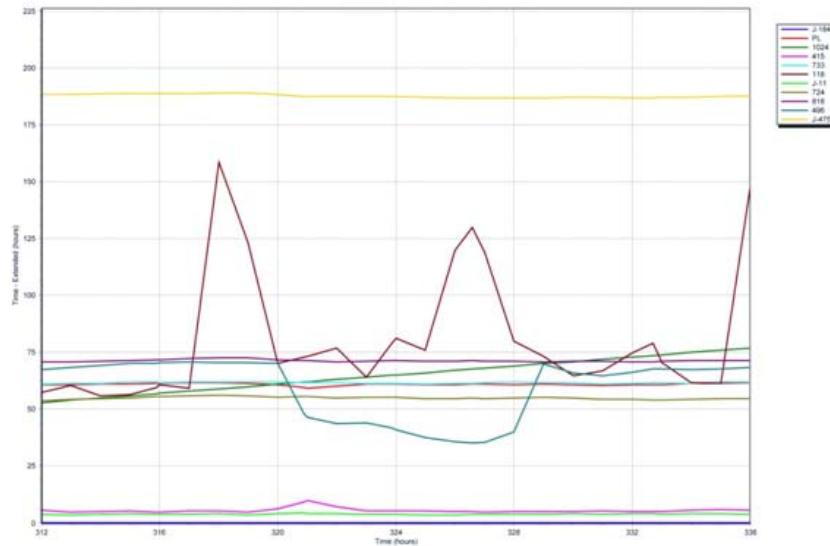


PREPARATION OF IDSE KEENE, NEW HAMPSHIRE



Water age over a 24-hour period at various locations in the Keene, NH water system.

In 2007, Dufresne Group (DG) prepared an Initial Distribution System Evaluation (IDSE) for the City of Keene, New Hampshire. The IDSE is the initial stage in the EPA's Stage 2 Disinfectants and Disinfection Rule (DBPR) and includes a study to identify locations in a water system with high concentrations of disinfection byproducts, mainly trihalomethanes (THMs) and haloacetic acids (HAAs).

Prior to this project, Dufresne Group developed and calibrated a computerized water system model for the City of Keene. Using the computer model in conjunction with data obtained during Stage 1 monitoring, DG identified the Stage 2 compliance monitoring site. Although not typical to use a water model for site selection, DG was able to demonstrate adequacy of the model for this use. Determination of monitoring sites included completing a water age analysis of the water system.

KEY FEATURES

- Use of water model for site selection
- Performed extensive water age analysis throughout the water system.
- Use previous sample data to confirm water model results.
- Developed sampling schedule for use by the City's Water Department.