IV- F: Wetlands & Floodplains

Over the years, wetland and floodplain regulation by state and federal agencies has been a controversial subject. While it is a known fact that wetlands and floodplains play a valuable role in flood attenuation, groundwater recharge, and habitat for multiple species of wildlife, development proposals often find themselves in conflict with state and federal regulations that regulate filling or draining of wetlands and development in floodplain areas.

Public opinion on wetland and floodplain issues is often strongly polarized. There are supporters who advocate for wetland and floodplain preservation and opponents who see wetlands and floodplains as obstacles to development and a burden to private property rights. While it would appear that the public is gaining a better understanding of the importance of floodplains and wetlands, in the past 2-3 years the debate on wetlands has become increasingly polarized as many communities react to the threat of the mosquito-borne West Nile Virus.

1. WETLANDS

In the Batavia Kill watershed, federal and state designated wetlands account for a very small percentage of the total watershed area. These wetlands are found predominately along immediate stream corridors or in conjunction with the lakes and impoundments found in the watershed **(see Map IV-7, Water Resources)**. In 1997, the U.S. Fish & Wildlife Service, under contract with NYCDEP, published National Wetland Inventory (NWI) maps for the entire NYC watershed area. These maps are available at local town halls, county planning offices, and the Greene County Soil & Water Conservation District.

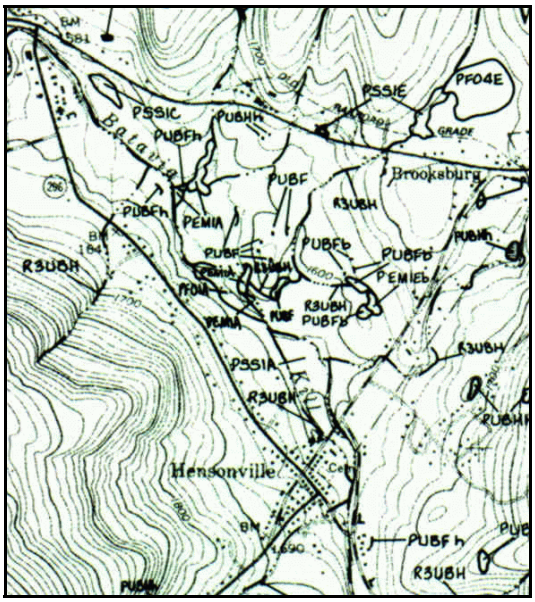

Figure IV-20: Section of National Wetland Inventory Map for Windham.

Figure IV-21: Typical riparian wetland along the Batavia Kill in Ashland. Note the oxbow ponds created in remnant stream channels.

It must be cautioned that the federally protected wetlands as mapped in the NWI should only be used as guidance, and that it is the responsibility of the property owner to determine if wetlands which meet the federal guidelines are located on their property. The NWI wetlands are mapped from aerial photo interpretation and generally only identify wetland areas of 1-3 acres or greater in size. These interpretations can be significantly impacted by the time of year the photos were taken, the rainfall conditions at that time, and a number of other factors.

In the Batavia Kill watershed, the combined area of state and federally-regulated wetlands (including open water cover) account for only 902 acres or 1.9% of the watershed area. As shown on **Map IV-7**, the Mad Brook watershed (Mitchell Hollow) has a high density of wetlands, with many riparian wetlands also located along the Batavia Kill mainstem.

A significant portion of the wetlands in the watershed are located in the immediate stream corridors (riverine wetlands), with old meander scrolls, floodplain depressions and aggraded waterways all providing ideal conditions for the development of wetland hydrological characteristics and vegetative communities. Palustrine wetlands also occur in the watershed and are characterized as being less than 20 acres in size with fairly shallow water. In many places in the watershed, development of wetland conditions is often associated with changes in hydrologic conditions caused by beaver activity, and the subsequent flooding of side channels and low floodplain areas.

Based on the observations and experiences of the GCSWCD, many smaller wetlands that meet federal criteria have not been mapped, and the total acreage is most likely significantly higher than current data indicates. The GCSWCD has addressed the current status of wetland regulations in the watershed, as well as recommendations on wetland management in later sections of this SMP.

2. FLOODPLAINS

The Batavia Kill watershed is typical of most areas in the Catskills, in having extensive areas of federally designated floodplains associated with most of the stream system. The watershed towns of Windham, Ashland and Prattsville have long been participating communities in the National Flood Insurance Program, with their initial Flood Insurance Rate Maps (FIRM) completed in the early 1970s.

Figure IV-22: Active floodplain on the Batavia Kill at Ashland during 12/17/00 flood event.

Prattsville:In the Town of Prattsville, the area of interest related to floodplains on the Batavia Kill is limited to the short segment of stream beginning at Red Falls and running to the Schoharie Creek. In general, the floodplain in this section of the town is fairly free of development in the floodplain, but nuisance flooding has been reported along Conine Road as well as the Conine Field facility which is located on the floodplain shared by the Batavia Kill and Schoharie Creek.

Ashland: In the Town of Ashland portion of the watershed, extensive, broad floodplains exist on both sides of the Batavia Kill, with smaller, narrower floodplains along the flatter sections of the tributaries. In Ashland, the only significant structure in the floodplain is the bridge to Tompkin's Gravel pit, which has been designed to allow flood flows to bypass the bridge. This presents short term loss of access when the stream stage is high, but it eliminates the typical situation where extensive fill is placed across the floodplain to elevate roadways.

Windham: The situation with floodplains and FIRM maps in the Town of Windham has been the focus of a great deal of attention during the last few years due to a FIRM map update project completed by the Federal Emergency Management Agency (FEMA). When Windham was first presented revised flood maps for review in 1995, the community felt very strongly that the maps were incorrect, and did not accurately reflect the benefits of the three flood control structures in the town. At that time, the town worked with the Natural Resources Conservation Service (NRCS) to provide FEMA and their contractor with data on

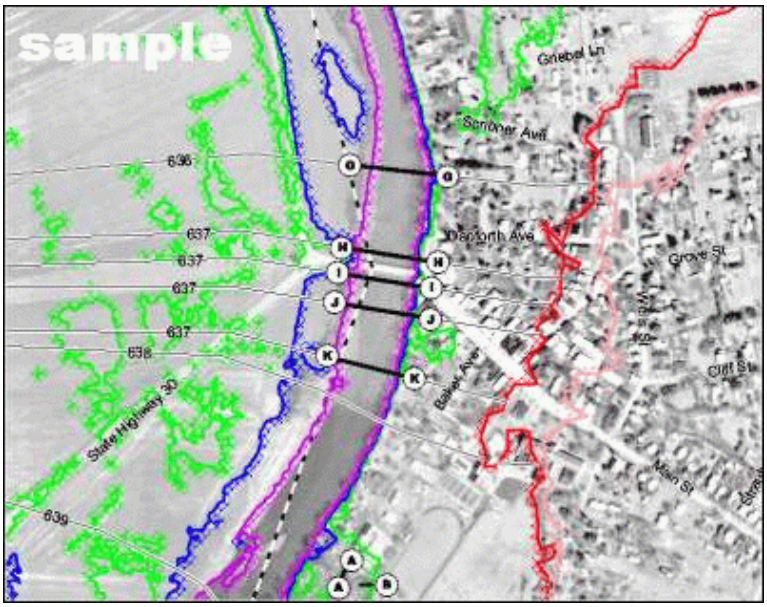

Figure IV-24: Sample of new digital FIRM from Schoharie County (NYSDEC)

a "laser scan" of the watershed topography completed from an airplane, the FIRM maps will integrate detailed terrain models, digital orthophotos, Geographic Information Systems, and hydraulic models to produce extremely detailed flood maps.

The new mapping tool will provide much better delineation of floodplain boundaries and property owners will actually be able to see roads, buildings and other features in relation to flood hazard zones, and the model will allow for flood contour lines indicating various depths of water under 100-year and other flood conditions. A sample of the new digital Flood Insurance Rate Map (FIRM) from Schoharie County is seen in **Figure IV-24**. Note that flood boundaries are represented on an aerial photo base map.