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48. © It's not all asphalt: Washington State Department of Transportation's use of native plants. Buis, S. International Plant Propagators' Society, combined proceedings, 2010, 60:241-244. 2011.

It's Not All Asphalt: Washington State Department of Transportation's Use of Native Plants[©]

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The Washington State Department of Transportation (WSDOT) spends most of its time and energy planning for, building, improving, and maintaining highways and other modes of transportation. What most people don't know is that our work also includes planting hundreds of thousands of mostly native plants in a variety of locations in several different kinds of projects.

Transportation impacts to aquatic resources are often unavoidable, since the area we have to work in is so limited and our state has so many wetlands, streams, and rivers. These unavoidable impacts must be mitigated, or compensated for, usually by creating or improving a similar resource nearby. This leads to a lot of native plants being installed in mitigation projects.

As well, our own policy requires us to repair or replace roadside elements disturbed or removed in the course of our work. That's true for sidewalks, lights, or plants. Disturbed vegetation is restored to a self-sustainable plant community that will keep out weeds, hold the soil, block or enhance views, reduce noise levels, and perform a host of other roadside functions, as well as be low maintenance to save money. In most situations this means planting native plants.

The right-of-way along a highway is part of the functional roadway, just like the traveling lanes, and has roles to fill as well. Among these jobs are preserving surface drainage, allowing traffic visibility, control of noxious and invasive weeds, maintaining visibility of signs, and providing erosion control and slope stability. A roadside plant has a tough job — it has to perform in disturbed soil, glaring sun, droughty conditions, where highways are a heat sink in the summer and channel cold winds in the winter, and there is a constant influx of weed seeds to battle.

As important as “Right Plant, Right Place” is in the garden, it's even more so in a mitigation site or on the roadside, where conditions are severe and follow-up care is minimal. Our landscape designers and biologists use nature as their template, taking climate, soil type and structure, water holding capacity, aspect, hydrology, and a host of other environmental factors into account when they choose species to use.

In order to do all that, we buy a lot of native plants. Actually the majority are not purchased directly by WSDOT but by the contractors who install our projects.

I used information on WSDOT's website to estimate the number of native plants bought from January 2005 through about July 2010 (Table 1). Using this system, I calculated that WSDOT has planted approximately 2 million native plants in the last 5 years. I didn't try to count the non-native plants, but they're a small fraction of the total, used mostly in highly urbanized areas or in community gateways. If you would like more detail, the website address is at the bottom of the table.

The USDA Forest Service has created a database of native plant propagation protocols that can be found at <www.Nativeplantnetwork.org>. Information about subscribing to the Native Plants Journal (NPJ) can also be found there. The NPJ is a journal for those interested in the practical aspects of growing and planting-