

Caroline Watershed Committee Meeting Minutes 6/19/18

Attendance: Mark Witmer, Chair; Barry Goodrich, Lucy Gagliardo, Kristen Hychka, Jackie Cassaniti

Guests: Mike Thorne, Superintendent of Public Works, City of Ithaca; Dave Hanny, Barton and Loguidice; Liz Myers, EcoLogic; and Donald Harner, T.G. Miller, P.C.

Mike Thorne has been interested for about 4 years in studying the stormwater that flows to the City of Ithaca from outlying areas. Now he is implementing a study of the creeks and waterways that come into the city that empty into Cayuga Lake, officially called the “City of Ithaca Flood Mapping and Mitigation Study.” (For more information go to <http://www.nysaccny.org/wp-uploads/Flood-Mapping-Mitigation-Study-Mike-Thorne.pdf>). He is now meeting in the towns where these waterways exist. He has enlisted the help of different organizations: Barton and Loguidice (working with Watts Architecture and Engineering), EcoLogic and T.G. Miller, P.C.; the Town of Caroline is the first place this group has met. They came with a number of maps of the town and the members of the watershed committee pointed out areas that need attention, are being worked on and have been completed.

Mike said in 1981 FEMA did flood maps of the area, now they need to be redone as waterways have changed and higher rainfalls in storms bring more flooding. The object is to reduce sediment loads and slow down water coming into the creeks. USGS has been hired to do the imaging on the “flats” of Ithaca and then outside of the city. Dave said that FEMA has developed flood models and other models to see watershed problems such as ditches and creek beds; and mitigation possibilities: such as settling ponds, new wetlands and creek structures. Mark added that the Cornell Local Roads Program has been involved with studying ditches and how they contribute to sediment pollution and flooding. Another point brought up was the design storm models for a 24 hour period; an example: flooding that would happen once a year, once in 100 years, and so forth floods. These now need to be changed as storms are stronger and can bring as much rain in 2 hours as was seen in 24 hours before. This has been studied by Professor Todd Walters and grad student James Knighton at the Cornell Soil and Water Lab.

Some other things to consider are ground water, snow melt and climate change, in addition there is a Penn State pollution study. A good starting point for a watershed study was the Cayuga Lake Watershed Intermunicipal Organization meeting in Seneca Falls in May. Kristen said that Sharon Anderson and Angel Hinickle have been studying ditching in the area. And work can be done outside the banks, to allow water in the “old” floodplain, which is a wider area where the water can go if there is a big storm, this slows down the water in the main channel also.

Barry talked about Six Mile Creek and how the town has mitigated some of the problems by completing the Barrille I and II projects as well as the Banks Road work to help keep the creek in its banks, by stopping incising and sinuosity to slow the water as well as maintaining grade and take the energy out of the water. Barrille I has been in place since 2005 and it is still in good working order. What also helps is the vegetation that was planted on the banks to help absorb the water as it goes to the creeks. The other thing is ditch control, in not sending water from the land it is draining to the ditches, but to a holding pond somewhere on the property of the landowner (but preferably to public land). This could cost the property owner money, but Dave is hoping

that there could be some kind of matching grant to off-set the cost. Mike talked about the city working with the Finger Lakes Land Trust to purchase easements for stream buffers and to keep pristine land from being developed and/or the destruction of the creek bed. (He also mentioned the dredging of the inlet, but that has been something that has been discussed for years, and he doesn't know if it will be done or not because of the cost, which goes up every year.) Kristen asked what the timeline would be, and Mike said with the fieldwork they hope to complete this summer, and the maps that will be drawn in the fall, as well as more meetings, they hope to have this part of the study done by next year.

Kristen and Lucy walked most of Six Mile Creek and saw some of the problem areas; one by the "600" high bank area, another by the convergence of the east and west branch of Six Mile Creek (Mill Bottom) as well as by Boiceville Road. Barry talked about the Barrille II project which was to protect the aquifer in Slaterville Springs and how far the bottom of Six Mile Creek has gone down since he has been in the area. Kristen said the Harmful Algae Bloom's (HAB) program could be a model for the flooding funding because they also suggest landowners run tiles to retention ponds to control HAB's (so the bacteria or nutrients don't get to the lake.)

Kristen, Lucy and Barry are doing a watershed assessment and looking at funding opportunities...and would like a grant writer for the town! Lucy will be the "point person" for the Town of Caroline and the Ithaca City Group. Mike said he would also like to talk to Cindy Whittaker, the Caroline Highway Superintendent.

Submitted by Jackie Cassaniti