

WILDLAND FIRE

Fire return interval

Forested acres on the Emigrant Creek RD = 630,000

Average fire return interval = 15 years

40,000+ acres/year of fire

How to get there?

Two types of Wildland Fire

1. Prescribed Fire – Planned ignitions
2. Wildfire – Unplanned ignitions or prescribed fires that are declared wildfires



PLANNED

Prescribed Fire Plans

A publication of the
National Wildfire
Coordinating Group



Interagency Prescribed Fire Planning and Implementation Procedures Guide

Prescribed Fire Plans

- 21 required elements
- Technical Review
- Prescribed Fire Specialist Review
- Fire Management Officer Review
- Agency Administrator Approval
- Agency Administrator Ignition Authorization and Prescribed Fire Go/No Go Checklist

May 4th – Ignitions

Silvies 9 – 450 acres



May 4th – Effects

Silvies 9 – 450 acres



May 4th – Effects

Silvies 9 – 450 acres



May 5th – Ignitions

Silvies 9 – 200 acres



May 5th – Effects

Silvies 9 200 acres

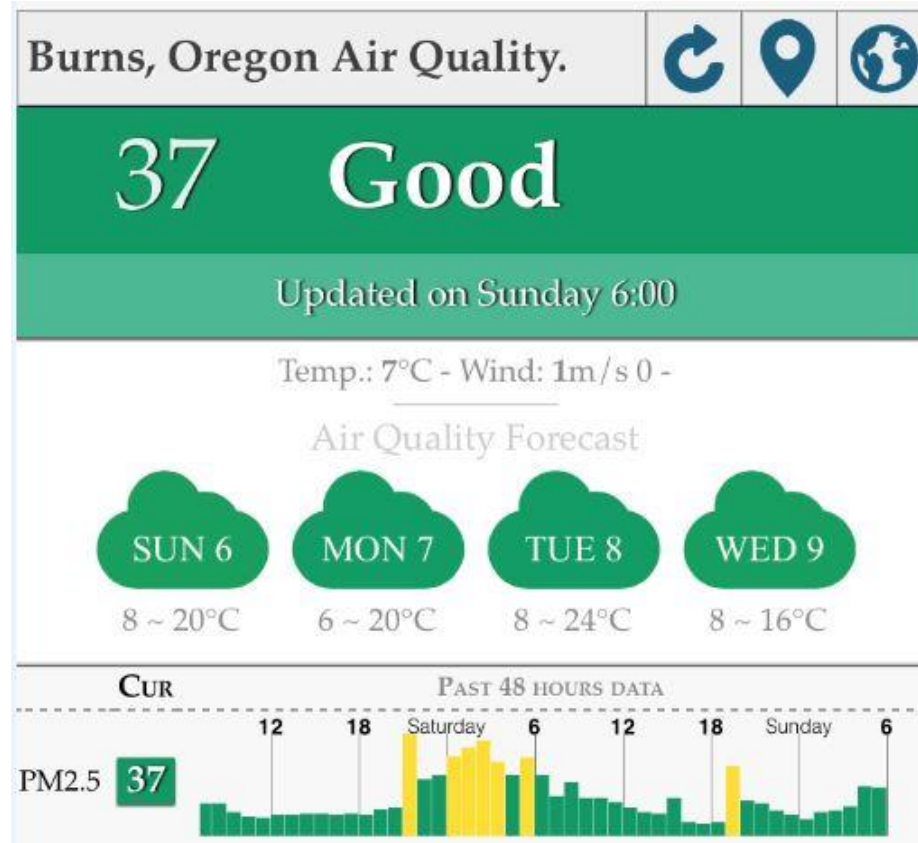


Smoke Management

AQI	Air Pollution Level	Health Implications	Cautionary Statement (for PM2.5)
0 - 50	Good	Air quality is considered satisfactory, and air pollution poses little or no risk	None
51 -100	Moderate	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
101-150	Unhealthy for Sensitive Groups	Members of sensitive groups may experience health effects. The general public is not likely to be affected.	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
151-200	Unhealthy	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects	Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion
201-300	Very Unhealthy	Health warnings of emergency conditions. The entire population is more likely to be affected.	Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
300+	Hazardous	Health alert: everyone may experience more serious health effects	Everyone should avoid all outdoor exertion

Smoke Management

Silvies 9 – 450 acres



May 7th – Ignitions

Marshall Devine F – 900 acres



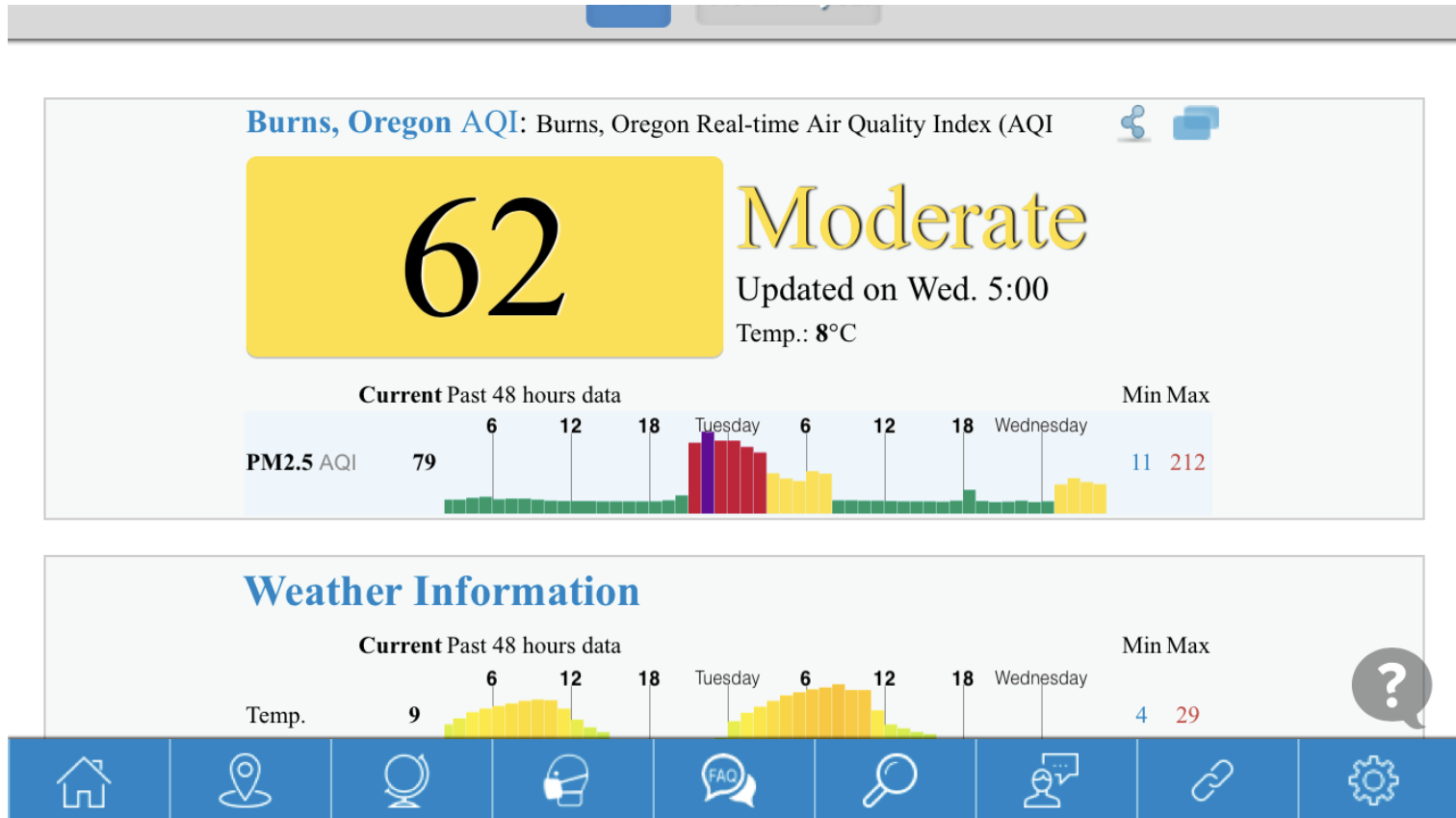
May 7th – Effects

Marshall Devine F – 900 acres



Smoke Management

Marshall Devine F – 900 acres



May 8th – Ignitions

Marshall Devine F – 400 acres



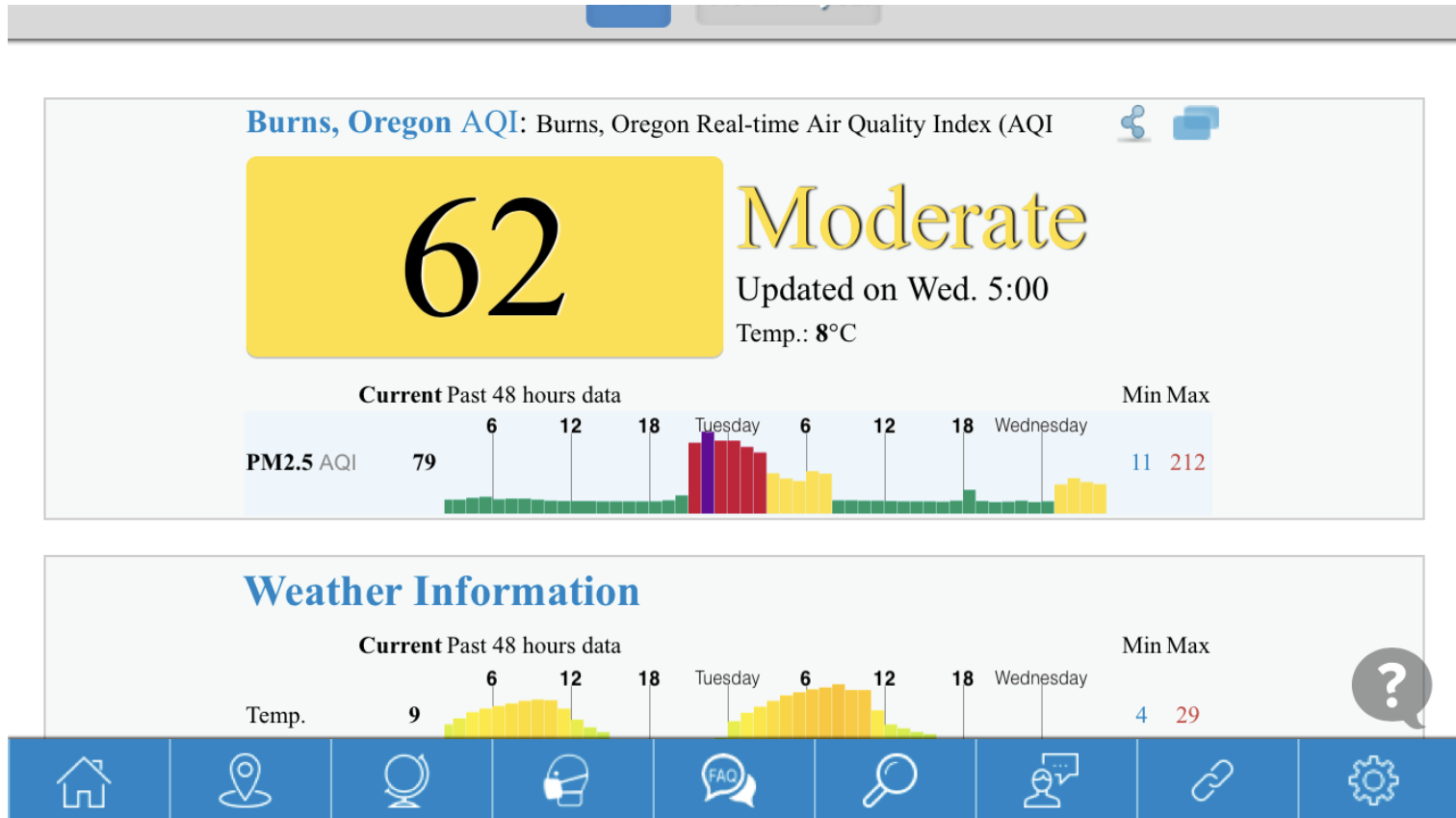
May 8th – Effects

Marshall Devine F – 400 acres



Smoke Management

Marshall Devine F – 400 acres



Smoke Management

Marshall Devine F – 900 acres



playground 2.0 beta

[Home](#) | [My Emissions](#) | [My Dispersions](#) | [Feedback](#) | [Help](#) | [Credits](#)

Logged in as [tboyce](#) | [Log Out](#)

[Home](#) » [My Dispersions](#) » MD050718 (HYSPLIT)

[Settings](#) | [Results](#) | [Notes](#)

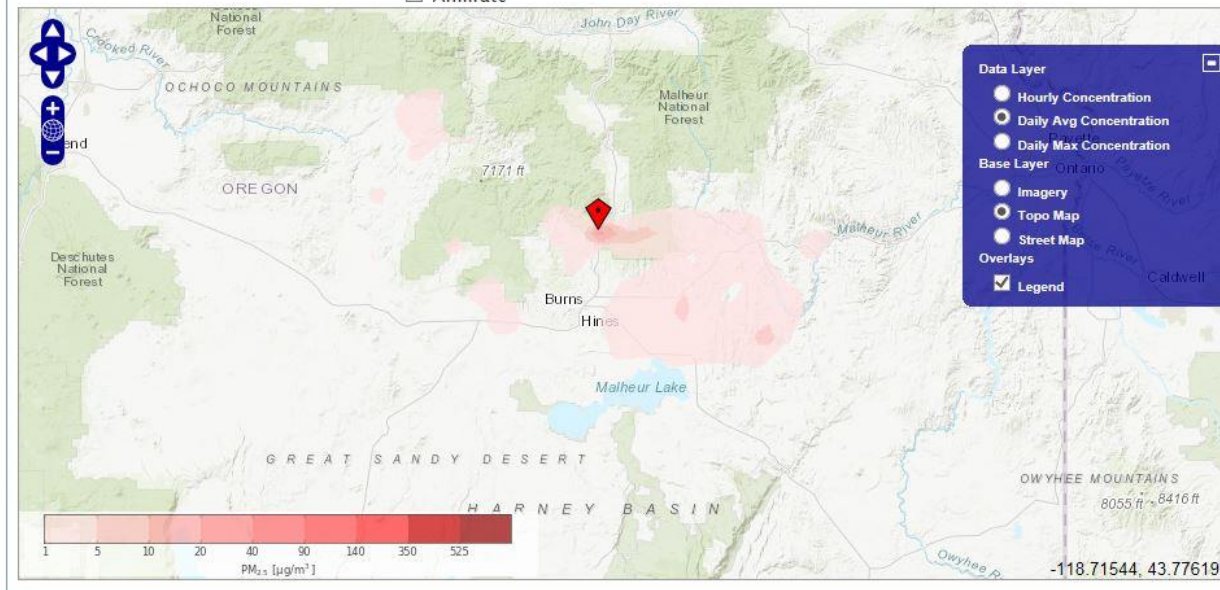
Full Dispersion Forecast



☐ Animate



day1 - May 8, 2018 ▾



Smoke Management

Marshall Devine F – 400 acres



playground

2.0 beta

[Home](#) | [My Emissions](#) | [My Dispersions](#) | [Feedback](#) | [Help](#) | [Credits](#)

Logged in as [tboyce](#) | [Log Out](#)

[Home](#) » [My Dispersions](#) » MD050808 (HYSPLIT)

[Settings](#) | [Results](#) | [Notes](#)

Full Dispersion Forecast

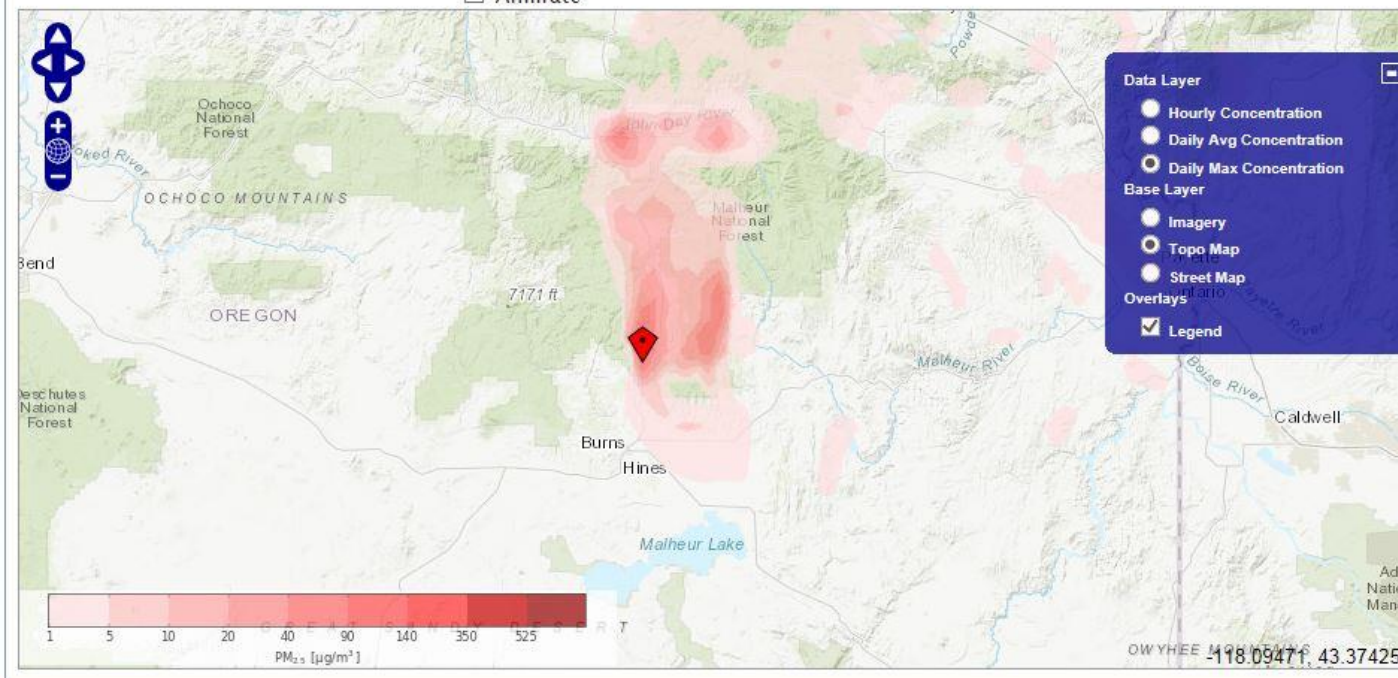


day1 - May 9, 2018

☐ Animate

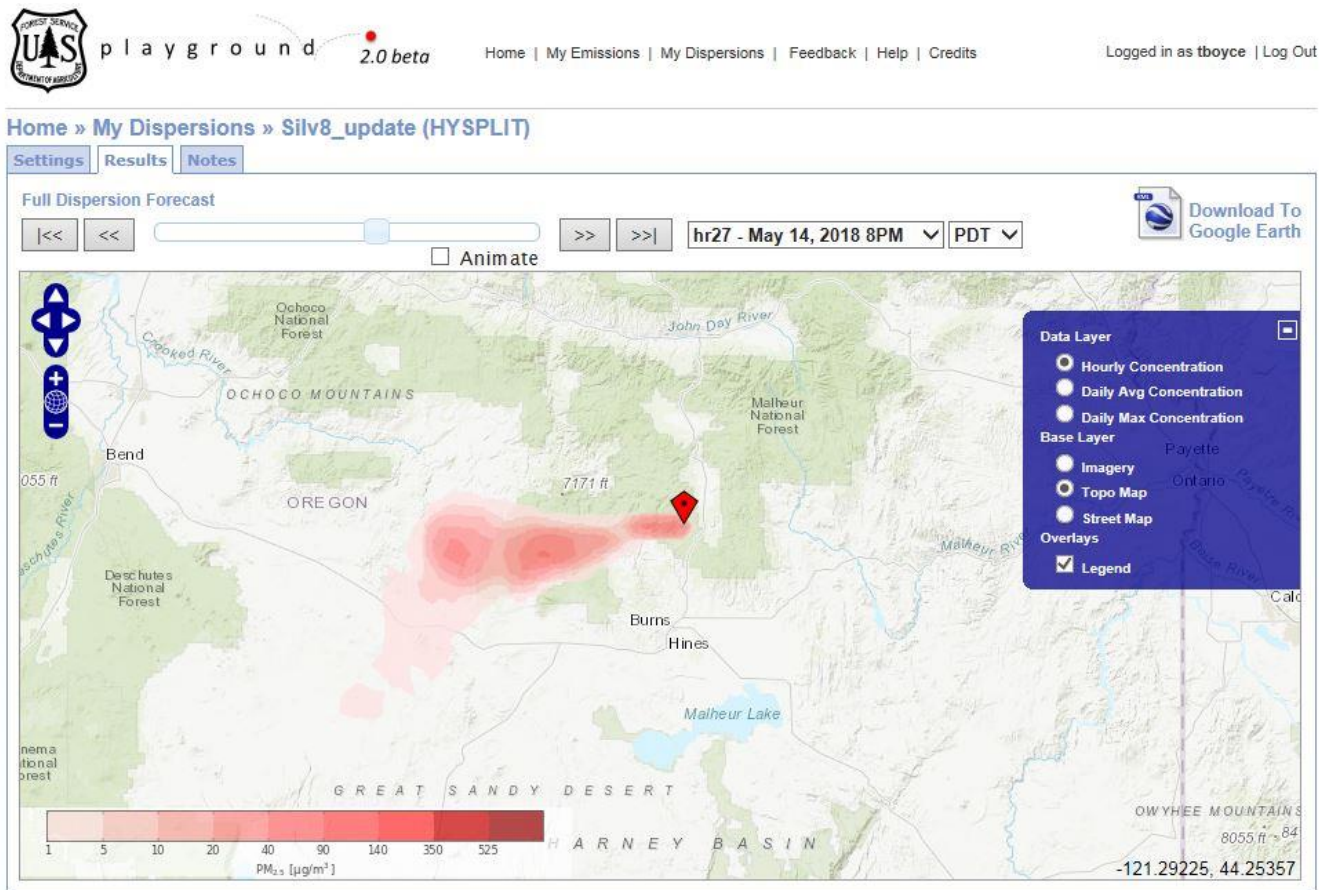


Download To
Google Earth



Smoke Management

Silvies 8 – 900 acres



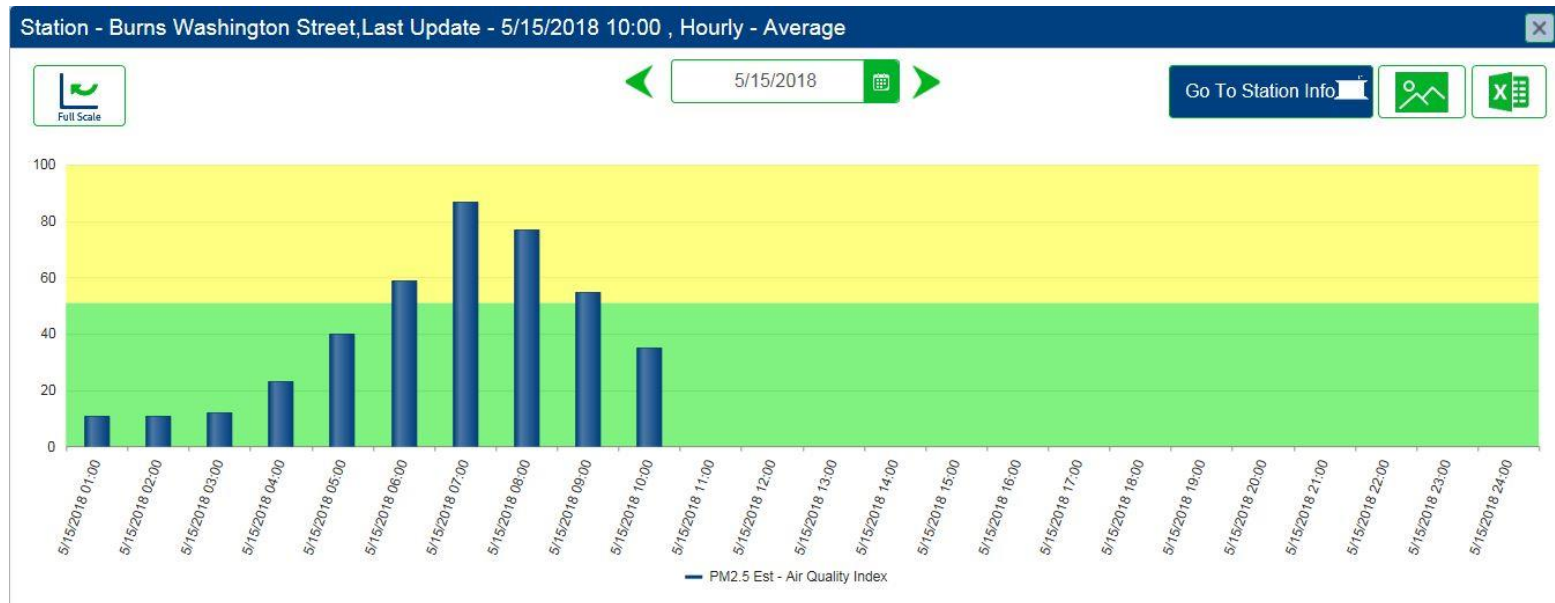
Smoke Management

Silvies 8 – 900 acres



Smoke Management

Silvies 8 – 900 acres



Smoke Management

Silvies 8 – 900 acres

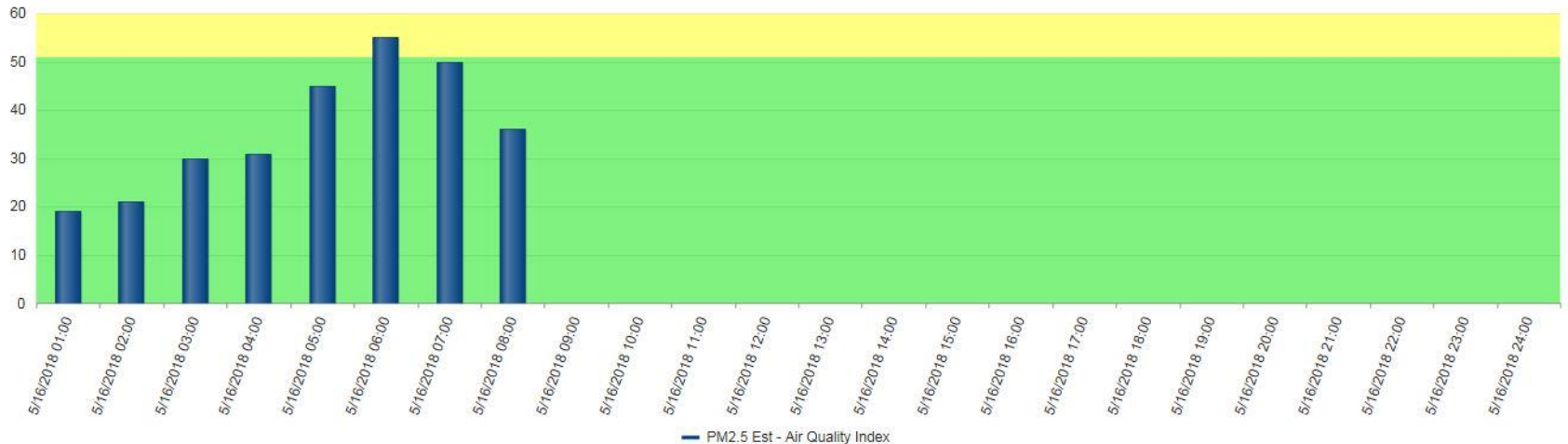
Station - Burns Washington Street, Last Update - 5/16/2018 08:00 , Hourly - Average



5/16/2018



Go To Station Info



Smoke Management

<http://aqicn.org/map/oregon/>

<https://oraqi.deq.state.or.us/home/map>

Summary:

UNPLANNED

Malheur Fire Action Plan and Assessment Guide

Malheur National Forest 2017 (March 31) **Fire Action Plan & Assessment Guide**

Forest Plan, Chapter IV: Forest Wide Management Direction, p. 44-45

Fire management direction in this Forest Plan shall guide the fire management analysis and resulting Fire Management Action Plan. The fire management action plan will give specific fire management direction for each management area and will be incorporated into this Forest Plan as an amendment (see Chapter V, Section D).

Apply an appropriate suppression response (see Glossary) to all wildfires. Implement responses cost efficiently and consistent with land and resource management objectives. Specific strategies for suppression will depend upon the fire location, expected fire behavior, and resource values at risk. Appropriate suppression criteria will be outlined in the fire management action plan.

Forest Plan Glossary (appendix F):

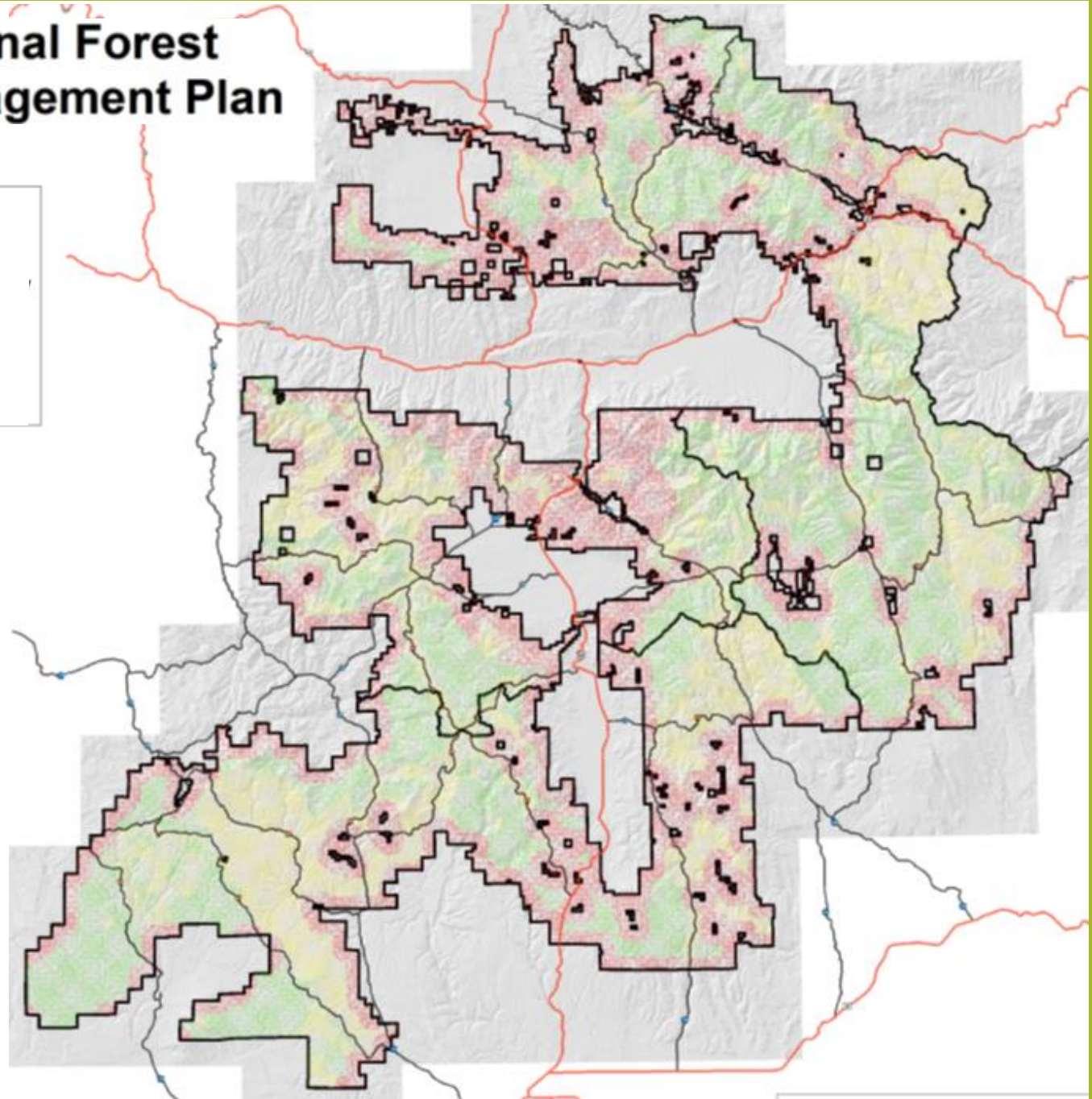
Fire Management Action Plan: Standards, guidelines, and practices to be used in wildfire suppression on the Malheur National Forest based on management practices presented in the Forest Plan.

Suppression: Any act taken to slow, stop, or extinguish a fire. Examples of suppression activities include fireline construction, backfiring, and application of water or chemical fire retardants.

Malheur National Forest Spatial Fire Management Plan

Legend

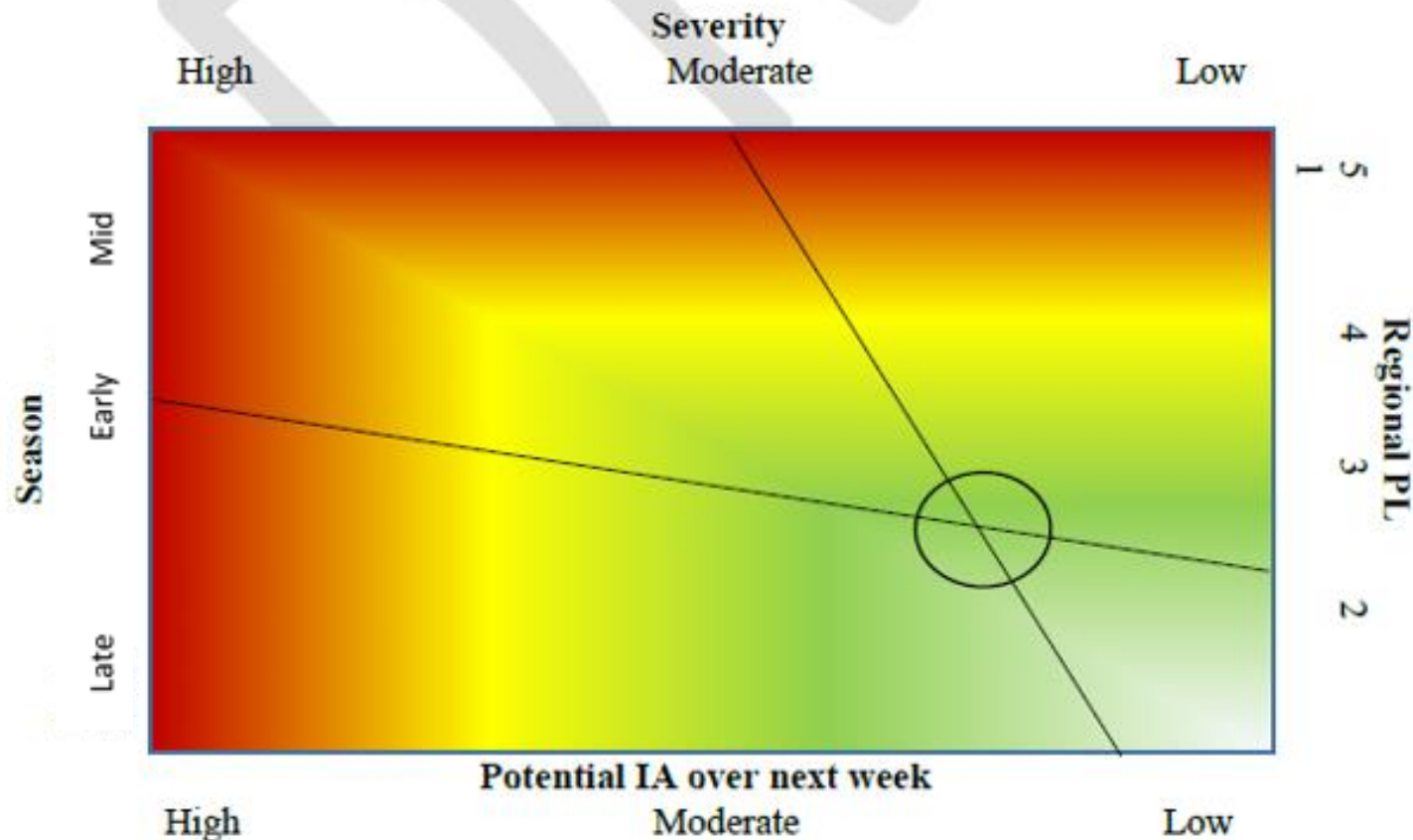
- High
- Moderate
- Critical



Wolf Fire Assessment

Weekly questions (pre fire, completed by forest and district level line officers and fire program managers):

1. Where are we at in the fire season (early/middle/late)? *Early*
2. Where are we at in terms of seasonal severity (ERCs/Adjective Class/Fire Restrictions)? *Moderate*
3. What is resource availability (National and Regional PL, Draw Down levels)? *Regional 2, National 2*
4. What is the potential IA workload for week? *Low*



Wolf Fire Questions - Managers

Evaluation questions for new start.
To be assessed by Duty Officer:

1. Which Fire Management Area are you in (Moderate, High, or Critical)? *Moderate*
2. What level of social/political interest do you expect? Do you have a PIO available or on order? *Moderate, used forest PAO*
3. Are there multi-jurisdictional considerations? *No*
4. Is this in an active planning or sale area? *No, Pronghorn analysis area scheduled for 2025.*
5. What are the other land management designations that overlap the potential fire area? (Old Growth, Wilderness, Eagle Nesting area, Roadless, etc) *Old Growth, Feeding Area (MA13). Forest Plan Direction (Progection-IV-107): Manage residue to maintain or enhance old-growth habitat. Protect old growth habitat from catastrophic wildfire.*
6. What is your 10-day fire weather outlook? *Hot and dry, becoming cool and wet towards weekend*
7. What are your short-term indices (BI)? *Moderate (60)*
8. What is your forecast for the next two days? *Continued hot and dry, potential for high sustained winds*
9. Have you reached out to other specialists (Range, Wildlife, Timber, Silviculture, Heritage, Aquatics, Hydro/Soils) to ensure there are no additional concerns, and/or mitigated for concerns by ordering a READ? *Range-Stiner confirmed Southworth is within that allotment, contact made by ECRD (Cheyne) no concerns. Silviculture-Providing READ, no concerns. Wildlife-Designation related to feeding area, deemed fire would be highly beneficial, no concerns. READ contacted other resource functions on 6/8, no concerns.*
10. What is the estimated cost for this strategy? *\$500/ac*

Wolf Fire Questions – Incident Commander

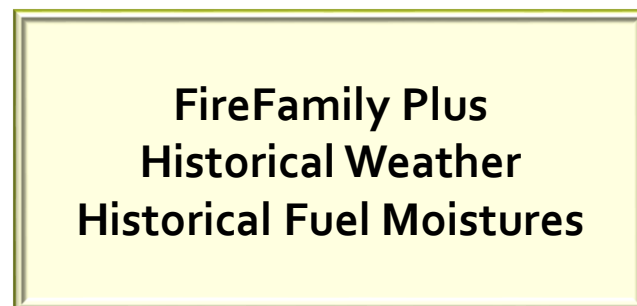
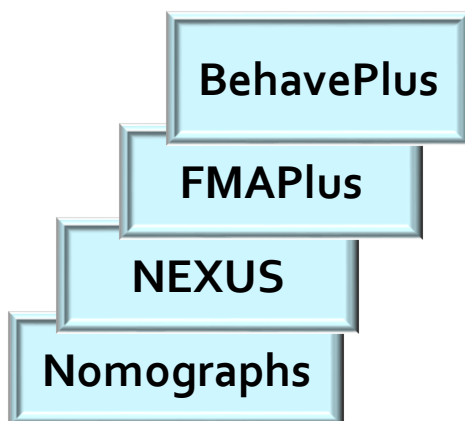
To be assessed in the field:

11. Are there natural or man-made potential containment lines?
 - a. What are they (be specific)? *FS Rd 659 and FS Rd 655*
 - b. What size would this make the fire? *241 acres*
12. How long will it take to prepare containment lines? To account for expected fire behavior? *2 days*
13. What are your resource needs to complete containment operations? *3 hand crews, 5 engines at peak*
14. Will this work based on your 10-day outlook? *Yes. Rain is in forecast.*
15. What would your Alternative, Contingency, and Emergency containment options look like (PACE model)? *Additional roads scouted around unit, operations completed before full PACE development complete.*

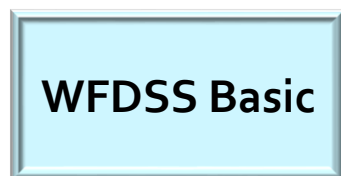
Wildland Fire Decision Support Tools

Spatial Scale

Non-Spatial



Spatial



Potential

**Short term
(1 day)**

**Near term
(<5 days)**

**Long term
(>5 days)**

Temporal Scale

Wolf



Tim Boyce
Prescribed Fire Specialist
Burns Interagency Fire Zone
Malheur National Forest
Emigrant Creek Ranger District
541-573-4319
tboyce@fs.fed.us