

Topic/Title: Exploratory Spatial Analysis of City Parks and Forest

Organization: City of Seattle & Puget Sound GIS

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Parks Personnel:

Rory Denovan—City of Seattle Plant Ecologist

Mark Mead- City of Seattle Urban Forester

Data available:

- Citywide GIS data
- Parks Habitat Data
- Critical Areas Data

Project Description:

SPR has been compiling habitat data over the last 10 years. They now have extensive data on plant species cover, tree density, and habitat in SPR's park and open-spaces. Working with both city ecologists and GIS professionals we hope to discover innovative solutions to improve the health of city parks and forests.

The purpose of this analysis would be guided by some basic questions:

- *How do we maximize the value of the forest in terms of ecosystem services?*
- *How do we maximize community participation?*
- *Geographic analysis – We'd like to compare our data to other community information such as census tract, to see how our work is spread across the city. As part of our race and social justice efforts, we would like to check to see what we can do better in traditionally underserved communities.*
- *Buffers and Corridors – Our Park forests are constantly under pressure from invasive plants and often too small to recruit the wildlife needed to insure forest sustainability. We would like to look at potential to create forest buffers and corridors for wildlife, especially keystone species.*

Expected benefits to organization:

Help discover innovative solutions to improve the health of city parks and forest.

Projects will assist Seattle Parks & Recreation restoration work in order to make informed management decisions when developing sustainable forests.

Expected benefits to student:

Perform scientific analysis with large datasets.