### April 2023

# Farming

## I. What has Hatfield said about this topic in earlier plans?

Most plans at some point highlight the agricultural or "rural character" of the town, long farming heritage and highly fertile soils. Over one-third of the town's acreage is

classified as prime farmland. Another 1,600 acres is designated as farmland of statewide importance. The 1999 Hatfield Master Plan community survey overwhelmingly indicated public support for the continuation of agriculture in Hatfield. "One cannot underestimate the strong role Hatfield's farming heritage plays in the town's rural character and sense of place." (Hazard Mitigation 2021, pg. 11)

Recurring themes include: 1) the increasing loss of farming families and farmland and 2) the importance of protecting farmland from development by enrolling more farms in the state Agricultural Preservation Restriction (APR) program. The 2014

Farming in HatfieldDo you value the continuation of farming in Hatfield?97 % value the continuation of<br/>farming in Hatfield3 % NOdo not value<br/>the continuation of<br/>farming in HatfieldHatfield Master Plan Survey Results - May 1999

Open Space Plan emphasized the alarming loss of farmland between 1997 and 2005 (606 acres or 17%) and referenced Hatfield farmland as part of the 19th most threatened agricultural landscape in the US.

The 2001 Master Plan and 2008 Open Space Plan noted the slow uptake of farms enrolled in APR - just 2 farms with land in APR totaling 258 acres in APR compared to 47 farms in Hadley with land in APR totaling 1,686 acres. They identified the limitations of the APR program undervaluing farmland in the flood plain due to its lower risk of development pressure (Pg 35), which continues to be a challenge to protecting more of Hatfield's farmland. There are now 8 farms with land in APR totaling 395 acres (OSRP 2023).

The 2021 Hazard Mitigation and MVP Plans assessed the risk of severe weather and climate change to farms. Most notably, the extensive network of unmaintained agricultural ditches built (or blasted) in the early 20th century have contributed to increased localized flooding on farms. Post-1985 Wetland Protection Regulations in

Massachusetts prevent the restoration of these ecologically sensitive ditches now on private, non-agricultural property even when abutting farmland.

## II. What have been key findings and recommended actions?

The key findings and recommendations have been relatively consistent across plans from 2001-2021. Roughly in order of frequency of mention over the years:

- 1. Make farmland preservation a priority
  - Promote the APR Program to local farms and landowners (Master Plan 2001)
  - Establish a local agricultural preservation bylaw that would augment state payments, cover smaller parcels, and allow for accessory uses that supplement farming income such as restaurants, educational centers, bed & breakfasts, etc. (DCR Heritage Landscape 2009, Open Space 2014, OSRP 2023) [NB The Town approved the use of CPA funds for farmland protection in Fall 2006]
  - Identify high value parcels at risk for development and acquire restrictions/purchase development rights to protect them (Open Space 2008) [NB 2022 PVPC Farmland protection maps]
  - Offer technical assistance to farmers to help them protect more land (Open Space 2008)
  - Create penalties for developing farmland (Vision 1999) [NB the Riverfront Overlay Zoning District was adopted in 2003]
  - Create incentives for placing APR/CRs on land in floodplains (MVP 2021)
  - Amend APR at the state level to include a climate resiliency component that targets lands on an ecological and climate mitigation basis. Areas of prime farmland that are not under APR and are not protected by wetland buffers or floodplains should be considered high-priority for farmland preservation. (MVP 2021)
- 2. Promote the local farm economy
  - Provide agricultural tax breaks (Vision 1999). [NB The Town has reduced water supply rates for farmers (MVP 2021)]
  - Support Buy Local campaigns (Master Plan 2001)
  - Create an agricultural advisory commission to represent farming issues at the local level, ensures that zoning and other bylaws reflect "farmer-friendly" approaches (Master Plan 2001) [NB Ag Commission bylaw adopted in 2001]
- 3. Transition to Climate Smart Farming
  - Provide Technical Assistance to farms to transition management practices and protect soils from erosion (MVP 2021)

- Use MVP Action Grant to incentivize farmers to transition to low or no-till (MVP 2021)
- Determine strategies to maintain agricultural ditches that provide a buffer to nearby farms against flooded fields in high precipitation events (MVP 2021 and OSRP 2023)

## III. What are best practices for consideration on this chapter topic? What should Hatfield be thinking about that might best help plan for the future, ensure greater resilience?

While Hatfield has made progress on a number of actions and recommendations identified in earlier plans, there are a handful that have proven to be more complex issues to address. Chief among these are the inherent limitations of the state APR program for protecting farmland in the flood plain and smaller parcels of subdivided farmland, and the difficulty of maintaining agricultural ditches on non-agricultural land. Many more resources will need to be leveraged to advocate for changes to state programs and untangle the sometimes competing interests of agricultural and ecological protection.

In terms of climate resilience, we underscore the importance of transitioning more farms to low-till and other climate-smart agricultural practices. Many farms are new to these techniques and cannot afford to take on the financial risks of trialing expensive new equipment or unfamiliar farming systems. Again, more resources, including State and Federal programs as well as private funding sources, will need to be leveraged to support this transition on a broad scale. Enhancing local public awareness and support for ecological farming practices that produce healthier soils and a more resilient food supply may also aid in increasing available funding streams.

In the Farmer Roundtable listening session on March 2, 2023, the 12 farm participants identified the current farming landscape to be very challenging: high cost of land and social barriers to entry, unpredictable weather, and inadequate infrastructure (including irrigation and drainage systems) were all named as top challenges. Follow-up survey results are still being gathered for additional insights.

Already, it is clear that farmers need more support to apply for existing State and Federal grant programs that can pay for infrastructure upgrades and help farms adapt to the changing climate. The NRCS, FSA, EEA, and MDAR, along with other local agricultural non-profits such as the Hampden-Hampshire Conservation District, CISA, and American Farmland Trust offer numerous programs and resources to provide this support.

The following five action steps to increase climate resiliency on farms were identified in the Climate Smart Farming Practices White Paper (RDG, March 2023):

- 1. Keep soil covered year round
- 2. Reduce traffic and tillage
- 3. Build soil organic matter
- 4. Diversify
- 5. Adapt to the new normal

Rapid adoption of climate smart farming practices among farmers in Hatfield over the next decade will make a critical difference in the overall vulnerability and climate resiliency of Hatfield and its surrounding communities. A workshop is currently being planned for Hatfield farmers in the Fall of 2023. Pproposed topics include providing more information about soil ecology as it relates to climate resilience, an overview of all the grants and assistance programs available to farmers, and a dialogue with state officials and representatives about pertinent local issues such as APR limitations and agricultural ditch maintenance.

Additional RDG research questions for consideration in chapter

- At what rate has development taken place within the 100-year flood plain (in the last 25 years)?
- To what extent is development in the floodplain a threat? Does this land (still) need protection?
- How many / what percent of farm parcels are under 5 acres?
- Can non-contiguous parcels still be enrolled in APR?
- How much farmland has been protected through the use of CPA funds since 2006?
- What has happened around the creation of a local APR bylaw?
- Are there other opportunities for funding farmland protection?
- How much of a threat is development in the floodplain?

Maps needed for chapter

PVPC farmland protection work maps from in 2022 Current updated flood work maps

Chapter background paper prepared by Jono Neiger and Seva Water, Regenerative Design Group