2019 Forest Health Update

John Richardson, Forest Health Program Manager
Arizona Department of Forestry and Fire Management
Background

• Annually, DFFM conducts an aerial survey for dead and dying trees.

• DFFM certified arborists, entomologists, and service foresters ground truth data and provide land managers and the public with information.

• In times of significant drought, trees become increasingly stressed and highly susceptible to insect and disease infestation.
Forest Health Conditions in 2018 - RECAP

- Most bark beetle impacts were being seen along the Mogollon Rim and in vegetation transitional zones.
- 90% of damage occurred in ponderosa pine.
- Heber-Overgaard was one of the heaviest hit areas.
Forest Health Conditions in 2018 - RECAP

- 275,934 acres of trees were impacted by bark beetles.
- That was an increase of 513%, up from just 45,003 acres in 2017.
Forest Health Conditions in 2018

Drought related bark beetle damage in ponderosa pine
Forest Health Conditions in 2018

2017

2018

Department of Forestry and Fire Management
## Historic Forest Health Conditions

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres</td>
<td>82,323</td>
<td>509,601</td>
<td>1,683,412</td>
<td>45,003</td>
<td>275,933</td>
<td>?</td>
</tr>
</tbody>
</table>

- **519%**
- **513%**
One Year Ago – May 1, 2018

https://droughtmonitor.unl.edu/

275,934 acres
Historic Forest Health Conditions

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Forest Health Conditions in 2019

- Forest and woodland vegetation are showing signs of improvement from record precipitation.

- Damage from bark beetles should decrease in 2019.
Forest Health Conditions in 2019

• Healthy trees are better able to defend from bark beetle attack.

• There are expected to be less generations of bark beetles in 2019.

• The potential for damage is still possible due to the exceptionally high populations of bark beetles in 2018.
Urban Forest Health Conditions in 2019

• Mediterranean Pine Engraver and Aleppo Pine Blight in Phoenix Metro.
Thank You

John Richardson
Forest Health Program Manager
JRichardson@dffm.az.gov
602-771-1420
dffm.az.gov