



United States Department of Agriculture

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**Natural Resources Conservation Service**  
Massachusetts State Office, 451 West Street, Amherst, MA 01002  
413-253-4350 | fax 855-596-7666 | www.ma.nrcs.usda.gov

**MASSACHUSETTS STATE TECHNICAL COMMITTEE  
MINUTES**

November 21, 2023

9:00am-12:00pm

Meeting Held Virtually

**Welcome and Opening Remarks – Dan Wright, NRCS/USDA**

The meeting was called to order at 9:00 am by Dan Wright, Massachusetts State Conservationist. Dan welcomed everyone and requested attendees enter their information into the Chat.

Minutes from the June 22, 2023, meeting of the State Technical Committee was accepted.

Dan spoke briefly about IRA funding. More to come on official funding numbers.

**Farm Bill Programs – Rita Thibodeau, NRCS/USDA**

Rita provided details from the Fiscal Year 2024 Financial Assistance Program Division (FAPD) and Easement Program Division (EPD):

- Environmental Quality Incentives Program (EQIP) = \$5,806,000
- EQIP Inflation Reduction Act (IRA) = \$9,188,000
- Landscape Conservation Initiative National Water Quality Initiative = \$70,000
- EQIP Conservation Innovation Grants (CIG) = \$290,000
- Agricultural Management Assistance Program (AMA) = \$155,000
- Agricultural Management Assistance Program Risk Management Agency (AMA RMA) \$ pending.
- Conservation Stewardship Program (CSP) = \$1,400,000
- CSP Inflation Reduction Act (IRA) = \$904,000

FY24 Program/Signup Deadlines:

- CSP – Classic & IRA - Round 1 / AFT RCPP 2311
  - Round 1: 11/3/2023
- EQIP/AMA/RCPP/NWQI / EQIP/AMA/RCPP/NWQI:
  - Round 1: 1/5/2024
  - Round 2: 3/8/2024
  - Round 3: 5/10/2024
- EQIP ACT NOW – all rounds, but do not wait to obligate like classic contracts.

#### Easements Funding:

- Agricultural Conservation Easement Program (ACEP)
- Agricultural Land Easement (ALE) = \$1,922,068
- Wetland Reserve Easement (WRE) = \$756,607
- WRE Stewardship = \$27,425

#### Easements Deadlines:

- ACEP ALE and WRE application deadline - December 29, 2023
- ACEP IRA application deadline - 11/3/2023
- Ranking Deadline - 12/13/2023
- Selection - 12/22/2023

ACEP IRA applications are sent to National Headquarters for Processing.

There is an expected announcement for RCPP FY 2024 Notice of Funding prior to the end of the calendar year.

### State Resource Conservationist – Catherine Magee, NRCS-USDA

Working on identifying top ten Priority Resource Concern Practices for FY2024.

#### Forestry Scenario Updates:

- 472 Forest/Farm Access Control: forestry boundary marking
- 655 Trail/Landing Location and Marking is ONLY for marking the **landing** perimeter. We are not going to use this scenario for trails.
- Skidder trails will be covered under “Trail Erosion Control w/o vegetation slopes < 35%”
- 560 Access Road can be used to allow for logging trucks to access the landing.

#### Pest Management Updates (595):

- Insect Exclusion Netting for High Tunnels
- On-Farm Weather Stations and NEWA Network
- Calibrating Spray Equipment
- Insect Lures, Traps and Scouting
- Row Covers and Insect Exclusion Netting

Urban Designation for the state has increased for FY24.

### State Soil Scientist, Maggie Payne, NRCS-USDA

#### Farmland of Local Importance Updates:

- Prime Farmland Designations
  - Prime Farmland = 10%
  - Farmland of Statewide Importance = 14%
  - Unique Farmland = < 1%
- Farmland of Local Importance (FLI) – Land that is locally important for crop production, but not categorized as prime farmland, unique farmland, or farmland of statewide importance.

### Why?

- Easement program eligibility
- State land use regulations
- Land use planning
- MA towns with Farmland of Local Importance designation = 72
- Process for Farmland of Local Importance Determination:
  - Town or Land Trust
    - Verify that the land is not currently classified as prime or unique farmland or farmland of statewide importance.
    - Compile evidence of suitability to produce crops.
  - NRCS
    - Evaluate soil survey map units associated with land.
    - Verify those soil survey map units that meet criteria for FLI.
  - NRCS and Local Municipal Representative
    - Sign document identifying farmland of local importance within the community.
- FLI documents can be found in the Field Office Technical Guide (FOTG)
- For more information contact Soil Scientist, Al Averill, [albert.averill@usda.gov](mailto:albert.averill@usda.gov), 413-253-4356.

## Forestry and Wildlife Subcommittee, Patrick Conlin

Patrick provided updates from the most recent subcommittee meeting:

- Discussed New Scenarios
- Forestry is represented on the Priority Practice list.
- CSP Payment Increase – use to mitigate RC like invasive plants.
- Program Deadlines
- Field Office Technical Guide updates
- Endangered Species Act – Northern Long Eared Bat
- Hiring a staff forester for NRCS – happy to have a professional Forester involved.
- Hosting a Workshop to encourage more to become TSPs.
- New England Society of Foresters in March meeting – getting time on the agenda to speak and encourage new folks to register.
- Next meeting will be in April.

## Soil Health Committee, Kate Parsons, Chair, NRCS-USDA

Kate provided updates from the most recent Soil Health Subcommittee Meeting:

- October 26 – 13-14 members joined.
- Discussed Landing soil health needs and challenges.
- People aren't thinking about it.
- Equipment
- Lack of Knowledge
- Economics
- Reduced Tillage is not easy – need to be creative.

- Discussed draft of payment rate
- Soil health ranking was discussed.
- Payment rates will be shared when they become available.
- Possibility of hosting a Webinar on the Soil Carbon Amendment

### **Easement Subcommittee, Jamie Pottern, Chair, AFT**

- Number of attendees at subcommittee meeting has increased.
- Buzzard Bay case studies were presented.
- MDAR and NRCS gave policy updates.
- Proposed updates to changes
  - Ranking cycle
  - Expand eligibility.
- AFT – hiring for an Easement Specialist

### **Urban Agriculture Subcommittee, Charline Xu**

- First Outreach amount – 40 people
- Next month Charline will have open Office Hours
- NOFA Winter outreach

### **Cape Cod Cranberry Growers' Association, Brian Wick, Executive Director**

- Founded in 1888
- Today's Mission: "To enhance the Massachusetts cranberry industry through the viability and sustainability of the CCCGA membership"
- Vaccinium Macrocarpon "American Cranberry"
  - Wetland perennial plant
  - One of three native fruits in Massachusetts
  - Grow on low-lying vines in beds layered with sand, peat, gravel, and clay.
  - Acidic soil preference (pH 4 - 4.5)
  - Sandy soils
  - Require adequate fresh water supply.
  - Need cool temperatures in the fall and chilling hours for dormancy.
- ~13,000 Acres in MA
- MA Economic Impact:
  - More than 1,900 jobs directly associated with cranberry farming.
  - Creates ~3,500 jobs in processing and support businesses.



- Totals over 6,300 jobs in MA
- Excess of \$1.7 billion in economic impact annually
- Effects of Climate Change:
  - Disrupts traditional growing season(s)
  - Drastic precipitation patterns (heavy rains and droughts)
  - Impacts the prevalence and behavior of certain pests and diseases.
  - Mild/unpredictable winters
  - More spring frost events
  - Warm and wet fall leads to poor fruit color.
  - Fluctuations in crop yield and quality affect market
  - Adaptive measures to cope with climate change are costly.
  - Rising sea levels pose danger to coastal bogs.
- Need for Renovation:
  - Vines become less productive over time.
  - Hybrid varieties produce 2-3X on same footprint with similar input costs.
  - Older bogs may have outdated infrastructure.
  - Leveling surface, upgrading irrigation and drainage systems improves efficiency and water management.
  - Regular renovation schedule helps maintain the quality and quantity of the crop.
  - Satisfies changing marketplace demands.
  - Helps maintain environmental stewardship by adopting more sustainable practices.
- Need for Sand:
  - Creates ideal growing condition for cranberries.
  - Aids in growth and expansion of vines.
  - Helps control disease, insects, and weeds.
  - Acts as a natural fertilizer.
  - Used for repair of bog infrastructure(s).
  - Necessary for renovation.
- Need for Water Resources:
  - Drought conditions necessitate ample water supply for irrigation, frost protection, and harvest.
  - Frost protection measures require water.
  - Helps efficiency of nutrient delivery.
  - Helps sustain wetland environment and bog ecosystem.

- Supports root development, helps plant withstand stress, and contributes to overall vigor.
- Wet harvesting (95% of crop) necessitates sufficient water resources.
- Expand/clean existing water resources.
- Dig new water resources (tailwater recovery).
- For more information on Cranberries in MA:

Cape Cod Cranberry Growers' Association

(508) 866-7878

[info@cranberries.org](mailto:info@cranberries.org)

[www.cranberries.org](http://www.cranberries.org)

Catherine Magee thanked everyone for participating in the state tech committee meeting and for providing input on NRCS programs. She will send out a survey to attendees to determine the date of the next meeting.

The meeting adjourned at 11:35am.

#### About the State Technical Committee

The State Technical Committee advises the NRCS State Conservationist on the technical guidelines necessary to implement the conservation provisions of the 2018 Farm Bill. Committee membership includes representatives from federal and state agriculture and environmental agencies, agricultural producers, UMass Extension, nonprofit organizations, and agribusiness.

State Technical Committee meetings are open to the public and are held as often as necessary to advise and implement NRCS conservation programs. For information about upcoming meetings, please contact Catherine Magee at the NRCS State Office at 413-253-4365 or [catherine.magee@usda.gov](mailto:catherine.magee@usda.gov). More information and meeting minutes are available on the MA NRCS web site:



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## Fiscal Year 2024 Funding Allocations for Financial Assistance and Easement Programs Updates

Rita Thibodeau, Assistant State Conservationist for Programs

November 21, 2023

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## Fiscal Year 2024 Financial Assistance Program Division (FAPD) and Easement Program Division (EPD)

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**ACEP IRA application deadline 11/3/2023**

**Ranking Deadline 12/13/2023**

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# NRCS Technical Updates

November 2023

Catherine Magee, State Resource Conservationist

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# Priority Resource Concern Practices

Priority Resource Concern Practices	
FY2022	FY2023
313 - Waste Storage Facility	313 - Waste Storage Facility
340 - Cover Crop	340 - Cover Crop
367 - Roofs and Covers	367 - Roofs and Covers
374 - Energy Efficient Agricultural Operation	374 - Energy Efficient Agricultural Operation
442 - Sprinkler System	442 - Sprinkler System
449 - Irrigation Water Management	449 - Irrigation Water Management
329 - Residue and Tillage Management, No Till	345 - Residue and Tillage Management, Reduced Till
561 - Heavy Use Area Protection	666 - Forest Stand Improvement
382 - Fence	314 - Brush Management
528 - Prescribed Grazing	400 - Bivalve Aquaculture Gear and Biofouling Control





# Forestry Scenario Updates

Practice	Scenario Name	Offer in MA '24	Scenario Cost Per Unit	75%	90% HU, PR, Wp	Unit	Typical Size	Total Scenario Cc
655 - Forest Trails and Landings	Trail Erosion Control w/o Vegetation, Slopes < 35%	x	\$4.68	\$3.51	\$4.21	Feet	1000	\$4,678.98
655 - Forest Trails and Landings	Grading and Shaping with Vegetative Establishment	x	\$5.26	\$3.95	\$4.73	Feet	1000	\$5,259.25
655 - Forest Trails and Landings	Temporary Stream Crossing	x	\$2,451.99	\$1,838.99	\$2,206.79	Each	1	\$2,451.99
655 - Forest Trails and Landings	Temporary Wetland Crossing, Sensitive Site	x	\$3.08	\$2.31	\$2.77	Square Feet	6600	\$20,358.16
655 - Forest Trails and Landings	Trail/Landing Location and Marking	x	\$0.43	\$0.32	\$0.39	Feet	5280	\$2,247.17
472 - Access Control	Trails/Roads Access Control	x	\$892.34	\$669.26	\$803.11	Each	1	\$892.34
472 - Access Control	Forest/Farm Access Control	x	\$0.24	\$0.18	\$0.22	Feet	1500	\$367.19

- 472 Forest/Farm Access Control: forestry boundary marking
- 655 Trail/Landing Location and Marking is ONLY for marking the **landing** perimeter. We are not going to use this scenarios for trails.
- Skidder trails will be covered under “Trail Erosion Control w/o vegetation slopes < 35%”
- 560 Access Road can be used to allow for logging trucks to access the landing





# Pest Management Updates (595)

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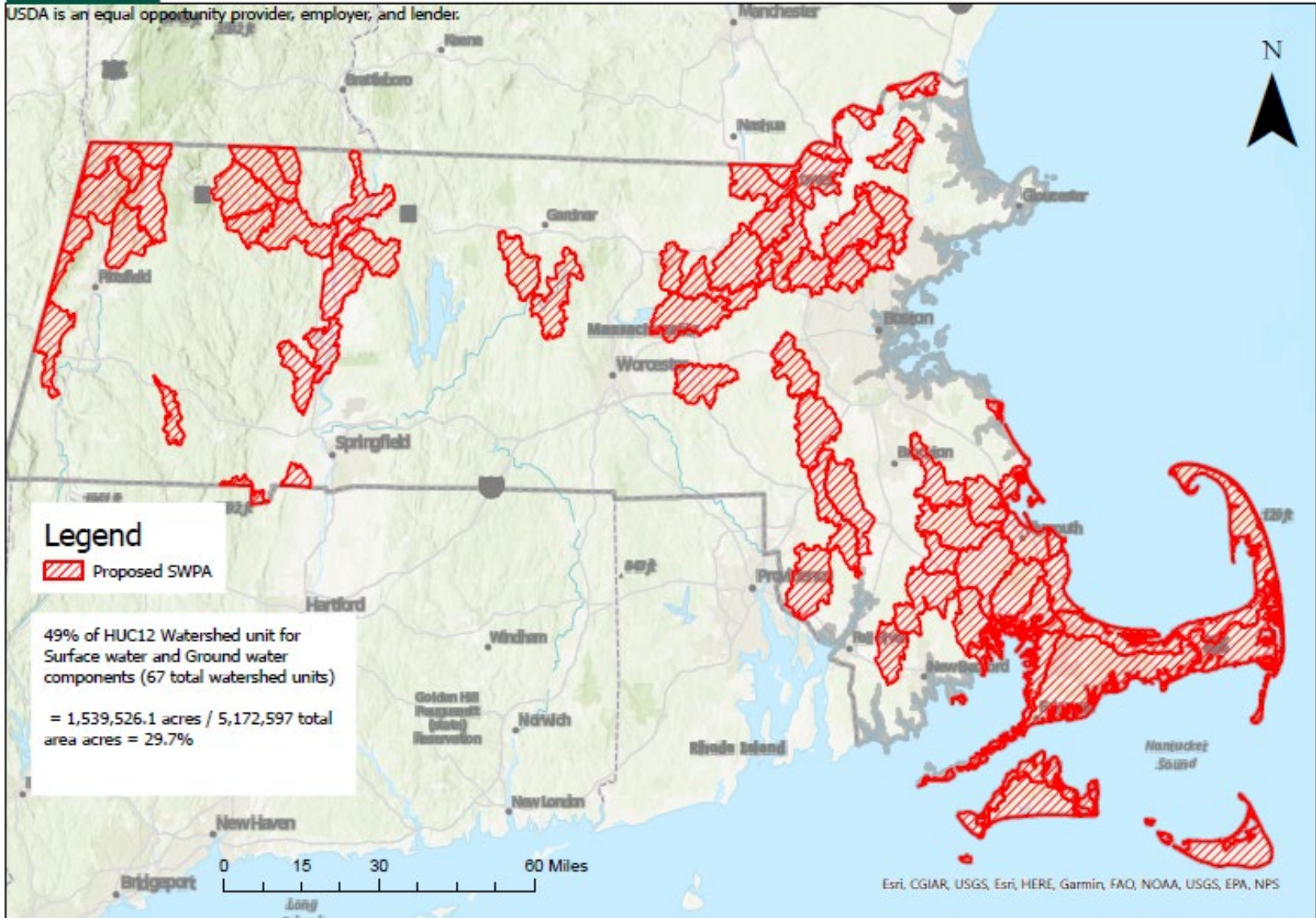
- Insect Exclusion Netting for High Tunnels
- On-Farm Weather Stations and NEWA Network
- Calibrating Spray Equipment
- Insect Lures, Traps and Scouting
- Row Covers and Insect Exclusion Netting





# FY 2024 Source Water Priority Areas

USDA is an equal opportunity provider, employer, and lender.



**Legend**  
 Proposed SWPA

49% of HUC12 Watershed unit for Surface water and Ground water components (67 total watershed units)  
 = 1,539,526.1 acres / 5,172,597 total area acres = 29.7%



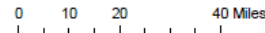
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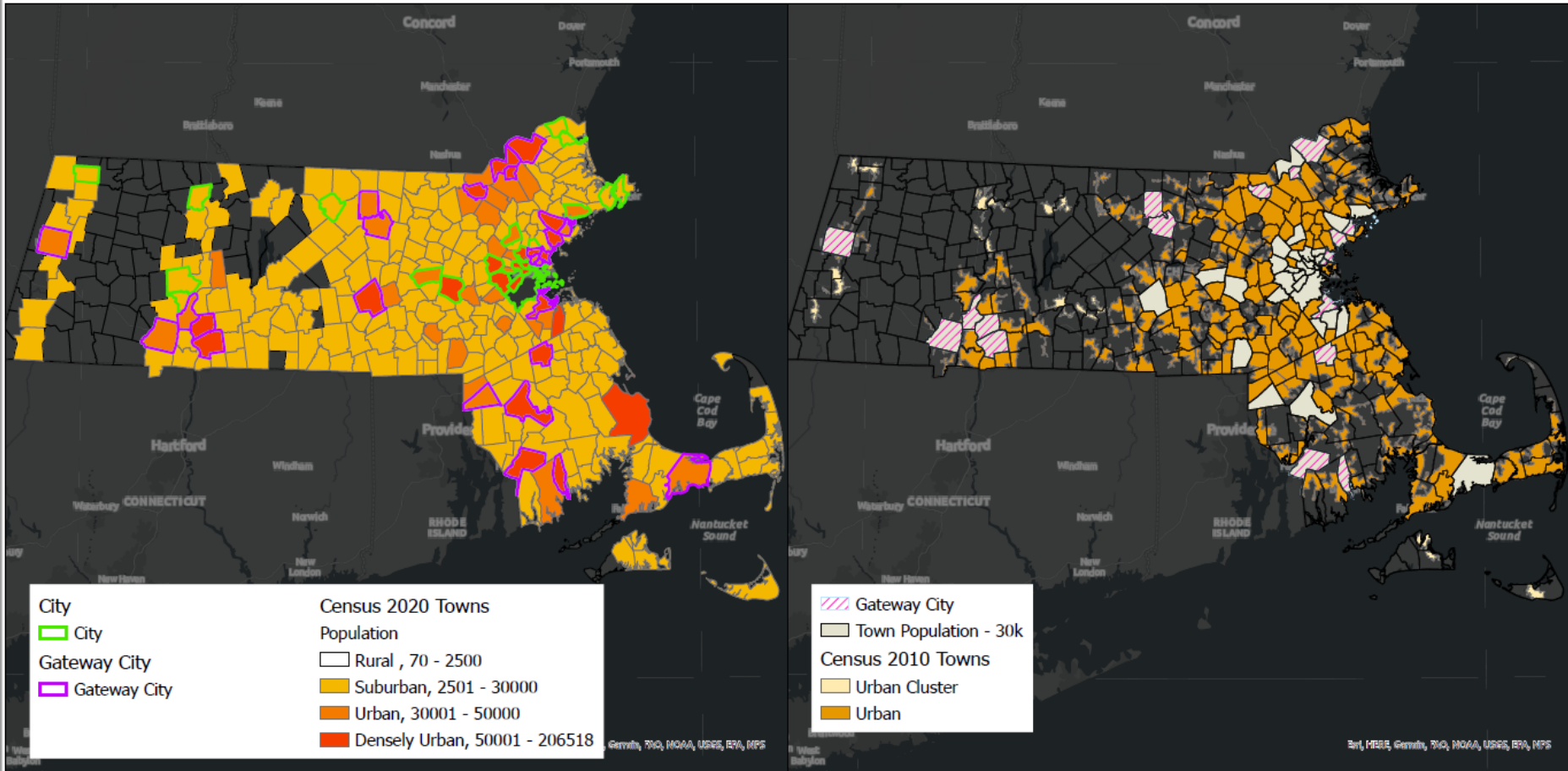
# Urban Designation



FY 24



FY 23







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## Contact Information:



Catherine Magee

[Catherine.magee@usda.gov](mailto:Catherine.magee@usda.gov)

Mobile: (413) 835-1278



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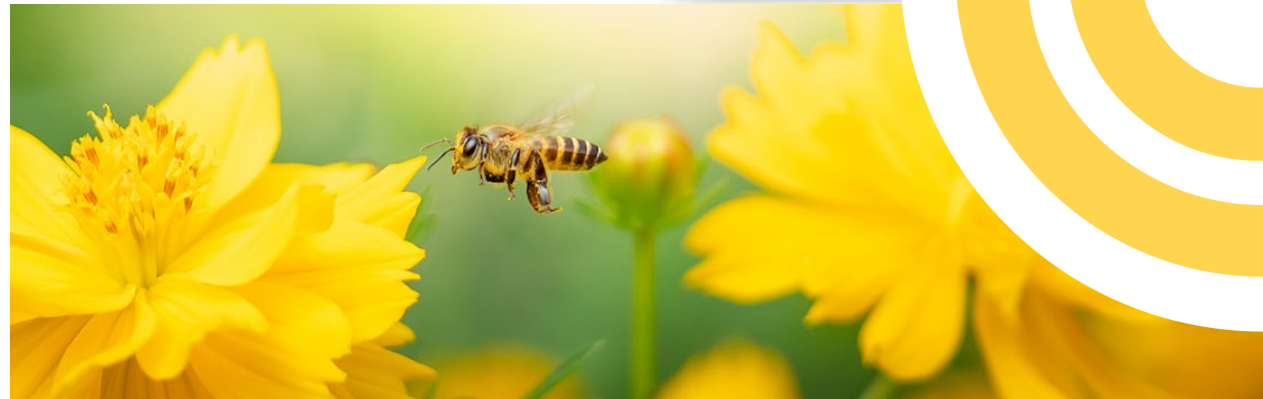
[nrcs.usda.gov/](http://nrcs.usda.gov/)







Natural Resources Conservation Service  
U.S. DEPARTMENT OF AGRICULTURE



## Farmland of Local Importance Update

Maggie Payne, NRCS State Soil Scientist

Massachusetts State Technical Committee Meeting 11/21/2023

FARM PRODUCTION AND CONSERVATION  
FSA | NRCS | RMA | Business Center



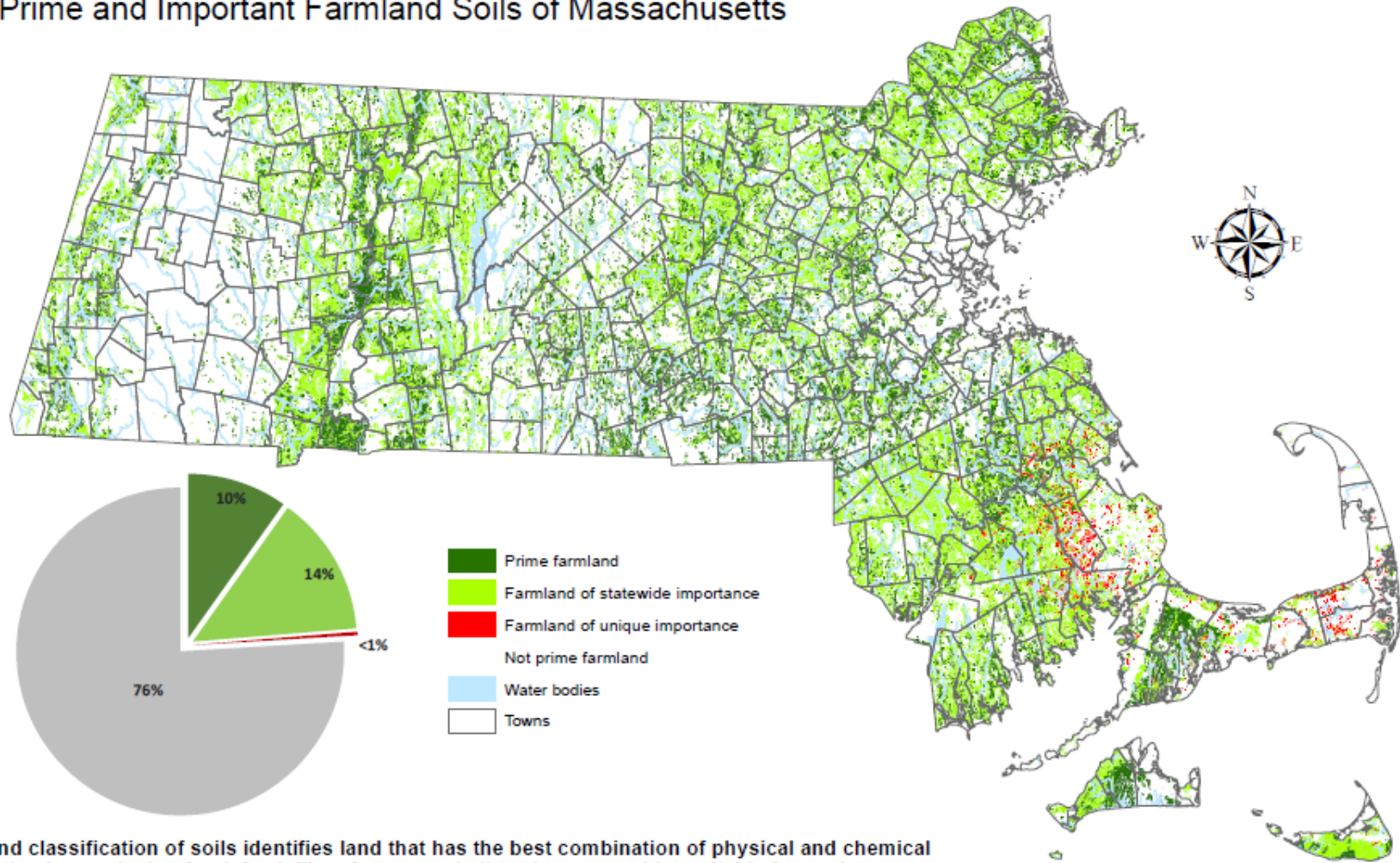
# Prime Farmland Designations

- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland





# Prime and Important Farmland Soils of Massachusetts



The farmland classification of soils identifies land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, and oilseed crops, and is available for such use.

Prime farmland soils have specific physical and chemical characteristics that make them well suited for growing crops.

Farmland of statewide importance are those soils that fail to meet one or more of the requirements of prime farmland, but are important for the production of food, feed, fiber, or forage crops. They include those soils that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.

Unique farmland is land other than prime farmland and farmland of statewide importance that is used for the production of specific high value food and fiber crops. In Massachusetts, soil map units suited and used for the production of cranberries have been identified as farmland of unique importance.





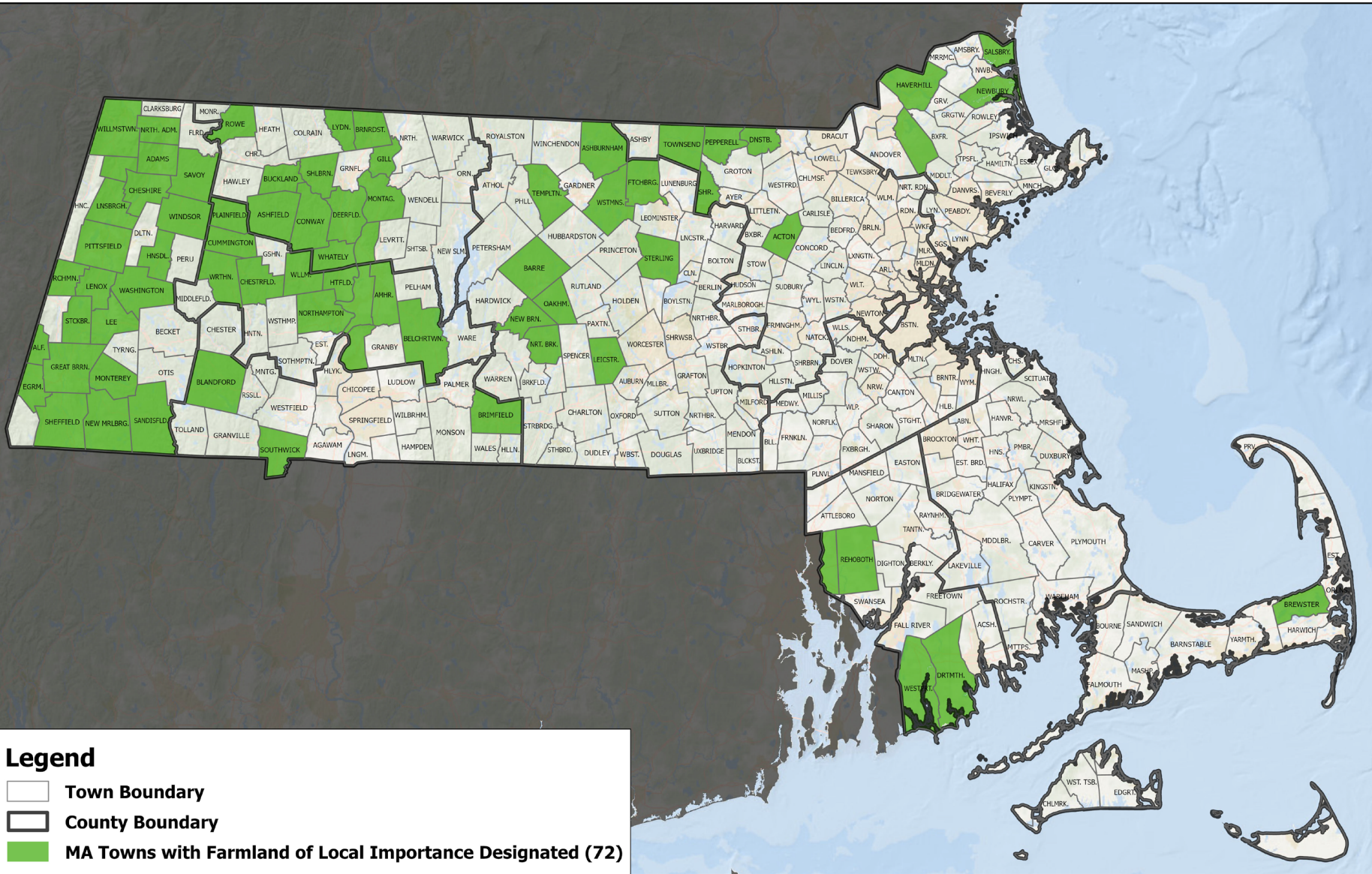
# Farmland of Local Importance

- Land that is locally important for crop production, but not categorized as prime farmland, unique farmland, or farmland of statewide importance.
- Why?
  - Easement program eligibility
  - State land use regulations
  - Land use planning



# Massachusetts Towns with Farmland of Local Importance Designated

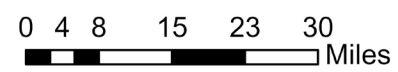
72 towns with Farmland of Local Importance Lists



**Legend**


- Town Boundary
- County Boundary
- MA Towns with Farmland of Local Importance Designated (72)

Natural Resources Conservation Service  
U.S. DEPARTMENT OF AGRICULTURE



created: 11-20-2023

# Field Office Technical Guide (FOTG)

 Field Office Technical Guide | MA
 

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Section 1 - General Resource References ▼

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Section 2 - Natural and Cultural Resources Information ▲

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Climatic Data ▼

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Cultural Resources Information ▼

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National Environmental Policy Act and Special Environmental Concerns

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Soils Information ▲

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Forestland Productivity

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Highly Erodible Soils (HEL) and Potentially Highly Erodible Soils (PHEL)

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Hydric Soils

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Nitrate Leaching Index

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**Soils Designated as Farmland of Local Importance**

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Soils Designated as Prime, Unique, and

★ Featured 📄 Export CSV

☰ Document Title (A-Z) ▼ 📄 Table 📃 Card

">	Document Title	Type	Pub Date	End Date	Subject	Keywords	Abstract	Size	Info
<input type="checkbox"/>	<a href="#">01 - Farmland of Local Importance in Massachusetts Towns</a>		2023-11-20	--	Important Farmland, Soils Information	farmland, soil	List of Massachusetts towns with Farmland of Local Importance designated	199 kB	<a href="#">i</a> <a href="#">👤</a>
<input type="checkbox"/>	<a href="#">02 Farmland of Local Importance Designation Protocol</a>		2020-02-27	--	Important Farmland, Soils Information	farmland, soil	Process for designating soil map units as Farmland of Local Importance within a town.	198 kB	<a href="#">i</a> <a href="#">👤</a>
<input type="checkbox"/>	<a href="#">Acton Farmland of Local Importance</a>		2023-05-12	--	Important Farmland, Soils Information	farmland, soil	Documentation of the map units designated as Farmland of Local Importance for the town of Acton.	223 kB	<a href="#">i</a> <a href="#">👤</a>
<input type="checkbox"/>	<a href="#">Adams Farmland of Local Importance</a>		2023-04-04	--	Important Farmland, Soils Information	farmland, soil	Documentation of the map units designated as Farmland of Local Importance for the town of Adams.	222 kB	<a href="#">i</a> <a href="#">👤</a>
<input type="checkbox"/>	<a href="#">Alford Farmland of Local Importance</a>		2022-09-12	--	Important Farmland, Soils Information	farmland, soil	Documentation of town of Alford soil map units	3 MB	<a href="#">i</a> <a href="#">👤</a>

<https://efotg.sc.egov.usda.gov/#/state/MA/documents/section=2&folder=62902>

# Process

- Town or land trust:
  - Verify that the land is not currently classified as prime or unique farmland or farmland of statewide importance
  - Compile evidence of suitability to produce crops
- NRCS:
  - Evaluate soil survey map units associated with land
  - Verify those soil survey map units that meet criteria for FLI
- NRCS and local municipal representative
  - Sign document identifying farmland of local importance within the community



# For More Information

Al Averill

Soil Scientist

American Farmland Trust

[albert.averill@usda.gov](mailto:albert.averill@usda.gov)

413-253-4356



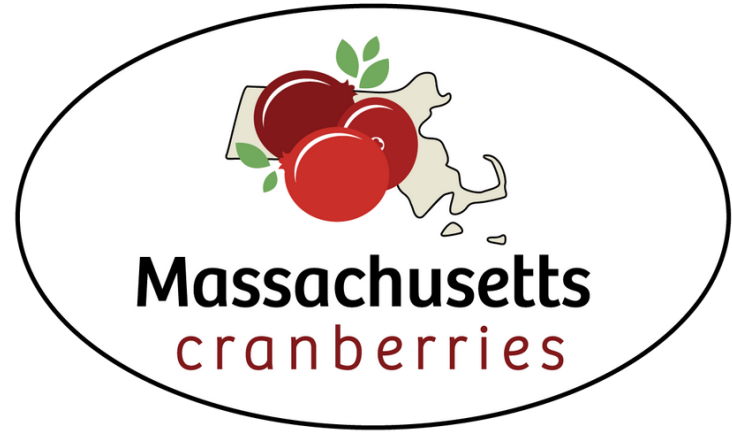


# MASSACHUSETTS CRANBERRIES

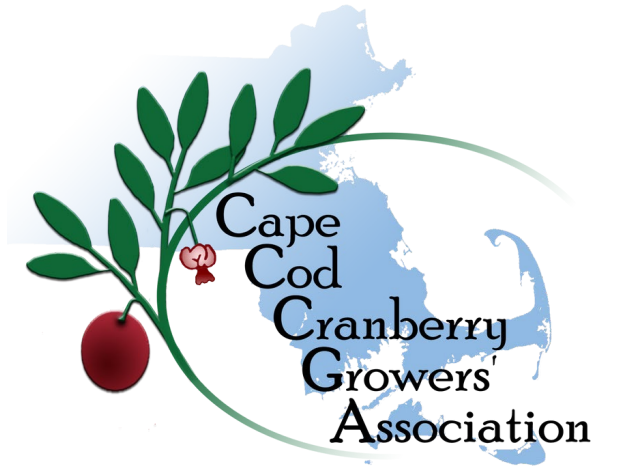
NRCS STATE TECHNICAL ADVISORY  
COMMITTEE MEETING

NOVEMBER 21, 2023





# CAPE COD CRANBERRY Growers' Association



FOUNDED IN 1888

"Standardize the barrel size,  
develop uniform pricing and  
better marketing of the crop"



TODAY'S MISSION

"To enhance the Massachusetts  
cranberry industry through the  
viability and sustainability of the  
CCCGA membership"





# VACCINIUM MACROCARPON

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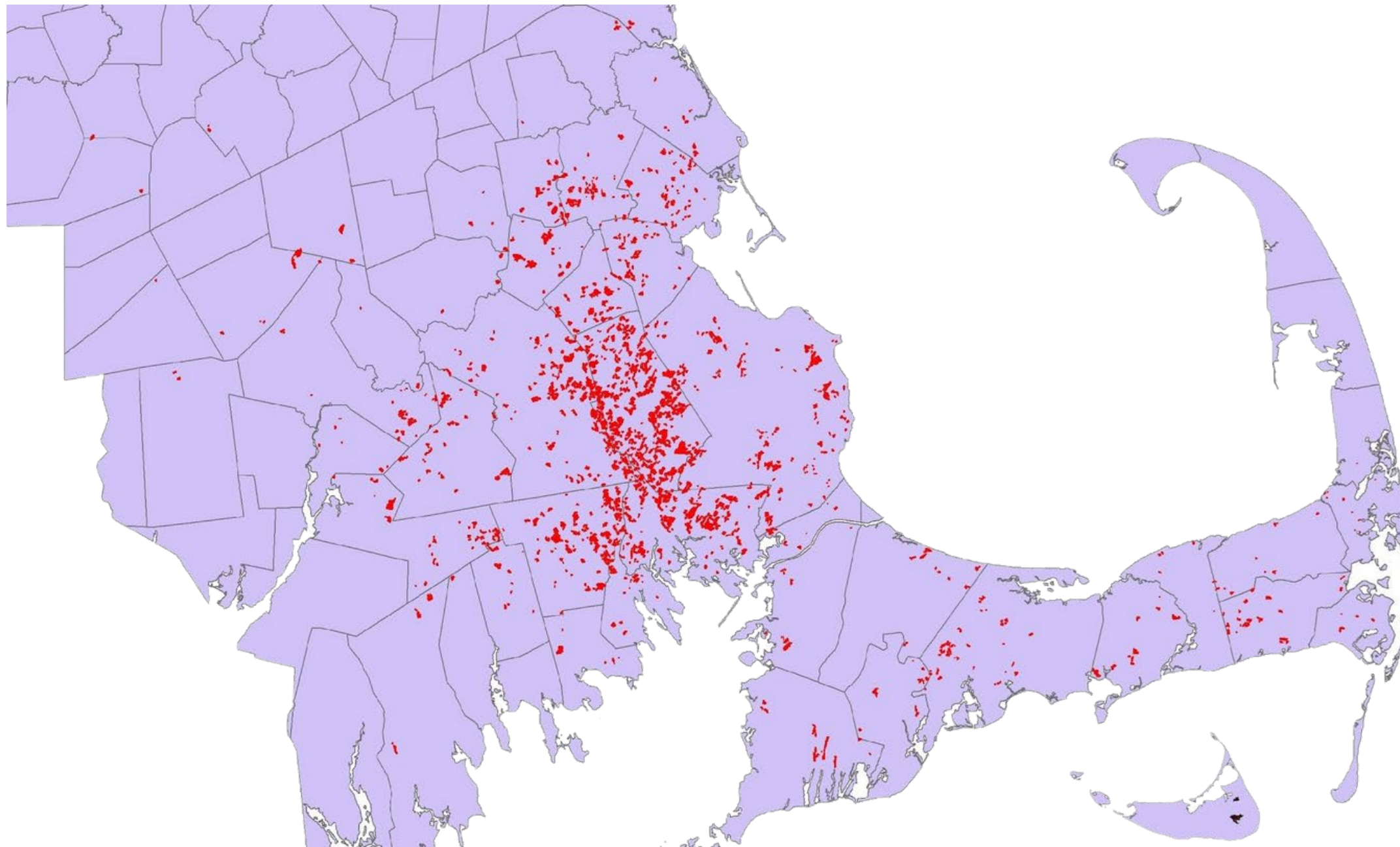
## "AMERICAN CRANBERRY"

- Wetland perennial plant
- One of three native fruits in Massachusetts
- Grow on low-lying vines in beds layered with sand, peat, gravel and clay
- Acidic soil preference (pH 4 - 4.5)
- Sandy soils
- Require adequate fresh water supply
- Need cool temperatures in the fall and chilling hours for dormancy





~ 13,000 ACRES IN  
MASSACHUSETTS





# MASSACHUSETTS CRANBERRY FARMING DEMOGRAPHICS

- ~300 cranberry growers
- Most farms are multi-generational
- 70% of farms have 15-20 acres
- Traditional peat bogs, 100+ years old
- 75% of growers aged 50+

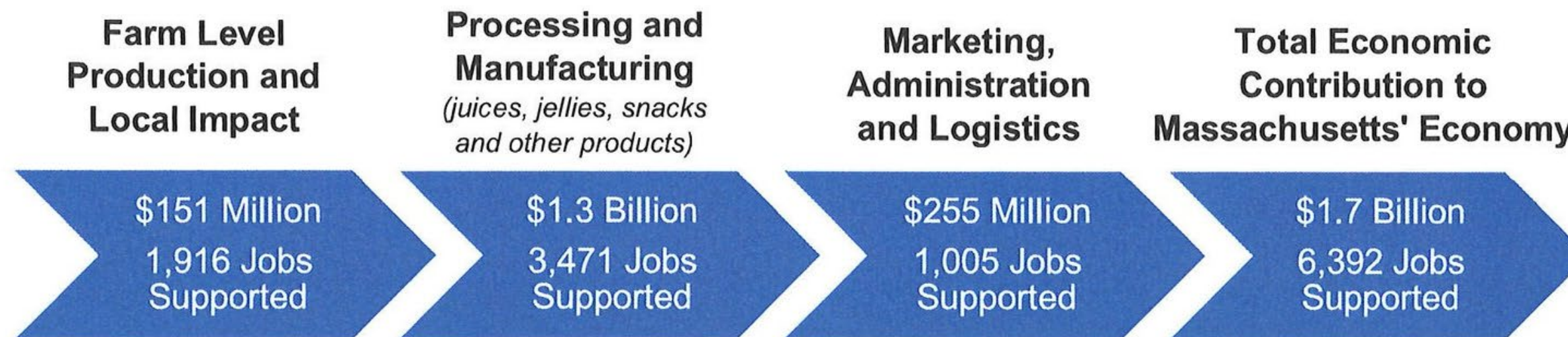




# MA ECONOMIC IMPACT

- More than 1,900 jobs directly associated with cranberry farming
- Creates ~3,500 jobs in processing and support businesses
- Totals over 6,300 jobs in MA
- Excess of \$1.7 billion in economic impact annually

## Economic Impact of Cranberry Production in Massachusetts (2023)

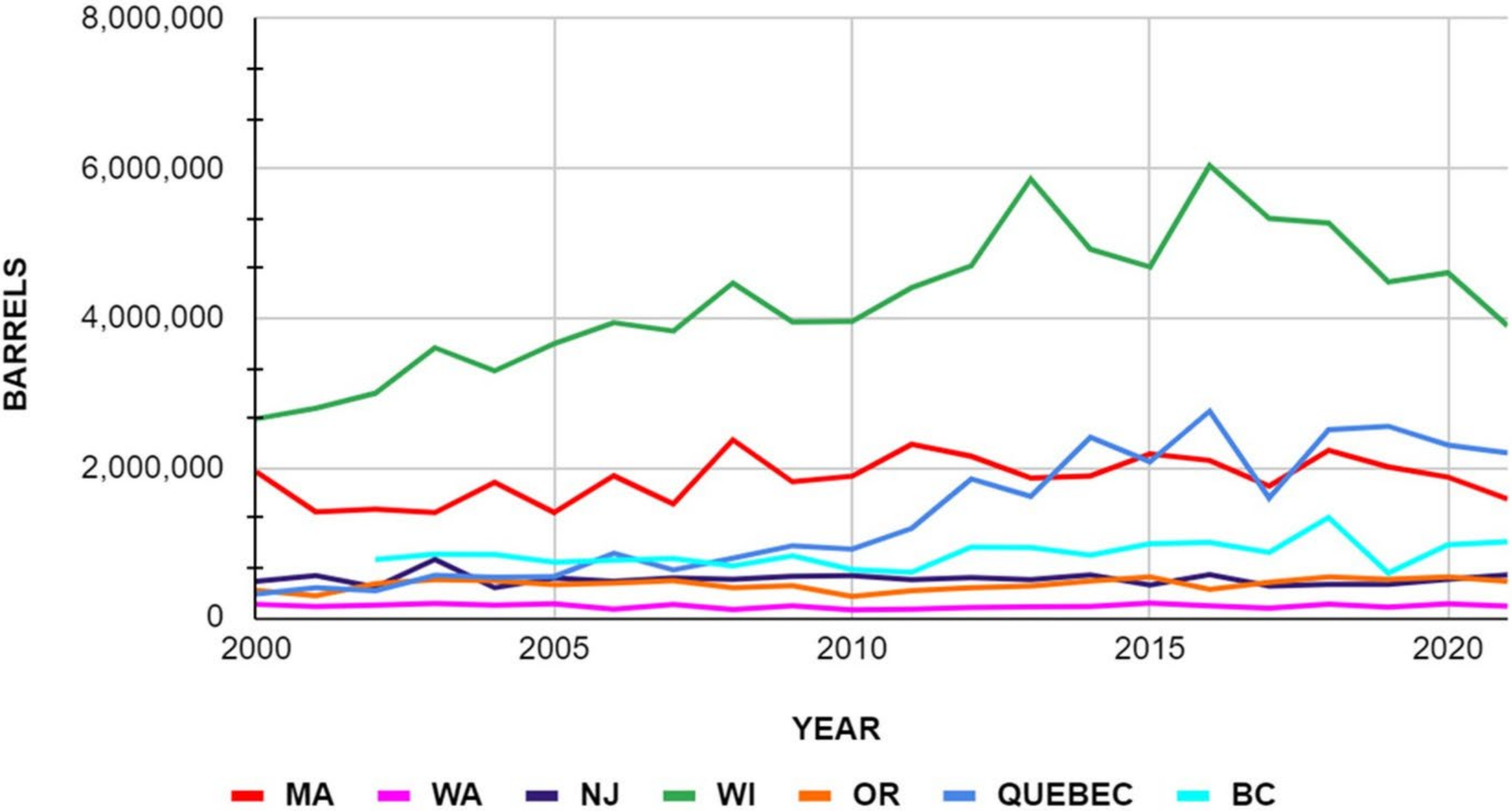




# HISTORICAL DATA BARRELS

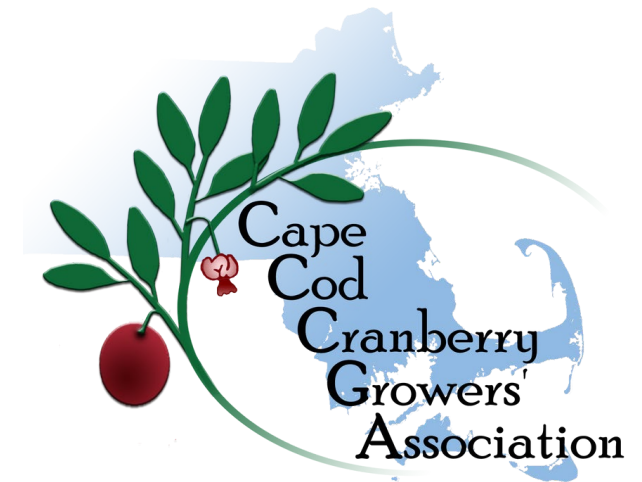


## HISTORIC CROP PRODUCTION





# 2023 HARVEST & CROP OUTLOOK



- About a 12-15% decrease in production as compared to last year's crop (estimated)
- Carryover impacts from 2022 drought
- Damage to vines from February deep freeze and May frost events
- Crop negatively affected by multitude of summer/fall rain events





# EFFECTS OF CLIMATE CHANGE

- Disrupts traditional growing season(s)
- Drastic precipitation patterns (heavy rains and droughts)
- Impacts the prevalence and behavior of certain pests and diseases
- Mild/unpredictable winters
- More spring frost events





# EFFECTS OF CLIMATE CHANGE (CONTINUED)

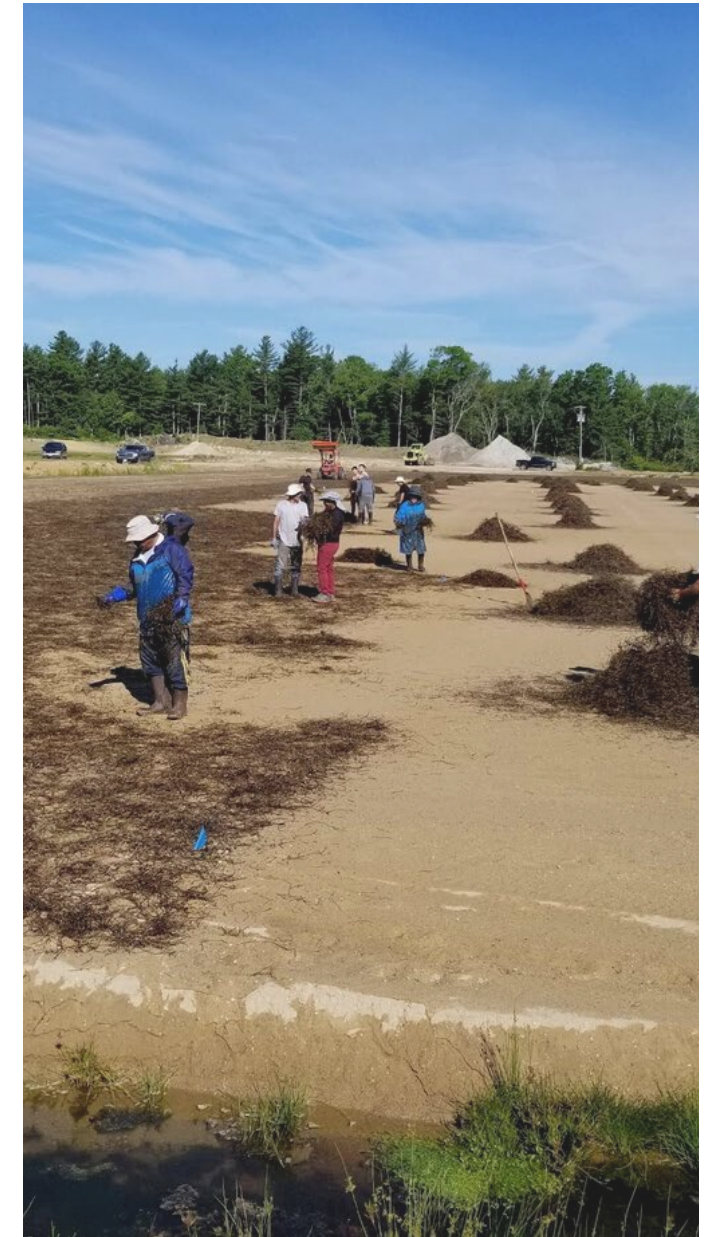
- Warm and wet fall leads to poor fruit color
- Fluctuations in crop yield and quality affect market
- Adaptive measures to cope with climate change are costly
- Rising sea levels pose danger to coastal bogs





# NEED FOR RENOVATION

- Vines become less productive over time
- Hybrid varieties produce 2-3X on same footprint with similar input costs
- Older bogs may have outdated infrastructure
- Leveling surface, upgrading irrigation and drainage systems improves efficiency and water management
- Regular renovation schedule helps maintain the quality and quantity of the crop
- Satisfies changing marketplace demands
- Helps maintain environmental stewardship by adopting more sustainable practices





# RENOVATION CONSIDERATIONS

- \$50,000/acre or more
- Lose production for ~3 years; 4-5 years for full production to return
- ROI 10+ years
- Long-term commitment
- Marketplace demands larger fruit
- ~50% MA acreage in older varieties
- Generational change in bogs
- Result:
  - Higher production
  - Lower water demand
  - Less pests
  - Similar input costs





# NEED FOR SAND

- Creates ideal growing condition for cranberries
- Aids in growth and expansion of vines
- Helps control disease, insects, and weeds
- Acts as a natural fertilizer
- Used for repair of bog infrastructure(s)
- Necessary for renovation





# NEED FOR WATER RESOURCES

- Drought conditions necessitate ample water supply for irrigation, frost protection, and harvest
- Frost protection measures require water
- Helps efficiency of nutrient delivery
- Helps sustain wetland environment and bog ecosystem
- Supports root development, helps plant withstand stress, and contributes to overall vigor
- Wet harvesting (95% of crop) necessitates sufficient water resources
- Expand/clean existing water resources
- Dig new water resources (tailwater recovery)



# NEED FOR AGRICULTURAL MESSAGING



- Agricultural literacy is low
- Need for education is high
- More divisive/opinionated society
- Opportunities for collaboration and understanding abound





# TECHNOLOGY ADVANCEMENTS

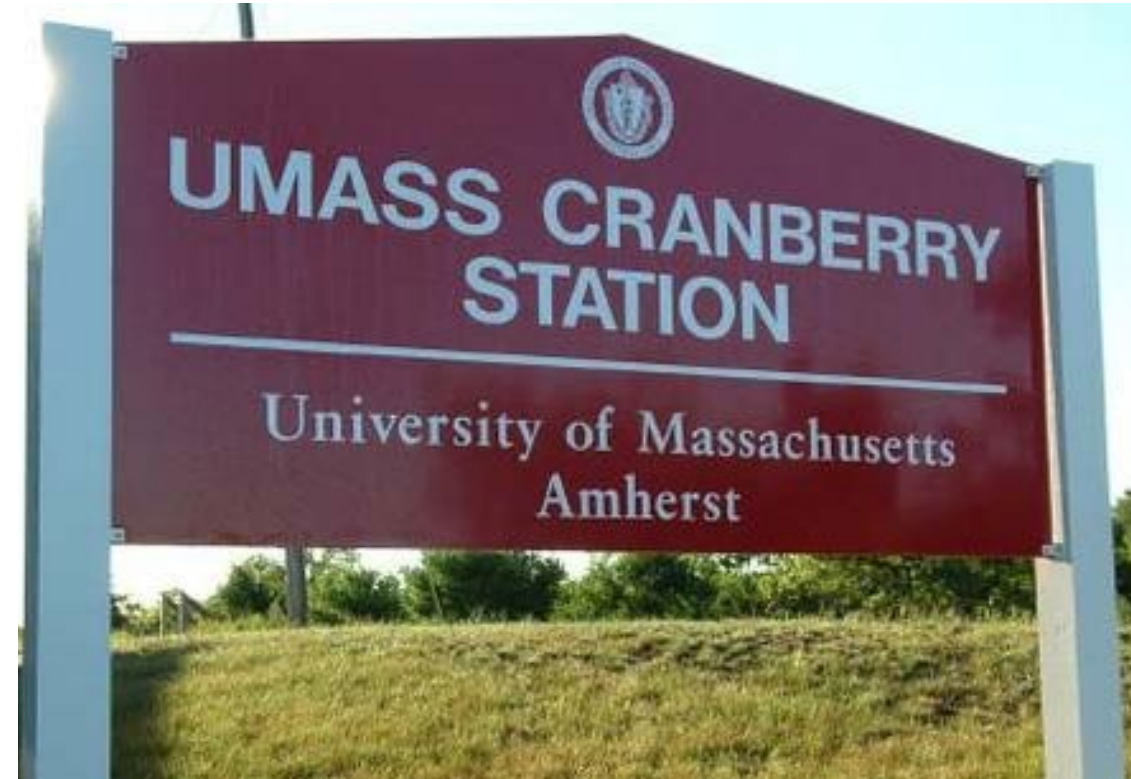
- Irrigation Automation
- Soil Moisture Probes
- Harvesting Equipment/Berry Pumps
- GPS
- Drones





# Horticultural Research

- UMass Cranberry Station
- USDA/Agricultural Research Service
- Decrease Water Use
- Optimum nutrient management
- IPM Standards
- Pest Management Advancements
- Shift away from broad-spectrum to target-specific options



# LABOR AND GENERATIONAL SHIFTS

- Seasonal labor demands makes it difficult to attract & retain employees
- HARD MANUAL/OUTDOOR CONDITIONS
- Immigration policies and workforce availability impact industry's ability to meet labor demands
- Increase in labor costs
- Competition for available labor
- Next generation of cranberry growers steering away from industry





# CRANBERRY BOG RESTORATION

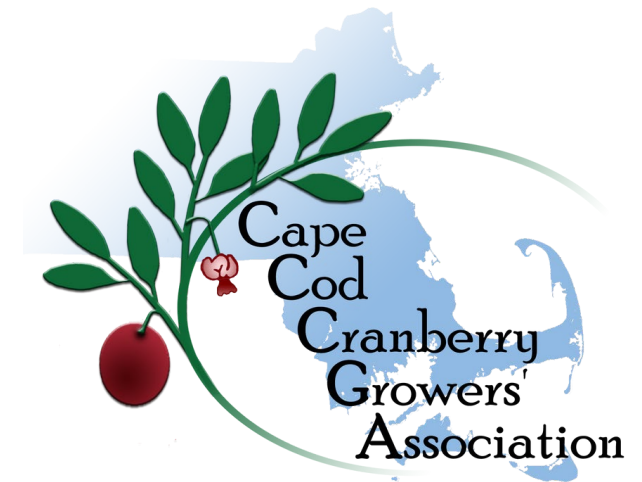
- Lack of succession opportunities for older generations makes bog restoration a sustainable option for retirement
- Some growers looking to retire some of their acreage to make the rest of their farm more viable
- Some bogs farmed in environmentally sensitive areas, sometimes with need for renovation
- Conservation easements and land preservation offer financial incentives or tax benefits
- Community and stakeholder support
- Long-term sustainability allows land to return to its natural state, while ensuring it remains ecologically viable



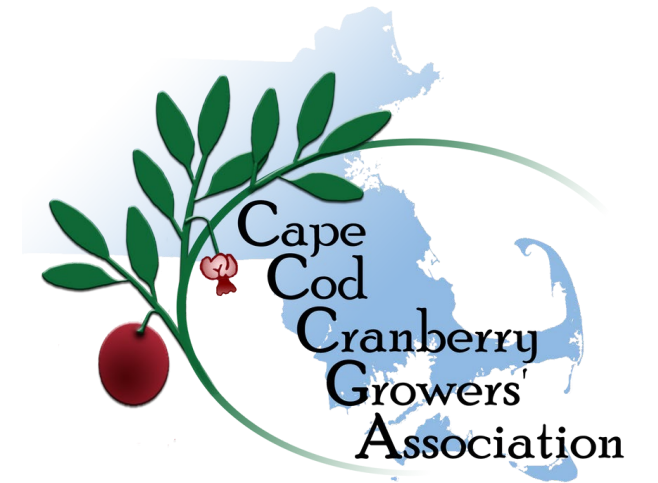


# MARKETPLACE

- >50% of Massachusetts berries are exported
- Future growth of industry relies in part to export opportunities
- Established or growing markets include Europe, China, Mexico, Japan
- Emerging markets include India, South America, southeast Asia
- Tariff and similar governmental relationship challenges slow down growth opportunities



# MARKETPLACE & HEALTH BENEFITS



- Health benefits improve marketability, high in polyphenols (PACS); vitamins/minerals; low in sugar
- Health benefits include:
  - UTI; gut health; heart health; anti-aging; cancer-preventing qualities; and more





Cape Cod Cranberry  
Growers' Association

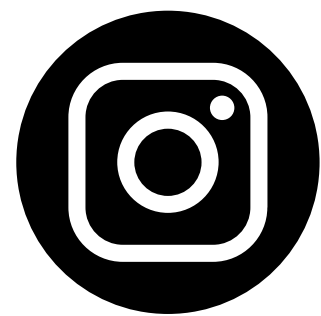
(508) 866-7878

info@cranberries.org

www.cranberries.org

LET'S GET SOCIAL!

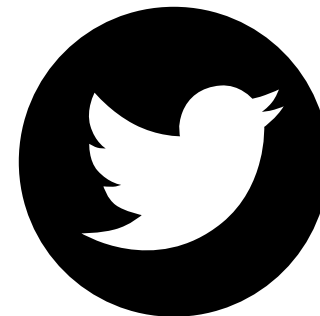
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