

NGI-LSU Project

Information Management Policies and Documents

Last updated July 2009

The mission of Louisiana State University's **Northern Gulf Institute/Shell (NGI)** Information Management System (IMS) is to facilitate the site's scientific work and to ensure the integrity of the information and databases resulting from the site's coastal Louisiana ecosystem research. To assure total support of the site and network science, the **NGI Project** Information Management (IM) team will establish a set of primary goals: 1) design and implement a IMS to handle research contributions from several large **NGI Project** research laboratories, 2) collect and archive both **NGI Project** and historical coastal Louisiana data, 3) provide comprehensive metadata for data interpretation and analysis, 4) design and implement tools that facilitate data management, data discovery and data access and 5) contribute to **NGI Project** network informatic activities. **NGI Project** researchers will adhere to a data submission policy that requires all data submissions to be accompanied by metadata. As a result of this staunch data submission policy, the **NGI Project** IMS will have a very robust archive of research metadata.

NGI Project Data Management Policy - The **NGI Project** Data Management Group has established a set of protocols and services for data collection, quality assurance, organization, data archival, data access, and data distribution to facilitate our scientific work. A full description of the **NGI Project** IMS topics are found in this document: IMS objectives, **NGI Project** research project management, data collection protocols, quality assurance procedures, data organization description, data archival and protection procedures, data distribution information, and the **NGI Project** data user agreement.

A goal of the **NGI Project** Data Management Group is to create and maintain an archive of NGI data files that are error free and fully documented. Good communication and interaction between the Information Manager, Project Manager, and scientists are both critical to preventing data loss and to maintaining data integrity. Any NGI researcher who submits data to the NGI database will be responsible for the quality assurance of that data, including the metadata content. Once those data have been submitted to the **NGI Project** Information Manager, the **NGI Project** Program Manager and Information Manager will be responsible for supervision and stewardship of datasets.

Data Submission Information -To ensure that **NGI Project** data are properly archived and protected, researchers are strongly encouraged to routinely submit data from ongoing research to the **NGI Project** Information Manager. The **NGI Project** Data Management Group have created this comprehensive document to provide detailed information to our

researchers about WHAT information needs to be contributed to the IMS, WHEN the information should be submitted and how to send documents to the **NGI Project** Information Manager. The **NGI Project** Information Management team consists of one full-time Information Manager and one full-time Project Manager funded by NGI-LSU.

All of the **NGI Project** core data and metadata files from individual research studies will be stored in a hierarchical flat file directory system. The IMS should give **NGI Project** researchers, network scientists and the general public an option to download complete original data files submitted by individual **NGI Project** scientists in addition to searching the metadata. Core data will be made available to the public within two years of data collection and will be accessible on-line in accordance with the **NGI Project** Data User Agreement. Presentations will be listed on the **NGI Project** website (<http://www.ngi.lsu.edu>), and in some cases, users may view a presentation via a document link.

Data and information contributions will be made to the **NGI Project** IMS from the designated NGI-LSU working groups. Researchers within these workgroups are responsible for quality assurance, quality, data entry, validation, and analysis for their respective projects. The Information Manager will schedule quarterly data collection dates (Jan 1, April 1, July 1, & October 1) throughout the year and will send email collection reminders to all participating researchers, with the appropriate data submittal information. Data submitted to the Information Manager undergo IMS quality assurance and quality control procedures; the data and metadata are thoroughly examined to ensure that the data fields and values are correctly described by the metadata.

Basic Project Information and Data Submission Steps - Researchers submit two (2) files to the **NGI Project** Information Manager: 1) Data file in either Microsoft Excel (.xls or .xlsx) format or delimited ASCII text (.txt) format and 2) accompanying Microsoft Excel NGI-LSU Project EML metadata template file. The template file can be obtained by request from either the Project Manger or Information Manger. File names must follow the naming convention set out below under "File Naming".

Once researchers have completed the metadata file that corresponds to their project data file, the files should be uploaded to the **NGI-LSU Project** Website (<http://www.ngi.lsu.edu/ngi/django/archive/upload/>). Researchers are strongly encouraged to submit new project metadata/data to the Information Manager within 6 months of a project commencement, and thereafter on the quarterly schedule. This part of the website is password protected. Either the NGI-LSU Project Manager or Information Manger will provide passwords.

The EML Metadata template (.xls or .xlsx) - The **NGI Project** Information Management Group has created an EML Metadata Template, available in Microsoft Excel (.xls) format, which follows the EML content standard and is based on the FCE-LTER EML Best Practices Tier 5 (EXCEPT for the "Constraint" Element (September, 2004)). All pertinent sections of the metadata template must be completed and verified by the

researcher. This metadata must accompany a corresponding data file when submitted to the **NGI Project Information Manager**.

File naming - NGI-LSU data files and their accompanying metadata files will carry the same name with the exception of the word ‘_meta’ added to the end of the metadata file name. Data and metadata files will be submitted in either Microsoft Excel (.xls or .xlsx) or tab delimited text files (.txt) formats. Datasets and metadata submitted by NGI-LSU researchers will be named by using 1) the type of dataset (see below), 2) researcher’s major research theme acronym abbreviation (see below), 3) researcher’s last name, and 4) a dataset number (based on the number of datasets previously submitted by researcher to the Information Manager). For example, the first short-term experiment dataset and dataset metadata submitted by Hollie Munday, a member of the Wetland Restoration Workgroup, would be assigned a dataset name of ST_WR_Munday_001 and ST_WR_Munday_001_meta, respectively. The first long-term experiment dataset and dataset metadata submitted to the Information Manager by Hollie Munday2, also a member of the Wetland Restoration Workgroup, would be assigned a dataset name of LT_WR_Munday2_001 and LT_PP_Munday2_001_meta, respectively. If Hollie Munday2 submitted her second long-term experiment dataset and dataset metadata related to a different research workgroup, Public Health, the dataset would be LT_PH_Munday2_001 and the metadata would be named LT_PH_Munday2_001_meta. For those researchers who will be updating data files already submitted to the Information Manager (e.g. monitoring data), the updated data file should retain the old data file name with a version extension added. For example, if the original data file is named LT_WR_Munday_001, the first update of the file will be named LT_WR_Munday_001.v1 and the second update of the file will be named LT_WR_Munday_001.v2. The accompanying metadata files will be named LT_WR_Munday_001.v1_meta and LT_WR_Munday_001.v2_meta.

NGI-LSU Dataset IDs contain the following information:

Data set type_Research Group_Originator’s last name*_Data set number

For example, LT_WR_Munday_001 refers to a long-term experiment dataset (ST) submitted by a member of the Wetland Restoration research group (WR) with a last name of Munday. The data set number is 001.

*the originator might be different from the contact person

Type of Data Set	Abbreviations
Short-Term*	ST
Long Term**	LT
* Data collected for a period <= to 3 years	
**Data that will be or has been collected for a period > than 3 years	

Research Group	Acronym
Modeling and Ecosystem Forecasting	EM
Material Exchange	ME
Trophic Linkages and Biomass Production	TL

Public Health	PH
Remote Sensing	RS
Barataria Bay Surveys	BB
Breton Sound Surveys	BS
Event Surveys	ES
Wetland Platforms	WP
Coastal Platforms	CP
Bay Platforms	BP

NGI Project Data Distribution Policy–The **NGI Project** recognizes that researchers have first priority for use of their data in publication. The **NGI Project** is committed to providing access to research data collected under the support of our project in a timely fashion. Data and information derived from publicly funded research, Institutional Cost-Share, or Partner Agency or Institution where a formal memorandum of understanding with the **NGI Project** has been established, will be made available online with as few restrictions as possible, on a nondiscriminatory basis. The **NGI Project Data Management Group** will make "unlocked" **NGI Project** data and metadata available for online access via the web according to the data availability status as defined by the following data 'Types' found in this document. The **NGI Project Information Manager** protocol is that researchers must provide an “unlock” date for all datasets (meaning a date after which these data can be unlocked and made available to the public). This “unlock-date” must be no more than 2 years from the submission date. The **NGI Project** researcher associated with a given dataset controls access to their data within this 2 year protected period. No locked datasets will be released to anyone (including **NGI Project**-affiliated researchers) without the expressed permission of the researcher, transmitted in writing to the **NGI Project Information Manager** (email is acceptable), whose data has been requested. If a longer protection period is necessary for a particular dataset, the **NGI Project** researcher may petition the **NGI Project Internal Executive Committee (IEC)** for a protection period extension.

The **NGI Project Data Management Group** will make “unlocked” **NGI Project** data and metadata available for on line access via the web according to the data availability status as defined by the following data ‘Types’:

Type 1: Published data and metadata are available upon request without restrictions other than those set out in the ‘Data Users Agreement’. These data cannot be “locked”.

Type 2: Collective data of the **NGI Project**, such as climatological and hydrological measurements, are available for specific scientific purposes within 1 year after collection. Maximum lock period = 1 year.

Type 3: Original **NGI Project** experimental data collected by individual **NGI-LSU** researchers are available for scientific purposes 2 years after collection. Maximum lock period = 2 years.

Type 4: Data related to the NGI-LSU Program but not funded by the scientific project are available for scientific purposes no more than 4 years after collection. Recommended maximum lock period = 2 years. In some cases, these data are funded by other agencies but the data are tied to the **NGI Project** objectives or were collected at **NGI Project** sites. In these cases, the researchers are strongly encouraged to either a) submit links to their databases, allowing direct connection to their web accessible data via the **NGI Project** website and through the **NGI Project** Database, or b) to also submit their data to the **NGI Project** Information Manager at the time they are released to the agency. In either case, the researcher should seek permission of the agency in question to make this link. In these cases, the recommended lock period is identical to that mandated by the funding agency.

Type 5: In rare cases, data may require permanent restriction, and thus always be "locked" except with the permission of individual researcher. Data may receive his Type 5 status due to following conditions:

A) Data that include sensitive resources that might be endangered by the release of information. This may include but not be limited to the locations of endangered species and locations of permanent plots in sensitive areas.

B) Data that may compromise a person's personal privacy such as census data involving human subjects.

C) Data that are covered by copyright laws such as TM and/or SPOT Imagery data.

Data User Agreement

Unlocked data sets available via the NGI-LSU site are freely available and can be downloaded for academic, research, or professional purposes subject to the following user terms:

A) User must notify designated NGI-LSU researcher when any future work based on or derived from NGI-LSU data is published.

B) User agrees not to redistribute original NGI-LSU data and documentation.

C) User will acknowledge the support of the NGI-LSU Program/ Researcher and the appropriate NOAA Grant numbers in any publications using these data with the following citation:

Data sets were provided by the Northern Gulf Institute at LSU (<http://www.ngi.lsu.edu>). This [report/video, etc.] is based upon work by [Researcher's name] under award NA06OAR4320264 06111039 to the Northern Gulf Institute by NOAA's Office of Ocean and Atmospheric Research, U.S. Department of Commerce.

D) User agrees to send 2 reprints of any publications resulting the use of the data and documentation to the following address:

Northern Gulf Institute at LSU
C/O Project Manager
3251 Energy, Coast and Environment Building
Louisiana State University
Baton Rouge, Louisiana 70803

By using or copying these data and documentation, the Data User agrees to abide by the terms of this agreement.