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**SIUSLAW STEWARDSHIP WATERSHED RESTORATION PROGRAM**

**FY 2026 Stewardship Fund Proposed Project Application**

The following application is for projects located in the Alsea, Hebo, Marys Peak, Siuslaw, and Smith-Umpqua-Dunes Stewardship areas (see Map in [Appendix A](#_APPENDIX_A:_MAP)) surrounding the Siuslaw National Forest (SNF). Projects must meet the eligibility criteria and guidelines for permitted project types (see [APPENDIX B: Eligibility Guidelines for Stewardship Fund Projects](#_APPENDIX_B:_Eligibility)).

The Siuslaw Stewardship Watershed Restoration Program (SSWRP) Fund (see [APPENDIX C: Siuslaw Stewardship Watershed Restoration Program (SSWRP) Fund History](#_APPENDIX_C:_Siuslaw) for background) provides approximately $400,000 annually from Siuslaw National Forest retained receipts, to support landowners and managers by providing a funding source to improve and restore fish and wildlife habitat on private and other non-federal lands where there is potential benefit to national forest lands. The FY2026 cycle will have an additional $50,000 available for Climate Change projects (see question 5 on page 6).

The exact amount of the base fund ($400,000) may vary annually depending on the completion of stewardship timber sales, which generate the funds for this program. Funds are distributed on a shared basis among the five Stewardship Groups. Projects with at least 25% match funding or in-kind contributions are preferred; however, match is not a requirement for funding.

Project ideas are presented to the Stewardship Group in which the project is located. Pre-Applications ([Section 1](#_Section_I:_Pre-Application) of this application) are submitted by email to Cascade Pacific RC&D (CPRCD) and reviewed by the SNF Program Managers. Full Applications are submitted after pre-approval for technical review. The Siuslaw National Forest technical team reviews projects to ensure that the proposals comply with federal law, regulations, and policy as well as ensure technical soundness. Input will be provided to applicants to include in their final application. Please see below for submission deadlines.

The SSWRP partnership program has been in operation since 2002. Approved projects have contributed to thousands of acres of restored forests, rivers, meadows and other habitats that support the plants, animals, soil, water and people that live in the Siuslaw watershed. We look forward to seeing new or continued projects that promote our effort to protect the watershed, its inhabitants and our local communities. Please contact Connie Barnes, [connie@cascadepacific.org](mailto:connie@cascadepacific.org) for assistance and questions regarding the application process.

**Submission Deadlines:**

|  |  |
| --- | --- |
| **November 15, 2024** | **SSRWP RFP Released and PRE-Application/Application available online** |
| **Dec. 2024 - Jan 2025** | **Project proposals discussed at Stewardship Group (SG) meetings and with SNF** |
| **January 31, 2025** | **PRE-Application due to CPRCD** |
| **February 3-28** | **SNF Natural Resource Staff and Stewardship Board review PRE-Applications** |
| **March 3** | **CPRCD notifies Applicants of approval to proceed to full application status** |
| **March 31** | **Full Applications due to CPRCD** |
| **April 3-30** | **SNF Technical Team (TT) Review of Applications** |
| **May 2-5** | **CPRCD forwards TT comments to Applicants** |
| **May 5-31** | **Applicants develop responses to TT comments with assistance from SG’s** |
| **By June 2-24** | **TT reviews Applicant responses and forwards final comments to CPRCD** |
| **June 30** | **Applicants receive final comments.** |
| **July and/or August** | **SG’s meet to prioritize projects** |
| **October** | **Roundtable meets to prioritize applications for SSWRP funding** |
| **October 31** | **FINAL Revised Applications due to CPRCD** |
| **November 15** | **Letter of Approval from SNF Forest Supervisor** |
| **Early 2026** | **Funding obligated by the SNF and contracts awarded to Applicants by CPRCD** |

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# Section I: Pre-Application Review

The Pre Application determines the “readiness” of a project and not the eligibility of a project to fit the criteria. Projects brought forth should adequately address the questions “how” things will be accomplished as well as “why here, why now.” For a project being considered but not yet ready with the following details, please work with Forest Service specialists and your local Stewardship Group before applying. The program operates on an annual cycle. Please review [APPENDIX B: Eligibility Guidelines for Stewardship Fund Projects](#_APPENDIX_B:_Eligibility) to determine a project’s eligibility.

|  |  |
| --- | --- |
| **Date** | *Pulldown Date Menu.* |

## Request, Match, Other Funds and Total Project Amount

|  |  |  |  |
| --- | --- | --- | --- |
| **Request Amount: $** | **Match: $** | **Other Funds: $** | **Total Project Cost: $** |

## CONTACT INFORMATION

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of project:** |  | | | |
| **OFFICIAL APPLICANT** (Organization) | | | | |
| **Applicant Name** |  | | **Position** |  |
| **Organization** |  | | **E-mail** |  |
| **Address** |  | | **Phone** |  |
| **City, State, Zip** |  | | **Fax** |  |
| **PROJECT MANAGER (if different than official contact)** | | | | |
| **Name** |  | | **Position** |  |
| **Organization** |  | | **E-mail** |  |
| **Address** |  | | **Phone** |  |
| **City, State, Zip** |  | | **Fax** |  |
| **IF APPLICABLE:** | | | | |
| **OTHER FEDERAL AGENCY CONTACTS** | | | | |
| **Contact 1 Name** |  | | **E-mail** |  |
| **Title** |  | | **Phone** |  |
| **Office Location** |  | **Designated NEPA lead?\*** | |  |
| **STATE/LOCAL AGENCY CONTACTS** | | | | |
| **Name** |  | | **E-mail** |  |
| **Street** |  | | **Phone** |  |
| **City, State, Zip** |  | | **Fax** |  |
| **PARTICIPATING LANDOWNER** | | | | |
| **Name** |  | | **E-mail** |  |
| **Street** |  | | **Phone** |  |
| **City, State, Zip** |  | | **Fax** |  |

***\*Verify if they are planning on covering any NEPA/SHPO requirements***

## Project Location Information

This project occurs at (check one):  single site  multiple sites

The project is for (check one):  single year  two years  three years

**Project location (general description)**:

| Click here to enter text. |
| --- |

**County:** *Choose County.*

**Township** Choose Township. **Range** *Choose Range.*

**Section (s)** and ¼ Section(s).

| Click here to enter text. |
| --- |

**Longitude:** *Click here to enter text.*

**Latitude:** *Click here to enter text.*

**Stewardship Area:** *Choose Stewardship Area*

**Drainage Area** (10 Digit HUC Watershed and/or 12 Digit HUC Subwatershed): *Click here to enter text.*

***If available submit GIS Spatial mapping files of project area including: .shp, .shx, .dbf or .sbn. If not, follow map requirements listed below.***

## Required Project Maps and Photos

1. **Vicinity/Location Map and Site Map** - Both maps must orient north/south, and include a title, north arrow, legend, nearest highway and city (Vicinity map), local road to access project, and project boundaries.
2. Pre-Project Photos (four per page, maximum of two pages)
3. All maps and photos must be embedded in the Pre and Final Application pdf, not sent as attachments. To do this, save this word application document as a PDF and add the maps and photos, so they are all in one PDF.
4. See [Appendix](#_APPENDIX_F:_Vicinity) E for examples of Vicinity and Site Maps.

## Proposed Project Type and Measurable Outcomes Expected

**Indicate Project Type and all Applicable activities:**

|  |
| --- |
| **Vegetation Management/Treatment:** Select all applicable activities   1. Planting    1. Meadow planting (Enter # of pieces and area treated )    2. Tidal/estuary planting (Enter # of pieces and area treated )    3. Upland forest planting (Enter # of pieces and area treated ) 2. Site Prep (if annual maintenance of weeds choose invasives control)     1. Check all methods that will be used:    2. Mechanical (Enter acreage, area, or distance )    3. Manual (Enter acreage, area, or distance )    4. Herbicide (Enter acreage, area, or distance )    5. Check all methods that will be used:    6. Mowing (Enter acreage, area, or distance )    7. Pulling (Enter acreage, area, or distance )    8. Thinning (Enter acreage, area, or distance ) 3. Seedling Protection (Enter # of pieces or plants ) 4. Piling and/or Burning (Enter area and/or # structures ) 5. Snag or downed woody debris creation (Enter acres and quantity created by piece ) |
| **Invasive Plants Control:** Select all applicable activities   1. Riparian invasive plant control    1. Manual (Enter acreage, area, or distance )    2. Mechanical (Enter acreage, area, or distance )    3. Herbicide (Enter acreage, area, or distance ) 2. Meadow, tidal, or upland forest invasives control    1. Manual (Enter acreage, area, or distance )    2. Mechanical (Enter acreage, area, or distance )    3. Herbicide (Enter acreage, area, or distance ) 3. Roadside invasive plant control    1. Manual (Enter acreage, area, or distance )    2. Mechanical (Enter acreage, area, or distance )    3. Herbicide (Enter acreage, area, or distance, and application method(s) ) |
| **Stream, Lake or Wetland Treatment:** Select all applicable activities   1. Riparian Planting (Enter acreage, area, or distance, and/or number of plants ) 2. Fencing (Enter acreage, area, or distance )    1. Will the fencing be wildlife-friendly?  Yes  No 3. New Culvert(s) replacement or repair existing for fish passage improvement )    1. Replacement (Enter number of culverts replaced )    2. Repair (Enter number of culverts repaired ) 4. New Bridgereplacement or repair existing for fish passage improvement )    1. Replace another bridge (Enter number of new bridges )    2. Replace culvert(s) (Enter number of bridges to replace number of culverts )    3. Repair (Enter number of bridges repaired ) 5. Boulder placement (Enter number of structures ) 6. Log Placement (Enter number of structures ) 7. Fish ladder (Enter number of structures ) 8. Stage Zero – Floodplain restoration (Enter acreage, area, distance, etc. ) |
| **Road Work:** Select all applicable activities   1. Decommissioning (Enter total miles )    1. Sidecast Pullback/Culvert (Enter miles of pullback ; # of culverts removed )    2. Fill removal (Enter volume or area ) 2. Water Quality Improvements    1. Drainage (Enter acreage, area, distance, or volume )    2. Rocking (Enter acreage, area, or distance )    3. Grading (Enter acreage, area, or distance )    4. Seeding (Enter acreage, area, or distance ) 3. Planting (Enter acreage, area, or distance, and/or number of plants ) |
| **Other:** Please describe your work in terms of primary activities and measurable outcomes. |

## Project Goals, Benefits, Description, Problem and Proposed Actions

Is this project being considered for climate change adaptation project funds?  Yes or  No

If yes, note that additional questions and information must be provided throughout the document. If not, you may leave that information area blank.

1. **Project Goals and Objectives**
   1. Provide a project goal statement(s).

| Click here to enter text. |
| --- |

* 1. List project objectives.

| Click here to enter text. |
| --- |

1. **Explain how the project benefits the Siuslaw National Forest and resources.**

| Click here to enter text. |
| --- |

1. **Contextual Overview and Project Description.**

Is the project a portion of a larger project effort in the watershed?  **Yes**  **No**

Is this a request for a single year or multiple years of SSWRP funding?  **Single year**   **Multiple Year**

Provide a contextual overview including: the significance of the project; why location was chosen; a brief explanation of the history of the issues leading to the project; and the context of the landscape including the key water quality, water quantity, species, habitat, land use and resource management issues (physical or social) that are proposed to be addressed in that watershed.

| Click here to enter text. |
| --- |

Using the table below, provide a description of the project that details the restoration activities to occur (e.g., remove 36″ culvert, place 12 three log clusters between RM 44 and 52, etc.), including a description of the methodologies (e.g., tree release – manual or herbicide; etc.) and the equipment planned for use. In addition, describe any Project Management functions/activities necessary to implement the project. The degree of detail should match the project complexity and technical difficulty to allow for full evaluation. For projects involving multiple sites, be sure to identify and describe them separately, and indicate their locations on maps, as appropriate.

| **Project Type**  *Choose from Section I, B* | **Proposed Action/Treatment** | **Quantity and Unit**  *See Section I, B* |
| --- | --- | --- |
| ***Restoration Activity*** |  |  |
|  |  |  |
| *Add rows as needed* |  |  |
| ***Project Management Activity*** |  |  |
|  |  |  |
| *Add rows as needed* |  |  |

1. **Problems to Be Addressed**

Use the table below to provide site-specific information for the project: a) The specific problem(s) you are addressing; and b) the *root* cause(s) of the problem(s).

|  |  |
| --- | --- |
| **Specific Problem(s)** | **Root Cause(s) of the Problem** |
|  |  |
|  |  |
| *Add rows as needed* |  |

1. **Climate Change Considerations\***

Fill out this section ONLY if you are interested in the climate change adaptation project funding

* + 1. Please describe the vulnerability of the location to climate change. What specific effects are relevant (e.g., increasing stream temperature, increased flood risks, drought, etc.) Cite any literature that supports the threat to that area.

| Click here to enter text. |
| --- |

* + 1. Describe how achieving the project goals and outcomes would help adapt the area to the climate vulnerabilities described above.

| Click here to enter text. |
| --- |

* + 1. Describe how project designs were developed with climate change considerations in mind. Did you change your preliminary designs based on information found in the CVA? If so, please describe.

| Click here to enter text. |
| --- |

**\*Guiding Documents for Climate Change Considerations (also: see Appendix G)**

**Adaptation actions identified in the Adaptation Library:** ([https://www.climatehubs.usda.gov/hubs/northwest/tools/adaptation-partners-climate-change-adaptation-library](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.climatehubs.usda.gov%2Fhubs%2Fnorthwest%2Ftools%2Fadaptation-partners-climate-change-adaptation-library&data=05%7C02%7Ckatie.isacksen%40usda.gov%7C8a8c8a0104ca4c00604b08dcb1a51b28%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C1%7C0%7C638580569888112576%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=92hCwXQC1saRu9U4Np%2F%2Bz%2F6%2BoRF%2FQ%2FxaPtj1evLsFnU%3D&reserved=0)),

**Chapter 9 of the Oregon Coast Adaptation Partnership vulnerability assessment:** ([https://adaptationpartners.org/ocap/docs/OCAP\_Assessment-Final\_with\_figures.pdf](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fadaptationpartners.org%2Focap%2Fdocs%2FOCAP_Assessment-Final_with_figures.pdf&data=05%7C02%7Ckatie.isacksen%40usda.gov%7C8a8c8a0104ca4c00604b08dcb1a51b28%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C1%7C0%7C638580569888129071%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=7Iv%2FzT1u9UQmDMYeV0tbkTAh21p4IyGm4GljFIllUSU%3D&reserved=0)). This document provides extensive discussions on climate conditions, climate changes, renewable natural resource and ecosystem service vulnerabilities, and adaptation techniques that are relevant to the OCAP assessment area. Vulnerabilities to, and recommended adaptation approaches for these have been summarized in Tables 9.1 through 9.7 of the OCAP CCVA. Tables for these resources and services have been reproduced for reference in this application and can be found in [Appendix G: Climate Change Considerations](#_Appendix_G:_Climate).

## Project Review by SNF Technical Team

* 1. **NEPA Considerations and Review**

All projects will be reviewed to determine NEPA requirements. The SNF will determine if the project would be covered under existing NEPA documentation or if additional work is required. Some projects may require additional documentation to meet those requirements. The SNF Tech Team will work with each applicant to cover these requirements. This is for information only. No response is necessary for #1.

**6.2 Cultural Resources Review**

SNF will determine whether the proposed project meets the requirements of the National Historic Preservation Act and all applicable Oregon State laws regarding any ground-disturbing activities that have the potential to impact historic properties such as archaeological sites, traditional cultural properties, or historic structures.

**Ground disturbing activities related to restoration include any activities that expose mineral soil to a depth greater than 2”** (tree planting, road building, culvert replacement, log placement, etc.).

**Provide the following information:**

1. Does your project include any ground-disturbing activities?  **Yes**  **No**
2. Are you aware of any that may occur in modern deposits (active floodplains or recent colluvium outside of older landforms) or disturbed deposits (previous road construction, artificial fill, etc.)? This will help determine if ground-disturbing impacts hold the potential to impact historic properties.

| Click here to enter text. |
| --- |

1. List any equipment to be used to conduct ground-disturbing activities (shovel, tracked excavator, etc.)

| Click here to enter text. |
| --- |

1. What is the expected area (m2, ft2, acres, etc.) and depth (cm, inch, m, ft) of each ground-disturbing activity? (e.g. 500 6” diameter holes excavated to 2’ deep for planting in a 5-acre area, or mechanical scraping of an 8-acre area to a depth of 3” for site preparation)

| Click here to enter text. |
| --- |

1. What is the timing of the ground disturbance (dry weather vs wet weather operating conditions can have an impact on whether the operation of large mechanical equipment could impact archaeological sites through rutting/potholing)?

| Click here to enter text. |
| --- |

1. Has other funding been sought for this project?  **Yes**  **No**

If Yes, please describe funding source (federal, private foundation, etc.), amounts sought and/or if the funding has been secured.

| Click here to enter text. |
| --- |

Will permits be required from other federal agencies?  **Yes**  **No**

1. Oregon State laws **require a permit for subsurface archaeological survey** on **non-federal public lands**.

Does this apply to this project?  **Yes**  **No**

*If so a copy of the permit must be included in the final contract award.*

1. On **private lands** permitting is required **if archaeological testing is required** to determine a historic

property’s eligibility for the National Register of Historic Places.

Does this apply to this project?  **Yes**  **No**

*If so a copy of the permit must be included in the final contract award.*

Based on the information provided above, the SNF Staff Archeologist will determine if the projects’ ground disturbing activities pose the potential to adversely affect previously recorded or unknown historic properties, a Section 106 survey and report, along with Tribal and SHPO consultation, will be required. The SNF will determine if it will be performed by the SNF staff or contracted through CPRCD. All consultation with the Tribes and SHPO will be conducted by the SNF, even if the work is conducted by contractors working on behalf of the applicant.

**6.3 Wildlife Review**

1. Will the project occur within 1.5 miles of the SNF?  **Yes**  **No**
   * If yes, follow mitigation measures in [Appendix D](#_APPENDIX_D:_WiIdlife).

**6.4 Engineering Design Review**

* 1. Provide information on engineering design requirements for the project.

| Click here to enter text. |
| --- |

* 1. Will the project require certified engineering designs?  **Yes**  **No**
* If yes, see the required information to be provided in the full application [Section III B](#_Project_Technical_Engineering).

**6.5 Fisheries and Hydrological Review**

1. Are there fish present in the proposed project area?  **Yes**  **No**

* If yes, which species? Are they ESA Federally listed?

1. Is the project planning to implement an Aquatic Organism Structure(s) (AOP)?  **Yes**  **No**

* If yes, refer to the link below to avoid conflicting design requirements. Projects will be reviewed to ensure they meet the objectives in the Stream Simulation Design Manual below.

o Stream simulation design manual from the US Forest Service:

[*https://www.fs.fed.us/eng/pubs/pdf/StreamSimulation/hi\_res/%20FullDoc.pdf*](https://www.fs.fed.us/eng/pubs/pdf/StreamSimulation/hi_res/%20FullDoc.pdf)

\*\*If there is something out of the ordinary you may reach out to the Siuslaw National Forest through the Stewardship Council for early consultation.

1. Is the project proposing stream-channel or natural channel alterations other than AOPs (floodplain restoration, large wood placement, etc.?  **Yes**  **No**

* If yes, please describe project and overall restoration goal in detail.

| Click here to enter text. |
| --- |

1. Pre-Application Technical/engineering designs for culvert replacement, stream restoration or stream modification projects must include the following in this application: At a minimum, detailed sketch showing the information below is required for this phase of the application. **Finished engineered plans and drawings with Certified Engineer Stamps and all other final designs and information will be required for the Final Project Application and Technical Team review.**

Required for the Pre-Application:

* Site plan(s) showing existing and proposed conditions (i.e. culverts, fish barriers, large woody

debris, etc.);

* + Project location map and extent of stream reach for treatment
  + Proposed stream simulation design plans. Include plan view and cross section view within AOP structures and all work proposed to be done outside of AOP structure within the waterbody. Show best estimate before final design of channel rock and stream simulation material, type and locations;
  + Approximate existing and proposed longitudinal profiles;
  + Existing and proposed cross sections;
  + Address how new structure will affect 100-year flood events for existing and proposed conditions;
  + Estimate of type, size, and amount of any proposed fill material (boulders, wood, etc.);
  + Clean water bypass plan;
  + Address any other specific features that will be part of proposed project that isn’t listed in other requirements or are unique in some way;
  + Address how new structures/or project will affect existing roads or other nearby features (i.e. cover requirements for structure, retaining walls, grade or alignment changes, railroads, property lines, fences, utilities, piping, etc.);
  + Identify a qualified design team including engineer, hydrologist and biologist or technical contacts representing these disciplines for this project;
  + Identify qualified construction management personnel who will oversee contract work for project applicant;
  + Proposed dates of work to be completed (work window).

**6.6 Botany Review**

1. Does the project propose the use of herbicide?  **Yes**  **No**
   * + **If yes,** please refer to the [Botanical Projects](#_Botanical_Projects) section of [APPENDIX B: Eligibility Guidelines for Stewardship Fund Projects](#_APPENDIX_B:_Eligibility).
2. Has a planting plan been developed?  **Yes**  **No**
   * + **If yes,** please attach.
     + **If no,** please provide a list of all plant species, the amount and source (local or regional) in the full application.
3. All invasive plant control projects must identify appropriate category as listed in [Appendix B](#_APPENDIX_B:_Eligibility).

# PRE- APPLICATION IS COMPLETE!

**Please save as a PDF and email to Connie Barnes,** [**connie@cascadepacific.org**](mailto:connie@cascadepacific.org)

**by January 31, 2025**

# Section II: Budget, Work Plan and Outreach

## Budget Development and Detail Explanations

There are a number of assumptions used to develop any budget. A line-by-line description of costs in the budget document is not necessary. However, provide detail of how and what the budget estimate was based on (below).

1. Explain how costs were determined. Describe if contractor conversations, past projects or other cost figures were used for items of the budget. This is particularly important for lump sum items. For project management costs describe the time and activities involved.

| Click here to enter text. |
| --- |

1. If there are any unusual cost factors, explain them. For example, if the fencing costs are unusually high because of steep, rocky terrain, and non-road access, explain this on the budget page.

| Click here to enter text. |
| --- |

## Stewardship Fund Scope of Work and Payment Plan

Using Line Items from your budget, create a schedule of when tasks will be completed, and funds will be needed for these tasks. Where possible, try to lump together activities that will be happening within the same 30-60-day period. **See example below for reference – then delete and replace it.** *This schedule should match your project described in Section I and will be used as Exhibit 1 in your contract Scope of Work.*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Budget Category** | **Restoration Category & Description of Activities** | **Quantity 1** | **Unit of Measure 1** | **Quantity 2** | **Unit of Measure 2** | **Date** | **Stewardship Fund Amount** |
| *Personnel* | *Project Management:*  *Purchase plants, landowner coordination* |  |  |  |  | *11/30/21-10/31/22* | *$14, 300* |
| *Supplies & Materials* | *Trees, Protectors, stakes, etc.* | *3000* | *trees* | *1320* | *Linear ft* | *12/31/21* | *$3,500* |
| *Contracted Services* | *Riparian Planting labor* | *3000* | *trees* | *1320* | *Linear ft* | *3/30/21* | *$7,200* |
| *Contracted Services* | *Project Management* |  |  |  |  |  | *$3,000* |
| *Personnel* | *Inspection, release, replant* | *500* | *trees* | *610* | *Linear ft* | *9/30/21* | *$4,400* |
|  |  |  |  |  |  | *TOTAL* | *$32,400* |
| *Add rows as needed* |  |  |  |  |  |  |  |

## Educational/Public Awareness Opportunities (Cannot be paid for by Stewardship funds)

Explain whether and how you will educate and raise public awareness about the project (e.g., install a project partner sign, write an article for the local paper, lead a site tour for local citizens). NOTE: Funds for education and outreach costs are ineligible from Stewardship Funds and must come from your matching source.

| Click here to enter text. |
| --- |

# Section III: Qualifications and Required Reporting and Monitoring

## Project Designer Qualifications and Design Elements

a. Provide a list of qualifications and experience you will require for the project designer. If a project design has been completed, identify the designer and what qualifications and experience they have (include CV; if a design firm, the credentials of key members, similar projects designed.)

| Click here to enter text. |
| --- |

b. Describe the design criteria used or proposed and how those criteria take into consideration natural events and conditions (e.g., culvert design to 100-year flood event, wood placement to readjust with higher than bank-full flows, cultivation to retain at least 75% stubble, 4-strand fence to allow for wildlife passage, etc.).

| Click here to enter text. |
| --- |

c. Were alternative designs or solutions considered? (Check one)  **Yes**  **No**

If yes, explain why the design or approach proposed was chosen. If no, explain why alternative approaches were not explored.

| Click here to enter text. |
| --- |

## Project Technical Engineering Design Requirements

Finished engineered plans and drawings with Certified Engineer Stamps and all other final designs and information will be required for the Final Project Application and Technical Team review

## Project Inspection and Annual Progress and/or Final Report Submittal

Identify who will inspect and sign off on the completed project, as well as submit the Progress (if a multi-year project) and /or Final Reports by January 10 of each year of the project.

|  |  |  |  |
| --- | --- | --- | --- |
| ***Agency/Organization*** | ***Telephone Number*** | ***Email Address*** | ***Project Element Inspected*** |
|  |  |  |  |
|  |  |  |  |
| *Add rows as needed* |  |  |  |

## Project Maintenance and Post Project Monitoring Report and Inspection

Fill in the table below regarding the responsible party for the project maintenance and monitoring report including Post-Project Monitoring Photos and a brief Report three years after project completion and implementation. Identify and provide contact information for that organization.

|  |  |  |
| --- | --- | --- |
| **Name of Person Agency/Organization**  **and Addresses** | **Telephone Number**  **E-mail Address** | **What will be done and for how long?** |
|  |  |  |
|  |  |  |
| *Add rows as needed* |  |  |

# Section IV: Permit and Licenses

## Permits or Licenses required to implement Project

List each component or activity of the project that requires a permit(s) and/or license(s) from a local, state or federal agency or governing body. Use the table provided to list the activities and permit(s)/license(s) including the entity issuing the permit(s)/license(s).

| **Project Activity Requiring a Permit/License\*** | **Permit or License Name** | **Entity Issuing Permit or License** |
| --- | --- | --- |
|  |  |  |
| *Add rows as needed* |  |  |

**\****Permits must be paid from match funding sources***.**

# Section V: MATCH FUNDING FORM

Document any match funding below (as shown in your budget). **Guidelines:**

The Siuslaw Stewardship Watershed Restoration Program (SSWRP) accepts all non-USFS funds as match. An applicant may not use *another SSWRP award* to match SSWRP grant.

Fill in the table below and identify the type of match (cash or in-kind), the status of the match (secured or pending), and either a dollar amount or a dollar value (based on local market rates) of the in-kind contribution. At the time of application, match funding does not have to be *secured.* However, at least 25% of match funding is strongly recommend and is taken into consideration when projects are prioritized.

**Project Name:** Click here to enter text.

**Applicant:** Click here to enter text.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Match Funding Source** | **Date** | **Type**  **(√ one)** | **Status**  **(√ one)\*** | **Dollar**  **Value** |
| Click here to enter text. |  | cash  in kind | secured  pending | $ |
| Click here to enter text. |  | cash  in kind | secured  pending | $ |
| Click here to enter text. |  | cash  in kind | secured  pending | $ |
| Click here to enter text. |  | cash  in kind | secured  pending | $ |
| Click here to enter text. |  | cash  in kind | secured  pending | $ |
| Click here to enter text. |  | cash  in kind | secured  pending | $ |

\*Authorized signatures (“secured match”) are not required at this time however prior to project funding award and signing the contract agreement with CPRCD, all “Secured” match-funds source will need a letter of support.

# Section VI: LANDOWNER/APPLICANT CERTIFICATION FORM

***Monitoring Information from Participating Private Lands is Public Record***

*All applications that involve physical changes or monitoring on private land must include a landowner signature signifying their approval and understanding that all monitoring information obtained on their property is public record. An explanation must accompany the application if any of the information required on the application cannot be provided. The landowner’s signature will be required prior to Applicant signing the funding contract agreement between CPRCD and the applicant to complete the project.*

**Therefore, EITHER the applicant must sign and date in the “For the Applicant” section below, OR all private landowners participating in the project must complete this form at the application stage (use additional pages, if necessary) by signing in the “For the Landowner(s)” section below.**

**The project will occur on (check one):**

Public land only (STOP: No need to complete the rest of the form)

Private land only  Public & private land (Complete appropriate boxes below)

**EITHER:**

**For the Applicant:** I am unable to secure all landowner signatures at this time as not all landowners have been identified at the time of application. I understand that should Cascade Pacific RC&D fund this project, I am required to secure all participating landowner signatures prior to Applicant signing the funding contract agreement between CPRCD and the applicant to complete the project

Applicant Signature Date

**OR:**

**For the Landowner(s):** By my signature below, I certify my understanding and approval that should Cascade Pacific RC&D fund part, or all, of this Application, that all monitoring information obtained on my property as a result of this project is public record. I understand that if I refuse to comply with the terms of this form, I will jeopardize my ability to utilize SSWRP funds for restoration on my property as part of this project outcomes and accomplishments.

Landowner Signature Date

Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Landowner Signature Date

Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Landowner Signature Date

Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Landowner Signature Date

Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Section VII: LEGAL REQUIREMENTS FORM

**AGREEMENTS** (Fill in items in the boxes.)

I/we Applicant Organizationof CityOregon, hereby submit this application for financial assistance under the terms and conditions of the Siuslaw Stewardship Watershed Restoration Program (SSWRP) in the amount of $ {Fund Amount Requested }. The total cost of the project is $ Total Project Cost as shown in Section I of the application and on the budget page.

I/we understand that if this project is funded, I/we will in most cases be required to:

* Sign a Contract Agreement containing the terms and conditions upon which SSWRP funds will be released (work on the project may not begin until all parties have signed the Contract Agreement);
* Submit a Cooperative Agreement between the Project Sponsor (Grantee) and the Landowner(s) addressing issues of site access, monitoring, and maintenance;
* Certify that the project complies with tribal, state, federal, and local regulations such as fill permits, endangered species, and cultural resources (Section I);
* Submit copies of all applicable permits and licenses from local, state, or federal agencies or governing bodies, or written evidence that permits and licenses are not needed;
* Submit Progress Report (if multi-year project), Final Report (at the completion of the project) and Post Implementation Monitoring Report three years after Project Completion date as required in the Contract Agreement exhibits;
* Resolve any and all outstanding issues from previous grants with Siuslaw Stewardship Watershed Restoration Program Funds.
* Agree that educational products and monitoring information resulting from projects are public domain;
* Certify that the work to be accomplished will comply with the USFS Stewardship Criteria.

Landowner Signature Date

Print Name: Title:

# APPLICATION CHECKLIST

[**Section I: Pre-Application Review**](#_Section_I:_Pre-Application)

* Complete Section I and email entire document to Connie Barnes, connie@cascadepacific.org
* Project Vicinity and Site Map is provided
* All contact information is correct

[**Section II: Budget, Work Plan and OutreachSection II: Budget, Work Plan and Outreach**](#_Section_II:_Budget,)

* All questions in this section have been answered
* All application instructions for completing the budget page have been answered
* Columns A and B have been completed, where appropriate
* The totals shown in the last row add up and are accurately reflected in Section II.
* Create Budget using the form available at CPRCD website  [**Stewardship Fund and Application page**](https://cascadepacific.org/cprcd-programs/siuslaw-stewardship-watershed-restoration-program/stewardship-project-funding/)
* Save as a budget excel spreadsheet as pdf and embed in Application (which will be one pdf).
* Also send budget excel spreadsheet as a separate attachment when submitting Application

[**Section III: Qualifications and Required Reporting and Monitoring**](#_Section_III:_Qualifications)

* All questions in this section have been answered

[**Section IV: Permit and Licenses**](#_Section_IV:_Permit)

* Ensure all local, county, state, and/or federal permits and licenses have been identified

[**Section V - Match Funding Form**](#_Section_V:_MATCH)

* Completed, signed, and dated by applicant and landowners (if available, or at the time contract is signed)

[**Section VI - Landowner/Applicant Certification Form**](#_Section_VI:_LANDOWNER/APPLICANT)

* Completed, signed, and dated by applicant and landowners (if available, or at the time contract is signed)

[**Section VII - Legal Requirements Form**](#_Section_VII:_LEGAL)

* Completed, signed, and dated by the applicant

[**Project Maps and Photos**](#_APPENDIX_A:_MAP)*(pdf file type)*

* Vicinity/Location Map
* Site Map (up close detail of project location, boundaries, restoration tasks identified in legend)
  + Both maps must orient north/south, and include a title, north arrow, legend, nearest highway, and city (Vicinity map), local road to access project, and project boundaries.
* Pre-Project Photos
  + Place four photos on each page, oriented landscape
  + Maximum of 8 photos and/or 2 pages
  + Show location of photos on Site Map
* ***All maps and photos must be embedded in the Pre and Final Application.***

**Preliminary Project Designs, CVs, and supporting documents**

* Provide any applicable project designs
* Resumes of personnel
* Partner letters of support

**PRE and FINAL Application Format:**

* Submit PRE and FINAL Application as one pdf (save this word document as a pdf) and embed maps, photos, budget, and other attachments so it is all in one pdf. Reduce images if necessary.
* Submit budget in excel form as well as in the FINAL application pdf.

**DEADLINES**

|  |  |  |  |
| --- | --- | --- | --- |
| Milestone | Pre-Application | Full Application | Final Application |
| Due Date | January 31, 2025 | March 21, 2025 | October 31, 2025 |

**Email all applications to Connie Barnes,** [**connie@cascadepacific.org**](mailto:connie@cascadepacific.org)

# APPENDIX A: MAP OF STEWARDSHIP GROUP AREAS

Map

Description automatically generated

# APPENDIX B: Eligibility Guidelines for Stewardship Fund Projects

## PROHIBITED Project Types and Activities

In general, Stewardship funds are limited to on the ground projects. The following activities **cannot** be funded and must be funded with matching funds.

* + Indirect Administration
  + Analysis/Research, Surveys, Inventories or Evaluation *(except for Section 106 Cultural Resource Surveys)*
  + Monitoring or Maintenance *(Project level monitoring and inventory is recommended to be included in stewardship project proposals, however those tasks must be funded through in-kind work or other match sources)*
  + Education or Signage
  + Technical/Engineering Design or NEPA Planning
  + Capital improvements (e.g., permanent structures such as bridges, footings, and concrete abutments etc.).

## ACCEPTED Project Types and Activities

### Terrestrial Projects

* Development of late-successional habitat
* Habitat improvement for neotropical migratory birds
* Dune protection and restoration
* Creation or improvement of upland meadows, or other early and mid-seral habitats for rare/unique species or elk forage
* Projects should be located within a 1 ½ miles of Siuslaw National Forest lands (based on the home range

radius of the northern spotted owl and elk movement).

### Aquatic Projects

* Opening additional fish passage to at least ¼ mile of fish habitat
* In-stream projects that will improve fish spawning, rearing and thermal refuge habitat
* Culverts and boxed culverts (purchase and placement only-no technical design)
* Noxious weed control
* Riparian planting
* Upgrades to poor road and trail system
* Road decommissioning
* Improvements to sanitation facilities
* Clean-up of dumpsites
* **Riparian and Wetland Projects**
  + Riparian projects that benefit water quality (especially temperature and sediment)
  + Long term in-stream habitat recovery and nutrient contribution
  + Tidal wetland projects that remove dikes and restore tide channels
  + Projects in sub-watersheds containing National Forest lands would be higher priority than projects in sub-watersheds with no National Forest lands.
* **Water Quality Projects**
* Projects that reduce point and non-point sources of pollution will be considered
* Upgrades to road and trail drainage
* Road decommissioning
* Improvements to sanitation facilities at undeveloped sites; and
* Cleanup of dumpsites that contain materials harmful to the watershed.
* Projects must demonstrate direct positive effects to water quality; mitigation work mandated by law cannot be funded.
* **In-stream and Fish Passage Enhancement Projects (See Section I for design requirements)**
  + Improvements to spawning, rearing and thermal refuge habitat.
  + Where migratory populations are found on NFS lands (especially anadromous or adfluvial life histories) the contribution can be direct and easy to demonstrate.
  + Where resident populations are present, benefit may be shown based on the presumption that the greater the number of fish produced within the basin, the better the resiliency of the population to recover if a catastrophic event occurs.
  + Removal of barriers downstream of SNF lands that can increase fish habitat.

### Botanical Projects

Invasive Weed Control

* Projects must identify weed species that have specific resource impact. See Table 1below for an invasive plant list to determine the weed species threat category:

Category A - can be anywhere in the basin;

Category B - vector or resource impact connection with NF lands needed and

Category C - adjacency to NF and resource impact needed.

Table . Invasive plant scientific name, common name, and weed species threat category.

|  |  |  |
| --- | --- | --- |
| *Scientific Name* | Common Name | Category |
| *Ammophila arenaria* | European beachgrass | C |
| *Brachypodium sylvaticum* | False brome | A |
| *Buddleja globosa* | Butterflybush | B |
| *Calystegia sepium* | Hedge bindweed | C |
| *Centaurea maculosa* | Spotted knapweed | B |
| *Centaurea pratensis* | Meadow knapweed | B |
| *Centaurea solstitialis* | Yellow starthistle | B |
| *Cirsium arvense* | Canada thistle | B |
| *Cirsium vulgare* | Bull thistle | B |
| *Clematis vitalba* | Clematis | B |
| *Cortaderia selloana* | Pampass grass | B |
| *Cytisus scoparius* | Scotch broom | C |
| *Cytisus striatus* | Portuguese broom | B |
| *Digitalis purpurea* | Foxglove | C |
| *Elodea densa* | So. Am waterweed | A |
| *Geranium robertianum* | Robert’s geranium | C |
| *Hedera helix* | English ivy | C |
| *Ilex aquafolium* | English holly | C |
| *Impatiens glandulifera* | Policeman’s helmut | B |
| *Iris pseudacorus* | Flag iris | B |
| *Lamiastrum galeobdolon* | Yellow archangel | A |
| *Lathyrus latifolius* | Everlasting peavine | C |
| *Leucanthemum vulgare* | Ox-eye daisy | B |
| *Linaria dalmatica*  *Lythrum salicaria Myriophllum aquaticum Phalaris arundinacea Polygonum cuspidatum Polygonum polystachyum Polygonum sachalinense*  *Rubus armeniacus*  *Rubus laciniatus*  *Sasa palmate*  *Senecio jacobaea*  *Ulex europaeus* | Dalmatian toadflax Purple loosestrife Parrot feather  Reed canary grass Japanese knotweed Himalayan knotweed Giant knotweed  Himalaya Blackberry  Evergreen blackberry  Bamboo  Tansy ragwort  Gorse | B  A A  C A  A  A  C  C  C  B  B |

## ACCEPTED Project Implementation Activities (that may be included but are not limited to)

**Pre-Implementation:** Activities must directly support project implementation. These activities may include:

* Coordination with landowners, organizations, contractors or agencies involved in project implementation;
* Pre-work meetings with contractors or cooperators;
* Travel to meetings associated with the implementation of the project.

**Implementation:** Activities paid for with stewardship funds must be in direct support of on the-ground implementation of the project and may include:

* On-the-ground work or supervision of project work;
* Administration of implementation contracts;
* Inspection and acceptance of work;
* Coordination of landowners, volunteers, other groups or agencies involved in project activities;
* Travel to project sites.

**Post Implementation**: Activities are limited to legal reporting requirements of any permits or activities associated with on-the-ground implementation and accomplishment reporting required for stewardship-retained receipts.

# APPENDIX C: Siuslaw Stewardship Watershed Restoration Program (SSWRP) Fund History

During the post WWII era, improved access to interior coastal forests and rivers resulted in booming economies throughout central Oregon coastal communities. Timber harvest and production on the Siuslaw NF was at its peak from 1960-90, averaging 380 million board feet (mmbf) per year. Intensive harvesting practices affected the forest ecosystem and its fish and wildlife populations. Impacts to watersheds included highly eroded streambanks, poor water quality, and impacts to critical fish habitat. Concerns about these impacts were voiced by citizens, stakeholders, local groups, and environmental activists. By 1992 the annual timber harvest was reduced from 380 to 5 mmbf due to the litigation in 1988 that became known as the Headwall Injunction. The Region 6 Northwest Forest Plan (NWFP) was approved in 1994. The decline of timber harvest revenues severely affected the SNF budget as well as the local communities.

From 1995-1998, collaborative efforts between the SNF staff and key stakeholders led to the process of addressing critical watershed restoration and forest management issues in and around the forest. Watershed assessments determined that 70-80% of the best habitat for threatened salmon was on private lands in the lower gradient reaches of the coastal watersheds. However, USFS funds were not permitted for use on private lands.

The vision and revolutionary concept of retaining the revenue from stewardship timber sales became known as the Siuslaw Option. Today, these retained receipts are identified as the Stewardship Fund.

The SNF developed the idea to allow commercial thinning within the LSR areas through stewardship contracting. In 1998 the Wyden Amendment to the Appropriations Act was passed. The Appropriations Act allowed the USFS and BLM to use retained receipts from stewardship contracting for projects that demonstrated improvements to whole watershed health and local communities.

From 1999 to 2002 Congress authorized the USFS to establish 84 stewardship contracting pilot projects nationwide. The Green Thin was the first SNF pilot stewardship contract, awarded in 2002 to Georgia Pacific to thin 900 acres of small diameter trees. In 2003 Congress passed the Healthy Forests Restoration Act (also known as Stewardship Contracting Authority), authorizing the Wyden Amendment for 10 years. Congress granted permanent authority under the 2014 Farm Bill. Today, the SSWRP has funded and restored thousands of acres of watersheds within and surrounding the SNF.

# APPENDIX D: Common Mitigation Measures

Please use these when developing your project if they are relevant

## Silviculture

* If planting, ensure proper sanitation procedures are implemented during nursery operations

## Wildlife

* For projects within 1.5 miles of the SNF managed lands:
* If the project proposes to operate noise-creating equipment within 110 yards of mature habitat for Marbled Murrelet habitat, follow seasonal protection measure of no noise from April 1 – August 5 and from August 5 – September 15 (no noise 2 hours after sunrise and 2 hours before sunset).
* If the project proposes to operate within an Activity Center of a Northern Spotted Owl, follow protection measures of no removal of trees greater than 11”; and all noise disturbing activities take place July 8 – February 28.
* Consider wildlifefriendly fencing for projects placing new fence line.

## Botany

* A planting plan is needed if this activity is part of the project. Planting plans need to include what you will plant, how much and from what source. Use of local or regional planting mix is best.
* Grasses should only be native, asnon-natives can create a future problem and inhibit native species.
* When using herbicides, time it prior to any flowering of invasive forbs to protect pollinators.
* **Table A - 11. Herbicide-use buffers for streams, wetlands, lakes, ponds, and high-water-table areas.**

|  |  |  |
| --- | --- | --- |
| **Herbicide** | **Application Method – Spot** | **Application Method** |
| Clopyralid | 15 feet | Bankfull |
| Glyphosate – aquatic formulation | Waterline | Bankfull |
| Imazapyr – aquatic formulation | Waterline | Bankfull |
| Sethoxydim | 20 feet | 50 feet |
| Triclopyr (aquatic) | 15 feet | Waterline |

## Engineering

* Document notification of any affected third-party Rights-of-Way holders and obtain any required permits or licenses.

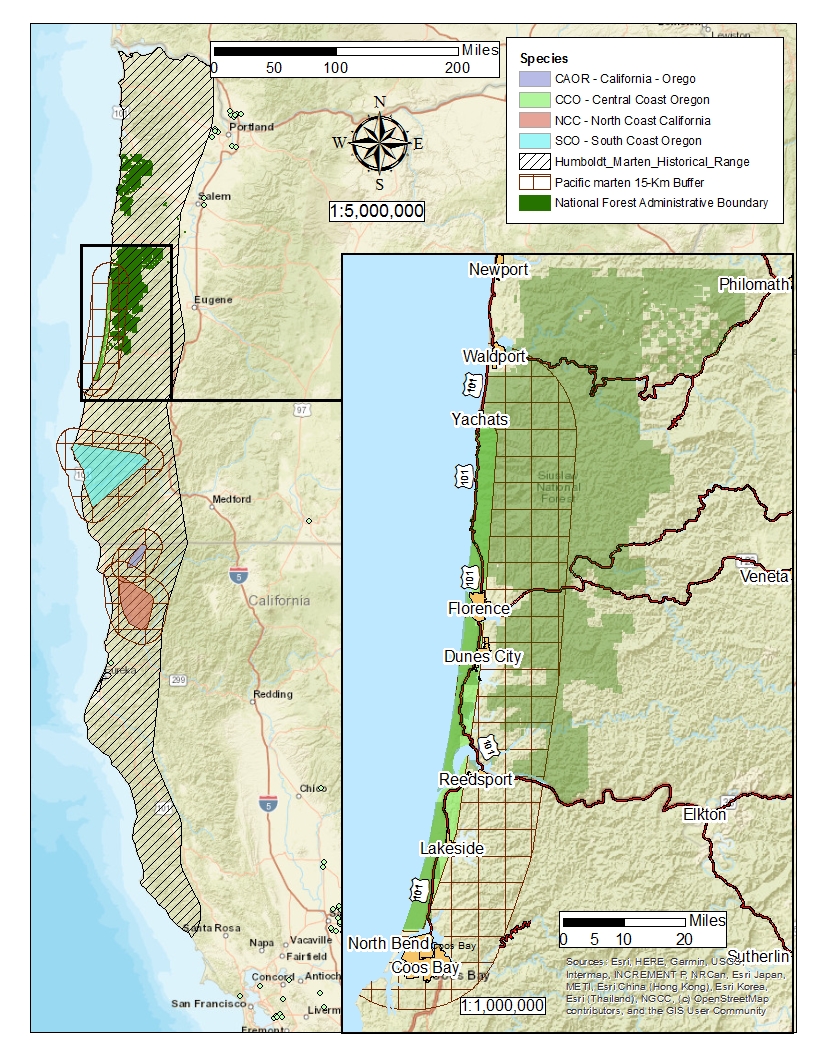
## Fisheries

* Any culvert replacements need to match stream size.
* Use buffers below when using herbicides near streams unless it is a drinking water source; then the buffer is 1,000 feet or further, if the instructions on the herbicides dictate a greater distance.

# APPENDIX E: Vicinity Map Examples

Map

Description automatically generated



# APPENDIX F: Site Plan Map Examples

Map

Description automatically generated



# Appendix G: Climate Change Considerations

Table 2. Hydrology and Water Resources (OCAP Table 9.1)

| Scenario | Sensitivity to Climatic Variability and Change | Adaptation Strategy/Approach | Specific Tactic – A | Specific Tactic – B | Specific Tactic – C |
| --- | --- | --- | --- | --- | --- |
| **1** | **Altered precipitation and sea-level rise will lead to changes in timing and volume of peak flows.** | **Increase resilience of depositional floodplains by increasing connectivity.** | **Tactic:** Reintroduce American beavers and make use of beaver dam analogs (BDAs).  **Where:** Degraded wetlands; low-gradient stream systems; intersections with tidal zones; spawning areas; high-use areas. | **Tactic:** Conduct land swaps/ acquisitions to increase the scale and connectivity of floodplain restoration.  **Where:** Low-gradient depositional valleys with salmon habitat and complex private/public ownership; locations where private landowners are concerned about flooding. | **Tactic:** Add roughness/large woody debris (LWD) to stream channels to slow streamflow and reduce erosion.  **Where:** After wildfires when snags can fall in streambeds; depositional valleys; degraded aquatic habitat; areas where wood removal and splash damming took place; high-gradient, erosion-prone streams. |
| **2** | **Altered timing and volume of peak flows may make infrastructure more vulnerable.** | **Increase resilience of transportation system to peak flows.** | **Tactic:** Upsize culverts where peak flows are expected to increase.  **Where:** High-elevation watersheds, fire-prone or burned areas; low-elevation crossings where tidal surge can increase flooding. | **Tactic:** Relocate, harden (storm proof), decommission, or hydraulically close vulnerable roads.  **Where:** Infrastructure in floodplains; infrastructure on unstable slopes; roads with undersized culverts that will not be used in the future; high-use roads and critical roads (emergency use, egress, etc.). | **Tactic:** Conduct post-fire restoration in watersheds with vulnerable infrastructure.  **Where:** Vulnerable areas identified using the Burned Area Emergency Rehabilitation (BAER) process; high-use recreation sites; drinking-water source areas; unstable slopes; utility corridors (can prepare infrastructure pre-disturbance). |
| **3** | **Water quality may decrease because of increased stream temperatures, sedimentation, and algal blooms.** | **Protect or improve water quality for aquatic and human systems.** | **Tactic:** Increase shade in riparian areas in low-elevation streams (where stream temperature is expected to increase).  **Where:** Where stream temperature is expected to increase; low-gradient depositional watersheds (use valley confinement algorithm to identify vulnerable locations). | **Tactic:** Restore riparian areas to reduce sediment inputs (e.g., modify harvest practices, conduct vegetation treatments, restore streamflow processes, disconnect roads, implement BDAs, create fire breaks)  **Where:** Headwalls (headwaters, high-elevation watersheds); watersheds that provide drinking water; low-gradient depositional watersheds (use valley confinement algorithm to identify vulnerable locations). | **Tactic:** Improve early warning systems and public health communication,  **Where:** USFS recreation sites and wells; private, undocumented wells (widespread); freshwater lakes, reservoirs, slack water, swimming areas, beaches; and where traditional foods and harvesting occur. |

Table 3. Fisheries And Watersheds (OCAP Table 9.2)

| Scenario | Sensitivity to Climatic Variability and Change | Adaptation Strategy/Approach | Specific Tactic – A | Specific Tactic – B | Specific Tactic – C |
| --- | --- | --- | --- | --- | --- |
| **1** | **Increased flood frequency, higher peak flows, lower summer flows, and warming stream temperatures may alter habitat quality and reduce survival.** | **Increase habitat resilience and access to upstream habitat refugia (summer thermal refugia and winter flow refugia) by restoring stream and floodplain structure and processes.** | **Tactic:** Remove or replace barriers (e.g., culverts, tide gates) to increase connectivity to allow fish to move to other areas when wildfires occur. **Where:** Forest-wide; prioritize near areas with high intrinsic potential, lower in the network, areas with low fire risk or high resistance to fire, streams with low gradients, and small, cold tributaries; areas with lower low-flows where connectivity of water remains; areas that may support recolonization by fish (lakes, estuaries, side channels, other tributaries). | **Tactic:** Introduce or maintain beaver habitat by incorporating BDAs. **Where:** Low-gradient areas where beaver food is available; Prescribed Burn Risk Assessment Tool can be used to identify these locations; locations that are conducive to BDAs. | **Tactic:** Restore stream channels to allow for floodplain connectivity so that beavers can establish dams to provide fish and macroinvertebrate habitat. **Where:** Main-stem rivers; river floodplains. |
| **2** | **Changes to estuaries and lower flows in rivers will affect key habitats for fishes, especially for those that use estuaries to transition to the ocean.** | **Increase habitat connectivity for fishes using estuaries to allow more habitat while they transition.** | **Tactic:** Remove tide gates and allow flooding to occur on federal lands, thus increasing the amount of water held on land and creating winter habitat. **Where:** Tide gate locations; floodplains that provide critical habitat. | Not Identified | Not Identified |
| **3** | **Increased flood frequency, higher peak flows, and lower summer flows may affect the ability of fishes to use limited floodplain habitats and access coastal lakes.** | **Increase habitat connectivity by reducing stressors caused by roads and infrastructure in the floodplain or by dams on coastal lakes.** | **Tactic:** Increase floodplain habitat by decommissioning roads and maintaining access to coastal lakes. **Where:** Areas where roads are vulnerable or in disrepair; roads and crossings that restrict habitat connectivity. | Not Identified | Not Identified |
| **4** | **Sedimentation and stream temperature will increase following wildfires, which will likely occur more frequently with climate change** | **Reduce sedimentation associated with erosion, wildfire, and trails, while increasing connectivity to allow fish movement.** | **Tactic:** Develop natural fire breaks; manage timber to achieve mosaic pattern of fire severity for both wildfire and prescribed fire (pre fire). **Where:** Fire-prone areas; riparian areas with critical habitat; timber, fuels, and restoration projects. | **Tactic:** Identify areas near fish habitat that are more important than other locations to limit post-fire timber harvest (outside of riparian areas and high-risk landslide areas) (post fire). **Where:** Recently burned areas; spawning habitats; coldwater refugia. | **Tactic:** Restore riparian areas to increase canopy diversity and to encourage fire breaks and shading as well as control invasive plant populations; promote wider spacing of shade-providing trees and reduce fuel loading (thin/harvest dense stands). **Where:** Fire-prone areas; riparian areas with critical habitat; timber, fuels, and restoration projects. |
| **5** | **Sedimentation and stream temperature will increase after wildfires, which will likely occur more frequently with climate change.** | **Improve or expand fish habitat and increase connectivity to allow fish movement.** | **Tactic:** Place large wood in lower-gradient areas from headwaters to main stem to catch sediment; focus on road network, areas without deposition/sediment-limited areas (pre and post fire).  **Where:** Lower-gradient areas from headwaters to main-stem rivers, especially areas with high intrinsic potential for wood placement. | **Tactic:** Remove or replace barriers (e.g., culverts, tide gates) to increase connectivity, allowing fish to move to other areas when fires occur (pre fire).  **Where:** Forest wide; prioritize areas that have high intrinsic potential for wood placement, that are lower in the network, that have lower fire risk or high resistance to fire, and that have a low gradient; target areas that may support recolonization by fish (lakes, estuaries, side channels, other tributaries). | **Tactic:** Design crossings in anticipation of areas prone to debris that transport materials up and over road; remove roads that are subject to debris flows install large, non-plastic culverts to remain resilient (pre and post fire).  **Where:** Use modeling to identify areas of high risk for high debris flow/landslides (e.g., Net Map). |

Table 4. Forest Vegetation (OCAP Table 9.3)

| Scenario | Sensitivity to Climatic Variability and Change | Adaptation Strategy/Approach | Specific Tactic – A | Specific Tactic – B | Specific Tactic – C | Specific Tactic – D |
| --- | --- | --- | --- | --- | --- | --- |
| **1** | **Increased warming, drought, and wildfire will reduce tree vigor and increase susceptibility to insects and pathogens, with increased potential for extensive outbreaks, particularly invasive insects, and pathogens.** | **Manage for adaptive capacity and enhance as much diversity on the landscape as possible (e.g. increase tree vigor by managing for proper stand densities; use monitoring and adaptive management approaches, including aerial detection surveys, Forest Inventory and Analysis (FIA) data, and potentially Lidar).** | **Tactic:** Use Maximum Stand Density models, which incorporate climate, soils, and other factors, to set stocking levels.  **Where:** Old plantations; stands under 80 years old (much of Siuslaw NF is late-successional reserves); prioritize based on areas expected to undergo loss of fog. | **Tactic:** Implement silvicultural treatments that promote stand and landscape diversity.  **Where:** Plantation areas on Mt. Hebo, including places with off-site trees; prioritize based on areas expected to undergo loss of fog. | **Tactic:** Use monitoring to identify regeneration failures, noticeable declines, and widespread mortality; implement adaptive management approaches in response  **Where:** Plantation areas on Mt. Hebo, including places with off-site trees. | **Tactic:** Implement pre-commercial thinning where appropriate (e.g., following post-fire regeneration).  **Where:** Prioritize based on areas expected to undergo loss of fog. |
| **2** | **Area burned and length of the fire season will increase with climate change.** | **Strategically reduce fire risk, considering fire-severity regime, ignition sources, burning conditions, and resources and values at risk (e.g., weather-driven fire events, smaller fires).** | **Tactic:** Promote Firewise practices, home hardening, and defensible space in the wildland-urban interface (WUI) and around communities.  **Where:** Near WUI and communities; USFS infrastructure (recreation sites); Cascade Head Experimental Forest (includes residences). | **Tactic:** Increase public education about fire risks, red flag warnings, and air quality.  **Where:** In the northern portion of Siuslaw NF where private property is interspersed. | **Tactic:** Reduce human-caused ignitions, including in infrastructure, through outreach to recreationists and collaboration with partners.  **Where:** Near WUI and communities; anywhere people congregate or there is infrastructure; campgrounds, dispersed camping areas; during deer hunting season (late summer to early fall). | Not provided. |
| **3** | **Opportunities for invasive plant species establishment may increase with climate change (e.g., gorse, Scotch broom, false brome).** | **Limit introductions, prevent establishment and spread, and limit where invasive species grow.** | **Tactic:** Implement early detection and rapid response and target species that threaten high-value resources.  **Where:** Areas adjacent to private property and areas that receive high visitation. | **Tactic:** Communicate with the public about reducing the role of humans, equipment, and ornamental escapes as vectors.  **Where:** Areas adjacent to private property. | **Tactic: I**nclude invasive species prevention measures in all projects.  **Where:** All projects (e.g., timber sales, culvert replacements, trail work, new trailheads, recreation facilities). | Not provided. |
| **4** | **Greater frequency of intense winter wind and rainstorms can result in blowdown, flooding, and debris flows (especially in sandstone geology).** | **Develop a better understanding of risks associated with wind events, including whether management interventions are feasible** | **Tactic:** Identify which topographic positions and stand characteristics are most vulnerable to wind events (e.g., use fine-scale wind modeling to investigate specifics).  **Where:** Most areas, across large landscapes. | **Tactic:** Manage stand density for wind firmness; maintain lower height-to-diameter ratios (e.g., keep below 70).  **Where:** Species with shallower root systems (western hemlock, western redcedar, Sitka spruce) are most susceptible; consider prioritizing based on the presence of stem or root decay; prioritize based on results from Tactic A. | **Tactic:** Update Late-Successional Reserve Assessment objectives for risk reduction related to wind.  **Where:** Forest-wide where there are landscape restoration efforts (e.g., late-successional reserves); results from Tactic A can inform Tactic C. | Not provided. |

Table 5. Non-Forest Vegetation (OCAP Table 9.4)

| Scenario | Sensitivity to Climatic Variability and Change | Adaptation Strategy/Approach | Specific Tactic – A | Specific Tactic – B | Specific Tactic – C |
| --- | --- | --- | --- | --- | --- |
| **1** | **Higher temperatures and an altered precipitation regime in the Coast Range may increase stress for some montane plant communities, including rare plants.** | **Build long-term resilience, build understanding of systems, and mitigate disturbance.** | **Tactic:** Improve/initiate long-term monitoring.  **Where:** Rare montane meadow locations, especially existing restoration projects (e.g., Marys Peak). | **Tactic:** Build resilience (e.g., sow native seed mixes); protect sensitive areas near recreation areas (e.g., limit access, designate special interest areas, use signage and education); plant native species in undisturbed areas).  **Where:** Disturbed meadow surfaces, especially near recreation sites, horse trails, and areas with OHV activity. | **Tactic:** Implement early detection and rapid response for invasive species, using a range of treatment options; educate recreationists on how to limit invasive introductions and spread.  **Where:** Disturbed areas; target oxeye daisy (*Leucanthemum vulgare* Lam.) and nonnative pasture grasses. |
| **~~2~~** | **Higher temperatures and reduced fog may increase stress for some coastal plant communities, including rare plants.** | **Build long-term resilience, build understanding of systems, and mitigate disturbance.** | **Tactic:** Improve/initiate long-term monitoring.  **Where:** Coastal headlands, slope meadows. | **Tactic:** Build resilience (e.g., sow native seed mixes); protect sensitive areas near recreation areas (e.g., limit access, designate special interest areas, use signage and education); plant native species in undisturbed areas)  **Where:** Disturbed meadow surfaces, especially near recreation sites, horse trails, and areas with OHV activity | **Tactic:** Implement early detection and rapid response for invasive species, using a range of treatment options; educate recreationists on how to limit invasive introductions and spread; consider biocontrol.  **Where:** Disturbed areas; target oxeye daisy (*Leucanthemum vulgare* Lam.) and nonnative pasture grasses. |
| **3** | **Climate change stressors cross boundaries, creating increased need for different landowners to collaborate.** | **Increase coordination among adjacent jurisdictions (federal agencies, state agencies, tribes, NGOs).** | Tactic: Formalize partnerships (agreements).  Where: Meadow and wetland area restoration. | Tactic: Enhance existing collaboratives and develop new ones if needed.  Where: Special habitat focus with an “all lands” approach. | (blank) |
| **4** | **Altered precipitation regime (more rain, less snow) in the Coast Range may facilitate woody vegetation encroachment in montane meadows.** | **Manage woody vegetation to retain meadows where feasible.** | **Tactic:** Monitor vegetation and related environmental variables (e.g., soil moisture).  **Where:** Marys Peak, Grass Mountain, Prairie Mountain. | **Tactic:** Remove woody vegetation (cutting, goats).  **Where:** Meadow edges. | (blank) |

Table 6. Wildlife Habitat (OCAP Table 9.5)

| Scenario | Sensitivity to Climatic Variability and Change | Adaptation Strategy/Approach | Specific Tactic – A | Specific Tactic – B | Specific Tactic – C | Specific Tactic – D |
| --- | --- | --- | --- | --- | --- | --- |
| **1** | **Altered timing of precipitation, drought, loss of fog, increased flooding events, snow melt, and rising sea level will reduce plant productivity, increase tree mortality, shift plant species composition, and alter wildlife habitat in forests, riparian areas, wetlands, meadows, estuaries, and beaches.** | **Restore and improve water-holding capacity of focal habitats; promote connectivity of focal habitats.** | **Tactic:** Promote and protect high-elevation refugia.  **Where:** North-facing slopes for noble fir on Marys Peak, Grass Mountain, Prairie Mountain, Little Grass Mountain, Monmouth Peak, and Mt. Hebo; meadow plant communities. | **Tactic:** Look at stream grade and plant composition to identify appropriate locations for beavers and areas with resilient native plant communities (for beaver habitat).  **Where:** Freshwater and brackish aquatic systems. | **Tactic:** Reintroduce beavers to improve water-holding capacity of aquatic systems.  **Where:** Freshwater and brackish aquatic systems. | **Tactic:** Form relationships with private landowners to implement projects that promote connectivity (purchase land when relevant).  **Where:** Adjacent private landowners, inholdings. |
| **2** | **Increased temperatures will cause shifts in plant and wildlife species ranges, reduce habitat for temperature-sensitive wildlife, and alter plant phenology and species interactions (e.g., predation, competition, timing of available food resources).** | **Develop a better understanding of implications of expected range shifts of plant and animal species, including interactions between native and nonnative species; identify situations where transitions are appropriate and shape transitions where feasible and appropriate.** | **Tactic:** Look at vegetative composition of edge habitats and enhance edge habitats, allowing for wildlife dispersal into these areas.  **Where:** May be applicable in some focal areas; where oak woodlands are expanding; edges of monoculture plantations; edge habitats that can connect isolated habitats of concern (e.g., between two isolated meadows) to avoid isolated island populations; edge habitats on Mt. Hebo and Mary’s Peak. | **Tactic:** Allow some beneficial nonnative animal and plant species, while removing other nonnative invasive plant species to address shifts in phenology; replace nonnatives with better adapted native species when feasible.  **Where:** Likely applicable across all habitat types; Oregon silverspot butterfly on Hebo Ranger District; other opportunities to promote native plants (e.g., common yarrow [*Achillea millefolium* L.]). | **Tactic:** Monitor phenology of flowers and berries, how it relates to temperature and moisture, and relationships to native pollinators.  **Where:** Meadows (likely differences between coastal meadows and montane meadows due to different soil conditions and precipitation patterns); coastal shrub areas; Sitka spruce and dune system, especially in areas that produce berries; places near Remote Automated Weather Station (RAWS) data stations for monitoring of seasonal weather. | **Tactic:** Ensure abundance of microhabitats that may be able to provide refugia under a range of weather conditions.  **Where:** High-elevation meadows: promote shrubs and driplines of trees as pollinator habitats (rather than removing all shrubs and trees as had previously been common practice); dune-shrub habitat. |
| **3** | **Changing frequency and extent of wildfire, insect outbreaks, and diseases may lead to loss of late-successional forest, altered structure and heterogeneity of other forest successional stages, reduction in habitat connectivity and distribution, and increased spread of invasive species.** | **Maintain resilience of old-growth forests and increase resilience of plantation forests.** | **Tactic:** Protect interior old-growth forests.  **Where:** Old-growth forests that are vulnerable to disturbance; fuel management projects. | **Tactic:** Protect old and larger trees from insects and disease.  **Where:** Old-growth forests that are vulnerable to disturbance. | **Tactic:** Increase structural and biological diversity of plantation forests.  **Where:** Fuel management projects; timber sales; reforestation efforts; during land management plan revision. | Not provided. |

Table 7. Recreation (OCAP Table 9.6)

| Scenario | Sensitivity to Climatic Variability and Change | Adaptation Strategy/Approach | Specific Tactic – A | Specific Tactic – B | Specific Tactic – C | Specific Tactic – D |
| --- | --- | --- | --- | --- | --- | --- |
| **1** | **Sea-level rise, higher high-tide lines, shifts in precipitation, and extreme storm surges will result in some coastal areas becoming unusable, damaging recreation infrastructure and access roads.** | **Incorporate climate change vulnerability as a component of sustainable recreation planning.** | **Tactic:** Improve understanding of which sites are vulnerable to flooding caused by extreme precipitation events.  **Where:** Following a large-scale recreation site analysis. | **Tactic:** Consider climate change vulnerability in project designs and strategic investment decisions; favor investments in sites that will be more resilient.  **Where:** Features located near streams or lakes or at low elevations may be especially vulnerable; project-level decisions. | **Tactic:** For sites deemed to be vulnerable, explore decommissioning, redesign, or shifting investments elsewhere.  **Where:** Features located near streams or lakes or at low elevations may be especially vulnerable. | **Tactic:** Emphasize alternate recreational locations and opportunities; manage expectations when notifying the public about sites that become unavailable.  **Where:** Sites that may become unavailable due to flooding, storm surges, high tides, and sea-level rise |
| **2** | **Increased temperatures in the fall and spring will result in increased use during the shoulder seasons.** | **Increase management flexibility and capacity for managing recreation resources to meet shifting demands.** | **Tactic:** Develop creative budget strategies to support longer and overlapping use seasons.  **Where:** Forest-wide. | **Tactic:** Coordinate with other recreation providers to be more strategic about which opportunities are offered, especially in the shoulder seasons.  **Where:** Forest-wide. | **Tactic:** Communicate with the public (including social media) about what is open, what is closed, and safety concerns specific to the shoulder seasons.  **Where:** Forest-wide. | **Tactic:** Add language to concessionaire contracts and special-use permits to allow for seasonal flexibility.  **Where:** Forest-wide. |
| **3** | **Increased wildfire frequency and extent will result in closures of sites and/or districts, fire restrictions, and changes in use patterns (e.g., recreationists coming from inland areas where fire and smoke are prevalent).** | **Facilitate resilience to wildfire through proactive planning and preparation.** | **Tactic:** Coordinate with other recreation providers and national forest units to ensure a consistent response to fire risk and consistent messaging.  **Where:** Pre-season coordination between recreation staffs on different units; implementation during fire events or when risks are elevated. | **Tactic:** Communicate with the public about fire risks and their implications for recreational access, including closures and fire restrictions, using social media and other outlets.  **Where:** Pre-season messaging with the public about fire risks and responses, thus managing expectations; messaging during the fire season to inform public about closures and restrictions. | **Tactic:** Consider the potential for increased summer demand and interactions with other climatic vulnerabilities during recreation planning.  **Where:** Recreation site analysis; National Access Management Program (NAMP) process. | **Tactic:** Establish tentative plans for rapid responses to wildfire and hazard tree removal in transportation corridors, high-use recreational areas, and campgrounds  **Where:** Pre-season coordination with ODOT, counties, law enforcement, search-and-rescue; implementation following fire and wind events. |

Table 8. Ecosystem Services (OCAP Table 9.7)

| Scenario | Sensitivity to Climatic Variability and Change | Adaptation Strategy/Approach | Specific Tactic – A | Specific Tactic – B | Specific Tactic – C | Specific Tactic – D |
| --- | --- | --- | --- | --- | --- | --- |
| **1** | **Altered disturbance patterns and habitat quality may affect sensitive plant and animal species that provide first foods and other non-timber forest products (NTFPs).** | **Collaborate with tribes to integrate traditional ecological knowledge (TEK) into management of culturally sensitive species.** | **Tactic:** Identify and map critical areas for culturally sensitive species (e.g., camas, rushes); monitor populations over time (with tribes).  **Where:** Estuaries, wet prairies; cultural sites that are co-located with culturally sensitive species. | **Tactic:** Protect areas of historical and anticipated future distribution for culturally sensitive species; consider acquiring land that may provide habitat in the future (e.g., wetlands, higher elevations).  **Where:** Estuaries, wet prairies; cultural sites that are co-located with culturally sensitive species. | **Tactic:** Work with tribes to explore effects of traditional plant management techniques for culturally sensitive species; identify practices that increase species resilience; develop best management practices.  **Where:** Projects involving camas, huckleberries, salmon, lampreys, and other culturally important foods. | Not provided. |
| **2** | **Altered hydrologic and disturbance regimes will affect the amount, seasonal distribution, and quality of water for municipal and ecosystem uses.** | **Protect areas that provide key hydrologic ecosystem services.** **Protect areas that provide key hydrologic ecosystem services.** | **Tactic:** Protect low-lying wetlands and estuaries to increase resilience to changes in hydrology and sea-level rise; review and improve zoning where possible (to prevent development of wetlands and estuaries).  **Where:** Low-lying wetlands and estuaries. | **Tactic:** Protect sole-source aquifers from salinization, overuse, and pollution; protect areas of dunes where surface water connects with the aquifer  **Where:** Water sources near Florence, Coos Bay, and North Bend. | **Tactic:** Increase communication about water quality issues in lakes and reservoirs (e.g., algal blooms, bacteria).  **Where:** Well users; recreationists (fishing, swimming). | Not provided. |
| **3** | **Pollinators may be increasingly vulnerable to climate change effects, including diminished habitat and phenology mismatches.** | **Enhance pollinator habitat on federal lands and near federal facilities.** | Tactic: Develop a checklist to consider pollinator services in planning, project analysis, and decision making; direct USFS units to improve pollinator habitat by increasing native vegetation (through Integrated Pest Management) and by applying pollinator-friendly, forest-wide best management practices and seed mixes.  Where: Sensitive habitats and species; plant communities vulnerable to climate change. | Tactic: Establish pollinator gardens.  Where: Pollinators Pathways Project. | Tactic: Establish a reserve of native seed mixes including pollinator-friendly plants that are available, affordable, and effective; develop revegetation guidelines that incorporate menu-based seed mixes by habitat type (e.g., species that are good for pollinators) and are delineated by empirical or provisional seed zones.  Where: Pollinators Pathways Project; incorporate Traditional Ecological Knowledge (TEK) in pollinator management. | Not provided. |
| **4** | **Altered timing, availability, and distribution of NTFPs caused by shifts in phenology, disturbance, and habitat quality, potentially leading to conflicting uses among tribal, recreational, and commercial uses, and possibly to more human impacts on resources.** | **Ensure equitable access and sustainable supply of NTFPs for resource users while maintaining ecological function.** | **Tactic:** Increase information on NTFP ecologies, harvest dynamics, stewardship practices, and market dynamics through data collection and research.  **Where:** All habitat types; thinning projects, prescribed fire, invasive species management, other management projects. | **Tactic:** Better integrate NTFPs into forest planning; use silvicultural prescriptions that enhance suitable conditions through canopy openings and appropriate stand structure, prescribed fire, and meadow management  **Where:** Upland forest, wetlands, meadows, dune ecosystems, estuaries, and other special habitats. | **Tactic:** Determine the abundance and distribution of NTFPs that meet needs of different user groups; manage harvest levels to ensure sustainable supplies.  **Where:** Popular harvest areas. | **Tactic:** Identify areas of particular importance to NTFPs and monitor population health, reproductive success, and age distribution of target species; assess viability and redirect use away from vulnerable areas.  **Where:** Popular harvest areas and other special habitats. |
| **5** | **Expected population growth in local communities will likely increase development pressure and demand for ecosystem services, interacting with potential increases in climate-influenced hazards and creating stress for regional infrastructure.** | **Increase planning, cross-jurisdictional coordination, and communication in preparation for climate-influenced acute (e.g., extreme events) and chronic (e.g., development, effects on water) stresses.** | **Tactic:** Identify sensitive roads; improve communication among jurisdictions and responsible parties for the regional road network.  **Where:** In valley bottoms; along Highway 101 and other coastal roads. | **Tactic:** Communicate with resource users so they have realistic expectations for access; restrict access in some cases (e.g., with a permit system).  **Where:** Areas with hazards and overuse. | **Tactic:** Increase communication among agencies to guide users to safe or alternative recreation sites if preferred sites are unavailable.  Where: Areas with hazards and overuse. | **Tactic:** Proactively acknowledge cumulative effects across land ownerships and modify management accordingly.  **Where:** Northern spotted owl (Strix occidentalis caurina Merriam) sites; sites with botanical species of concern; areas with high fire risk (adjacent to WUI); watersheds of concern. |