Island Falls Water Department Maine System Mapping Case Study

Infrastructure Type: Drinking Water
Project Type: Compliance
TAP: Art Astarita

Population Served: 793
Low Income Population: 367
Minority Population Served: 8
Connections/Households: 633
Median Household Income: $27,083

Project Details
As the result of a referral by the Maine Drinking Water Program, RCAP Solutions agreed to assist the community in digitizing the 1967 data into GIS format for use in conceptual, preliminary planning, and context mapping activities. The goals were to create a digital map of the system’s critical assets thus preserving current system knowledge and facilitate the system's proper operation, maintenance and capital planning. This information is not to be used in design or construction work.

The outputs were reviewed and corrected by superintendent based upon his experience. In a finite series of reiterative steps by direct delivery, mail and e-mail exchange, RCAP Solutions incorporated those corrections to produce a final map that best reflects the system. This work will be the basis for developing a critical asset inventory for entry into the CUPPS Asset Management software under a subsequent project, if approved by the town.

Solution/Resolution
RCAP Solutions with the help of the system completed a GIS map of their critical assets. The mapping included distribution pipe (type and size), valves, hydrants, and water source, treatment and storage facilities. The results of this work provided the water department and their system engineer with the first maps they have had since 1967. This project sets the foundation for strategic planning, an asset management and capital improvement plan.

“The project came at an opportune time with the requirement from the state coming due in a few years. It is also nice to have accurate records on which to rely. Having the maps will make it easier for new employees to get to know the water system and locate gates and services. Thanks again for your services, without your organization assisting with the mapping of our system I’m not sure how it would have been able to get it done. It was a pleasure working with the RCAP organization.”

Brian MacDonald, Superintendent
Island Falls Water Department