Defense Coastal/Estuarine Research Program (DCERP)

SERDP RC-2245

DCERP Data Policy
Version 2.0

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A. Data Use Agreement
Definitions

Data Requestor or Data User—For the purposes of this document, the terms “data requestor” or “data user” are often used interchangeably, depending on context.

DCERP (Defense Coastal/Estuarine Research Program)—This program is a Strategic Environmental Research and Development Program (SERDP)–funded study sited at Marine Corps Base Camp Lejeune (MCBCL). The first cycle of DCERP is referred to as DCERP1 and was conducted from July 2006—January 2013. DCERP2, the second cycle of DCERP, is being conducted from February 2013—October 2017. This document is inclusive of both cycles of the DCERP.

DIMS (Data and Information Management System)—The DCERP DIMS is a comprehensive system that supports and provides a repository for DCERP’s collection and storage of environmental data. DIMS supports DCERP’s geospatial data management, statistical analysis, model integration, and document sharing. The DCERP DIMS consists of the following systems: the Monitoring and Research Data Information System (MARDIS), the DCERP public Web site, the Document Database, and the Spatial Decision-Support System (SDSS), which consists of the interactive mapping applications (iMAP) and ecosystem-based management tools.

Ecosystem Module Team—DCERP uses four ecosystem modules to facilitate its research and monitoring activities at MCBCL. The following four ecosystem modules were included in both DCERP1 and DCERP2: Aquatic/Estuarine, Coastal Wetlands, Coastal Barrier, and Terrestrial Modules.

iMAP (Interactive Mapping Applications)—The iMAP is the component of the SDSS for visualizing DCERP geospatial data and providing spatial search capabilities for data from MARDIS and other sources.

MARDIS (Monitoring and Research Data Information System)—MARDIS is the long-term repository for all DCERP monitoring and research data.

MCBCL (Marine Corps Base Camp Lejeune)—Located in Jacksonville, NC, MCBCL is the largest U.S. Marine installation on the East Coast and serves as the main host site for DCERP.

Monitoring Data—This term refers to data collected under activities specified in the DCERP Baseline Monitoring Plan (RTI International, 2007a), the DCERP2 Monitoring Plan (RTI International, 2013a), or added by approved supplemental funding requests as new monitoring activities.

RCC (Regional Coordinating Committee)—The RCC is a group of local, state, and regional stakeholders whose organizations conduct research similar to that conducted under DCERP. These stakeholders provide input about their organization’s findings and how their results may be used by DCERP researchers, as well as valuable input to the RTI International DCERP Team regarding the application of results to real-world natural resource management issues.

Research Data—This term refers to data collected under research project activities specified in the DCERP Research Plan (RTI International, 2007b), the DCERP2 Research Plan (RTI International, 2013b), or added by approved supplemental funding requests as new research projects.

RTI DCERP Team or Researchers—The RTI DCERP Team includes the DCERP Principal Investigator, other environmental scientists from RTI, and researchers from seven universities, three federal agencies, and five small businesses.
SERDP (Strategic Environmental Research and Development Program)—This program is the U.S. Department of Defense’s environmental science and technology program, implemented in partnership with the U.S. Department of Energy and the U.S. Environmental Protection Agency. SERDP invests in basic and applied research and provides funding and oversight for numerous research projects including DCERP.

SDSS (Spatial Decision-Support System)—The SDSS is the information system that brings together research and monitoring data from MARDIS, geographic information system (GIS) maps, various management and climate scenarios, and models and tools in interactive, and mostly spatial, interfaces.

TAC (Technical Advisory Committee)—The DCERP TAC consists of scientific experts from a variety of disciplines from academia, federal agencies, and the private sector who are selected by SERDP to review the science conducted in DCERP and make recommendations to assist the team in attaining the research objectives of the program. The TAC provides third-party review of the program and recommends course corrections when needed.
1.0 Introduction

The DCERP Team created the DCERP Data Policy version 1.0 in 2009 and updated it in 2016 as version 2.0. This section of the policy provides the background for the data management strategy for the Defense Coastal/Estuarine Research Program (DCERP) and discusses the purpose of the Data Policy for this program.

1.1 Background

The data management strategy for DCERP is designed to address the needs of the program, individual DCERP researchers, Marine Corps Base Camp Lejeune (MCBCL), the larger scientific community, and other stakeholders. Central to this strategy is the timely submission and sharing of data and metadata collected during the monitoring and the research programs. DCERP researchers have a strong commitment to data integrity and to meeting the data management requirements established by the Strategic Environmental Research and Development Program (SERDP) for storing and sharing this data with MCBCL and other U.S. Department of Defense (DoD) installations, the scientific community, and other local, state, and regional stakeholders.

To facilitate data management, the DCERP Data and Information Management System (DIMS) was implemented by the Data Management Team in DCERP1. The first objective of DIMS is to support the data collection and research efforts of DCERP that better enable DCERP researchers to communicate, collaborate, and contribute to DCERP objectives. The second objective of DIMS is to make DCERP data readily available and usable by MCBCL staff to support ecosystem-based data management. DIMS includes the Monitoring and Research Data Information System (MARDIS), Spatial Decision-Support System (SDSS), and the Document Database. MARDIS is a centralized database that stores and presents data collection activities from each ecosystem module in a consistent format and standardized structure. The SDSS is the information system that brings together data from MARDIS, geographic information system (GIS) maps, various management and climate scenarios, and models and tools in interactive and mostly spatial interfaces. The Document Database is a repository for unstructured data, maps, reports, and documents.

1.2 Purpose

The purpose of the DCERP Data Policy is to encourage openness and sharing of DCERP data for the mutual benefit of SERDP, DCERP, MCBCL, other DoD installations, the scientific community, and other stakeholders. The Data Policy applies to current and future access to research and monitoring data collected or information produced by using SERDP funds that are contained in the DCERP DIMS, including the MARDIS, the interactive mapping applications (iMAP), and the Document Database. The goals of the Data Policy presented in this document are to allow access to DCERP data consistent with the following:

- Protecting the security interests of MCBCL
- Protecting the intellectual rights of DCERP researchers to have first rights to publish the results of their work
- Maintaining an open and cooperative relationship between DCERP researchers and MCBCL staff
- Enhancing the use of publicly funded data to meet multiple scientific, DoD installation, and other end-user purposes.

This DCERP Data Policy also specifies the general roles and responsibilities of the DCERP Data Management Team, the DCERP researchers, and the various data users regarding the use of DCERP data;
describes the data access and release processes; and discusses the acceptance of the Data Use Agreement by all parties.

2.0 Data Management Responsibilities

This section of the Data Policy describes the data management responsibilities of the various parties: the DCERP Data Management Team, the DCERP researchers, and other data users.

2.1 Responsibilities of the DCERP Data Management Team

The Data Management Team is responsible for providing and maintaining the DCERP DIMS. The team also develops and implements policies, guidelines, standards, and procedures for DCERP data management activities, thus ensuring the integrity, security, accessibility, and usefulness of data and information maintained in DIMS. In addition, the Data Management Team ensures that data are maintained in a secure environment and are suitably controlled to ensure that only authorized users can access the data. The team defines data standards that allow for integration and standardization across the various types of DCERP data and information and provides basic validation checks of data to ensure compliance with MARDIS standards and data integrity. The Data Management Team also provides Web-based user interfaces that will allow authorized users to view and download data and information. Finally, the team serves as the liaison with the DCERP researchers, the DCERP On-Site Coordinator, MCBCL, SERDP, and other users to encourage and evaluate feedback, ensure that user community needs are being met, and ensure that all levels of data and metadata are available in the appropriate time frame.

2.2 Responsibilities of the DCERP Researchers

DCERP researchers are responsible for the timely submission of all data and metadata generated during monitoring activities and research projects to DIMS. DCERP researchers also have primary responsibility for the quality and correctness of data submitted to DIMS and should interact with the Data Management Team to ensure that

- Data comply with DIMS standards and contain metadata that conform to the policies developed for the DCERP DIMS
- Data are uploaded into DIMS by using the approved format and appropriate templates
- Data subject to revision are promptly updated in MARDIS and revisions are thoroughly documented
- Each data set or product in DIMS has metadata or a fact sheet (described in Section 3.1.2 of this Data Policy)
- Questions and concerns related to submitted data or metadata are promptly resolved.

2.3 Responsibilities of Data Users

SERDP recognizes the legitimate rights of data originators and collaborating DCERP researchers regarding the first use of the data they collect. In addition, SERDP encourages data sharing with the scientific community at large and with other local, state, and regional stakeholders. All data users must abide by the terms and policies outlined in this DCERP Data Policy, must follow the data access and release processes outlined in Section 3.0 of this document, and agree to the Data Use Agreement in Appendix A of this Data Policy. These terms and processes include, but are not limited to, working in cooperation with the DCERP researchers, properly citing the DCERP data used, agreeing to the terms of acceptable use, and understanding and agreeing that DCERP data are provided for use solely by the approved data requestor. Any redistribution of the DCERP data or metadata to other unauthorized parties is prohibited.
Access to DCERP data is subject to registration to enable the Data Management Team to track usage, evaluate the data’s impacts in the scientific community, and confirm the data user’s agreement to the terms of acceptable use. Once registered, approved data users will be allowed access to DCERP data.

The following information will be required for registration to access DIMS and is also required when transferring any data to a data requestor via methods other than DIMS:

- Name of the data requestor
- Affiliation of the data requestor
- E-mail address of the data requestor
- Complete contact information (i.e., street address, city, state, zip code, and telephone number)
- Acceptance of the Data Use Agreement, as applicable.

### 3.0 Data Types, Data Users, and Data Access Privileges

To ensure data integrity, DCERP data should be acquired directly from DIMS and not from other third-party sources that may alter the data or may not include the latest updates and revisions to the data. This section of the DCERP Data Policy describes the types of DCERP data available and accessibility, defines the various users, and discusses the user access privileges.

#### 3.1 Data and Metadata Types

##### 3.1.1 Data Types

DCERP data include monitoring and research data. These two different types of data will be available for access to data users within the following time frames:

- **Monitoring data**—DCERP monitoring data, which are identified in the *DCERP Baseline Monitoring Plan* (RTI International, 2007a), and the *DCERP2 Monitoring Plan* (RTI International, 2013a) are available in MARDIS within 6 months after collection.

- **Research data**—DCERP research data, which are identified in the *DCERP Research Plan* (RTI International, 2007b), and the *DCERP2 Research Plan* (RTI International, 2013b), are available in MARDIS within 2 years of the data collection date or by June 2017 to allow time for the DCERP researchers to perform analyses, conduct quality assurance and quality control on the data, and publish the final results.

A third type of data available in DIMS is MCBCL–generated data. These data were provided by MCBCL and are only available to the DCERP Team, SERDP, and DoD users.

##### 3.1.2 Metadata Types

Metadata are needed so that data and products are accurately understood and used in an appropriate manner. Different formats and methods were used to develop this information, but clarity and completeness were the objectives for all metadata. There are three main types of metadata associated with data archived in the DCERP DIMS: metadata required with each MARDIS record (research and monitoring data), geospatial metadata, and data fact sheets. These three types of metadata are discussed further as follows:

- **Research and monitoring data in MARDIS**—Metadata provide supporting information about monitoring and research data that include, but are not limited to, a description of the location where the data were collected, the field and laboratory methods used to collect and analyze the data, and the spatial extent and temporal frequency of the data collected. In MARDIS, metadata fields have been combined with the actual sampling data fields; therefore, DCERP metadata are
not a separate element, table, or document, but instead they are an integral component of each data record.

- **Geospatial metadata (including modeling results)**—Geospatial data generated by DCERP are available in the Document Database and iMAP. When possible, the geospatial metadata uses the format established by the Federal Geographic Data Committee Content Standard for Digital Geospatial Metadata (FGDC-STD-001-1998) and is available in the Document Database.

- **Data fact sheets**—These documents provide general descriptions of the data set, describe the methods used to collect or produce the data, and explain how the data were or can be used and where to find additional information about the data set. The fact sheets are available for the data sets and products displayed in iMAP. Fact sheets are also available on the DCERP public Web site.

### 3.2 Data Users

This section of the DCERP Data Policy identifies the specific types of data users and the level of access to DCERP research and monitoring data for each type of data user. The primary data users are defined as follows:

- RTI International DCERP Team and DCERP researchers (to be identified by RTI)
- SERDP Management Team (to be identified by the SERDP/Environmental Security Technology Certification Program [ESTCP] Executive Director)
- MCBCL personnel (to be identified by MCBCL)
- Other DoD installation personnel (to be identified by the SERDP/ESTCP Program Manager for Resource Conservation and Climate Change)
- Non-DCERP SERDP/ESTCP researchers (to be identified by the SERDP/ESTCP Program Manager for Resource Conservation and Climate Change)
- Technical Advisory Committee (TAC) and Regional Coordinating Committee ([RCC], both to be identified by the SERDP Resource Conservation and Climate Change Program Manager)
- Registered users (including local, state, and federal personnel, as well as private sector, university, and public individuals)
- Unregistered users (no password or registration required; however, user access is limited to the DCERP public Web site only).

### 3.3 Data and DIMS User-Access Privileges

There are three types of access privileges to DIMS: upload, view, and download. Currently, only the DCERP Team, including the Data Management Team, has the ability to upload or edit data directly to DIMS. **Table 1** describes the different data users and the access privileges for each user group based on the type of data (monitoring or research data).
Table 1. Data and DIMS User-Access Privileges for DCERP Research and Monitoring Data\(^a\)

<table>
<thead>
<tr>
<th>Data Users</th>
<th>MARDIS and iMAP Access</th>
<th>Document Database Access</th>
<th>DCERP1 Monitoring and Research Data</th>
<th>DCERP2 Monitoring Data</th>
<th>DCERP2 Research Data(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCERP Research Team</td>
<td>Yes</td>
<td>Yes</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
</tr>
<tr>
<td>SERDP Management Team</td>
<td>Yes</td>
<td>Yes</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
</tr>
<tr>
<td>MCBCL personnel</td>
<td>Yes</td>
<td>Yes</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
</tr>
<tr>
<td>Other DoD installation personnel</td>
<td>Yes</td>
<td>Yes</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
</tr>
<tr>
<td>Non-DCERP SERDP/ESTCP researchers</td>
<td>Yes</td>
<td>No</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
<td>View data privileges</td>
</tr>
<tr>
<td>TAC and RCC members</td>
<td>Yes</td>
<td>No</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
<td>View data privileges</td>
</tr>
<tr>
<td>Registered users</td>
<td>Yes</td>
<td>No</td>
<td>View and download(^c) data privileges</td>
<td>View and download(^c) data privileges</td>
<td>No</td>
</tr>
<tr>
<td>Public access (unregistered users(^d))</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

\(^a\) MCBCL and SERDP have the right to limit the release of sensitive DoD installation data as appropriate.

\(^b\) Access to DCERP2 research data is limited until October 2017 for some users. After that time, DCERP1 and 2 data will be available to all registered users for viewing and downloading.

\(^c\) Prior to downloading data, the user must agree to the Data Use Agreement (see Appendix A of this DCERP Data Policy).

\(^d\) Unregistered users only have access to the DCERP public Web site. Unregistered users, however, can register to obtain data privileges.
4.0 **DCERP Data Use Guidelines**

Monitoring and research data acquired from DIMS will be accompanied by the Data Use Agreement, which describes the general roles, obligations, and rights enjoyed by each data user regarding the use of the released data sets. The Data Use Agreement is available in Appendix A of this DCERP Data Policy. This section of the DCERP Data Policy also describes the required DoD disclaimer and acknowledgments associated with the use of the DCERP data in presentations, publications, and reports for the DCERP Research Team.

4.1 **Data Use Agreement**

The Data Use Agreement pertains to the DCERP Team, SERDP, MCBCL, other DoD installation personnel, non-DCERP SERDP/ESTCP researchers, members of the DCERP TAC and RCC members, and registered users.

The use of DCERP data has the potential to greatly increase communication, collaboration, and synthesis within and among various disciplines, and thus is fostered, supported, and encouraged by SERDP. By accepting DCERP data, the data user agrees to abide by the terms of the Data Use Agreement. The DCERP Principal Investigator (PI) has the right to immediately terminate this agreement by written notice if the data user fails to comply with any of the terms outlined in this agreement. The data user may be held responsible for any misuse that is caused or encouraged by his or her failure to abide by the terms of this agreement. In accordance with the Data Use Agreement (for additional details, see Appendix A of this DCERP Data Policy).

4.2 **Disclaimer and Acknowledgments (DCERP Research Team Only)**

4.2.1 **U.S. Department of Defense Disclaimer**

All publications or reports prepared as part of DCERP must conspicuously display the following disclaimer on the cover page or in the front matter of the report:

“Views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official U.S. Department of Defense position or decision unless so designated by other official documentation.”

4.2.2 **SERDP Acknowledgment**

The following acknowledgment statement must also be included in any report prepared as part of DCERP:

“This research was conducted under the Defense Coastal/Estuarine Research Program (DCERP), funded by the Strategic Environmental Research and Development Program (SERDP).”

In addition to the SERDP acknowledgment previously mentioned, DCERP Team members should also recognize and acknowledge the services provided by MCBCL as the host installation or specific MCBCL staff who provided assistance, as appropriate, in the conduct of their research.

5.0 **References**


Appendix A

Data Use Agreement

(To accompany all data transfers)
Appendix A: Data Use Agreement

Defense Coastal/Estuarine Research Program Data Use Agreement
Version 2.0: February 2016

By accepting Defense Coastal/Estuarine Research Program (DCERP) data, the data user agrees to abide by the terms of the Data Use Agreement. The DCERP Principal Investigator (PI) has the right to immediately terminate this agreement by written notice if the data user fails to comply with any of the terms outlined in this agreement. The data user may be held responsible for any misuse that is caused or encouraged by his or her failure to abide by the terms of this agreement. If you have any questions concerning data access or use policies, please contact the DCERP PI, Dr. Patricia Cunningham, via e-mail at pate@rti.org or the DCERP Data Manager, Ms. Danette Boezio, via e-mail at dboezio@rti.org.

Permission to use DCERP data is granted to the data user subject to the following terms and conditions:

- **Acceptable use.** Use of the DCERP data is restricted to academic, research, educational, government, or other not-for-profit professional purposes. Distribution and/or release of this information and/or data for other purposes are strictly prohibited.

- **Data liability.** Although substantial efforts are made to ensure the accuracy of data and documentation contained in the Data and Information Management System (DIMS), complete accuracy of data and metadata cannot be guaranteed; all data and metadata are made available “as is.” The data user agrees not to hold the RTI International DCERP Team or the individual DCERP researcher liable or responsible for any loss, damage, claim, cost, or expense as a result of DCERP data contents or their use or interpretation. The data user must be aware of data conditions and ultimately bears responsibility for the appropriate use of the information.

- **Redistribution.** DCERP data are provided for use only by the data requestor or user. Redistribution of the data or metadata to other unauthorized parties is strictly prohibited.

- **Citation.** The data user must properly cite the DCERP data in any publications, presentations, posters, or other materials and/or in the metadata of any derived data products that were produced using the DCERP data. A citation should appear in the following general format: *DCERP researcher’s name, year of data collection, title of data set: DCERP Data and Information Management System (database), and date accessed.* An example of a citation is presented as follows:


- **Collaboration.** DCERP data have been released in the spirit of open scientific collaboration; therefore, data users should consider consultation, collaboration, and/or co-authorship with the DCERP researcher who collected the data.

- **Notification.** The data user will notify the DCERP PI (Dr. Cunningham) and the DCERP On-Site Coordinator (Dr. Susan Cohen via e-mail at susan.cohen@usmil.gov) when any derivative work or publication, based on or derived from the DCERP data, is being prepared for distribution in posters, presentations, or publications.