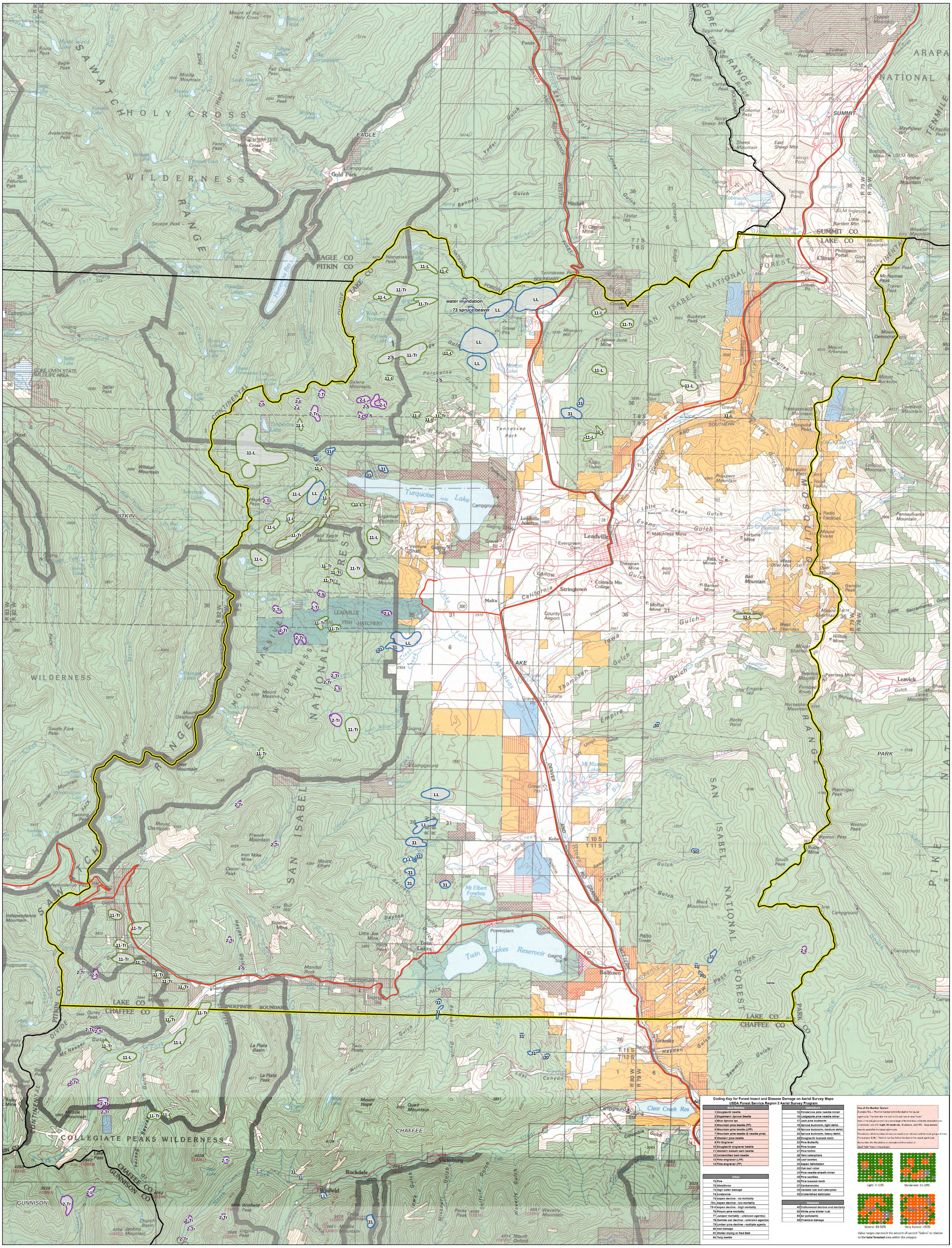
2015 Aerial Detection Survey
All Damage Cause Agents
Salida District / Lake County



Coding Key for Forest Insect and Disease Damage on Aerial Survey Maps
USDA Forest Service Region 2 Aerial Survey Program

Bark Beetles	
1	Douglas-fir beetle
2	Engelmann Spruce Beetle
3	Blue Spruce Ips
5	Mountain pine beetle (PP)
6	Mountain pine beetle (LPP)
7	Mountain pine beetle (5 needle pine)
8	Western pine beetle
9	Fir Engraver
10	Douglas-fir engraver beetle
11	Western balsam bark beetle
12	Unidentified bark beetle
13	Pine engraver (LPP)
14	Pine engraver (PP)

Other	
70	Fire
72	Windthrow
73	High water damage
74	Avalanche
75	Aspen decline - no mortality
75-L	Aspen decline - low mortality
75-H	Aspen decline - high mortality
76	Pinyon pine mortality
77	Juniper mortality - unknown agent(s)
78	Gamble oak decline - unknown agent(s)
79	Limber pine decline - multiple agents
80	Hail Damage
81	Winter drying or Red Belt
83	Twig beetle

Defoliators	
15	Ponderosa pine needle miner
16	Lodgepole pine needle miner
17	Jack pine budworm
18	Spruce budworm, light defol.
19	Spruce budworm, medium defol.
20	Spruce budworm, heavy defol.
22	Douglas-fir tussock moth
23	Pine Butterfly
26	Pine looper
27	Pine tortrix
28	Tent caterpillars
29	Leaf beetles
30	Aspen Defoliation
33	Oak leaf roller
34	Pine needle-sheath miner
35	Pine sawflies
36	Pine tussock moth
37	Cankerworms
38	Variable oak leaf caterpillar
39	Unidentified defoliator

Diseases	
40	Cottonwood decline and mortality
50	White pine blister rust
54	Air pollutants
55	Chemical damage

Use of the Number System
Example: 5-L = The first number before the dash is the causal agent code. The letter after the dash is the estimate of dead "fader" trees in the polygon or point as a percentage of the total trees within the delineated area. an intensity code of **L-light, M-moderate, S-severe, and VS - very severe** may be used after the causal agent code.
Periodically, whole numbers of trees can used as an intensity code for small groups of trees. For example: 5-10 = The first number before the dash is the causal agent code. the number after the dash is an estimation of the number of dead "fader" trees in the polygon.

Light: 1-10% | Moderate: 11-29% | Severe: 30-50% | Very Severe: >50%

Value ranges represent the percent of current "faders" in relation to the **total forested** area within the polygon

5 Miles

Douglas-fir Beetle | Spruce Beetle | Subalpine Fir Decline | Mountain Pine Beetle | Western Spruce Budworm | Other Insects and Diseases

Map created 04-01-2016 by CSFS GIS
Data Sources: USDA FHTET, USFS, CDOT