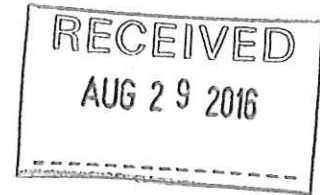


Ground Water Protection Committee Memorandum
August 28, 2016
Submitted by: Dick de Grasse, Secretary



The front page of the September 2016, issue of The Working Waterfront discussed issues of freshwater supply and saltwater intrusion in Stonington and Castine. I compared notes of Islesboro and Castine fresh water with Castine town manager James Goodson. They have a municipal water system serving approximately 760 meters when Maine Maritime Academy is in session. The 760 meters use approximately 110,000 gallons of water per day. Using the assumption of 2.5 users per meter it works out to be 1900 users or 58 gallons of water per day per user. James Goodson estimated 65 gallons of water per day per user. From my experience either number is reasonable. They are served by a much small aquifer than we have on Islesboro. Their 2, 300-400 foot wells serve a population of 1200 to 1800 people and can't keep up with the demand during drought periods. They installed a French drain type of system to catch run-off: 340 feet of 6" pipe set in gravel, 16 to 18 feet deep at about the level of bed rock. Former utility superintendent George Motycka and Camden consultant Peter Garrett designed the French drain type of system. It worked. They have little or no data on private wells.

The Working Waterfront also mentioned rising seawater levels due to melting Artic icecaps. Apparently no one in Castine is moving to higher ground; they have not detected any rise in seawater levels.