Introduction to the Ecosystem Services Registry

for Forest Management Certificate Holders

Introduction

Purpose of the Document

This user manual is designed to provide forest managers with comprehensive guidance on utilizing the Ecosystem Services Registry. It outlines the steps for documenting ecosystem service impacts, ensuring users can efficiently and effectively leverage the system to enhance forest management practices.

Overview of the Registry

The Ecosystem Service Impact Registry is a digital tool created to streamline the process of capturing, analyzing, and reporting ecosystem service impacts. It enables forest managers to document project details like ecosystem services, management activities, and methods used to measure impacts. The registry supports transparency and accountability, fostering collaboration among stakeholders in ecological conservation efforts.

Why Use This Registry?

- **Efficiency:** Reduces the time spent documenting impacts.
- **Accuracy:** Provides structured data fields to ensure precision.
- **Accessibility:** Allows easy sharing and collaboration.
- **Consistency:** Facilitates comparisons over time with standardized processes.
- **Impact Demonstration:** Helps exhibit positive management results to foster partnerships.

This manual will guide users in maximizing the registry's potential and improving forest management practices.

Getting Started

System Requirements

To effectively use the Ecosystem Service Impact Registry, ensure that your hardware and software meet the following minimum requirements:

Hardware

- Computer or tablet with a dual-core processor.
- Minimum 4GB RAM for optimal performance.
- Stable internet connection with at least 2 Mbps bandwidth.

Software

- **Operating System:** Compatible with Windows 10 or later, macOS High Sierra (10.13) or later, or the latest version of iOS/Android.
- **Web Browser:** Latest versions of Chrome, Firefox, Safari, or Microsoft Edge with JavaScript enabled.

Accessing the Registry

A Forest Manager needs to exist in the FSC system to use our registry. Please contact the FSC to create a Forest Manager account to access the Registry

Login Procedures:

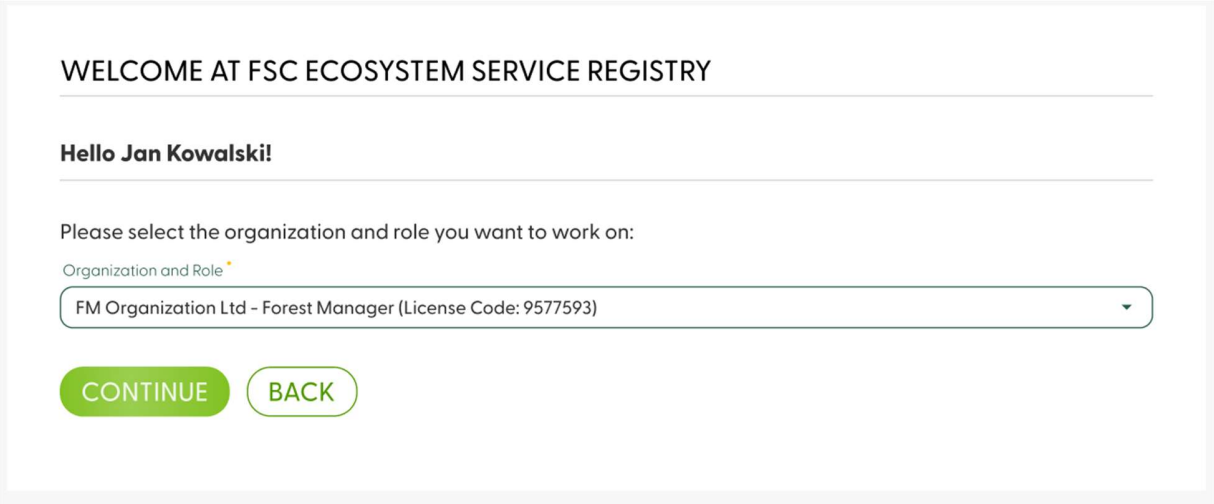
- Open Browser/Application: Launch your preferred web browser or the installed application if applicable.
- Navigate to Login Page: Visit the official website - https://connect.fsc.org/
- Goto Home page and select the "Login" option to access the system.
- Enter Credentials: Type in your username and password in the designated fields.
- Security Verification: Complete any verification steps
- Log In: Click on the "Login" button to access the system.

Select your Organization, Role and License Code:

Once logged in, you will be directed to a selection screen. Here, you need to:

- **Choose Your Organization:** Select the organization you are associated with.
- **Define Your Role:** Specify your role within the organization.
- **Select a License Code:** Pick the license code relevant to your work or project.

Completing these steps ensures that you are working in the correct context and accessing the appropriate resources within the registry system.

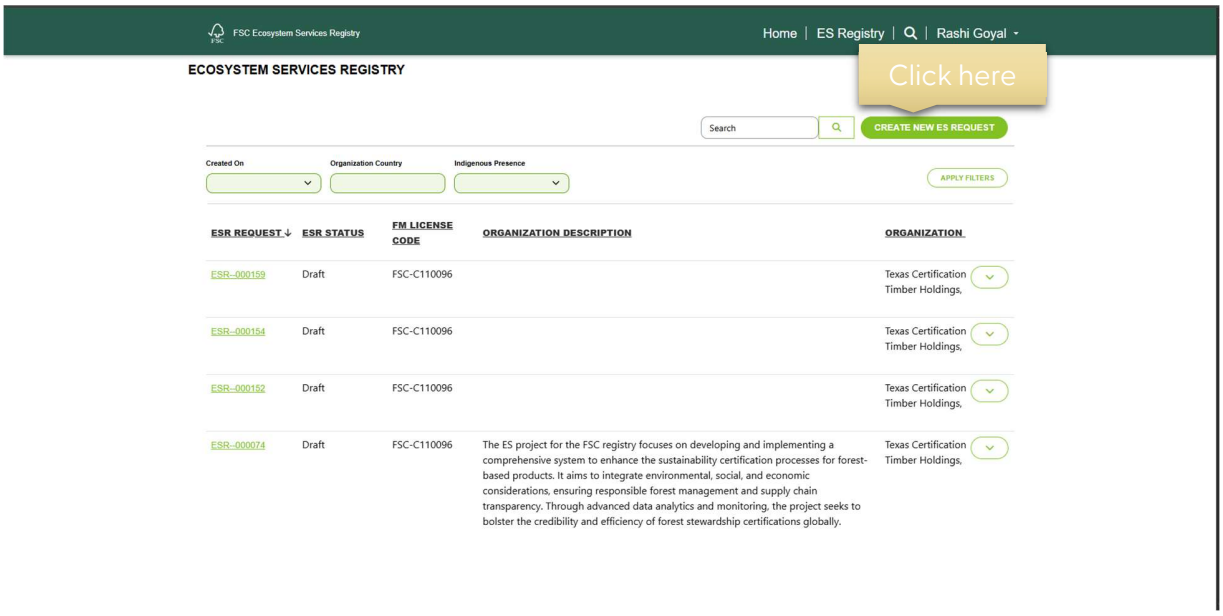


Creating an Ecosystem Service Impact Document

Step-by-Step Instructions for Creating a New Document

Log In to the System:

- **Navigate to Dashboard:** Click on ES Registry tab to navigate to your dashboard.
- **Initiate New Document:** Click the "New ES Request" button to begin.



FM Dashboard:

The Forest Manager Dashboard is your central hub for accessing and managing information about your organization and ecosystem service impact projects. This section provides a summary view of your ongoing projects and ecosystem service impacts.

Using the Dashboard

- Accessing Data: Utilize filters to narrow down projects and access specific data sets relevant to your current needs or analysis.
- Updating Information: Regularly update organizational and project information to ensure accuracy and compliance with regulatory requirements.
- Monitoring Projects: Use the dashboard to monitor the progress and outcomes of ecosystem service impact projects effectively.

By fully understanding and utilizing the Forest Manager Dashboard, you can enhance your organization's efficiency, accuracy, and impact on forest management practices.

Below is a guide to understanding the key fields and features available on the dashboard:

Dashboard Components

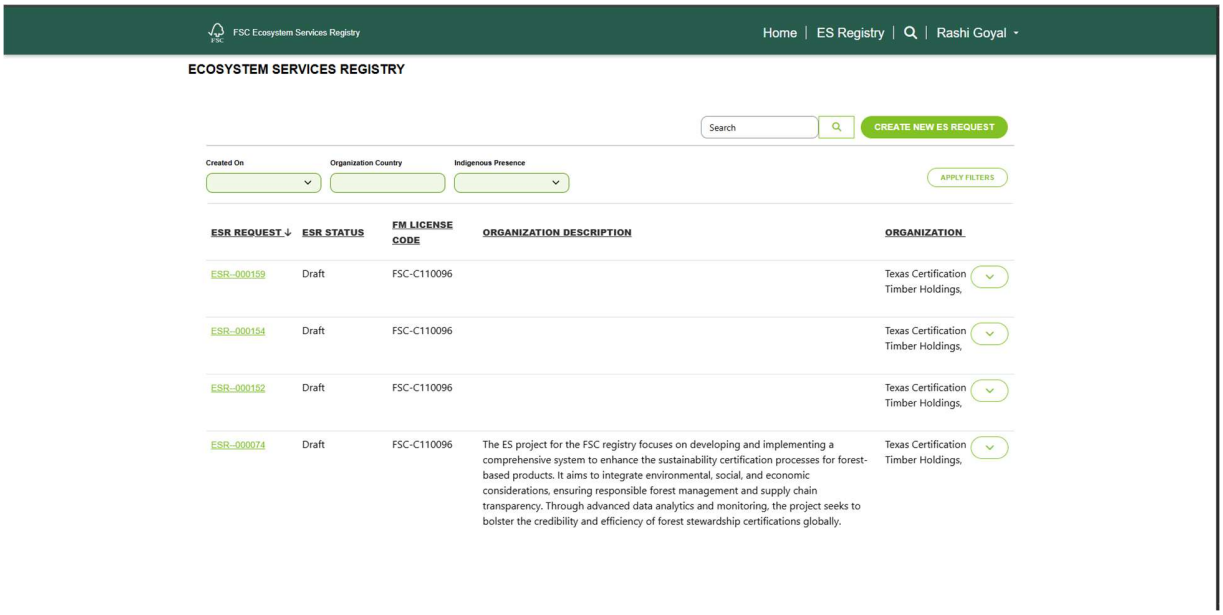
1. Filters:

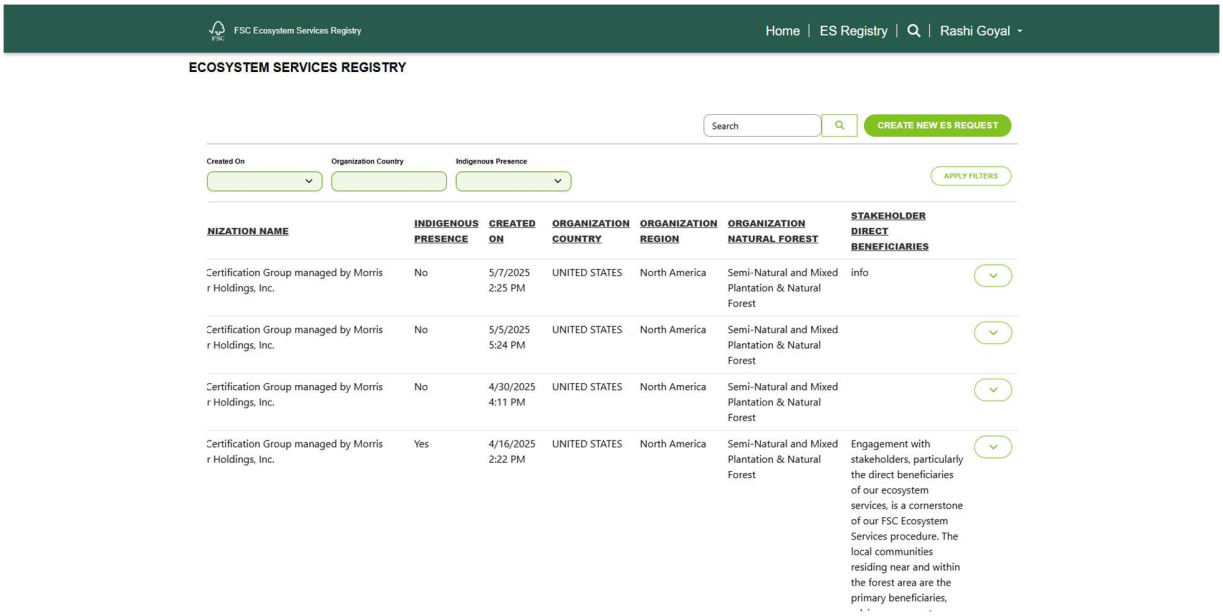
- Created On: Filter documents based on the date they were created.
- Organization Country: Filter projects by the country in which your organization operates.
- Indigenous Presence: Filter projects based on the presence of indigenous communities involved or affected by the management unit.

2. Dashboard:

- ESR Request: Overview of ecosystem service requests submitted for approval or review.
- ESR Status: Status of the ecosystem service requests, indicating whether they are approved, pending, or rejected.
- FM License Code: Your organization's forest management license code, useful for certification and official documentation.
- Organization Description: A brief description of your organization, including mission, history, and operational scope.
- Organization Name: Official name of your forest management organization.

- Organization Country: Country where your organization is based, which may influence legal and operational frameworks.
- Organization Region: Specific regional area within the country where you operate.
- Organization Natural Forest: Information indicating whether your operations involve natural forests or plantations.
- Stakeholder Direct Beneficiaries: Identify and outline the direct beneficiaries involved in or affected by your ecosystem service projects.





Initiate a New Document:

- Click on the new **ES Request** button

Data Entry Procedures: Overview of the Steps for ESR Creation and Guidance on What Information to Include and Where

Step 1: General information about the project and License Code

You can introduce here a brief description of your project, and what you would like to highlight about it.

Step 2: Project area and scope

Here you must submit the area where the project is happening, the ES impacts you want do demonstrate, and the areas that contribute to the ES.

Step 3: Description of the Ecosystem Services (Legal/customary rights and presence in external standards)

Describe here your legal or customary right to obtain payments for the forest ES, as well as overlaps of the project area with external environmental assets

Step 4: Description of the Ecosystem Services: Condition of the ES and stakeholder engagement.

Explain here the past and current condition of the ES you chose, the culturally appropriate stakeholder engagements you did as part of the project, and how you obtained FPIC

Step 5: Theory of change and risk management plan

Describe here the management activities you are implementing, how they impact the ecosystem services, what indicators you used to measure impact, and how you are managing the risk of losing such ES

Step 6: Methodologies to quantify impact

Explain here how you have measured the chosen impacts. This includes the methodology used and the process to collect data

Step 7: Measurement of outcome indicators

Insert here the obtained measurements, how you are providing conservative estimations, and any other assumptions used in the process of measurement

Step 8: Statement of results

Summarize your results, their relevance to your desired impacts, and outline your (optional) plan to achieve these results.

Tips for Accurate and Complete Data Submission

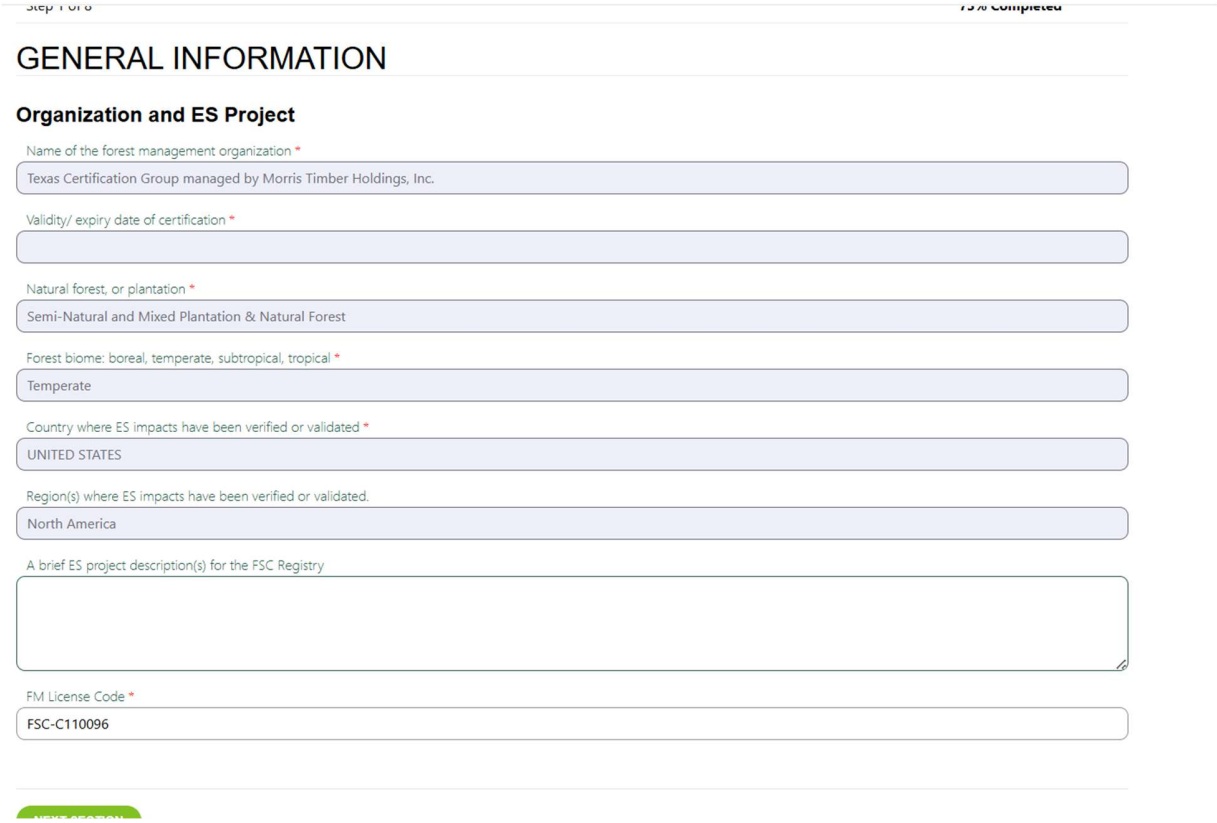
- **Ensure Completeness**: Make sure all required fields are filled before submission to prevent delays in processing.
- **Verify Information:** Double-check all entries for accuracy, especially numerical data and geographical details.
- **Use Consistent Terminology:** Maintain uniformity in terminology to ensure clarity and ease of understanding for all stakeholders.
- **Avoid Overestimations:** Provide conservative estimations and justification for results to ensure data integrity.
- **Regular Revisions:** Review and update your document as new data or results become available to maintain relevance and accuracy.

Steps for Creating/Editing an ES Request

Step 1 – General Information about your Organization and ES Project

Here, details about your organization and ES projects will be auto populated based on data from FSC and data received from ESRI. You can introduce here a brief description of your project, and what you would like to highlight about it.

Please ensure the license code is correct and corresponds to the License code you have used after log in. If incorrect, please log in with the correct license code.



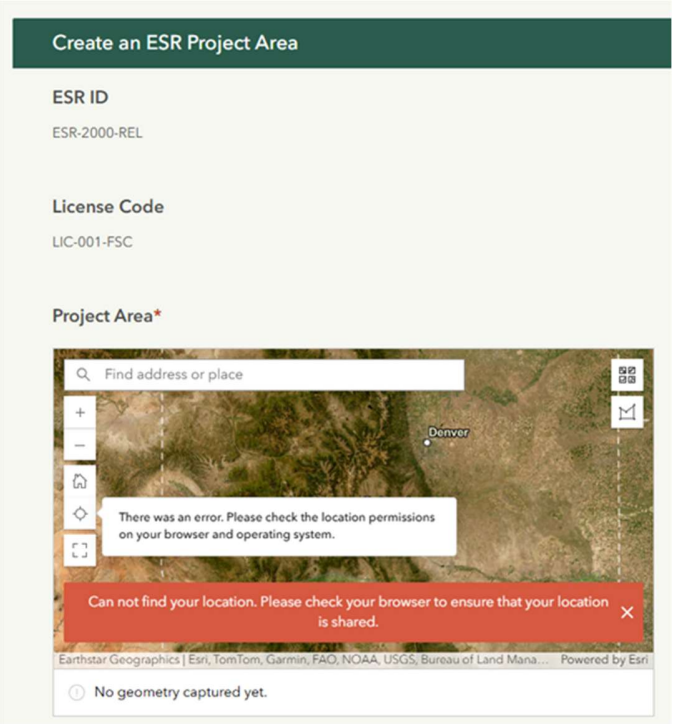
Step 2 – Project area and scope

Here you must submit the area where the project is happening, the ES impacts you want to demonstrate, and the areas that contribute to the ES.

Click on the button 'Redirect to ArcGIS'. Please follow the instructions provided for navigation

Creating an ESR Project Area

After logging in, you'll need to create an **ESR Project Area** by filling out the form with the following details:



ESR ID

This is a **pre-filled, automatically generated** unique identifier for your ecosystem services project.

License Code

Also, pre-filled, this code reflects your project's FSC certification and corresponds to the one provided in Step 1.

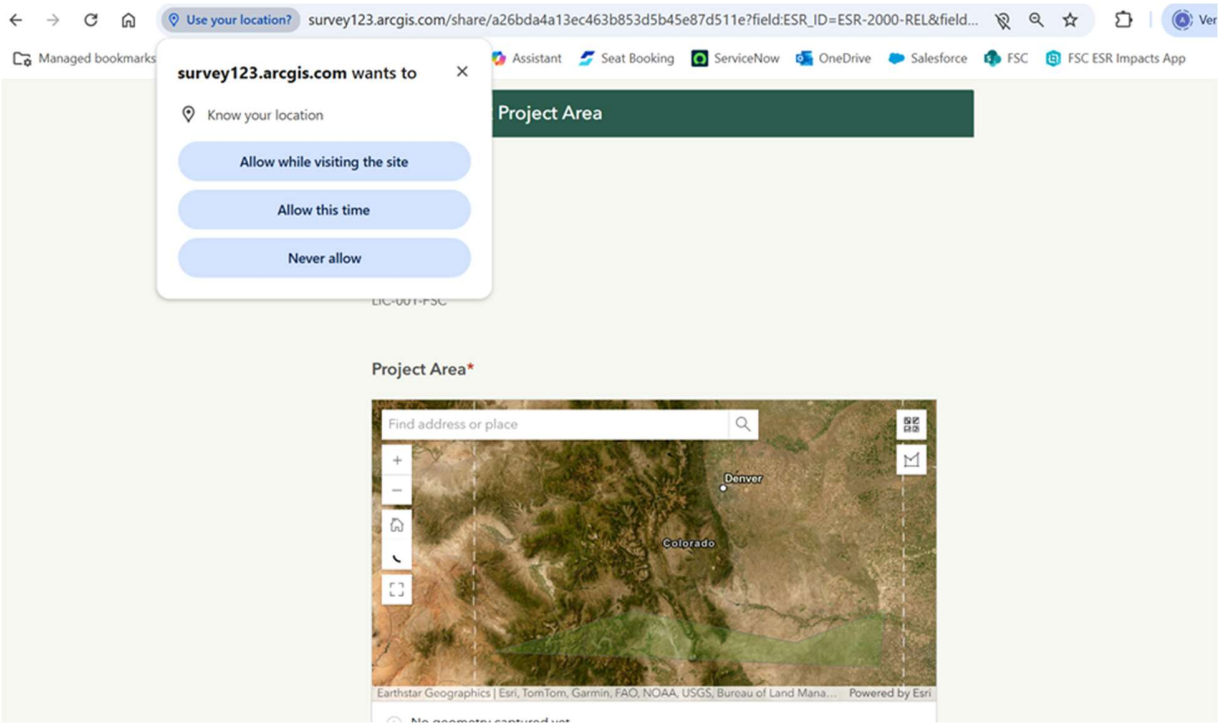
Project Area

Clearly define your project area by drawing it on the map.

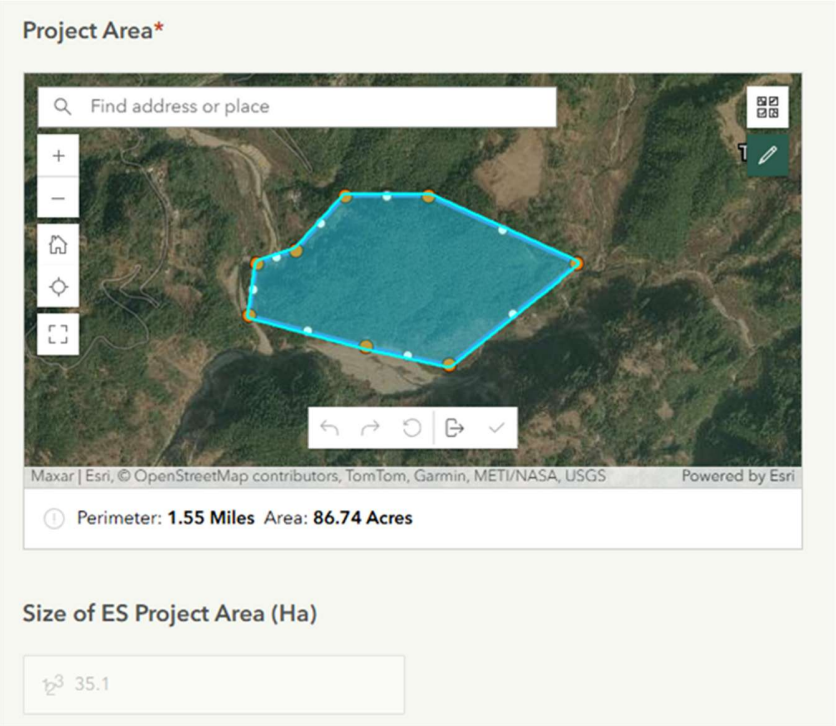
If you encounter the error message: "*Cannot find the location. Please check your browser to ensure that your location is shared,*" make sure your browser has permission to access your current location.

Once location access is granted, click the **circle icon** on the left side of the map to view your current location.

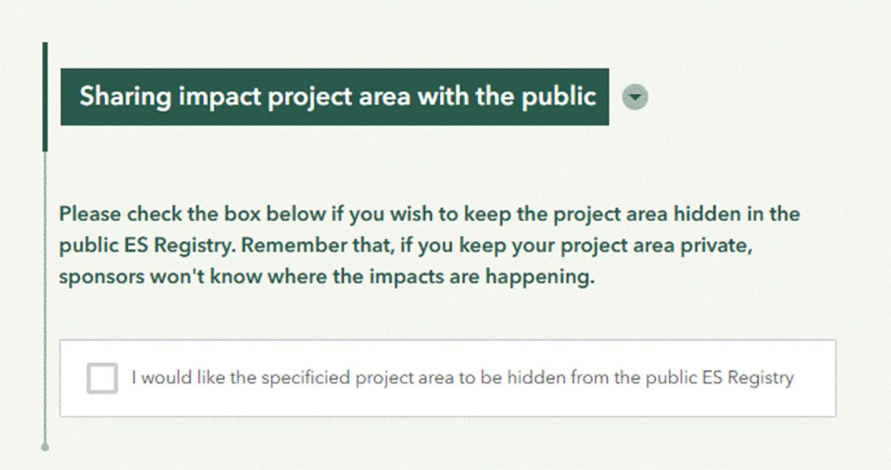
You can then **shift the map** and use the **marking tool on the right-hand side** to outline the desired project area.



Finalizing the Project Area: After marking the project area by clicking on each node one by one, complete the shape by double-clicking on the final node. This action confirms your selection. Once the area is finalized: The **perimeter** and **total area** will be **automatically calculated**. These values will be displayed **below the map** on your screen.



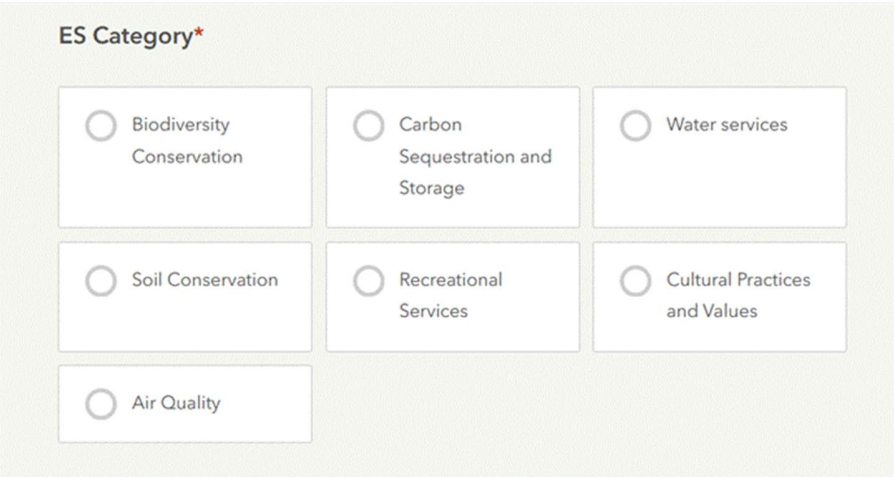
Following this, you must provide a declaration stating that the selected area is concealed from the public Electronic Services (ES) registry.



Selecting the Ecosystem Services (ES) Category

Next, choose the appropriate **Ecosystem Services (ES) category** based on your project's requirements.

You can select from the **7 available options** provided in the interface.



Selecting the ES Impact

Once you've chosen an **Ecosystem Services (ES) category**, you'll be presented with a list of **ES Impact options** relevant to that category.

These impact options are **dynamic** and will vary depending on the category you selected.

Based on the different categories, you'll find corresponding impact options tailored to each one.

Biodiversity Conservation

1. Enhancement of Natural Forest Cover
2. Maintenance of Intact Forest Landscapes
3. Maintenance of Ecologically sufficient Conservation Area Network
4. Enhancement of Ecologically sufficient Conservation Area Network
5. Maintenance of Natural forest structure
6. Enhancement of Natural forest structure
7. Maintenance of Native species diversity
8. Enhancement of Native species diversity
9. Maintenance of Functional biodiversity
10. Enhancement of Functional biodiversity
11. Maintenance of Rare, endemic, threatened or endangered habitats or ecosystems
12. Enhancement of Rare, endemic, threatened or endangered habitats or ecosystems

Carbon Sequestration and storage

1. Maintenance of forest carbon stocks through forest protection or conservation
2. Maintenance of forest carbon stocks through responsible forest management
3. Enhancement of forest carbon stocks through afforestation, reforestation and restoration
4. Enhancement of forest carbon removals through responsible forest management
5. Enhancement of forest climate benefits through increased carbon stock or reduction of GHG emissions

Water Services

1. Maintenance of Water quality

2. Enhancement of Water quality
3. Maintenance of Water volume regulation
4. Enhancement of Water volume regulation

Soil Conservation

1. Maintenance of Soil condition
2. Enhancement of Soil condition
3. Maintenance of Soil stability and protection against soil erosion
4. Enhancement of Soil stability and protection against soil erosion

Recreational Services

1. Maintenance of Social-ecological benefits from forest recreation and/or tourism
2. Enhancement of Social-ecological benefits from forest recreation and/or tourism
3. Maintenance of Populations of species of interest for nature-based tourism
4. Enhancement of Populations of species of interest for nature-based tourism

Cultural Practices and values

1. Maintenance of Cultural and ancestral knowledge, practices and language
2. Enhancement of Cultural and ancestral knowledge, practices and language
3. Maintenance of Culturally valued populations or species
4. Enhancement of Culturally valued populations or species

Air Quality

1. Maintenance of Air quality
2. Enhancement of Air quality

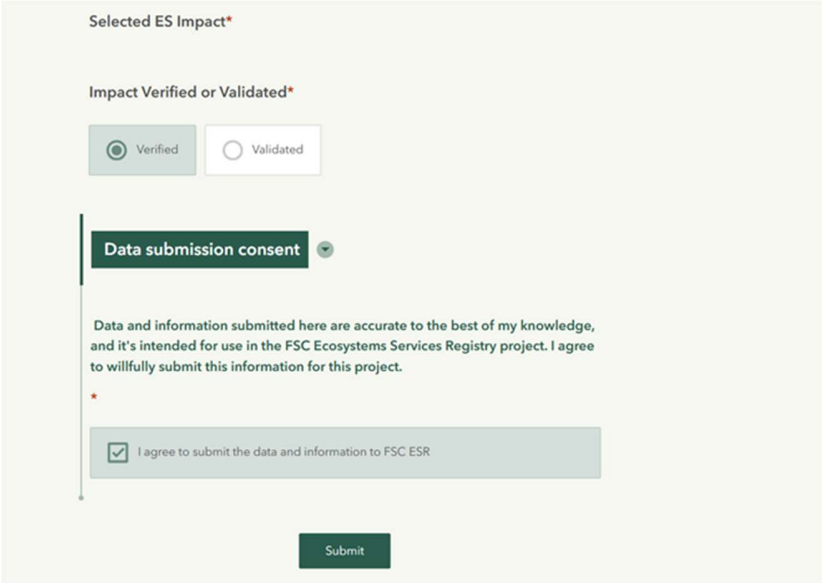
Verification and Consent

After selecting all the required parameters, you'll need to:

- Specify the status of the ES Impact — whether it is Verified or Validated.
- Provide your consent for data submission to complete the process.

Submit the project area

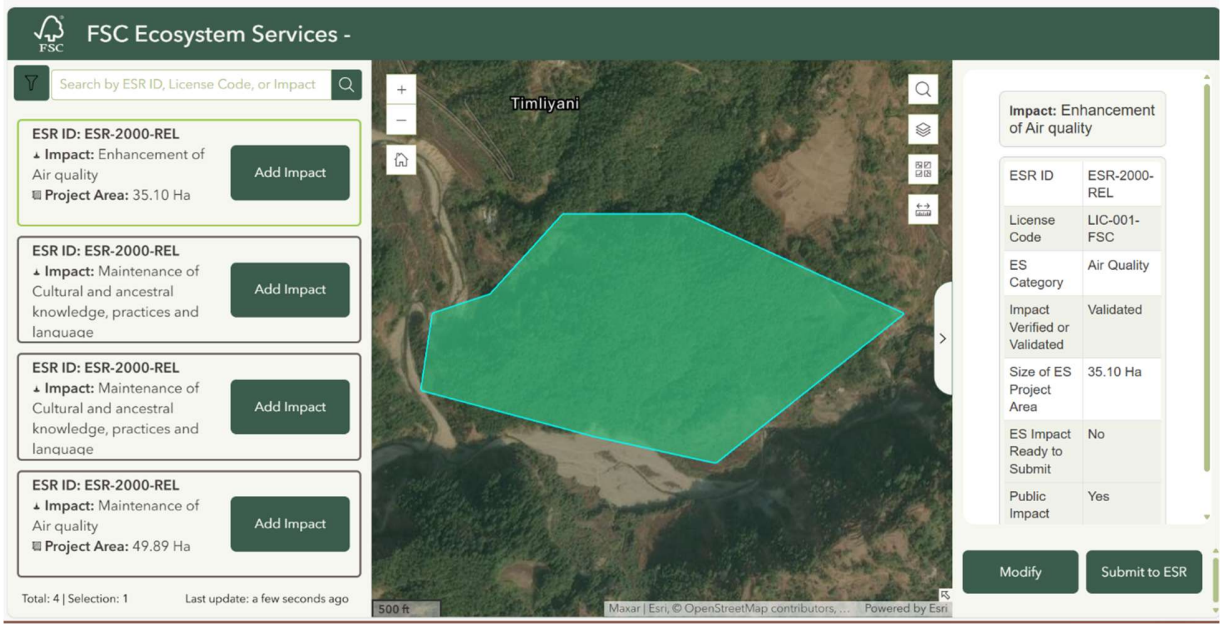
Click the submit button



Review and Edit the Submitted Area

After completing the previous steps, a new window will open displaying your submitted project area on a larger map. Here, you can:

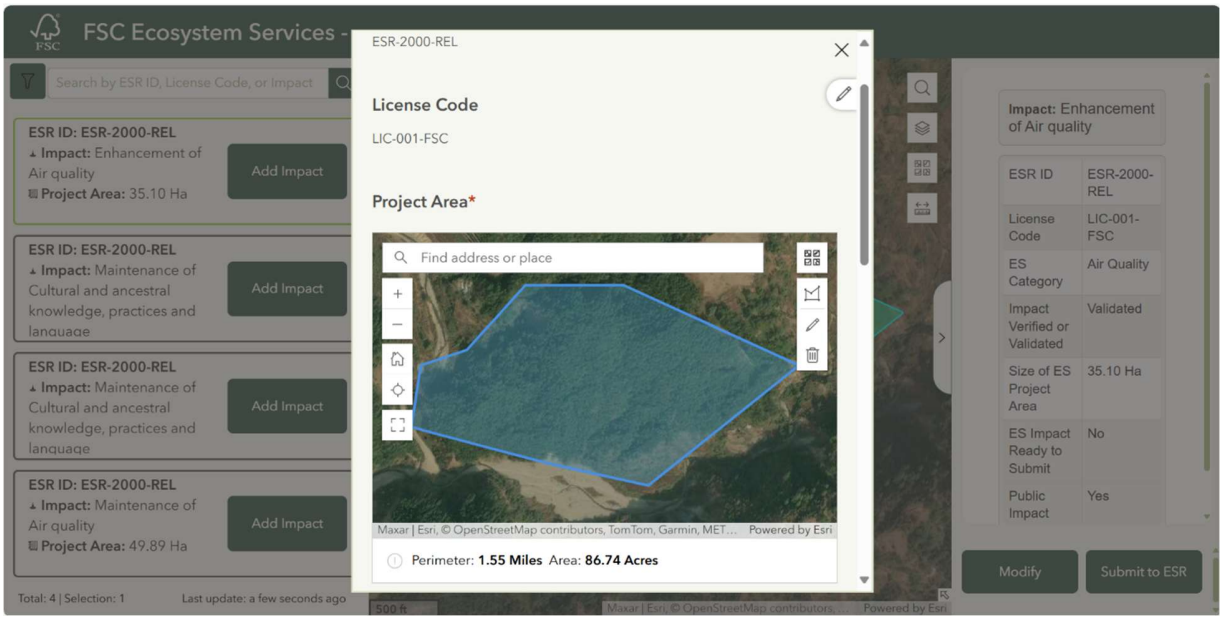
- Review the marked area in detail.
- If you wish to make changes, click the “Modify” button located at the bottom right corner of the screen to edit the area.

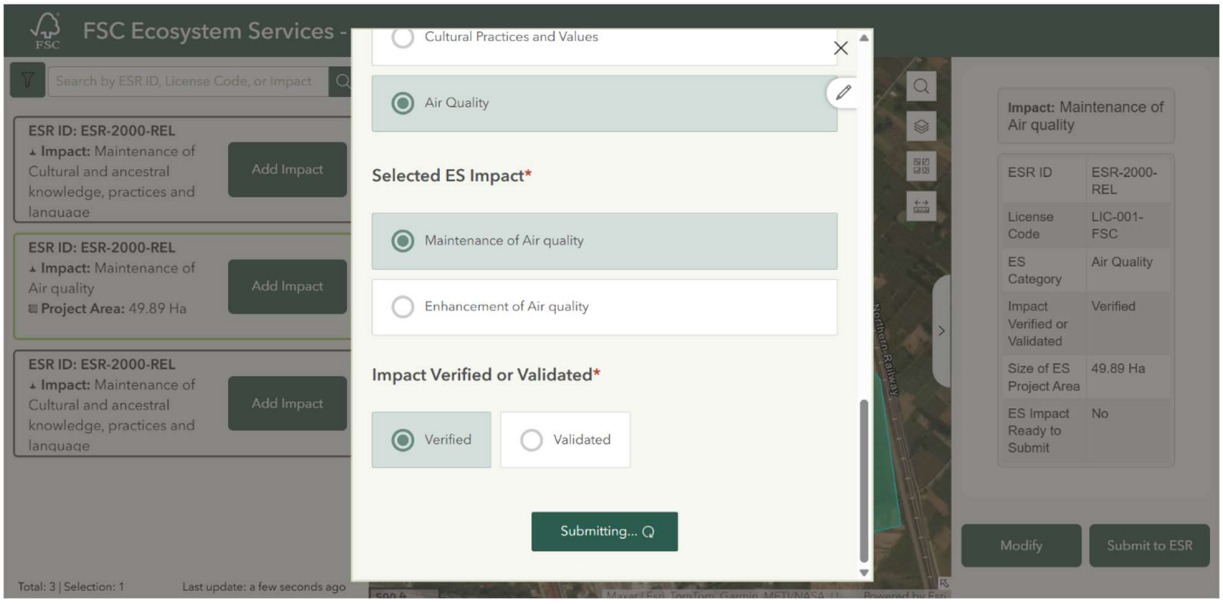


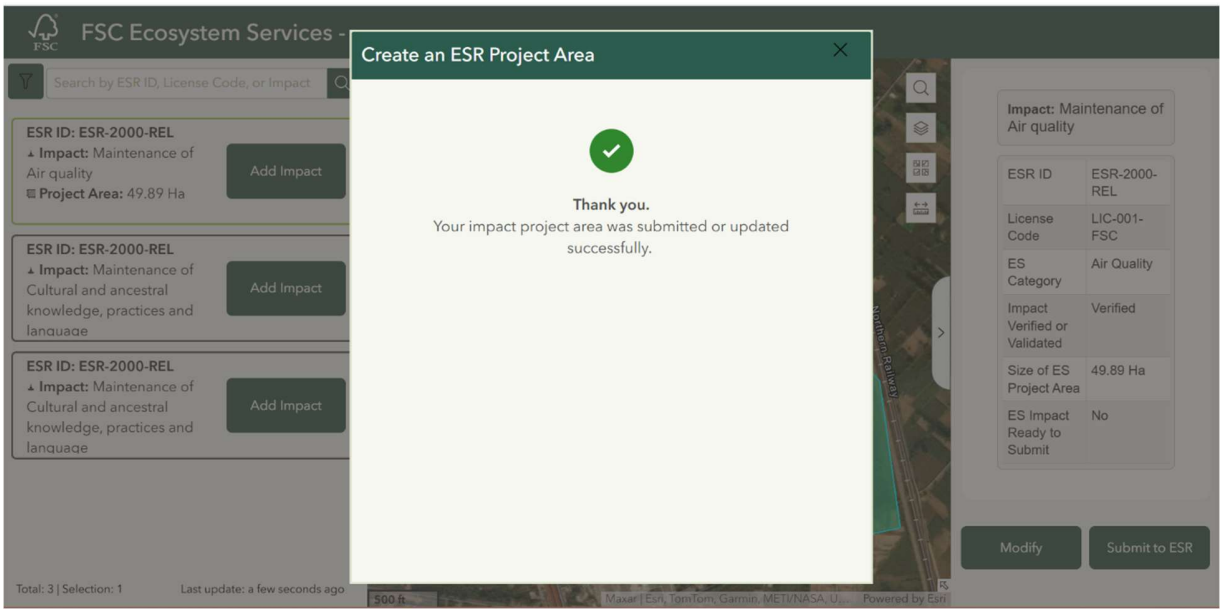
Modifying the Project Area

If you wish to make changes, you can **redraw the area directly from the Project Area window** using the available editing tools and submit it again.

Once updated, simply **submit the revised area** to complete the modification.

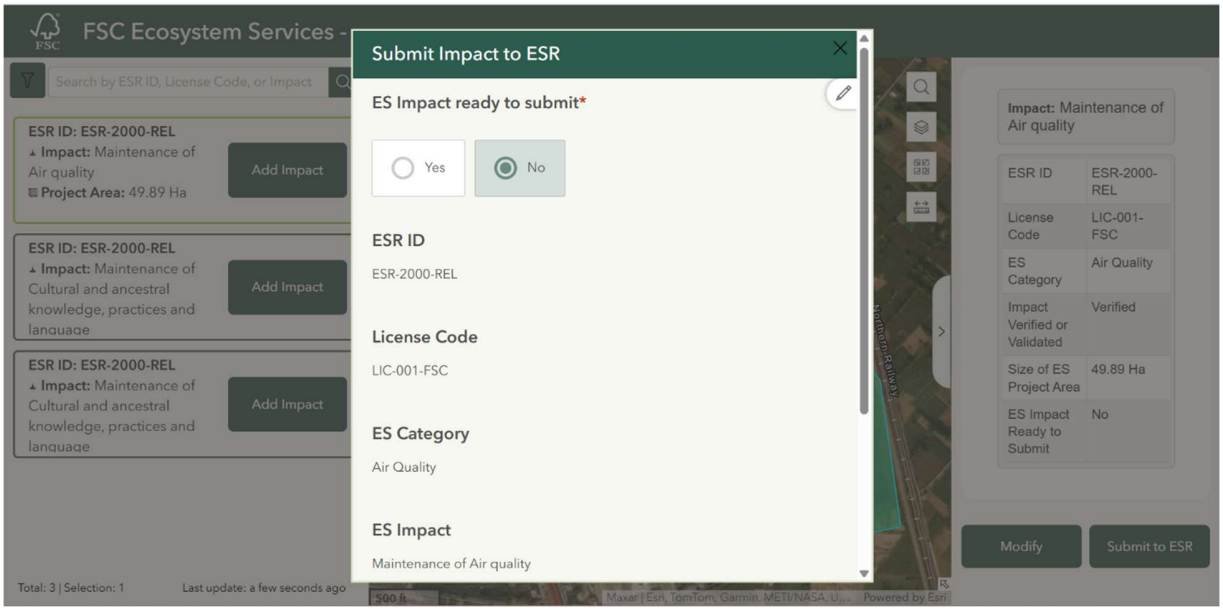


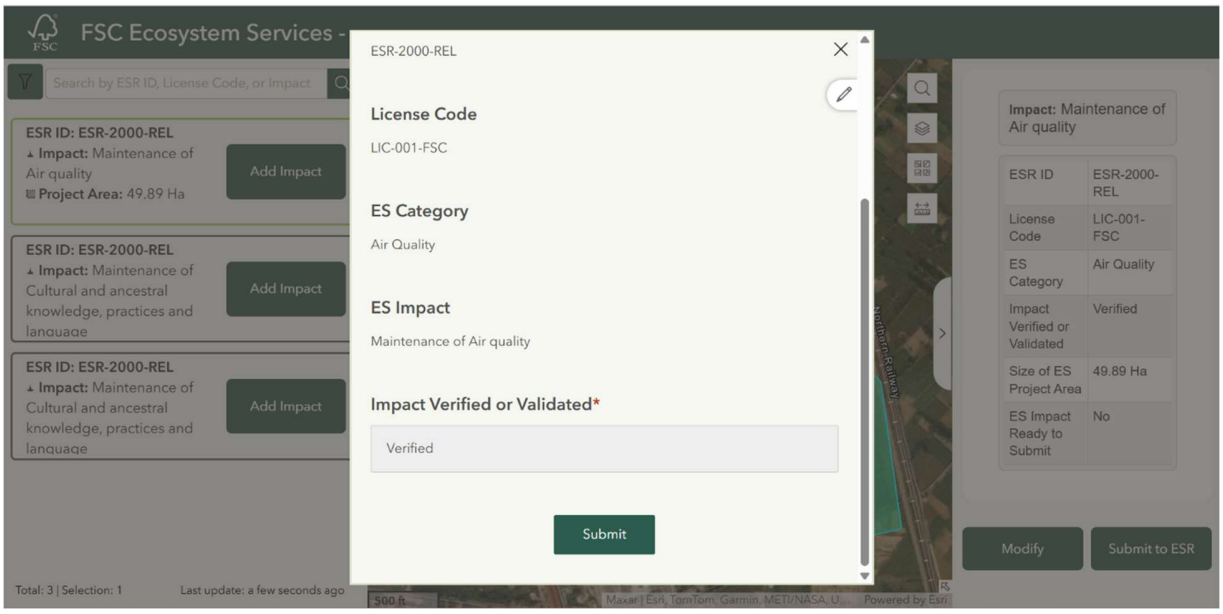


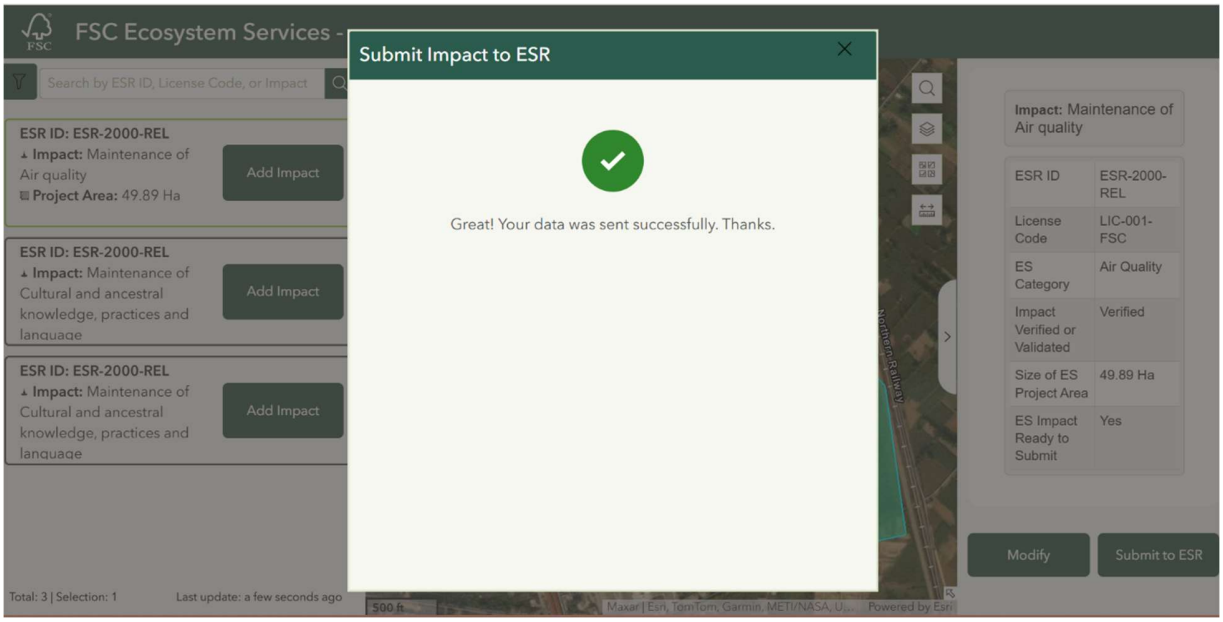


Submitting the ESR

If you've reviewed all details and are ready to proceed, simply click on **"Submit ESR"**.
This action will **lock all pre-filled variables**, meaning they can no longer be modified after submission.

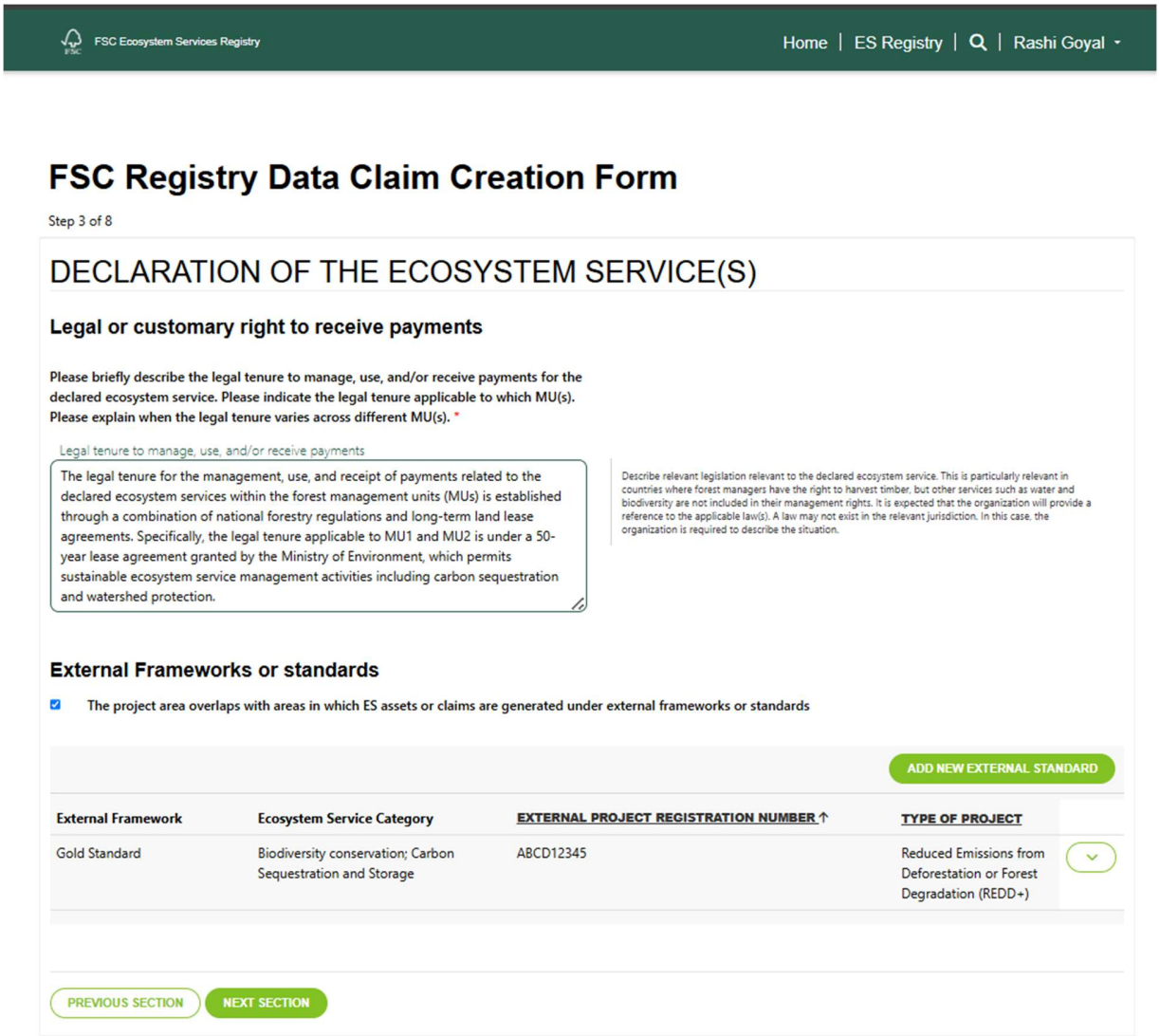






After this, you can close the window and navigate back to the Registry. Your submitted Impacts will be visible from Step 5

Step 3 - Description of the Ecosystem Services - Legal or customary right to receive payments



Step 3 is a critical component of the Ecosystem Services (ES) registry process, requiring detailed information about the legal and customary rights associated with managing, using, and receiving payments for the declared ES within the forest management units (MUs).

Key Information Needed

- **Legal Tenure:** Briefly describe the basis of your legal or customary rights to manage, use, or receive payments for the declared ES, as per clause 4.2 of the organization's guidelines. This is a mandatory field requiring clear and specific details.

- **Overlap with External Frameworks or Standards:** Indicate whether the project area overlaps with areas where ES assets or claims are generated under external frameworks or standards. Use a Yes/No checkbox to declare this information.

Additional External Framework Fields

If the external frameworks or standards checkbox is checked, the following fields must be completed:

- **External Framework/Standard:** Select the relevant frameworks or standards from a multi-selection drop-down list. Options include:
    - Verra
    - Gold Standard
    - Plan Vivo
    - American Carbon Registry
    - Other

  If "other" is selected, a new field will appear asking the Forest Manager (FM) to specify the framework.
- **Ecosystem Services Category Covered by the External Standard :** Use a multi-selection dropdown list to highlight the specific ES categories addressed within the external framework. Options include:
    - Biodiversity conservation
    - Carbon Sequestration and Storage
    - Water services
    - Soil conservation
    - Recreational services
    - Cultural practices and values

    - Air Quality
- **External Project Registration Number:** Input the registration number associated with the external framework or standard. This field adds traceability and credibility to your submission.
- **Link to External Registry:** Provide a valid link to the registry or documentation of the external framework or standard. This can include URLs to databases or official sites related to ES assets.
- **Type of Project:** Specify the type of project linked to the external framework using a drop-down field. If "other" is selected, a new field will appear asking the FM to specify the type of project.
- Available options include:
    - Afforestation, Reforestation and Revegetation
    - Improved Forest Management
    - Reduced Emissions from Deforestation or Forest Degradation (REDD+)
    - Biodiversity restoration or conservation
    - Water quality improvement
- **Justification of Distinct ES Impacts:** Clearly explain how your ES impacts differ from ES assets or claims obtained under external frameworks or standards. This could involve differentiation by ES category, aspect, or project timeline (e.g., different ES category, different aspect of the same ES category, and/or different project period). . Options include:
    - Different geographical area within the same Management Unit (MU)
    - Different ES category (e.g., a carbon project versus a recreational services project)
    - Different aspect of the same ES category (e.g., enhancement of natural forest structure versus maintenance of a specific wildlife species population)
    - Different project period(s) (e.g., ES impact verified from 2017-2022, biodiversity credits generated from 2023)
- Provide a detailed textual explanation of the justification, aligning with the selected aspects.

Step 4 - Description of the Ecosystem Services, the past condition of the ecosystem service, based on best available information

Step 4 focuses on describing the past and current condition of the ecosystem services (ES) chosen for your project. This step is essential as it establishes the baseline against which your project's progress and impacts will be measured. Additionally, it requires a culturally appropriate engagement with stakeholders and documentation of how Free, Prior, and Informed Consent (FPIC) was obtained.

The Past Condition of the Ecosystem Service

- **Qualitative Description:** Provide a detailed qualitative description of the ecosystem service based on the best available information. This includes historical records, scientific studies, and anecdotal evidence.
- **Special Features or Outstanding Values:** Highlight any legally, internationally, or FSC-recognized concepts such as Key Biodiversity Areas, UNESCO World Heritage Sites, IUCN Red List species, or High Conservation Values (HCV).
- **Principal Management Objectives:** Specify the primary goals and objectives related to ecosystem services.
- **Forest Management Regime:** Describe the management regime applied to the forest to support ecosystem service.
- **Major Natural Disturbances:** Identify significant natural events that impacted the ecosystem service, such as wildfires, insect attacks, or windthrow.
- **Human-Induced Pressures:** Include human activities that have affected the ecosystem service, such as poaching, road construction, or controlled burning of undergrowth.

FSC Registry Data Claim Creation Form

Step 4 of 8

DESCRIPTION OF THE ECOSYSTEM SERVICE(S)

The past condition of the ecosystem service, based on best available information

a) qualitative description of the ecosystem service; *

The ecosystem service provided by our forest management area is primarily focused on supporting biodiversity conservation. Our forests serve as critical habitats for a diverse range of flora and fauna, including several endemic and threatened species. The dense canopy and varied undergrowth offer shelter and food resources essential for maintaining healthy populations of key species, such as the rare [Species Name] and the endangered [Species Name].

b) legally, internationally, or FSC-related recognized concept of special features or outstanding values (e.g. Key Biodiversity Area, UNESCO World heritage site, IUCN Red List, High Conservation Values (HCV)); *

Our forest management area is recognized as a High Conservation Value (HCV) forest, adhering to the criteria outlined by the FSC. This designation underscores its critical role in preserving biodiversity, supporting rare and endangered species, and maintaining ecosystem services vital to surrounding communities. Additionally, the area overlaps with an officially designated Key Biodiversity Area (KBA), which highlights its importance on an international scale for the conservation of unique biotic communities and species. The presence of species listed on the IUCN Red List

Provide information about any protection status of the forest in the ES project area, including information if the protection is based on regulatory requirements (legally protected area) or voluntary protection, details about the classification of the protection and protection status as well as conservation status and limitations in the forest management.

c) major natural disturbance that affected or posed a major risk to the ecosystem service

---

c) major natural disturbance that affected or posed a major risk to the ecosystem service (e.g. wildfire, insect attack, windthrow); *

In the past decade, our forest management area experienced a significant natural disturbance in the form of a severe windthrow event. In 2017, a series of intense storms with high winds swept through the region, leading to substantial tree falls and canopy gaps. This disturbance not only posed an immediate threat to the structural integrity of the forest but also impacted the ecosystem services we provide, such as carbon sequestration and habitat stability for local wildlife.

'Provide information about any past or potential natural risk for the ecosystem. Any disturbance such as wildfire, insect outbreak, windthrow, drought, flooding etc. which already affected the ecosystem service or pose a risk shall be described here. The information shall be consistent with the risk management plan details mentioned below in step 3.

d) human-induced pressures which have affected the ecosystem service (e.g. poaching, road construction/maintenance, controlled burning of undergrowth); *

The ecosystem services provided by our forest management area have been affected by human-induced pressures, particularly road construction and maintenance activities. The development of roads has led to habitat fragmentation, disrupting wildlife corridors and affecting the movement patterns of key species. Additionally, increased accessibility has inadvertently facilitated poaching and illegal logging activities, posing further threats to biodiversity and undermining the forest's ecological balance.

'Provide information about any past or potential anthropogenic risk for the ecosystem. Any disturbance such as poaching, infrastructure construction, illegal logging, controlled burning etc. which already affected the ecosystem service or pose a risk shall be described here. The information shall be consistent with the risk management plan details mentioned below in step 3.

e) principal management objectives *

Our principal management objectives within the FSC Ecosystem Services framework focus on ensuring the sustainability and enhancement of ecosystem services provided by our forest area. Key objectives include maintaining and improving biodiversity conservation through habitat protection and restoration initiatives, supporting carbon sequestration efforts by implementing sustainable forestry practices, and promoting soil and water conservation to ensure the continued quality and availability of these vital resources.

Provide information about the management objective in the ES project area (e.g. production of high quality wood, pulp wood, biomass, non-timber products or biodiveristy protection or water catchment protection etc.)

f) forest management regime *

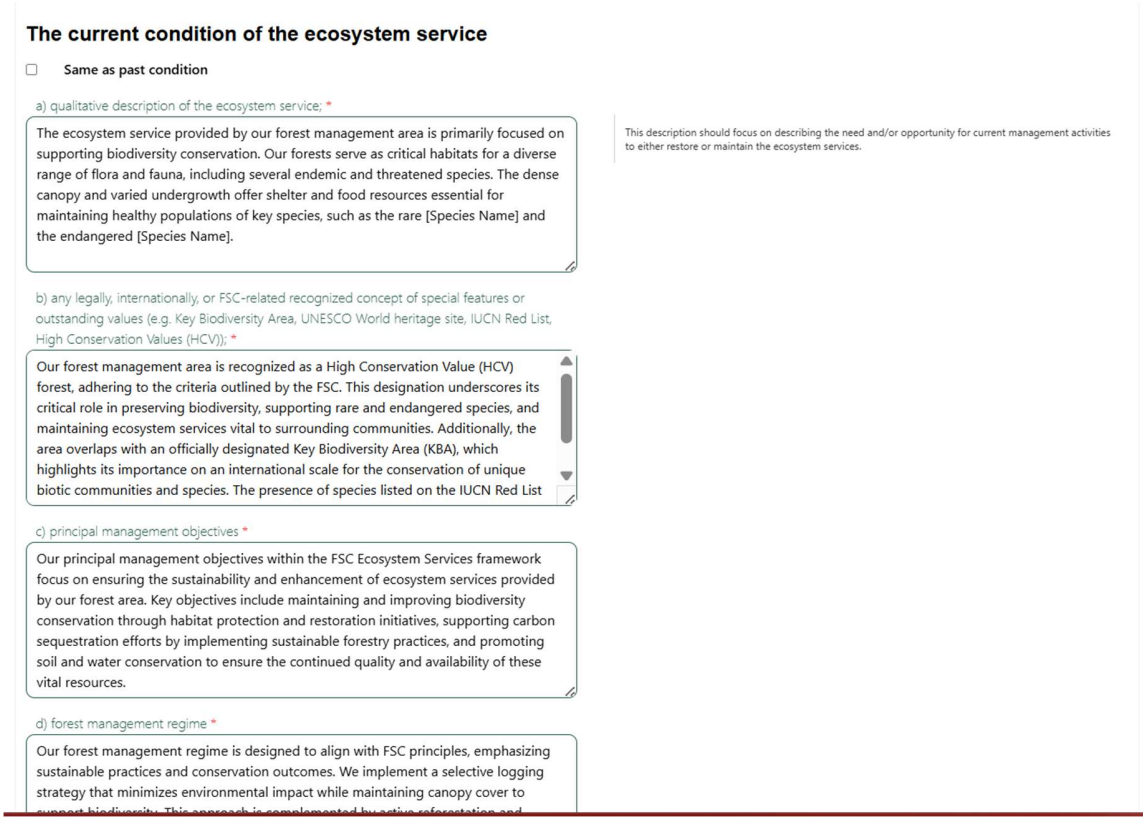
Our forest management regime is designed to align with FSC principles, emphasizing sustainable practices and conservation outcomes. We implement a selective logging strategy that minimizes environmental impact while maintaining canopy cover to support biodiversity. This approach is complemented by active reforestation and afforestation projects to restore degraded areas and enhance habitat connectivity.

Indicate the forest management regime (e.g., selective logging, clearfelling, logging cycle, conservation);

The Current Condition of the Ecosystem Service

You must indicate whether the current condition is the same as the past condition. If yes, values will be replicated in this section, and fields for current conditions will be hidden. If not, provide updated information.

- **Qualitative Description:** Offer a present-day assessment of the ecosystem service, detailing its structure, function, and any recent changes.
- **Special Features or Outstanding Values:** Provide information on any legally, internationally, or FSC-recognized concepts if applicable.
- **Principal Management Objectives:** Specify current objectives tied directly to the ecosystem service.
- **Forest Management Regime:** Describe the ongoing forest management practices and their role in maintaining or enhancing the ecosystem service.



The current condition of the ecosystem service

☐ **Same as past condition**

a) qualitative description of the ecosystem service; *

The ecosystem service provided by our forest management area is primarily focused on supporting biodiversity conservation. Our forests serve as critical habitats for a diverse range of flora and fauna, including several endemic and threatened species. The dense canopy and varied undergrowth offer shelter and food resources essential for maintaining healthy populations of key species, such as the rare [Species Name] and the endangered [Species Name].

This description should focus on describing the need and/or opportunity for current management activities to either restore or maintain the ecosystem services.

b) any legally, internationally, or FSC-related recognized concept of special features or outstanding values (e.g. Key Biodiversity Area, UNESCO World heritage site, IUCN Red List, High Conservation Values (HCV)); *

Our forest management area is recognized as a High Conservation Value (HCV) forest, adhering to the criteria outlined by the FSC. This designation underscores its critical role in preserving biodiversity, supporting rare and endangered species, and maintaining ecosystem services vital to surrounding communities. Additionally, the area overlaps with an officially designated Key Biodiversity Area (KBA), which highlights its importance on an international scale for the conservation of unique biotic communities and species. The presence of species listed on the IUCN Red List

c) principal management objectives *

Our principal management objectives within the FSC Ecosystem Services framework focus on ensuring the sustainability and enhancement of ecosystem services provided by our forest area. Key objectives include maintaining and improving biodiversity conservation through habitat protection and restoration initiatives, supporting carbon sequestration efforts by implementing sustainable forestry practices, and promoting soil and water conservation to ensure the continued quality and availability of these vital resources.

d) forest management regime *

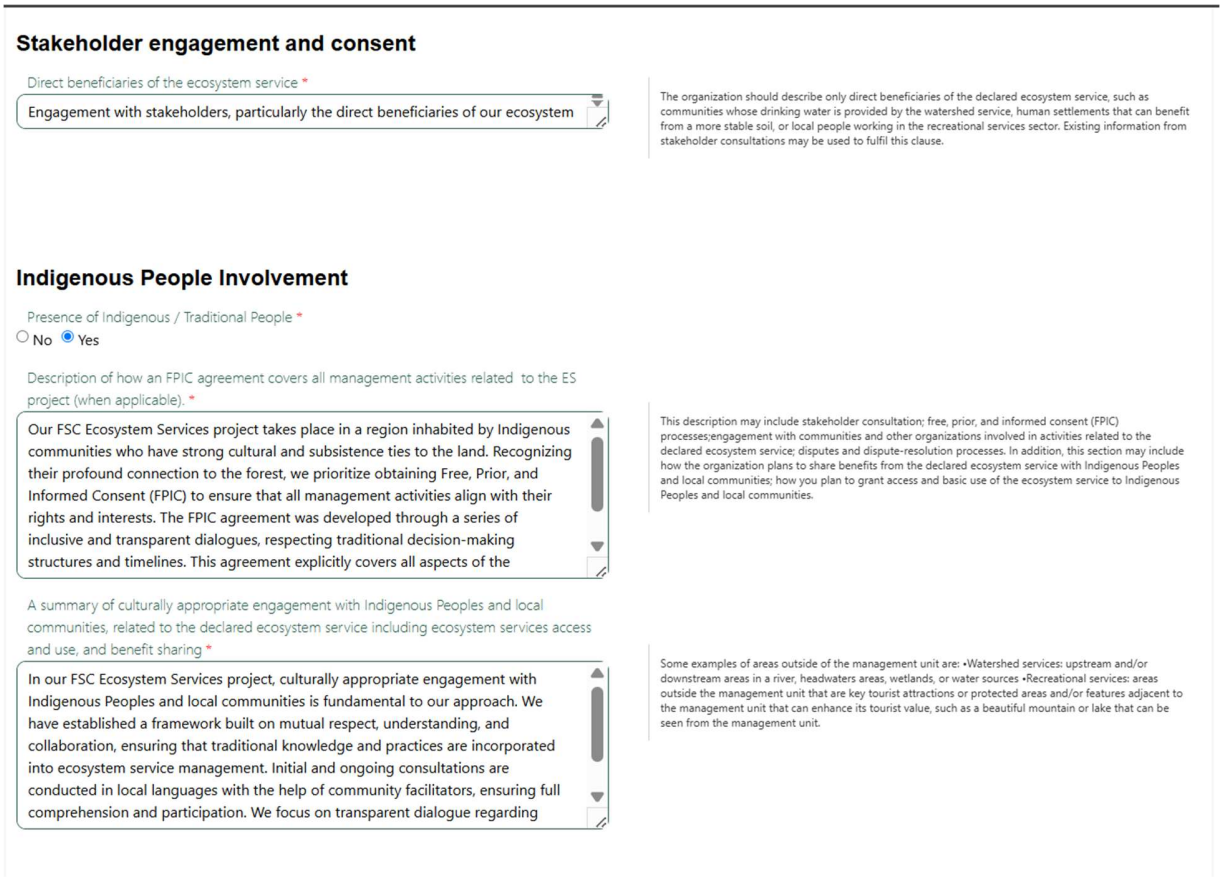
Our forest management regime is designed to align with FSC principles, emphasizing sustainable practices and conservation outcomes. We implement a selective logging strategy that minimizes environmental impact while maintaining canopy cover to

Stakeholder engagement and consent

- **Direct beneficiaries of the ecosystem service:** Please provide direct beneficiaries of the declared ecosystem service

Presence of Indigenous/Traditional People

- **Presence of Indigenous/Traditional People:** Indicate whether indigenous or traditional people are present in the project area.
- **FPIC Agreement:** If indigenous/traditional people are present, provide a detailed explanation of how Free, Prior, and Informed Consent (FPIC) agreements cover all related management activities.
- **Culturally Appropriate Engagement:** Summarize the engagement with Indigenous Peoples and local communities, focusing on aspects such as access and use of ecosystem services and benefit sharing.



Stakeholder engagement and consent

Direct beneficiaries of the ecosystem service *

Engagement with stakeholders, particularly the direct beneficiaries of our ecosystem

The organization should describe only direct beneficiaries of the declared ecosystem service, such as communities whose drinking water is provided by the watershed service, human settlements that can benefit from a more stable soil, or local people working in the recreational services sector. Existing information from stakeholder consultations may be used to fulfil this clause.

Indigenous People Involvement

Presence of Indigenous / Traditional People *

○ No ◉ Yes

Description of how an FPIC agreement covers all management activities related to the ES project (when applicable). *

Our FSC Ecosystem Services project takes place in a region inhabited by Indigenous communities who have strong cultural and subsistence ties to the land. Recognizing their profound connection to the forest, we prioritize obtaining Free, Prior, and Informed Consent (FPIC) to ensure that all management activities align with their rights and interests. The FPIC agreement was developed through a series of inclusive and transparent dialogues, respecting traditional decision-making structures and timelines. This agreement explicitly covers all aspects of the

This description may include stakeholder consultation; free, prior, and informed consent (FPIC) processes;engagement with communities and other organizations involved in activities related to the declared ecosystem service; disputes and dispute-resolution processes. In addition, this section may include how the organization plans to share benefits from the declared ecosystem service with Indigenous Peoples and local communities; how you plan to grant access and basic use of the ecosystem service to Indigenous Peoples and local communities.

A summary of culturally appropriate engagement with Indigenous Peoples and local communities, related to the declared ecosystem service including ecosystem services access and use, and benefit sharing *

In our FSC Ecosystem Services project, culturally appropriate engagement with Indigenous Peoples and local communities is fundamental to our approach. We have established a framework built on mutual respect, understanding, and collaboration, ensuring that traditional knowledge and practices are incorporated into ecosystem service management. Initial and ongoing consultations are conducted in local languages with the help of community facilitators, ensuring full comprehension and participation. We focus on transparent dialogue regarding

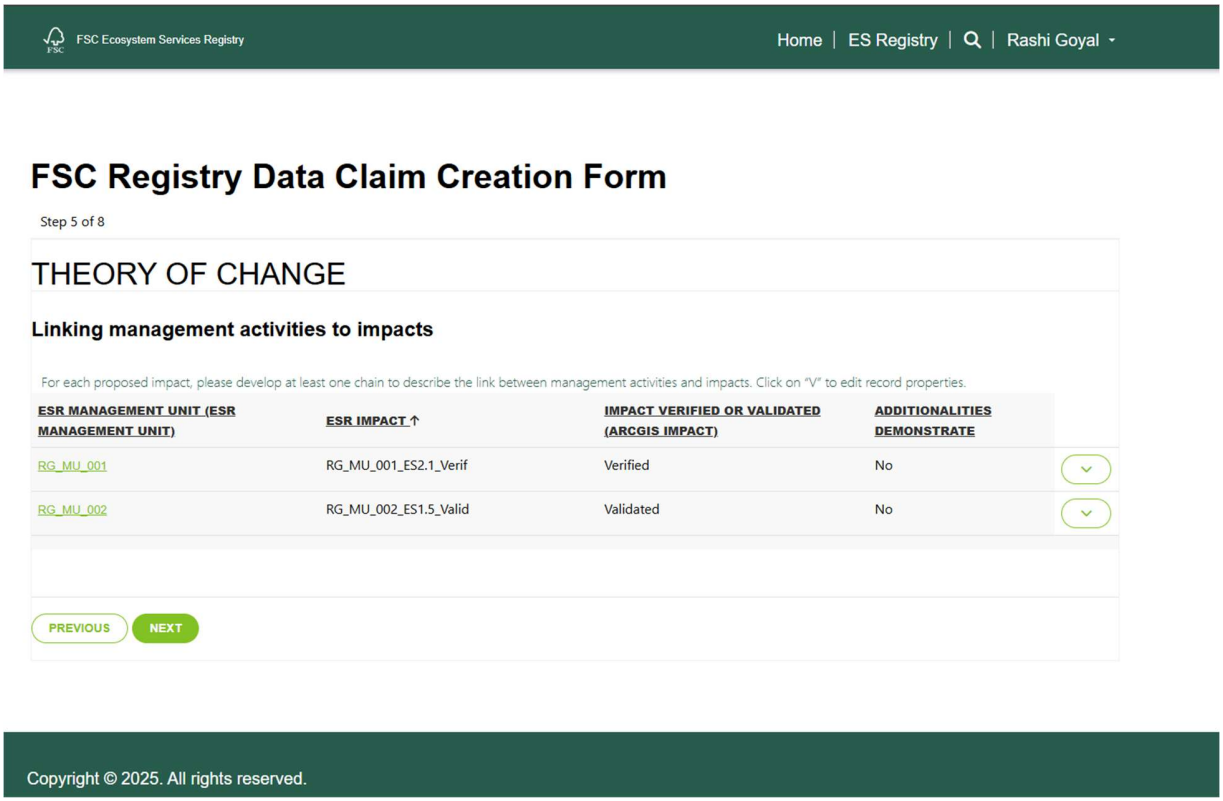
Some examples of areas outside of the management unit are: •Watershed services: upstream and/or downstream areas in a river, headwaters areas, wetlands, or water sources •Recreational services: areas outside the management unit that are key tourist attractions or protected areas and/or features adjacent to the management unit that can enhance its tourist value, such as a beautiful mountain or lake that can be seen from the management unit.

Step 5 – Theory of Change

Describe here the management activities you are implementing, how they impact the ecosystem services, what indicators you used to measure impact, and how you are managing the risk of losing such ES

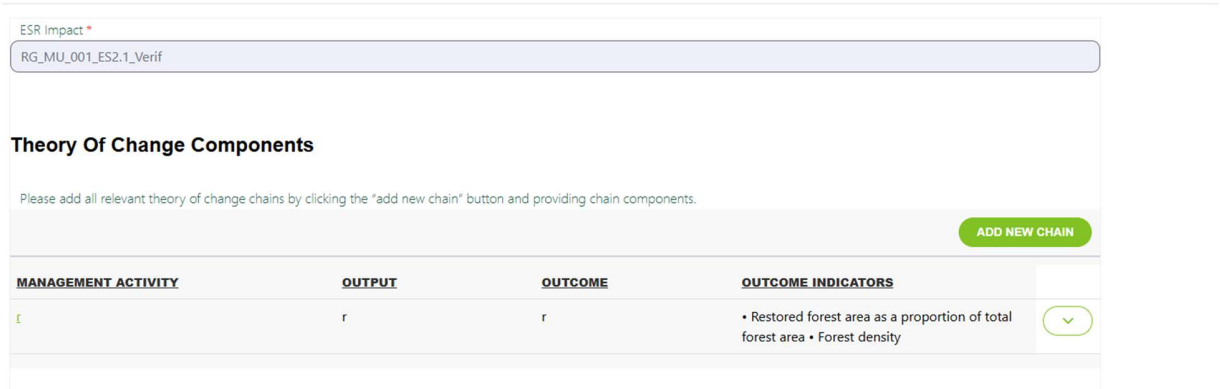
By filling out each field meticulously, forest managers can ensure precise tracking, effective management, and sustainable outcomes for ecosystem services. Step 5 serves as a vital foundation for maintaining and enhancing environmental health.

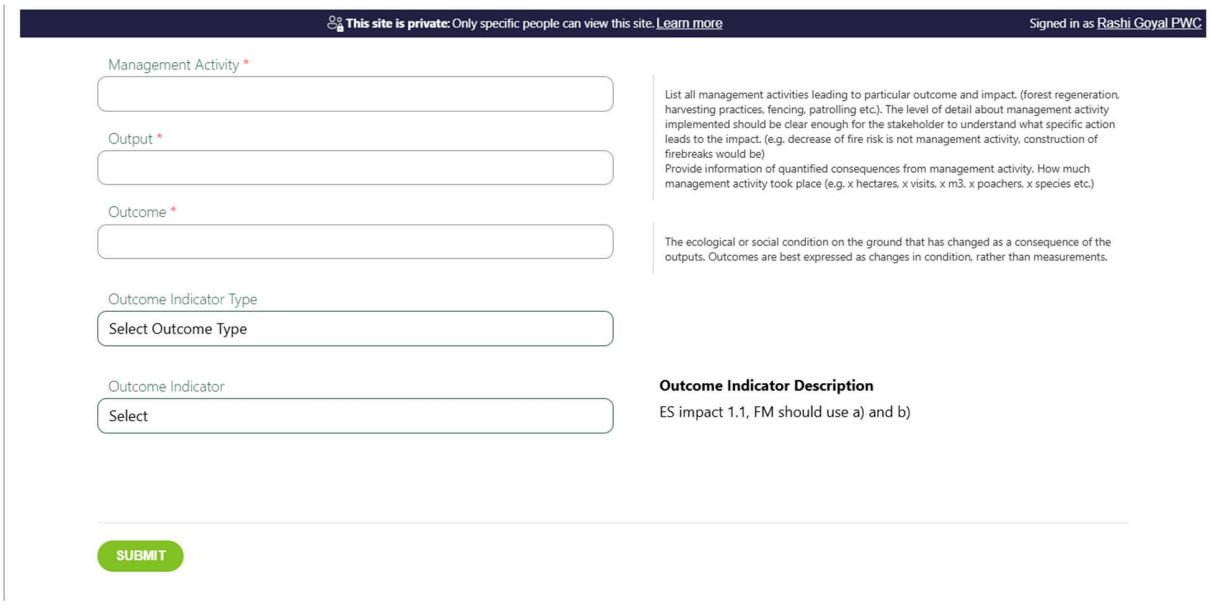
To View details of each Theory of Change, click on ‘Edit’



Add new Management Activities, Outputs, and Outcomes

This step establishes the connection between management activities, their outputs, and the resulting ecological and social outcomes. Here's a guide to help you navigate through the fields provided:





1. Management Activities

- **Details Matter:** Provide a clear and specific description of all management activities implemented.
- **Connect Actions to Impacts:** Ensure that each activity is tied to a tangible impact. For instance, rather than saying "reduce fire risk," specify actions like "constructed firebreaks spanning X kilometers."

2. Output

- **Quantify the Efforts:** Express management activities in measurable terms that stakeholders can clearly understand. Use units like hectares covered, number of patrols, volume of harvested materials, species observed, or poachers apprehended.
- **Be Transparent:** Provide precise data for each activity, ensuring all stakeholders can trace the effort to the intended impact.

3. Outcomes

- **Describe Conditions Changed:** Focus on the ecological or social conditions on the ground that have shifted as a result of your outputs. For instance, improved soil health, higher wildlife population density, or enhanced community access to clean water.
- **Avoid Pure Metrics:** Outcomes should reflect changes in conditions rather than just numbers. For example, instead of saying "X species spotted," describe how biodiversity in the area has improved.

4. Outcome Indicator Type

- **Define the Outcome Indicator type:** Specify the type of indicator used to measure the outcome. Outcome indicators are based on the ES Impact

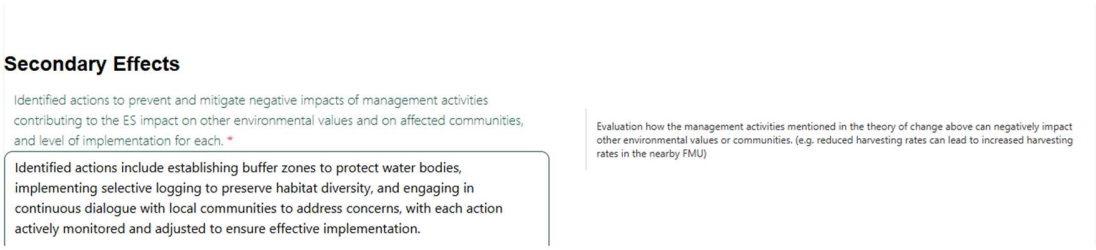
5. Outcome Indicator

- **Select Relevant Outcome Indicator:** Choose all relevant outcome indicators. Please select the outcome indicator based on the Outcome Indicator Type chosen and the guidance provided in the application. Refer to appendices for link to the document

Outcome Indicators Type and Outcome Indicators Mapping

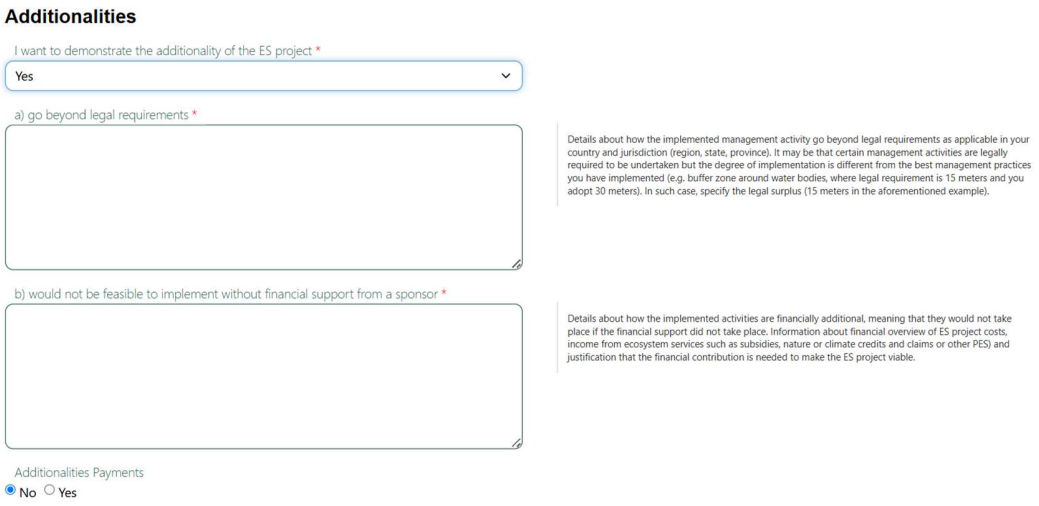
- **Outcome Indicators:** The dictionary filters outcome indicators from the data model based on the selected impact and indicator type. For example:
    - *Impact ES1.1:* FMs must select at least one outcome indicator from type (a) AND one from type (b) .
    - *Impact ES1.7:* FMs must select at least one indicator from type (a) OR type (b) AND one from type (c).
- **Post Validation:** If FM selections do not follow the logic, a message will appear indicating the required logic for adjustment.
- **Link to Reference Document:** FMs will have access to a document containing logic mappings for reference.

Address Secondary Effects



- Identify actions to prevent and mitigate any negative impacts of management activities on other environmental values or affected communities. This includes:
- Listing potential negative effects.
- Providing specific mitigation strategies to minimize harm.
- Ensuring transparency and highlighting the level of implementation for each mitigation action.

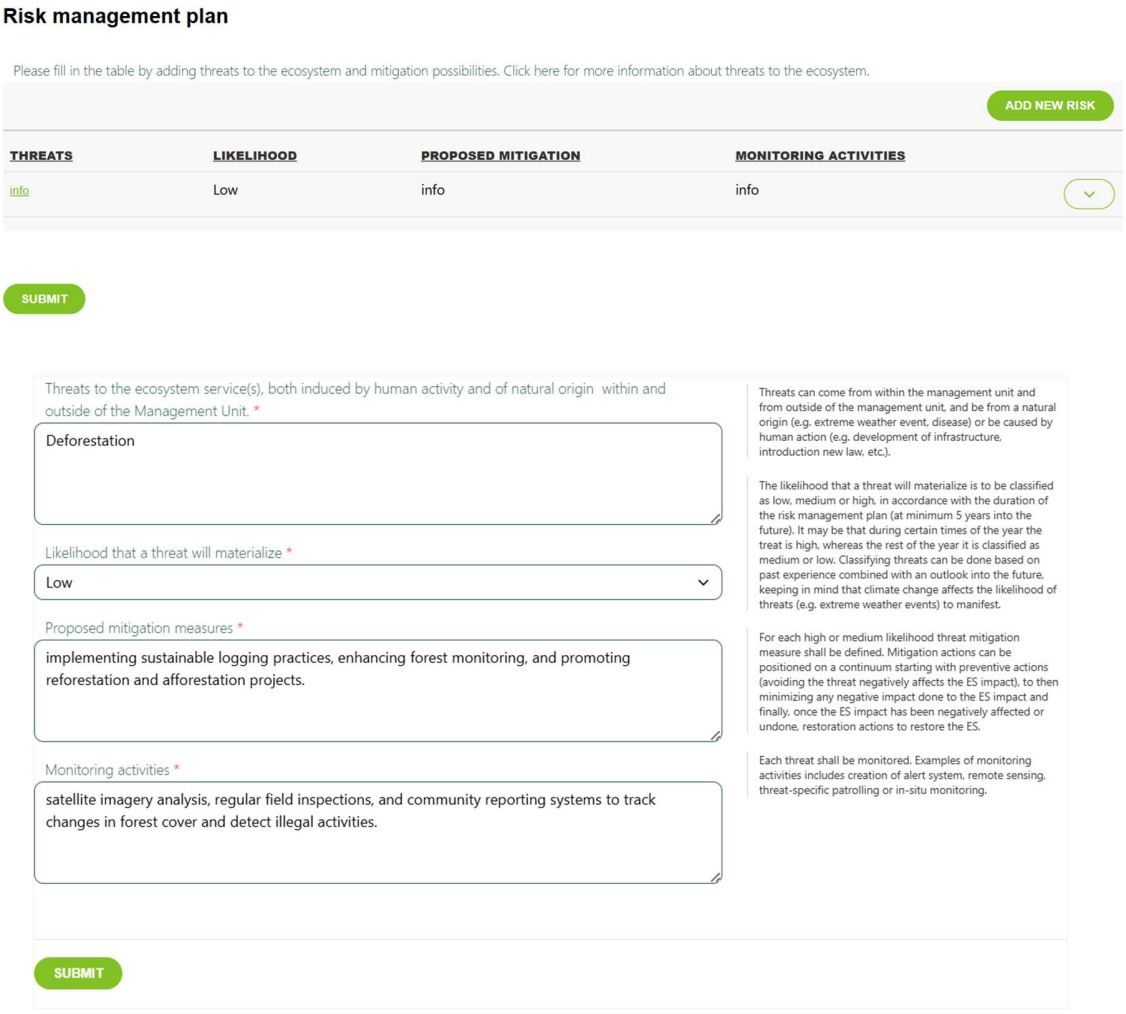
Demonstrate Additionalities



To showcase the additionality of your ES project, focus on the following:

- **Legal Compliance:** Details about how the implemented management activity go beyond legal requirements as applicable in your country and jurisdiction (region, state, province). It may be that certain management activities are legally required to be undertaken but the degree of implementation is different from the best management practices you have implemented (e.g. buffer zone around water bodies, where legal requirement is 15 meters and you adopt 30 meters). In such case, specify the legal surplus (15 meters in the aforementioned example).
- **Feasibility:** Details about how the implemented activities are financially additional, meaning that they would not take place if the financial support did not take place. Information about financial overview of ES project costs, income from ecosystem services such as subsidies, nature or climate credits and claims or other PES) and justification that the financial contribution is needed to make the ES project viable.
- **Additionalities Payments:** Indicate whether Additionalities payments are required and justification if yes.

Develop a Risk Management Plan



This step focuses on creating a comprehensive risk management plan to address threats to ecosystem services. This guide outlines the essential components you need to complete and strategies to effectively mitigate risks.

Threats: Identify Potential Risks - Begin by pinpointing the major risks facing ecosystem services. These could include:

- Disease outbreaks
- Deforestation
- Soil erosion
- Other environmental or anthropogenic threats

Be as detailed as possible to ensure all risks are clearly understood.

Likelihood: Assess Probability - Evaluate the likelihood of each identified threat occurring. Use clear qualifiers such as:

- Low
- Medium
- High

Base your assessment of historical data, trends, and expert opinions.

Proposed Mitigation: Develop Mitigation Strategies - For each threat, outline precise and actionable strategies to reduce or eliminate its impact. Examples include:

- Reforestation programs to combat deforestation
- Construction of terraces to reduce soil erosion
- Vaccination campaigns to address disease outbreaks

Be sure to tailor the mitigation efforts to the specifics of each threat.

Monitoring Activities: Specify Monitoring Actions - Provide a detailed account of the actions taken to monitor both potential threats and the efficacy of your mitigation strategies. Examples include:

- Regular surveys of forest cover
- Soil composition tests
- Wildlife population counts

Monitoring should be systematic and ongoing to provide reliable insights into risk management effectiveness.

Best Practices for Risk Management

To ensure the success of your risk management plan:

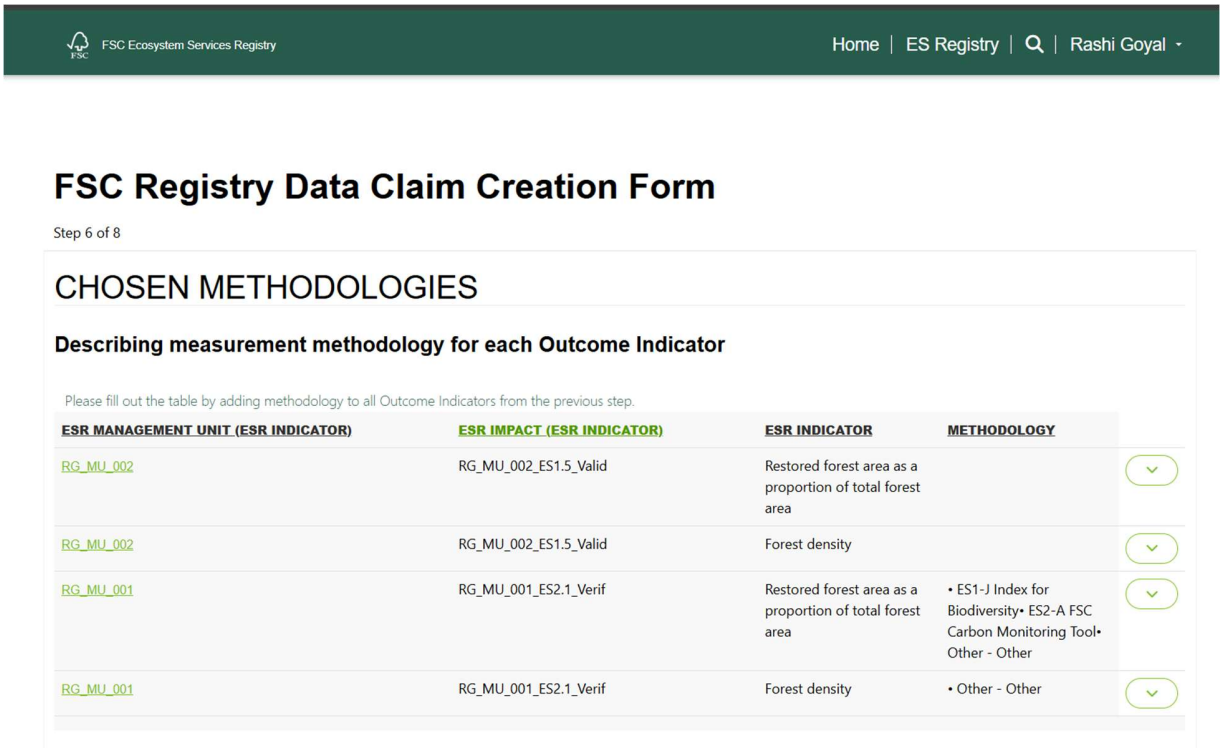
- Engage stakeholders and experts to validate the threats and mitigation strategies.
- Use transparent methods to assess likelihood and implement monitoring activities.
- Update the plan periodically based on new data or changes in conditions.
- Communicate findings with all relevant parties to foster collaboration and accountability.

Step 6 – Chosen Methodologies, Describing measurement methodology for each Outcome Indicator

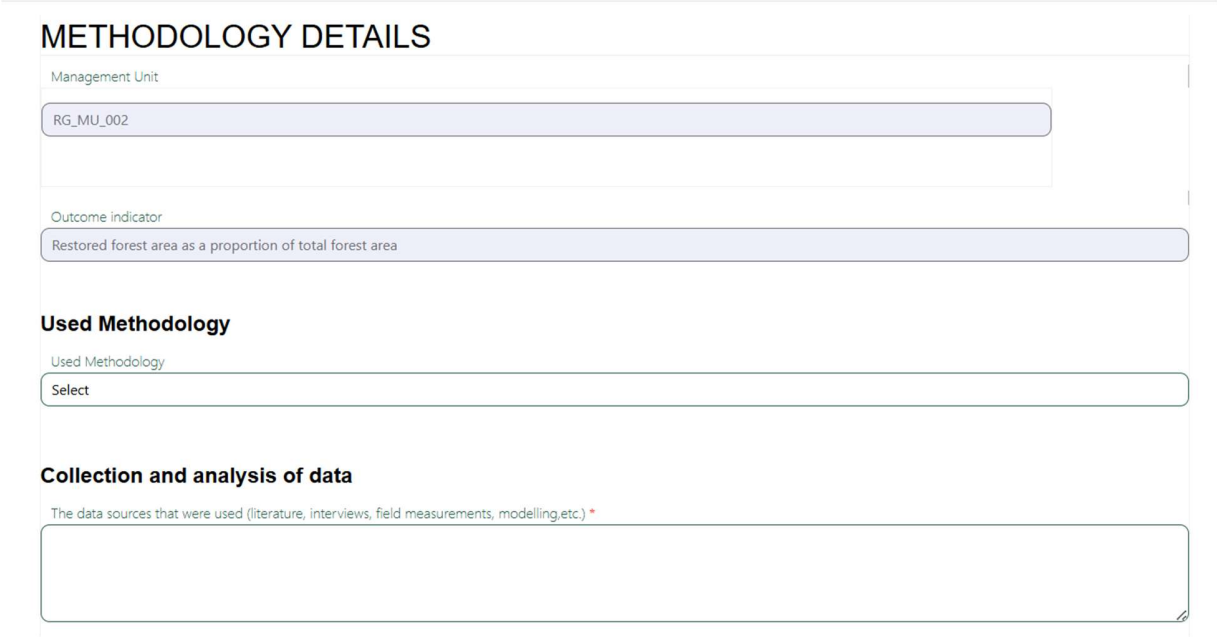
Step 6 is a crucial part of the measurement process for assessing the impacts of your product. This step involves selecting and implementing the appropriate methodologies for each outcome indicator while ensuring transparency, consistency, and alignment with intended objectives. Below is a comprehensive guide based on the fields provided.

For each measurement unit and impact, please add the methodology used. Actions that can be performed for each measurement unit:

- Adding new methodologies by clicking ‘Edit’
- Copying data from another row
- View methodology that has already been added

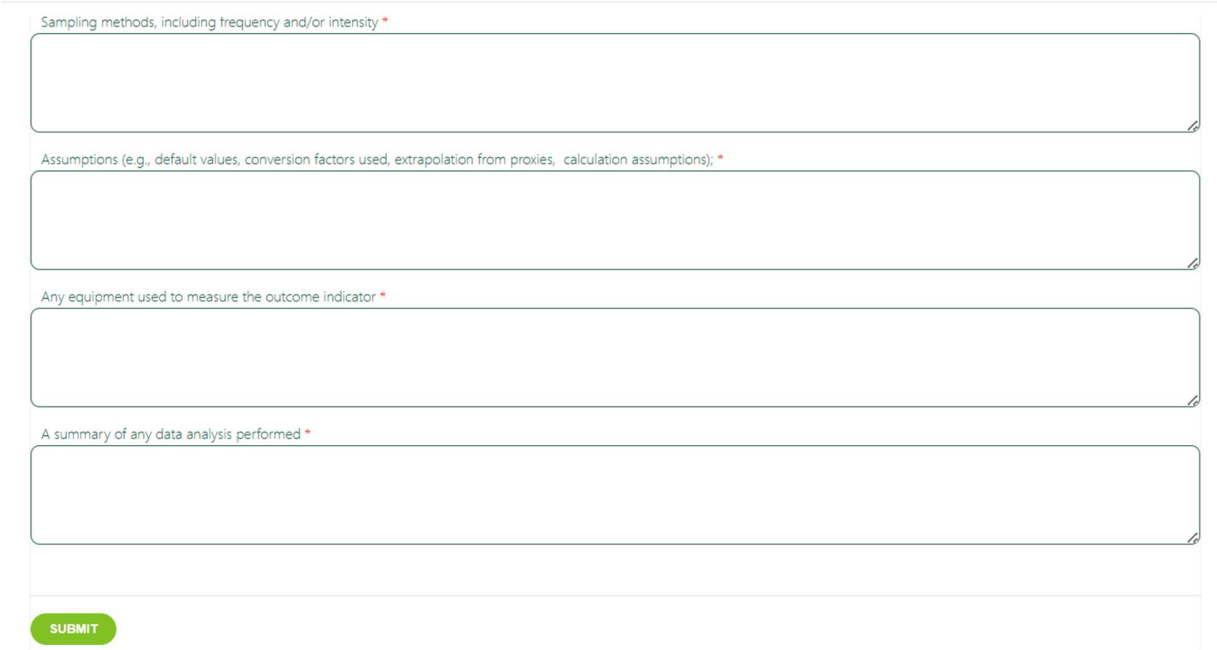


Describing measurement methodology for each Outcome Indicator



Methodology Details

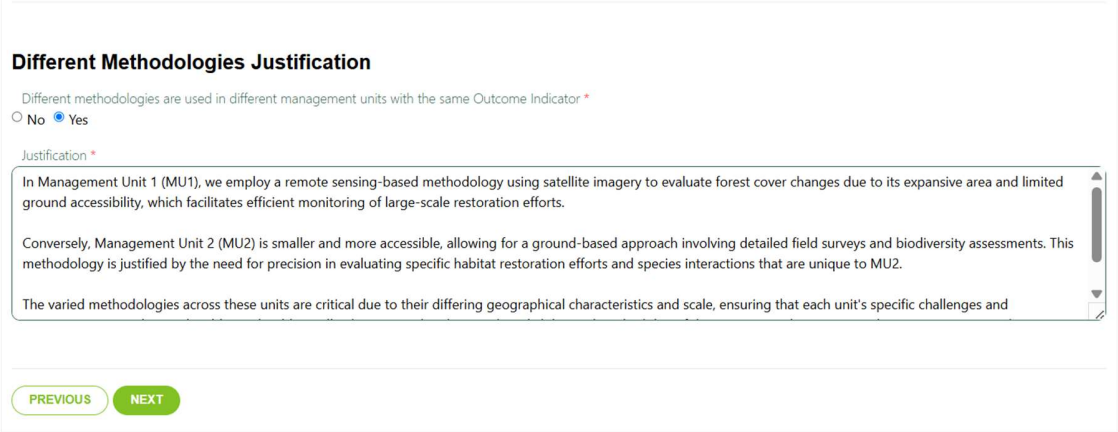
- Management Unit: Management unit will be visible in read only mode from previous steps.
- Outcome Indicator: This will be present in read only mode from previous steps
- Used Methodology: Clearly select the methodology employed to measure the outcome indicator. Think about details on how the methodology was selected, its relevance to the indicator, and any validation steps taken.



Collection and Analysis of Data

- The data sources that were used: Specify the origins of the data used for measurement. These may include - Literature reviews, Interviews with stakeholders, Field measurements, Modeling techniques
- Sampling methods, including frequency and/or intensity: Outline the specific sampling methods employed, including - Frequency and/or intensity of sampling, Criteria for sample selection, Approaches to ensure data reliability and validity
- Assumptions: Detail the assumptions applied during the measurement process. Examples include - Default values used in calculations, Conversion factors applied, Extrapolation methods based on proxies, Calculation assumptions
- Any equipment used to measure the outcome indicator: List any equipment or tools utilized to measure the outcome indicator. This may include measurement devices, software, or other resources that facilitate data collection and analysis.
- A summary of any data analysis performed: Provide a concise summary of the data analysis performed, such as: Statistical models applied, Comparative analyses conducted, Methods used to interpret and validate findings

Different Methodologies Justification



When determining whether different methodologies are applicable for measuring the same Outcome Indicator across various management units, you should follow a clear and well-documented process. Below is detailed guidance to assist Field Managers in effectively addressing these fields:

1. Decision on Using Different Methodologies

Yes or No: Clearly indicates whether different methodologies are being used in separate management units for the same Outcome Indicator. This decision should be supported by a thorough analysis of the unique contexts, challenges, and constraints of each management unit.

2. Providing Justification

Justification for Methodology Differences: If the answer is "Yes," provide a comprehensive explanation of why different methodologies are necessary. Key considerations include:

- **Geographical Variability:** Explain how differences in terrain, climate, or ecological conditions necessitate tailored approaches.
- **Resource Availability:** Highlight disparities in available tools, personnel expertise, or budget constraints that influence methodology of choice.
- **Indicator Sensitivity:** Address whether specific methodologies provide more reliable or accurate data for certain management units.
- **Stakeholder Requirements:** Consider feedback or expectations from local stakeholders that might dictate specialized methodologies.

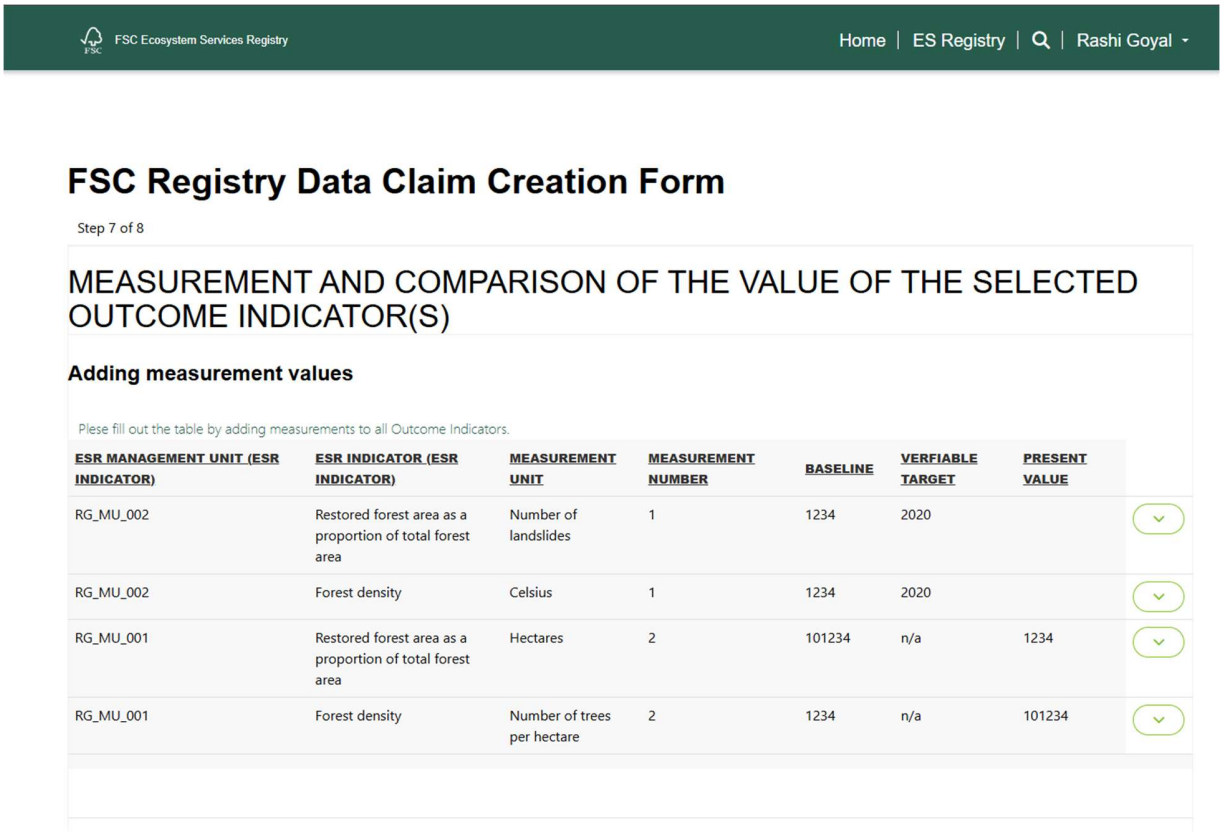
3. Answering "No"

If the answer is "No," justify the decision to use a standardized methodology across all management units. Your justification may include:

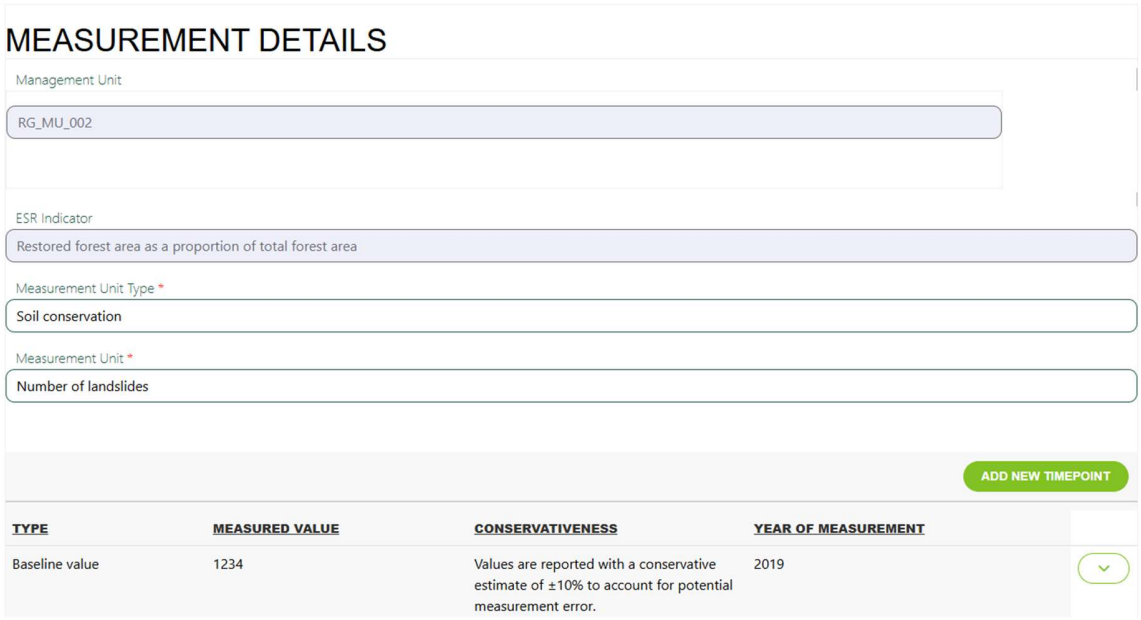
- **Consistency:** Emphasize the value of uniformity in data collection and analysis for comparative purposes.
- **Efficiency:** Highlight how standardization minimizes costs and simplifies operational processes.
- **Proven Effectiveness:** Reference to empirical evidence or prior successes using the same methodology across similar management units

Step 7 - Measurement and comparison of the value of the selected outcome indicator(s)

Step 7 focuses on recording measurements for each outcome indicator at different time points in an Environmental Sustainability (ES) project. This step also requires creating a table for each ES impact to present baseline, present, and other measurements.



Measurement Details



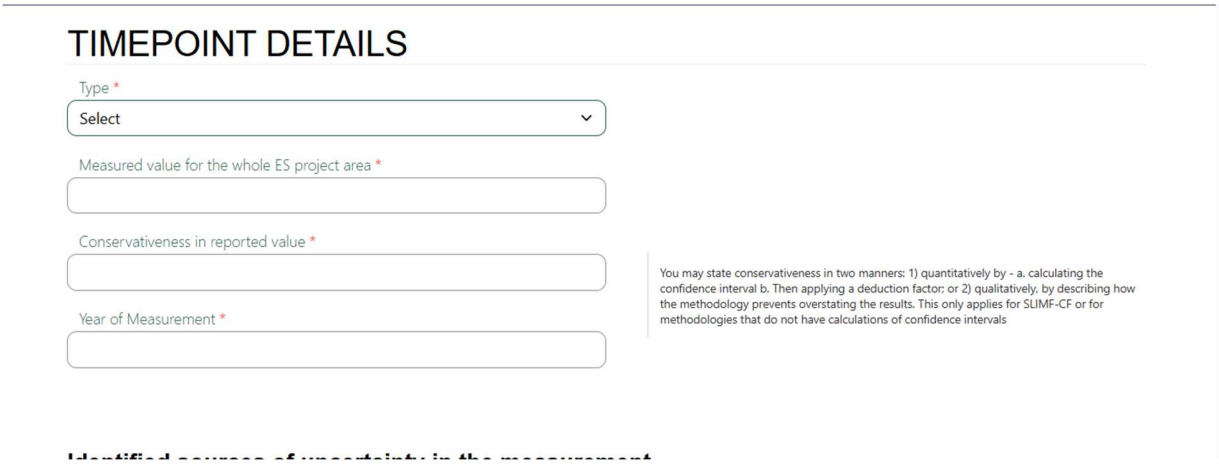
This step involves detailing the measurement process and ensuring that the data collected is both conservative and accurate. Here are the key actions you should take:

- Management Unit: Ensure that the management unit is clearly identified and corresponds to the area or organizational structure being measured. This field should be pre-populated or selected from the previous steps.
- ESR Indicator: Defines the indicator for measurement. This field should be pre-populated or selected from the previous steps. Verify that this indicator aligns with your goals and intended impacts.
- Measurement Unit Type and Measurement Unit: Select the appropriate measurement unit type and actual measurement unit for quantifying the indicator. Examples might include hectares, percentages, or square meters. Ensure the selected unit is suitable for conveying the scale and outcome clearly.

Utilize the "Actions" section to sort, edit, or update the data as needed. Ensure that the input fields are complete and accurate for each record.

Timepoint Details

This step focuses on capturing detailed timepoint information to ensure the measurement process is thorough, accurate, and addresses uncertainties effectively. Indicate whether the measurement corresponds to the present value, baseline value, or another previous value.
Note: For verified impacts, both baseline and present value are required, whereas for validated ones only baseline is required.
Please add the timepoints accordingly. Below is a structured guide to help you complete this step:



Fields to fill -

1. Type Selection: Select the appropriate type for the timepoint, ensuring it corresponds to the data being collected. Values Include: baseline, present value or another previous measurement

2. Measured Value for the Whole ES Project Area: Input the measured value that represents the entire ecosystem services (ES) project area. Ensure this value aligns with the defined boundaries and objectives of the project.

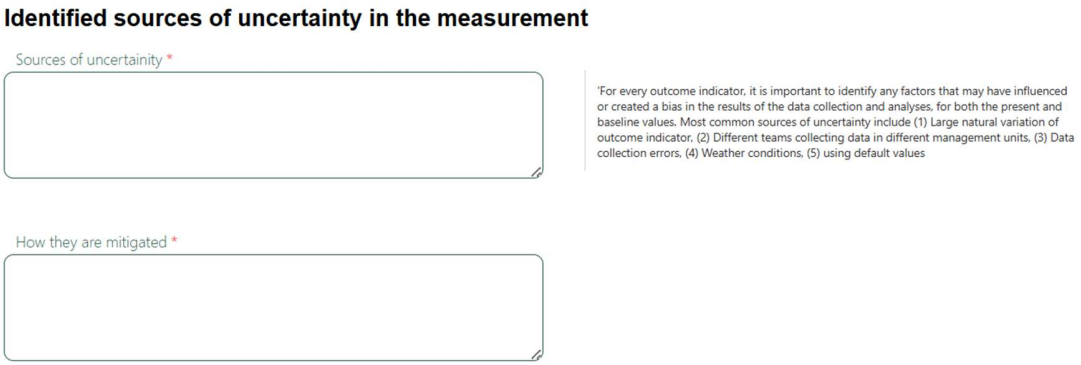
3. Conservativeness in Reported Value: Indicate how conservative the reported value is, including adjustments for potential overestimations and methods ensuring cautious data representation. Provide a brief justification if applicable.

4. Year of Measurement: Record the exact year in which the measurement took place. This practice facilitates traceability and ensures that the data corresponds with the project's timeline.

Identified Sources of Uncertainty

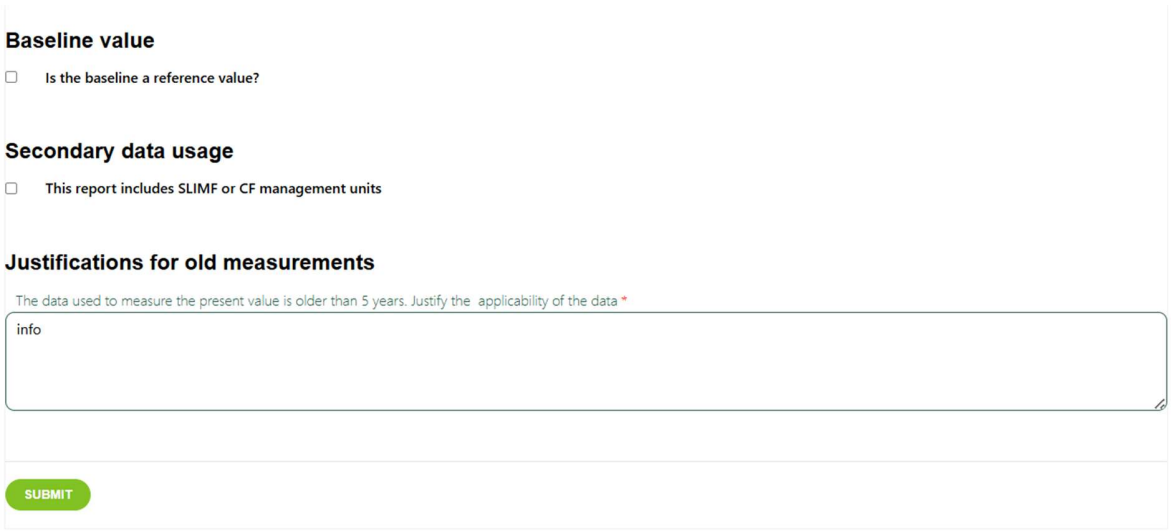
List and elaborate on any sources of uncertainty surrounding the measurement process. Common sources might include Variability in primary data collection methods, Limitations of secondary data usage, and Environmental factors influencing accuracy.

Mitigation of Uncertainties: For each identified source of uncertainty, explain the measures taken to mitigate their impact. Examples include Implementing stricter data validation procedures, using complementary methods to cross-verify results, increasing sample sizes to reduce variability.



Reference Value for Baseline:

- If baseline value is based on a reference value, provide justification for its adequacy for comparison against the present value in management units. Include considerations such as:
    - Geographic location (e.g., national or regional reference).
    - Legal and political situation.
    - Forest ecology.
    - Land characteristics.
    - Land use and management history.
    - Other relevant factors, such as proximity to infrastructure.



SLIMF or CF Management Units:

- If the report includes Small and Low-Intensity Managed Forests (SLIMF) or Community Forest (CF) management units, indicate this using [Yes/No].
- If measurements are based on secondary data, this field becomes mandatory. [Yes/No]

Justification for Old Data:

- If the data present value is older than five years, provide a justification for its applicability.
- If the data baseline value is older than ten years, provide a justification for its applicability.

7. Secondary Data Usage: Indicate whether secondary data has been utilized in the measurement process. If yes, specify: The sources of secondary data, and how these sources meet the project's reliability standards.

Special Instructions for ES2 - Carbon Sequestration and Storage

11. Carbon Pools:

- Specify carbon pools included in the measurement for both present and baseline values. [Multi-selection dropdown]

12. Negative Effects:

- Provide an explanation of how the ES project does not negatively affect carbon pools excluded from the measurement. [Text]

Verifiable Targets:

- Indicate the intended verifiable target and year for each outcome indicator. This is mandatory for validated ES impacts

Dictionary

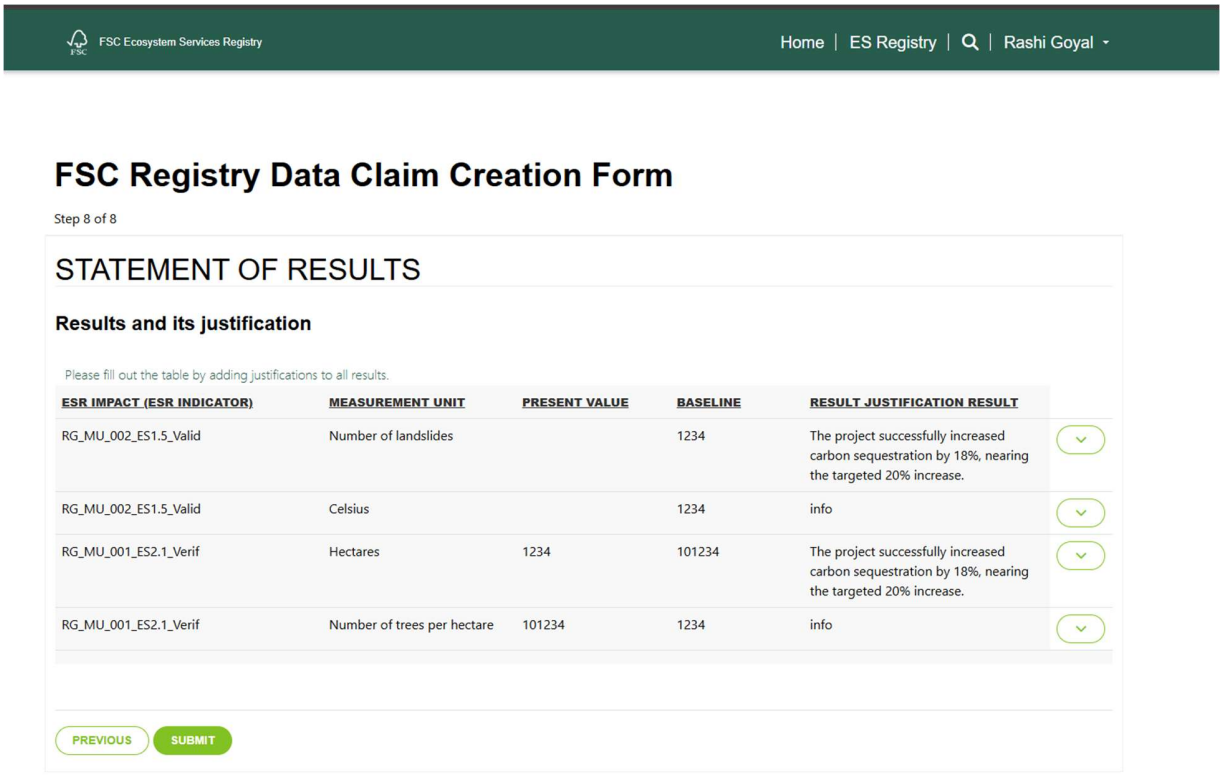
Definitions of key terms and measurement units:

- **Baseline Value:** Measurement reflecting the initial state for comparison.
- **Present Value:** Current measurement reflecting verified impacts.
- **Another Previous Measurement:** Any other recorded measurement.

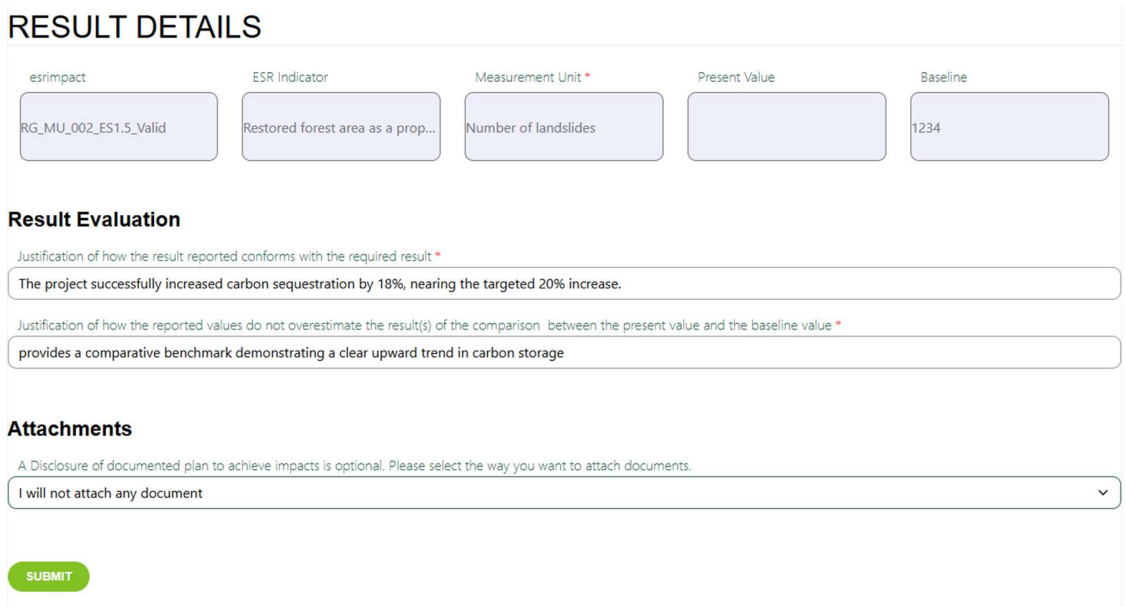
Units of measurement vary based on the indicator type and include options such as hectares, cubic meters, and percentage. Refer to the complete list for specific unit types.

Step 8 - Statement of Results

Explain here the results you obtained, how they fit with the impacts you want to demonstrate, and disclose (optionally) the plan you must achieve the intended results



Step 8 focuses on presenting and justifying the results of your project by consolidating the collected data into a comprehensive format. Based on the table and fields provided in the reference image, here are detailed instructions for completing this step:



Review Existing Data

Carefully examine the **ESR Impact**, **Measurement Unit**, **Present Value**, **Baseline**, and **Result Justification** columns for accuracy and completeness. Ensure that each entry is consistent with previous steps and aligns with the intended impacts of your project.

Add Justifications to Results

For each result in the table, provide a clear and concise justification explaining how the data supports the project's objectives. Address the following points:

- **Consistency:** Verify that the present value corresponds appropriately to the baseline measurement.
- **Impact Alignment:** Explain how the results align with the ESR Impact and indicators.
- **Supporting Evidence:** Reference any measurements, validated data, or secondary sources to substantiate your claims.

Optional Plan Disclosure

If current results do not fully achieve intended impacts, outline a plan for improvement, including:

- Adjustments to methodologies or indicators.
- Additional data collection and validation procedures.
- Strategies to mitigate uncertainties or challenges.

By following these instructions, Step 8 can effectively demonstrate the results of your project and their justification, strengthening the overall impact analysis.

Glossary

Definitions of key terms used in the manual and registry

Appendices

- Quick reference guides
    - Outcome Indicator Selection Logic

Outcome Indicator Selection Logic.xlsx