



# WALLY FARMS

COLUMBIA  
**GSAPP**  
HUDSON VALLEY  
INITIATIVE



This Report is a summary of a study undertaken by the Hudson Valley Initiative at Columbia University's Graduate School of Architecture, Planning and Preservation on behalf of the Eutopia Foundation. The purpose of the Report is to assist the Foundation in framing the design parameters to establish a community at Wally Farms, in Columbia County. The Report documents siting, housing, and lotting scenarios for an experimental community, and explores models of environmentally, economically and socially sustainable living which supports exchange among Foundation targeted populations including artists, makers, scientists and innovators.

## HUDSON VALLEY INITIATIVE

Summer 2018

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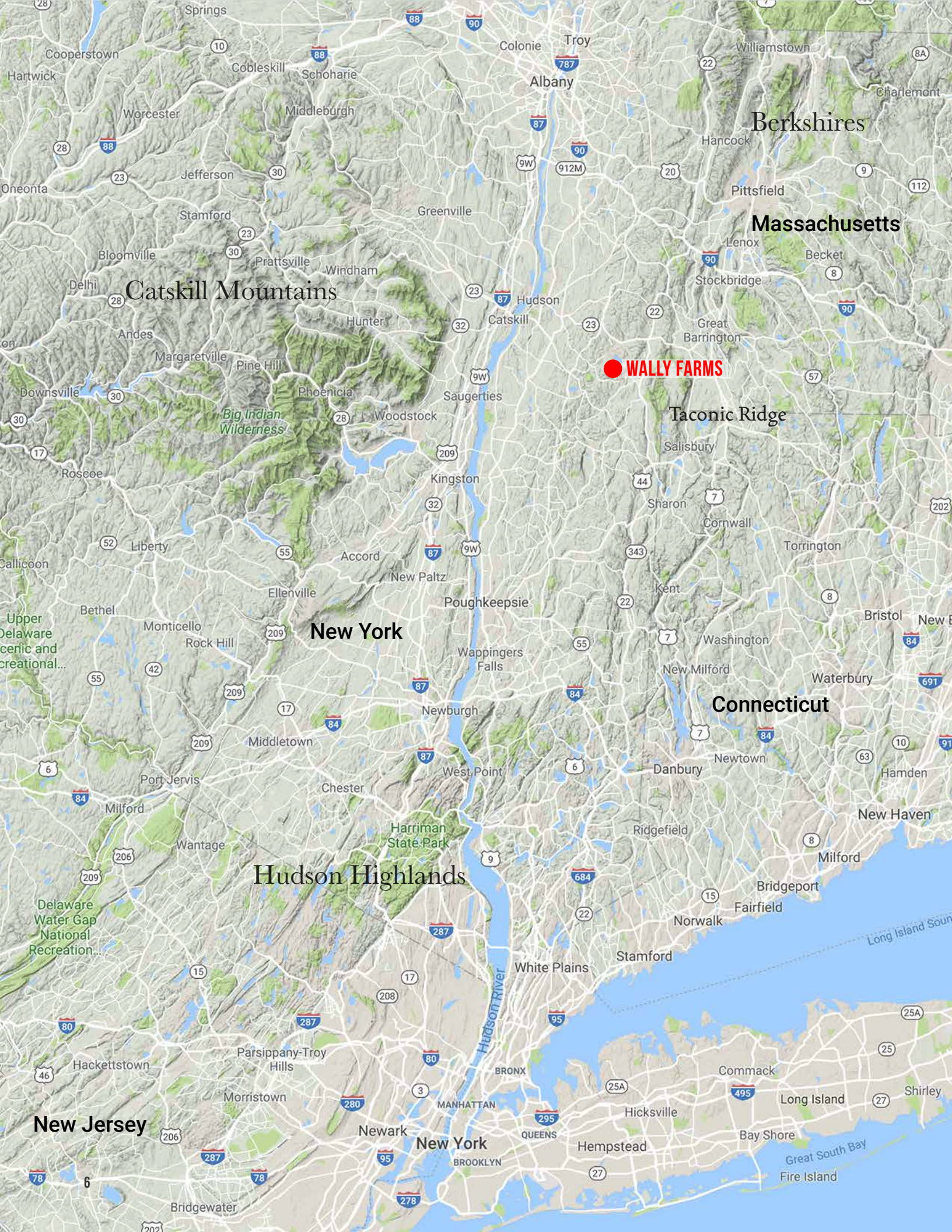


# **INTRODUCTION**

Wally Farms provides space and opportunity for like-minded individuals to form a community that addresses the challenges of climate change by drawing on the arts, sciences and practice to develop and share innovative solutions that respect all beings.

This report explores ways in which this goal can be implemented using the following principles.

- 1. WORK WITH THE ECOLOGY OF SITE AND REGION**
- 2. FORM A COMMUNITY AROUND A COMMON INTEREST**
- 3. BRING TOGETHER RESEARCH, ART AND PRACTICE**
- 4. BECOME SELF SUSTAINING**
- 5. EXPERIMENT WITH MATERIALS AND PROCESS**
- 6. BUILD NEIGHBORHOODS AND CLUSTERS**
- 7. GROW COMMUNITY AND PROGRAM OVER TIME**
- 8. ENGAGE WITH SURROUNDING COMMUNITIES**
- 9. EXPAND THE EXPERIENCE TO OTHERS**
- 10. OPEN SOURCE EVERYTHING**



**WALLY FARMS**

**Catskill Mountains**

**Berkshires**

**Massachusetts**

**Taconic Ridge**

**New York**

**Connecticut**

**Hudson Highlands**

**New Jersey**

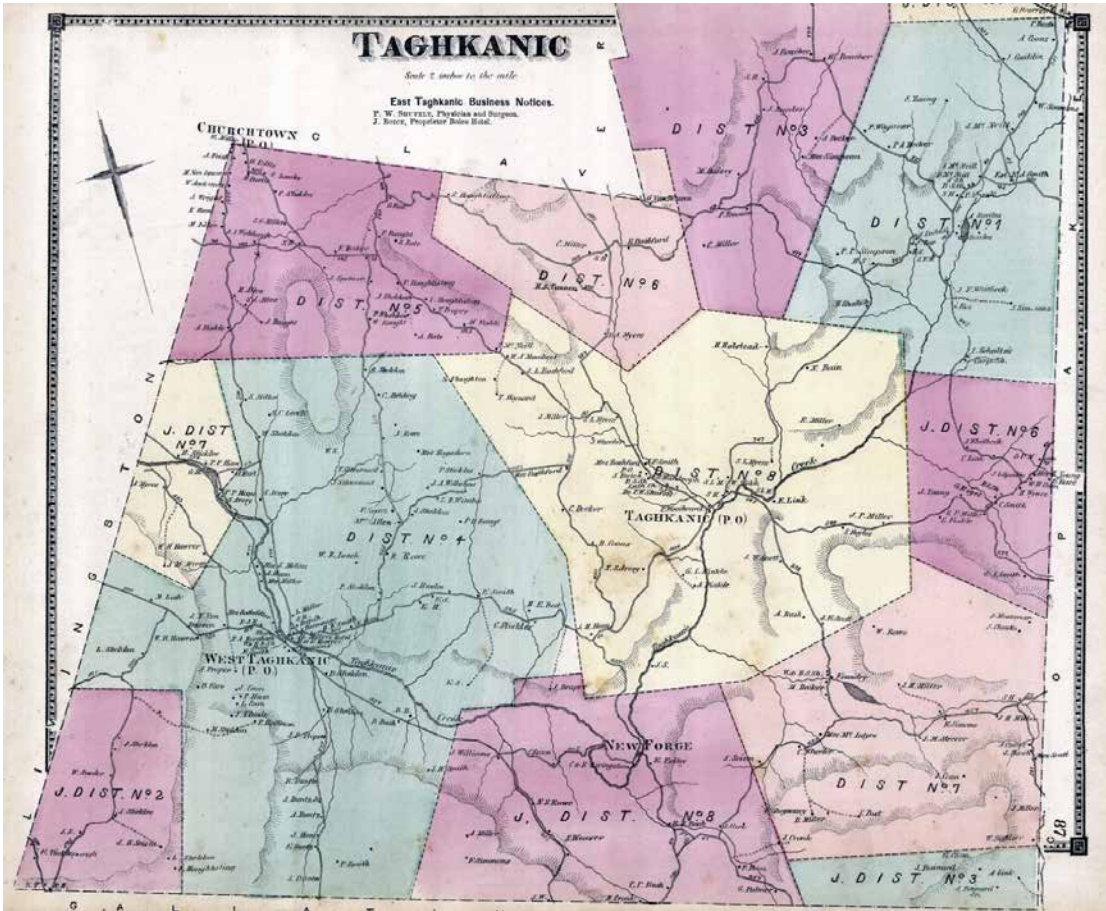
**New York**

**Long Island**

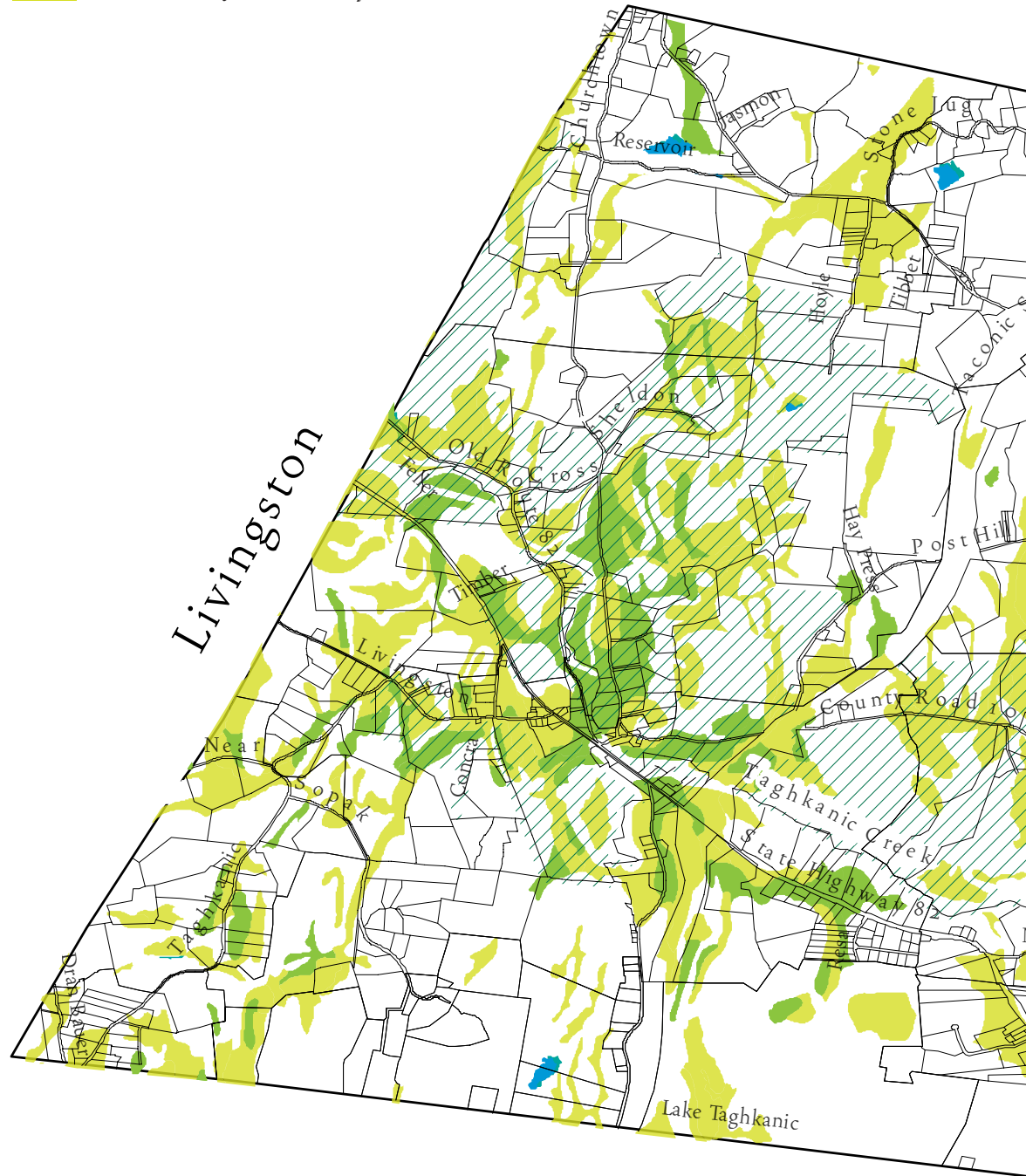
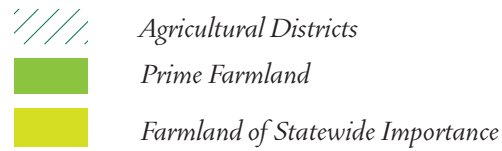
# WORK WITH THE ECOLOGY OF SITE AND REGION

This chapter begins with the premise that the existing landscape at Wally Farms, consisting of forest, farmland and wetland, is a clear ecological asset that can and should be utilized to develop innovation and knowledge that address climate change. The site itself becomes a vehicle for exploration and experimentation.

Wally Farms is in the Hudson Valley, in Columbia County, approximately 2.5 hours from New York City near the Taconic State Parkway. Situated in the town of Taghkanic with a population of 1,310 (according to the 2010 census). The nearest urban center is Hudson, NY, about 25 minutes driving time. The Farm's 500 acre landscape of **forest, farmland** and **wetland** is typical for the Hudson Valley and Columbia County.



Source: 1873 Atlas of Columbia County, D. G. Beers & Co

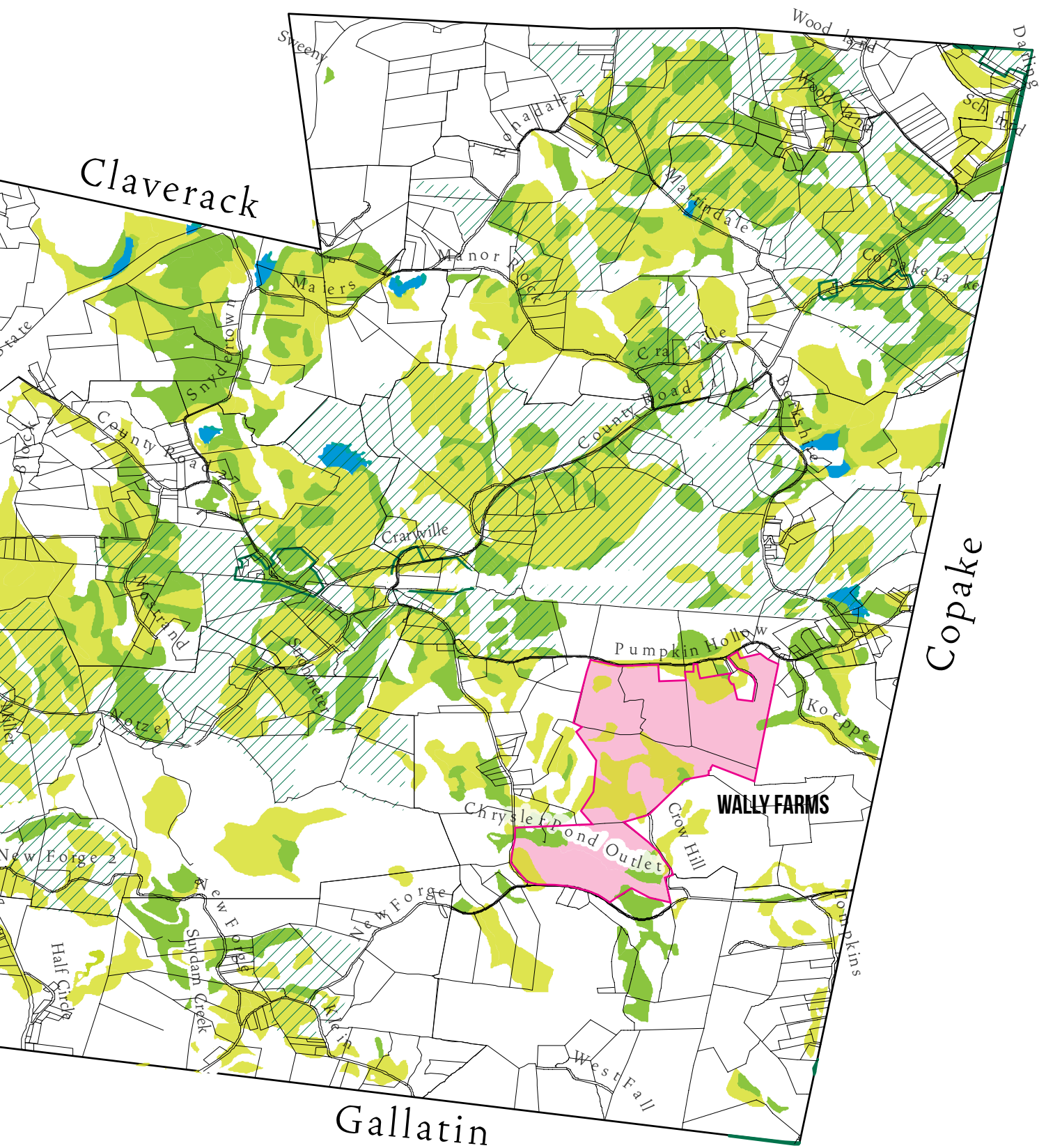


## SOIL

As is common throughout the Hudson Valley and Columbia County, the site provides excellent conditions for farming. The USDA's Natural Resource Conservation Service identifies certain soil types as Prime Farmland Soils or Soils of Statewide Importance for Farming<sup>1</sup>. Approximately 84 acres of farmland exist at Wally Farms on existing clearings between forest and wetlands. However, decades of farmed monocultures have deprived the soil of important nutrients and yield is expected to be low until several seasons of [crop rotation](#) have enabled regeneration of the soil.

<sup>1</sup> <https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=NY/>

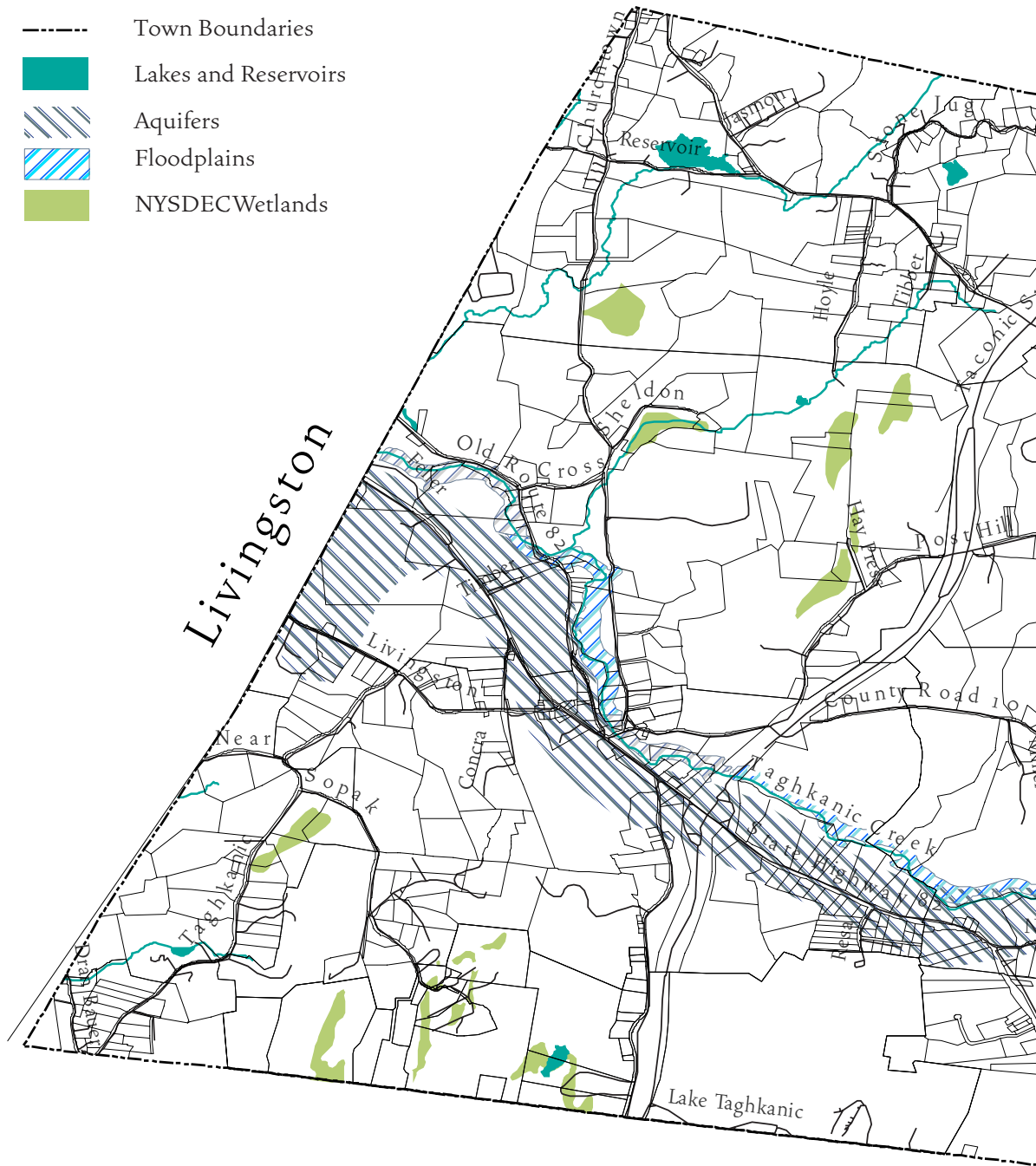




Map Source: Town of Taghkanic Comprehensive Plan 2009

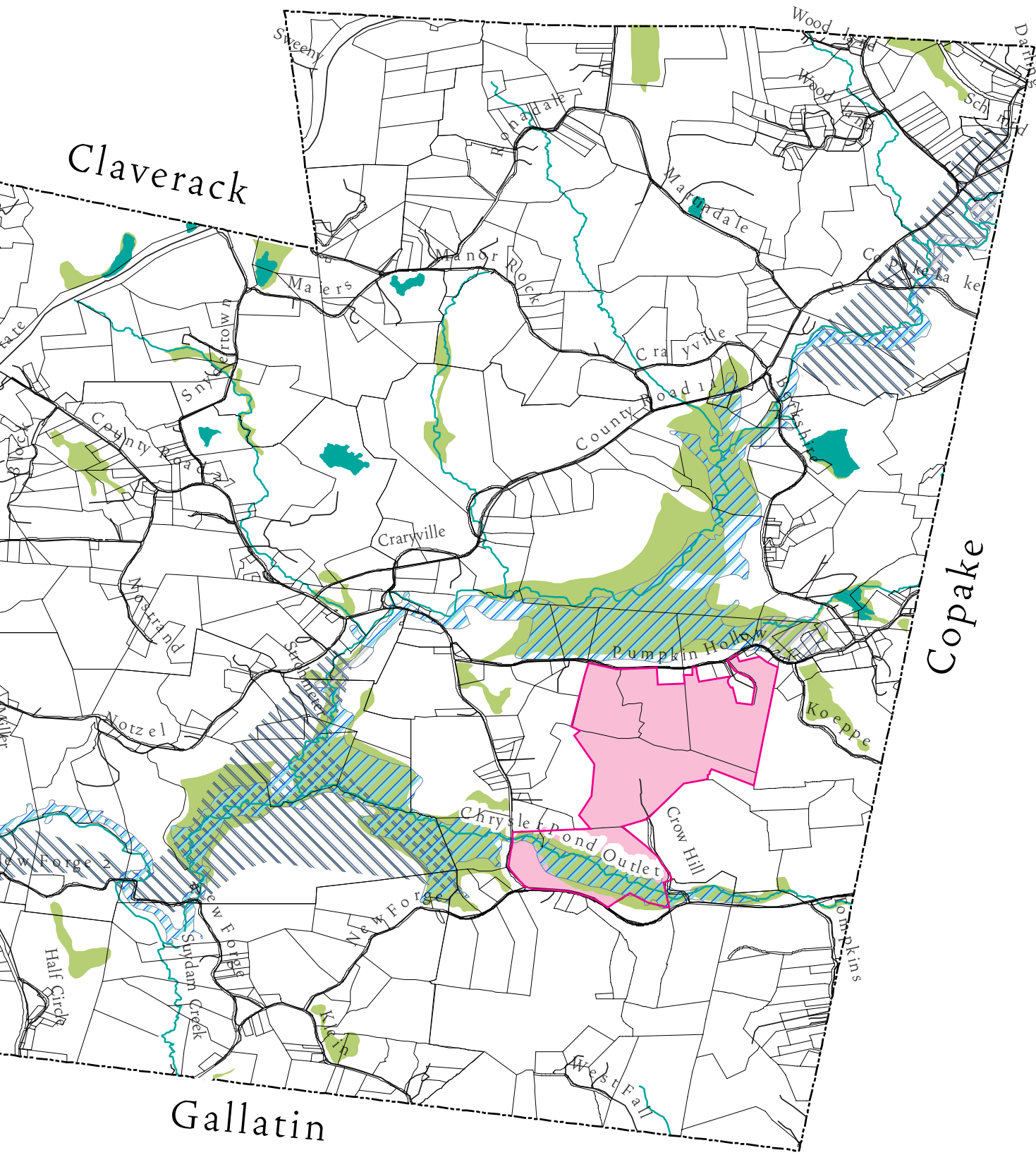
WORK WITH THE ECOLOGY OF SITE AND REGION

- Tax Parcels
- Streams and Rivers
- Major Roads
- - - Town Boundaries
- Lakes and Reservoirs
- ▨ Aquifers
- ▨ Floodplains
- NYSDEC Wetlands



## WATER

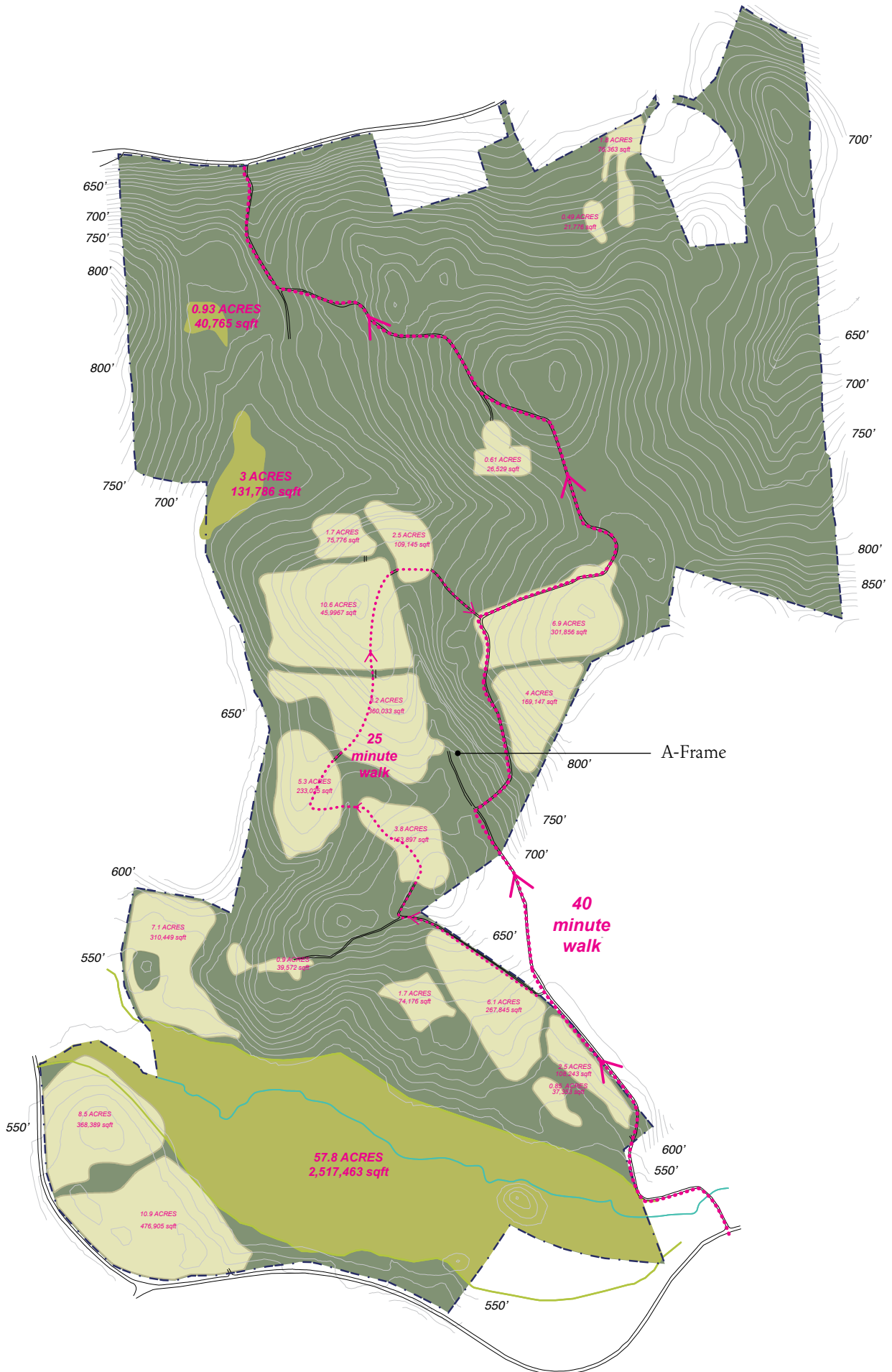
Several significant freshwater systems are in close proximity to the site, such as the Churchtown Reservoir, which supplies water to the City of Hudson, as well as several other ponds and waterways. The Chrysler Pond Outlet runs alongside the southern edge of Wally Farms. There are natural floodplains immediately to the East and North of the site with the largest drainage system located along Taghkanic Creek, in addition to the two large unconsolidated aquifers that also run along Taghkanic Creek.



FOREST

FARMLAND

WETLAND





The site is roughly divided into three major ecological zones:

## **WETLAND, FARMLAND AND FOREST**

The environmental conditions and wildlife of each of these zones can differ dramatically. These conditions should be understood as fully as possible and taken into account when establishing uses, programs or considering development in these areas. State regulations apply to each of the three zone types, and local and regional organizations work to protect these areas.

The three ecological zones provide a great opportunity to define common interests for future users of the site and can be explored through interdisciplinary research, combining the arts, sciences and other practices which focus on natural resources, such as projects that explore sustainable farming practices, forest conservation or wetland habitat. A more detailed understanding of the current ecological conditions of these environments is recommended in order to document existing and potential threats or imbalances that would affect future uses of the site. [Hudsonia Ltd., a non-profit research and educational organization](#) in nearby Annandale offers resources and information, including a *Biodiversity Assessment Manual* for the Hudson Valley. The [Columbia Land Conservancy](#) also offers resources for stewardship in addition to programs for farmland conservation. The New York State Department of Environmental Conservation (DEC) offers an [Environmental Resource Mapper](#), which provides basic information about wetlands and [rare natural communities](#). The DEC also offers [Grants for Environmental Conservation](#).

# ECOLOGICAL SECTION THROUGH THE SITE



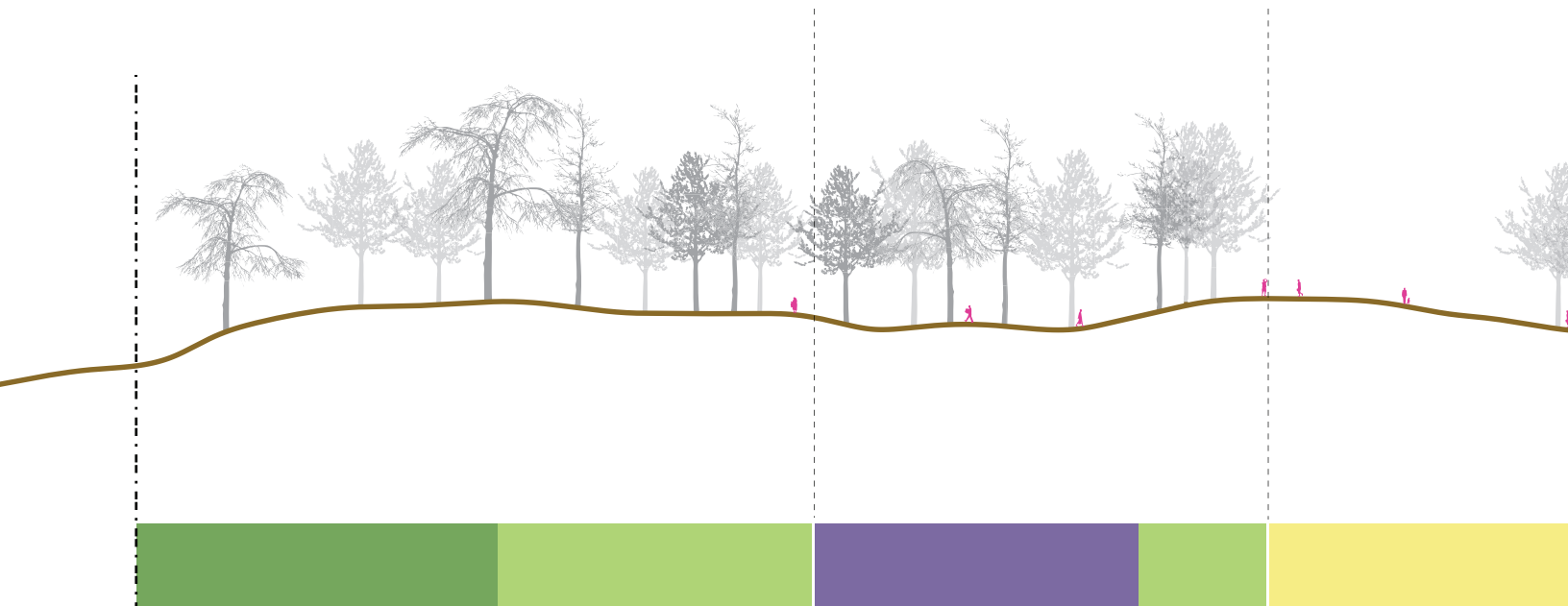
*Mixed Forest/ Hardwood Conifer*

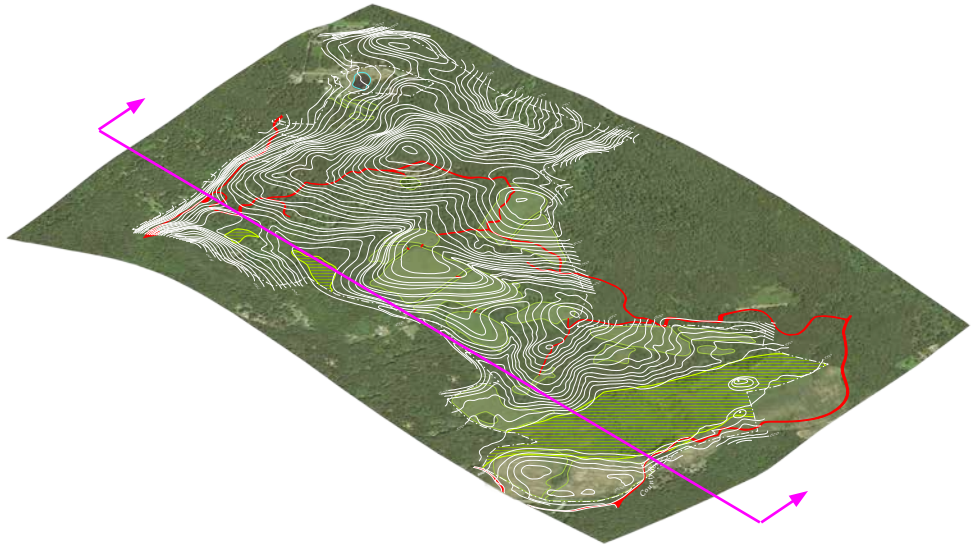


*Swamp/Hardwood*



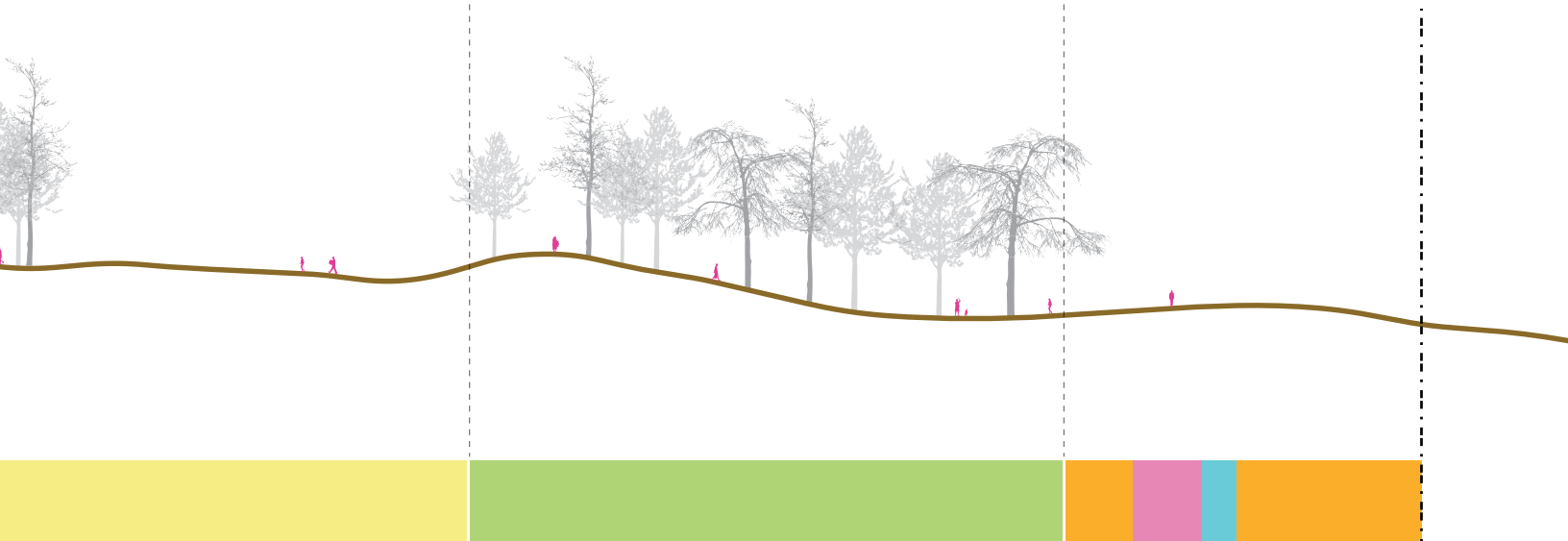
*Pasture/Hayfield/Shrubland*





*Forest/Hardwood*

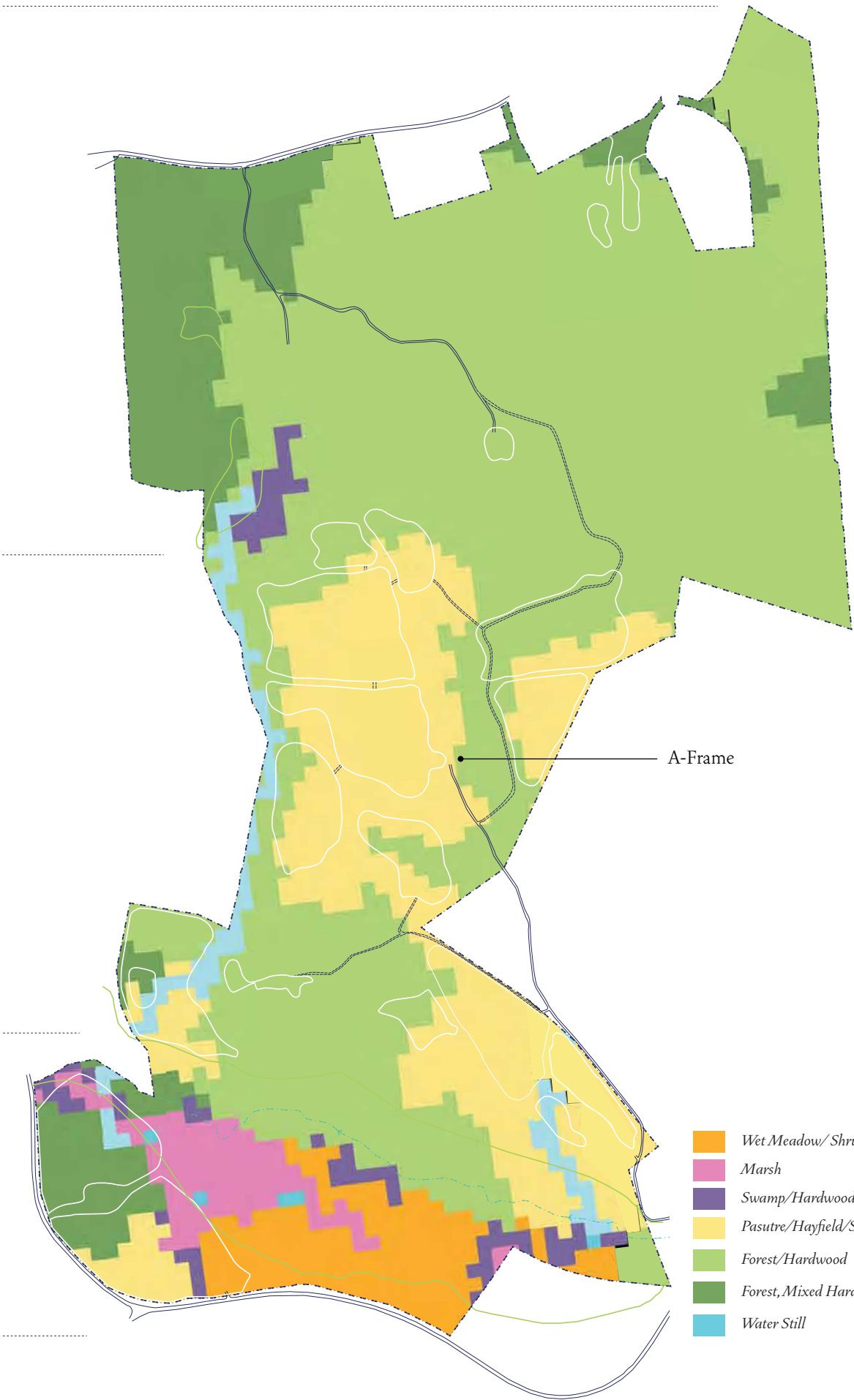
*Wet Meadow/Shrub Swamp*



FOREST

FARMLAND

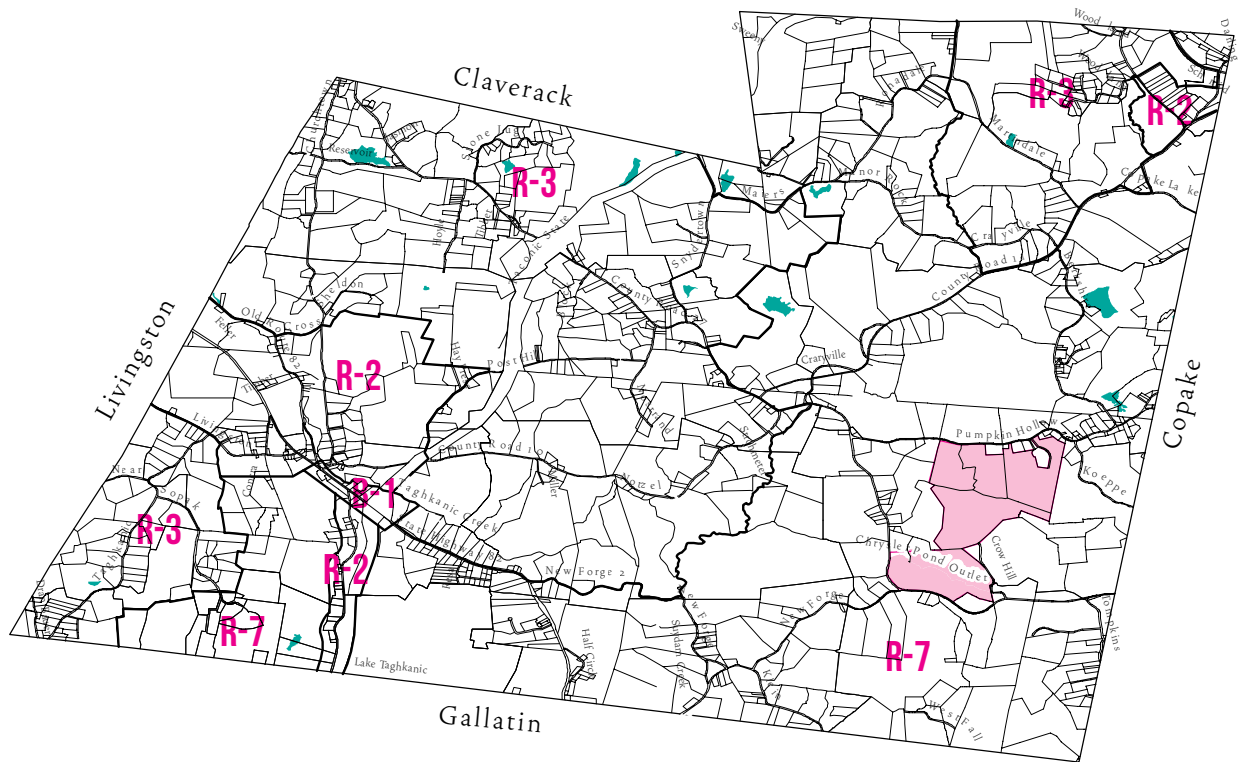
WETLAND



A-Frame

- Wet Meadow/ Shrub Swamp
- Marsh
- Swamp/Hardwood
- Pasture/Hayfield/Shrubland
- Forest/Hardwood
- Forest, Mixed Hardwood Conifer
- Water Still





## DEVELOPMENT

According to Taghkanic's Zoning Ordinance there are four zoning districts:

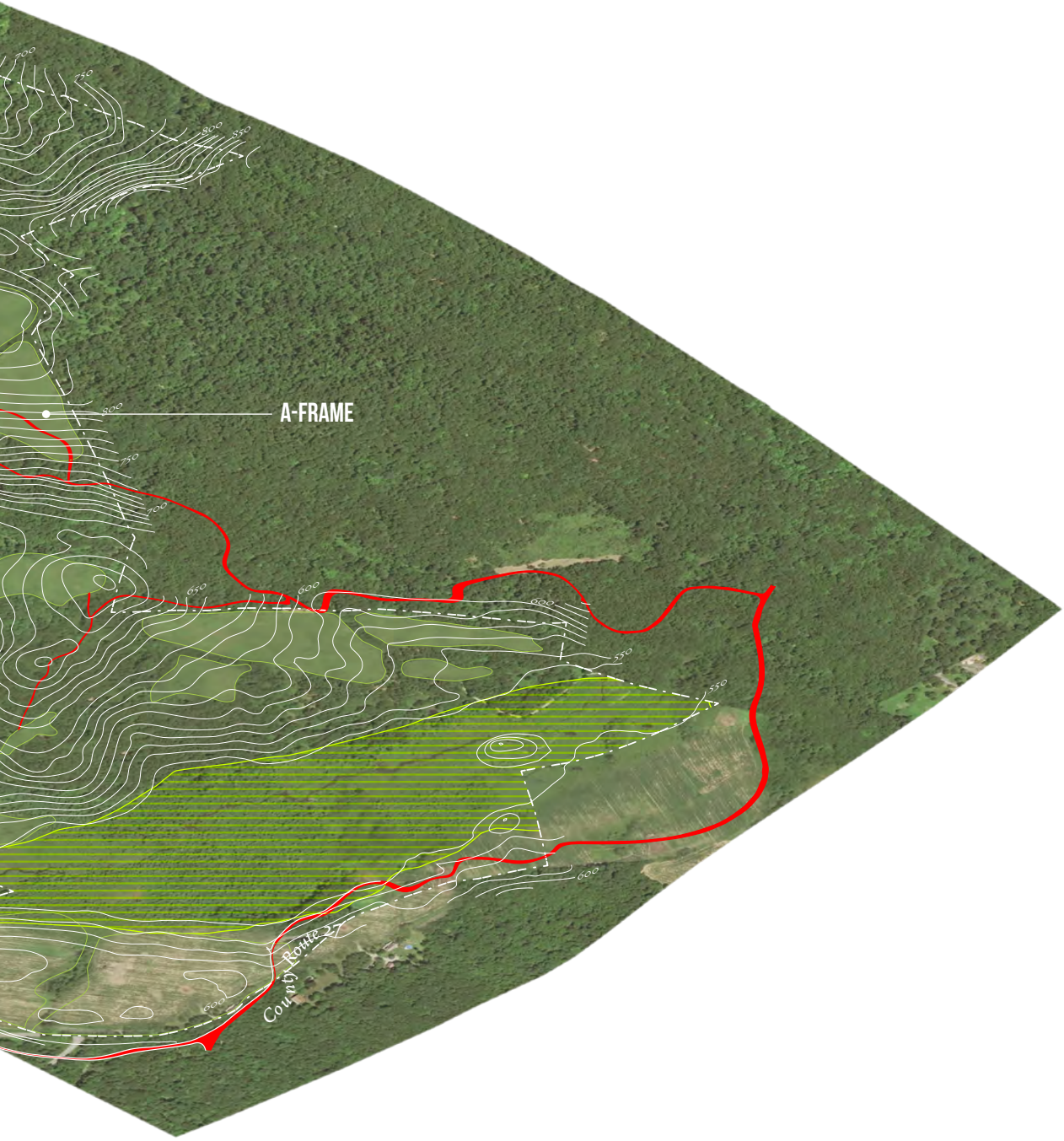
- R-2 Residences: one family per 2 acres
- R-3 Residences: one family per 3 acres
- R-7: One family per 7 acres
- B-1: General Business.

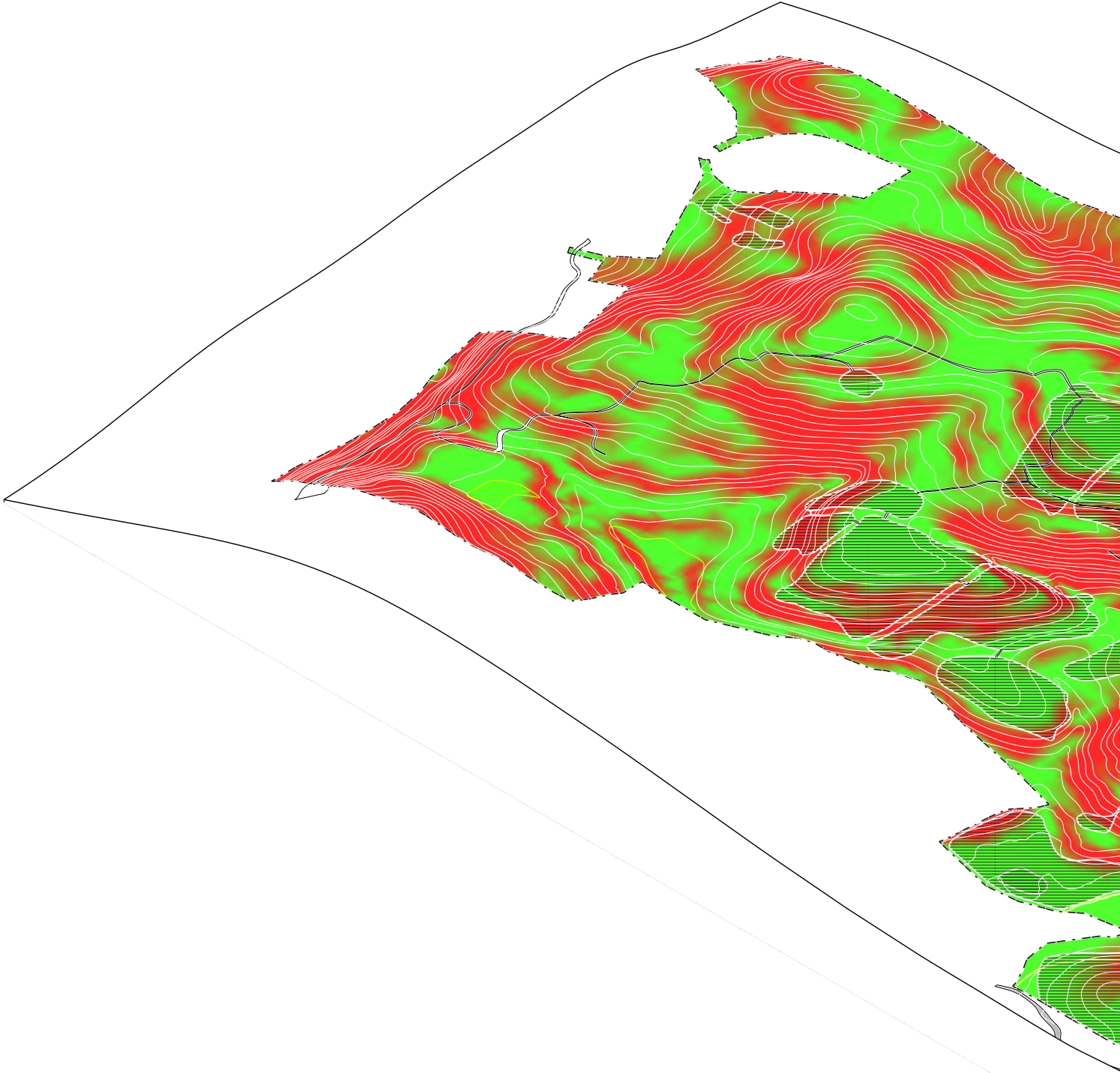
Wally Farms (highlighted in red) is located within the [Town of Taghkanic](#) and is classified as an R-7 district according to the [town's zoning ordinance](#) (See page 4 continuing of the document, zoning Amendments adopted January 4, 1988). Permitted uses in R-7 districts include one-family dwellings as well as agriculture including the keeping of fowl and farm animals. In addition, conditional uses such as boarding houses, resorts or camps as well as retail of agricultural products, and institutional or recreational uses are contingent upon securing a special use permit from the Zoning Board of Appeals or are subject to site plan review by the Planning Board.





- Forest
- Wetland Area
- Clearing Area
- Roads

Currently, there is no development on the site with the exception of a 170 sf A-Frame building and recently improved roadways accessing the 19 areas that have been cleared of all trees and obstructions, and are used by a nearby dairy farm to grow feed for livestock. The following pages illustrate some large-scale considerations such as slope and orientation.



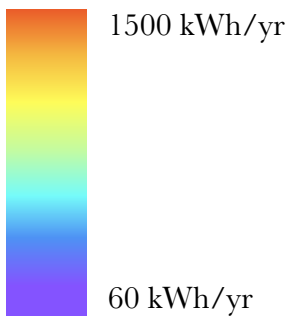
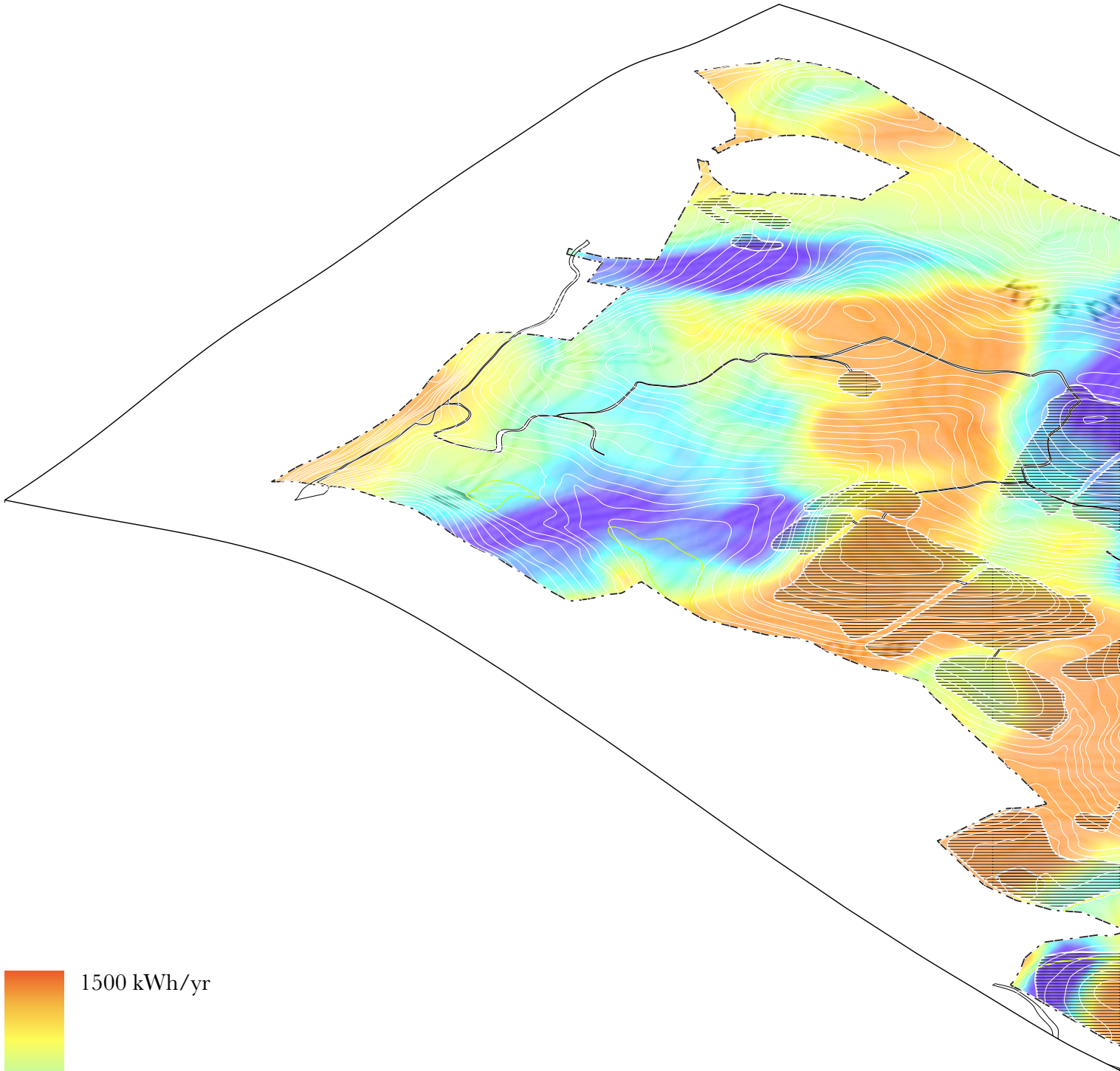


 Greater than 20% Slope  
 Less Than 20% Slope

## SLOPE

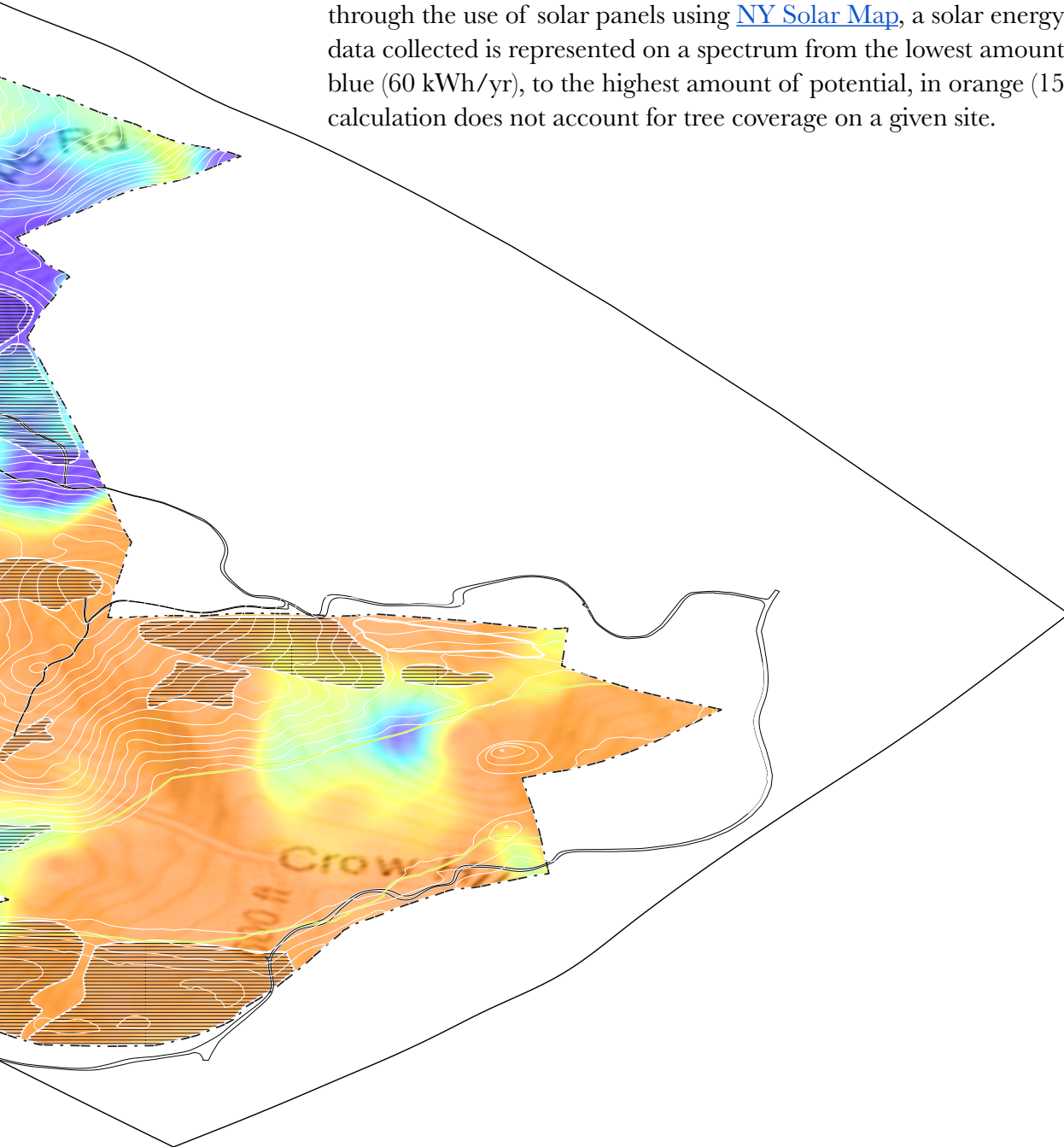
The site changes dramatically in elevation in several locations from just under 600 ft above sea level to over 850 ft with hills and valleys and occasional steep slopes. Using a 3D model, an analysis of slopes shows several areas within the site with a slope greater than 20%. While not impossible to build upon on such steep terrain, it is generally easier (and more cost efficient) to build in areas with less steep slopes. This analysis should also be considered when establishing circulation paths through the site.





## SUN

This 3D model illustrates the sun's exposure on the terrain. It identifies the area's access to direct sunlight, to determine how much solar energy could be harnessed through the use of solar panels using [NY Solar Map](#), a solar energy data service. The data collected is represented on a spectrum from the lowest amount of potential, in blue (60 kWh/yr), to the highest amount of potential, in orange (1500 kWh/yr). This calculation does not account for tree coverage on a given site.







## FORM A COMMUNITY AROUND A COMMON INTEREST

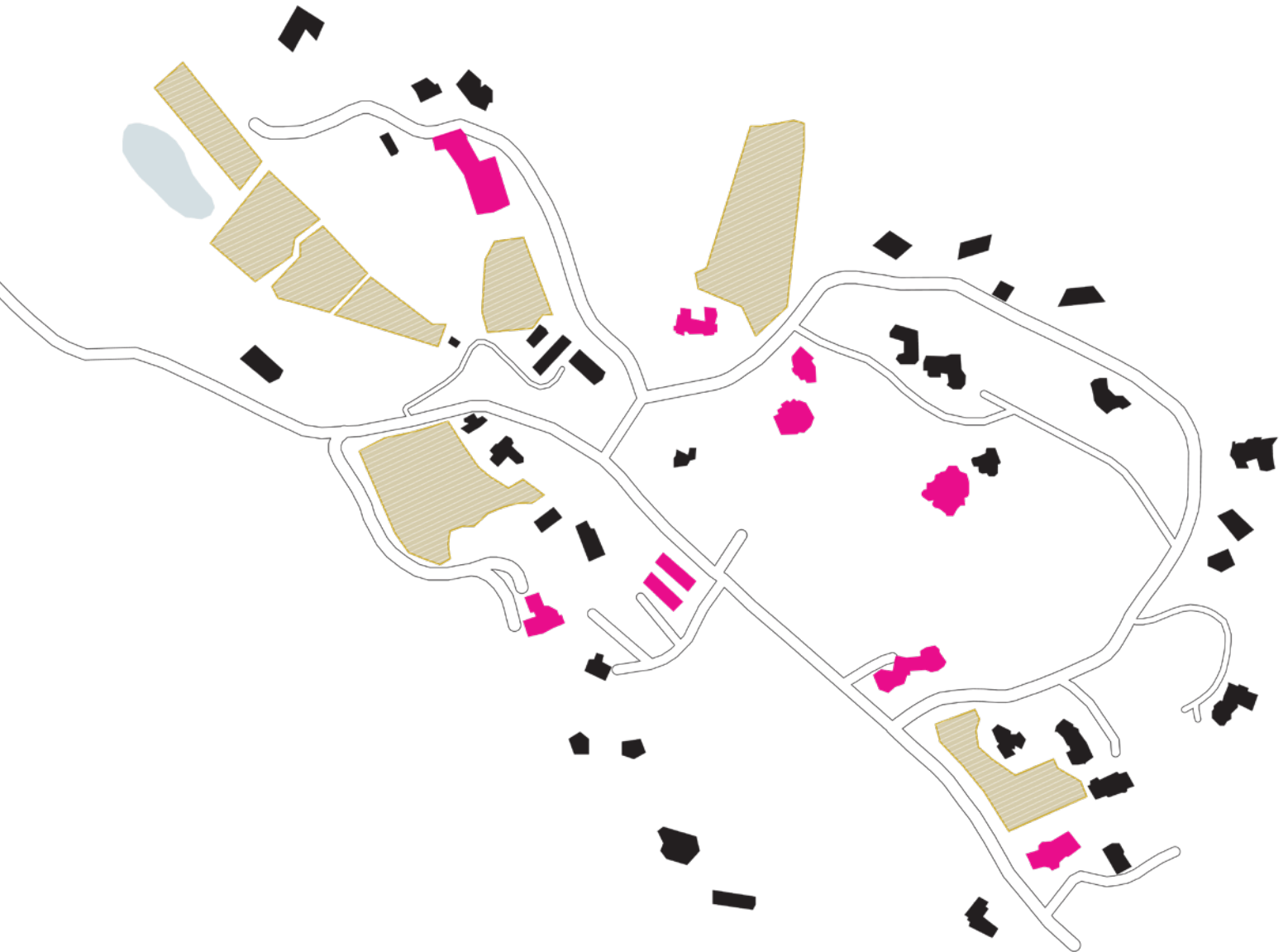
Communities formed around a common interest, or “intentional communities,” have a long history in the United States and elsewhere. As early as the 16th century, new (white) immigrant communities were often focused around religion and spirituality, and included the Mennonites, Shakers and Amish. The 19th century saw the emergence of utopian experiments as seen at [Brook Farm](#) in Massachusetts and [New Harmony in Indiana](#). Brook Farmers believed that by sharing the workload, ample time would be available for leisure activities and intellectual pursuits. Each member could choose to do whatever work they found most appealing and all were paid equally, including women. New Harmony’s founder Robert Owen sought to redefine collective life against the depredations of industrialization.

These and the more contemporary communities discussed in this chapter are formed around an interest in alternative ways of permanently living together and sharing that experience. Other means of connecting around common interest include artist or artisan communities, or networks of scientists. Early arts communities in the Hudson Valley include the [Byrdcliffe Guild](#) in Woodstock, founded in 1902. Seven farms, totalling 1,500 acres, were purchased by a wealthy couple named Ralph Radcliffe Whitehead and Jane Byrd McCall. By the time it was completed in 1903, thirty buildings stood, comprising what has been referred to as a “textbook example” of a utopian Arts and Crafts Community. It had a large studio for art classes, metalworking shop, pottery studio, woodworking shop, dairy barn, guest houses, dormitory for students, library, and Whitehead’s own house, White Pines. Today, Byrdcliffe offers an integrated program of exhibitions, performance, classes, workshops, symposia, summer residences, and artist housing on its current 250 acre campus.





This chapter examines case studies of communities with similar missions. Most are in the Northeast, some in close proximity to Wally Farms in the Hudson Valley. They offer different lessons ranging from arrangement of buildings to programming of residencies to technologies of living off the grid or funding mechanisms. Each case study diagram is drawn to same scale to offer a comparison of site planning and footprint.

*On 615 acres of wooded hills, gardens, and pastures in rural upstate New York, adults with special needs and long- and short-term service volunteers live and work together as equals in extended family homes throughout Camphill Village.*

*-- Excerpt of Mission Statement at Camphill*



**CAMPBILL COPAKE, COLUMBIA COUNTY, NY**

-  Major Roads
-  Housing
-  Other uses
-  Farmland

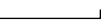
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Image via Camphill Village

## **CAMPHILL COPAKE, COLUMBIA COUNTY, NY**

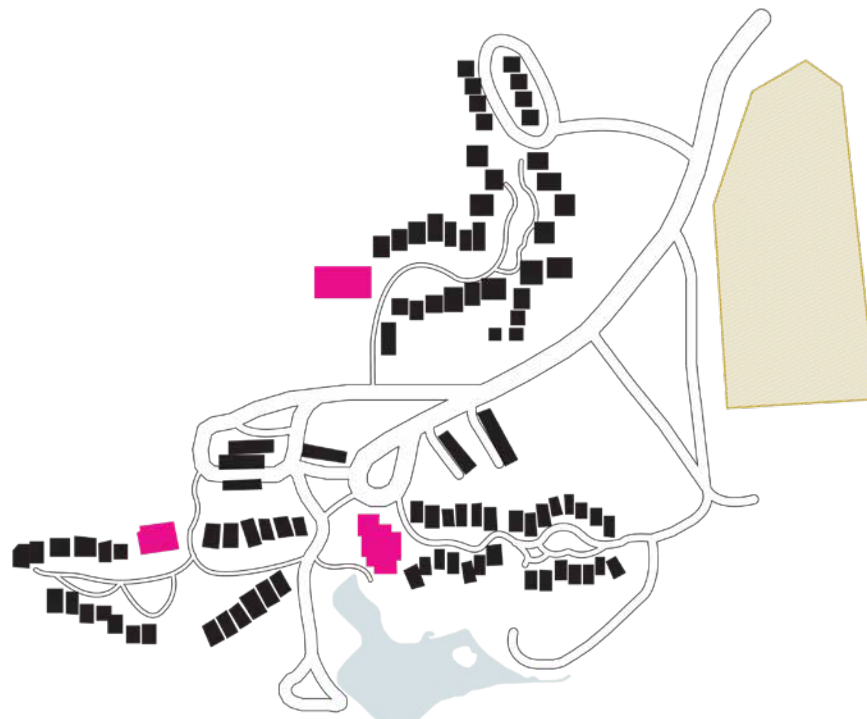
[Camphill Village](#) helped create a transformative movement in the United States to reform how society treats people with special needs, becoming known as the Camphill Movement. Founded in 1961, Camphill Copake is the first and largest Camphill community in the United States, with approximately 240 residents of different abilities. Worldwide, there are now over 100 Camphill communities. Camphill Copake occupies 615 acres in Columbia County, NY, 220 acres of which are farmed and the rest, forested. Copake practices biodynamic farming, a holistic, ecological, and ethical approach to farming, gardening, food, and nutrition that has become an important critique of typical agricultural processes<sup>2</sup>. The organization is a 501(c)3. In 2016, Camphill's annual revenue was \$12 million. More than 50% of it came from State Funds and Grants.

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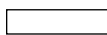



<sup>2</sup> The biodynamic approach has its philosophical roots in the social reformist work of Dr. Rudolph Steiner, and specifically in a series of 1924 lectures to farmers which advocated a new way to join scientific with spiritual understandings of nature.

*EcoVillage Ithaca is an intentional or traditional community using local participatory processes to holistically integrate ecological, economic, social, and cultural dimensions of sustainability in order to regenerate social and natural environments.*

*-- Excerpt of Mission Statement at Eco Village*

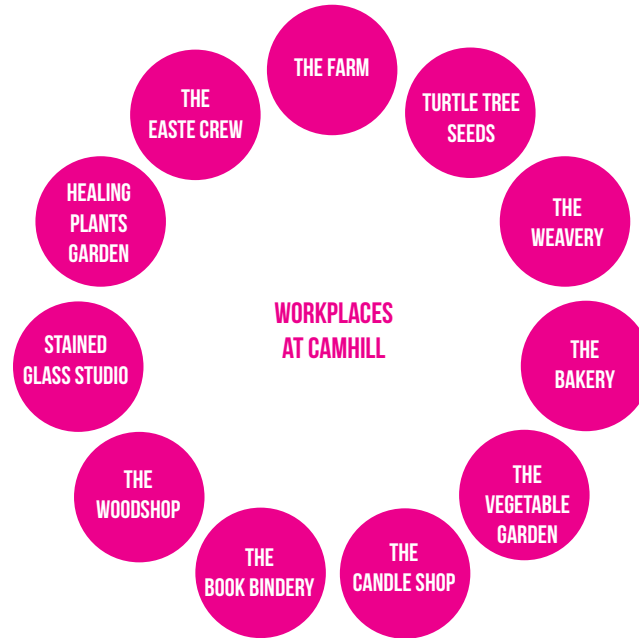


**ECO VILLAGE, ITHACA, NY**

-  Major Roads
-  Housing
-  Other uses ("Common Houses")
-  Farmland

200 ft 

The Copake community offers several lessons for Wally Farms. Most broadly, Copake is organized by small neighborhoods and clusters of 2 to 3 houses, and the village grows by 2 to 3 houses a year. Programmatically, long-term (special needs) residents live together with long-term and short-term volunteers in each house. Ecological factors at Copake include sand filtration used for water treatment (held uphill in a cistern). The community aims to be 80% food self-sufficient and each resident works onsite: on the farm, in the vegetable garden or in one of several workshops.



## ECO VILLAGE, ITHACA, NY

Founded in 1991, EcoVillage was one of just a handful of cohousing communities in the US, among twenty or so intentional sustainable communities worldwide. Similar to Camphill, it is part of a worldwide movement of EcoVillages. In Ithaca, approximately 220 residents live on 175 acres in three neighborhoods. 80% of the land is conserved as open space and includes a 50 acre conservation easement held by the Finger Lakes Land Trust.

Unlike Camphill, Ecovillage does not operate a shared workplace environment in which residents work; in fact, the required work contribution to the community is only 2-4 hours per week. Residents decide for themselves which task areas they will undertake and there are teams for cooking, dishes, outdoors, maintenance, finance, process/steering, community life, and more.

Villagers have regular jobs outside the community, they operate small businesses and professional practices, and do substantial work as volunteers. Almost half of the residents work from home on the affiliated farms or in offices in the common houses.



Image: Eco Village Ithaca via Taitem blog

Through its embedded non-profit called Learn@EcoVillage, a small staff and volunteers share knowledge about Village development, its sustainable practices and its hopes for the future. The Village is host to 1,000 local and international visitors per year through tours, workshops, immersion experiences, and home stays, films, study groups or hand-on service projects.<sup>3</sup>

EcoVillage offers guidance for Wally Farms in governance, income generation, and site planning and architecture. Overall, the Village operates like a cooperative, with a village association and consensus decision-making. All Villagers are member/owners. Recent investments for on-site energy production via solar panels were also cooperatively implemented. The onsite farms run as a separate commercial entities, which are funded by a community-supported agriculture (CSA), a “U-pick” berries farm, sales at farmers markets, and an incubator farm that trains young farmers. The education component operates as its own non-profit entity relying on grants and donations. Each neighborhood experiments with green building technologies and energy efficiency.

## **OMI ART CENTER, GHENT, NY**

[Art Omi](#) is a non-profit arts organization in Ghent, NY with residency programs for international artists, writers, translators, musicians, architects and dancers. By forming a community with creative expression as its common denominator, Omi creates a sanctuary for the arts community and affirms the transformative role of art.

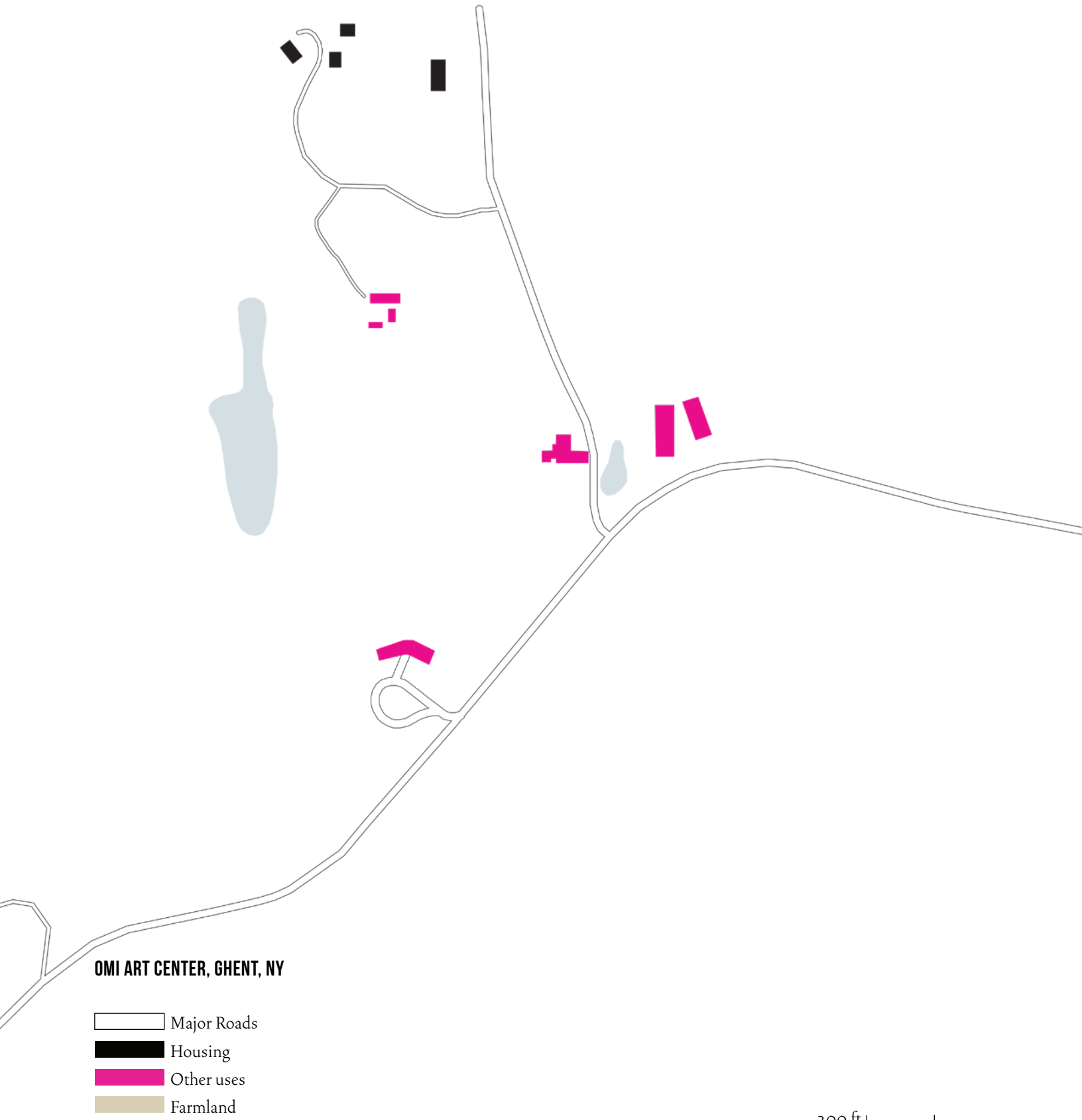
Since its founding in 1992 by Francis Greenburger – real estate investor, entrepreneur, literary agent, and arts enthusiast – Art Omi has been guided by the principle that artistic expression transcends economic, political, and cultural boundaries. To date, Omi has hosted more than 2,000 artists from over 100 countries. Inviting a unique and varied mix of artists, writers, musicians and dancers from all over the world Omi creates a diverse, positive working community.

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<sup>3</sup> <http://ecovillageithaca.org/about-ecovillage/>

*Exposure to internationally diverse creative voices fosters tolerance and respect, raises awareness, inspires innovation, and ignites change*

*-- Excerpt of Mission Statement at Art OMI*



**OMI ART CENTER, GHENT, NY**

- Major Roads
- Housing
- Other uses
- Farmland

200 ft





Image via Art OMI

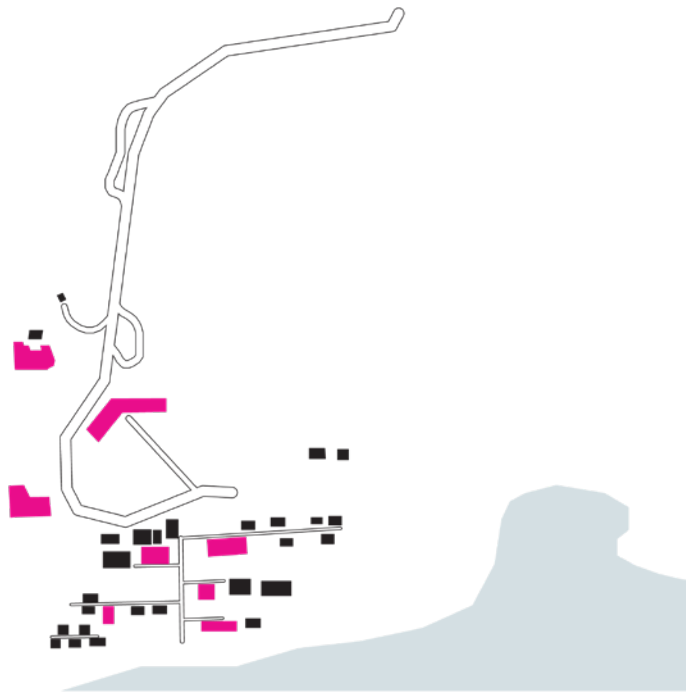
Situated on 300 acres of open land, Omi has facilities for over 30 residents at a time, including a large two-story barn with indoor studios and contemporary residence buildings, surrounded by perennial beds, expansive lawns, and fruit trees, all adjacent to an open sculpture park. A late 18<sup>th</sup> century Federal style farmhouse serves as a gathering center, providing a full kitchen, television room and library, and a view of the Catskill mountains.

Work spaces include indoor and protected outdoor studio spaces, a kiln, a printmaking shop, hand tools, welding equipment and five private light-tight studios for projection work. Daily trips to regional arts suppliers are provided. A [“Visitors Program”](#) enables gallery dealers, curators, critics and artists to meet the residents and discuss their work, and foster a more connected community of arts professionals. While the original community was small, Omi has grown to include two large public sculpture fields and a visitor center that houses public and educational programming. In 2017, Omi added an architecture residency to complement the mission of the arts programs. Omi is well funded, with an annual budget of \$2 million injecting more than \$500,000 into the local economy.

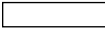



As a private foundation, Art Omi offers guidance in its programming of a large site for semi-public residencies as well as public programming, and a year-round accessible sculpture park. All public programming is free of charge.

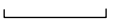
*Created as a research and studio program in the arts, Haystack's original mission was to teach fine craftsmanship, develop latent or inherent creative ability, and carry on research and development in connection with the crafts*

*-- Excerpt of Mission Statement at Haystack*



**HAYSTACK MOUNTAIN SCHOOL OF CRAFTS, DEER ISLE, MAINE**

-  Major Roads
-  Housing
-  Other uses
-  Farmland

200 ft 

## HAYSTACK MOUNTAIN SCHOOL OF CRAFTS, DEER ISLE, MAINE

[Haystack Mountain School of Crafts](#) is an international, non-profit, studio program located on Deer Island off the coast of central Maine. Founded in 1950, Haystack offers facilities, workshops, residencies and classes for a wide variety of arts and crafts practitioners, at any stage of their career, drawing from the international community of artists as well as Maine residents and students.

The 1961 design of the 40 acre School, by noted modern architect Edward Larrabee Barnes, is a distinct part of its identity: a central stairway runs down slope from the entrance to the shoreline – offering a view of the horizon – and is flanked on either side by platforms with six studio workshops, dining hall, residential cabins, library and 100-seat auditorium. The School focuses on crafts practices in ceramics, fiber, graphics, metals, glass and wood, and has recently established a Fab Lab (digital fabrication) in partnership with MIT.

The School, which runs programs for about half the year, offers short term stays as well as long term residencies, and students, visiting artists, and faculty live, eat and work on site. Studio work is led by local, visiting and prominent faculty artists. Regular programming and events in music, poetry and dance supplement the work and schedules of residents. In addition, international workshops, symposia, and special conferences on topics ranging from materials, to new technology, and the creative process are a key part of the cultural work at Haystack.

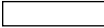





Image via Haystack Mountain School of Crafts

*Hawthorne Valley is a place to rediscover our connection to nature, to how the food that we eat every day is produced, and to ourselves as participants in a dynamic social and natural ecosystem.*

*-- Excerpt of Mission Statement at Hawthorne Valley Farm*

**HAWTHORNE VALLEY FARM, GHENT, NY**

-  Major Roads
-  Housing
-  Other uses
-  Farmland

200 ft 

Haystack revenue consists of tuition and housing charges, as well as grants, donations and endowment. About 25% of Haystack residents receive some form of scholarship or fellowship.

Haystack offers interesting lessons in its emphasis on crafts and providing specialized work spaces for specific techniques. Traditional practices such as wood working, print making, or textile art are interwoven with new methods such as 3D printing and CNC mills. Haystack also offers lay persons or hobby artists the opportunity to participate in its workshops.

## **HAWTHORNE VALLEY FARM, GHENT, NY**

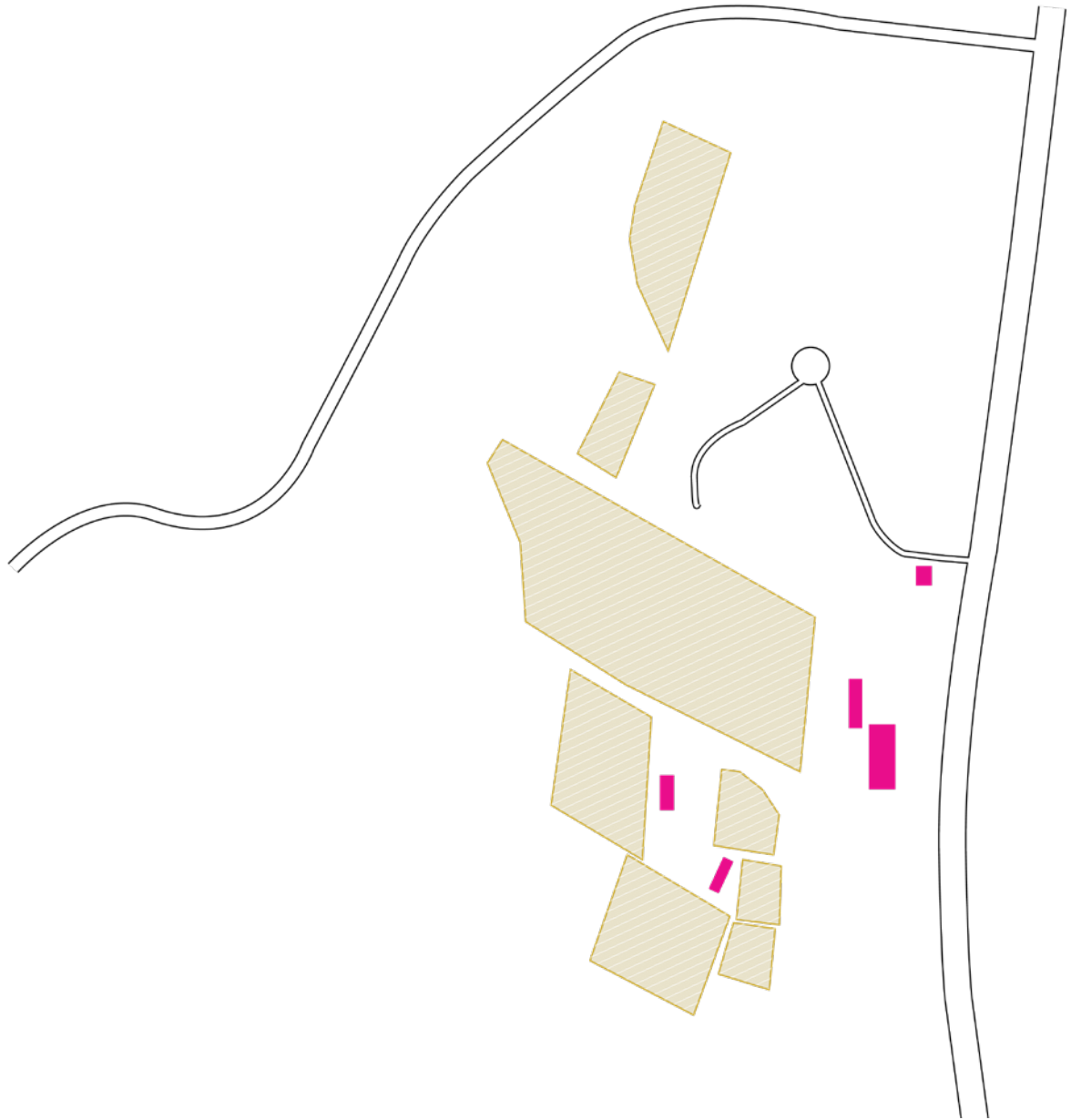
[Hawthorne Valley Farm](#) is a 900-acre certified biodynamic agricultural community in Columbia County whose goal is the “integration of education, agriculture and the arts.” Founded in 1972 and fueled by the philosophy of Rudolf Steiner, the Farm’s first initiative was to teach children from New York City about land stewardship and farming. Since then Hawthorne Valley has grown dramatically and now serves as the umbrella organization for many projects, including on-site education programs, including a pre-K through 12 Waldorf School; a commercial-scale organic and natural foods production facility for regional and NYC distribution; a biodynamic creamery, organic bakery, and fermentation cellar; the “Farm Store” for local retailing of its goods; a 300-plus member biodynamic community-supported agriculture (CSA) program; and several socio-ecological research and teaching programs.

HVF has approximately 14 acres in vegetable production – two of which supply the Farm Store and the Waldorf school. The CSA program and farmers market production takes up about 12 acres. Another 60 acres are used for grain and the remaining land is used as pasture for approximately 65 dairy cows. Six full-time farmers work at Hawthorne together with 8 to 9 apprentices. Other staffing for the School, the Store and other projects totals over 100 people, and accommodation is provided for farm apprentices, summer camp counselors and interns.

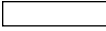



The HVF has become a nationally-recognized leader in biodynamic social and agricultural practices, sponsoring or participating in programs for farmer training and ecological education. HVR programs include [Center for Social Research](#), the [Free Columbia Art Program](#) and the [Farmscape Ecology Program](#), all of which extend the reach of the HVI into the social life of the region, and develop constituencies as well as ideas about the importance of sustainable land stewardship.


*FARM works with everyone from commercial fruit and vegetable growers to backyard gardeners and community members to support the research done by HVRL scientists to protect the agricultural heritage of the Hudson Valley and Eastern New York.*

*-- Excerpt of Mission Statement at FARM*



**HUDSON VALLEY RESEARCH LABORATORY, HIGHLAND, NY**

-  Major Roads
-  Housing
-  Other uses
-  Farmland

200 ft 

## HUDSON VALLEY RESEARCH LABORATORY / FARMER'S ALLIANCE FOR RESEARCH & MANAGEMENT

The [HVRL/FARM](#) is a research facility in Highland, NY, which focuses on the sciences of plants, fruits, and planting, and the bio-ecological systems in which they operate. Housed in a 5,000 sf laboratory and utilizing a 20-acre research orchard, the organization works to protect and support the agricultural heritage of the Hudson Valley and Eastern New York. The organization specializes in tree fruit research, including disease and pest management; horticultural production practices; and commodity research on small fruit, vegetables and regional plants. The organization also conducts Grower Case Studies in the Hudson Valley to study, improve and document changing agricultural practices.

HVRL/FARM works directly with Cornell University and its New York State Agricultural Experiment Station (now called Cornell AgriTech). HVRL was founded in 1963 as a non-profit organization devoted to providing research and information for farming. Today the partnership generates vital research and testing for agricultural practices of the Hudson Valley.



Image via HVRL FARM



Image via The Browning School

“Black Rock Forest is a living laboratory for field-based research and education, encompassing native terrestrial and aquatic ecosystems that are increasingly rare in the region.

*-- Excerpt of Mission Statement at Black Rock Forest Consortium*



## BLACK ROCK FOREST CONSORTIUM

[Black Rock Forest Consortium](https://blackrockforest.org) is non-profit organization, which “advances scientific understanding of the natural world through research, education and conservation programs<sup>4</sup>.” The Consortium maintains a nearly 4,000-acre forest and scientific field station in the Hudson Highlands, near Cornwall, NY; the forest itself is notable, with more than 1,000 feet of relief and “numerous lakes and streams, and high species and habitat diversity.”

The Consortium collaborates with universities, schools, scientific and cultural institutions to foster scientific inquiry, and to create educational programs for students, teachers, and the general public. The Consortium emerged from the 1960s controversy over a pumped storage power plant on nearby Storm King Mountain, and galvanized action to create a new culture of land stewardship. More recently, the organization has added programming specifically under the banner of sustainability.

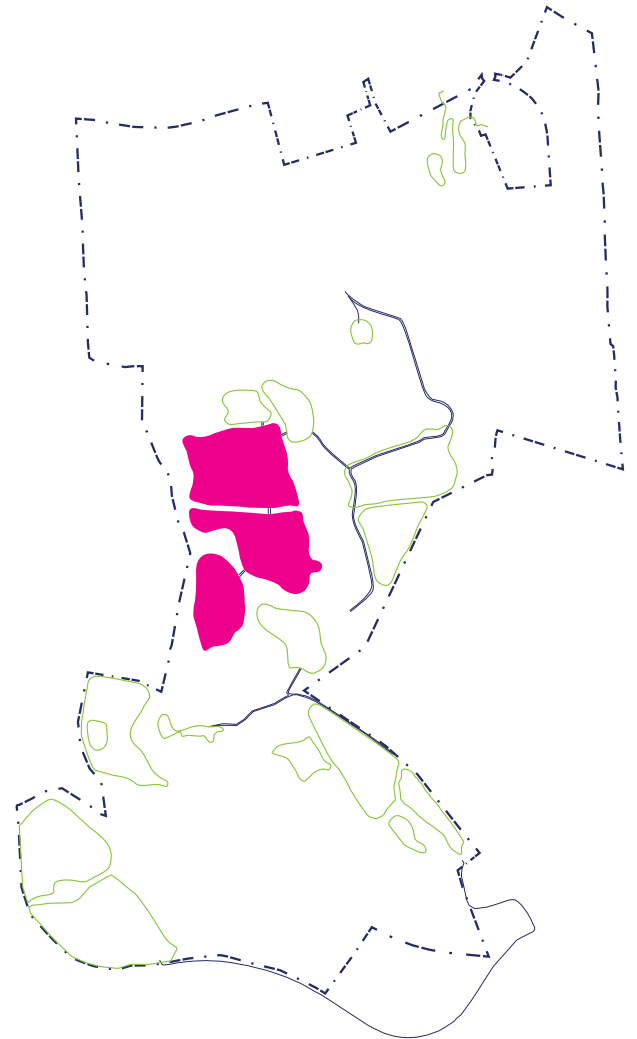
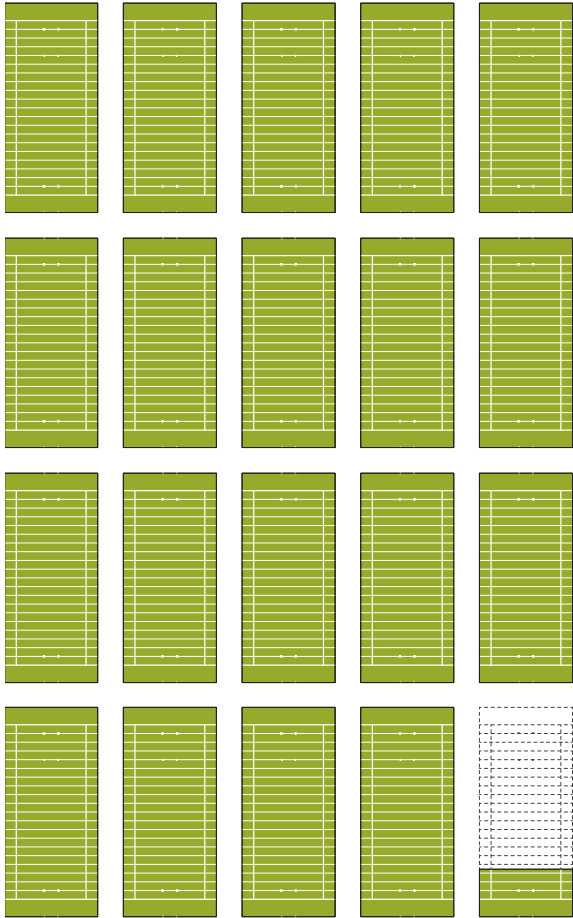
The Forest partners and collaborators have produced many scientific papers, news articles and informational publications, and the site is an active scientific field station. Public programming takes place in two buildings, the Center for Science and Education, with labs and classrooms, and the Forest Lodge, for overnight stays. There is also an experimental solar panel pavilion for energy generation. The Consortium website indicates that the facility and the Forest serve more than 13,000 student-visitor days annually.

Both the Hudson Valley Research Laboratory and the Black Rock Forest Consortium offer guidance and inspiration in using the landscape of the Hudson Valley as a subject of common interest for a large network of researchers. Both organizations practice a networked approach to their defined common interest, while also offering a specific site researchers can use as their laboratory.

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4 <https://blackrockforest.org/about-1>

# FOOD PRODUCTION : 50% SELF-SUSTAINING



25.5 Acres Required for 100 People  
(19.25 Football Fields)

3 Clearings at Wally Farms

## Individual Use

<i>Vegeterian Diet</i>	
<i>Fruits, grains and vegetables</i>	9,583.25 sqft
<i>Meat</i>	
<i>using pork only</i>	1,501.5 sqft
<i>Wheat</i>	
<i>for an average one year diet</i>	25.875 sqft
<i>Dairy</i>	
<i>using a nubian goat</i>	12.5 sqft
<i>Eggs</i>	
<i>using an average family</i>	8.125 sqft

---

**Total** 11,131.25 sqft  
.255 acres per person

*additional land area for grazing ca. 330 sqft*

# THE SELF-SUSTAINING COMMUNITY

A self-sustaining community is one in which the preponderance of its needs can be efficiently produced within its fences and by its residents. This chapter examines two key aspects of life in such a community: food and energy, and the diagrams included here illustrate the programmatic and spatial requirements that would meet the needs of a population of 100 people. Other resources that could be included in a map of self-sustainability are water, (waste water, potable water and irrigation systems) and various forms of waste (and its ability to produce energy).

## FOOD

How much land is needed to feed a 100 person self-sufficient community? The diagrams included here utilize a widely-accepted baseline of providing a diverse low-fat diet with modest amounts of meat and dairy, totaling 2,300 calories per day. A plant-based diet requires the least amount of land but also requires high-quality soil. In New York State, typical agricultural land is of lesser-quality and is more suitable for perennial forage such as hay and pasturing – which are better for cows – than for intensive annual crop production such as soy, wheat, vegetables.<sup>1</sup>

The feeding or growth of a self-sustaining community depends, in part, on the price of land since most forms of development other than agriculture are more profitable in real estate markets. In other words, land protection is often necessary.

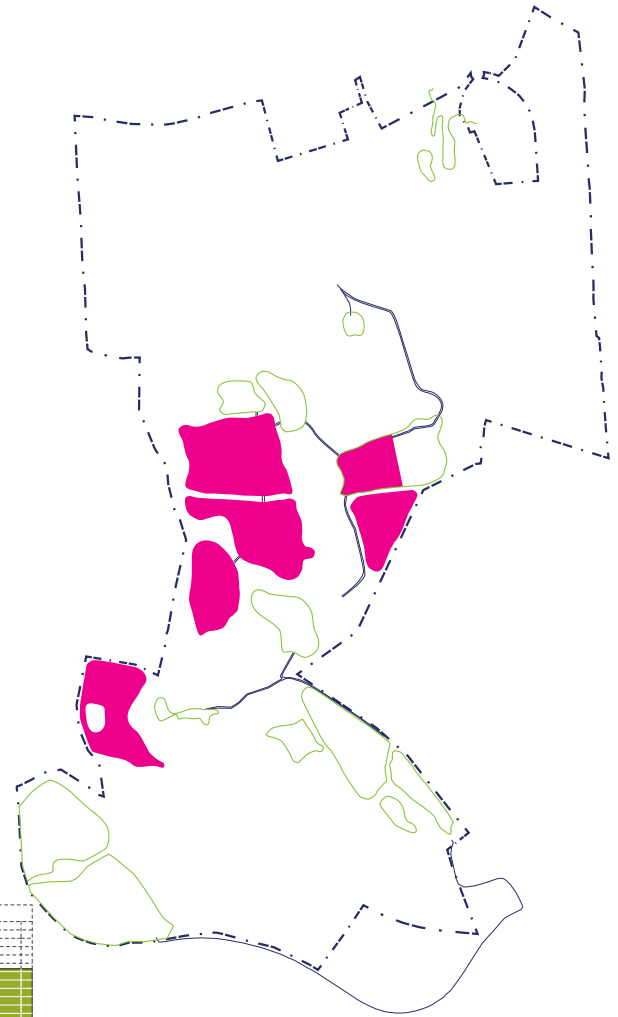
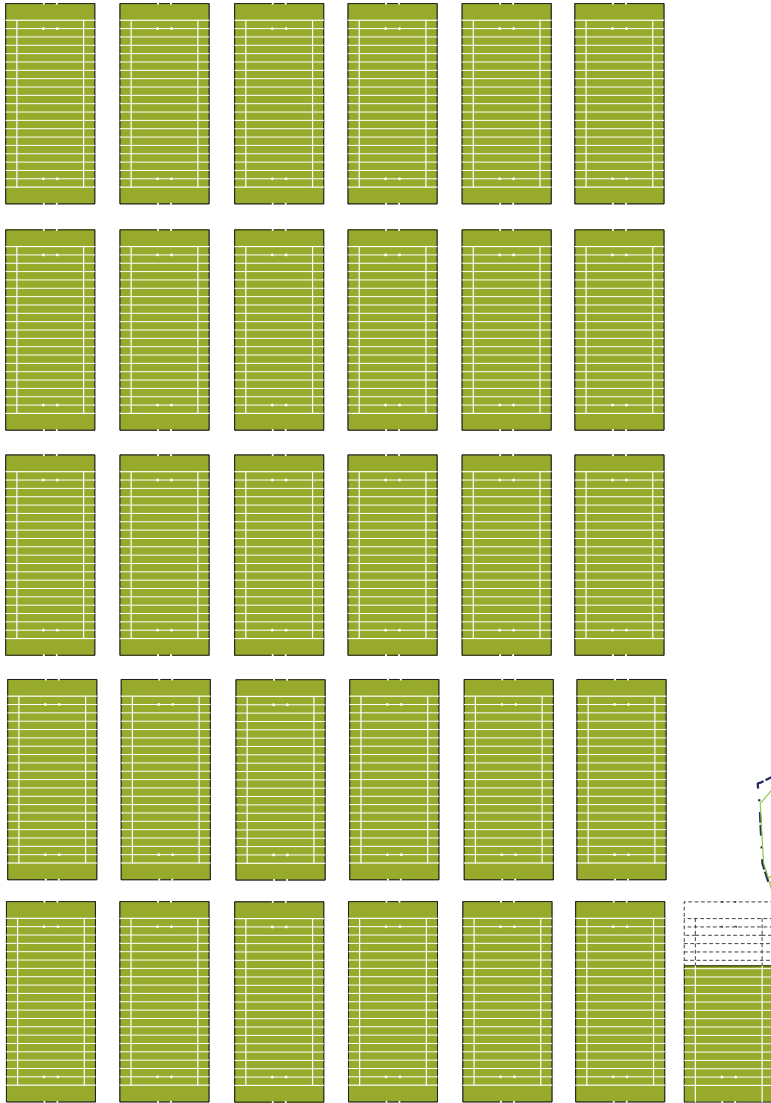
The New York State Department of Agriculture and Markets offers several programs to plan for, implement, and fund the protection of agricultural land using land trust and easement models. In the past 25 years, State programs have protected over 60,000 acres of viable agricultural land.<sup>2</sup> Typically, the state provides a substantial portion of the cost of easements, while the owner, farmer or municipality provide the remainder. New York State also funds the [New York Farm Viability Institute](#), which provides grants for research and education to improve the long-term viability of farms, the food system, and their communities.

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1 Christian J. Peters, Jennifer L. Wilkins, and Gary W. Fick, Cornell University (2008): Land and Diet: What's the most land efficient diet for New York State? in rural new york minute, <http://essex.cce.cornell.edu/resources/land-diet-what-s-the-most-land-efficient-diet-for-new-york-state> (accessed 9/27/2018)

2 See: Agricultural and Farmland Protection Program: <https://www.agriculture.ny.gov/AP/agsservices/farmprotect.html>

# FOOD PRODUCTION : 80% SELF-SUSTAINING



40.9 Acres Required for 100 People  
(30.75 Football Fields)

5.5 Clearings at Wally Farms

## Individual Use

<i>Vegetarian Diet</i>	
<i>Fruits, grains and vegetables</i>	15,333.2 sqft
<i>Meat</i>	
<i>using pork only</i>	2,02.4 sqft
<i>Wheat</i>	
<i>for an average one year diet</i>	41.4 sqft
<i>Dairy</i>	
<i>using a nubian goat</i>	20 sqft
<i>Eggs</i>	
<i>using an average family</i>	13 sqft

---

*Total* 17,810 sqft  
 .409 acres per person

*additional land area for grazing ca. 530 sqft*

Programs offered by regional organizations such as the [Sustainable Agriculture Research and Education \(SARE\)](#) support on-farm research, demonstration projects, marketing innovations, value adding activities, and other projects that enable income generation to keep land under sustainable cultivation.

Additional Resources for farming and sustainable agriculture include the [National Young Farmers Coalition](#), an advocacy organization for young farmers, who are often in need of affordable farm land and the [Northeast Organic Farming Association of NY \(NOFA-NY\)](#), which provides education to farmers, consumers and land care professionals.

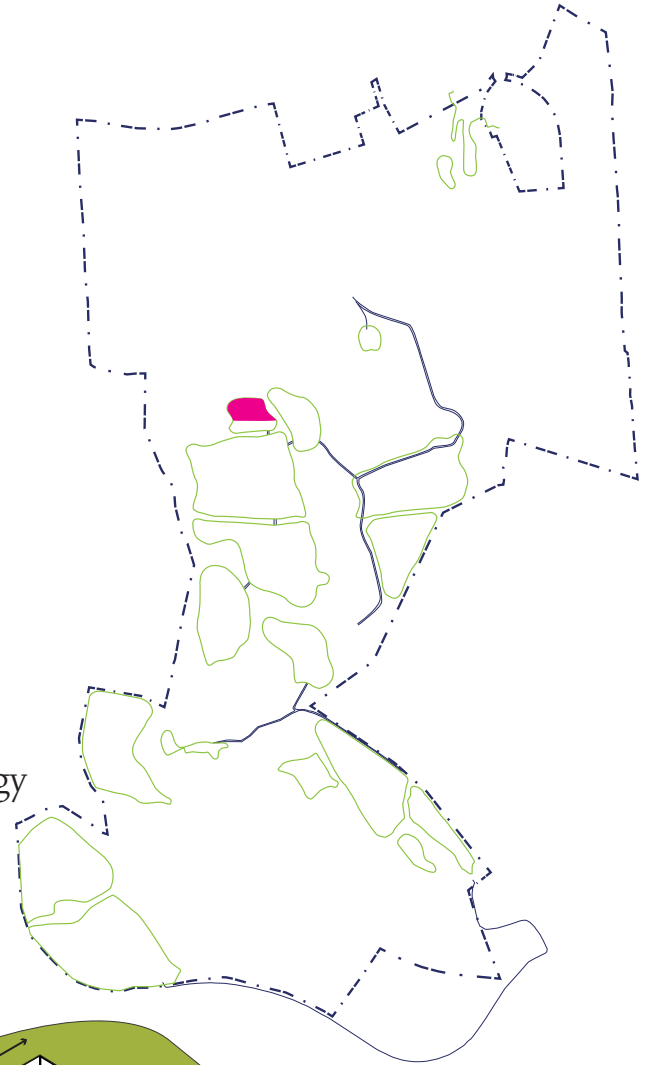
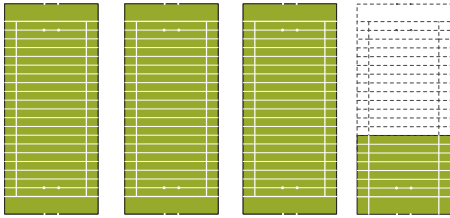
## **SOLAR ENERGY**

Energy is a major cost to any community. Today, solar energy has emerged as means of reducing dependence on national or regional energy supply systems, that is, by going “off-grid.” A self-sustaining community needs to understand how off-grid systems work, and how they can be incorporated into local energy needs and daily routines.

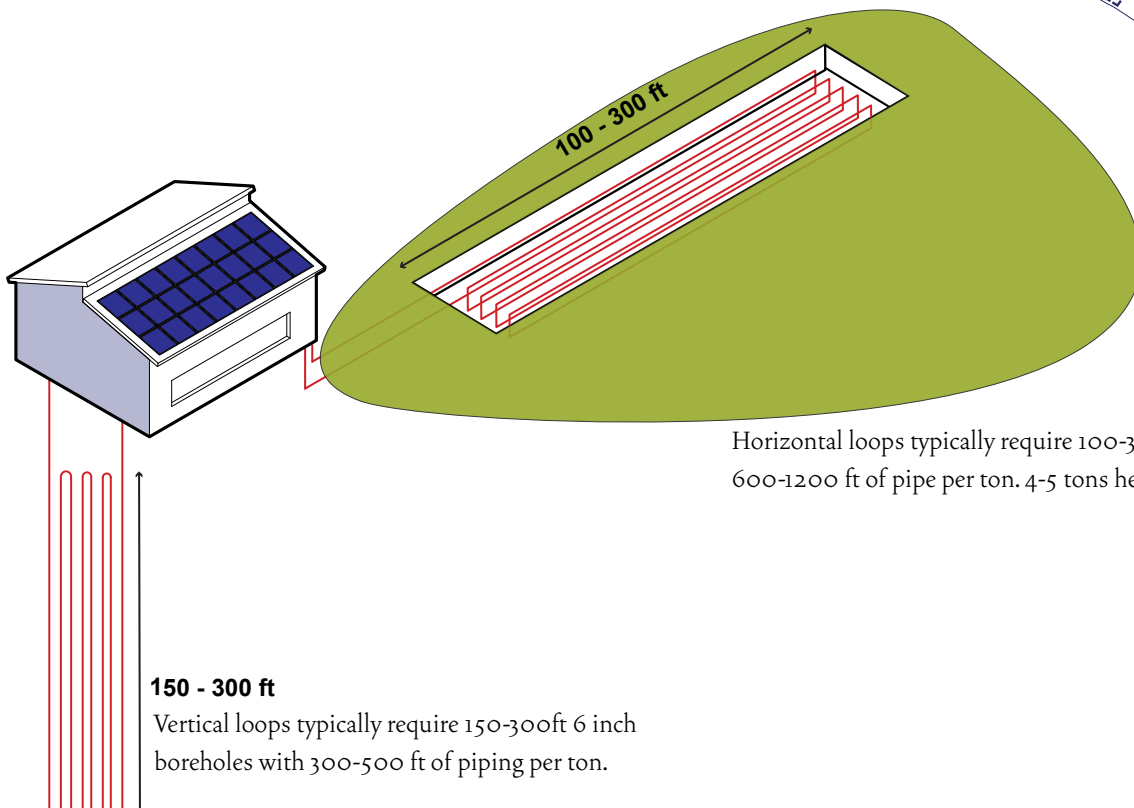
For the sake of simplicity, this report uses the typical NY State residential energy consumption figure of 7.450 kWh for an individual, on an annual basis. To supply this demand using solar power requires about 280 sf of panel area on a south facing surface.<sup>3</sup>

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<sup>3</sup> For calculations, see guidance at <https://www.solarpowerrocks.com/solar-basics/how-much-electricity-does-a-solar-panel-produce/>. Assuming average panel efficiency of 320 watts and 4 hours of full sunlight per day. This calculation is based on “typical” residential needs. Equipment such as cold storage, servers and computers will increase usage.



0.64 Acres Required for 100 People for Solar Energy  
 (3.3 Football Fields)  
 0.5 Clearings at Wally Farms



## GEOTHERMAL HEATING AND COOLING

Like solar energy, geothermal systems have emerged as cost effective ways of reducing reliance on external sources, in this case, on fossil fuels. Geothermal systems can heat or cool buildings by transferring heat to, or from, the moderate temperatures (approx. 55° F) found below the earth's surface. Such systems use heat pumps and in-ground piping, and while start up costs are high, once operational, they are relatively inexpensive.<sup>4</sup>

New York State's Clean Energy Standard (CES) requires that the contribution to in-state electricity generation from renewable resources rise to 50% by 2030, and, in 2017, 28% of in-state generation came from renewable sources.<sup>5</sup> To meet the long-term goal, State agencies offer incentives, tax credits and rebates for conversion to renewable sources, most run through the New York State Energy Research and Development Authority ([NYSERDA](#)). Programs to help with energy efficiency include [NY Sun](#) or [Energy Star](#), and other specialty programs for energy management improvement such as farm waste management (biogas), energy efficiency and conservation, wind power, and geothermal installations. Federal tax credits are also available energy improvement work, including [geothermal](#) installations. The non-profit industry group – the [New York Geothermal Energy Organization](#) – offers advise and training for experts and novices.

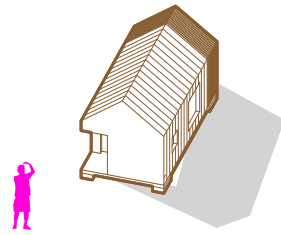
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4 Some systems add ductwork and fans to move heated air. Geothermal systems can also provide residential hot water.

5 US Energy Information Administration quick facts <https://www.eia.gov/state/?sid=NY>

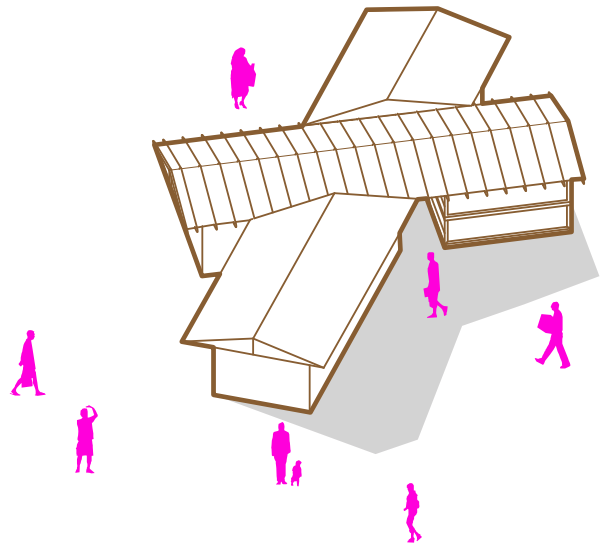
# PRIVATE/MINIMAL

200 - 400 SQFT



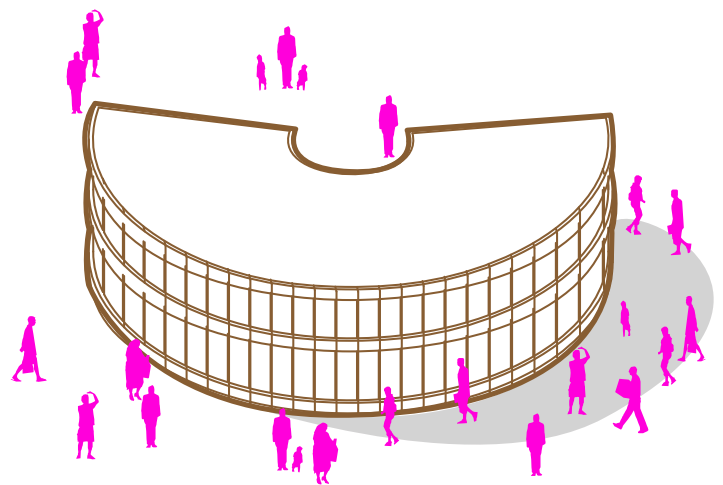
# COLLECTIVE

1,000 - 20,000 SQFT



# PUBLIC/SHARED

1,000 - 80,000 SQFT





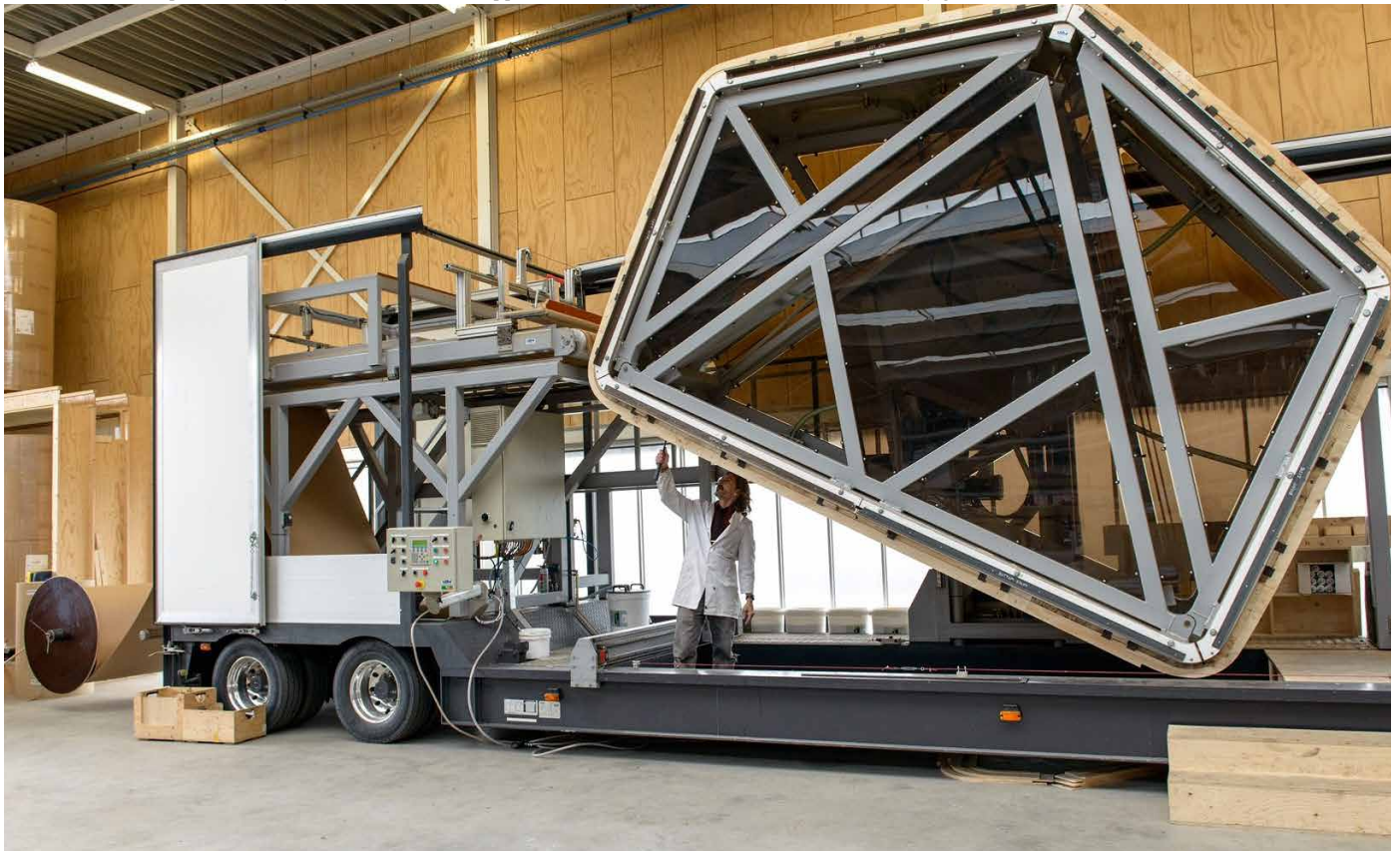
## **EXPERIMENT WITH MATERIALS AND PROCESS**

The Wally Farm project provides an opportunity to experiment with architectural and building techniques, with materials, and with spatial prototypes. This chapter examines built examples of three building types:



Above: 270 sqft unit made out of five segments

Below: Fabrication process: 24 layers of carboard are wrapped around a mould and bonded with eco-friendly glue



Images via Fiction Factory

- A. The private minimal space
- B. The collective work/live space
- C. The public and shared space

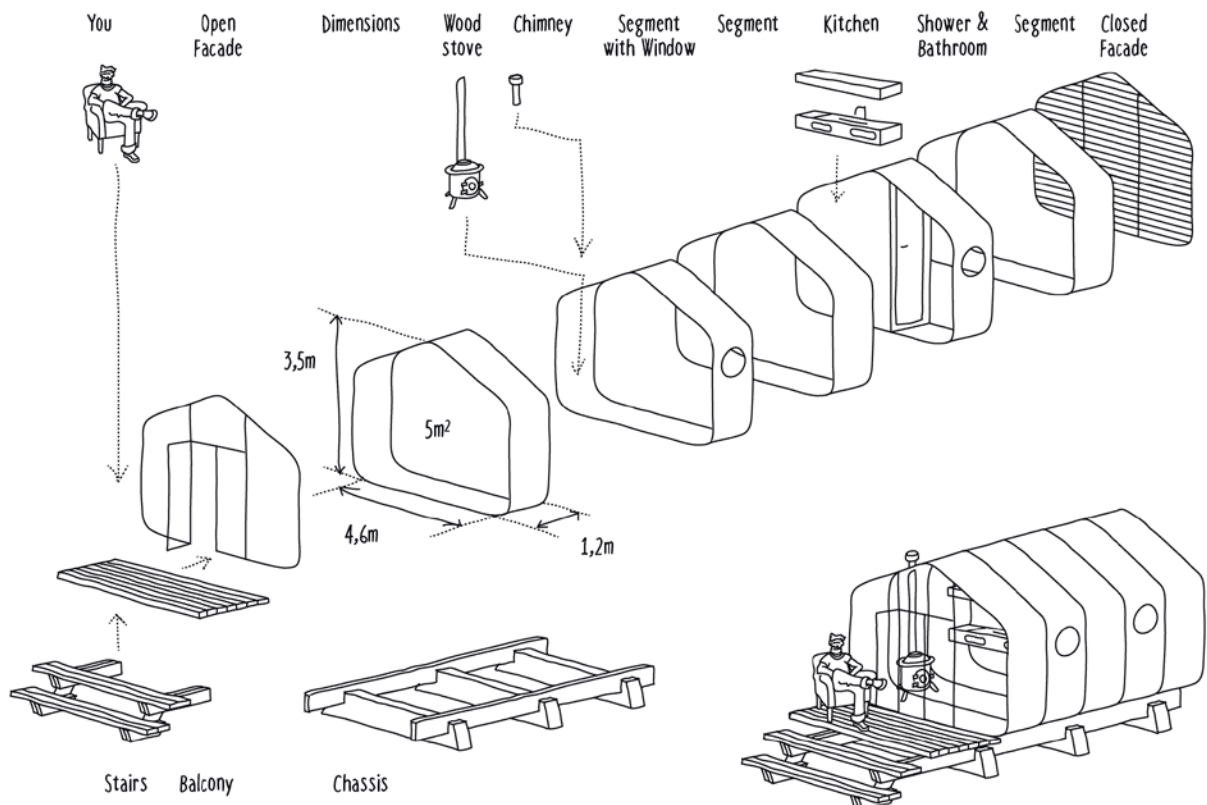
## TYPE A: THE PRIVATE MINIMAL SPACE (200-400SF)

*Wikkelsehouse*, Netherlands, 2016

Architects: [Fiction Factory](#), Amsterdam

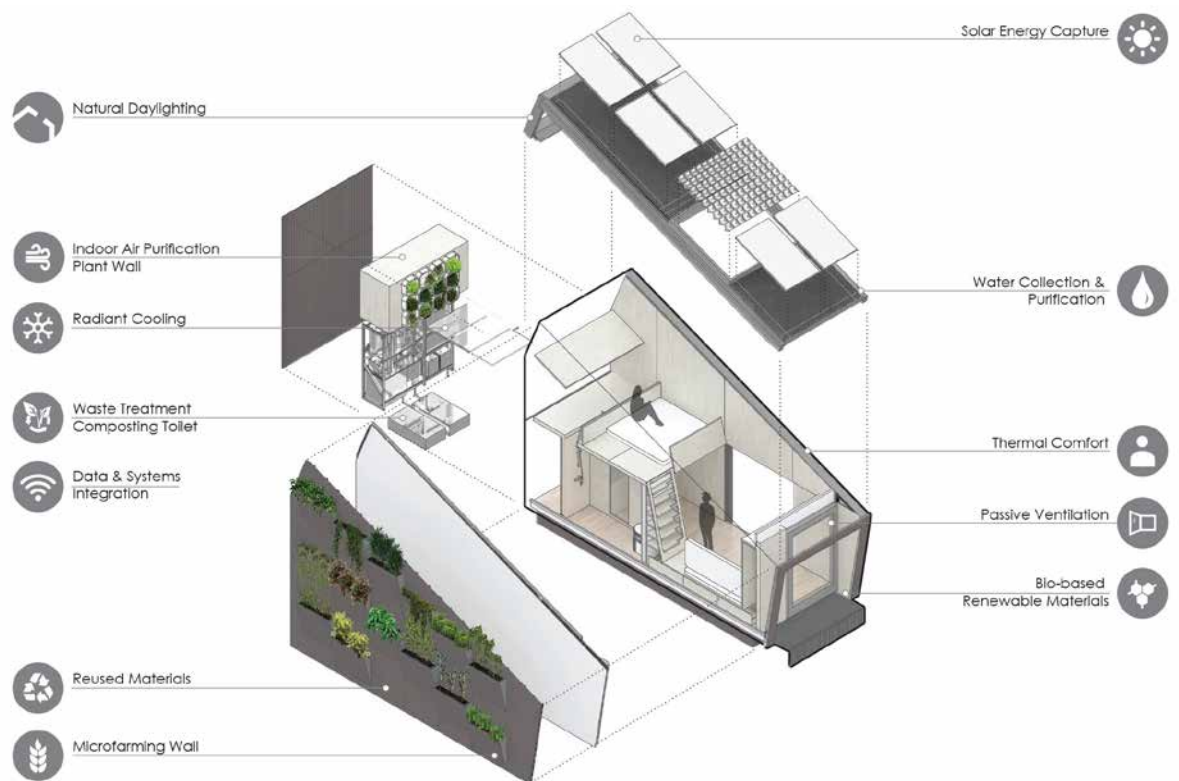
Size: Multiples of 54 sf

The [Wikkelsehouse](#) is made of prefabricated sections – each about 54 sf – that can be delivered to a site, ready for installation. Each Wikkelsehouse section is made of layers





Display of the Ecological Living Module at the United Nations in New York, Summer 2018



of cardboard shaped by a mold, and each is approximately 11.5' high by 15' wide x 4' deep (3.5 m x 4.6 m x 1.2 m) and can be combined to create small dwelling units. Each segment weighs about 1100 lbs. (500 kg) and does not need a foundation. Installation is measured in days, not weeks or months.

***Ecological Living Module*** (ELM), New York, US, 2018

Architects: [Gray Organschi Architects](#), New Haven, CT

Size: 237sf

[The Ecological Living Module](#) is designed and engineered to operate autonomously. It is a demonstration project for residential construction that meets the United Nations' Sustainable Development Goals (SDGs) and provides high-quality, efficient, and flexible housing. The ELM was developed in partnership with the Yale Center for Ecosystems in Architecture (CEA) and UN Environment.

Each 237 sf house is powered by renewable energy and minimizes the use of natural resources, in particular, water. The module's built-in systems include solar energy generation, non-toxic materials, on-site water collection, micro-agriculture infrastructure, natural daylighting, plant-based air purification, and passive cross-ventilation.

***COBS Year-Round Micro Cabins***, Leadville, CO, 2016

Architects: [Colorado Building Workshop](#), University of Colorado, Denver

Size: 200 sf

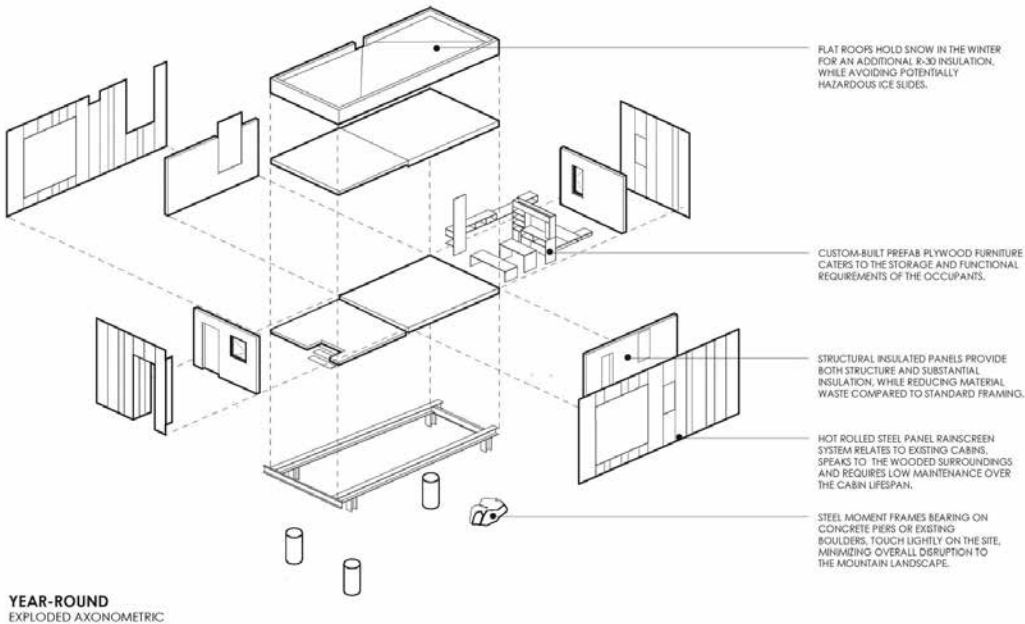
The Micro Cabins were produced for the Colorado Outward Bound School ([COBS](#)) – a non-profit organization that focuses on outdoor education. Designed and built by 28 students (and faculty), each of the seven Cabins is 200 sf and accommodates one or two residents. Each cabin is sited differently on the hilly wooded site, and each has unique design features.

Each cabin is fully insulated and meets the International Energy Conservation Code climate Zones 7 & 8 (typically used only in Alaska); and each Cabin is powered by a single electrical circuit providing lighting, heating, and power for small appliances and computers. Inspired by [quinzees](#), a snow shelter made from a hollowed-out pile of snow, the students adapted the logic of “snow insulation” for the Cabins. The 2016 Micro Cabin workshop was preceded by a 2015 workshop, which yielded 14 seasonal, uninsulated cabins at a remote, high-altitude forested site.



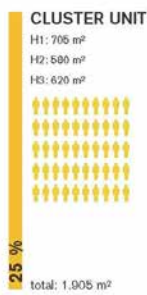
The COBS Cabins also include a central staff lodge for cooking and laundry.

Interesting takeaways for Wally Farms from these examples are the extremely small size of each of the units. At less than 300 sf, they offer living space for 1-3 individuals including a washroom, cooking and dining. The ELM and the COBS cabins also demonstrate the ability to design and build these small units and run them self-sufficient using solar energy production and passive house standards.

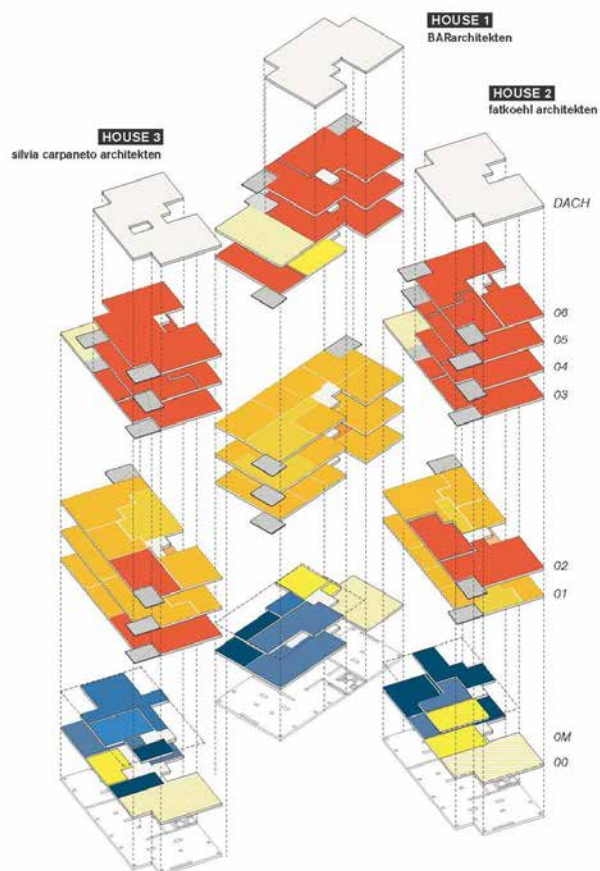




**PROGRAM INTERIOR**



**TOTAL: 7.620 m<sup>2</sup>**





## TYPE B: THE COLLECTIVE WORK/LIVE SPACE (2000 - 30,000 SF)

*Coop Housing at River Spreefeld*, Berlin, Germany, 2013

Architects: [Carpaneto Architekten](#), [Fatkoehl Architekten](#), [BARarchitekten](#)

Size: 65,000 sf

[Coop Housing Spreefeld](#) is a cooperatively developed, multigenerational, and multicultural 64 unit housing project in the heart of Berlin. The project consists of three buildings, creating a shared communal space that is open to the Spree River. Each building utilizes an open frame concrete structure which enables a variety of unit and space types to accommodate different user groups – including conventional families as well as communal living arrangements in cluster apartments for groups of 4 to 21 people.<sup>6</sup> There are communal laundry rooms, fitness rooms, guest rooms, rooftop terraces, and a music and youth room. All apartments are barrier-free.

Non-structural elements of Spreefeld are environmentally-safe materials, mostly wood products, for exterior panels, wood wool insulation, and balconies. The buildings comply with passive house standards, and utilize a co-generation unit, a geo-thermal system and photovoltaics to maximize on-site energy production and use.

Equity in the project varies greatly, with subsidies made via the coop, and residents build out their own units.

6 For more on the “cluster” type, see: <https://medium.com/@15kwhm2a/bring-on-the-clusterwohnung-gen-c5490d76a87b>





***Yokohama Apartment***, Kanagawa, Japan, 2013

Architects: [ON Design Partners](#)

Size: 1,600 sf

The [Yokohama Apartment](#) is an artists residence, which consists of a ground-level courtyard giving access to four one-room units above. The courtyard is designed as exhibition and work space and is open to the street. The four “huts” above are 215 sf, each with a private bathroom and kitchenette.

These examples offer guidance for Wally Farms in experimenting with shared living or work spaces. The great difference in size also highlights that there is great flexibility in designing shared spaces.

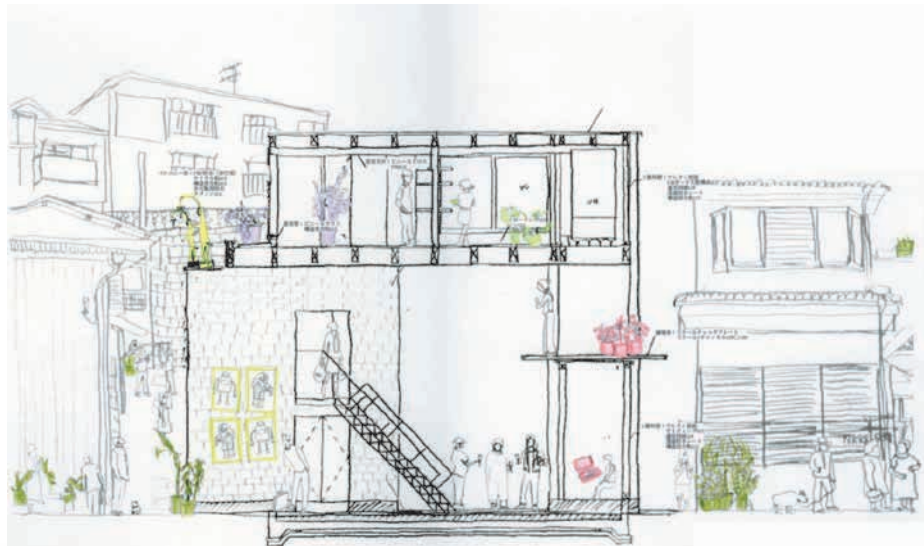




Image: Dean Kaufman via Dezeen



©BNIM

Image: BNIM Architects

## TYPE C: THE PUBLIC AND SHARED SPACE (1000 - 100,000 SF)

***River Building***, Grace Farms, New Canaan, CT, 2015

Architects: [SANAA](#)

Landscape Design: [OLIN](#)

Size: 83,000 sf

Grace Farms is an 80-acre nature preserve and cultural facility less than one hour from Manhattan. The River Building houses the many programs and spatial needs of the Grace Farms Foundation whose mission is for “people to experience nature, encounter the arts, pursue justice, foster community and explore faith.”<sup>7</sup> The building has a unique shape and disposition across the site and includes a 700-seat theatre, a 3,300sf library, a 7,000 sf dining room, a 1000 sf welcome center and a 7,000 sf gymnasium. The building is heated and cooled by a vertical closed-loop geothermal system.

Approximately 77 of Grace Farms’ 80 acres are retained in perpetuity as open meadows, woods, wetlands and ponds. The River Building preserves and enhances the existing habitat for native flora and fauna while integrating a community garden, athletic fields and a playground and trails. Trees cleared for construction are being milled on site to construct the furniture for Grace Farms.

***Omega Center for Sustainable Living***, Rhinebeck, NY, 2009

Architects: [BNIM Architects](#)

Size: 6,250 sf

The Omega Center for Sustainable Living (OCSL), is part of the [Omega](#) spiritual and educational Retreat Center, and is a sustainably built environmental education center and water treatment facility. It is a net zero energy building, generating more electricity than it consumes over the course of the year. It uses 200 photovoltaic solar panels, is heated and cooled using geothermal energy, and was built with low chemical materials sourced according to the highest sustainability standards as set by the US Green Building Council.<sup>8</sup>

The OCSL houses the wastewater treatment system – the [Eco Machine](#) – for the Omega Retreat Center, and combines an array of technologies and materials to process up to 52,000 gallons of water per day.

Both of these case studies offer insight in integrating sustainable processes for energy production and water management in a public building. In the case of the River Building, these building techniques are mostly invisible. What dominates the architectural form is the spatial experience of the building in the landscape. In the case of the Omega Center, the building itself is an experiment and the demonstration object of these techniques.

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7 See <https://gracefarms.org/grace-farms-foundation/>

8 See: US Green Building Council, [LEED Platinum designation](#).

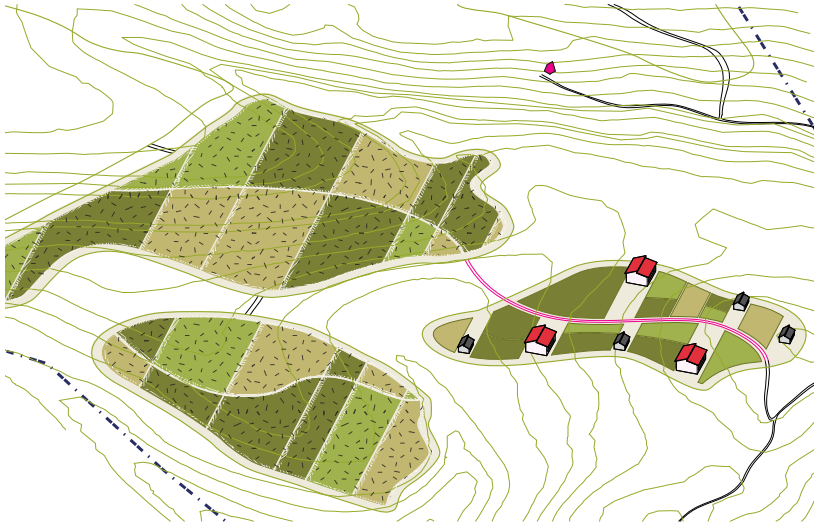


Diagram 1: Linear Central Axis

Buildings of different sizes and uses are arranged along a linear spine that provides access through the clearing. Open spaces between buildings are used for gardens and farming. Small units can be small private work/live units, whereas the larger buildings contain communal spaces as well as private rooms. Other clearings are reserved for more production-oriented farming to serve the immediate community, whereas other clearings are farmed to serve outside needs.

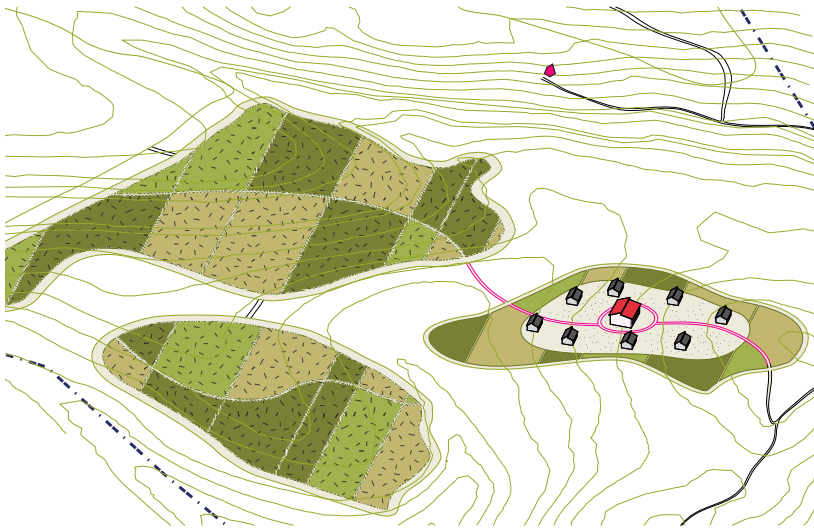


Diagram 2: Town Center

Small, scattered private units are arranged around a central communal space and building. This larger structure contains a communal kitchen and shared workspaces. While the space between buildings is designed for foot traffic and encounters between buildings, the entire central cluster is surrounded by a ring of open space, gardens and vegetable farming. Other clearings are reserved for more production-oriented farming to serve the immediate community, whereas other clearings are farmed to serve outside needs.

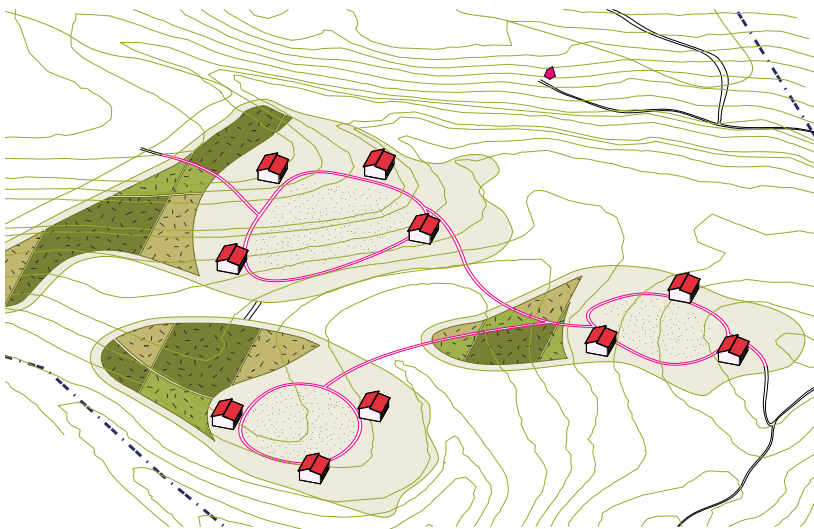


Diagram 3: Neighborhoods

Clusters of two to four medium size buildings form a small neighborhood in existing clearings. Each building contains a mix of private and shared or semi-public spaces, and each neighborhood has a central public space. Here, in each clearing, approximately 50% of the land is reserved for farming to supply the respective *neighborhood* with its food needs on site.

## **BUILD NEIGHBORHOODS AND CLUSTERS**

Central to the capacity of Wally Farms to become a robust and thriving community is its site planning. The relation between buildings, indoor and outdoor spaces, and circulation paths, that is, among the programmed uses and necessary places, will shape daily life. The shape and size of collective spaces also need to allow users and residents to form their own relationships and shared experiences. Learning from some of the previous research, the diagrams to the left test examples of forming neighborhoods and clusters of different size and use to create adjacencies, but also to allow users and residents to form smaller sub-communities of shared spaces, interest or responsibilities.





## GROW OVER TIME

How will Wally Farms grow? Speculating about the Farms' first decade, two contrasting scenarios follow, utilizing the research and lessons documented above, and emerging from discussions with many people.

Both scenarios begin small, building on one clearing and growing outward over time. Other clearings would be used for farming, although at least one would transition from the current feed crop to a more diverse palette of vegetables and fruits to sustain future residents.

Both scenarios envision a mix of permanent and temporary residents. Temporary living units would be for artists, scientists and other practitioners in residence, who would use the space and the land to work, share knowledge, and collaborate to further Wally Farms' mission. In addition, some units are reserved for long-term residents, who act as stewards of the farmland, forest, and wetlands, and help build new structures and the organization itself.

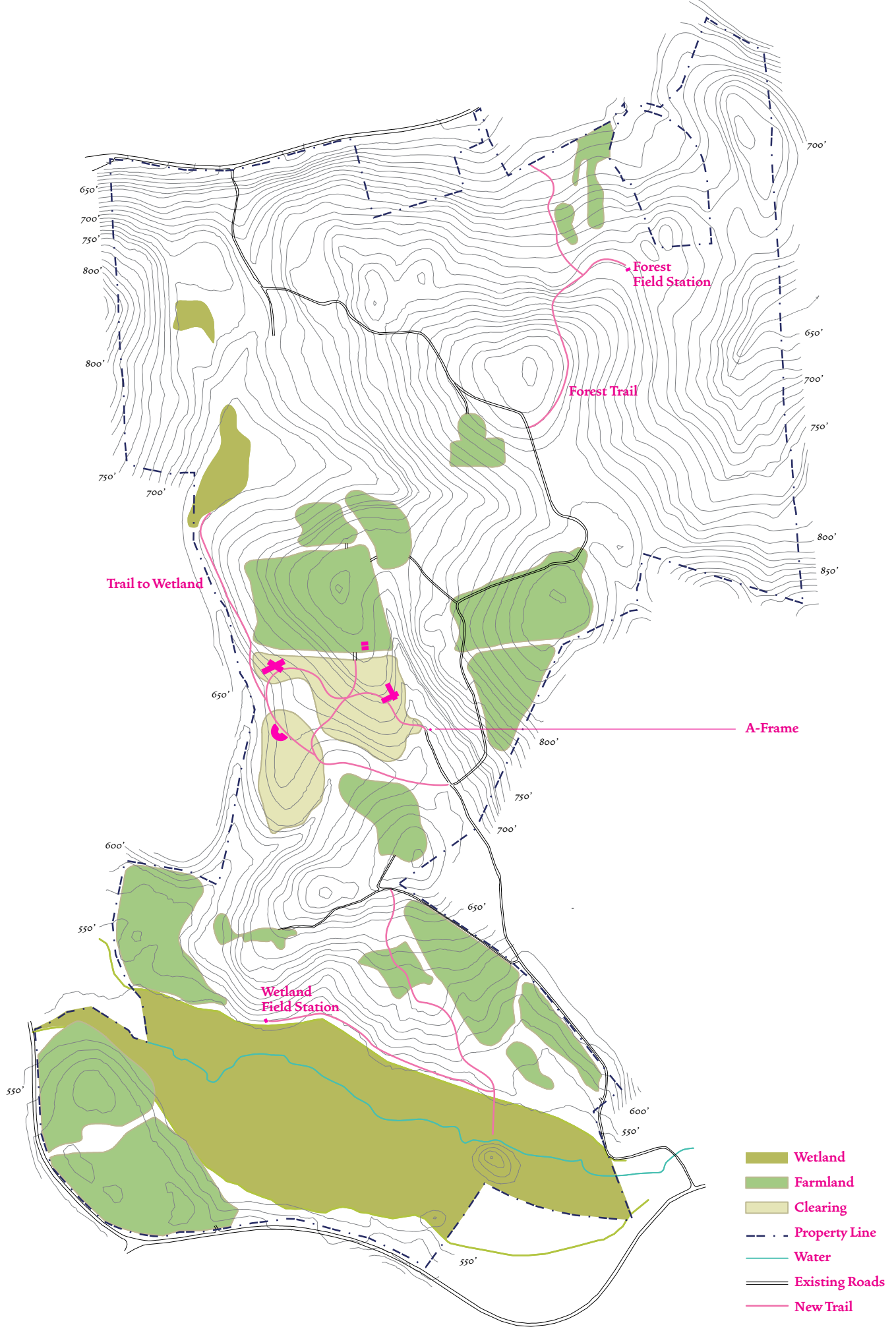
Both scenarios envision three key actors/activities:

A farmer in residence works the clearings to supply food for residents and for commercial or CSA markets. The farmer also assists with research projects about soil sciences, farming techniques, seed collections, greenhouses or aquaponics.

A curator of temporary residency programs manages the scheduling and daily life of the visiting artists, architects, scientists and other practitioners, as well as public programming.

An ecologist ensures the health of the farmed and non-farmed land, develops research, monitoring and evaluation protocols, develops an ecological assessment and a long-term conservation plan. The ecologist in residence can also assist the curator in creating public educational programming around land conservation and ecosystem change.

Over time, each actor will generate new staffing needs. Scenario 1, "Communal Live/Work" envisions a greater emphasis on permanent residents sharing larger structures, whereas Scenario 2 "Scattered Sites" offers a variety of small spaces for residency programs.



## SCENARIO 1: COMMUNAL LIVE/WORK

*Wally Farms is a collective enterprise consisting of shared live and work spaces.* Buildings are mixed-use and, like a meeting house or a lodge, provide multiple opportunities for learning, interaction and discussion. Distinctions between private, shared and public spaces are expressed within each structure, unlike scenario 2, where private units are separate from communal spaces.

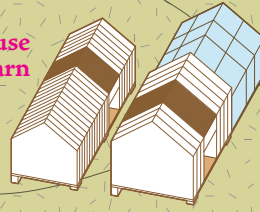
Each clearing accommodates one such “meeting house,” integrated with kitchen gardens, vegetable farming, small animal grazing areas, or open work and meeting places.

Each “meeting house” is commissioned through a design brief shaped by its future residents and staff, focusing on site-specific and program-specific needs, such as common spaces that foster certain types of work – for instance, communal craft studios, aquaponics greenhouses, fabrication labs.

Storage for equipment is also housed in these larger structures. Shared buildings are equipped with heating and cooling systems using a combination of geothermal, biogas and solar panels on each roof.

This scenario suggests a cooperative ownership and governance structure similar to EcoVillage Ithaca, where each building is run by its 10 to 15 residents, all of whom participate in the planning and design of the buildings and associated grounds. Larger infrastructures such as farming operations, public programs or other facilities can be owned and managed as separate entities.

Greenhouse and Barn

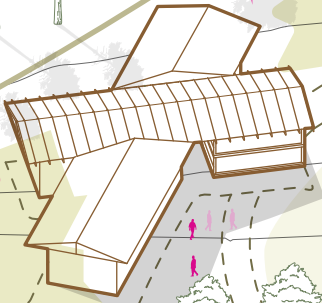


Biodynamic Farm

Grazing Field

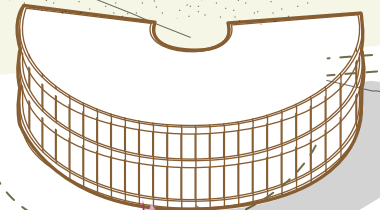
Private living spaces and communal cooking and dining for 8-10 residents; Residency workshops

Wood Workshop



Ceramic Workshop

3D Fabrication Lab  
Bioscience Laboratory



Private living spaces and communal cooking and dining for 10-15 residents

Co-Housing for 10-15 residents;  
Co-working Space;  
Lecture/Gallery Space

Kitchen Garden

Storage/Barn

A-Frame 

Greenhouse

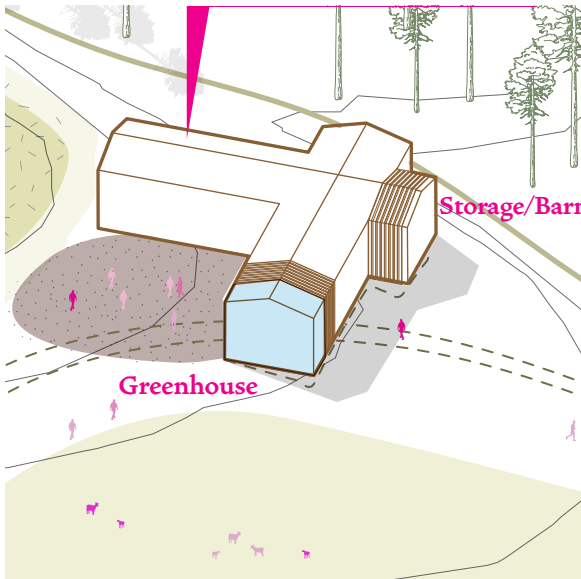
Grazing Field

and  
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GROW OVER TIME

**FIRST COMMUNAL BUILDING**

*Design and build* a space for 10-15 residents to live, work, and eat together. the first building contains small private spaces (bedrooms + bathrooms), communal kitchen and dining, 1-2 communal, flexible workshops, communal exhibition/lecture space, and 1-2 guest rooms. The above-mentioned actors or roles (farmer, curator, ecologist) needed to establish Wally Farms as an organization will be part of this first group of residents.



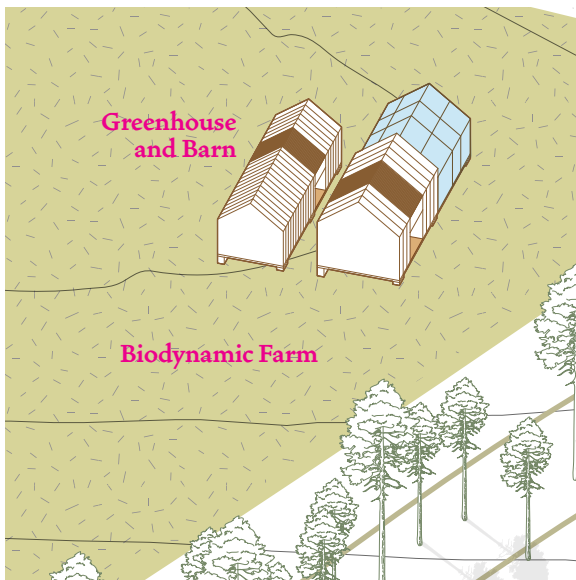
**OPEN SPACE**

*Utilize* the open space surrounding the building for kitchen garden, grazing fields for sheep, goats, or chickens as well as common outdoor areas for meeting, working, and installing artwork or experiments on site.



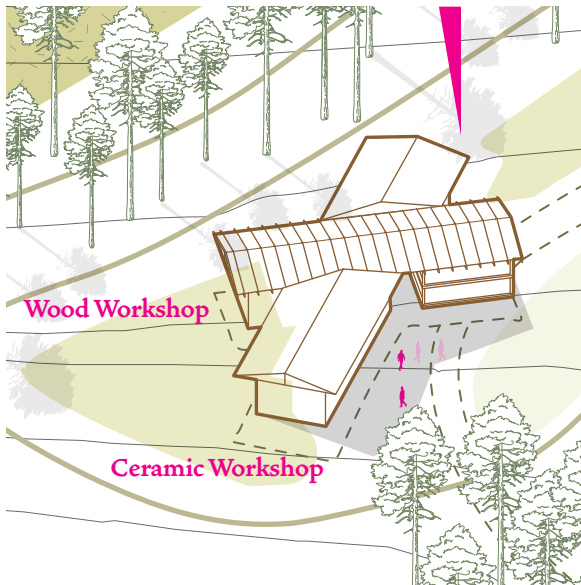
**FARMING**

On a separate clearing, *develop* a biodynamic farming operation with diverse food crop to provide for much of the food needs for residents. A greenhouse provides for extended vegetable growing and a barn is equipped with solar energy production.



## ADDITIONAL COMMUNAL BUILDINGS

## YEAR 5-10



After evaluation and monitoring of the first building, *convene* residents, networks and visitors to plan for growth, including new or revised (or discontinued) programs, space needs, material and technical performance, governance models. New structures incorporate specialized work or research spaces for all residents. Relative proximity between buildings or programs supports collaboration, while conserving the majority of clearings for farming.

## BIODIVERSITY AND CONSERVATION

After an initial “landing” on the site, *develop* a biodiversity assessment and conservation plan to guide future expansion. *Establish and expand* partnerships with research organizations, schools or other non-profits to maximize the use of the land.

*Establish* trails throughout the site, between clearings, and into the wetlands and forest. Study “desire lines” – paths made by daily use, not planning – from Phase 1 to revise movement system.



Image: James River Tidal Swamp via James River Association

## FIELD STATIONS

*Establish* “field stations” on the site to offer opportunity to engage with forest and wetlands through arts and research. These can be used as small cabins for residents. *Strengthen* public programming and residencies by adding a welcome center or gallery space, a calendar of public programming, and encourage artists and scientists to occupy and utilize the entire site

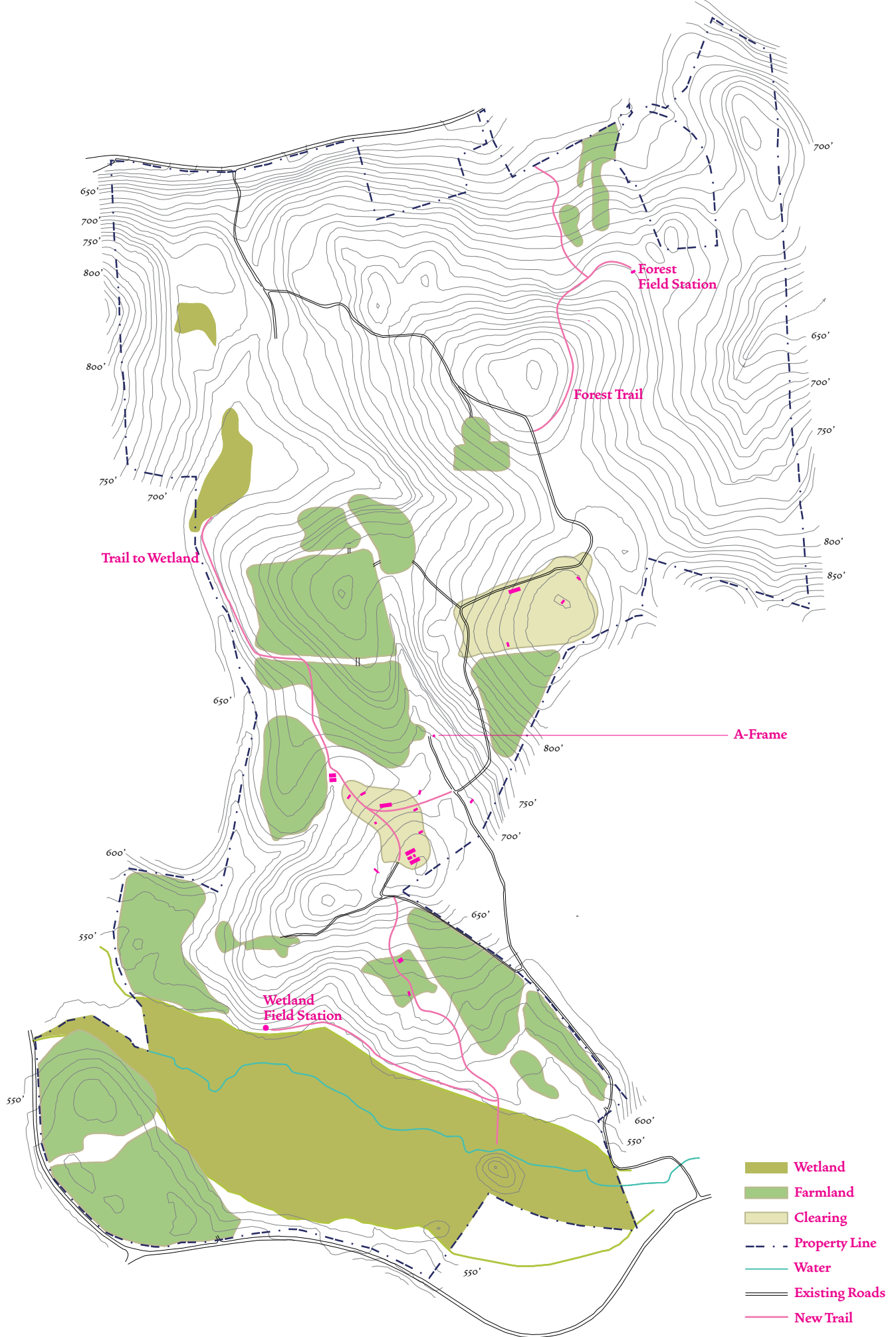


Image: Brockloch Treehouse via a JoyfulCottage







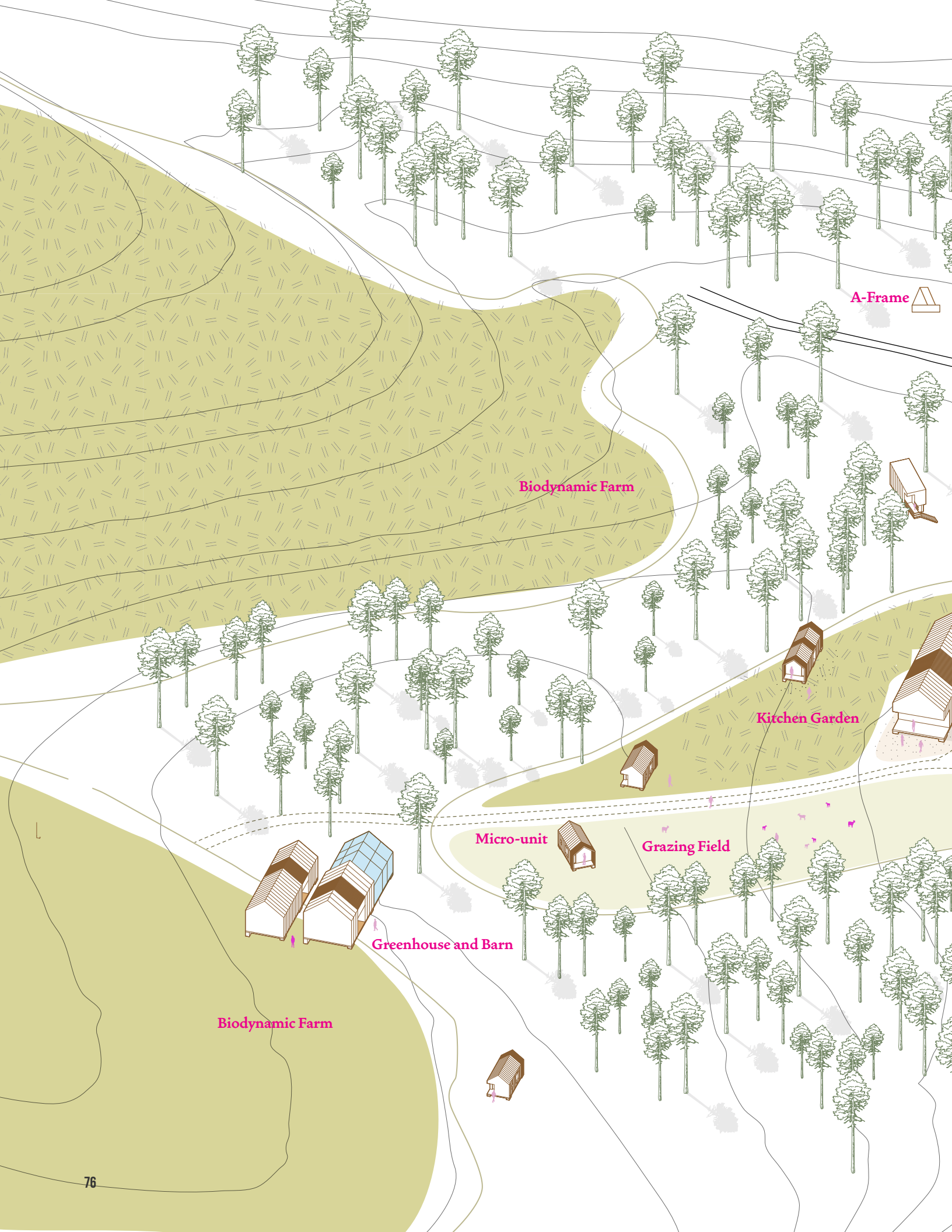


## SCENARIO 2: SCATTERED SITES

*Wally Farms is a collection of individuals who come together for important events.* Residents live and conduct a portion of their work in private, off-the-grid, micro-units scattered across the site, and complemented by communal buildings for cooking and eating, with spaces for collective meeting and working. These larger structures will also provide private space for permanent residents such as a curator, a farmer-in-resident or ecologist-in-residence. Storage for equipment is also housed in these larger structures. Shared buildings are equipped with heating and cooling systems using a combination of geothermal, biogas and solar panels on each roof.

The micro-units are designed and built through an architectural competition with a brief calling for innovative solutions to both seasonal and year-round live/work units.

While Scenario 2 is spatially decentralized, it is governed by a centralized model with a non-profit entity acting as the owner and curator of the site, commissioning design competitions and managing residencies and programming. As the owner and steward of the land, it will also assume responsibility for any farming operation and land conservation efforts through lease agreements with a farmer on site or off-site.



A-Frame 

Biodynamic Farm

Kitchen Garden

Micro-unit

Grazing Field

Greenhouse and Barn

Biodynamic Farm



to Upper Clearings & Forest

Property line

Welcome Center

Communal Kitchen,  
Dining and Workspace  
for 10-15 residents

Communal Workspaces  
and Equipment Storage

Micro-unit

Grazing Field

Greenhouse

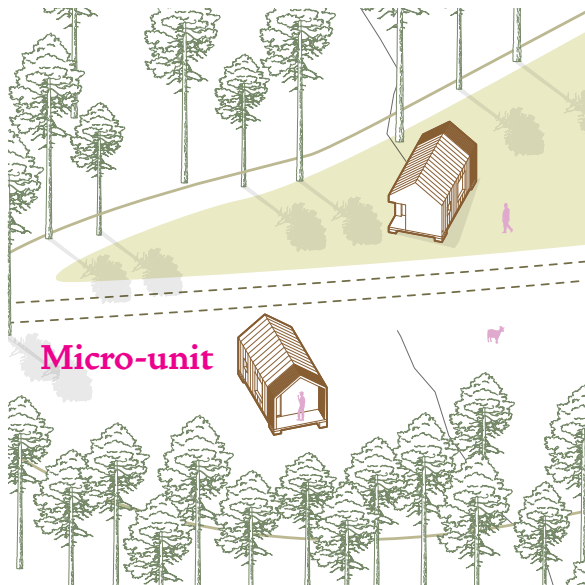
Micro-unit

Workshops & Studios

Micro-unit

Micro-unit

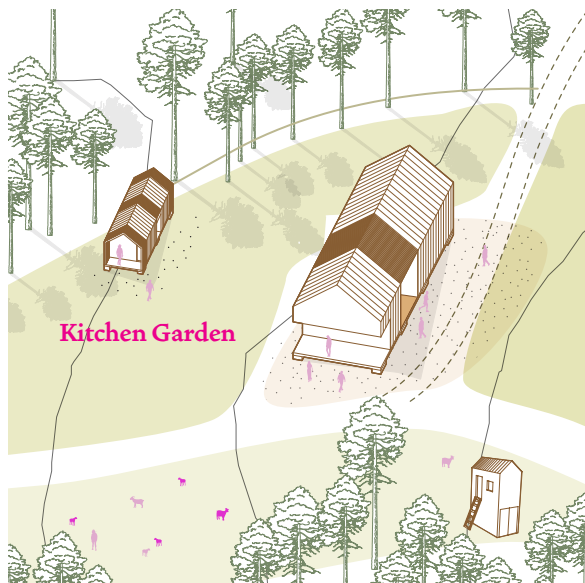
to Wetland



## MICRO UNITS

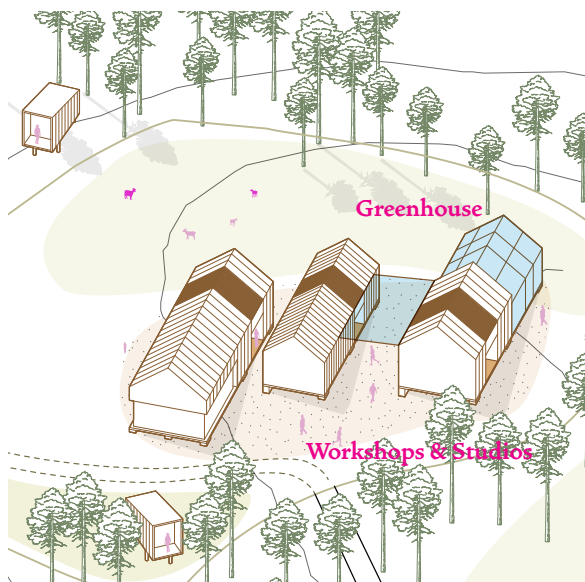
## YEAR 1-5

*Design and build* three micro-units through a design/build competition. Site plans, views and relations between units are part of the competition. Units are 200-400 sf, use passive house technology with solar-powered hot water and electricity. Architects develop new materials, and new building techniques.



## COMMUNAL CENTRAL BUILDING

*Design and build* a central communal building for shared meals and meetings. This also serves as the permanent residence for long-term residents. It is surrounded by shared open spaces and sitting areas, kitchen gardens and space for small animal grazing.



## WORKSPACES

*Establish* 2-3 shared workspaces in close proximity for optimal harvesting of passive energy (geothermal and solar) using one closed loop system. Proximity of different types of workspaces also encourages exchange and multi-media (ceramics, textile, 3D printing) workflows. Together with the central dining and meeting space, these workspaces form a central cluster, while additional micro-units can be more dispersed.



## CONSERVATION PLAN

## YEAR 5-10

*Develop* a comprehensive biodiversity assessment and conservation plan to guide future expansion, especially to determine which and how much of the clearings should be reserved for farming and where to allow for expansion of the micro-units design/built program.

Establish trails throughout the site with additional trails between clearings and into the wetlands and forest. Utilize “desire lines” experienced in the first five years to formalize trails

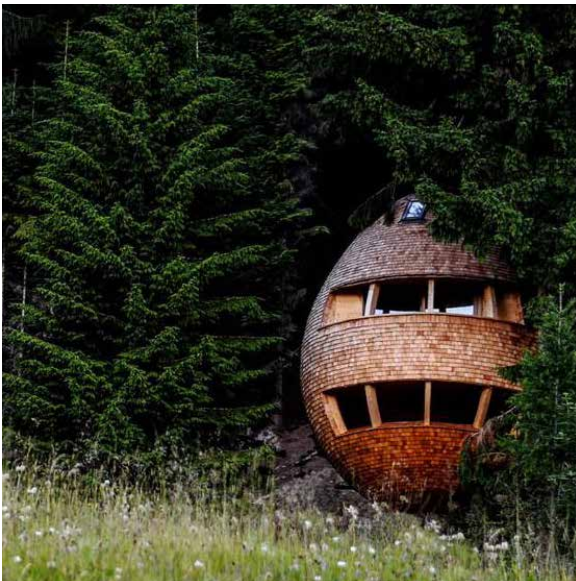


Image: Domus Gaia via Dezeen

## IMAGE MICRO-UNIT IN FOREST

*Develop* additional micro-units, utilizing the entire site and extending into more unique and isolated conditions in the forest or near the wetlands. The micro-units will also serve as field stations for researchers or artists with an interest in these types of environments and habitat. Some units are larger to provide space for families.



## PUBLIC PROGRAM, ART AND RESEARCH

*Establish and expand* partnerships with research organizations, who can utilize the land and field stations for research and education

Diversify farming on remaining clearings from feed crop to produce, vegetables to support research and biodynamic farming methods.







GROW OVER TIME



# ENGAGE WITH SURROUNDING COMMUNITIES & EXPAND THE EXPERIENCE TO OTHERS

The design and operation of Wally Farms must look beyond its borders. This chapter introduces ways in which residents might engage with the larger region, and measure their impact, and expand the experience of place to a wider audience.

Immediate neighbors such as Hawthorne Valley Farms and Art OMI, both located in Columbia County, emphasize their [impact on the local economy](#) through jobs provided, or material and contractors obtained locally. While Hawthorne Valley has grown from a Waldorf School and farm to include other initiatives inviting a larger audience of participants, other organizations, such as the [Hudson Valley Research Laboratory](#) practice a networked approach, collaborating with academic institutions and local farmers. Art OMI maintains a visitor center with a cafe, indoor exhibition space, and a calendar of events in addition to its expansive outdoor sculpture fields, all accessible without a fee. [Haystack Mountain School of Craft](#) offers public programming during the summer months, and school and community programming in the off-season when artists or workshop participants are not in residence. Both examples of intentional communities such as Camphill Village and EcoVillage Ithaca allow visitors to engage with their community through [visits](#), programming or [volunteer](#) work. EcoVillage in particular has developed a robust [independent non-profit organization](#) to facilitate the export of knowledge generated over 25 years of building and living at EcoVillage.



## OPEN SOURCE EVERYTHING

The Eutopia Foundation aims to publicly share the art, research and knowledge produced at Wally Farms via a Creative Commons License. This commitment begins with this Report.

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