DRAFT

ENVIRONMENTAL ASSESSMENT

Project Name:	Statewide DNRC-CARDD Grant Funded Pollinator Habitat Plantings Programmatic EA
Proposed Implementation Date:	September 1, 2025
Proponent:	Montana Department of Natural Resources and Conservation
Location:	State of Montana
County:	All Counties within the state of Montana

I. TYPE AND PURPOSE OF ACTION

The Montana Department of Natural Resources and Conservation (DNRC) Conservation and Resource Development Division (CARDD) is preparing this Statewide Pollinator Habitat Plantings Programmatic Environmental Assessment (Programmatic EA) to analyze the impacts DNRC-CARDD grant funded pollinator habitat projects and programs may have on the various physical and human environments in Montana.

DNRC-CARDD identified a need to develop a programmatic review to efficiently process environmental documents for grant programs that fund pollinator habitat planting initiatives. CARDD programs manage several grants that fund pollinator habitat projects in a given fiscal year all of which are similar in terms of methods and impacts to the environment. Presently, an environmental assessment document accompanies each individual grant project, or an environmental review decision is made on a project-by-project basis. This method is inefficient because these grant projects occur on sites with similar conditions, are implemented under standard guidelines with technical assistance from statewide plant materials specialists, and have limited and short-term adverse environmental impacts. Thus, DNRC-CARDD personnel must repeatedly analyze similar actions and impacts with each project. This inefficient process can ultimately delay or prevent the implementation of beneficial pollinator habitat improvement projects. These plantings utilize native and conservation species seed mixes and containerized herbaceous forbs, grasses, and woody plant materials to provide and enhance pollinator habitat in agricultural, suburban, and urban settings throughout Montana. Projects may include differing degrees of environmental impact depending on the size of planting, site preparation method and plant materials being used, but in general most plantings in rural and urban areas that are grant

supported have limited impact due to the size and are commonly 1,000 square feet or less. Agricultural, landscape level seed plantings are less common in grant projects but are included in this analysis as well.

DNRC-CARDD program staff will evaluate the alternatives and associated actions of implementing a programmatic environmental assessment (EA) for grant programs that include establishment of native and beneficial pollinator plants from seed or containerized plant materials in agricultural, riparian, suburban and urban settings. DNRC will also analyze the beneficial and adverse, direct and indirect, and cumulative impacts that the pollinator habitat plantings implementation may have on the environment. This broad review will provide an efficient process to determine the level of potential environmental impacts of grant projects and programs focused on creating pollinator habitat through planting seed or containerized herbaceous and woody plant materials.

The purpose for implementing this programmatic review is twofold: it will allow DNRC-CARDD to meet its obligation to be compliant with Montana Environmental Policy Act (MEPA) and associated state and federal laws, such as the Endangered Species Act (ESA), Clean Water Act, National Historic Preservation Act, and state water rights processes; and it will initiate the efficient processing of environmental documents concurrent with the current state government administration initiatives, which seek to cut 'red-tape' regulatory processes. DNRC is preparing this Programmatic EA in accordance with the Montana Environmental Policy Act (MCA 75-1-101) and the Agency specific rules of preparing a Programmatic assessment per the Administrative Rules of Montana (ARM; 36.2.522 Definitions; 36.2.523 General Requirements of the Environmental Review Process; 36.2.537 Preparation, Content, and Distribution of a Programmatic Review). DNRC is required to assess the impacts Agency-funded projects may have on the Montana human and physical environment.

Effective pollinator habitat restoration plantings have many co-benefits, and they've been shown to:

- Improve floral resources on the landscape for foraging pollinators;
- Reduce soil erosion and improve soil biology by providing vegetative cover;
- Improve water quality through improved infiltration in surface water runoff;
- Reduce pest infestation; and
- Improve the visual aesthetics of a given area (Lee, Isenhart, & Schultz, 2003).

In addition, implementing pollinator habitats along crop field margins may also facilitate areas of nesting for birds, or other species associated with natural pest control, as well as foraging and use by other mammals or invertebrates (Lovell & Sullivan, 2005). These are just a few examples illustrating how uniquely critical pollinator habitat is to both the natural and human processes of the world. While there are multiple species and genera considered to be pollinators, including many vertebrate and invertebrate species, bees have many species specialized in pollinating specific native plants.

Many species of pollinators are rapidly declining throughout the world (Rhodes, 2018). Worldwide, insects are facing significant declines in diversity and abundance due to various stressors acting synergistically. These stressors are anthropogenically driven and include habitat loss and degradation, pesticide use, climate change and drought, and invasive species (Cardoso & Leather, 2019). To help combat and address the loss and degradation of pollinator habitat in Montana, DNRC partners use grant funds to work with eligible entities on pollinator habitat plantings and improvements using native and conservation species that are implemented by farmers, ranchers, homeowners, renters, business owners and managers, public and private land managers, and schools.

This collaboration between state entities, local and federal governments, communities, and landowners is crucial to both building additional pollinator habitats and maintaining current habitats. This habitat conservation work is especially important for bee species like the western bumblebee (*Bombus occidentalis)*, whose habitat range encompasses large parts of western Montana. This species has experienced a 93% population decline since 1998 and are under review by the U.S. Fish and Wildlife service for listing as an ESA threatened species (Graves, et al., 2020). Pollinator Programs funded by DNRC-CARDD grants are a proactive way for state resource managers to have direct beneficial impacts addressing the habitat issues facing the western bumblebee and all other pollinators. The goal of this Programmatic EA is to make it more streamlined for entities to implement these native plant habitat plantings in a timely fashion to mitigate the effects of human development on pollinator habitat.

DNRC will approve the Programmatic EA after the actions are reviewed.

II. PROJECT DEVELOPMENT

1. **PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:**
   Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

Statewide support for pollinator plantings and projects was directly identified by the Montana 66th legislature in 2019, when they designated funding to develop, implement, and improve pollinator habitat in Montana. The Department of Natural Recourse Conservation, Conservation and Resource Development Division disburses and provides fiscal management of these program funds to Montana's 58 conservation districts (CDs), through the Conservation Districts Bureau (CDB). Additionally, various other CARDD programs offer grant funds that support pollinator projects to address non-point source pollution concerns. CDs have been the primary partners for this work to date and, as political subdivisions of the State of Montana, they are legislatively mandated to work towards the conservation of natural resources. CDs and other entities CARDD contracts with support local natural resource conservation projects through technical and financial support and

education and outreach programs. A conservation priority for the Montana Legislature, CARDD and the CDs is pollinator habitat with several CDs listing it in their yearly work plans. Each biennium, the legislature appropriates funds specifically for CDs to work with private landowners and communities to improve pollinator habitat. Since 2017, CDs across the state, with help from other partners, have developed pollinator initiative programs that provide resources to landowners to implement on-the-ground restoration and conservation of habitat while also promoting pollinator habitat conservation through community education programs. Thousands of residents throughout Montana have participated in these grant programs implementing pollinator plantings on thousands of acres of private and public land since they were made a focal point by the legislature, CARDD and CDs.

DNRC will use a public comment period to help determine issues or deficiencies in this programmatic EA. DNRC will post the draft programmatic EA on the DNRC Public Notices webpage. If DNRC receives any public and/or other interested groups comments on the draft programmatic EA, DNRC will appropriately address the submitted comments and incorporate into the final programmatic EA. In addition, DNRC will note the changes within the 'Public Involvement' section. DNRC will then obtain final approval by the CARD Division Administrator and post the final, approved programmatic EA on the DNRC Environmental Documents webpage. If any of the public submits additional comments on the final programmatic EA, DNRC will make sure to address appropriately and incorporate into the final programmatic EA document.

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2. **OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:**
   Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 318 Authorization, Air Quality Major Open Burning Permit.

Pollinator habitat improvement projects utilizing DNRC grant funds generally occur on private property but are occasionally carried out on public school or municipal property. The projects do not generally require permitting; however, when projects take place near a waterway or wetland a 310 permit, 124 permit, 404 permit, and/or 318 authorizations may be required (MT-DNRC, 2025). If the project is located immediately adjacent to a perennially flowing stream either a 310 or 124 permit will be required. If a private landowner is conducting the project, they will apply for their 310 permit under the Montana Natural Streambed and Land Preservation Act, administered by CDs. If, however, a CD or other state or federal entity is conducting the project they would be required to get a 124 permit from Montana Fish Wildlife and Parks. A 404 permit from the U.S. Army Corps of Engineers would be required in the event the project will result in the reduction of designated wetland habitat. Given the nature of pollinator habitat improvement projects, and the standard buffers to surface waters that program participants are encouraged to use, the need for a 404 permit is unlikely. Additionally, any activity in any state water that will cause unavoidable short-term violations of water quality standards does require a 318 Authorization that can be applied for in conjunction with 310/124, 404 or floodplain permits with the State of Montana Joint Application for proposed work in Montana's streams, wetlands, floodplains or other water bodies, however the need for a 318 authorization is unlikely as well. Finally, if a planting is completed in an area with complex

underground utilities, it is a best management practice (BMP) to have the area marked for underground utilities by local utility managers.

There are potentially several other laws, statutes, regulations, and policies that may guide and direct the various pollinator habitat improvement projects including but not limited to (MT-DNRC, 2025);

- Montana Water Quality Act
- Montana Water Use Act
- Federal Clean Water Act
- Stormwater Discharge Rule (DEQ)
- National Historic Preservation Act
- Montana State Antiquities Act and Tribal Historic Preservation
- Endangered Species Act
- Migratory Birds Treaty Act
- Protection of Wetlands Act
- Montana Natural Streambed and Land Preservation Act (310)
- Montana Stream Protection Act (SPA 124)
- City or County Floodplain Development Permit
- Short-Term Water Quality Standard for Turbidity (318 Authorization)
- Montana Water Use Act
- Stormwater Discharge General Permit
- Lakeshore Protection Act
- Confederated Salish and Kootenai Tribes Shoreline Protection and Aquatic Land Conservation Ordinance—applicable on the Flathead Reservation only.

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3. **ALTERNATIVE DEVELOPMENT:**
   Describe alternatives considered and, if applicable, provide brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why. Include the No Action alternative.

Alternative 1: No Action

The No Action Alternative *would not* use a programmatic EA to help evaluate the effects of pollinator habitat improvement projects that would be implemented, funded, or technically supported by DNRC. The No Action Alternative would maintain the current case-by-case MEPA analysis on specific project actions. Currently, the DNRC evaluates habitat improvement projects as they are advanced by different sponsors or proponents at different times. These projects are rarely packaged or timed in a manner that facilitates coordinated review under MEPA. The No Action Alternative continues this practice.

Alternative 2: Pollinator Seed Purchase and Distribution Only

Alternative 2 would include an impact analysis on only the purchase and distribution of pollinator seed and would not include a review of other pollinator habitat improvement project types, such as demonstration plots or improving habitat with containerized/bareroot stock plants. Under this alternative, this programmatic environmental assessment would only provide coordinated review of one type of project conducted by grant fund recipients. It would likely not meet the objectives as it would require continued project-specific analysis for all other types of projects.

Alternative 3: Programmatic Environmental Assessment for Pollinator Projects

This is the preferred alternative. Under this Proposed Action, DNRC would use this Programmatic EA for a coordinated approach to help evaluate the potential environmental impacts of several routine potential actions that conservation districts and other partners using DNRC grant funds are likely to choose from when proposing a residential, community or agricultural pollinator habitat improvement project. These categories of actions represent well-established habitat improvement techniques that have been applied throughout the state and have been demonstrated to be effective in restoring and creating new habitats. Because the nature and extent of environmental effects from these well-established techniques are generally well known, monitored and documented, the DNRC has chosen to evaluate them programmatically to gain more consistent environmental impact evaluations, streamline contracting and implementation processes, save costs, and bring the benefits of improved pollinator habitat more quickly.

In general, pollinator habitat planting techniques follow the process described below (USDA-NRCS, 2021) and (Foltz-Jordan, et al.):

- Site Selection for pollinator plantings
    - Agricultural planting site selection will be based on landowner objectives of their on-farm vegetation management plan and will use common considerations including, ability to irrigate, slope, soil texture and fertility, weed presence, livestock grazing plan etc.
    - Urban and rural site selection considerations include shade/sun, ability to irrigate, slope, soil texture and fertility, weed presence, etc.
    - Additional rural considerations include location of septic leach field or buried underground infrastructure.
    - Additional urban and suburban considerations include proximity to foundation, soil water holding capacity and underground utilities.
- Pre-Site Prep
    - There are no additional pre-site prep considerations for agricultural plantings beyond site selection considerations.
    - Before site preparation begins for urban or suburban pollinator plantings the landowner

or property owner/manager needs to call the city or county utility service to mark out the utility lines and identify any other buried underground infrastructure before work is started and plants are planted, native plants have long roots that need to be accounted for in pre-site prep planning.

- Site Preparation—Agricultural, Urban and Suburban Sites
    - Herbicide application
        - Glyphosate – Glyphosate is a non-selective, broad-spectrum herbicide that is labeled for a wide variety of uses, including home use. It is absorbed by leaves and translocated throughout the plant and disrupts the photosynthetic process. Herbicide affects a wide variety of plants, including grasses and many broadleaf species, and has the potential to eliminate desirable as well as undesirable vegetation. Some plant selectivity can be achieved by using a wick applicator to directly apply glyphosate to the target plant, thereby avoiding desirable vegetation.
    - Tillage
        - Mechanical treatment of vegetation would match the scale of the plantings and could include the use of small-scale rototillers or larger scale disc harrows and other implements to break up vegetation mats and bring seeds to the surface for germination. Tillage is non-selective and breaks up the roots of both desirable and non-desirable vegetation. All seeds in the seed bed are brought to the surface for germination, including desirable and non-desirables species. Repeated tilling or tilling when the soils are too damp can result in soil compaction, reduced water absorption, and reduced microorganism biodiversity.
    - Solarization
        - Solarization is a weed management strategy that uses clear or opaque plastic sheeting or materials like cardboard to smother out plant competition through intensification of heat from sunlight or blocking out sunlight. The plastic or cardboard ground cover is placed over desired pollinator habitat planting site for up to one year. The plastic magnifies the intensity of the sun, heating the soils. The cardboard blocks out the sun and smothers new vegetative growth. This method is non-selective and damages or kills both beneficial plants and weeds. Depending on the duration of use and temperatures reached, solarization can also temporarily reduce quantities of beneficial microorganisms in the top 1-3 inches of soil.
    - Irrigation
        - Agricultural planting irrigation in the form of pivots, handlines or flood irrigating could be used to water young pollinator plots during establishment and during times of severe drought. Improper irrigation before proper plant establishment could result in water runoff or excessive water use additionally irrigation not properly timed with pesticide application could result in leaching of pesticides into the ground or surface waters.
        - Irrigation using basic lawn sprinklers or hoses is used to germinate seeds brought

to the surface by tillage and is only used when required by weather conditions. Improper irrigation could result in water runoff or excessive water use.
        - Irrigation is also used to water young pollinator plots during establishment and during times of severe drought. Irrigation needs are minimized by the use of drought-tolerant native plants.
- Urban and Suburban Demonstration and Private Landowner Gardens
    - Construction of raised beds
        - Raised beds are occasionally used for pollinator habitat plots in urban areas or where soil conditions are not conducive to direct seeding/planting. Raised beds are constructed with a variety of materials including treated timbers, natural materials including rocks and logs, cement blocks, and metal containers. Generally, soil amendments from offsite, such as purchased topsoil and mulch, are used to fill the bed. Occasionally, as conditions allow, the beds are filled with native soils sources onsite. Raised beds are not likely to exceed 1000 square feet in size.
    - Construction of green stormwater infrastructure like rain gardens or other stormwater runoff mitigation structures.
        - Green stormwater infrastructure such as rain gardens or other similar stormwater runoff mitigation structures can be utilized to provide native plant or pollinator habitats as well as manage runoff, reduce flooding, and increase onsite infiltration. Constructing these features often follow the same or similar methods as described above for pollinator habitat plantings. In addition to the site selection and preparation described above, green stormwater infrastructure will be designed in a way to capture, retain, and infiltrate stormwater. This often includes a shallow depression that is typically designed to infiltrate within 48 hours or less. In areas where the soil composition does not allow for infiltration, soil amendments or underdrains may be used to increase the infiltration rate. Features may only include landscaping and contouring the landscape, or they may also include rocks or other natural items for either aesthetics or to improve infiltration. When green stormwater infrastructure is utilized in a commercial or otherwise similar setting, there may be small, constructed features designed to channel the runoff to the green stormwater infrastructure as well as provide an emergency overflow for excess runoff to prevent flooding.
    - Planting
        - Small scale and large-scale pollinator seed plantings are used to establish new pollinator habitat or restore degraded pollinator habitat. Small scale residential and community habitat plantings are completed in urban and suburban settings. Planned and pre-designed seed planting species lists have been created for grantees by NRCS Plant Materials Statewide Specialists from the Bridger Plant Materials Center for western and eastern Montana. Large scale seed plantings are designed with technical assistance for site specific planting considerations.
        - Containerized or bareroot herbaceous and woody plants are used to establish new

pollinator habitat or restore degraded pollinator habitat in residential, commercial and riparian spaces. Planned and designed species lists have been made for these programs for grantees by DNRC, CD, NRCS, WMCC and other plant materials specialists and are available for use by all program participants. Native trees, woody shrubs, herbaceous flowers, and grasses are planted as either containerized stock or as bareroot stock, depending on the size and species of plant.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

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4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:
Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify direct, indirect, and cumulative effects to soils.

Soil quality is understood to mean a collection of soil physical and biochemical properties that sustain the native biodiversity, processes, and activity of soil biota and the proliferation of roots of plant species (Doran et al., 1996; DeLuca et al., 2019). Soil quality and ecosystem function are interrelated and combine to impact the range of soil properties and associated ecological processes that characterize plant systems in Montana (Bisbing et al., 2010). Soils are highly variable and affect the composition and distribution of species, habitats, and plant communities across Montana. At least 700 soil types have been described statewide, which presents challenges in drawing generalized conclusions about soil health (Montagne et al., 1982). In general, grant-supported pollinator habitat plantings, including agricultural, suburban and urban applications, are being planted in areas with historically disturbed soils that have diminished soil biology and structure. Pollinator habitat plantings do not impact the geology or geologic features of an area, so only the impact on soils will be considered.

Preferred Alternative – The cumulative impact of pollinator plantings would be beneficial for affected soils health and structure due to the complex root systems and canopy they create, as well as the

organic matter layer that will form in a perennial planting, which helps with soils water holding capacity. There are short-term, direct adverse impacts to soil, however those impacts are limited, temporary, and the level of risk would be dependent on planting size. The largest direct adverse impact of the plantings is exposed, bare soil. This condition is expected for small- and large-scale plantings during site prep, planting and/or seeding, and establishment. The adverse impacts from a failed large scale seed planting would be the highest environmental impact of all the planting types, which is why consistent technical assistance from professional vegetation managers is always a part of grant programs that might support these plantings. The technical assistance offered to the grant participants addresses mitigation strategies like utilizing no-till seeding equipment for appropriate sites and ensuring a properly planned seed mix. This provides some fast-growing non-persistent annuals that can help with soil stability and ground cover early on, so site soils would be protected from wind and water erosion and invasive species invasion.

The adverse impacts from urban and suburban plantings are anticipated to be smaller in size and scope, as soils will be minimally disturbed since seed, herbaceous, and woody containerized plantings rarely cover more than a 500-1000 square foot area, and seed-based community programs seed giveaways are generally capped at 2500 square feet. Additionally, for smaller sites, mulch is prescribed as a best management practice (BMP) and woody mulch or straw is recommended to mitigate the presence of bare soil by providing cover to promote erosion control, water holding capacity, and soil biology development. Light layers (3-6 inches) of non-site derived mulch or rock that could be suggested to be added to sites to increase organic matter or aid in infiltration will not adversely impact the soil deeper than 12 inches from the surface. If a small-scale residential seed planting is being done, disturbance occurs within the first few inches of the soil with tillage and shouldn't go further because pollinator seeds are very small and light and germinate best at shallow planting depths, commonly ¼ of an inch. Herbaceous and woody materials are generally planted 6-18 inches deep, depending on the size of the plant materials (plugs-gallon sized), and a mulch layer is added immediately after the plants are installed which limits the time of soil exposure.

No Action Alternative – Individual site evaluation environmental assessments (EA) would address the items covered in the Programmatic EA but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds. Staff would have to complete a soils assessment for each project, most of which have limited adverse impacts due to the size and nature of the plantings. Additionally, all plantings are done under standard guidelines that have well documented, limited, short-term adverse environmental impacts (USDA-NRCS, 2021).

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5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify direct, indirect, and cumulative effects to water resources.

Montana is headwaters to several major river systems of the northern Rockies. West of the continental divide, the Clark Fork and Kootenai basins have a wetter and more temperate climate than the rest of the states. Higher elevations receive a heavy winter snowpack, and much of the basin receives more rainfall than lands to the east. As a result, total water yield and water yield relative to basin area are greater in the Clark Fork and Kootenai basins than in other parts of the state. Some valley bottomlands receive less than one foot of moisture annually, similar to the eastern Montana prairie. East of the continental divide lie the Missouri and Yellowstone basins. Here, the climate is generally drier, windier, and experiences more extreme seasonal temperature fluctuations. Summers are hot and dry, and winters are cold. Valley and prairie lands are arid to semi-arid, some receiving less than 10 inches of moisture a year. High elevations east of the divide accumulate a heavy snowpack and also receive more rainfall than the lower elevations.

Aquifers are an important water source, but whether groundwater is physically available at any given location depends on the on-site physical characteristics of the aquifer, recharge to the aquifer from precipitation, and interactions with surface water. The most common sources of groundwater in Montana are shallow sand and gravel aquifers (surficial aquifers) along the floodplains of major streams and rivers. These alluvial aquifers are by far the most common sources of water for irrigation, municipal, industrial, household, and livestock purposes. Bedrock aquifers are another important source of groundwater in Montana. Bedrock aquifers in western Montana are limited to the edges of valleys where fractures and faults are sufficient to provide adequate water supplies for individual residential or small public water supplies that rely upon multiple wells to provide an adequate water source. Bedrock aquifers in sandstone and limestone rock formations are an important source of groundwater in the central and eastern parts of the state providing water supplies for domestic and stock uses, and occasionally for larger municipal or industrial uses.

Plants help soils retain water by improving its physical structure with their root systems, which create pores for water to enter and hold onto. They also shade the soil, reducing evaporation, and can establish microclimates that buffer wind and maintain soil moisture. Additionally, the organic matter from decomposing plant material acts like a sponge, absorbing and holding water, making it available for plants when needed. Native plants are those that have been growing in a specific area for hundreds or thousands of years. Because they are well-suited to the local climate and soil, they require less maintenance and water and help conserve water. Native plants often have deep roots that reach far into the soil and help improve soil structure and health. They allow water to penetrate the soil more

effectively, reducing runoff and erosion. Healthier soils retain moisture better. These deep roots can also access water that is deep underground, reducing the need for frequent watering. Many native plants have evolved to survive dry conditions and can withstand long periods without rain, making them ideal for areas prone to drought.

Preferred Alternative – The existing site conditions of pollinator habitat plantings vary but are often degraded or non-native plant communities. For urban and suburban plantings, the sites are often areas with perennial non-native turf grasses or areas of bare ground from some sort of construction activity. In commercial agricultural settings, habitat plantings are often looked at for areas that were annually cropped that are being converted into perennial pasture or conversion of perennial pasture or wildlife habitat to native and conservation plant species from a monoculture of non-native grasses and invasive weeds.

Cumulatively the plantings will not have adverse impacts on water quality and will generally have beneficial impacts. Beneficial impacts to water quality include improved filtration of surface waters from converting monocultures of non-native grasses and weedy or invasive species that have limited root depths to diverse mixes of native and conservation pollinator plant species that have more complex root systems. The pollinator habitat plantings feature drought tolerant native plants that have long and intricate root systems which assist the slow filtration of surface water to groundwater, giving time for toxics and other pathogens to filter out before reaching the groundwater. The native plants promoted by the programs often need less water over time, helping conserve water resources and mitigate irrigation runoff effects by limiting supplemental waterings. Additionally, urban and suburban grant supported pollinator habitat plantings can include low-impact passive stormwater management structures that help impound surface runoff from urban sites for slower filtration of water that has washed over parking lots or other urban settings and encountered excess nutrients, hazardous waste, and other toxics that pose threats to human health. These stormwater structures, like rain gardens, help filter this runoff by using deep rooted native plants to protect water quality.

There are potential adverse impacts to surface and groundwater water quality that would be limited to site prep, planting, and establishment for the plantings. There are several different site prep methods to manage existing unwanted vegetation at the beginning of the conversion process but generally three common categories including tillage, solarization, and herbicide application. Herbicides used in initial site prep could pose seasonal issues from runoff that leaches into surface waters or groundwater, depending on application rates, timing of treatment, frequency of chemical use, and depth to groundwater of the planting. If plantings are near wetlands, streams, lakes or other water bodies or habitat types of concern, appropriate permits and buffers are required to ensure the planting will not adversely impact water quality. Once the pollinator plantings are established after site prep, additional herbicide usage, if used as a management tool, will decrease and become more focused on targeted

applications versus broadcast indirect spraying of the chemical. Grant programs promoting the plantings use targeted education and outreach in their programming to mitigate overuse of herbicides as well as appropriate timing of application. Additionally, proper site prep methods that follow standard guidelines are included and stressed in all literature and outreach materials associated with pollinator habitat plantings grant work (USDA-NRCS, 2021).

If the planting is in close proximity to surface waters, the bare soil uncovered from the tillage process could experience wind or water erosion, which could create short-term adverse impacts to water quality from increased turbidity. To mitigate these adverse impacts on small scale residential plantings, landowners participating in urban and suburban grant programs are encouraged to use mulch or straw at the time of plantings to immediately cover exposed soil from site prep to limit erosion. Agricultural or landscape level plantings are encouraged to use no-till planting practices, if applicable, to mitigate soil erosion opportunities and appropriate buffers from surface water to limit sedimentation impacts to water sources.

Overall, the pollinator grant planting activities will have beneficial impacts to water quality and quantity of surface and groundwaters by offering natural solutions through site specific vegetative land cover and increased infiltration time through the soil. By increasing the quantity and diversity of vegetation from non-native to native species, projects will help participants lower water needs because the plant species associated with the programs are locally adapted to the climate. This benefits water quality and quantity by mitigating the possible adverse impacts of irrigation runoff and conserving ground and surface water quantity.

No Action Alternative – Environmental assessment review would be the same but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to complete a water quality-quantity impact assessment for each project through an individual environmental assessment instead of using the institutional knowledge, documentation, and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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6. **AIR QUALITY:**
   What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc.)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.

Air quality in Montana varies across the state and is impacted by seasonal factors such as pollen, wildfire smoke, and commercial and industrial facilities. Montana has 12 nonattainment areas where air quality levels fail to meet the National Ambient Air Quality Standards set by the U.S. Environmental

Protection Agency. These standards are established for pollutants like ozone, particulate matter, carbon monoxide, and sulfur dioxide that are harmful to public health. In nonattainment areas, stricter regulations are imposed to reduce emissions and achieve the legally mandated clear air levels.

Preferred Alternative – Pollinator seed and larger forb and woody materials plantings are done under standard guidelines and the activities associated with implementing them have limited and short-term adverse impacts to air quality. There is a short period of time that there could be indirect adverse air quality impacts due to wind erosion from the soil being exposed during the initial site preparation and planting of large-scale seed plantings, but it will be limited and short-term. Larger forb and woody material plantings are relatively small, and it is a common BMP to cover planting sites with mulch or straw immediately at the time of planting to limit soil erosion by wind further limiting direct adverse impacts to air quality.

No Action Alternative – Environmental assessment review would be the same but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to complete an air quality assessment for each project through an individual environmental assessment to determine the potential environmental impacts instead of using the institutional knowledge, documentation, and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify direct, indirect, and cumulative effects to vegetation.

Montana's native plants are an integral part of the state's biological diversity, functional ecosystems, cultural heritage, and economic sustainability. Montana has at least 2,833 vascular plant taxa, including 2.092 native species and 442 exotic species, that span a great diversity of landscapes and habitats. Native plants and pollinators co-evolved more than 65 million years ago (Proctor et al., 1996). Today, animals help pollinate nearly 88% of the world's 352,000 flowing plant species (Ollerton et al, 2011). This symbiotic relationship has shaped the diversity of both plants and animals in our region and across the globe. The coexistence of native plants and native animal pollinators hinges on the ability of these species to live in functioning plant habitats.

Native plants differ in their size, shape, habit, soil, water and nutrient requirements, and leaf chemistry, which means that where there is a diversity of plant species, there will be greater opportunities for animals to obtain their food energy with less competition. A greater array of native plant species also means more opportunities for native pollinators to find shelter, nesting, and resting sites, along with

water, prey, and other components to carry out their life cycles. In Montana native animal pollinators include insects, bats, and birds. At least 1,890 flowering plant species native to Montana provide nutritious foods in the form of pollen and/or nectar to native animal pollinators (MTNHP 2023a). While foraging for this food, pollinators transfer pollen and one flower to another, thereby enabling fertilization and seed production for the plant. The reproductive success of most native plant species depends on their animal pollinators.

The vegetative conditions of pollinator habitat plantings vary but are typically degraded and/or non-native plant communities in private landowners' yards, on their property, and in agricultural fields. The grant programs do not support funding plantings in current healthy native plant communities, plant communities that could be considered rare, or other cover types that are deemed beneficial pollinator and/or statewide important cover types for wildlife that already exist like sage-grouse habitat in eastern Montana. For urban and suburban plantings, the sites are often areas with perennial non-native turf grasses or areas of bare ground from construction activity. In large scale agricultural settings, pollinator habitat plantings are often areas that were annual croplands that are being converted into perennial pasture, or conversion/renovation of perennial pasture or wildlife habitat to native and conservation species from a monoculture of non-native grasses and/or invasive plant species. Conversion of these sites happens through removal of current vegetation and replanting of native vegetation. Different site prep techniques to eliminate current vegetation include tillage, herbicide use, and solarization (USDA-NRCS, 2021).

Preferred Alternative – The impacts to vegetation are expected to be largely beneficial and will result in higher quality floral resources for pollinators, vegetation more adapted to the local climate, and a larger quantity of native species overall, providing crucial habitat for native pollinators and other wildlife (Pearson, DePuy, & Kuhlman, 2025). In most instances there are only minor, temporary adverse impacts expected during site preparation and planting. There could be minor to major adverse impacts from failed establishment and/or management of large-scale plantings from seed. For some programs, prior to receiving seed or plants, landowners agree to certain terms including but not limited to following all state and federal guidelines for herbicide use, only seeding or planting in appropriate locations, conserving water through proper irrigation methods, and agreeing to allow program partners to conduct monitoring surveys. A potential direct adverse impact to vegetative communities from seed plantings is accidental noxious weed introduction through native seed mixes purchased from commercial seed producers. Pollinator programs try to mitigate the potential for this adverse impact by sourcing their seed from suppliers that are providing weed-free seed. DNRC Conservation Nursery recently started a Montana Native Seed Network Program to start supplying local seed to programs, ensuring availability of ecotypic native species that are produced and processed in local facilities. This would help mitigate new noxious weeds from being introduced by native seed shipments from out of

state. Once the seed program is established and seed available, DNRC pollinator programs will utilize this seed source for their grant programs.

Another potential direct adverse impact from large-scale seed plantings arises during establishment of new plants. If the pollinator seeds planted don't germinate and produce groundcover, the site is at a higher risk of noxious weed infestation. DNRC program managers mitigate this risk by providing technical support to grantees for seed species planning as well as containerized plantings. This is accomplished by providing specialized site-specific seed mixes for large-scale plantings, regional species mixes for small-scale urban and suburban seed plantings, and pre-determined lists for urban and suburban containerized plantings developed by Montana native plant and pollinator experts (USDA-NRCS, 2021). The seed mixes can contain native species as well as conservation species, because conservation species are non-invasive, non-persistent species that are known to compete well with noxious weeds. Because native pollinator seeds often have high stratification, requiring several freeze-thaw cycles to germinate, they can be slow to establish and do not always compete well with noxious weeds. The conservation species are included in the seed mixes to act as a temporary cover crop, preventing the incursion of noxious weeds and providing time for the native seeds to germinate and establish robust populations. Over time the conservation species are outcompeted by the established native species or naturally die off during harsh conditions, resulting in a completely native habitat. Additionally, native seeds chosen for each seed mix are adapted to the local conditions and each mix includes a diversity of seeds to ensure forage and habitat are provided by several species throughout each season (Clausen, Pokorny, Guillion, Gamblin, & Limberger, 2017-2021).

Pollinator plantings from containerized plant materials (not seed) use native species of plants that are already established and help improve current vegetation communities, and increase native species diversity, quality, and quantity for wildlife habitat (Pearson, DePuy, & Kuhlman, 2025). Cumulatively these smaller-scale pollinator plantings are beneficial to the populations of native plants in urban and suburban settings where most landscapes are predominantly turf grasses and non-native species. There are limited risks to the vegetative community because the sites are smaller and easier to manage, the plants are already established, and the risks of germinating from seed are negated. With a smaller site comes a smaller opportunity for noxious weed issues from site prep. Additionally, to ensure the most beneficial plants are being selected by program participants, programs provide native plant lists and suppliers for residential and community plantings to assist public participants pair the most beneficial native plants with their sites.

No Action Alternative – Environmental assessment review would be the same but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to complete a vegetative assessment for each project through an individual environmental assessment instead of using the institutional knowledge, documentation, and

management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify direct, indirect, and cumulative effects to fish and wildlife.

Montana provides habitat for 109 mammal species, 456 bird species, 15 bat species, and over 90 fish species, with 226 of these animals being species of concern and 59 having a special status designation (rare, threatened or endangered). Wildlife are generally mobile, capable of moving freely across the landscape and utilizing available suitable habitats. Existing sites for pollinator plantings vary throughout the state but are commonly implemented in urban and suburban areas with degraded soils, and non-native grass-dominated vegetative communities that inherently have lower wildlife habitat value due to the lack of diversity in native flowering shrubs and forbs that are key for healthy wildlife, bird, and fish populations (Pearson, DePuy, & Kuhlman, 2025). Agricultural large-scale seed plantings are not occurring on prime farmland or in other large areas of habitat types of concern in Montana. The standard management goals on these agricultural sites include conversion of annual small grain cropping areas to perennial stands of native and conservation forb and grass species, as well as conversion of perennial vegetation on sites that have undesirable grasses to a more native plant community with the overall goal of supporting more diverse insect and wildlife communities.

Preferred Alternative – The cumulative overall impact of the pollinator habitat plantings on terrestrial and aquatic ecosystems are anticipated to be beneficial and long-term. Increased native plant habitat will directly benefit numerous taxa such as small rodents, amphibians, songbirds, native insects, and microorganisms. Out of 220 species on the 2024 Montana Natural Heritage Program Animal Species of Concern list there are almost 40 species of insects that use nectar, pollen or other pollinator plant parts in their life cycle. These species include state species of concern whose habitat overlaps large portions of western Montana, including Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*) and the western bumble bee (*Bombus occidentalis*). Additionally, the species of concern list includes 3 beetles, 7 butterflies, 6 dragonflies, 13 caddisflies, mayflies and damselflies that all access some part of native plants in their life cycle (Montana Natural Heritage Program, 2024). Along with these insects there are several other mammals, reptiles, amphibians, and fish species on the list that would benefit from more robust, diverse insect habitats that include more flowering plant species. In addition to producing pollen and nectar for insects, these habitat areas also provide forage, hiding cover, nesting habitat, and migration corridors for the other non-insect species on the list.

All geographic areas of Montana are eligible for DNRC CARDD pollinator habitat grant programs, but not all habitat types. Through education and outreach, coupled with all financial and technical assistance grant funds, programs work to ensure they are not funding projects in existing high quality, critical habitat zones. There would be variable beneficial impacts depending on the species, but overall no direct negative impact to currently identified priority habitat types that are part of the USFWS Threatened & Endangered Species Critical Habitat zones for Canada Lynx (*Lynx canadensis*), Piping Plover (*Charadrius melodus*), bull trout (*Salvelinus confluentus*), or BLM Priority Habitat Management Areas for Sage Grouse core, connectivity, and general habitat (USFWS, 2025) (State of Montana, 2025). The grant-funded pollinator planting sites occur almost exclusively in developed urban and suburban areas with non-native plant communities or in degraded agricultural areas that are not part of the designated habitat type management zones. Although these sites are in degraded areas with mainly non-native plants there is a chance that the areas could contain suitable habitat for one of the 441 plant species of concern and 135 potential plant species of concern listed in the 2010 Plant Species of Concern list managed by the Montana Natural Heritage Program (Montana Natural Heritage Program, 2025). Programs mitigate the unintentional destruction of prime habitat or a species of concern by requiring participants to discuss and/or document site conditions and understand existing vegetation conditions before plant materials are provided. If areas of special concern come up with individual sites, there are statewide partners who are native plant experts available to identify plants and ensure no species of concern are being destroyed.

Adverse impacts to terrestrial, avian and aquatic life and habitats will be minor, localized, and temporary during site preparation and planting, with key concerns being pesticide use, soil exposure to wind and water erosion, and the impacts of sediment transfer. These adverse impacts will be ameliorated through mitigation strategies to limit the duration of soil disturbance through methods discussed in prior sections like mulching or using no-till equipment. There can be some indirect negative impacts to pollinator and insect species from site prep if herbicide is used to kill vegetation. To mitigate these impacts to pollinators, program managers provide participants with educational resources to understand the BMPs for using herbicide responsibly (EPA, 2025) (USDA-NRCS, 2021).

No Action Alternative – Individual site evaluation environmental assessments would address the impacts to the physical environment similar to the Programmatic EA but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to complete a full environmental assessment for each project, most of which are 500 to 1000 square feet or less, in degraded environments, will improve habitat value, and the plantings are done under standard guidelines that have limited and short-term environmental impacts.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify direct, indirect, and cumulative effects to these species and their habitat.

In various locations throughout Montana there are unique habitats that have been formed under specific, uncommon environmental conditions. Unique habitats differ from most communities in that they occupy relatively small areas, have formed under unusual combinations of geology, soil chemistry, hydrology, and other factors, and typically support species assemblages that are not common (MNTHP 2024). Montana's unique habitats include but are not limited to high-elevation sagebrush grasslands, wetlands and prairie potholes, riparian zones, alpine areas, the Red Desert, the Swan Valley corridor, high-elevation meltwater streams, metamorphosed limestone, Centennial Valley sand dunes, wooded vernal ponds, obsidian sands, bedrock glades, vernally moist cliffs, shale barrens, peatlands, and bentonite deposits.

The State of Montana has defined critical habitat areas for 3 species listed as threatened or endangered by USFWS (Canada Lynx, Bull Trout, and Piping Plover), as well as 4 threatened or endangered bird species, 1 threatened tree species, 3 threatened or endangered fish species, 2 threatened flowering plant species, 2 threatened insect species, and 5 threatened or endangered mammal species (Montana FWP website, USFWS website).

Species Occurrences of Threatened and Endangered Species and Status

Black-footed Ferret	*Mustela nigripes*	Endangered
Canada Lynx	*Lynx canadensis*	Threatened
Grizzly Bear	*Ursus arctos horribilis*	Threatened
North American Wolverine	*Gulo gulo luscus*	Threatened
Northern Long-eared Bat	*Myotis septentrionalis*	Endangered
Yellow-billed Cuckoo	*Coccyzus americanus*	Threatened
Piping Plover	*Charadris melodus*	Threatened
Rufa Red Knot	*Calidris canutus rufa*	Threatened
Whooping Crane	*Grus americana*	Endangered
Bull Trout	*Salvelinus confluentus*	Threatened
Pallid Sturgeon	*Scaphirhynchus albus*	Endangered
White Sturgeon	*Acipenser transmontanus*	Endangered
Whitebark Pine	*Pinus albicaulis*	Threatened
Spalding's Catchfly	*Silene spaldingii*	Threatened

Ute Ladies'-tresses	*Spiranthes diluvialis*	Threatened
Meltwater Lednian Stonefly	*Lednia tumana*	Threatened
Western Glacier Stonefly	*Zapada glacier*	Threatened

Montana also has three species that are proposed for listing as threatened or endangered with USFWS. The species under review for listing are:

Proposed Threatened and Endangered Species

Monarch Butterfly	*Danaus plexippus*	Candidate Species
Suckley's Cuckoo Bumble Bee	*Bombus suckleyi*	Candidate Species
Western Regal Fritillary	*Argynnis idalia occidentalis*	Candidate Species

Montana has an estimated 2.6% of its total land areas covered by wetlands, which equates to approximately 2,435,123 acres of wetland habitat (Montana Audubon website). These areas are vital for a large portion of Montana's bird species and provide crucial ecosystem services like enhancing water quality and flood control. Wetlands are considered fragile habitats because they are sensitive to changes in water levels, salinity, and soil conditions, making them vulnerable to human activities like development, agriculture, and pollution, as well as natural factors such as climate change. Their complex hydrological systems require a delicate balance of water flow and nutrient input to remain healthy, and disturbances to these systems can quickly lead to degradation and loss of their vital functions and habitats (USGS website).

Existing sites for pollinator plantings vary throughout the state but are commonly implemented in urban and suburban areas with degraded soils and non-native grass dominated vegetative communities. Containerized plantings and seeds are used for grant programs that support yard conversions from turf grass to native plants. Agricultural large scale seed plantings are not occurring on prime farmland and if they are near wetlands, streams, lakes, or other water bodies or habitat types of concern, appropriate permits and buffers are used to ensure the planting will not negatively impact existing beneficial vegetation. The standard management goals on large-scale sites include conversion of annual small grain cropping areas to perennial stands of native and conservation forb and grass species.

Preferred Alternative – Pollinator habitat plantings will have direct, cumulative, long-term beneficial impacts to listed species. Insect species will experience the greatest benefit of pollinator gardens, with particular focus on the western bumble bee, one of the main bumble bee species being considered for listing in the Western United States by USFWS. These native plant pollinator habitat conversion projects funded by grants occur throughout the state but there is a specific focus and interest of partners in

Western Montana to implement these urban, suburban and agricultural pollinator habitat plantings. Projects completed with these grant funds would have direct beneficial impacts on the quality of habitat for western bumble bees (WBB) in its listed range (USFWS, 2025), which includes large sections of northwestern Montana and continuing south through Missoula to the Bitterroot valley. To understand what is driving the apparent WBB population decline, we must understand stressors to those populations. Research shows that pathogens, pesticides, habitat loss and degradation, climate change, livestock grazing, competition from non-native bees, and synergistic effects of these stressors can affect WBB or closely related bees (Graves, et al., 2020). By providing more floral resources on the landscape these plantings can proactively help address one of the key stressors to the WBB, habitat loss and degradation. These plantings will also help decrease pesticide use by helping reduce the amount of lawn urban residents have to maintain, as well increase the diversity of the plant communities from solely grass to a mix of grass and forbs in agricultural settings.

These plantings will also have direct beneficial impacts on habitat for the Monarch Butterfly that is currently a candidate for being listed as a threatened or endangered species. Program managers have expressed specific interest in working to restore milkweed habitat and there are several species of milkweed listed on the approved native plants list provided as a resource for grantees (Xerces Society for Invertebrate Conservation, 2025).

There could be some indirect adverse impacts to pollinator species from site preparations if herbicide is used to kill established vegetation on site prior to planting or seeding. To mitigate the effects of herbicide use, the pollinators programs provide participants with resources to understand the BMPs for using herbicide responsibly (EPA, 2025).

There will be no additional adverse impacts to the other Threatened, Endangered, Proposed, and Candidate Species or their habitats listed on the current USFWS field office website. There could be additional indirect beneficial impacts from programs that support improving native plant floral resources on a landscape level throughout the state by supporting more diverse and abundant wildlife habitat.

No Action Alternative – Individual site evaluation environmental assessments (EA) would address the impacts to the physical environment similar to the Programmatic EA but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to complete a full environmental assessment for each project, most of which are 500-1000 square feet or less, are in degraded environments, will improve habitat value and the plantings are done under standard guidelines that have limited and short-term environmental impacts that program managers provide targeted education and outreach materials for.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

From 10,000-year-old archaeological sites to 100-year-old homestead farms, Montana has countless historic, cultural, and archeological places. Montana features important archeological sites like the ancient Anzick Site, the oldest North American Clovis burial site, and the rock art at Pictograph Cave State Park. Other locations include the Paleoindian-era Barton Gulch site, various sites with tipi rings and bison kills, Medicine Rocks State Park, Chief Plenty Coups State Park, Pompeys Pillar National Monument, Little Bighorn Battlefield National Monument, and Glacier National Park.

Preferred Alternative and *No Action Alternative* – No cultural or historical resource impacts are anticipated. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify direct, indirect, and cumulative effects to aesthetics.

The aesthetic conditions of pollinator habitat planting sites vary but are typically turf grass, degraded and/or non-native plant communities in private landowners' yards, on their property, and in agricultural fields. Grant programs not only support plantings on private lands, but they also support community pollinator gardens and green stormwater infrastructure projects that occur at varying sites and include native species plantings around parking lots or in community spaces and gathering places.

Preferred Alternative – Pollinator habitat projects will have direct, long-term, cumulative beneficial impact on aesthetic. Adding flowering plants with different colors, structures and shapes add diversity, color and beneficial use to areas that are degraded and/or are monocultures of turf grass or other grass and crop species. These grass habitat types don't benefit as many wildlife and insect species as flowering plants do because grasses have limited beneficial nectar and pollen resources for insects to utilize. Adverse impacts to the aesthetic of the landscape will be minor, localized, and short-term occurring mainly during site preparation and planting. Adverse impacts to aesthetics during construction are from the effects of creating exposed soil. To ensure long-term aesthetic quality, all pollinator programs provide additional education and outreach materials on continued Operation and

Maintenance (O&M) of the plantings to mitigate a situation that allows the planting to become overrun with non-desirable species.

No Action Alternative – Environmental assessment review would be the same for aesthetics but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess aesthetics for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify direct, indirect, and cumulative effects to environmental resources.

The grant funded pollinator plantings would have no impact or demands on environmental resources of land, water, air or energy.

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13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

There are no other environmental review documents that influence or supplement this document

IV. IMPACTS ON THE HUMAN POPULATION
• *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.* • *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.* • *Enter "NONE" If no impacts are identified or the resource is not present.*

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14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Montana's human health and safety are influenced by both natural and built environments. Pollinator habitat plantings, whether in agricultural, rural, riparian, urban, or suburban areas, take place in varied settings where people live, work, and recreate. Existing agricultural lands involve periodic herbicide use, tillage, and machinery operations, while urban and suburban environments include pedestrian activity, underground utilities, and public infrastructure like stormwater systems and green spaces.

Public exposure to chemical applications such as glyphosate and other herbicides poses potential health concerns, particularly if drift carries these chemicals into non-target areas. Although the U.S. Environmental Protection Agency (EPA, 2024) has determined that correctly labeled glyphosate poses no risks to humans, drift remains a recognized hazard for non-target vegetation and organisms. A study from Penn State found that even regulated herbicides like dicamba can unintentionally impact flowering plants and pollinators through drift (Pennsylvania State University, 2022). In populated areas, those passing by or near application zones—including workers, children, and bystanders—may face adverse effects if herbicides are misapplied.

Urban and suburban habitat implementations, such as raised beds, hedgerows, and rain gardens, incorporate green stormwater infrastructure (GSI) techniques. These elements can enhance public health and safety by capturing stormwater runoff, reducing flooding and urban heat, and creating amenities for exercise and well-being. The EPA highlights that GSI can filter pollutants, support community mental health, and improve safety through enhanced green spaces (EPA, 2023a; USDA Forest Service, 2021).

However, potential risks also exist during construction and planting stages. Tillage, soil preparation, and planting involve heavy equipment, trip hazards, and exposure to dust and allergens. Temporary increases in airborne particulates may impact individuals with respiratory sensitivities. Additionally, activities involving digging—such as establishing raised beds or installing woody stock—necessitate locating and avoiding underground utilities to prevent injury, gas leaks, or service disruptions.

Preferred Alternative – Uses of non-selective herbicides, notably glyphosate, present potential direct adverse impact to human health and safety through exposure risk to nearby residents and workers. Though current labeling and EPA assessments indicate low risk when glyphosate is applied properly (EPA, 2024; Bayer, 2023), chemical drift can impair non-target plants and pollinators (Prairie Rivers Network, 2022; Pennsylvania State University, 2022; Wikipedia, 2023). To mitigate these risks, project plans will require adherence to label directions, targeted application practices (e.g., wick applicators), buffer zones near sensitive areas, notifying adjacent landowners, and prohibiting spraying under windy conditions.

Site preparation methods, including tillage, solarization, and installation of planting infrastructure, can pose indirect adverse impacts to health and safety through physical safety hazards. These include

tripping over tools, encountering underground utilities, and inhaling dust. Mitigation measures will include mandatory use of utility marking services, enforcing appropriate personal protective equipment (PPE), implementing dust control (e.g., wetting soils on dry, windy days), and ensuring comprehensive safety training and signage for crew and public areas. Breaking ground and disturbing soil can lead to short-term, indirect adverse impacts to human health and safety through increases in pollen, dust, and other particulates, potentially triggering respiratory discomfort. Mitigation strategies include monitoring for high sensitivity individuals, using vegetative stabilization or mulches to limit dust, and timing soil work to minimize community exposure.

The introduction of GSI features such as rain gardens, bioretention cells, and permeable pavement present direct beneficial impacts to public health and safety. These installations reduce runoff-related flooding and improve local air and water quality (Beyond Pesticides, 2023; EPA, 2023b; Flyway Excavating, 2023; SCS Stormwater, 2023). They also help mitigate heat islands and lower ambient temperatures, reducing heat-related illnesses (Wired, 2022; Wikipedia, 2023). Habitat plantings in urban and suburban settings, including linear hedgerows and pollinator gardens, produce cumulative, long-term beneficial impacts for mental and physical well-being. Studies associate access to green spaces with stress reduction, increased exercise, and social cohesion. These enhancements to public safety and community health align with broader planning goals and support DNRC's mission to improve environmental quality through practical landscape interventions.

No Action Alternative – Environmental assessment review would be the same for human health and safety but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess human health and safety for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

Montana's economic foundation relies heavily on agriculture, livestock and rangeland grazing, small-scale manufacturing, and supporting commercial services (USDA-ERS, 2022). Native pollinators – such as bumblebees (Bombus spp.), solitary ground-nesting bees (Andrena spp., Halictus spp., Anthophora spp.), and cavity-nesting bees (Osmia, Megachile) – play vital roles in pollinating a wide variety of crops, including alfalfa, canola, cherries, and tomatoes, as well as native rangeland flora (MSU Extension, 2025; Montana Right Now, 2025). These native pollinators facilitate critical ecosystem services, sustaining forage for livestock, reducing soil erosion, and enhancing biodiversity across agricultural and rangeland systems (MSU Extension, 2025; Working Lands for Wildlife, 2024).

In rangeland settings, managed grazing and rest-rotation techniques have been shown to support native bee abundance by maintaining patches (~15%) of bare ground essential for nesting (MSU Extension, 2025; Working Lands for Wildlife, 2024). This synergy between grazing and pollinator habitat supports robust livestock production and ecosystem resilience across about one-quarter of Montana's landscape. Commercial activities like seed production, floral retail, and nursery operations also depend on native wildflower and pollinator habitat establishment to sustain their industries (Montana State University, 2023).

The DNRC Pollinator Habitat Planting Program will increase native habitat by integrating wildflower strips, hedgerows, and riparian woody plantings – directly aligning with current agricultural and rangeland management practices. These efforts are anticipated to bolster native pollinator populations, thereby increasing pollination efficiency for key crops. Studies indicate that native bees often outperform honeybees in buzz-pollinated crops (e.g., tomatoes, peppers), and Montana State University research shows flower strips can generate both ecological and economic returns within just a few years (MSU Extension, 2024; Entomology Today, 2025). Moreover, enhancing native pollinator habitat supports the seed-production and landscaping sectors by creating consistent demand for native species seed, plant material, and installation labor. Retailers of native wildflower seed may benefit from stocking regionally adapted mixes, as demonstrated by MSU's cost-benefit analysis showing profitability for seed sales in farmscaping environments (Delphia et al., 2019).

Preferred Alternative – Pollinator gardens are anticipated to have direct beneficial impacts on agriculture by increasing crop pollination and yields. By establishing native flower strips and enhanced habitat, native pollinator populations are expected to increase, directly enhancing crop yields—especially for buzz-pollinated species—and stabilizing agroecosystems (MSU Extension, 2025; Entomology Today, 2025). Proposed locations for pollinator plantings can target plantings in high-value cropping areas, promote montane-appropriate native species, and provide guidance on strip placement and maintenance. Pollinator plantings may have indirect beneficial impacts on commercial wildflower and native seed markets. Grant-funded purchases of native wildflower seed and woody plants create economic opportunities for local native seed producers and nurseries. MSU's study confirms seed strip sales can offset establishment costs by year two (Delphia et al., 2019). Pollinator supported grant programs will prioritize seed sourcing from Montana suppliers; develop cooperative partnerships to streamline seed production.

Pollinator projects will have indirect beneficial impacts on agriculture by enhancing rangeland pollinator populations through grazing synergies, Supporting managed grazing that preserves bare ground fosters nesting habitat for ground-nesting bees. Research shows grazed pastures host 2–3× more native bees than idle lands (Working Lands for Wildlife, 2024). DNRC grant program

administrators will promote pollinator-beneficial grazing practices through outreach and integrate pollinator metrics into grazing plans.

Pollinator projects are anticipated to have indirect beneficial impacts on commercial businesses through support for small-scale business services. Contracts for planting hedgerows, rain gardens, and urban green infrastructure support small landscaping and conservation enterprises. DNRC will provide technical support and training to rural contractors and prioritize local companies and suppliers.

Pollinator projects may have minor, indirect adverse impacts to agriculture by shifting land use intensity. Converting productive cropland to habitat may reduce active production. To mitigate this potential, DNRC will encourage plantings on marginal lands, field margins, and uncropped areas to balance land use with ecological restoration.

By centering on native pollinators, pollinator projects will enhance Montana's industrial and agricultural sectors through improved crop yield, expanded seed markets, and strengthened ecological resilience. Benefits are direct—through enhanced pollination services—and indirect—via economic stimulus in seed and planting industries and rangeland synergies. Potential adverse land-use shifts are minimal and can be mitigated through strategic siting and integration with existing agricultural operations. This rural and ecological focus aligns with DNRC's goals to support sustainable land management and community-based economic development.

No Action Alternative – Environmental assessment review would be the same for industrial, commercial, and agricultural activities but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess industry impacts for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify direct, indirect, and cumulative effects to the employment market.

Montana's employment landscape in conservation and agriculture relies heavily on seasonal and project-based work, particularly within Conservation Districts, DNRC-funded projects, and related contractors. According to Montana Department of Labor and Industry roughly 20% of the state's workforce in 2023 was employed in sectors that intersect with pollinator habitat efforts, including agriculture, natural resources, and conservation. Conservation Districts alone employ professionals and technicians engaged in habitat planning, seed procurement, planting logistics, and community outreach (DNRC, 2024). Seasonal labor demand related to seeding, site prep, and native planting supports

numerous small businesses and local contractors. Federal programs like NRCS EQIP and CSP have historically funded habitat plantings, such as the establishment of 22 acres on the Bonsell Ranch in Carter County, which provided seasonal work and technical assistance (USDA NRCS, 2018; Montana Living, 2019).

Preferred Alternative – Pollinator projects have potential direct beneficial impacts on the quantity and distribution of employment. Streamlining environmental reviews through the Programmatic EA is projected to expedite grant approvals and increase habitat-based contracts by approximately 10–20% per year. Based on CD staffing ratios and historical grant volumes, this could yield an estimated 30–60 additional seasonal full-time equivalents (FTEs) annually across CDs, private restoration firms, seed suppliers, and landscaping crews. These jobs would focus on planting native seed mixes, woody stock, rain garden installations, and site monitoring (Montana DNRC, 2024; Montana Labor, 2023). DNRC will prioritize local contracting and include workforce training clauses in grants to enhance rural employment. Pollinator projects have potential indirect beneficial impacts through increased demand for Montana native seed and plant materials. This increased demand is expected to support regional seed growers and nurseries. USDA's Montana Agriculture report shows conservation funding supported over 1,057 local jobs and $182 million in economic activity under ALE programs from 2014–2021 (USDA NRCS, 2022). If similar investment levels are realized through pollinator programs, we could see the creation of 20–40 indirect jobs in seed production, plant propagation, mulch and compost supply, and equipment rental. Grant guidance will encourage sourcing from Montana-based suppliers, and capacity-building assistance will be offered to small seed vendors.

Pollinator projects have potential cumulative beneficial impacts through consistent multi-year funding cycles and the avoidance of repeated case-by-case reviews, which can stabilize employment. Stable project pipelines help retain qualified staff, encourage Conservation Corps or AgCorps involvement (Montana Dept. of Agriculture, 2025), and support educational outreach positions. Over time, the workforce gains capacity in ecological restoration, training, and native plant science—benefitting long-term rural economic resilience. DNRC will partner with AgCorps and education institutions to embed conservation training into curriculum.

Pollinator projects have potential for minor, short-term adverse impacts on employment. As seasonal labor is reallocated toward pollinator habitat, other conservation projects (e.g., weed control, erosion management) relying on the same labor pool may experience shortages or delays. Private contractors may need to balance multiple seasonal contracts. Project scheduling will be coordinated across CDs and agencies to stagger resource use, reduce bottlenecks, and maintain availability.

Implementation of the program is expected to generate modest but meaningful increases in employment, particularly in rural and conservation-oriented sectors—without displacing existing jobs.

Improved efficiency and expanded demand are projected to support approximately 50–100 additional jobs (direct and indirect) each year while promoting workforce development and local economic growth. Minor short-term challenges related to labor allocation can be effectively managed through strategic scheduling and inter-agency coordination.

No Action Alternative – Environmental assessment review would be the same for quantity and distribution of employment but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess employment for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify direct, indirect, and cumulative effects to taxes and revenue.

Montana's tax system is supported by a mix of property taxes, individual income taxes, and selective excise taxes, with agricultural activities playing a key role in the rural economy and local tax base. As of 2020, Montana's agricultural sector produced approximately $3.7 billion in annual cash receipts, making it a significant contributor to both household incomes and taxable revenues (USDA ERS, 2022). Crops that rely heavily on insect pollination, such as alfalfa, oilseeds, fruits, and certain vegetables, constitute a substantial portion of this total. These pollinator-dependent crops not only bolster the state's agricultural output but also influence land valuation and, therefore, property tax assessments at the local level.

Pollinator populations, particularly native species like the western bumblebee, are in steep decline due to multiple anthropogenic factors including habitat loss, pesticide use, and climate change (USFWS, 2023). The western bumblebee alone has experienced a 93% population decline since 1998 and is currently under review for potential listing under the Endangered Species Act. Because of their essential ecological role in maintaining crop productivity and ecosystem resilience, the loss of pollinators may pose indirect risks to agricultural profitability and, by extension, to the tax revenues generated from agricultural production and land use.

Beyond agriculture, pollinator habitat restoration can intersect with other parts of Montana's economy and tax base. For example, in urban and suburban environments, projects such as pollinator-friendly landscaping, rain gardens, and green stormwater infrastructure may increase nearby property values by enhancing visual aesthetics and stormwater management capacity. These improvements can indirectly result in increased property tax assessments over time (EPA, 2020). Similarly, investments in native

habitat materials, such as seeds, containerized plants, irrigation equipment, and soil amendments, stimulate local economic activity and generate taxable sales revenue within the state (Montana DOR, 2023).

Statewide support for pollinator habitat improvements, formalized by the Montana Legislature in 2019 through dedicated funding, has enabled thousands of residents to engage in on-the-ground restoration and land conservation work. Conservation Districts (CDs), functioning as political subdivisions of the state, administer these funds and support local implementation through technical assistance and educational programming. These public investments in conservation provide long-term returns by supporting sustainable land management, safeguarding crop yields, reducing public infrastructure burdens, and helping to stabilize the rural tax base.

Preferred Alternative – Pollinator Habitat Plantings Programmatic EA may have direct beneficial impacts to Montana's economy through modest increases in tax revenue from the sale of planting materials and increased agricultural yields associated with improved pollination services. Indirect beneficial impacts through the implementation of these projects may support job creation in landscaping, seed production, and conservation contracting sectors, contributing to income and business tax revenue. In urban contexts, improved aesthetics and reduced stormwater runoff may contribute to enhanced property values and avoided municipal infrastructure costs (EPA, 2016). Over time, these outcomes may cumulatively reinforce the resilience of both the ecological landscape and the fiscal health of rural and urban communities.

Some potential adverse impacts could include temporary reductions in taxable agricultural production if land is converted from cropping to habitat. However, this risk is expected to be minimal and can be mitigated by prioritizing planting on marginal or low-productivity lands and by promoting dual-use approaches, such as incorporating habitat into grazing systems or field borders, to maintain agricultural utility while enhancing pollinator support. In urban settings, construction of features like raised beds or rain gardens requires no significant land conversion and is unlikely to affect the local tax base negatively.

To maximize benefits and reduce unintended fiscal or land-use conflicts, the program can employ best management practices that include strategic site selection, promotion of native drought-tolerant species that reduce water use, and support for multi-use design. This aligns with broader conservation goals and supports fiscal sustainability across Montana's diverse communities.

No Action Alternative – Environmental assessment review would be the same for local and state tax base but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess impacts to tax bases for each project through an individual environmental assessment instead of using the institutional knowledge,

documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify direct, indirect, and cumulative effects of this and other projects on government services.

Montana's rural and urban communities rely on a variety of government services including fire protection, law enforcement, schools, and transportation infrastructure. While much of Montana is rural with low population density, urban areas like Missoula, Billings, and Bozeman experience growing demands on public services due to population growth and development (Montana Department of Transportation [MDT], 2023; Montana Office of Public Instruction, 2023).

Montana DNRC CARDD manages grant-funded pollinator habitat planting programs primarily on private lands but also on some public school and municipal properties. These projects generally involve small- to moderate-scale land use changes with seasonal site preparation and planting activities. Because these plantings mostly replace or enhance existing agricultural or disturbed land, the projects themselves generate minimal permanent population growth or long-term infrastructure demand.

Preferred Alternative – Pollinator habitat projects may have short-term, limited adverse impacts to traffic and changes to traffic patterns through increased traffic and changes to traffic patterns. Projects often require seasonal delivery of seed, planting materials (containerized stock), equipment, and personnel mobilization for site preparation and planting. These activities are generally limited to short periods in spring or fall and involve light to moderate vehicle traffic, mostly from trucks, tractors, and utility vehicles. Adverse impacts to traffic patterns through traffic increases are therefore temporary and localized. Due to the widespread geographic distribution of projects, often in rural or agricultural areas, no significant sustained increase in traffic volume on Montana's primary roadways is expected. However, localized adverse impacts on secondary or gravel roads may include short-term wear or congestion during peak planting times. Such traffic impacts are minor relative to daily rural traffic volumes and typically occur during off-peak hours. No substantial changes to traffic patterns such as permanent rerouting or traffic signal modifications are anticipated, as pollinator projects do not induce permanent population increases or new residential/commercial developments (MDT, 2023).

Pollinator habitat plantings utilize native vegetation and may increase vegetative cover in some areas; however, these habitats generally reduce invasive weeds and maintain controlled fire-risk landscapes due to management by landowners and conservation districts. No significant increases in fire risk are projected, nor is an increase in demand for firefighting services anticipated (Montana Department of

Natural Resources and Conservation, 2023). Fire departments may require minimal training or awareness to recognize habitat types, but no substantial infrastructure or staffing changes are needed.

The nature of pollinator projects—rural, seasonal, and involving cooperative landowners—does not imply increased demand for police services. Traffic generated is related to construction and planting activities, not new residential development or commercial activity, so impacts on law enforcement calls or patrols are not anticipated (Montana Board of Crime Control, 2024).

Projects occasionally occur on public school properties, often to enhance landscaping or educational demonstration plots. These uses promote educational opportunities but do not increase student populations or require additional school infrastructure or services (Montana Office of Public Instruction, 2023). Thus, no impact on school capacity, transportation, or staff is expected.

Minor additional demand may occur for permitting and environmental review coordination between DNRC, conservation districts, and local government agencies (e.g., permits related to waterways or wetlands). These administrative demands are expected to be efficiently managed within existing staffing through the new programmatic environmental assessment process, which aims to streamline project approvals. This type of impact is considered minor but relevant for implementation efficiency. To mitigate this, the project will utilize the Programmatic Environmental Assessment to streamline the review and approval processes. Additionally, staff will receive training on standardized procedures to enhance consistency and reduce processing time.

Indirect beneficial impacts of pollinator projects include improvements in vegetation cover, which may enhance stormwater management and reduce runoff-related stress on local drainage infrastructure and water treatment services. Furthermore, enhanced habitat quality contributes to broader ecosystem services that support agricultural productivity, which in turn may help stabilize rural economies and reduce long-term demand for social services. The establishment of demonstration plantings, particularly at schools, may provide valuable educational opportunities, increase environmental literacy and foster community resilience and stewardship.

DNRC grant-funded pollinator habitat projects are expected to have minimal to negligible adverse impacts on government services in Montana. Seasonal and localized increases in traffic are temporary and manageable, while demands on fire, police, and schools are unlikely to increase based on pollinator project implementation. The programmatic EA process will improve permitting efficiency, reducing administrative burdens. The ecological benefits of these projects may indirectly support reduced strain on infrastructure and emergency services over the long term.

No Action Alternative – Environmental assessment review would be the same for demand for government services but there would be an increased workload and unnecessary additional paperwork

for staff running a program using grant funds because they would have to assess impacts to government services for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Montana's environmental management landscape is shaped by a diverse mix of local, state, federal, and Tribal planning frameworks that seek to protect and enhance natural resources through collaborative, place-based strategies. Many of these frameworks prioritize native biodiversity, water quality, drought resilience, and habitat connectivity—core elements supported by the DNRC's approach to pollinator habitat enhancement.

At the state level, the Montana State Wildlife Action Plan (SWAP) outlines conservation priorities for species and habitats of concern and emphasizes pollinator conservation, native vegetation, and habitat resilience as key strategies (Montana FWP, 2015). Similarly, the Montana Climate Solutions Plan—guided by the Governor's Climate Solutions Council—calls for investments in nature-based solutions like native plantings, which provide ecosystem services such as erosion control, drought adaptation, and carbon sequestration (Montana DEQ, 2020).

Conservation Districts, operating as political subdivisions of the state, develop annual and multi-year Local Work Plans that often list pollinator habitat as a priority. These plans are grounded in community-identified needs and benefit from state appropriations and technical assistance from the DNRC's Conservation and Resource Development Division. Since 2019, dozens of CDs across Montana—including Yellowstone, Cascade, Gallatin, Missoula, and Flathead—have implemented demonstration gardens, seed distributions, and outreach campaigns in alignment with their stated goals.

Counties and municipalities incorporate pollinator and green infrastructure goals into zoning ordinances, stormwater master plans, and urban forest management plans. For instance, Missoula's Our Missoula Growth Policy promotes native landscaping, biodiversity corridors, and ecosystem services, while Gallatin County's Growth Policy encourages habitat protection through incentive-based conservation (City of Missoula, 2015; Gallatin County, 2021). These plans directly support the goals of DNRC's pollinator programs by providing regulatory pathways and community buy-in.

Tribal governments, such as the Confederated Salish and Kootenai Tribes (CSKT), manage their own natural resource and shoreline protection plans, including ordinances that require shoreline setbacks

and vegetation protection on the Flathead Reservation. These tribal policies align with the ecological and cultural values of native plant use and habitat restoration.

Federal agencies, such as the U.S. Forest Service (USFS) and Bureau of Land Management (BLM), manage millions of acres under land management plans that include native plant restoration, pollinator conservation strategies, and prescribed fire for ecological benefit. The BLM's Integrated Vegetation Management Strategy and the USFS's Pollinator-Friendly Practices Guidelines offer consistency with proposed plantings on adjacent lands and opportunities for federal-state alignment.

In summary, Montana's environmental governance includes a patchwork of locally adopted policies that align with the DNRC's objectives to restore pollinator habitats through native vegetation. These existing plans provide institutional and social support, regulatory guidance, and ecological justification for implementing pollinator-focused grant programs.

Preferred Alternative **–** Pollinator grant programs align with several local and state environmental plans, enhancing habitat resilience while presenting few adverse impacts. Montana's Native Plant Conservation Strategy supports the use of native and conservation species—core to the DNRC pollinator programs—which helps achieve state goals to prevent habitat loss and bolster ecological resilience (Montana Native Plant Conservation Strategy, 2024). Potential direct adverse impacts of pollinator grants could arise through misalignment with native plant sourcing or species selection, which could weaken project efficacy. To mitigate this potential adverse impact, all grant-funded projects will be required to follow native seed sourcing standards consistent with the DNRC and USDA NRCS guidelines.

The USDA NRCS Pollinator Habitat Practice (E420A) mandates specific seed compositions and management guidelines. Additionally, the Endangered Species Act (ESA) requires habitat protection for listed species such as the Western bumblebee, under current review for threatened status (USFWS, 2024). Potential direct adverse impacts could arise through risk of noncompliance with NRCS requirements or ESA-protected species. To mitigate this potential adverse impact, project screening will include ESA consultations where needed and use NRCS-compliant native seed mixes.

Conservation District's local work plans regularly include pollinator projects and often host demonstration gardens and school outreach. County floodplain and development permits must be obtained when necessary. Potential direct adverse impacts could arise through planting on regulated lands or without proper notification may cause delays. To mitigate this potential adverse impact, early consultation with county planners and conservation district staff will occur to identify regulatory requirements and integrate local goals.

Urban and suburban green infrastructure goals (e.g., rain gardens, hedgerows) align with pollinator habitat efforts. Cities like Missoula and Bozeman support native landscaping ordinances and waterwise

strategies. Potential direct adverse impacts could arise through urban infrastructure conflicts (e.g., underground utilities, zoning codes). To mitigate this potential adverse impact, pollinator programs will require BMPs such as utility marking, setback compliance, and urban demonstration plot guidelines.

On or near Tribal lands or public lands managed by the USFS or BLM, coordination is needed to comply with Tribal Historic Preservation Offices (THPOs) and federal habitat management plans. Potential direct adverse impacts could arise through cultural or ecological disturbance on shared jurisdiction lands. To mitigate this potential adverse impact. Pollinator grant programs will initiate government-to-government consultations with Tribes and adhere to cultural resource review procedures.

No Action Alternative – Environmental assessment review would be the same for locally adopted environmental plans and goals but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess impacts to local environmental plans for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify direct, indirect, and cumulative effects to recreational and wilderness activities.

Montana offers abundant access to high-quality recreational and wilderness activities due to its expansive public lands, iconic landscapes, and protected wilderness areas. The state is home to over 30 million acres of public land, including national forests, Bureau of Land Management (BLM) lands, and state parks, which support activities like hiking, hunting, fishing, birdwatching, and camping (Montana Office of Outdoor Recreation, 2023). Nearby wilderness areas, such as the Bob Marshall Wilderness Complex, Absaroka-Beartooth Wilderness, and Lee Metcalf Wilderness, are significant both ecologically and recreationally. In addition, the Montana State Parks system includes over 50 parks providing access to scenic natural features, historical sites, and trails. Pollinator habitat enhancement projects supported by DNRC may take place in proximity to or within access corridors leading to these recreational lands. Many of these corridors also serve as wildlife corridors, trail systems, or agricultural buffers that support mixed uses, including recreational entry.

Preferred Alternative – Given the nature and scale of the pollinator projects, the direct impacts to recreational access or wilderness quality are expected to be minimal or beneficial. Direct adverse impacts to recreational activities may occur temporarily during the site preparation or planting phase,

particularly if habitat projects are installed near popular trailheads, stream corridors, or community parks. Potential disturbances include limited access due to short-term closures, visual disruptions during active work phases, or minor changes to landscape aesthetics. These adverse impacts are temporary and can be mitigated through advanced public notice, scheduling during off-peak recreation times, and signage explaining the conservation purpose of the work.

Indirect beneficial impacts could include enhanced recreational experiences due to improved biodiversity and visual appeal from flowering pollinator habitat plantings. These enhancements may attract more visitors to trailheads, greenways, or riverfront parks, especially in urban and suburban settings. Long-term, pollinator habitat near trails and waterways may improve environmental quality by stabilizing soils, enhancing native vegetation cover, and reducing runoff, which would have a beneficial impact to recreation and water-based activities (Hopwood et al., 2015). Visual enhancements to the landscape may have indirect adverse impacts on sensitive areas through increased human activity in sensitive areas due to perceived attraction. This can be mitigated by partnering with land managers to guide appropriate public use and maintain trails and infrastructure.

Cumulatively, the establishment of widespread pollinator habitat, especially in agricultural margins, riparian buffers, and park peripheries, will have beneficial impacts through landscape-level improvements in ecological health, wildlife viewing opportunities, and community engagement with conservation. These improvements align with Montana's Statewide Comprehensive Outdoor Recreation Plan (SCORP) and the 2020 Montana Climate Solutions Plan, both of which emphasize ecosystem health, community-based stewardship, and climate resilience as pathways to support outdoor recreation (Montana Fish, Wildlife & Parks, 2020; Montana Governor's Office, 2020).

No Action Alternative – Environmental assessment review would be the same for access to and quality of recreational and wilderness areas but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess impacts to recreation and wilderness for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify direct, indirect, and cumulative effects to population and housing.

Montana is characterized by a low population density and dispersed housing patterns, reflecting its predominantly rural landscape. As of the 2020 U.S. Census, Montana's population was approximately

1.08 million people, with a state-wide average density of 7.5 persons per square mile—among the lowest in the United States (U.S. Census Bureau, 2021). Population centers such as Billings, Missoula, Bozeman, Great Falls, and Helena contrast sharply with vast rural counties that have fewer than two people per square mile. Housing development follows this same trend, with concentrated growth near urban centers and minimal development in rural and agricultural areas. Housing types include a mix of single-family homes, mobile homes, and multi-family units, with increasing demand in fast-growing areas like Gallatin and Missoula counties due to in-migration and housing shortages.

Preferred Alternative – The DNRC's pollinator habitat planting projects are not expected to result in any direct impacts to population or demand for additional housing. These projects do not require relocation, new construction, or development that would draw permanent residents. Rather, they focus on habitat improvement using existing land managed by private landowners, local governments, or institutions such as schools. As such, there are no anticipated direct population impacts or additional housing needs resulting from the implementation of pollinator habitat projects. Indirectly, these projects may have beneficial impacts to the density of populations through quality-of-life enhancements that make nearby areas more attractive for residents, particularly in suburban and urban settings where projects may include rain gardens, lawn conversions, or community gardens. These enhancements, while beneficial, are unlikely to significantly impact migration patterns or spur residential development due to the small scale and seasonal nature of the work. The cumulative impact of multiple projects across the state could marginally improve aesthetic and environmental conditions in communities, but without triggering a measurable increase in population or housing development. To mitigate any adverse impacts from localized construction or land use conflicts, especially in urban or suburban areas, the DNRC requires site selection to consider existing infrastructure, including underground utilities and proximity to buildings. Best Management Practices such as utility marking, low-impact site prep methods, and native plant use are implemented to reduce potential disruption.

The pollinator projects, therefore, align well with Montana's existing demographic and housing landscape. By maintaining the character of local communities while providing ecosystem benefits, the proposed actions offer a low-risk, high-reward approach to environmental restoration without imposing population pressure or development demands.

No Action Alternative – Environmental assessment review would be the same for density and distribution of population and housing but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess impacts to populations and housing for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Montana's social fabric is shaped by a strong sense of place, rural independence, and stewardship of the land. The state is home to a diverse range of communities, including long-established agricultural and ranching families, urban professionals, and 12 federally-recognized tribal nations with deep ancestral and cultural connections to the land. The indigenous tribes in Montana are the:

- Salish / Sélish
- Pend d'Oreille / Qĺispé
- Kootenai / Ksanka
- Blackfeet / Niitsitapi (Pikuni)
- Chippewa (Ojibwe) / Annishinabe
- Plains Cree / Ne-i-yah-wahk
- Gros Ventre / A'aninin
- Assiniboine / Nokado, Nakona
- Sioux / Lakota, Dakota
- Northern Cheyenne / Tsetsêhesêstâhase and So'taa'eo'o
- Crow / Apsáalooke
- Little Shell Chippewa / Annishinabe and Métis

These 12 federally- and state-recognized tribal nations were grouped into 7 reservations through the Fort Laramie Treaty of 1851 and the Flathead and Blackfeet Treaties of 1855. Boundaries for these reservations, shown on the attached map, reflect the demarcations of territories by non-Indian officials at treaty time and do not accurately represent tribal territories occupies in the 1850's.

Tribal communities, in particular, continue to rely on native plant species for spiritual, ecological, and practical uses, making land management decisions highly significant to cultural continuity. Social mores in Montana emphasize self-reliance, community interdependence, land conservation, and respect for traditional and Indigenous ways of life (Montana Department of Commerce, 2021). Many rural residents participate in practices passed down across generations, such as dryland farming, rotational grazing, and ceremonial or subsistence gathering on traditional lands.

Preferred Alternative – The pollinator habitat plantings are unlikely to impact Montana's social structures or traditional lifestyles. Rather, the programs complement community values by promoting conservation and supporting stewardship through voluntary and locally-led actions. The projects are designed for flexibility, allowing adaptation to site-specific cultural and ecological contexts. Tribal and rural communities can participate in pollinator habitat improvements in a way that aligns with their traditional knowledge and land ethics, particularly when native and culturally important plant species are prioritized in seed mixes and restoration planning. Nevertheless, potential indirect adverse impacts could arise if project planning does not adequately account for traditional land uses or spiritual values, particularly in tribal areas or places of cultural significance. For example, soil disturbance during site preparation or the introduction of certain herbicides may conflict with practices that prioritize soil integrity and non-chemical land management. There is also the risk that dominant conservation paradigms could overshadow Indigenous ecological knowledge or exclude culturally specific goals unless deliberate tribal engagement occurs in project design. To mitigate this potential adverse impact, DNRC will facilitate consultation with tribal governments and community leaders during project planning; select culturally appropriate native species; use non-chemical site prep options when requested; and continue voluntary participation and flexibility in grant implementation.

The DNRC has recognized the importance of broad public participation in shaping the Programmatic EA, including engagement with tribal nations, landowners, and other stakeholders through formal scoping and public comment processes. These steps help ensure that the program remains responsive to community values and does not inadvertently cause cultural or social disruption. The proposed actions under the Programmatic EA, such as small-scale restoration, native plantings, and rain garden development, align with many of Montana's long-standing conservation mores and support the social structure by empowering individuals, conservation districts, and tribal governments to restore ecological balance. When paired with early and meaningful stakeholder engagement, the program can have a beneficial impact on social structures and mores by helping to reinforce social cohesion and cultural stewardship while restoring pollinator habitat across the state.

No Action Alternative – Environmental assessment review would be the same for social structure and mores but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess impacts to social structures and mores for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

Montana is characterized by its vast cultural diversity, deeply rooted in both Indigenous and settler histories. The state is home to 12 federally recognized tribes and seven Indian reservations, each with distinct cultural identities, languages, and traditional ecological knowledge systems (Montana Governor's Office of Indian Affairs, 2024). Additionally, Montana's rural communities reflect a wide range of settler heritage including Scandinavian, German, Irish, and Hutterite populations whose traditions in agriculture, land stewardship, and communal life shape the social landscape. This cultural patchwork contributes to a unique and deeply place-based identity across Montana's towns, reservations, and landscapes.

Preferred Alternative – The implementation of grant-funded pollinator habitat plantings is not expected to directly impact cultural uniqueness. In fact, the program's emphasis on local control, native species selection, and voluntary participation enhances opportunities for communities to integrate cultural values into habitat restoration. The projects' use of native plants, many of which hold cultural significance to tribal nations, may support intergenerational knowledge-sharing, traditional uses of plants, and ceremonies tied to land and ecology. For example, many native flowering plants support not only pollinators but also serve medicinal, ceremonial, or subsistence roles for Indigenous communities (Yellowstone to Yukon Conservation Initiative, 2023). However, without intentional engagement, there is a potential adverse risk of cultural insensitivity in project design, especially where site preparation techniques such as herbicide application or soil disturbance may conflict with traditional ecological or spiritual values. Additionally, if grant-funded projects on or near tribal lands proceed without adequate consultation, they could unintentionally overlook Indigenous stewardship practices or historical connections to the landscape. To mitigate this potential direct adverse impact, DNRC pollinator projects will engage in early consultation with tribal historic preservation officers (THPOs), selection of culturally appropriate plant species, optional inclusion of Indigenous stewardship frameworks in planting designs, and avoidance of herbicide or mechanical disturbance in areas with known cultural sensitivity.

Another potential direct adverse impact is the exclusion of culturally diverse communities from project planning due to language, historical mistrust, or lack of outreach. To mitigate these potential adverse impacts, DNRC pollinator programs will prepare multilingual outreach materials, install tribal-led demonstration plots, involve tribal colleges and community organizations, and prioritize grants for projects that include diverse community partnerships. DNRC's emphasis on local partnerships, including with conservation districts and tribal governments, creates a structure through which cultural uniqueness can be supported rather than eroded. By ensuring project planning includes space for local input and respect for cultural land uses, the program can enhance rather than threaten Montana's cultural diversity. Furthermore, DNRC's public comment period and its direct outreach to tribes, landowners, and conservation partners will be critical in identifying and mitigating unintentional

cultural impacts. When integrated with site-specific reviews and coordination with Tribal Historic Preservation and Cultural Resource staff, this programmatic approach can strengthen community ownership of habitat restoration efforts and reinforce cultural continuity across Montana's diverse landscapes.

No Action Alternative – Environmental assessment review would be the same for cultural uniqueness and diversity but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess impacts to cultural uniqueness and diversity for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.

The existing social and economic environment in Montana reflects a strong dependence on agriculture, conservation, and rural community vitality. Agriculture contributes significantly to the state's economy, with total farm cash receipts reaching approximately $3.7 billion in 2020, making up about 5% of Montana's gross domestic product. Local food systems are a growing economic driver, with farmgate sales totaling $42.5 million in 2021 and supporting an estimated 1,110 jobs across the state. The retail value of this sector is estimated at $158.5 million (Grow Montana, 2022). Alfalfa, Montana's most valuable hay crop, accounts for over $430 million in annual value and is highly dependent on pollination services (Montana Department of Agriculture, n.d.). Effective pollinator habitat supports crop production, soil health, water conservation, and pest control, generating both ecological and economic value.

Preferred Alternative – The implementation of pollinator habitat improvement projects would have a cumulative beneficial impact to social and economic circumstances by supporting and enhancing the existing economic systems by streamlining environmental review processes and increasing the scale and pace of habitat installation. Urban and suburban pollinator plantings may also align with green infrastructure development, stormwater management improvements, and educational or recreational green space initiatives. Additionally, pollinator habitat could increase the viability of agri-tourism operations, school demonstration gardens, and conservation easements, enhancing the socioeconomic value of these lands beyond traditional agricultural uses. These expanded land-use options may help diversify rural incomes, support climate resilience, and deepen community engagement in ecological stewardship.

The direct economic impacts of the proposed action are expected to be largely beneficial. Improved pollinator habitat correlates with increased crop yields, better crop quality, and higher farm revenue. Nationally, wild native pollinators contribute an estimated $3 billion in services annually (USDA-NIFA, 2019), with one-third of global food production dependent on pollination to some degree (Gallai et al., 2009). In Montana, farms that integrate native habitat near crops frequently report higher yields due to increased pollinator activity. Indirect beneficial impacts to economics include stimulation of local supply chains for seeds, equipment, and restoration services, as well as increased employment opportunities in conservation, landscaping, and nursery production. Cumulatively, these projects could significantly boost Montana's ecological resilience, reduce reliance on agrochemicals, enhance soil and water resources, and support long-term rural economic development.

Social impacts of the proposed action are also expected to be beneficial. Community engagement through schools, landowner partnerships, and neighborhood demonstration projects fosters environmental awareness and stewardship. Conservation Districts and other partners already report strong participation in pollinator programs, with thousands of acres of habitat planted since 2019. These projects have helped strengthen local ties, educate youth, and encourage multigenerational land stewardship. Over time, the cumulative social benefits include greater public understanding of ecological systems, improved human well-being through exposure to green spaces, and stronger rural-urban partnerships.

While the economic and social outcomes of the proposed action are overwhelmingly positive, potential adverse impacts include the financial burden of implementing habitat plantings and the risks of herbicide or water mismanagement. These direct and indirect adverse impacts can be mitigated through DNRC's proposed grant structure, which includes cost-share mechanisms, BMP requirements, and landowner education. For example, improper herbicide application or overwatering during establishment could lead to runoff or reduced efficacy of native plantings. However, these risks are addressed through mitigation measures such as landowner agreements requiring compliance with herbicide labeling laws and water conservation guidelines.

In summary, the implementation of a program to support pollinator habitat improvement projects across Montana is likely to produce a wide range of positive economic and social impacts. These include enhanced crop productivity, job creation in conservation and agriculture, reduced input costs, and increased public engagement with environmental stewardship. As native pollinators and their habitats continue to decline due to climate change, land degradation, and pesticide use, the DNRC's proposed action offers an effective strategy to bolster both ecological health and rural prosperity in Montana.

No Action Alternative – Environmental assessment review would be the same for other appropriate social and economic circumstances but there would be an increased workload and unnecessary

additional paperwork for staff running a program using grant funds because they would have to assess impacts to other social and economic circumstances for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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25. DRINKING WATER AND/OR CLEAN WATER

Identify potential impacts to water and/or sewer infrastructure (e.g., community water supply, stormwater, sewage system, solid waste management) and identify direct, indirect, and cumulative effects likely to occur as a result of the proposed action.

Montana's drinking water, wastewater, solid waste and stormwater infrastructure serves over one million residents. For drinking water this includes 2,300 water systems operated by public and private entities. For wastewater, there are a mix of public and private systems and approximately 616,000 residents, or 58% of the state's population, are served by around 500 public wastewater systems, while private septic tanks and drain field systems serve the remainder. For solid waste, the state operates 31 landfills, and a total landfill capacity of about 30 million tons is unevenly distributed throughout the state and finally, for stormwater, there are 14 permitted districts that have local stormwater utilities that cover the state's few urban areas (Montana Section of the American Society of Civil Engineers, 2024). Many smaller communities lack the capacity and funding to address local stormwater issues effectively and due to Montana's rural character and diverse landscapes, managing stormwater runoff is a significant concern. Stormwater runoff in Montana comes not only from urban and suburban landscapes but also includes agricultural runoff. While more urban areas have increased pollution control measures, runoff in rural areas remains largely unregulated. DNRC pollinator habitat programs help address these urban/suburban stormwater runoff and rural agricultural runoff issues by promoting the use of climate adapted native plant species that are designed to be perennial.

Additionally, Montana municipalities plan for protection of water sources, supply, and demand in many ways with key consideration and focus on drought and water conservation efforts. For drought management planning, effective strategies and operations to manage water demand during drought-related water shortages are key. While water conservation efforts are largely focused on outdoor irrigation strategies that include irrigation system improvements, water efficient landscape designs, and smart irrigation controllers (Montana DNRC and Montana Rural Water Systems Inc., 2021). DNRC grant funded pollinator plantings are inherently water efficient designs due to their focus on hearty ecotypic plant species.

Ultimately, encouraging responsible watering is largely a public relations initiative and Montana State University Extension has developed a Yard and Garden Water Management MontGuide (Montana State

University Extension, 2010) with recommendations to encourage responsible outdoor water use. Several of these recommendations fall in line with the kind of projects that DNRC grant funded Pollinator Habitat programs and projects support including xeriscaping and rain gardens of deep-rooted native plant species.

Outdoor water recommendations include:

- Avoid watering in wet or windy conditions
- Utilize drip or soaker hoses, which can reduce evaporation by approximately 60 percent
- Water in the early morning or early evening, when evaporative losses are lowest
- Apply water slowly to avoid runoff and encourage deep root growth
- Do not overwater. Established lawns need approximately 1-2 inches of water every 3-5 days
- Consider the use of timers, rain barrels, xeriscaping, and rain gardens.

Preferred Alternative – The pollinator grant programs, which focus on planting native grass, forb and woody plant species that are more adapted to the local climate, would have no direct negative adverse impacts on drinking water and/or clean water. Grant funded community projects focus on converting plant communities from non-native plants, that have shallow roots, and water needs not adapted to local climates, to native plant communities of drought tolerant, long-rooted plants. Planting activities can also help municipalities and agricultural producers achieve goals that directly benefit the protection of community and individual water supply and demand. While projects like rain garden plantings and xeriscaping offer nature-based solutions to address both drought and stormwater treatment through site specific vegetative land cover. To mitigate any adverse impacts to drinking water, wastewater, solid waste and stormwater infrastructure from localized construction or land use conflicts, especially in urban or suburban areas, the DNRC requires site selection to consider existing infrastructure, including underground utilities and proximity to buildings. Best Management Practices such as utility marking, low-impact site prep methods, and native plant use are implemented to reduce potential disruption. Additionally, urban and suburban green infrastructure goals (e.g., rain gardens, hedgerows) align with pollinator habitat efforts. Cities like Missoula and Bozeman support native landscaping ordinances and waterwise strategies. Potential direct adverse impacts could arise through urban infrastructure conflicts (e.g., underground utilities, zoning codes). To mitigate this potential adverse impact, pollinator programs will require BMPs such as utility marking, setback compliance, and urban demonstration plot guidelines.

No Action Alternative – Environmental assessment review would be the same for drinking water and/or clean water but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess impacts to drinking water

and/or clean water for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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26. ENVIRONMENTAL JUSTICE

Will the proposed project result in disproportionately high or adverse human health or environmental effects on minority or low-income populations per the Environmental Justice Executive Order 12898? Identify potential impacts to and identify direct, indirect, and cumulative effects likely to occur as a result of the proposed action.

Montana, like many states, includes communities with higher proportions of minority or low-income households, notably in areas impacted by legacy pollution, such as Butte and Libby. The EPA's EJSCREEN tool shows that these demographic groups often coincide with greater environmental burdens, including air pollution and toxic sites (Montana Department of Environmental Quality [DEQ], n.d.). Region VIII, which includes Montana, actively considers environmental justice (EJ) during permitting under the Clean Air Act to assess impacts on minority, low-income, and Indigenous communities (U.S. Environmental Protection Agency [EPA], 2021). While EJSCREEN highlights elevated environmental burdens in specific communities, for example, Butte's low-income rate is 55% compared to the statewide average of 34% (Montana DEQ, n.d.), the overall statewide baseline reveals that EJ communities are geographically dispersed.

Preferred Alternative – The pollinator grant programs, which focuses on planting native flora across agricultural, riparian, suburban, and urban areas, is unlikely to cause direct human health impacts. It does not involve industrial pollutants or infrastructure development. Instead, it offers beneficial impacts to environmental health, such as improved air and water quality, potentially enhancing conditions in EJ communities near project sites by reducing erosion and runoff (Wikipedia, 2023). No significant direct adverse effects on minority or low-income populations are anticipated.

Indirectly, increasing pollinator habitats can have beneficial impacts to ecosystem services, such as clean water filtration and improved aesthetic landscapes, that may disproportionately benefit rural, low-income, or Indigenous residents who rely more heavily on local natural systems and subsistence practices. These improvements may promote environmental equity by offering better health and recreation outcomes. However, caution is necessary during site preparation stages, including herbicide application and tillage, as these activities could temporarily adversely impact nearby waterways. Following herbicide label directions, applying best management practices, and complying with water protection standards can mitigate risks and ensure that indirect benefits are shared equitably across EJ populations.

Cumulatively, statewide pollinator plantings could provide long-term beneficial impacts to environmental justice through environmental improvements in EJ communities by enhancing soil retention, pollinator presence, and landscape aesthetics. These gains would complement ongoing environmental justice efforts by the EPA and Montana DEQ, which prioritize outreach and investment in historically overburdened communities like Butte (EPA, 2023; Montana DEQ, n.d.). With sustained commitment, pollinator projects could help correct long-standing disparities in environmental health through ecosystem restoration and localized ecological gains.

One potential adverse impact to environmental justice is minor, localized, and short-term environmental risk resulting from temporary disturbances, such as herbicide use, tillage, or irrigation, near sensitive water bodies. Mitigation strategies include requiring grantees to follow herbicide label instructions, implement best management practices (BMPs) for soil and water protection, and avoid disturbance of wetlands or streams during site preparation.

Another potential adverse impact involves equitable access to program benefits. Uneven distribution across socio-economic groups could limit access for some EJ communities. To mitigate this, the DNRC and conservation districts will employ outreach strategies proven effective in environmental justice contexts, such as door-to-door materials and neighborhood meetings in low-income areas.

Under Executive Order 12898, the proposed pollinator habitat programs do not pose disproportionately high or adverse health or environmental impacts on minority or low-income populations. It is expected to deliver net beneficial impacts, such as improved ecosystem health and water quality, when implemented with proper safeguards and community engagement. By aligning with DNRC's commitment to the Montana Environmental Policy Act (MEPA), as well as federal and state law, the pollinator programs support Montana's EJ objectives by promoting fair treatment, preventing environmental racism, and expanding community access to environmental benefits in historically overburdened areas (Wikipedia, 2023; U.S. Government Publishing Office, n.d.).

No Action Alternative – Environmental assessment review would be the same for environmental justice but there would be an increased workload and unnecessary additional paperwork for staff running a program using grant funds because they would have to assess impacts to environmental justice for each project through an individual environmental assessment instead of using the institutional knowledge, documentation and management experiences of common site conditions that are being used for these pollinator plantings in this programmatic review (USDA-NRCS, 2021).

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V. FINDING

27. ALTERNATIVE SELECTED:

Alternative 3: Programmatic Environmental Assessment for Pollinator Projects

This is the preferred alternative. Under this Proposed Action, DNRC would use this Programmatic EA for a coordinated approach to help evaluate the potential environmental impacts of several routine potential actions that conservation districts and other partners using DNRC grant funds are likely to choose from when proposing a residential, community or agricultural pollinator habitat improvement project. These categories of actions represent well-established habitat improvement techniques that have been applied throughout the state and have been demonstrated to be effective in restoring and creating new habitats. Because the nature and extent of environmental effects from these well-established techniques are generally well known, monitored and documented, the DNRC has chosen to evaluate them programmatically to gain more consistent environmental impact evaluations, streamline contracting and implementation processes, save costs, and bring the benefits of improved pollinator habitat more quickly.

In general, pollinator habitat planting techniques follow the process described below (USDA-NRCS, 2021) and (Foltz-Jordan, et al.):

- Site Selection for pollinator plantings
    - Agricultural planting site selection will be based on landowner objectives of their on-farm vegetation management plan and will use common considerations including, ability to irrigate, slope, soil texture and fertility, weed presence, livestock grazing plan etc.
    - Urban and rural site selection considerations include shade/sun, ability to irrigate, slope, soil texture and fertility, weed presence, etc.
    - Additional rural considerations include location of septic leach field or buried underground infrastructure.
    - Additional urban and suburban considerations include proximity to foundation, soil water holding capacity and underground utilities.
- Pre-Site Prep

    - There are no additional pre-site prep considerations for agricultural plantings beyond site selection considerations.
    - Before site preparation begins for urban or suburban pollinator plantings the landowner or property owner/manager needs to call the city or county utility service to mark out the utility lines and identify any other buried underground infrastructure before work is started and plants are planted, native plants have long roots that need to be accounted for in pre-site prep planning.
- Site Preparation—Agricultural, Urban and Suburban Sites
    - Herbicide application
        - Glyphosate – Glyphosate is a non-selective, broad-spectrum herbicide that is labeled for a wide variety of uses, including home use. It is absorbed by leaves and translocated throughout the plant and disrupts the photosynthetic process. Herbicide affects a wide variety of plants, including grasses and many broadleaf species, and has the potential to eliminate desirable as well as undesirable vegetation. Some plant selectivity can be achieved by using a wick applicator to directly apply glyphosate to the target plant, thereby avoiding desirable vegetation.
    - Tillage
        - Mechanical treatment of vegetation would match the scale of the plantings and could include the use of small-scale rototillers or larger scale disc harrows and other implements to break up vegetation mats and bring seeds to the surface for germination. Tillage is non-selective and breaks up the roots of both desirable and non-desirable vegetation. All seeds in the seed bed are brought to the surface for germination, including desirable and non-desirables species. Repeated tilling or tilling when the soils are too damp can result in soil compaction, reduced water absorption, and reduced microorganism biodiversity.
    - Solarization
        - Solarization is a weed management strategy that uses clear or opaque plastic sheeting or materials like cardboard to smother out plant competition through intensification of heat from sunlight or blocking out sunlight. The plastic or cardboard ground cover is placed over desired pollinator habitat planting site for up to one year. The plastic magnifies the intensity of the sun, heating the soils. The cardboard blocks out the sun and smothers new vegetative growth. This method is non-selective and damages or kills both beneficial plants and weeds. Depending on the duration of use and temperatures reached, solarization can also temporarily reduce quantities of beneficial microorganisms in the top 1-3 inches of soil.
    - Irrigation
        - Agricultural planting irrigation in the form of pivots, handlines or flood irrigating could be used to water young pollinator plots during establishment and during times of severe drought. Improper irrigation before proper plant establishment could result in water runoff or excessive water use additionally irrigation not

properly timed with pesticide application could result in leaching of pesticides into the ground or surface waters.
        - Irrigation using basic lawn sprinklers or hoses is used to germinate seeds brought to the surface by tillage and is only used when required by weather conditions. Improper irrigation could result in water runoff or excessive water use.
        - Irrigation is also used to water young pollinator plots during establishment and during times of severe drought. Irrigation needs are minimized by the use of drought-tolerant native plants.
- Urban and Suburban Demonstration and Private Landowner Gardens
    - Construction of raised beds
        - Raised beds are occasionally used for pollinator habitat plots in urban areas or where soil conditions are not conducive to direct seeding/planting. Raised beds are constructed with a variety of materials including treated timbers, natural materials including rocks and logs, cement blocks, and metal containers. Generally, soil amendments from offsite, such as purchased topsoil and mulch, are used to fill the bed. Occasionally, as conditions allow, the beds are filled with native soils sources onsite. Raised beds are not likely to exceed 1000 square feet in size.
    - Construction of green stormwater infrastructure like rain gardens or other stormwater runoff mitigation structures.
        - Green stormwater infrastructure such as rain gardens or other similar stormwater runoff mitigation structures can be utilized to provide native plant or pollinator habitats as well as manage runoff, reduce flooding, and increase onsite infiltration. Constructing these features often follow the same or similar methods as described above for pollinator habitat plantings. In addition to the site selection and preparation described above, green stormwater infrastructure will be designed in a way to capture, retain, and infiltrate stormwater. This often includes a shallow depression that is typically designed to infiltrate within 48 hours or less. In areas where the soil composition does not allow for infiltration, soil amendments or underdrains may be used to increase the infiltration rate. Features may only include landscaping and contouring the landscape, or they may also include rocks or other natural items for either aesthetics or to improve infiltration. When green stormwater infrastructure is utilized in a commercial or otherwise similar setting, there may be small, constructed features designed to channel the runoff to the green stormwater infrastructure as well as provide an emergency overflow for excess runoff to prevent flooding.
    - Planting
        - Small scale and large-scale pollinator seed plantings are used to establish new pollinator habitat or restore degraded pollinator habitat. Small scale residential and community habitat plantings are completed in urban and suburban settings. Planned and pre-designed seed planting species lists have been created for grantees by NRCS Plant Materials Statewide Specialists from the Bridger Plant

Materials Center for western and eastern Montana. Large scale seed plantings are designed with technical assistance for site specific planting considerations.

- Containerized or bareroot herbaceous and woody plants are used to establish new pollinator habitat or restore degraded pollinator habitat in residential, commercial and riparian spaces. Planned and designed species lists have been made for these programs for grantees by DNRC, CD, NRCS, WMCC and other plant materials specialists and are available for use by all program participants. Native trees, woody shrubs, herbaceous flowers, and grasses are planted as either containerized stock or as bareroot stock, depending on the size and species of plant.

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29. SIGNIFICANCE OF POTENTIAL IMPACTS:

No SIGNIFICANT ADVERSE Impacts are anticipated from pollinator-related projects funded by DNRC grant program. Potential adverse impacts and suggested mitigation measures are as follows:

GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

There are short-term, direct adverse impacts to soil, however those impacts are limited, temporary, and the level of risk would be dependent on planting size. The largest direct adverse impact of the plantings is exposed, bare soil. This condition is expected for small- and large-scale plantings during site prep, planting and/or seeding, and establishment. The adverse impacts from a failed large scale seed planting would be the highest environmental impact of all the planting types, which is why consistent technical assistance from professional vegetation managers is always a part of grant programs that might support these plantings. The technical assistance offered to the grant participants addresses mitigation strategies like utilizing no-till seeding equipment for appropriate sites and ensuring a properly planned seed mix. This provides some fast-growing non-persistent annuals that can help with soil stability and ground cover early on, so site soils would be protected from wind and water erosion and invasive species invasion.

The adverse impacts from urban and suburban plantings are anticipated to be smaller in size and scope, as soils will be minimally disturbed since seed, herbaceous, and woody containerized plantings rarely cover more than a 500-1000 square foot area, and seed-based community programs seed giveaways are generally capped at 2500 square feet. Additionally, for smaller sites, mulch is prescribed as a best management practice (BMP) and woody mulch or straw is recommended to

mitigate the presence of bare soil by providing cover to promote erosion control, water holding capacity, and soil biology development. Light layers (3-6 inches) of non-site derived mulch or rock that could be suggested to be added to sites to increase organic matter or aid in infiltration will not adversely impact the soil deeper than 12" from the surface. If a small-scale residential seed planting is being done, disturbance occurs within the first few inches of the soil with tillage and shouldn't go further because pollinator seeds are very small and light and germinate best at shallow planting depths, commonly ¼ of an inch. Herbaceous and woody materials are generally planted 6-18 inches deep, depending on the size of the plant materials (plugs-gallon sized), and a mulch layer is added immediately after the plants are installed which limits the time of soil exposure.

WATER QUALITY, QUANTITY AND DISTRIBUTION:

There are potential adverse impacts to surface and groundwater water quality that would be limited to site prep, planting, and establishment for the plantings. There are several different site prep methods to manage existing unwanted vegetation at the beginning of the conversion process but generally three common categories including tillage, solarization, and herbicide application. Herbicides used in initial site prep could pose seasonal issues from runoff that leaches into surface waters or groundwater, depending on application rates, timing of treatment, frequency of chemical use, and depth to groundwater of the planting. If plantings are near wetlands, streams, lakes or other water bodies or habitat types of concern, appropriate permits and buffers are required to ensure the planting will not adversely impact water quality. Once the pollinator plantings are established after site prep, additional herbicide usage, if used as a management tool, will decrease and become more focused on targeted applications versus broadcast indirect spraying of the chemical. Grant programs promoting the plantings use targeted education and outreach in their programming to mitigate overuse of herbicides as well as appropriate timing of application. Additionally, proper site prep methods that follow standard guidelines are included and stressed in all literature and outreach materials associated with pollinator habitat plantings grant work (USDA-NRCS, 2021).

If the planting is in close proximity to surface waters, the bare soil uncovered from the tillage process could experience wind or water erosion, which could create short-term adverse impacts to water quality from increased turbidity. To mitigate these adverse impacts on small scale residential plantings, landowners participating in urban and suburban grant programs are encouraged to use mulch or straw at the time of plantings to immediately cover exposed soil from site prep to limit erosion. Agricultural or landscape level plantings are encouraged to use no-till planting practices, if applicable, to mitigate soil erosion opportunities and appropriate buffers from surface water to limit sedimentation impacts to water sources.

AIR QUALITY:

Pollinator seed and larger forb and woody materials plantings are done under standard guidelines and the activities associated with implementing them have limited and short-term adverse impacts on air quality. There is a short period of time that there could be indirect adverse air quality impacts due to wind erosion from the soil being exposed during the initial site preparation and planting of large-scale seed plantings, but it will be limited and short-term. Larger forb and woody material plantings are relatively small, and it is a common BMP to cover planting sites with mulch or straw immediately at the time of planting to limit soil erosion by wind further limiting direct adverse impacts to air quality.

VEGETATION COVER, QUANTITY AND QUALITY:

In most instances there are only minor, temporary adverse impacts expected during site preparation and planting. There could be minor to major adverse impacts from failed establishment and/or management of large-scale plantings from seed. For some programs, prior to receiving seed or plants, landowners agree to certain terms including but not limited to following all state and federal guidelines for herbicide use, only seeding or planting in appropriate locations, conserving water through proper irrigation methods, and agreeing to allow program partners to conduct monitoring surveys. A potential direct adverse impact to vegetative communities from seed plantings is accidental noxious weed introduction through native seed mixes purchased from commercial seed producers. Pollinator programs try to mitigate the potential for this adverse impact by sourcing their seed from suppliers that are providing weed-free seed. DNRC Conservation Nursery recently started a Montana Native Seed Network Program to start supplying local seed to programs, ensuring availability of ecotypic native species that are produced and processed in local facilities. This would help mitigate new noxious weeds from being introduced by native seed shipments from out of state. Once the seed program is established and seed available, DNRC pollinator programs will utilize this seed source for their grant programs.

Another potential direct adverse impact from large-scale seed plantings arises during establishment of new plants. If the pollinator seeds planted don't germinate and produce groundcover, the site is at a higher risk of noxious weed infestation. DNRC program managers mitigate this risk by providing technical support to grantees for seed species planning as well as containerized plantings. This is accomplished by providing specialized site-specific seed mixes for large-scale plantings, regional species mixes for small-scale urban and suburban seed plantings, and pre-determined lists for urban and suburban containerized plantings developed by Montana native plant and pollinator experts (USDA-NRCS, 2021). The seed mixes can contain native species as well as conservation species, because conservation species are non-invasive, non-persistent species that are known to compete well with noxious weeds. Because native pollinator seeds often have high stratification, requiring several freeze-thaw cycles to germinate, they can be slow to establish and do not always compete well with noxious weeds. The conservation species are included in the seed mixes to act as a temporary cover crop, preventing the incursion of noxious weeds and providing time for the native seeds to germinate and

establish robust populations. Over time the conservation species are outcompeted by the established native species or naturally die off during harsh conditions, resulting in a completely native habitat. Additionally, native seeds chosen for each seed mix are adapted to the local conditions and each mix includes a diversity of seeds to ensure forage and habitat are provided by several species throughout each season (Clausen, Pokorny, Guillion, Gamblin, & Limberger, 2017-2021).

TERRESTRIAL, AVIAN, AND AQUATIC LIFE AND HABITATS:

The grant-funded pollinator planting sites occur almost exclusively in developed urban and suburban areas with non-native plant communities or in degraded agricultural areas that are not part of the designated habitat type management zones. Although these sites are in degraded areas with mainly non-native plants there is a chance that the areas could contain suitable habitat for one of the 441 plant species of concern and 135 potential plant species of concern listed in the 2010 Plant Species of Concern list managed by the Montana Natural Heritage Program (Montana Natural Heritage Program, 2025). Programs mitigate the unintentional destruction of prime habitat or a species of concern by requiring participants to discuss and/or document site conditions and understand existing vegetation conditions before plant materials are provided. If areas of special concern come up with individual sites, there are statewide partners who are native plant experts available to identify plants and ensure no species of concern are being destroyed.

Adverse impacts to terrestrial, avian and aquatic life and habitats will be minor, localized, and temporary during site preparation and planting, with key concerns being pesticide use, soil exposure to wind and water erosion, and the impacts of sediment transfer. These adverse impacts will be ameliorated through mitigation strategies to limit the duration of soil disturbance through methods discussed in prior sections like mulching or using no-till equipment. There can be some indirect negative impacts to pollinator and insect species from site prep if herbicide is used to kill vegetation. To mitigate these impacts to pollinators, program managers provide participants with educational resources to understand the BMPs for using herbicide responsibly (EPA, 2025) (USDA-NRCS, 2021).

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

There could be some indirect adverse impacts to pollinator species from site preparations if herbicide is used to kill established vegetation on site prior to planting or seeding. To mitigate the effects of herbicide use, the pollinators programs provide participants with resources to understand the BMPs for using herbicide responsibly (EPA, 2025).

There will be no additional adverse impacts to the other Threatened, Endangered, Proposed, and Candidate Species or their habitats listed on the current USFWS field office website. There could be additional indirect beneficial impacts from programs that support improving native plant floral

resources on a landscape level throughout the state by supporting more diverse and abundant wildlife habitat.

AESTHETICS:

Adverse impacts to the aesthetic of the landscape will be minor, localized, and short-term occurring mainly during site preparation and planting. Adverse impacts to aesthetics during construction are from the effects of creating exposed soil. To ensure long-term aesthetic quality, all pollinator programs provide additional education and outreach materials on continued Operation and Maintenance (O&M) of the plantings to mitigate a situation that allows the planting to become overrun with non-desirable species.

HUMAN HEALTH AND SAFETY:

Uses of non-selective herbicides, notably glyphosate, present potential direct adverse impact to human health and safety through exposure risk to nearby residents and workers. Though current labeling and EPA assessments indicate low risk when glyphosate is applied properly (EPA, 2024; Bayer, 2023), chemical drift can impair non-target plants and pollinators (Prairie Rivers Network, 2022; Pennsylvania State University, 2022; Wikipedia, 2023). To mitigate these risks, project plans will require adherence to label directions, targeted application practices (e.g., wick applicators), buffer zones near sensitive areas, notifying adjacent landowners, and prohibiting spraying under windy conditions.

Site preparation methods, including tillage, solarization, and installation of planting infrastructure, can pose indirect adverse impacts to health and safety through physical safety hazards. These include tripping over tools, encountering underground utilities, and inhaling dust. Mitigation measures will include mandatory use of utility marking services, enforcing appropriate personal protective equipment (PPE), implementing dust control (e.g., wetting soils on dry, windy days), and ensuring comprehensive safety training and signage for crew and public areas. Breaking ground and disturbing soil can lead to short-term, indirect adverse impacts to human health and safety through increases in pollen, dust, and other particulates, potentially triggering respiratory discomfort. Mitigation strategies include monitoring for high sensitivity individuals, using vegetative stabilization or mulches to limit dust, and timing soil work to minimize community exposure.

INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:

Pollinator projects may have minor, indirect adverse impacts to agriculture by shifting land use intensity. Converting productive cropland to habitat may reduce active production. To mitigate this potential, DNRC will encourage plantings on marginal lands, field margins, and uncropped areas to balance land use with ecological restoration.

QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Pollinator projects have potential for minor, short-term adverse impacts on employment. As seasonal labor is reallocated toward pollinator habitat, other conservation projects (e.g., weed control, erosion management) relying on the same labor pool may experience shortages or delays. Private contractors may need to balance multiple seasonal contracts. Project scheduling will be coordinated across CDs and agencies to stagger resource use, reduce bottlenecks, and maintain availability.

LOCAL AND STATE TAX BASE AND TAX REVENUES:

Some potential adverse impacts could include temporary reductions in taxable agricultural production if land is converted from cropping to habitat. However, this risk is expected to be minimal and can be mitigated by prioritizing planting on marginal or low-productivity lands and by promoting dual-use approaches, such as incorporating habitat into grazing systems or field borders, to maintain agricultural utility while enhancing pollinator support. In urban settings, construction of features like raised beds or rain gardens requires no significant land conversion and is unlikely to affect the local tax base negatively. To maximize benefits and reduce unintended fiscal or land-use conflicts, the program can employ best management practices that include strategic site selection, promotion of native drought-tolerant species that reduce water use, and support for multi-use design. This aligns with broader conservation goals and supports fiscal sustainability across Montana's diverse communities.

DEMAND FOR GOVERNMENT SERVICES:

Pollinator habitat projects may have short-term, limited adverse impacts to traffic and changes to traffic patterns through increased traffic and changes to traffic patterns. Projects often require seasonal delivery of seed, planting materials (containerized stock), equipment, and personnel mobilization for site preparation and planting. These activities are generally limited to short periods in spring or fall and involve light to moderate vehicle traffic, mostly from trucks, tractors, and utility vehicles. Adverse impacts to traffic patterns through traffic increases are therefore temporary and localized. Due to the widespread geographic distribution of projects, often in rural or agricultural areas, no significant sustained increase in traffic volume on Montana's primary roadways is expected. However, localized adverse impacts on secondary or gravel roads may include short-term wear or congestion during peak planting times. Such traffic impacts are minor relative to daily rural traffic volumes and typically occur during off-peak hours. No substantial changes to traffic patterns such as permanent rerouting or traffic signal modifications are anticipated, as pollinator projects do not induce permanent population increases or new residential/commercial developments (MDT, 2023).

LOCALLY ADOPTED ENVRIONMENTAL PLANS AND GOALS:

Potential direct adverse impacts of pollinator grants could arise through misalignment with native plant sourcing or species selection, which could weaken project efficacy. To mitigate this potential adverse impact, all grant-funded projects will be required to follow native seed sourcing standards consistent with the DNRC and USDA NRCS guidelines.

The USDA NRCS Pollinator Habitat Practice (E420A) mandates specific seed compositions and management guidelines. Additionally, the Endangered Species Act (ESA) requires habitat protection for listed species such as the Western bumblebee, under current review for threatened status (USFWS, 2024). Potential direct adverse impacts could arise through risk of noncompliance with NRCS requirements or ESA-protected species. To mitigate this potential adverse impact, project screening will include ESA consultations where needed and use NRCS-compliant native seed mixes.

Conservation District's local work plans regularly include pollinator projects and often host demonstration gardens and school outreach. County floodplain and development permits must be obtained when necessary. Potential direct adverse impacts could arise through planting on regulated lands or without proper notification may cause delays. To mitigate this potential adverse impact, early consultation with county planners and conservation district staff will occur to identify regulatory requirements and integrate local goals.

Urban and suburban green infrastructure goals (e.g., rain gardens, hedgerows) align with pollinator habitat efforts. Cities like Missoula and Bozeman support native landscaping ordinances and waterwise strategies. Potential direct adverse impacts could arise through urban infrastructure conflicts (e.g., underground utilities, zoning codes). To mitigate this potential adverse impact, pollinator programs will require BMPs such as utility marking, setback compliance, and urban demonstration plot guidelines.

On or near Tribal lands or public lands managed by the USFS or BLM, coordination is needed to comply with Tribal Historic Preservation Offices (THPOs) and federal habitat management plans. Potential direct adverse impacts could arise through cultural or ecological disturbance on shared jurisdiction lands. To mitigate this potential adverse impact. Pollinator grant programs will initiate government-to-government consultations with Tribes and adhere to cultural resource review procedures.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Given the nature and scale of the pollinator projects, the direct impacts to recreational access or wilderness quality are expected to be minimal or beneficial. Direct adverse impacts to recreational activities may occur temporarily during the site preparation or planting phase, particularly if habitat projects are installed near popular trailheads, stream corridors, or community parks. Potential disturbances include limited access due to short-term closures, visual disruptions during active work phases, or minor changes to landscape aesthetics. These adverse impacts are temporary and can be mitigated through advanced public notice, scheduling during off-peak recreation times, and signage explaining the conservation purpose of the work.

DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

To mitigate any adverse impacts from localized construction or land use conflicts, especially in urban or suburban areas, the DNRC requires site selection to consider existing infrastructure, including underground utilities and proximity to buildings. Best Management Practices such as utility marking, low-impact site prep methods, and native plant use are implemented to reduce potential disruption.

SOCIAL STRUCTURES AND MORES:

The projects are designed for flexibility, allowing adaptation to site-specific cultural and ecological contexts. Tribal and rural communities can participate in pollinator habitat improvements in a way that aligns with their traditional knowledge and land ethics, particularly when native and culturally important plant species are prioritized in seed mixes and restoration planning. Nevertheless, potential indirect adverse impacts could arise if project planning does not adequately account for traditional land uses or spiritual values, particularly in tribal areas or places of cultural significance. For example, soil disturbance during site preparation or the introduction of certain herbicides may conflict with practices that prioritize soil integrity and non-chemical land management. There is also the risk that dominant conservation paradigms could overshadow Indigenous ecological knowledge or exclude culturally specific goals unless deliberate tribal engagement occurs in project design. To mitigate this potential adverse impact, DNRC will facilitate consultation with tribal governments and community leaders during project planning; select culturally appropriate native species; use non-chemical site prep options when requested; and continue voluntary participation and flexibility in grant implementation.

OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

While the economic and social outcomes of the proposed action are overwhelmingly positive, potential adverse impacts include the financial burden of implementing habitat plantings and the risks of herbicide or water mismanagement. These direct and indirect adverse impacts can be mitigated through DNRC's proposed grant structure, which includes cost-share mechanisms, BMP requirements, and landowner education. For example, improper herbicide application or overwatering during establishment could lead to runoff or reduced efficacy of native plantings. However, these risks are addressed through mitigation measures such as landowner agreements requiring compliance with herbicide labeling laws and water conservation guidelines.

DRINKING WATER AND/OR CLEAN WATER:

To mitigate any adverse impacts to drinking water, wastewater, solid waste and stormwater infrastructure from localized construction or land use conflicts, especially in urban or suburban areas, the DNRC requires site selection to consider existing infrastructure, including underground utilities and proximity to buildings. Best Management Practices such as utility marking, low-impact site prep methods, and native plant use are implemented to reduce potential disruption. Additionally, urban and suburban green infrastructure goals (e.g., rain gardens, hedgerows) align with pollinator habitat efforts. Cities like Missoula and Bozeman support native landscaping ordinances and waterwise strategies.

Potential direct adverse impacts could arise through urban infrastructure conflicts (e.g., underground utilities, zoning codes). To mitigate this potential adverse impact, pollinator programs will require BMPs such as utility marking, setback compliance, and urban demonstration plot guidelines.

ENVIRONMENTAL JUSTICE:

These improvements may promote environmental equity by offering better health and recreation outcomes. However, caution is necessary during site preparation stages, including herbicide application and tillage, as these activities could temporarily adversely impact nearby waterways. Following herbicide label directions, applying best management practices, and complying with water protection standards can mitigate risks and ensure that indirect benefits are shared equitably across EJ populations. One potential direct adverse impact to environmental justice is minor, localized, and short-term environmental risk resulting from temporary disturbances, such as herbicide use, tillage, or irrigation, near sensitive water bodies. Mitigation strategies include requiring grantees to follow herbicide label instructions, implement best management practices (BMPs) for soil and water protection, and avoid disturbance of wetlands or streams during site preparation.

Another potential adverse impact involves equitable access to program benefits. Uneven distribution across socio-economic groups could limit access for some EJ communities. To mitigate this, the DNRC and conservation districts will employ outreach strategies proven effective in environmental justice contexts, such as door-to-door materials and neighborhood meetings in low-income areas.

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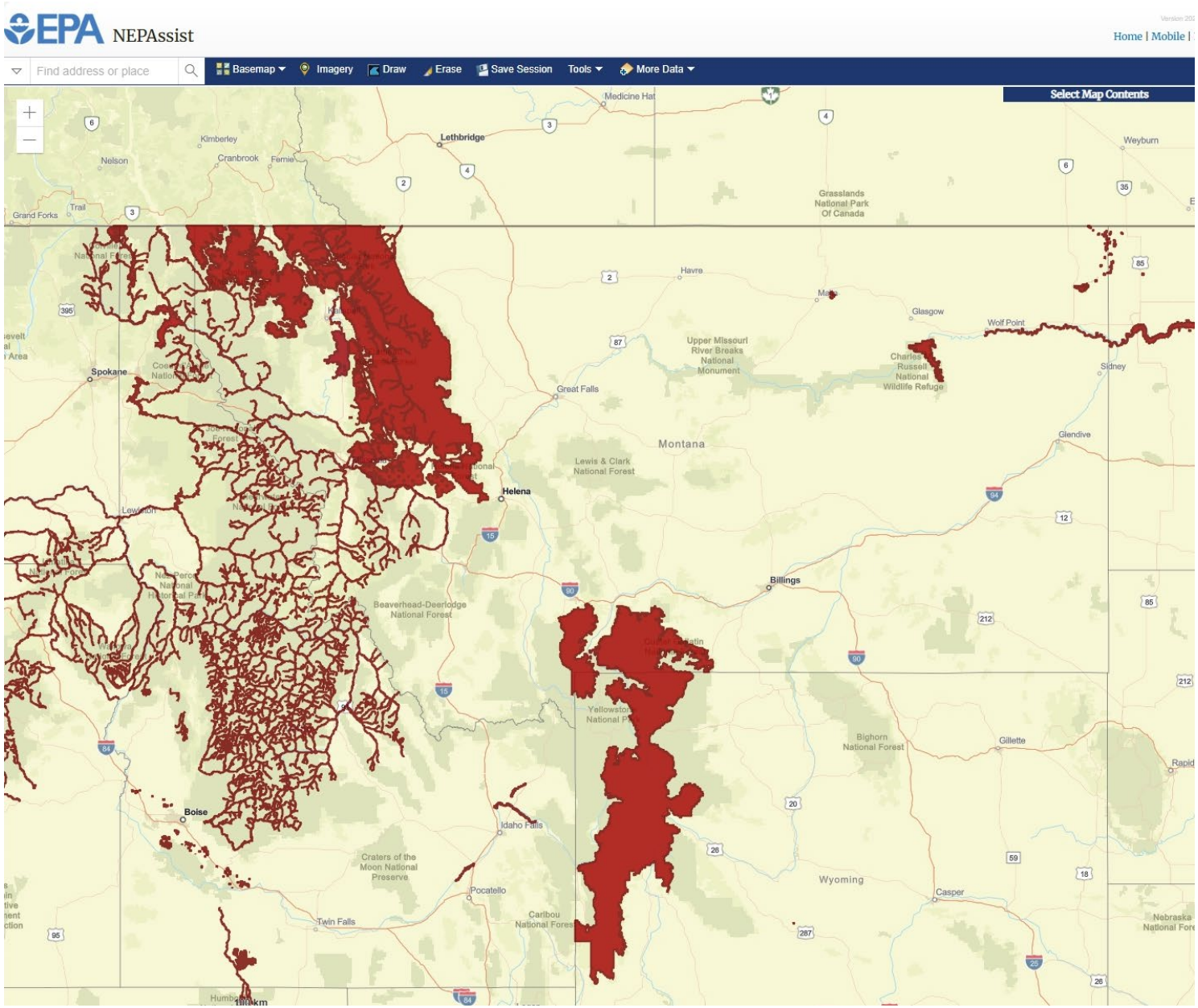
30. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

This is a draft. DNRC concludes that no significant adverse impacts will occur as a result of the proposed project work, and therefore no additional environmental review is required. The draft environmental assessment will be posted for public notice. If comments are received, they will be addressed in the final environmental assessment.

[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

EA Approved By:	**Name:** **Title:**	
Signature:		**Date**: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Grasslands National Park Of Canada
Havre
Glasgow
Wolf Point
Sidney
Upper Missouri River Breaks National Monument
Charles M. Russell National Wildlife Refuge
Great Falls
Montana
Glendive
Lewis & Clark National Forest
Helena
Spokane
Billings
Beaverhead-Deerlodge National Forest
Yellowstone National Park
Bighorn National Forest
Gillette
Rapid
Boise
Idaho Falls
Craters of the Moon National Preserve
Pocatello
Twin Falls
Caribou National Forest
Wyoming
Casper
Nebraska National Fore
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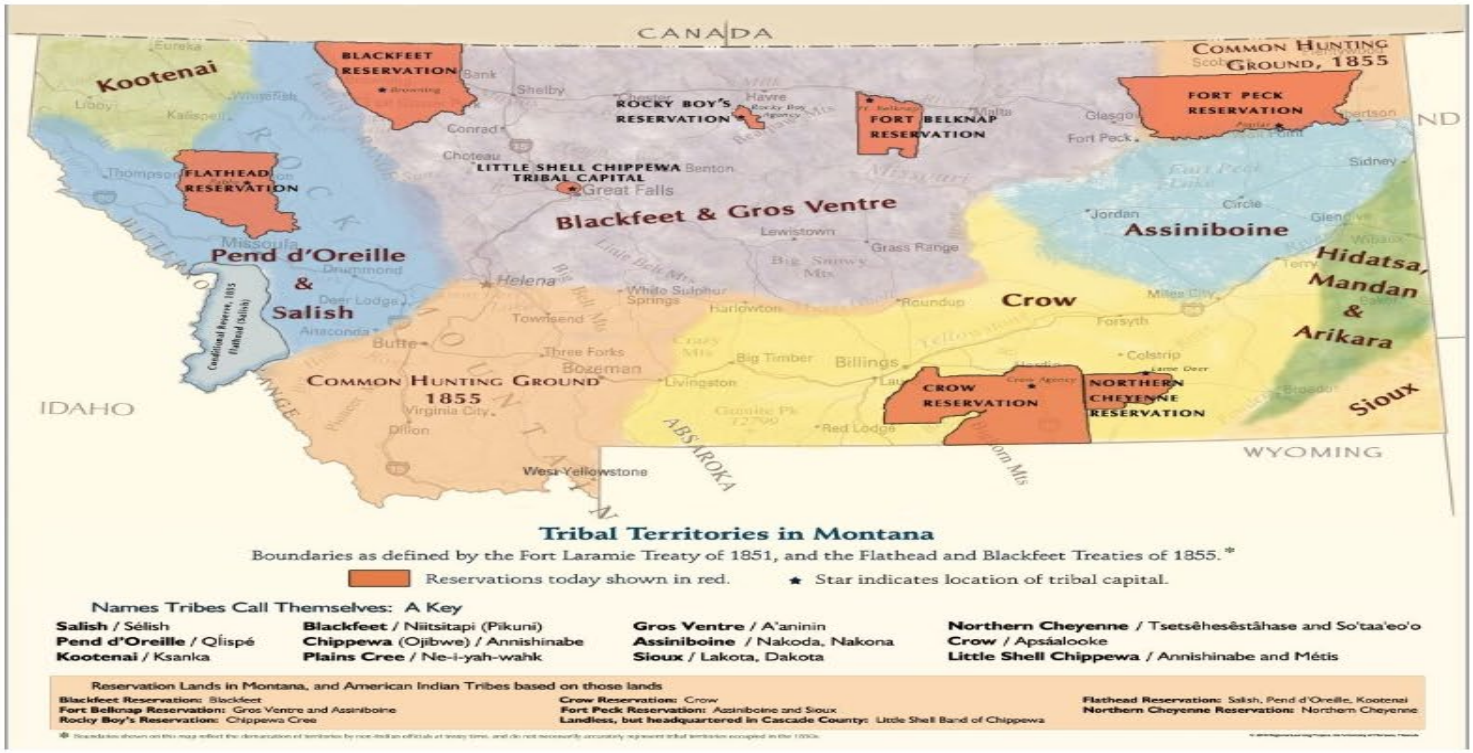
Tribal Territories in Montana

The map below identifies each of Montana's seven American Indian reservations as well as each of the tribes on those lands. As you examine the map further, what else do you notice?



Map long description: This map shows the tribal boundaries defined by the Fort Laramie Treaty of 1851 and the Flathead and Blackfeet Treaties of 1855. The state is generally divided into two common hunting ground regions in the southwest and northeast corners of the state and the following tribal territories:

1. Kootenai – located on the western side of the state
2. Pend d'Oreille & Salish – located on the western side of the state
3. Confederated Reserve, 1855, Flathead (Salish) – located on the western side of the state
4. Blackfeet & Gros Ventre – located in the north-central part of the state
5. Crow – located in the south-central part of the state
6. Assiniboine – located on the eastern side of the state
7. Hidatsa, Mandan & Arikara – located on the eastern side of the state

The tribes and the names they call themselves are listed below the map and include:

1. Salish / Sélish
2. Pend d'Oreille / Qİispé
3. Kootenai / Ksanka
4. Blackfeet / Niitsitapi (Pikuni)
5. Chippewa (Ojibwe) / Annishinabe
6. Plains Cree / Ne-i-yah-wahk
7. Gros Ventre / A'aninin
8. Assiniboine / Nokado, Nakona
9. Sioux / Lakota, Dakota
10. Northern Cheyenne / Tsetsêhesêstâhase and So'taa'eo'o
11. Crow / Apsáalooke
12. Little Shell Chippewa / Annishinabe and Métis

The boundaries for Montana's present-day reservations, their tribal capital, and the tribes located on these lands today are:

1. Flathead Reservation (Pablo) – Salish, Pend d'Orielle, Kootenai tribes
2. Blackfeet Reservation (Browning) – Blackfeet tribe
3. Rocky Boy's Reservation (Rocky Boy Agency) – Chippewa Cree tribe
4. Fort Belknap Reservation (Ft. Belknap) – Gros Ventre and Assiniboine tribe
5. Fort Peck Reservation (Poplar) – Assiniboine and Sioux tribes
6. Northern Cheyenne Reservation (Lame Deer) – Northern Cheyenne tribe
7. Crow Reservation (Crow Agency) – Crow tribe
8. Little Shell Chippewa Tribal Capital (landless, but headquartered in Cascade County) – Little Shell Band of Chippewa

The reservations are all significantly smaller than the original lands occupied by the tribes in the 1850's.

This disclaimer is provided at the bottom of the map: "Boundaries shown on this map reflect the demarcation of territories by non-Indian officials at treaty time and do not accurately represent tribal territories occupied in the 1850's."

Listed species with spatial current range believed to or known to occur in Montana

Notes:

- This report includes species only if they have a **Spatial Current Range** in ECOS.
- **As of 02/13/2015 the data in this report has been updated to use a different set of information.** Results are based on where the species is believed to or known to occur. The FWS feels utilizing this data set is a better representation of species occurrence. Note: there may be other federally listed species that are not currently known or expected to occur in this state but are covered by the ESA wherever they are found; Thus if new surveys detected them in this state they are still covered by the ESA. The FWS is using the best information available on this date to generate this list.
- This report shows listed species or populations believed to or known to occur in MT
- This list does not include experimental populations and similarity of appearance listings.
- Click on the highlighted scientific names below to view a Species Profile.

Listed Species

Sort by group: ☑

CSV

Show All entries

Search:

18 Species Listings

Scientific Name	Common Name	Where Listed	Region	ESA Listing Status
Birds				
Charadrius melodus	Piping Plover	[Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.	5	Threatened
Calidris canutus rufa	rufa red knot	Wherever found	5	Threatened
Grus americana	Whooping crane	Wherever found, except where listed as an experimental population	2	Endangered
Coccyzus americanus	Yellow-billed Cuckoo	Western U.S. DPS	2	Threatened
Conifers and Cycads				
Pinus albicaulis	Whitebark pine	Wherever found	6	Threatened
Fishes				
Salvelinus confluentus	Bull Trout	U.S.A., coterminous, lower 48 states	1	Threatened
Scaphirhynchus albus	Pallid sturgeon	Wherever found	6	Endangered
Acipenser transmontanus	White sturgeon	U.S.A. (ID, MT), Canada (B.C.), Kootenai R. system	1	Endangered
Flowering Plants				
Silene spaldingii	Spalding's Catchfly	Wherever found	1	Threatened
Spiranthes diluvialis	Ute ladies'-tresses	Wherever found	6	Threatened
Insects				
Lednia tumana	Meltwater lednian stonefly	Wherever found	6	Threatened
Zapada glacier	Western glacier stonefly	Wherever found	6	Threatened
Mammals				
Mustela nigripes	Black-footed ferret	Wherever found, except where listed as an experimental population	6	Endangered
Mustela nigripes	Black-footed ferret	U.S.A. (WY and specified portions of AZ, CO, MT, SD, and UT, see 17.84(g)(9))	6	Experimental Population, Non-Essential
Lynx canadensis	Canada Lynx	Wherever Found in Contiguous U.S.	6	Threatened
Ursus arctos horribilis	Grizzly bear	U.S.A., conterminous (lower 48) States, except where listed as an experimental population	6	Threatened
Gulo gulo luscus	North American wolverine	Wherever found	6	Threatened
Myotis septentrionalis	Northern Long-Eared Bat	Wherever found	3	Endangered

Showing 1 to 18 of 18 entries

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