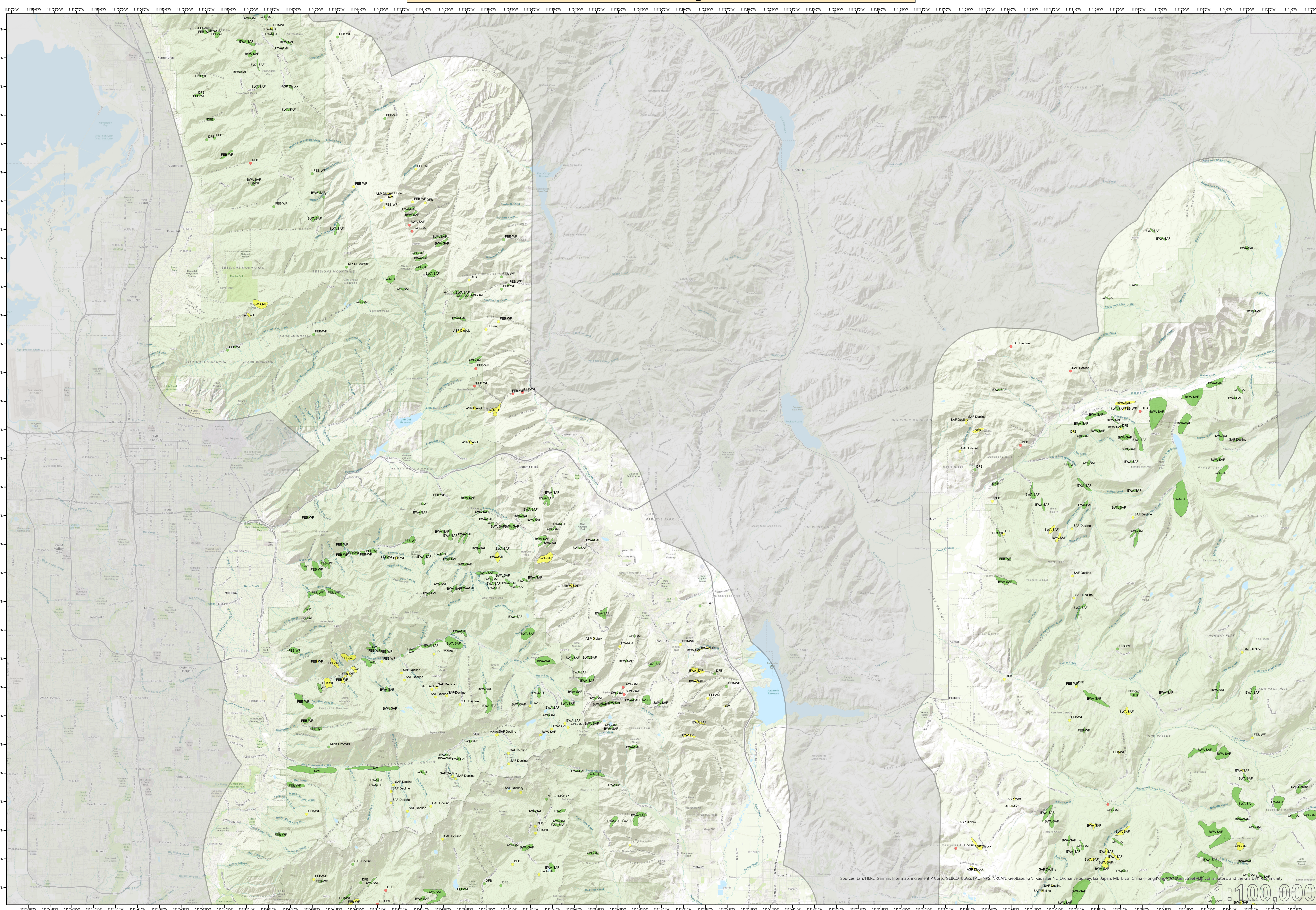


2022 Aerial Insect and Disease Survey Salt Lake City, Utah



Damage Point
Number of Trees

- 1 - 5
- 6 - 30
- > 30

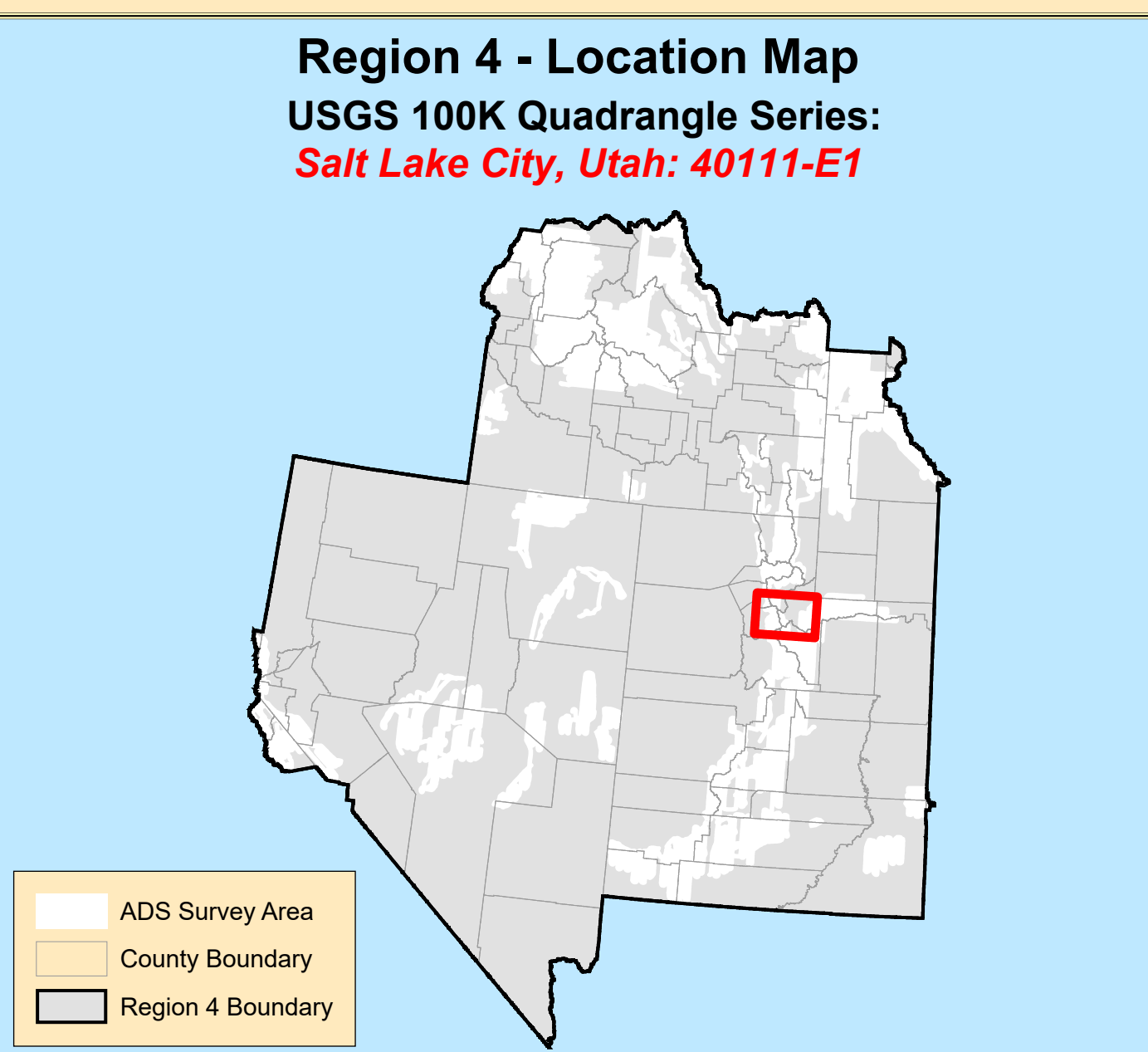
Damage Polygons
Percent Affected

- Light (1-10%)
- Moderate (11-50%)
- Severe (>50%)

Legend:
 Outside ADS Survey Area
 Fire Perimeters (2019 - 2021)

CODING SYSTEM
Codes have two parts: the first represents the causal agent and the second represents the host. If needed, the two-part code is followed by an 'M' or 'H' to indicate severity of the activity. Data is color coded to represent the intensity of activity as seen in the legend. Examples:
 MPB-LP represents mountain pine beetle in Lodgepole pine.
 WSB-DF-SAF-H represents western spruce budworm infestation in subalpine fir/Douglas-fir mix with >75% of leaves defoliated.

Abiotic Causal Agent Codes		Host Codes	
Avalch	Avalanche	ASP	Aspen
Dgrht	Drought	DF	Douglas-fir
Fire	Fire	GF	Grand Fir
Flood	Flooding-high water	Jeffery	Jeffery Pine
Bark Beetles Causal Agent Codes		LIM	Limber Pine
DFB	Douglas-fir Beetle	LP	Lodgepole Pine
ESB	Engelmann Spruce Beetle	PP	Ponderosa Pine
FEB	Fir Engorver Beetle	PN	Pinon
IPS	Ips Engorver Beetle	RF	California red Fir
Jeffery PB	Jeffery Pine Beetle	SAF	Subalpine Fir
MPB	Mountain Pine Beetle	SP	Sugar Pine
TSB	Twig Beetles	WBP	Whitebark Pine
WBBS	Western Balsam Bark Beetle	WF	White Fir
WPR	Western Pine Beetle	WL	Western Larch
Defoliators Causal Agent Codes		WWP	Western White Pine
BWA	Balsam Woolly Adelgid	Defol	Defoliation
DFTM	Douglas-fir Tussock Moth	Disc	Crown Discoloration
Mansonia	Mansonia Leaf Blight	Flag	Flagging
Satin Moth	Satin Moth	H	Defoliation - Heavy (> 75% of leaves defoliated)
Spider Mite	Spruce Spider Mite	L	Defoliation - Low (< 30% of leaves defoliated)
WSB	Western Spruce Budworm	M	Defoliation - Moderate (30-75% of leaves defoliated)
Disease Causal Agent Codes		Mort	Mortality
SAF Decline	Sub Alpine Fir Decline	Topk	Top kill
ScI	Scale Insects	Unk	Unknown
WPRR	White Pine Blister Rust		



HOW THE AERIAL SURVEYS ARE CONDUCTED

Data represented on this map are based on trees visibly affected by forest insects, diseases and abiotic factors that are detected and recorded by observers during aerial survey flights. These flights are conducted by a joint partnership between the USDA Forest Service and state cooperators.

Observers have just a few seconds to recognize characteristic signatures of healthy and damaged trees of different species, correctly diagnose damage causal agents, estimate the intensity or extent of damage, and precisely record information on a digital sketch mapping platform. Air turbulence, cloud shadow, haze, smoke, and observer experience can affect the quality of the survey. These sketchmaps and the resultant data summaries provide an estimate of conditions on the ground, and may differ from estimates derived by other methods.

Annual aerial surveys provide important information on the current status of detected causal agents and can be used to determine trends in damage levels over time by comparing previous and current survey data over large areas.

Map Created: 12/13/2022
Projection: UTM NAD83 Zone 12T
Author: R1/R4 FHP GIS, USDA Forest Service
 A data dictionary and digital copies of this map and the insect and disease data are available at: <https://www.fs.usda.gov/detail/r1/forest-grasslandhealth>

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DISCLAIMER

The digital map layer 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 for actual location and causal agent. Polygons indicate locations of tree mortality, defoliation, and/or other damage. 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.