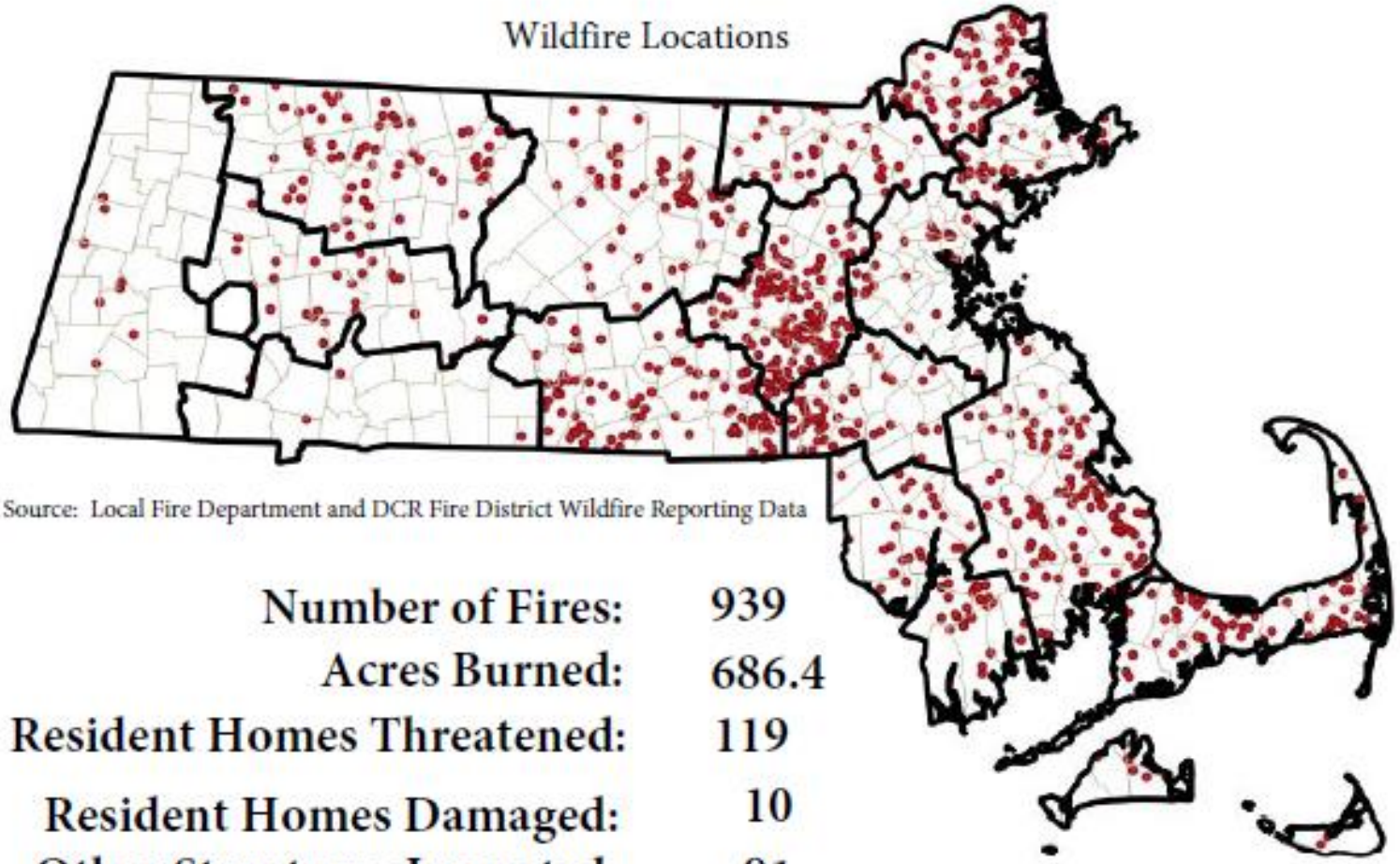
Wildland Fire Management Current Drought Impacts

- **Fire Statistics**
  - 939 Fires YTD for 686.4 Acres burned, 220 DCR Fire responses
    - June: 116 Fires
    - July: 55 Fires
    - **August: 105 Fires**

  - Grinding Rockhill Fire- Middlesex Fells Res. : 3 Acres going 8-13 ongoing
  - Copicut Woods Fire- Fall River: 8.5 Ac, 7-16, finally declared out
  - Tully MT Fire – Orange: .5 Ac, Started on 8-10, ongoing in monitor status
  - Ashley Res. Fire: Holyoke Watershed, .5 Ac started 8-26 in monitor status

- **Drought Impacts on Fire Behavior and Suppression:**
  - Scattered precip events, slight improvement in CT River Valley/Berkshire
  - Main area of concern is Southeast / Southern Bristol County.
  - Grass and shrub fuels showing drought stress in SE
  - Moisture has not impacted critically dry duff layer and ground fuels.
  - Lightning remains a real concern for new starts due to dry ground fuels.
  - All fires with extended burn time from ignition are multi day incidents.
  - Concerns shifting to potential fall fire season conditions.

MASSACHUSETTS WILDFIRE OCCURRENCE MAP
Year to Date 8-31-20



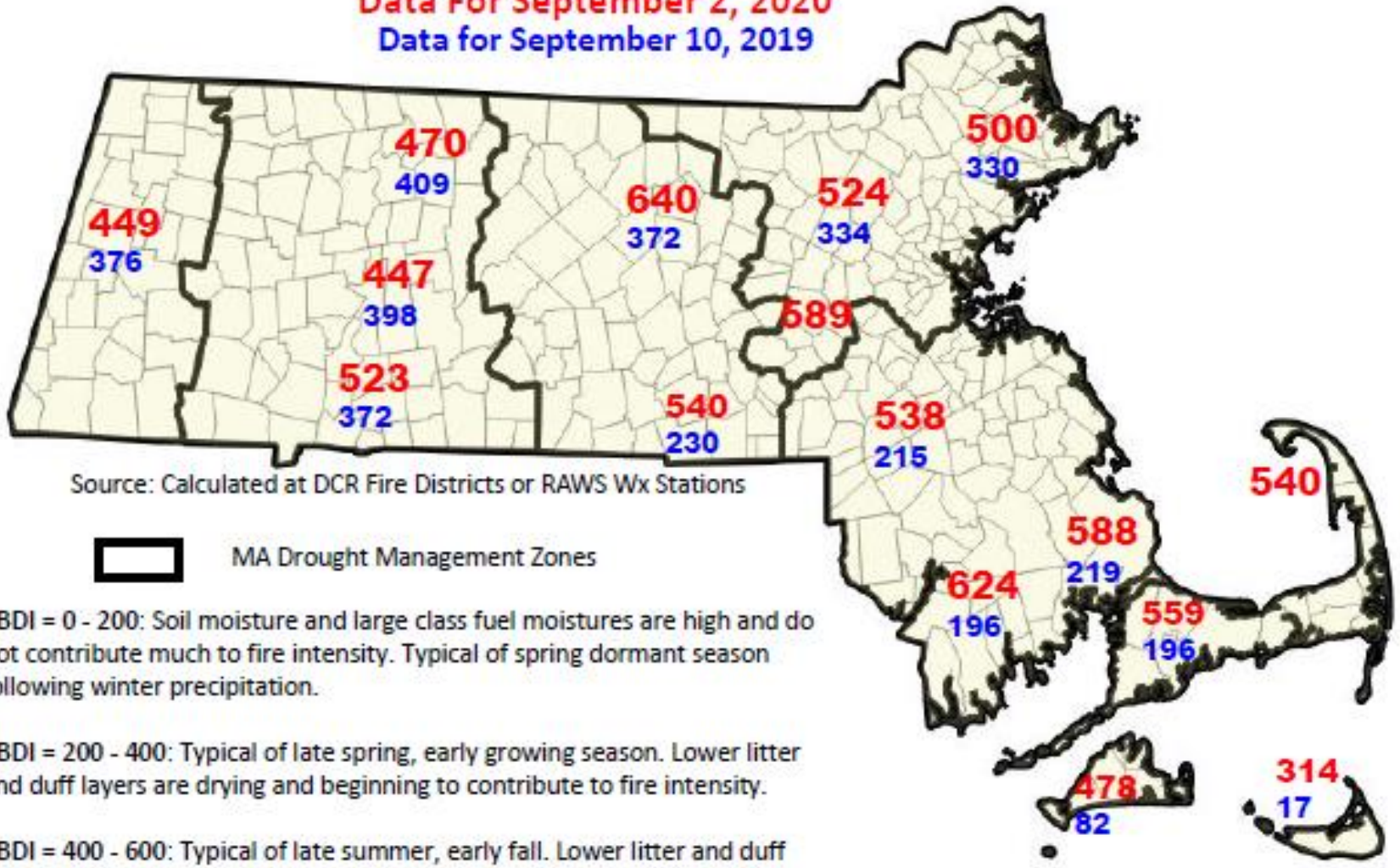
Source: Local Fire Department and DCR Fire District Wildfire Reporting Data

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**

Keetch – Byram Drought Index

Data For September 2, 2020

Data for September 10, 2019



Source: Calculated at DCR Fire Districts or RAWS Wx Stations

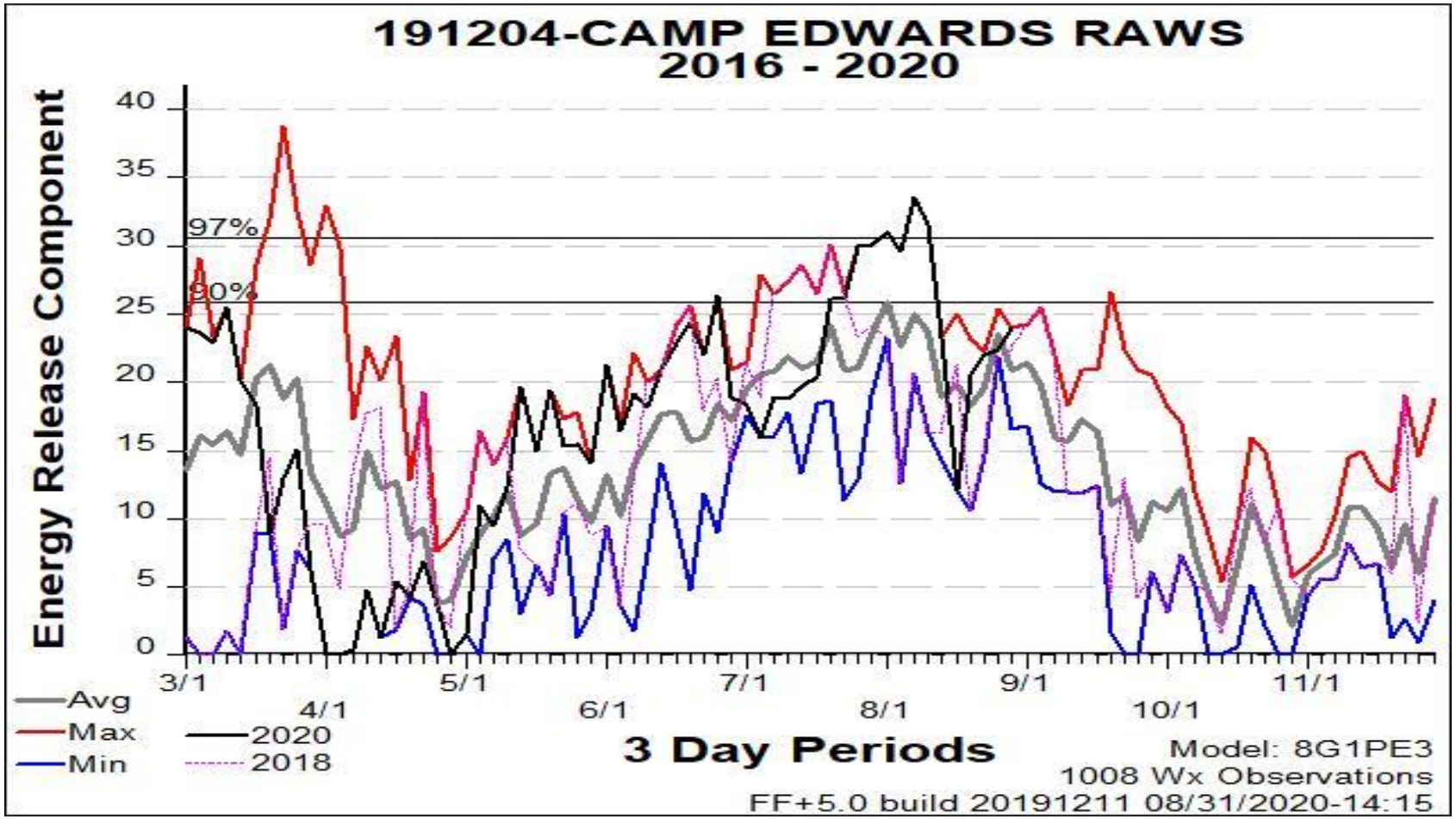
MA Drought Management Zones

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.



The **energy release component** (ERC) is a number related to the available **energy** (BTU) per unit area (square foot) within the flaming front at the head of a fire. Daily variations in ERC are due to changes in moisture content of the various fuels present, both live and dead.

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