

**To:** Minnesota House of Representatives, Transportation Finance & Policy, Chair Rep. Frank Hornstein

**From:** Pollinator Friendly Alliance and Minnesota Coalition, PO Box 934, Stillwater, MN laurie@pollinatorfriendly.org

**Date:** April 5, 2022

RE: Coalition Support for HF4313 *Highways for Habitat in Omnibus HF1683* to establish a state roadside program to significantly enhance roadsides with needed pollinator habitat and pollution buffers to protect declining pollinator and bird populations, to protect water quality and prevent soil erosion.

Minnesotans care about the environment, want cleaner water and more ecologically responsible practices on public lands. Pollinator, bird and animal species are disappearing at alarming rates. World Wildlife Fund reports wildlife and insect populations have plummeted by more than two-thirds in the last 50 years. The Wildlife Society reported that one in four bird species are gone in less than a lifetime. Factors contributing to species decline include loss of habitat, fragmentation of habitat, pesticide pollution and climate change. Roadsides have been identified by many scientists and wildlife organizations as potential for critical wildlife habitat and migration corridors.

The new federal infrastructure bill allows for clean drinking water, climate change mitigation and roadside repairs. Attempts at Minnesota roadside habitat programs have so far fallen short by Minnesota agencies. Now is a critical time to enrich roadway corridors into needed native habitat. With a mandated Integrated Roadside Vegetation Management (IRVM) plan this new state program:

- helps at-risk monarch butterfly, bumble bee and migratory bird species recover and helps avoid additional federal listings, permitting and regulation
- reduce costs for mowing and herbicide treatments
- filters and protects water quality, manages stormwater runoff
- reduces soil erosion and rejuvenates soil health
- blocks agricultural pesticide drift and improves air quality
- moderates climates and absorbs carbon
- increases visual appeal
- provides living wind and snow breaks
- contributes to highway safety
- provides wildlife travel and migration corridors
- provides habitat for birds, pollinators and other small wildlife
- improves and preserves Minnesota for future generations

Other states such as Iowa, Texas and New York have already implemented substantial roadside habitat programs. In a 2018 survey of roadside managers and engineers in Iowa, they reported the following results from their living roadside habitat program:

80% - provides attractive roadsides

90% - improves water quality

94% - protects soil resources

80% - reduces spread of invasive species

90% - effective for weed and pest control

80% - reduces blowing snow

78% - saves money long and short term

70% - makes roadway safer

## **Background:**

Native plants have extensive root systems that absorb storm water runoff chemicals that would otherwise enter waterways and help prevent erosion – both important issues especially along rural roadways. Native grasses and flowering plants provide habitat, decrease water and pesticide drift pollutants, provide soil stabilization and erosion control, provide natural snow and wind breaks, increase wildlife corridors/connectivity, carbon sequestration, and increase driver safety and driver experience.

Scientists have been alerting us for decades about climate crisis and species decline. Monarch populations dropped 99% in the west since the 1980s. U.S. Fish & Wildlife Service finds that "Ground Nester Birds nesting in highway rights-of-way are vulnerable to direct mortality due to mowing practices. Most states mow rights-of-way to maintain sight distances and for esthetic reasons. Mowing for esthetic purposes instead of vegetation control may be possible to forego." Songbird decline is driven by loss of insect populations, pesticide use and habitat loss. Roadside herbicide spraying is costly and destroys both target and non-target plant species.

This is a historical time when climate crisis and species extinctions are upon us, and we need to take immediate actions locally and nationally. The actions we take now will be looked upon in history as part of the solution or part of the problem.

# Organizations in support of Highways for Habitat:

Audubon Chapter of Minneapolis

Audubon Minnesota River Valley Chapter

Bee Safe Minneapolis

Citizens Climate Lobby Minnesota

CURE (Clean Up the River Environment)

Friends of Minneapolis Wildlife

Friends of Roberts Bird Sanctuary

**Humming for Bees** 

Izaak Walton League, Wes Libbey Northern Lakes Chapter

Lakeville Friends of the Environment

Land Stewardship Project

LONA (Legacy of Nature Alliance)

Minnesota Environmental Partnership (MEP)

Minnesota Hobby Beekeepers Association

Minnesota Ornithologists Union

Minnesota River Valley Audubon Chapter

Minnesota Well Owners Organization

**National Audubon Society** 

Pesticide Action Network

Pollinate Minnesota

Pollinator Stewardship Council

Pollinator Friendly Alliance

Renewing the Countryside

Roots Return Heritage Farm

Salt N Pepper Farm

Sierra Club North Star Chapter

Vote Climate

Ely Minnesota.com Guide to BWCAW

Water Legacy

Wild Ones St. Croix Oak Savanna Chapter

Wilderness in the City

# Support documents, articles and scientific papers:

**Integrated Roadside Management Overview** 

https://tallgrassprairiecenter.org/roadsides

Living Roadway Trust Fund and Roadside Habitat: Highway 35 Corridor: Federal Highway Administration <a href="https://www.environment.fhwa.dot.gov/env">https://www.environment.fhwa.dot.gov/env</a> topics/ecosystems/roadside revegetation/ch08.aspx

Washington State Department of Transportation Ecologically based roadside vegetation design and management

https://wsdot.wa.gov/publications/manuals/fulltext/M25-30/800.pdf

Texas State Department of Transportation Vegetation Management Plan with environmental sensitivity <a href="http://onlinemanuals.txdot.gov/txdotmanuals/veg/veg.pdf">http://onlinemanuals.txdot.gov/txdotmanuals/veg/veg.pdf</a>

Federal Highway Administration: Department of Transportation increase pollinator habitat along roadways <a href="https://www.environment.fhwa.dot.gov/env">https://www.environment.fhwa.dot.gov/env</a> topics/ecosystems/pollinators.aspx

Roadside revegetation: integrated approach to establishing native plants and pollinator habitat http://nativerevegetation.org/

**Iowa's Living Roadway Plant Profiler** 

https://www.iowadot.gov/pdf\_files/plant\_profiler.pdf

### **Monarch Highways**

https://environment.transportation.org/case study/six-state-dots-join-forces-to-build-monarch-highway/

Illinois Transportation forges a new wildlife habitat roadside conservation program <a href="https://quailforever.org/Newsroom-(1)/2017-August/Illinois-Habitat-Highway-A-New-Partnership-for-Wil.aspx">https://quailforever.org/Newsroom-(1)/2017-August/Illinois-Habitat-Highway-A-New-Partnership-for-Wil.aspx</a>

A Massive Increase in Roadside Woody Vegetation: Goals, Pros and Cons: Harvard University <a href="https://escholarship.org/uc/item/22h2s7jt">https://escholarship.org/uc/item/22h2s7jt</a>

#### Minnesota Dept of Natural Resources roadside protocols:

Roadside mowing law 160.232 mowing ditches outside cities

DNR Roadsides for wildlife: encourages public to plant and not hay, timed mowing

1988 Roadsides for wildlife materials from DNR focus on nesting birds and avoiding mowing Aprilaugust.

<u>Integrated roadside vegetation management techniques.</u> (Tactics include biological, pesticides, mowing, and fire.)

### **Integrated Roadside Vegetation Management Technical Manual Iowa**

https://scholarworks.uni.edu/facbook/116/

## Lax Pesticide Policies are putting wildlife health at risk

https://www.audubon.org/magazine/summer-2021/lax-pesticide-policies-are-putting-wildlife

### **Bird Poisoning and Decline:**

https://www.science.org/doi/abs/10.1126/science.aaw9419

#### Three billion birds have been lost in North America since 1970

https://www.nationalgeographic.com/animals/article/three-billion-birds-lost-north-america

### Roadsides are important habitat for nesting pheasants and waterfowl

https://www.outdoornews.com/2017/07/03/pheasants-forever-ditch-mowing-roadside-disturbances/

# Pesticides are leading cause of grassland bird declines

https://abcbirds.org/article/new-study-finds-pesticides-leading-cause-of-grassland-bird-declines/

### National Wildlife Federation on importance of habitat highways:

Importance of habitat highways

**Pollinator Decline / Insect Apocalypse:** Xerces Society: *The science behind the role neonics play in harming bees.* Jennifer Hopwood, Aimee Code, Mace Vaughan et al. (2016)

https://xerces.org/sites/default/files/2018-05/16-023 01 XercesSoc ExecSummary How-Neonicotinoids-Can-Kill-Bees web.pdf

Science, 8/3/2021, Goulson Study combines 232 scientists' signatures to restrict neonicotinoids Phys Org, 8/2/2021: Study shows common insecticide is harmful in any amount <a href="https://www.mprnews.org/story/2021/02/26/npr-climate-change-deforestation-threaten-monarch-butterfly-migration">https://www.mprnews.org/story/2021/02/26/npr-climate-change-deforestation-threaten-monarch-butterfly-migration</a>

### Monarch butterflies on verge of extinction

https://www.nationalgeographic.com/animals/article/monarch-butterflies-near-extinction

## Monarch Joint Venture roadside mowing protocol:

https://monarchjointventure.org/images/uploads/documents/MowingForMonarchsUpdated.pdf

### **EPA National and State PCA are not protecting us from pesticide contamination:**

The Intercept 8/7/2021: How Pesticide Companies Corrupted the EPA and Poisoned America <a href="https://theintercept.com/2021/06/30/epa-pesticides-exposure-opp/?emci=2a58c809-74db-eb11-a7ad-501ac57b8fa7&emdi=37e67a18-27e0-eb11-a7ad-501ac57b8fa7&eid=341111">https://theintercept.com/2021/06/30/epa-pesticides-exposure-opp/?emci=2a58c809-74db-eb11-a7ad-501ac57b8fa7&eid=341111</a>

### Government is not protecting us from pesticides

https://www.audubon.org/magazine/summer-2021/lax-pesticide-policies-are-putting-wildlife