

# Privacy Impact Assessment

## Template: January, 2010

### Cyber and Privacy Policy and Oversight

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- Prepared for: USDA OCIO CPPO
- Prepared by: Kimberly A. Hennings



# Privacy Impact Assessment for the Resource Data Marts

## 2.4.3 Resource Data Gateway (NRIIA-NRD-Gateway) 2.3.2 Geospatial Data Warehouse (NRIIA-DWM-GDW)

Owner Details	
Name	Ken Rojas
Contact Number	(970) 492-7326
E-mail Address	Ken.Rojas@ftc.usda.gov

Revision History			
Revision	Date	Author	Comments
1.0	July 20, 2010	Kimberly Hennings	Initial Draft

## **Abstract**

The primary purpose of the Resource Data Marts application suite is to provide users the ability to identify an area of interest, select available geospatial data for that area, and provides packaging and order fulfillment of geospatial data in support of conservation programs, analyzing and reporting progress, and management applications. This fulfills a congressional mandate. The Resource Data Marts are suite of legacy information systems currently undergoing the Certification and Accreditation process.

## **Overview**

The mission of the Natural Resources Conservation Service (NRCS) is to provide leadership in a partnership effort to help people conserve, maintain, and improve the nation's natural resources and environment. NRCS assists owners of America's private land with conserving their soil, water, and other natural resources. NRCS delivers technical assistance based on sound science and suited to a customer's specific needs.

As directed by the Secretary of Agriculture's March 16, 1998 memorandum, the Natural Resources Conservation Service (NRCS), Farm Service Agency (FSA), and Rural Development (RD) agencies co-located offices, modernized business processes, and partnered to achieve a "one-stop service" for United States Department of Agriculture (USDA) customers at their county-based field offices (Service Centers). One of the major components of the modernization initiative involved the implementation of a Geographic Information System (GIS) across each of the Partner Agencies and in all 2,550 Service Center offices. A Geospatial Data Gateway Team (aka Resource Data Gateway or just Gateway) was chartered with developing a mechanism to deliver geospatial data to users in the Partner Agencies.

The Geospatial Data Gateway allows users to identify an area of interest, select available geospatial data for that area, and provides packaging and order fulfillment of geospatial data in support of conservation programs, analyzing and reporting progress, and management applications.

## Section 1.0 Characterization of the Information

The following questions are intended to define the scope of the information requested and/or collected as well as reasons for its collection as part of the program, system, rule, or technology being developed.

### 1.1 What information is collected, used, disseminated, or maintained in the system?

- Geospatial Data
- Customer Name
- Mailing Address
- Agency Affiliation
- Email address
- Phone Number
- Fax Number
- Map data layers that are ordered and particular data about that order.

### 1.2 What are the sources of the information in the system?

Sources of data within this information system are from customers who place orders for Geospatial Data.

### 1.3 Why is the information being collected, used, disseminated, or maintained?

The primary purpose of the Resource Data Marts application suite is to provide users the ability to identify an area of interest, select available geospatial data for that area, and provides packaging and order fulfillment of geospatial data in support of conservation programs, analyzing and reporting progress, and management applications. This fulfills a congressional mandate.

### 1.4 How is the information collected?

Geospatial data is considered public information. Geospatial data contained in these warehouses may originate from agency collected information such as soils, be purchased for use by USDA customers, or be integrated from a data partner such as the U.S. Geological Survey or US Census Bureau. Map layers are updated on an ongoing basis according to data management plans ([http://www.itc.nrcs.usda.gov/scdm/current\\_dmp.htm](http://www.itc.nrcs.usda.gov/scdm/current_dmp.htm)). Customer order

data is collected from the customer placing orders for Geospatial data and is collected via web-based interface, which is open to the public.

### **1.5 How will the information be checked for accuracy?**

The data is not checked for accuracy. Geospatial data collected from other USDA organizations is assumed correct. Customer order data collected from the customer is not validated for accuracy.

### **1.6 What specific legal authorities, arrangements, and/or agreements defined the collection of information?**

NRCS has developed and implemented the Resource Data Gateway (RDG) at the OCIO ITS Hosting Operations Branch (Web Farm) facility at Fort Collins, CO to enable the agency to meet each initiative within the President’s Management Agenda. The Resource Data Gateway (RDG) is a web-based portal system used to order and deliver digital geospatial resource data stored in the Geospatial Data Warehouse (GDW) to individuals on demand (including public users) around the globe. RDG allows the user to easily locate data that exists for selected geographic areas. Once data is selected, RDG users can arrange to receive the data via File Transfer Protocol (FTP) or compact disk in formats compatible with commercial and Service Center applications.

### **1.7 Privacy Impact Analysis: Given the amount and type of data collected, discuss the privacy risks identified and how they were mitigated.**

The Resource Data Mart application suite handles data as follows:

- Customer Name
- Mailing Address
- Agency Affiliation
- Email address
- Phone Number
- Fax Number

It is important to note that this data is collected by customers wishing to order geospatial data, and is utilized strictly for the purpose of fulfilling the order. It is not shared, disseminated or transmitted to any outside entities. There is a plan in place to migrate the database and tables that contain this information to the OCIO-ITS Hosting Web Farm in Kansas City, MO by the end of the current fiscal year.

## Section 2.0 Uses of the Information

The following questions are intended to delineate clearly the use of information and the accuracy of the data being used.

### 2.1 Describe all the uses of information.

The goals and objectives of access and delivery of geospatial data in the context of GIS Implementation in the Service Centers include:

- Provide one stop shopping for geospatial data.
- Support more efficient and timely program delivery
- Supply greater quantity and variety of products and services for the customer
- Improved quality of products and services for the customer
- Optimize service center staff access to resource data and information
- Strengthen partnerships within government, research organizations, and private sector
- Encourage better use and management of data resources
- GIS improves service center operations by eliminating spatially inaccurate and expensive paper-based maps and information, eliminating duplicate sets of information and processes, and providing easy online access to geospatial data. These improvements and the service center GIS system will enable the development of re-engineered business processes that improve customer service and reduce agency costs.
- Data Warehouse
- To facilitate access, browsing, retrieval, and use of geospatial data, integrated data themes are stored at data warehouses.
- Maps are delivered that are named according to file naming standards in the USDA Geospatial Dataset File Naming Standard (<http://www.itc.nrcs.usda.gov/scdm/docs/SPG-GeospatialDatasetFileNaming.pdf> ).
- The map layers to be served by the gateway are outlined in the USDA Geospatial Data Standard (<http://www.itc.nrcs.usda.gov/scdm/docs/SPG-GeospatialDataStandard.pdf>). Those in bold have been identified as critical layers.

## 2.2 What types of tools are used to analyze data and what type of data may be produced?

RDG is a collection of software applications to address above business needs. All applications are web-based with centralized Web Farm application servers. The geospatial data sets are housed at the Farm Service Agency (FSA) Air Photo Field Office (APFO) in Salt Lake City, UT and at the National Cartographic and Geographic Center (NCGC) in Fort Worth, Texas. RDG is a web-based single access point (portal) system developed with Java and ASP pages. Database servers at the Web Farm are running Microsoft SQL Server 2000. On the NCGC side, RDG application services are served through Internet Information Services (IIS) 6. NCGC-hosted RDG servers also utilize one external storage array on Promise RM8000 systems. Servers at APFO running Image and Data Services use PCNFS to a Sun System.

The RDG subsystem applications are:

- Spatial Data Engine (SDE) Vector Data Service. This service is used, via Arc Internet Mapping System (ArcIMS) to copy maps from the SDE and its underlying Database Management System (DBMS).
- Image Data Service. This service is the same as the SDE Vector Data Service except that it copies maps from a directory/file database.
- CD Service. The CD service utilizes the Rimage Publishing pool at NCGC to burn a copy of CDs or DVDs to send to the user through US postal mail.
- Catalog Details Service. The Catalog service tracks what types of data are available for the geographic area the user is searching in. The user can then pick from these data types to order the data through FTP download or CD/DVD sets.
- Order Service. The Order Service places requests to the SDE Vector and Imaging Services to order an FTP download or CD/DVD set of the information requested by the user.
- Gateway Administration. The Gateway Administration WebPages provide the ability to review RDG components' status, and produce reports; graphs and tables of orders placed with the Gateway. These web pages also enable administrators to troubleshoot problems associated with daily Gateway operations.

The hardware to support these applications is under the OCIO-ITS C&A package.

## 2.3 If the system uses commercial or publicly available data please explain why and how it is used.

- The map layers to be served by the gateway are outlined in the USDA Geospatial Data Standard (<http://www.itc.nrcs.usda.gov/scdm/docs/SPG-GeospatialDataStandard.pdf>). Those in bold have been identified as critical layers. The layers are the following:

- Air Quality
- Archeology
- Cadastral
  - Public Land Survey System (PLSS)
  - Military Installations
  - National/State Forests
  - National/State/County Parks
  - Bureau of Land Management Lands
  - Indian Lands
  - Other Ownership
- - Tax Records
- Census
  - Census Tract Boundaries
  - Census of Population and Housing
  - Census Blocks
  - Census Block Groups
  - Census of Agriculture
  - Economic Census
- Climate/Precipitation
  - Annual
  - Monthly
- Climate/Temperature
- Common Land Unit
- Conservation Practices
  - Planned and Applied Conservation Practices
- Elevation
  - Contours (hypsography)
  - Digital Elevation Models
  - LiDAR & IFSAR data (high resolution elevation data and derived products)
- Endangered/Habitat
- Environmental Easements



- Wetland Reserve Program
- Geographic Names
  - GNIS Major physical and cultural features (concise)
- Governmental Units
  - GNIS Cities and Towns (populated places)
  - State boundaries
  - County boundaries
  - City boundaries
  - Minor civil divisions
  - Congressional Districts
  - Managed Area Database
  - Soil and Water Conservation Districts
  - Resource Conservation and Development Areas
  - Zip codes
- Hydrography
  - EPA Reach 3 Files
  - FEMA Flood Hazard Maps
  - USGS Hydrography
  - Water Control Infrastructures/National Inventory of Dams
- Hydrologic Units
  - 14 digit
- Imagery
- Land Use/Land Cover
- Map Indexes
  - National Aerial Photography Program
  - Quad Index 1:12K, 1:24K, 1:100K, 1:250K
- Ortho Imagery
  - Digital Ortho Quadrangles
  - County Mosaic
- Plants
- Soils

- SSURGO
- Soil attribute database
- Major Land Resource Area (MLRA)
- Topographic Images
  - Digital Raster Graphs
- Transportation
  - Roads
  - Railroad
  - Utilities (pipelines, transmission lines, utility lines)
- Wetlands
  - Agricultural Wetland Determinations (National Food Security Act)
  - National Wetlands Inventory

**2.4 Privacy Impact Analysis: Describe any types of controls that may be in place to ensure that information is handled in accordance with the above described uses.**

N/A. Data produced from this information system is intended for public use. Customer data entered into the system is not disseminated or shared. It is utilized solely for the facilitation and delivery in the purpose of fulfilling customer-requested geospatial data orders.

## **Section 3.0 Retention**

The following questions are intended to outline how long information will be retained after the initial collection.

### **3.1 How long is information retained?**

Customer order information is retained in a database for a period of five (5) years. Once the five (5) year threshold has been reached, all customer data is then hashed. Information regarding what type of geospatial data the customer ordered is kept indefinitely for historical purposes.

**3.2 Has the retention period been approved by the component records officer and the National Archives and Records Administration (NARA)?**

N/A The retention period does not require NARA approval since retention of the data is intended to meet business and organizational requirements for this particular information system.

**3.3 Privacy Impact Analysis: Please discuss the risks associated with the length of time data is retained and how those risks are mitigated.**

Retention of the data is required to meet business and organizational requirements for this particular information system.

## **Section 4.0 Internal Sharing and Disclosure**

The following questions are intended to define the scope of sharing within the United States Department of Agriculture.

**4.1 With which internal organization(s) is the information shared, what information is shared and for what purpose?**

- The *Aerial Photography Field Office (APFO)*: The APFO is a division of the Farm Service Agency (FSA), of the United States Department of Agriculture (USDA). The APFO uses aerial photography to track farm records by drafting farm tract and field boundaries onto aerial photographic enlargements. This allowed for USDA workers and farmers to interact with USDA farm programs. The aerial photos were rectified to allow for accurate measurements and counties were furnished new imagery on average every five years. Aerial photography and digital orthophotography acquired by the USDA are in the public domain and are available to federal and state agencies, and to the general public through the Aerial Photography Field Office.
- The *National Cartography and Geospatial Center (NCGC)*: The NCGC is a division of the NRCS, and produces geospatial maps to support various NRCS projects and programs. NCGC is a major distributor of geospatial data to support NRCS, National, State and local field needs.

**4.2 How is the information transmitted or disclosed?**

This information system utilizes several components to transmit and disclose the data within the information system to offer all users geospatial-related data via the Internet, and provides the ability to order reports via CD and FTP. All information within this information system is intended for public use. Customer contact data entered during the ordering process is not

shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data.

**4.3 Privacy Impact Analysis: Considering the extent of internal information sharing, discuss the privacy risks associated with the sharing and how they were mitigated.**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data.

## **Section 5.0 External Sharing and Disclosure**

The following questions are intended to define the content, scope, and authority for information sharing external to USDA which includes Federal, state and local government, and the private sector.

**5.1 With which external organization(s) is the information shared, what information is shared, and for what purpose?**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data.

**5.2 Is the sharing of personally identifiable information outside the Department compatible with the original collection? If so, is it covered by an appropriate routine use in a SORN? If so, please describe. If not, please describe under what legal mechanism the program or system is allowed to share the personally identifiable information outside of USDA.**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data.

**5.3 How is the information shared outside the Department and what security measures safeguard its transmission?**

N/A All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data.

**5.4 Privacy Impact Analysis: Given the external sharing, explain the privacy risks identified and describe how they were mitigated.**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data.

## **Section 6.0 Notice**

The following questions are directed at notice to the individual of the scope of information collected, the right to consent to uses of said information, and the right to decline to provide information.

**6.1 Was notice provided to the individual prior to collection of information?**

The information system provides a link to the USDA Privacy Policy governing collection of customer-related ordering information. The USDA Privacy Policy is found here: <http://www.nrcs.usda.gov/privacy.html>

**6.2 Do individuals have the opportunity and/or right to decline to provide information?**

Yes. Users also have the right to decline the use of cookies in the information system so that their personal information is not held within session-related cookies. Please see the image below for a screenshot of this capability within the information system.

Please enter your contact information. It is very important to enter a valid email address as this will be the address that a completion email will be sent to when your order is complete.

Your delivery and contact information will be saved as a browser cookie unless you uncheck this box:

**SAVE CONTACT DATA**

Please review our [PRIVACY POLICY](#) for our policies regarding data collected in this application.

**6.3 Do individuals have the right to consent to particular uses of the information? If so, how does the individual exercise the right?**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data.

**6.4 Privacy Impact Analysis: Describe how notice is provided to individuals, and how the risks associated with individuals being unaware of the collection are mitigated.**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data.

## Section 7.0 Access, Redress and Correction

The following questions are directed at an individual’s ability to ensure the accuracy of the information collected about them.

### **7.1 What are the procedures that allow individuals to gain access to their information?**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data. Customers are able to retrieve their order via FTP or have it delivered to them on a CD delivered via U.S. Postal Service mail. To retrieve the geospatial data via FTP services, the customer is sent an email to the email address they provided in the system with directions on how to retrieve their order. Customers retrieve their order by using their email address, name, or system-generated order number.

### **7.2 What are the procedures for correcting inaccurate or erroneous information?**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data. Customers are able to retrieve their order via FTP or have it delivered to them on a CD delivered via U.S. Postal Service mail. If a customer enters an incorrect email address, physical address, etc., they have the option of using the “Contact Us” feature for technical assistance or re-submitting the order.

### **7.3 How are individuals notified of the procedures for correcting their information?**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data. Customers are able to retrieve their order via FTP or have it delivered to them on a CD delivered via U.S. Postal Service mail. If a customer enters an incorrect email address, physical address, etc., they have the option of using the “Contact Us” feature for technical assistance or re-submitting the order.

**7.4 If no formal redress is provided, what alternatives are available to the individual?**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data. Customers are able to retrieve their order via FTP or have it delivered to them on a CD delivered via U.S. Postal Service mail. If a customer enters an incorrect email address, physical address, etc., they have the option of using the “Contact Us” feature for technical assistance or re-submitting the order.

**7.5 Privacy Impact Analysis: Please discuss the privacy risks associated with the redress available to individuals and how those risks are mitigated.**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data. Customers are able to retrieve their order via FTP or have it delivered to them on a CD delivered via U.S. Postal Service mail. If a customer enters an incorrect email address, physical address, etc., they have the option of using the “Contact Us” feature for technical assistance or re-submitting the order.

## **Section 8.0 Technical Access and Security**

The following questions are intended to describe technical safeguards and security measures.

**8.1 What procedures are in place to determine which users may access the system and are they documented?**

The Resource Data Marts information system leverages the access control mechanisms provided through the eAuthentication system. All users must have a Level 2 eAuthentication account. RDM then utilizes Role Based Access Control (RBAC) mechanisms to assign roles for administrative duties within the system. Access to administrative duties is completed via eAuthentication access control procedures as well as the SAAR process. Non-administrative users are public users, and the data disseminated through the system is intended for public use.

**8.2 Will Department contractors have access to the system?**

Yes.



**8.3 Describe what privacy training is provided to users either generally or specifically relevant to the program or system?**

Administrative users of the system are limited to USDA Employees or USDA Contractors. These individuals are required to successfully complete annual Privacy and Information Security training as well as Information Security Awareness and Rules of Behavior Training as a condition for employment. All other users are public users, and information provided by the system is intended for public use.

**8.4 Has Certification & Accreditation been completed for the system or systems supporting the program?**

Yes. The Resource Data Mart information system is a legacy system in the process of undergoing its' periodic Certification and Accreditation process.

**8.5 What auditing measures and technical safeguards are in place to prevent misuse of data?**

This particular information system does not perform quality assurance checks on the geospatial data presented. Customer contact information that is entered by the customer for the purpose of ordering publicly available geospatial data is not checked for accuracy.

**8.6 Privacy Impact Analysis: Given the sensitivity and scope of the information collected, as well as any information sharing conducted on the system, what privacy risks were identified and how do the security controls mitigate them?**

N/A. All geospatial data within this information system is considered public and intended for public use. Customer contact data entered during the ordering process is not shared with the general public or any other agency outside the USDA and is utilized solely for the purpose of fulfilling customer-requested geospatial data.

## **Section 9.0 Technology**

The following questions are directed at critically analyzing the selection process for any technologies utilized by the system, including system hardware and other technology.

### **9.1 What type of project is the program or system?**

The Resource Data Marts system is a legacy information system and web solution comprised of several components utilizing Microsoft C# .NET version 3.5, Silverlight 3.0, Javascript and jQuery 1.3.2 technology.

### **9.2 Does the project employ technology which may raise privacy concerns? If so please discuss their implementation.**

Resource Data Marts is not utilizing any technology not previously employed by any other NRCS information system which has not already been certified and accredited.



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## Privacy Impact Assessment Authorization

### Memorandum

I have carefully assessed the Privacy Impact Assessment for the  
Resource Data Marts

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This document has been completed in accordance with the requirements of the E-Government Act of 2002.

We fully accept the changes as needed improvements and authorize initiation of work to proceed. Based on our authority and judgment, the continued operation of this system is authorized.

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Frank Geter  
NRCS ITC Branch Chief

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Date

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Mary Alston  
NRCS FOIA/PA Officer

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Date

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Gary S. Washington  
NRCS CIO

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Date