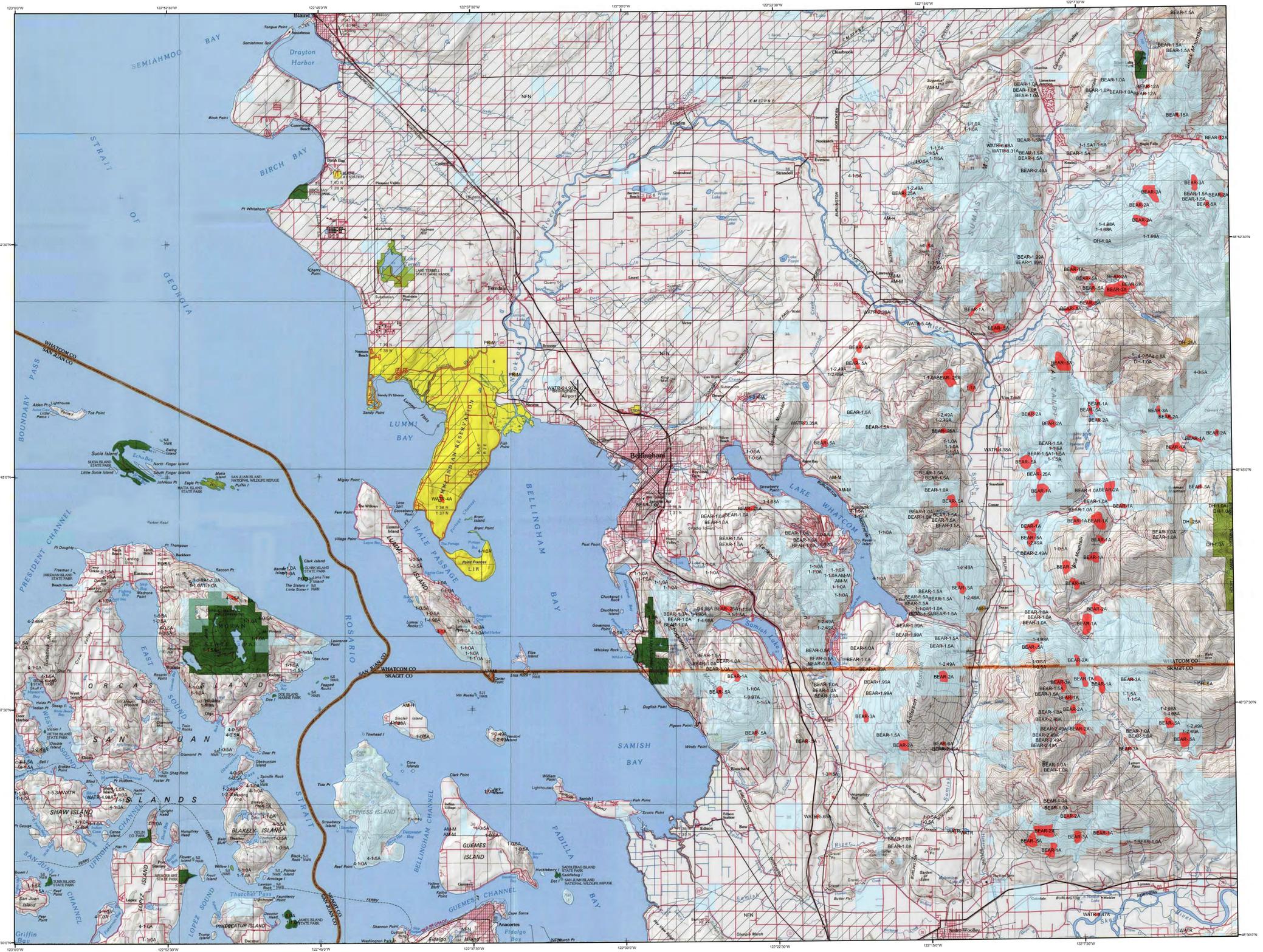


2011 Aerial Insect and Disease Survey

USGS 100K Quad: BELLINGHAM - E148122; 3A



Mortality Agents		
Code	Damaging Agent	Primary Host
2	Douglas fir beetle	Douglas fir
3	Western spruce bark beetle	Western spruce
4	Pine engraver	True fir
5	Western balsam bark beetle	Sub-alpine fir
6B	Mountain pine beetle	Whitebark pine
6C	Mountain pine beetle	Lodgepole pine
6D	Mountain pine beetle	Ponderosa pine
6E	Mountain pine beetle	Western white pine
6F	Mountain pine beetle	Pacific silver pine
6G	Mountain pine beetle	Western white pine
6H	Mountain pine beetle	Western white pine
6I	Mountain pine beetle	Western white pine
6J	Mountain pine beetle	Western white pine
6K	Mountain pine beetle	Western white pine
6L	Mountain pine beetle	Western white pine
6M	Mountain pine beetle	Western white pine
6N	Mountain pine beetle	Western white pine
6O	Mountain pine beetle	Western white pine
6P	Mountain pine beetle	Western white pine
6Q	Mountain pine beetle	Western white pine
6R	Mountain pine beetle	Western white pine
6S	Mountain pine beetle	Western white pine
6T	Mountain pine beetle	Western white pine
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6W	Mountain pine beetle	Western white pine
6X	Mountain pine beetle	Western white pine
6Y	Mountain pine beetle	Western white pine
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USGS 100K Quad: BELLINGHAM - E148122; 3A
 2011 Aerial Insect and Disease Survey
 Map Scale: 1:100,000
 Date: 13 December 2011

Legend

- Defoliating Agents
- Mortality Agents
- Other Damage
- WadNR Managed Lands
- Areas Not Flown
- 2011 Large Fires

Source: Northwest Interagency Coordination Center

The TOPOI maps are seamless, scanned images of United States Geological Survey (USGS) paper topographic maps. For more information on this map, visit us online at http://gto.arcgis.com/arcgis/rest/services/USA_Topographic

A data dictionary, digital copies of this map and Aerial Insect and Disease data are available at: www.fs.usda.gov/gto/r/fhp/ads

How the Aerial Surveys Are Conducted

Data represented on this map are based on trees visibly affected by forest insects and diseases detected and recorded during aerial survey flights conducted by the USDA Forest Service, the Washington Department of Natural Resources and the Oregon Department of Forestry. Observers have just a few seconds to recognize the color difference between healthy and damaged trees of different species; diagnose causal agents correctly; estimate intensity; delineate the extent of damage; and precisely record this information on a georeferenced, digital map. Air turbulence, cloud shadows, distance from aircraft, haze, smoke and observer experience can all affect the quality of the survey. These data summaries provide an estimate of conditions on the ground and may differ from estimates derived by other methods.

The aerial survey provides information on the current status for many causal agents, and is important when examining insect activity trends by comparing historical and current survey data over large areas.

Overview surveys are a 'snap shot' in time and therefore may not be timed to accurately capture the true extent or severity of a particular disturbance activity. Specially designed surveys with modified flight patterns and timing may be conducted to more accurately delineate the extent and severity of a particular disturbance agent. Special surveys, such as Swiss needle cast surveys, are conducted when resources are available to address situations of sufficient economic, political or environmental importance.

DIRECT ALL INQUIRIES TO:

Washington State Department of Natural Resources
 Resource Protection Division
 Forest Health
 1111 Washington St. SE
 MS 47037
 Olympia, WA 98504-7037

-- OR --

USDA Forest Service, Region 6
 Natural Resources
 Forest Health Protection
 PO Box 3623
 Portland, Oregon 97208

DISCLAIMER
 Forest Health Protection (FHP), Washington Department of Natural Resources (WADNR) and Oregon Department of Forestry (ODF) strive to maintain an accurate Aerial Insect and Disease Survey (AIDS) dataset, but due to the conditions under which the data are collected FHP, WADNR and ODF shall not be held responsible for missing or inaccurate data. AIDS are not intended to replace more specific information. An accuracy assessment has not been done for this dataset; however, ground checks are completed in accordance with local and national guidelines. This disclaimer is for informational purposes only. Maps and data may be updated without notice. Please cite: "USDA Forest Service, Forest Health Protection, Washington Department of Natural Resources, Resource Protection Division, and Oregon Department of Forestry, Forest Health Management" as the source of this data.