

USFS Pacific Northwest Research Station: Urban Science Initiative
Urban Eco-CARE (aka Stewardship Mapping)
February 4, 2010 :: Kathleen Wolf, kwolf@uw.edu

1. The Need for Citizen Stewardship

Urban sustainability is increasingly becoming a core policy of cities and towns. Environmental and ecosystem issues are numerous, and local governments are creating policy and programs to address these concerns. However, governmental resources alone are not adequate to restore, create and steward the environment. Rather than assuming that people are the source of urban ecosystem disorders, the environmental stewardship community calls on positive human agency to address environmental conservation and restoration across private and public lands.

2. Understanding the Environmental Stewardship “Footprint”

At this time we know little about the outcomes and benefits associated with urban environmental stewardship. There are hints of significant outcomes, e.g., the urban forest canopy cover of Portland has increased largely due to the efforts of local agency and NGO stewardship partnership. Outcomes evaluations are sparse, and stewardship projects are largely perceived as independent, scattered efforts. Yet a preliminary census of the Puget Sound region (King and Pierce Counties) reveals that 588 organizations conduct stewardship projects across the wildland to urban landscape gradient. While environment is the focus of activity, the organizations’ mission statements also indicate high interest in human community development.

3. A Systems Approach to Stewardship Research

Seattle-based stewardship should be investigated with a regional systems outlook at multiple scales:

a. Understand Stewardship Motivations –

Understand the reasons why individuals engage in eco-care and resulting satisfactions. This would aid with recruitment, training, and retention of property owners, participants, and program sponsors.

b. Evaluate Stewardship Organizations –

Assess the actions and interventions that organizations employ in stewardship. This knowledge will enable more organizations to conduct more expansive and effective programs.

c. Map Stewardship Organizations and

Networks – Geospatial mapping of organizations will provide a complete model of stewardship activity within a designated bioregion. This work has been done in New York City. Also, social networks are associated with increased capacity and resilience. Organizational network analysis will reveal potential collaborations, resource sharing, and coalition building.

d. Evaluate Urban Ecosystem Outcomes – Develop and implement ecological indicators and metrics to assess the cumulative effects of stewardship. These would be developed with consideration of 1) priority ecological goals and plans of a bioregion (such as Puget Sound Partnership), and 2) goals and objectives of stewardship organizations (grass roots sources).



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