The Farm-City Vision

A Long-Range Social Ecological Plan for the Town of Putnam, Connecticut

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NRE 5850 -Practicum Project
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Image: Pixabay.

Contents*

*see document: *On the Falls' Premises* for Parts I and II; Maps 1, 2, 3; and bibliography.

Statement of Purpose

Public Act 15-95

Connecticut Public Act 15-95 established the precedent for towns to decennially draft and publish a plan of conservation and development (POCD). The Act states that a POCD shall:

"(A) be a statement of policies, goals and standards for the physical and economic development of the municipality, (B) provide for a system of principle thoroughfares, parkways, bridges, streets, sidewalks, multipurpose trails and other public ways as appropriate, (C) be designed to promote, with the greatest efficiency and economy, the coordinated development of the municipality and the general welfare and prosperity of its people and identify areas where it is feasible and prudent (i) to have compact, transit accessible, pedestrian-oriented mixed use development patterns and land reuse…"[1]

The decennial timing allows towns a manageable period in which to plan, implement, assess, and replan its activities to improve environmental, economic, and social conditions. Aside from mandating plan submissions, Act 15-95 holds towns to low minimum standards of planning content and implementation. The towns are rightly free to set their own goals, yet also free from accountability for achieving those goals.

Putnam's current POCD, adopted 2016, sets the town's goal of sustaining the community through the American Planning Association's "Triple Bottom Line", described through the "three E's" of sustainability: economic vitality, environmental protection, and social equity.[2] I believe that the goal of sustainability requires a vision ranged longer than ten years.

In their book *Cities as Sustainable Ecosystems*, Peter Newman and Isabella Jennings invoke the Iroquois Confederacy's philosophy of planning for the Seventh Generation, their intention to cultivate a world that can be passed on in good or better condition in perpetuity.[3] By considering more than those currently living—i.e., those on whom we can collect data and therefore tailor our plans—we can make choices today that resonate universally, and hence leave for later generations plenty of what they need to live fully. This long-range plan presents a few of the many choices we can make in the short term that will resonate in the long term.

Section 106 and NEPA

This practicum project reflects the kind of work completed during federal reviews for planning projects. Putnam is a town of some national historic significance, firstly for its mill history and secondarily for its inclusion in the Last Green Valley National Heritage Corridor. While Putnam's current POCD does not involve the town in any federal projects, an implementation of a long range vision should be amenable to federal assistance. In such a case, the development choices would be subject to review under Section 106 of the 1966 National Historic Preservation Act (NHPA) as well as the 1970 National Environmental Policy Act (NEPA). Both documents outline review processes that exemplify the forethought if long range planning. Section 106 places a multi-generational value on the integrity of historic structures as "irreplaceable heritage," that should be "maintained and enriched for future generations of Americans."[4]

Section 106 reviews can be performed in concurrence with NEPA reviews. Per NEPA, federal projects must be preceded by an Environmental Assessment (EA) or an Environmental

Impact Statement (EIS). The EA scopes out the potential environmental impacts of federal projects and, when necessary, suggests project alternatives. If an EA determines that the project poses a risk of a significant environmental impact, it is followed with an EIS. The EIS reviews the situation in further depth and presents the project to the public for review.

By considering the social and ecological effects of various historical and potential development choices in Putnam, this long-range plan follows the kind of research that is conducted during both Section 106 and NEPA reviews. As the Advisory Council on Historic Preservation says, it makes sense to integrate Section 106 and NEPA planning because they both respond to federally funded project initiations, both occur early within planning processes, and the types of resources considered (such as historic properties) in each present high degrees of overlap.[5] Whether or not Putnam applies for federal funding for its plans, I hope this long-range plan further elucidates beyond those noted in the POCD the overlaps between historic and environmental infrastructure, and further stresses the attention that ought to be paid to the two.

Introduction

Toward Completing my Master of Energy and Environmental Management, I have devoted the 2022 summer semester to studying Putnam's social ecological history. My final practicum project critiques the 1957 document entitled *Rebirth of Putnam: Master Plan for the Redevelopment of Putnam*. This document guided planners through the redevelopment and urban renewal of the town following a superflood in 1955. Putnam rightly regards this period as foundational to its existing conditions. And while these midcentury redevelopment efforts gave us much to celebrate, they also initiated much of the infrastructure, habits, and attitudes that make modern Putnam unsustainable. Putnam's POCD points toward restoring some of the town's pre-flood aspects, including public transit and agricultural support. The midcentury redevelopment projects appropriated local history to justify their choices and kept their historical interpretations shallow. In the process, they erased entire colors from the palette of Putnam's history, and so narrowed its future.

If this practicum project has proved anything, it's the wisdom of looking back deeply before pressing ahead. To understand how Putnam came to be in 1955 before the flood, I looked back to the last comparable period of major development: the 1806 purchase by industrial capitalists of the mill privilege at Cargill Falls. The Pomfret Factory village became the nexus of industry, transportation, and communication that inspired the 1855 incorporation of Putnam from its parent towns. What modern Putnam misses in its celebration of its industrial

history is the concurrent agricultural past. Although dense historical urban infrastructure separates Putnam from its rural neighbors—including east Putnam—it need not. Early Putnam held intimate relationships with the agricultural communities even while the capitalists made it harder for local agriculture to flourish. Thankfully, industrialism never completely destroyed local agriculture, and modern Putnam sits deep within a broader region that is facilitating a resurgence of local agriculture. The way forward should focus on nurturing the relationship between town and country. If Putnam will create a sustainable relationship between its urban center and the surrounding agriculture, it should start by rekindling the vision that farmers had for the unity between agriculture and industry and take its role as a "farm city". I describe this history in greater detail and nuance in my project's "Part I: Town as Machine."

"Part II: Town as Mall" digs into the attitudes behind the choices made during midcentury post-flood development. Along with extensive damage, the flood also brought national and state funding for local urban renewal. During this period, the town embraced a vision of the future that was nearly blind to all but its most recent past. This encouraged the building of extensive flood control infrastructure, better described as "river control." The planners believed that change could radiate outward from the town's center. They defined the town's "center" in terms of development rather than pure planar geography and drew a temporary boundary around the old factories, the clusters of houses, and the downtown that lay near the town's western border. This was their Urban Renewal Area. For my project, I expanded the boundary to encompass what I call the town's Historic Core. During industrialization, mills, centered around the river, radiated urbanization out even into the deepest rural areas. From mid-20th century on, the town's development radiated out from its

new center: a strip mall surrounded by a parking lot. To that sad truth I respond with this document. I consider it my project's "Part III: Town as Ecosystem," an effort to recenter Putnam on its natural, geological, hydrological, biological, and agricultural histories. It puts the town's center where people are most likely to gather, socialize, and bond and optimizes those spaces for the healthiest of such interactions. The goal is to create a town infrastructure that fosters an energetic public connected to nature and capable of taking sustainable attitudes from the public sphere to the economic, political, and broader environmental spheres.

In corporatocratic language, this project suggests a rebranding of Putnam that involves more than sloganeering and pandering to consumerist desires. By reclaiming public spaces from private enterprise, solidarizing with agriculturalists, and ritualizing the reliance of residents on nature, the developmental changes described herein plant the seeds for a maximally sustainable Putnam. History shows humanity's ecological role includes pollinating ideas to improve the world for everyone. It's a role that many have neglected to play, and have instead created a society that resents its dependence on nature. We need a better vision.

This project taught me that education can and should do more than credential professionals. Through education we expand our capacity to be better citizens. American towns, with our professionalized governments and commercialized publics, let the citizenry flounder until all that's left is a tax base, a consumer base, and an population assessed for its average income. Therefore, while the above notion of "rebranding" will make sense to the average reader, it poorly denotes the kind of change that our town needs. On several of my many, many walks through the town during the completion of this project, I spoke with our homeless neighbors. They told me that Putnam's police kicked them out of public parks for

doing nothing other than sleeping. They told me that they were waiting for a ride, or for enough money to purchase a ride, to a shelter in a neighboring municipality. They were waiting for their town to come through on a promised subsidized housing. A healthy citizenry includes all. Exclusion of the friendly because of homelessness is a flaw fatal to every town. Putnam's POCD sets the town into collaboration with the Connecticut Coalition to End Homelessness, Generations, and other local social services.[6] This is a good start. However, we should so believe in the health of our city that we welcome the homeless into its center to be cared for and shaped by the whole community like in a healthy, sustainable ecosystem, and expect that they will in turn improve the city. To make that a reality, we need a connected, compassionate, thoughtful, and attentive community. We have the people. We hyst need the infrastructure to connect us.

Community Collaboration

This speculative plan represents just one voice among thousands. One person wrote it, so it remains full of holes. The ideas expressed herein should be taken as an exploration into the town's potentialities, one long response to the question "what if". These ideas, sincere yet incomplete, should spawn other what-ifs. Newman and Jennings write about the imperative to incorporate as many people as possible within a town's visioning process. As they say, visioning is "good politics," and while many towns worldwide have attempted to create an ecological vision, "mostly these visions are fragmented, failing to bring together the necessary elements and not based on broad community ownership."[7] Without much in the way of a town commons, a place where the citizenry spontaneously gathers to converse, Putnam must get creative in its implementation of a visioning process.

Schools make for an obvious starting point. While young people pay little or no taxes, cannot vote, and lack a deep sense of the world's political and economic machinations, they do one thing quite dependably: grow up and move away. And why not? What can Putnam really offer them that they can't get better somewhere else? Their whole lives they—we—pay the psychological taxes of living in an environment designed for motor vehicles rather than for people, one that asks of them little more than to earn and spend money, all while the dollar value sinks. Ask younger children to draw pictures of the town. Encourage them to imagine something that would improve it. Ask the older children to write about their vision of a perfect town. What do they need in order to feel like they belong, like they have personal and

communal autonomy? How can the town facilitate their needs to self-discover and self-express? What would they want their children to have?

Current POCDs are developed for communities that have long traditions of nourishing the propertied classes. If you count motor vehicles, this does account for a significant portion of the population, but only around ten percent of the town's grand list. Only a little over half of the town's housing units (about 56 percent in 2012) are occupied by their owners, the rest (about 44 percent) are occupied by renters.[8] Residential real estate accounts, oddly enough, for about 56 percent of the total grand list. Combined with commercial, industrial, and vacant land ownership, all real estate accounts for 82 percent of the total grand list.[9] Such a predicament incentivizes town planners to cater their choices toward the propertied, marginalizing in often unseen ways the large portion of renters and homeless who occupy the town. When, during the visioning process, we query adults for their input about the town and its future, it matters what questions we ask, how we ask them, and to whom we ask.

For example, the passage in Putnam's POCD that covers "Downtown Parking and Circulation" responds to a 2008 study that seemed to confirm the "frequently-expressed concern of both the public and merchants of a perceived lack of parking in the Downtown area."[10] Town officials have pointed out that the parking "problem" is mostly a matter of perspective, given Putnam's walkability.[11] But the town outlined in the POCD plans to increase parking lots, add parking meters to Main Street, and establish a parking authority, among other solutions. Since the town has yet to implement any of these suggested changes, and since the town also wishes to decrease greyfields, I think it better to clarify the issue during the visioning

process. Regarding the people who wish for more parking, I think we should be able to answer these questions first:

- The POCD states that some of these people are downtown employees and has already suggested plans to accommodate these people. Are these plans insufficient? Who else desires more parking, and why should they feel as though the town should publicly relinquish its limited land space to satiate this desire—are they people handicapped and having trouble finding designated parking? Are they regular customers who have been spoiled by three generations of convenient storefront parking?
- What do people dislike about the parking situation? Is it the distance itself? Is it the prolonged exposure to the elements during the walk? Is it the unpleasantness of having to, as a pedestrian, negotiate roadways dominated by motor vehicles? All of the above?
- Have businesses lost revenue because of the parking situation, or is it merely an annoyance?

With better questions we can devise creative solutions without ceding more of the town and public space to vehicular infrastructure.

There are two classes of people to whom we give disproportionate voice in our town. The first is voices from the past, specifically the recent past, that sound off in numbers far too high. People who lived in Putnam, or designed Putnam, or otherwise invested in Putnam continue to add to the rigidity of the town's development process. This is again obvious in the parking lot example. The midcentury choice to set high parking minimums while envisioning the

town as a retail destination for motorists sustains the expectation that customers should find storefront parking everywhere. The subsequent dependence of locals on personal vehicles makes any suggestion of reducing parking unpalatable to many, if not most, even if it's a good choices.

The other set of voices is that of future voices, the hundreds of thousands of those yet to be born who come into the world and receive no say in its arrangement until they must inhabit the world as adults. When we develop town plans we choose not only for ourselves but for those upon whom we must eventually bestow the town. If we trust the sciences and look with them down the line, far down the line to the Seventh Generation, we can see some of the potential realities with which the Seventh Generation will most likely live. That future currently looks grim. When we take the time to envision ourselves living in that world we draw into focus the voices of our successors. Only by giving voice to the Seventh Generation do we complete the visioning process.

Social Ecological Assets & Liabilities

Putnam's POCD breaks down the town's political, social, economic, physical, and cultural characteristics into separate categories, describing for each the town's existing conditions and potential needs. Although the POCD does make some connections, it could be improved. Social ecology conceives of those characteristics as interrelated, each occupying a spectral swath between sustainability and unsustainability. For simplicity, I have split the spectrum into two overlapping halves. One half describes **social ecological assets**, or any natural, purposeful, or incidental creation that facilitates symbiotic equity between humans and the biosphere. The second describes **social ecological liabilities**, or any natural, purposeful, or incidental creation that trades symbiotic equity for a perceived benefit to humans at a biospheric expense. This section highlights only a few of the town's creations to set an example of how we might change our conception of the town's needs. I try to describe how each creation acts as both an asset and a liability, although this list should be expanded and given more depth.

ASSETS

Walkability

Downtown Putnam's relatively small size and plentiful sidewalks give it a walkable character. The POCD advises implementing structural changes to curb vehicular encroachment on pedestrian territory, including slower speeds, pedestrian islands, elevated crosswalks, etc.[12]

But walkability is also colored by the spatial arrangement of walking paths and destinations. The town's linear layout, running oblong along a north-south axis, lacks the kind of landmarks that allow pedestrians to intuitively orient themselves to the area. Nothing marks the boundaries of the downtown area, and therefore nothing signals to pedestrians whether they are entering or leaving. There is, rather, one large and imposing boundary between the downtown and its scenic, natural portion. Kennedy Drive can only be said to unite the town if the town is thought of as being composed of motorists and not pedestrians. In Putnam, roadways and parking lots segregate the shops from one another, detracting from the pedestrian experience. In Summer and Fall, outdoor diners sit beside loud motors and breathe car exhaust. Engines and asphalt contribute to higher levels of ambient and sustained heat. What the town gains or could gain from pedestrian infrastructure, it could gain doubly by increasing the fluidity of its spatial arrangement.

Parks

Parks retain portions of the town as non-developed spaces that connect people with natural surroundings. Parks provide river access, shade, and escape from commercial temptations. They are places for exercise, relaxation, and reflection. On about 4.6 acres, Simonzi Park provides a small kayak and canoe launch far south of the Cargill Falls Dam, along with picnic areas with tables and camp stoves, and a small arboretum's variety of common landscape trees. Simonzi Park connects via a walking path to Rotary Park, an expanse of about 4 acres that is broad rather than linear and has a rock garden, a stage for public and private shows, as well as picnic tables, seating, and perhaps the quaintest remaining view of Cargill

Falls, looking southward down from the top. Together the parks provide wise use of the Quinebaug's immediate flood-plain area, providing a buffer of un-encroached, somewhat pervious surface area between the river and the town.

However, Kennedy Drive's bounding cut through the parkland reduces the town's truly useable park area by more than half. About 8.4 acres of land east of Simonzi Park across Kennedy Drive in the vicinity of the Pall Corporation building were originally planned as parkland following the 1955 flood. While the undeveloped portions of this space serve parklike purposes, they lack the infrastructure (and public ownership) to draw people to it. Kennedy Drive keeps up a steady din of motor noise throughout the downtown area, including its parks.

Shops and Restaurants

In the lower Main Street area of town, shops and restaurants create social atmospheres. They make lower Main Street a good place for events such as First Fridays, the annual Fire and Ice Festival, etc. Throughout the town, shops and restaurants provide outlets for economic exchange, cultural experiences, and socializing. Though technically not public establishments, they serve as points of consumption for the consumerist population, facilitating monetary flow by providing jobs as well as a customer base for artists and artisans.

Solar Exposure

The sun provides the earth with its primary source of energy. Taken to the roots, everything is solar powered. Putnam, as with many places, has plenty of space available to harness the sun's energy into plants, passive thermal absorption, and photovoltaic technology

(see Map 4). One major benefit of the remaining 19th century architecture is that it was built prior to the town's electrification, meaning that in order to maximally harness light and heat, buildings such as the Cargill Falls Mill and many houses were built with a broad southern exposure. Additional buildings have flat or gently sloped rooftops, making them prime locations for solar panels and vegetation. Modern Putnam has yet to appreciably take advantage of this asset.

The Quinebaug River

Putnam incorporated because the Quinebaug provided waterpower to industrial mills. It is the town's one constant feature, connecting the people to history as far back as ancient times. It physically connects the eastern Connecticut region to the Atlantic Ocean and the rest of the world. In lower sections south of Cargill Falls, it provides recreation for paddlers. People can fish its entire length. People gather on the riverside parks for community events such as the Putnam River Fire. The US Geological Survey keeps a water monitoring station just below Cargill Falls. The three dams each power a hydroelectric project.

LIABILITIES

Dams

All three of the town's historic mill privileges are used by private non-utility power generating companies. Each relies on the run of the river to power its turbines; each utilizes the existing, historic infrastructure to conceal production. Together, they represent a 1.9 megawatt

production capacity.[13] None of these companies provide significant amounts of employment, with official employee numbers in the single digits.

Long past the age of the water wheel, hydropower companies continue to give the town trouble. The latest, owned by Putnam Green Power, LLC, utilizes the southern privilege at Cargill Falls to produce electricity and provides power to the tenants at the new Lofts at Cargill Falls apartment complex at sub-market rates. During construction, the company tried to alter its initial plans to include a trash boom, along with other modifications that would alter the flow of water over the natural falls. The Town of Putnam protested. However, the town's concerns were entirely aesthetic. "Those falls are on our logo. That's how important to us they are," said the mayor in 2015.[14] The town dealt with a similar issue at the same privilege in 1989, and was drawn into a legal battle with Summit Hydropower, a developer that wished to extensively alter the waterfall vignette to produce electricity.[15]

At the central privilege, Putnam Hydropower, Inc. holds the longest continual Low Impact Hydropower Institute (LIHI) Certification of any project ever. A 2017 recertification document states that the project does not contribute to the Quinebaug's impairment (per Clean Water Act Section 303(d)), and blames "other causes (stormwater, remediation, municipal discharges, etc.)." [16] The dams and other river control infrastructure do, however, prevent the river from self-purifying. While a free-flowing river must also be protected from pollution, the effects of pollution compound when the river cannot help in the purification process. The recertification document also says that, according to "state resource agencies", the dam does not prohibit the passage of migratory salmon and shad, claiming that salmon could not have climbed the "natural falls" downstream.[17] This is a sad, dubious, ahistorical

claim given that: A), per historical record, salmon did once in fact ascend the falls; B), salmon famously ascend more impressive falls; and C), there is a ten foot high vertical dam obstructing half of the river's width at that very location. The above analysis poorly attempts to judge the abilities of a long extirpated ancient species against the river's modern hydrography. By allowing these operations to persist—and under the pretenses of being "green" per murky standards, no less—we write unsustainability into our town's infrastructure at moderate benefit to very few, profit-driven people.

Vehicular Infrastructure

Within the Historic Core area, parking, asphalt, and other vehicular space—excluding roadways and driveways—account for at least 53 acres (see Map 3). Combined with the roadways and rooftops, parking spaces contribute 110. 6 of 287 acres (38.5%) of the downtown's impervious surface area. This conservative estimate excludes sidewalks, driveways, as well as recreational and other hardtops. We should also consider that the Multi-Resolution Land Characteristics Consortium's (MRLC) "Urban Imperviousness" dataset (2019), that averages the amount and type of impervious surface per 30-meter square, reads the entirety of Putnam's Historic Core as impervious.[18]

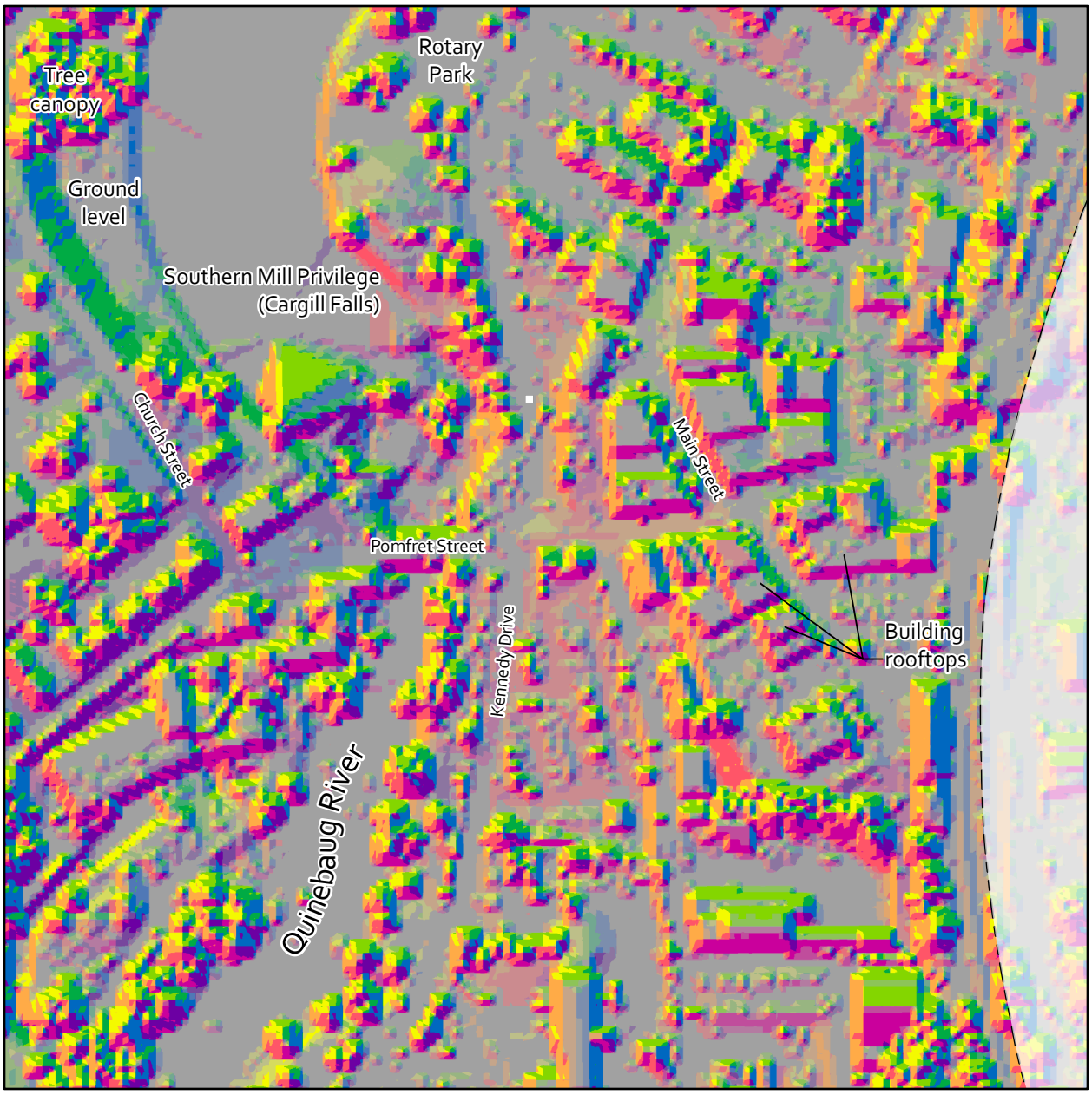
Privatized Commons

Putnam's parent towns of Pomfret, Thompson, and Killingly founded their communities on commons. Each built, as its first priority, town meetinghouses and churches to facilitate their town meeting style of governance. Later, they relegated other space for common use as the

folk saw fit. Common grazing areas allowed the predominantly agricultural folk to maximally use their private lands without turning it all into separate grazing fields. Common forests provided for sustained hunting and trapping. Common lands were used in Pomfret to build a house for the homeless, and doctors were granted privileges in exchange for seeing to those in public care. Commons engendered a sense of place, comradery, community, longevity, flexibility, purpose, and autonomy.

While Putnam's municipal buildings and parks provide many services and opportunities to the public, they hardly function as commons. Rotary Park, for example, hosts public and private events where people gather to celebrate and share experiences. But on an average day, when no specific event is planned, the park attracts people precisely for its ability to disperse. It is an escape, and the existing infrastructure (tables, shade trees, walking paths, etc.) tends to draw people toward its edges rather than its center so that it functions in a way that repeats the linear arrangement seen throughout downtown. Since the parks also serve to draw in and support local businesses, it would be doubly difficult to reappropriate the spaces for any use other than consumer attraction.

Roads and parking lots relegate massive amounts of public space to primarily privately owned vehicle (POV) passage. Without a public fleet of POVs that anyone can borrow, the existence of vehicular infrastructure effectively restricts the useability of public land space to those who have access to POVs. While this may be a majority or a super majority of the population, it still presents a massive waste, inundating public spaces with noise and fumes, costing large amounts of tax dollars for road maintenance, contributing to the impaired state of the Quinebaug, and expanding the amount of impervious land surface.



Solar Exposure

Putnam, CT

0 125 250 Ft.

N

DESCRIPTION

First returns from USGS LIDAR depict ground level, tree canopies, and building rooftop elevations in vicinity of Downtown Putnam. Converted to show aspect and slope, the data locate spaces for prime solar exposure.

Aspect - Slope

- No Slope
- N - Low
- NE - Low
- E - Low
- SE - Low
- S - Low
- SW - Low
- W - Low
- NW - Low
- N - Mod.
- NE - Mod.
- E - Mod.
- SE - Mod.
- S - Mod.
- SW - Mod.
- W - Mod.
- NW - Mod.
- N - High
- NE - High
- E - High
- SE - High
- S - High
- SW - High
- W - High
- NW - High
- Historic Core

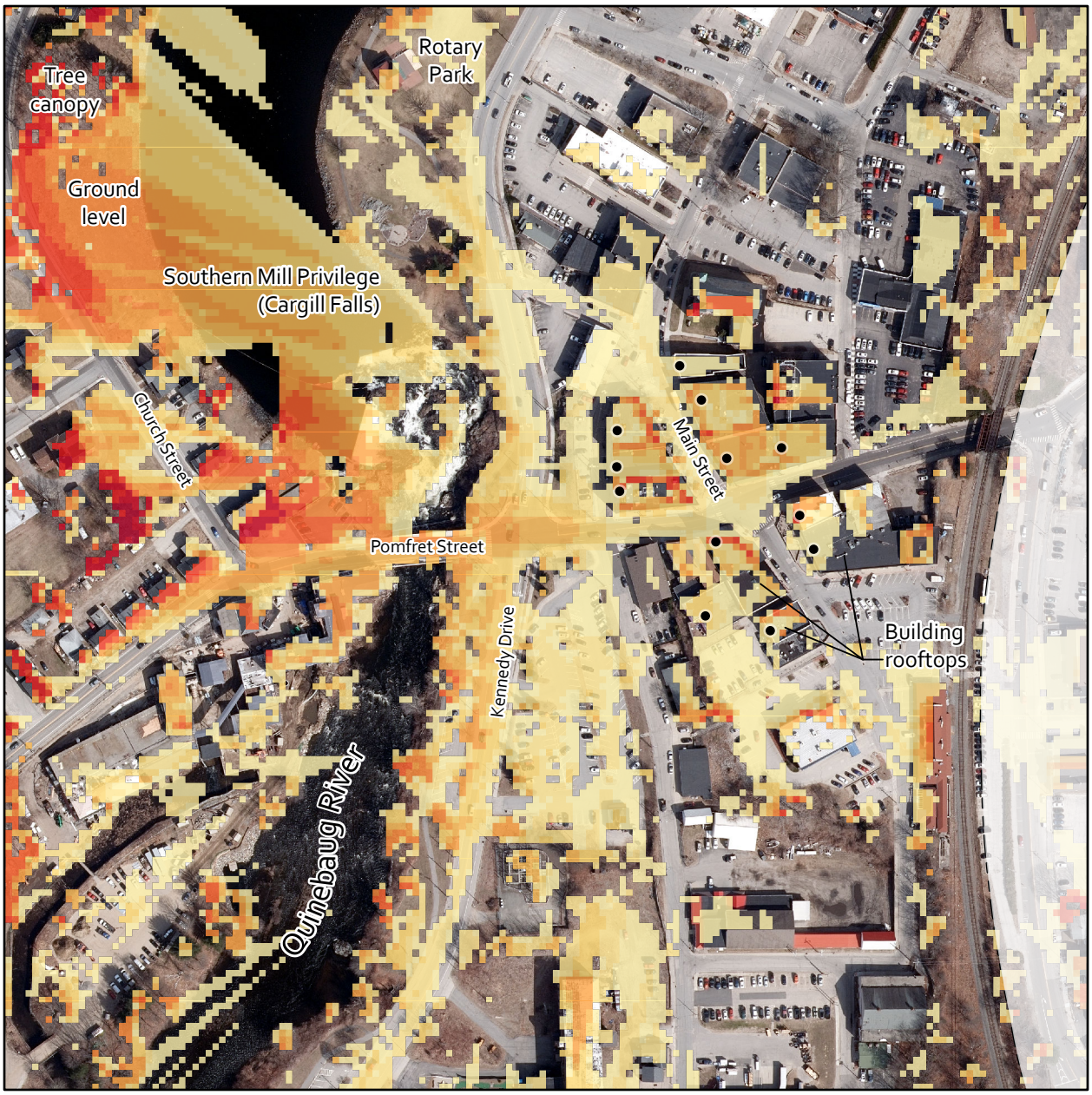
KEY

No slope: < 5 deg.; Low: 5 - 20 deg.; Moderate (Mod.): 20 - 40 deg.; High: > 40 deg.

SOURCES

1. USGS LIDAR Elevation Model, 2020

Drawn by Ethan Berriault, 2022
All features shown in approximate size and location.



Rooftop River Views

Putnam, CT

0 125 250 Ft.

N

Viewpoints

- Roof

Views

12

0

DESCRIPTION

Hidden from ground level behind terrain grading and vegetation, the Quinebaug River opens up to viewpoints from downtown building rooftops. The twelve selected locations along Main Street indicate possible points that might reconnect the downtown area to the river.

The black dots indicate 12 viewpoint locations, the yellow-red spectrum shows the visible terrain as colored by how many viewpoints provide coverage to that location, ranging from 0-12 viewpoints.

SOURCES

1. USGS Orthoimagery, 2019
2. USGS LIDAR Elevation Model, 2020

Drawn by Ethan Berriault, 2022

All features shown in approximate size and location.

0 450 Feet

N

Historic Core Site Plan
2055 Speculative Conditions: Putnam, CT

SOURCES
1. USGS Orthoimagery, 2019
2. USGS Digital Elevation Model, 2020
3. Field Review, August 2022

Drawn by Ethan Berriault, 2022
All features shown in approximate size and location

- Historic Core Boundary
- Building (solarized)
- Building
- Parking Garage
- Road
- Road (Limited Access)
- Parking / misc. asphalt
- Recreational Hardtop
- Water
- Tree Canopy
- Brush
- Wildflower Garden
- Dam Ruins
- Railroad
- Railroad Remnant
- Deciduous Tree
- Evergreen Tree

- [A] Historic Mill Museum
- [B] Expanded Downtown Parking
- [C] Cascade Stairs
- [D] Courtyard on Main Street
- [E] Parking Garage
- [F] Former Central Privilege
- [G] Former Northern Privilege

Redevelopment Narrative: Town as Ecosystem

This narrative envisions downtown Putnam as more than a small urban center within an urbanizing rural expanse. Rather, it asks: what if Putnam assumed the role of a rallying center for farmers and rural artisans? It seems improbable that Putnam should expect to build its entire economic base on the sales of local produce, or that surrounding farms will ever make their profits primarily in Putnam's urban markets. But if there remains an ideal in which human beings live sustainably within and around urban centers, that ideal skews agrarian. Prior to industrialization, farmers lived in relative concert with their surroundings. There have always been exceptions, and those exceptions became the rule during industrialization. The modern goal is to create a self-sustaining region centered on Putnam's area of the Quinebaug Valley where the postindustrial rule of wastefulness can once again be reduced to an exception. Toward this vision, the town should take inspiration from farmers themselves, and recreate with urban amenities what farmers do: make the most economic use of the land so that it will produce in perpetuity; develop neighborly interdependences at a regional level; facilitate a dignified commerce.

For the sake of simplicity, I have limited my vision to the years between 2025 and 2055. This three-decade expanse ends on Putnam's bicentennial that also happens to be the hundredth anniversary of the 1955 superflood. While this timeline fails to reach the Seventh Generation, the proposed changes so dramatically alter the landscape so as to restore its place on geological and biological timelines. Meaning, by 2055, the town as hereby envisioned more

closely resembles the home of a burgeoning, organically evolved agrarian society than the inorganic, anomalous society that it currently is. This vision embodies of the town's full heritage, from the pre-contact eras to the 21st century. Putnam as envisioned in 2055 still functions like a modern urban center, perhaps even facilitating a significant population increase, but lacks the burden of having to radically service to profiteers. The people there are more like citizens and less like consumers. It is a town where the surrounding rural population feels empowered. It is a weekend pilgrimage for day-trippers, a respected (and enthusiastically funded) cultural heritage base, and an attractive place of business. Everyone, businesses included, quickly grasps the sense of place.

Written in past tense by a narrator from the future looking back on Putnam's "eco era", this narrative tells an optimistic story about Putnam's enactment of a long ranged social ecological plan, the realization of the farm-city vision. As noted above, it has its flaws. For example, I propose building multi-use commercial buildings topped with apartments. The inclination for this comes from a desire to draw any further town residence into the town's center to discourage sprawl. However, it's easy to imagine such a development resulting in a sort of gentrification with soaring rent prices that draw in a select group of people while excluding the less fortunate, even easier to imagine the prices leading to mass vacancy and leaving the town with more empty buildings. Furthermore, I do not detail how to make use of the town's existing buildings, many of which might make for good apartment buildings without necessitating further development. My intent was not to lay out the town's future as I believe it will happen, but rather, to inspire the imaginations of people who are more knowledgeable and creative than I. It's easier and more fun to revise than devise.

Chapter 1: 2025-2035

a: 2025-2030

Wildflowers began Putnam's eco era. In 2025, the town decided to dedicate big portions of its parks to growing native flowering plants. The first year, they planted several acres of wildflowers at Simonzi and Rotary Parks to create a beautifed buffer between the river and Kennedy Drive. Asters, plantains, roses, poppies—the planters held their collective breath, but eventually, the flowers did bloom. Butterflies, bees, beetles, and birds abounded. It made for a wonderful show that perplexed and delighted the populace. The town trained public workers to identify non-native nuisance species so that, instead of loudly mowing throughout the parks, they carefully walked the new gardens to check for invasives and occasionally answered the questions of curious bystanders. Some residents scoffed at the loss of grass, but most people loved the idea.

The next year, the town did it bigger. During winter, the town reminded local restaurants and businesses to thematically integrate local wildflowers into their commerce. The restaurants experimented with various flavors and presentations that utilized various local wild plants. They coordinated with local farmers to grow and supply a steady crop of the desired plants, thus cementing new relationships between farm and city.

Having recently expanded the downtown parking base into the old CL&P property, the town decided it would convert one of the older downtown parking lots at Main Street's southern end (parcel 015-082/Union Street) into a public courtyard. Many people opposed it, especially the local businesses that stood to lose parking. The town reassured them that parking

spaces would be reserved for employees and handicapped customers, and that the added seating, shade, and a small stage would draw foot traffic at levels unseen since the 20th century decommissioning of the passenger trainlines. Planners commissioned conceptual artwork of the park, and one by one, the businesses were convinced to lend it support, and hung the artwork in their windows. At town meeting that March, the vote tipped in favor of the park, but barely. The town hired a construction crew to demolish the parking lot and to build the new park.

On Saturday, May 2, 2026, the town inaugurated its first Wildflower Weekend with a river fire. They handed out scavenger hunts for the kids to see if they could identify the April/May plants. Every restaurant innovated various incorporations of plants into their dishes and cocktails, sending adults on their own scavenger hunt. It was the beginning of the town's commitment to stake a portion of its commerce upon the whims of nature, reuniting the people with local biorhythms. Every few weeks the restaurants tried new recipes, the kids had new scavenger hunts, and the restauranteurs deepened their relationships with the local farmers, opting to see what other crops they might be able to use to diversify their menus. Local merchants joined in trying to capitalize on the new culture, dedicating portions of their storefronts, parking medians, and sidewalk planters to some wild native cultivar. Bands from all around came to perform free concerts on a stage at the new courtyard. Customers came for free to watch and listen and dance, and to patronize the restaurants. A message board at the park's Main Street entrance told bits about the town's history, stored a map of the downtown area, and alerted the people to all of the town's happenings, from events to various official meetings to the local native blooming schedule.

Over the next couple years, the town continued its Wildflower Weekends. Some years the blossoms were spectacular. Other years, they did okay. The town's population grew slightly, but its customer base blossomed.

b: 2030-2035

The downtown courtyard quickly became the chief landmark for townsfolk. People coordinated to meet there before commencing a night on the town. Old friends and family bumped into each other at the park and held long conversations about Putnam on the rise. The park also drew people during the daytime. So many, in fact, that the town decided to expand upon the downtown experience by professionally restoring and widening the Aaron C. Stark Memorial Stairs that were painted with stark's rainbow likeness of the Quinebaug River, "Cascade" (see Figure 3-1). People who parked at the public lot just below the courtyard naturally began using the stairs to reach the best part of downtown. By widening the base of the stairs, pedestrians entering downtown now faced an artistic likeness of the river. They experienced a sense of enclosure as the stairs narrowed, and then a release when at the top of the stairs, they arrived at a courtyard rich in vegetation and bustling with people. It

ritualistically reminded the people that they could have a downtown because of the river at their backs.

The town began talking to the downtown businesses about solarizing their rooftops. The western-most shops held the best views that the downtown would ever get of the river itself. It took significant height to see over the town's steeply graded banks and vegetation to see the river. To support these viewsheds, the town decided to cut some of the vegetation around Cargill Falls, replacing it with wildflowers. They also replaced the lost trees by planting flowering and fruit-bearing trees throughout the old parks. The Central Building and the New Sedar Building devoted rooftop space to gardens. In some sections they planted herbs and vegetables to service the restaurants. They improved the park-like atmosphere of the rooftops by planting small trees and other flowering, woody plants in pots. Plans quickly developed for an elevator to bring the handicapped into the rooftop experience. It was now easily possible for pedestrians to

Figure 3-1: "Cascade" painted by Aaron C. Stark. Photo provided by author.

circulate between built and naturalistic environs without having to compete with vehicular traffic. All they had to do was go up.

Chapter 2: 2035-2045

a: 2035-2040

Time and reason allowed, finally, for the closure of Main Street to thru traffic. First, they closed down the road only in the vicinity of the new courtyard, from Pomfret Street to Monohansett Street. They retained a right of way for emergency, handicapped, and delivery vehicles, and gave special passage for employees, but otherwise, the street belonged to pedestrians. At first, the town received pushback. For the past 80 years the town had been built for maximum vehicular access. Putnam, like every other town, was a car-town. But the local and visiting populations continued to increase, specifically with people who came for the downtown park and restaurants with river views. The town continued to experiment with temporary closures of Main Street on the other side from Massicotte Circle to Pomfret Street as well. Word started to spread about Putnam's downtown, which could now easily compete with nearby Danielson and Willimantic, and warranted rides out from Hartford, Worcester, Providence, and the Connecticut shore.

Especially, people came for the new market. Every weekend, the town transformed into a large farmer's market, but it was more than that. With Main Street shut down, all kinds of local artisans, artists, and collectors would gather to peddle their products. People circulated stories about great deals on used, refurbished, and upcycled wares. The hubbub usually reserved for other town farmers markets and the Brimfield flea market drifted toward Putnam.

All around the Main Street and the parks, buskers played music for donations, and the bars and restaurants repeatedly reached First Friday capacity. Local farmers advertised the products, services, and events held outside the city on their farm properties. If you wanted to find a local supplier of produce or a rural space to host an event, you went on any given weekend to downtown Putnam. It inspired Danielson and Willimantic shops to increase their local product sourcing in an attempt to compete. The farm-city vision was fast regionalizing.

In 2039, Quinebaug fish were infected with Viral Hemorrhagic Septicemia (VHS). The VHS spread fast, decimating local fish populations. The most likely cause, according to officials, was the unwitting transport of baitfish from an infected body of water probably in New York. DEEP worked hard to contain the spread. They noted that it was the sharpest decline in migratory riverine fish since the 19th century extirpation of salmon from the region. What especially shocked them was that, in recent years, populations had been on a stable incline. Improvements to water quality and the abundance of insects had helped nurture populations enough to reduce hatchery production. A small group of progressive biologists suggested at least talking about removing the old dams and other river control architecture. The notion was shut down because it ran counter to problem. Viruses need containment. It made no sense to unleash infected fish to the entire river's span all the way down to the ocean. The counter argument came that by removing impediments, the river could better self-purify. It would also reduce water temperatures, adding more days to the year that were fatal to VHS-infected fish. The idea was hushed quickly by the voices who worried that dam removal, by exposing riverside towns to flooding and disallowing hydropower production, would prove detrimental to local economies. Nevertheless, the novel idea sparked local intrigue. More than a few

residents, having seen that the reintroduction of native wildflowers had restored the forgotten symbiosis between humans, their environment, and the economy, saw the dams as hindrances to symbiosis.

b: 2040-2045

The Connecticut Office of Tourism took notice. The Quiet Corner was again alight with activity. Not only that, but the region, centered on Putnam, seemed to be innovating change within the "green" sector. It made for a great marketing narrative. Long prevented by its remoteness from the spoils of mass development, the Quiet Corner was fast becoming the state's locus of sustainability. "Green" companies wanted to associate their brands with the kind of rustic hinterlands found in northeast Connecticut and bid for space at Putnam's "Quinebaug Regional Technology Park." Workers and clients alike loved to tour corporate premises because of their proximity to downtown Putnam. For tourists, long day drives through the fields and forests ended with dinners at restaurants that served locally innovated recipes. It was a good look for the state and therefore deserved state funding.

A college student started grafting fruit tree branches onto park trees, increasing the ornamentation and symbolizing the farm-city ethos. A few of the locals had been planting their lawns as native wildflower gardens since the first Wildflower Weekend. Putnam was now a city with a distinct flavor and culture, inspiring not just agriculture but art. Visual artists came specifically to capture the town's views, its natural environs, and the people. Historians dug deeper into local history and expanded the sense of place. Regional and national publications, like Yankee Magazine, annually added Putnam to their "best places" articles, and occasionally

sent staff writers to capture the local scene. The sense of place was so obvious now that it profited the town and its businesses to continue changing in the same direction. After being approved for multiple grants, the owners of a riverfront commercial property near Cargill Falls commissioned a replica 17th century mill with waterwheel—the Cargill Falls Museum.

Chapter 3: 2045-2055

a: 2045-2049

Parking continued to be an issue in the town for a while. Residents and visitors both hailed the town for its nice walks, but on busy nights, the parking lots and streets so crowded with vehicles that the town seemed to have reached its limit. The Quinebaug Corporation, nearing the end of its 99-year lease on the Riverfront Commons, sought the town's permission to build a parking garage. This caught the public's ear and received some favor. Yet a dissenting few raised their voices. Putnam was on its way out of the age of the automobile, said the dissenters, and so why should we devote more infrastructure to the past? It would slow the transition and lock future generations into the old ways. After working on the issue, the town proposed a compromise: the town would partner with Quinebaug Corp to build and operate the garage. Once the garage began to turn a profit, the Quinebaug Corp would sell its shares to the town over the course of ten years, allowing all to profit while ultimately leaving control of the property in the hands of the people. The corporation fought it but the town persisted. Unwilling to lose another few years of profits, the corporation relented.

The town subsequently began taking bids on a new development project over the old Riverfront Commons parking lot property. The town would retain ownership of the land itself

and maintain it as a commons. Using a combination of state tourism grants and single-generation leases (25 years), the town partnered with other public and private enterprises— including housing cooperatives— to build three mixed-use buildings with small commercial stores on the first floor and multi-story apartment complexes above. Some of the old timers said that Putnam was unrecognizable. But newcomers returned and often stayed in Putnam for the town's instant familiarity.

The feeder streets all along Main Street were shut down to thru traffic create something like a pedestrian island. The speed limit on Kennedy Drive was dropped and installed with speed bumps. Commuters began to choose routes around the downtown, making a more pleasant atmosphere and reducing the amount of pollution in the Quinebaug.

b: Putnam's Bicentennial

Putnam could never decide what to do with its dams. To the older generations they symbolized safety and prosperity. Hydropower projects still turned profits at the old sites, and the army still operated the flood control dams upstream. But a new generation was maturing, made up of people who had grown up in the Farm City, a place that seemed to be constantly changing for the better whenever the people reconnected with the landscape or allowed the land to reconnect with itself. It was a place of healing, a place with potential that honored better than any other town the people's agency over physical and social structures. In honor of the bicentennial, the town decided in 2054 to return the publicly held riverside land and mill privileges to the Nipmuc and Narragansett tribes. As noted at their creation, the riverside parks generated next to no profit except as a backdrop for local businesses. The hydropower projects

likewise generated little of the town's tax base. The town had little to lose and much to gain by entering in such a historic partnership with the land's original owners. Some dissenters applauded the move, but lamented that it was too little, too late, and that the only sensible thing to do would be to return the whole town to native hands. Other dissenters took a predictable, racist stance unworthy of mentioning here. Most of the assent came from a place of curiosity, more than anything, for Putnam was a place for people who celebrated curiosity.

The tribes eventually removed the dams. They left some portions intact, and others strewn about the river as ruins to remind all of the industrial past. They also left the channelization stones in place as reminders, but also to allow the Quinebaug to reform itself by moving the stones and eroding the earthworks. The tribes began drafting legislation to allow them control should salmon ever return. Should the day come when salmon regained the Quinebaug as a habitat, the tribes would have full authority over the populations, contributing to habitat protection and setting regulations over fish consumption. With the cooperation of DEEP, they conducted feasibility studies for restoring the salmon habitat by freeing the river of all dams.

With these advancements, Putnam came into international focus as another stronghold of native environmental justice. The town hardly had to plan any celebration for its bicentennial because media publications of all types had been following the story of its revival for decades. In addition to many public events, the town decided to celebrate the occasion by closing off Bridge Street to thru-traffic, officially connecting the downtown pedestrian island to the river's western bank, symbolizing the fresh unity between Putnam's past and future.

Conclusion

I almost finished this story with a great flood. It was quite tempting to subject the Quinebaug to another freak weather event and suppose that it would somehow justify the many evolutions that I desire for Putnam. The question I had to ask was, should Putnam, for having freed the river's outflow in the town, be spared from massive flood damage? Should the weather event be so freakish as once again destroy the town, highlighting its other deficiencies? Or should Putnam fare somewhere in between? Even with the freedom of a fictioneer, I could not decide.

In early August of 2022, a series of rainstorms caused flooding in Missouri, Illinois, and Kentucky. The floods resulted in incalculable damages, including dozens of deaths. The US Weather Service judged the floods to be thousand-year floods caused by climatic instability.[19] Similarities and differences between these events and Putnam's potential future should be analyzed deeply by flood experts rather than by a graduate student. However, the increasing frequency of such events should absolutely shake the faith of town planners and residents alike in the social and physical infrastructures of Quinebaug towns. The National Oceanic and Atmospheric Administration has already noted that New England states are warming faster than the average for the continental US, and they predict that 12-30% of the annual precipitation will shift from snow to rain.[20] Such forecasts of unpredictability call for increased local flexibility and regional autonomy.

The story of Putnam as here written deserves no nice conclusion. Since 1806, and certainly earlier, a small handful of powerful people have altered the landscape with, but mostly without, the consent of those who connect the town with nature. These developments,

as repeated in other towns across the globe, have made our town unsustainable. The way toward a sustainable future involves everyone and prioritizes reduction of the town from its dependence on external markets in favor of regionalization. For this way there is plenty of historical justification. We just have to decide whether or not to take it.

Endnotes

[1] Connecticut Senate and House of Representatives, *An Act Concerning Municipal Plans of Conservation and Development,* Public Act 15-95, as amended June 22, 2015, 3.
[2] *Town of Putnam, Connecticut Plan of Conservation and Development* (POCD) (2016), 4.
[3] Peter Newman and Isabella Jennings, *Cities as Sustainable Ecosystems: Principles and Practices* (Washington, D.C.: Island Press, 2008), 8.
[4] *Section 1 of the National Historic Preservation Act,* Pub. L. No. 89-665, as amended by Pub. L. No. 96-515., 1.
[5] "Integrating NEPA and Section 106", Advisory Council on Historic Preservation, accessed July 23, 2022, https://www.achp.gov/integrating_nepa_106.
[6] POCD, 166.
[7] Newman and Jennings, 9.
[8] POCD, 25.
[9] POCD, 11.
[10] POCD, 118.
[11] Kerensa Konesni, "Putnam ponders parking problems and solutions," The Norwich Bulletin, July 18, 2018.
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[13] Hydropower Reform Coalition, "Quinebaug River hydropower projects", https://hydroreform.org/on-your-river/?fwp_waterway=Quinebaug%20River. Accessed July 24, 22.
[14] Francesca Kefalas, "Putnam officials: Work at Cargill Falls is not what town approved," The Norwich Bulletin, December 25, 2015.
[15] Cynthia B. Watt, "Proposed Decision Summit Hydropower Cargill Falls Hydroelectric Project", FERC Project Number 10038-001 (Hartford, CT: 1990).
[16] Cleantech Analytics LLC, "Putnam Hydroelectric Facility Stage II Recertification Report" (Arlington, MA: Low Impact Hydropower Institute, 2017), 3.
[17] Cleantech Analytics LLC, 3.
[18] The MRLC also creates and publishes the data used to calculate land coverage in Putnam's POCD such as in Table 5-1 on page 56 and Figure 5-4 on page 58.
[19] Amanda Holpuch, "3 Downpours in 8 Days: How Extreme Rain Soaked the Midwest", *The New York Times*, August 5, 2022.
[20] Hadley Barndollar, "NOAA says New England's temps are warming, sea levels rising faster than global rate", *The Providence Journal*, February 18, 2022.