**Online Monitoring\_v2 Application Template**

**This application template is ONLY A TOOL and CANNOT BE SUBMITTED in lieu of the online application.**

*Template Version: Monitoring\_v2 v3 (generated 3/7/2024 from 'oweb')*

# Administrative

## Abstract

Provide an abstract statement for the project. Include the following information: 1) Identify the project location; 2) Briefly state the project need; 3) Describe the proposed work; 4) Identify project partners. (2000 character limit)

[2000 character limit] The abstract statement provides important reference information for the project and will be the first place OWEB staff and technical reviewers look to understand the location and proposed activities. In crafting the abstract, make an effort to be clear, concise, and keep the description of the proposed activities succinct. See Guidance document for additional detail.

## Location Information

Current Location:

What is the ownership of the project site(s)?

Both can be selected

 [ ]  Public land (any lands owned by the Federal government, the State of Oregon, a city, county, district or municipal or public corporation in Oregon)

What agency(ies) are involved? (1000 character limit)

 [ ]  Tribal lands (any lands owned/managed by a Tribal government)

 [ ]  Private (land owned by non-governmental entities)

Please select one of the following Landowner Contact Certification statements:

 [ ]  I certify that I have informed all participating private landowners involved in the project of the existence of the application, and I have advised all of them that all monitoring information obtained on their property is public record.

Please include a complete list of participating private landowners (8000 character limit)

 [ ]  I certify that contact with all participating private landowners was not possible at the time of application for the following reasons: Furthermore, I understand that should this project be awarded, I will be required by the terms of the OWEB grant agreement to secure cooperative landowner agreements with all participating private landowners prior to expending Board funds on a property.

Please List your reasons (8000 character limit)

 [ ]  Not applicable to this project

 [ ]  This grant will take place in more than one county.

List the counties affected: (8000 character limit)

## Permits

Other than the land-use form, do you need a permit, license or other regulatory approval of any of the proposed project activities?

 [ ]  Yes

 [ ]  No

Go to Permit Page

I acknowledge that I am responsible for verifying applicable permits, licenses, and General Authorizations required for the project, and can update information at grant agreement execution.

Permit and license information provided in the application will be imported into the final grant agreement for the awarded grant. Applicants are responsible for verifying applicable permits, licenses, and General Authorizations required for the project, and can update information at grant agreement execution.

 [ ]  Yes

## Racial and Ethnic Impact Statement

Racial and Ethnic Impact Statement

Chapter 600 of the 2013 Oregon Laws require applicants to include with each grant application a racial and ethnic impact statement.

 [ ]  The proposed grant project policies or programs could have a disproportionate or unique POSITIVE impact on the following minority persons. (indicate all that apply)

 [ ]  Women

 [ ]  Persons with Disabilities

 [ ]  African-Americans

 [ ]  Hispanics

 [ ]  Asians or Pacific Islanders

 [ ]  American Indians

 [ ]  Alaskan Natives

Please provide the rationale for the existence of policies or programs having a disproportionate or unique impact on minority persons. (8000 character limit)

Please provide evidence of consultation with representative(s) of affected minority persons. (8000 character limit)

 [ ]  The proposed grant project policies or programs could have a disproportionate or unique NEGATIVE impact on the following minority persons. (indicate all that apply)

 [ ]  Women

 [ ]  Persons with Disabilities

 [ ]  African-Americans

 [ ]  Hispanics

 [ ]  Asians or Pacific Islanders

 [ ]  American Indians

 [ ]  Alaskan Natives

Please provide the rationale for the existence of policies or programs having a disproportionate or unique impact on minority persons. (8000 character limit)

Please provide evidence of consultation with representative(s) of affected minority persons. (8000 character limit)

 [ ]  The proposed grant project policies or programs WILL HAVE NO disproportionate or unique impact on minority persons.

## Insurance Information

If applicable, select all the activities that are part of your project - These require a risk assessment tool unless otherwise noted (check all that apply).

Link to Insurance Requirements: https://www.oregon.gov/das/Risk/Documents/RATool\_GS.xls

 [ ]  Working with hazardous materials (not including materials used in the normal operation of equipment such as hydraulic fluid)

 [ ]  Earth moving work around the footprint of a drinking water well

 [ ]  Removal or alteration of structures that hold back water on land or instream including dams, levees, dikes, tidegates and other water control devices (this does not include temporary diversion dams used solely to divert water for irrigation)

 [ ]  Applicant’s staff or volunteers are working with kids related to this project (DAS Risk assessment tool not required, additional insurance is required )

 [ ]  Applicant’s staff are applying herbicides or pesticides (DAS Risk assessment tool not required, additional insurance is required)

 [ ]  Insurance not applicable to this project

## Additional Information

 [ ]  This project affects Sage-Grouse.

At the April 2015 Board meeting the Board adopted a policy to make available at least $10 million through its granting programs, over ten years, in support of projects located in Oregon's sage steppe ecosystem directed to improve Greater Sage Grouse habitat. This question allows OWEB to track these dollars. If the project includes a sensitive Sage-grouse location. Use the applicant's address as the map point.

# Problem Statement

## Problem Statement

Describe the habitat conditions or watershed functions this monitoring will evaluate. (5000 character limit)

DO NOT describe the monitoring project you are proposing in this application. Describe the situation, specific problem, or watershed limiting factors, including climate change impacts. Include a discussion of the restoration and monitoring history to provide context for the project.

Evaluation Criteria:

1.) How does the proposed monitoring relate to limiting factors, habitat conditions, watershed processes or actions described in local plans?

2.) Is there a clear need, relevance, applicability, and timeliness for the proposed monitoring to inform future projects?

Example 1.) Many amphibians around the world are experiencing declines. In the western USA, wetland loss and modification, invasive species, hydrological changes, and other stressors are affecting amphibian populations. The Oregon spotted frog (OSF) is endemic to a small range in the Pacific Northwest and most populations are in Oregon. Declines around its range contributed to its listing as Threatened under the Endangered Species Act in 2014. The Oregon Department of Fish and Wildlife identifies OSF as a Strategy Species in the Oregon Conservation Strategy. Habitat loss and modification are extensive in historic OSF habitat throughout the lowlands of the Willamette basin. The only remaining populations west of the Cascade Crest are at high elevations, and two of the three remaining populations are in the Mink Lake basin (South Fork of McKenzie River sub-watershed) in the Three Sisters Wilderness. Their remote location makes them difficult to study but management agencies need to know the status of these populations and their responses to recent beaver activities that are directly altering OSF habitat.

Why is this monitoring project needed at this time? (2000 character limit)

Describe what key information will be produced and what led you to propose this monitoring. For example, if you are monitoring the effectiveness of restoration actions, describe why this information is needed. Are you developing a new restoration approach and the data will inform adaptive management and/or do you need this information to measure and communicate progress? Applicants proposing long term repeat monitoring should describe why there is an ongoing need for this data.

Evaluation Criteria:

1.) Is there a clear need, relevance, applicability, and timeliness for the proposed monitoring to inform future projects?

2.) How are monitoring activities necessary for carrying out projects that protect or restore native fish or wildlife habitats, or protect or restore natural watershed or ecosystem functions to improve water quality or stream flows?

## Project History

Continuation/Phased - Are you requesting funds to continue work on projects previously funded by OWEB?

Answer "yes" if new information changed the original project scope so you are now seeking additional funds to address the new information or if you want to continue the monitoring project.

 [ ]  Yes

 [ ]  No

Briefly describe what was completed. (2000 character limit)

Provide all applicable OWEB Grant Number(s). (250 character limit)

Separate multiple grant numbers with semi-colons.

Resubmit - Have you submitted an OWEB application for this project before that was not awarded?

 [ ]  Yes

 [ ]  No

Provide all applicable OWEB Grant Number(s). (250 character limit)

Separate multiple grant numbers with semi-colons.

Briefly describe how previous concerns were addressed. (2000 character limit)

Provide a high-level summary of how you addressed concerns from the previous evaluation.
Example 1.) If a previous concern identified lump sum line items in the budget lacks details needed to understand project costs, a response could be “we addressed previous concerns regarding budget details is addressed by splitting out lump sum contractor costs; see budget page for more detail.”

## Plans

What federal, state, or local assessment, basin plan, recovery plan, or watershed action plan informed your project selection? (1000 character limit)

List plans where monitoring or information needs related to limiting factors, habitat conditions, watershed processes or actions are identified in a federal, tribal, regional, state, or local plan or assessment.

Example: Oregon Mid-C Steelhead Conservation and Recovery Plan (ODFW, 2010) and Pedee Creek Watershed Assessment and Action Plan (Pedee Watershed Council, 2015)

Evaluation Criteria:

1.) How does the proposed monitoring relate to limiting factors, habitat conditions, watershed processes or actions described in local plans?

# Project Overview

## Monitoring Activity

What are you proposing to do? Choose only one.

 [ ]  Status and Trend: Monitoring made at a regular interval in order to determine the long-term pattern of a particular parameter(s) and to assess those conditions relative to specific criteria. If proposing rapid bioassessment, choose status and trend.

 [ ]  Effectiveness of a Restoration Project(s): Monitoring designed to determine if a restoration project/ projects is/are effective at meeting its biological and ecological objectives.

 [ ]  Landscape Scale Effectiveness: Monitoring that measures environmental parameters to ascertain whether restoration actions were effective in creating a desired change in habitat conditions at a large geographical scale.

## Goals and Actions

What is the goal of the monitoring? (500 character limit)

A goal statement sets the stage for understanding project outcomes.

Example (status and trend): The goal of this project is to collect up-to-date, comprehensive fish habitat use and habitat quality monitoring data for the Oregon portion of the Goose Lake Basin.

Example (effectiveness monitoring): Gather data that aids our understanding of Oregon spotted frog responses to drought and Bull frog removal.

Example (landscape effectiveness): Collect, analyze and publish data describing changes in vegetation cover, floodplain inundation, stream temperature, stream channel features, and overbank sedimentation that relate to implementing riparian revegetation projects within Willamette anchor habitats.

List specific and measurable actions planned to achieve the goal. For each action, describe how that action will be implemented.

## Action

List a specific quantified action(s) to achieve your goal: (500 character limit)

Monitoring action statements should include what you plan to do, where it will occur, and when it will occur.

Example 1.) Collect continuous water quality data at 5 locations in the Sandy River Basin for three years.

Describe how the action(s) will be implemented: (1500 character limit)

Describe the steps that you will follow to complete this action.

## Quality Control/Assurance

Do you have a Quality Assurance Project Plan or Sampling and Analysis Plan?

For example, projects related to water-quality require an EPA or ODEQ approved Quality Assurance Project Plan (QAP) and/or Sampling Analysis Plan. Data must be submitted to ODEQ at the end of the project. For more information on the available ODEQ assistance, please see the fact sheet found at: https://www.oregon.gov/deq/wq/Pages/WQ-Monitoring-Resources.aspx. Projects with no water quality nexus may also require or benefit from a quality assurance plan. If this fits your project, select Yes and provide more information below.

Evaluation Criteria:

1.) Will professionally accepted monitoring and analysis protocols, including quality assurance / quality control procedures to be utilized?

 [ ]  Yes

Provide the reference and briefly describe the project quality control/quality assurance plan, sampling and analysis plan, and/or other relevant document that you will be following to perform this monitoring. (4000 character limit)

Describe the document that you will be following and if any revisions are necessary based on the monitoring proposed in this application that may not be covered in your current document. Include a description of your quality assurance and quality control (QA/QC) procedures. Include a description of how you will ensure relevant staff incorporate QA/QC measures for data collection, review, management, analysis and reporting.

 [ ]  No

Explain why and how you plan to incorporate quality assurance/quality control measures into your monitoring and data management approach and practices. (4000 character limit)

If you are collecting water quality data, please describe your plan to write a Sampling and Analysis Plan (SAP) with ODEQ approval. If you are not collecting water quality data, you may not need an ODEQ approved SAP. Describe your quality assurance and quality control (QA/QC) procedures. Include a description of how you will ensure relevant staff incorporate QA/QC measures for data collection, review, management, analysis and reporting.

## Project Workplan

For each project action identified above, provide the responsible entity overseeing implementation, their specific role, related qualifications/experience to oversee that action, and when the action will start and end.

Identify the entity responsible for managing major elements of your project including study design, data collection, data management, analysis and reporting, as applicable. If a contractor has not yet been hired, provide only the desired qualifications. The individuals identified in this table should match those that are listed in your budget. Evaluation Criteria:

1.) How will appropriate technical experts and community members be engaged in the project?

2.) Does applicant have the organizational capacity to implement the proposed project?

3.) Does applicant have relevant experience implementing monitoring projects?

4.) Is the applicant’s technical staff, consultants, or project partners qualified to implement the proposed monitoring approaches, data collection, and data analysis methods needed to successfully complete the monitoring project?

This is a table… utilize online application system to insert records.

# Status and Trend

## Methods and Design

Describe each monitoring question along with its associated study design to be employed.

## Monitoring Question

Describe the monitoring question(s) this project will answer. (1500 character limit)

Describe the specific monitoring question(s) this project will answer as it relates to the monitoring goal listed above.

Evaluation Criteria 1.) Are there clear monitoring questions and proposed monitoring methods to answer these questions?

Example 1.) How do Oregon spotted frogs respond to drought, both in abundance and in distribution?

Describe the study design used to choose sampling locations (where), parameters (what), and frequency (when) to answer this monitoring question. (4000 character limit)

For each monitoring question(s), explain why you have chosen the specific monitoring locations, the parameters you are monitoring, and the frequency of data collection to answer your monitoring questions.
Evaluation Criteria 1.) To what extent does the proposed project clearly address the monitoring questions and how the proposed monitoring methods and activities (including study design, data collection and management, and analysis procedures) will answer these questions?
Example 1.) Current water quantity data throughout our region is quite sparse, with many watersheds lacking any current data or gauging stations. Monitoring both stage and discharge in each of our watersheds will improve our understanding of the effects of extreme storm events on flows throughout our region and allow us to begin to see if and how those effects change over time as an increase in extreme storm events is projected with climate change. We will also monitor sediment-related water quality parameters to determine sediment mobilization dynamics related to these extreme events, how those dynamics may change over time, and rapidly identify areas experiencing increased erosion or landslides. We also plan to monitor and track impacts of extreme storms that occur in different parts of the wet season (i.e., early, middle, late).

Describe the monitoring method(s) that will be followed and provide the citation for the protocols that will be used. (4000 character limit)

Sufficient detail of the methods and protocols should be provided to demonstrate how the data will be collected for quality assurance and control. For established methods and protocols, include references and locations of where they are available on the internet. DO NOT upload the protocol or report to the application and reference the attached document.

Evaluation Criteria:

1.) To what extent does the proposed project clearly address the monitoring questions and how the proposed monitoring methods and activities (including study design, data collection and management, and analysis procedures) will answer these questions?

2. How has consideration of greenhouse gas emissions informed the selection of your method(s)?

Example 1.) Real-time temperature monitors will be deployed that will collect data remotely; this reduces the travel time, costs, and greenhouse gas emissions associated with frequent visits to the project sites.

## Information and Engagement

Will the monitoring activities proposed in this application consist of gathering baseline data?

 [ ]  Yes

Describe in detail the proposed baseline data collection in the goals and actions section.

 [ ]  No

Does baseline data already exist? Explain. (4000 character limit)

How does this project complement relevant existing data and current or planned monitoring efforts? (4000 character limit)

Describe how this proposed monitoring project will build on any existing data, including historical data and indigenous knowledge. Indigenous knowledge is also known as traditional ecological knowledge or TEK. If you are incorporating indigenous knowledge into your monitoring project describe the context that you will be using this information in developing and implementing your monitoring project. If building on current and/or planned monitoring efforts, explain why new data collection is necessary, and how proposed monitoring will leverage current or planned monitoring efforts. If there are no existing data, or planned or current monitoring efforts, describe how you determined new data is needed.

Evaluation Criteria 1.) To what extent does the proposed project clearly address existing data, including historical data and indigenous knowledge, or current or planned monitoring efforts that this project will complement?

Describe how the appropriate technical experts and community members, including local communities disproportionately impacted by climate change, are engaged. (4000 character limit)

Describe who may have a role in the proposed project from planning the monitoring through using the resulting information to make decisions in the future. List the technical experts and community members you are working with, or plan to work with, and why they are relevant to the proposed project and describe their role in the proposed project.

Evaluation Criteria:

1.) How will appropriate technical experts and community members be engaged in the project?

2.) How will engagement with local communities disproportionately impacted by climate change, such as Native American tribes, communities of color, rural communities, coastal communities, communities experiencing lower incomes, and other audiences traditionally underrepresented in public processes, including seniors, youth, and persons with disabilities, inform the project?

Example 1.) Air temperature and forest cover monitoring will occur in a low-income neighborhood to build support for a reforestation project. The project proponents have reached out to the community and coordinated with a local entity to deploy the monitors, and for the real-time data to be shared via web-based interface with public access. The local entity and community plan to review and analyze the data to provide recommendations for potential future reforestation that could contribute adaptation and resilience benefits for the ecosystem and local community.

## Data

Describe how the resulting data will be managed, analyzed, and interpreted. Explain the steps and software tools used to manage and analyze the data to answer the monitoring questions posed in the application. (4000 character limit)

Describe how you plan to analyze the data to answer your monitoring question(s). Describe what statistical analysis will be performed and what software will be used to analyze the data you plan to collect, if appropriate.

Evaluation Criteria:

1.) Will professionally accepted monitoring and analysis protocols, including quality assurance / quality control procedures to be utilized?

2.) To what extent does the proposed project clearly address the monitoring questions and how the proposed monitoring methods and activities (including study design, data collection and management, and analysis procedures) will answer these questions?

Describe how the data will be stored, reported, and made available to the public. (4000 character limit)

Evaluation Criteria 1.) To what extent does the proposed project clearly address the process by which data and results will be stored, reported, and made publicly available?

Example 1.) Project data will be stored in a cloud based database. Access to the database is password protected and only those associated with collecting and analyzing the data will have access. A technical report will be generated to summarize the overall project outcomes, including the collection, analysis, and interpretation of the data. This report will be peer reviewed by project partners. The report will be made available to OWEB at time of completion, as well as disseminated out to project partners and appropriate online venues.

# Effectiveness of a Restoration Project(s)

## Methods and Design

Describe each monitoring question along with its associated study design to be employed.

## Monitoring Question

Describe the monitoring question(s) this project will answer. (1500 character limit)

Describe the specific monitoring question(s) this project will answer as it relates to the monitoring goal listed above.

Evaluation Criteria 1.) Are there clear monitoring questions and proposed monitoring methods to answer these questions?

Example 1.) How do Oregon spotted frogs respond to drought, both in abundance and in distribution?

Describe the study design used to choose sampling locations (where), parameters (what), and frequency (when) to answer this monitoring question. (4000 character limit)

For each monitoring question(s), explain why you have chosen the specific monitoring locations, the parameters you are monitoring, and the frequency of data collection to answer your monitoring questions.

Evaluation Criteria 1.) To what extent does the proposed project clearly address the monitoring questions and how the proposed monitoring methods and activities (including study design, data collection and management, and analysis procedures) will answer these questions?

Example 1.) Current water quantity data throughout our region is quite sparse, with many watersheds lacking any current data or gauging stations. Monitoring both stage and discharge in each of our watersheds will improve our understanding of the effects of extreme storm events on flows throughout our region and allow us to begin to see if and how those effects change over time as an increase in extreme storm events is projected with climate change. We will also monitor sediment-related water quality parameters to determine sediment mobilization dynamics related to these extreme events, how those dynamics may change over time, and rapidly identify areas experiencing increased erosion or landslides. We also plan to monitor and track impacts of extreme storms that occur in different parts of the wet season (i.e., early, middle, late).

Describe the monitoring methods that will be followed and provide the citation for the protocols that will be used. (4000 character limit)

Sufficient detail of the methods and protocols should be provided to demonstrate how the data will be collected for quality assurance and control. For established methods and protocols, include references and locations of where they are available on the internet. DO NOT upload the protocol or report to the application and reference the attached document.
Evaluation Criteria: 1.) To what extent does the proposed project clearly address the monitoring questions and how the proposed monitoring methods and activities (including study design, data collection and management, and analysis procedures) will answer these questions? 2.) How has consideration of greenhouse gas emissions informed the selection of your method(s)?

Example 1.) Real-time temperature monitors will be deployed that will collect data remotely; this reduces the travel time, costs, and greenhouse gas emissions associated with frequent visits to the project sites.

## Information and Engagement

Describe the restoration project that will be monitored. (4000 character limit)

If Restoration funded by OWEB, please list grant #(s).

Will baseline data be collected as part of this project?

 [ ]  Yes

Describe in detail the proposed baseline data collection in the goals and actions section.

 [ ]  No

What baseline data will be used? (4000 character limit)

How does this project complement relevant existing data and current or planned monitoring efforts? (4000 character limit)

Describe how this proposed monitoring project will build on any existing data, including historical data and indigenous knowledge. Indigenous knowledge is also known as traditional ecological knowledge or TEK. If you are incorporating indigenous knowledge into your monitoring project describe the context that you will be using this information in developing and implementing your monitoring project. If building on current and/or planned monitoring efforts, explain why new data collection is necessary, and how proposed monitoring will leverage current or planned monitoring efforts. If there are no existing data, or planned or current monitoring efforts, describe how you determined new data is needed.

Evaluation Criteria 1.) To what extent does the proposed project clearly address existing data, including historical data and indigenous knowledge, or current or planned monitoring efforts that this project will complement?

Describe how the appropriate technical experts and community members, including local communities disproportionately impacted by climate change, are engaged. (4000 character limit)

Describe who may have a role in the proposed project from planning the monitoring through using the resulting information to make decisions in the future. List the technical experts and community members you are working with, or plan to work with, and why they are relevant to the proposed project and describe their role in the proposed project.

Evaluation Criteria 1.) How will appropriate technical experts and community members be engaged in the project?

2.) How will engagement with local communities disproportionately impacted by climate change, such as Native American tribes, communities of color, rural communities, coastal communities, communities experiencing lower incomes, and other audiences traditionally underrepresented in public processes, including seniors, youth, and persons with disabilities, inform the project?

Example 1.) Air temperature and forest cover monitoring will occur in a low-income neighborhood to build support for a reforestation project. The project proponents have reached out to the community and coordinated with a local entity to deploy the monitors, and for the real-time data to be shared via web-based interface with public access. The local entity and community plan to review and analyze the data to provide recommendations for potential future reforestation that could contribute adaptation and resilience benefits for the ecosystem and local community.

## Data

Describe how the resulting data will be managed, analyzed, and interpreted. Explain the steps and software tools used to manage and analyze the data to answer the monitoring questions posed in the application. (4000 character limit)

Describe how you plan to analyze the data to answer your monitoring question(s). Describe what statistical analysis will be performed and what software will be used to analyze the data you plan to collect, if appropriate.

Evaluation Criteria 1.) Will professionally accepted monitoring and analysis protocols, including quality assurance / quality control procedures to be utilized? 2.) To what extent does the proposed project clearly address the monitoring questions and how the proposed monitoring methods and activities (including study design, data collection and management, and analysis procedures) will answer these questions?

Describe how the data will be stored, reported and made available to the public. (4000 character limit)

Evaluation Criteria 1.) To what extent does the proposed project clearly address the process by which data and results will be stored, reported, and made publicly available?

Example 1.) Project data will be stored in a cloud based database. Access to the database is password protected and only those associated with collecting and analyzing the data will have access. A technical report will be generated to summarize the overall project outcomes, including the collection, analysis, and interpretation of the data. This report will be peer reviewed by project partners. The report will be made available to OWEB at time of completion, as well as disseminated out to project partners and appropriate online venues.

# Landscape Scale Effectiveness

## Methods and Design

Describe each monitoring question along with its associated study design to be employed.

## Monitoring Question

Describe the monitoring question(s) this project will answer. (1500 character limit)

Describe the specific monitoring question(s) this project will answer as it relates to the monitoring goal listed above.

Evaluation Criteria 1.) Are there clear monitoring questions and proposed monitoring methods to answer these questions?

Example 1.) How do Oregon spotted frogs respond to drought, both in abundance and in distribution?

Describe the study design used to choose sampling locations (where), parameters (what), and frequency (when) to answer this monitoring question. (4000 character limit)

For each monitoring question(s), explain why you have chosen the specific monitoring locations, the parameters you are monitoring, and the frequency of data collection to answer your monitoring questions.

Evaluation Criteria 1.) To what extent does the proposed project clearly address the monitoring questions and how the proposed monitoring methods and activities (including study design, data collection and management, and analysis procedures) will answer these questions?

Example 1.) Current water quantity data throughout our region is quite sparse, with many watersheds lacking any current data or gauging stations. Monitoring both stage and discharge in each of our watersheds will improve our understanding of the effects of extreme storm events on flows throughout our region and allow us to begin to see if and how those effects change over time as an increase in extreme storm events is projected with climate change. We will also monitor sediment-related water quality parameters to determine sediment mobilization dynamics related to these extreme events, how those dynamics may change over time, and rapidly identify areas experiencing increased erosion or landslides. We also plan to monitor and track impacts of extreme storms that occur in different parts of the wet season (i.e., early, middle, late).

Describe the monitoring methods that will be followed and provide the citation for the protocols that will be used. (4000 character limit)

Sufficient detail of the methods and protocols should be provided to demonstrate how the data will be collected for quality assurance and control. For established methods and protocols, include references and locations of where they are available on the internet. DO NOT upload the protocol or report to the application and reference the attached document.

Evaluation Criteria 1.) To what extent does the proposed project clearly address the monitoring questions and how the proposed monitoring methods and activities (including study design, data collection and management, and analysis procedures) will answer these questions? 2.) How has consideration of greenhouse gas emissions informed the selection of your method(s)?

Example 1.) Real-time temperature monitors will be deployed that will collect data remotely; this reduces the travel time, costs, and greenhouse gas emissions associated with frequent visits to the project sites.

## Information and Engagement

Describe restoration project(s) that will be monitored. (4000 character limit)

If Restoration funded by OWEB, please list grant #(s).

Will baseline data be collected as part of this project?

 [ ]  Yes

Describe in detail the proposed baseline data collection in the goals and actions section.

 [ ]  No

What baseline data will be used? (4000 character limit)

How does this project complement relevant existing data and current or planned monitoring efforts? (4000 character limit)

Describe how this proposed monitoring project will build on any existing data, including historical data and indigenous knowledge. Indigenous knowledge is also known as traditional ecological knowledge or TEK. If you are incorporating indigenous knowledge into your monitoring project describe the context that you will be using this information in developing and implementing your monitoring project. If building on current and/or planned monitoring efforts, explain why new data collection is necessary, and how proposed monitoring will leverage current or planned monitoring efforts. If there are no existing data, or planned or current monitoring efforts, describe how you determined new data is needed.

Evaluation Criteria 1.) To what extent does the proposed project clearly address existing data, including historical data and indigenous knowledge, or current or planned monitoring efforts that this project will complement?

Describe how the appropriate technical experts and community members, including local communities disproportionately impacted by climate change, are engaged. (4000 character limit)

Describe who may have a role in the proposed project from planning the monitoring through using the resulting information to make decisions in the future. List the technical experts and community members you are working with, or plan to work with, and why they are relevant to the proposed project and describe their role in the proposed project.

Evaluation Criteria 1.) How will appropriate technical experts and community members be engaged in the project?

2.) How will engagement with local communities disproportionately impacted by climate change, such as Native American tribes, communities of color, rural communities, coastal communities, communities experiencing lower incomes, and other audiences traditionally underrepresented in public processes, including seniors, youth, and persons with disabilities, inform the project?

Example 1.) Air temperature and forest cover monitoring will occur in a low-income neighborhood to build support for a reforestation project. The project proponents have reached out to the community and coordinated with a local entity to deploy the monitors, and for the real-time data to be shared via web-based interface with public access. The local entity and community plan to review and analyze the data to provide recommendations for potential future reforestation that could contribute adaptation and resilience benefits for the ecosystem and local community.

## Data

Describe how the resulting data will be managed, analyzed, and interpreted. Explain the steps and software tools that will be used to manage and analyze the data to answer the monitoring questions. (4000 character limit)

Describe how you plan to analyze the data to answer your monitoring question(s). Describe what statistical analysis will be performed and what software will be used to analyze the data you plan to collect, if appropriate.

Evaluation Criteria 1.) Will professionally accepted monitoring and analysis protocols, including quality assurance / quality control procedures to be utilized? 2.) To what extent does the proposed project clearly address the monitoring questions and how the proposed monitoring methods and activities (including study design, data collection and management, and analysis procedures) will answer these questions?

Describe how the data will be stored, reported and made available to the public. (4000 character limit)

Evaluation Criteria 1.) To what extent does the proposed project clearly address the process by which data and results will be stored, reported, and made publicly available?

Example 1.) Project data will be stored in a cloud based database. Access to the database is password protected and only those associated with collecting and analyzing the data will have access. A technical report will be generated to summarize the overall project outcomes, including the collection, analysis, and interpretation of the data. This report will be peer reviewed by project partners. The report will be made available to OWEB at time of completion, as well as disseminated out to project partners and appropriate online venues.

# Wrap-Up

## Benefits

How will this monitoring project inform future planning, implementation, or adaptive management of restoration or acquisition projects? (4000 character limit)

Be specific and succinct in articulating anticipated fish, wildlife, and/or water quality or quantity benefits that will result from future restoration or acquisition project(s) (ORS 541.956).

 Evaluation Criteria 1.) How are monitoring activities necessary for carrying out projects that protect or restore native fish or wildlife habitats, or protect or restore natural watershed or ecosystem functions to improve water quality or stream flows? 2.) How can data inform actions to adapt to changing climate conditions and contribute to resilient ecosystems? 3.) How can data inform consideration of greenhouse gas emissions or contribute to long-term carbon sequestration or storage?

Will this project benefit salmon or steelhead?

 [ ]  Yes

 [ ]  No

# Budget

|  |
| --- |
| Type |
| Salaries, Wages and Benefits |
| Contracted Services |
| Travel and Training |
| Materials and Supplies |
| Equipment |
| Other |
| Indirect Costs |
| Indirect Costs |

# Funding Table

# Match Table

# Match Questions

Do match funding sources have any restrictions on how funds are used, timelines or other limitations that would impact the portion of the project proposed for OWEB funding?

 [ ]  Yes

 [ ]  No

Do you need state OWEB dollars (not Federal) to match the requirements of any other federal funding you will be using to complete this project?

 [ ]  Yes

 [ ]  No

If yes, please provide the amount of state dollars needed out of your total request and upload documentation indicating the amount of non-federal match that is needed.

Does the non-OWEB cash funding include Pacific Coast Salmon Recovery Funds?

 [ ]  Yes

 [ ]  No

# Upload

|  |  |  |
| --- | --- | --- |
| Type | Required | Restricted |
| Letters |  |  |
| Map | Y |  |
| Other |  |  |
| Photo (other) |  |  |
| Project Design |  |  |
| Secured Match Forms |  |  |

# Permit

If applicant is successful, the permit and license information provided will be imported into the final grant agreement. It is the applicant’s responsibility to verify and update which permits, licenses, and General Authorizations are required for the Project at the time of execution of the agreement and on an ongoing basis.

This is a table… utilize online application system to insert records.