**Developing a Plant Community Targeting Tool for Ecological Restoration in Pennsylvania

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 **Abstract:**Understanding what plant species may thrive at a particular site is important in ecological restoration activities and greatly benefits from a solid understanding of a site's ecological characteristics. Identifying a target natural plant community, a group of species occurring together on the landscape driven by ecological site characters, can be a key component of a restoration activity. Since the late 1990s, the Pennsylvania Natural Heritage Program (PNHP) has collected plot-based plant community data, which include species composition and structure information as well as ecological site data. These data, which have been used to drive the development of Pennsylvania's plant community classification and to determine rare natural plant communities in the state (used in the state's environmental review process) are also available to guide restoration planning. This presentation will review a new tool developed by PNHP and NatureServe, which uses the PNHP plot data and geospatial information to determine the plant communities and plant species that may exist at a specific site based on the similarity of each site to classified plots in the Heritage Program's plots database. The tool was designed to be utilized by wetland consultants, regulators, and land managers to provide site specific planting recommendations for restoration activities. We believe that a better understanding of the plant community types that are found at a specific site will benefit native wildlife species, lessen the overall negative ecological impact of development activities, and improve the successes and sustainability of restoration projects.