

Data Management Plan (DMP)

DMPs are living documents that capture information about how data are managed throughout the data lifecycle. Prompts to communicate important aspects of managing DNR data are provided in blue.

Data Name and DMP Contact Information

Data Name	Name of data asset, dataset, spreadsheet, or other form of data.
Division/Business Unit	Name of division and business unit responsible for the data.
Business Data Steward	Who at DNR is primarily responsible to define, monitor, and advocate for appropriate use and management of the data?
Technical Data Steward	Who at MNIT DNR has primary responsibility for providing technical expertise and administration of related data systems?
Link or DMP location	Where will the current copy of this document be stored?
Date	Date DMP drafted or last updated.

Step 1: Business Value, Potential Risks, and Interested Parties

1A. Purpose and value	Describe the business purpose for creating or collecting the data. Describe how the data will be used. Does the data have business, financial, legal or historical significance to the DNR? Identify any relevant laws, executive orders, statutes, or rules. Specify any contractual obligations for collecting the data.
1B. Risks and limitations	What potential risks could arise by collecting these data? What risks could occur if the data are not properly managed? What is important for users to know in order to properly interpret the data and use it within the scope of its limitations?
1C. Stakeholders	Which individuals or entities (organizations, divisions, or programs) have a vested interest in this data and how it is managed and distributed? Do others collect, manage, interpret, or share similar data? How might your work impact or complement the work of others? What opportunities will you seek to inform, coordinate, or collaborate with these stakeholders?
1D. Customers	Who are the customers of these data? How do you assess customer need and satisfaction? How will you engage DNR communications staff (e.g. information officers) to help with review and design of data resources shared with customers? Note: Customers are the individuals or entities whose satisfaction with the products and services determines if the work is successful and effective.
1E. Roles and Responsibilities	What data management roles and responsibilities are important to formalize? Consider creating a RASCI matrix .

Step 2: Planning Considerations

2A. Data origin	What is the origin of these data? If the data does not currently exist and will be collected during the course of a project, document how you will acquire it. If the data are coming from another entity, will DNR be responsible for the long-term management of these data moving forward? If so, is there an MOU that clarifies this responsibility?
2B. Data formats	<p>Identify the formats in which staff create, collect, maintain, and make data available. Check all that apply.</p> <p><input type="checkbox"/> Form</p> <p><input type="checkbox"/> Spreadsheet</p> <p><input type="checkbox"/> Database</p> <p><input type="checkbox"/> GIS Files (i.e. feature class file, geodatabase, etc.)</p> <p><input type="checkbox"/> Media (photos, video, audio)</p> <p><input type="checkbox"/> Other:</p> <p>Are any of the associated file types at risk of going obsolete over time? What strategy will you employ to limit the inability to read these data in the future?</p>
2C. Equipment, tools, and software	Describe technologies and capabilities that will be used to collect, read, work with or visualize the data. This includes, but is not limited to, equipment (make and model), software (versions), applications used as editing interfaces or viewing interfaces, and ETL (extract, transform, load) tools. Ensure that all software and online tools are approved for use at DNR.
2D. Data quality	<p>During data acquisition: Describe the criteria and processes you will use to ensure and verify data meet specified quality standards (quality assurance).</p> <p>After data are in hand: Describe the criteria and processes you will use to detect and repair data issues (quality control).</p>
2E. Data standards	Are there any applicable data standards (e.g. parcel data standards, contact and demographic data standards, etc.)? DNR's formally approved data standards can be found on the Intranet .
2F. Data practices designee	Identify your division's data practices designee. They can help you identify the MGDPA classification of your data and will help you to respond to any data practices requests you receive throughout the course of your work.
2G. Minnesota Government Data Practices Act (MGDPA)	<p>What is the MGDPA classification of the data? Check all that apply.</p> <p><input type="checkbox"/> Public</p> <p><input type="checkbox"/> Private</p> <p><input type="checkbox"/> Confidential</p> <p><input type="checkbox"/> Nonpublic</p> <p><input type="checkbox"/> Protected Nonpublic</p> <p><input type="checkbox"/> Unknown (if unknown, work with your data practices designee to identify the classification)</p> <p>Indicate any relevant statute, or other pertinent documentation, that classifies any of the data as 'not public'. Note: 'Not Public' data include data classified as private, confidential, nonpublic or protected nonpublic. To learn more, visit the DNR's Data Practices Homeroom.</p>
2H. MNIT Data Protection Category	<p>If an IT application is used to manage or disseminate these data, what is the Data Protection Category that these data fall in? This rating is largely based on the MGDPA and other federal classifications of the data and identifies security controls MNIT would implement as part of any relevant IT projects.</p> <p><input type="checkbox"/> High</p> <p><input type="checkbox"/> Moderate</p> <p><input type="checkbox"/> Low</p>

2I. Data on individuals	Will you be collecting, storing, or using data on individuals ? If so, what is the business need for collecting data on individuals? How will you limit the collection of unnecessary information on individuals? Are any surveys developed in compliance with DNR's Survey Data Policy? **Consider MGDPA classification and Survey Resource Hub best practices.
2J. Tennessean Warning	A Tennessean Warning must be provided to a respondent before DNR collects any private or confidential data on individuals. Where will you maintain records of the Tennessean Warnings you provided in order to collect these data? Tennessean warnings specify why the DNR is collecting the data, how it will be used, consequences for not supplying data, and who has access to the data. How will future DNR staff know which data were collected under a Tennessean warning, and how will you ensure DNR staff are aware of any restrictions on use of that data?
2J. Other restrictions	Identify any other constraints on access or use beyond MGDPA (e.g. software with license restrictions, user permissions, etc.) and provide justification for the restriction(s).

Step 3: Documentation and Metadata

3A. Metadata	What types of information should be captured and stored with your data that will allow others to find, understand, trust, and protect/share the data? What metadata will be documented to support data stewards managing source datasets? What metadata will be developed and packaged alongside the derived data products shared with data users? Note: Reference any metadata templates, tools, or standards used. Examples include DNR templates, Minnesota Geographic Metadata Guidelines (MGMG), IPTC standards, etc.
3B. Process documentation and business rules	What documentation do you use to standardize your data collection/data processing/analysis procedures? Are these procedures aligned with other programs and partner agencies that collect similar data? What are the foundational business rules (the who, what, where, when, why, and how) for creating, reading, updating, and deleting data. Formalized business rules bring transparency to how data are managed and ensure the long-term and consistent management of the data over time. Business processes that include different roles, or decision-making steps, can benefit from the development of a SIPOC diagram or Swimlane Process Map. Please link to any available process mapping resources.
3C. Tracking changes	How will changes to the data or related procedures be tracked over time? How will you document the rationale for implementing these revisions?

Step 4: Prepare Your Data Storage, Retention, and Disposal Plan

4A. Storage requirements	How long should the data be stored? Is the data subject to a records retention schedule ? How much storage space will be required? Will it increase over time? Is there a backup and disaster recovery plan in place for these data?
4B. Storage location	Where do you plan to store the master copy of your source data, data products, and associated metadata? How will you avoid duplicates/ copies of your data from being stored in multiple locations? See Guidelines for Electronic File Storage
4C. Organization	How will you group together and maintain data so that you can quickly locate and retrieve it when needed? If applicable, what folder structure or file naming conventions will be applied? Is there a taxonomy or controlled vocabulary used to make your data more easily searchable?
4D. Security measures	For 'not public' data, what data handling, data access, and security measures are needed? How will the data be appropriately secured and protected? **Consider MGDPA classification (step 2G) and consult existing data practices resources for data specific guidance. For IT applications, the MNIT Data Protection Classification (step 2H) may apply.

4E. Disposition	<p>What is your disposition plan for these data? Do files (drafts, duplicates, etc.) need to be actively disposed of during the work or at some defined close out date? Is disposition of the data defined by a records retention schedule?</p> <p>Note: If the data does not have a permanent (historical) value, is not subject to a retention schedule or the required retention period has passed, then the data should be disposed of promptly in accordance with DNR records management policy. If the data are subject to a retention schedule, a Records Destruction Report must be completed and signed by the records coordinator before disposal occurs.</p>
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Step 5: Sharing, Access, and Reuse

5A. Data products	What data products or services are created and made available to data users?
5B. Citation	Specify how the data and any data products should be cited or referred to.
5C. Repositories/Platforms	Identify any repositories or platforms where you plan to share your data. Indicate if data will be integrated into an existing collection or offered as a new collection. Will the data you provide be a snapshot in time or will you work with MNIT to develop a service that provides regular updates of the data?
5D. Data Sharing	<p>DNR shares data through publicly accessible platforms, with other entities as needed as part of a program's established business processes or following requests for data. Check all that apply and document relevant information.</p> <p><input type="checkbox"/> Publicly accessible: What data is made publicly available to users? How often are these data updated and who at DNR is responsible for authorizing updates and releases of these data?</p> <p><input type="checkbox"/> Established business processes: Which data (if any) are regularly provided to partners as part of a program's established business processes? What are those established processes and who are the data regularly shared with?</p> <p><input type="checkbox"/> Data practices requests: What is your program's plan for responding to DP requests? Note: Staff should direct individuals requesting data to the Data Request Form. Data practices requests can be sent to the DPCO or the DP designee in your division unless the request is part of your program's established business processes.</p>
5E. Data Sharing Agreement	DNR executes Data Sharing Agreements (DSA) to clarify responsibilities for external entities that are provided access to data classified as not public. DSAs are limited in duration but can be renewed. Do you share data that requires a DSA? What requirements will be included in the DSA? How will the data be securely shared? Where will you store the DSA?
5F. Communications	How will you inform users about the data, metadata, data products, or services? If generating a DNR publication, has the DNR librarian been informed so that this record can be made findable in the DNR's Library Collection?
5F. Accessibility	How will you ensure the data and associated documentation are compliant with the State of MN Accessibility Standard ?
5H. DNR Branding	If applicable, how will you ensure data products shared publicly align with DNR's style guidance and branding ?

Step 6: Follow-up

6A. We plan to revisit the decisions in this plan every...	<p>Select a review cycle.</p> <p><input type="checkbox"/> 6 months <input type="checkbox"/> 1 year <input type="checkbox"/> Other:</p>
6B. Next date for review	Insert date.

Notes

Insert any important notes. You may consider including appendices here that are referenced in above sections.