Introduction

The Department of the Interior requires PIAs to be conducted and maintained on all IT systems whether already in existence, in development or undergoing modification in order to adequately evaluate privacy risks, ensure the protection of privacy information, and consider privacy implications throughout the information system development life cycle. This PIA form may not be modified and must be completed electronically; hand-written submissions will not be accepted. See the DOI PIA Guide for additional guidance on conducting a PIA or meeting the requirements of the E-Government Act of 2002. See Section 6.0 of the DOI PIA Guide for specific guidance on answering the questions in this form.

NOTE: See Section 7.0 of the DOI PIA Guide for guidance on using the DOI Adapted PIA template to assess third-party websites or applications.

Name of Project: General Land Office Records Automation System (GLORAS)
Bureau/Office: Bureau of Land Management/ Eastern States Office
Date: 08/09/2019
Point of Contact:
Name: Suzanne S Wachter
Title: BLM Associate Privacy Officer
Email: blm_wo_privacy@blm.gov
Phone: (202) 912-7178
Address: 20 M Street SE, Washington DC 20003

Section 1. General System Information

A. Is a full PIA required?
   ☒ Yes, information is collected from or maintained on
      □ Members of the general public
      □ Federal personnel and/or Federal contractors
      □ Volunteers
      ☒ All

   □ No: Information is NOT collected, maintained, or used that is identifiable to the individual in this system. Only sections 1 and 5 of this form are required to be completed.

B. What is the purpose of the system?

The General Land Office Records Automation System (GLORAS) is a website, database, and image server that provides online access to land patents. Users may search for and retrieve metadata and document images of land records that are public records.
GLORAS maintains more than twelve million historical land documents—survey plats and field notes, homesteads, patents, military warrants, and railroad grants. These records are valuable resources for natural resource agencies, historians, title companies, and genealogists. Increased demand for the records information and the preservation of the historic documents provided the impetus for the BLM to automate the information and archive the documents.

The General Land Office (GLO) records project provides a clear patent image to be used in lieu of the original document to confirm title or for historical or genealogical evidence. The image is made available to preserve the original archival record which is housed by delegation of authority at Eastern States. Many of these documents are now computerized and are accessible via the Internet at https://glorecords.blm.gov. The current database contains more than 12 million records for 30 Public Land States.

GLORAS provides real time World Wide Web (WWW) access to these Federal Land Conveyance Records for Public Land States via the GLORAS. Currently, access to more than 12 million images of Federal Land Title Records for Public Land States, issued between 1788 and present, are available. Additional images of survey plats and field notes, tract books, master title plats and control document index records are in the process of being added to the website.

Currently, members of the public can download an order form from GLORAS and email or mail it to the BLM. When the form is processed the information on the form will be entered in the BLM’s Collection and Billings System (CBS). For additional information please see the PIA for CBS, which can be viewed at https://www.doi.gov/privacy/pia#BLM. This PIA covers only the website application for the land records. Any other connected processes are not covered by this PIA (i.e. the paper records and the process by which members of the public request and are provided the certified copies of the records).

GLORAS uses Active Directory (AD) authentication for system administrator access. AD authentication for user access is covered under the DOI Enterprise Hosted Infrastructure (EHI) Privacy Impact Assessment. For additional information on authentication please see the EHI PIA on the DOI Privacy website (www.doi.gov/privacy/pia).

C. What is the legal authority?

1 Stat. 464, The Public Land Act of 1796
2 Stat. 716, The General Land Office Act, April 25, 1812
9 Stat. 395, Establishing Act of March 3, 1849

D. Why is this PIA being completed or modified?

☐ New Information System
☐ New Electronic Collection
☒ Existing Information System under Periodic Review
☐ Merging of Systems
☐ Significantly Modified Information System
☐ Conversion from Paper to Electronic Records
☐ Retiring or Decommissioning a System
☐ Other: Describe

E. Is this information system registered in CSAM?

☒ Yes: Enter the UII Code and the System Security Plan (SSP) Name
The UII code is 010-000000111; System Security Plan (SSP) for General Land Office Records Automation System
☐ No

F. List all minor applications or subsystems that are hosted on this system and covered under this privacy impact assessment.

<table>
<thead>
<tr>
<th>Subsystem Name</th>
<th>Purpose</th>
<th>Contains PII (Yes/No)</th>
<th>Describe If Yes, provide a description.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/a</td>
<td>N/a</td>
<td>N/a</td>
<td>N/a</td>
</tr>
</tbody>
</table>

G. Does this information system or electronic collection require a published Privacy Act System of Records Notice (SORN)?

☒ Yes: List Privacy Act SORN Identifier(s)


☐ No

H. Does this information system or electronic collection require an OMB Control Number?

☐ Yes: Describe
☒ No
Section 2. Summary of System Data

A. What PII will be collected? Indicate all that apply.

☒ Name
☒ Spouse Information
☒ Tribal or Other ID Number
☒ Marital Status
☒ Military Status/Service
☒ Other: Specify the PII collected. Records in the system include, but are not limited to, information related to historical land documents, homestead certificates, cash patents, military warrants, and railroad grants, including survey plats and field notes, land status records and controlled document indexes. Information within these records may include but are not limited to: Names of individuals, county, township, range, meridian, section number, Land Office, document number, Indian Allotment number, survey number, authority for the grant, issue date, militia grant, tribe, geographical name of the property, mining claim, survey type, surveyor name, contract/group number, survey approved date, and document type.

GLORAS front end allows users to add copies to a shopping cart. Once the user is content with their cart, the user proceeds to generate a print-ready document with the following details: line items of each record being requested, subtotals and totals, and empty lines for user contact information. The user can send a check or follow up by telephone to provide credit card information to the BLM Accounts office and is processed into the BLM’s Collections and Billing System (CBS). Any privacy information (home address, telephone number, financial information, and bank account information) collected for processing payments for purchasing products is not collected through GLORAS, all payments are completely processed through CBS and are covered in the CBS PIA and DOI-86 Accounts Receivable: FBMS SORN. This is provided for informational purposes only. The process by which members of the public purchase certified copies past the initial shopping cart form generation are not covered by this PIA.

B. What is the source for the PII collected? Indicate all that apply.

☒ Individual
☒ Federal agency
☐ Tribal agency
☐ Local agency
☒ DOI records
☐ Third party source
☐ State agency
☒ Other: Describe GLORAS maintains records of historical significance related to land records. As such, these records may be originally from federal entities no longer in existence.
C. How will the information be collected? Indicate all that apply.

☒ Paper Format
☐ Email
☐ Face-to-Face Contact
☐ Web site
☐ Fax
☐ Telephone Interview
☒ Information Shared Between Systems
☒ Other: Describe Information that meets the requirements of The General Land Office Act, April 25, 1812 and is collected via the BLM LR2000 (land description records) and Enterprise Geographic Information System (eGIS) (geospatial data related to land records) systems may be downloaded into GLORAS. For additional information regarding LR2000 and eGIS, their PIAs may be viewed at https://www.doi.gov/privacy/pia#BLM.

D. What is the intended use of the PII collected?

The system of records contains information collected from publicly available historical Federal land conveyance documents (land patents, survey plats, field notes and land status records) maintained by the BLM General Land Office.

The purpose of this system is to maintain, protect and preserve more than five million documents of historical relevance and to make these valuable resources for natural resource agencies, historians, surveyors, title companies, and genealogists available via the General Land Office Records Website.

E. With whom will the PII be shared, both within DOI and outside DOI? Indicate all that apply.

☒ Within the Bureau/Office: Describe the bureau/office and how the data will be used.

GLORAS system administrators with the proper privileges may use database administration tools to access the data collected in the system using SQL server management studio. Information is shared within the BLM to facilitate the purchases of copies of records maintained within GLORAS.

Today the GLORAS front end still allows users to add copies to a shopping cart. Once the user is content with their cart, the user proceeds to generate a print-ready document with the following details:

- BLM ESSO Address
- Line items of each record being requested
- Subtotals and Totals
- Empty lines for user contact information
The user can send a check or follow up by telephone to provide credit card information to an accounts receivable office. The financial information is received and entered by Eastern States (ES) Accounts into CBS. Once payment has been processed, ES Accounts delivers the receipt to the ES Lands team to complete the copy request. The receipt and copies of the records requested are then mailed via USPS to the customer. This is provided for informational purposes. This process is not intended to be covered under this PIA.

Some data is downloaded from LR2000 on the back end to assist with data validation and efficient productivity. Only those fields relevant to GLORAS are downloaded. GLORAS does not share data back to LR2000.

☐ Other Bureaus/Offices: Describe the bureau/office and how the data will be used.

☒ Other Federal Agencies: Describe the federal agency and how the data will be used.

Information may also be shared with other Federal Agencies as authorized and described in the routine uses contained in the BLM-42, General Land Office Records Automation System (GLORAS) system of records notice.

Information collected via the payment processing that is maintained by CBS may be shared with the Department of the Treasury as authorized and described in the routine uses contained in the DOI-86, Accounts Receivable: FBMS system of records notice.

☐ Tribal, State or Local Agencies: Describe the Tribal, state or local agencies and how the data will be used.

☒ Contractor: Describe the contractor and how the data will be used.

Information may also be shared with contractors who provide program support or IT system administration support as authorized and described in the routine uses contained in the BLM-42, General Land Office Records Automation System (GLORAS) system of records notices.

☒ Other Third Party Sources: Describe the third party source and how the data will be used.

By federal law, land records are public information. The primary purpose of GLORAS is the make historical land documents-survey plats and field notes, homesteads, patents, military warrants, and railroad grants available to the public, or other organization as authorized and described in the routine uses contained in the BLM-42, General Land Office Records Automation System (GLORAS) system of records notice.

F. Do individuals have the opportunity to decline to provide information or to consent to the specific uses of their PII?

☒ Yes: Describe the method by which individuals can decline to provide information or how individuals consent to specific uses.
Individuals voluntarily provide their information when requesting a land record. Any privacy information (home address, telephone number, financial information, and bank account information) collected for processing payments for purchasing GLORAS products is processed through CBS and individuals have the opportunity to voluntarily consent to providing their information or may decline to provide information to purchase products. Please see the CBS PIA and the FBMS SORN.

☒ No: *State the reason why individuals cannot object or why individuals cannot give or withhold their consent.*

Records on GLORAS are historical documents. Individuals do not have an opportunity to consent as any PII within the system is found on historical land records. By federal law these are public records. GLORAS does not collect or maintain any new PII from individuals within the system.

G. What information is provided to an individual when asked to provide PII data? Indicate all that apply.

☒ Privacy Act Statement: *Describe each applicable format.*

The Privacy Act Statement will be available via a linked web page, as well as a PDF file that can be downloaded and printed.

☒ Privacy Notice: *Describe each applicable format.*

A link to DOI’s Privacy Notice is located on the General Land Office Record’s website. Notice is also provided through the publication of this privacy impact assessment, the privacy impact assessment for CBS, the BLM-42 General Land Office Records Automation System and the DOI-86, Accounts Receivable: FBMS system of records notice, both of which may be viewed at [https://www.doi.gov/privacy/sorn](https://www.doi.gov/privacy/sorn).

☐ Other: *Describe each applicable format.*

☐ None

H. How will the data be retrieved? List the identifiers that will be used to retrieve information (e.g., name, case number, etc.).

Historical documents may be retrieved by any searchable field to include: Names of individuals, county, township, range, meridian, section number, Land Office, document number, Indian Allotment number, survey number, authority for the grant, issue date, militia grant, tribe,
geographical name of the property, mining claim, survey type, surveyor name, contract/group number, survey approved date, and document type.

I. Will reports be produced on individuals?

☐ Yes: What will be the use of these reports? Who will have access to them?

☒ No

Section 3. Attributes of System Data

A. How will data collected from sources other than DOI records be verified for accuracy?

Any information collected for payment from the individual is presumed to be accurate. The data contained in this system consists of electronic reproductions of official land records. No validation is necessary beyond initial quality control check of the image.

B. How will data be checked for completeness?

The data contained in this system consists of electronic reproductions and metadata of official land records. No validation is necessary beyond initial quality control check of the image.

C. What procedures are taken to ensure the data is current? Identify the process or name the document (e.g., data models).

The data contained in this system consists of electronic reproductions and metadata of official land records. No validation is necessary beyond initial quality control check of the image.

D. What are the retention periods for data in the system? Identify the associated records retention schedule for the records in this system.

The BLM Records Retention schedule is BLM 4/33a, which has been approved by the National Archives Records Administration (NARA). Records for GLORAS are permanent with a cut off every 5 years for transmission to NARA.

Transfer a copy of the master file to NARA upon approval of this schedule, along with the technical documentation, in accordance with 36 CFR 1235.44-50. Thereafter, transfer a copy every 5 years, along with the current technical documentation. (N1-049-09-4, 1a).

Payment information is covered under CBS. The records are under permanent retention until transferred per the Departmental Records Schedule, Administrative Schedule, B. [0011] Long-term Financial and Acquisition Records.

E. What are the procedures for disposition of the data at the end of the retention period? Where are the procedures documented?
The procedures for the GLORAS files are documented in BLM BLM 4/33a. Transfer a copy of the master file to NARA upon approval of this schedule, along with the technical documentation, in accordance with 36 CFR 1235.44-50. Thereafter, transfer a copy every 5 years, along with the current technical documentation. (N1-049-09-4, 1a).

F. Briefly describe privacy risks and how information handling practices at each stage of the “information lifecycle” (i.e., collection, use, retention, processing, disclosure and destruction) affect individual privacy.

There are minimal risks to the privacy of individuals due to the type of PII contained within GLORAS. There are over 12 million records in the GLO database related to official government survey plats, field notes, and land patents (titles). The data collected in GLO are attributes related to the scanned image of title documents dating back to 1788. Title documents are a matter of public record. Any individual has the right to research and obtain copies of these records from the BLM, most often in a BLM public room. The collection, retention, and processing of the data is secured within the BLM and hosted behind the BLM DMZ (firewall). No user data is actively collected or requested from visitors of the site. GLORAS is classified as low for FISMA and has all of the required system security documentation and a current Authority to Operate (ATO).

In accordance with OMB Circulars A-123 and A-130, GLORAS has controls in place to prevent the misuse of the data by those having access to the data. For system administration, GLORAS can only be accessed within the BLM network. Security measures and controls consist of: two factor authentication, passwords, user identification, IP addresses, database permissions and software controls. All employees including contractors must meet the requirements for protecting Privacy Act information.

Business rules and guidelines, as well as rules of behavior, have been established to prevent inadvertent disclosure to individuals not authorized to use the system or those who do not have a direct “need to know” certain information contained in the system. All internal users are authenticated using Government PIV card for access. All new users receive training on the use of the system. All DOI employees must complete mandatory privacy, security and records management training annually, and acknowledge the DOI Rules of Behavior.

There is a risk that authorized users will conduct unauthorized activities such as using, extracting and sharing the underlying metadata information with unauthorized recipients. This risk is mitigated by limiting access to the system to only those personnel who have an official need to perform their job duties. Access to information is role-based and is only granted on a need-to-know basis, and requires DOI credentials. Accounts are reviewed annually to ensure that only authorized personnel have systems logins. Additionally, any account that is inactive for more than one year is automatically suspended. All personnel accessing the system must acknowledge the rules of behavior prior to each login. The System Security Plan describes the practice of audit trails. Audit trails maintain a record of system activity and user activity including invalid logon attempts and access to data via User ID, IP Address, etc. Audit trails are also captured within the system to determine who has added, deleted or changed the data within the system. Any
qualification overrides require that the account manager document the reasoning and the login name with date and time is added by the system.

There is minimal risk due to the nature of the records being permanent. These records are historical in nature and provide valuable insight into how land has been transferred by the US Government.

There is moderate risk for the information submitted to purchase land records that are processed within CBS. Please see the CBS PIA for evaluation of privacy risk (https://www.doi.gov/privacy/pia#BLM).

Section 4. PIA Risk Review

A. Is the use of the data both relevant and necessary to the purpose for which the system is being designed?

☒ Yes: Explanation

The primary purpose of the system is to provide researchers and other interested members of the public with online access to millions of historical land documents that may be used for research purposes, or in lieu of the original document to confirm title, or for historical or genealogical evidence.

☐ No

B. Does this system or electronic collection derive new data or create previously unavailable data about an individual through data aggregation?

☐ Yes: Explain what risks are introduced by this data aggregation and how these risks will be mitigated.

☒ No

C. Will the new data be placed in the individual’s record?

☐ Yes: Explanation

☒ No

D. Can the system make determinations about individuals that would not be possible without the new data?

☐ Yes: Explanation

☒ No
E. How will the new data be verified for relevance and accuracy?

The system does not in any way create new data about individuals.

F. Are the data or the processes being consolidated?

☐ Yes, data is being consolidated. *Describe the controls that are in place to protect the data from unauthorized access or use.*

☐ Yes, processes are being consolidated. *Describe the controls that are in place to protect the data from unauthorized access or use.*

☒ No, data or processes are not being consolidated.

G. Who will have access to data in the system or electronic collection? Indicate all that apply.

☒ Users
☒ Contractors
☒ Developers
☒ System Administrator
☒ Other: *Describe*

Users of the systems fall into these four categories: the public, GLO system administrators, contractors, and software agents.

Public access is limited to the web interface, which allows only retrieval of land patent metadata and images. No username or password or user email address is required for access. All privacy data accessed by the public is land grant information that is required to be made publicly available under federal law.

GLO system administrators with proper privileges may use database administration applications such as Microsoft SQL Management Studio to access, modify, and update the data in GLO.

As needed, GLO system administrators may grant on-site contractors system administrator privileges.

Software agents (engines, services, and jobs, such as Microsoft Robocopy) run under accounts with least privileges. (i.e., the accounts are granted only those privileges needed to perform their tasks).

H. How is user access to data determined? Will users have access to all data or will access be restricted?

User access is restricted. The public has read-only access to land patent metadata and images. These restrictions are enforced at a low-level by the database engine.
I. Are contractors involved with the design and/or development of the system, or will they be involved with the maintenance of the system?

☒ Yes. Were Privacy Act contract clauses included in their contracts and other regulatory measures addressed?

Contractors are involved with the design, development, and maintenance of the system. Contractors are required to take annual security and privacy training to be granted access to BLM resources. The contract included standard FAR clauses.

☐ No

J. Is the system using technologies in ways that the DOI has not previously employed (e.g., monitoring software, SmartCards or Caller ID)?

☐ Yes. Explanation

☒ No

K. Will this system provide the capability to identify, locate and monitor individuals?

☐ Yes. Explanation

☒ No

L. What kinds of information are collected as a function of the monitoring of individuals?

Not Applicable

M. What controls will be used to prevent unauthorized monitoring?

Not Applicable

N. How will the PII be secured?

(1) Physical Controls. Indicate all that apply.

☒ Security Guards
☒ Key Guards
☒ Locked File Cabinets
☒ Secured Facility
☒ Closed Circuit Television
☒ Cipher Locks
☒ Identification Badges
☒ Safes
☒ Combination Locks
☒ Locked Offices
☒ Other. Describe

(2) Technical Controls. Indicate all that apply.

☒ Password
☒ Firewall
☒ Encryption
☒ User Identification
☐ Biometrics
☒ Intrusion Detection System (IDS)
☒ Virtual Private Network (VPN)
☒ Public Key Infrastructure (PKI) Certificates
☒ Personal Identity Verification (PIV) Card
☐ Other. Describe

(3) Administrative Controls. Indicate all that apply.

☒ Periodic Security Audits
☒ Backups Secured Off-site
☒ Rules of Behavior
☒ Role-Based Training
☒ Regular Monitoring of Users’ Security Practices
☒ Methods to Ensure Only Authorized Personnel Have Access to PII
☒ Encryption of Backups Containing Sensitive Data
☒ Mandatory Security, Privacy and Records Management Training
☐ Other. Describe

**O. Who will be responsible for protecting the privacy rights of the public and employees? This includes officials responsible for addressing Privacy Act complaints and requests for redress or amendment of records.**

The Privacy Officer and GLORAS System Manager are responsible for protecting the privacy rights of the public and employees affected by the interface. The State Director for Eastern States is the GLORAS Information System Owner and the official responsible for oversight and management of the GLORAS security and privacy controls and the protection of agency information processed and stored in the GLORAS application. The Information System Owner and GLORAS Privacy Act System Manager, in collaboration with the BLM Senior Management Team, are responsible for ensuring adequate safeguards are implemented to protect individual privacy in compliance with Federal laws and policies for the data managed, used, and stored in the GLORAS application. These officials and authorized GLORAS personnel are responsible
for protecting individual privacy for the information collected, maintained, and used in the system, and for meeting the requirements of the Privacy Act, including providing adequate notice, making decisions on Privacy Act requests for notification, access, and amendments, as well as processing complaints, in consultation with BLM Privacy Officer.

P. Who is responsible for assuring proper use of the data and for reporting the loss, compromise, unauthorized disclosure, or unauthorized access of privacy protected information?

Responsibility rests with the users of the system and the System Owner, the State Director for Eastern States. All users receive system training and all BLM employees and contractors are required to complete periodic Privacy Act training. All federal employees comply with the requirements in OMB Circulars A-123 and A-130 as well as the Departmental Manual, 383 DM 3, Privacy Act – Bureau Responsibilities. The GLORAS Information System Owner and the BLM Information System Security Officer are responsible for ensuring that any loss, compromise, unauthorized access or disclosure of PII is reported to DOI-CIRC within 1-hour of discovery in accordance with Federal policy and established procedures, and appropriate remedial activities are taken to mitigate any impact to individuals, in coordination with the BLM Privacy Officer.