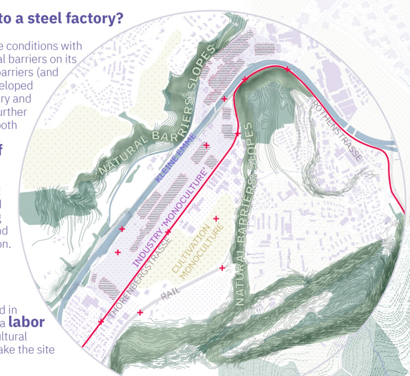
Kleine Emmie &The Others



Why would I move next to a steel factory?

Littauerboden has very specific site conditions with slopes and the river forming natural barriers on its perimeter. Along with the natural barriers (and thanks to them) - the area has developed as an industrial forpost. The industry and its serving rail and roads created further physical barriers for connectivity, both for humans and for the ecosystem.
Kleine Emme was cut off from the city.

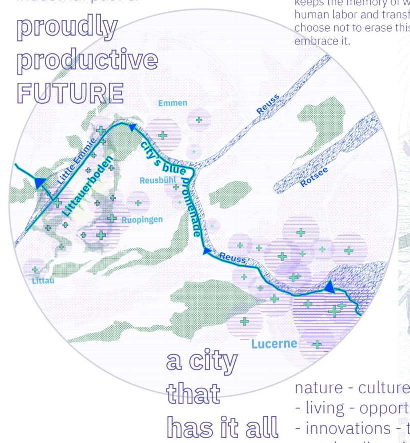
The space which humans wouldn't use for settling remained open and served for agriculture - obstructing the natural biotope connections and introducing monocultutal cultivation.

Besides the obvious barriers to development, there are the less evident **social barriers** - the distinctively industrial area resulted in specialized industry jobs, creating a **labor 'monoculture'.** The lack of cultural happenings, events or activities make the site very introverted to the city

From Monoculture Suburb to a Diverse Cultural Hotspot

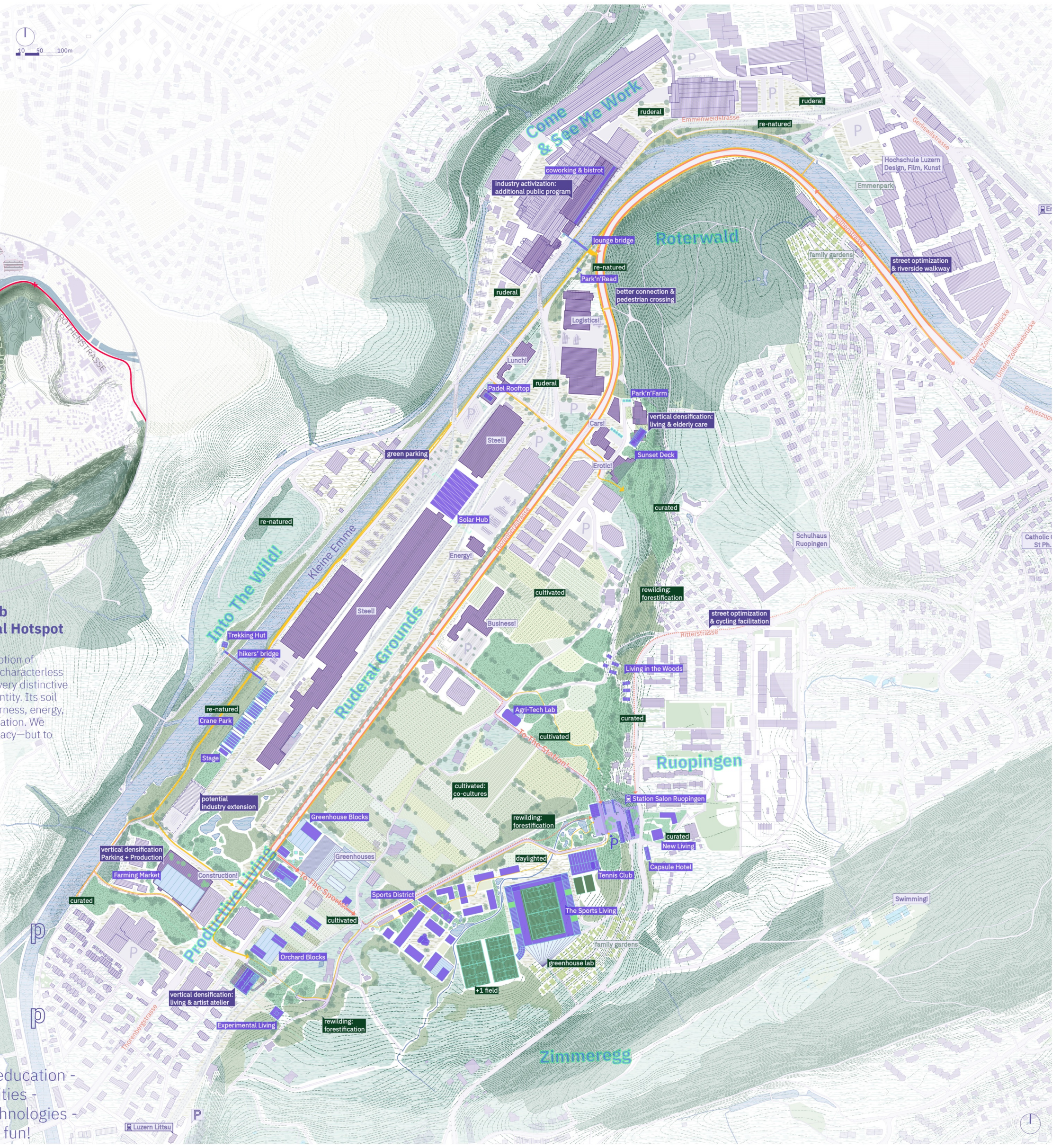
Against the common perception of industrial zones as lifeless, characterless voids, Littauerboden has a very distinctive and resilient productive identity. Its soil keeps the memory of wilderness, energy, human labor and transformation. We choose not to erase this legacy—but to embrace it.

deeply rooted, very characteristic industrial past & proudly productive FUTURE



a city that has it all

nature - culture - education - - living - opportunities - - innovations - technologies - - work - diversity - fun!



Phase 1: Re-naturing (2025 - 2030)

Nature	+12'00 m² re-natured
Living	+ 52 units
Production	+2'560 m² workspace
Culture	+1'200 m² cultural spaces
Population: + 130 residents	
Jobs Created: + 150 (coworking,hospitality, tech)	

Phase 2: Urban Densification (2030 - 2040)

Nature	+8'000 m² food systems
Living	+1'315 units
Production	+2'500 m² agri-tech
Culture	+4'300 m² sports district
Population: + 2'300 residents	
Jobs Created: + 800 (coworking,hospitality, tech)	

Phase 3: Industry Modernization & Automation (2040 - 2050)

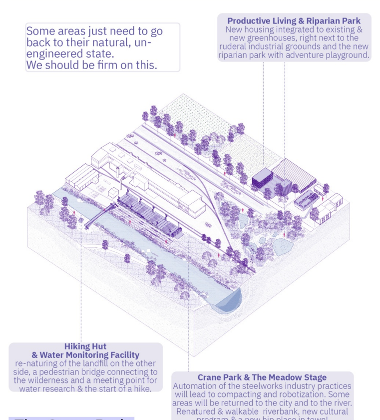
Nature	+10'600 m² renatured
Living	+217 units
Production	+7'900 m² circular industry
Culture	+2'500 m² facilities
Population: + 450 residents	
Jobs Created: + 400 (coworking,hospitality, tech)	

Phase 4: New Station & Further Densification (2050 +)

Nature	Ecosystem completion
Living	+129 units
Production	+6'850 m² transit/office
Culture	+2'320 m² station culture
Population: + 120 residents	
Jobs Created: + 200 (coworking,hospitality, tech)	

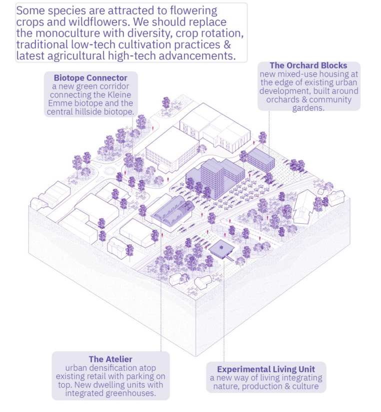
nature re-natured

Some areas just need to go back to their natural, un-engineered state. We should be firm on this.



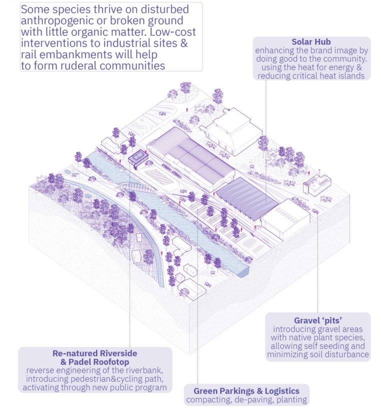
living cultivated

Some species are attracted to flowering crops and wildflowers. We should replace the monoculture with diversity, crop rotation, traditional low-tech cultivation practices & latest agricultural high-tech advancements.



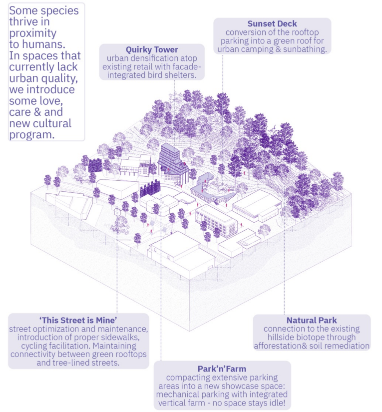
production ruderal

Some species thrive on disturbed anthropogenic or broken ground with little organic matter. Low-cost interventions to industrial sites & rail embankments will help to form ruderal communities



culture curated

Some species thrive in proximity to humans. In spaces that currently lack urban quality, we introduce some love, care and new cultural program.



The Crane Park

Little Emmie wakes from the sound of birds. They've come early today, sweeping low over fresh reeds. A pair of red-crested pochards ripple the surface, bright heads nodding. On the terraced lawn, the first joggers pass. One stops to stretch, looking out over the water.

Slowly, the automated cranes begin their morning shift behind the park wall.

This used to be a sad place before - steel sheets, dust, chains. Now, grass grows where metal once waited. The old yard lives on—compacted and efficient, tucked behind a green wall.

Little Emmie listens. Not just to birdsong now, but to the subtle rhythm of a place that has learned to move gently. A place once built to store and stack, now re-natured to breathe.

The Farming Yards

Peter from Littau was sceptical at first. He had grown up here, and the changes felt like a risk. But soon, he saw how the new developments brought life back to familiar places.

Now, he starts his day by stopping by the farm market above the old department store. He picks up fresh produce and chats with Lina and Matteo, a retired couple living nearby in the new housing. While their youngsters head to Luzern Center for work, they spend their time at the orchards, selling what they grow at the market.

Sometimes, the three head to the cidery that opened in the old greenhouses. So refreshing to have a cool drink in the morning sun!

The Ruderal Grounds

Edis gets off the bus, same stop every morning. But the place isn't quite the same. The wide, cracked asphalt now has patches of life. Sand, gravel, and scattered grasses break up what used to be one continuous lot.

He spots a green lizard darting between concrete slabs - cute!

Further in, under the solar canopies, a few workers are already stretching. At lunch, they'll play padel on the roof behind the canteen—one of the best ways to shake off the shift.

The factory runs—more efficient now, much of it automated. Its character has changed as well: more open, softer, alive.

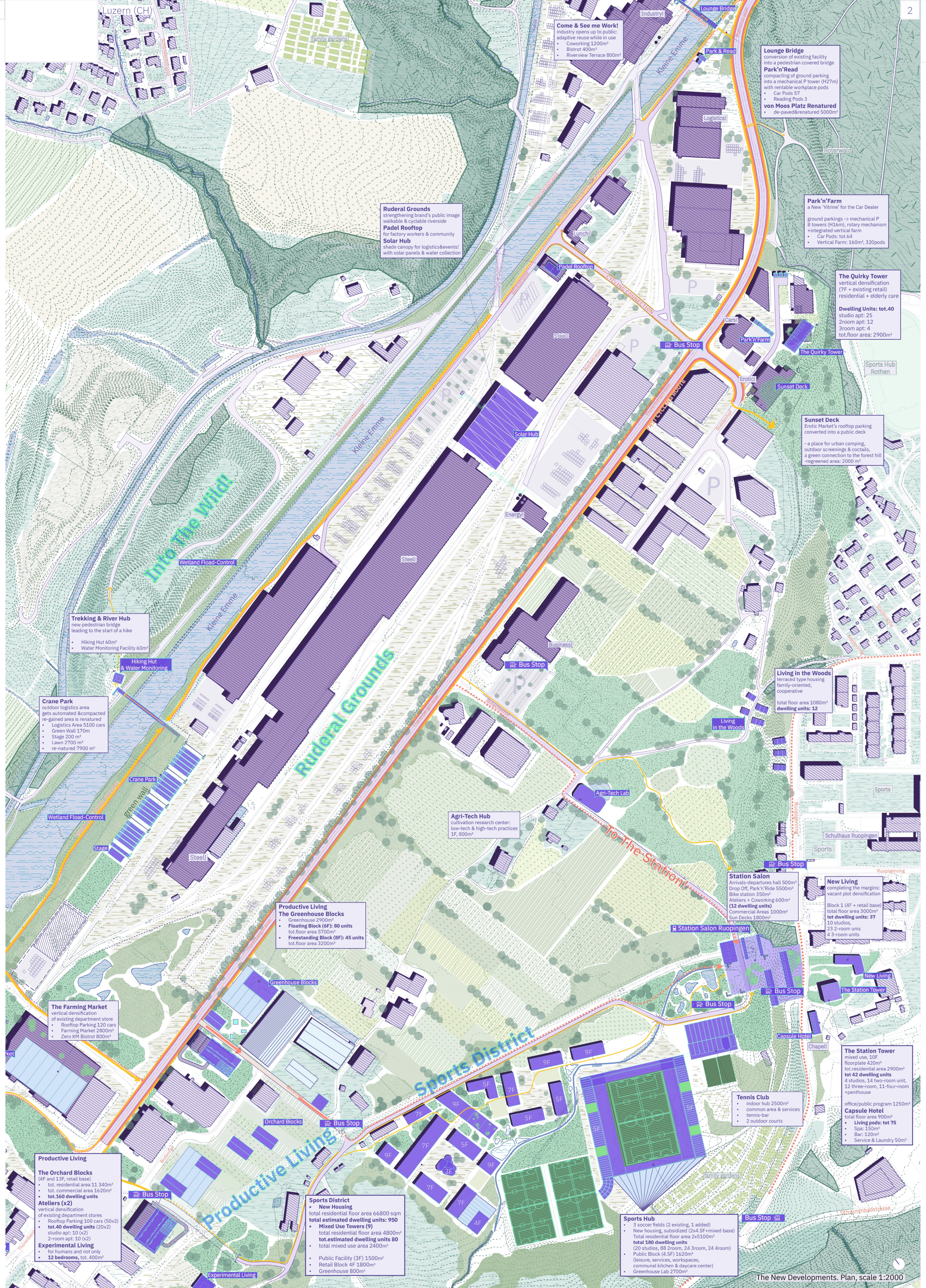
The Sunset Deck

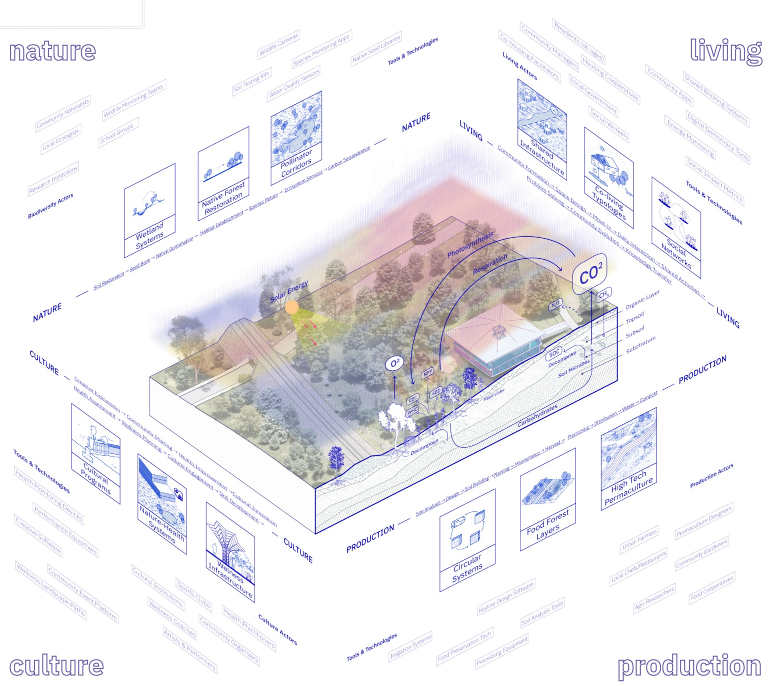
After class, Emil and Jules bike over. The light's just starting to shift. This part of town used to be a dead zone—big boxes, parking lots and some quirky shops.

Now, all the scattered parking is stacked into one vertical structure - a mechanical parking with integrated vertical farm - just next to the car dealer.

A new tower tops one of the old stores. It's a mixed use with offices, rental units, a capsule hotel - it brought lots of buzz, light and safety to the place.

The guys head up to the rooftop. No more parked cars here —just a wide, open deck facing west. They grab snacks, find a spot. The screen lights up. It's race night. F1 under a pink sky.

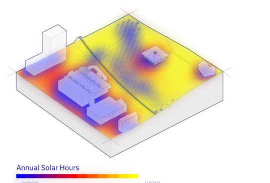


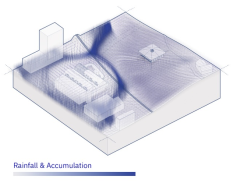


How much land does biodiversity actually need?

Where is water retention critical?
Which areas are overheating?
Where is the best productive yield?
How many people are good enough for a strong, self-sustaining community?
How many are needed for the economic viability?

Is there an objective method to determine what is the best for each single piece of land, its ecosystem, people, enterprises?

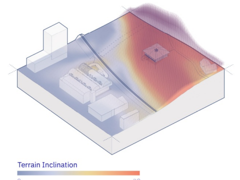




Soil Memory

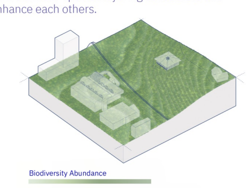
We divided the site into 150×150m plots and ran simulations on radiation, slope, rain accumulation, wind and biodiversity potential. We collected data on the existing resources - both material and intangible. With the support of new parametric tools we were able to identify and cross multiple data about the native species of the area, soil typology and growth simulation under specific conditions.

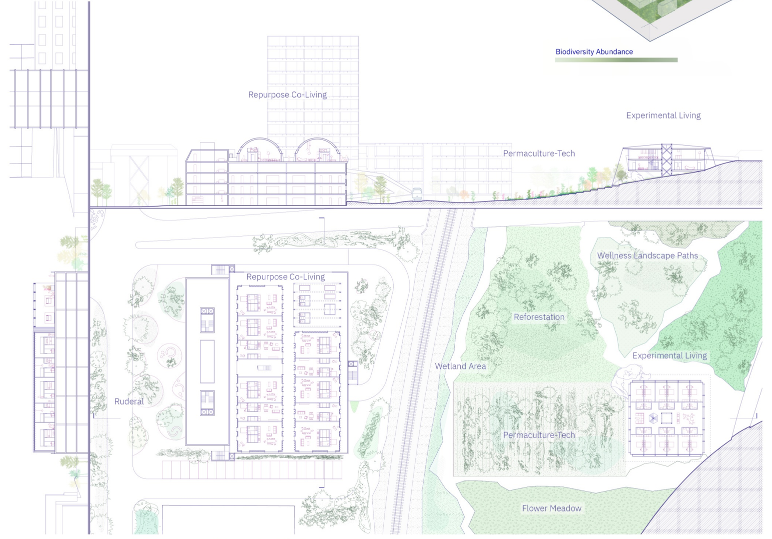
Soil memory is part of the system—we build on what the ground remembers. Former use, history&transformations, compaction, contamination, fertility—all informs the logic.



Four Intertwined Layers

The result is a calibrated field. Some plots lean toward nature—buffer zones, wild edges, ruderal cores. Others priorities production—high-tech farming, food forests, circular systems. Some anchor living—compact, well-connected, facing green. Others activate culture—gathering points, sports, collective rituals. Each plot intertwines all four layers: nature, production, living, culture - overlapping, negotiating, adjusting. The whole is a balanced result that mimic a healthy ecosystem where a multi-species layering collaborate and enhance each others.





Urban Densification & Experimental Living Unit | plan& section

The Tube: a link between living, culture & production

The Sports Living

Sports District: The New Hub

The Sports District

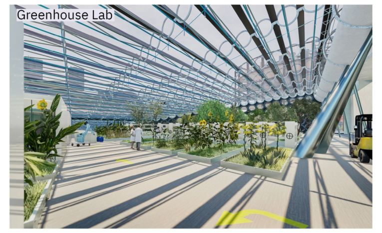
Clement, a single dad, lives with his son in the new housing built alongside the football field. He's happy they moved here—while he works in the logistics industry nearby, his son can fully dedicate himself to playing. Choosing a school wasn't a problem, and the local community is very strong - both him and Eddie found friends quickly.

His son plays professionally and dreams of making it to the national team.

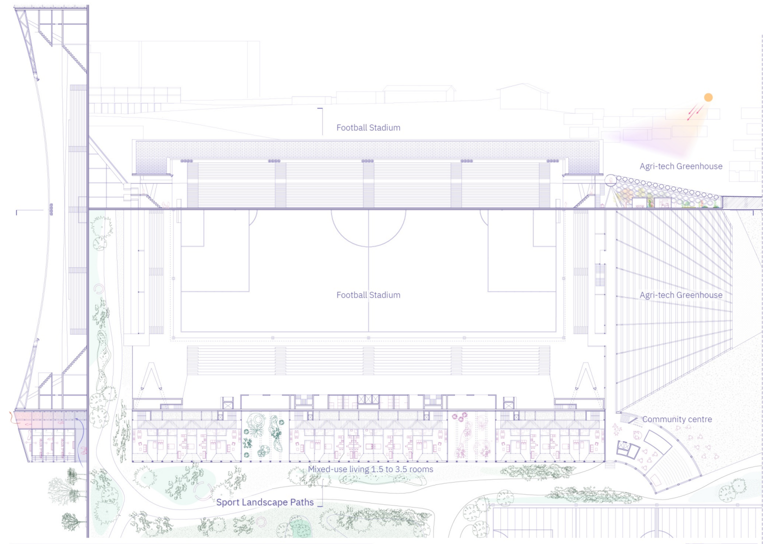
After walking him down to the pitch, Clement rushes to the new station to catch the train—he's meeting his new girlfriend in the city center.

Even if he needs to hurry, he can't resist staying just a moment longer in the tube, watching down into the greenhouse lab. Rows of vegetables, the quiet movement of robots and people—it's almost meditative.

On the way to the station, in the renatured part of the slope, he passes a few grazing sheep and a blackbird picking at the gravel. One time he even thought to have spotted a fox!



Greenhouse Lab



The New Hub: Sports+Living+Food Production | plan & section

Experimental Living

Lukas is a soil scientist at the Agri-lab. He moved to the experimental living unit to be close to work and to test their findings in his own living.

He first saw the building from the train window and got in love with it - the house floats just above the slope—lifted off the ground to let the landscape pass through. Next week he moved in.

Inside, everything is shared: kitchen, workspace, long table, terrace. Only the bedrooms close with a door. It's quiet, but never still. A mix of researchers, artists, students. Conversations start with coffee and drift into experiments.

Some mornings he walks to work through the orchard and the fields. Other days he bikes. It's not far, and never boring.

The Station Salon

Marco arrives early to the new Ruopingen stop. He steps out into the station plaza—a wide wooden deck built into the hillside, open to the fields below.

It's more than a stop: people love to hang out here at any time of the day - a real city living room dug into the hill. The artists and young startups dwelling right at the station add a special flavor to it. Marco already knows some of these folks - they met at the bar.

A coffee in hand, he enjoys the view and morning air. He grabs a warm pastry from the café counter. Then, down to the lower level. He unlocks a bike from the station and sets off. The ride through open fields to his office is smooth, quiet, and green. A perfect start for a productive day!

Experimental Living II

Jonas and Marc moved in last spring. They were lucky to find this affordable option - it's not so easy these days!

Their studio sits on the upper level of the station building—broad windows overlooking the cultivated fields and the slope where cows graze freely between patches of wild grass.

They live and work in the art cluster, just above the arrivals hall and the passing road. Below: trains, deliveries, the rhythm of movement. Above: a quieter layer of living, coworking, and production. They like the contrast.

On weekends, they open their studio doors. People drift in from the terraces, some even buy art. With the station nearby their work is getting more and more noticed. Good.

The Park'n'Read

Mira lives on the other side of Reuss. Since recently she's got a new habit. She takes a walk along Rotherstrasse, where a new path now runs beside the Little Emmie. Between the forest hill and the river, this is one of her favorite walks in town.

In 10 minutes, she reaches the Park'n'Read tower and taps her phone. A few moments later, her book arrives—automatically delivered from one of the library pods hidden in the mechanical parking car stack. Then she crosses the plaza and the new footbridge. Few people are sitting under there - reading or chilling under the bridge roof. She is heading to the old factory.

The top floor is now a coworking space with a balcony and fresh smoothies. She settles in—ready to work.

Kleine Emmie &The Others

Adaptive Reuse of the Intangible Resources

The industrial zones are usually perceived as lifeless areas with no identity. Littauerboden has, however, a very distinctive and strong productive identity and history. Resourcing and adaptive reuse is not only about physical structures, but goes way beyond. It is about activation of the already-present, reviving the forgotten knowledge, unvalued routines, overlooked structures and underused land. The soil of Littauerboden keeps the memory of wilderness, energy, human labor and transformation. We choose not to erase this legacy—but to embrace it. We have lots to build upon - gravel lots and embankments with some ruderal ecologies, vast open ground for logistics, low density industrial boxes and wide streets - everything has a potential when re-read with care.

Our site conditions are very specific with slopes and river forming natural barriers on one side and the infrastructure and industrial areas further obstructing the connectivity. Kleine Emme is practically cut off from the city and from the neighbouring biotopes. This is our challenge n.1 - we should be able to have a pleasant promenade along a renatured riverbank.

Another barrier for the development of the area is the monoculture - both in terms of cultivation and labour market - the distinctively industrial area results in very specialized industry jobs, excluding many from the area. The lack of cultural happenings, events and openness to the society make the site even more introverted. Thus, we see our next challenge into shifting from a monoculture suburb into a diverse cultural hotspot.

The Method

How much land does biodiversity actually need?
Where is water retention critical?
Which areas are overheating?
Where is the best productive yield?
How many people are good enough for a strong, self-sustaining community?
How many are needed for the economic viability?

Is there an objective method to determine what is the best for each single piece of land, its ecosystem, people, enterprises?

In order to have some objective data we divided the site into 150×150m plots and ran simulations on radiation, slope, rain accumulation, wind and biodiversity potential (with the new Rhino.Ecologic tool). We collected data on the existing resources - both physical and intangible. Soil memory is part of the system—we build on what the ground remembers. Former use, history&transformations, compaction, contamination, fertility, burred water canals — all become parameters that inform our planning.

We map the critical habitats needed by target species, then establish spatial parameters—minimum patch sizes, connecting corridors, and protective buffer zones—to create a viable ecological network. Urban development is strategically positioned in the remaining spaces between these ecological requirements. At key network nodes, we integrate new cultural programming designed to enliven and activate these strategic locations.

We identify locations where people genuinely want to live and conditions that support inhabiting. We organize these into walkable and bikeable clusters, each with local focal points and intersecting daily patterns. The spaces between clusters are dedicated to cultivation and productive activities. We pinpoint areas crucial for production systems and secure the logistics and mobility networks that connect them. We identify activation thresholds—edges, rooftops, underused surfaces—that can be intensified and opened to urban life. From these elements, we develop an integrated scenario that is both ambitious and achievable, where ecological, social, and productive functions support rather than compete with each other.

Kleine Emmie &The Others

The site operates as four interconnected layers: nature, production, living, and culture. Each area is precisely calibrated—some emphasize natural systems through buffer zones, wild margins, and spontaneous growth areas. Others prioritize production through advanced farming, food forests, and circular resource flows. Some focus on habitation through compact, well-connected neighbourhoods facing green space. Others activate cultural life through gathering spaces, recreation, and collective activities.
Every plot weaves together all four layers—nature, production, living, and culture—creating overlapping territories that continuously negotiate and adapt to changing needs.

The Landscape Mosaics

We study carefully the existing biotopes, potential connections and target species identified for the City of Lucerne and Agglomeration, the Valley of Kleine Emme and the Central Hill country. From this research we come up with a landscape mosaics consisting of 4 umbrella categories: natural, ruderal, cultivated and curated.

Re-natured landscapes
Some areas just need to go back to their natural, un-engineered state. We should be firm on this. Places that were transformed due to the industry will now be re-natured again. The industry was also transforming all this time and it will ultimately be modernized, automated, compacted. Some places next to natural biotopes will benefit from unmanned production.

target species for agricultural woodland corridors, hedgerows and forest edge habitats: Bufo calamita Eptesicus serotinus Coronella austriaca Alytes obstetricans Corvus monedula Various pollinators Small mammals

for wetland and riparian ecosystems: Unio crassus Netta rufina Natrix natrix Alytes obstetricans Alytes obstetricans

Ruderal landscapes
Some species thrive on disturbed anthropogenic or broken ground with little organic matter. Our strategy is a minimal and cost-efficient intervention to the industrial sites, railway embankments. paved areas and roadsides to form ruderal
communities.

target species: Centaurium pulchellum Herniaria glabra Polycarpon tetraphyllum Trifolium fragiferum Ranunculus sardous

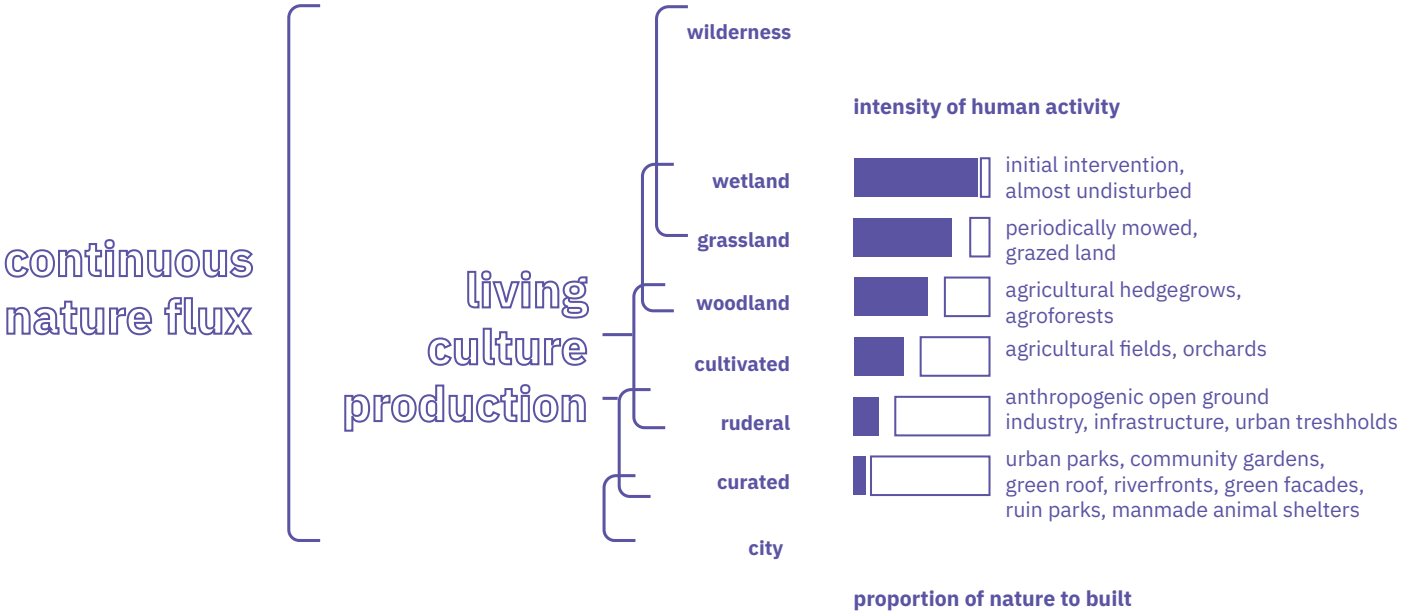
Cultivated landscapes
Some species are attracted to flowering crops and wildflowers. Our strategy is to introduce diversity and crop rotation to the existing fields and form new, productive living clusters at the existing urban edges, linked with community gardens, orchards, existing and new greenhouses. Low-tech cultivation practices +
high tech agriculture.

target species: Ranunculus arvensis Silene noctiflora Valerianella dentata Potamogeton helveticus Ceratophyllum demersum

Curated landscapes
Some species thrive in proximity to humans. In spaces that currently lack urban quality, we introduce some love, care & and new cultural program. Green roofs with dry-tolerant vegetation and calcareous gravel areas, ensuring connectivity between green rooftops and tree-lined streets, preserving old walls and structures as ruin-parks . Introducing urban green pockets, installing animal shelters such as bat boxes and bird nesting sites on buildings community gardens, parks, and orchards near residential areas

target species: Eptesicus serotinus, Corvus monedula, Natrix natrix

Kleine Emmie &The Others



Phase 1: Renaturing. Ground First, Life Follows

Population: + 130 residents
Jobs: + 150 workers

We begin by opening the ground—literally and strategically. Where feasible, asphalt surfaces are removed. What emerges is not costly designed landscapes, but pioneer ecologies: gravel beds, sandy patches, loose soil substrates. These low-maintenance, open-ground conditions invite hardy vegetation and adaptive species—the vanguard of returning biodiversity.

Key Moves:
- Ruderal zones introduced along rail tracks, logistics yards, and decommissioned parking.
- Kleine Emme renatured: its banks softened, tributaries daylighted, and a new riverside path introduced.
- Streets are optimized, first using tactical urbanism then by structural interventions.
- Compacting ground-level parking via automation to free up land.
- Landscape mosaics emerge—wild, ruderal, cultivated, curated.

In productive areas, we reestablish agricultural cycles and ecological farming: rotating meadows, fruit orchards, extensive grazing alongside intensive pastures, and controlled-environment growing. These integrate with designed green interventions—living walls, productive rooftops, and planted terraces. One strategic move is the Biodiversity Corridor adjacent to the planned station—a green spine connecting forest patches and habitat zones. By the time rail service arrives, this space will already be thriving, cherished, and exemplary of infrastructure-integrated ecology.

Phase 2: Urban Densification. Productive Living, Cultural Production

Population: + 2’300 residents
Jobs: + 800 workers

We apply industrial logic—efficiency, stacking, multi-functionality—to urban densification. No land remains underutilized.

Key Moves:
- Rooftop densification of existing department stores, introducing mixed-use housing, rooftop greenhouses, and a farm market with a zero-km bistro.
- Vacant plots near the Littau rail/bus node are reimagined as productive residential clusters: housing over orchards, co-living beside cultivated fields.
- Around existing sports infrastructure, we introduce hybrid housing: live-work spaces organized around shared courtyards. Units open onto green, pedestrian streets where recreation and

production intersect. These new neighborhoods function independently while benefiting from Littau station proximity and anticipating future Ruopingen station access

Phase 3. Modernization & Automation: Industry Meets Public

Population: + 450 residents
Jobs: + 400 workers

We approach modernization as transformation rather than elimination. Industries will automate, consolidate, and evolve, releasing land and resources for broader community use while strengthening their operational identity.

Key Moves:
-The Crane Park: a bold example of how logistics automation can give back space. Outdoor storage becomes a renatured terrace park beside the river, framed by a vertical logistics green wall.
- Adaptive reuse of selected steelworks building parts, allowing for coliving of operational industry and community—cafés, coworking, public events.

The modernization process becomes visible and compelling. Littauerboden evolves into a cultural and productive district Luzern can celebrate—where industrial equipment, recreational courts, community spaces, and renewable energy systems coexist.

4. Phase 4. The Arrival of New Station: Slope as Salon

Population: + 120 residents
Jobs: + 200 workers

The incoming station functions not as disruption, but as connection. Carved into the topography, it transforms a barrier into a community living room—a multi-level public space.

Key Moves:
- Station salon: terraced plaza with panoramic views, a covered deck, F\&B, coworking, retail, and ateliers.
- Multilevel mobility hub below: trains, bike station, compacted parking.
- Further densification around the area.

Littauerboden's transformation operates through four interconnected systems: nature, living, production, and culture. Nature provides the foundation—restored grounds, pioneer ecosystems, and cultivated landscapes. Living follows, embedded within productive landscapes through housing that balances proximity with permeability. remains visible but evolved—modernized, automated, and integrated with residents' daily lives. Culture is not institutionalized but woven into routines—from community gardens to repurposed industrial spaces and neighborhood recreation facilities.
Within this framework, sports and wellness shift from private consumption to shared practice—an urban cultural expression where swimming, tennis, or walking the elevated deck become moments of connection, visibility, and collective rhythm.
Littauerboden embraces its identity rather than concealing it. Spaces are reclaimed and reshaped while nature is invited back in.

Littauerboden doesn't hide what it is. Spaces are reclaimed, reshaped and nature is let in. It's not a tabula rasa—it's a mosaic landscape, where steelwork meets soil, cranes meet joggers, and orchards meet innovation. Here, living is layered, and the future is not only human!