Background
At over 800 acres of forested public land, the West Duwamish Greenbelt is the largest remaining contiguous forest within the city limits of Seattle. The greenbelt runs for over four miles along the length of a steep hillside over the Duwamish waterway. It is dominated by forests regenerating from logging during the past century. The area of focus for this proposal is approximately 200 acres of mixed use forested greenbelts and park areas. This underutilized forest remnant in Seattle provides a valuable opportunity to examine what problems are inherent in this type of forest and what might be required to bring them to a more sustainable state.

The Duwamish Greenbelt is located in the heart of Seattle and serves as an important link within the Puget Sound region’s greenbelt system. It is an oasis for wildlife, providing a variety of habitats for a diversity of plant and animal species. The greenbelt also provides important ecological functions, such as stormwater management and flood control, and helps to maintain the health of the Puget Sound Estuary.

Impact
Currently the greenbelt provides an aesthetic and sound buffer between the adjacent neighborhoods and the unattractive development along the Duwamish waterway. The waterway provides an access point for ship cargo to be unloaded into warehouses and much of the shipping vehicle traffic not suffer by the road. The forest also provides habitat for certain birds and small mammals. Some restoration work is currently being employed in the less developed areas, including trail development and planting of native trees and shrubs.

Use
A majority of the area is designated park space and much of the area between the developed parks is deciduous forest with undergrowth dominated by non-native species such as English ivy (Hedera helix).

Facilities
Local amenities include restrooms, picnic sites, play areas (some ADA Compliant), lawn bowling, P-Patch community garden, basketball and tennis courts, soccer and baseball/softball fields, and dog off-leash area. These amenities are scattered amongst the parks and connecting them would foster the wanderweg approach of this project. It is recommended that current facilities be supplemented and improved as the project progresses and use increases. Their proposal and implementation will be dependent on budgetary constraints.

Goals
This plan is intended to be a preliminary guideline for trail-related stewardship, maintenance, and improvements to be carried out by the management authorities described previously in this proposal. There are no trails between most of the parks, and so primary trail issues in the forest is how to develop the forest’s natural state and keep the trail experience as inspiring and uncluttered by human touch as possible, while keeping the trails safe and keeping their maintenance costs affordable. It would be ideal to incorporate amenities such as benches, trash bins at trailheads, dog bag stations, kiosks with maps for wayfinding and other signs to direct the public to amenities.

The removal of the English ivy is vital in order to eliminate the negative effects on the current vegetation species in the greenbelt and to protect current and future restoration efforts. The method proposed is to girdle the ivy around the trunks of infected trees and to remove the ivy within a four-foot radius around the base of the tree. To prevent the ivy from growing back up the tree, a cloth tarp should be laid down around the base of the tree and covered with “macromulch” to secure the cloth from blowing away and present a more aesthetically pleasing view of the tree to visitors.

Environmental
The greenbelt is part of the Duwamish River watershed. Two rivers that flow through the greenbelt are the Puyallup River and one small unnamed stream. Local and persistent sources of contaminants and invasive species may threaten the sustainability of riparian sites’ performance. This plan strives to pursue connections between the corridor and other ecological, and man-made systems while encouraging safe, enjoyable, and environmentally compatible use of the natural environment. In restoring the forest to a more sustainable and more ecologically sound nature, trees will need to be removed to create gaps in the canopy of forest species. This will allow for species to regenerate and provide for a more diverse and healthy forest.

Cultural/Social
The greenbelt provides a great opportunity for a restorative environment within the city. However, current circumstances allow undesirable users to establish residence in the greenbelt. This evidence of human presence detracts from a user's experience and can lead them to be wary of the greenbelt. Many people think of cities as devoid of life, a human habitat full of manicure structure. Nature does not have to be a place that you drive outside of the city to experience and it does not have to be an agriculural zone or something to be preserved from any anthropogenic influence. Nature is something that should be integrated into our daily life, especially in places like cities where we can lose sight of nature through the concrete jungle. With human influence becoming so prevalent on almost every ecosystem on the planet it is imprudent to continually view nature as a separate entity on which humans are constantly working as outside forces to change.

Economic
Variable retention is a viable harvesting option for a forest such as the one in the Duwamish greenbelt. The primary goals: increase timber value before final harvest, focus on crop trees, provide secondary habitat and recreation/social benefits, suppress and contain natural disturbances, accelerate the development of older forest structure and habitat, and provide wood and revenue for landowners concerned with biodiversity/ecological pursuits. Revenue from harvesting can be directed back to fund the management of the greenbelt. Businesses near the greenbelt would benefit from the fact that apartments and offices in wooded areas rent more quickly and have higher occupancy rates.

Educational
This project is also an ideal opportunity for traditional forestry. Many educational institutions in the Seattle area could benefit from researching and experimenting ways to harvest and sustain urban forests for ecological, economic, and social purposes. For example, the University of Washington’s Sustainability Science research on education about nature and biodiversity, and on providing many and varied opportunities to learn about and directly experience nature. The greenbelt has the potential to provide opportunities to join others in learning about a deepening, deeply connecting appreciation of the greenbelt and our stewardship over nature, whether through a nature club, organized hikes, camping in city parks, or volunteering for nature restoration projects.

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