

Privacy Impact Assessment

for

Forest Service SkyNet (FS SN)

Policy, E-Government and Fair Information Practices

Version: 1.7

Date: July 12, 2023

Prepared for: USDA FS CIO





Contact Point

Zahid Chaudhry

System Owner

USDA NRE Forest Service

503-808-2440

Reviewing Official

Cynthia Ebersohn

Privacy Officer

USDA NRE Forest Service

386-301-4060

Abstract

Forest Service (FS) SkyNet is a general support system (GSS) owned by the US Forest Service Chief Information Office (CIO) and operated by the Data Center Services Branch of the FS CIO Operations Division.

FS SkyNet contains the following types of resources: webs servers, database servers, software development tools, and authentication and authorization capabilities.

These resources are used to provision logically separated production and work area environments for FS business units. The production environment consists of the resources used to host applications needed for daily operations and includes a logically separated, publicly accessible demilitarized zone (DMZ), a Low environment and a Moderate environment. The work area environment is accessed by FS employees and contractors and contains resources needed to develop or improve IT assets that support the FS mission. This includes activities such as application development, testing, support, quality assurance, pilot projects, and any other relevant work that is not in production.

FS SkyNet environments are used by FS business units to design, build and deploy their mission-specific applications and systems.

Overview

Forest Service (FS) SkyNet is a general support system (GSS) owned by the US Forest Service Chief Information Office (CIO) and Hosting Support Services (HSS) Branch of the FS CIO Operations & Service Delivery (OSD) Division. FS SkyNet resides within the AWS GovCloud. AWS GovCloud is the Infrastructure as a Service (IaaS) provider for FS SkyNet.

FS SkyNet utilizes the following types of shared public cloud resources: compute, storage, database, and networking. These resources are used to support the testing, deployment, and operation of cloud workloads. A cloud workload is understood as the amount of work (or load) that software imposes on the underlying cloud computing resources. Broadly stated, an application's workload is related to the amount of time and computing resources required to perform a specific task or produce an output from inputs provided. The SkyNet production environment consists of an Amazon Web Services platform that includes but is not limited to:

- Virtual machines and images (AWS AMI),
- Container configurations and images,

- Network ACLs and subnets/VPCs,
- Storage (Amazon S3 bucket),
- Identity policies and roles (AWS IAM), and
- Serverless functions and code (Lambda, Elastic Beanstalk, etc.).

FS SkyNet GSS includes hosted applications. The FS SkyNet applications are described below:

- **Automated Flight Following (AFF):** An online government application that automatically tracks the location and velocity of specially equipped aircraft and mobile assets and provides this information in near real time to dispatchers, aviation managers, and other authorized users. This information is a safety requirement for any aircraft flying for the Forest Service across Forest Service lands.
- **FS Apps:** Central authentication system for eAuth and Login.gov.
- **Vehicle Deficiency Report (VDR):** Application to track issues and deficiencies related to fire vehicles in order to track trends and make decisions that will ensure safety and facilitate cost savings.
- **Hot Dry Windy Index (HDWI):** The Hot-Dry-Windy Index (HDWI) is a fire weather index designed to inform fire weather forecasters and fire managers when weather conditions can contribute to making a wildland fire more difficult to manage. The application downloads weather forecast data from NOAA, computes the HDWI, prepares png images that include maps and other forecast products derived from HDWI values, and posts the images to a web page for viewing by fire weather forecasters and fire managers.
- **InciWeb:** Incident Information Web (InciWeb): An interagency all risk incident information source for incident related information. InciWeb provides a standardized reporting tool for authorized members of the interagency Public Affairs community. It also provides view-only access to basic incident information to the general public.
- **Huckleberry:** This application will allow members of the public the ability to obtain free-use permits to harvest Huckleberries and Mushrooms in the Gifford Pinchot National Forest.
- **NRM Base Platform:** The NRM Base Platform is a web platform that runs on the Forest Service SkyNet (AWS) cloud infrastructure to provide support for its hosted applications. NRM Base Platform allows for the separation of the functionality of the applications into

smaller units that provide for more advanced user management and access. This helps to ensure that zero-trust is foundational to the application. The NRM Base Platform creates a unified technical stack and a set of shared services that allow the same functionality to be efficiently implemented across multiple applications.

- **WildfireSAFE:** The WildfireSAFE application provides risk assessment information for every wildfire currently burning in the United States. It gives access to 7-day forecasts by fire as well as information about structures and populated areas that are threatened.
- **GrowHub (formerly NMIS):** The purpose of the Nursery GrowHub application is to integrate, track, and support the business operations of the FS Nursery System. GrowHub incorporates all the business functions of the nurseries to allow tracking of material, seed, business order processing, and reporting.
- **Enterprise Check In And Out (CIAO):** The purpose of the CIAO application is to provide a secure and intuitive method for personal safety checks of Forest Service personnel engaged in field work. This information will be used in escalating procedure should the personnel become missing, injured or otherwise fail to “check in”.
- **Fire Environment Mapping System (FEMS):** FEMS is a wildland fire IT application which will support wildland fire preparedness and decision-making with better access to fire environment datasets and online analysis tools. The application provides an interactive map which displays the following weather datasets for all permanent RAWS and Rest API Services of RAWS weather and NFDRSv4 outputs are available for use by other wildland fire applications.

FS SkyNet allows for its customers to develop and deploy applications without the overhead of managing infrastructure. FS SkyNet is Platform as a Service (IaaS/PaaS) and provides the tools, services and frameworks necessary to aid application teams in focusing on delivery. The purpose of FS SkyNet is to provide a platform for application teams to easily onboard new and modernized applications efficiently while reducing the management overhead inherent to meeting federal compliance standards both initially and on a continuous basis. FS SkyNet applications individually have unique flows of information based on mission requirements. FS SkyNet has two applications (CIAO and Huckleberry) that have PII in their 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 Identification

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

Individual name, address, email, telephone/cell phone number, passport number, driver's license number, State ID number, tribal ID number, vehicle license plate number

1.2 Source

What is the source(s) of the information in the system?

Individuals enter their own information at their discretion.

1.3 Justification

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

CIAO: This information is collected to provide a secure and intuitive method for personal safety checks of Forest Service personnel engaged in field work. This information will be used in escalating procedure should the personnel become missing, injured or otherwise fail to "check in".

Huckleberry: This information is collected to allow members of the public the ability to obtain free-use permits to harvest Huckleberries and Mushrooms in the Gifford Pinchot National Forest.

1.4 Collection

How is the information collected?

The user enters their own information into the application website.

1.5 Validation

How will the information be checked for accuracy?

The user is responsible for ensuring their information is accurate.

1.6 Authority

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

N/A. No specific legal authority arrangements direct to the system's collection of data.

1.7 Risk Mitigation

Given the amount and type of data collected, discuss the privacy risks identified and how they were mitigated.

Risk identified-the potential for an individual user's information to be widely accessible within the system. This is mitigated by:

- Limiting viewing of the individual user information by only the individual user and/or the individual user's manager and administrators.
- Only authorized and authenticated users can access the system.
- This information isn't used for any other purpose, other than for the purpose described.

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 Usage

Describe all the uses of information.

CIAO: This information is used in escalating procedure should the personnel become missing, injured or otherwise fail to "check in".

Huckleberry: This information is used to allow members of the public the ability to obtain free-use permits to harvest Huckleberries and Mushrooms in the Gifford Pinchot National Forest.

2.2 Analysis and Production

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

No data is analyzed or produced by the system.

2.3 Commercial/Public Use

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

N/A No data is obtained from commercial or publicly available sources.,

2.4 Risk Mitigation

Describe any types of controls that may be in place to ensure that information is handled in accordance with the above described uses.

Role-based access controls

Section 3.0 Retention

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

3.1 Time Period

How long is information retained?

CIAO: 6200 – Office Management, Administrative Records Common to Most Offices.
The FSH 6209.11- Records Management Handbook

Huckleberry:

2720 - Special Uses Administration

- Special Use Applications
 - o Temporary, 10 years (see note); N1-95-10-4, item 247
- Special Use Easement Cases
 - o Temporary, 10 years (see note); N1-95-10-4, item 250
- Special Use Permit Cases
 - o Temporary 10 years FY (see notes); DAA-0095-2018-0059-0001
- Significant Special Uses Cases
 - o PERMANENT (see note); N1-95-10-2, item 122

2790 – Special Uses Data System

- Special Uses Reports
 - o PERMANENT (see note); N1-95-10-2, Item 129

3.2 Approval

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

Yes, FS SkyNet worked with NARA to agree on retention times to comply with The Federal Records Act which says that agencies must be maintaining adequate and proper documentation of policies and transactions of the Federal Government.

3.3 Risk Mitigation

Please discuss the risks associated with the length of time data is retained and how those risks are mitigated.



Data set stored on FS SkyNet system is subject to risk confidentiality and integrity. FS SkyNet mitigates the risk with role based access control and file integrity monitoring of the data set.

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 Identification and Purpose

With which organization(s) outside of the Forest Service, but still within the Department of Agriculture is the information shared? What information is shared and for what purpose?

N/A

4.2 Delivery and Disclosure

How is the information transmitted or disclosed?

N/A

4.3 Risk Mitigation

Considering the extent of internal information sharing, discuss the privacy risks associated with the sharing and how they were mitigated.

N/A

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 Identification and Purpose

With which external organization(s), outside of both the Forest Service and the Department of Agriculture, is the information shared? What information is shared, and for what purpose?

N/A

5.2 Compatibility

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, provide SORN name and hyperlink URL to text.

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

5.3 Delivery and Security Measures

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

N/A

5.4 Risk Mitigation

Given the external sharing, explain the privacy risks identified and describe how they were mitigated.

N/A

Section 6.0 System of Records Notice (SORN)

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 Requirement and Identification

Does this system require a SORN?

If so, please provide SORN name and hyperlink URL to text.

If a SORN is not required, answer “No” to this question, and “N/A” for questions 6.2 through 6.5.

CIAO: No SORN required because information is not pulled up using a personal identifier. Information is pulled up via a dashboard, based on forest location.

Huckleberry: Special Use Authorizations [FS-24](#)

6.2 Individual Notification

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

Information to individuals is provided via:

FS SN Privacy Impact Analysis (PIA) on the USDA PIA website.

The Federal register for SORN's and legal authorities

FS specific SORNs are also published on FS websites

Forms are approved through OMB for the Paperwork Reduction Act (also cited in the Federal Register) and they cite the privacy information act.

6.3 Right to Decline

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

CIAO: Yes, users enter the information voluntarily.

Huckleberry: Yes, however if they do decline, they will not receive the permit requested.

6.4 Right of Consent

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

CIAO: Yes, users consent by entering the information voluntarily.

Huckleberry: Yes, individuals have the right to consent to particular uses of information. Huckleberry itemizes consent using the minimal necessary PII required to complete permits requested by individuals. Individuals can either accept the uses required to complete their requested permit application or not accept the particular uses. If consent is not given, then permit applications do not have sufficient information to occur.

6.5 Risk Mitigation

Describe how notice is provided to individuals, and how the risks associated with individuals being unaware of the collection are mitigated.

CIAO: All personal information is requested on a voluntary basis. Solicitation of this information is for the safety of the individual.

Huckleberry: All personal information is requested on a voluntary basis; however, if you do not provide this personal information, your permit application will not be accepted, and the authorization will not be granted to you. Solicitation of this information is necessary for the government to conduct its authorization program.

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 Access

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

CIAO: N/A. Individuals may access their own information directly and update as necessary.

Huckleberry: N/A. Individuals cannot gain access to their information.

7.2 Correction

What are the procedures for correcting inaccurate or erroneous information?

CIAO: N/A. Individuals are responsible for correcting their own information.

Huckleberry: N/A. Individuals cannot correct inaccurate or erroneous information after permit application is submitted.

7.3 Notification

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

CIAO: N/A. Individuals are not notified and are responsible for correcting their own information.

Huckleberry: N/A. Public users can not change their information after permit submission. User may request an email change for future applications.

7.4 Redress Alternatives

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

N/A

7.5 Risk Mitigation



Please discuss the privacy risks associated with the redress available to individuals and how those risks are mitigated.

Negligible privacy risks exist.

Section 8.0 Technical Access and Security

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

8.1 Procedures

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

CIAO: All account access requests are reviewed and approved by the supervisor and unit administrator. These access requests are retained for audit purposes.

Huckleberry: All users have public access through the website to complete and submit permit application. No user authentication is required.

8.2 Contractor Access

Will Department contractors have access to the system?

N/A

8.3 Privacy Training

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

CIAO: Annual security awareness training is conducted which is required for all employees and contractors. Volunteers receive Rules of Behavior (RoB) and Privacy awareness information as part of the account request process.

Huckleberry: N/A

8.4 System Authority to Operate

Has Assessment & Authorization been completed for the system(s) supporting the program? If so, answer "Yes" and provide ATO expiration date(s).

Yes, 08/03/2025

8.5 Audit and Technical Safeguards



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

Quarterly and Annual account reviews. Role-based access controls, encryption, account management procedures.

8.6 Risk Mitigation

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?

Negligible privacy risks exist and are adequately addressed via current technical and security access controls.

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 Description

What type of project is the program or system?

The FS SkyNet (FS SN) is a system inclusive of a suite of applications that utilizes the following types of shared public cloud resources: compute, storage, database, and networking on the Amazon Web Services platform.

9.2 Privacy Concerns

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

No

Section 10.0 Third Party Websites/Applications

The following questions are directed at critically analyzing the privacy impact of using third party websites and/or applications.

10.1 Review

Has the System Owner (SO) and/or Information Systems Security Program Manager (ISSPM) reviewed Office of Management and Budget (OMB) memorandums M-10-22 “Guidance for Online Use of Web Measurement and Customization Technology” and M-10-23 “Guidance for Agency Use of Third-Party Websites and Applications”?

N/A

10.2 Purpose

What is the specific purpose of the agency’s use of 3rd party websites and/or applications?

N/A

10.3 PII Availability

What Personally Identifiable Information (PII) will become available through the agency’s use of 3rd party websites and/or applications.

N/A

10.4 PII Usage

How will the PII that becomes available through the agency’s use of 3rd party websites and/or applications be used?

N/A

10.5 PII Maintenance and Security

How will the PII that becomes available through the agency’s use of 3rd party websites and/or applications be maintained and secured?

N/A

10.6 PII Purging

Is the PII that becomes available through the agency’s use of 3rd party websites and/or applications purged periodically? If so, is it done automatically? If so, is it done on a recurring basis?

N/A

10.7 PII Access

Who will have access to PII that becomes available through the agency’s use of 3rd party websites and/or applications?

N/A

10.8 PII Sharing

With whom will the PII that becomes available through the agency’s use of 3rd party websites and/or applications be shared—either internally or externally?

N/A

10.9 SORN Requirement

Will the activities involving the PII that becomes available through the agency’s use of 3rd party websites and/or applications require either the creation or modification of a system of records notice (SORN)?

N/A

10.10 Web Measurement and Customization

Does the system use web measurement and customization technology? If so, is the system and procedures reviewed annually to demonstrate compliance to OMB M-10-23?

N/A

10.11 Web Measurement and Customization Opt-In/Opt-Out



Does the system allow users to either decline to opt-in or decide to opt-out of all uses of web measurement and customization technology? If so, does the agency provide the public with alternatives for acquiring comparable information and services?

N/A

10.12 Risk Mitigation

Given the amount and type of PII that becomes available through the agency's use of 3rd party websites and/or applications, discuss the privacy risks identified and how they were mitigated.

N/A



Responsible Official

ZAHID CHAUDHRY Digitally signed by ZAHID CHAUDHRY
Date: 2023.07.12 10:57:19 -07'00'
Zahid Chaudhry
System Owner (SO)
Natural Resources and Environment, Forest Service
United States Department of Agriculture

Approval Signature

CYNTHIA TOWERS Digitally signed by CYNTHIA TOWERS
Date: 2023.07.12 15:52:00 -05'00'
Cynthia Ebersohn
Privacy Officer (PO)
Natural Resources and Environment, Forest Service
United States Department of Agriculture

BENJAMIN MOREAU Digitally signed by BENJAMIN MOREAU
Date: 2023.07.24 11:52:36 -04'00'
Benjamin Moreau
Assistant Chief Information Security Officer (ACISO)
Natural Resources and Environment, Forest Service
United States Department of Agriculture