

Summer 2010 Water Supply Summary/Drought Update

Following the wettest 12 months ever in New Jersey (March '09-'10), the state experienced a string of months characterized by record warmth and below-normal rainfall that continued into September. The warmest spring and summer on record caused unprecedented peak water demands in many water systems, which quickly began to deplete storage in key reservoirs in the Northeast and Coastal North drought regions. The water supply indicators that NJDEP monitors to assess the impact of drought conditions also declined throughout the summer.

As a result, the NJDEP issued a Drought Alert on July 6, 2010, followed by a Drought Watch designation for the Northeast drought region on August 5, 2010. The Drought Watch was later expanded statewide on September 8, 2010. Due to the degrading water supply indicators and the potential need to declare a Drought Warning, NJDEP held two public hearings on August 25 and September 29, 2010. All the while, NJDEP staff continued to consult and coordinate with affected water suppliers in an effort to manage and preserve available supplies

Isolated precipitation events in July, August, and mid-September replenished key reservoirs and temporarily moderated demands. A multi-day rain event associated with Tropical Storm Nicole began on the last day of September, bringing as much as 4"-6" to the state's westernmost counties. The heaviest rainfall was concentrated well to the west of New Jersey and the state's driest areas (the central core and coastal region) received considerably less rainfall (ranging from ½" to 1½"). Subsequent rains on October 3rd through the 5th, however, delivered 3-4" to portions of the parched coastal plain. Overall, the early October rainfall produced significant increases in reservoir storage due to enhanced stream flows and pump/storage into key reservoirs.

The aforementioned rains reduced, but did not erase, the large precipitation deficit that had been looming across much of New Jersey over the past several months. The current precipitation deficit, following the rains, ranges from 4"-6" over much of the coastal plain; the remainder of the state is at or slightly above normal for the past 3 months. Staff will continue to evaluate the full effects of the recent rainfall on drought indicators as well as monitor demands as a return to clear, dry and warmer-than-normal weather is forecast for mid-October.