Species: Soft-leaved sedge (Carex disperma)

Global Rank: G5 State Rank: S3

Climate Change Vulnerability Index: Highly Vulnerable

Confidence: Very high

Habitat:

Soft-leaved sedge is most often found in mixed hardwood-conifer swamps and conifer swamps and seeps dominated by hemlock in northern Pennsylvania (Allegheny Plateau). The soil is generally saturated, shallow organic or mineral where water is acidic and low in nutrients.

Threats:

Anthropogenic activities such as logging and road construction that alter the hydrological regime may threaten this species. Beaver activity also alters habitat hydrology.

Main Factors Contributing to Vulnerability Rank:

Dispersal Ability: The species is wind dispersed and possibly animal. The achenes are eaten by waterfowl. Short distance dispersal within the home habitat (via wind) may be more plausible than long distance dispersal (via animals) between suitable habitats.

Predicted micro sensitivity to changes in temperature: This species is found in high elevation wetlands located in northern Pennsylvania.

Predicted macro sensitivity to changes in precipitation, hydrology, or moisture regime: Within the species range in Pennsylvania, the species has experienced a less than average precipitation variation in the past 50 years.

Additional information:

Soft-leaved sedge is at the southern end of its range in Pennsylvania, which suggests that it is a cold-limited species that may retreat northward.