

Number: 25-78

Proposed Title: Targeted Mowing of ODOT Right-of-way to Provide Economic, Environmental, and Social Benefits

1. Concisely describe the **transportation issue** (including problems, improvements, or untested solutions) that Oregon needs to research.

Highway right of way (ROW) lands are not currently managed as assets, despite their value. Demonstrated benefits of optimizing ROW land management practices, specifically mowing practices, include improved stormwater control, enhanced erosion control, increased personnel safety, fuel and maintenance cost savings, pollinator and agricultural production benefits, wildlife habitat benefits, invasive species control, as well as wildfire and drought reduction benefits. To date twelve active state DOTs including WashDOT have now instituted successful targeted mowing practices and are reaping the associated economic, environmental, and social benefits of managed land assets. Given that Washington and Oregon share similar climatic conditions across the state, the feasibility of ODOT similarly reaping these benefits is high. To assess potential benefits and identify limitations for targeted, optimized mowing practices a proof-of-concept extended pilot and forecasting modeling effort is needed.

2. Document how this **transportation issue** is important to Oregon and will meet the [Oregon Research Advisory Committee Priorities](#)

Reduced mowing has the potential to reduce costs for ODOT Maintenance and aligns with the RAC priority for stewardship of public resources as well operational savings. Targeted mowing that factors in timing and location can also improve stormwater control. Improved stormwater control can prolong roadway and water conveyance infrastructure lifespan, as well as improve vegetation health (and thus pollinator health)—both of which are also in alignment with RAC priorities of safety, sustainability, and climate action. Targeted mowing benefits for plants and pollinators is well-documented and may alleviate ODOT's increasing risk for potential litigation. Federal protection of pollinators, like the Monarch butterfly, will require ODOT to alter mowing practice. One other aspect of reduced mowing that is difficult to quantify is the potential for enhanced community vitality that can be generated with beautification of the right-of-way through that prolonged provision of pollinator habitat (flowers).

3. What **final product or information** needs to be produced to enable this research to be implemented?

The economic, environmental, and social benefits of targeted mowing practices will be explored. At least five pilot study locations will be identified representing each ODOT Region to establish location-based targeted mowing protocols, seasonal communications, and community interaction. A final report will be delivered that will review the pilot studies and document the following: 1) pilot development process and methods, 2) monitoring parameter identification (plants, line-of-sight, pollinators, etc.), methods, and results, 3) assessment of results, 4) analysis of positive and negative impacts to ODOT and the environment (cost benefit analysis, increased pollinators, improved stormwater drainage, improved vegetation health, improved soil health, etc.), and 5) community impacts. If the targeted mowing pilots are successful, the final report can be used by Region and District decision makers to develop new or updated policies and procedures. To further assist with this process an interactive online map of potential ROW locations that could benefit from targeted mowing will also be delivered to serve as a communication visual/tool for decision making.

4. (Optional) Are there any individuals in Oregon who will be instrumental to the success of implementing any solution that is identified by this research? If so, please list them below.

| Name | Title | Email | Phone |
|--------------------|---|--------------------------------------|-------|
| Paris Edwards | Climate Specialist | Paris.b.edwards@odot.oregon.gov | |
| Katherine Silva | Adaptation and Resilience Program Manager | Katherine.silva@odot.oregon.gov | |
| Magnus Bernhardt | Reg. 1 Roadside Manager | Magnus.U.BERNHARDT@odot.oregon.gov | |
| Kira Glover-Cutter | Research Lead | Kira.M.GLOVER-CUTTER@odot.oregon.gov | |
| Robert Marshall | Statewide Roadside Manage | Robert.R.MARSHALL@odot.oregon.gov | |
| Paul Benton | Env. Program Coordinator | paul.d.benton@odot.oregon.gov | |

5. Other comments:

6. Corresponding Submitter's Contact Information:

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|--------------|---------------------------------|
| Name: | Paris Edwards |
| Title: | Climate Office |
| Affiliation: | ODOT |
| Telephone: | 541-282-4900 |
| Email: | Paris.b.edwards@odot.oregon.gov |