A second gargantuan greenhouse is in the works for RI

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The Providence Journal



SOUTH KINGSTOWN — The future of agriculture is as clear as glass, say experts in the field.

The path there, however, may not be as smooth.

First, there's the case of <u>Tim Schartner</u>. <u>His construction of a 25-acre, 1-million-square-foot greenhouse</u> on the family's Exeter farm to grow tomatoes year-round is yielding more criticism as the enormous project takes shape — all without town regulation, so far.

But Schartner's colossal greenhouse — equal in size to the Warwick Mall — isn't the only model of what's coming in Rhode Island food production.

Eight miles south in Kingston, on the outskirts of the University of Rhode Island, another gargantuan greenhouse, which would first be of near equal size and eventually much larger, is scheduled to rise next year from 59 acres of prime farm land.

And some controversy is just now poking through.

Supporters say this other large-scale example of "controlled environment agriculture" (CEA) could someday be an important provider of the state's vegetable needs — with an adjacent new education center spinning off programs in agricultural research, and jobs.

"CEA is more and more the future of agriculture across the country, and at URI we hope to have our students trained and give them opportunities in this nascent industry," says Katharine Hazard Flynn, executive director of <u>URI's Business Engagement Center</u>.

Warming climate and critical water shortages in the West, where much of the nation's food grows, are prompting more calls for local food production in Eastern states.

In Rhode Island, which produces less than 5% of its own food, "We need as much agriculture under glass as possible," says Flynn.

URI greenhouse plan criticized as 'ridiculous and offensive' use of prime farmland

The URI-based greenhouse would be located south of Route 138, adjacent to the university's <u>Peckham Farm</u>, where students learn animal husbandry.

And that's the rub, for some.

Michael Sullivan, a former director of the state Department of Environmental Management, says the siting of the greenhouse and research center (the greenhouse will initially take up about 22 acres) "is both ridiculous and offensive."

For decades, taxpayers have willingly answered the call of state officials and conservationists and spent millions of dollars to preserve Rhode Island's vanishing agricultural lands, says Sullivan.

"And here they want to drop this into the middle of the best soil we have in the state," Sullivan says. "What a fatally flawed example of practicing something other than what you preach, and a bad example of public stewardship."

Asked for reaction to Sullivan's comments, Hazard Flynn and Peter Rumsey, URI's chief business development officer, said they were unaware of any opposition.

URI spokesman Linda Acciardo said university officials "have not had conversations with Mike Sullivan about his personal concerns with regard to the siting of this project."



Advocates cite benefits for RI food supply and jobs

Acciardo said the full project would be a tremendous bonus to the state, providing a needed supply of fresh, local food and generating some 274 jobs. Further, "preservation of top soil would allow for land to be returned to near original condition if the construction were razed and not replaced."

Brian Bouchard, owner of Kingston Turf Farms, who leases a 55-acre turf field from the university south of Peckham Farm, says he considers himself displaced collateral damage from the project.

Because the greenhouse and education center would take up the farm's current hayfield, Bouchard says, the university has terminated his lease so that Peckham Farm could grow hay in the turf field instead. (At least for now. A map of the project appears to show a 52-acre "expansion area" where the turf field is now.)

"Here is the university about to tear up some of the nicest turf in the country so they can plant hay," he says. "It's stupid. I'm sure we are all for advanced agricultural techniques. I practice it every day. But sometimes people don't ask the second question. It's destroying farmland that another farmer is using."



Public/private partnership will build and manage new greenhouse

The URI project is a public/private partnership, with the university leasing the land to a newly formed company and the state also providing \$4 million in seed money for the adjacent "agricultural innovation center."

On the private side, the expanding <u>Rhode Island Mushroom Co.</u>, along with Boston-based <u>American Ag Energy</u>, have formed <u>"Rhode Island Ag Technologies"</u> to raise the roughly \$110 million needed to build and manage the greenhouse and innovation center.

The URI greenhouse would initially grow 10 acres of tomatoes, 5 acres of lettuce and 5 acres of cucumbers. There would also be 4.5 acres set aside for growing and packaging mushrooms, according to a project map.



"The project is expected to expand significantly over time, sharing technology and innovation widely," a project summary reads, "enabling the development of similar facilities elsewhere, and contributing to food security in the state."

American Ag Energy is also planning to build a 20-acre greenhouse in Berlin, New Hampshire.

Madison, Maine, now hosts a 42-acre CEA greenhouse, and the Netherlands company <u>Havecon</u>, which is building Schartner's greenhouse, constructed a 70-acre greenhouse in Oneida, New York.



Hydroponic greenhouse technology promises high yields year-round in Rhode Island

Growing vegetables under glass is the science of manipulation, of fooling plants into thinking it's just another warm, sunny day in California, and to keep growing — even if outside it is winter in New England.

In these controlled settings, plants are fed a liquid diet as opposed to using soil to transfer nutrients into their roots. The technology, already used on smaller Rhode Island farms, can produce exceptional yields using a fraction of the water traditionally needed — and can keep struggling farmers farming.

Schartner has said his 25-acre operation will be able to grow 42,000 pounds of beefsteak tomatoes a day while using less than 5% of the water and will employ some 80 people year-round.

Schartner says he has a contract with Sunset produce company to distribute throughout the Northeast every tomato he grows for 10 years.

And his company, Rhode Island Grows LLC, has intentions of expanding to perhaps 1,000 acres, with similar-size greenhouses erected in and around Exeter, he has said.

That potential has some Exeter residents and officials nervous that a proliferation of such structures could harm the town's rural character. (Particularly since Schartner moved ahead with his farm's greenhouse without a building permit, arguing that the structure meets the definition of "greenhouse" and therefore needs no permit.)

Michael Hallock, the founder and CEO of Rhode Island Mushroom, whose new company will build the URI greenhouse, says such projects as Schartner's and URI's could make Rhode Island a regional leader in advanced agricultural technology.

"Both projects complement each other, because there's so much good work to be done," he says. This technology "is happening now, and it's going to continue. And it would be great if Rhode Island is in the center of it."

Schartner's emotional response to criticism at Exeter hearing

Wednesday evening, about 60 Exeter residents filed into an elementary school cafeteria for a public hearing on a new zoning amendment that would allow agricultural projects like Schartner's to have a solar-powered energy system "by right" without going through a permit process.

But much of the discussion centered directly on Schartner and his project.

While several people, including a couple of fellow farmers, supported Schartner's right to farm his land the way he sees fit and save it from development, most others found fault with the project or accused Schartner of keeping the town in the dark and skirting oversight.

"It's very upsetting to see this thing going up without permitting from the town," Council Vice President Michael A. Lefebvre told Schartner and his business associates. "Pushy, arrogant. It's not the way you want to go about this. People are against it, in part, because of that. It's disrespectful to the town and the people."

For more than two hours, Schartner listened as he sat in the audience, tapping a set of plans against a thigh and staring at the floor.

Eventually he stood to reply. "I never meant to disrespect anybody. I was told I had the greenhouse as a right and didn't need permitting."

As he spoke, emotion seeped into his voice. "I want everyone to understand. I'm trying to save my farm. It's a Hail Mary. And this opportunity is essential."

Schartner said he broke ground on the greenhouse when he did, in June, because the pandemic was jeopardizing material deliveries and jacking up costs.

"The damn steel is going to be three times ..." He paused. "It's going to blow the whole thing out."

After several minutes of his fragmented explanation, council member Francis T. Maher Jr. suggested Schartner take a break and have a sip of water.

In the end, the council unanimously denied the proposed zoning ordinance, noting that the language was far too ambiguous.

"It needs a lot of work." said Council President Daniel W. Patterson.

Afterward, Schartner agreed with the outcome. Perhaps, he said, a better proposal could be worked out now with planning officials.

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