Delaware River between Handsome Eddy and Dingmans Ferry – The Delaware River forms the eastern border of Pike County. The river creates a variety of unique habitats, including scour areas, floodplains, steep forested slopes, and vertical cliffs. Maintaining the natural character of the river is necessary to maintain these habitats. Rivers naturally change their course over time and need to remain free-flowing systems to allow for this movement. The Delaware River has remained undammed, allowing movement of the aquatic species found here.

Rocky Gleason, PNHP

Riverine sand cherry (*Prunus pumila var. susquehanae*)

The lower section of this site north to Milford is part of the Delaware Water Gap National Recreation Area, protecting it from development and other large scale disturbances. This section of the Delaware River provides habitat for several aquatic species of concern. **Alewife floater (*Anodonta implicata*), brook floater (*Alasmidonta varicosa*),** and **triangle floater (*Alasmidonta undulata*)**, three mussel species of concern, were found in the gravel river bottom. **Extra-striped snaketail (*Ophiogomphus anomalus*), harpoon clubtail (*Gomphus descriptus*), rapids clubtail (*Gomphus quadricolor*), green-faced clubtail (*Gomphus viridifrons*), slaty skimmer (*Libellula incesta*),** and **spine-crowned clubtail (*Gomphus abbreviatus*)** are dragonfly species of concern found along the river. Large flat rocks along the shoreline provide habitat for several plant species of concern – **Riverine sandcherry (*Prunus pumila var. depressa*), three-toothed cinquefoil (*Potentilla tridentata*),** and **tufted hairgrass (*Deschampsia cespitosa*)**. **A sedge (*Carex sprengelii*)** is another plant species of concern found growing along the shoreline. **Two additional species of concern,** not named at the request of the agencies overseeing their protection, were also found in this section of the Delaware River.

Threats and Stresses –The mussel and dragonfly species found in this area are dependent upon maintaining good water quality. These species are sensitive to pollution, sedimentation, and other degradation of the water quality. Roads, residential and agricultural areas, and other breaks in the forested buffer surrounding the Delaware River allow more of these pollutants to be carried by runoff into the water without being filtered. Damming and other alteration of the natural flow of the river and its tributaries would impact the habitats that these species of concern rely upon to persist. Invasive species, especially Japanese knotweed (*Fallopia japonica*), can be found in high concentrations on the shoreline. These species can eliminate habitat for native species.

Rick Koval

Slaty skimmer (*Libellula incesta*)

Management Recommendations – Maintain the existing forested buffer at least 100 meters (328 feet) from the edge of the river and adjacent wetlands. Improve the buffer wherever possible, especially along roads, houses, and other breaks in the forested habitat. Continue to allow the river and its tributaries to meander within the floodplain and do not artificially alter the flow of the Delaware River. Monitor for the presence of invasive species and remove them in areas where they are already established.