

**PSEUDOTSUGA MENZIESII – ABIES GRANDIS /
GAULTHERIA SHALLON**

Douglas-fir – grand fir / salal
Abbreviated Name: PSME-ABGR/GASH

Sample size = 10 plots

DISTRIBUTION: In Washington, this association occurs in the San Juan Islands, islands in western Skagit County, northern and central Whidbey Island, and possibly the far northeastern Olympic Peninsula. It probably also occurs in adjacent British Columbia on the Gulf Islands and southeastern Vancouver Island, but is recognized as part of a broader unit there.

GLOBAL/STATE STATUS: GNR51. There are less than 5 high-quality occurrences known in Washington. Much of the area of this type has been displaced or degraded by development. The vast majority of stands have been significantly impacted by past timber harvest. Development is an ongoing threat. The type has a limited geographic range.

ID TIPS: Grand fir occupies >10% cover or is the dominant tree regeneration and western hemlock and western redcedar are either absent or minor in importance. Salal occupies >10% cover. If present, sword fern occupies <10% cover. Beaked hazelnut and vine maple are absent.

ENVIRONMENT: These sites are moderately dry to perhaps mesic and appear to be relatively nutrient-poor. Slopes are usually gentle, occasionally moderate in steepness. Aspect is variable. Mid slopes are typical. Parent materials are most often glacial till, but also include glacial drift without a restrictive layer. Stony or gravelly loams are most typical. All plots are within about 1 mile of saltwater shorelines at low elevations. Found only in dry climatic areas.

Precipitation: 21-29 inches (mean 24)

Elevation: sea level - 250 feet

Aspect/slope: various/ 3-44% (mean 13)

Slope position: mid, plain, lower, upper

Soil series: Roche, Keystone, Swinomish

DISTURBANCE/SUCCESSION: Fire is the primary natural disturbance. Old-growth stands show evidence of past low- to moderate-severity fire (underburns). Grand fir will increase over

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Vegetation Composition Table (selected species):

Con = constancy, the percent of plots within which each species was found;
Cov = cover, the mean crown cover of the species in plots where it was found;
+ = trace (< 0.5% cover).

Trees	Kartesz 2005 Name	Con	Cov
Douglas-fir	Pseudotsuga menziesii var. menziesii	100	47
grand fir	Abies grandis	100	34
Scouler's willow	Salix scouleriana	60	3
western redcedar	Thuja plicata	40	7
Pacific yew	Taxus brevifolia	30	9
Sitka spruce	Picea sitchensis	20	13
Shrubs and Dwarf-shrubs			
salal	Gaultheria shallon	100	62
oceanspray	Holodiscus discolor	100	20
baldhip rose	Rosa gymnocarpa	90	6
trailing blackberry	Rubus ursinus ssp. macropetalus	60	2
orange honeysuckle	Lonicera ciliosa	40	2
common snowberry	Symphoricarpos albus var. laevigatus	30	4
Graminoids			
western fescue	Festuca occidentalis	80	2
Coast Range fescue	Festuca subuliflora	40	1
Forbs and Ferns			
sword fern	Polystichum munitum	60	6
bracken fern	Pteridium aquilinum var. pubescens	60	2
western starflower	Trientalis borealis ssp. latifolia	30	5
sweet-scented bedstraw	Galium triflorum	30	1

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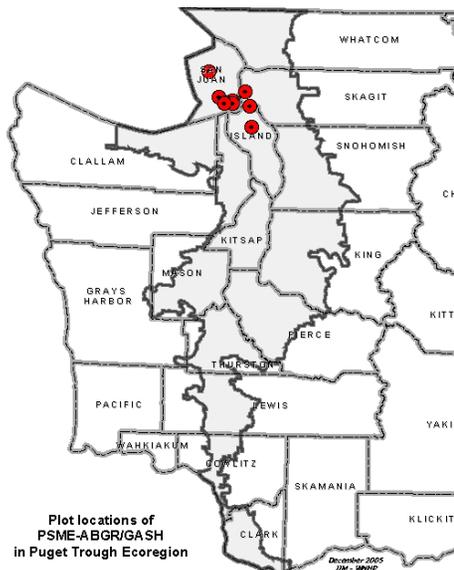
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time in the absence of disturbance, Douglas-fir decreases, though still remains prominent after hundreds of years. Some of these stands may have been Douglas-fir savannas prior to fire suppression. Depending on seed sources, Pacific madrone or lodgepole pine could regenerate abundantly on these sites after a major disturbance and persist until sometime in the middle of the sero.

VEGETATION: Canopy is dominated by Douglas-fir or co-dominated by that species and grand fir. Grand fir dominates tree regeneration or a lower canopy layer. Sitka spruce is occasionally prominent. Western redcedar is sometimes present in small amounts. Salal dominates the understory. Oceanspray usually forms a prominent to co-dominant tall shrub layer. Baldhip rose and trailing blackberry are usually present. The herb layer is poorly developed. Western fescue, bracken fern, and sword fern are usually present in small amounts.

CLASSIFICATION NOTES: Not previously described in the literature. Chappell (1997) considered it part of PSME-THPL/GASH-HODI. NatureServe (2005) does not currently recognize it, but will probably include it in the near future as a part of PSME-(THPL-ABGR)/MANE-GASH.

MANAGEMENT NOTES: Stands that have not been previously harvested, especially mature and old-growth, should be considered for conservation status. These sites appear to be moderately low in productivity for tree growth.



Chappell, C.B. 2006. Upland plant associations of the Puget Trough ecoregion, Washington. Washington Department of Natural Resources, Natural Heritage Program, Olympia, WA. [<http://www.dnr.wa.gov/nhp/refdesk/communities/pdf/intro.pdf>].