



University
of Windsor

Building a Data Management Plan for your Research Project

Presented by: Leddy Library & Office of
Research and Innovation Services

Land acknowledgement

The University of Windsor sits on the traditional territory of the Three Fires Confederacy of First Nations, which includes the Ojibwe, the Odawa and the Potawatomie. We respect the longstanding relationships with First Nations people in this place in the 100-mile Windsor-Essex peninsula and the straits – les détroits – of Detroit.

University of Windsor RDM Strategy Committees

As required by the [Tri-Agency Research Data Management Policy](#), each post-secondary institution and research hospital eligible to administer CIHR, NSERC or SSHRC funds was required to create an institutional RDM strategy by March 1, 2023. The institutional strategy is publicly available [here](#).

The institutional RDM strategy was developed by the former University of Windsor Research Data Management Steering Committee in close consultation with the University of Windsor Research Data Management Advisory Group. A list of members is available [here](#).

The Research Data Management Strategy was the first step of this process, outlining the current state as well as the underlying principles for RDM at the University of Windsor. The strategy will now need to be followed by concentrated effort, resource investment, and shared responsibility. Initial steps toward the implementation of the Strategy are underway.

The Research Data Management implementation activities at the University of Windsor will be overseen by the VPRI as Executive Sponsor, RDM Executive Steering Committee (RDM-ESC), and the RDM Operational Leadership Committee (RDM-OLC).

Executive Sponsor:

Vice-President, Research and Innovation, Dr. Shanthi Johnson

The University of Windsor Research Data Management – Executive Steering Committee (RDM-ESC)

Executive Sponsor: Dr. Shanthi Johnson

University Librarian, Dr. Selinda Berg

Vice-President, Research and Innovation, Dr. Shanthi Johnson

Associate Vice President Information Technology Services, Marcin Pulcer

The University of Windsor Research Data Management – Operational Leadership Committee (RDM-OLC)

Research Data Librarian (Leddy Library) (co-chair), Berenica Vejvoda

Office of Research and Innovation Services, Research Metrics and Systems Coordinator (co-chair), Kate Rosser-Davies

Learning Specialist, Indigenization, Jaimie Kechego

Systems Librarian (Leddy Library), Pascal Calarco

Office of Research and Innovation Services, Research Coordinator, Dr. Natasha Wiebe

Office of Research Ethics representative, Harmony Peach

Information Technology Services representative, Nigel Bertrand





Agenda



What are we talking about?

The essentials of data management planning and why it matters.



Who is asking?

Some grant programs currently asking for Data Management Plans, and what to expect from the Tri-Agency policy.



Why does it matter?

Legal and ethical considerations of good data management planning and promoting good science!



What happens next?

How to make a good DMP
Introducing the Digital Research Alliance DMP Assistant tool!

The Tri-Agency Research Data Management Policy (March 2021)

Tri-Agency Research Data Management Policy

1. Preamble

The [Canadian Institutes of Health Research \(CIHR\)](#), the [Natural Sciences and Engineering Research Council of Canada \(NSERC\)](#), and the [Social Sciences and Humanities Research Council of Canada \(SSHRC\)](#) (the agencies) are federal granting agencies that promote and support research, research training, knowledge transfer and innovation within Canada.

The agencies expect the research they fund to be conducted to the highest professional and disciplinary standards, domestically and internationally. These standards support research excellence by ensuring that research is performed ethically and makes good use of public funds, experiments and studies are replicable, and research results are as accessible as possible. Research data management (RDM) is a necessary part of research excellence.

The agencies believe that research data collected through the use of public funds should be responsibly and securely managed and be, where ethical, legal and commercial obligations allow, available for reuse by others. To this end, the agencies support the FAIR (Findable, Accessible, Interoperable, and Reusable) guiding principles for research data management and stewardship.

The agencies acknowledge the diversity of models of scientific and scholarly inquiry that advance knowledge within and across the disciplines represented by agency mandates. The agencies therefore recognize that there are legitimate differences in the standards for RDM among the disciplines, areas of research, and modes of inquiry that the agencies support.

Supporting Canadian research excellence by promoting sound RDM and data stewardship practices.

<https://science.gc.ca/site/science/en/interagency-research-funding/policies-and-guidelines/research-data-management/tri-agency-research-data-management-policy>



The Tri-Agency Research Data Management Policy

“All grant proposals submitted to the agencies should include methodologies that reflect best practices in RDM. **For certain funding opportunities, the agencies will require data management plans (DMPs) to be submitted to the appropriate agency at the time of application**, as outlined in the call for proposals; in these cases, the DMPs will be considered in the adjudication process.”

*Innovation, Science and Economic Development Canada. “Tri-Agency Research Data Management Policy.” Government of Canada. Innovation, Science and Economic Development Canada, March 15, 2021. <https://science.gc.ca/site/science/en/interagency-research-funding/policiesandguidelines/research-data-management/tri-agency-research-data-management-policy>



The Tri-Agency Research Data Management Policy

- **Institutional strategies:** By March 1, 2023, institutions subject to this requirement must post their RDM strategies and notify the agencies when they have done so. See UWindsor RDM Strategy, [here](#)
- **Data management plans:** By Spring 2022, the agencies will identify an initial set of funding opportunities that will be subject to the data management plan requirement (pilots)
- **Data deposit:** After reviewing the institutional RDM strategies, and in line with the readiness of the Canadian research community, the agencies will phase in the deposit requirement (requirement late 2025; first cohort, grants awarded 2025-26)



Requirements on current grant applications

- Canadian Institutes of Health Research (CIHR)
 - Network Grants in Skin Health and Muscular Dystrophy (pilot)
 - Strengthening the Health Workforce for System Transformation (pilot)
- Natural Sciences and Engineering Research Council of Canada (NSERC)
 - Subatomic Physics Discovery Grants - Individual and Project (pilot)
 - NSERC Alliance Society (mandatory Sept 1, 2025; feedback vs. formal evaluation) (pilot)
- Social Sciences and Humanities Research Council of Canada (SSHRC)
 - Partnership Grants Stage 2 (pilot)
 - SSHRC Policy Innovation Partnership Grant (pilot)
- Most Tri Agency applications require applicants to discuss data management as part of the Methodology section (evaluation: appropriateness of method)



Requirements on current grant applications

New Frontiers in Research Fund – Transformation

- Management plans (maximum 3 pages if written in English; maximum 3.6 pages if written in French)
 - Describe how various aspects of the project will be managed, including:
 - governance/management approach (how the project will be managed and the grant administered);
 - performance measurement plan, including risk assessment and management and results frameworks (how achievement of short-, medium- and long-term anticipated outcomes will be monitored and assessed according to established indicators and timelines; mitigation plans);
 - data management (how research data from the project will be managed and safeguarded; for guidance on research data management [RDM] considerations to include in the research proposal, refer to the [NFRF Research Data Management page](#)); and
 - training (the training, development and mentoring plan for students and other highly qualified personnel).
 - Plans for data management should align with the [Tri-Agency Statement of Principles on Digital Data Management](#) and not conflict with any terms and conditions, policies or other requirements of the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council and SSHRC.



Requirements on current grant applications

NFRF-T has a firm requirement on RDM, but elements of RDM overlap with security requirements for some other programs.

Mitigating Economic and Geopolitical Risk Checklist

Cybersecurity and Data Management

- ☒ Verify all team members have completed cyber hygiene and data management training.
- ☒ Assess if data management and cybersecurity measures needed to adequately protect research integrity are in place across all partners.
- ☒ Focus on addressing divergent cybersecurity and data management practices and decide on a mutually acceptable approach to securing your research project.
- ☒ If professional or personal international travel is expected during the project, agree to a protocol for device management.



Global requirements

- **UK & EU:** Many major funders (e.g., *Wellcome Trust*) require data management plans
- **USA:**
 - *National Science Foundation (NSF)* includes DMPs in grant requirements
 - *National Institutes of Health (NIH)* launched a Data Management and Sharing Policy in 2023, requiring a DMSP



What is Research Data Management?

Government of Canada. (n.d.). *Research data management*. Science.gc.ca.

<https://science.gc.ca/site/science/en/interagency-research-funding/policies-and-guidelines/research-data-management>

Research Data Management

Research data management (RDM) refers to the processes applied through a research project's life-cycle that guide the collection, documentation, storage, sharing and preservation of research data.



Why is RDM Important?

- Organizing your data and planning early can help you save both time and effort throughout your project
- Implementing reliable storage and backup methods protects your data from potential loss due to theft, hardware failure, or file corruption
- Making your data accessible promotes transparency, enables others to replicate your findings, and supports the generation of new insights
- Archiving and sharing your data can enhance the visibility and impact of your work, leading to more citations
- Altogether, these practices contribute to stronger, more robust research



What are the FAIR principles?

The FAIR principles for scientific data management and stewardship are an international best practice for improving the findability, accessibility, interoperability and reuse of digital assets.



Findable



Accessible



Interoperable



Reusable



What is a data management plan (DMP)?

- A Data Management Plan (DMP) is a formal document that details the strategies and tools you will implement to effectively manage your data during the active phase of your research, and the mechanisms you will use for preserving and appropriately sharing your data at the end of the project
- A DMP provides a structured approach for handling your research data throughout its entire lifecycle
- It serves as an adaptable guide that describes how you will create, manage, organize, document, safeguard, preserve, and share your research data
- You can create a DMP easily using tools like the DMP Assistant
- This tool prompts you with thoughtful questions to help clarify and refine your data management approach
- A DMP outlines your strategies for managing data during your research and ensuring its accessibility and preservation after the project ends



Data management plans (DMPs) are living documents

- DMPs are dynamic documents that can be revised to reflect changes as your research progresses
- The term *living document* acknowledges change is a natural part of the research process
- A living document is intended to be reviewed and updated regularly
- Revisit and revise your DMP as your project evolves—consider doing so at least every few months

*Innovation, Science and Economic Development Canada. “Tri-Agency Research Data Management Policy.” Government of Canada. Innovation, Science and Economic Development Canada, March 15, 2021. <https://science.gc.ca/site/science/en/interagency-research-funding/policiesand-guidelines/research-data-management/tri-agency-research-data-management-policy>



Why should I make a data management plan (DMP)?

- Establishing clear, consistent approaches to managing, sharing, and preserving your data from the outset of your research
- Allows you to assess what's working well and where improvements are needed in your current data practices
- Supports strong quality control throughout your research process
- Helps protect your data and ensures it is handled in line with ethical and legal obligations



What goes into a Data Management Plan (DMP)?

- Data collection
- Documentation and metadata
- Storage and backup
- Preservation
- Sharing & reuse
- Responsibilities and resources
- Ethics and legal compliance



Data collection

- What types of data will you collect, generate, or access?
- Are you using any existing datasets? If so, where are they from?
- What file formats will you use to store your data?
- How large are your data files?
- How will your data be organized? (e.g., spreadsheets, stats software, text documents, audio/image/video files)
- What systems will you use for naming files, tracking versions, and structuring your data?



Data collection: Case Example

- Research project could collect various kinds of data, including:
 - Surveys
 - Interviews (in-depth and semi-structured)
 - Focus groups
 - Community discussions
 - Arts-based approaches (e.g., photography)
- These methods will generate a mix of data formats, such as:
 - Numeric (e.g., survey responses)
 - Textual (e.g., transcripts)
 - Audio (e.g., interview recordings)
 - Images (e.g., participant-generated photographs)
 - Video



Data collection: Case Example

- Data will be stored in widely accessible and standardized, (non-proprietary if possible) formats:
- CSV, XML for spreadsheets and databases
- JPG, TIFF for image files
- WAVE/FLAC for audio recordings (MP3, lossy and not completely open)
- TXT for text documents
- File Naming Standard:
Format: [project]_[file description]_[region]_[YYYYMMDD]
Example: education_interviewguide_ON_20200617
- Version Control:
Use sequential suffixes (e.g., _v1, _v2)
Example: education_interviewguide_ON_20200617_v1



Documentation and metadata

- What information is needed to ensure your data can be properly understood and reused later?
- How will you ensure documentation is created consistently throughout the project?
- Will you apply metadata standards or use tools to help describe your data?



Documentation and metadata

To support future reuse, each dataset should include details about:

- Who created the data
- How the data were gathered
- Any tools used, such as interview guides or survey instruments
- Notes on data quality or limitations
- Background information that helps others interpret the data (methodologies)
- For survey data, a codebook should be provided
- For qualitative data, interview protocols should be included



Documentation and metadata

- Spreadsheet column names are defined in a codebook.
- Analytical work in software should be documented through logs and saved syntax files.
- Participant data must be fully de-identified – document how direct and indirect identifiers treated
- Metadata should reference the grant title and funding agencies (e.g., SSHRC, NSERC, CIHR).
- Data will be deposited in the University of Windsor Borealis using the DDI (Data Documentation Initiative) standard for metadata.
- See UWindsor RDM Knowledge Portal for more [guidance](#)



Storage and backup

- Data loss happens more often than expected—hardware like USBs or external drives can fail, get lost, or be stolen
- Consider your storage needs early:
 - What storage capacity will your project require?
 - Where and how will data be stored and backed up during the research process?
 - How will team members and collaborators access, edit, and contribute to shared data securely?



Storage and backup

Backing up your data:

- To mitigate against the risk of losing research data due to human error, natural disasters, or other mishaps, your data management plan should include strategies to prevent loss. Loss of data can be mitigated by following the **3-2-1 Backup Rule**:
- **You should have at least 3** copies of your data:
 - The **here** copy, which can be your working copy
 - The **near** copy, which is a local backup. Perhaps an external hard drive.
 - The **far** copy that is stored off-site and ideally accessible from another computer vs your own
 - The copies should be stored in 2 different locations, like your backup disk and the cloud. Do not store two extra copies on the same backup disk.

Metadata and README files should be also backed up with your research data.



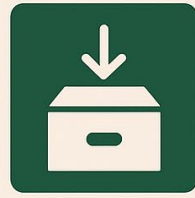
Storage and backup

RDM Knowledge Portal <https://ledgy.uwindsor.ca/rdm/storage-security>

- DRAC ARC: 1 TB is assigned by default. If more is needed, researchers can apply for more but there are costs. To establish an ARC account, these are the storage options:
<https://alliancecan.ca/en/services/advanced-research-computing/national-services/storage>.
 - To apply for an account email: accounts@tech.alliancecan.ca.
 - ARC systems are not specifically set up for very sensitive data, if that is a concern. This platform also requires command line (versus a web interface) and is intended for larger datasets.
- NextCloud: free access through the University's DRAC membership. Researchers are assigned 100GB by default.
 - This setup also may not be a solution for very sensitive data
 - Apply for an account here [Account Management | Digital Research Alliance of Canada](#). The CCDB account works for both platforms. The nice thing about NextCloud is it has an easy to use interface.
- Your local hard drive may be the most convenient option for primary storage of most extremely sensitive data at present. Make sure you have external backup copies and in more than one location! Also, encrypt and password protect files to minimize security risk.



Preservation



Planning for Long-Term Data Preservation

- Where will your data be archived to support long-term access and preservation after your project ends?
- What steps will you take to prepare your data for archiving?

Think about:



Using formats suitable for long-term preservation



Ensuring file integrity



Removing or anonymizing personal identifiers



Including documentation to support future reuse



Preservation resources

- University of Windsor [RDM Knowledge Portal](#)
- University of Windsor [Borealis](#)
 - Data owners can retain complete control over who can access their data. Specific datasets can be made freely available, available only on request, or restricted to only certain IPs, to an individual account(s) or to specific groups.
 - Borealis is widely used by academic institutions in Canada and the U.S. and datasets are indexed and searchable across institutions.
 - Borealis is most suited for datasets up to **2GB**.
- Federated Research Data Repository ([FRDR](#))
 - Long term preservation of larger datasets
 - **1TB** of repository storage is available to all faculty members at Canadian post-secondary institutions.
 - Fast and efficient data upload and download for large datasets through Globus File Transfer
 - DOI registration for datasets (persistent identifier that can be used for data citation)
 - Optional embargoes on data and metadata records
 - Secure repository storage for a minimum of 10 years after deposit
 - Regular backups and geographically distributed storage
- [Re3data.org](#)

A directory of research data repositories searchable by discipline and field of research.



Sharing and re-use

Data Sharing Considerations



What type of data do you plan to make available, and in what format (e.g., unprocessed, cleaned, interpreted, or finalized)?



At what stage in the research timeline will the data be made accessible?



Have you determined what kind of license or terms of use will apply to your shared data?



What strategies will you use to ensure the research community is aware of the data's availability?



Are there any methodological constraints or other factors that would limit or prevent sharing your data?



Sharing and reuse: Case example

- De-identified, analyzed dataset will be made available through mediated access via the University of Windsor's Borealis data repository.
- Individuals wishing to reuse the data must submit an access request.
- These requests will be reviewed by the Principal Investigator (PI) or a designated member of the research team. The PI, in collaboration with the team, will define the conditions for data access and usage to ensure it aligns with the intended purpose and ethical standards.
- Once deposited in Borealis, the dataset will be assigned a Digital Object Identifier (DOI), providing a permanent and citable link for others to locate and access the data.
- Additionally, metadata will be harvested by the Federated Research Data Repository (FRDR), enabling broader discovery and visibility of the dataset across Canada. The dataset will also be linked to any publications that result from the research.



Sharing and reuse resources

- Data Anonymization
 - Digital Research Alliance of Canada De-Identification Guidance
<https://zenodo.org/record/4270551>
- Data Licenses
 - DCC - How to License Research Data
<https://www.dcc.ac.uk/guidance/how-guides/license-researchdata>



Responsibilities and resources

Data Management Responsibility



Who will oversee the data during and after the project?



What data-related duties will other team members have?



How will transitions in personnel, including a change of PI, be addressed?



What resources and estimated cost will the data management plan require?



Responsibilities and resources

- UK Data Service Costing tool
 - <https://ukdataservice.ac.uk/media/622368/costingtool.pdf>
- University of Utrecht Costs of data management estimator
 - <https://www.uu.nl/en/research/research-datamanagement/guides/costs-of-data-management>
- Roles & Responsibilities
 - DataOne Best Practices: Defines roles and assign responsibilities for RDM
<https://dataoneorg.github.io/Education/bestpractices/defineroles-and>



Ethics and legal compliance

Sensitive Data



If Indigenous data are involved, will the DMP be collaboratively developed?



If the project includes sensitive data, how will it be securely managed and accessible only to authorized project members?



What approaches will be used to address secondary uses of sensitive data?



What ethical, legal, and commercial limitations apply to the data?



Ethical Considerations for Your DMP: TCPS2 Chapter 5

Privacy

Confidentiality

Security

Physical
Safeguards

Administrative
Safeguards

Technical
Safeguards



TCPS2 Chapter 5 Considers whether Data are Identifiable

- **Directly identifying information** – name, social insurance number, personal health number.
- **Indirectly identifying information** – date of birth, place of residence or unique personal characteristic.
- **Coded information** – direct identifiers are removed; replaced with a code. May be possible to re-identify specific participants (e.g., the principal investigator retains a list that links the participants' code names with their actual names so data can be re-linked if necessary).
- **Anonymized information** – the information irrevocably stripped of direct identifiers; code is not kept to allow future re-linkage; risk of re-identification of individuals from remaining indirect identifiers is low or very low.
- **Anonymous information** – the information never had identifiers associated with it (e.g., anonymous surveys).

Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*. (December, 2018).



Data Risk Levels

Portage Network. (2020, September). *Sensitive data toolkit for researchers part 2: Human participant research data risk matrix*. portage@carl-abrc.ca

Low Risk

- Publicly available data where there is no reasonable expectation of privacy, regardless of sensitivity or identifiability.
- Data collected with no information that could reasonably identify individuals or groups.
- Data contains no confidential, private, or sensitive information.
- Data subjects are not vulnerable in the context of the research and would not be harmed if a breach were to occur.

Medium Risk *Majority of human research is in this category*

- All identifiers collected have been stripped so that data to be deposited has no information that could reasonably identify individuals or groups.
- Data may contain information originally collected as confidential, private or sensitive.
- Data subjects are not vulnerable in the context of the research and would not be harmed if a breach were to occur.

High Risk

- Identifiers remain and/or (re)-identification is possible or probable.
- Data contains confidential, private or sensitive information.
- Data subjects may be vulnerable in the context of the research and may be harmed if a breach were to occur.

Extreme Risk

- Data acquired through an agreement (formal or informal) with a custodian, barring further use or retention.
- Identifiers remain and/or (re)-identification is possible or probable.
- Data contains confidential, private or sensitive information.
- Data subjects are vulnerable in the context of the research and would be harmed if a breach were to occur.



Ethics and legal compliance

- Research data may contain sensitive information and cannot be shared for legal or ethical reasons. Sensitive data may contain:
 - Personal Identifiers
 - Personal Health Information
 - Personal financial information
 - Confidential business information
 - Sensitive ecological information
 - Indigenous cultural practices
- Some data containing sensitive information can be anonymized or de-identified—allowing for sharing.
- De-identification is the process of removing any identifiable data from a dataset. This happens by removing or replacing personal identifiers. With some datasets, it may be impossible to completely anonymize the data, as even when direct identifiers are removed, combinations of other data may make it possible to still identify the individuals in the dataset (indirect identifiers). Datasets that cannot be completely anonymized should not be shared openly.
- Software which can help with data de-identification. For a full review of the different packages, see the [Digital Research Alliance of Canada De-Identification Guidance document](#). Tools include [Amnesia](#), and [sdcmicro](#). Amnesia is considerably easier to use but sdcmicro has a more powerful features.
- Indigenous Data Principles:
 - First Nations OCAP Principles <https://fnigc.ca/ocap-training/>
 - CARE Principles for Indigenous Data Governance <https://www.gidaglobal.org/care>



DMP Assistant



The **DMP Assistant** is a national, online, bilingual data management planning tool developed by the **Digital Research Alliance of Canada (the Alliance)** in collaboration with host institution **University of Alberta** to assist researchers in preparing **data management plans (DMPs)**.

[DMP Assistant](#)



RDM knowledge portal

Research Data Management



 **BOOK A CONSULTATION**



<https://ledy.uwindsor.ca/research-data-management>



University
of Windsor

Data management planning for Tri-Agency Grant Applications

DMP Assistant

[Home](#)[Public DMPs](#)[DMP Templates](#)[Help](#)[About](#)

Welcome to DMP Assistant.

DMP Assistant is a national, online, bilingual data management planning tool developed by the **Digital Research Alliance of Canada (the Alliance)** in collaboration with host institution **University of Alberta** to assist researchers in preparing **data management plans (DMPs)**. This tool is freely available to all researchers, and develops a DMP through a series of key data management questions, supported by best-practice guidance and examples.

DMPs are one of the foundations of good research data management (RDM), an international best practice, and increasingly required by institutions and funders, including the Canadian Tri-Agencies as outlined in their Research Data Management Policy.

Getting started:

- [Brief Guide – Data Management Plans](#)
- [Brief Guide – Create an Effective Data Management Plan](#)
- [Primer – Data Management Plan](#)
- [How to Manage Your Data](#)
- Tutorial Videos:
 - [Introduction to Data Management Plans \(DMPs\)](#)
 - [Introduction to DMP Assistant](#)
 - [Managing DMPs with DMP Assistant](#)
- Webinars:
 - [Supporting researchers in meeting DMP requirements - introducing a new DMP template!](#)
 - [Support Your Research with DMP Assistant 2.0](#)
 - [Support Your Research with Data Management Planning](#)

For more resources and training materials spanning the entire research data life cycle, see the [Alliance Training Resources](#).

Sign in [Create account](#)

* Email

bvejvoda@uwindsor.ca

* Password

.....

Forgot password?

☐ Remember email

Sign in

- or -

Sign in with institutional or social ID



University
of Windsor

Data management planning for Tri-Agency Grant Applications

DMP Assistant

Create a new plan

Before you get started, we need some information about your research project to set you up with the best DMP template for your needs.

* What research project are you planning?

Data Management Plan for Longitudinal Monitoring of Freshwater Ecosystem

☐ mock project for testing, practice, or educational purposes

* Indicate the primary research organization

Organization

University of Windsor

- or -

☐ No research organization associated with this plan or my research organization is not listed

Which DMP template would you like to use?

University of Windsor



We found multiple DMP templates corresponding to your primary research organization

Create plan

Cancel



University
of Windsor

Data management planning for Tri-Agency Grant Applications

DMP questions

<https://leddy.uwindsor.ca/rdm/data-management-plans>

Sections	Questions for Preparing a DMP	Circle if you have gathered this information
1. Administration	<p>Name(s) and contact information for Principal Investigator (PI)(s), Co-Investigator(s), and research assistant(s) who have access to the data</p> <p>Is the main data contact (the person responsible for the data) identified?</p>	<p>Y / N / NA</p> <p>Y / N / NA</p>
2. Data Collection	<p>Have you considered what data do you intend to collect?</p> <p>Have you identified the file formats your data be collected and saved in?</p> <p>Do you know much data storage space do you anticipate needing for the data you will collect?</p> <p>Have you considered if you will be re-using any data? If so have you considered how you will obtain that data and integrate it into your research project?</p> <p>What conventions and procedures will you use to structure, name and version control your files to ensure that your data is well-organized?</p>	<p>Y / N / NA</p> <p>Y / N / NA</p> <p>Y / N / NA</p> <p>Y / N / NA</p> <p>Y / N / NA</p>
3. Documentation and Metadata	<p>What documentation will be needed for the data to be read and interpreted correctly in the future?</p> <p>Are you able to list the metadata standard and tools you will use to document and describe your data? If there is not an appropriate standard, can you explain how you will ensure consistency in your documentation?</p> <p>How will you make sure that documentation is created or captured consistently throughout your project?</p>	<p>Y / N / NA</p> <p>Y / N / NA</p> <p>Y / N / NA</p>
4. Storage and Backup	<p>How and where will your data be stored and backed up during your research project?</p> <p>How will you ensure that sensitive data is stored securely and only accessible to the research team during the research project?</p>	<p>Y / N / NA</p>



DMP Assistant

Data Management Plan for Longitudinal Monitoring of Freshwater Ecosystems under Climate Change Stressors

Project Details	Contributors	Plan overview	Write Plan	Research Outputs	Share	Download
-----------------	--------------	---------------	------------	------------------	-------	----------

expand all | collapse all

0/24

Data Collection (0 / 5)	+
Documentation and Metadata (0 / 3)	+
Storage and Backup (0 / 2)	+
Preservation (0 / 3)	+
Data Sharing and Reuse (0 / 4)	+
Ethics and Legal Compliance (0 / 3)	+
Responsibilities and Resources (0 / 4)	+



DMP Assistant

Data Management Plan for Longitudinal Monitoring of Freshwater Ecosystems under Climate Change Stressors

[Project Details](#)[Contributors](#)[Plan overview](#)[Write Plan](#)[Research Outputs](#)[Share](#)[Download](#)

Set plan visibility

Public Or Organizational Visibility Is Intended For Finished Plans. You Must Answer At Least 0% Of The Questions To Enable These Options. Note: Test Plans Are Set To Private Visibility By Default.

- ☒ Private: visible to me, specified collaborators and administrators at my organization
- ☐ Organization: anyone at my organization can view
- ☐ Public: anyone can view or download from the Public DMPs page











University
of Windsor

Data management planning for Tri-Agency Grant Applications

DMP Assistant: Templates

DMP Templates

- [Data Management Plan Template: Advanced Research Computing](#) 
- [Data Management Plan Template: Arts-Based Research](#) 
- [Data Management Plan Template: CRDCN: Accessing Data from Research Data Centres](#) 
- [Data Management Plan Template: CRDCN: Research Data Centres and External Analysis](#) 
- [Data Management Plan Template: History and the Humanities](#) 
- [Data Management Plan Template: Interdisciplinary Health Software/Technology Development](#) 
- [Data Management Plan Template: Mixed Methods \(Surveys & Qualitative Research\)](#) 
- [Data Management Plan Template: Neuroimaging in the Neurosciences](#) 
- [Data Management Plan Template: Open Science Workflows](#) 
- [Data Management Plan Template: Qualitative Health Sciences Research](#) 
- [Data Management Plan Template: Studying Molecular Interactions](#) 
- [Data Management Plan Template: Systematic Reviews](#) 
- [Data Management Plan Template: Water Quality Research](#) 

<https://alliancecan.ca/en/services/research-data-management/learning-and-training/training-resources#heading-dmp-templates>



Meet DMP Assistant: Exemplars

The screenshot shows the Zenodo website interface. At the top, there's a blue header with the Zenodo logo, a search bar containing 'exemplar', and links for 'Communities' and 'My dashboard'. Below the header, a banner for the 'Digital Research Alliance of Canada - Alliance de recherche numérique du Canada' is visible. The main content area displays search results for 'exemplar', showing 19 results found. On the left sidebar, there are filters for 'Versions', 'Access status', 'Resource types', and 'Subjects'. The 'Subjects' filter is currently selected, showing 'Data Management Plan' (19 results) and 'Exemplar' (19 results). The main results list shows two entries: 'Data Management Plan Exemplar #3: Mixed Methods Fictional Exemplar' by Doiron, James, and 'Data Management Plan: Soundscape Study (Exemplar)' by Paquette-Digias, Ève. Each entry includes a brief description, the date of upload, and the number of views and downloads.

<https://zenodo.org/communities/alliancecan/records?q=exemplar&f=subject%3AExemplar&l=list&p=1&s=10&sort=bestmatch>



Data Management Planning Wrap Up

- Provide clear, detailed responses throughout your DMP
- Update your plan regularly as your project evolves
- Refer to strong examples to guide your own DMP
 - [Exemplars](#) from the Digital Research Alliance of Canada
 - See UWindsor's checklist of [guiding questions](#)
- Connect with us for a [consultation](#)
- Visit the University of Windsor [RDM Knowledge Portal](#) for further guidance across the research data life cycle



Research Data Management Workshops



Research Data Management Workshops

DEPOSITING AND SHARING DATASETS FOR PRESERVATION IN BOREALIS

Thursday, April 24, 2025, 1:00pm - 2:00pm

Online, Faculty members, Graduate students, Post-docs and research staff, University staff

REGISTER

Depositing and sharing research data are becoming widely recognized as essential practices for promoting open science, reproducibility, research integrity, and collaboration. Many disciplines, funding agencies, and academic journals now require researchers to make their data publicly available. But how can you ensure your dataset is prepared for sharing? Which repository is the best fit for your data? If you have a dataset ready for deposit or need guidance on preparing one, join this workshop to learn more.

Add to:

GOOGLE CALENDAR

OTHER CALENDAR (.ICS)

APRIL 24, 1-2PM
[Register](#)



University
of Windsor

Data management planning for Tri-Agency Grant Applications

Research Data Management Workshops

BEST PRACTICES FOR MANAGING YOUR RESEARCH DATA

Thursday, May 8, 2025, 1:00pm - 2:00pm

Online, Faculty members, Graduate students, Post-docs and research staff, University staff,
Research practices

REGISTER

This workshop will cover essential research data management practices, highlighting how a little effort in organizing your data now can save significant time and hassle later. Participants will learn key strategies for data planning, storage, organization, preservation, and sharing to ensure efficient and effective research workflows.

Add to:

GOOGLE CALENDAR

OTHER CALENDAR (.ICS)

MAY 8, 1-2PM

[Register](#)



University
of Windsor

Data management planning for Tri-Agency Grant Applications