

#### COLORADO

Center of Excellence for Advanced Technology Aerial Firefighting

Department of Public Safety

#### **Colorado Fire Prediction System**

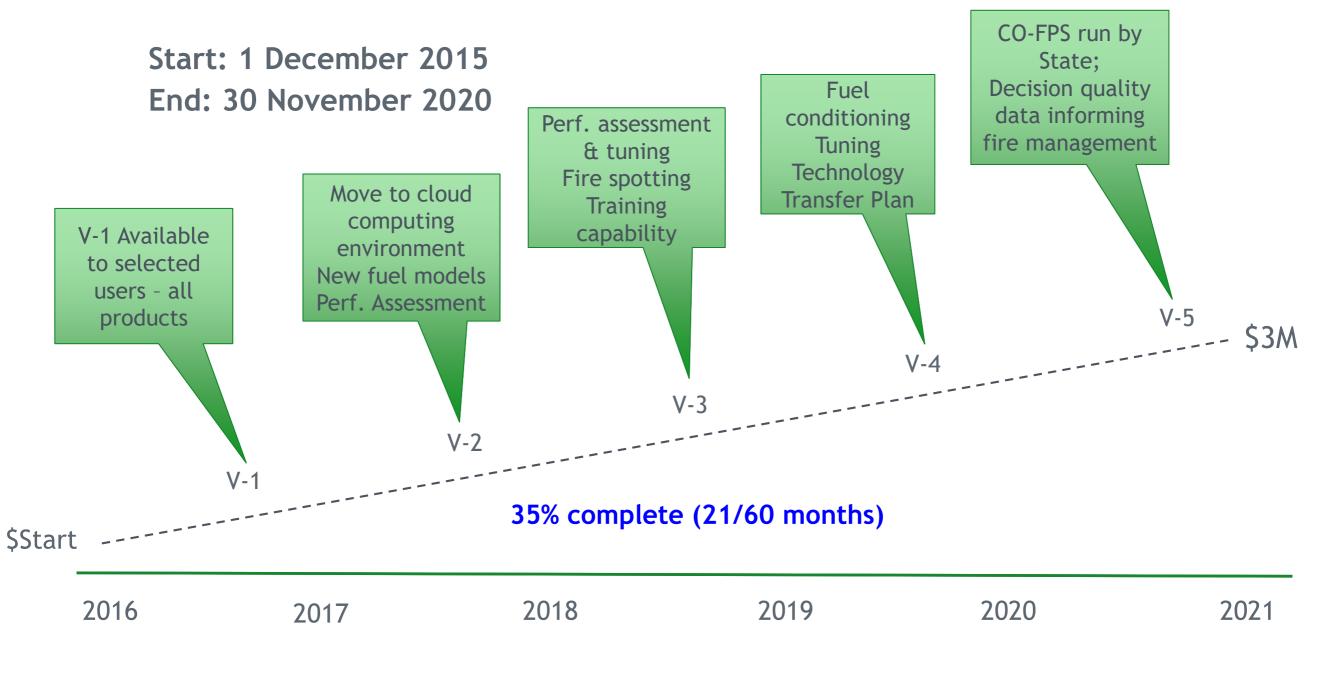
#### Planned Development and Research



**COLORADO** Department of Public Safety

## Is the project on Schedule?

#### YES - On schedule and budget

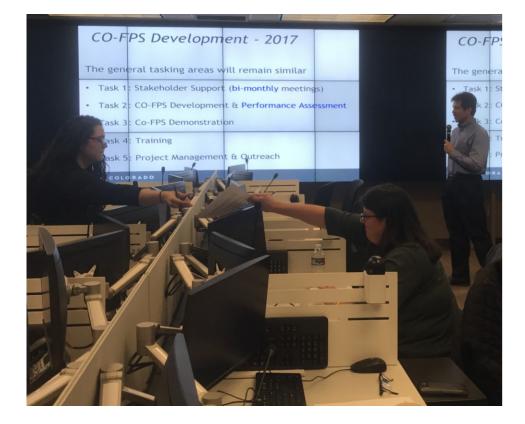




#### **CO-FPS Long Term Vision**

CO-FPS moved to cloud, additional stakeholders solicited Additional features added to CO-FPS including enhanced fuels data

Verification study drives improved accuracy of system Decision-quality data produced by CO-FPS, technology transferred to State



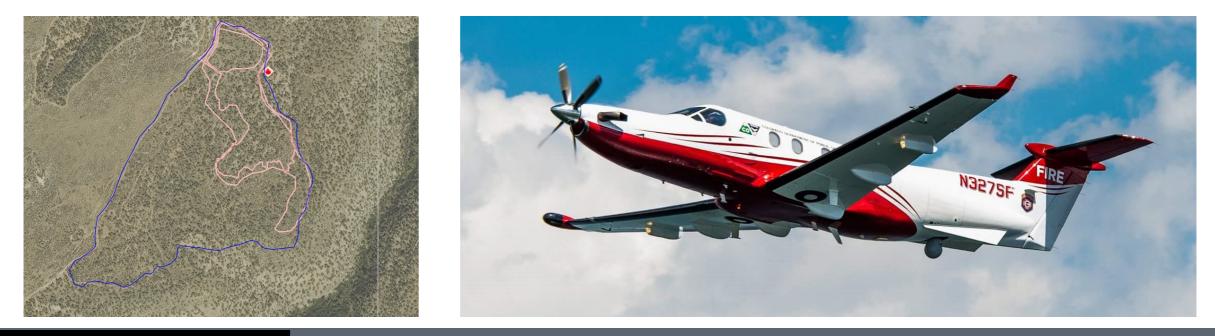






## Verification Plan

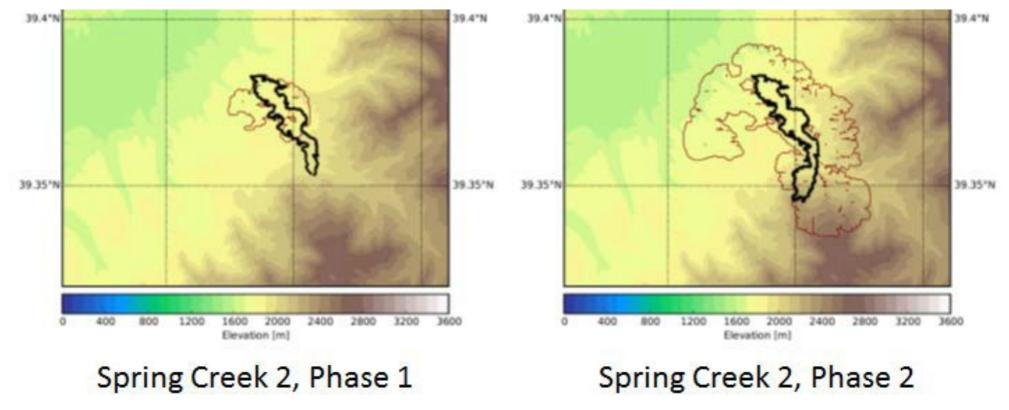
- Remotely sensed data from DFPC and federal aircraft, and satellites is utilized to verify predicted fire spread.
- The ability of the MMA to capture multiple perimeters on a single fire has been demonstrated several times.
- NCAR is ingesting this type of remotely sensed data into CO-FPS for model verification purposes.





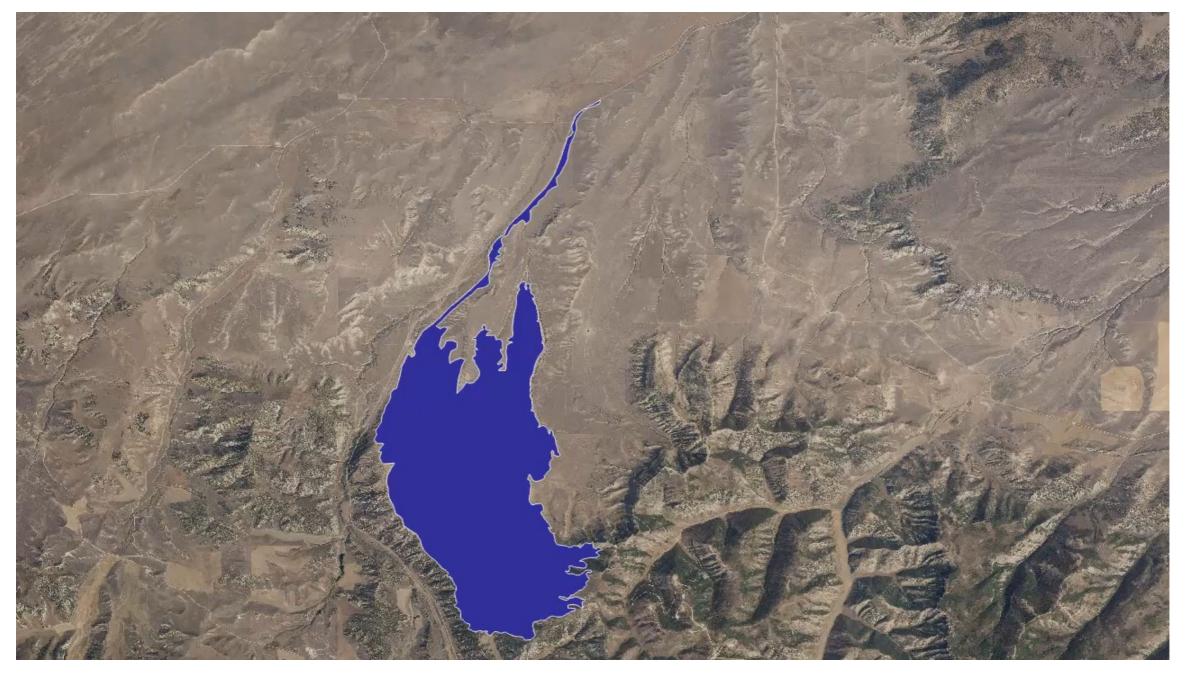
## 2016 Verification Research

- Comparison between actual fire growth and CO-FPS predictions were made on 11 Colorado wildland fires in 2016. The model is currently being tuned using results from this study.
- 2016 research revealed that CO-FPS generally over-predicts fire growth, though most researched fires were subject to human fire suppression.



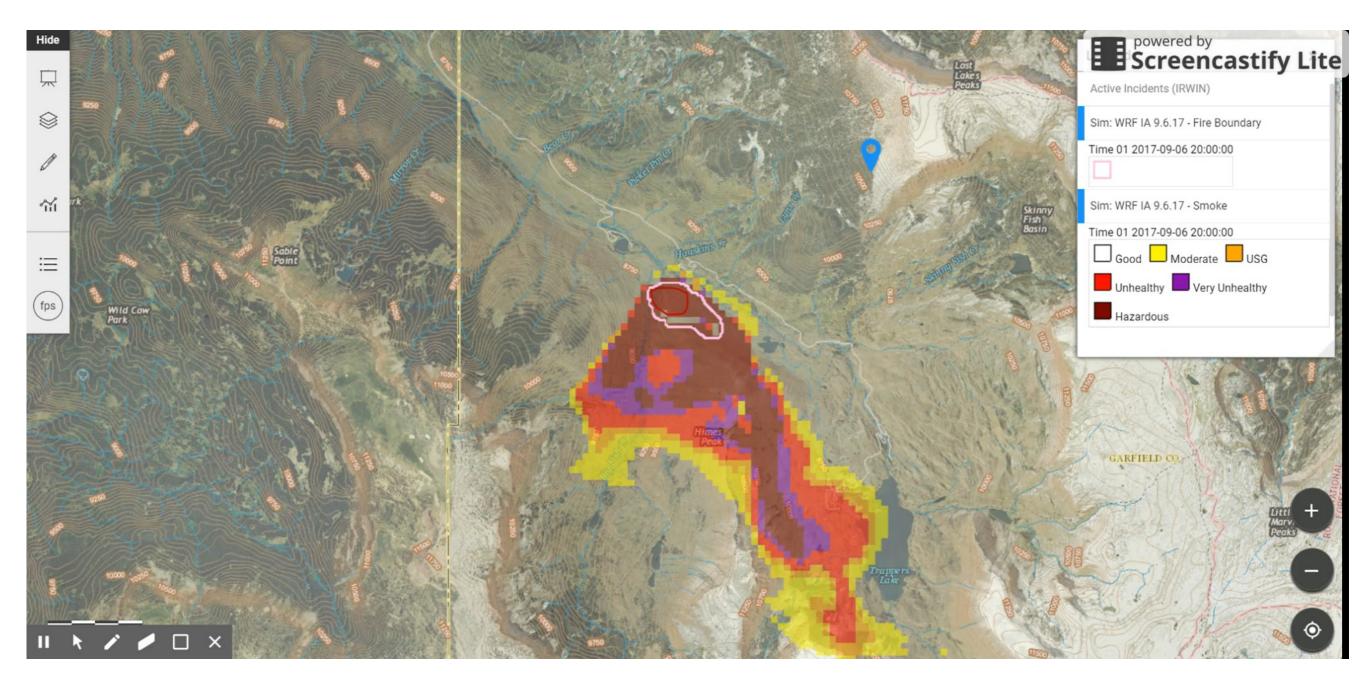


## Observed Fire Growth - Pine Tree Fire 9/10/17





# Himes Peak Fire Simulation - 9/6/17, 1:00 pm





#### Analysis - Himes Peak

