RP 295 – Achieving Multi-Purpose Roadside Vegetation: Reducing Weed Invasion and Fire Risk while Enhancing Pollinator Habitat

**Project Description:**
ITD’s roadside vegetation management practices primarily have focused on controlling erosion. However, there is interest in establishing native plants along department roadsides that can resist expansion of invasive weeds. Similarly, there is interest in reducing the risk of fire along roadsides, which is often greater in areas dominated by invasive plants, by establishing plants that have low flammability and generate low fuel loads. In addition, roadsides are increasingly recognized as important habitat for insect pollinators, such as butterflies and bees. There is growing interest in creating and enhancing roadside habitats to support pollinator abundance. This project will focus on testing revegetation practices that maximize multiple management goals. The overall objective of this study is to identify roadside restoration and management practices that simultaneously reduce weed invasion and fire risk and enhance pollinator abundance. As part of this project, 216 test plots will be established along ITD roadsides in common ecoregions, and data will be gathered to assess plant and pollinator responses to experimental treatments over several growing seasons. Researchers will analyze study data to evaluate the costs and benefits of multipurpose revegetation methods and provide recommendations for best practices for roadside vegetation management.

**Project Objective:**
The objectives of this project include:
- Identifying factors that act alone or in combination to enhance native plant establishment.
- Identifying native plant assemblages that are resistant to invasion by weeds.
- Measuring fire fuel loads associated with plant assemblages established by different methods.
  - Quantifying insect pollinator responses to restored plant assemblages.
  - Identifying roadside revegetation practices that provide greatest return on investment. Estimated

**Completion Date:** December 31, 2023

**Budget:** $105,105

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