

Final Report
**“Potential to Modify Traditional Clearing, Grading,
& Landscaping Practices” Project**

To U.S. Environmental Protection Agency
From Washington State University Cooperative Extension —
Thurston County, Native Plant Salvage Program

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Background: This project aimed to identify the potential economic benefit to builders of new homes to retain existing vegetation during the land-clearing phase of construction. As part of this project, the staff of the Native Plant Salvage Project and the Center for Real Estate Research at WSU interviewed developers and municipal planners; conducted a literature search; conducted a telephone survey of recent home buyers; and offered a series of workshops for developers, realtors, and custom-home buyers. Below are the results of this work and our findings.

Interviews with local developers, realtors and planners: There is general agreement among this group that houses with mature vegetation have a higher value, although no one is able to quantify that value. In addition, houses with existing vegetation sell more quickly, which is an added benefit.

Developers in general maintain that large-scale clearing is the most cost-effective strategy for beginning new projects. Furthermore, many sites are initially “developed” by one entity, and then individual lots are sold to builders who build on speculation, without a buyer. Thus, the initial developer has no incentive to offer lots with a more attractive/valuable landscape. Large-scale clearing allows the developer to address all utility needs at once, which presumably is a cost savings. Although there are developments in which each lot has been individually cleared to maintain native vegetation, no one we spoke with was able to provide cost estimates for large-scale clearing vs. individual clearing.

The developers interviewed believe that the Growth Management Act is a deterrent to leaving major blocks of native vegetation. Municipal planners agree that the way that GMA is regulated generally makes it very difficult for developers to build houses with large footprints and also leave vegetation; however, houses with smaller footprints, that occupy more than one level, can achieve high densities and still leave vegetation. Regulations that encourage open space on new developments are generally only aimed at very large tracts, so smaller developments generally do more clearing. Locally, there are very few incentives in regulations to encourage voluntary retention of native vegetation.

Literature Search: This search focused on the increased value of houses that have mature/native vegetation. The result of this search is summarized in an attached memo from Chris Neal to Glenn Crellin. Generally, the literature shows that native plant landscaping adds value to homes by: conserving water; avoiding landscape installation and maintenance; avoiding stormwater; increasing energy efficiency by providing summer cooling and wind barriers; providing privacy and noise barriers; and stabilizing slopes. One study indicated that mature landscaping might reduce utility bills by as much as 30 percent. Home sellers benefit from more rapid sales, more favorable public relations, and through the perception of home buyers of the values outlined above. Some studies indicate that mature home landscaping may add three to seven percent to the value of a home.

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Survey of Landscaping Preferences: This survey was conducted in the fall of 2001 and aimed at recent home purchasers (although a minority of the respondents had been in their home for several years). The goals of the survey were to identify the kinds of landscaping that home buyers find desirable and to see if buyers would be willing to pay more to purchase a home with an existing mature/native landscape. We attempted to contact 170 individuals, and successfully completed 73 interviews. Full analysis of this survey can be found in the accompanying report. Here are some key findings:

- The results express a general interest in mature landscapes, with value placed on landscapes that are “natural,” “attract wildlife,” “provide privacy and noise screen,” and landscapes that offer a mix of trees, shrubs, minimal lawn, with almost “no maintenance.”
- Those with the least amount of mature vegetation — “bare dirt,” or just a few shrubs, — were more likely to have been “somewhat” or “very dissatisfied” with their landscaping upon moving into their house.
- The dissatisfied group was much more likely to have a home over \$250,000, and also much more likely to have been willing to pay extra in the purchase price of the home to have their preferred landscaping upon moving in.
- The dissatisfied group was more likely to have purchased a newly constructed home, vs. an existing, previously occupied home.
- The dissatisfied group was much more likely to have planted trees, shrubs and native plants since moving in than those in the satisfied group.
- “Landscaping” or “landscaping potential” rate higher as factors in purchase decision than location’s relationship to schools, view, privacy, convenience to recreation, and rank almost as high as location’s convenience to work.

Workshops: WSU/NPSP coordinated three workshops under the terms of this grant: two aimed at custom-home buyers, and one aimed at the development community.

Custom-home buyers: The first workshop offered for custom-home buyers was held November 6, 1999 and had 39 participants. The second was held November 4, 2000, and had 42 participants. Agendas, attendee lists, resource lists, and summaries of the evaluations of these workshops are attached. The workshops featured morning lectures regarding the role of vegetation and native soils in stormwater interception and infiltration, natural factors to consider, working with a contractor, and knowing regulations and codes. We also provided time for information exchange with other resource people, primarily builders from the Eco-building Guild. We offered many relevant handouts, especially materials prepared by Elliott Menashe of Greenbelt Consulting and excerpts from useful publications (some of these are attached to this report).

The afternoon was devoted to touring homes that were built to maximize the amount of vegetation retained. In 2000, we added a related topic of working with resource-conserving, recycled, and earth/health-friendly building materials, and the tour included houses using these products. Attached are photos from the home tours.

Generally, respondents reported that they planned to use the information provided to (1) reduce the footprint of their home; (2) do better site planning to reduce removal of vegetation; and (3) retain native plants. The major criticism of the workshops was that too much information was presented; some participants would have preferred a multi-day workshop covering all topics in greater detail.

We believe that presenting this information to custom-home buyers is a critical need in our communities. Moreover, in our efforts to educate the public about the need to retain native

vegetation in development, custom-home buyers offer us “low-hanging fruit”: they are generally eager and willing to do whatever they can to retain vegetation on their property; they just need the proper information to do so. We encourage other community educators to offer workshops of this type on a regular basis.

Workshop for Development Community: This workshop, titled “Building & Selling Sustainably Developed Homes” was offered December 15, 2000. The agenda, list of attendees, and summary of evaluations is attached. The 41 participants were recruited from the entire Puget Sound region and represented developers, builders, realtors, appraisers, architects, landscape architects, financiers, building-materials suppliers and government officials. Participants learned about the role of native vegetation in intercepting stormwater, recharging ground water, and maintaining aquatic and terrestrial habitats. They further learned about actual case studies and strategies for retaining vegetation, reducing footprint size, reducing impervious surface, and avoiding harmful development practices. Other speakers addressed proposed “low-impact” regulations and innovative strategies for preserving plants and soil. Although the speaker from WSU Center for Real Estate Research was unable to attend due to dangerous weather conditions, his remarks regarding the economic benefits of retaining native plants were shared with the participants at the end of the day.

During the field trip portion of the workshop, participants visited a local development that was installed with minimal clearing of native vegetation. A resident of the development, who is also a low-impact development specialist, discussed both the positive and negative features of the development. For instance, in the positive category, multi-story native vegetation was left on the home lots and in open, shared space; while in the negative category, the roads are much wider than they need to be. Following this, the group toured an area with extensive native vegetation and narrow, curbless roads to understand some of the principles of “zero-impact” development.

Participants in this workshop were extremely interested in the information provided, and anxious to see more low-impact development strategies in practice. There is clearly a need for further workshops of this nature aimed at this audience. We have since refined and repeated this workshop in 2001, and expect to continue offering it to our local development community.

Brochure for Land Stewards: A brochure to encourage property owners to retain and maintain native vegetation was developed by Flora Johnson Skelly in 1999. This brochure was copied and distributed at all workshops described above, as well as others. A copy is attached to this report.

Recommendations for Next Steps: Since we applied for this grant in 1998, many more organizations have become involved in researching and promoting “low-impact” development that attempts to achieve many of the same goals as our project. However, while the need to retain forest cover is now understood and generally accepted, most regulations are still not addressing the need to more selectively grade and clear development sites. Further, while this project clearly shows that there is a generally higher value applied to homes with mature/native landscaping, it is difficult to calculate the additional costs or potential cost savings to developers who do not do full-scale clearing. Finding the answers to these questions may be critical for convincing more developers to voluntarily change their practices; this information may be more easily obtained by trained social researchers and economists. Moreover, it is clear that a combination of widespread changes to development regulations as well as substantial outreach and education will be necessary to drive more extensive changes that will truly make a difference in retaining native vegetation.