



Pennsylvania Prescribed Fire Council
4075 Linglestown Rd #330
Harrisburg, PA 17112

<http://paprescribedfire.org>

S-390 Introduction to Wildland Fire Behavior Calculations

September 8-12, 2025

Wyndham Garden, Boalsburg, PA

NOMINATIONS DUE: June 20, 2025

COURSE DESCRIPTION:

This course is a **BETA version** of the traditional S-390 course. While the traditional course focuses on manual fire behavior calculations using nomograms, the BETA version introduces students to modern methods using the **Behave 7 fire modeling system** and the Fireline Handbook Appendix B: Fire Behavior (PMS 410-2). Students will gain an understanding of the determinants of fire behavior through studying inputs (weather, slope, fuels, and fuel moisture). Students also learn how to interpret fire behavior outputs, documentation processes, and fire behavior briefing components.

Note: Students are required to bring a laptop to class. Students will be using Behave 7, which is accessible via the internet and does not need to be downloaded prior to class. However, if you prefer to download it in advance, you can do so here: [Behave 7 \(v7.0.1\)](#)

OBJECTIVES:

- List the assumptions, limitations, and appropriate uses of fire behavior prediction models.
- Describe how environmental factors and processes affect fire behavior predictions and safety.
- Define and interpret fire behavior prediction model inputs.
- Calculate fire behavior outputs using available fire behavior processors.
- Interpret, communicate, apply, and document wildland fire behavior and weather information.

TARGET GROUP:

Personnel desiring to be qualified as Division/Group Supervisor ([DIVS](#)), Prescribed Fire Burn Boss Type 2 ([RXB2](#)), or Incident Commander Type 3 ([ICT3](#)).

PREREQUISITES:

- S-290 Intermediate Wildland Fire Behavior.
- Qualified as any single resource boss. (Strongly Recommended)
- Satisfactory completion of pre-selection assessment and pre-course work.

PRE-COURSE ASSESSMENT: This instructor-led course has pre-course work (estimate 8-10 hours) and a pre-selection assessment (estimate 2 hours). Pre-course work will be sent to students once they are accepted into the class.

COST: \$350 for PA Prescribed Fire Council Members, \$400 for Non-members. Payment by non-members will include a membership for the remainder of the year.

LODGING: Information on lodging will be emailed to students once they are accepted into the class. A block of rooms will be available at the conference center.

NOMINATIONS: If you are interested in attending this course, please fill out and submit the nomination form on or before June 20, 2025 by following this link, <https://forms.office.com/g/ar6mQKqcp0> Reminder: Agency personnel must obtain supervisor approval prior to completing the nomination form.

Questions can be directed to the Training Coordinator, Dan Smith at danielsmi@pa.gov