The CAP LTER information management system: data management for project investigators and the scientific community



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overview

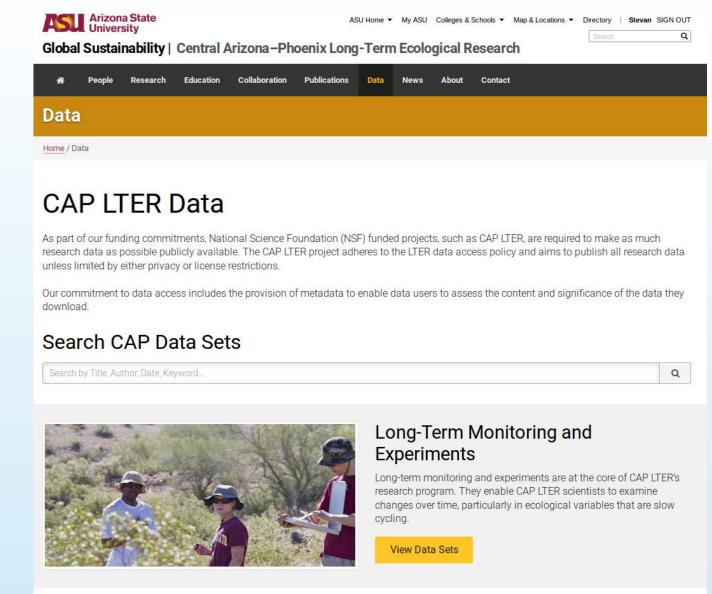
- The CAP LTER addresses the long-term curation and dissemination of research data with a robust Information Management System (IMS) that benefits CAP LTER investigators and the broader scientific community.
- The CAP LTER IMS facilitates the ingestion of research data and metadata that are housed in the CAP LTER and Environmental Data Initiative (EDI) data repositories, providing long-term storage and access to research data.
- Submitting data through the CAP LTER meets data publishing requirements set by funders and publishers, and each data set is given a unique Digital Object Identifier (DOI) that a data provider may reference.
- The CAP LTER Information Manager and the GIOS Informatics team are available to assist with the data publishing process, developing data management plans, and to provide guidance regarding effective approaches to research data management.

data resources & services

CAP LTER project data are publicly available. Resources include data from current and historic long-term monitoring programs, and investigator-provided data. Vignettes provide overviews of the long-term monitoring programs. Project data are searchable by author and keywords through the CAP LTER and EDI data catalogs.

Data publishing services are available for all GIOS research initiatives.

A **Data Management Plan** (DMP) is now required for most proposals. The GIOS Informatics team can help with boiler-plate DMP materials, and advice regarding DMP development.



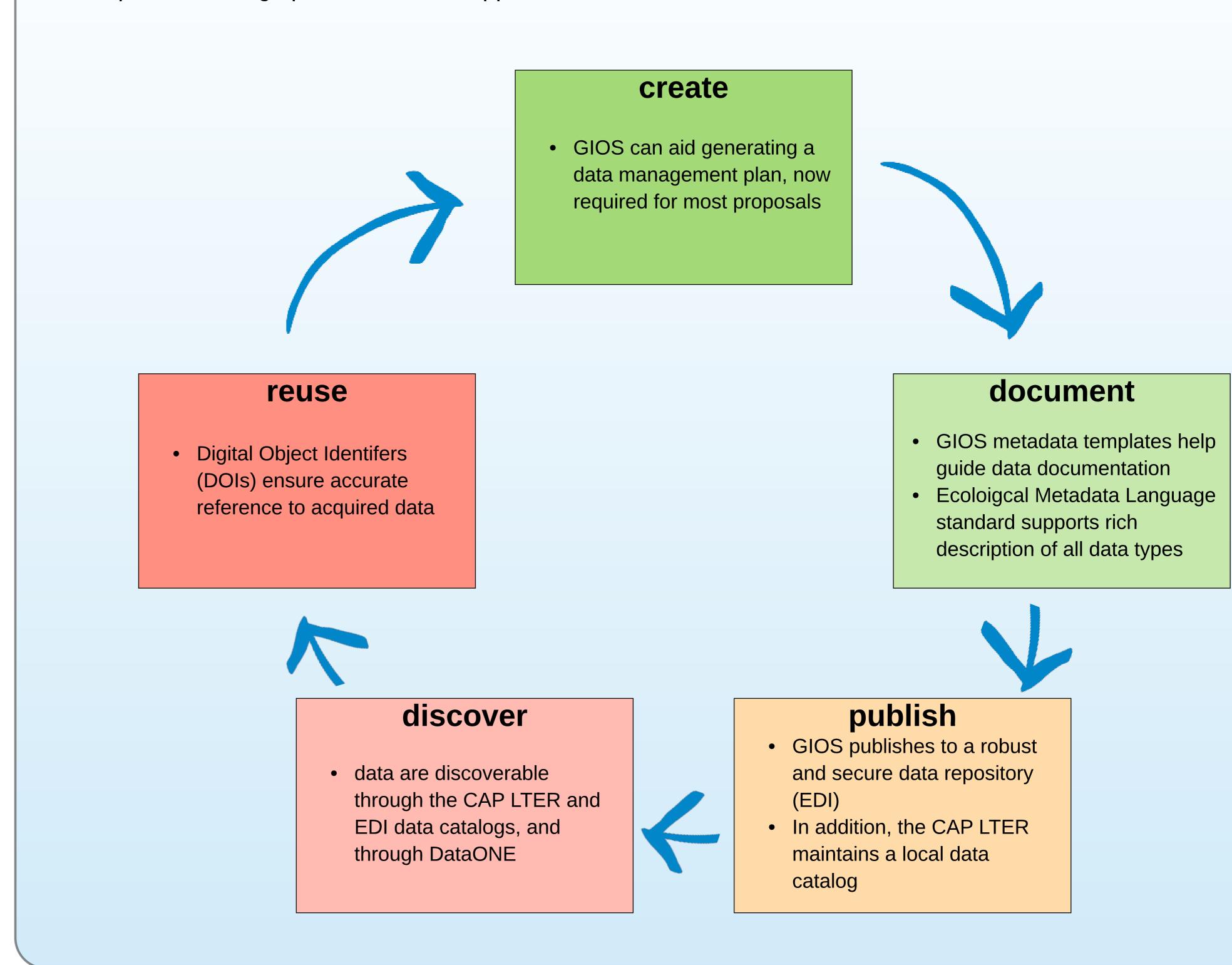
data management infrastructure and processes

The CAP LTER employs a robust internal infrastucture and system processes to facilitate resilient storage of research data and metadata. Data and metadata undergo quality control before achiving through Amazon Web Services and with the Environmental Data Initiative (EDI). Data are discoverable and available through the CAP LTER and EDI data catalogs, the latter providing a Digital Object Identifier (DOI) for data packages that can be referenced in the same manner as a manuscript. The EDI data catalog is also visible through DataONE, an aggregator of a number of diverse data repositories, which greatly enhances data discoverability.

data archiving & publishing data discovery data undergo quality control metadata are standardized processed data & metadata are CAP LTER in the Ecological Metadata housed with AWS and EDI data Language (EML) long-term repository monitoring data packages are available databases through the CAP LTER and EDI metadata data catalogs standardization: quality control monitoring CAP LTER data ___packaged data program & metadata catalog metadata investigator-Environmental supplied data Data Initative (EDI) DataONE data repository metadata standardization: / quality control / investigator- the EDI data catalog is visible through supplied DataONE, a data aggregator that metadata greatly enhance discoverability. packaged data & metadata **Digital Object** Identifier

data life cycle

GIOS infrastructure, and data resources and serices help investigators to complete the **data life cycle** from data creation and acquisition through publication that supports data reuse.



web: https://sustainability.asu.edu/caplter/data/

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