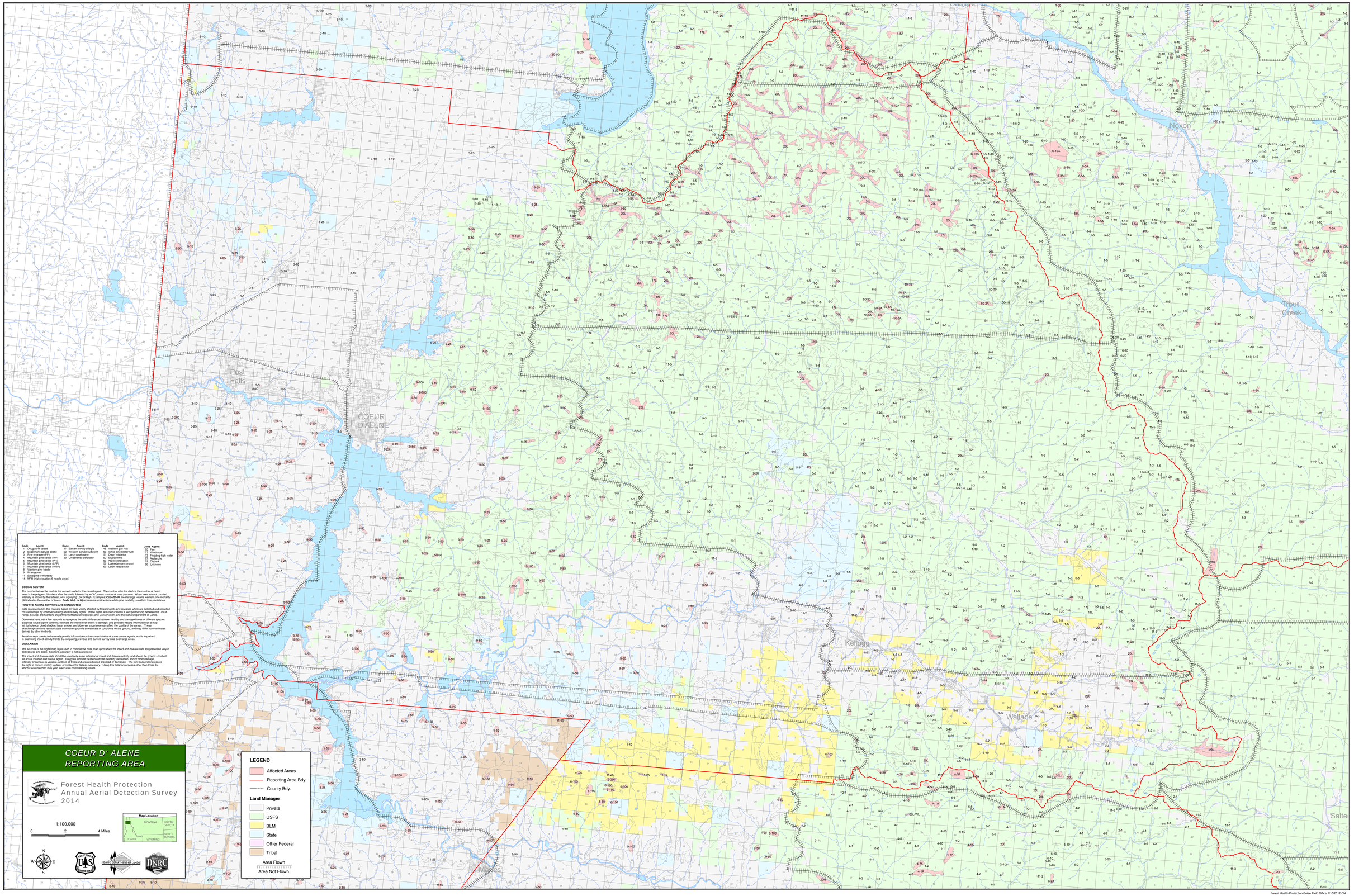

Code	Agent:	Code	Agent:	Code	Agent:	Code	Agent:
1	Douglas-fir beetle	17	Balsam woolly adelgid	46	Western gall rust	70	Fire
2	Engelmann spruce beetle	20	Western spruce budworm	50	White pine blister rust	72	Windthrow
3	Pine engraver (PR)	21	Larch casebearer	51	Dwarf mistletoe	73	Flooding-high water
4	Western pine beetle (WP)	39	Unidentified defoliator	52	Root disease	74	Avalanche
5	Mountain pine beetle (PP)			53	Aspen defoliation	79	Drought
6	Mountain pine beetle (LPP)			56	Lophodermium pinastri	99	Unknown
7	Mountain pine beetle (WBP)			69	Larch needle cast		
8	Western pine beetle						
9	Fir engraver						
11	Subalpine fir mortality						
15	MPB (high elevation 5-needle pines)						

CODING SYSTEM

The number before the dash is the numeric code for the causal agent. The number after the dash is the number of dead trees in the polygon. Numbers after the dash, followed by an "A", mean number of trees per acre. When trees are not counted, the number after the dash is a letter representing Low, Medium or High. Examples: **Code 5b-H** means large volume western pine mortality (**H**i indicates the number of trees). **Code M-6_A-H**) represents small volume white pine mortality, usually in tree plantations.

HOW THE AERIAL SURVEYS ARE CONDUCTED

Data represented on this map are based on trees visibly affected by forest insects and diseases which are delineated and recorded from aerial observations made during aerial surveys. These flights are made by the joint cooperators between the USDA Forest Service, the Montana Department of Natural Resources and Conservation, and the Idaho Department of Lands.

Observers have just a few seconds to recognize the color difference between healthy and damaged trees of different species, diagnose causal agent correctly, estimate the intensity or extent of damage, and precisely record information on a map. Air turbulence, cloud shadow, haze, smoke, and observer experience can affect the quality of the survey. These aerial survey sketch mapped data summaries provide an estimate of conditions on the ground, and may differ from estimates derived by other methods.

Aerial surveys conducted annually provide information on the current status of some causal agents, and is important in examining insect activity trends by comparing previous and current survey data over large areas.

DISCLAIMER

The sources of the digital map layer used to compile the base map upon which the insect and disease data are presented vary in both source and scale; therefore, accuracy is not guaranteed.

The insect and disease data should be used only as an indicator of insect and disease activity, and should be ground - truthed before management decisions are made. Not all trees in areas indicated are dead or damaged. Intensity of damage is variable, and not all trees and areas indicated are dead or damaged. The joint cooperators reserve the right to correct, modify, update, or replace the data as necessary. Using this data for purposes other than those for which it was intended may yield inaccurate or misleading results.

Forest Health Protection-Boise Field Office 1/10/2012 CN