



I. WHY DO WE NEED A DATA POLICY?

As data owners, custodians, and users, we recognize the value of data as well as our responsibility to collect, manage, use, and share the data. With respect to Mekong Hydroshare, data policies are necessary to regulate the management and publication of the data shared on this platform. Our goal is to ensure that data posted are properly obtained, shared, and attributed. Ultimately, the primary outcome is to maintain high quality of the data.

MekongWater generally supports *open data* policies to maximize the value of data for all stakeholders. Open data does not equate to unregulated distribution and sharing of data; conversely, open data can only be possible if all data are properly attributed. As the person uploading the data, it is essential to describe the data provenance to the best of your knowledge. In other words, others using the data should be able to understand clearly who created the data, who owns the data, and who is managing the data so that they can properly attribute or ask question as needed.

II. ROLES AND RESPONSIBILITIES

The various data roles (defined by their responsibility to the data) often belong to the same person and attribution is simple. In cases where the roles belong to different people, it's important to make the right attribution. We identify two key roles with respect to data as follows:

Data Owner: The Data Owner has entire rights over the dataset, including deleting or removing it from the public domain. The data owner may not necessarily be the person who collected the data, but has ownership over it. Subsequent uses and new versions of the data must be approved by the data owner. Along with these rights, the data owners must also assume the ultimate accountability for the data. Data owners are responsible for data quality, and compliance with applicable law and regulation.

Data Custodian: In cases where it's necessary, data owners assign data custodians manage the data on their behalf. Data custodians may be individuals or organizations (such as a database or repository). The data custodian has limited rights over the data, based on the agreement with the data owner. For example, the data custodian may be able to share the data, make minor updates or edits, or consult data users on how to best analyze or use the data. Rights that are *not* usually given to data custodians include: delete or remove data from circulation, or make substantial edits to the raw data. Responsibilities of the data custodian include: promote and share the data on behalf of the data owner, ensure that the data is used appropriately, improve quality and searchability of the data, and bring major issues to the attention of data owners.

Note on Data Uploader: MekongWater depends on the community to upload data for sharing and collaboration. While we encourage and support as much data sharing as possible, all data uploaded to MekongWater must abide by relevant local, national, and international law. For example, data cannot contain information deemed sensitive that violate national law (such as personally identifiable medical record). The data uploader must have the right to share the data on MekongWater. *If the uploader is not*

the owner or custodian of the data, he/she must have received explicit permission to upload data on their behalf.

If you are NOT the owner or official custodian of the data, or you have not been designated to upload the data on their behalf, please do NOT upload the data.

III. F.A.I.R DATA PRINCIPLES:

The mission of MekongWater is to promote data sharing and transboundary collaboration. Therefore, MekongWater adopts the F.A.I.R (Findable, Accessible, Interoperable, and Reusable) data principles, which is summarized as follows:

Findable – In order for data to be used by collaborators, it must be findable. To ensure that others can find your data, we ask that data be hosted by a stable and recognized open repository (such as Mekong Hydroshare). Such systems support powerful search engine that can quickly find your data if a potential is looking for it. Using such a repository also ensures that your dataset continues to be available to both humans and machines in a useable form in the future.

To aid discoverability, metadata should capture as much information as possible on the data. Critical information includes data owner/author, dates, location, subject keywords, etc. The format of metadata standards adopted by Mekong Hydroshare is the result of discussion with the broad hydrologic community. Since metadata is created to support the users, if you have recommendation for changes please write to us directly.

Accessible – Once the data is found, the user needs to know how to access it. Data accessibility is defined by the presence of a terms-of-use for the data. In other words, the data owner must specify explicitly how the users can obtain and use the data. Examples include: the user must get permission from the data owner, the user can only use the data for certain purposes, or the data is freely available as long as the user credit the data owner. Those wishing to better understand the accessibility issues may consult references such as the “creative commons” community and their license structure (<https://creativecommons.org/licenses/>).

Interoperable – Data is most powerful when it’s used in combination with other data and resources to increase scale and impact. That is, data should be organized and stored using community-adopted standards so that it’s readily available to be compared or integrated with other data, and analyzed by machines. To bolster interoperability, data should be stored in a non-proprietary open file format and described using a standard vocabulary (where available).

Reusable – Data that is findable, accessible, and interoperable is generally fit for reuse. On occasion, the inclusion of additional documentation alongside the data may be required to ensure that the data are understandable and thus reusable. As a general rule, someone who is not familiar with the data should be able to understand what it is about using only the metadata and documentation provided.

This data policy is developed for Mekong Hydroshare. Questions about this policy document, including suggestions for changes, can be directed to: support@mekongwater.org