

Massachusetts DCR Bureau of Forest Fire Control



**2020 Fire Season –
Not So Normal!**



DCR

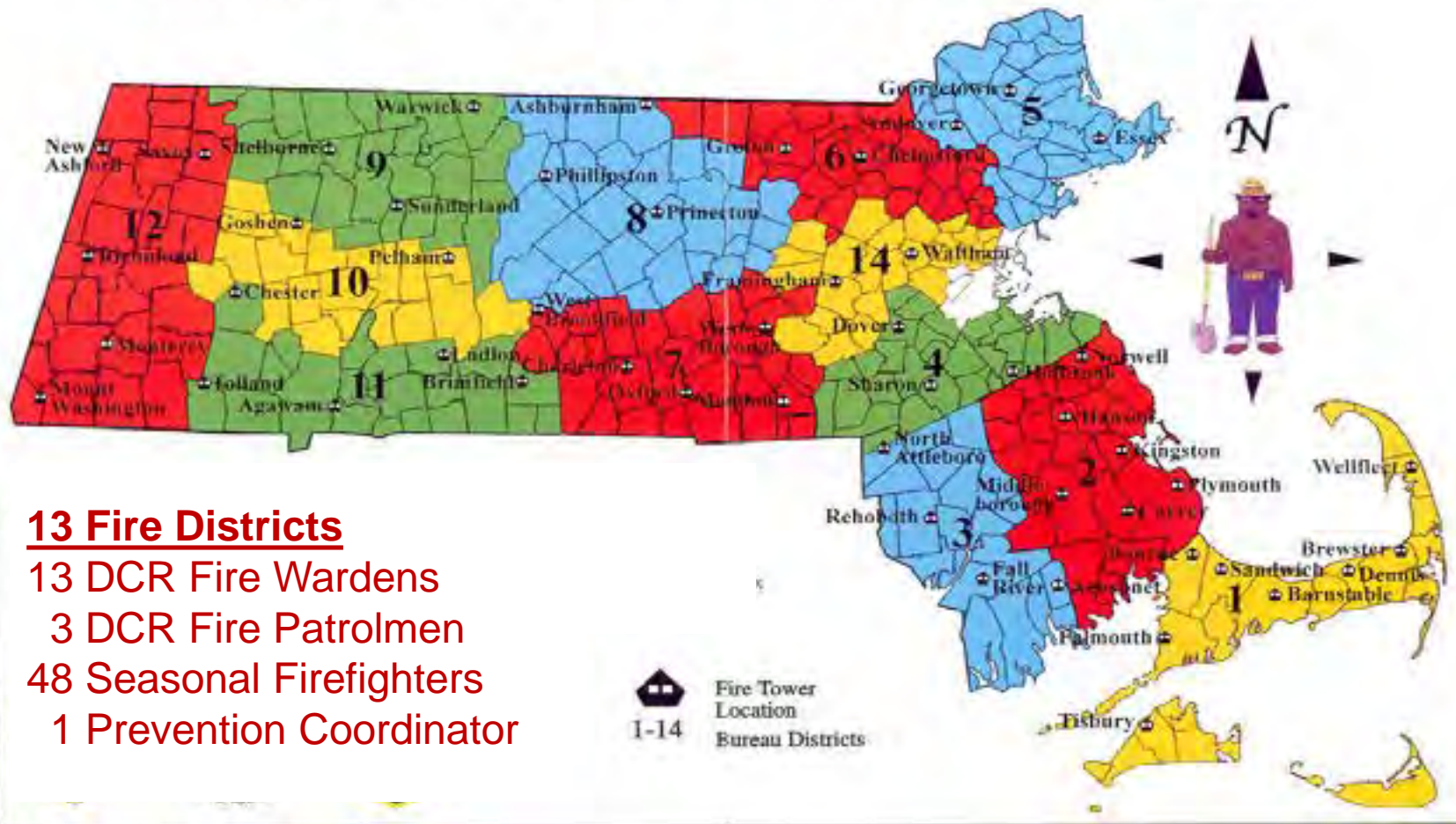
Bureau of Forest Fire Control and Forestry

Forest Fire Control Responsibilities

Providing aid and assistance in the prevention, detection and suppression of forest fires to cities and towns since 1911.

DCR Bureau of Forest Fire Control

Massachusetts Bureau of Forest Fire Control Districts and Tower Network



DCR Bureau of Forest Fire Control Staffing

- **13 District Fire Wardens**
- **3 District Patrolmen**
- **48 Seasonals April through September**
- **1 Prevention Coordinator**

Bureau of Forest Fire Control Services

- **Wildfire Response to Cities and Towns**
- **State Wildfire Occurrence Reporting**
- **Fire Detection / Fire Tower Network**
- **Prescribed Fire on State and Partnership Lands**
- **MEMA State Resource**
- **Federal Excess Property Program/VFA**
- **Wildfire Crew / National Mobilization**
- **Wildfire Training**
- **Fire Danger Rating / Fire Weather Intel**
- **State Drought Management Task Force**
- **DCR Parks and Forestry Operational Support**

DCR Forest Fire Control Fire Tower Operations

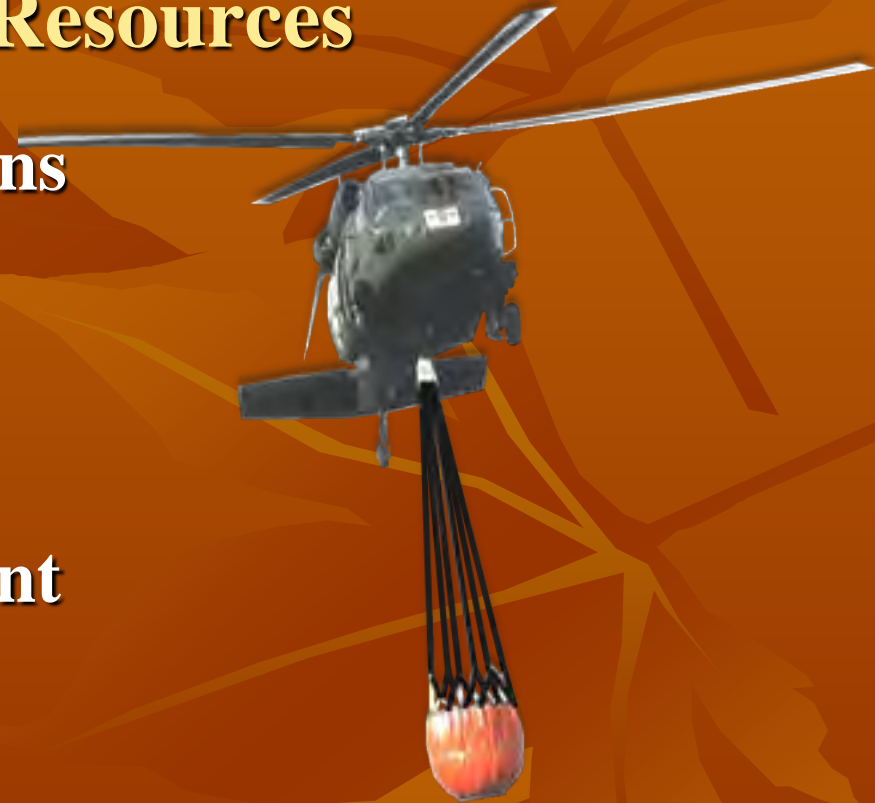
- 42 Fire Towers Statewide
- Fire Detection
 - Staff 22 fire towers statewide



DCR Bureau of Forest Fire Control Specialized Resources

DCR / MANG Air Operations for Fire Fighting

- **State Air Ops MOU**
- **DCR Role:**
 - **Provide on site Assessment of need.**
 - **Air to Ground Coordination and Communication.**



DCR Bureau of Forest Fire Control

Federal Excess Property Program

- U.S. Forest Service Fire Program
- Delivered by State Forester
- Provides Surplus Equipment to State Agency, and Municipalities

-2015..... \$ 6.5 million in equipment value provided to Massachusetts cities and towns by DCR.



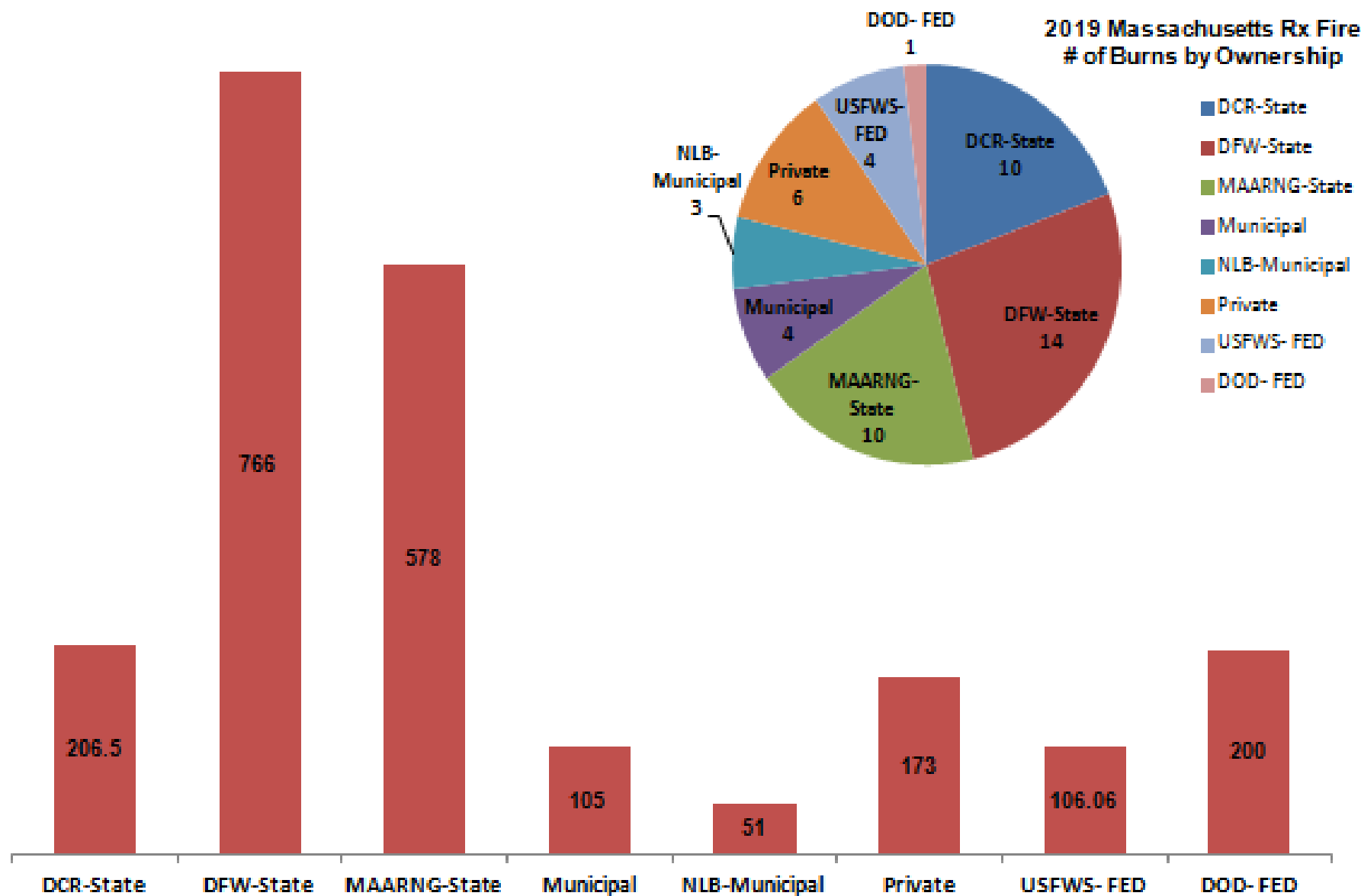
Hazardous Fuels Mitigation and Ecosystem Restoration Project / *PRESCRIBED FIRE*

- Over 2,100 acres of Prescribed fire applied to the landscape on state and partnership lands in 2019 for the purpose of Hazard Mitigation or Ecosystem Restoration.
- DCR has over 1,800 acres in burn plans ready for implementation in Myles Standish SF, Freetown SF, Quabbin Resv., and Manuel Correllus SF
- Success through a cooperative partnership with MA Fish and Wildlife



Massachusetts 2019 Rx Fire Burned Acres by Ownership

Total: 2,185.56 Ac



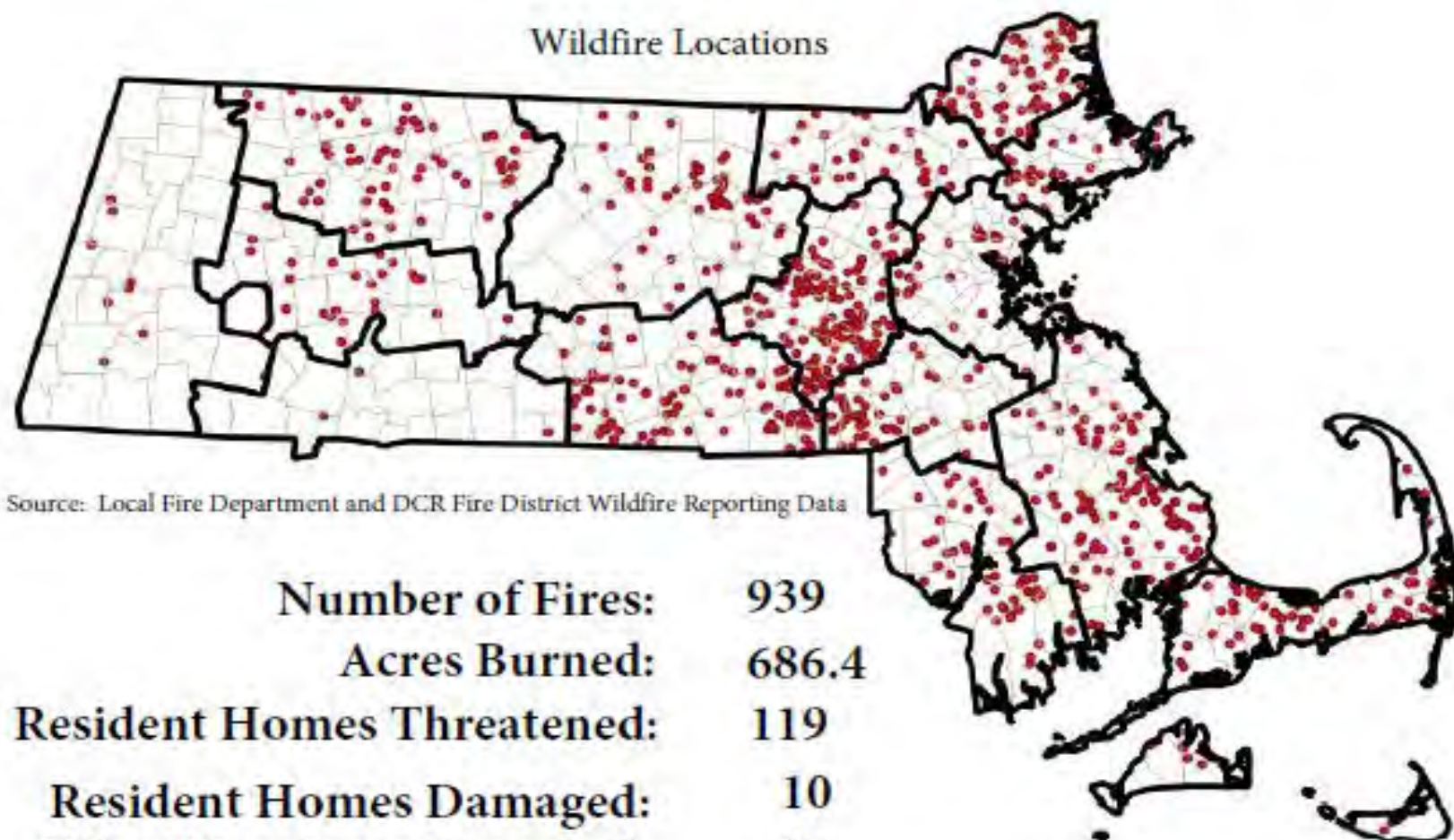
DCR Bureau of Forest Fire Control Park Operations Assistance

- **Townsend SF / Willard Brook SF**
 - Over 13 Miles of Forest Rd Improvements
- **Shawme Crowell SF**
 - 8 Miles of Fire Rd maintenance
- **Statewide Response to multiple State Park storm damage needs.**
- **Assistance with excessive visitor / crowd / vehicle parking management.**
 - Bash Bish Falls Barriers
- **Gill Bliss SF –Cummington**
 - Rescue Access issue

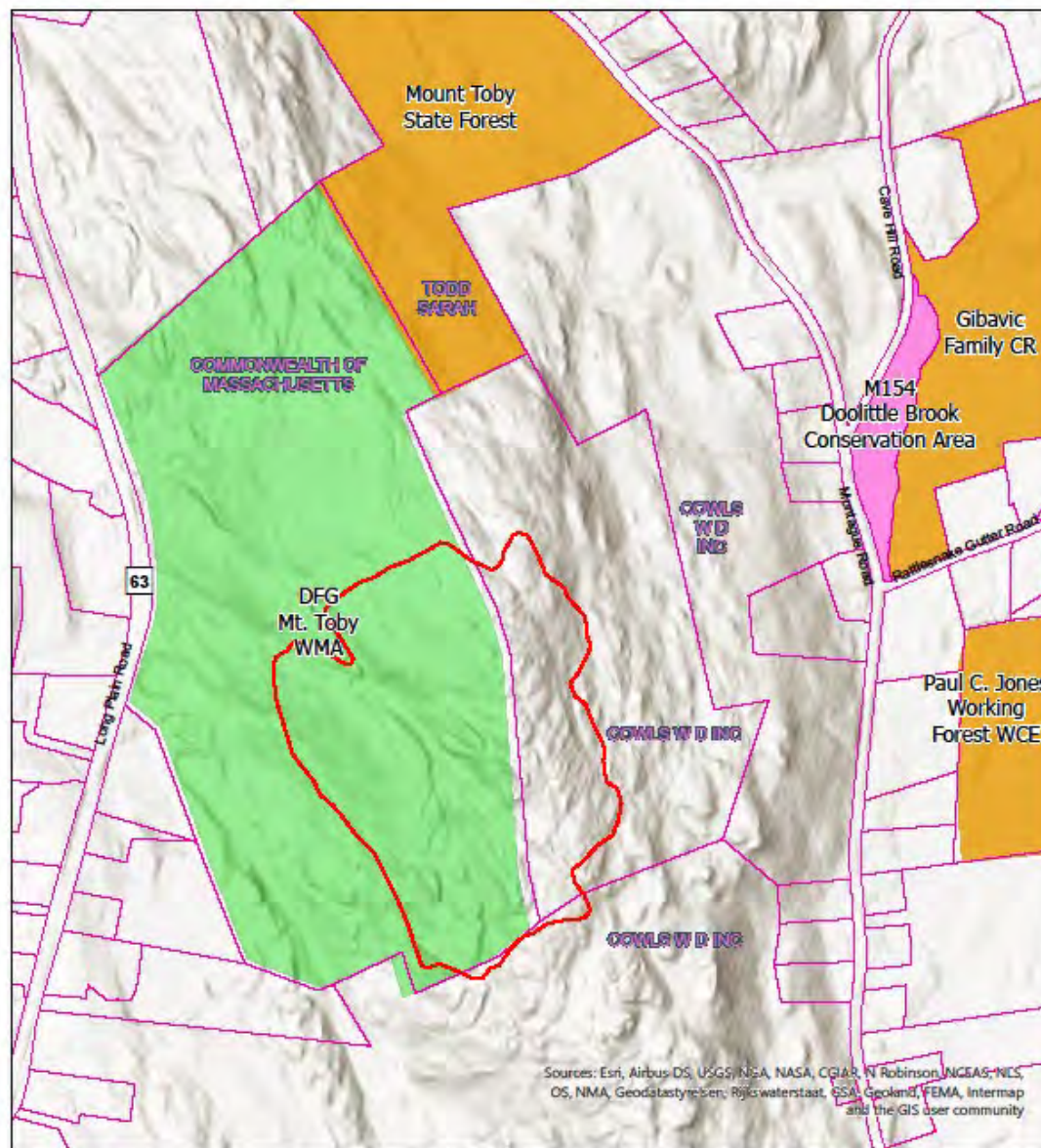


MASSACHUSETTS WILDFIRE OCCURRENCE MAP

Year to Date 8-31-20



Number of Fires:	939
Acres Burned:	686.4
Resident Homes Threatened:	119
Resident Homes Damaged:	10
Other Structures Impacted:	81
Number of DCR Fire Responses:	220



0 500 1,000 2,000 Feet

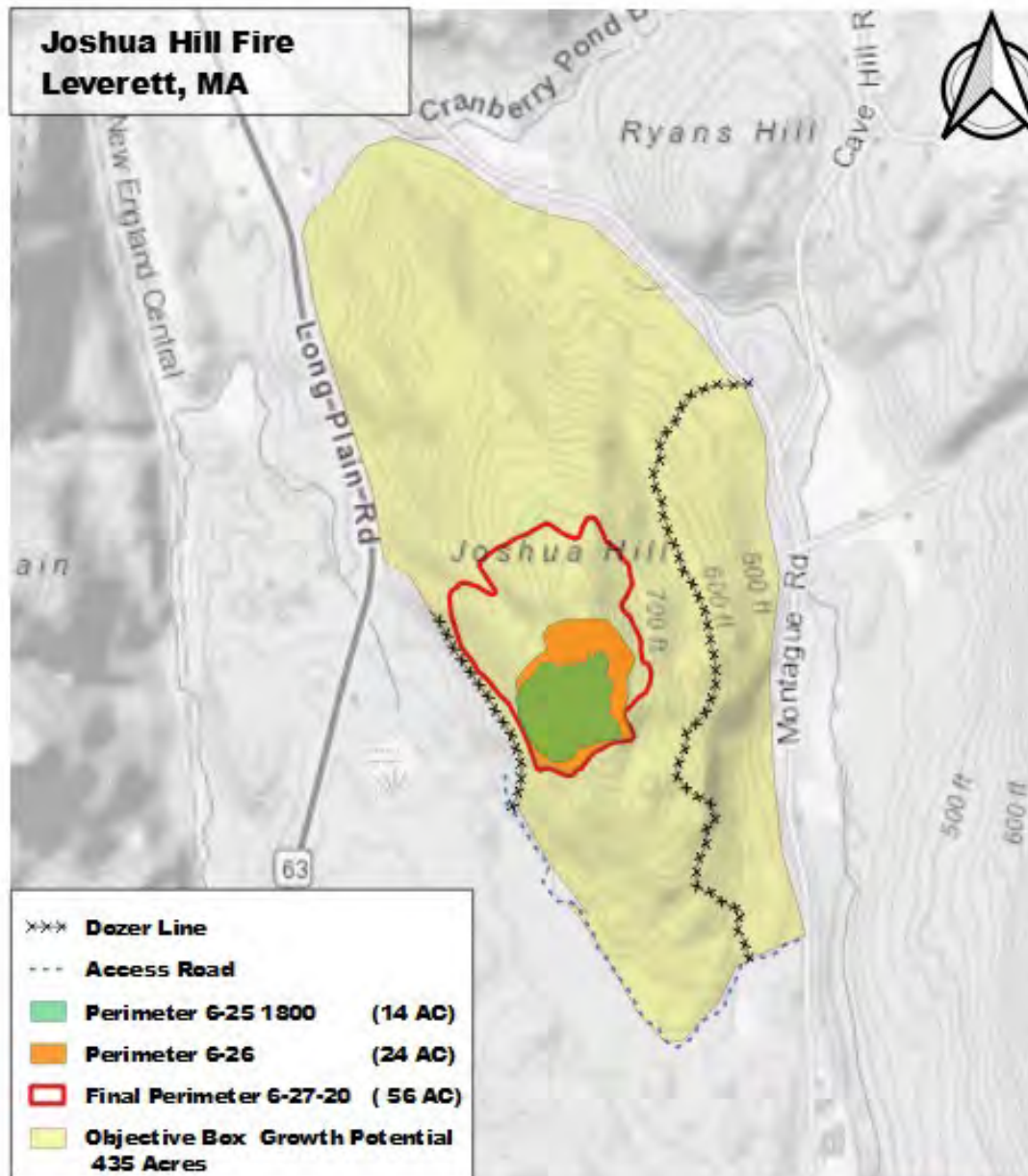
Joshua Hill Wildfire, Leverett, MA

As of 06/28/2020:
Fire Perimeter 6951 feet
Area 56 acres.

- Joshua Hill Fire Perimeter
- Municipal
- DCR-State Parks & Recreation
- Assessor Parcels
- Private
- DFG-MassWildlife



Joshua Hill Fire Leverett, MA



Start Date: 6-25-20
 Current Status: Monitor / Patrol
 Final Size: 56 AC
 Cause: Under Investigation

0 500 1,000 1,500 ft



Copicut Woods Fire

Fall River, MA
41.707924
-71.051945

Freetown State Forest



Copicut Road
Copicut Reservoir

Timber Lot

- State Forest Bound
- Dozer Line - Perimeter 8-8-20
- Fire perimeter 7-16-20

Fire Perimeter 8-9-20

SIZE: 8.0 Ac
CONTAINMENT: 95 % Not out
CAUSE: Lightning
OWNERSHIP: TTOR

0 500 1,000 ft



TULLY MT FIRE



Tully Mountain

DYKING

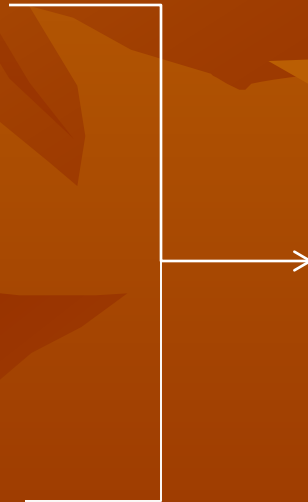
0 250 500 750 1,000 ft

FIRE BEHAVIOR ENVIRONMENTAL FACTORS

- **FUELS**

- **WEATHER**

- **TOPOGRAPHY**



- **FIRE BEHAVIOR**

- **SIZE UP**

- **FF SAFETY**

- **STRATEGY**

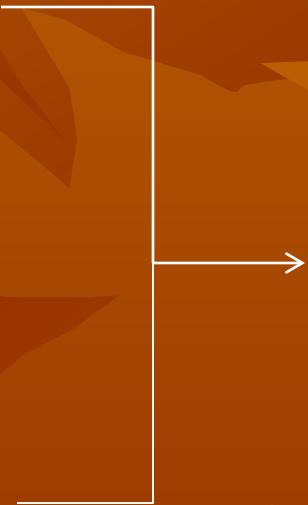
- **TACTICS**

- **RISK**

- MANAGEMENT**

FIRE BEHAVIOR ENVIRONMENTAL FACTORS

■ FUELS

- 
- FUEL TYPE
 - SIZE CLASS
 - FUEL MOISTURE
 - ARRANGEMENT
 - LOADING
 - LIVE OR DEAD

FIRE BEHAVIOR ENVIRONMENTAL FACTORS

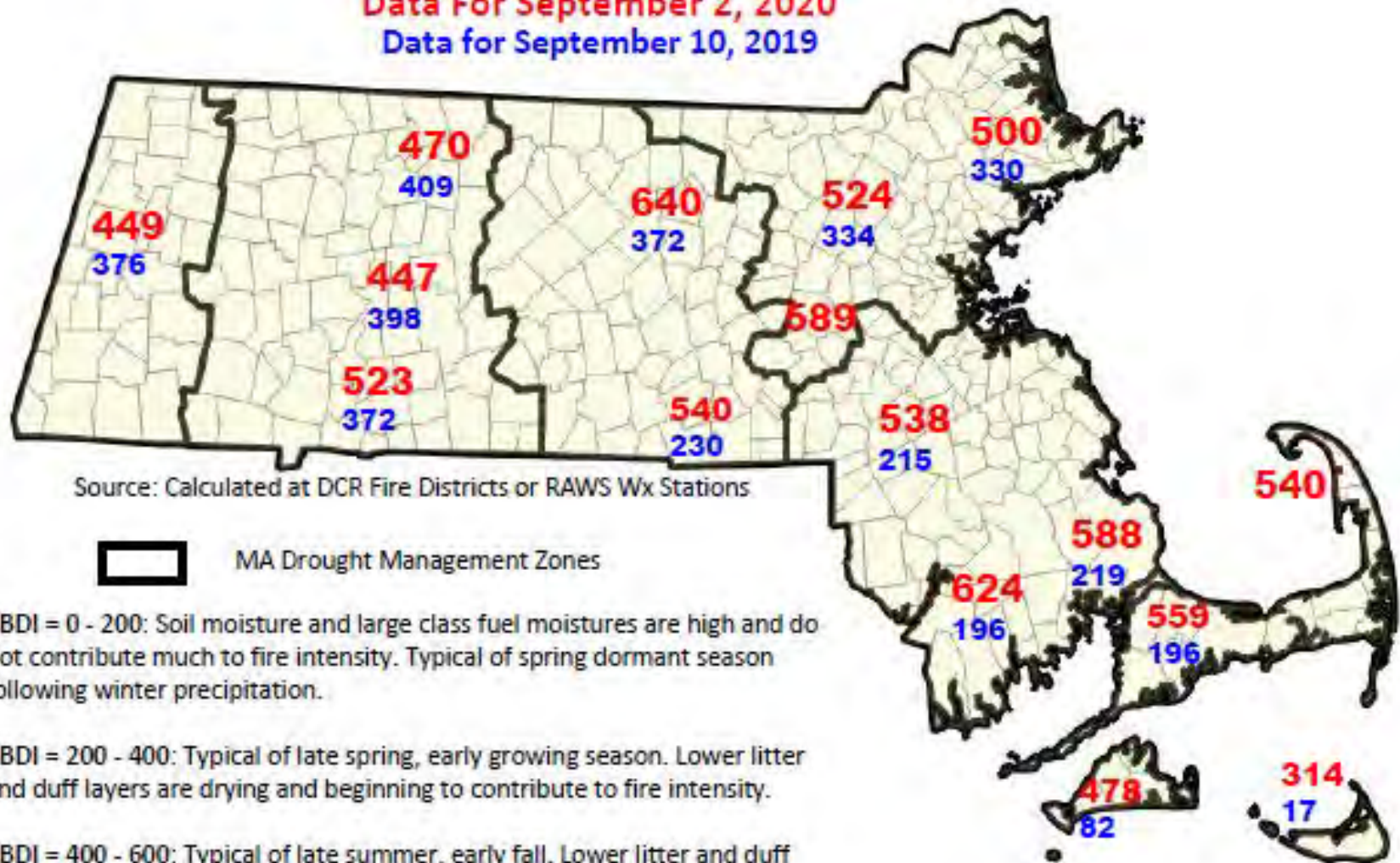
■ WEATHER

- AIR TEMP ←
- WIND Speed/Dir
- RELATIVE HUMIDITY ←
- PRECIPITATION ←
- DROUGHT (K) ←
- INVERSIONS
- T~STORMS / COLD FRONTS
- LIGHTNING ACTIVITY ←

Keetch – Byram Drought Index

Data For September 2, 2020

Data for September 10, 2019



KBDI = 0 - 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. Typical of spring dormant season following winter precipitation.

KBDI = 200 - 400: Typical of late spring, early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 400 - 600: Typical of late summer, early fall. Lower litter and duff layers actively contribute to fire intensity and will burn actively.

KBDI = 600 - 800: Often associated with more severe drought with increased wildfire occurrence. Intense, deep burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

Fire Behavior and Tactics in Since June



2020.... Not so normal for DCR Forest Fire Control

- **COVID -19**
- **COVID Related Hiring / Admin challenges**
- **Wildfire Response under COVID Risk Mitigation**
- **DCR Operations under COVID Protocols**
- **DROUGHT Induced Fire Behavior**
- **Sharp increase in Fireworks use / Lightning Fires**

2020.... Not so normal for DCR Forest Fire Control..... So How We Manage the Operation?

- **DCR FIRE Incident Management Team in place since end of March**
- **Trained Staff in specific positions...**
 - **IC, Safety, PIO, OPS, Plans, Logistics, Finance**
- **Incident Action Plan developed weekly**
- **Operational Briefing provided for all staff every Monday and Friday morning.**

Incident Action Plan

DCR Fire COVID-19 Response
MA-MAS-202001



Operational Period
September 8 – 21, 2020
0700-1800 Daily



Mass DCR Bureau of Fire and Forestry
Incident Management Team
Incident Commander: Dave Celino

ICS Form 202

INCIDENT OBJECTIVES	1. INCIDENT NAME DCR Fire COVID-19 Response	2. DATE 09/06/2020	3. TIME 1600												
4. OPERATIONAL PERIOD (DATE/TIME) 09/08/2020 – 09/21/2020 0700-1800															
5. GENERAL CONTROL OBJECTIVES FOR THE INCIDENT (INCLUDE ALTERNATIVES) <ul style="list-style-type: none"> • Provide for the safety and wellbeing of ALL staff through accurate and timely sharing of all guidance, procedures, logistical support, and situational awareness supporting information. • Provide for continuity of mission delivery assistance in fire detection and suppression, support of all on-going programs, including qualification of out-of-state interagency wildfire crew, while adhering to all COVID-19 National, State and Agency direction and procedures. • Provide Logistical support for Bureau needs. • Provide support to other Bureau of Fire and Forestry and Recreation programs, as requested. 															
6. WEATHER FORECAST FOR OPERATIONAL PERIOD General Weather –Partly to mostly sunny skies with temps in the 70' - 80's on Tuesday and 70's through the week, winds – averaging 5mph inland and 5-10mph along the coast. Chance of showers Wednesday evening through Sunday. Please refer to the NWS Norton fire weather forecast for your areas for more specific information.															
7. GENERAL SAFETY MESSAGE Personal safety of our staff is top priority and cannot be stressed enough. Our mission of Detection, Suppression and Prevention continues with the added complexity of the COVID-19 era. Governor Baker issued an order requiring the use of masks or face coverings in public places where maintaining social distancing from others is not possible. This statewide order goes into effect on Wednesday, May 6, 2020.															
8. Attachments (<input checked="" type="checkbox"/> if attached) <table border="0"> <tr> <td>X Organization List (ICS 203)</td> <td>X Medical Plan (ICS 206)</td> <td>X <u>Mass 4 You EAP</u></td> </tr> <tr> <td>X Assignment List (ICS 204)</td> <td>X Safety Message</td> <td>X <u>Division Map</u></td> </tr> <tr> <td>X Communications Plan (ICS 205)</td> <td>X DCR Fire Alert</td> <td>X <u>Fire Occurrence Map</u></td> </tr> <tr> <td>X State Face Cover Guidance</td> <td>X U.S. Drought Monitor Map</td> <td></td> </tr> </table>				X Organization List (ICS 203)	X Medical Plan (ICS 206)	X <u>Mass 4 You EAP</u>	X Assignment List (ICS 204)	X Safety Message	X <u>Division Map</u>	X Communications Plan (ICS 205)	X DCR Fire Alert	X <u>Fire Occurrence Map</u>	X State Face Cover Guidance	X U.S. Drought Monitor Map	
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9. PREPARED BY (PLANNING SECTION CHIEF) IAP Page 2 /S/ Patricia Correia		10. APPROVED BY (INCIDENT COMMANDER) David Celino <i>David Celino</i>													

Concerns for Fall Fire Season



- Continued Precip Deficits
- Continued Dry Ground Fuel Conditions (KBDI)
- Leaf Drop increasing surface fuel loading.
- Above average Temps.
- Typical drier air masses
- Historical Fall Fire Occurrence as Reference



THANK YOU

Dave Celino

Chief Forest Fire Warden

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