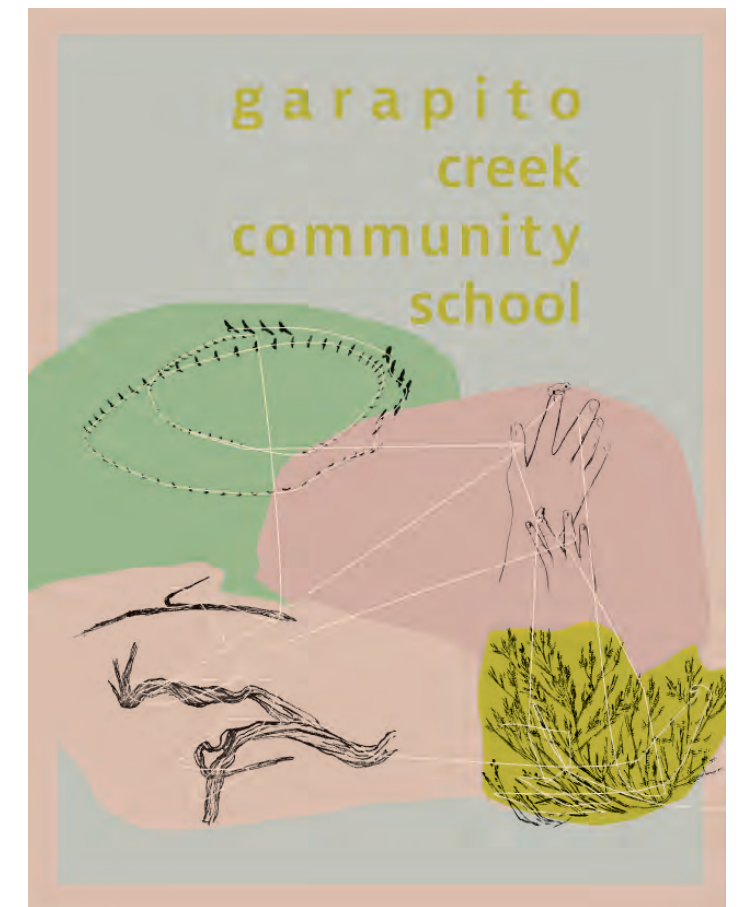
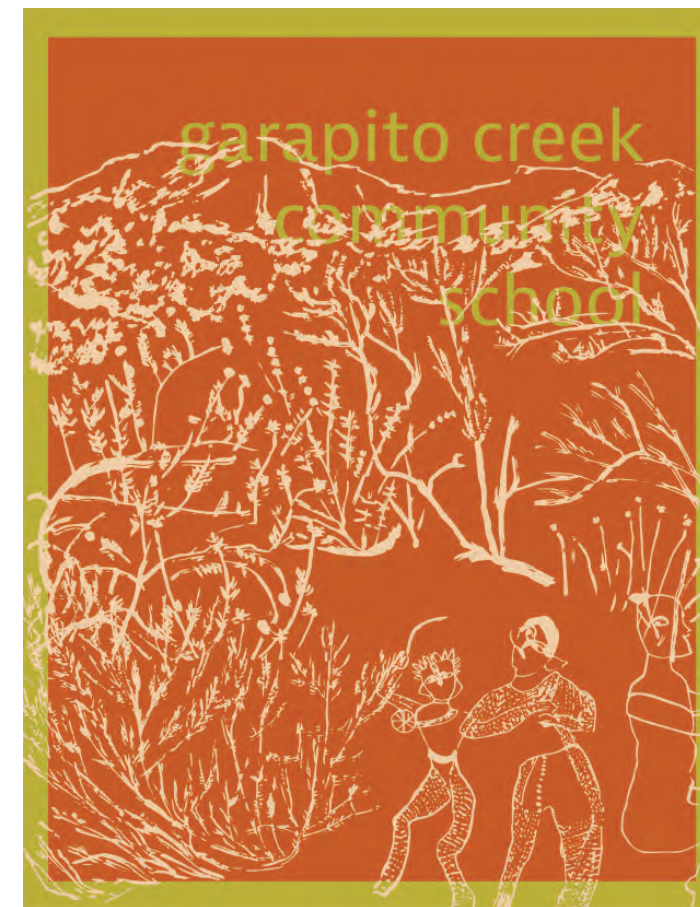
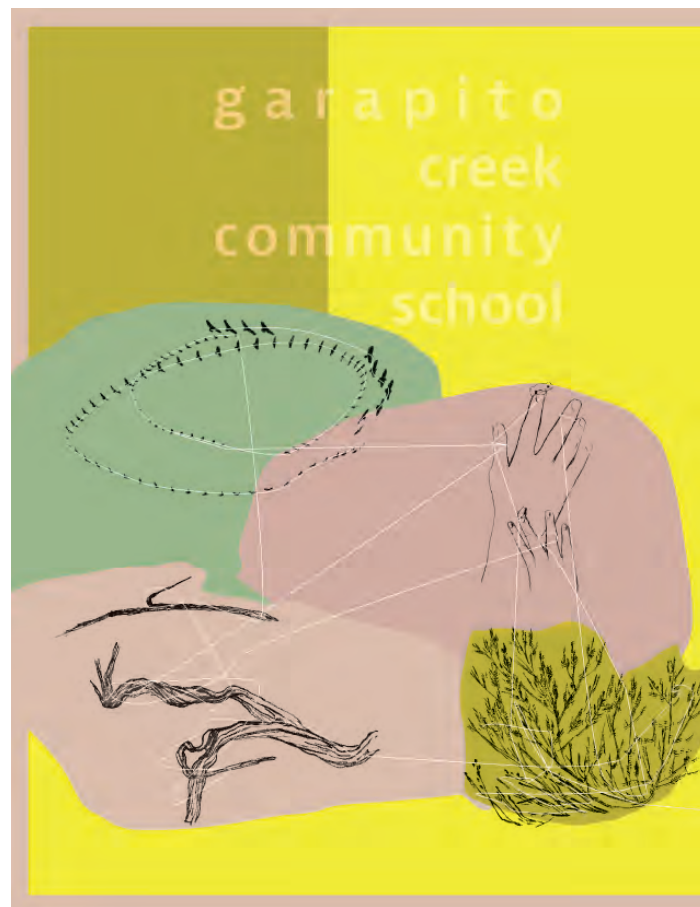
*i want to hear you even as extinction tears you away*



## *it's the year 2040*

This project is my attempt to grapple with how to live in a time of increasing extinction and loss. How should we go on? Knowing everything we know about how implicated we are in the unraveling of lives?

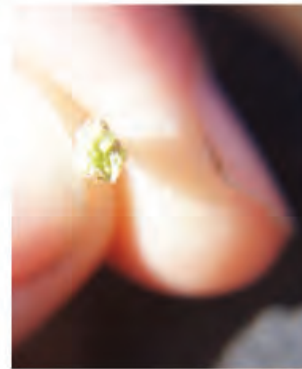




This thesis envisions a social infrastructure to catalyze both spatial and intrapersonal change, grounded where I live, in Topanga Canyon California, peri-urban neighborhood of Los Angeles.

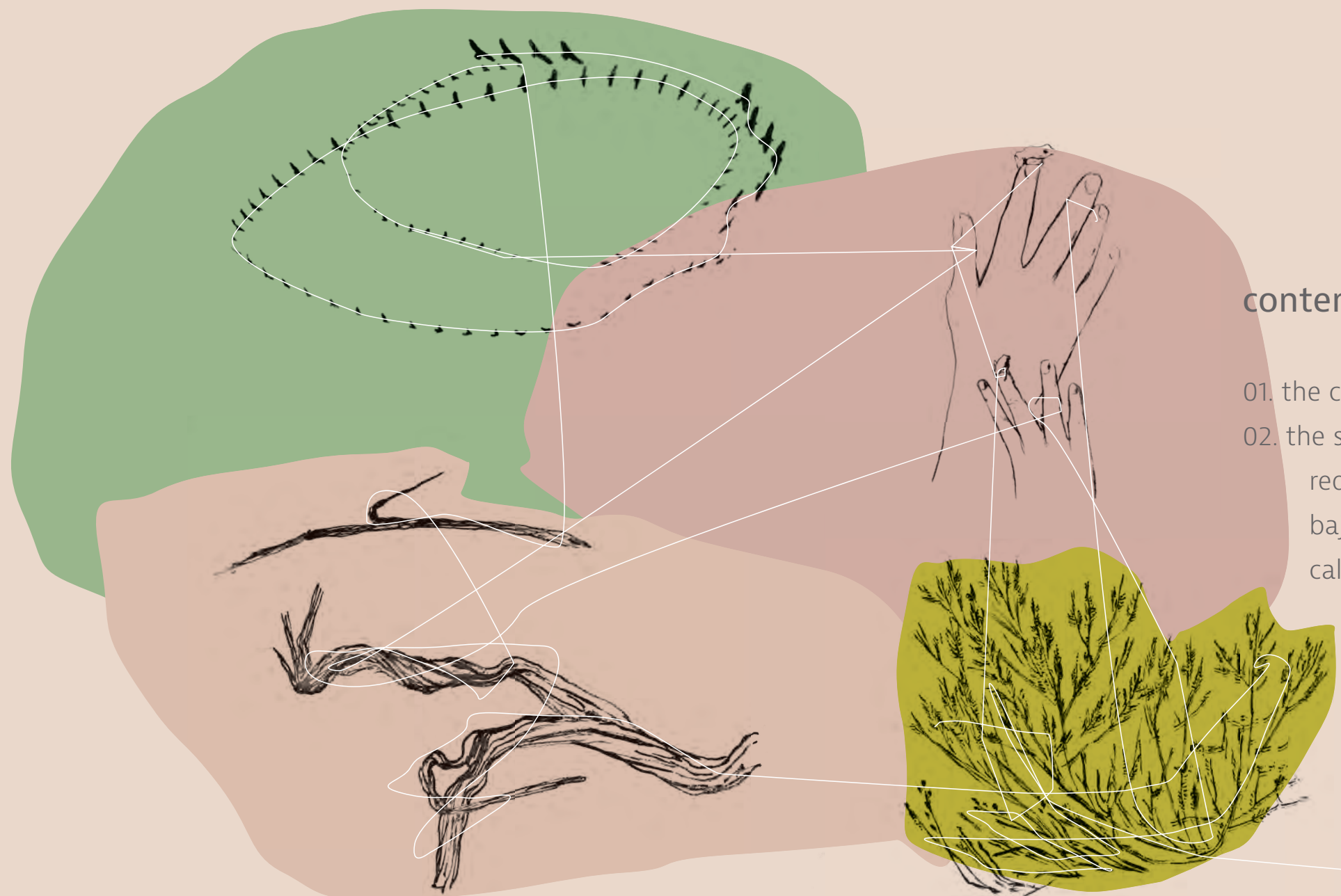
The Garapito Creek Community School is an experimental design-build lab, galvanizing community members as agents of change through radical multispecies politics and interventions that address the needs of the entire community, human and non-human. It is the center of gravity for existential reckoning. It asks, how do we expand what we call community?





The project, and thus the politics of the school, insist that a design practice in the face of these existential threats must be personal, must be embodied, must honor grief, and must come into being through the rebuilding of deep relationships with others.





## contents

01. the context **1990 - 2021**

02. the school told through three relationships **2021 - 2040**

red-tailed hawk

baja-california tree frog

california sagebrush



*the context: 1990 - 2021*





I was born in these mountains. My earliest memories are of the sandstone boulders and the bursting feeling of dried California buckwheat flowers. I remember the summer heat, my mother carrying me surrounded by the sweet smell of mule-fat plants along the creek bed.

The problem is, I don't remember all the butterflies that aren't here anymore. The thousands of them gone now. Or the beetles. Or the songbirds I don't even know the names of. I don't remember the particular wildflowers that no longer bloom, having been out-competed by European grasses. I have no memories of the salamanders you can't find anymore. I can't recall what it feels like to hold a red-legged frog in my little chubby cupped hands.

In my years here, how many lives have faded away? Who was already missing by the time I was born?





There's a home video that surfaced recently from when I was a baby. My dad is shooting. He's got the camera zoomed in on a massive, hairy, black tarantula. He's screaming and bellowing at my mom to kill it. My mom leans into the frame, holding me, a little chunky dumpling.







She says with a sweet somber voice to my dad,

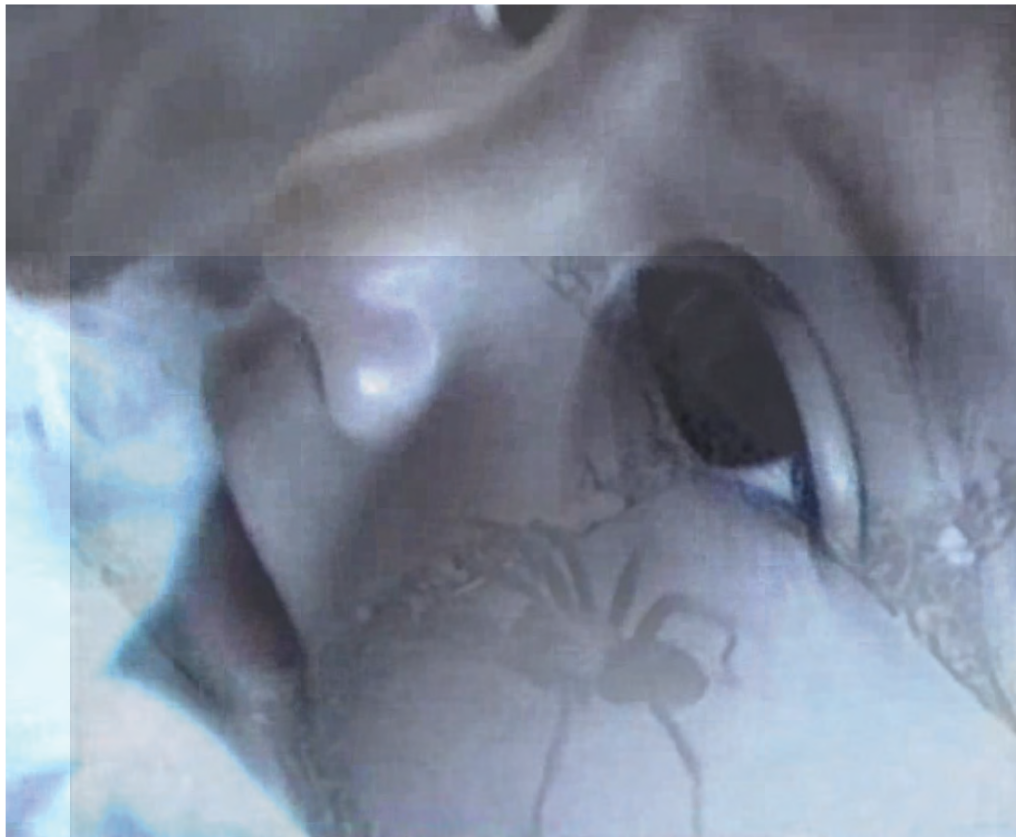


"I don't kill them because they're beautiful living creatures".





When I saw that video, it helped me understand better why I long for the world I long for.





# Animal populations worldwide have declined nearly 70% in just 50 years, new report says

BY SOPHIE LEWIS  
SEPTEMBER 10, 2020 / 9:09 PM / CBS NEWS

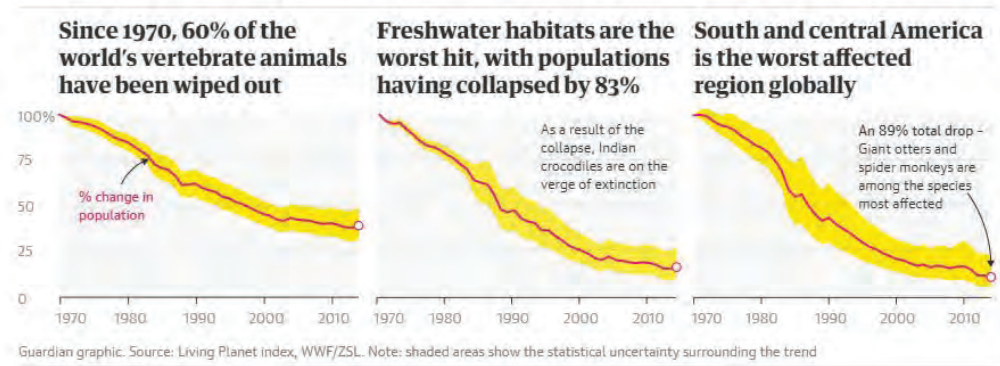


Animal populations worldwide have declined nearly 70% in just 50 years. 60% of vertebrates wiped out.

Changing weather cycles. Insect population collapse. Viruses. Pathogens. Indirect habitat loss.

Chaparral and sage scrub habitats are some of the most biodiverse in the world. In California, only 10% of the communities that once spread across the state are left. 90% gone. Unable to survive the desire for prime California real estate.

As designers, we know we are implicated in this. It's this conflict, between the way we live and build, and the decline of the living world, that sets the context for the story of The Garapito Creek Community School.



"We are rapidly running out of time," said Prof Johan Rockström, a global

## Humanity has wiped out 60% of animal populations since 1970, report finds

The huge loss is a tragedy in itself but also threatens the survival of civilisation, say the world's leading scientists







As U.N. warns of widespread extinction, California is already losing species



CORONAVIRUS, VACCINES AND PANDEMIC >

Zoos, scientists aim to curb people giving virus to animals

A long overdue exhale at Disney California Adventure before Disneyland's reopening



Animal populations worldwide declined nearly 70% in just report says

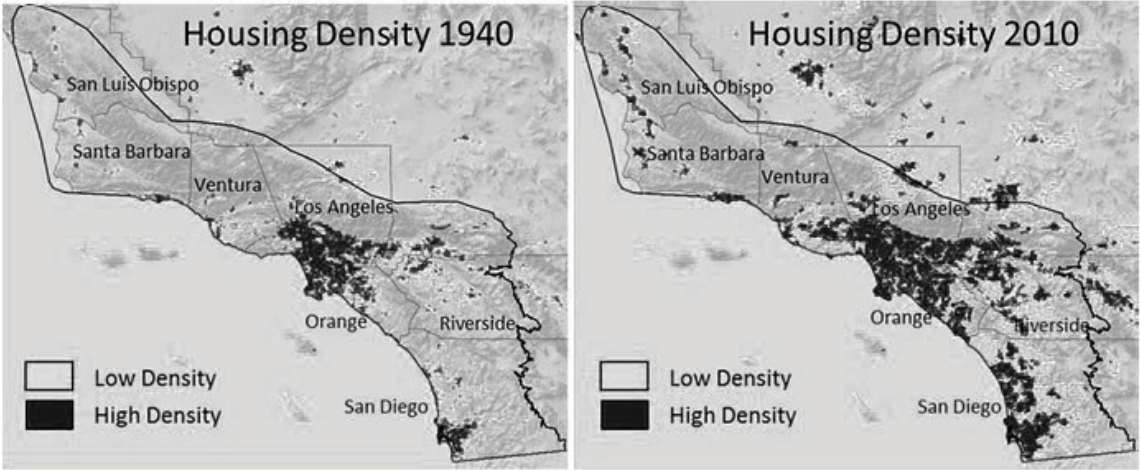
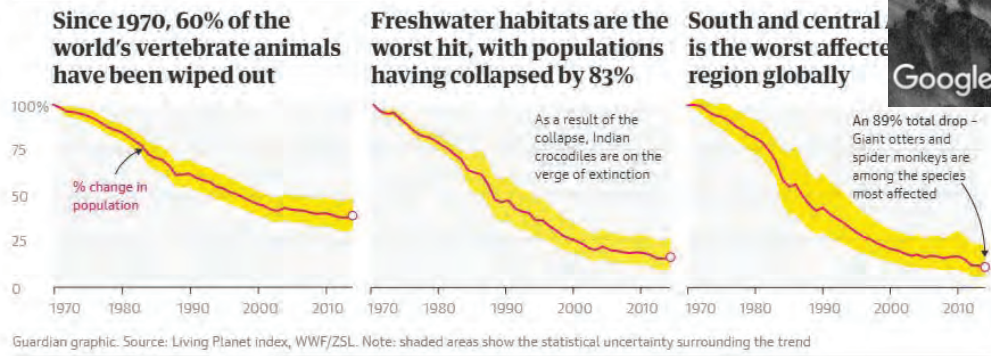


Fig. 12.2 Maps of low and medium-high housing density in 1940 and 2010 in the South Coast Ecoregion of southern California

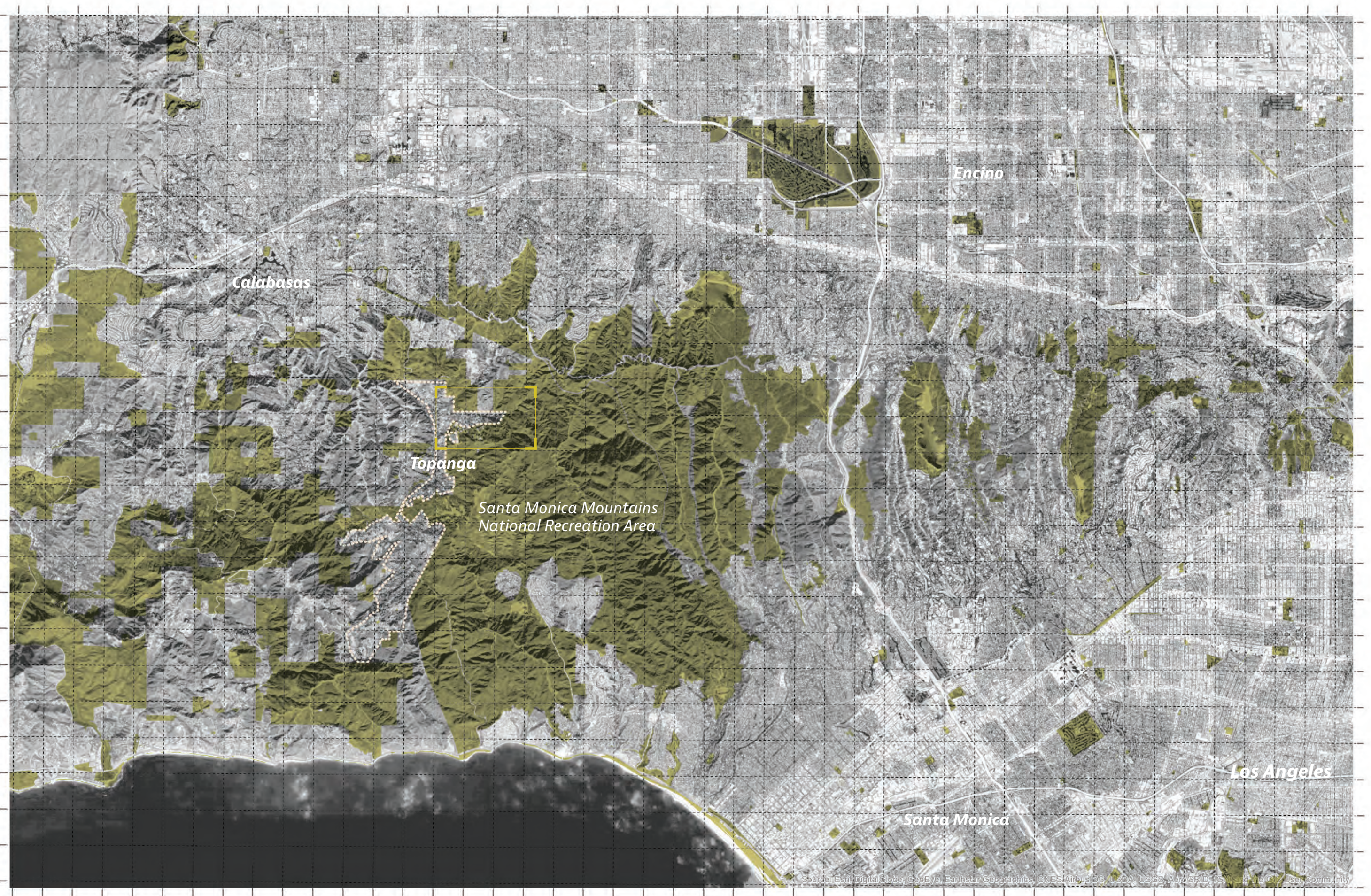
12.2.3 Indirect Habitat Loss and Conversion



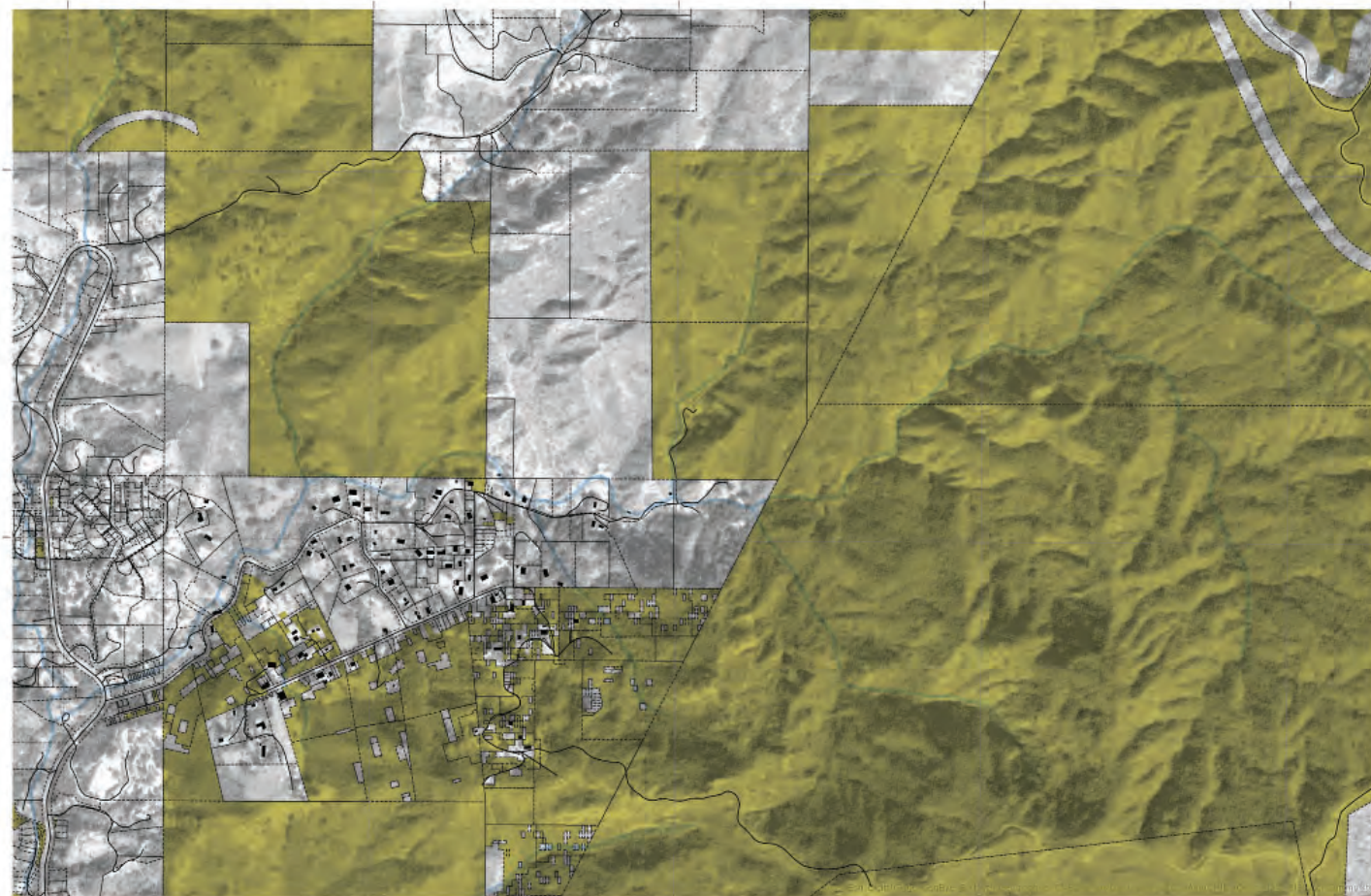
"We are rapidly running out of time," said Prof Johan Rockström, a global











Garapito Canyon, Sub-neighborhood of Topanga

privately owned land

publicly owned land

0 0.25 0.5 1 km

The neighborhood of Topanga, within which our community is located, is at the edge of the largest urban national park in the US, the Santa Monica Mountains Recreation Area.

It's a community up in the mountains, on the unceded land of chumash and tongva people. It's an unincorporated town, part of Los Angeles county. Though down the road from many estates and subdivisions, the neighborhood is peri-urban in form, numbering only around 200 people. It's a patchwork of communal and nuclear housing forms. Mixed incomes, often rough and DIY. It's has attracted people who wanted to live differently with a history of experiments in counter cultural projects.





















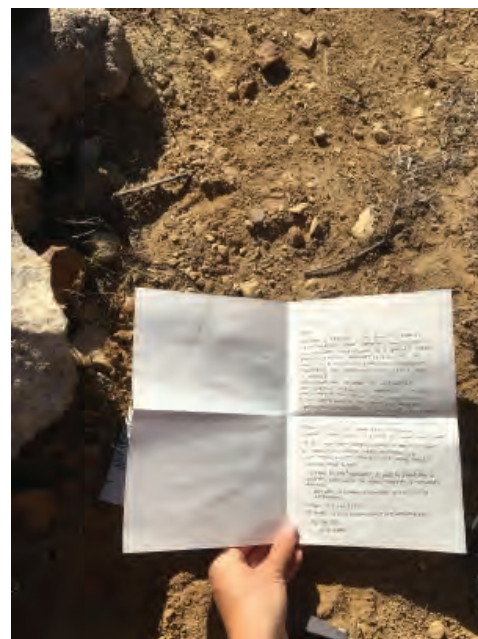
*the school: 2021 - 2040*





The school began at this moment perhaps, dropping a note in my neighbors Ben and Karinay's smiling pink mailbox.





Followed by more notes, and more conversations with neighbors, asking, how should we live knowing everything we know?

One particularly catalyzing conversation early on was with Deena Metzger, a longtime resident here who is an author and healer. In 2019 she wrote,



*"The only healing for extinction illness is to change our lives to stop extinction"*

*"How shall we live?"*

*Deena Metzger, Extinction Illness, 2019*



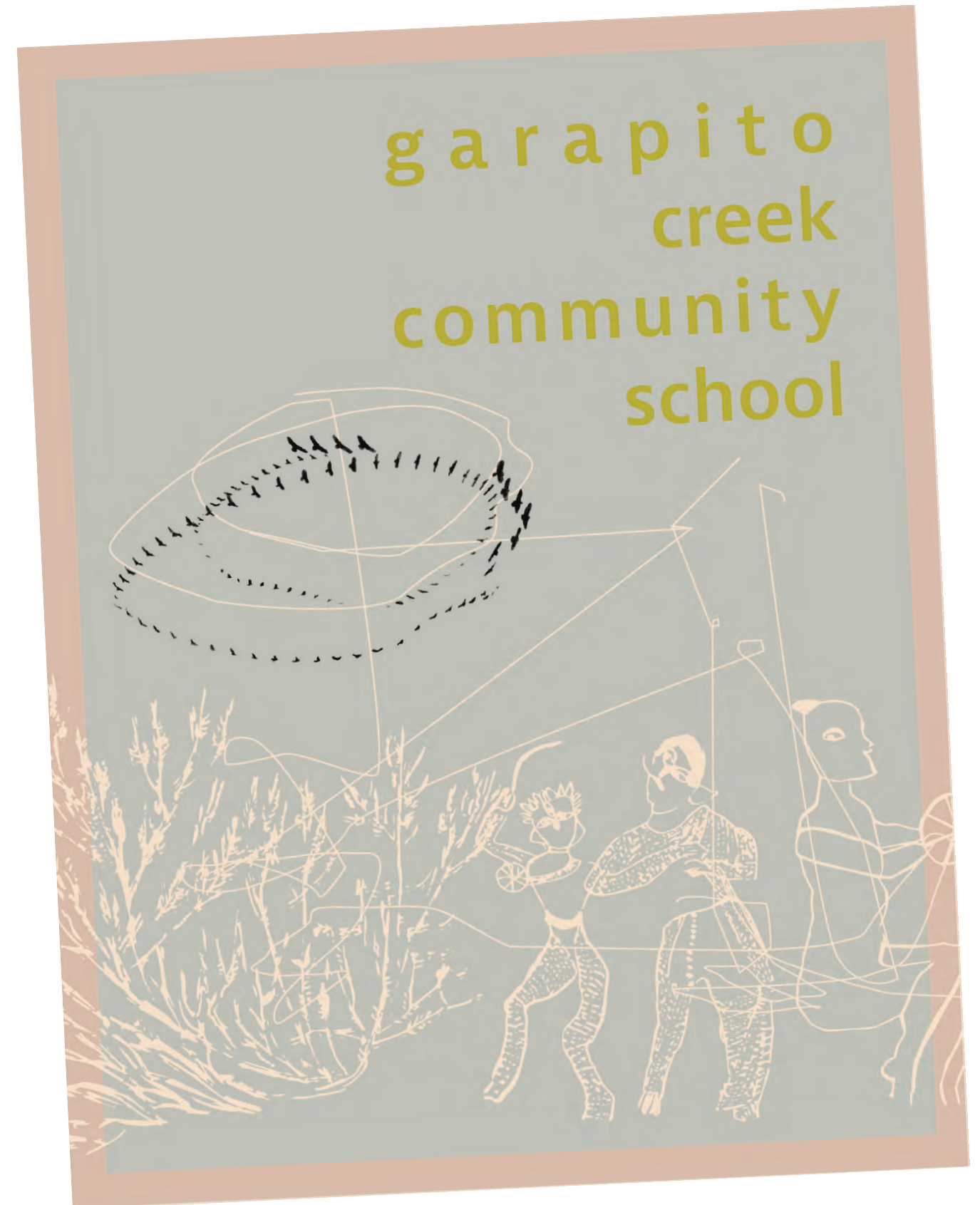
There was a mounting sense of urgency.

But who has the time? Who has the energy to make radical change? Life is hard enough...




That's how the school came into being. As the center of gravity for adaptation. A way to share, exchange, test and grow applied knowledge.

Key precedents included:



RURAL  
STUDIO

RS20K



Gold Medal

Sambo Mockbee is posthumously honored with the prestigious American Institute of Architects Gold Medal, awarded to one esteemed architect a year for "a body of distinguished architectural work."

August 2004: 20K Project research begins

Rural Studio begins the 20K Project, initiating a body of research aimed at identifying scalable solutions to stubborn rural housing problems.

Rural Studio, Auburn University School of Architecture design-build program

RURAL  
STUDIO

OUR WORK

Rural Studio philosophy suggests that everyone, both rich and poor, deserves the benefit of good design. The students work within our community to clarify problems, define solutions, design, fundraise, and, ultimately, build remarkable projects. Our research addresses rural communities holistically: from houses to infrastructure and resources, always mindful of the connectedness of the many facets of rural life.

MORE →



garapito creek community school precedents



01. c. Radical Observation

**The practice:** Radical Observation is a methodology that provides a practitioner-developed framework for understanding human interaction with the natural world. Practitioners are guided through situated **postures of awareness** that focus attention on specific natural dynamics in order to understand, design and/or maintain a landscape or ecosystem. Radical Observation is practiced by the VBAZO-CoP from 2018 until present.



Debra Solomon | PhD candidate UvA Urban Planning | The Amsterdam Zuidoost Food Forest | Harvard GSD | Feb 17 2021 |

The Amsterdam Zuidoost Food Forest, Community of Practice  
Debra Solomon



Mediamatic Art Center, Amsterdam

garapito creek community school precedents

*"Medium Design: Knowing How to Work on the World considers the potentials of mutualism as embodied in spatial arrangements. Focusing not only on objects in urban space but also the matrix of relationships that connects them."*

*"In Medium Design, **designing is not solving but further entangling.**"*

*"To borrow from Isabel Stengers, how do you convert capital's "chains of dependence" back to "relationships of interdependence?""*

*Reading Mutualism: A Contemplation after Medium Design, Keller Easterling, 2021*

garapito creek community school precedents



*"What settler colonialism, and its extensions into contemporary petrocapiatalism does is a severing of relations. It is a severing of relations between humans and the soil, between plants and animals, between minerals and our bones. This is the logic of the Anthropocene."*

*On the Importance of Date, or Decolonizing the Anthropocene, Heather Davis and Zoe Todd, 2017*

garapito creek community school precedents

g a r a p i t o

comm



l i s t e n  
u n d e s i g n  
u n b u i l t  
s u s t a i n

l i s t e n  
d e s i g n  
b u i l d  
s u s t a i n

The Garapito Creek Community School is an evolving attempt at a social infrastructure to rebuild relationships on multiple levels. To further entangle.

To do so, the work of the school expands both inward, and outward from more traditional design-build models. We spend as much time asking, how are we listening? What inner work is needed in each of us to make shifts? As we do designing, building and of course, evolving practices of care and mutualism that can sustain deep long term relationships with the land and species that need particular support.




*the structure of the school, told through my relationship with*

***red-tailed hawks***





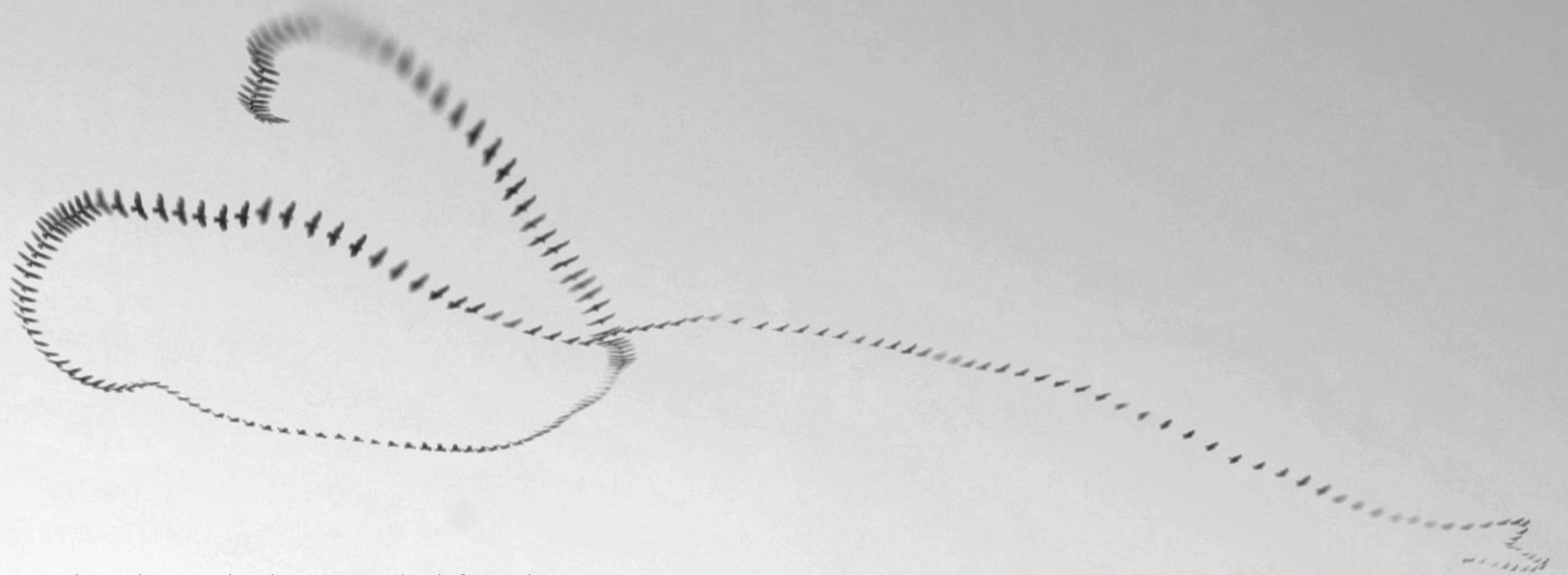


A black and white photograph showing a large flock of birds, likely hawks, flying in a circular pattern over a landscape. In the background, a multi-lane highway with several lanes of traffic is visible, stretching from the bottom left towards the center. The foreground is filled with dark, dense evergreen trees. The sky is light and clear. The birds are arranged in a large, loose circle, with some individuals visible along the perimeter and others in the center. The overall scene suggests a natural behavior of the birds in a human-altered environment.

Hawks are generalists, survivors in damaged worlds. They have adapted to our roadkill, to our high rises, to miles and miles of paved suburbia. They dive from the sky to sink their talons into the bodies of mice, rats and ground squirrels that have been lucky to thrive in the wake of settler-colonial-industrial change.

What can they teach us about surviving in damaged worlds?



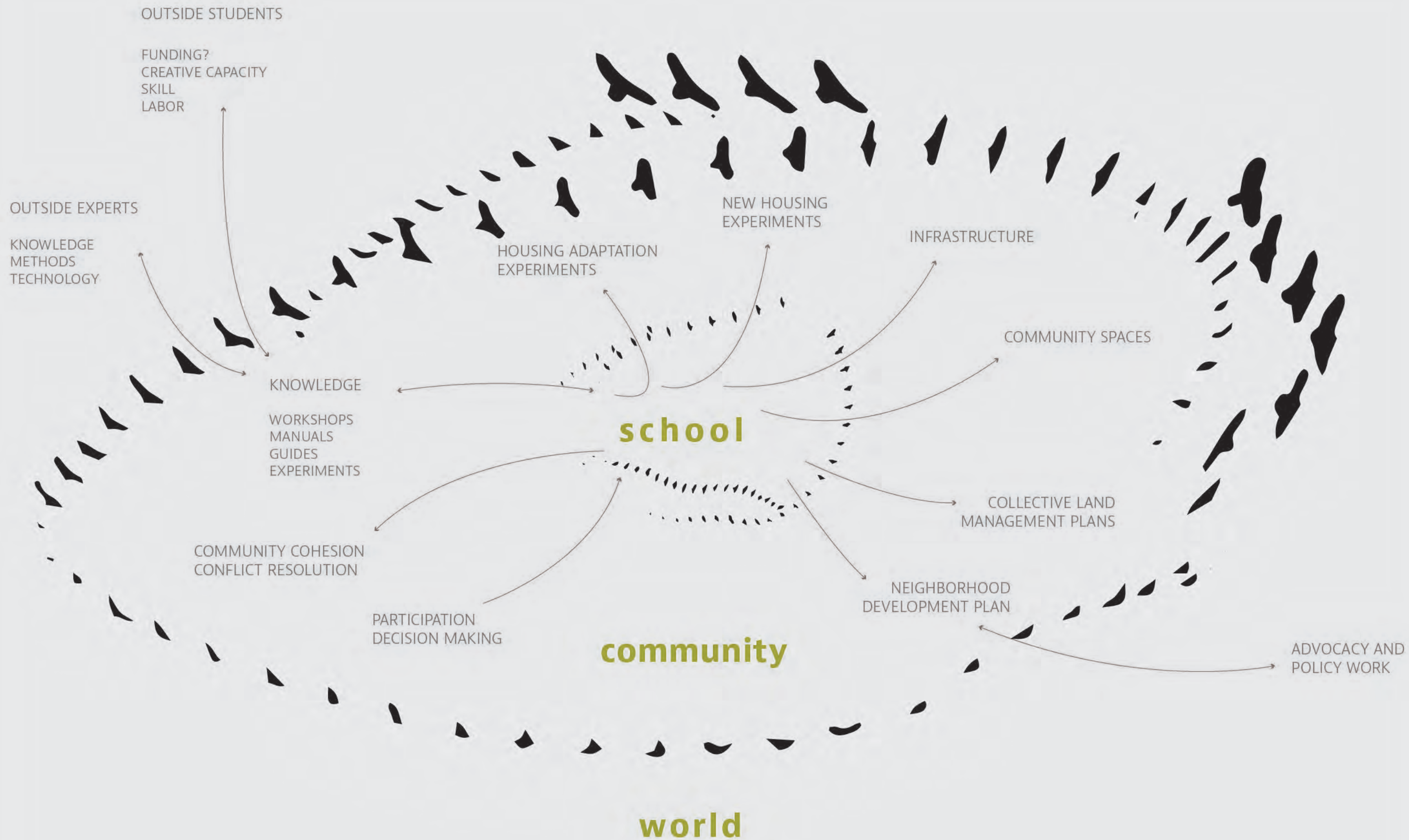


First, they can teach us about scale, about seeing both far and near with precision, and the power of circling for clear sight. Spending time quietly watching hawks, I have an intense awareness of our bodily difference. I'm stuck in one place as they glide rapidly in and out of my view. The boundaries of my perception make them small blurry marks against sky but looking down at me, they can see every hair in my eyebrows and the palpitation of my chest. Circling, they study me from every angle.





The school is the pivot point around which we circle.  
Its structure is designed to support clearer sight.







The school is a combination of a design-build program model and an education oriented community center. Small cohorts of design students are invited into the neighborhood as well as visiting designers as instructors. Those programs are woven with short workshops geared towards community members. All projects are opportunities for learning, testing, and sharing, and take place within the community: taking the form of constructed adaptations to peoples homes and properties, new affordable experimental housing, projects specifically to address the needs of other species, and community spaces.

Thus, the school brings in the energy of outside experts and outside students and gathers and grows the lived knowledge of community members.

At the largest scale, we coordinate advocacy efforts like changing the neighborhood plan and patterns of development. Putting limits on new construction square footage. Incentivizing affordable housing. Allowing for experimental building under a new code similar to the class K code for owner-built rural dwellings in northern California that allows far greater permitting flexibility for experimental building methods.

At the medium scale, the new housing and existing housing adaptation experiments address water care, soil care, following the source of materials of construction, building habitat into the walls and micro-climates made by the structure, and inventing forms that support how we relate and communicate with other species.

At the smallest scale, we work on being attentive to the quality of perception in a single moment. Attentive to the difference between the gush of wind under the wings of a crow, vs a vulture, vs a falcon, vs a redtail.



listen

undesign

unbuild

sustain

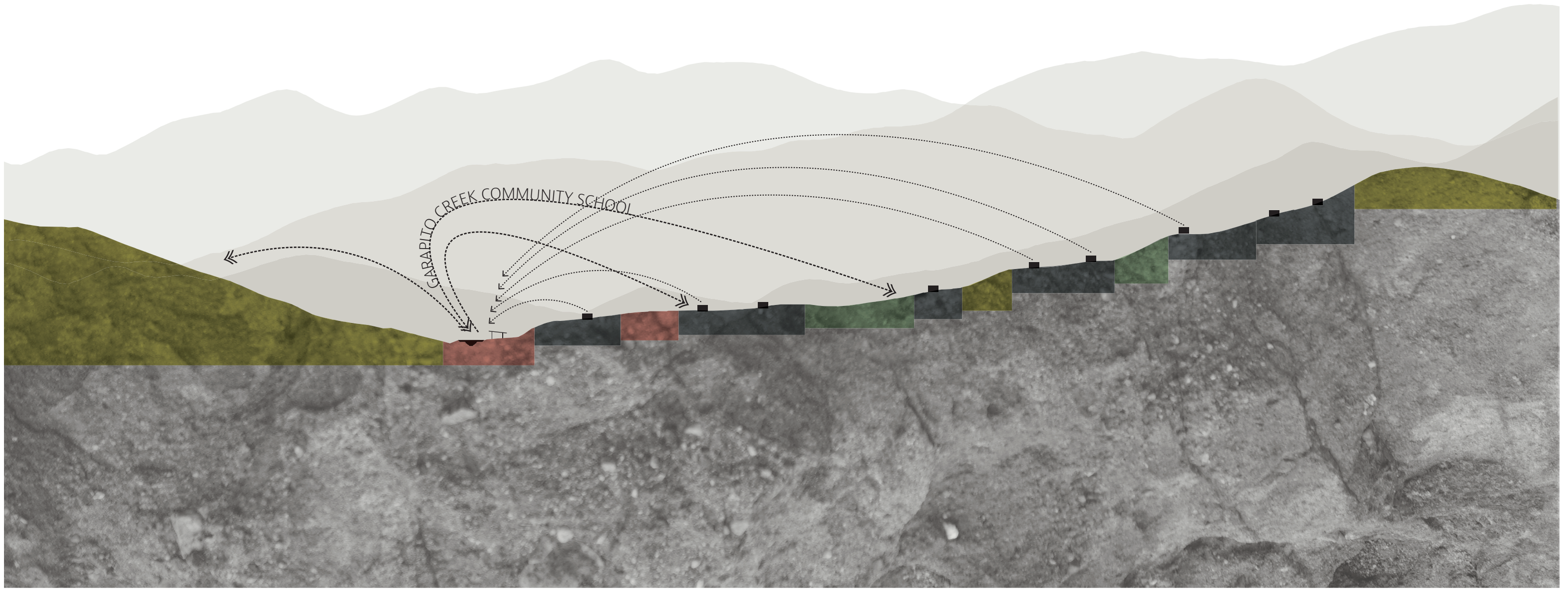


- material construction lab
- material cycling, deconstruction methods lab
- communal land working group
- regenerative arid agriculture working group
- landscape labor program
- community/ public land management planing and testing

garapito creek community school programs





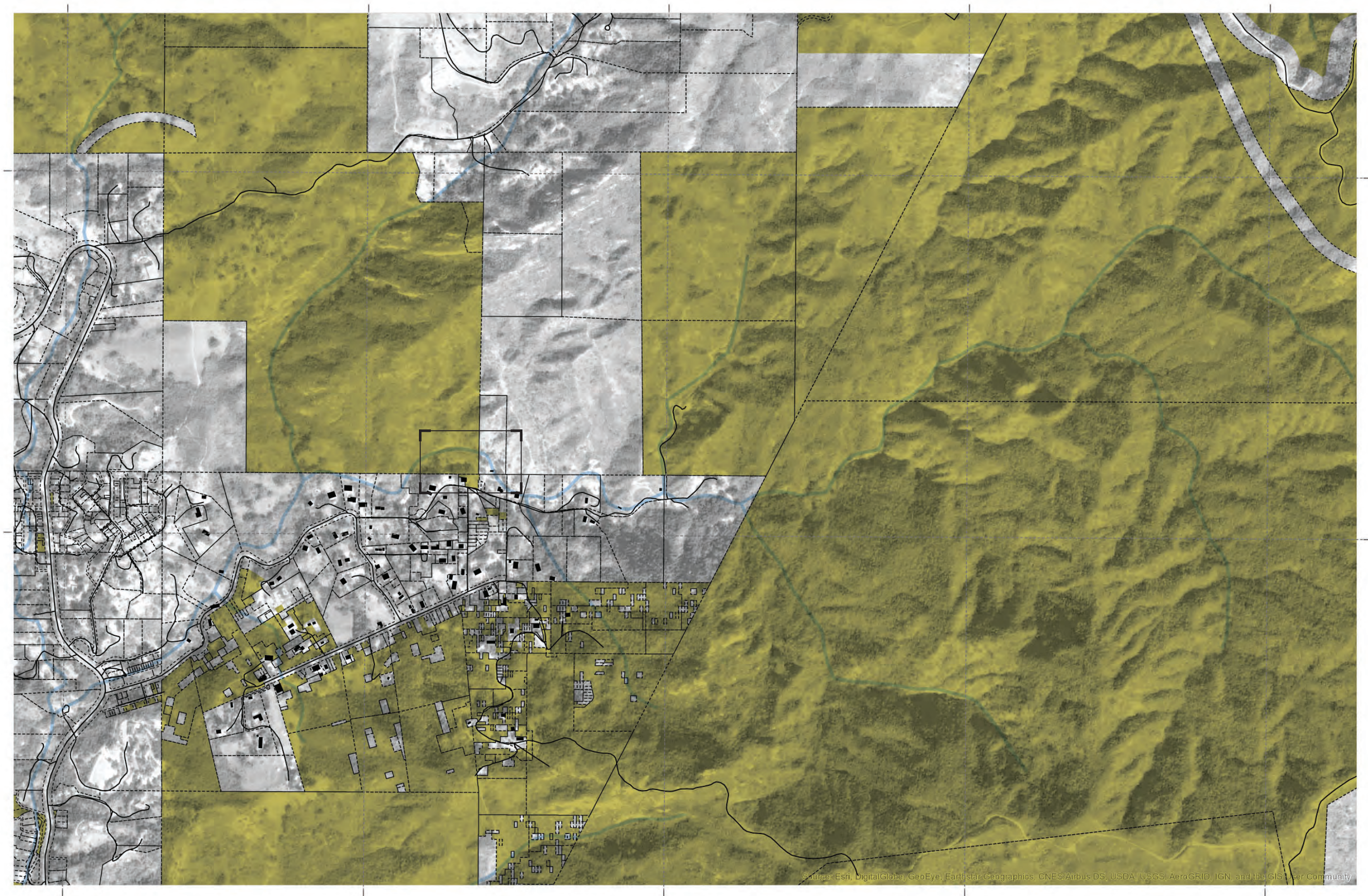


collectively managed land
  private residential property
  community space
  public parks and conservation areas

0 250 500 1000 ft  
 x3 in the vertical

Spatially, this plays out as a continuous, flexible gathering at the central community space and school workspace, and the implementation of tests, projects and practices throughout the neighborhood.





Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

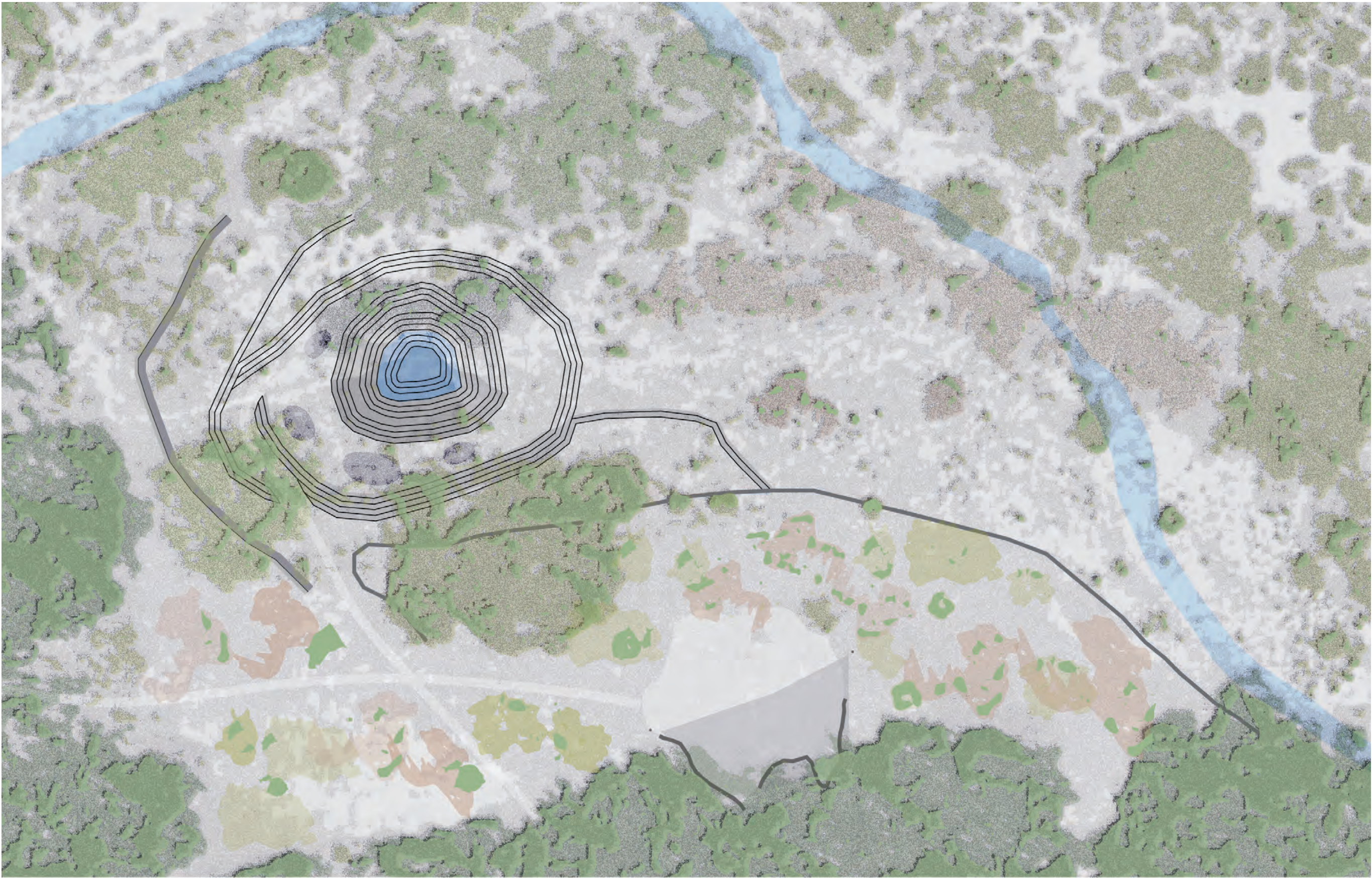
Garapito Creek Community School, Location

privately owned land

publicly owned land







Garapito Creek Community School, Plan







*the school gathering space, told through my relationship with*  
***baja-california tree frogs***















Treefrogs actually don't live in the trees here. They live along the riparian buffer during the long dry season, using the cool burrows of other creatures as shelter. Then the precious rains come. Winter rainstorms that make the whole canyon instantly neon green. All night froggy chirping choruses. Strings of thousands of eggs, and then the squirming tadpoles in the creek.

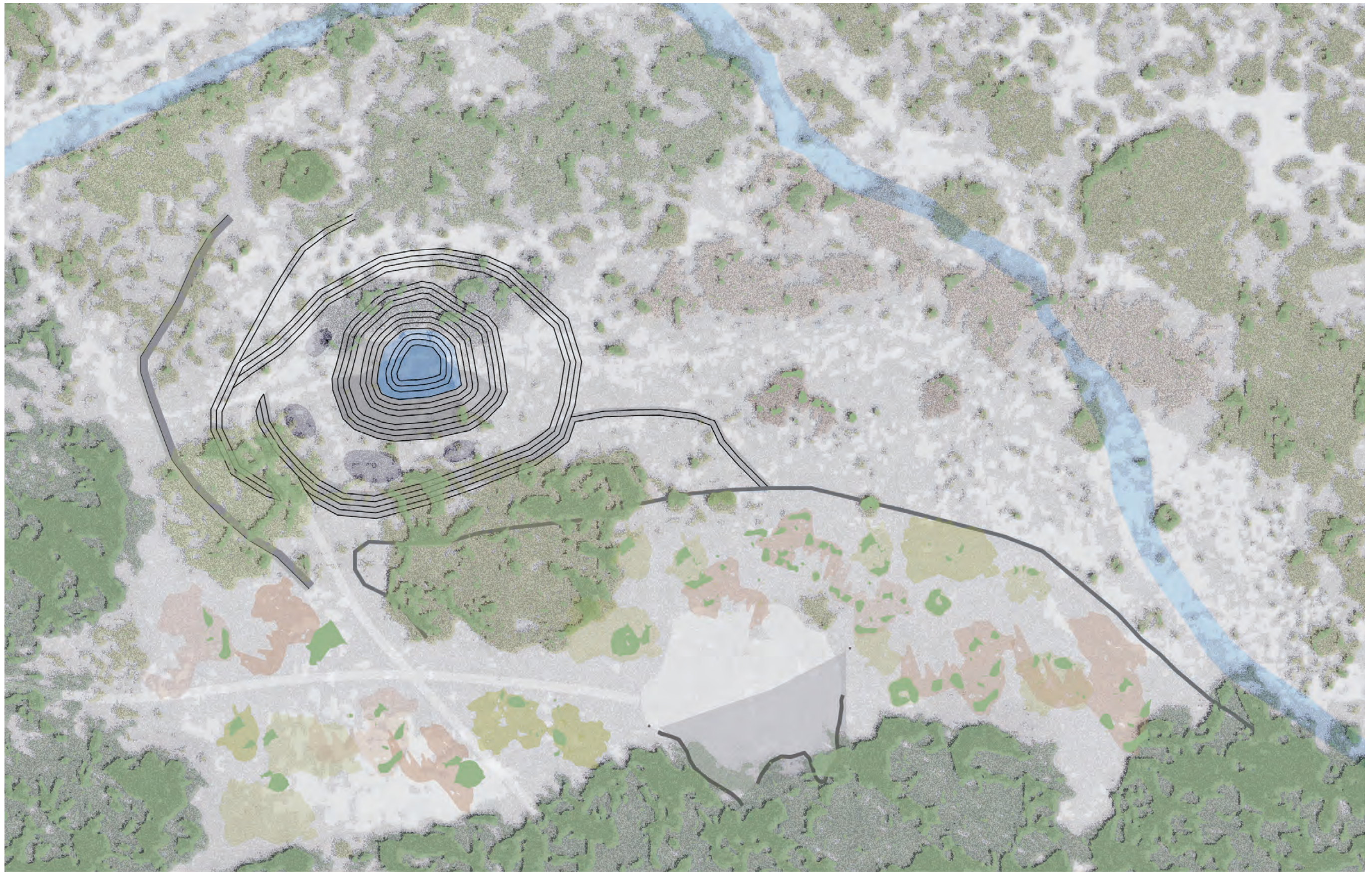
In India, where my mother is from, water is often revered as sacred. She was born on the banks of the Ganges river, who is understood as a living goddess. To create a multispecies future here in an arid land of rapidly increasing drought and water scarcity, the loving design of water's presence is essential, and the frogs are the ones that help guide the way. The frogs are indicator species, absorbing pollution through their skin, the first to suffer deaths when the respect for water is abused. My relationship with them brings a heightened sensitivity to choices made around water – where and how is it held, released, cleansed, and saturated.







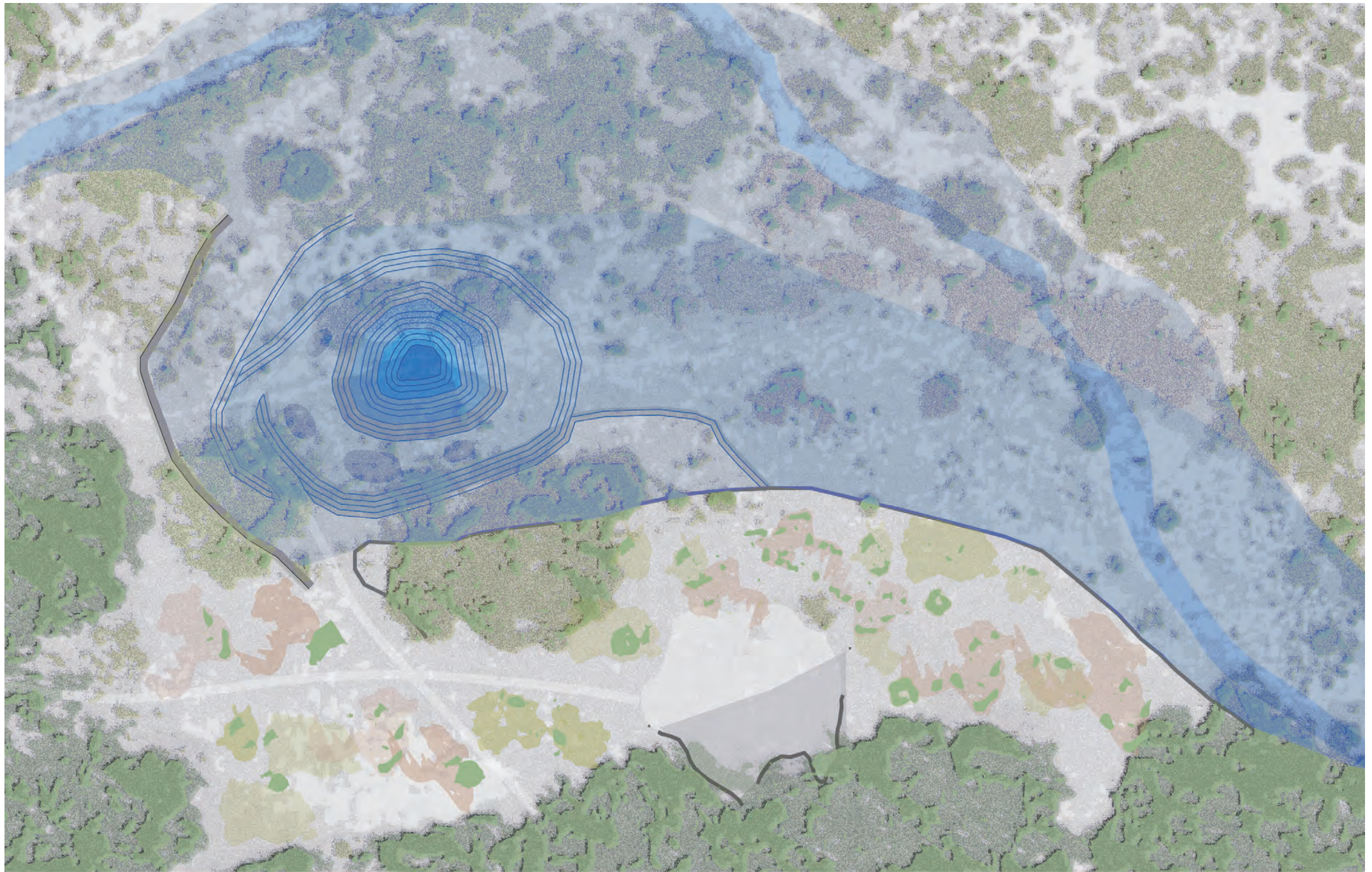




This space, the space that gathers our activities, centers us around water.







During the more and more unpredictable winter rains, it floods and collects.

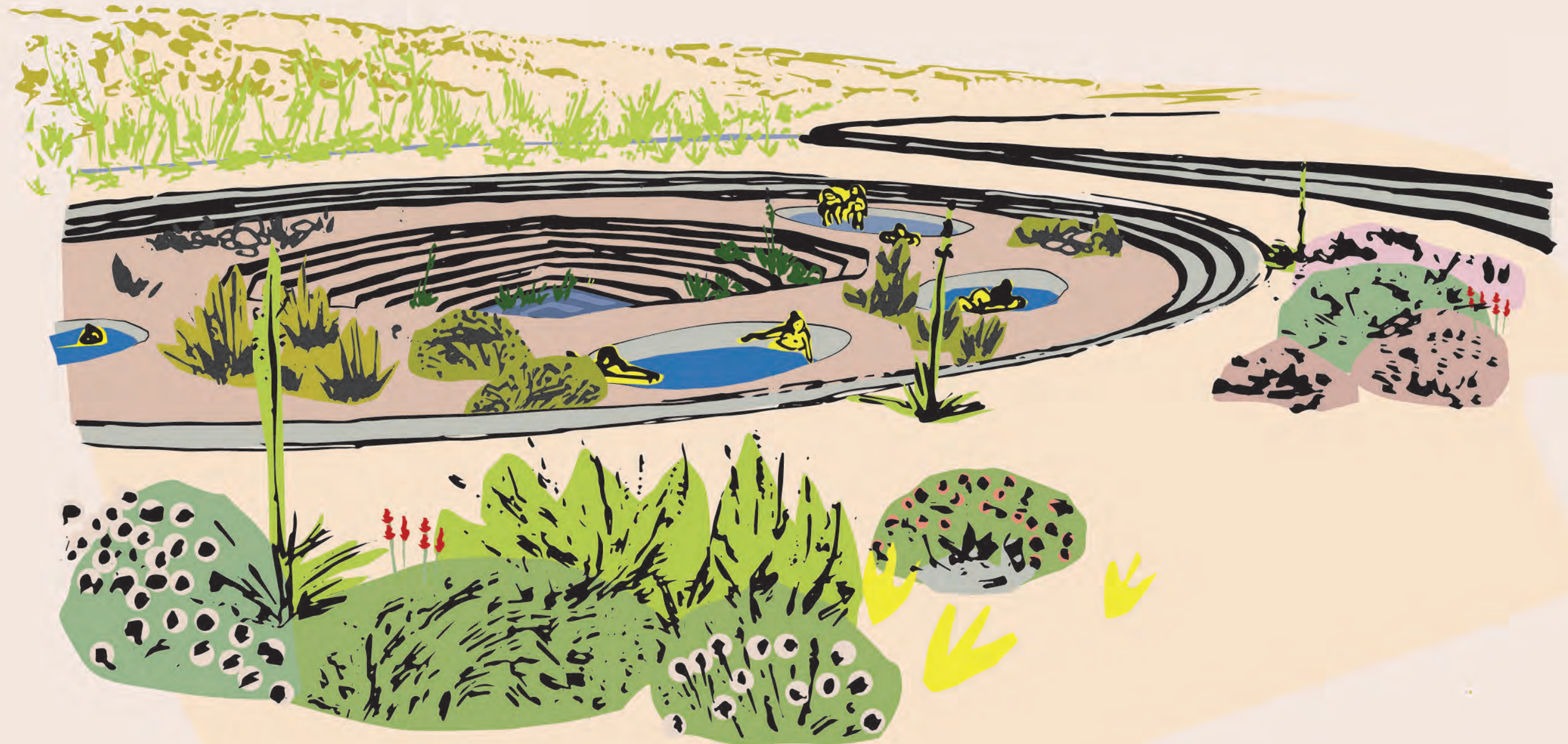








In spring, as the wildflowers are blooming, the step-well transforms into a community bath space. Baths that only fill when there is enough rain. A brief moment. A place to celebrate the precious arrival of water.



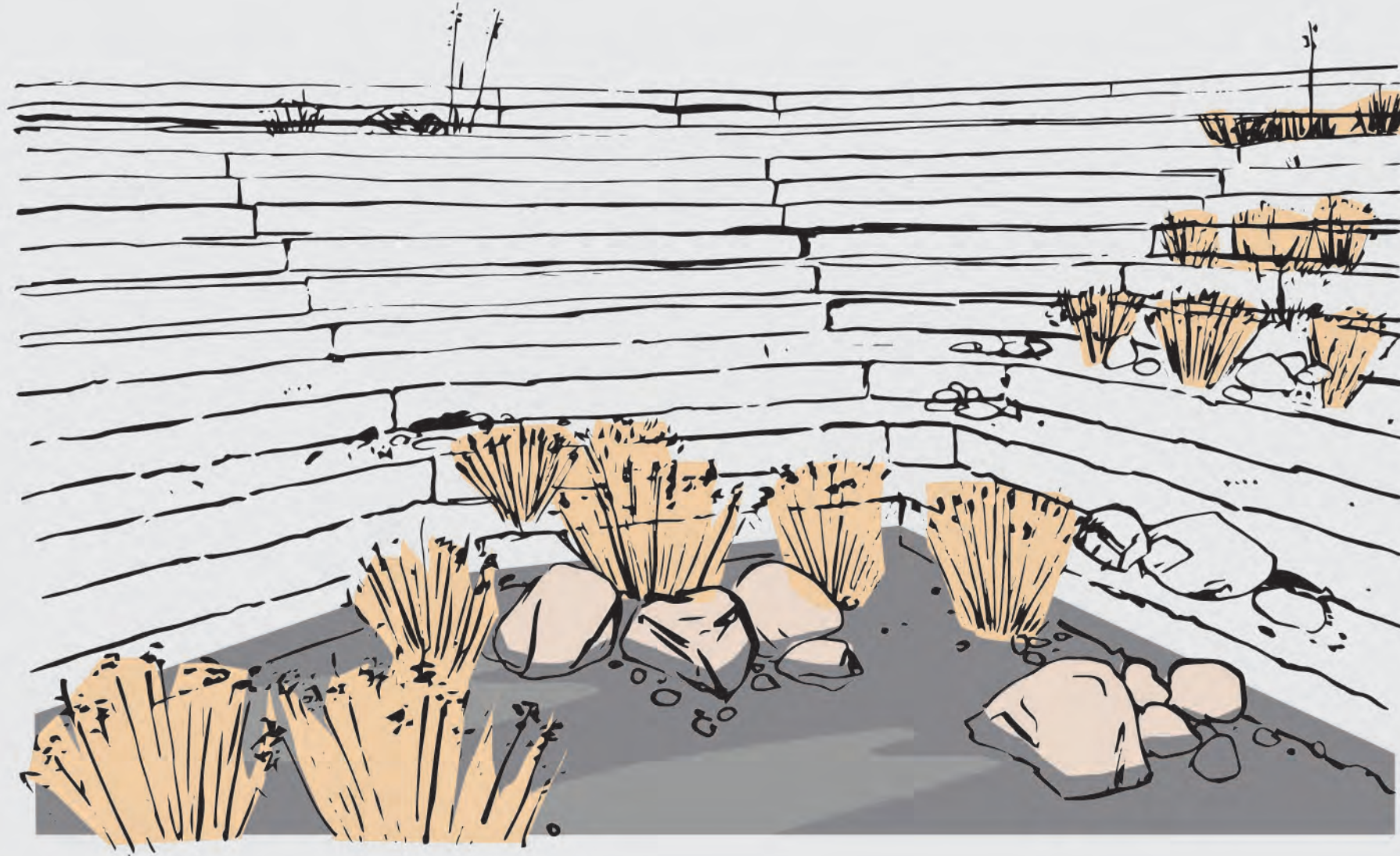




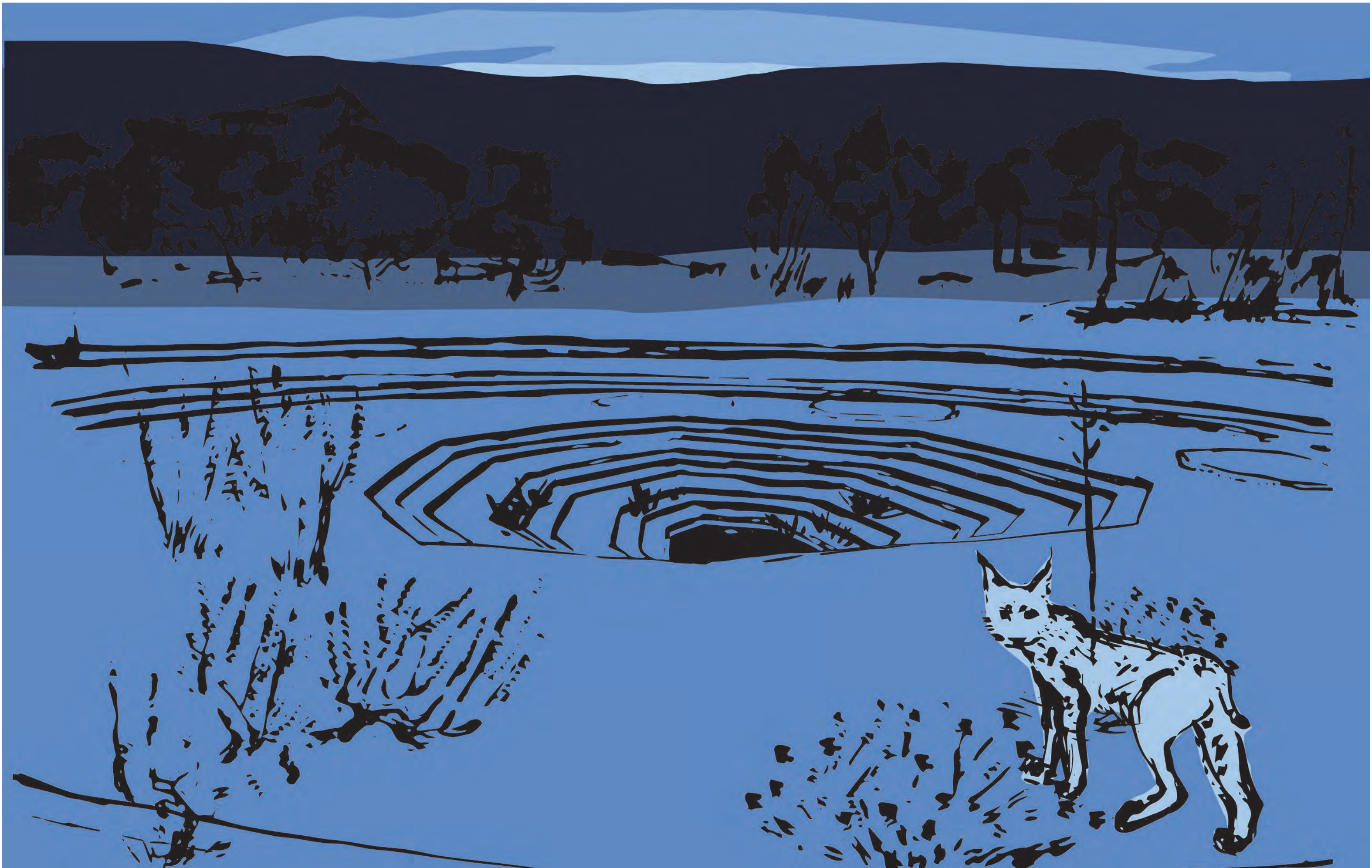
Embodied, heightened sensory attunement and pleasure.

Tying us to the vulnerable bodies of frogs. Whose habitat we care for as the water level in the central step well rises and falls. This space is an offering to them, helping guard them against the severity of increasing drought lengths.

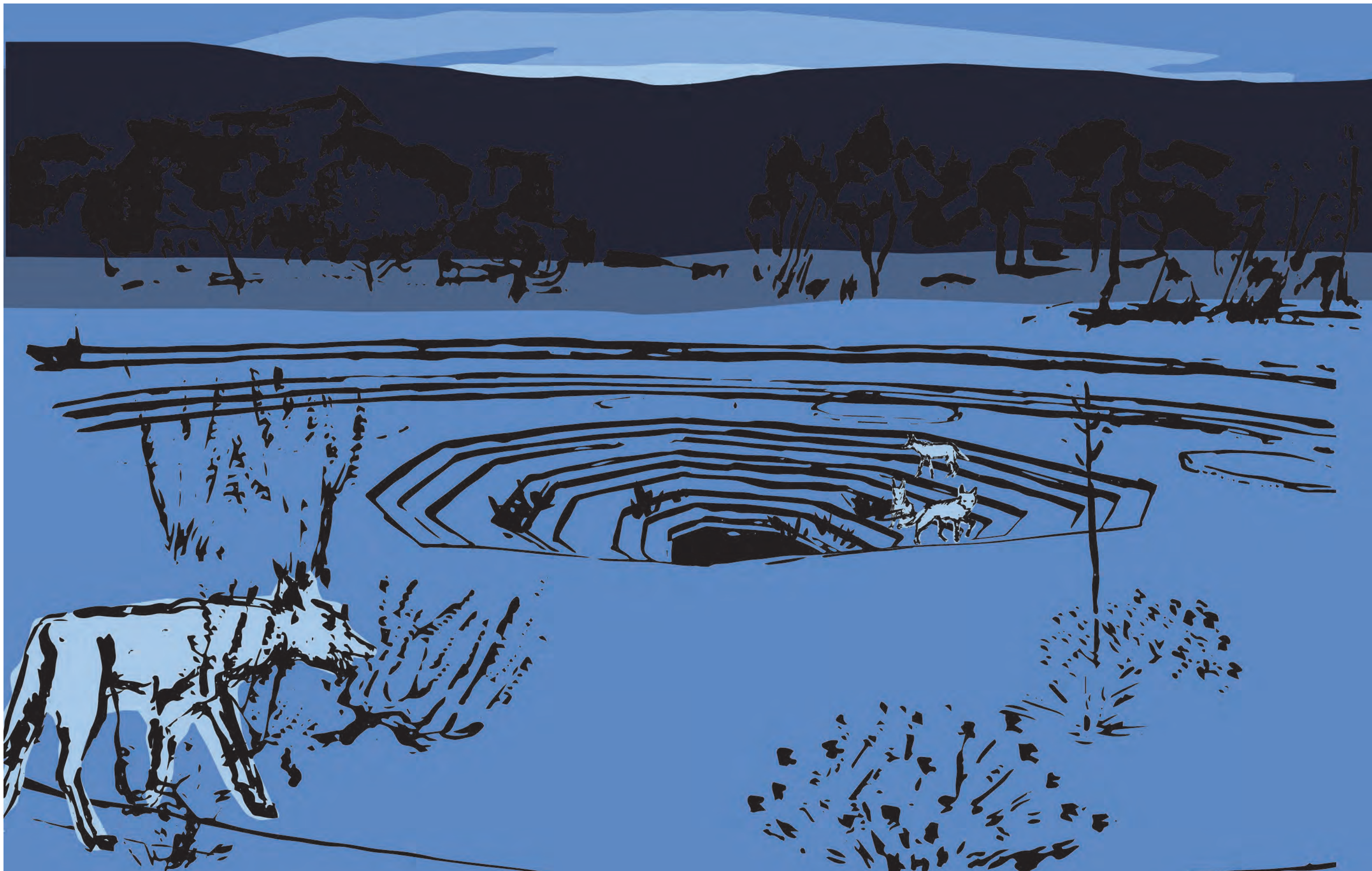














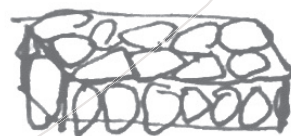
And an offering to all the others. A community center for the full community. Gathering everyone around water. The step well designed to invite as many species as possible. During the droughts, temporary dew harvesting structures collect water that makes its way down the steps into small drinking pools and pockets of moisture.

### STEP WELL QUESTIONS:

- WHAT DEPTH IS NECESSARY FOR REACHING GROUND WATER 6-9 months / yr?

- IS A CERTAIN SLOPE OPTIMAL FOR BEING OPEN ENOUGH FOR ANIMALS TO FEEL SAFE ENTERING?

- WHAT MATERIAL / METHOD OF CONSTRUCTING STEPS TO CREATE NESTED HABITAT?



STONE!



SPUCCO / CONCRETE / FINISH

CREEK FLOW, SEASONALLY DRY

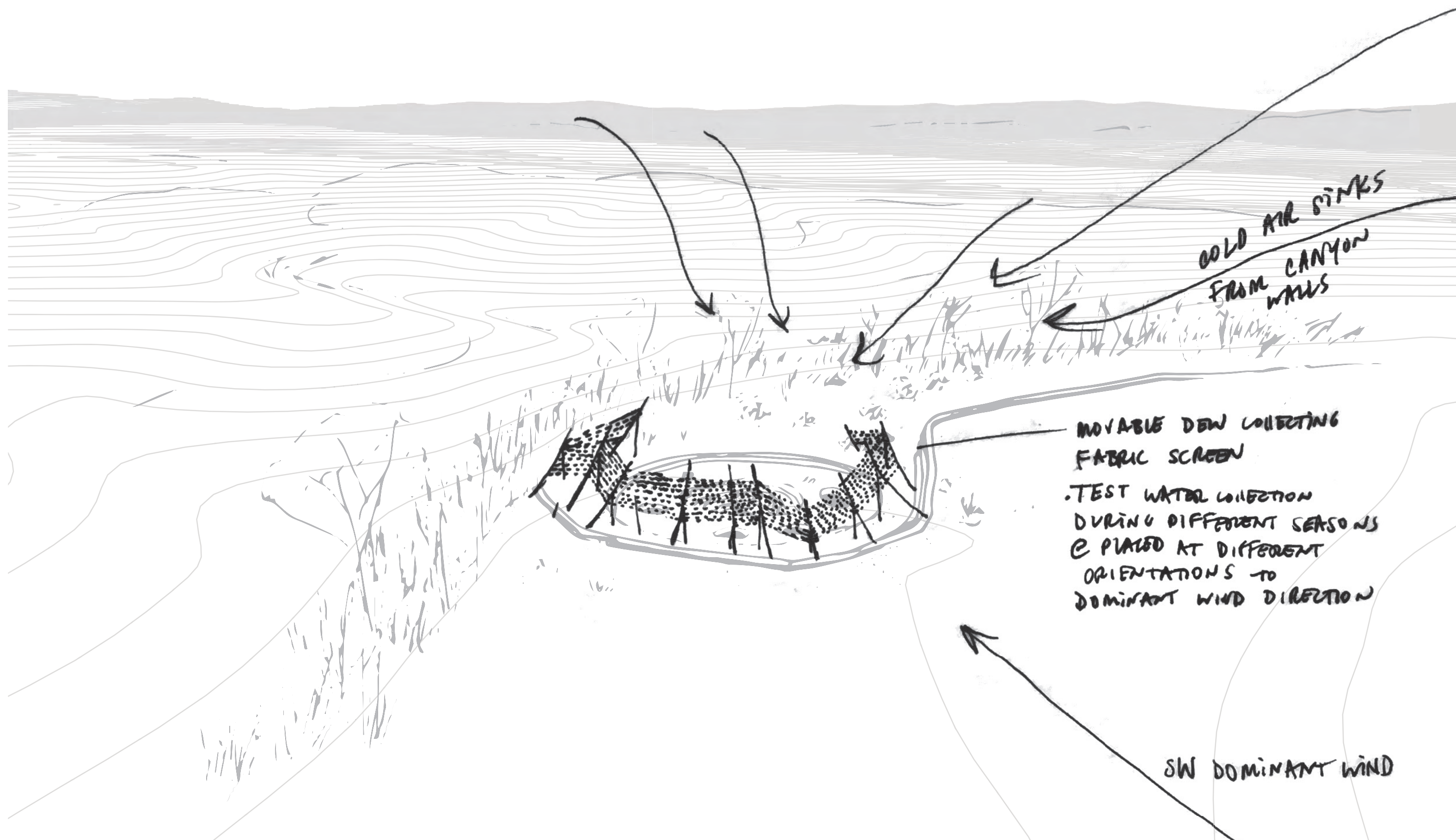
high ground / dry ground gathering space

SHOULD THIS WALL BE SOLID & DUG DEEP TO POOL GROUND WATER?

?

Flow & Ground Water







In the dry season, the baths are covered and return to working and gathering surfaces.

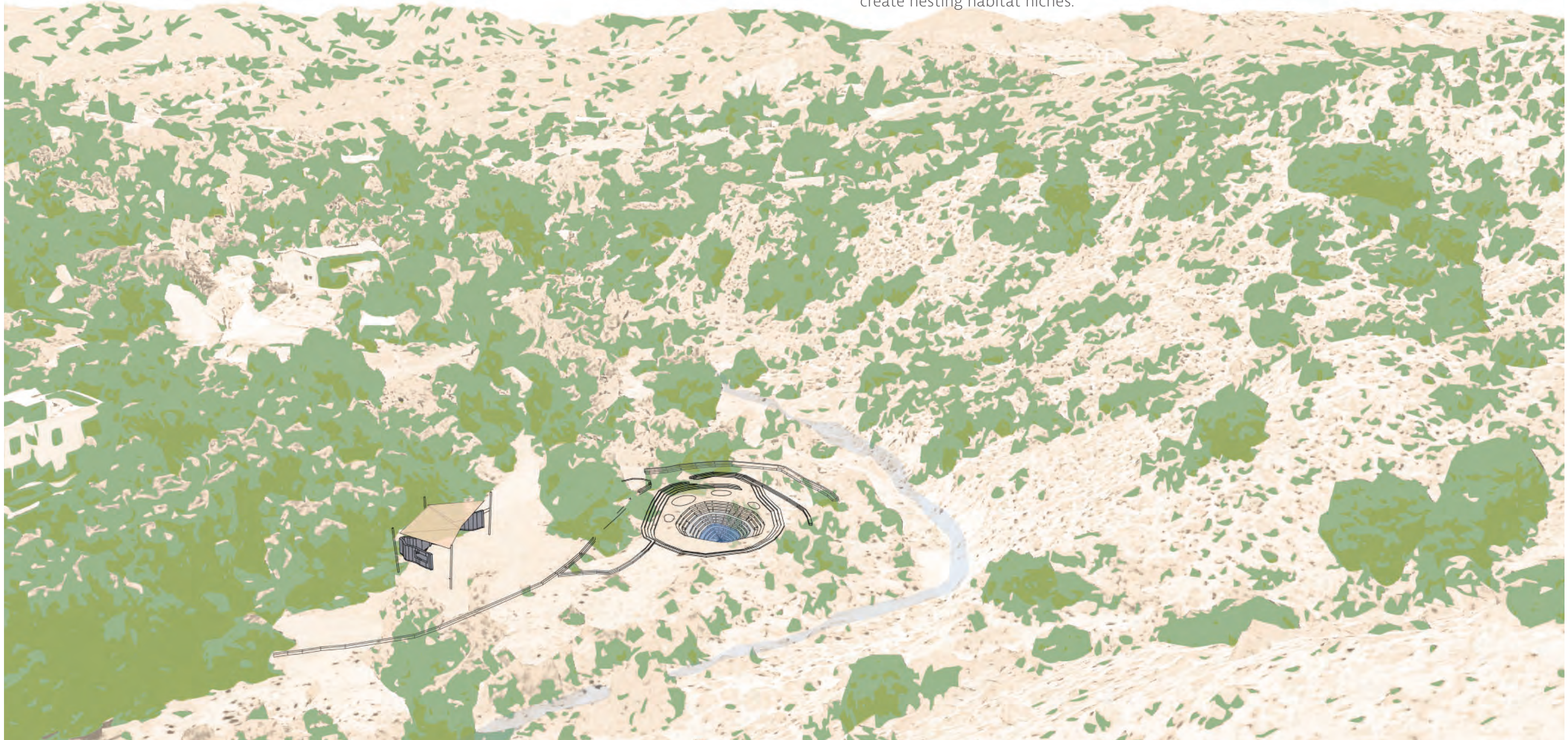




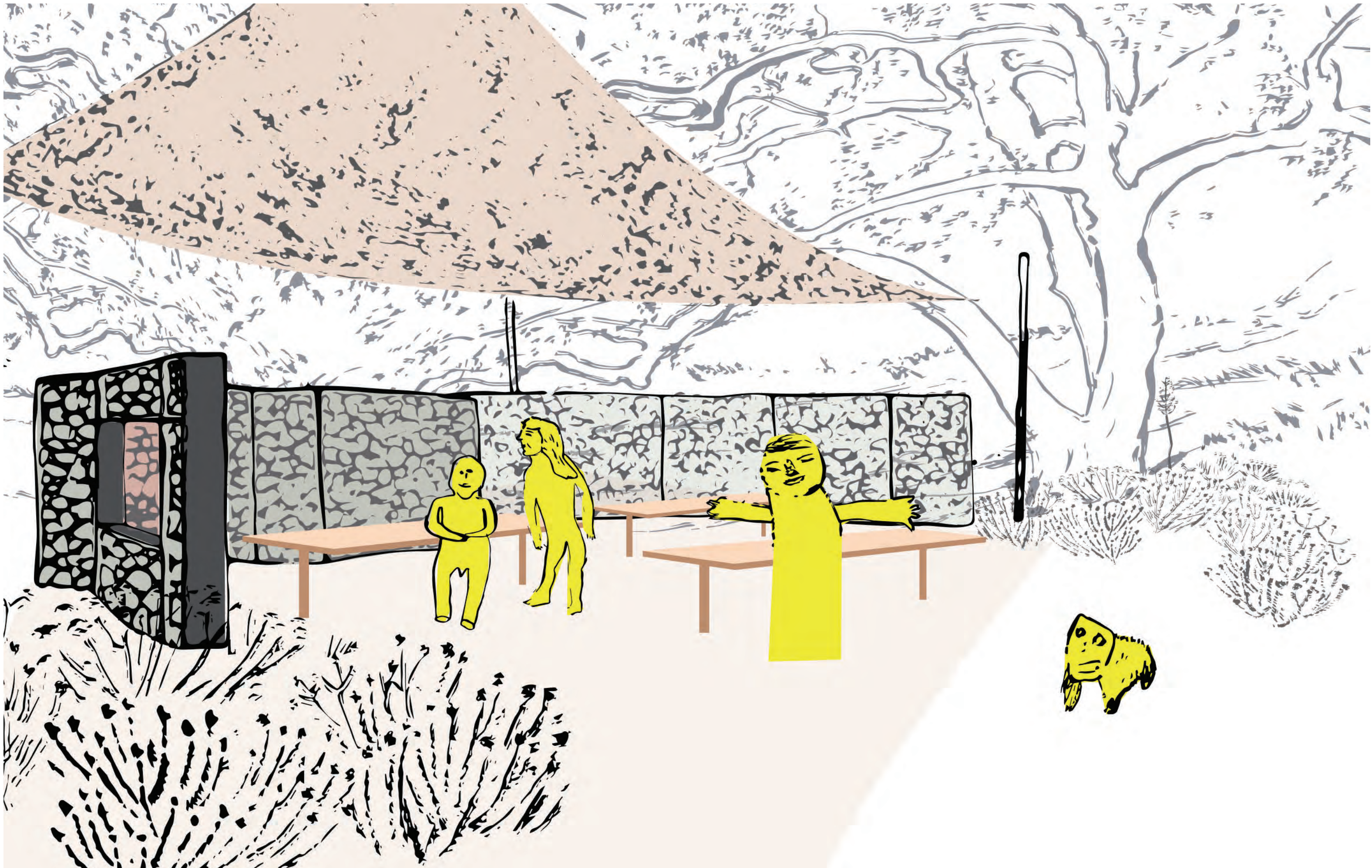
Above the well, tucked into the overhang of a line of huge coast live oaks, is our main workspace. Oriented to protect from wind and provide shade, a threshold between the neighborhood and the step-well.

Extreme care was taken for the soil in the construction of this space. We used the rocks removed in the well construction to build the shade structure, the gabion walls curving to create multiple microclimates and habitat niches along its exterior.

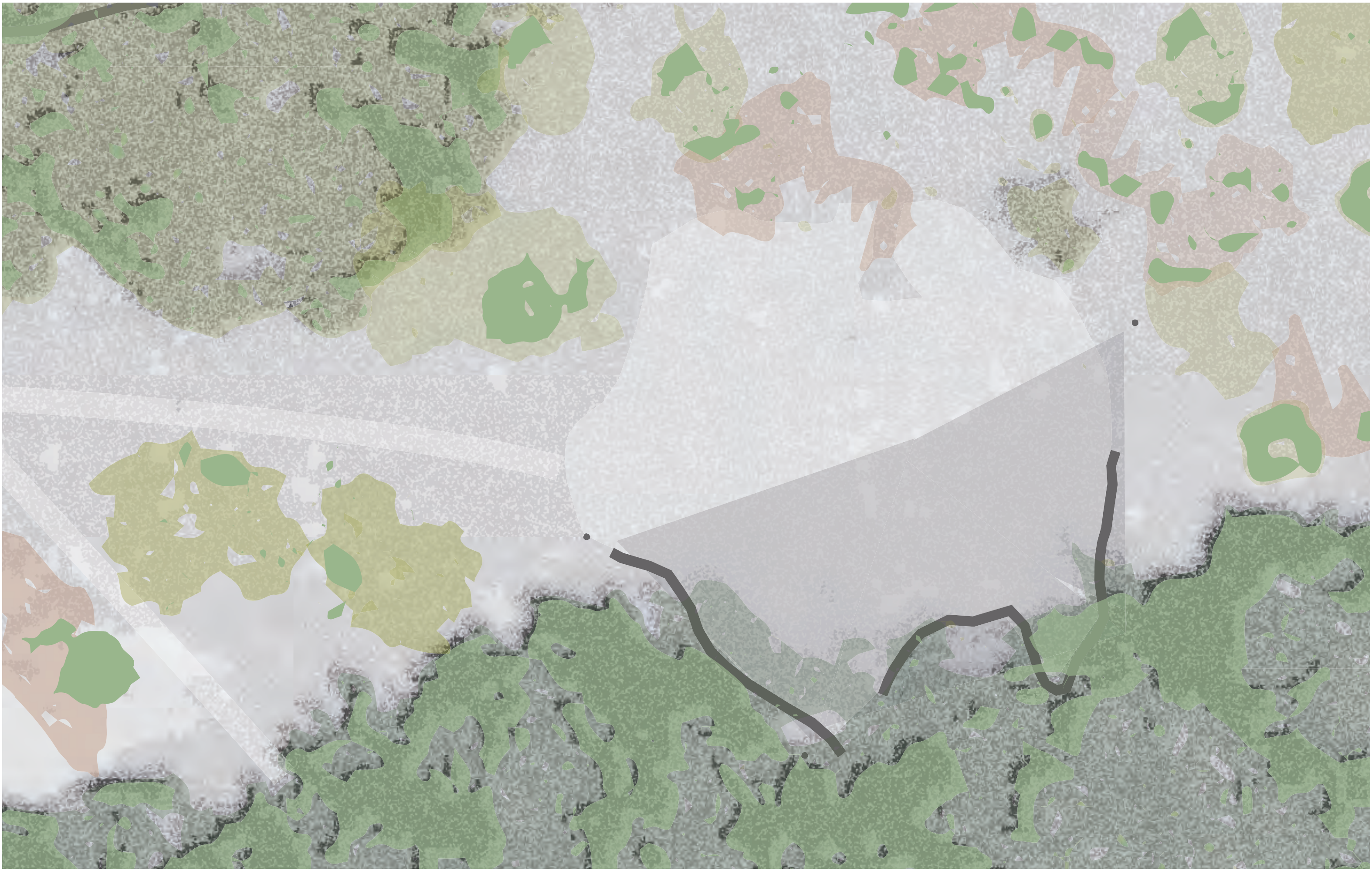
These walls, along with the retaining walls that curve around the site, designed to create nesting habitat niches.



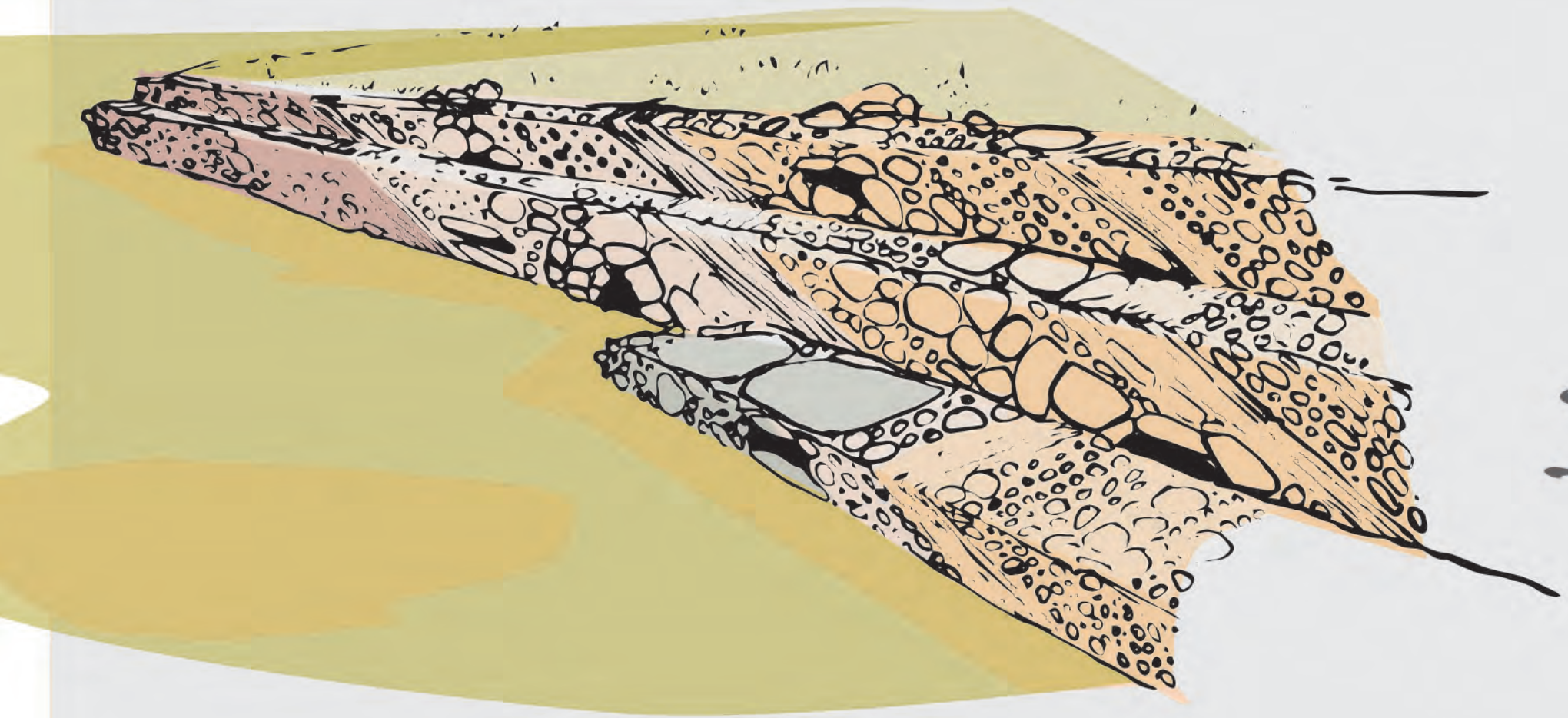










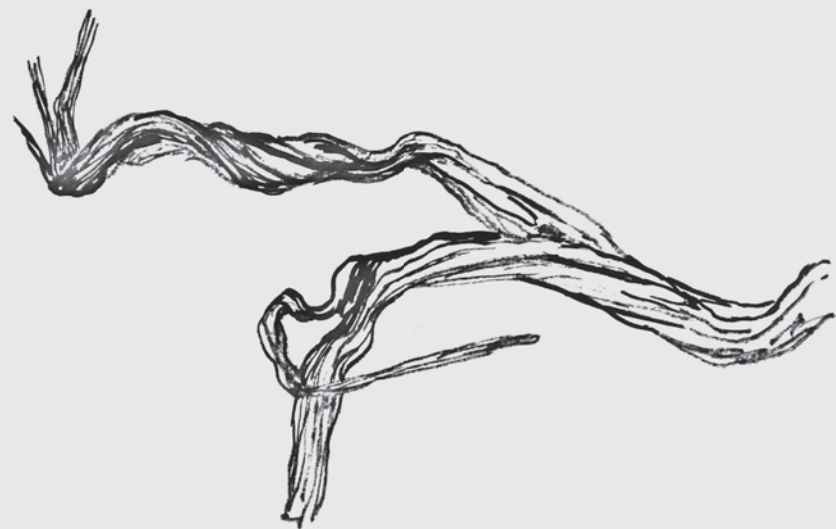






The formal language of this space developed through attention to the twisting, bending, arcing forms that so many plants here create in their branching.

As well of course to the circling forms of the hawks...









If my relationship with the frogs has been about the hope embodied in centering care for the most vulnerable, I have to return now to my relationship with hawks to talk about how this space supports us in honoring grief and loss.





When I was 17, I was woken from sleep by a violent crash. I jumped out of bed and ran to the living room. The window was smashed through. A massive shadow was throwing itself against the wall. A redtail hawk. Desperate and stunned.













When deaths loom in my family, the hawks arrive. That's what my father believes, and he has many stories to tell. Stories of being visited by the dead and dying, hawks landing outside his windows, quietly carrying their messages. That time, it was my grandmother Berry, my father's mother, who just passed away.

I bundled the bird in a blanket and carried us outside. Unwrapped, the hawk carefully turned to look at me, its wings fully extended in a dappled massive array. We were silent like that for thirty minutes. A few feet apart. In the dark. Staring at each other, not looking away.

What spaces do we have in this society to gather and mourn?









Though this is a space that honors life though honoring water, it is also critically a space to sit quietly with death, loss, and the messages of those who are gone or are disappearing.





*the land care collective, told through my relationship with*  
***california sagebrush***







Sagebrush grounds me here. Distressed, I walk out into the mountains and brush along its soft leaves. It's scent musty, sweet and healing. For generations, it has been honored and used as a medicine by the Tongva and other tribal nations of this region. It soothes pain and is used to help in the process of giving birth.















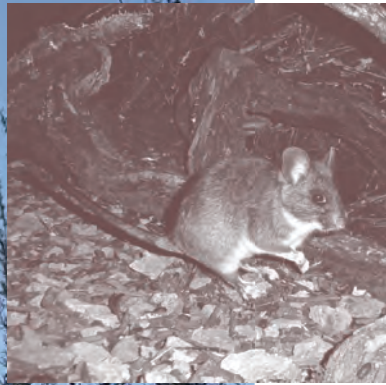












Sagebrush is a key species in this coastal sage and mixed chaparral habitat, supporting many nearly exterminated species in their dense woody underworlds.

The plants are the backbone of the riot of life that unfolds here. They have evolved brilliant survival strategies over thousands of years, crown sprouting after fire, able to survive a whole year on the amount of water we use in a single day. Yet, we're witnessing both slow drawn-out disappearances, like the sages slowing dying away from the nitrogen falling from emissions, and like what happened with Laurel sumac in the early 2020's, where a new fungal pathogen took over and left thousands of dead sumacs turning the hills brown in the span of a couple years.





MIXED  
CHAPARRAL:  
CHAMISE  
LAUREL SUMAC  
TOYON

ARTEMISIA  
+ BUCKWHEAT  
+ BLACK SAGE

ARTEMISIA  
SCOTCH BROOM

BLACK  
SAGE

SCOTCH  
BROOM

MIXED  
CHAPARRAL:  
CHAMISE  
LAUREL  
SUMAC  
TOYON  
SCOUT BARK

BUCKWHEAT

ARTEMISIA  
+ BUCKWHEAT

ARTEMISIA

ARTEMISIA  
SCOTCH BROOM

ANNUAL  
GRASSES

BLACK  
SAGE

SCOTCH  
BROOM

BUCKWHEAT +  
SCOTCH BROOM

Buckwheat



CRISTATA COLE BERRY  
12" - 18" HEIGHT  
12" WIDTH  
SHRUB, no sign of spines with roots  
COMMONLY GROWN IN MOUNTAIN & SMALL STREAM / ROCKY BOTTOM  
OF CANYON. SOIL VERY ROCKY & STONY. IN BOTH SW & NE SHORES





*What does it mean to be a community  
member re-entangled with the health of  
the larger community of beings?*





Since the early days, this question has been a central to the school, giving rise to the land care collective.

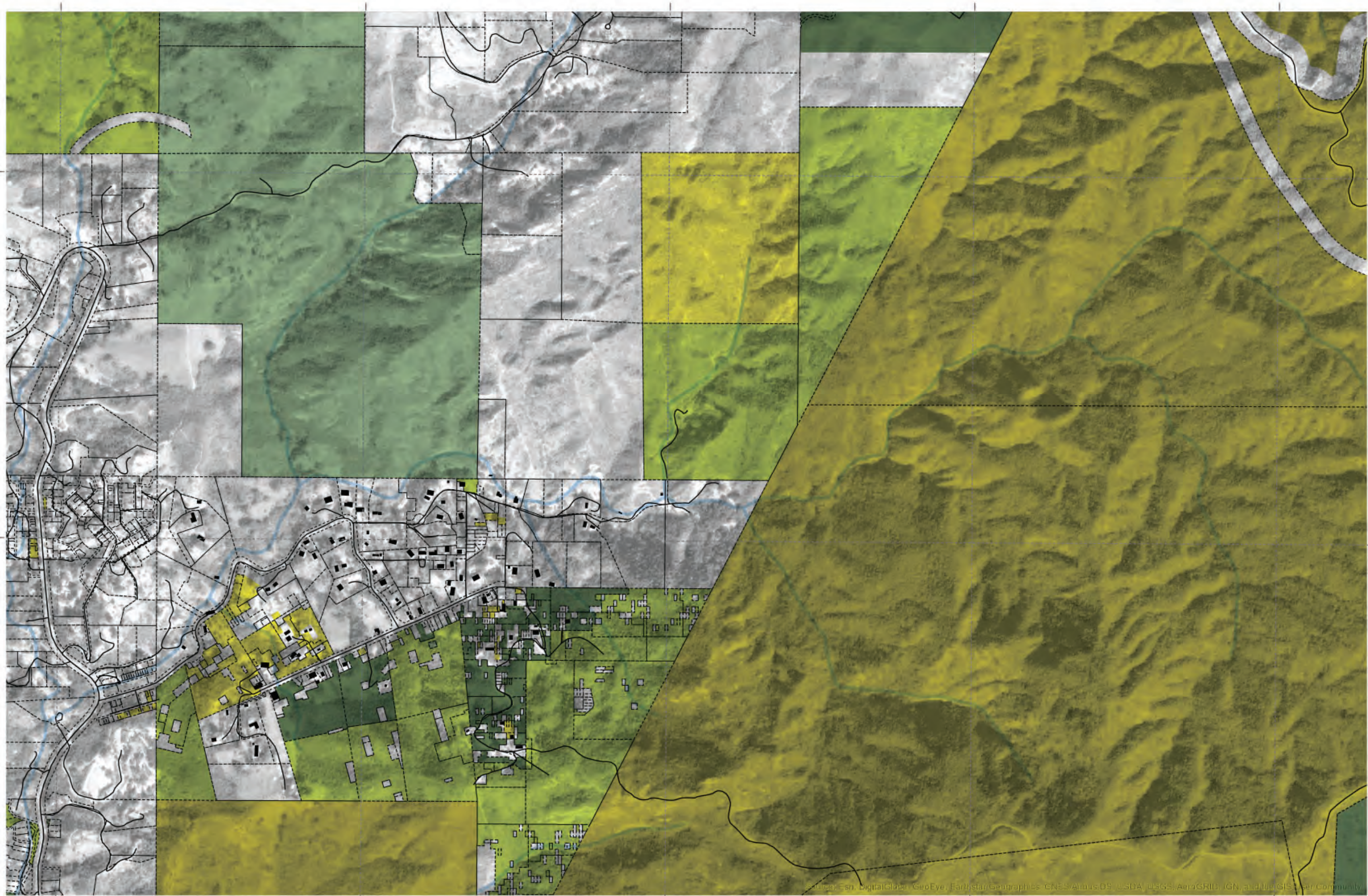
The Garapito creek community school is the home of the land care collective.

Anyone in the neighborhood and all landscape professionals who are employed here are invited to join the meetings. We bring in experts and partner with scientists as well as people with lived knowledge and/ or ancestral knowledge of how to care for the land. Land management used to be fragmented along property lines, with no conversation between private owners and the large public land agencies that surround the neighborhood, with many people feeling overwhelmed by their properties, and unable to respond to either the slow or rapid disappearances unfolding. Now, together, through conversation, research, and experimentation, we coordinate collective land management practices to amplify our capacity to respond.



garapito creek land care collective





LA County Parks



SMMC (public land trust)



MRCA (public land trust)



Cal. State Parks and Rec.

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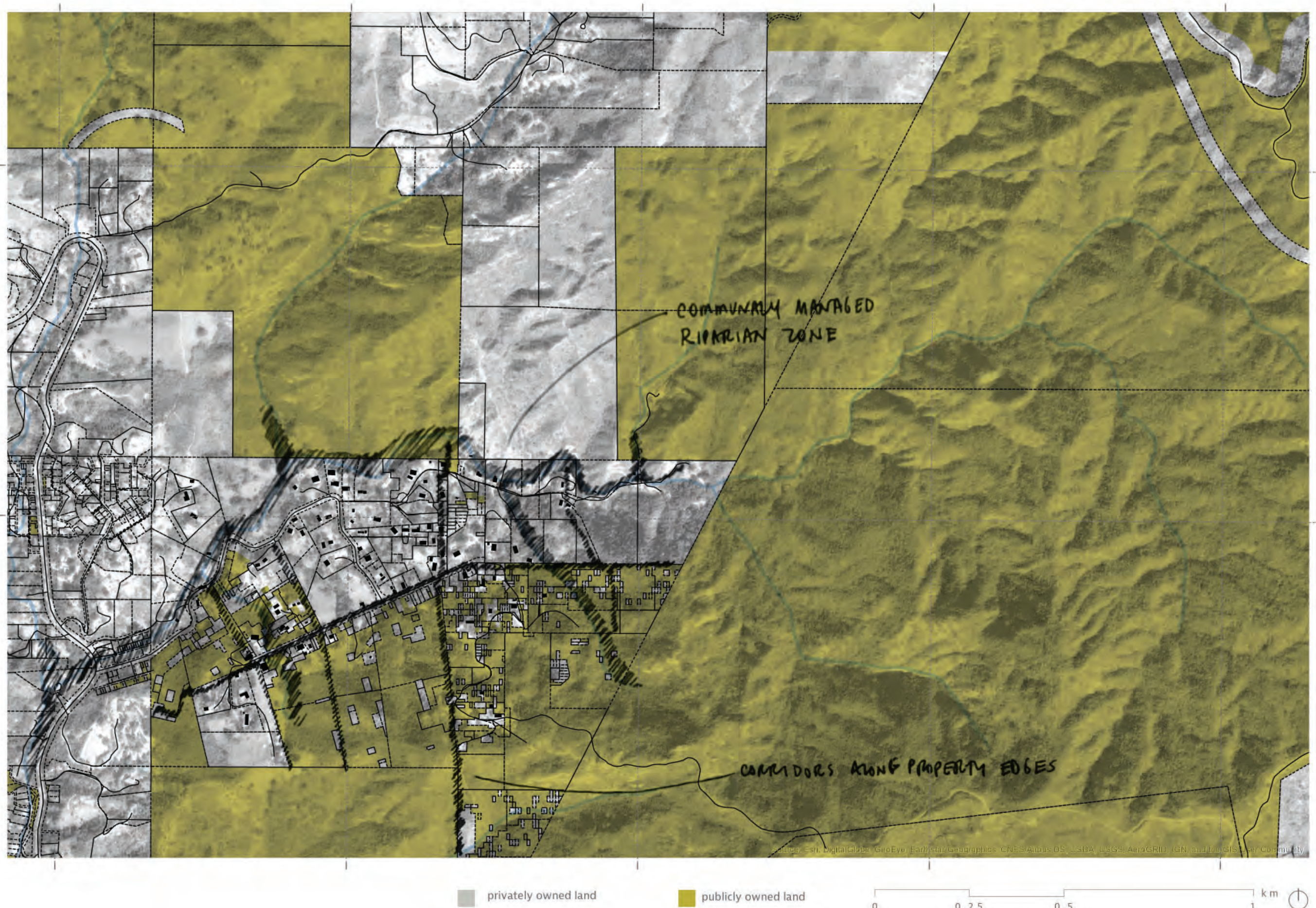
0.25

0.5

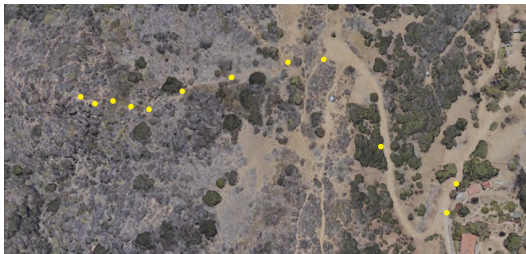
1 km











Practices have included:

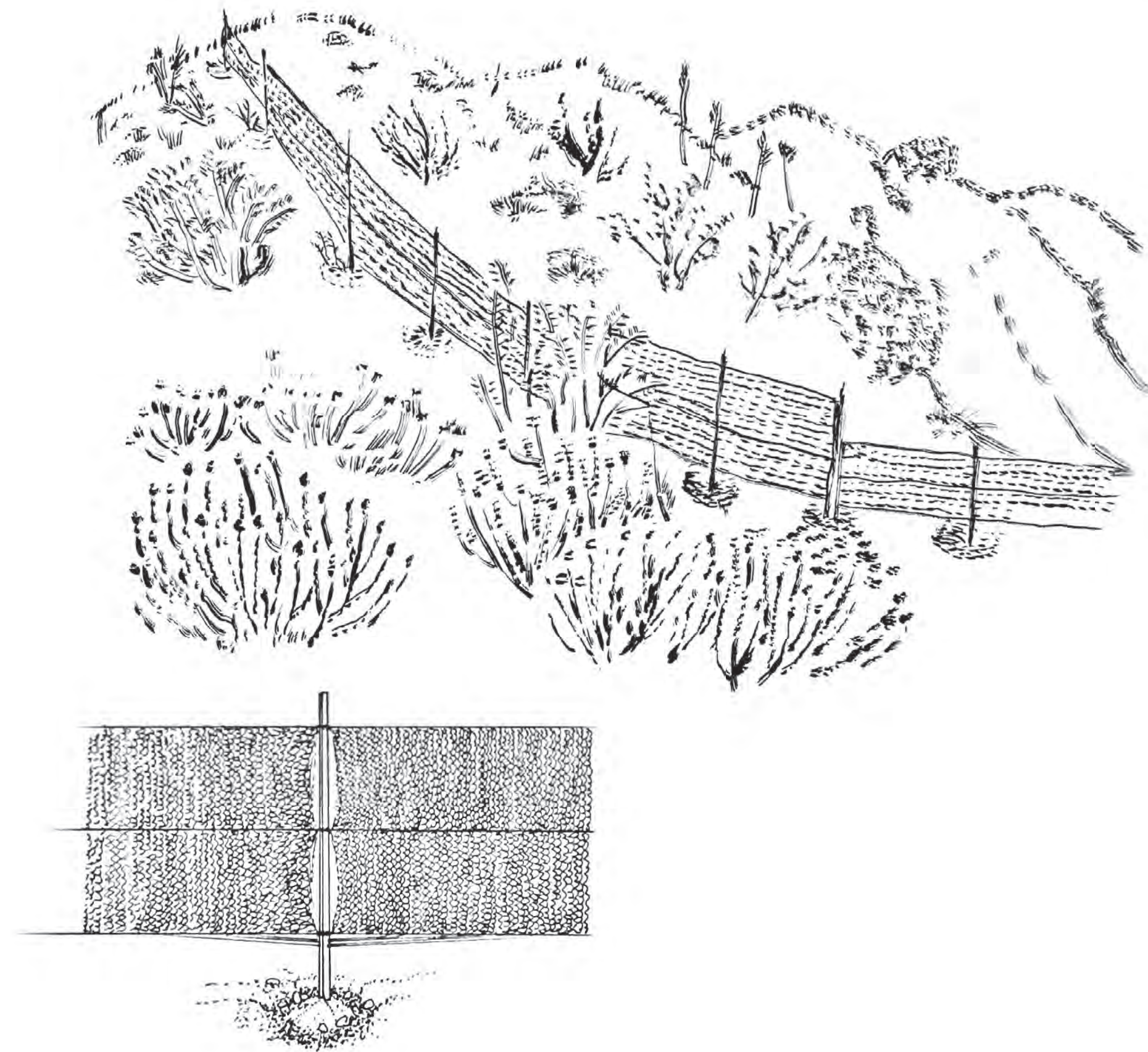
Changing our fencing patterns to create wildlife corridors along the riparian zone and property lines. Planting to support particular insect populations. Planting edible species as food forests where invasive mustards have become dominant.

Testing the grazing patterns of different animals to manage the fuel load for fire safety but support a thriving rhizosphere. Using dew capturing fabric along the temporary grazing fences to offer water during droughts.

And perhaps most critically, collecting and propagating seeds from individual plants found to be more resistant to the onslaught of pathogens, and the stresses of higher temperatures, drought lengths, nitrogen levels, and increased fire frequency.

garapito creek land care collective





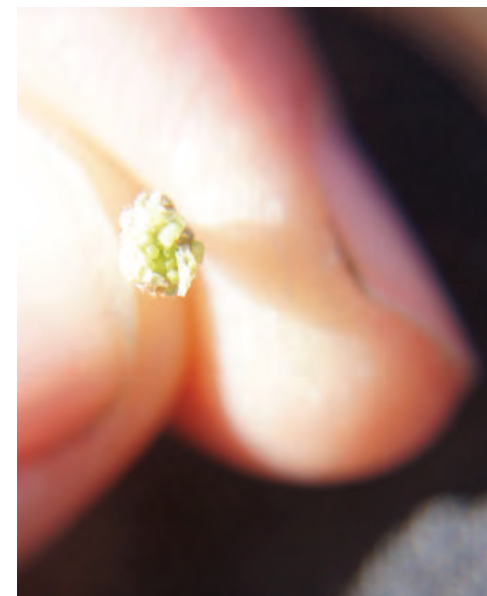
garapito creek land care collective





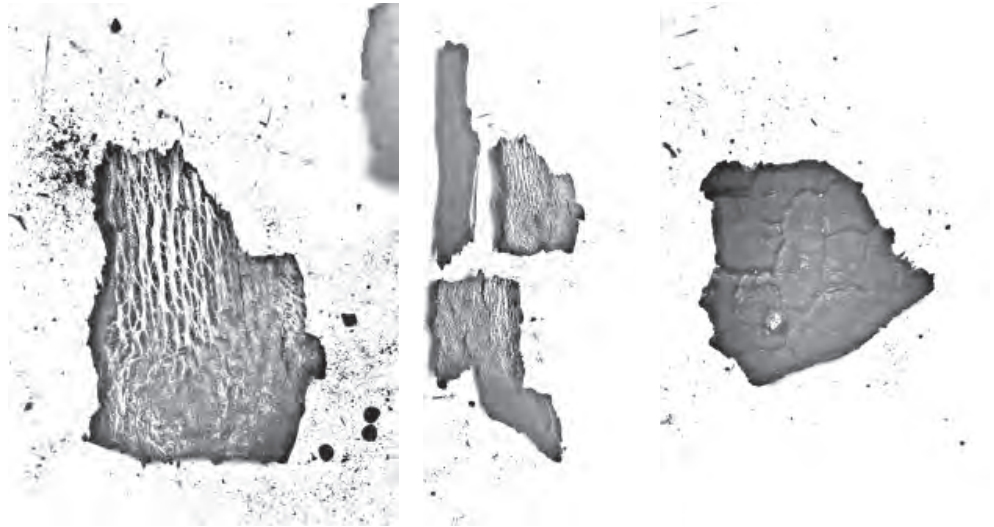
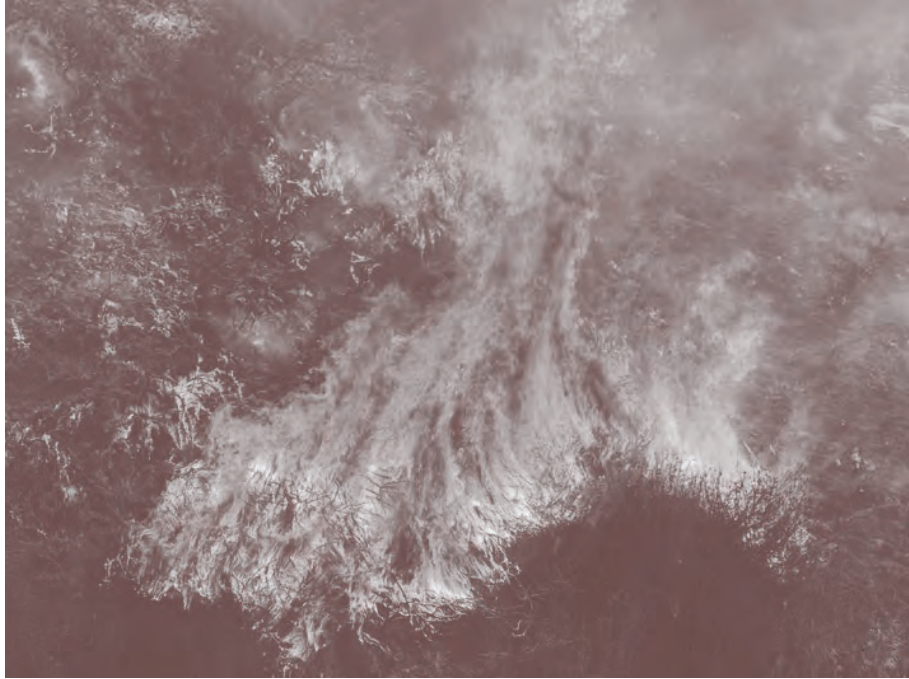
garapito creek land care collective





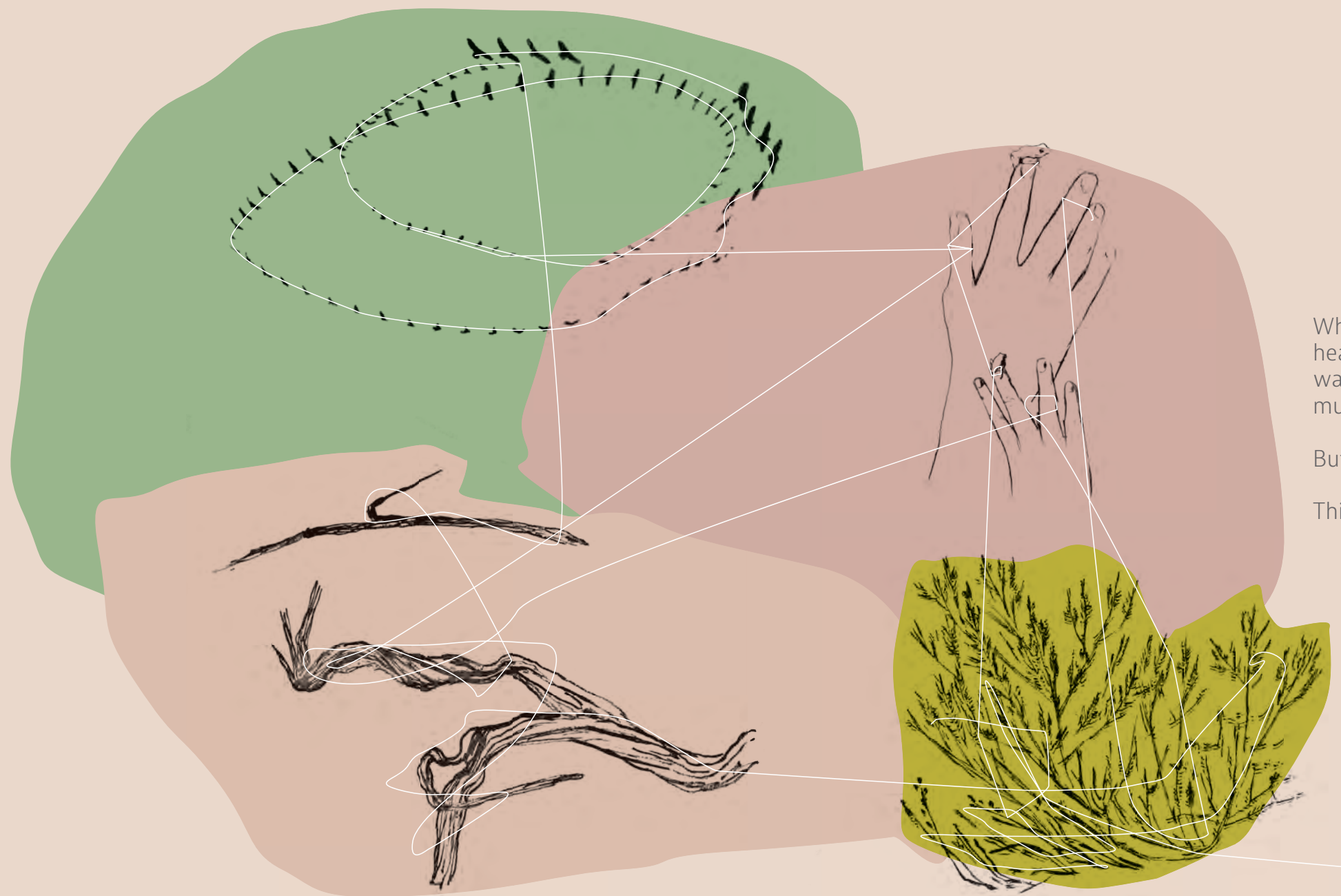
garapito creek land care collective





garapito creek land care collective





What does it mean to be a community member re-entangled with the health of the larger community of beings? Personally, I think it means waking up and listening, even if it makes me vulnerable to the pain of so much change and loss.

But this is an ongoing conversation.

This is life work, generational work.



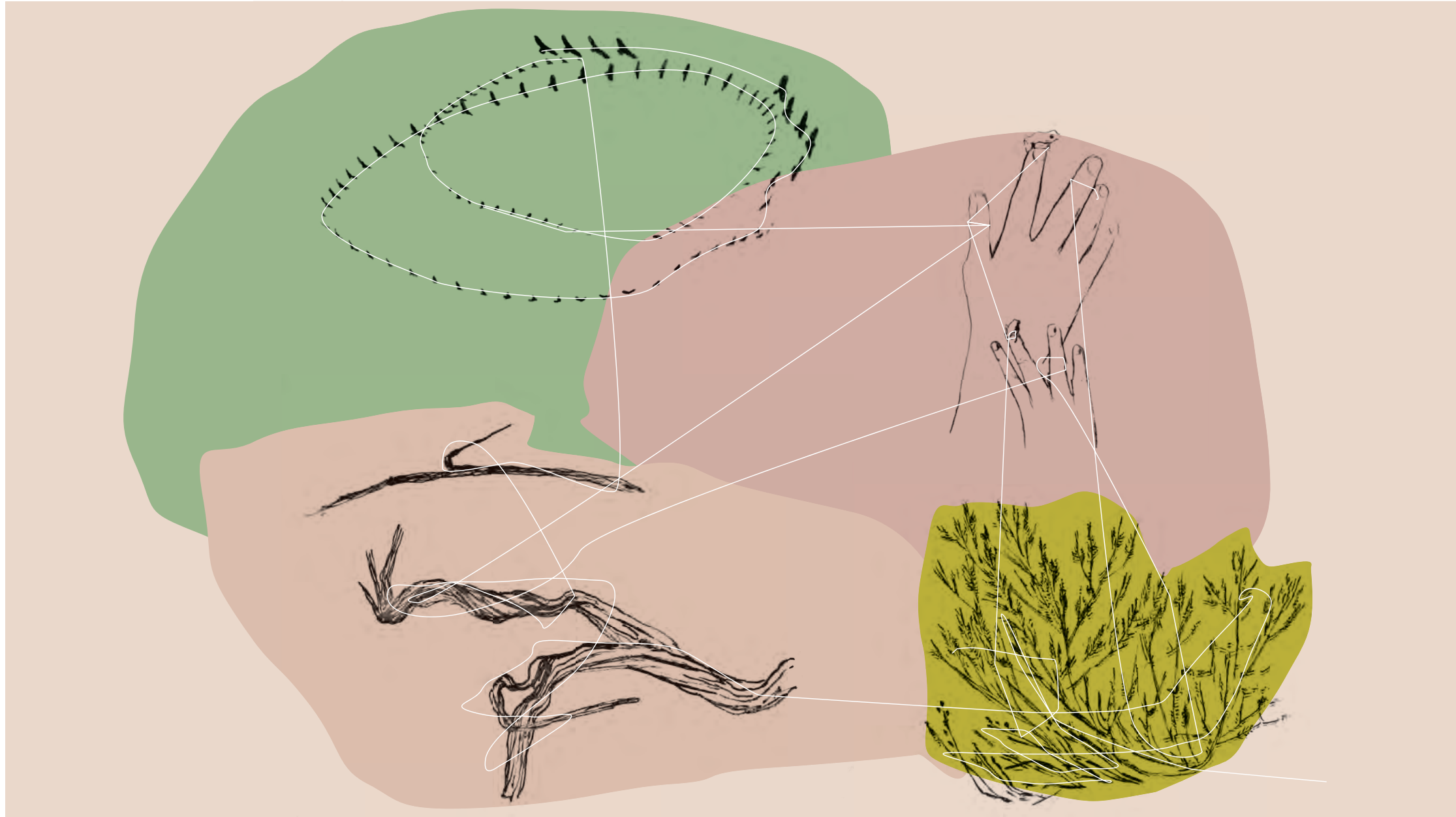




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i want to live together

kanchan wali-richardson  
advised by malkit shoshan

*i want to hear you even as extinction tears you away*

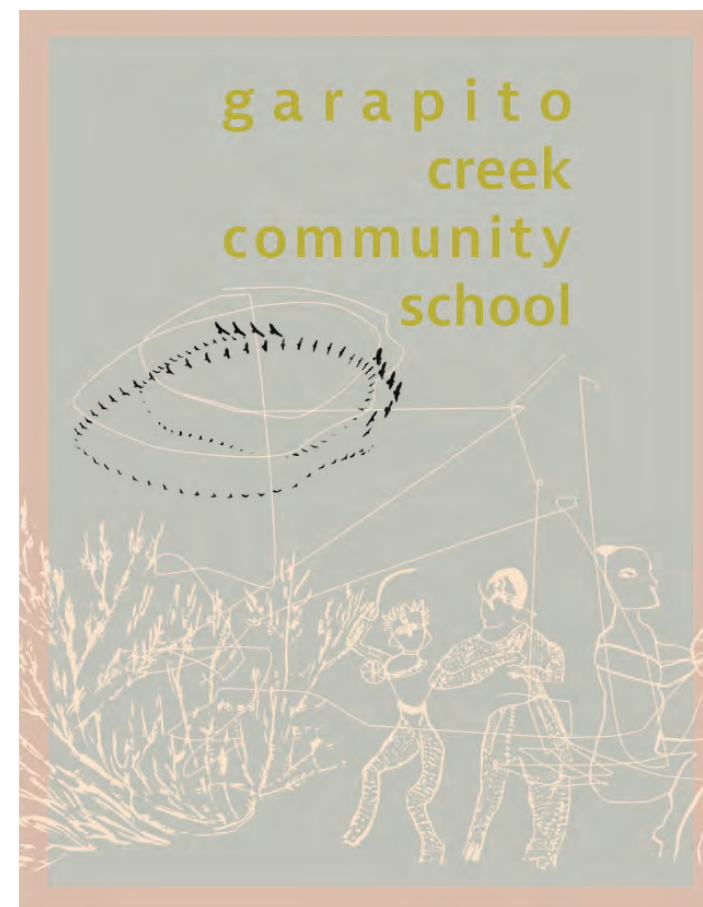
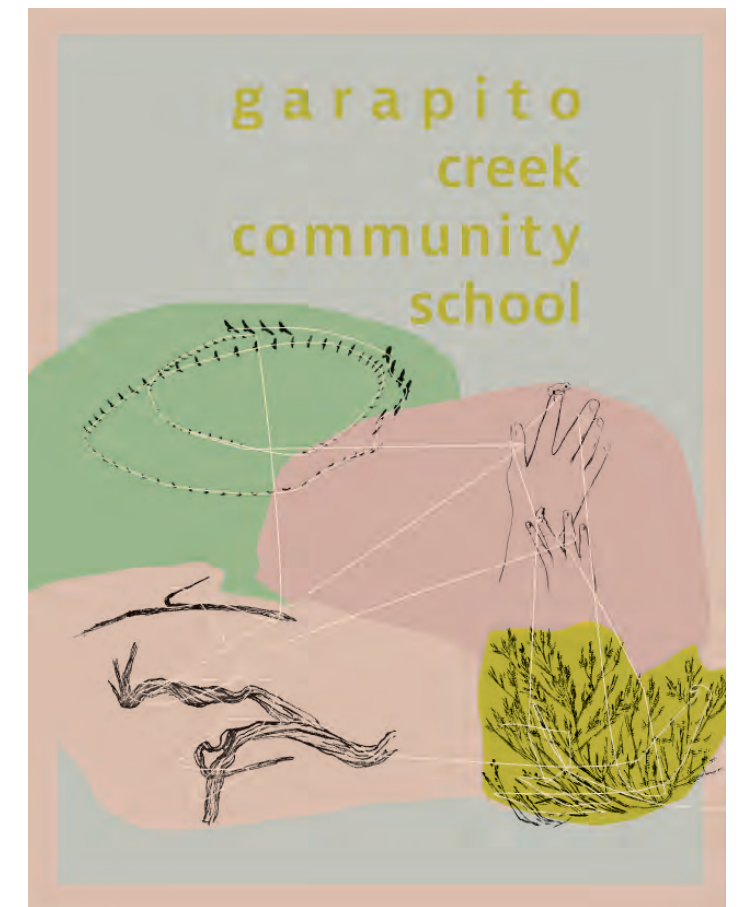
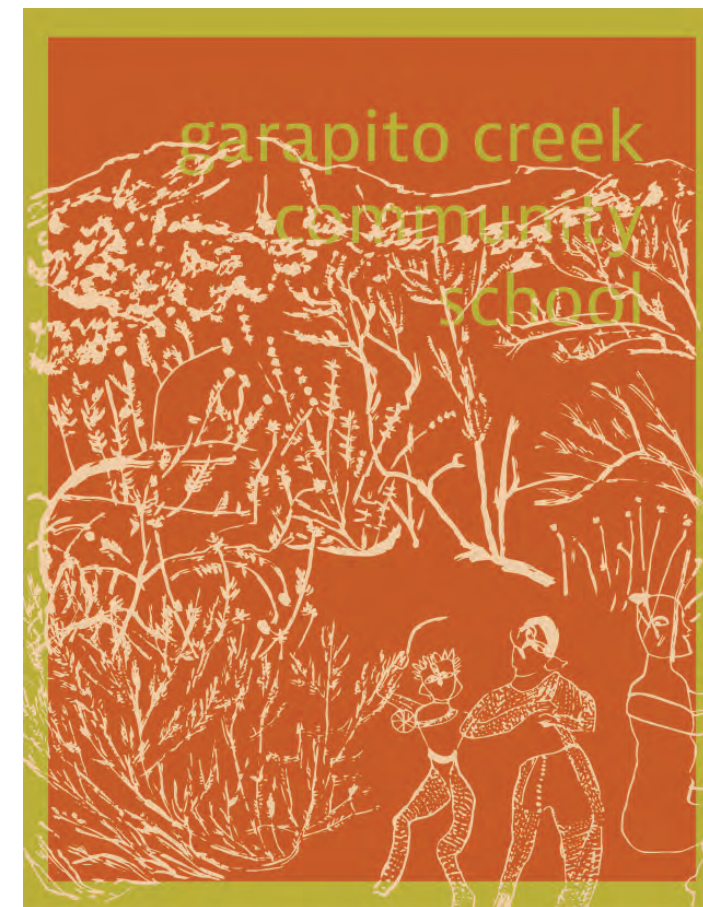
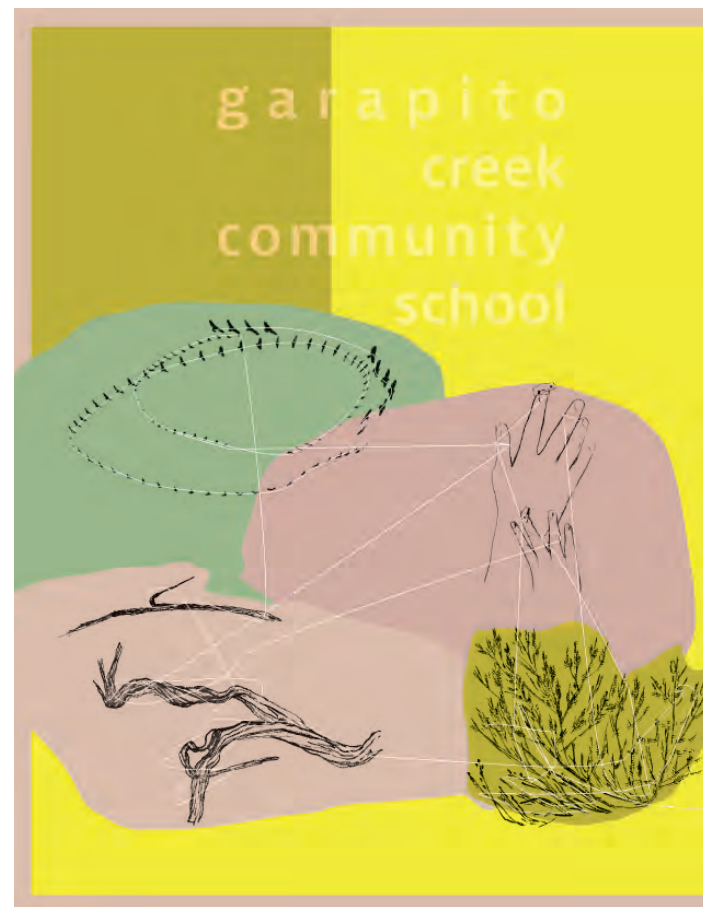




## *it's the year 2040*

This project is an attempt to grapple with how to live in a time of increasing extinction and loss. How should we go on? Knowing everything we know about how implicated we are in the unraveling of lives?

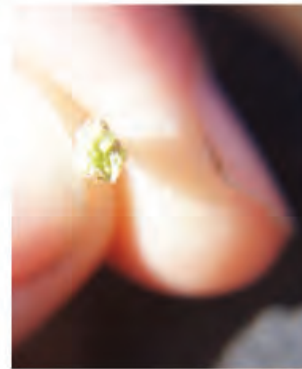




This thesis envisions a social infrastructure, The Garapito Creek Community School, to catalyze both spatial and intrapersonal change, grounded where I live, in Topanga Canyon California, a peri-urban neighborhood of Los Angeles.

The Garapito Creek Community School is an experimental design-build lab, galvanizing community members as agents of change through radical multispecies politics and interventions that address the needs of the entire community, human and non-human. It is the center of gravity for existential reckoning. It asks, how do we expand what we call community?

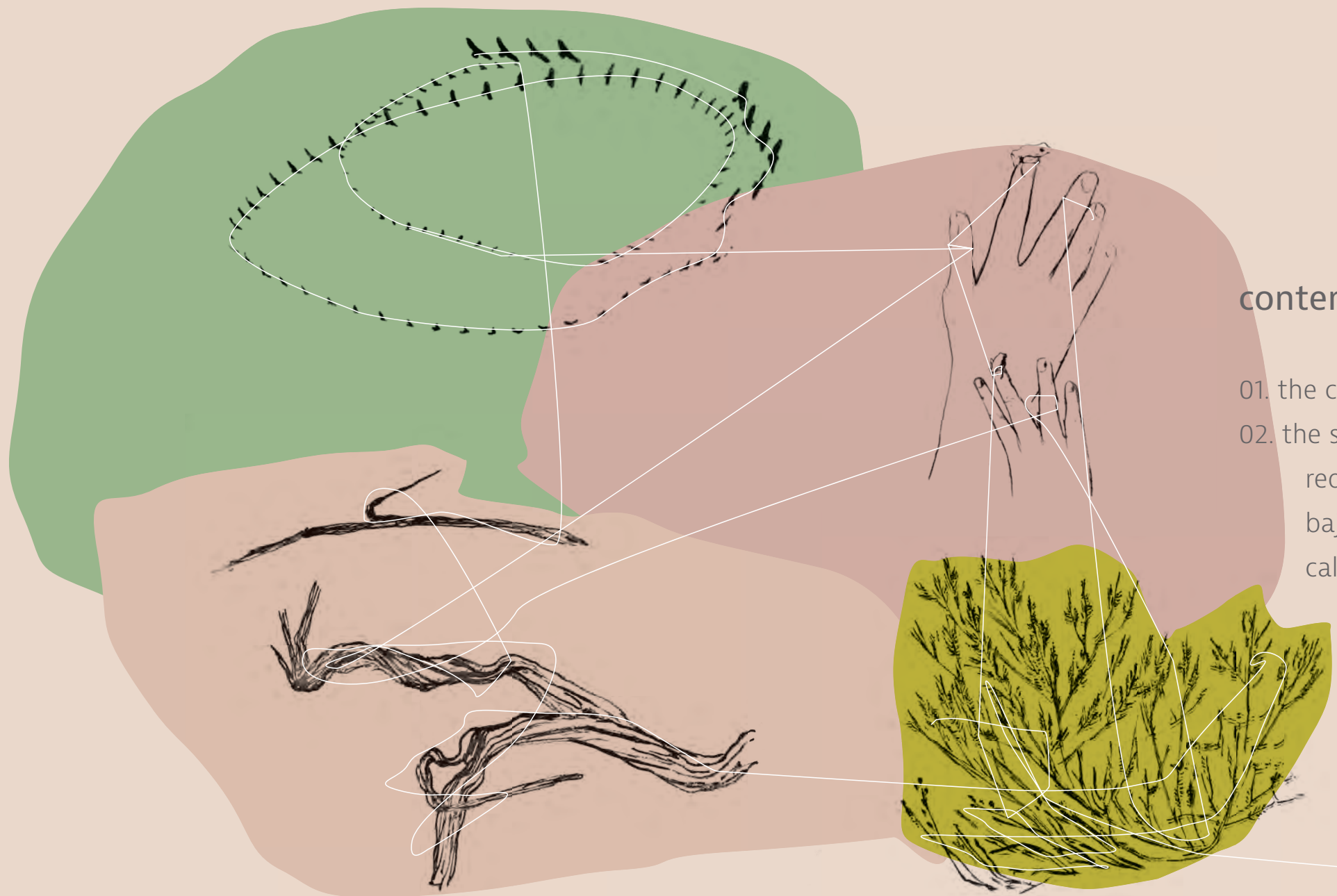




The project, and thus the politics of the school, insist that a design practice in the face of these existential threats must be personal, must be embodied, must honor grief, and must come into being through the rebuilding of deep relationships with others.







## contents

01. the context **1990 - 2021**

02. the school told through three relationships **2021 - 2040**

red-tailed hawk

baja-california tree frog

california sagebrush





*the context: 1990 - 2021*





I was born in these mountains. My earliest memories are of the sandstone boulders and the bursting feeling of dried California buckwheat flowers. I remember the summer heat, my mother carrying me surrounded by the sweet smell of mule-fat plants along the creek bed.



The problem is, I don't remember all the butterflies that aren't here anymore. The thousands of them gone now. Or the beetles. Or the songbirds I don't even know the names of. I don't remember the particular wildflowers that no longer bloom, having been out-competed by European grasses. I have no memories of the salamanders you can't find anymore. I can't recall what it feels like to hold a red-legged frog in my little chubby cupped hands.

In my years here, how many lives have faded away? Who was already missing by the time I was born?





There's a home video that surfaced recently from when I was a baby. My dad is shooting. He's got the camera zoomed in on a massive, hairy, black tarantula. He's screaming and bellowing at my mom to kill it. My mom leans into the frame, holding me, a little chunky dumpling.













She says with a sweet somber voice to my dad,





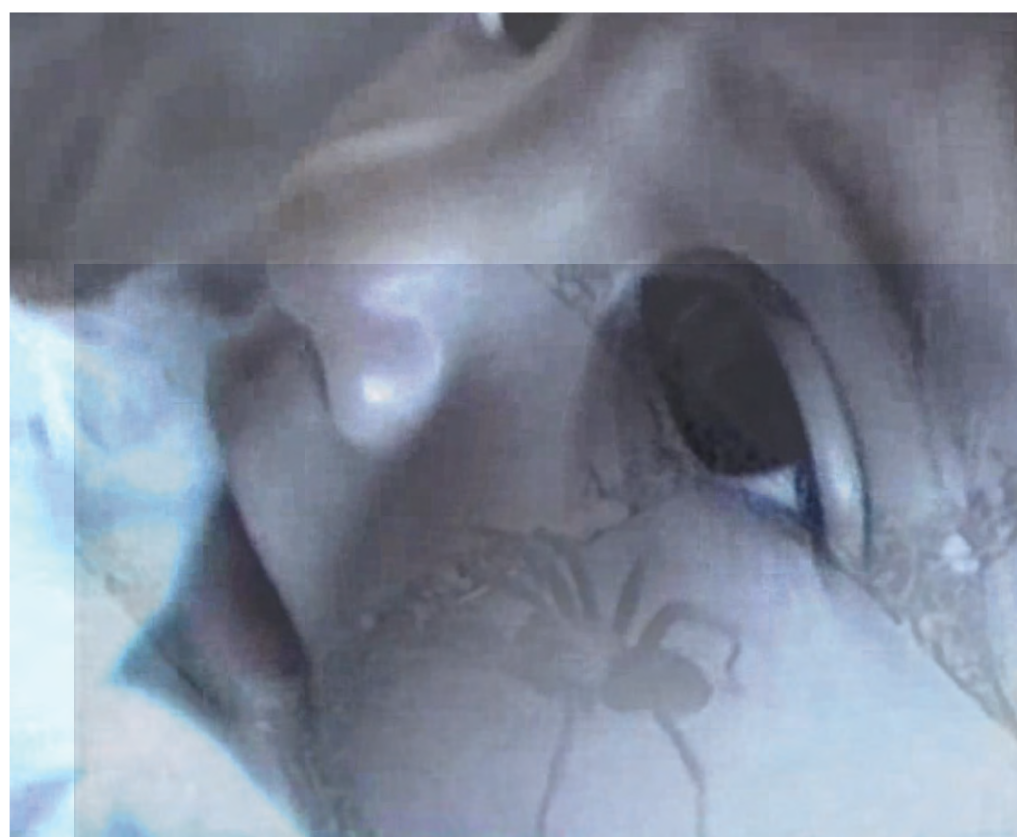
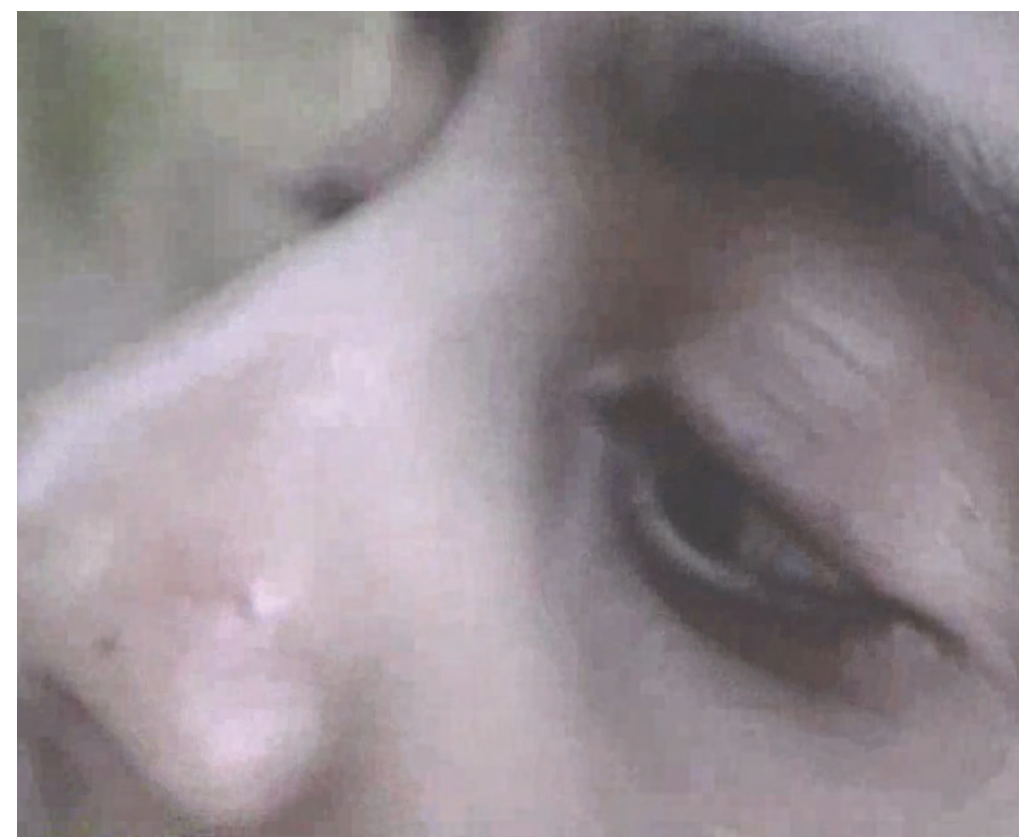
"I don't kill them because they're beautiful living creatures".





When I saw that video, it helped me understand better why I long for the world I long for.







# Animal populations worldwide have declined nearly 70% in just 50 years, new report says

BY SOPHIE LEWIS  
SEPTEMBER 10, 2020 / 9:09 PM / CBS NEWS

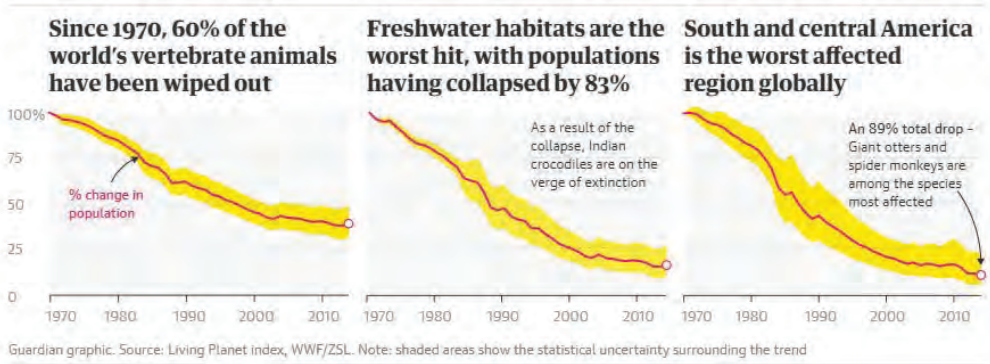


Animal populations worldwide have declined nearly 70% in just 50 years. 60% of vertebrates wiped out.

Changing weather cycles. Insect population collapse. Viruses. Pathogens. Indirect habitat loss.

Chaparral and sage scrub habitats are some of the most biodiverse in the world. Yet, in California, only 10% of the communities that once spread across the state are left. 90% gone. Unable to survive the desire for prime California real estate.

As designers, we know we are implicated in this. It's this conflict, between the way we live and build, and the decline of the living world, that sets the context for the story of The Garapito Creek Community School.



"We are rapidly running out of time," said Prof Johan Rockström, a global

## Humanity has wiped out 60% of animal populations since 1970, report finds

The huge loss is a tragedy in itself but also threatens the survival of civilisation, say the world's leading scientists







# As U.N. warns of widespread extinction, California is already losing species



CORONAVIRUS, VACCINES AND PANDEMIC >

Zoos, scientists aim to curb people giving virus to animals

A long overdue exhale at Disney California Adventure before Disneyland's reopening



## Animal populations worldwide declined nearly 70% in just report says



12 Chaparral Landscape Conversion in Southern California

329

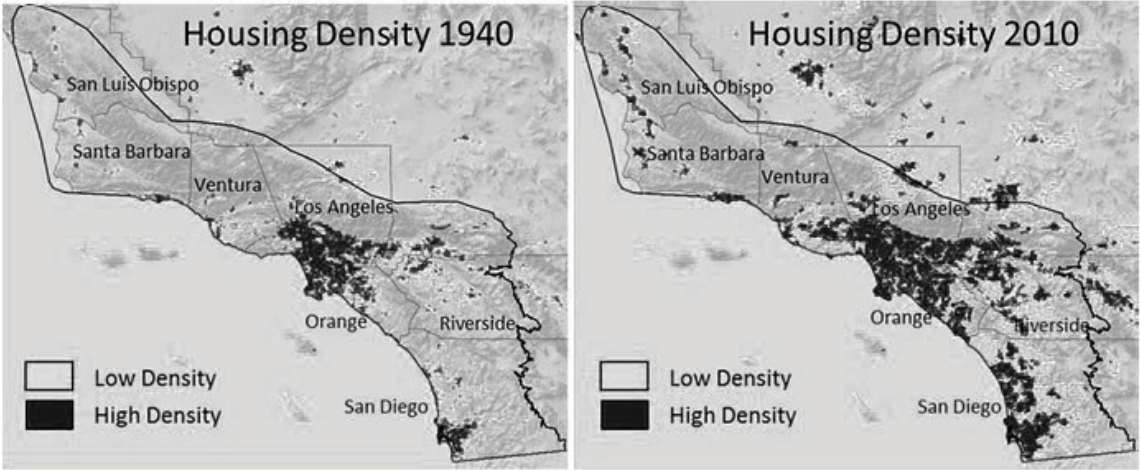
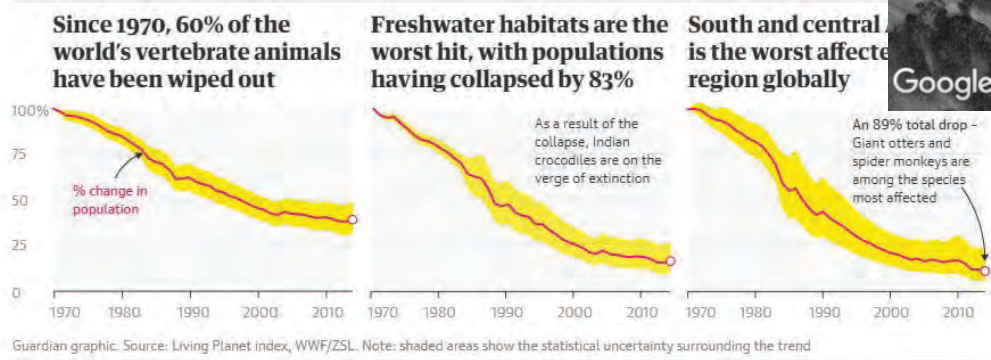


Fig. 12.2 Maps of low and medium-high housing density in 1940 and 2010 in the South Coast Ecoregion of southern California

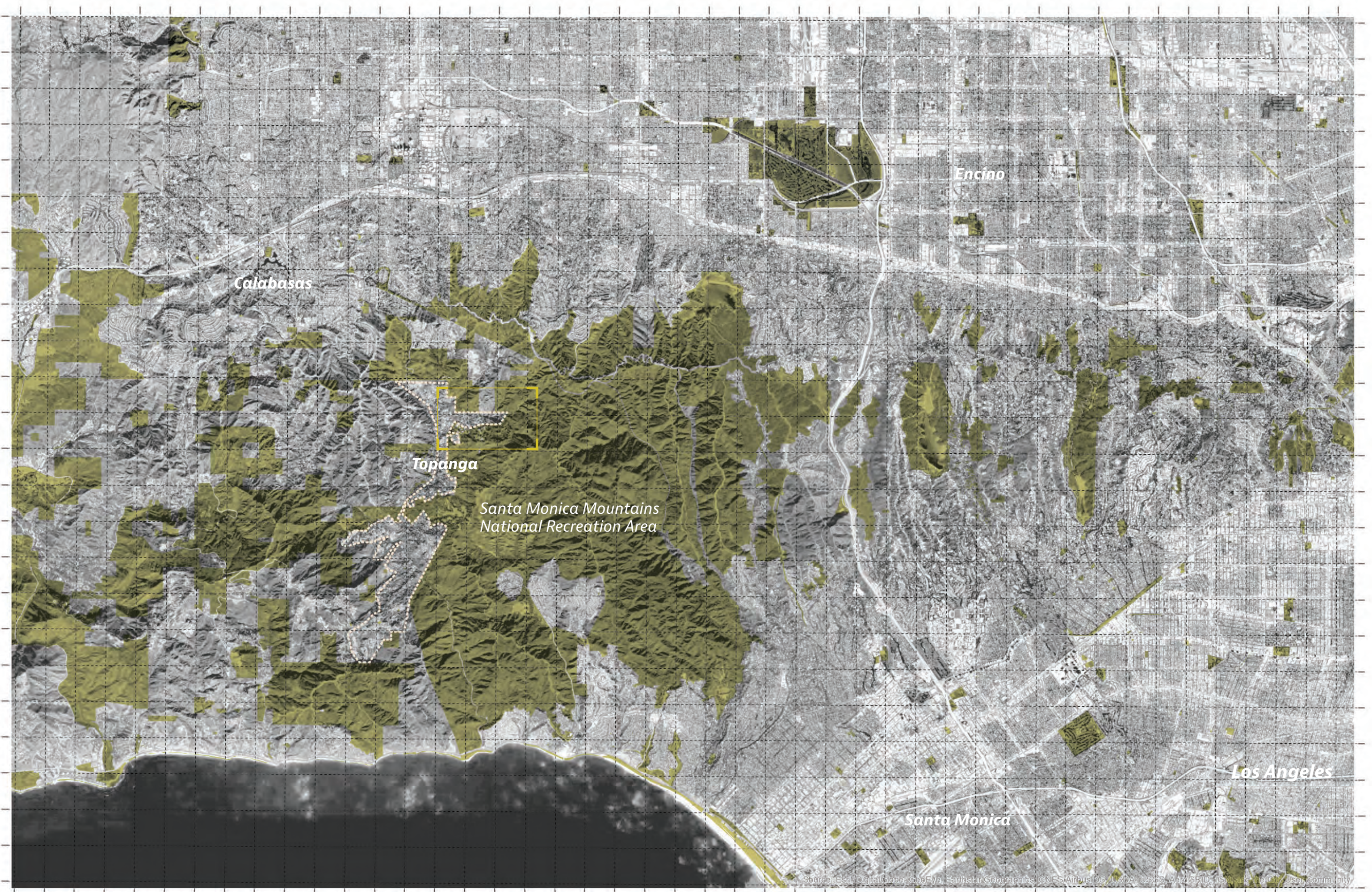
### 12.2.3 Indirect Habitat Loss and Conversion



"We are rapidly running out of time," said Prof Johan Rockström, a global

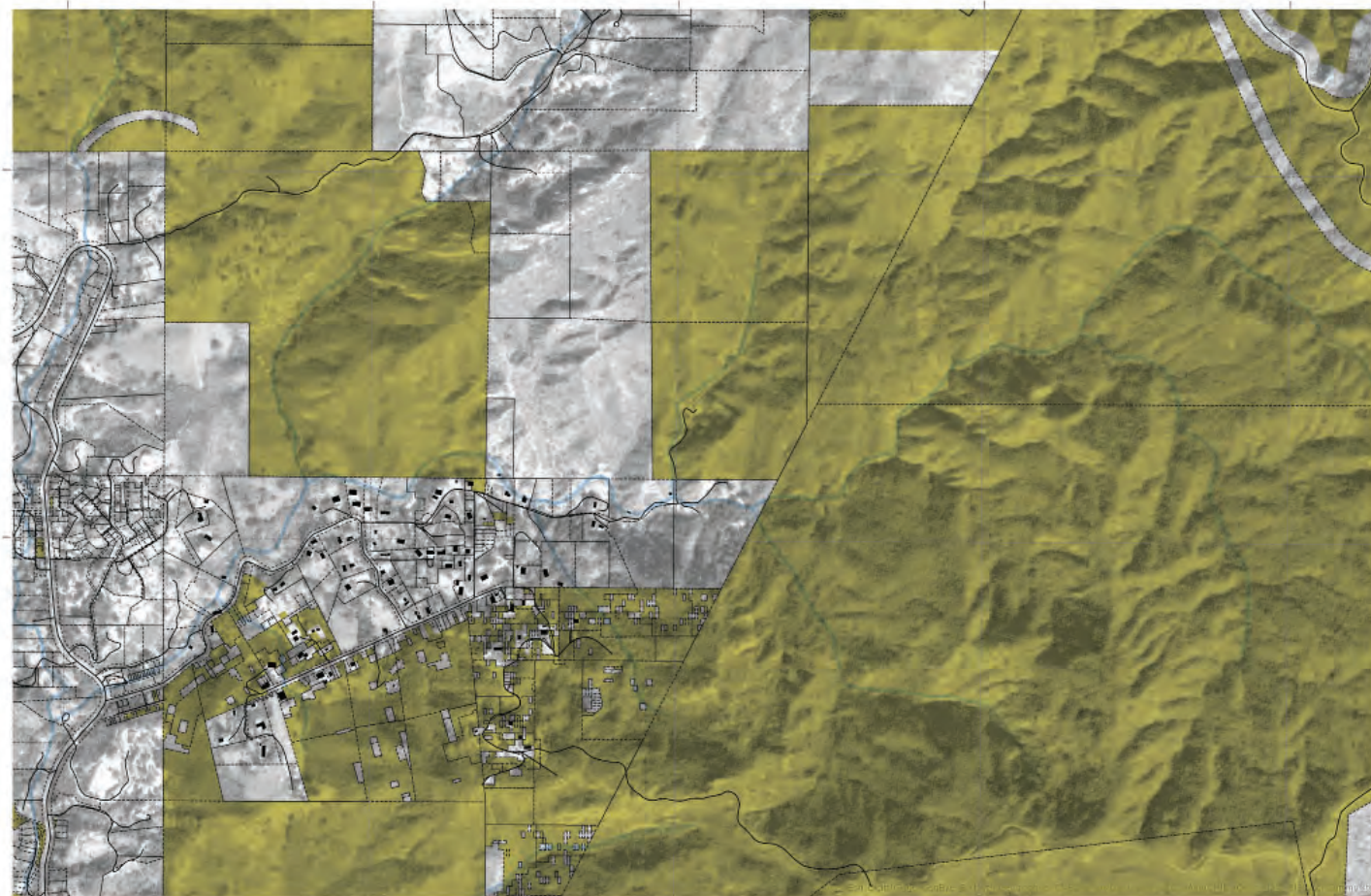






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community





Garapito Canyon, Sub-neighborhood of Topanga

privately owned land

publicly owned land

0 0.25 0.5 1 km

The neighborhood of Topanga, within which our community is located, is at the edge of the largest urban national park in the US, the Santa Monica Mountains Recreation Area.

It's a community up in the mountains, on the unceded land of chumash and tongva people. It's an unincorporated town, part of Los Angeles county. Though down the road from many estates and subdivisions, the neighborhood is peri-urban in form, numbering only around 200 people. It's a patchwork of communal and nuclear housing forms. Mixed incomes, often rough and DIY. It's has attracted people who wanted to live differently with a history of experiments in counter cultural projects.





















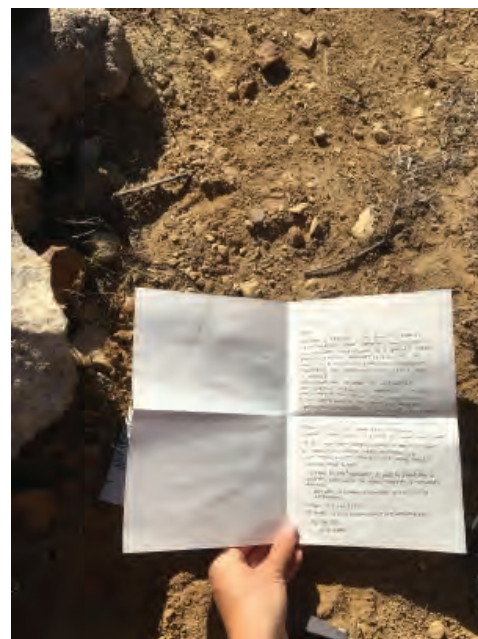
*the school: 2021 - 2040*





The school began at this moment perhaps, dropping a note in my neighbors Ben and Karinay's smiling pink mailbox.





Followed by more notes, and more conversations with neighbors, asking, how should we live knowing everything we know?

One particularly catalyzing conversation early on was with Deena Metzger, a longtime resident here who is an author and healer. In 2019 she wrote,





*"The only healing for extinction illness is to change our lives to stop extinction"*

*"How shall we live?"*

*Deena Metzger, Extinction Illness, 2019*





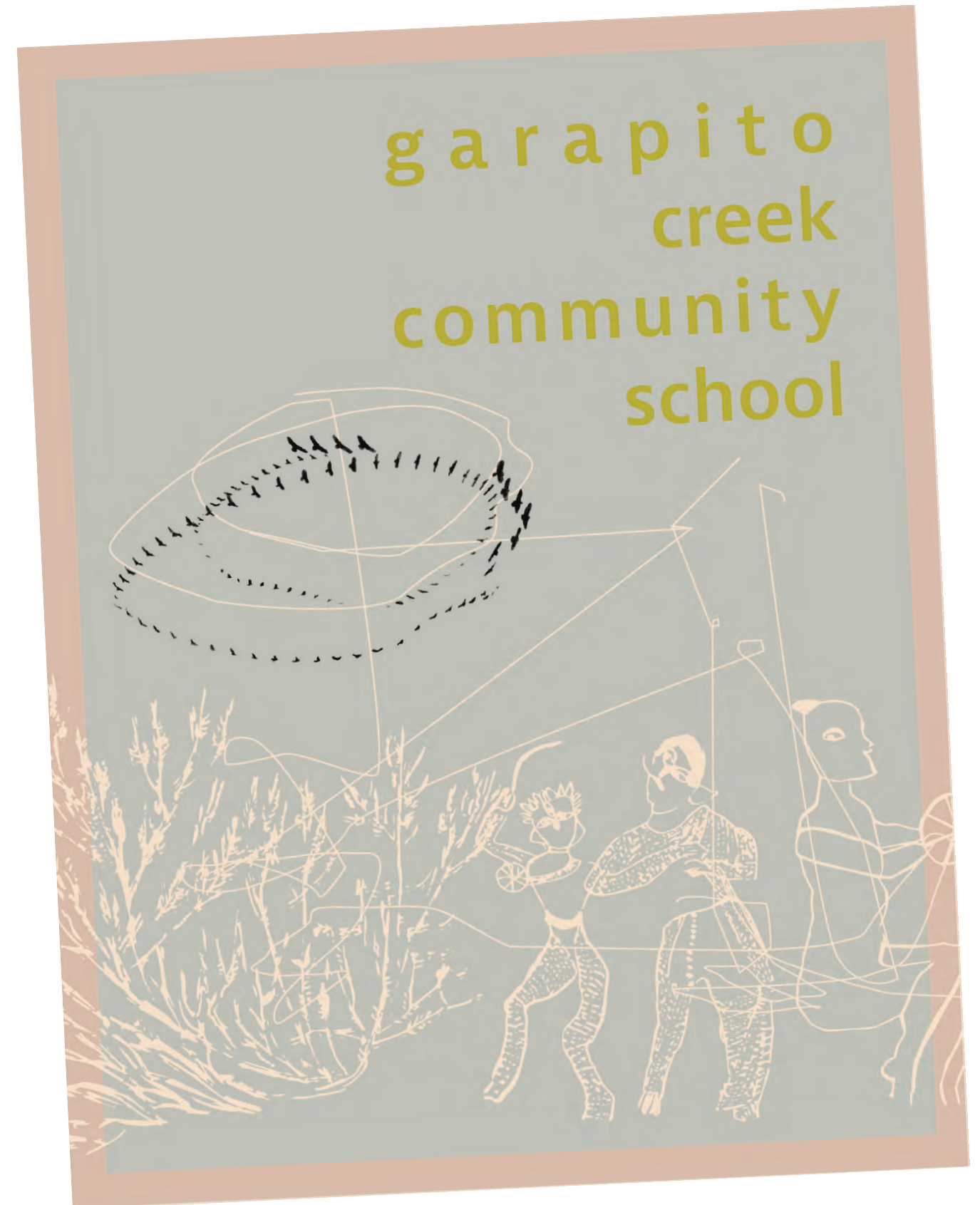
There was a mounting sense of urgency.

But who has the time? Who has the energy to make radical change? Life is hard enough...



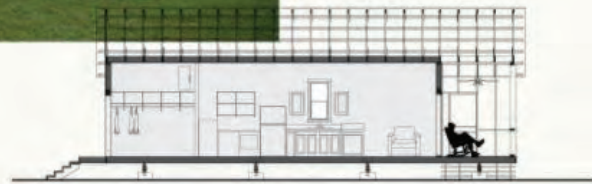
That's how the school came into being. As the center of gravity for adaptation. A way to share, exchange, test and grow applied knowledge.

Key precedents included:





RS20K



### Gold Medal

Sambo Mockbee is posthumously honored with the prestigious American Institute of Architects Gold Medal, awarded to one esteemed architect a year for "a body of distinguished architectural work."

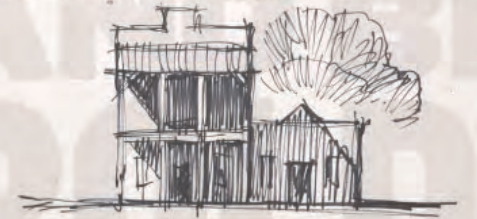
### August 2004: 20K Project research begins

Rural Studio begins the 20K Project, initiating a body of research aimed at identifying scalable solutions to stubborn rural housing problems.

### OUR WORK

Rural Studio philosophy suggests that everyone, both rich and poor, deserves the benefit of good design. The students work within our community to clarify problems, define solutions, design, fundraise, and, ultimately, build remarkable projects. Our research addresses rural communities holistically: from houses to infrastructure and resources, always mindful of the connectedness of the many facets of rural life.

MORE →



*Rural Studio, Auburn University School of Architecture design-build program*

garapito creek community school precedents



01. c. Radical Observation

**The practice:** Radical Observation is a methodology that provides a practitioner-developed framework for understanding human interaction with the natural world. Practitioners are guided through situated **postures of awareness** that focus attention on specific natural dynamics in order to understand, design and/or maintain a landscape or ecosystem. Radical Observation is practiced by the VBAZO-CoP from 2018 until present.



Debra Solomon | PhD candidate UvA Urban Planning | The Amsterdam Zuidoost Food Forest | Harvard GSD | Feb 17 2021 |

The Amsterdam Zuidoost Food Forest, Community of Practice  
Debra Solomon

Mediamatic Program People Venue Shop Restaurant

log in en search

Pigeon Towers Events Bibliography Towers Credits Arne Hendriks

FUNGUS, RESEARCH, URBAN AGRICULTURE, NATURE, FOOD, ECOLOGY, ARCHITECTURE, HYBRID Similar

Arne Hendriks

Is it an urban mushroom farm? Is it a pigeon tower? Is it a pile of compost? What are those structures outside the barn at Mediamatic?

Share

Because these structures are made from living mycelium WHAT you call it probably depends on WHEN you encounter it. At first they are horizontal mushroom farms, and many of our neighbours have enjoyed picking the very tasty yellow oyster mushrooms that grow from its walls. If you look carefully some traces of the mushrooms are still

Blog

Pigeon Towers

Mediamatic Blog

Related

Exhibition: Cartier Pigeon Tower 03

Exhibition: Mediamatic Biotoop Mycelium Pigeon Towers by Arne Hendriks

Mediamatic Art Center, Amsterdam



*"Medium Design: Knowing How to Work on the World considers the potentials of mutualism as embodied in spatial arrangements. Focusing not only on objects in urban space but also the matrix of relationships that connects them."*

*"In Medium Design, **designing is not solving but further entangling.**"*

*"To borrow from Isabel Stengers, how do you convert capital's "chains of dependence" back to "relationships of interdependence?""*

*Reading Mutualism: A Contemplation after Medium Design, Keller Easterling, 2021*

garapito creek community school precedents



*"What settler colonialism, and its extensions into contemporary petrocapiatalism does is a severing of relations. It is a severing of relations between humans and the soil, between plants and animals, between minerals and our bones. This is the logic of the Anthropocene."*

*On the Importance of Date, or Decolonizing the Anthropocene, Heather Davis and Zoe Todd, 2017*

garapito creek community school precedents



g a r a p i t o

commu



The Garapito Creek Community School is an evolving attempt at a social infrastructure to rebuild relationships on multiple levels. To further entangle.

To do so, the work of the school expands both inward, and outward from more traditional design-build models. We spend as much time asking, how are we listening? What inner work is needed in each of us to make shifts? As we do designing, building and of course, evolving practices of care and mutualism that can sustain deep long term relationships with the land and species that need particular support.






*the structure of the school, told through my relationship with*  
***red-tailed hawks***





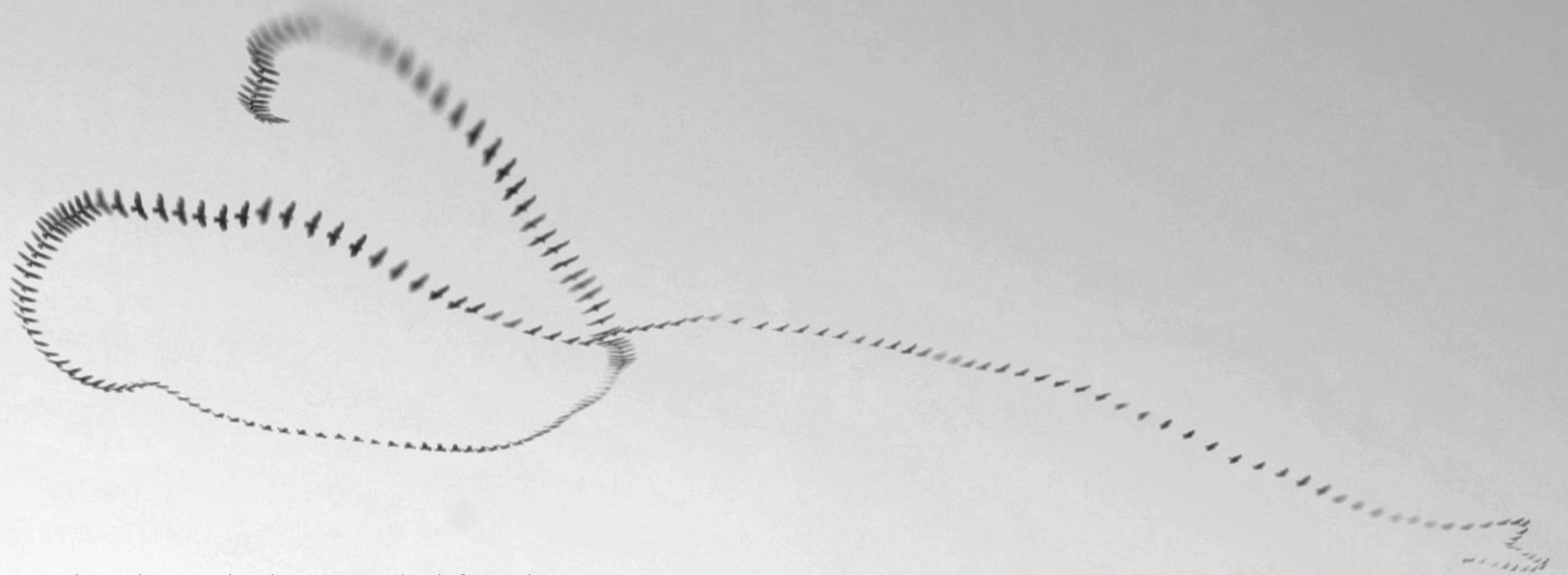


A black and white photograph showing a large flock of birds, likely hawks, flying in a circular pattern over a landscape. In the background, a multi-lane highway with several lanes of traffic is visible, stretching from the bottom left towards the center. The foreground and middle ground are filled with dense, dark evergreen trees. The sky is a uniform light gray, providing a stark contrast to the dark trees and the circular formation of the birds. The overall scene suggests a juxtaposition of nature and human-made infrastructure.

Hawks are generalists, survivors in damaged worlds. They have adapted to our roadkill, to our high rises, to miles and miles of paved suburbia. They dive from the sky to sink their talons into the bodies of mice, rats and ground squirrels that have been lucky to thrive in the wake of settler-colonial-industrial change.

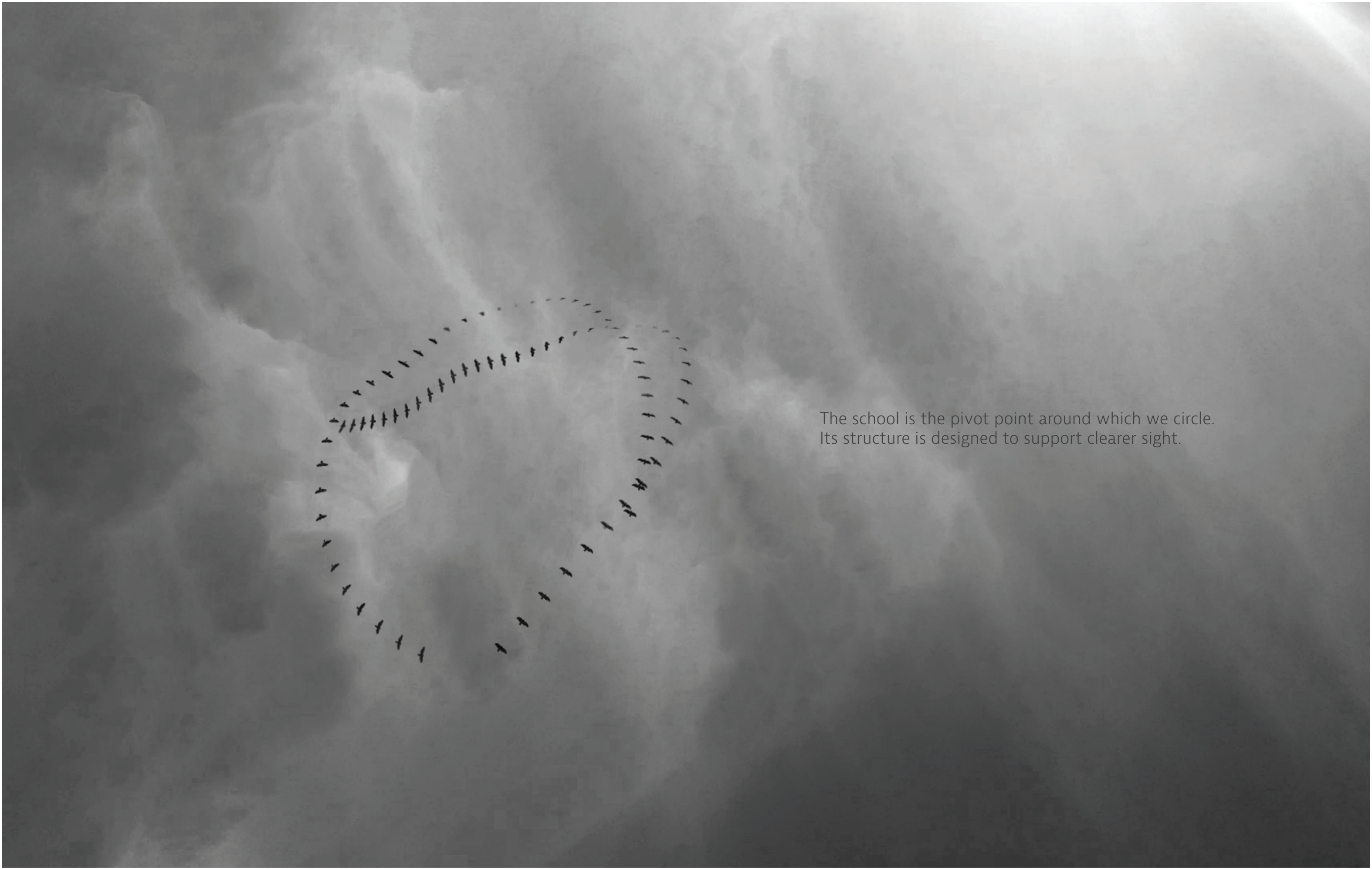
What can they teach us about surviving in damaged worlds?





First, they can teach us about scale, about seeing both far and near with precision, and the power of circling for clear sight. Spending time quietly watching hawks, I have an intense awareness of our bodily difference. I'm stuck in one place as they glide rapidly in and out of my view. The boundaries of my perception make them small blurry marks against sky but looking down at me, they can see every hair in my eyebrows and the palpitation of my chest. Circling, they study me from every angle.





The school is the pivot point around which we circle.  
Its structure is designed to support clearer sight.



OUTSIDE STUDENTS

FUNDING  
CREATIVE CAPACITY  
SKILL  
LABOR

OUTSIDE EXPERTS

KNOWLEDGE  
METHODS  
TECHNOLOGY

NEW HOUSING  
EXPERIMENTS

HOUSING ADAPTATION  
EXPERIMENTS

INFRASTRUCTURE

COMMUNITY SPACES

KNOWLEDGE

WORKSHOPS  
MANUALS  
GUIDES  
EXPERIMENTS

**school**

COLLECTIVE LAND  
MANAGEMENT PLANS

COMMUNITY COHESION  
CONFLICT RESOLUTION

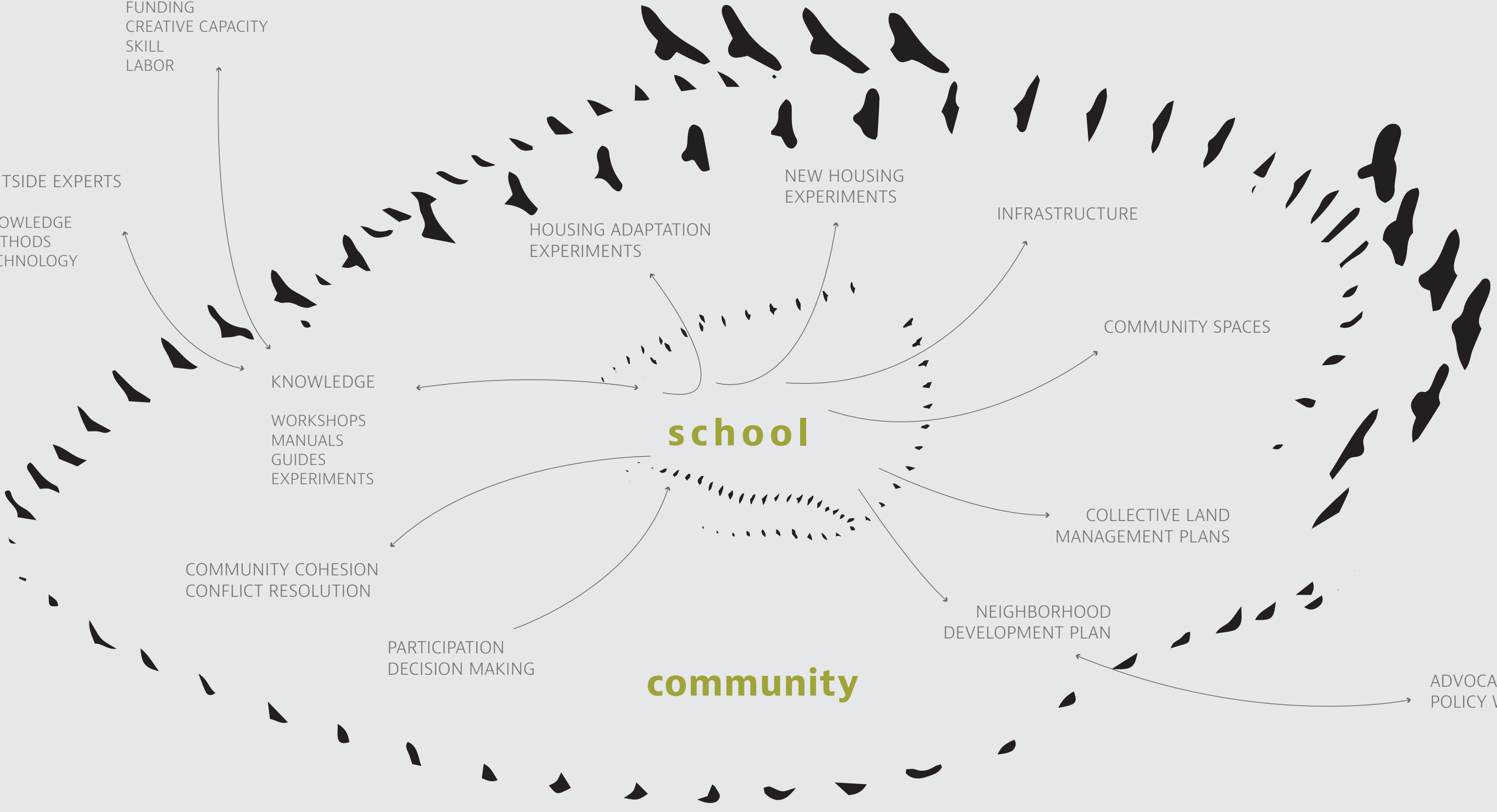
PARTICIPATION  
DECISION MAKING

**community**

NEIGHBORHOOD  
DEVELOPMENT PLAN

ADVOCACY AND  
POLICY WORK

**world**







The school is a combination of a design-build program model and an education oriented community center. Small cohorts of design students are invited into the neighborhood as well as visiting designers as instructors. Those programs are woven with short workshops geared towards community members. All projects are opportunities for learning, testing, and sharing, and take place within the community: taking the form of constructed adaptations to peoples homes and properties, new affordable experimental housing, projects specifically to address the needs of other species, and community spaces.

Thus, the school brings in the energy of outside experts and outside students and gathers and grows the lived knowledge of community members.

At the largest scale, we coordinate advocacy efforts like changing the neighborhood plan and patterns of development. Putting limits on new construction square footage. Incentivizing affordable housing. Allowing for experimental building under a new code similar to the class K code for owner-built rural dwellings in northern California that allows far greater permitting flexibility for experimental building methods.

At the medium scale, the new housing and existing housing adaptation experiments address water care, soil care, following the source of materials of construction, building habitat into the walls and micro-climates made by the structure, and inventing forms that support how we relate and communicate with other species.

At the smallest scale, we work on being attentive to the quality of perception in a single moment. Attentive to the difference between the gush of wind under the wings of a crow, vs a vulture, vs a falcon, vs a redtail.



listen

un**design**

un**build**

sustain

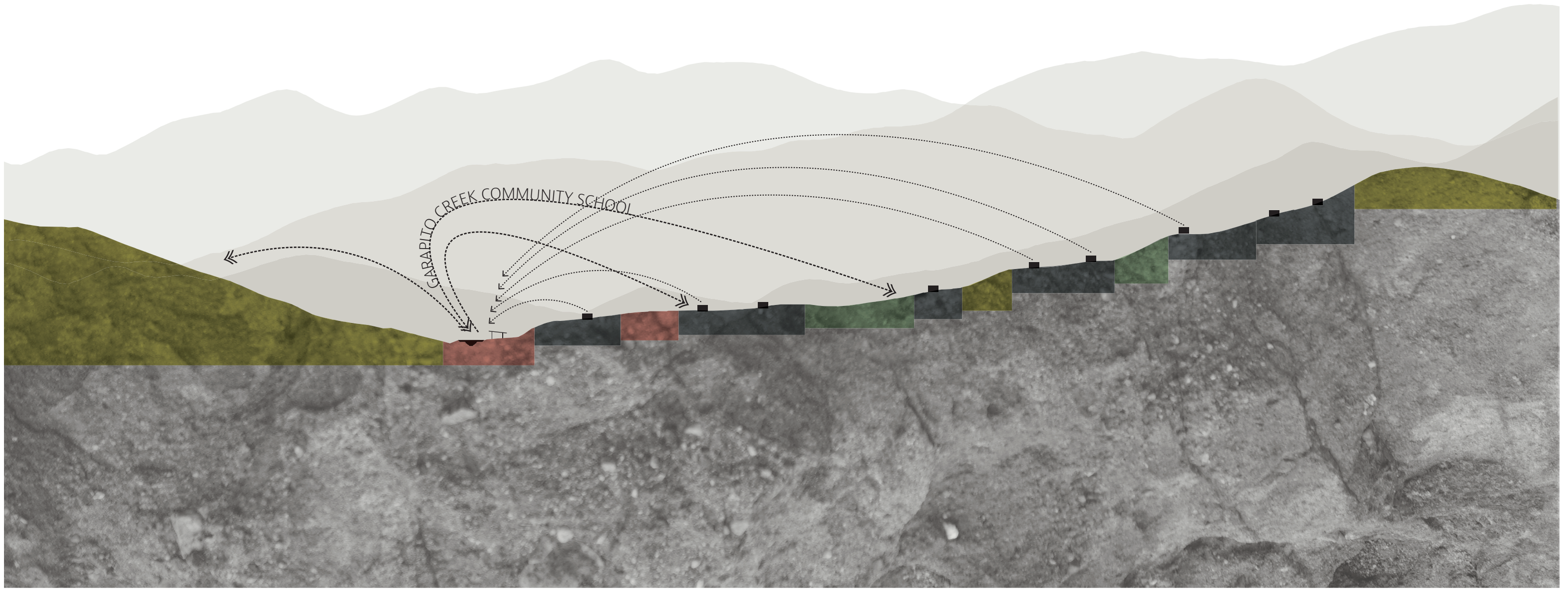


- material construction lab
- communal land working group
- material cycling, deconstruction methods lab
- regenerative arid agriculture working group
- landscape labor program
- community/ public land management planing and testing


garapito creek community school programs








 collectively managed land

 private residential property

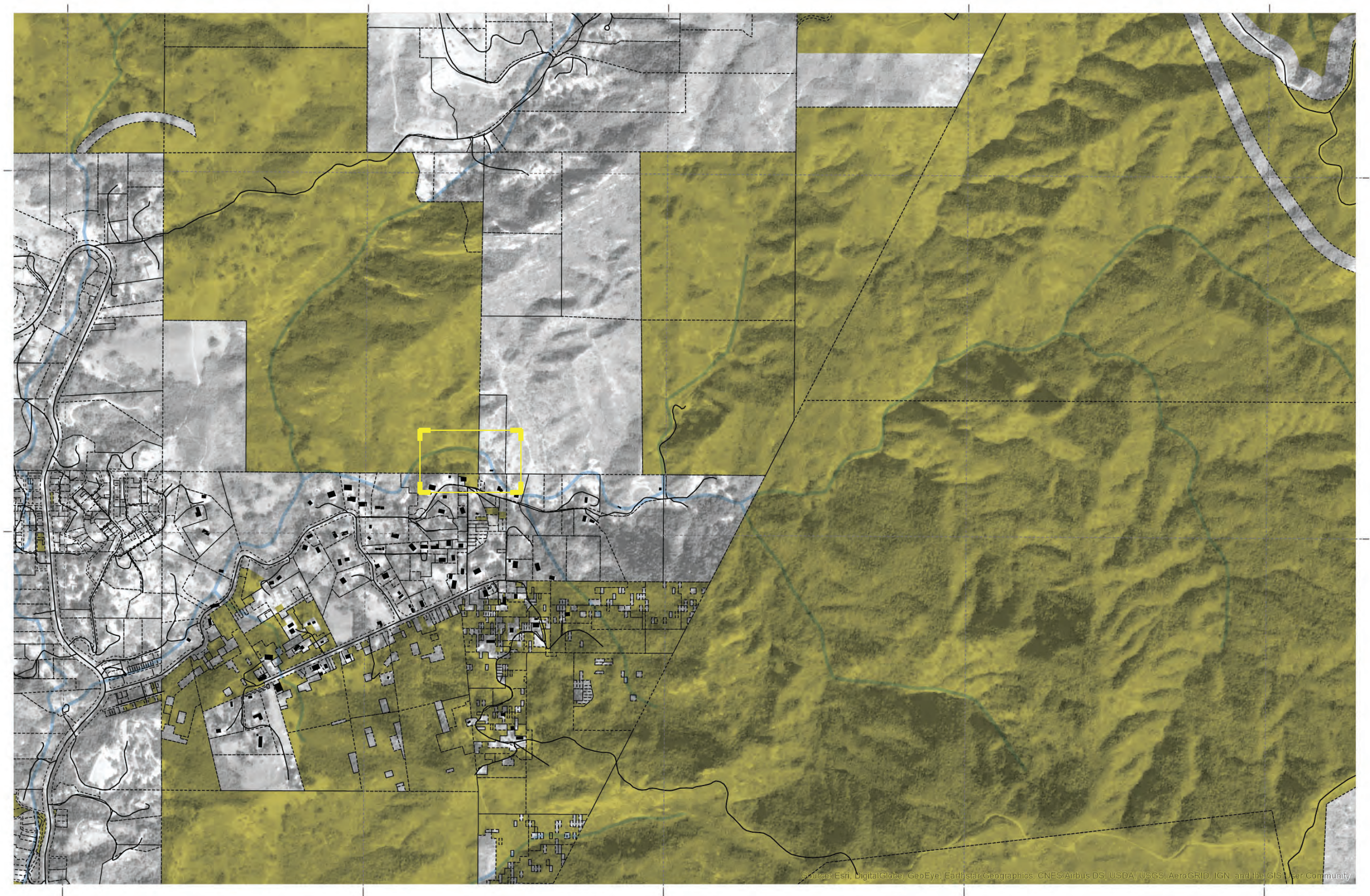
 community space

 public parks and conservation areas

0 250 500 1000 ft  
x3 in the vertical

Spatially, this plays out as a continuous, flexible gathering at the central community space and school workspace, and the implementation of tests, projects and practices throughout the neighborhood.





Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

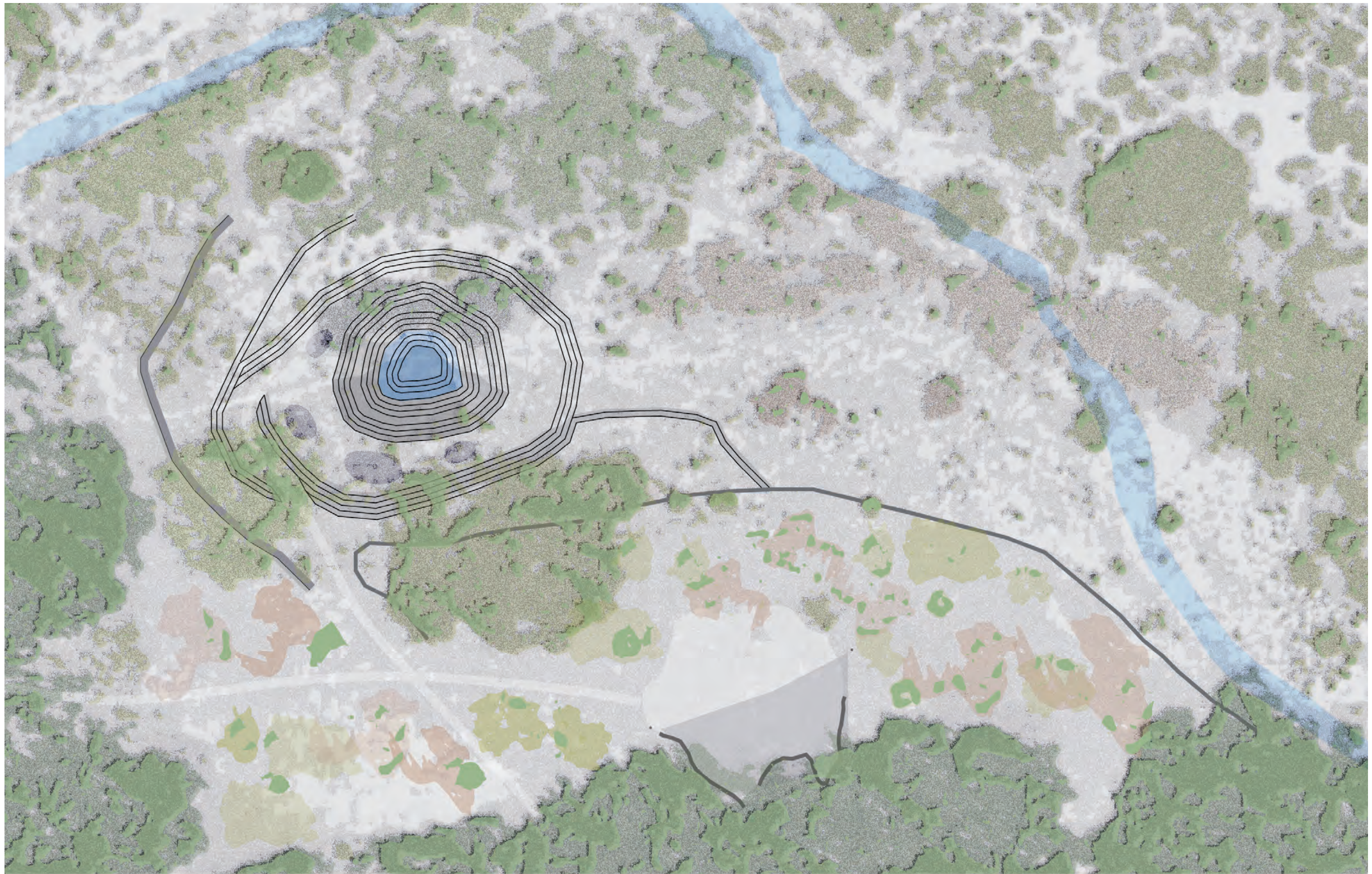
Garapito Creek Community School, Location

privately owned land

publicly owned land







Garapito Creek Community School, Plan







*the school gathering space, told through my relationship with*  
***baja-california tree frogs***



















Treefrogs actually don't live in the trees here. They live along the riparian buffer during the long dry season, using the cool burrows of other creatures as shelter. Then the precious rains come. Winter rainstorms that make the whole canyon instantly neon green. All night froggy chirping choruses. Strings of thousands of eggs, and then the squirming tadpoles in the creek.

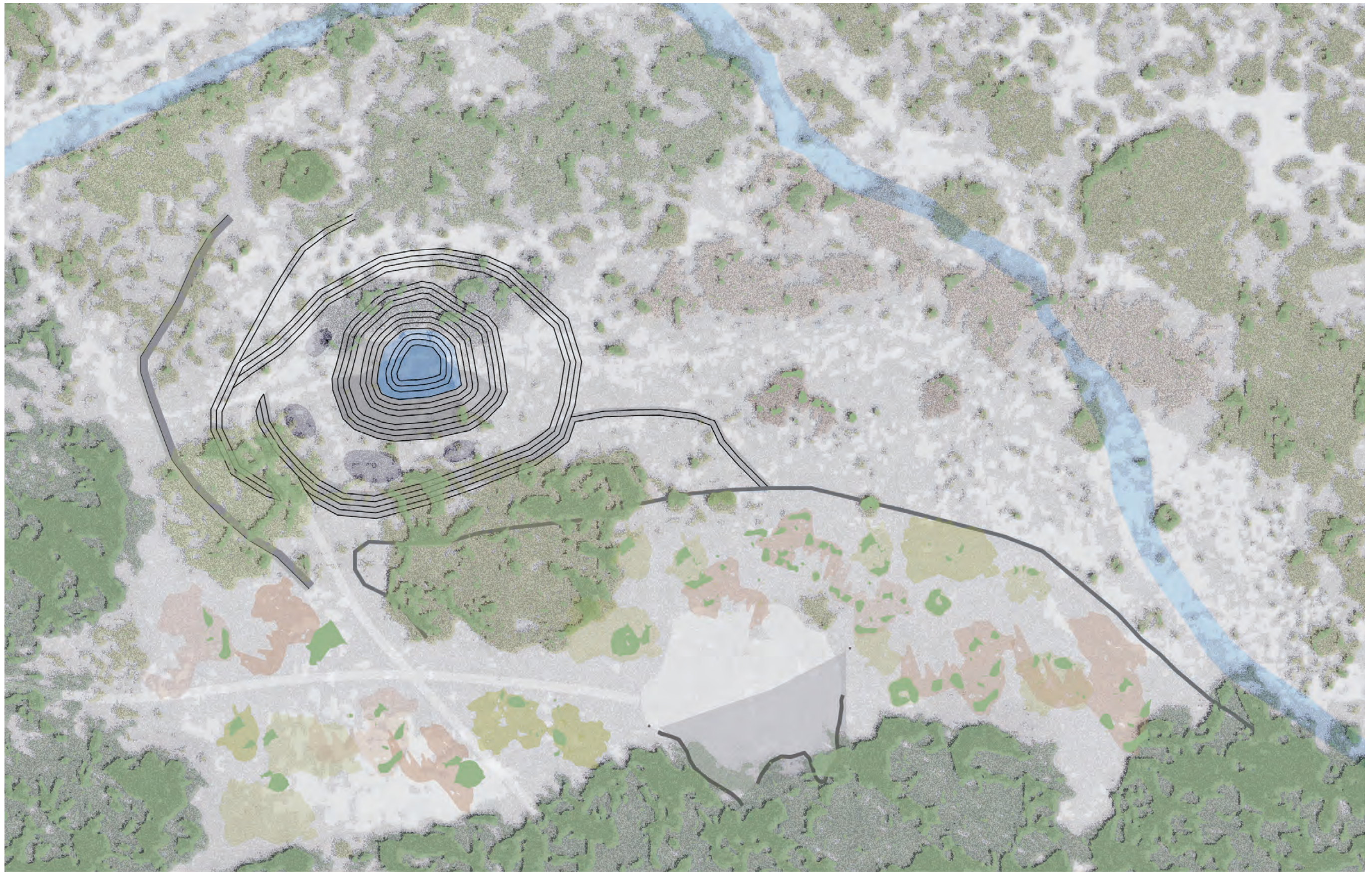
In India, where my mother is from, water is often revered as sacred. She was born on the banks of the Ganges river, who is understood as a living goddess. To create a multispecies future here in an arid land of rapidly increasing drought and water scarcity, the loving design of water's presence is essential, and the frogs are the ones that help guide the way. The frogs are indicator species, absorbing pollution through their skin, the first to suffer deaths when the respect for water is abused. My relationship with them brings a heightened sensitivity to choices made around water – where and how is it held, released, cleansed, and saturated.







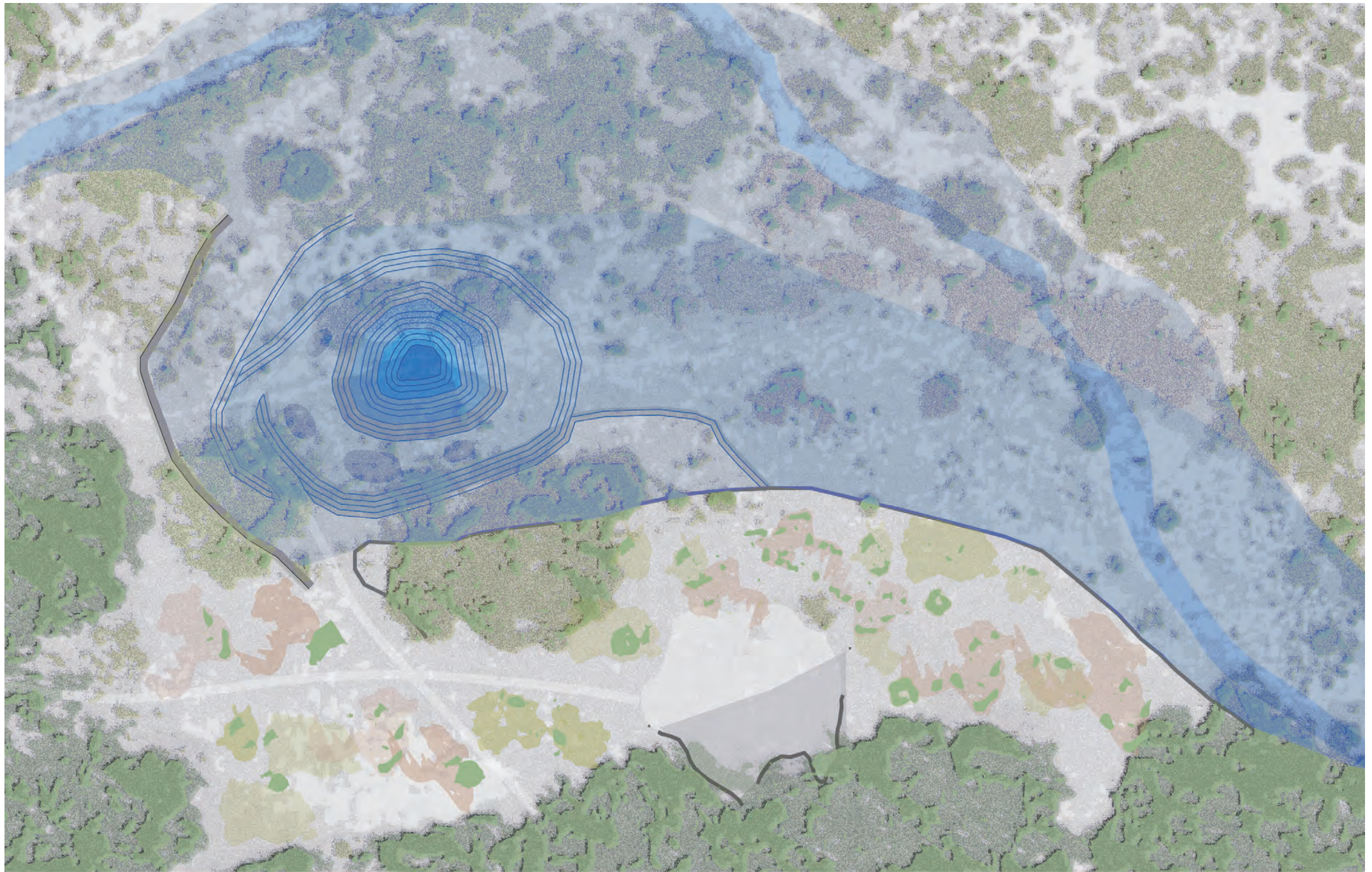




This space, the space that gathers our activities, centers us around water.







During the more and more unpredictable winter rains, it floods and collects.

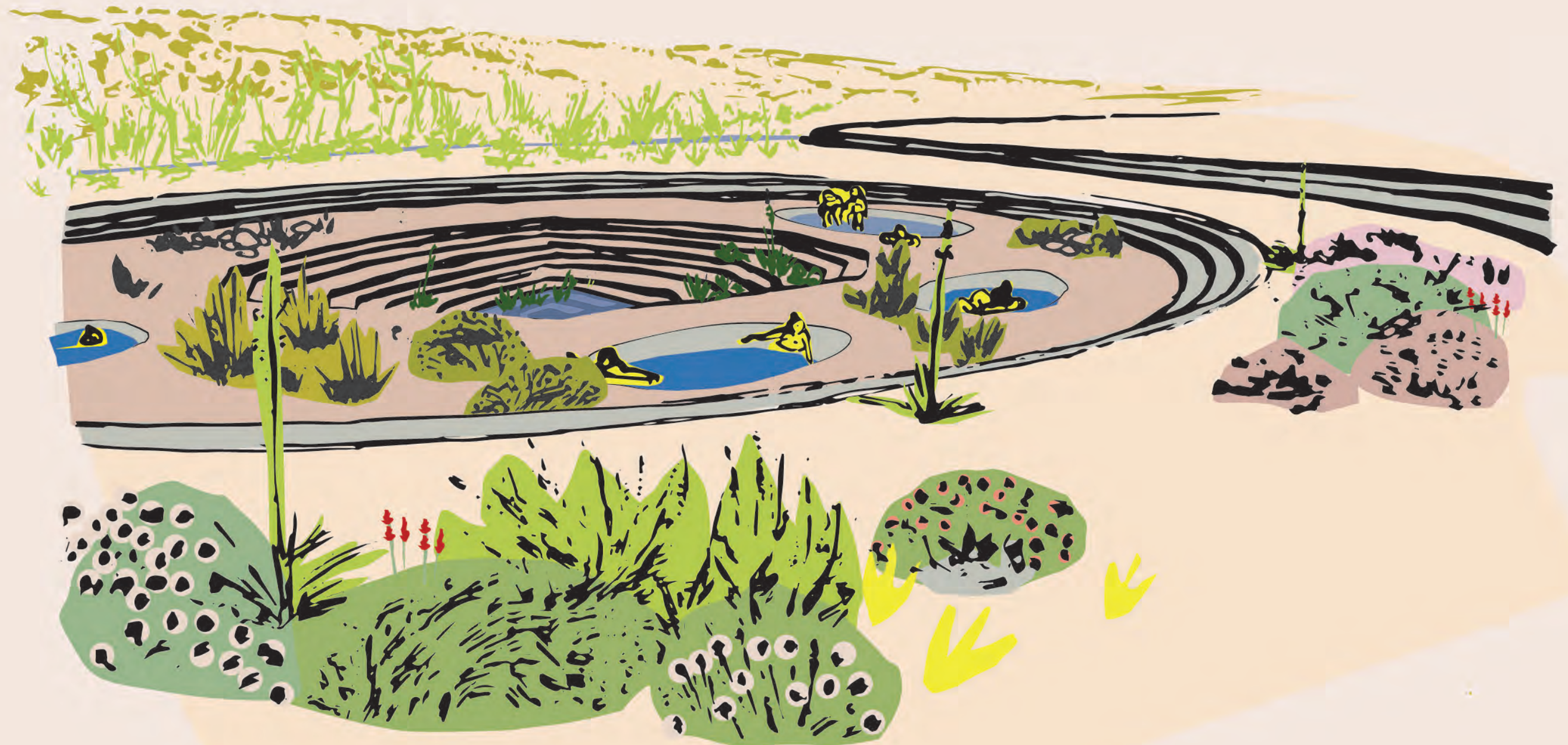








In spring, as the wildflowers are blooming, the step-well transforms into a community bath space. Baths that only fill when there is enough rain. A brief moment. A place to celebrate the precious arrival of water.



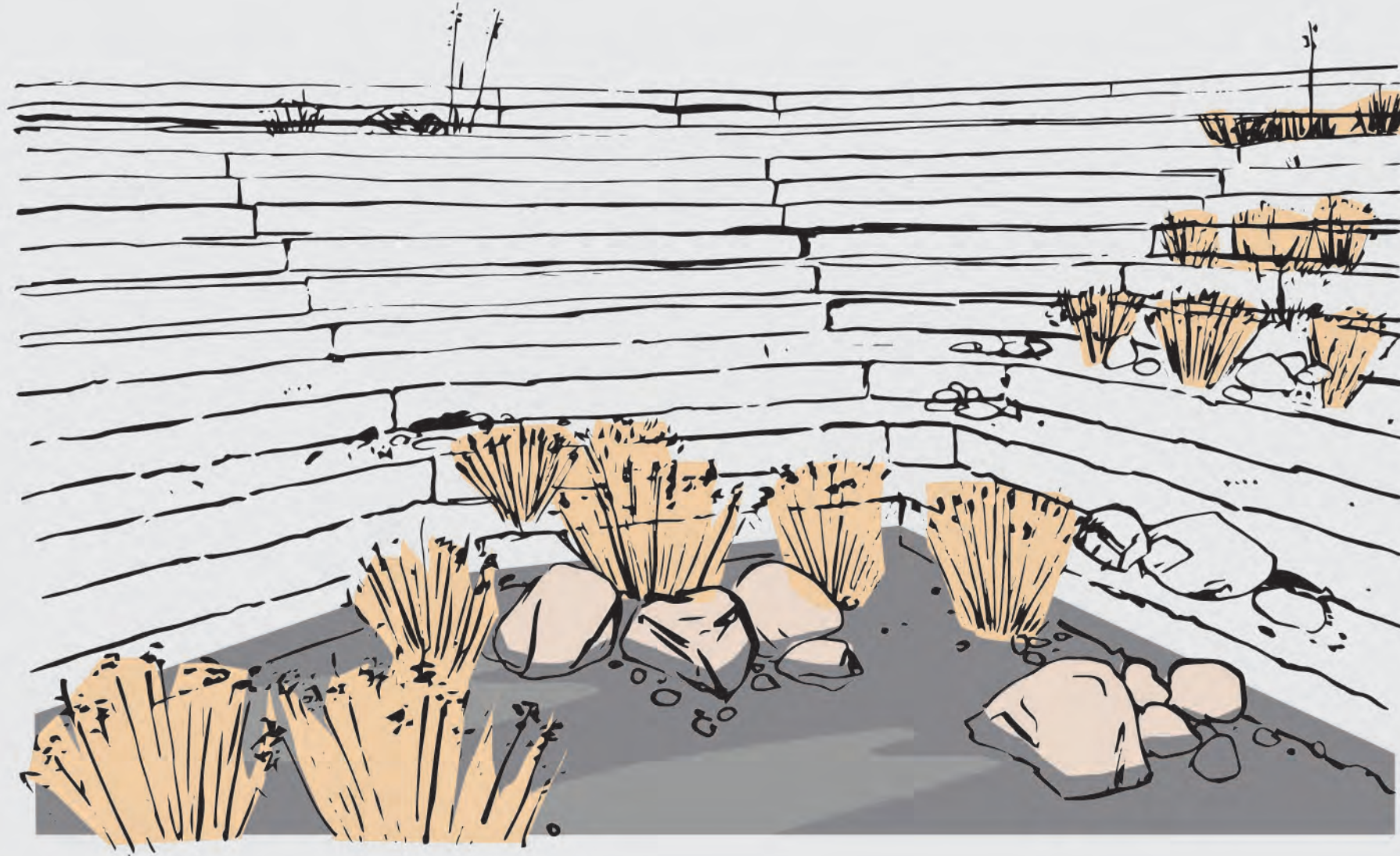




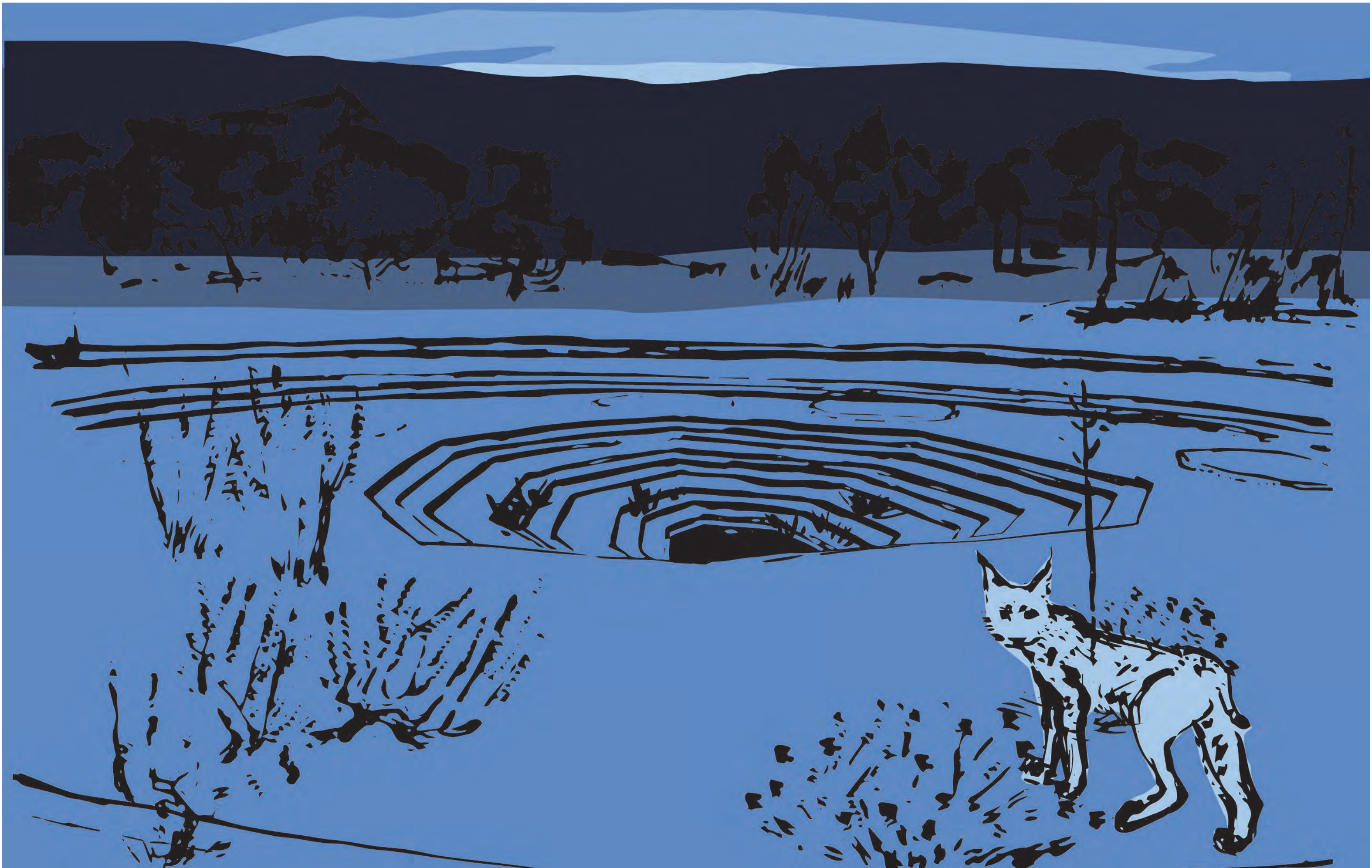
Embodied, heightened sensory attunement and pleasure.

Tying us to the vulnerable bodies of frogs. Whose habitat we care for as the water level in the central step well rises and falls. This space is an offering to them, helping guard them against the severity of increasing drought lengths.

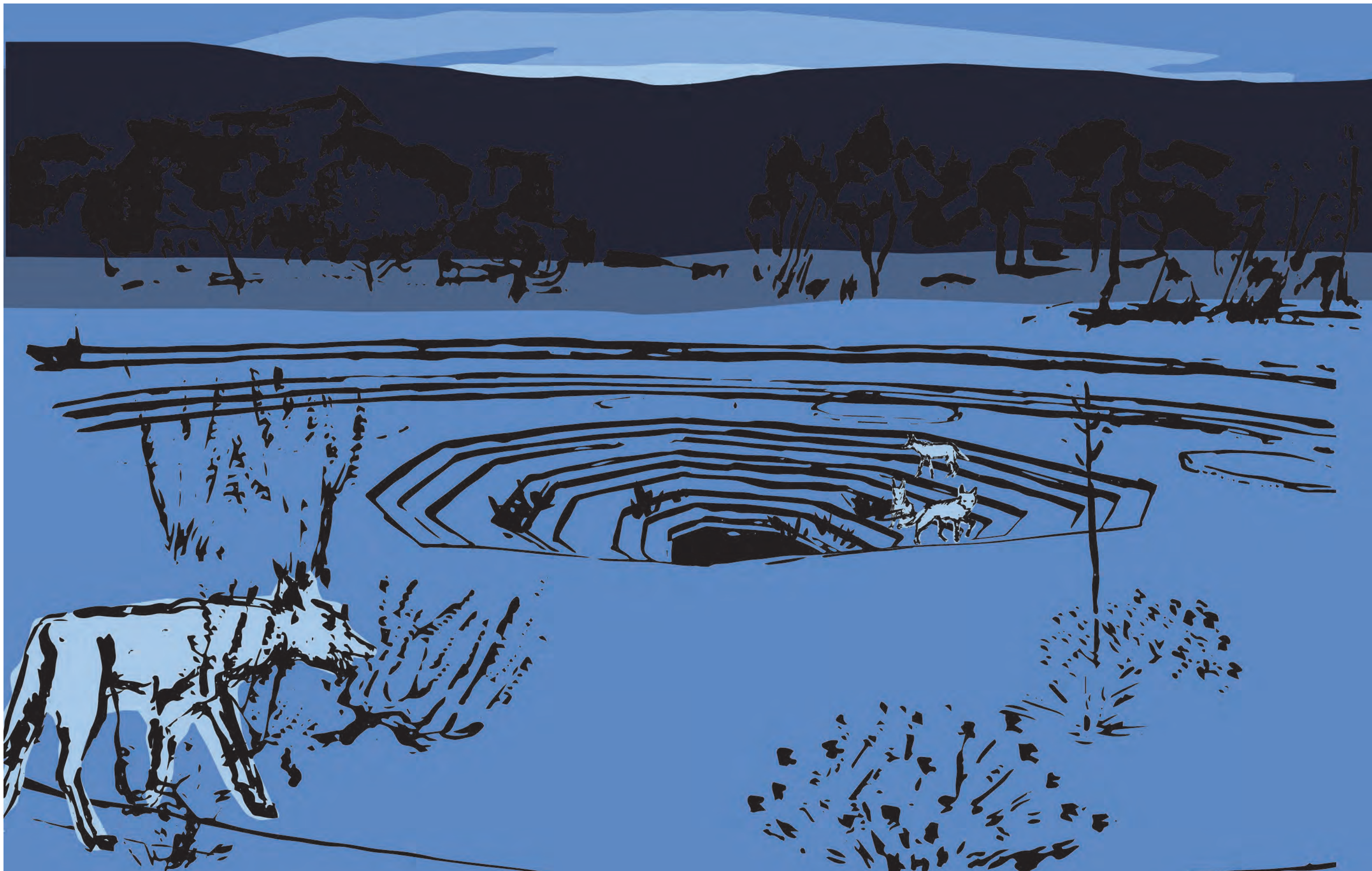














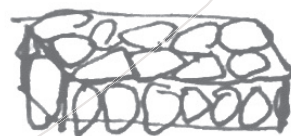
And an offering to all the others. A community center for the full community. Gathering everyone around water. The step well designed to invite as many species as possible. During the droughts, temporary dew harvesting structures collect water that makes its way down the steps into small drinking pools and pockets of moisture.

### STEP WELL QUESTIONS:

- WHAT DEPTH IS NECESSARY FOR REACHING GROUND WATER 6-9 months / yr?

- IS A CERTAIN SLOPE OPTIMAL FOR BEING OPEN ENOUGH FOR ANIMALS TO FEEL SAFE ENTERING?

- WHAT MATERIAL / METHOD OF CONSTRUCTING STEPS TO CREATE NESTED HABITAT?



STONE!



STUCCO / CONCRETE? FINISH

CREEK FLOW, SEASONALLY DRY

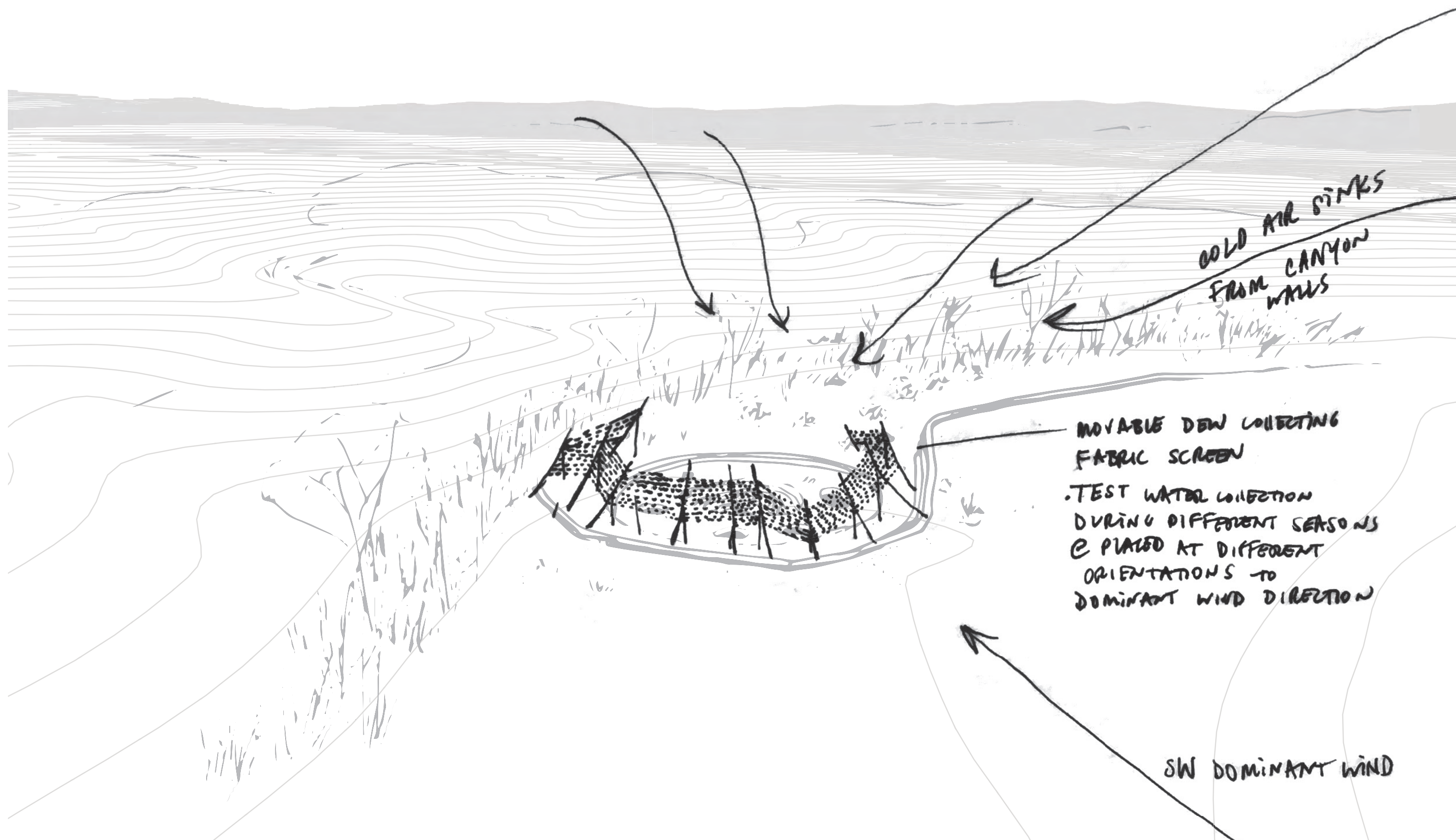
high ground / dry ground gathering space

SHOULD THIS WALL BE SOLID & DUG DEEP TO POOL GROUND WATER?

?

Flow & GROUND WATER







In the dry season, the baths are covered and return to working and gathering surfaces.

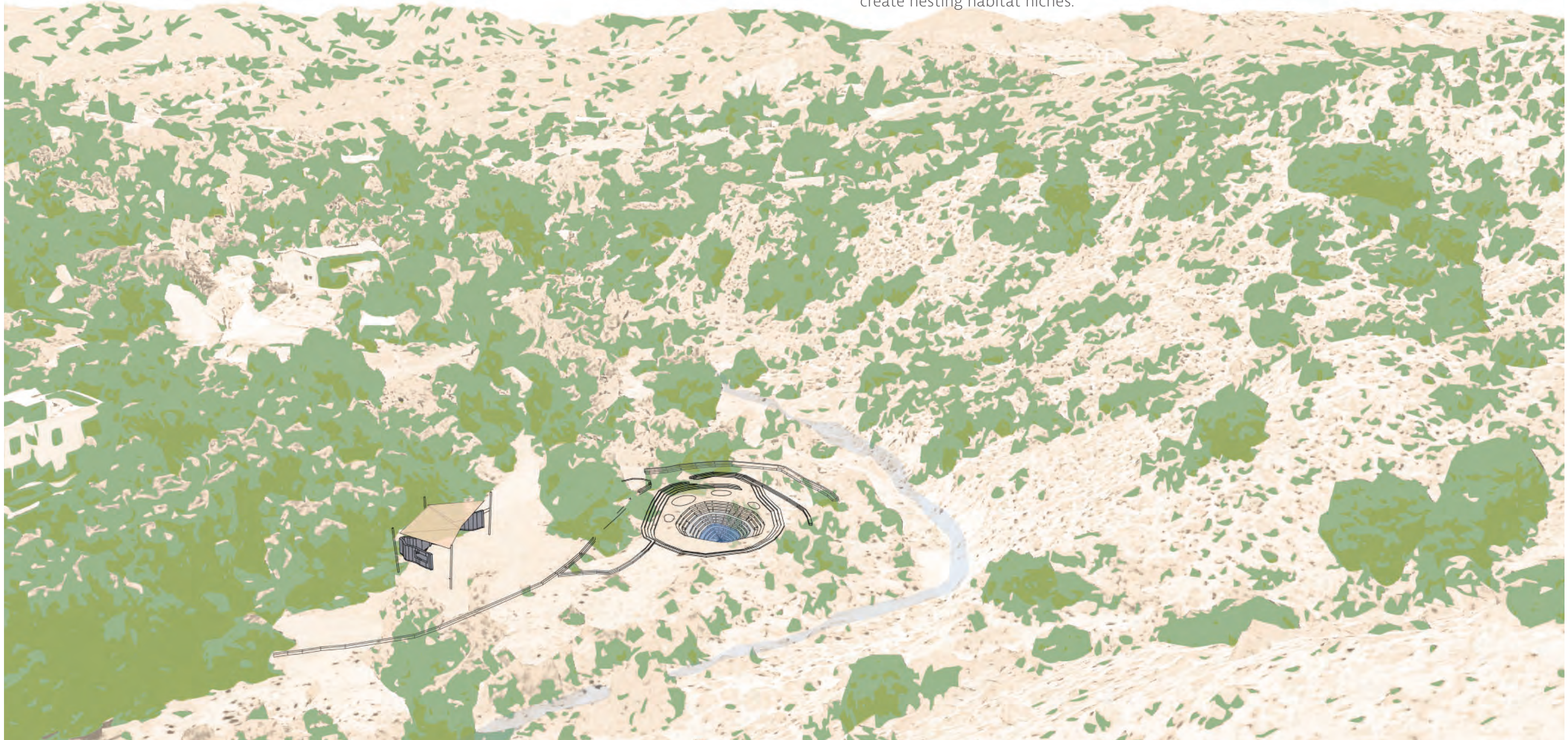




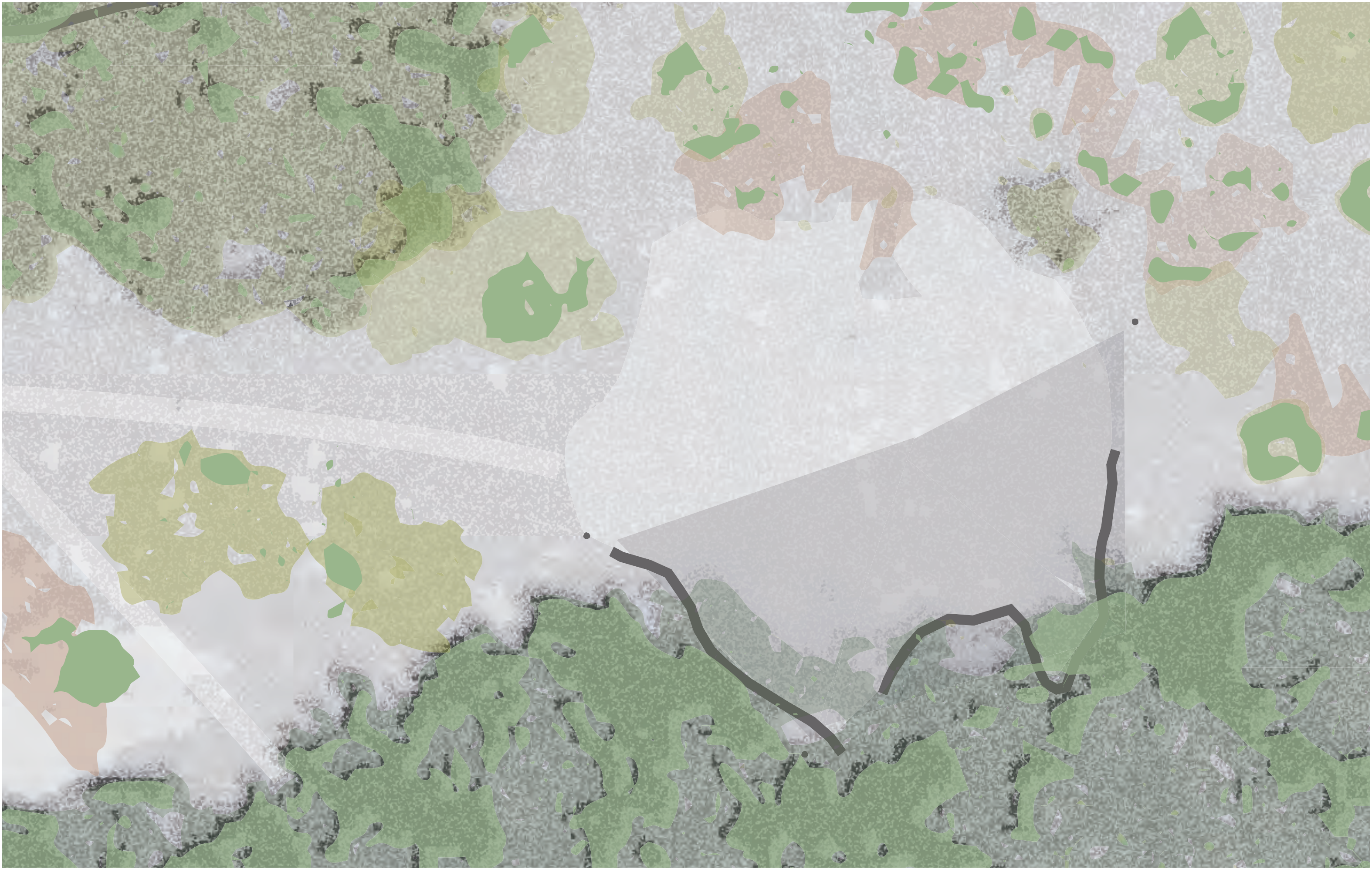
Above the well, tucked into the overhang of a line of huge coast live oaks, is our main workspace. Oriented to protect from wind and provide shade, a threshold between the neighborhood and the step-well.

Extreme care was taken for the soil in the construction of this space. We used the rocks removed in the well construction to build the shade structure, the gabion walls curving to create multiple microclimates and habitat niches along its exterior.

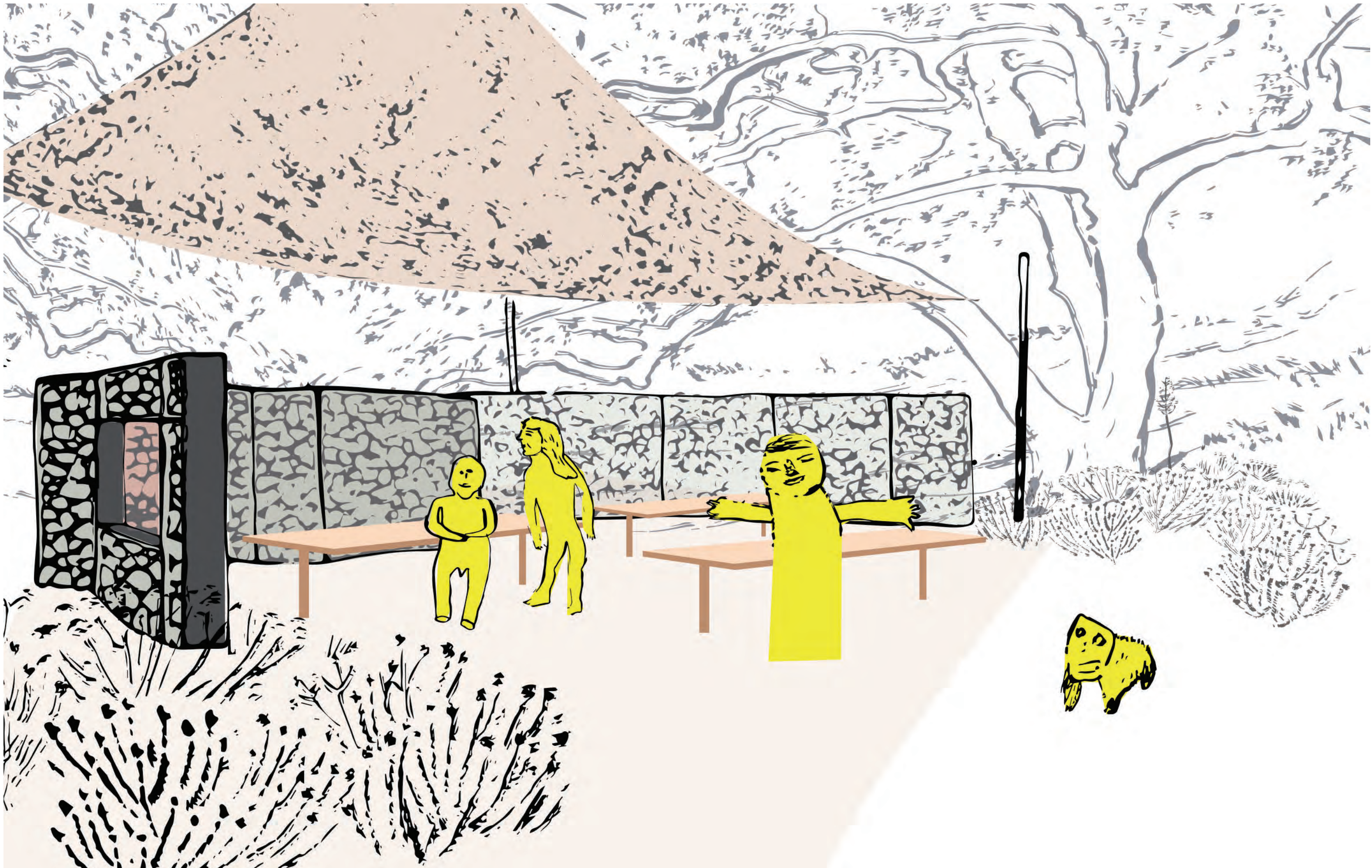
These walls, along with the retaining walls that curve around the site, designed to create nesting habitat niches.



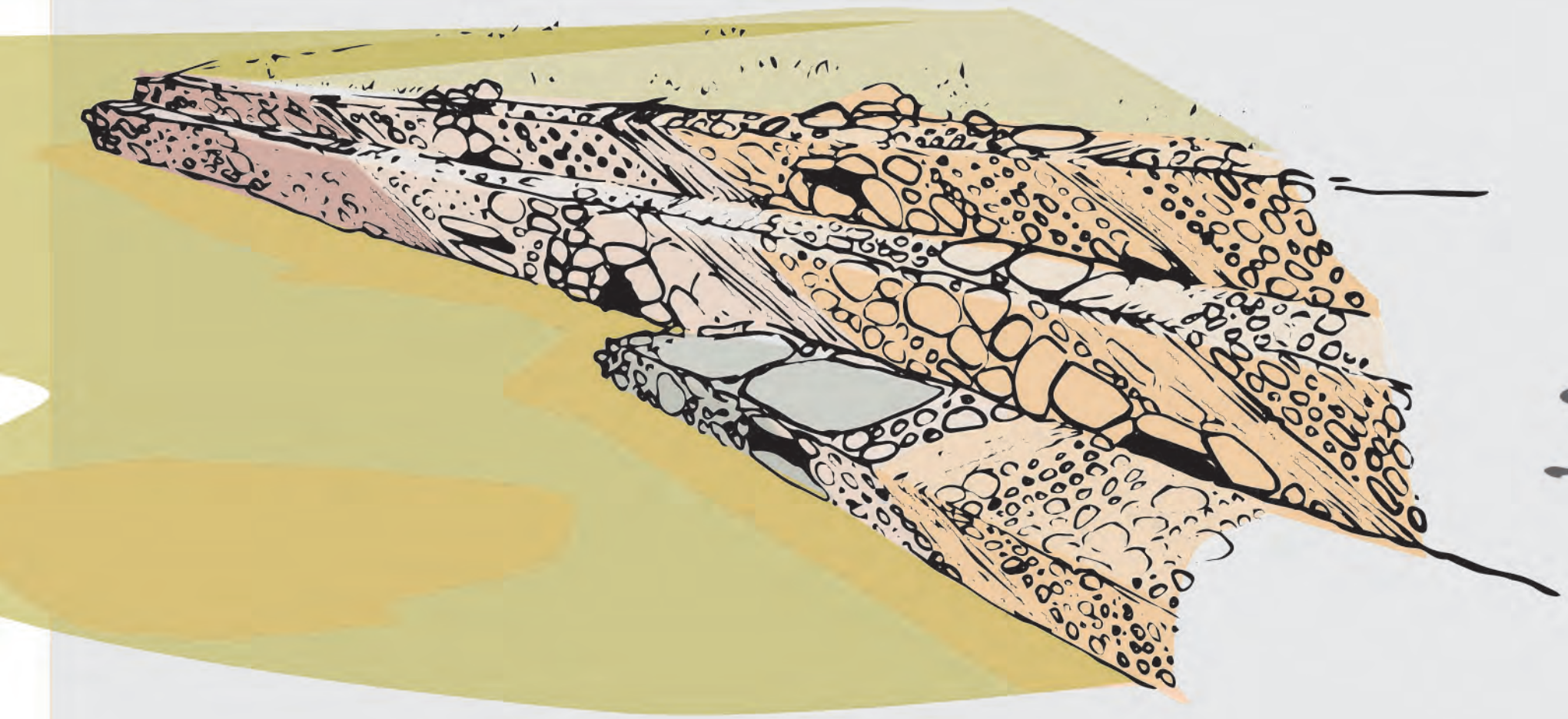
















The formal language of this space was developed through attention to the twisting, bending, arcing forms that so many plants here create in their branching.

As well of course to the circling forms of the hawks...









If my relationship with tree frogs has been about the hope embodied in centering care for the most vulnerable, I have to return now to my relationship with hawks to talk about how this space supports us in honoring grief and loss.





When I was 17, I was woken from sleep by a violent crash. I jumped out of bed and ran to the living room. The window was smashed through. A massive shadow was throwing itself against the wall. A redtail hawk. Desperate and stunned.













When deaths loom in my family, the hawks arrive. That's what my father believes, and he has many stories to tell. Stories of being visited by the dead and dying, hawks landing outside his windows, quietly carrying their messages. That time, it was my grandmother Berry, my father's mother, who just passed away.

I bundled the bird in a blanket and carried us outside. Unwrapped, the hawk carefully turned to look at me, its wings fully extended in a dappled massive array. We were silent like that for thirty minutes. A few feet apart. In the dark. Staring at each other, not looking away.

What spaces do we have in this society to gather and mourn?









Though this is a space that honors life though honoring water, it is also critically a space to sit quietly with death, loss, and the messages of those who are gone or are disappearing.





*the land care collective, told through my relationship with*  
***california sagebrush***







Sagebrush grounds me here. Distressed, I walk out into the mountains and brush along its soft leaves. It's scent musty, sweet and healing. For generations, it has been honored and used as a medicine by the Tongva and other tribal nations of this region.















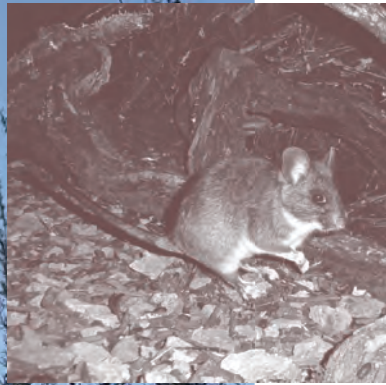












Sagebrush is a key species in this coastal sage and mixed chaparral habitat, supporting many nearly exterminated species in their dense woody underworlds.

Plants are the backbone of the riot of life that unfolds here. They have evolved brilliant survival strategies over thousands of years: crown sprouting after fire, able to survive a whole year on the amount of water we use in a single day. Yet, we're witnessing both slow drawn-out disappearances, like the sages slowing dying away from the nitrogen falling from emissions, and rapid ones, such as what happened with Laurel sumac in the early 2020's, where a fungal pathogen left thousands of dead sumacs turning the hills brown in the span of a few years.





MIXED  
CHAPARRAL:  
CHAMISE  
LAUREL SUMAC  
TOYON

ARTEMISIA  
+ BUCKWHEAT  
+ BLACK SAGE

ARTEMISIA  
SCOTCH BROOM

BLACK  
SAGE

SCOTCH  
BROOM

MIXED  
CHAPARRAL:  
CHAMISE  
LAUREL  
SUMAC  
TOYON  
SCOTCH BROOM

BUCKWHEAT

ARTEMISIA  
+ BUCKWHEAT

ARTEMISIA

ARTEMISIA  
SCOTCH BROOM

ANNUAL  
GRASSES

BLACK  
SAGE

SCOTCH  
BROOM

BUCKWHEAT +  
SCOTCH BROOM

Buckwheat



*What does it mean to be a community member re-entangled with the health of the larger community of beings?*





Since the early days, this question has been a central to the school, giving rise to the land care collective.

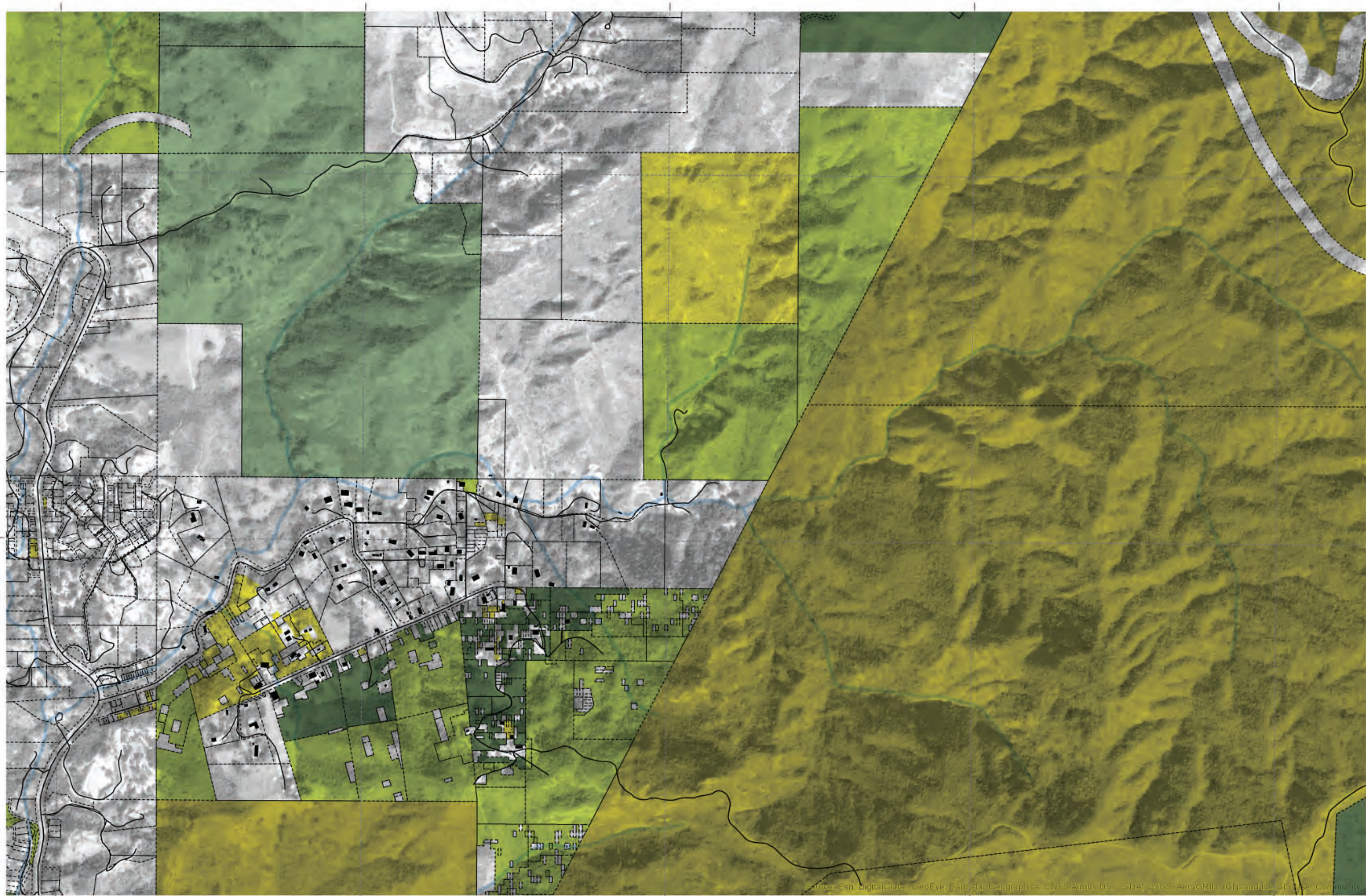
The Garapito creek community school is the home of the land care collective.

Anyone in the neighborhood and all landscape professionals who are employed here are invited to join the meetings. We bring in experts and partner with scientists as well as people with lived knowledge and/ or ancestral knowledge of how to care for the land. Land management used to be fragmented along property lines, with no conversation between private owners and the large public land agencies that surround the neighborhood, with many people feeling overwhelmed by their properties, and unable to respond to either the slow or rapid disappearances unfolding. Now, together, through conversation, research, and experimentation, we coordinate collective land management practices to amplify our capacity to respond.



garapito creek land care collective





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



LA County Parks



SMMC (public land trust)



MRCA (public land trust)



Cal. State Parks and Rec.



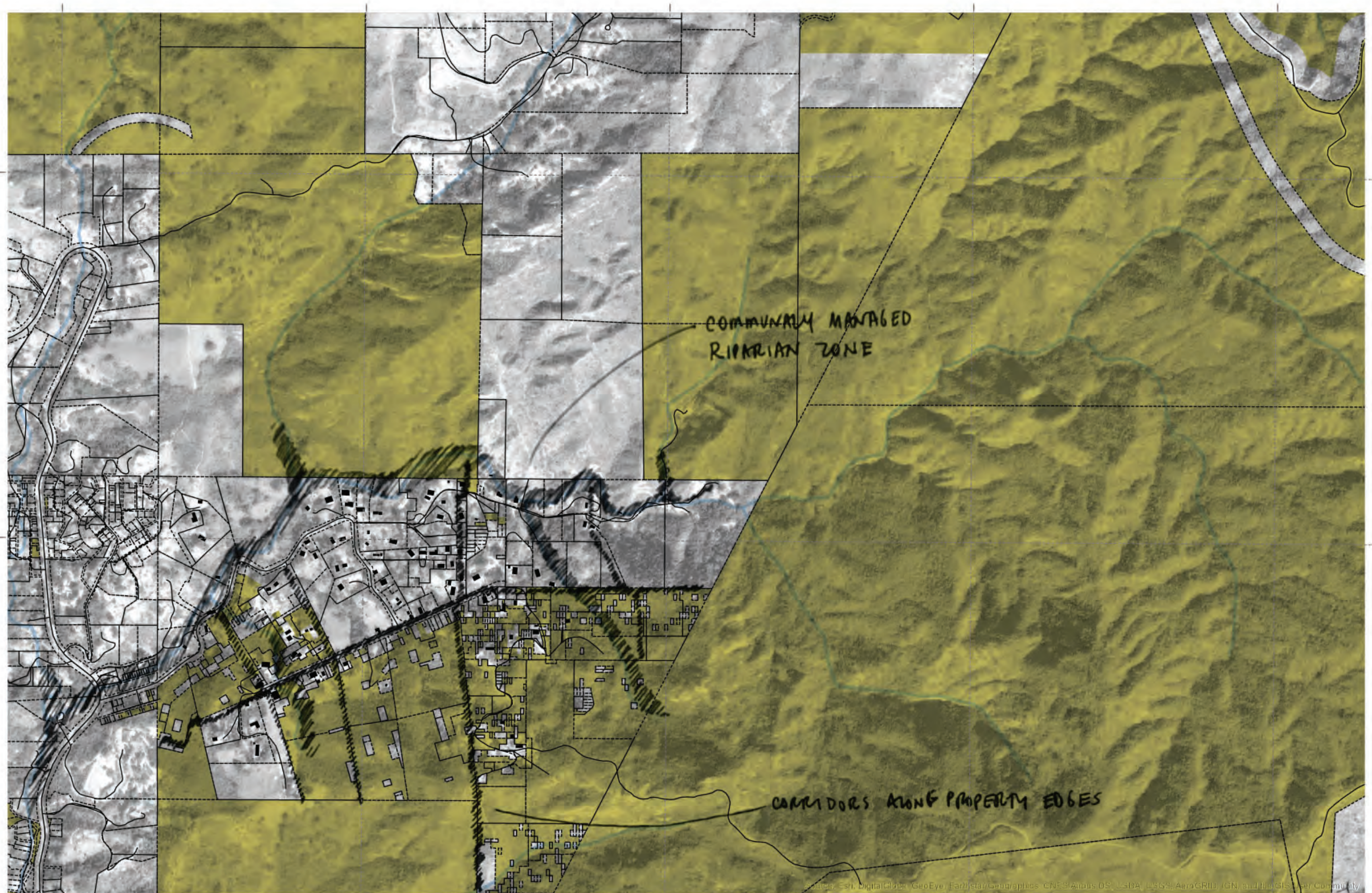
0.25

0.5

1 km





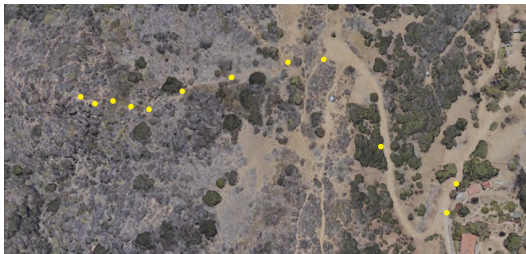


privately owned land

publicly owned land

0 0.25 0.5 1 km





Practices have included:

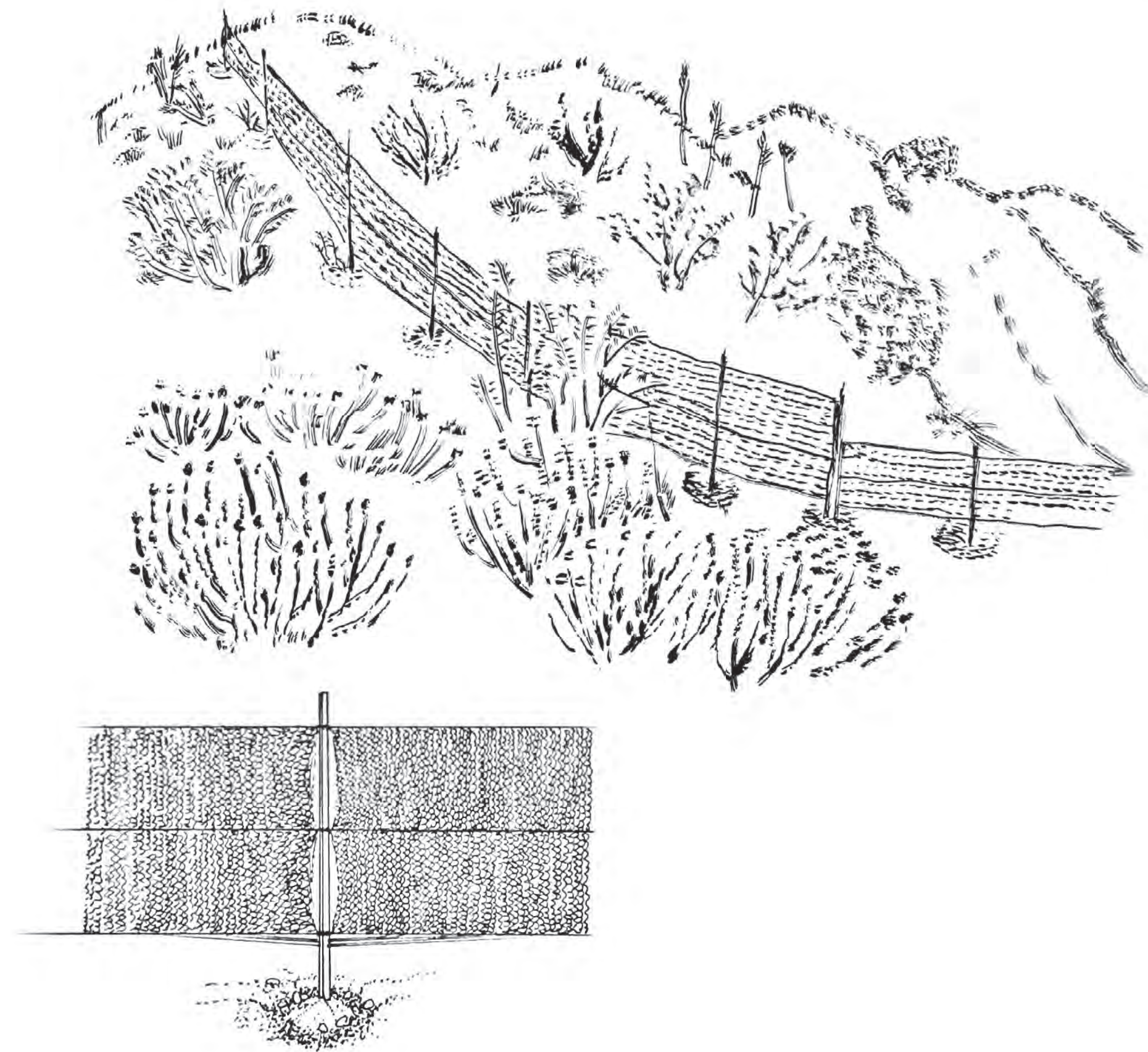
Changing our fencing patterns to create wildlife corridors along the riparian zone and property lines. Planting to support particular insect populations. Planting edible species as food forests where invasive mustards have become dominant.

Testing the grazing patterns of different animals to manage the fuel load for fire safety but support a thriving rhizosphere. Using dew capturing fabric along the temporary grazing fences to offer water during droughts.

And perhaps most critically, collecting and propagating seeds from individual plants found to be more resistant to the onslaught of pathogens, and the stresses of higher temperatures, drought lengths, nitrogen levels, and increased fire frequency.

garapito creek land care collective





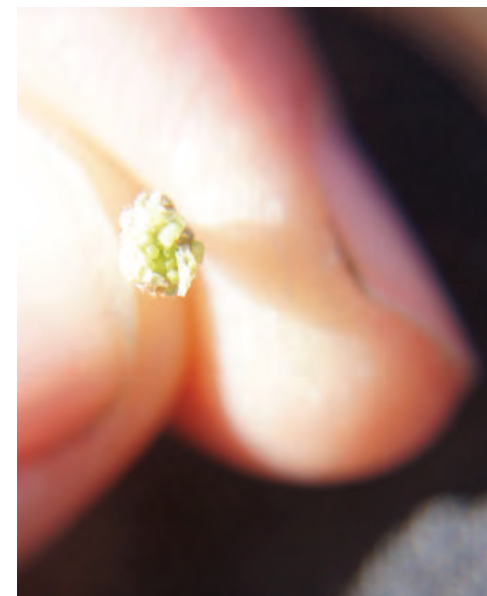
garapito creek land care collective





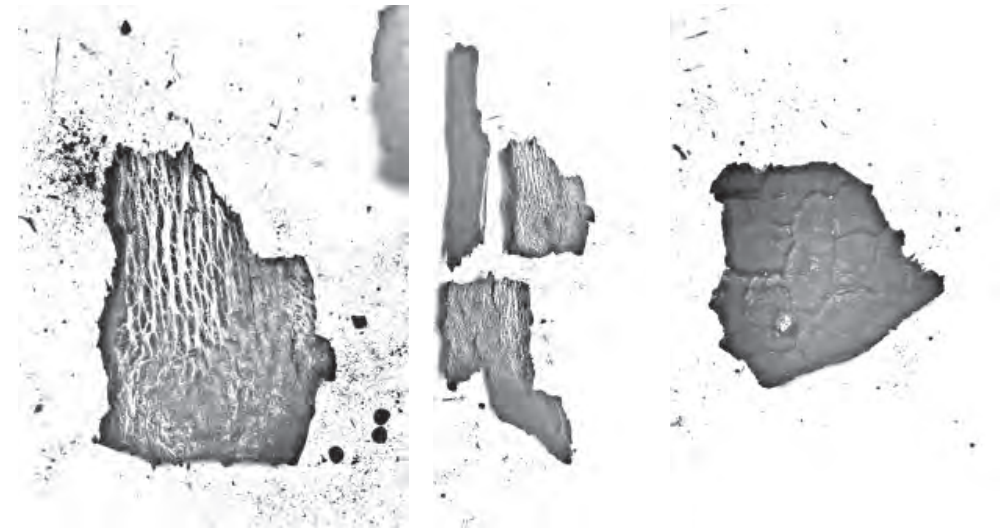
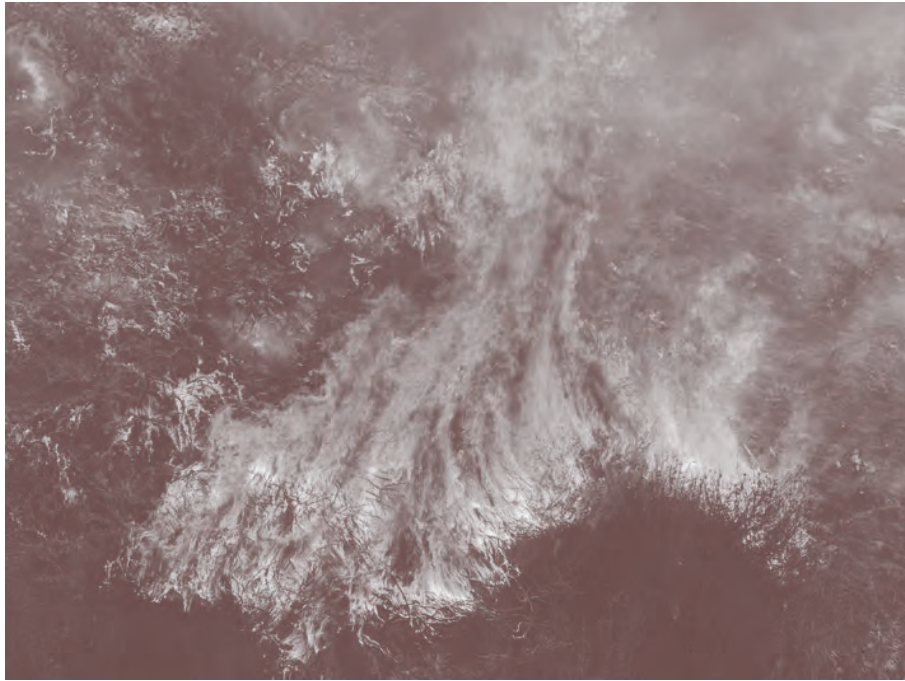
garapito creek land care collective





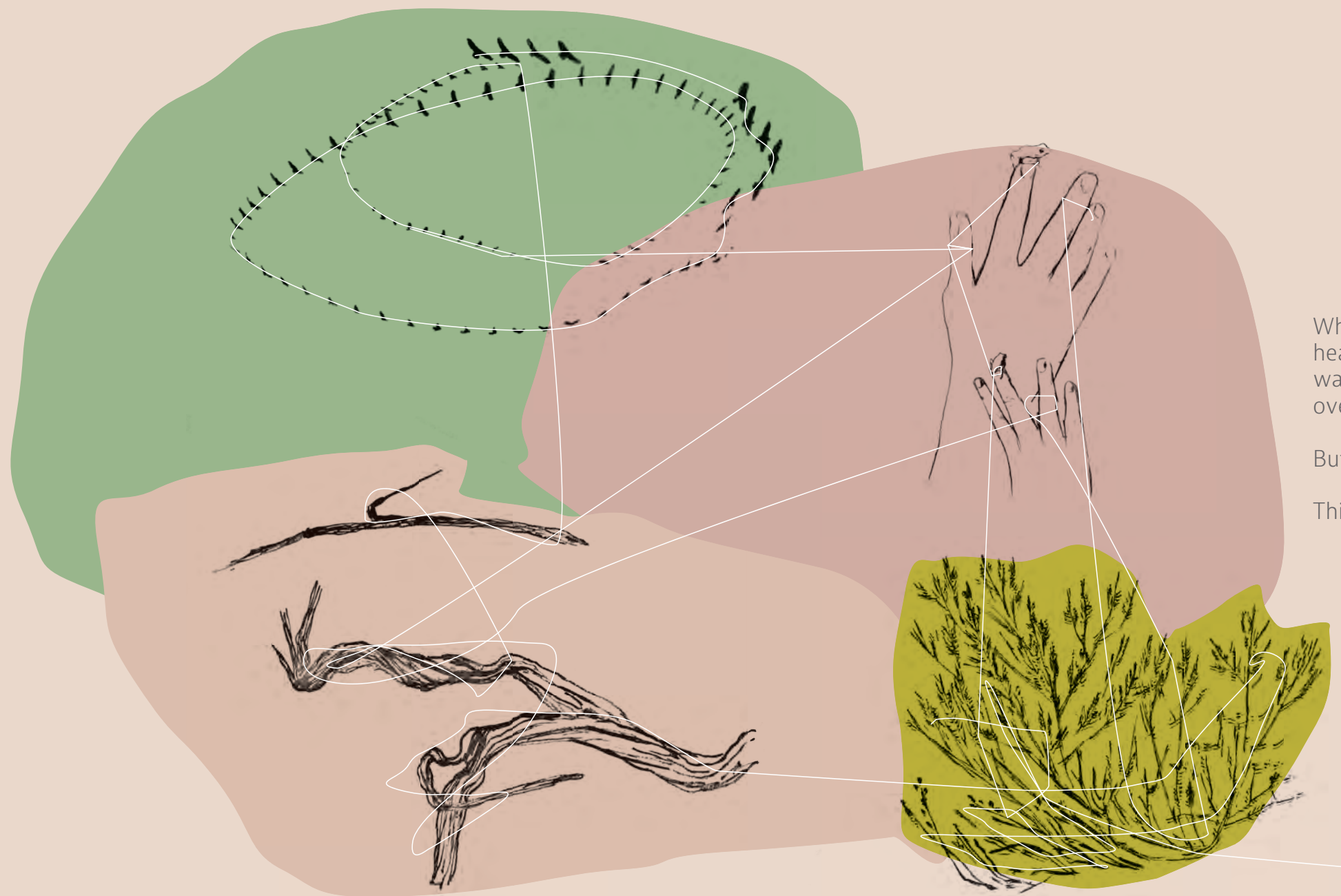
garapito creek land care collective





garapito creek land care collective





What does it mean to be a community member re-entangled with the health of the larger community of beings? Personally, I think it means waking up and listening, even if it makes us vulnerable to the pain of overwhelming change and loss.

But this is an ongoing conversation.

This is life work, generational work.







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