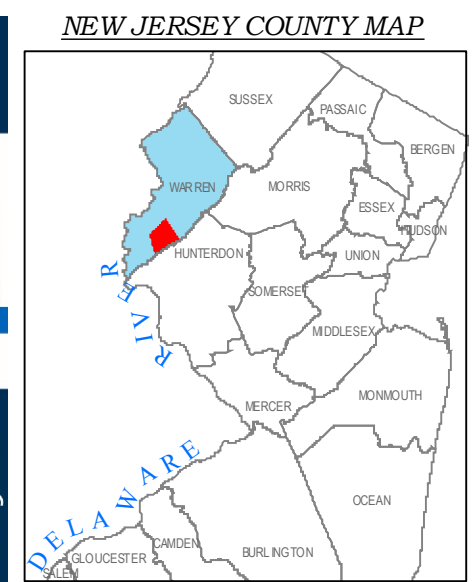
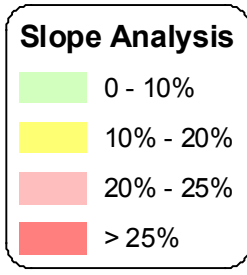
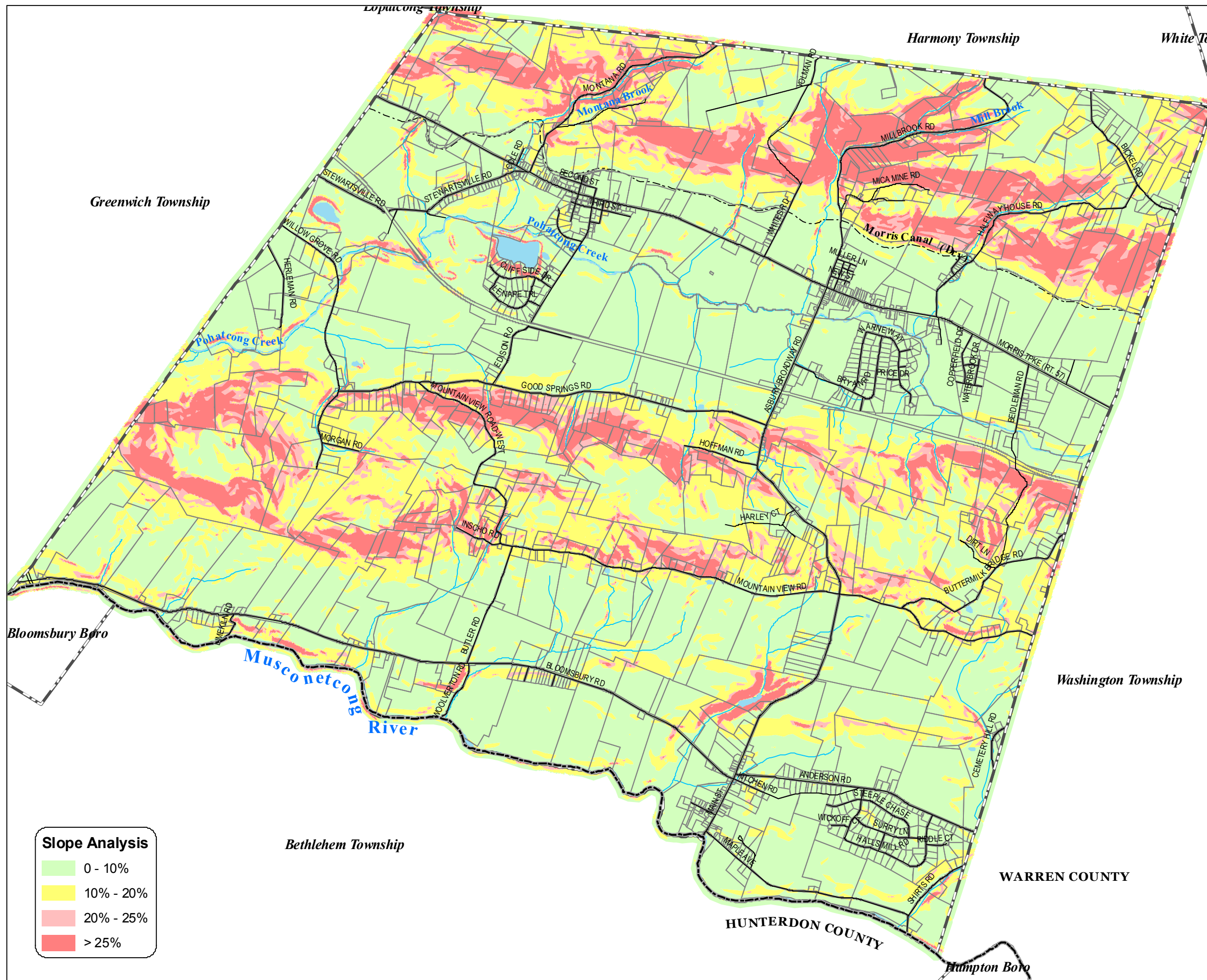


#### **4: STEEP SLOPES/ SLOPES ANALYSIS**

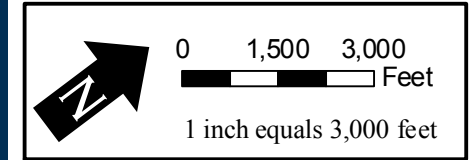
The subject of steep slopes is important for two main reasons: the potential for excessive erosion and the physical limitation of development. Steep slopes present concerns for development, and careful planning is essential to avoid adverse impacts to the surrounding environment. Disturbance of existing vegetation on steep slopes often leads to excessive erosion. This is because the vegetation holds the soils in place and intact, mitigating the erosive forces of precipitation and wind. When vegetation is removed, the soils on steep slopes become less stable and prone to erosion. This in turn degrades water quality through high turbidity/poor clarity, sediment deposition, and additional pollutant loads of contaminants bound to soil particles. Excessive erosion may also lead to slope failure, posing a hazard to surrounding building and/or transportation corridors. Steep slopes are also treasured for their scenic and environmental qualities. Ravines and steep hillsides often provide impressive scenic vistas. These resources are important to the overall characteristics of the Township. Vegetation on slopes increases not only soil stability, but also wildlife habitat. Limited accessibility also enhances the attractiveness of this habitat to a variety of species, including plants. Steep slopes also serve as natural boundaries between land uses and districts within a community.

Franklin Township has specific regulations regarding development and construction grading on slopes, as included in the Land Use Ordinance (§90). This ordinance prohibits development in “critical areas”, defined as having slopes of 20% or greater (§90-72C), and also defines the minimum buildable area in the Township as areas with slopes of less than 25%. The Highlands Act states there shall be no new development on slopes greater than 20% and places additional restrictions on slopes greater than 10%. These restrictions will become necessary in areas of the Township that fall within the Highlands Preservation Area and are recommended for areas of the Township that fall within the Highlands Planning Area. For more information on the Highlands Act, please refer to Section 16 and Figure 15.

The majority of Franklin Township, 82.8% by area, has slopes from 0% to less than 20%, which characterizes the Township as rolling with areas of high relief ([Figure 4](#)). Slopes greater than 25% characterize 10.8% of the Township area. And finally, slopes ranging from 20% to less than 25% account for 6.4% of Township land area. The northern and central sections of the Township are characterized by steep slopes and ridgelines. The Pohatcong ridge in the central portion of the Township is a continuous ridge that divides the Musconetcong River from the Pohatcong Creek. The ridge that runs along the northern portion of the Township consists of Scotts Mountain and is included in the Highlands Preservation Area. Together these two ridgelines provide habitat and scenic value and important watershed function.



PRINCETON HYDRO, LLC.  
 1108 OLD YORK ROAD, SUITE 1  
 RINGOES, NEW JERSEY, 08551



**SOURCES:**

1. Parcel, roads and the Franklin Township Boundary data obtained from Warren County Planning Dept. "This map was developed using the Warren County New Jersey, Geographic Information System digital data, but this secondary product has not been verified by Warren County and is not county-authorized."
2. Surface water data obtained from the NJDEP, Division of GIS.
3. Slopes were calculated with GIS utilizing a 10 meter Digital Elevation Model (DEM). Slope classifications based on Franklin Township ordinances.

**FIGURE 4  
 SLOPES ANALYSIS**

NATURAL RESOURCE INVENTORY  
 FRANKLIN TOWNSHIP  
 WARREN COUNTY, NEW JERSEY

