

Pollinator-Friendly Practices on Roadsides and Highway Rights-of-Way Discretionary Grant Program

Fiscal Year 2023 Application Template

This is the Application Template (Template) for the Fiscal Year (FY) 2023 Pollinator-Friendly Practices (PFP) on Roadsides and Highway Rights-of-Way Discretionary Grant Program, also known as the Roadside Pollinator Program. This Template is required for applicants of the Roadside Pollinator Program. Applicants should read the Roadside Pollinator Program Notice of Funding Opportunity (NOFO) in its entirety prior to filling out the Template.

Provide a response to each item below. Items in this section will be used to determine grant program eligibility, as detailed in Section C of the NOFO, and to determine how the project will address each Merit Criteria and Project Readiness Criteria, as detailed in Section E.1 of the NOFO. More information on completing specific elements of this Template can be found in Section D.2.i.f of the NOFO.

I. Basic Information

Applicant Information

Item	Description	Response
1. Application Title:	<i>Provide a title for your Application.</i>	Plan Development and Implementation of Pollinator-Friendly Practices on Maryland Roadsides and Highway Rights-of-Way
2. Name of Applicant:	<i>Provide the full name of the applicant. Do not use abbreviations.</i>	Maryland Department of Transportation State Highway Administration Office of Environmental Design Landscape Programs Division (MDOT SHA OED LPD)
3. Is your organization (an eligible entity) submitting more than one application?	<i>Please see the definition of "Eligible Applicants" in the NOFO Section C.1</i>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
4. If your organization is submitting more than one application how is this application ranked?	<i>Only one award, not to exceed \$150,000, will be provided per eligible entity, regardless of the number of applications submitted. Please see NOFO Section C.3.i for</i>	Ranked <u> 1 </u> of <u> 1 </u>

	<i>additional information.</i>	
5. Point of Contact	<i>Provide up to two points of contact at the Applicant's organization.</i>	<p>Name: Stacey Shackelford Title: Assistant Division Chief, Landscape Programs Division, Office of Environmental Design, Maryland State Highway Administration Physical Address: 707 N. Calvert Street, Baltimore, MD 21202 Email Address: sshackelford1@mdot.maryland.gov Phone Number: 410-545-8547 Cell Phone Number: 302-528-8080</p> <p>Name: Christy Bernal Title: Discretionary Grant Manager, Program Development Division, Office of Preliminary Planning and Engineering, Maryland State Highway Administration Physical Address: 707 N. Calvert Street, Baltimore, MD 21202 Email Address: cbernal@mdot.maryland.gov Phone Number: 410-545-5659 Cell Phone Number: 301-728-4838</p>

Summary of Funding Request

Item	Description	Response
6. Total Amount of Roadside Pollinator Program Funds Requested:	<i>Provide the total amount of Roadside Pollinator Program funds requested up to a maximum of \$150,000</i>	\$150,000
7. How will the Roadside Pollinator Program grant funds be used if the application is selected to receive a grant?	<i>Select all that apply. Plan improvement applies to revisions or updates to existing information and further development of a plan applies to developing new information on topics not previously covered.</i>	<input checked="" type="checkbox"/> Plan implementation <input checked="" type="checkbox"/> Plan improvement <input checked="" type="checkbox"/> Further development of the Plan

Eligibility Information

Item	Description	Response
8. Type of Eligible Entity:		<input checked="" type="checkbox"/> State DOT <input type="checkbox"/> Federal Land Management Agency <input type="checkbox"/> Indian Tribe
9. Have you attached or linked to a Pollinator-Friendly Practices Plan, and any related or supporting documents (e.g., a Candidate Conservation Agreement with Assurances), to this application?	<i>Provide a list of the names or titles of documents, attachments or weblinks in the space provided to the right.</i>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> List by name: MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual Integrated Vegetation Management Manual December 2023 (maryland.gov)
10. If the eligible applicant or Lead Applicant is a State DOT or Federal Land Management Agency, does the application include documentation of coordination with applicable State agencies in the development of the Plan?		Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> <i>If "N/A" is selected, explain why this requirement does not apply in Section II:</i>
11. If the eligible applicant or Lead Applicant is a State DOT or Federal Land Management Agency does the application include		Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> <i>If "N/A" is selected, explain why this requirement does not apply in Section II:</i>

documentation of consultation with affected or interested Indian tribes in the development of the Plan?		
12. Will all PFPs from Categories 1-4 take place on Right-of-Way or immediately adjacent land that is currently owned by the applicant?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
13. If the answer to No. 12 is No, is the land adequately controlled via lease, easement or other means by the applicant?	<i>Please attach supporting documentation as necessary.</i>	Yes <input type="checkbox"/> No <input type="checkbox"/> Supporting Documentation attached <input type="checkbox"/>

Project Location Information

Item	Description	Response
14. General Location(s) of Award	<i>Provide the general location where the Project will be implemented. Use the format: State, county, city (where applicable)</i>	Maryland: Charles, Prince George's, Somerset, Washington, and Worcester Counties.
15. Is the project located in an Urban or Rural Community?	<i>For the purpose of this NOFO, FHWA will consider communities that are within Urbanized Areas (i.e., areas with a population of 50,000 or more) to be urban</i>	Urban <input type="checkbox"/> Rural <input type="checkbox"/> Both <input checked="" type="checkbox"/>

	<i>communities and all other communities to be rural.</i>	
16. Is the map of Funded Activities provided as an attachment?	<i>A map of the Project area and locations should be provided as an attachment. For improvement or further development of a Plan, show the locations the Plan refers to. For training, the locations where the training will be applied.</i>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Existing and Proposed Sites Map PFP Grant Map of Existing and Proposed Sites.pdf Site Detail Map PFP Grant Detail Site Maps.pdf

Project Schedule

Item	Description	Response
17. Roadside Pollinator Project Start Date	<i>Date that work will begin on the first element of the Roadside Pollinators Project. Use the format MM/DD/YYYY</i>	09/01/2024
18. Roadside Pollinator Project End Date	<i>Date that the entire Roadside Pollinator Project will be complete. Use the format MM/DD/YYYY</i>	06/30/2027

Environmental Review and Permitting

Item	Description	Response
19. What National Environmental Policy Act (NEPA) class of action is	<i>Please select all that apply and describe in the narrative section below (II.7)</i>	<input type="checkbox"/> NEPA Complete <input checked="" type="checkbox"/> CE Expected <input type="checkbox"/> EA/FONSI Expected <input type="checkbox"/> EIS Expected <input type="checkbox"/> Re-Evaluation

<i>applicable to this Roadside Pollinator Project?</i>		<input type="checkbox"/> Not Applicable
20. Will all necessary environmental approvals and permits meet the project delivery timeline specified in the project schedule?	<i>Please describe your schedule and status in the narrative section below (II.7)</i>	<input checked="" type="checkbox"/> Yes (<i>Provide Documentation</i>) <input type="checkbox"/> No

II. Narrative Responses

Provide a narrative response to each section below. There is a word limit of 500 words for each response, excluding budget tables.

Consultation & Coordination Narrative

Each response should be no longer than 500 words. Provide a narrative description of how the applicant has met the required consultation or coordination requirements in the development of the Pollinator-Friendly Practices Plan (Plan). Applicants who are State DOTs or Federal Land Management Agencies should describe their coordination with applicable State agencies and their consultation with affected or interested Indian Tribes in developing their Plan. For each applicable State agency and affected or interested Indian Tribe, provide the full name and describe the consultation or coordination that occurred. Provide any supporting documentation as a clearly labeled attachment or indicate which page of the Plan contains such documentation. Responses to the criteria listed below will be used to determine whether the Plan submitted with this application is eligible to receive Roadside Pollinator Program funding, as described in Sections C.3.iv and C.3.v of the NOFO. Applicants who do not believe these requirements apply to them because there are no applicable State agencies or affected or interested Indian Tribes should provide sufficient detail justifying this belief. Applicants who are an Indian Tribe do not need to complete this section.

1. Coordination with applicable State agencies.

The 2016 Maryland Pollinator Habitat Plans law aimed to restore and increase habitat for bees, birds, butterflies, and other wildlife. This law requires that Maryland’s Departments of Natural Resources, Environmental Services, and the State Highway Administration (SHA) establish pollinator habitat plans for lands owned or managed by each agency. The SHA Pollinator Habitat Plan fulfills the requirement of this law and was established to cover rights-of-way, roadsides, medians, and other SHA-owned lands. Since the land and potential habitat under the plan is owned by SHA, the need for coordination with other state agencies is not applicable. With the proposed plan revision detailed in this

application, coordination may become necessary, in which case it will be documented and incorporated into the final Plan.

2. Consultation with affected or interested Indian Tribes.

The State of Maryland has no federally recognized tribes, therefore, consultation with affected or interested Indian Tribes is not applicable.

Merit Criteria Narrative

Each response should be no longer than 500 words. Provide a narrative description of how you will address each Merit Criteria described in Section E.1.i of the NOFO. Responses to the criteria listed below will be used to determine the rating that an application receives for each Merit Criteria (High, Medium, and Low), and will partially determine an application's overall rating.

3. Overall Benefits to Pollinator Species and Habitats.

The State Highway Administration's effort to increase pollinator habitat will be delivered through the Office of Environmental Design Landscape Programs Division (OED LPD). We are requesting funds to improve and further develop the SHA Pollinator Plan and to adopt a pollinator-friendly practices (PFP) Best Management Practice Guidance for mowing, site design, meadow and garden installation, and meadow and garden maintenance. This inter-disciplinary revision will be led by OED LPD and incorporate participation by impacted stakeholders, including SHA District representatives, SHA Office of Maintenance personnel, and in coordination with other agency representatives, as needed. The revision will signify a coordinated approach to state-wide PFP and is supported by internal leadership. Once the Final Plan is approved select OED LPD staff will train SHA District shop personnel and other OED staff on the Guidance and Plan at two training sessions and record the training for future use. The traveling public will also have an opportunity to visit two open houses at the pollinator demonstration gardens installed at the Maryland Welcome Centers on I-70 East and West in 2019. These open houses will be for education and outreach on the Final Plan and Guidance with OED LDP staff members in attendance to answer questions as well as a pollinator mix seed packet giveaway.

Additionally, we are requesting funds to develop and install roadside signage identifying established roadside meadows as "no mow zones." These meadows are on an annual mowing schedule so informing the traveling public of this management technique will allow for an opportunity for outreach and education. A secondary benefit will be to ensure that SHA maintenance crews do not inadvertently mow these meadows more than once per year. The funds requested will cover a total of 300 18x24-inch signs which equates to approximately 10-15 signs for each of the twenty-seven SHA shops spread over the entire state.

Lastly, funding is requested for PFP implementation and construction of eight roadside or median pollinator meadows in five counties across the State of Maryland. The total size of the implementation portion of the request is over 38,000 square yards, adding approximately 7.9 additional acres of pollinator habitat. In the proposed roadside and median sites, the existing vegetation is turf grass. Site preparation and selectively seeding these areas with pollinator-friendly seed mix; including a diverse selection of native

plants (grasses, perennials, and annuals) with successive seasonal bloom to act as host plants, nesting resources, as well as a food source; will create a high level of measurable benefit to pollinators and pollinator habitat. OED LPD is anticipating an increase in the diversity and status of targeted pollinator species in the new habitats over existing conditions. Our primary target species is the monarch butterfly as well as Maryland's 400 species of native bees. One of our measurable benchmarks is ensuring that the seed mix includes native grasses for nesting sites and other native flowering perennials for food sources, including a minimum 4% milkweed seeds.

4. Context and Connectivity.

Maryland is on the direct migration pathway for monarch butterflies and with the monarch potentially being listed as an Endangered Species, we are committed to preserving and enhancing habitat and life-cycle feeding sources as part of the SHA Integrated Vegetation Management Manual ([Integrated Vegetation Management Manual December 2023 \(maryland.gov\)](#)), environmental stewardship goals ([Environment - MDOT SHA](#)), and Pollinator Habitat Plan ([Pollinator Habitat Plan - MDOT SHA](#)). The State Highway Administration is investigating and planning to pursue a Candidate Conservation Agreement with Assurances (CCAA) for the monarch butterfly and is committed to meeting the requirements of participation. The attached maps show the current pollinator sites as well as the proposed projects sites. We have prioritized installing pollinator meadows around town welcome signs in our proposed projects to offer context and connection to those who live there as well as those who are passing through. Through this we are demonstrating SHA's commitment to outreach and education as well as showcasing our native wildflowers and the interdependence between plants and pollinators.

Context and connectivity will be a priority in the Plan improvement and development efforts. Including stakeholders from across SHA will increase the context of the plan and intentionally developing guidance for site choice will ensure a connected habitat for pollinators across the State's green spaces.

Intentional outreach and education are planned for open houses at the Pollinator Demonstration Gardens at two Welcome Centers on I-70. Training is also planned for SHA staff. This outreach will educate the public and staff on pollinators and their habitats as well as about the Final SHA Pollinator Plan and Best Management Practice Guidance that will be the result of the development and improvement included in this funding request.

5. Roadside Pollinator Project Design and Methods.

Project design and methods will be a priority in the Plan improvement and development efforts. Creating intentional guidance throughout the implementation process, beginning with site choice and design, and progressing through installation and maintenance will ensure each project milestone is developed with PFP in mind. Installing roadside signs to identify meadows, and providing outreach and education through external open houses and internal training sessions will increase public support and knowledge of PFP best practices.

During the first year of funding, the eight proposed median and roadside pollinator sites, ranging in size from ½ acre to 2 acres, will be removed from the regular 4-6 week turf mowing rotation and only mowed once in late winter. During this time these sites will be monitored for desirable species germination and establishment, noting any species deficiencies that are needed for pollinator food sources, nesting sites, or overwintering habitat. During early spring of the second year, the sites will be prepared by removing invasive and undesirable vegetation and close mowing, selective drill seeding at a specific rate of pure live seed from a prescribed seed list featuring untreated, native grasses, annuals, and perennials (species found to be lacking during the first year of monitoring will be seeded); and monitored for invasive woody species and noxious weed infestation. The seeding will occur in the early spring season for the best results in germination and to take advantage of Maryland's rainy spring season to aim to meet initial watering needs. If the weather is too dry, supplemental watering will be provided through the first season. If germination is not successful, reseeding and/or additional watering will be required. Ongoing scouting and spot spraying or manual invasive and woody plant removal will occur for at least an additional 12 months after installation. These sites will be mowed once per year after the seeds have matured and dropped in early winter through late winter. All proposed median and roadside sites are set back from the traffic safety clear zone and do not obstruct sight lines or interfere with safety considerations. All proposed project estimates include items related to Maintenance of Traffic (MOT) that follows the SHA Traffic Typical Applications so that installation and establishment work will also not interfere with safety of the traveling public. The SHA team members who are responsible for these projects are trained in horticulture, landscaping, construction, plant identification, weed identification, pest identification, and pesticide application.

6. Maintenance and Management.

Developing maintenance and management guidance will be a priority in the Plan improvement and development efforts which will detail adaptive management practices for monitoring and control of undesirable vegetation and ongoing maintenance of pollinator habitat sites.

In the implementation sites, after initial seeding and 12 months of establishment, the roadside and median sites will be monitored on a quarterly basis by OED LPD field staff and evaluated for management needs. If sites are determined to have invasive pressure, either spot spraying or manual invasive removal will be directed. Field staff will also monitor the site for mowing needs which are forecasted to occur between once per year to once every three years, depending on site conditions. Increased height mowing will occur in the dormant season after seed drop.

Project Readiness Criteria Narrative

Each response should be no longer than 500 words. Provide a narrative description demonstrating how you will address each Project Readiness Criteria described in Sections D.2.i.f.i and E.1.ii of the NOFO. Responses to the criteria listed below will be used to determine

the rating that an application receives for each Project Readiness Rating and will partially determine an application's overall rating.

7. Environmental Review and Permitting Risk.

All proposed implementation projects will undergo environmental review and documentation in accordance with NEPA, and local and state regulations. The scope of this work falls within SHA's programmatic CE for projects with minor impacts. Coordination with regulatory authorities would occur, as needed, for each project. The environmental review, coordination and documentation process is anticipated to take 1-4 months to complete from project start and would be completed prior to advertisement and work starting. The proposed projects are considered low risk and would fall into the minor PCE category. Any other state and local environmental permits are expected to be received during this timeframe.

8. Project Risks and Mitigation Strategies.

Risks to the success of these proposed implementation projects include weather impacts and delays, possible vehicular damage, inappropriate seasonal timing of installation, procurement of materials, and bidding risk. Weather could be a factor impacting the installation of plant material, especially too much or too little water or irregular weather phenomena, such as hail, tornadoes, or damaging winds. To mitigate weather impacts, we will require additional water in the case of too little rain or reseeding and/or plant replacement during the 12-month establishment phase in the case of too much rain or irregular phenomena. Roadside and median installations are subjected to the risk of vehicular damage. To mitigate this risk, all installations will be set-back from the 10-foot clear zone. If vehicular damage were to occur during the 12-month establishment phase, then we would require reseeding or plant replacement. If vehicular damage were to occur outside of the 12-month establishment phase, we would monitor the damage and monitor for natural reseeding. If the project were to experience unanticipated delays pushing the installation outside of the ideal spring window, we would reschedule the installation for the following winter or spring depending on if seeds were to be installed. We would still provide for a 12-month establishment phase. Any installation project has risk associated with procuring project supplies (seed, chemical, equipment). To mitigate this risk, there are numerous suppliers for the seed, chemicals, and equipment that are included in the specifications. There is inherent risk in the differences between estimating costs and actual bid prices. To mitigate this risk in bid prices, the estimated costs for implementation were determined using current prices from projects installed in 2024. The proposed Plan revision project would begin with timelines and deliverables which would be tracked against the budget. If implementation project bid prices are higher than expected, the Plan revision budget and timeline would be adjusted to complete the project on time and on budget.

9. Technical Assessment.

The Maryland Department of Transportation SHA has extensive experience complying with Federal requirements and is responsible for numerous transportation projects annually. For example, the MDOT Consolidated Transportation Program currently allocates SHA over \$1.6 billion to its Major Construction Program for FY 2024 alone. Capital transportation projects that include federal funding such as the MD 210 Bicycle and Pedestrian Connectivity Project are standard for the agency. The MDOT has vast experience receiving and administering Federal funds and programs. On January 12,

2024, USDOT announced Maryland Transportation Authority (MDTA) was awarded the State’s first ever Mega grant for the I-895 at Frankfurst Avenue Interchange Improvement project. MDOT also received historic funding to support the Frederick Douglas Tunnel and Amtrak’s Northeast Corridor from the Federal-State Partnership for Intercity Rail Program. MDOT has also received recent awards from the ATTAIN, RAISE, CRISI, NEVI Set-aside, and RCE programs. From the RAISE program specifically, the Maryland Transit Administration (MTA) received an FY 2023 RAISE award for the Mondawmin Transit Hub project and both MTA and the Maryland Port Administration have received several RAISE, BUILD, and TIGER awards over the past fifteen years. The numerous projects MDOT and SHA are responsible for implementing annually are completed in compliance with federal requirements including Title VI as well as contract and procurement requirements including Buy America, the Americans with Disabilities Act, the Uniform Relocation Assistance and Real Property Acquisition Policies Act, and the Davis-Bacon Act.

The State Highway Administration OED LPD will be the technical resource dedicated to the Roadside Pollinator Program. The Landscape Programs Division has recent and long-term experience in successfully implementing projects with similar scope and specifications from a technical perspective. Since multiple pollinator sites were installed in spring 2024, the estimates provided in the requested project table reflect the most current pricing for the same type of work and adjusted for location differences. The Landscape Programs Division is familiar with the contractor pool that would potentially be bidding on these projects and is confident that the projects would be subjected to a competitive bid situation.

10. Financial Completeness.

Provide a budget table and brief narrative to show how different funding sources will share in each activity and present the data in dollars and percentages. The budget should identify other Federal funds the applicant is applying for, has been awarded, or intends to use. Funding sources should be grouped into three categories: non-Federal, current application Roadside Pollinator Project, and other Federal programs with specific amounts for each funding source.

The proposed projects listed in the request table are 100% within the \$150,000 request amount for this PFP grant. No additional funding sources are needed for the proposed projects.

Project Rank	Proposed Project Location	Estimated Project Cost	Funding Source	%
1	Pollinator Habitat Plan Revision and Best Management Practices Guidelines	\$11,000.00	PFP Grant	100%
2	Roadside meadow sign design, fabrication, and installation (approximately 300 signs)	\$11,000.00	PFP Grant	100%
3	Training personnel on revised Pollinator Habitat and Maintenance Plan	\$6,900.00	PFP Grant	100%

4	Public outreach, to include open houses at Demonstration Gardens and Welcome Centers and seed packet giveaway.	\$5,000.00	PFP Grant	100%
5-7	Somerset County - US13 Median at the Princess Anne Welcome Sign (north and south signs)	\$35,100.00	PFP Grant	100%
8-10	Worcester County - US 13 Median at Pocomoke City Welcome Sign	\$7,500.00	PFP Grant	100%
11-13	Worcester County – US50 Median at MD818 at Berlin Welcome Sign	\$7,800.00	PFP Grant	100%
14-16	Prince George's County - MD 5 Median at Burch Hill Road	\$14,100.00	PFP Grant	100%
17-19	Charles County - MD5 Southbound Roadside south of MD231	\$8,100.00	PFP Grant	100%
20-22	Washington County - I-70 Median at MM3, West of Rayloc Drive	\$18,000.00	PFP Grant	100%
23-25	Washington County - I-70 Median from MD Welcome Sign to before PA State Line	\$25,500.00	PFP Grant	100%
	Total	\$150,000.00	PFP Grant	100%

III. Summary of Pollinator-Friendly Practices

1. Previously Implemented Pollinator-Friendly Practices

Please complete the relevant sections of the following tables following the instructions provided below regarding PFPs an applicant has previously implemented. Applicants should only include information on PFPs included in the applicant’s Plan that were implemented by the Applicant for the 5-year period prior to the date this NOFO was released. Applicants are not required to have implemented PFPs in every category and there is no upper or lower limit on the number of PFPs an applicant may list. Applicants may add rows to the table or delete rows as required. There are completed examples in Appendix B of this document showing the required format. The number of PFPs an applicant has implemented will be considered in determining the amount of Roadside Pollinator Program funding a Satisfactory application will receive.

- Practice Number: Number each practice in the table starting with 1. There is no upper or lower limit on the number of PFPs, and applicants may add additional rows to the table as needed.
- Category: Indicate which category the practice belongs in, from the list of Eligible Categories using the Number and letter codes: ex. 3a, 7b. The list is provided in the NOFO Section C.3.iii and in Appendix A of this Template. For previously implemented practices, applicants may also include practices that do not fall under any such Category under “Any Additional Pollinator-Friendly Practices the Applicant has Implemented.” Such practices do not need to have a Category listed.
- Description: provide a brief text description of the practice. Examples of completed tables are provided in Appendix B.
- Location: provide a single latitude/longitude for each project in decimal degrees. For PFPs that fall under Categories 5-9 provide a central location.
- Start and End Date: provide the start and end dates in the format MM/YY
- Road Miles: (for PFPs that fall under Categories 1-4): Indicate the number of linear road miles that are affected. Applicants should count road miles separately for both directions of travel and for the median, as applicable.
- People reached: (for PFPs that fall under Categories 5-6): Provide the estimated number of people reached.
- Reference to Plan: Provide the page number or other easily identifiable reference to the practice’s inclusion in the Plan where applicable. FHWA does not require previously implemented practices to be included in a Plan.

Categories 1-4: Implementation of on-the-ground Pollinator-Friendly Practices from the Existing Plan

Practice Number	Category	Description (including results of the practice)	Location	Start and End Date	Road Miles	Reference to Plan
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1	3 b	Invasive perennial grass, perennial broadleaf, and woody plant removal and mowing to improve survivability of native flowering plants of approximately 2.1 acres of pollinator meadow on roadside of US 301 in Anne Arundel County, Maryland	39°03'52 "N 76°04'45 "W	March – April 2024	0.25 miles	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
2	3 a	Seeding of approximately 2.1 acres of pollinator meadow with native wildflowers, grasses, and forbs (see attached Special Provision—Pollinator Meadow Seeding for seed mix and rates) in roadside of US 301 in Anne Arundel County, Maryland	39°03'52 "N 76°04'45 "W	April – May 2024	0.25 miles	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation

						Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
3	3 c	Thistle and Johnson grass controls on approximately 2.1 acres of pollinator meadow in roadside of US 301 in Anne Arundel County, Maryland	39°03'52 "N 76°04'45 "W	May – June 2024	0.25 miles	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)

4	3 b	Invasive perennial grass, perennial broadleaf, and woody plant removal and mowing to improve survivability of native flowering plants of approximately 2.3 acres of pollinator meadow on roadside of US 50 in Queen Anne’s County. Maryland	38°57'18 "N 76°04'45 "W	March – April 2024	0.8 miles	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
5	3 a	Seeding of approximately 2.3 acres of pollinator meadow with native wildflowers, grasses, and forbs (see attached Special Provision—Pollinator Meadow Seeding for seed mix and rates) in roadside of US 50 in Queen Anne’s County. Maryland	38°57'18 "N 76°04'45 "W	April – May 2024	0.8 miles	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation

						Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
6	3 c	Thistle and Johnson grass controls approximately 2.3 acres of pollinator meadow in roadside of US 50 in Queen Anne’s County. Maryland	38°57'18 "N 76°04'45 "W	May – June 2024	0.8 miles	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)

7	3 b	Invasive perennial grass, perennial broadleaf, and woody plant removal and mowing to improve survivability of native flowering plants of approximately 2.3 acres of pollinator meadow in median of I-70 in Howard County, Maryland	39°17'45 "N 76°50'35 "W	March – April 2024	0.71 miles	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
8	3 a	Seeding of approximately 2.3 acres of pollinator meadow with native wildflowers, grasses, and forbs (see attached Special Provision—Pollinator Meadow Seeding for seed mix and rates) in median of I-70 in Howard County, Maryland	39°17'45 "N 76°50'35 "W	April – May 2024	0.71 miles	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation

						Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
9	3 c	Thistle and Johnson grass controls on approximately 2.3 acres of pollinator meadow in median of I-70 in Howard County, Maryland	39°17'45 "N 76°50'35 "W	May – June 2024	0.71 miles	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
Totals					5.28	

Categories 5-6: Implementation of Training or Outreach Activities from the Existing Plan

Practice Number	Category	Description (including results of the practice)	Location	Start and End Date	People Reached	Reference to Plan
12	5 a	Trained SHA staff on management techniques that benefit pollinators in Pesticide Applicator Recertification training.	virtually on Teams, state-wide	May 23, 2024	80	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
13	6 a	Installation (site preparation, planting) of pollinator demonstration gardens including milkweed and other pollinator-friendly native species at the MDOT SHA Hanover Complex	39°09'35 "N 76°40'47 "W	March 2024	18,250	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189

						MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.go v)
14	6 a	Installation (site preparation, planting) of pollinator demonstration gardens including milkweed and other pollinator-friendly native species at the MDOT SHA District 4 Office in Hunt Valley, Maryland	39°28'29 "N 76°39'21 "W	March 2024	5,000	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023

						(maryland.gov)
15	6 a	Installation (site preparation, planting) of pollinator demonstration gardens including milkweed and other pollinator-friendly native species at the MDOT SHA District 7 Office in Frederick, Maryland	39°22'27 "N 77°24'32 "W	March 2024	11,250	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
16	6 a	Installation (site preparation, seeding, planting) of pollinator demonstration gardens including milkweed and other pollinator-friendly native species at the MDOT SHA District 5 Office in Annapolis, Maryland	38°59'11 "N 76°33'12 "W	March 2024	5,000	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189

						MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.go v)
17	6 a	Installation (site preparation, seeding, planting) of pollinator demonstration gardens including milkweed and other pollinator-friendly native species at the MDOT SHA District 3 Office in Greenbelt, Maryland	39°00'24 "N 76°53'35 "W	March 2024	8,000	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023

						(maryland.gov)
18	6 a	Installation of interpretive signs at the pollinator habitat demonstration gardens at SHA offices and Hanover Complex.	locations listed above in Practices 13-17	May 2024-June 2024	47,500	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
19	6 a	Installation (site preparation, seeding, planting) of pollinator demonstration gardens with pollinator-friendly native species at I-95 Welcome Centers Southbound and Northbound in Howard County, Maryland	39°08'44 "N 76°50'43 "W and 39°08'27 "N 76°50'41 "W	March-July 2019	57,000	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189

						MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
20	6 a	Installation (site preparation, seeding, planting) of pollinator demonstration gardens with pollinator-friendly native species at I-70 South Mountain Welcome Centers Eastbound and Westbound in Frederick County, Maryland	39°31'41 "N 77°36'14 "W and 39°31'30 "N 77°36'02 "W	March-July 2019	76,000	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual— Section 5 Integrated Vegetation Management Manual December 2023

						(maryland.gov)
21	6 a	Installation (site preparation, seeding, planting) of pollinator demonstration gardens with pollinator-friendly native species at US15 Mason Dixon Welcome Center in Frederick County, Maryland	39°42'28 "N 77°18'50 "W	March-July 2019	27,000	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
Totals					255,080	

Categories 7-9: Planning

Practice Number	Category	Description (including results of the practice)	Location	Start and End Date	Reference to Plan
22	8 a	Performed inventory including field verification to identify existing habitat for pollinators on roadsides and ROW	Statewide	January – June 2024	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189

23	8 a	Mapped inventory of previously installed meadows as part of District roadway construction projects and Office of Environmental design projects.	Statewide	January – June 2024	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189
24	8a	Created geo-spatial database inventory of potential meadow sites on the roadside and ROW determined through field verification and analysis (project shelf).	Statewide	January – June 2024	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189
25	7	Draft and adoption of SHA Pollinator Habitat Plan	Statewide	July – September 2020	MDOT SHA Pollinator Plan https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=189
Totals					

Any Additional Pollinator-Friendly Practices the Applicant Has Implemented.

Practice Number		Description (including results of the practice)	Location	Start and End Date	
26	7	Developed Pollinator Meadow Seeding Specification for inclusion in Invitations for Bids and Contract Documents, including seed quantities, types, and rates.		November - December 2023	700-799 Pollinator Meadow Seeding FY2024.docx

2. Roadside Pollinator Project (request)

Please complete the relevant sections of the following tables following the instruction provided below for each PFP that the applicant plans to implement using Roadside Pollinator Program funds. Applicants are not required to implement PFPs in every category or group of categories and there is no upper or lower limit on the number of practices. Applicants may add rows to the table or delete rows as required. There are completed examples in Appendix B of this document showing the required format.

- Rank: Rank each practice across the entire table in order of priority. If Roadside Pollinator Program funding is limited, FHWA may decide to only provide Roadside Pollinator Program funding to the highest ranked practices.
- Category: Indicate which category the PFP belongs in, from the list of Eligible Categories using the Number and letter codes: ex. 3a, 7b. The list is provided in Section C.3.iii of the NOFO and in Appendix A of this Template. All PFPs in the following tables must fall under at least one such Category to be eligible to receive Roadside Pollinator Program funding and to be used

to determine the amount of award funding an applicant may receive. If multiple PFPs are to take place at one site, list them separately, ex. Site preparation via soil amendments, planting, ongoing removal of invasive species.

- Description: Provide a brief text description of the PFP. Examples of completed tables are provided in Appendix B.
- Location: provide a single latitude/longitude for each project in decimal degrees. For PFPs that fall under Categories 5-9, provide a central location.
- Road Miles (for PFPs that fall under Categories 1-4): Indicate the number of linear road miles that are affected. Applicants should count road miles separately for both directions of travel and for the median, as applicable.
- People reached (for PFPs that fall under Categories 5-6): Provide the estimated number of people reached.
- Total Cost: Provide the anticipated total cost to implement each PFP for which the applicant is seeking Roadside Pollinator Program funding, rounded to the nearest dollar.
- Roadside Pollinator Program Request: Provide the amount of Roadside Pollinator Program funds the applicant is requesting for each PFP. Round to the nearest dollar. If the Roadside Pollinator Program Request is less than the Total Cost of the PFP, applicants should briefly describe the plans for covering the full cost of the PFP from all sources in Narrative Response II.10, above.
- Reference to Plan: Provide the page number or other easily identifiable reference to the practice’s inclusion in the Plan. PFPs that are not included in the Plan will not be eligible to receive Roadside Pollinator Program funding and will not be used to determine the amount of award funding an applicant may receive.

Categories 1-4: Implementation of on-the-ground activities from the Existing Plan

Rank	Category	Description (including expected results)	Location	Road miles	Total Cost	RPP Request	Reference to Plan
5	3 b	<p>Invasive species removal and site preparation of approximately 9,500 SY in the median of US 13 at the Princess Anne Welcome signs (signs located north of town and south of town) in Somerset County, Maryland in preparation for planting of pollinator-friendly seed mix to include:</p> <ul style="list-style-type: none"> • Spot spraying of invasive species • Close mowing • Control of cool-season grasses 	<p>38°13'39" N 75°41'31" W and 38°11'08" N 75°41'27" W</p>	0.82	\$11,700	\$11,700	<p>MDOT SHA Pollinator Plan https://www.roadsmaryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5</p>

							Integrated Vegetation Management Manual December 2023 (maryland.gov)
6	3 a	Selective planting pollinator seed mix on the same 9,500 SY in the median of US 13 at the Princess Anne Welcome signs (signs located north of town and south of town) in Somerset County, Maryland. The seed mix was developed by the SHA Technical Resources Team, is locally sourced, genetically suitable, untreated, and contains milkweed at a minimum of 4%	38°13'39" N 75°41'31" W and 38°11'08" N 75°41'27" W	0.82	\$11,700	\$11,700	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
7	3 c	Conducting maintenance activities in the same 9,500 SY in the median of US 13 at the Princess Anne Welcome signs (signs located north of town and south of town) in Somerset County, Maryland to ensure good seed establishment including: <ul style="list-style-type: none"> Applying water as weather conditions require 	38°13'39" N 75°41'31" W and 38°11'08" N 75°41'27" W	0.82	\$11,700	\$11,700	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation

		<ul style="list-style-type: none"> • Monthly monitoring and mechanical or hand removal or spot spraying of invasive or noxious weeds • Modified mowing schedule (one time per year in late fall after seeds drop) outside of the clear zone to encourage establishment 					Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
8	3 b	Invasive species removal and site preparation of approximately 2,000 SY in the median of US 13 at the Pocomoke City Welcome sign in Worcester County, Maryland in preparation for planting of pollinator-friendly seed mix to include: <ul style="list-style-type: none"> • Spot spraying of invasive species • Close mowing • Control of cool-season grasses 	38°03'33" N 75°32'40" W	0.16	\$2,500	\$2,500	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
9	3 a	Selective planting pollinator seed mix on the same 2,000 SY in the median of US 13 at the Pocomoke City Welcome sign in Worcester County, Maryland. The seed mix was developed by the SHA Technical Resources Team, is locally sourced, genetically suitable,	38°03'33" N 75°32'40" W	0.16	\$2,500	\$2,500	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189

		untreated, and contains milkweed at a minimum of 4%					MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
10	3 c	<p>Conducting maintenance activities in the same 2,000 SY in the median of US 13 at the Pocomoke City Welcome sign in Worcester County, Maryland to ensure good seed establishment including:</p> <ul style="list-style-type: none"> • Applying water as weather conditions require • Monthly monitoring and mechanical or hand removal or spot spraying of invasive or noxious weeds • Modified mowing schedule (one time per year in late fall after seeds drop) outside of the clear zone to encourage establishment 	38°03'33" N 75°32'40" W	0.16	\$2,500	\$2,500	<p>MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189</p> <p>MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)</p>
11	3 b	Invasive species removal and site preparation of approximately 2,200 SY in the median of US 50 at MD 818 at the Berlin welcome sign in Worcester County, Maryland in preparation	38°20'39" N 75°13'23" W	0.36	\$2,600	\$2,600	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/

		<p>for planting of pollinator-friendly seed mix to include:</p> <ul style="list-style-type: none"> • Spot spraying of invasive species • Close mowing • Control of cool-season grasses 					<p>mdotsha/pages/IntegratedVegetationManagementManual—Section 5 Integrated Vegetation Management Manual—December 2023 (maryland.gov)</p>
12	3 a	<p>Selective planting pollinator seed mix on the same 2,200 SY of median of US 50 at MD 818 at the Berlin Welcome sign in Worcester County, Maryland. The seed mix was developed by the SHA Technical Resources Team, is locally sourced, genetically suitable, untreated, and contains milkweed at a minimum of 4%</p>	<p>38°20'39" N 75°13'23" W</p>	0.36	\$2,600	\$2,600	<p>MDOT SHA Pollinator Plan https://www.roadsmaryland.gov/mdotsha/pages/IntegratedVegetationManagementManual—Section 5 Integrated Vegetation Management Manual—December 2023 (maryland.gov)</p>

13	3 c	<p>Conducting maintenance activities in the same 2,200 SY in the median of US 50 at MD 818 at the Berlin Welcome sign in Worcester County, Maryland to ensure good seed establishment including:</p> <ul style="list-style-type: none"> • Applying water as weather conditions require • Monthly monitoring and mechanical or hand removal or spot spraying of invasive or noxious weeds • Modified mowing schedule (one time per year in late fall after seeds drop) outside of the clear zone to encourage establishment 	38°20'39" N 75°13'23" W	0.36	\$2,600	\$2,600	<p>MDOT SHA Pollinator Plan https://www.roadsmaryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)</p>
14	3 b	<p>Invasive species removal and site preparation of approximately 4,000 SY in the median of MD 5 at Burch Hill Road in Prince George's County, Maryland in preparation for planting of pollinator-friendly seed mix to include: Spot spraying of invasive species Close mowing Control of cool-season grasses</p>	38°43'42" N 76°52'53" W	0.34	\$4,700	\$4,700	<p>MDOT SHA Pollinator Plan https://www.roadsmaryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management</p>

							Manual December 2023 (maryland.gov)
15	3 a	Selective planting pollinator seed mix on the same 4,000 SY in the median of MD 5 at Burch Hill Road in Prince George’s County, Maryland. The seed mix was developed by the SHA Technical Resources Team, is locally sourced, genetically suitable, untreated, and contains milkweed at a minimum of 4%	38°43'42" N 76°52'53" W	0.34	\$4,700	\$4,700	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
16	3 c	Conducting maintenance activities in the same 4,000 SY in the median of MD 5 at Burch Hill Road in Prince George’s County, Maryland to ensure good seed establishment including: <ul style="list-style-type: none"> • Applying water as weather conditions require • Monthly monitoring and mechanical or hand removal or spot spraying of invasive or noxious weeds • Modified mowing schedule (one time per year in late fall after seeds drop) 	38°43'42" N 76°52'53" W	0.34	\$4,700	\$4,700	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5

		outside of the clear zone to encourage establishment					Integrated Vegetation Management Manual December 2023 (maryland.gov)
17	3 b	<p>Invasive species removal and site preparation of approximately 2,000 SY in the southbound roadside of MD 5 just south of MD 231 in Charles County, Maryland in preparation for planting of pollinator-friendly seed mix to include:</p> <ul style="list-style-type: none"> • Spot spraying of invasive species • Close mowing • Control of cool-season grasses 	38°31'29" N 76°46'46" W	0.12	\$2,700	\$2,700	<p>MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189</p> <p>MDOT SHA Integrated Vegetation Management Manual—Section 5</p> <p>Integrated Vegetation Management Manual December 2023 (maryland.gov)</p>
18	3 a	Selective planting pollinator seed mix on the same 2,000 SY in the southbound roadside of MD 5 just south of MD 231 in Charles County, Maryland. The seed mix was developed by the SHA Technical Resources Team, is locally sourced, genetically suitable, untreated, and contains milkweed at a minimum of 4%	38°31'29" N 76°46'46" W	0.12	\$2,700	\$2,700	<p>MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189</p> <p>MDOT SHA Integrated Vegetation</p>

							Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
19	3 c	<p>Conducting maintenance activities in the same 2,000 SY in the southbound roadside of MD 5 just south of MD 231 in Charles County, Maryland to ensure good seed establishment including:</p> <ul style="list-style-type: none"> • Applying water as weather conditions require • Monthly monitoring and mechanical or hand removal or spot spraying of invasive or noxious weeds • Modified mowing schedule (one time per year in late fall after seeds drop) outside of the clear zone to encourage establishment 	38°31'29" N 76°46'46" W	0.12	\$2,700	\$2,700	<p>MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189</p> <p>MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)</p>
20	3 b	<p>Invasive species removal and site preparation of approximately 5,000 SY in the median of I-70 at MM3, west of Rayloc Drive in Washington County, Maryland in preparation for planting of pollinator-friendly seed mix to include:</p>	39°42'00" N 78°09'19" W	0.25	\$6,000	\$6,000	<p>MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189</p>

		<ul style="list-style-type: none"> • Spot spraying of invasive species • Close mowing • Control of cool-season grasses 					MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
21	3 a	Selective planting pollinator seed mix on the same 5,000 SY in the median of I-70 at MM3, west of Rayloc Drive in Washington County, Maryland. The seed mix was developed by the SHA Technical Resources Team, is locally sourced, genetically suitable, untreated, and contains milkweed at a minimum of 4%	39°42'00" N 78°09'19" W	0.25	\$6,000	\$6,000	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
22	3 c	Conducting maintenance activities in the same 5,000 SY in the median of I-70 at MM3, west of Rayloc Drive in Washington County,	39°42'00" N 78°09'19" W	0.25	\$6,000	\$6,000	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/

		<p>Maryland to ensure good seed establishment including:</p> <ul style="list-style-type: none"> • Applying water as weather conditions require • Monthly monitoring and mechanical or hand removal or spot spraying of invasive or noxious weeds • Modified mowing schedule (one time per year in late fall after seeds drop) outside of the clear zone to encourage establishment 					mdotsha/pages/IntegratedVegetationManagementManual—Section 5 IntegratedVegetationManagementManual—Section 5 December 2023 (maryland.gov)
23	3 b	<p>Invasive species removal and site preparation of approximately 7,300 SY in the median of I-70 at the Welcome to Maryland sign at the Pennsylvania State Line Washington County, Maryland in preparation for planting of pollinator-friendly seed mix to include:</p> <ul style="list-style-type: none"> • Spot spraying of invasive species • Close mowing • Control of cool-season grasses 	<p>39°43'05" N 78°11'14" W</p>	0.53	\$8,500	\$8,500	<p>MDOT SHA Pollinator Plan</p> https://www.road.s.maryland.gov/mdotsha/pages/IntegratedVegetationManagementManual—Section 5 IntegratedVegetationManagementManual—Section 5 December 2023 (maryland.gov)

24	3 a	<p>Selective planting pollinator seed mix on the same 7,300 SY in the median of I-70 at the Welcome to Maryland sign at the Pennsylvania State Line Washington County, Maryland. The seed mix was developed by the SHA Technical Resources Team, is locally sourced, genetically suitable, untreated, and contains milkweed at a minimum of 4%</p>	<p>39°43'05" N 78°11'14" W</p>	0.53	\$8,500	\$8,500	<p>MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)</p>
25	3 c	<p>Conducting maintenance activities in the same 7,300 SY in the median of I-70 at the Welcome to Maryland sign at the Pennsylvania State Line Washington County, Maryland to ensure good seed establishment including:</p> <ul style="list-style-type: none"> • Applying water as weather conditions require • Monthly monitoring and mechanical or hand removal or spot spraying of invasive or noxious weeds • Modified mowing schedule (one time per year in late fall after seeds drop) outside of the clear zone to encourage establishment 	<p>39°43'05" N 78°11'14" W</p>	0.53	\$8,500	\$8,500	<p>MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)</p>

							Manual December 2023 (maryland.gov)
Totals					\$137,100	\$137,100	

Categories 5-6: Implementation of Training or Outreach Activities from the Existing Plan

Rank	Category	Description (including expected results)	Location	People reached	Total Cost	RPP Request	Reference to Plan
2	6a	Designing, fabricating, and installing approximately 300 “No Mow Meadow” signs (10-15 for each SHA shop) to be placed in roadside meadows in coordination with OED LDP based on visibility and impact to heighten public awareness and support for pollinator habitat and PFP adaptive management.	Meadow sites across the state	200,000	\$11,000	\$11,000	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
3	5a	Training SHA staff (District and OED personnel) on the Revised Pollinator Plan and Best Management Practice Guidelines at two training session and recording training for future use.	39°09'35" N 76°40'47" W	300	\$6,900	\$6,900	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189

							MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
4	6a	Public outreach to include two open houses at I-70 Welcome Centers (East and West) and pollinator meadow seed packet giveaway. OED LPD Staff will be available to answer questions on pollinators, plant dependencies, plant species, and PFP in the Best Management Practices Guidelines.	39°31'41" N 77°36'14" W and 39°31'30" N 77°36'02" W	1,000	\$5,000	\$5,000	MDOT SHA Pollinator Plan https://www.road.s.maryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
Totals						\$22,900	\$22,900

Category 7-9: Planning and Modifications to Existing Plan

Rank	Category	Description (including expected results)	Location	Total Cost	RPP Request	Reference to Plan
1	7	Updating, improving, and developing the MDOT SHA Pollinator Habitat Plan focusing on: <ul style="list-style-type: none"> • General Plan improvement and increase in scope in selected sections • Collaboration and stakeholder engagement • Guidance through project lifecycle • Evaluate and incorporate new science and climate change impacts • Best Management Practices Guidance for SHA District and OED personnel 		\$11,000	\$11,000	MDOT SHA Pollinator Plan https://www.roadsmaryland.gov/mdotsha/pages/Index.aspx?PageId=189 MDOT SHA Integrated Vegetation Management Manual—Section 5 Integrated Vegetation Management Manual December 2023 (maryland.gov)
Totals				\$11,000	\$11,000	
Total Direct Costs					\$135,400	
Indirect Costs					\$14,600	
Total Request: sum of direct and indirect costs (not to exceed \$150,000)					\$150,000	

Appendix A: Categories of Eligible Pollinator-Friendly-Practices

Categories of ELIGIBLE Activities. Each Pollinator-friendly-practice must fall under one of these categories. See section C.3.iii in the NOFO.

1. Pollinator-friendly mowing strategies

- a) Implementation of mowing strategies that promote early successional vegetation and limit disturbance during periods of highest use by target pollinator species on roadsides and highway rights-of-way such as: reducing the mowing swath outside of the State-designated safety zone, increasing mowing height, reducing mowing frequency, refraining from mowing monarch and other pollinator habitat during periods in which monarchs or other pollinators are present; use of a flushing bar and cutting at reduced speeds to reduce pollinator deaths due to mowing; or reducing raking along roadsides and highway rights-of-way.

2. Implementation of an integrated vegetation management plan or Pollinator-Friendly Practices Plan

- a) Implementation of additional vegetation management practices found in an integrated vegetation management plan that promote early successional vegetation and limits disturbance during periods of highest use by target pollinator species on roadsides and highway rights-of-way such as: mechanical tree and brush removal, targeted and judicious use of herbicides, mowing, controlled burns, grazing, and brush removal.
- b) Implementation of policies that reduce the negative impacts of herbicides on pollinators and nontarget plants on roadsides and highway rights-of-way.
- c) Creation of additional habitats on roadsides and highway rights-of-way that benefit pollinators such as overwintering areas, nesting areas, or other resources necessary to sustain their populations.
- d) Monitoring, evaluation, and adaptive management of pollinator habitat.

3. Planting or Seeding

- a) Salvaging, collecting, purchasing, planting, or seeding of native, locally appropriate grasses and wildflowers on roadsides and highway rights-of-way to enhance pollinator habitat. Seeds must not be treated with any neonicotinoid pesticide for the PFP to be eligible for funding.
- b) Carrying out site preparation to improve survival of native flowering plants on roadsides and highway rights-of-way to enhance pollinator habitat, such as the purchase and application of soil amendments or removal of invasive species.
- c) Conducting maintenance during plant establishment on roadsides and highway rights-of-way, such as watering, weed control, replanting, and controlling invasive species.

4. Safety

- a) Implementation of design, construction, or maintenance techniques to ensure that pollinator friendly habitat is protected but does not negatively impact roadway safety.

5. Obtaining expert training or assistance on pollinator-friendly practices

- a) Training staff on the role of roadsides in pollinator conservation; the implementation of management techniques that benefit pollinators; the role of native plants in ecosystems; the identification of native plants; incorporating design elements, such as land management practices, to benefit pollinators and establish and manage locally-appropriate native plants; and pollinator-focused integrated vegetation management.

- b) Obtaining expert training or assistance on PFPs described in this section and pollinator-friendly topics.

6. Outreach

- a) Implementing outreach strategies to increase public support for pollinator habitat on roadsides and highway rights-of-way, including signage.
- b) Coordinating with adjacent or nearby property owners and managers to roadsides and highway rights-of-way to promote pollinator habitat.

7. Updating, improving, or further developing the Pollinator Friendly Practices Plan

- a) This may include updates and improvements to an applicant's existing Plan, such as general improvements and updates; increase in scope; incorporating changing conditions, new science, increased collaboration; or other conditions that necessitate a Plan update or improvement.

8. Protecting existing habitat

- a) Perform inventories and identify existing habitat for pollinators on roadsides and highway rights-of-way.
- b) Create or maintain an inventory database of pollinator habitat on roadsides and highway rights-of-way.

9. Removing nonnative grasses from planting and seeding mixes

- a) Development of, or updates to, seed lists and mixes that remove or omit nonnative species from planting and seeding mixes, except for use as nurse or cover crops. May include development of additional information on plant attributes, functional roles, and value to pollinators.

Appendix B: Examples of Completed Pollinator-Friendly Practices Table.

Example Table 1

Previously Implemented Pollinator-Friendly Practices

Categories 1-4: Implementation of on-the-ground pollinator-friendly practices from the Existing Plan

Practice Number	Category	Description (including results of the practice)	Location	Start and End Date	Road Miles	Reference to Plan
1	1a	Purchase of 100 flusher bars for use when mowing. These were used on all state highways.	38.869, -77.014	05/19-09/21	1600	4.2.1
2	3a	Planting of wildflower seed including milkweed seed at the rate of 3lbs/ acre on both sides of 5 miles of road. Plantings were made at ¼ depth. Wildflower seed mix was developed in coordination with State Department of Fish and Wildlife and were sourced from local stock.	38.869, -77.014	05/21	10	5.2
Totals						

Categories 5-6: Implementation of Training or Outreach Activities from the Existing Plan

Practice Number	Category	Description (including results of the practice)	Location	Start and End Date	People Reached	Reference to Plan
3	5a	Hiring company representative to give half day training to staff on installation and use of flusher bars.	38.869, -77.014	05/19	25	4.2.1
Totals						

Categories 7-9: Planning

Practice Number	Category	Description (including results of the practice)	Location	Start and End Date	Reference to Plan
4		Performed an inventory of 250 miles of secondary highways and identified, mapped, and inventoried areas of special value for pollinators. Created a written plan to manage these areas and implemented the plan.	38.869, -77.014	7/19 – 7/20	1.2.3
Totals					

Any Additional Pollinator-Friendly Practices the Applicant Has Implemented.

Practice Number		Description (including results of the practice)	Location	Start and End Date	

5		Development of Pollinator-Friendly Practices Plan	38.869, -77.014	08/18-01/19	
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Example Table 2

Roadside Pollinator Project (request)

Categories 1-4: Implementation of on-the-ground activities from the Existing Plan

Rank	Category	Description (including expected results)	Location	Road miles	Total Cost	RPP Request	Reference to Plan
1	3b	Invasive species removal and site preparation on both sides of a 5 mile stretch of Route 84 in preparation for planting of pollinator- friendly seed mix to include: <ul style="list-style-type: none"> • Spot spraying invasive species • Close mowing Soil amendments	38.869, -77.014	10	\$80,000	\$80,000	Pg 74
2	3a	Planting a seed mix on the same 5 miles of road developed in cooperation with the University specifically to benefit pollinators including monarch butterflies. The seed mix is locally sourced and genetically suitable seed that is untreated and contains milkweed seed at a minimum 2% of total mixture.	38.869, -77.014	10	\$40,000	\$40,000	Section 4.2.1
3	3c	Carrying out maintenance activities to ensure good seed establishment including: <ul style="list-style-type: none"> • Watering 2x week for 2 seasons • Monthly monitoring and mechanical or hand removal or spot spraying of persistent invasive or noxious weeds Modified mowing schedule outside clear zone to encourage establishment.	38.869, -77.014	10	\$20,000	\$10,000	Chapter 8
Totals				30	\$140,000	\$130,000	

Categories 5-6: Implementation of Training or Outreach Activities from the Existing Plan

Rank	Category	Description (including expected results)	Location	People reached	Total Cost	RPP Request	Reference to Plan
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4	6a	Purchasing and installing metal Monarch butterfly corridor signs using existing design	38.869, -77.014	25,000	\$5,000	\$5,000	Section 7.6
Totals					\$5,000	\$5,000	

Category 7-9: Planning and Modifications to Existing Plan

Rank	Category	Description (including expected results)	Location	Total Cost	RPP Request	Reference to Plan
5	9a	Hire a contractor to update seed mixes for wetland areas to only include locally sourced native seeds and to increase benefit to pollinators. Current mixes include commercially available seed that is not locally sourced and do not include any forbs or flowering plants.	38.869, -77.014	\$15,000	\$10,000	n/a
Totals				\$15,000	\$10,000	
Total Direct Costs				\$160,000	\$145,000	
Indirect Costs				\$15,000	\$5,000	
Total Request: sum of direct and indirect costs (not to exceed \$150,000)				\$175,000	\$150,000	