MONTHLY REPORT OF HYDROLOGIC CONDITIONS

TO: Hydrologic Information Center, W/OS31
NOAA’s National Weather Service
1325 East West Highway
Silver Spring, MD  20910-3283

SIGNATURE
/s/ John Goff, Lead Meteorologist

DATE
08/16/2018

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

July 2018 could be characterized as very warm and dry across the majority of Vermont and northern New York as strong high pressure was the dominant day to day large scale weather feature. In fact, Burlington, VT recorded their warmest July on record with an average temperature of 76.0 degrees, while Massena, NY was third warmest with an average of 72.8 degrees. On average, monthly mean temperatures ranged from 2 to 5 degrees above normal with areas of the Champlain Valley and portions of southeastern VT seeing departures of 6 to 8 degrees above normal (Fig. 1). With high pressure in control, precipitation was generally on the light side and irregular in coverage, coming in the form of scattered showers and thunderstorms as occasional weak frontal boundaries crossed the region. The exception was across extreme northeastern VT in the eastern portions of Essex and Caledonia Counties, and more notably across southern and southeastern VT where several rounds of heavier rainfall fell toward month’s end. The most significant event in this area occurred on the afternoon of the 27th during which training thunderstorm activity produced localized rainfall up to 4 inches in the southeastern Vermont town of Springfield, leading to localized flash flooding and damaging several buildings including a senior housing facility. On average, monthly totals ranged from 1.5 to 3.5 inches with localized heavier amounts from 4 to 6 inches occurring in the aforementioned wetter areas. As such, negative monthly mean precipitation departures of 1 to 3 inches occurred in a fairly large swath of central and northern VT west through northern New York (Figs. 2-4). This led to a continuation of abnormally dry to moderate drought conditions across a large portion of the HSA and States of Emergency remained in effect for the Essex County towns of Willsboro and Wadhams, NY for low water levels at months end (Fig. 5).
Figure 1: Monthly mean temperature departure (July 2018).

Figure 2: Monthly precipitation totals (July 2018).
Figure 3: Monthly precipitation departure from normal (July 2018).

Figure 4: Monthly precipitation percent of normal (July 2018).
Figure 5: Drought status as of 31 July, 2018.