

**Montana Department of Environmental Quality
Draft Environmental Assessment**

Division / Bureau: Water Quality Division: Water Protection Bureau

Proposed Action: The proposed action is the reissuance of the Montana Pollutant Discharge Elimination System (MPDES) “General Permit for Storm Water Discharges Associated with Small Municipal Separate Storm Sewer Systems”, MPDES Permit Number MTR040000 and subsequent authorizations. In this document, this is hereafter referred to as the “General Permit” or “MTR040000”.

Description of the Proposed Action: The Montana Department of Environmental Quality (DEQ) is proposing to reissue MTR040000. The proposed reissuance will be effective January 1, 2017, through a five-year permit cycle and expire December 31, 2021. MTR040000 is the permitting mechanism developed to provide and continue coverage (or authorizations) for small municipal separate storm sewer systems (small MS4) that require permit coverage for their discharges of storm water into state waters. Small MS4s within Montana that have US Census Bureau designated urbanized area and require MPDES permit coverage include the City of Billings, portions of Yellowstone County outside the City of Billings, the City of Missoula, portions of Missoula County outside the City of Missoula, the City of Great Falls, and portions of Cascade County located outside the City of Great Falls. Also, DEQ designated the following cities: Helena, Butte, Bozeman, and Kalispell; and the following systems similar to separate storm sewer systems in municipalities: Malmstrom Air Force Base, University of Montana-Missoula, Montana State University-Bozeman, and Montana Department of Transportation (MDT), as small MS4s that require MPDES permit coverage. MDT applied for a MPDES Individual MS4 Permit to maintain required storm water permit coverage in November 2014 and is not authorized under the expiring General Permit. With the reissuance of MTR040000, DEQ will continue to regulate the storm water discharges from the above mentioned small MS4s to receiving waterbodies statewide. MTR040000 requires the small MS4s to inventory their storm water sewer infrastructure to include mapping of all outfall locations and the names and location of all surface waters that receive discharges from those outfalls. As part of this environmental assessment, Appendix A provides US Census Bureau maps to summarize boundaries of small MS4s and receiving waterbodies.

DEQ will implement the reissuance of MTR040000 by requirements established in the General Permit applicable to the subsequent authorizations of small MS4s required to obtain coverage for their storm water discharges to state waters. Small MS4 authorizations under the proposed reissuance of MTR040000 require review of an application package as outlined by the General Permit. The reissuance of MTR040000 proposes changes and improvements to each regulated small MS4 through implementation of a more prescriptive Storm Water Management Program (SWMP), specific requirements for discharges to impaired waterbodies, and increased storm water discharge monitoring. The **Draft Fact Sheet** for the proposed reissuance of **MPDES Permit Number MTR040000** provides explanation of the proposed permitting approach in **Part X** and proposed permit changes in **Part IV**. The Draft Fact Sheet provides rationale for Draft Permit and is a reference document for the Draft Environmental Assessment.

DEQ is considering the reissuance of MTR040000 because DEQ will continue to administer a pollutant discharge permit system which is compatible with the national pollutant discharge

elimination system as established by the U.S. Environmental Protection Agency pursuant to section 402 of the Federal Clean Water Act. Furthermore, the Montana Water Quality Act outlines the duties of DEQ including the issuance of permits to discharge wastes into state waters (75-5-402, Montana Code Annotated (MCA)). DEQ's duties to issue permits extends to general permits for specific categories of point source discharges, as determined appropriate by the Board of Environmental Review, to include point source discharges of storm water (Administrative Rules of Montana (ARM) 17.30.1341). The federal storm water Phase II Rules expanded the scope of storm water permitting to include small MS4s and DEQ has regulated storm water discharges from small MS4s pursuant to ARM, Title 17, Chapter 30, Subchapters 11, 12, and 13. Additional applicable regulations include ARM, Title 17, Chapter 30, Subchapters 2, 6, and 7. The proposed reissuance is the fourth iteration of MTR040000 and DEQ reaffirms that the General Permit is an effective and efficient permitting mechanism for storm water discharges from small MS4s. Also, this Draft Environmental Assessment of the proposed action has been prepared in accordance with ARM, Title 17, Chapter 4 Procedural Rules, Subchapter 6 Montana Environmental Policy Act, and utilized the reference documents from U.S. EPA Stormwater Phase II Finale Rule Fact Sheet Series to include the Stormwater Phase II Proposed Rule Overview Fact Sheet 1.0; and the Small MS4 Program Fact Sheets 2.0- 2.9.

Purpose and Benefits of the Proposed Action: The purpose of the issuance of the General Permit, other than satisfying federal and state rules, is to regulate the storm water discharges from small MS4s. Storm water discharges from MS4s in urbanized areas are a concern because of the concentration of pollutants found in these discharges. Concentrated development in urbanized areas substantially increases impervious surfaces, such as city streets, driveways, parking lots, and sidewalks, on which pollutants from concentrated human activities settle and remain until a storm event washes them into nearby storm drains. Common pollutants include pesticides, fertilizers, oils, salt, litter and other debris, and sediment. Another concern is the possible illicit connections of sanitary sewers, which can result in fecal coliform bacteria entering the storm sewer system. Storm water runoff picks up and transports these and other harmful pollutants, then discharges them to waterways via storm sewer systems. When left uncontrolled, these storm water discharges can result in fish kills, the destruction of spawning and wildlife habitats, a loss in aesthetic value, and contamination of drinking water supplies and recreational waterways that can threaten public health. A detailed description of environmental effects from storm water discharges, as well as the programs designed to mitigate these effects, can be found in *Urban Storm Water Management in the United States* (National Research Council, 2008).

Issuance of MTR040000 will fulfill the purpose of regulating storm water discharges from small MS4s through the requirements for permittees authorized under this General Permit. The core requirement of regulating storm water discharges through MTR040000 is for permittees (small MS4s with permit coverage) to develop, maintain, and enforce a Storm Water Management Program (SWMP). The SWMP is a program comprised of six elements (minimum control measures) that, when implemented in concert, are expected to result in significant reductions of pollutants discharged into receiving waterbodies. The six minimum control measures: Public Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection & Elimination, Construction Site Storm Water Runoff Control, Post-Construction Site Storm Water Management in New and Redevelopment, and Pollution Prevent/Good Housekeeping for Permittee Operations. DEQ outlines clear, specific, measurable, and enforceable requirements for the minimum control measure. Then the small MS4s will select best management practices (BMPs) to satisfy the requirements of each of the six minimum control measures above. DEQ provides the flexibility for permittees to utilize their

location-specific discretion to self-determine appropriate BMPs to control pollutant sources, evaluate and modify the selected BMPs. Through the iterative process of DEQ reissuing MTR040000 and the requirements derived from an adaptive management approach for storm water permitting, the permittees consistently improve storm water quality, and consequently, the overall benefit of the proposed action is the improved quality of receiving waterbodies statewide.

Listing of Additional Government Agencies with Overlapping or Additional Jurisdiction, or Environmental Review Responsibility for the Proposed Action (and the permits, licenses, and other authorizations required):

No other additional government agencies have required environmental review responsibilities for the proposed action. In accordance with ARM, Title 17, Chapter 4 Procedural Rules, Subchapter 6 Montana Environmental Policy Act, DEQ conducts the environmental review process for the proposed reissuance of MTR040000. Additional government agencies with overlapping or additional jurisdiction for the proposed action include local city and county governments that are required to regulate storm water discharges from their small MS4s. The overlapping jurisdiction resulted from the first issuance of MTR040000 that required regulated small MS4s to create ordinances as part of their Storm Water Management Program. Now, the proposed action to reissue MTR040000 (the fourth iteration of the General Permit) will maintain overlapping jurisdictions of these localized governments in strict regards to discharges of storm water to receiving waterbodies only. Also, local water quality districts may have overlapping jurisdiction, but this is not a direct result of the proposed action. Water quality districts are not regulated under the proposed action, but water quality districts may assist a small MS4 in completing requirements of the proposed action.

Evaluation of Affected Environment and Impacts of the Proposed Project:

Environmental Assessment for Potential Effects to the Physical Environment	
Topic	Evaluation
Terrestrial, avian, and aquatic life and corresponding habitats	<p>The proposed action is protective of receiving waterbodies from pollutants transported by storm water via storm sewer systems. Therefore, aquatic life and habitat will have a positive correlation with MPDES General Permit MTR040000 and the subsequent authorizations covered under this General Permit. MTR040000 focuses on storm water from urban areas with development and concentrated areas of human populations.</p> <p>Terrestrial and avian life and corresponding habitat may be positively affected because post-construction runoff requirements emphasize both storm water retention/detention and vegetative best management practices (BMPs). Retention or detention BMPs control storm water by gathering runoff in to sediment basins such as wet ponds, dry basins, or multi-chamber catch basins. These sediment basins function as a storm water impoundments and sediment accumulation reservoirs that may become new or increased habitat within an urbanized</p>

	<p>area. Vegetative BMPs are landscaping features that, with optimal design and good soil conditions, remove pollutants, and facilitate percolation of runoff, thereby promoting healthier habitats, and increasing aesthetic appeal. Examples include grassy swales, filter strips, artificial wetlands, and rain gardens. Vegetative BMPs may increase and enhance terrestrial and avian life and corresponding habitats in an urbanized area.</p>
<p>Sage Grouse Executive Order No. 12-2015</p>	<p>Cities and towns do not provide sagebrush habitat for sage grouse-the land has already been converted to human-related land uses. Not applying the Executive Order to areas within the boundaries of incorporated cities and towns will not exacerbate threats to sage grouse. Furthermore, even if the regulatory mechanism were to be applied within the city limits, overall threats to sagebrush habitats will not be reduced nor will habitats be enhanced through mitigation or restoration efforts. The Montana Sage Grouse Oversight Team granted a geographically-limited exception to the consultation requirements and stipulations for any activity that would wholly occur within the boundaries of incorporated cities and towns as of March 28, 2016. The cities of Billings, Bozeman, Butte, Great Falls, Helena, Kalispell, and Missoula are regulated Small MS4s and the geographic area of permit coverage includes the entirety of the municipal incorporated boundaries. The counties of Cascade, Missoula, and Yellowstone are regulated only within the designated urbanized area in accordance with the 2010 U.S. Census. DEQ concludes that the boundaries of urbanized areas of the counties follow the same rationale of boundaries of incorporated cities. Small MS4 counties will not exacerbate threats to sage grouse habitat. Malmstrom Air Force Base, Montana State University, and the University of Montana (Missoula) are all located within the boundaries of incorporated cities and therefore fall within the exception to the consultation requirements.</p>
<p>Water quality, quantity, and distribution</p>	<p>The proposed action will continue the beneficial effects of regulated small MS4s maintaining and updating a storm water management program designed to reduce the discharge of pollutants to the maximum extent practicable, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act. A small MS4 Storm Water Management Program is comprised of six elements that, when implemented in concert, are expected to result in substantial reductions of pollutants discharged into receiving waterbodies. The proposed action requires small MS4s to self-monitor for specific pollutants typical</p>

	<p>for urban storm water runoff. The monitoring data allows the small MS4s to evaluate and update their Storm Water Management Programs based on the results and continuously improve the water quality of the storm water from their urbanized area. MTR04000 will not directly affect water quantity. The post-construction run-off requirements include infiltration, evapotranspiration, and/or the capture for reuse the post-construction runoff generated from the first 0.5 inches of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation. Therefore, water can be infiltrated back into the aquifer, evapotranspired back into the water cycle, or reused. These requirements mediate the known increase of the quantity of water delivered to a receiving waterbody during storms from urbanized area's impervious surfaces disrupting the natural cycle of gradual percolation through vegetation and soil. The proposed action is focused on water quality and should not affect distribution.</p>
<p>Geology, and Soil quality, stability, and moisture</p>	<p>Storm water runoff is generated when precipitation from and snowmelt event flows over land or impervious surfaces and does not percolate into the ground. Small MS4s include increased impervious surface because their boundaries are designated regarding urbanized area. Storm water runoff from construction sites within urbanized areas may carry sediment (and increase erosion) from the disturbed project sites.</p> <p>The proposed action promotes the stability and retention of native soils through construction and post-construction runoff control requirements as part of a small MS4's storm water management program. These requirements include sediment and erosion controls for areas of disturbance (or exposed soils). Sediment control BMPs are designed to prevent soil particles already being carried in storm water from discharging from a construction site such as silt fence, straw wattles, earthen berms, inlet protection, sediment traps, and sediment basins. Erosion control BMPs usually consist of a ground cover BMP used to prevent any of the forms of erosion from occurring such as surface roughening, diversion ditches, slope drains, velocity checks, and preservation of natural vegetation or vegetative buffers.</p> <p>The geology of permitted MS4s may have already been affected because these permitted areas are already developed or urbanized areas. The regulation of storm water is specific to "surface" water quality, and the nature,</p>

	<p>transmissivity, and hydraulic conductivity of rock should not be affected by the proposed action. Therefore, issuance of MTR04000 would mitigate potential erosion or sediment migration and support beneficial effects within this category for these regulated urbanized areas throughout Montana.</p>
Vegetation cover, quantity, and quality	<p>MTR04000 focuses on storm water from urban areas with development and concentrated areas of human populations. Much of the original vegetation has already been altered through urbanization, but the proposed action includes options for regulated small MS4s to increase, restore, and maintain vegetative BMPs within their urbanized boundaries. These vegetative BMPs are landscaping features that, with optimal design and good soil conditions, remove pollutants, and facilitate percolation of runoff, thereby promoting healthier habitats, and increasing aesthetic appeal. Vegetative BMPs may include grassy swales, filter strips, artificial wetlands, and rain gardens; and these increased and maintained landscaping features may improve and enhance vegetation quantity and quality in the urbanized area.</p>
Aesthetics (visual quality, nuisances, odors, noise)	<p>As discussed above in the benefits of the proposed action to terrestrial, avian, and aquatic life and corresponding habitats, and vegetation cover, quantity, and quality, the proposed action may increase the visual aesthetic appeal of regulated small MS4s and urbanized areas within their boundaries. The proposed action to continue to regulate storm water within the permitted MS4 boundaries should not affect noise within an urbanized area. The proposed action may have a beneficial effect on odors if these odors originate from contaminants conveyed through storm water in state surface waters or from illicit discharges.</p>
Air Quality	<p>Issuance of MTR04000 should have no direct effect on air quality. The proposed action focuses on the water quality of storm water discharged from urbanized areas to receiving waterbodies. Disturbed areas within construction sites have the potential for dust based on increased, temporary exposed soils, but these sites are required to implement and maintain BMPs to manage sediment on site and potentially leaving their site.</p>
Unique, endangered, fragile, or limited environmental resources to include endangered species and species of concern	<p>The proposed action is protective of receiving waterbodies from pollutants transported by storm water via storm sewer systems. Therefore, aquatic life and habitat will have a positive correlation with MTR040000 and the subsequent authorizations covered under this General Permit. MTR04000 focuses on storm water from urban areas with development and concentrated areas of human populations.</p>

	<p>The proposed action includes options for regulated small MS4s to increase, restore, and maintain vegetative BMPs (as discussed in vegetation cover, quantity, and quality) that may benefit terrestrial and avian life and corresponding habitat. Summarized in Appendix B are vegetative communities, and terrestrial, avian, and aquatic habitats that are potentially located within the boundaries of the regulated small MS4s. Overall, the proposed action may have a beneficial effect on unique, endangered, fragile, or limited environmental resources because MTR04000 focuses on improving water quality and encourages increased vegetation in urbanized areas.</p>
<p>Historical and archaeological sites</p>	<p>The proposed action includes development and implementation of (1) a construction project plan review process focused on sediment and erosion controls, (2) a construction inspection process for implemented sediment and erosion controls, and (3) a construction site inventory. Identification of historical and archaeological sites located within planned urbanized area development or redevelopment may occur based on federal, state, or local laws, ordinances, or other requirements outside of the focus of the proposed action. Issuance of MTR04000 should have no direct effect on identified historical and archaeological sites. The proposed action may have a secondary beneficial effect of reduced or controlled erosion near or within a historical or archaeological site (if development or redevelopment is approved) because regulated small MS4s will require erosion and sediment controls on all regulated construction projects within their boundaries and ensure that these controls are included in site plans as well.</p>
<p>Demands on environmental resources (land, water, air, and/or energy use)</p>	<p>The proposed action will continue the beneficial effects of regulated small MS4s maintaining and updating a Storm Water Management Program designed to reduce the discharge of pollutants to the maximum extent practicable, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act. Therefore, the proposed action is intended to prevent, plan, and mitigate the potential negative effects of pollutants carried by storm water within urbanized areas and reduce the demand on resources that would result from uncontrolled storm water discharges (like contamination of local waterbodies, fish kills, and the destruction of spawning and wildlife habitats) and any consequential remediation efforts.</p>
<p>Cumulative and Secondary Effects Analysis: The defined spatial boundaries of the proposed action are visually provided in Appendix A: 2010 United States Census Bureau Urban Area Reference Maps. Also, the General Permit outlines the actual permit area of permitted MS4s under the 2015-</p>	

Issued General Permit to include the following: the cities of Billings, Bozeman, Butte, Great Falls, Helena, Kalispell, and Missoula; the counties of Cascade, Missoula, and Yellowstone; and the other permittees of Malmstrom Air Force Base, Montana State University, and the University of Montana (Missoula). The proposed action is protective of receiving waterbodies within these spatial boundaries from pollutants transported by storm water via storm sewer systems located within the identified urbanized areas. The proposed action will have a net beneficial (positive) cumulative effect on storm water quality. MTR04000 proposes to continue regulating storm water discharges because unregulated and uncontrolled urban storm water often has interrelated and cumulative effects such as degraded water quality and increased water quantity joining to impact terrestrial, avian, and aquatic habitat and environmental resources. Urban storm water cumulative effects are more easily documented through impacts to habitat and aquatic life rather than changes in the water column chemistry because storm water from municipal discharges combine with non-point discharges to receiving waterbodies. All sources of pollutants can cumulatively impact receiving waterbodies. The proposed action maintains and further develops the current Storm Water Management Programs for regulated small MS4s, and thus, continues to mitigate and reduce the cumulative effects of unregulated urban storm water into receiving waterbodies. Furthermore, the General Permit requires small MS4s to identify impaired receiving waterbodies and their approved contributions to the impairments. Then, the small MS4s will develop controls and a strategy to effectively manage pollutants of impairments. The Department upholds its position that Montana’s surface water quality standards can be maintained for discharges from small MS4s through water quality-based controls and implemented with BMPs as proposed by this action of the reissuance of MTR04000. The General Permit is an iterative process of adaptive management of the small MS4 storm water program, and future proposed reissuances will continue to mitigate and reduce potential negative cumulative effects from unregulated urban storm water.

Environmental Assessment for Potential Effects to the Human Population	
Topic	Evaluation
Social structures	The proposed action will have no impacts on this category.
Cultural uniqueness and diversity	The proposed action will have no impacts on this category.
Access to and quality of recreational and wilderness activities	The proposed action will have no impacts on the access to recreational and wilderness activities. As discussed above in aesthetics and vegetation cover, quantity, and quality, the proposed action may enhance (benefit) the quality of recreational and wilderness activities of regulated small MS4s and urbanized areas within their boundaries.
Local and state tax base and tax revenues	The requirements within MTR04000 are carried out by municipalities which are funded through taxes. In order to meet the requirements, a small MS4 may assess budgets, allocation of resources, and/or propose a new or increased source of funding. In return and if applicable, these potential effects will result in a supported Storm Water Management Program. If MTR04000 is not reissued, municipalities may have to allocate resources to mitigate any negative impacts of uncontrolled urban storm water runoff into receiving waterbodies. The analysis of this category concludes that the proposed action may have a

	beneficial effect.
Human Health	<p>Urban storm water runoff may affect human health from bacteria and disease causing bacteria carried in storm water and conveyed to receiving waterbodies used for water supplies, fishing, and recreation. Issuance of the General Permit, and subsequent maintenance, and further development and implementation of storm water management programs may potentially neutralize the effects of uncontrolled urban storm water. The proposed action includes requirements for public education and outreach that raise awareness to audiences about the behaviors and activities that have the potential to pollute storm water discharges (ie sources of bacteria and disease like pet waste), and motivate action to change behaviors to reduce pollutants in storm water runoff. Also, the proposed action includes requirements for illicit discharge detection and elimination (IDDE) program to detect and eliminate illicit discharges into storm sewer systems that will reach receiving waterbodies. The IDDE program is designed to track, investigate, eliminate, and abate any illicit discharges reported or discovered to include discharges negatively affecting human health. Analysis of the proposed action concludes that continued storm water regulation may have a beneficial effect on human health.</p>
Quantity and distribution of employment	<p>As discussed above in local and state tax base and tax revenues, the MTR040000 requirements may consequently cause a small MS4 to assess budgets, allocation of resources, and/or propose a new or increased source of funding. This assessment may include the need for additional internal or external services that may result in a potential minor increase in local employment and economy. Also, tourism and recreational fishing is a source of employment through guide services and gear distribution and retailers. The issuance of the General Permit protects receiving waterbodies which inadvertently protects this sector of Montana employment. Analysis of the proposed action relating to quantity and distribution of employment concludes that the continued regulation of storm water may have a beneficial effect on this category.</p>
Distribution and density of population and housing	The proposed action will have no impacts on this category.
Demands for government services	<p>Demand on the Department exists for continuing to implement discharge permitting under this General Permit, but storm water permitting is a fee-funded program. By minimizing potential impacts to state surface waters through storm water discharge permitting, there may be a potential beneficial effect on other government services</p>

	<p>through the avoidance of respective water pollution and related issues. Regulated small MS4s have to allocate budgets and resources towards the permitting requirements. The proposed action is the fourth iteration of the General Permit and small MS4s have developed programs (using allocated budgets and resources) based on previous iteration permitting requirements. The continued regulation of storm water is beneficial to the physical environment (discussed above) and human health (discussed above) within the boundaries of a small MS4s and alleviates the allocation of budget and resources to other local governmental agencies/departments that would potentially mitigate the negative effects of unregulated storm water.</p>
<p>Agricultural, industrial, and commercial production and activity (to include transportation)</p>	<p>The proposed action will have no impacts on agricultural, industrial, and commercial production. The proposed action is in relation to urbanized areas, so no impacts to agricultural activity within permitted boundaries have been determined. The proposed action may have an effect on industrial and commercial activity within the boundaries of regulated small MS4s. Proposed requirements for further development of the IDDE program include the prioritization of industrial drainage areas for dry weather screening to detect illicit discharges. Also, small MS4s will continue monitoring from a location representative of commercial/industrial sector within their boundaries to assess the effectiveness of their Storm Water Management Program. The effect of the proposed action is increased awareness of industrial and commercial activities within the small MS4s, and the abatement of pollutants if such activities are illicitly discharging from their facilities and areas of operation. Analysis of the proposed action concludes that regulated storm water may have a beneficial effect on the local water quality from an IDDE program that addresses industrial and commercial activities.</p>
<p>Locally adopted environmental plans and goals</p>	<p>The proposed action is the fourth iteration of the General Permit. Previous iterations of MTR040000 included requirements for the IDDE program to the extent allowable for small MS4s to enact an ordinance or other regulatory mechanism to prohibit illicit discharges. Also, the construction and post-construction requirements have required the small MS4s, to the extent allowable, to adopt an ordinance or other regulatory mechanism to effectively require erosion and sediment controls and controls of other construction-related pollutant sources on construction projects within their boundaries and implement appropriate enforcement procedures and actions. Through the iterative</p>

	<p>process of the reissuance of MTR040000 and the adaptive management approach of storm water permitting, DEQ influences the environmental plans and goals of small MS4s that will in return improve storm water quality. Analysis of the proposed action concludes that local environmental plans and goals may have a beneficial effect on the local water quality because of locally adopted ordinances or other regulatory mechanisms regarding storm water, and DEQ’s environmental foresight with administering the fourth iteration of MTR040000.</p>
<p>Other social and economic circumstances</p>	<p>No further human population categories require analysis for the proposed action.</p>
<p>Cumulative and Secondary Effects Analysis: The defined spatial boundaries of the proposed action are the same as described above in the Physical Environment Cumulative and Secondary Effects Analysis. The proposed action is protective of receiving waterbodies within these spatial boundaries from pollutants transported by storm water via storm sewer systems located within the identified urbanized areas. The proposed action will have a net beneficial (positive) cumulative effect on storm water quality. MTR04000 proposes to continue regulating storm water discharges because unregulated and uncontrolled urban storm water often has interrelated and cumulative effects such as degraded water quality to impact human health through illness from consumption of polluted water supplies, direct contact during recreational activities like swimming and fishing, and consumption of contaminated fish. Secondary effects of polluted waterbodies from unregulated and uncontrolled storm water may include a negative impact on tourism and recreational fishing and the employment associated with these industries. The proposed action maintains and further develops the current Storm Water Management Programs for regulated small MS4s, and thus, continues to mitigate and reduce the cumulative and secondary effects of unregulated urban storm water into receiving waterbodies. As discussed above in the Physical Environment Cumulative and Secondary Effects Analysis, the General Permit requires small MS4s to identify impaired receiving waterbodies and their approved contributions, and develop a strategy to effectively manage pollutants of impairments. The Department upholds its position that Montana’s surface water quality standards can be maintained for discharges from small MS4s through water quality-based controls and implemented with BMPs as proposed by this action of the reissuance of MTR04000. The General Permit is an iterative process of adaptive management of the small MS4 storm water program, and future proposed reissuances will continue to mitigate and reduce potential negative cumulative and secondary effects from unregulated urban storm water.</p>	

Description and analysis of reasonable alternatives to a proposed action (whenever alternatives are reasonably available and the implementation of these alternatives); and selection of the preferred action.

The proposed action is the reissuance of the Montana Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Small Municipal Separate Storm Sewer Systems. The reasonable alternative to reissuance is to not reissue the General Permit. The Department concludes that not reissuing the General Permit entails allowing the General Permit to expire and then General Permit coverage is no longer available for regulated small MS4s. The Department has labeled this alternative action as a “No Action Alternative” because no action would be taken in the reissuance of the General Permit that subsequently expires and alternative permit coverage would still be required for regulated small MS4s that were underneath the hypothetical, expired General Permit. The Department discusses this alternative and selects the preferred action below.

No Action Alternative: Without reissuance of MTR04000, the third iteration and active General Permit would expire effective midnight, December 31, 2016. All permitted small MS4s would be required to obtain individual permit coverage. The individual permit application process would be (1) more expensive for the small MS4s with the same baseline six minimum control measures and (2) delay updated MS4 program requirements from being implemented as the proposed action requirements are already outlined for the upcoming five years. The federal storm water Phase II Rules were designed to accommodate general permit issuance and the small MS4 General Permit is the typical approach being used by the EPA and other states. The General Permit enables (1) DEQ the ability to provide an enforceable statewide regulatory mechanism for storm water discharges from small MS4s where application and permit coverage can be effectively managed and expedited and (2) the permitted small MS4s can still utilize their location-specific discretion to self-determine appropriate BMPs to control pollutant sources. *The No Action Alternative is not preferred.*

Issuance of the General Permit: Per DEQ’s duties to issue general permits for specific categories of point source discharges including discharges of storm water and the federal storm water Phase II Rules, the reissuance of MTR04000 will continue to regulate storm water discharges from currently permitted small MS4s and continue to prevent violations of water quality standards to receiving waterbodies.

The proposed action requires small MS4s to maintain, update, and enforce a Storm Water Management Program (SWMP) that includes management practices, control techniques, systems, designs, good standard engineering practices, and such other provisions necessary to reduce the discharge of pollutants from the permitted small MS4 to the maximum extent practicable. The small MS4s will effectively manage their SWMP to include the six minimum control measures: Public Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection & Elimination, Construction Site Storm Water Runoff Control, Post-Construction Site Storm Water Management in New and Redevelopment, and Pollution Prevent/Good Housekeeping for Permittee Operations. Implementation of BMPs consistent with the six minimum control measures above and all other provisions, including monitoring, reporting, and special conditions for impaired waterbodies and implementation of wasteload allocations, of the General Permit will eliminate or minimize the migration of pollutants to surface waters to the maximum extent practicable.

Consistent with EPA's Phase II Final Rule, the Department has determined that the achievement of maximum extent practicable is an iterative and evaluative process. The Department will reassess this standard with each permit renewal cycle and this standard will continually adapt to current MS4 conditions and BMP effectiveness. *To facilitate this iterative process, the preferred action is the reissuance of the fourth iteration of MTR040000 (for another five-year cycle) and this action will continue to provide an effective regulatory mechanism for storm water discharges from small MS4s.*

Listing and evaluation of mitigation, stipulations, and other controls enforceable by the agency or other government agencies: The Montana DEQ administers the Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity to regulate storm water discharges from industrial activities, and mining and oil and gas activities. This General Permit requires control measures and a storm water pollution prevention plan. Certain permitted facilities and activities may be located within the boundaries of small MS4s and their storm water may discharge into the storm sewer system or the same waterbodies. Receiving waterbodies from small MS4 storm water and storm water permitted from industrial, mining, or oil and gas activities may benefit from the controls required by the Multi-Sector General Permit. The Montana DEQ administers the General Permit for Storm Water Discharges Associated with Construction Activity to regulate construction activities that result in a total area of ground disturbance of equal to or greater than one acre. This General Permit requires control measures and a storm water pollution prevention plan. Certain construction sites may be located within the boundaries of small MS4s. Requirements associated with these two other storm water General Permits may overlap or supplement requirements of the proposed action.

Appropriate level of analysis and rationale: This programmatic review / environmental assessment is the appropriate level of evaluation because the proposed action continues to mitigate and reduce effects of unregulated urban storm water into receiving waterbodies and does not consequently result in potential significant impacts on the physical environment and the human population. Further analysis through an environmental impact statement is not required for the proposed action to reissue MTR040000.

Listing of other agencies and groups that have been contacted or have contributed information: Montana Natural Heritage Program, Montana State Historic Preservation Office

EA Prepared by: Carolina Davies, September 2016

Approved by:

Jon Kenning, Chief

Date

Appendix A: 2010 United States Census Bureau Urban Area Reference Maps

LEGEND

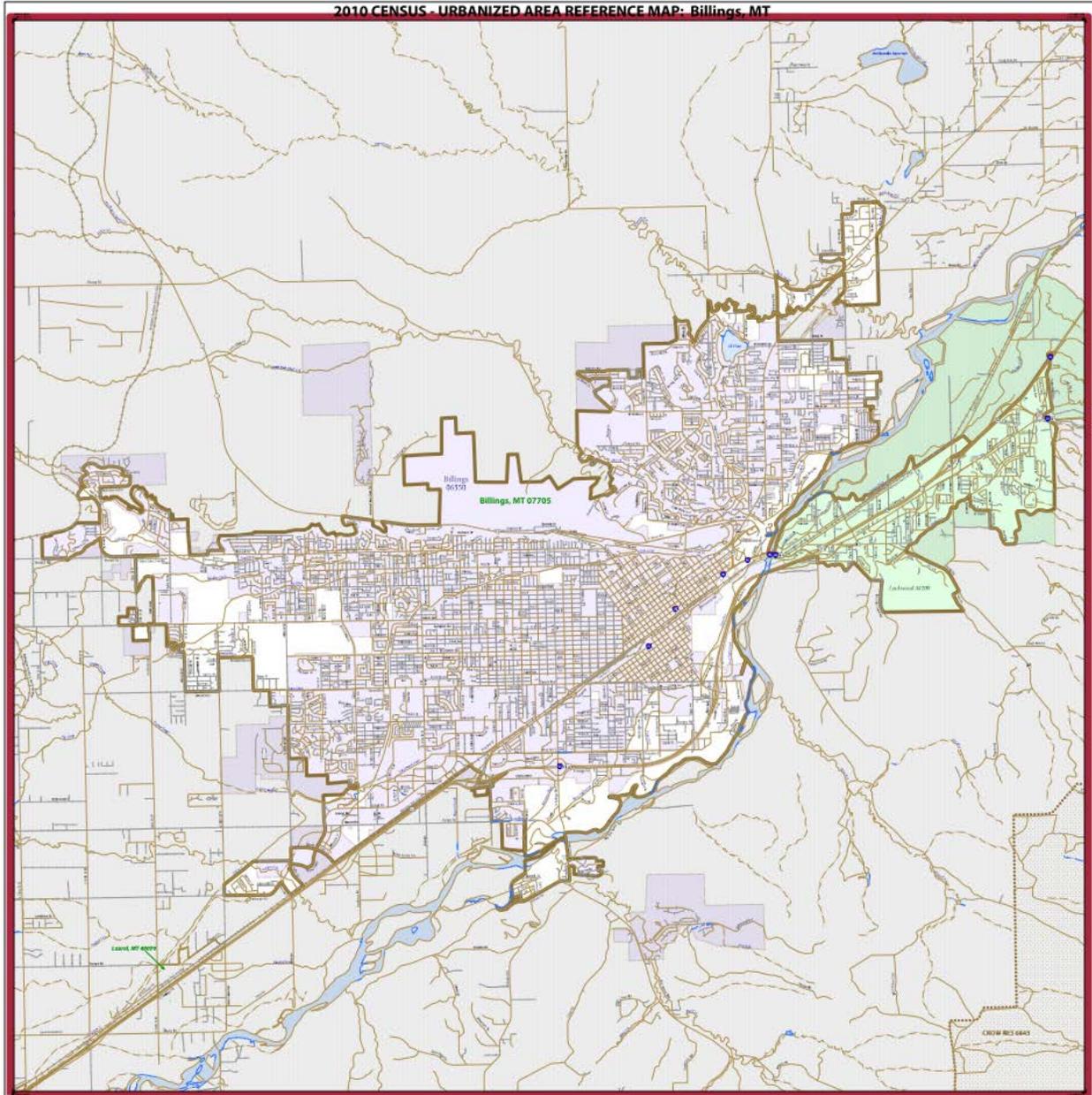
<u>SYMBOL DESCRIPTION</u>	<u>SYMBOL</u>	<u>LABEL STYLE</u>
International		CANADA
Federal American Indian Reservation		L'ANSE RES 1880
Off-Reservation Trust Land		T1880
Urbanized Area		Dover, DE 24580
Urban Cluster		Tooele, VT 88057
State (or statistically equivalent entity)		NEW YORK 36
County (or statistically equivalent entity)		ERIE 029
Minor Civil Division (MCD) ^{1,2}		Bristol town 07485
Consolidated City		MILFORD 47500
Incorporated Place ^{1,3}		Davis 18100
Census Designated Place (CDP) ³		Incline Village 35100

<u>DESCRIPTION</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>	<u>SYMBOL</u>
Interstate		Water Body	Pleasant Lake
U.S. Highway		Military	-Fort Belvoir-
State Highway		Outside Subject Area	
Other Road	Marsh Ln		
Railroad	Southern RR		
Perennial Stream	Tansley Cr		
Intermittent Stream	Piney Cr		

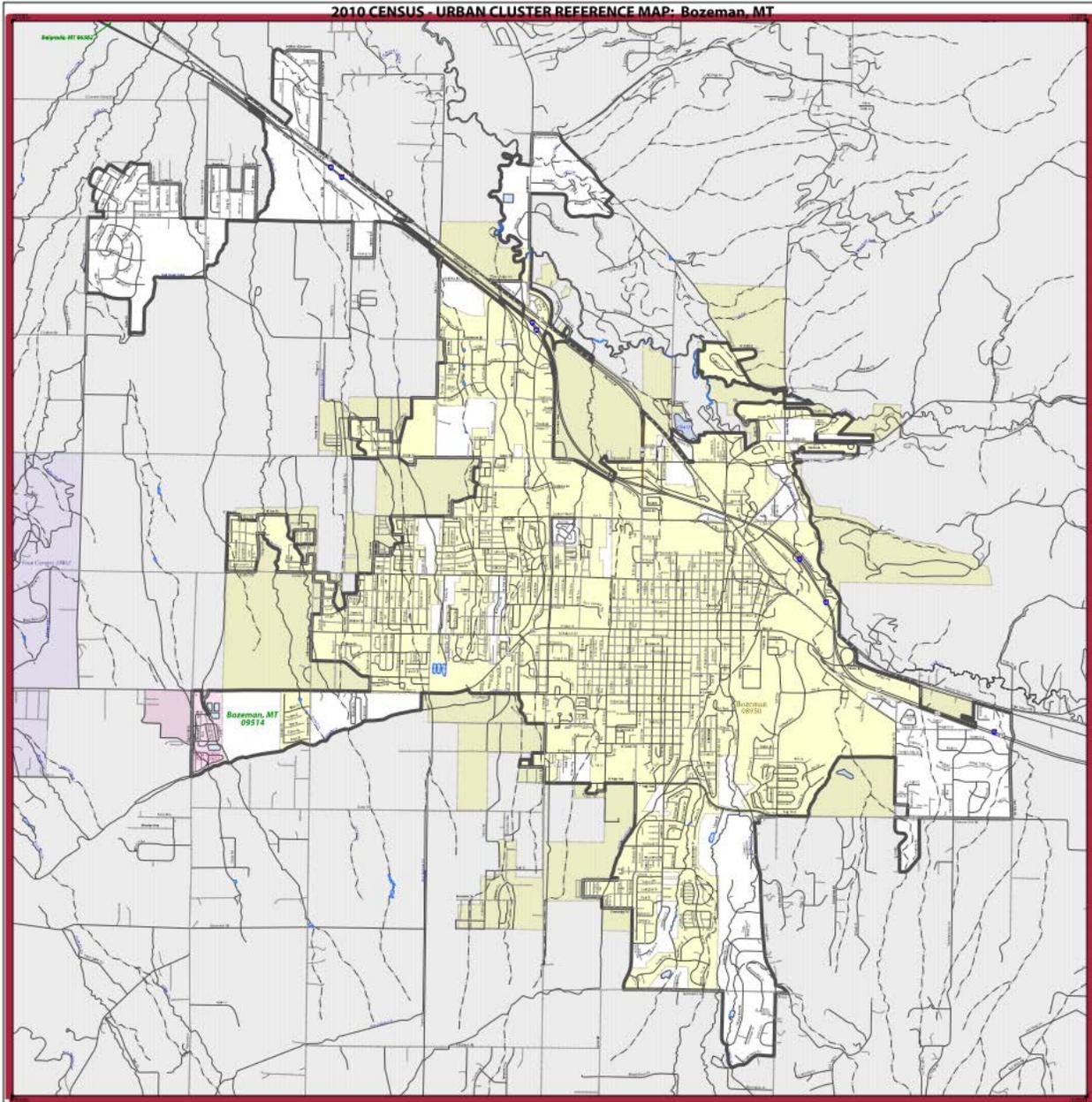
Where international, state, county, and/or MCD boundaries coincide, the map shows the boundary symbol for only the highest-ranking of these boundaries.

- A '*' following an MCD name denotes a false MCD. A '°' following a place name indicates that a false MCD exists with the same name and FIPS code as the place; the false MCD label is not shown.
- MCD boundaries are shown in the following states in which some or all MCDs function as general-purpose governmental units: Connecticut, Illinois, Indiana, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, and Wisconsin. (Note that Illinois and Nebraska have some counties covered by nongovernmental precincts and Missouri has most counties covered by nongovernmental townships.)
- Place label color corresponds to the place fill color.
Label colors: Davis Davis Davis Davis Davis

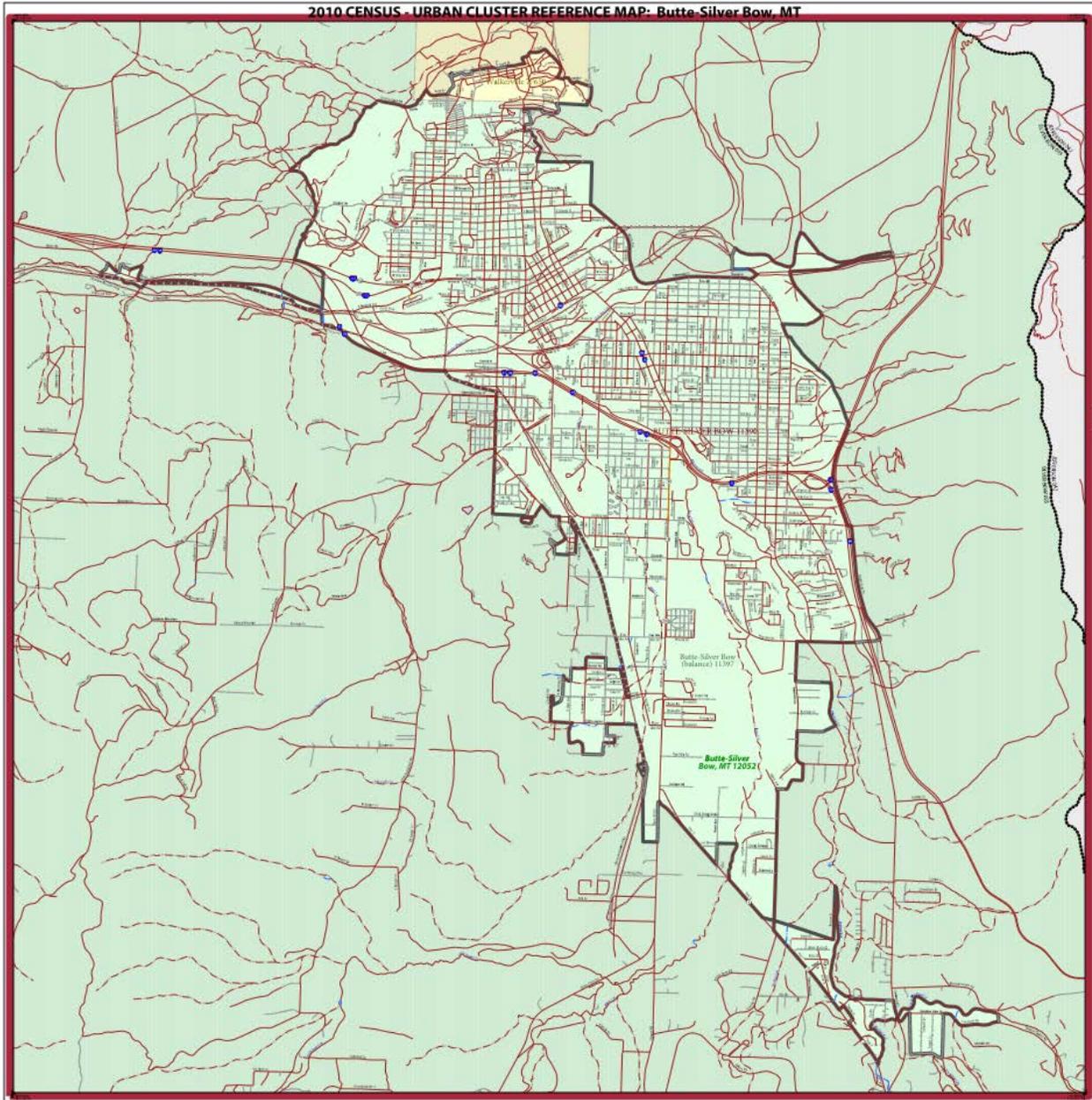
These maps display the boundaries for urban areas of the cities: Billings, Bozeman, Butte-Silver Bow, Great Falls, Helena, Kalispell, and Missoula as determined by the 2010 U.S. Census. PDF links are provided with each map. The legend for all the maps is provided as a reference.



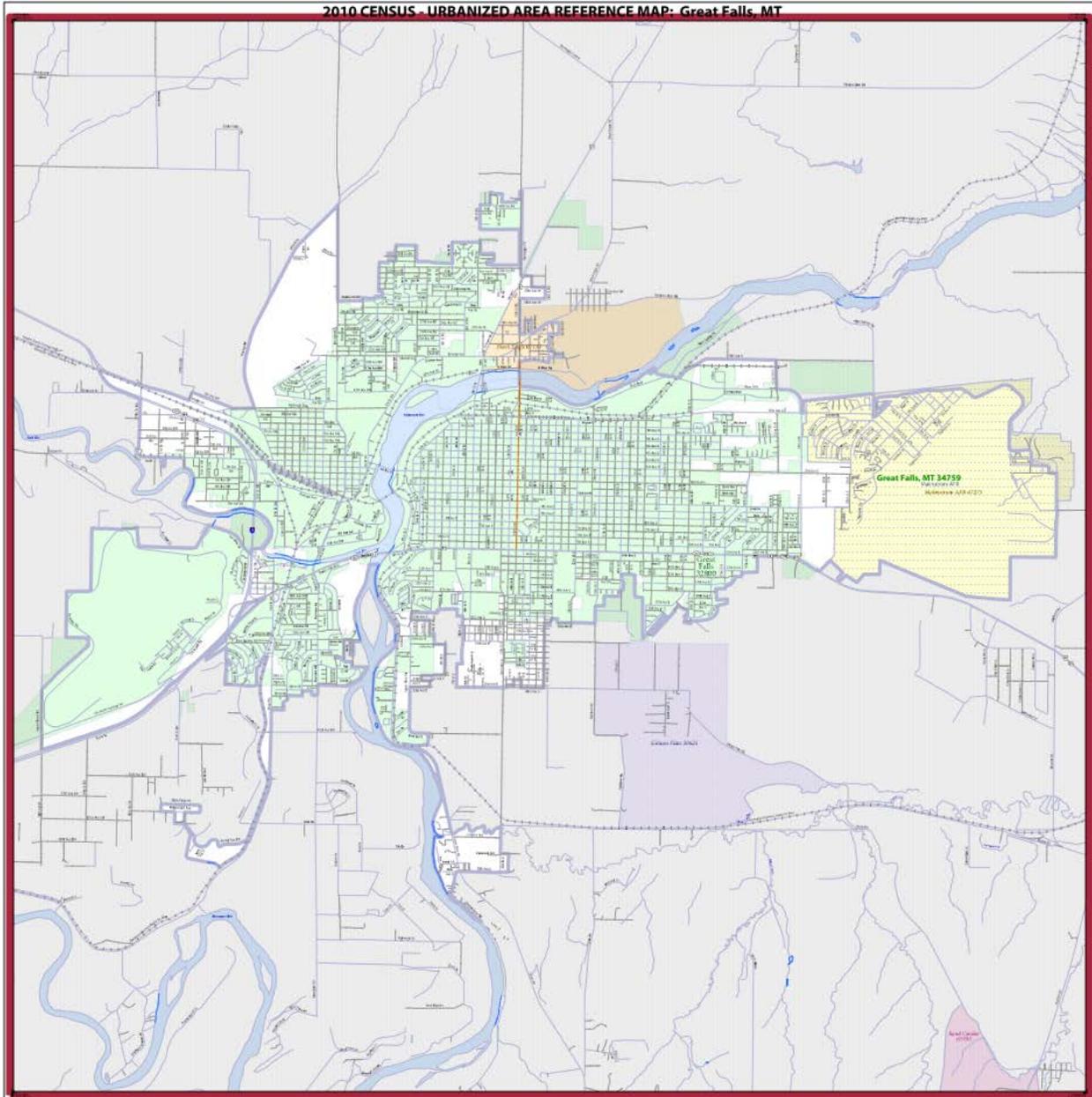
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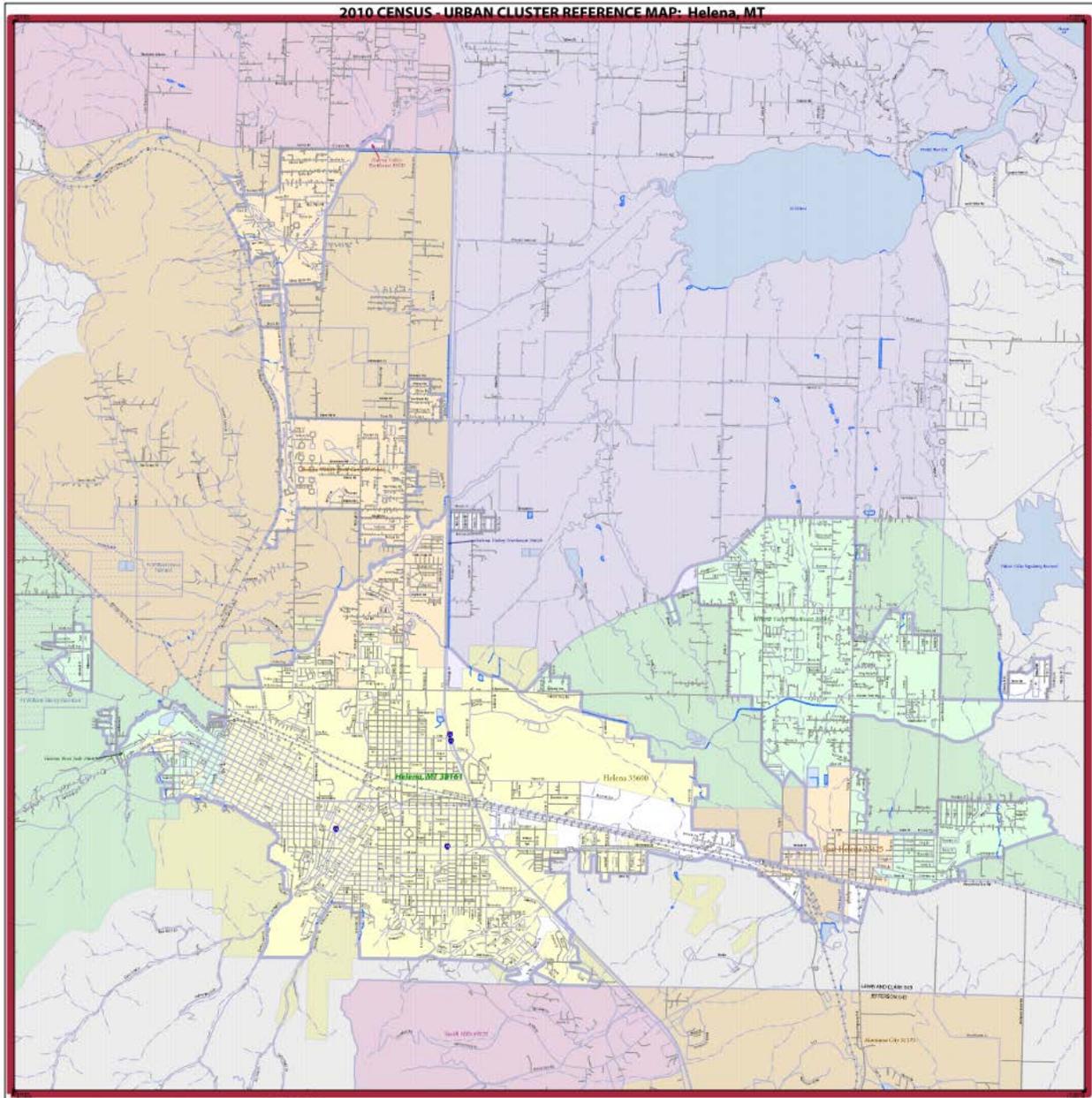
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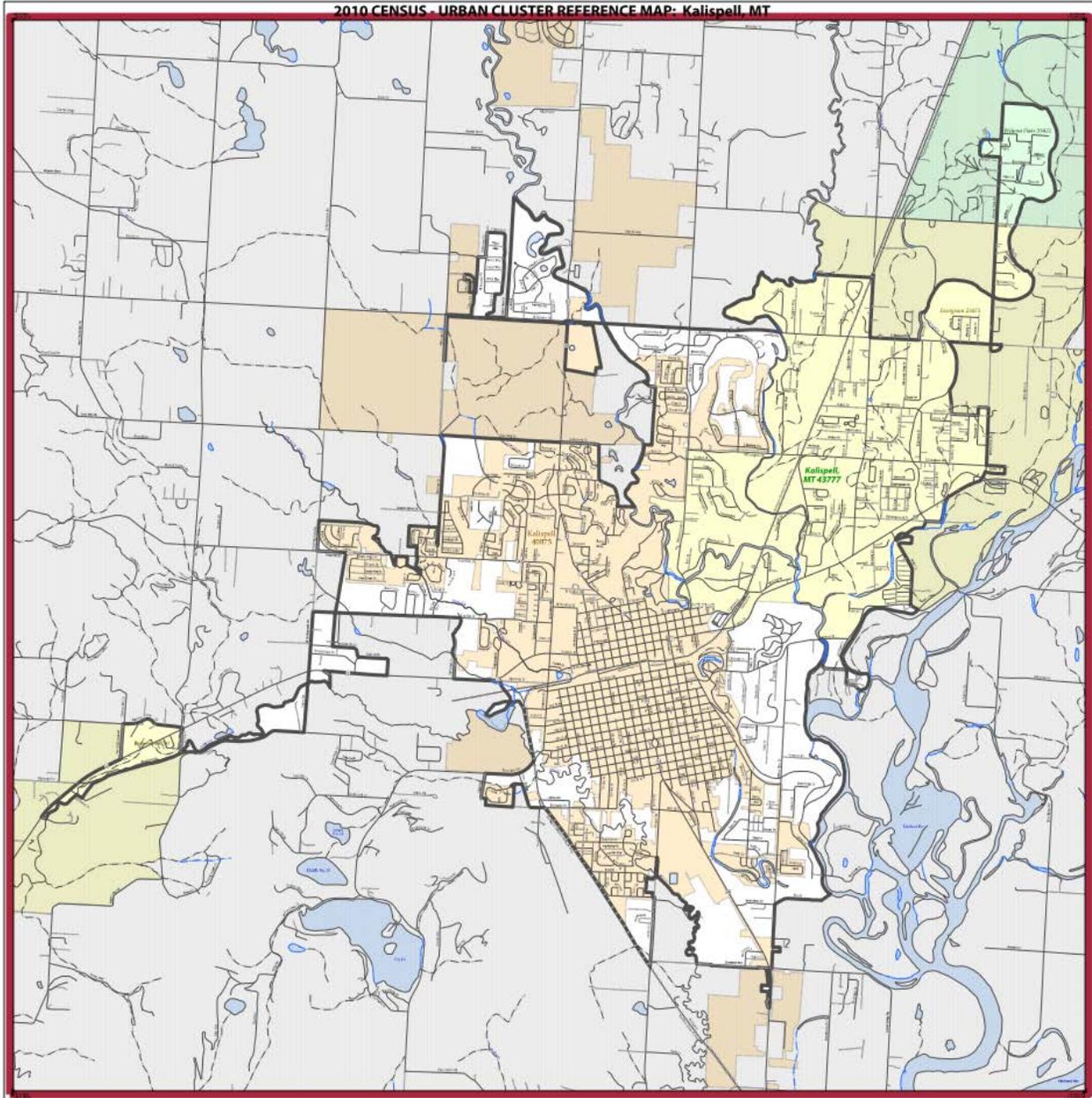
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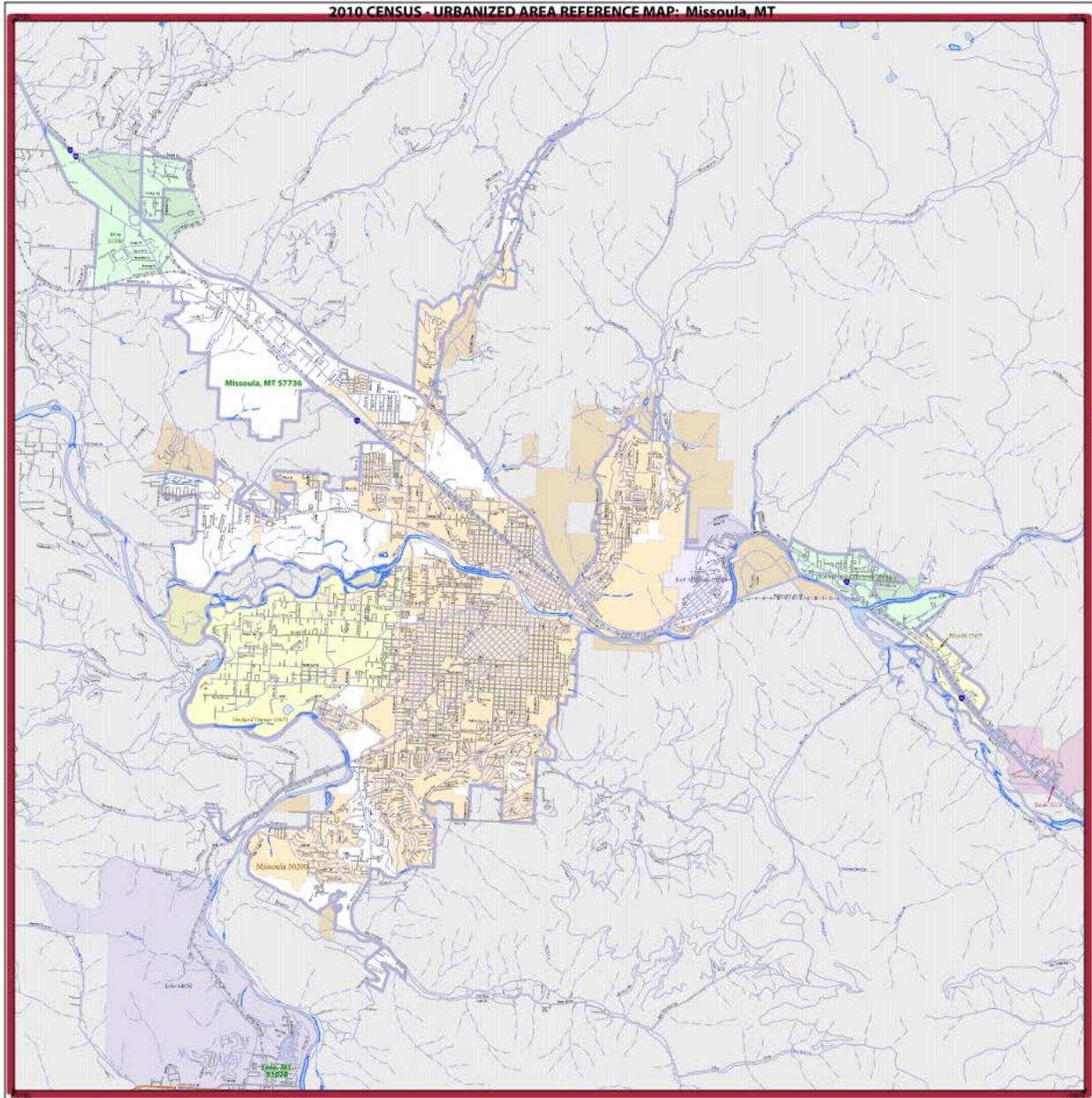
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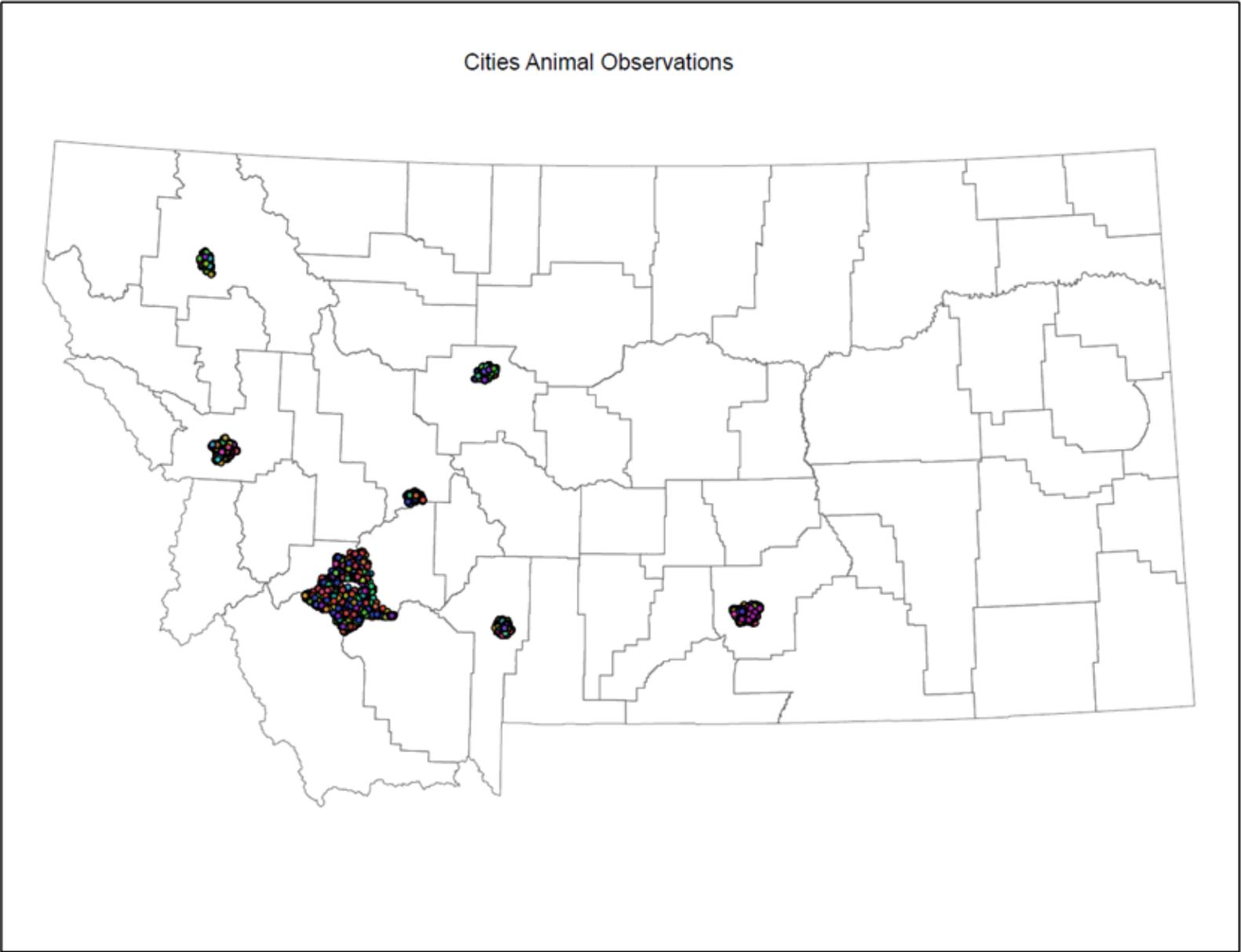


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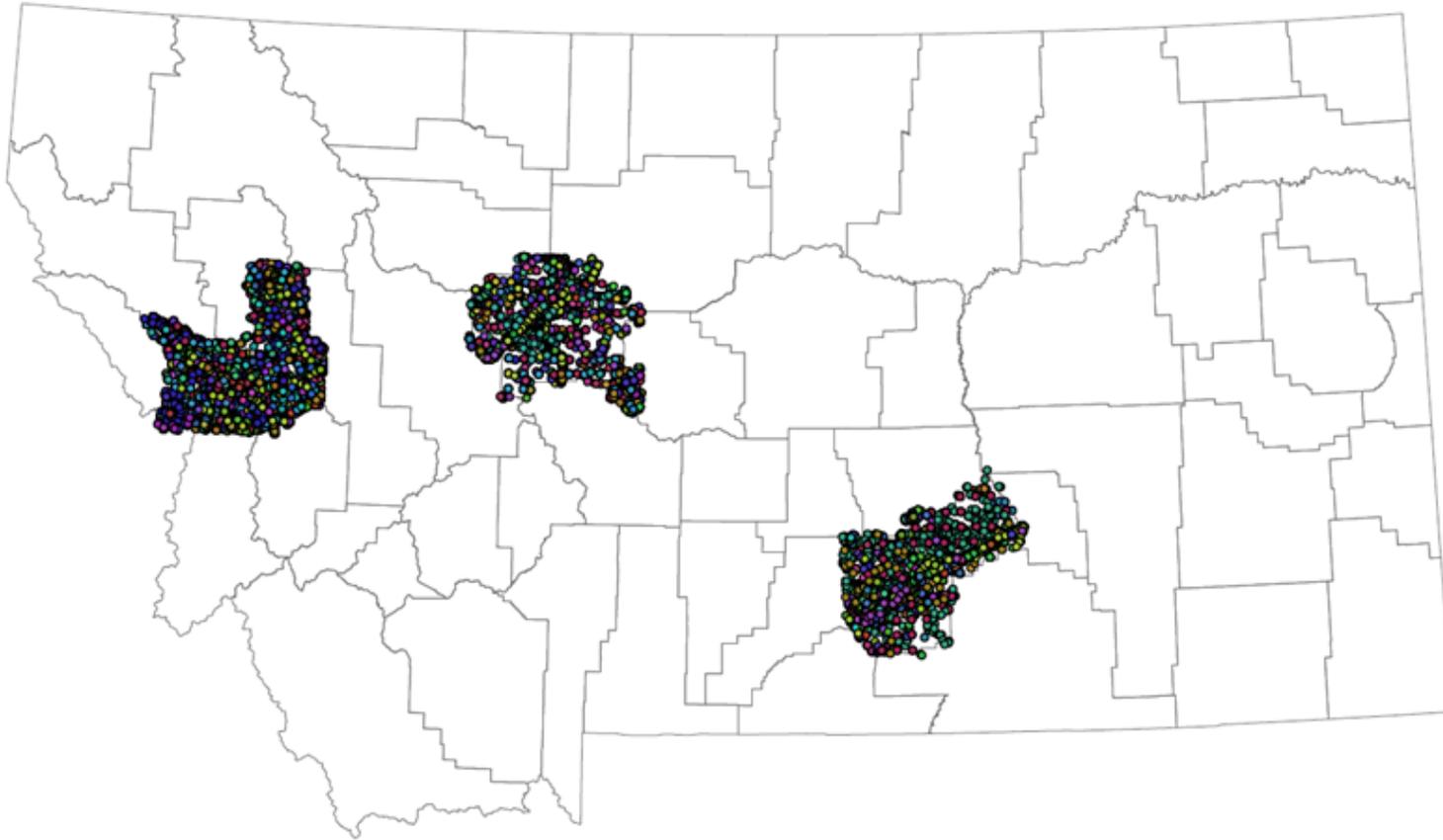


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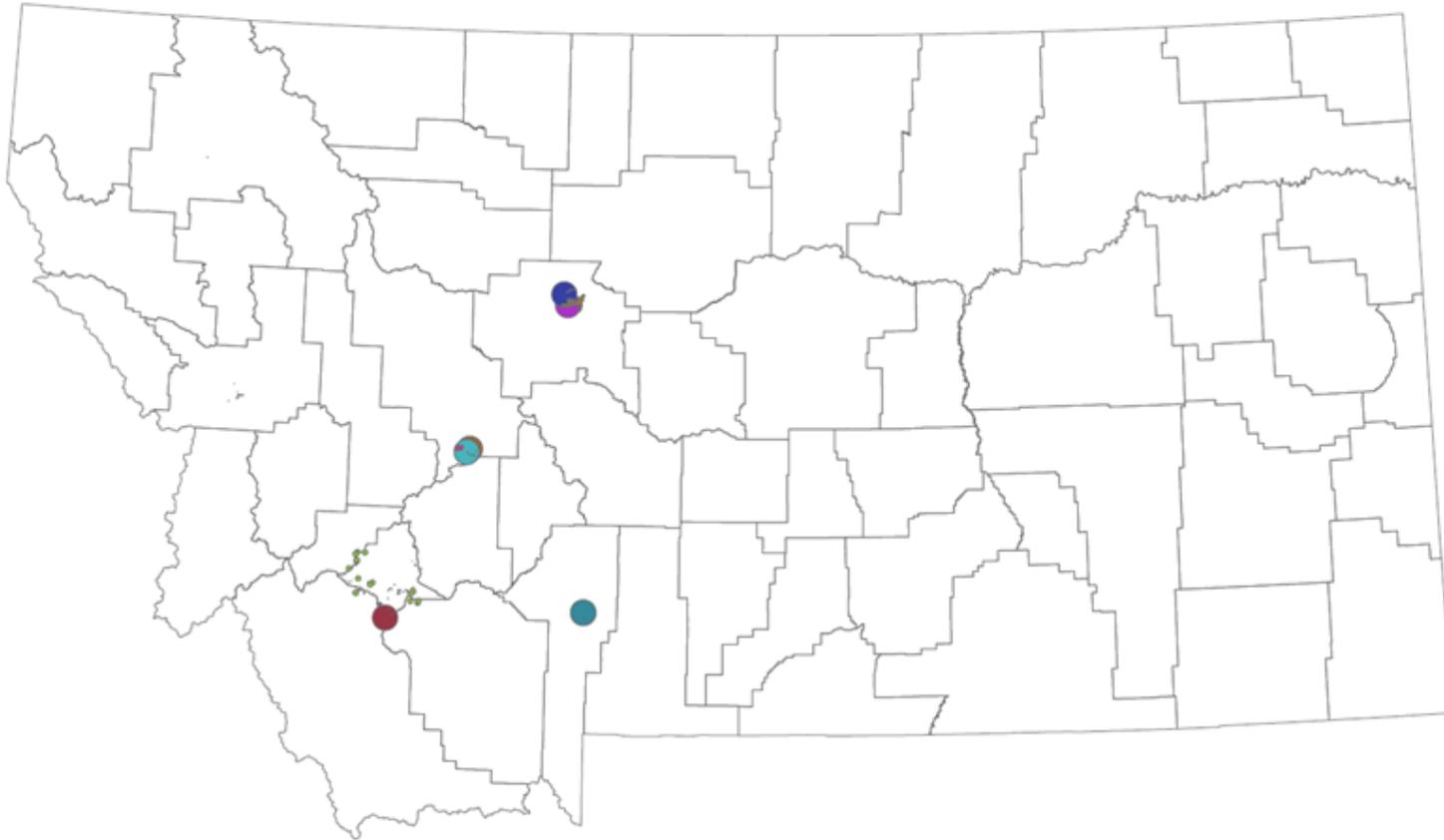
Cities Animal Observations



County Animal Observations



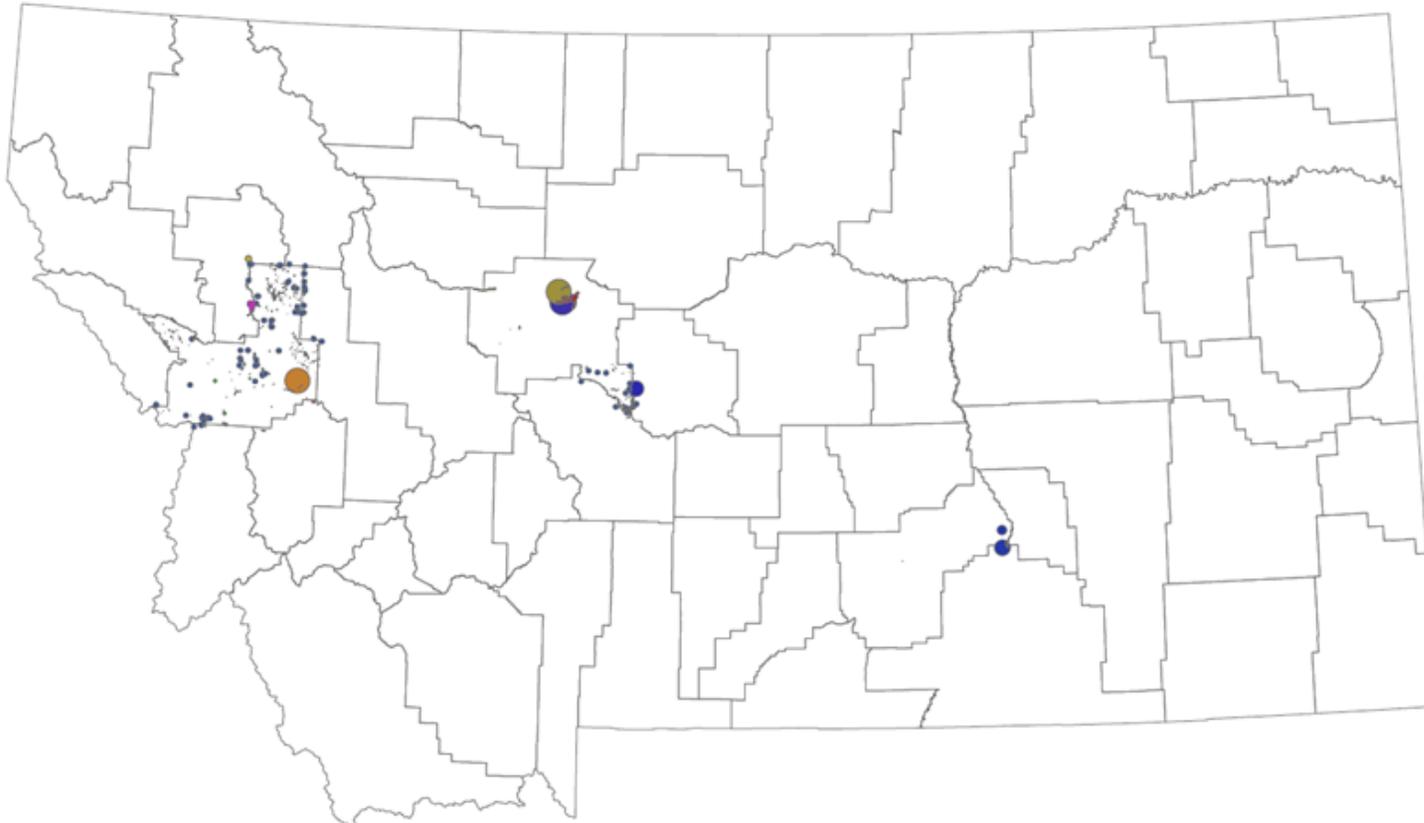
City Plant Occurrences



Legend

S_Com_Name					
A Lichen	Dwarf woolly-heads	Lemhi Beardtongue	Missoula Phlox	Slender Wedgegrass	Toothcup
Arctic Buttercup	Electric Peak Larkspur	Lesser Rushy Milkvetch	Mojave Brickellbush	Small Dropseed	Wedge-leaf Saltbush
Candystick	Entosthodon moss	Limestone Larkspur	Obscure Evening-primrose	Small Yellow Lady's-slipper	Whitebark Pine
Dense-leaf Draba	Guadalupe Water-nymph	Linear-leaf Fleabane	Rocky Mountain Twinpod	Small-flowered Pennygrass	
Dwarf Phacelia	High Northern Buttercup	Little Indian Breadroot	Roundleaf Water-hyssop	Suksdorf Monkeyflower	
	Idaho Sedge	Many-headed Sedge	Sapphire Rockrose	Sword Townsend-daisy	

County Plant Occurrences



Legend

counties_plant_occurrences	S_Com_Name
A Lichen	Calleryn moss
Adder's Tongue	Caliche redgrass
Alpine Coloman	Chaffweed
Beaked Spikemah	Chocolate Chip Lichen
Beak Water-margot	Climbup
Bitterroot Draba	Coff Toebwort
Burn-headed Pansweed	Clustered Lady's-elfpper
Rush morning-glory	Columbia Water-meat
	Coville's Rush
	Crested Sheddren
	Deer Indian Pantbrush
	Dwarf woolly-heads
	Elf-ear Lichen
	English Sundew
	Ernstshohn moss
	Fringed Chocolate Chip Lichen
	Gakus Beaked Sedge
	Guadalupe Water-nymph
	High Northern Buttercup
	Hiker's Gentian
	Hooded Kamaina Lichen
	Howell's Gunweed
	Hydrothya Lichen
	Isho Baren Strawberry
	Krukberg's Swarthen
	Lead Lichen
	Limestone Larkspur
	Linear-leaf Fleabane
	Little Indian Breadroot
	Long-styled Thistle
	Magellan's Peatmoss
	Mary-headed Sedge
	Mendocino Peatmoss
	Mission Mountain Asterisks
	Miscoua Pike
	Moonworts
	Northern Bog Outmoss
	Linear-leaf Plantain
	Northern Patteroke-plantain
	Northern Willye
	Norwegian tortula moss
	Obscure Evening-primrose
	Oregon Buetels
	Persistent-kegal Yellow-ores
	Pod Grass
	Pointed Broom Sedge
	Pygmy Water-ly
	Roundleaf Sundew
	Roundleaf Water-hyssop
	Scantel Ammannia
	Schweitzer's Pabadge
	Scorpidum moss
	Shadow Lichen
	Shiny Pabadge
	Slimder Cottongrass
	St-emmed Kamaina Lichen
	Small Yellow Lady's-elfpper
	Smooth Goosefoot
	Square-stem Monkeyflower
	Stalk-leaved Monkeyflower
	Straightbeak Buttercup
	Streamside Sphagnum moss
	Toothcup
	Water Burnish
	Water Hebeella
	Waterweed
	Western Pearl-flower
	Whitesark Pine
	Yerba Buena