Stewardship Footprints & Ecosystem Recovery Across the Wildland/Urban Interface – Puget Sound, WA Research -

Dr. Dale Blahna, Dr. Kathleen Wolf
USDA Forest Service, Pacific NW Research Station

Emerging Issues Along the Urban-Rural Interfaces
Atlanta :: April 2010
environmental stewardship

• action oriented programs or projects
• involving individuals, households, communities
• involving informal & formal institutions
• public and private resource management
• for combined purpose of improving the environment & quality of life
Social Science of Ecology
Stewardship Studies

Wildland to Rural Context

• ecoregional landscape management (e.g. rangeland)
• endangered species habitat
• collaborative recreation plans
• watershed councils
• family forest extension
• non-industrial forest cooperatives

Source: Millennium Ecosystem Assessment
stewardship of city green
citizen science
street tree planting
habitat restoration
riparian zone repair
salmon rearing
park clean-up
“master” programs
“x-keepers” programs
“friends of” xxx
Urban Natural Resources Stewardship

STEW-MAP: The Stewardship Mapping and Assessment Project

Project History and Intent

This project builds on a pilot assessment of urban stewardship in six-cities in the Northeastern United States that was conducted in 2004 by the Urban Ecology Collaborative (UEC) Research Committee. The goal of the assessment was to analyze a sample of organizations and community-based urban stewardship initiatives operating in Boston, New Haven, New York, Pittsburgh, Baltimore, and Washington, D.C. STEW-MAP directly addresses the questions emerging from the pilot assessment regarding the relationship between stewardship ideologies, management types, capacities, networks, and outcomes.

STEW-MAP will add a social layer of information to pre-existing biophysical and urban geographic information on ‘green infrastructure’ to understand how environmental stewardship is taking place in New York City. By capitalizing on newly emerging technologies that provide information in a non-referenced format.
Urban Natural Resources Stewardship: NYC

2,793 groups citywide

How do you visualize the overlapping relationships between resources (left) and organizations plotted by STEW MAP (right)?
King/Pierce Counties
Stewardship Org Census

Activity Location
U-urban; S-suburban; R-rural; W-wildland

Organization Type

Figure 1. Landscape Gradient

Figure 2. Organization Type
King/Pierce Counties
Stewardship Org Census
Mission Statements

Wordle analysis
Build Community Capacity

Friends of High Line
native plant palette - bioregional
Community Resilience

collaborative resource management
Elinor Ostrom
Urban Natural Resources Stewardship

ecosystem services
improved human capital

health benefits
physical activity
improved living conditions

community benefits
capacity building
resilience
Psychosocial Motivations :: Stewardship

increase in value/metric

intact "naturalness"

"legacy"

parcel size

organizational complexity

cultural influence

civic ecology
Green Cities Research Alliance
Urban Natural Resources Stewardship

Partnering for sustainable cities through science, policy, and citizen action

More than 80% of the region’s population lives in urbanized areas. A new research program is coming together in the Puget Sound region. The studies will focus on the social and environmental situations where people live, learn, work, and play. This knowledge will help us to create more sustainable urban areas and more livable cities.

Guiding Principles

In early 2009 US Forest Service and University of Washington scientists conducted informational interviews with about a dozen key organizations and agencies in the region. Many research needs within urbanized areas were discussed. Detailed notes were taken and reviewed, leading to a set of guiding principles that address both the process and purpose of a new research program.

http://depts.washington.edu/gcra