Several factors are good predictors of wildfire in statistical models used to map the risk of daily lightning/person-caused fires and predict the expected number of fires including the range of uncertainty.

**Person-Caused Fire Factors**
- Railway
- Location
- Seasonal Trends
- Fine Fuel Moisture Code
- Roads
- Forest & Landscape Type
- Public & Wildland Interface (WUI)
- Recreation & Industry

**Lightning-Caused Fire Factors**
- Strike (number, polarity & density)
- Sheltered Duff Moisture Code
- Drought Code
- Forest & Landscape Type

Our suite of provincial FOP models was developed using the methodologies described in Wotton and Martell (2005) and Taylor et al. (2013) and references therein. Output from these FOP models is used to produce spatially-explicit risk maps, and the forecasted counts of fires over regions resulting from the development of a new methodology to quantify the range of uncertainty in such predicted counts.

**Validation**
- We are evaluating the performance of the models in different ways. 1) Daily observed fires are within the prediction interval. 2) Daily observed fires compared to the predicted expected number of fires. 3) Good agreement with fire risk spatially. 4) Performance similar to the predictions made by expert staff. Between July 4th and August 11th 2016, the results of the prediction model were analyzed.

**Results**
- The average error spatially over the period was less than +/- one fire. Day-to-day variability shows that the models generally predict well. The models predicts similarly sized ranges to the experts, and in general performs about as well. If used together the models can be complimentary.
- These models are currently classed as prototype; validation efforts are continuing.

**What next?** Efforts are ongoing to calibrate the models to new conditions and data. We plan to explore other WUI type mapping techniques as an input to the person-caused fire models. Currently the WUI factor is derived from GIS rules and staff identification. We have been looking at options such as the "wildland-human interface" mapping by Johnston (2016) to replace the currently largely manual mapping exercise.

**What Next?** Exploring opportunity to make daily predictions available to partners and academics through a web-based service.