

# Final Recreation Project Plan for the O. H. Hinsdale Garden Spruce Reach Island

Bureau of Land Management - Coos Bay District

October 22, 2010

Public Lands USA:  
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**Recreation Project Plan for the  
O.H. Hinsdale Garden  
Spruce Reach Island**

October 2010

Umpqua Field Office  
Coos Bay District  
Bureau of Land Management  
US Department of the Interior

Approved by:

*A. Dennis Turowski*

A. Dennis Turowski  
Umpqua Field Manager

*Oct. 22, 2010*

Date

United States Department of Interior  
Bureau of Land Management  
Coos Bay District

**Decision Record for Categorical Exclusion DOI-BLM-OR-C030-FY-2010-0003-CX**

**Decision:**

It is my decision to implement Recreation Project Plan for the O.H. Hinsdale Garden Spruce Reach Island as described in DOI-BLM-OR-C030-FY-2010-0003-CX which is located on pages 29-35 of the Recreation Project Plan for the O.H. Hinsdale Garden Spruce Reach Island.

**Decision Rationale:**

The proposed action has been reviewed by Resource Area Staff and appropriate project Design Features as specified will be incorporated into the proposal. Based on the NEPA Categorical Exclusion Review, I have determined that the proposed action involves no significant impact to the human environment and no further analysis is required.

**Signature of Authorizing Official:**



A. Dennis Turowski  
Umpqua Field Manager

Date: Oct. 22, 2010

**Administrative Remedies:**

This decision may be appealed to the Interior Board of Land Appeals (IBLA), Office of the Secretary, in accordance with regulations contained in 43 CFR Part 4. If an appeal is taken, your notice of appeal must be filed with the Umpqua Field Office, Coos Bay BLM, 1300 Airport Lane, North Bend OR, 97459 (43 CFR 4.411 and 4.413). A copy of the Notice of Appeal must also be sent to the BLM Regional Solicitor, Pacific Northwest Region, 500 NE Multnomah St. Suite 607, Portland, OR 97232.

The appellant has the burden of showing that the decision being appealed is in error.

For further information, contact Sharon Cawley, Project Lead, at 1300 Airport Lane, North Bend OR 97459 or (541) 756-0100.

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## Chapter 1 Purpose and Need for a Recreation Project Plan

### Introduction

Spruce Reach Island sits between the Umpqua River and State Highway 38 and is part of the Dean Creek Elk Viewing Area and the Umpqua River Scenic Byway.

The Bureau of Land Management (BLM) acquired the island in 1994 and an amendment to the *Dean Creek Elk Viewing Area Activity Management Plan* (April 1993) was written to include Spruce Reach Island in 1998.

Until that time, the island was owned by the Hinsdale family, a family with roots in lower Umpqua River commerce and navigation. The Hinsdale family developed approximately five acres of the island, including a woodland garden (O.H. Hinsdale Garden), house (the Spruce Reach house) and barn.

Since the time that the Dean Creek Plan and amendment (September 1998) were written, the garden came to the attention of Gordon Wylie, a former president of the American Rhododendron Society (ARS). He and his English colleague, John Hammond, initiated contact with the Coos Bay BLM. With their assistance, it was discovered that the unique woodland garden is a historic resource that is potentially eligible for inclusion on the National Register of Historic Places as a cultural landscape (July 17, 2007 memorandum). BLM policy is to manage cultural resources which are potentially eligible for inclusion on this list in a way that protects them “against impairment, destruction, and inadvertent loss”, while “encouraging and accommodating the uses determined appropriate through planning and public participation” (BLM Manual 8100.06).

The garden is of interest to visitors for its history and recreation opportunities. The spring blooming season will attract visitors to enjoy the wonderful array of colors, and visitors can enjoy being by the Umpqua River throughout the summer months.

This recreation project plan is needed to outline how the *Dean Creek Elk Viewing Area Activity Management Plan* and its amendments will be implemented in regards to the O.H. Hinsdale Garden and Spruce Reach house.



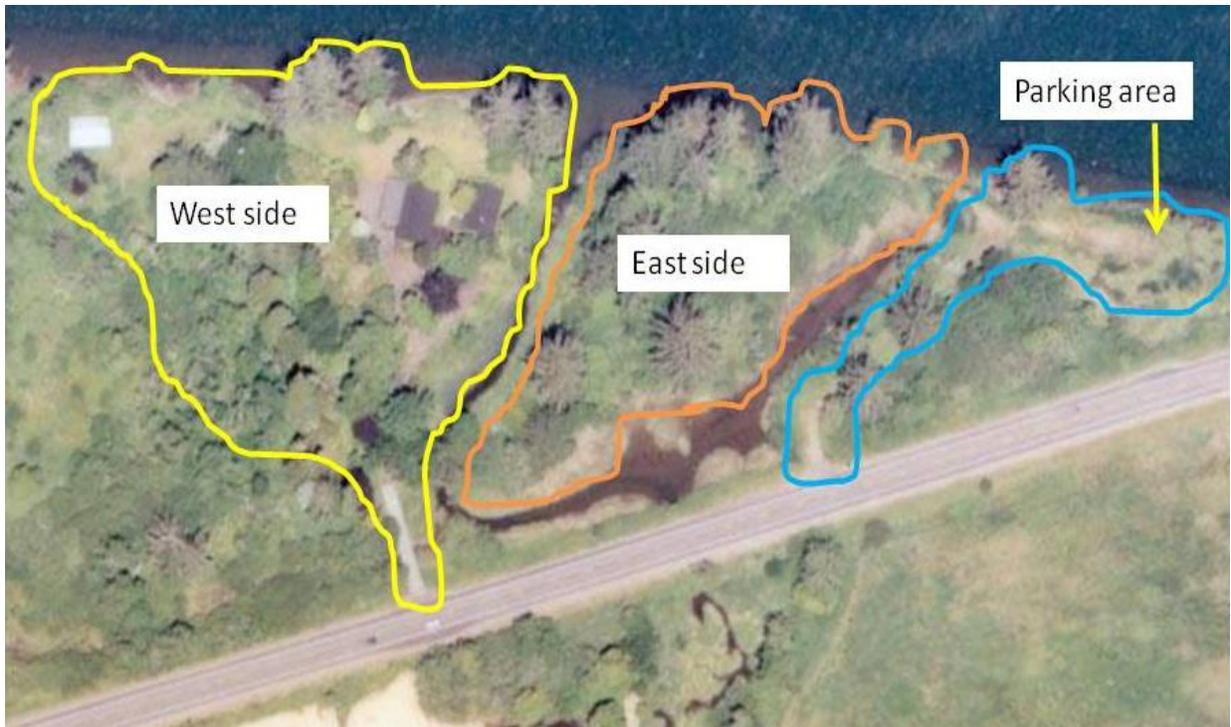
**Figure 1. A view of the O.H. Hinsdale Garden**

### **Description of the Planning Area**

Spruce Reach Island is approximately 67 acres in size and is largely covered with wetlands and spruce forest, providing habitat for a variety of plants and animals. The island has no developed facilities except for the area around the garden. The focus of this plan is solely on the O.H. Hinsdale Garden and the east-side parking area.

O.H. Hinsdale established a garden around his house (referred to as the Spruce Reach house in the management plan amendment). The garden was laid out as a woodland garden, similar to a style used around small English Country estates around the turn of the 20<sup>th</sup> Century. Instead of formal paths and fountains, the garden was designed to be more natural in appearance with layers of vegetation. Hundreds of rhododendrons and azaleas were planted, along with camellias, other shrubs and a variety of trees. The “formal” areas are part of the garden as well, which are located along the driveway and the river side of the house.

A slough splits the garden into two sections. The western section is around the house, driveway and barn area, and the smaller eastern area is across the slough, which was traditionally accessed with a footbridge. In 2002, BLM acquired the adjacent 2.33 acre parcel immediately east of the garden for public access and parking (see Figure 2 for layout of the garden and parking area).



**Figure 2. Map of garden and parking locations**

### **A Focus on Outcomes**

This recreation project plan uses an outcomes-focused approach to planning, also known in the recreation management field as benefits based management. Outcome-focused management (OFM) is a customer-driven approach to identify positive or beneficial outcomes people derive or want from recreation. These outcomes guide the BLM to plan and deliver recreation services that benefit individuals, communities, economies and the environment.

This requires shifting the focus of recreation planning and management beyond just facility development to an emphasis on:

- Experiences, opportunities and outcomes (visitor benefits relating to social, economic and the environment)
- Potential partnerships and community involvement
- Stewardship of public lands and resource management

The planning foundation for OFM is generally set out during the resource management planning process. However, the current Coos Bay District Resource Management Plan and the Dean Creek management plans predate the development of OFM as a planning tool in the BLM. This project plan will be used to identify the beneficial outcomes for recreation participation at the O.H. Hinsdale Garden in order to guide the BLM's management of the Spruce Reach Island.

## **Public Involvement**

While drafting this plan, the BLM met with the Reedsport Chamber of Commerce and Reedsport City Council. The BLM also held a public meeting at the Umpqua Discovery Center that was attended by 25 community members. The BLM also received six letters containing comments on the draft Recreation Project Plan for O.H. Hinsdale Garden Spruce Reach Island during a 30 day public comment period. The District received a variety of feedback on proposed plans for the garden and desired uses for the area.

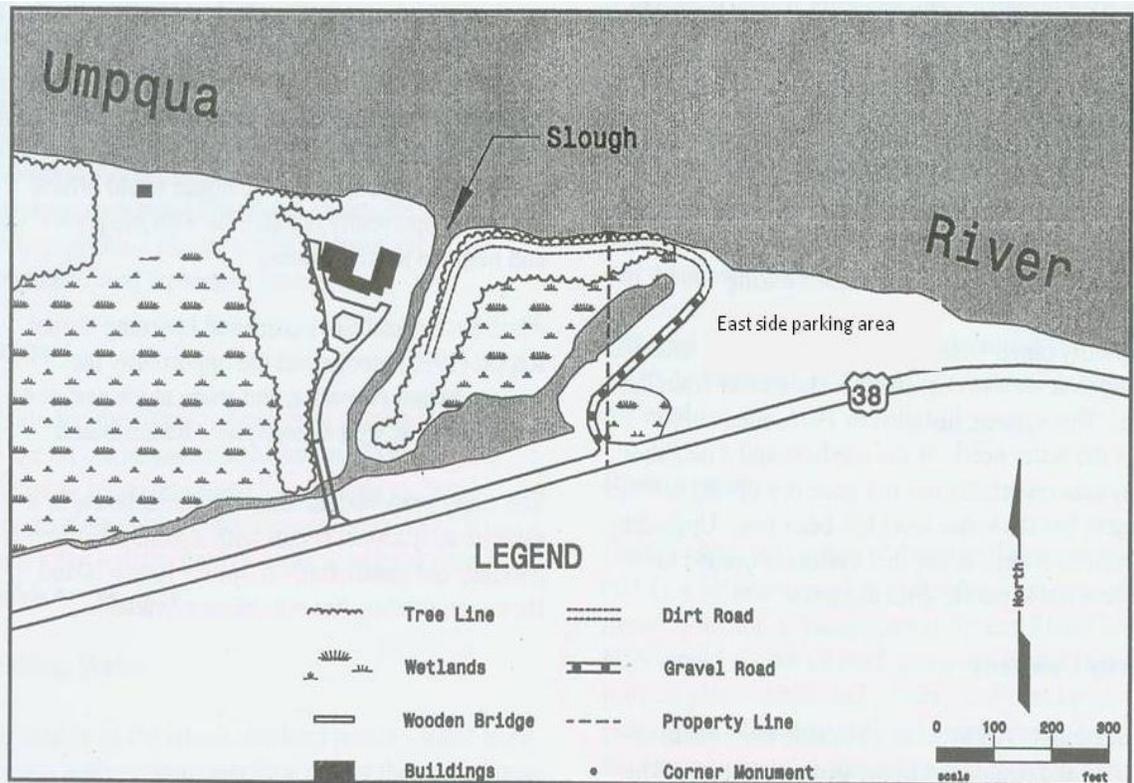
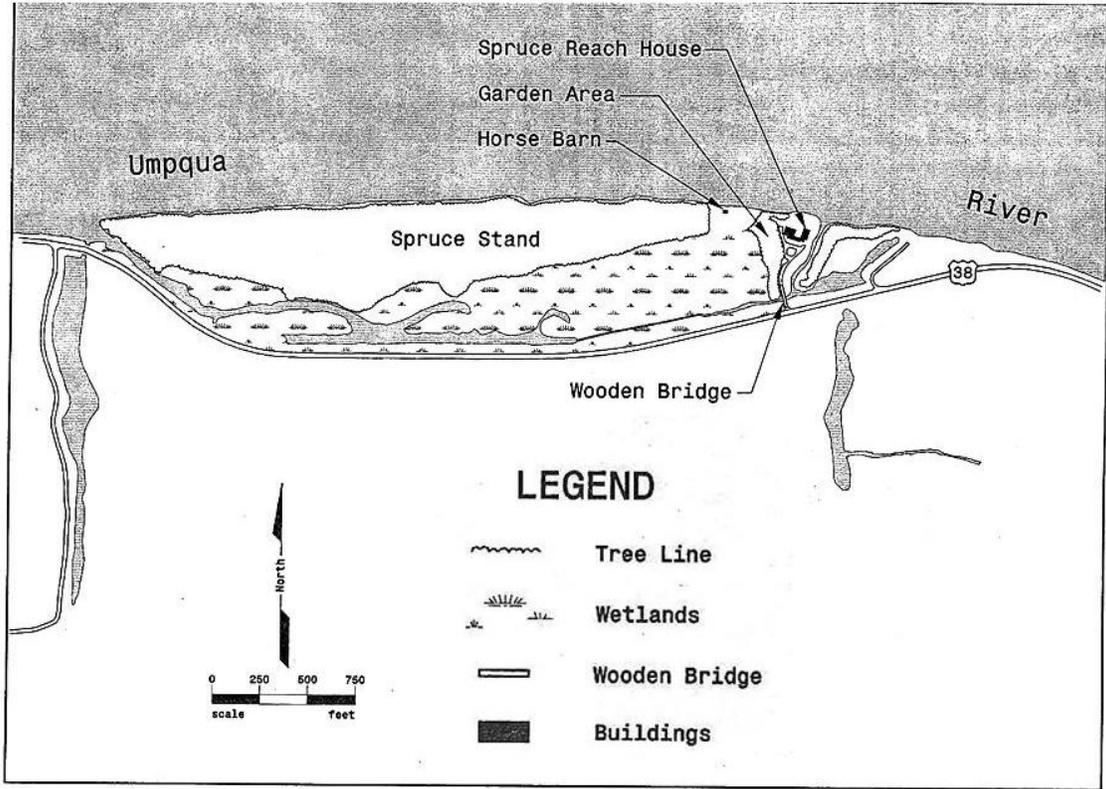


Figure 3. Project plan location maps

## **Planning Challenges**

A planning challenge is defined as a matter of controversy, a hurdle, or general concern over resource management activities, the environmental effects, or land use. Challenges that the BLM tried to resolve in developing this plan, taking into account management goals and legal requirements, are as follows:

### Recreational Use

Recreation beneficial outcomes for the garden and potential uses that fit with the setting need to be determined. Facilities (e.g., picnic tables, rest rooms, etc.) and interpretation/environmental education need to be based on management objectives for achieving outcomes.

### Public Access

Oregon Department of Transportation (ODOT) controls access from Highway 38. Currently, there are two authorized access points, the paved access to the old Hinsdale residence and the gravel access road to the east end parcel.

Vehicular access to the garden was restored in June 2010 with installation of a culvert and two-lane road where Hinsdale's wooden bridge was located. The two lane road is intended for administrative use only (National Environmental Protection Act (NEPA) analysis completed in 2008). General public use of this road and any future development of a new parking area in the west side of the garden would require approval and permits from ODOT. No recreational vehicle (RV) or bus access is possible on the north side of Highway 38 due to site limitations.

The 2.33 acre east-side parcel was acquired for the parking potential of a small number of vehicles (10 – 15). A single lane gravel road with a gate leads into this parking area with no pull outs. Vehicles heading east would have to cross Highway 38 to enter this parking area. The site provides a limited turning radius. It is adequate for standard passenger vehicles, but will not accommodate RVs, trailers or buses.

There is currently no foot bridge to connect the east-side parking area with the west side of the garden. People park on the east-side, walk along Highway 38, and access the west side of the garden via the paved access. The path along Highway 38 is not barrier free.

No developed boating, hiking or biking access is currently available.

See Appendix A for access alternatives that were considered.

### Public Tours

Public tours are not currently being conducted on a regular basis; BLM staffing levels do not support this over the long-term. However, the BLM may accommodate public tours on occasion. In such instances, due to the limited parking, public tours would need to be done by vans shuttling people to the site from a nearby location. Shuttle parking is available at the main Dean Creek Elk Viewing Area parking lot, at the east end ranch house, and off-site in Reedsport.

## Garden Operations

For the short-term, BLM has been doing work on the garden with staff, volunteers and the Northwest Youth Corps. A long-term strategy outlining guidelines for the maintenance and care of the garden needs to be developed with the assistance of the American Rhododendron Society.

## Wildlife

Five species of bats are known to roost in the Spruce Reach house, including fringed myotis (*Myotis thysanodes*), a BLM Special Status Species. At least four of these bat species, including the fringed myotis, use the house for a maternity and winter roost. Bats have been heard at multiple locations in the shake siding, but exact locations of the roosts are unknown.

The spruce forest covering most of the island is occupied marbled murrelet habitat and suitable habitat for northern spotted owl, both federally listed threatened species. Except for a small portion of the garden area by the barn, the garden is not within distances likely to cause disruption as defined in previous consultation with the U.S. Fish and Wildlife Service. Other unforeseen actions involving potentially disturbing activities, such as extremely loud equipment, burning, blasting, or helicopter use would require increased restricted distances during the breeding season (Appendix D).

## Spruce Reach House

The BLM determined in 1996 that the house is not eligible for inclusion on the National Register of Historic Places. Although the final configuration of this structure was completed in 1947, the BLM determined that its “Cultural Resource Use Category” is “Discharged from Management” as a cultural resource (BLM Manual 8110.42F).



**Figure 4. Side of Spruce Reach house**



**Figure 5. Front of Spruce Reach house**

The BLM considered and evaluated improving the house for public use in 1998, but determined that it would require substantial reconstruction and upgrading, and the cost would subsequently be prohibitive and unwarranted given the lack of specific needs for public use.

No maintenance has been done on the house nor does the BLM plan to do any renovation work in the future. A BLM engineer conducted a survey on the exterior of the house in August 2009 and found that the roof is bowing and deteriorating. BLM management has determined that the house is an attractive nuisance and safety hazard for the public. As such, it represents a liability. In addition, the house may contain hazardous materials that will need proper disposal.

Because of these conditions the BLM intends to implement the 1998 Plan amendment decision to remove the house from the site. The timing, methods, objectives and possible mitigation for bats will be determined through the development of an environmental assessment.

#### Potential Flooding and Bank Erosion

Anticipated flooding and bank erosion need to be considered when evaluating development alternatives for Spruce Reach.

According to the Federal Emergency Management Agency Flood Insurance Rate Map No. 410059 0235 A, Spruce Reach Island and the 2.33 acre parking area are located within the 100-year flood plain of the Umpqua River. The base flood elevation at the east side of the island is approximately 15.5 feet (National Geodetic Vertical Datum of 1929). This water surface elevation is approximately three feet higher than the shoulder of Highway 38 at the main entrance to the garden, and 2.4 feet higher than the shoulder of the highway near the gated access road.



**Figure 6. Aerial view of 1964 flooding at Dean Creek**

Peak flow information from the Umpqua River gauging station near Elkton, Oregon indicates that flooding along the lower Umpqua happens relatively frequently. Flood water one to two feet deep inundated parts of Spruce Reach Island and flowed south over Highway 38 as recently as December 2005. The discharge associated with this flooding was the 12<sup>th</sup> highest flow recorded during the 102-year history of this Umpqua River gauging station. The average recurrence

interval or return period for this flow is less than nine years, and this flow has a probability of 12% of being equaled or exceeded in any given year.

River bank erosion may claim some of the east-side parking area and the access path leading to the west side of the garden. The rate of bank erosion is currently being monitored. However, there are no current plans to provide bank stabilization.

### Safety and Security

Prior to installation of the culvert and road, access to the island was limited and public safety was of minor concern. With increased access, BLM must actively manage safety. Unauthorized access to the island has resulted in theft of maintenance equipment in the past, as well as unauthorized entry into the house from time to time.

Now that the west side garden is more accessible to the public, there is increased concern that the house will be a target for vandalism or other depreciative behaviors.

With improved access to the island, the garden will need to be monitored for potential theft and/or damage to garden plants.

### Sewage and Drinking Water

No water or sewer systems are currently used on the island. Old systems that existed on the island are unusable by today's standards.

## **Relationship to Bureau of Land Management Planning**

Management actions proposed in this plan are in conformance with the *Dean Creek Elk Viewing Area Activity Management Plan - Coos Bay District BLM* (USDI 1993) and the *Dean Creek Elk Viewing Area 1998 Amendment to 1993 Management Plan - Coos Bay District BLM* (USDI 1998).

A list of documents used in the development of this project plan and coordination with other entities can be found in Appendix B.

## **Chapter 2 Management Actions Past, Present and Future**

The *Dean Creek Elk Viewing Area 1998 Amendment to 1993 Management Plan* specified management goals and actions for Spruce Reach Island to protect resources while providing opportunities for continued human use in the planning area. Specific goals of this recreation project plan include:

- Provide facilities and programs that support visitor safety; wildlife viewing; interpretive, educational and passive recreational uses that are compatible with the elk and other wildlife that inhabit the Dean Creek Elk Viewing Area.
- Manage visitor use to avoid unacceptable conflicts with, or damage to, wildlife and their habitats on a seasonal basis (Dean Creek Elk Viewing Area Plan).
- Accomplish garden maintenance and public access objectives in a cost-efficient manner by keeping development to the minimum level necessary and by making maximum use of partnerships and volunteers to operate and maintain the garden.

Other goals of this plan include:

- Provide for the restoration and maintenance of the O.H. Hinsdale Garden
- Provide public access for use and enjoyment of the site.

### **Current Planning Base, Status, and Proposed Actions**

Outlined below are the management actions identified in the 1998 plan amendment together with a description of the current status and proposed actions that apply to the management action. The proposed actions are further described in the recreation facilities and development section (page 17).

**Action 3.1:** Acquire the private 2.33 acres of land east of Spruce Reach Island, provided the owner is willing, and develop for parking. Build a utility road and pedestrian/maintenance bridge from this parking area to the island. If unable to acquire the private land, develop parking on the island. Dismantle the present wooden bridge and build a new one from state Highway 38 to the island.

Current Status:

- (1) Land acquired in 2002.
- (2) The bank erosion occurring along the east-side (2.33 acre) parcel limits vehicle use and multiple egress.
- (3) No developed parking is currently available on the island due to lack of public access, design, and facilities.
- (4) The wooden bridge was removed and an environmental assessment was done (EA No. OR125-08-05) in December 2008 to install a culvert and road in June 2010 along with associated wetland mitigation in the adjacent area.

Proposed Actions:

- (1) Develop east-side parking. Coordinate with Oregon Department of Transportation (ODOT) on ingress and egress.
- (2) Construct a barrier-free pedestrian bridge connecting both sides of the garden. The bridge should allow access for a small utility vehicle to cross for garden maintenance.
- (3) If/when visitor use exceeds the east-side parking area capacity and/or becomes unsafe, BLM will consider and, if appropriate, plan, design and implement other public access and parking alternatives. Coordinate access and permits with ODOT if needed.

**Action 3.2:** Maintain the Spruce Reach house for five years or until an acceptable plan for the house is developed and undertaken sooner by interested organizations. Enter into a partnership agreement with these organizations. If no acceptable plan is developed within two years, or if an acceptable plan is developed, but not substantial implementation is undertaken within five years, dismantle the present structure, build an interpretive kiosk, provide public access on a reservation basis, and provide for public water and sewage systems.

Current Status:

- (1) No viable plan was submitted for the house within the given timeline, and consequently no agreements were created pertaining to the house.
- (2) The house has not yet been removed. While not suitable for humans, the house is a roost for five species of bats, one of which is a BLM Special Status Species.
- (3) Interpretation, public access, and water and sewage systems have not been developed.

Proposed Actions:

- (1) Conduct NEPA (National Environmental Policy Act) analysis to determine how to implement the 1998 plan amendment decision to dismantle and remove the house. Develop alternatives to mitigate the effects to bats.
- (2) Write an interpretive prospectus to define and guide development of interpretive messages and media that will be incorporated at the site.
- (3) No reservation system is needed unless tours are conducted. Public access can be provided at the small parking area on the east-side.
- (4) Current visitor outcomes and expected use of the garden indicate that no drinking water or sewage system should be developed at this time.

	<p>(5) Design and install a water system for maintaining the garden plants.</p> <p>(6) Provide portable restrooms on site from March through October. Consider potential for flooding when developing any other facilities/amenities.</p>
<p><b>Action 3.3:</b> Construct a host site and recruit hosts to provide security.</p>	
<p><u>Current Status:</u></p> <p>(1) A host site has not been built on Spruce Reach Island.</p>	<p><u>Proposed Actions:</u></p> <p>(1) Until public use indicates that a host site is needed, the Dean Creek volunteer host (located at the east end ranch house) can provide security.</p>

**Action 3.4:** Allow a private river transportation company to anchor its dock at Spruce Reach Island to ferry visitors between the island and Reedsport.

Current Status:

(1) There are no companies or organizations providing this service to Spruce Reach Island. (Oregon Ridge and River Excursions of Glide, Oregon, received a commercial use special recreation permit (SRP) in July 2001. The permit authorized commercial canoe trips with stops on Spruce Reach Island with no more than 20 visitors at one time. No visitation was reported for this permit in calendar year 2001. The permit expired in November 2001 and was not reissued.)

Proposed Actions:

(1) A special recreation permit (SRP) could be issued for a business or organization to provide this service if a proposal is determined to be viable and compatible with overall site management goals and visitor outcomes. Future planning consideration could also be given to providing a small boat access (e.g., small dock, tie-up or ramp) at the island for public use if demand warrants and compatible with other site management needs (e.g., site security) and objectives.

**Action 3.5:** Form working partnerships with local organizations to help restore and maintain the gardens.

Current Status:

(1) A Memorandum of Understanding was signed in 2009 with the American Rhododendron Society (ARS) for this purpose.  
 (2) The Northwest Youth Corps (NYC) provides labor for blackberry removal, tree limbing and mulching.  
 (3) Individual volunteers with the BLM help with garden maintenance.

Proposed Actions:

(1) Continue to work closely and foster a strong partnership with the American Rhododendron Society (ARS). Mutually explore the potential for ARS to take on a site management role.  
 (2) Continue to work with the Northwest Youth Corps.  
 (3) Work on making other community connections that would benefit the garden such as with local governments, soil and water conservation groups, schools, civic groups and the Umpqua Discovery Center. Their contributions could include physical work on the

	<p>garden, marketing the garden, providing tours, environmental education and interpretation.</p> <p>(4) Explore forming an interpretive association or ‘friends’ group to aid with care of the garden, environmental education, interpretation and donation collections if a proposal is determined to be compatible with other management goals and visitor outcomes.</p> <p>(5) Issue special recreation permits or contracts that provide fair value and generate sufficient resources to sustain services and maintenance/operations of the garden over the long-term.</p> <p>(6) The BLM does not currently plan to charge use fees at the site. If this should change due to federal or bureau-wide policy decisions, budget shortfalls or any other reason in the future, the decision to implement a fee would be made in accordance with the public process set out in the Federal Lands Recreation Enhancement Act (FRLEA).</p>
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<p><b>Action 4.1:</b> Allow natural processes to continue working without human intervention on the Sitka spruce stands and wetlands.</p>	
<p><u>Current Status:</u></p> <p>(1) No human intervention has occurred within the spruce stands.</p> <p>(2) The Confederated Tribes of the Coos Lower Umpqua and Siuslaw Indians have been granted access and permission to gather bulrushes/tules in a portion of the wetlands adjacent to the east-side parking area.</p>	<p><u>Proposed Actions:</u></p> <p>(1) Continue to permit members of the Confederated Tribes for the Coos, Lower Umpqua and Siuslaw Indians to gather tules in cooperation with district archeologist.</p>

<b>Action 4.2:</b> Build a trail for guided interpretive walks within the spruce stand.	
<u>Current Status:</u>  (1) No formal trails have been designed or developed.	<u>Proposed Actions:</u>  (1) None.



**Figure 7. Public use zone with current and proposed facilities**

## **Implementation Phases for Proposed Facilities and Development Actions**

Recreation developments at the O.H. Hinsdale Garden will be focused primarily on meeting the minimal amenity needs of visitors to this day use area while restoring and maintaining the garden and protecting natural resources. Facilities will primarily be used to support garden maintenance, provide for visitor comfort and sanitation, and to provide information and interpretation to protect the site and enhance the visitor experience.

Implementation will be done in phases, contingent on funding, staffing availability and completion of environmental analysis. The BLM will be required to conduct National Environmental Protection Act (NEPA) analysis to assess the effects of the decision in the 1998 plan amendment to dismantle and remove the Spruce Reach Island house in light of information about the fringed myotis bat. Future environmental analysis may also be needed for projects such as garden trails and a garden watering system as well as a volunteer host site on the island and a boat dock and/or ramp. The time period for Phase I is 2010 – 2011 and includes opening the garden to public visitation in a seasonal and semi-supervised setting. Public visits to the garden would be accommodated during this period and would need to provide for a minimal level of development to support the safety and comfort of site visitors as well as agency staff, volunteers and partners assisting with maintenance and restoration efforts. Facilities during this interim phase may be temporary in nature.

Phase II implementation could begin in 2011-2013 onward as further design and NEPA analysis is completed and additional project funding is obtained. Facilities, if needed, would be more permanent, more durable and site appropriate.

Phase II would provide for the long-term preservation of the garden and site management for public appreciation and enjoyment. All developments would be designed to harmonize and be subordinate to the overall garden and riverfront setting of Spruce Reach Island. Facilities would be constructed so as to withstand periodic flooding in accordance with contemporary sustainable design standards.

A design guide for potential garden improvements / developments was completed by a landscape architect through a “Service First” agreement with the Siuslaw National Forest. This document will be used to help guide development within the public use zone and garden.

Planned actions for Phase I and Phase II are listed on the following tables. Use of the Northwest Youth Corps is indicated with “NYC” and “ARS” indicates the American Rhododendron Society.

## Phase I

Purpose	Facility/Project	Planned Actions	Year & Funding Source
Visitor experience & cohesive design of facilities	Conceptual Landscape Design	<ul style="list-style-type: none"> <li>• Use the Spruce Reach Island Design Guide to create a physical design with related aesthetic considerations for site planning, facility improvements and maintenance.</li> <li>• Identify layout and surface material for garden trails.</li> </ul>	Yr 2010 – 2011 BLM funding
Facilitate Access & Maintenance	Culvert and Gate	<ul style="list-style-type: none"> <li>• Complete wetlands mitigation work adjacent to culvert.</li> </ul>	Yr 2011 BLM funding
	Administrative Road/Driveway	<ul style="list-style-type: none"> <li>• Remove moss and debris from administrative access road (old driveway) to main garden. Patch and seal asphalt surfaces.</li> </ul>	Yr 2010 - 2011 BLM funding NYC work
	Parking Area & Access Road	<ul style="list-style-type: none"> <li>• Complete design of east-end access road, parking area and trail access improvements.</li> <li>• Begin implementation which may include gravel access road and east-side parking area, install temporary vehicle parking barriers/bumpers along north edge of parking area, identify and sign a disabled parking space and ensure surface is firm and meets slope requirements.</li> </ul>	Yr 2010- 2011 BLM funding NYC work
	Trails	<ul style="list-style-type: none"> <li>• Gravel access path from the parking area to the east garden along river bank.</li> <li>• Coordinate with ODOT on repair of access route along Highway 38 from parking area.</li> <li>• Accommodate access needs for people with disabilities to both the east and west gardens. Until a footbridge is constructed, accommodate vehicle access to west/main garden for disabled parking.</li> </ul>	Yr 2011 BLM funding NYC work
	Foot Bridge	<ul style="list-style-type: none"> <li>• Complete design for a footbridge connecting the east and west/main gardens.</li> </ul>	Yr 2011 BLM funding
Visitor Comfort, Safety & Sanitation	Temporary Portable Restrooms	<ul style="list-style-type: none"> <li>• Rent two portable restrooms with service, one for the east-side and one for the west end. The restrooms will be made available during the periods of highest visitor use, and be removed during the winter when risk of flooding is highest.</li> </ul>	Yr 2010 - 2011+ BLM funding Cost = \$1,600/year
	Temporary Garbage Cans	<ul style="list-style-type: none"> <li>• Provide animal-proof garbage cans by the restrooms with regular trash pickup and disposal.</li> </ul>	Yr 2010+

## Phase I

Purpose	Facility/Project	Planned Actions	Year & Funding Source
Wildlife Needs & Visitor Safety	Planning/NEPA Analysis for Implementation of Spruce Reach House Removal	<ul style="list-style-type: none"> <li>• Conduct environmental analysis and any associated project design.</li> <li>• Consider the need for maintaining barn.</li> <li>• Begin implementation of the selected house removal alternative, associated mitigation and monitoring.</li> </ul>	Yr 2011 BLM funding
Information & Interpretation	Temporary Transportation-related Signs	<ul style="list-style-type: none"> <li>• Create a sign plan for site.</li> <li>• Install parking area signs – maximum vehicle length restrictions, garden entrance and parking information, disabled parking space identification, speed limits, and narrow road advisory.</li> </ul>	Yr 2011 BLM funding
	Temporary Site Use Signs	<ul style="list-style-type: none"> <li>• Install signs: day use only, no overnight parking, fire restrictions, site map, access information and minimum impact use recommendations such as packing out trash.</li> </ul>	Yr 2011 BLM funding
Garden Maintenance	Garden Operations	<ul style="list-style-type: none"> <li>• Continue historical research on garden, plant identification and work with American Rhododendron Society (ARS).</li> <li>• Garden maintenance: mulching, fertilizing, weeding, blackberry removal, pruning, etc.</li> </ul>	Yr 2011+ ARS, NYC work Volunteer work
	Temporary Water System for Garden	<ul style="list-style-type: none"> <li>• Install method for watering garden plants during the summer and fall.</li> </ul>	Yr 2011 BLM funding
Temporary Visitor Access Method for Safety	Garden Tours	<ul style="list-style-type: none"> <li>• Implement use of organized tours to the garden during the bloom period.</li> <li>• Evaluate effectiveness, need, and opportunity to continue in the long term using partners.</li> </ul>	Yr 2011

**Phase II**

Purpose	Facility	Actions Needed	Year & Funding Source
Cohesive design of facilities & enhanced visitor experience	Site Design Plan	<ul style="list-style-type: none"> <li>Begin implementing the site design plan, such as permanently locating amenities (trails, signs and interpretation, etc.)</li> </ul>	Yr 2011+ BLM funding
Facilitate Access & Maintenance	Parking Area & Access Road	<ul style="list-style-type: none"> <li>Complete design and installation of permanent barriers/bumpers, signs, disabled parking space, and kiosk/information board utilizing suggestions outlined in the Spruce Reach Island Design Guide.</li> </ul>	Yr 2011 – 2012 BLM funding
	Trails	<ul style="list-style-type: none"> <li>Construct trails with sustainable materials.</li> <li>Accommodate access needs for people with disabilities to the highest degree possible without adversely affecting the site setting.</li> </ul>	Yr 2011 - 2012 BLM funding
	Foot Bridge	<ul style="list-style-type: none"> <li>Obtain and install a foot bridge to connect the east and west/main gardens.</li> </ul>	Yr 2011- 2012 BLM funding Est. cost = \$50,000
	Barn	<ul style="list-style-type: none"> <li>Maintain or dismantle the barn depending upon the outcome of house removal NEPA analysis.</li> </ul>	Yr 2011-2012 BLM funding
	Host Site	<ul style="list-style-type: none"> <li>If determined that conditions warrant a host site, either (1) install a host site at the garden with electric, water and sewage hookups, or (2) install a second host station at the Dean Creek east end ranch house.</li> </ul>	Yr 2011-2013 BLM funding Est. cost = \$10,000
	River Access	<ul style="list-style-type: none"> <li>Evaluate the need for and the manageability of river access to the garden. If warranted, provide for a minimal mooring site and stairs up the riverbank. Conduct NEPA analysis as required.</li> </ul>	Yr 2012- 2013 BLM funding
	Routine Maintenance	<ul style="list-style-type: none"> <li>Continued upkeep on administrative access road, culvert, gates, etc. as needed.</li> </ul>	Yr 2011+ BLM funding
Visitor Comfort, Safety & Sanitation	Restrooms	<ul style="list-style-type: none"> <li>Evaluate the need for and feasibility of constructing permanent restrooms and install a permanent vault restroom at a location determined in the landscape architect’s plan after applicable NEPA analysis. If not, continue to provide portable restrooms (approximately \$1,600 for 7 months).</li> </ul>	Yr 2012-2013 BLM funding Est. cost = \$45,000

## Phase II

Purpose	Facility	Actions Needed	Year & Funding Source
Visitor Comfort, Safety & Sanitation	Garbage Cans	<ul style="list-style-type: none"> <li>Provide garbage cans at locations determined in the site design.</li> </ul>	Yr 2012
	Picnic Tables	<ul style="list-style-type: none"> <li>Install permanent/temporary picnic tables at a location determined in the site design plan.</li> </ul>	Yr 2012 BLM funding
	Benches	<ul style="list-style-type: none"> <li>Install permanent park benches at a location determined in the site design plan.</li> </ul>	Yr 2012 BLM funding
Wildlife needs & Visitor Safety	Spruce Reach House	<ul style="list-style-type: none"> <li>Complete mitigation measures identified via the environmental analysis on house removal.</li> </ul>	Yr 2011-2013 BLM funding
Information & Interpretation	Transportation Related Signs	<ul style="list-style-type: none"> <li>Per the site design and sign plans, install permanent highway and parking area signs – maximum vehicle length requirements, recreation site destination sign, garden entrance and parking information, disabled parking space identification, speed limits, and a narrow road advisory.</li> </ul>	Yr 2012 - 2013 BLM funding and ODOT Support
	Site Use Signs	<ul style="list-style-type: none"> <li>Per the site design plan, install permanent signs for day use only, no overnight parking, fire restrictions and minimum use recommendations.</li> </ul>	Yr 2011- 2012 BLM funding
	Information, Interpretive & Environmental Education	<ul style="list-style-type: none"> <li>Write an interpretive prospectus that supports the design plan. Include themes, orientation map, educational opportunities, and how the site is managed through partnerships.</li> <li>Per the site design plan and interpretive prospectus install an interpretive kiosk and an information board at the parking area for information, regulations, site designation signs and interpretation. Use a landscape architect to blend in the main fireplace/house footprint with the aesthetics of the garden if possible.</li> <li>Work with schools to develop environmental education program.</li> <li>Identify means for local youth to be involved with garden.</li> </ul>	Yr 2011 - 2012 BLM funding
	Tours & Special Events	<ul style="list-style-type: none"> <li>Continue to provide organized garden tours if Phase I evaluation of the effectiveness, interest/need and opportunity warrants.</li> <li>Address any special events and/or recreation permits as they arise.</li> </ul>	Yr 2011+ 5830 funding

**Phase II**

<b>Purpose</b>	<b>Facility</b>	<b>Actions Needed</b>	<b>Year &amp; Funding Source</b>
Garden Maintenance	Garden Operations	<ul style="list-style-type: none"> <li>• Continue to work closely with the ARS to maintain, restore and operate the garden.</li> <li>• Establish a garden operations plan for the long-term based on information provided in this plan for garden upkeep. Plan to include tools and equipment, staffing needs, volunteer management, etc.</li> <li>• Continue with garden upkeep: mulching, fertilizing, etc.</li> </ul>	<p>Yr 2011+</p> <p>Yr 2011-2013</p> <p>Yr 2011+</p>
	Partners	<ul style="list-style-type: none"> <li>• Develop other partnerships for garden maintenance and education where possible.</li> <li>• Recruit volunteers.</li> </ul>	Yr 2011+
	Water System for Garden	<ul style="list-style-type: none"> <li>• Develop a permanent method for watering garden during summer and fall.</li> <li>• Research a rain water collection system for filling on-site water tank.</li> <li>• Complete environmental analysis as needed.</li> </ul>	Yr 2011-2012
Weed Management	Weeds	<ul style="list-style-type: none"> <li>• Add Spruce Reach Island to the Umpqua Field Office weed management abatement program.</li> </ul>	Yr 2011

## Partnerships

Throughout the planning process, the importance of maintaining current and creating new partnerships for management of the O.H. Hinsdale Garden was recognized. Goals for partnerships are:

- Develop a sustainable program to enable the BLM to maintain and operate the O.H. Hinsdale Garden for the benefit of the public.
- Enhance the technical expertise in horticulture, English woodland gardens, rhododendron garden preservation, and share that knowledge with community members.
- Leverage the BLM’s budget commitment to the operations and maintenance of the garden through the use of partners, volunteers and non-base funds.
- As a result of all of the above, enhance BLM’s ability to achieve site management objectives and timelines within the labor capacity of its botany, cultural, maintenance, wildlife, and recreation programs.

The following table includes suggestions for partnerships. Key areas for partners are:

- 1) Horticulture – English woodland garden management
- 2) Garden operations management and upkeep
- 3) Visitor services, interpretation and environmental education
- 4) General garden and recreation site maintenance

Function	Purpose	Active & Potential Partners	Method	Funding Source
Shrub Care & Preservation	To provide technical expertise in growing rhododendrons and skilled labor (ex. pruning) for maintaining these plants.  Coordination and supervision of the American Rhododendron Society (ARS) volunteers.	ARS  Oregon State University (OSU) Master Gardeners  Local garden clubs  Individuals and organized groups	Memorandum of Understanding (MOU) and Group Volunteer Agreements with the Oregon District of ARS (Chapters include Portland, Tualatin Valley, Willamette, Eugene, Siuslaw and Southwestern Oregon).  Individual volunteer agreements	Volunteer relationship, minimal funding provided (5830, 6332, 6251 and Challenge Cost Share (CCS)/Budget Planning System (BPS)
Garden Management, Skilled	Technical expertise and skilled labor for the overall garden	Umpqua Soil & Water Conservation District Horticulturist	Assistance Agreement in order to transfer funding for use in part	5830 and CCS/BPS funding

Function	Purpose	Active & Potential Partners	Method	Funding Source
Maintenance & Volunteer Supervision	management.  Oversee volunteer projects (March-June).	Internship with Southwestern Oregon Community College, OSU and/or AmeriCorps	time salary or stipend.	
Garden & Recreation Site Maintenance	Provide physical labor needed to maintain and operate the garden.	ARS  Northwest Youth Corps  Oregon Conservation Corps  Reedsport High School charter program	Assistance Agreements  Volunteer agreements	5830, 6332 EOY funds and CCS/BPS funds
Visitor Services & Interpretation	Coordinate and supervise tours.  Provide environmental education programs. Assist with marketing garden and outreach.  Collect donations and/or fees if/when implemented.  Identify means for local youth participation.	Volunteer docents from the ARS, garden clubs, and interested local volunteers for tour guides.  Umpqua Discovery Center to take reservations and conduct tours.  Environmental education programs provided by Umpqua Discovery Center, tribes, local schools, and/or contract.  Friends group	Group and Individual volunteer agreements.  MOU	Minimal funding needed (5830, 6332 and CCS/BPS funds).  Explore an expanded amenity fee for tours of the garden as set out in Phase "II".

This is a non-inclusive list of other potential partners:

- Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians
- Umpqua Scenic Byway Committee
- Reedsport/Winchester Bay Chamber of Commerce
- Reedsport City Council
- Civic organizations
- Reedsport School District
- Interested groups and organizations
- Local users
- Historical Society
- Oregon Department of Transportation
- Umpqua Community College
- Elkton Charter School
- Douglas County agencies



**Figure 8. Living room fire place that may be included in interpretation of site**

## **Chapter 3 Recreation Management**

Outcome-focused management is used to produce recreational opportunities and to provide opportunities for the public to derive positive outcomes from recreation. This requires shifting the focus of recreation management beyond facility development and traditional planning.

Opportunities for the attainment of desired experiences and benefits are produced through a combination of recreation setting character conditions and management actions. Setting character is directly influenced and determined by management, marketing and administrative actions. Those actions also affect and determine the kinds of recreation opportunities being produced.

### **Primary Market Strategy**

The O.H. Hinsdale Garden primarily serves a community market based in the Lower Umpqua River Valley. The community of Reedsport is the gateway community for the Dean Creek Elk Viewing Area and there has been local interest in the garden since the BLM acquired Spruce Reach Island in 1994. While the site will potentially function as a wayside along the Umpqua River State Scenic Byway, a major corridor from Interstate 5 to the Oregon Coast, the context of the site is primarily within a regional community setting rather than as a primary destination.

Amenities for the O.H. Hinsdale Garden will be provided to the public from late March/early April through October, with the highest visitation expected during the flower blooming season.

While estimating visitor use is somewhat speculative at this time, an estimate was generated using projections based on factors such as the parking lot capacity; the length of the peak use season; an average of 2 visitors/vehicle; and estimates of parking lot occupancy during peak usage times and days of the week. The projection is for 8,040 visits during the peak bloom period between April and June; 4,400 visits during the summer tourist season in July and August; and 1,720 visits during the months of March, September and October. This would result in an estimated 14,160 visitors per year. These numbers will be revised when the site is actually open in 2011 using visitor use counting devices to obtain a more accurate estimate.

Most of the visits are predicted to occur on the weekends. Visitor use would be expected to decline during the non-bloom months of July – October. Visitation may change if the garden becomes a fee site in the future.

**Niche:** Spruce Reach Island offers visitors an opportunity to view a regionally significant English woodland garden set along the banks of the Umpqua River.

**Considerations:** Restroom and drinking fountain facilities at the main Dean Creek Elk Viewing Area may experience more use due to garden visitors, especially during the plant blooming season. Crowding may occur from using a van shuttle system.

People exploring the Umpqua River Scenic Byway will have an additional place to stop and enjoy being next to the Umpqua River and learn about local history.

The local economy may benefit from special use permits and/or contracts for work done at the garden.

Enjoyment of the O. H. Hinsdale Garden would compliment other recreation opportunities in the area. Its close proximity to Reedsport makes it ideal for local use for pleasure and/or education.

There is no plan to construct a dock on Spruce Reach Island as boat landings may increase noise on the river and disturb feelings of quiet and solitude.

Flooding of the island could harm the garden and amenities.

The house is considered an attractive nuisance that represents a public safety and liability issue for the BLM.

## **Recreation Experience Zones**

For management purposes, Spruce Reach Island has been divided into two recreation experience zones, each emphasizing a distinctly different primary purpose: the public use zone and the resource protection zone. The five-acre public use zone (comparable to an urban setting in the Recreation Opportunity Spectrum) includes the O.H. Hinsdale Garden and where developments are proposed. The 62 acre resource protection zone (comparable to a backcountry setting in the Recreation Opportunity Spectrum) includes the rest of the island.

This project plan only addresses development and operations of the public use zone (see Figure 7 on page 17).

### **Public Use Zone – O.H. Hinsdale Garden**

This zone includes the area developed by the Hinsdale family, with the primary focus on the garden, as well as the east-side parking area. This zone would be appropriate for facilities such as a small parking lot, foot bridge across the slough to connect the garden, access roads, foot trails and interpretive enhancements, all designed for accessibility. This zone requires a higher level of management and regular facility, trail, and sign maintenance to meet the experience goals of garden visitors than would be found in a resource protection zone.

The naturalness of the setting and facilities in this zone can be described as natural-appearing with some subtle modifications. Facilities should be modest, rustic, and very basic, blending in with the landscape and barrier-free accessible.

The desired future condition of this zone is to restore and maintain the garden as a lower Umpqua River version of an English Woodland landscape that is compatible with the rural landscape. As opposed to the architectural forms used in a Formal English Garden, one objective of an English Woodland Garden is to make it appear as if the landscape was natural and not modified by humans. Natural and cultural resource impacts should be kept to a minimum.

The tables in Appendix C provide direction to recreation managers on achieving these goals through outcomes, setting prescriptions, management and marketing actions, administrative and monitoring actions.

## **Chapter 4 Environmental Analysis**

This recreation project plan is intended to be implemented in several phases over multiple years depending upon public demand and available funding. Many of the actions described in this recreation project plan are ongoing maintenance items that fit the definition of a categorical exclusion of routine and continuing government business. This chapter describes these routine actions and contains the relevant environmental analysis.

Several of the proposed actions and construction activities in this plan will require additional environmental analysis. Analysis for these items would be conducted prior to their

implementation if the need for the action becomes clear and funding becomes available. As previously stated, they are:

- (1) Removal of the Spruce Reach Island house;
- (2) additional garden trail delineation or construction as appropriate;
- (3) A permanent watering system for the garden;
- (4) A boat dock and/or ramp;
- (5) A volunteer host site.

Each subsequent environmental analysis would contain updated baseline information based on the previous management activities undertaken by BLM on this site, including human impacts.

Other actions that have already been addressed and are in compliance with NEPA include:

- (1) Culvert installation in 2010 - Spruce Reach Island Culvert Environmental Assessment (EA No. OR125-08-05) Coos Bay District BLM, December 2008.
- (2) Noxious weed control/treatment would continue to be conducted under the guidelines of the District Noxious Weed EA (EA OR120-97-11).
- (3) Development of the east-side parking area and the footbridge to connect the two garden sections (EA OR125-96-14).

## **Categorical Exclusion Review - DOI-BLM-OR-C030-2010-0003-CX**

### **A. Proposed Activities**

Annual, seasonal, monthly, or weekly, maintenance is needed to upkeep the garden and provide for public safety. These routine activities are:

- 1) Garden maintenance which includes (but not limited to): pruning, mowing, replanting, watering and application of fertilizer.
- 2) Facility maintenance which includes (but not limited to): control of vegetation along roadsides by mechanical or manual (hand tools) methods, maintenance of road surfaces (i.e. grading, paving, patching, surfacing, etc.), maintenance of existing trails (i.e. grading, surfacing), and a temporary watering system.
- 3) Hazard tree and dead branch removal.
- 4) Maintenance of existing signs and installation of new site-use and transportation related signs.
- 5) Sanitation which includes: rental of two portable restrooms and cleaning contract; garbage cans with regular trash pickup and disposal.
- 6) Monitoring and assessment of listed and potentially eligible special status species, including Henderson's checkermallow (*Sidalcea hendersonii*).

Road repair, use of heavy equipment, pile driving, chainsaw use, burning or blasting will be done in accordance with distances and timing restrictions stated in the biological assessment for marbled murrelets and northern spotted owls (see Appendix D).

## B. Land Use Plan Conformance Review

This project is tiered to and in conformance with the *Coos Bay District Resource Management Plan/Final Environmental Impact Statement* (USDI BLM 1994) and its *Record of Decision* (ROD/RMP), as supplemented and amended. The Coos Bay ROD/RMP is supported by and consistent with the *Final Supplemental Environmental Impact Statement (FSEIS) on Management of Habitat for Late Successional and Old Growth Forest Related Species Within the Range of the Northern Spotted Owl (Northwest Forest Plan [NFP])* (USDA/USDI 1994) and its *Record of Decision* (USDA/USDI 1994a).

The proposed action is in conformance with the land use plan (LUP), even though it is not specifically provided for, because it is clearly consistent with the following LUP decision(s) (objectives, terms, and conditions):

- Conserve and protect designated cultural resources for future generations (page 40).
- Manage scenic, natural, and cultural resources to enhance visitor recreation experience expectations and to satisfy public land users (page 46).
- Develop and maintain a transportation system that serves the needs of users in an environmentally sound manner (page 69).

## C. Affected Environment

This section describes the relevant existing environmental resources that may be affected by the proposed activities.

### Special Status Species - Wildlife

#### Northern Spotted Owls and Marbled Murrelets

The public use zone, as previously described in this plan, does not contain habitat suitable for either the northern spotted owl (*Strix occidentalis*) or marbled murrelet (*Brachyramphus marmoratus*). This area contains the garden and existing structures and is the primary area in which activities listed in this plan would occur. The remaining western portion of the island contains suitable owl habitat and occupied murrelet habitat. A 100 yard disruption zone intended to minimize effects to both species extends into the public use zone and includes the barn area (see Appendix D for specifications).

#### Bats

The Spruce Reach house provides habitat and is a known maternity and winter roost for five bat species, including a BLM Special Status Species, the fringed myotis (*Myotis thysanodes*).

A bat survey was done in June 2009 and three or four species of bats were captured, including big brown bats (*Eptesicus fuscus*) and the fringed myotis (*Myotis thysanodes*). Positive species identification will follow DNA tests on two indistinguishable species, little brown bat (*Myotis lucifigus*) and Yuma myotis (*Myotis yumanensis*). The California myotis (*Californicus myotis*) and long eared myotis (*Myotis evotis*) have been documented in previous surveys. Bats could be

heard inside the shake siding on the Spruce Reach house at several locations; no formal survey was done to find all locations where bats were roosting to avoid disturbance to the roosting bats.

Based on this survey and previous survey data, the Spruce Reach house is a verified year-round roost site for at least four bat species on the Coos Bay District. Visitors are not being allowed to enter or disturb the house in any way that might result in disturbance to these roosting bats.

### Fish

The slough that splits the garden into two portions provides fish habitat for:

- (1) Bureau Special Status Species Coho salmon (*Oncorhynchus kisutch*); also listed as threatened under the Endangered Species Act;
- (2) Bureau Special Status Species Chinook salmon (*O. tshawytscha*);
- (3) Bureau Special Status Species steelhead (*O. mykiss*);
- (4) Cutthroat trout (*O. clarkia*);
- (5) Pacific Lamprey (*Lampetra tridentate*);
- (6) Green Sturgeon (*Acipenser medirostris*), listed as threatened under the Endangered Species Act;
- (7) A variety of other estuarine fish species.

### **Special Status Species - Plants**

Inventory of the flora of the Spruce Reach Island is incomplete and only surveys for Special Status Species are complete for the garden area. Spruce Reach Island and its surrounding areas have a high probability of providing habitat for several Special Status Species. There are three known Special Status Species plants located in both the forested portion of the island and the wetland area just east of the island:

- (1) Species of Concern Henderson Checkermallow (*Sidalcea hendersonii*) was reintroduced to the site on the eastern portion of the garden along the slough in two places;
- (2) Bureau Sensitive lichen *Heterodermia leucomela*;
- (3) Bureau Sensitive liverwort *Metzgeria violacea*.

See Appendix E for a list of Special Status plant species suspected in the Spruce Reach area.

### **Vegetation**

The vegetation is comprised mostly of older spruce trees (*Picea sitchensis*) and some alder (*Alnus rubra*), while shrubs are mainly willow (*Salix ssp.*), twinberry (*Lonicera involucrata*), blackberry (*Rubus armeniacus*) and evergreen huckleberry (*Vaccinium ovatum*). The marsh vegetation surrounding the island consists mainly of bulrushes (*Juncus ssp.*), carex species (*Carex ssp.*), cattail (*Typha latifolia*), yellow flag iris (*Iris pseudacorus*), Pacific silverweed (*Argentina egedii*) and Canary grass (*Phalaris arundinacea*).

## **Invasive Species**

There are several known noxious weeds on Spruce Reach Island: Armenian blackberry (formerly known as Himalayan blackberry) occurs throughout the garden and along the perimeter, purple loosestrife has invaded mud flat areas surrounding garden, and yellow flag iris occurs in one main patch on the east edge of the main garden along the slough. Other noxious weeds include Scotch broom, Canada thistle, knotweed, bull thistle, and tansy ragwort. Noxious weeds found on the site would be treated in accordance with the current District weed program.

Invasive plants found in the garden include: nipplewort, sow thistle, foxglove, wisteria, holly, and Ajuga.

The New Zealand mud snail (*Potamopyrgus antipodarum*), an aquatic invasive species of concern, is present in the slough. Environmental officials have attempted to slow the spread of the snail by advising the public to treat any gear or equipment which may contain the mud snails.

## **Cultural**

As previously mentioned, the O.H. Hinsdale Garden is potentially eligible for inclusion into the National Register of Historic Places; however, the house does not meet the criteria.

Field surveys have determined that there are no known archeological sites on the island.

## **Barn**

The barn, located on the west side of the garden by the river, is currently not in use. A 100-yard disruption zone intended to minimize effects to spotted owls and marbled murrelets includes the barn area.

## **Floodplains**

According to the Federal Emergency Management Agency Flood Insurance Rate Map No. 410059 0235 A, the island is within the 100-year flood plain of the Umpqua River.

## **Wild and Scenic Rivers**

The Umpqua River, from its mouth to Kellogg OR, has been determined to be eligible for inclusion in the National Wild and Scenic River system as a recreational river segment. Spruce Reach Island is located within the 1/4 mile wide river corridor, in which interim management is directed to maintain the river's outstanding remarkable values (ORV). The ORVs for this section of river are: fish, ecological, scenic, recreational, geological, prehistoric, cultural and historic.

## Visual Resource Management (VRM)

The segment of public domain lands that encompass Spruce Reach Island are managed as Visual Resource Management (VRM) Class III. The site is also situated along the Umpqua River State Scenic Byway and therefore has a high degree of visual resource sensitivity.

### D. Compliance with NEPA

The Proposed Activities listed in section A above are categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with several Departmental and Bureau categorical exclusions.

516 DM 2, Appendix 1, §1.7: Routine and continuing government business, including such things as supervision, administration, operations, maintenance and replacement activities having limited context and intensity; e.g. limited size and magnitude or short-term effects.

516 DM 11.9 A (5): Routine augmentations, such as fish stocking, providing no new species are introduced.

516 DM 11.9 G (2): Installation of routine signs, markers, water tank, culverts, ditches, water bars, gates, or cattle guards on/or adjacent to roads and trails identified in any land use or transportation plan, or eligible for incorporation in such plan.

516 DM 11.9 G (4): Placement of recreational, special designation, or information signs, visitor registers, kiosks, and portable sanitation devices.

These categorical exclusions are appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed and none of the extraordinary circumstances described in 516 DM 2 Appendix 2 apply.

A summary of the extraordinary circumstances is listed below. The action must have a significant or a disproportional adverse effect on the listed categories to warrant further analysis and environmental review.

The proposed categorical exclusion action would not:

2.1 Have significant impacts on public health or safety.

Rationale: All proposed activities would follow established rules concerning health and safety.

2.2 Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.

Rationale: The Spruce Reach Island area does contain wetlands, is within a 100-year flood zone, and is adjacent to an eligible Wild and Scenic River. Maintenance of existing facilities and improvements would not result in the loss or degradation of wetlands, and installation of sign and gate posts would have a negligible effect on the function of the flood plain (i.e. improvements would only occupy a few cubic feet of the island and they would not produce a measurable change in flood magnitude or duration along the Umpqua). Fertilizer would be applied according to label directions to protect surface and ground water and no new impervious surfaces would be constructed. These types of routine activities would not remove habitat at the species level; as such, the proposed action would not have significant impacts on migratory birds.

2.3 Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102 (2) (E)]

Rationale: Past experience from these types of routine activities has shown no environmental effects from the proposed action which are considered to be highly controversial or are there unresolved conflicts concerning alternative uses.

2.4 Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.

Rationale: Past experience from these types of routine activities has shown no highly uncertain, potentially significant, unique or unknown risks.

2.5 Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.

Rationale: The BLM has conducted similar actions throughout the District for years. There is no evidence that these types of routine activities have potentially significant environmental effects. These activities would not establish a precedent or decision for future actions with potentially significant environmental effects.

2.6 Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.

Rationale: Considering the context and intensity of these types of routine activities, the proposed action would not have cumulatively significant environmental effects. Site specific NEPA analysis would be required for future construction actions; cumulative effects from those actions would be assessed with each subsequent analysis.

2.7 Have significant impacts on properties listed, or potentially eligible for listing, on the National register of Historic Places as determined by either the bureau or office.

Rationale: The O.H. Hinsdale Garden is potentially eligible for inclusion into the National Register of Historic Places. These types of routine activities are intended to maintain the site.

2.8 Have significant impacts on species listed, or proposed to be listed, on the List of Threatened or Endangered Species, or have significant impacts on designated Critical Habitat for these species.

Rationale: The public use zone in which these routine activities would occur does not contain suitable or critical habitat for endangered species. However, occupied marbled murrelet habitat and suitable spotted owl habitat are adjacent to this zone. Some of these routine activities may utilize chain saws, which may cause disturbance to nesting murrelets. The Coos Bay District's Programmatic Biological Opinion (FWS 13420-2008-F-0118) contains recommendations to minimize disturbance during the breeding seasons. The garden area, as shown on Figure 10, is located more than 100 yards from occupied habitat and most activities planned for the garden area would not require restrictions. The area surrounding the barn, as indicated in Figure 10, is within 100 yards of occupied marbled murrelet habitat, and potentially disruptive activities would be restricted during the critical breeding season within the disruption distance. Human presence would be partially visually-shielded by trees or vegetation on the edge of the occupied habitat. Low disturbance activities would not require seasonal or daily timing restrictions. There is currently no plan to enter occupied habitat or remove any habitat features. See Appendix D for restrictions on activities and timing.

2.9 Violate a Federal, State, Local, or tribal law or requirement imposed for the protection of the environment.

Rationale: These types of routine activities conform to the direction given for the management of public lands in the Record of Decision/Resource Management Plan (ROD/RMP), which complies with all applicable Federal, State, local and tribal laws.

2.10 Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).

Rationale: These types of routine activities would not affect low income or minority populations.

2.11 Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).

Rationale: There are no known sacred Indian sites within the island area. Collection of bulrushes/tules by the Confederated Tribes could still occur with the oversight of the district archeologist.

2.12 Contribute to the introduction, continued existence, or spread of noxious weeds or nonnative invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).

Rationale: These types of routine activities would not result in measurable changes to the current baseline of the risk, or actual introduction, continued existence, or spread of noxious weeds or non-native invasive species in or from the project area. Noxious or invasive weeds found in the area would be removed in accordance with current practices under the District Noxious Weed EA (EA OR120-97-11).

# Appendices

## Appendix A: Public Access

The planning team brainstormed a variety of ways for the public to access the site. After looking at what the Oregon Department of Transportation (ODOT) recommended and other site constraints, the team decided on (1) a parking lot on the east-side with a foot bridge to the main part of the garden, (2) additional parking in the house footprint if necessary in the future, and (3) boat access, to be developed if necessary in the future.

Access Idea	Description	Need to Include	+	-
E. side parking with one way loop	Enter at current E. side road, park in current area & exit to hwy by other gated road. Use footbridge to access main garden.	<ul style="list-style-type: none"> <li>- footbridge to main garden</li> <li>- wetland mitigation</li> <li>- rip rap of river bank</li> <li>- 2 turn lanes on hwy</li> </ul>	<ul style="list-style-type: none"> <li>- smooth traffic flow</li> <li>- culvert access could be used by emergency vehicles</li> <li>- view of garden not impacted with vehicles</li> <li>- could add additional trail from footbridge to give public scenic view of house and garden</li> <li>- space for 10 - 15 vehicles</li> <li>- use property for intended purposes as stated in mgt. plan</li> <li>- enables public to see both sides of garden</li> </ul>	<ul style="list-style-type: none"> <li>- may need to straighten hwy corner for safety at exit road</li> <li>- may have difficulty getting large vehicles/RVs in unless widen one way road</li> </ul>
E. side parking with two way road	Enter & exit at current E. side road. Use footbridge to access main garden.	<ul style="list-style-type: none"> <li>- footbridge to main garden</li> <li>- wetland mitigation</li> <li>- road widening</li> <li>- 2 turn lanes on hwy</li> </ul>	<ul style="list-style-type: none"> <li>- culvert access could be used by emergency vehicles</li> <li>- view of garden not impacted with vehicles</li> <li>- could add additional trail from footbridge to give public scenic view of house and garden</li> <li>- space for 15 – 20 vehicles</li> <li>- use property for intended purposes as stated in mgt. plan</li> <li>- enables public to see both sides of garden</li> </ul>	<ul style="list-style-type: none"> <li>- may have difficulty getting large vehicles/RVs in unless widen one-way road</li> </ul>

Access Idea	Description	Need to Include	+	-
Clover leaf configuration	Hwy clover leaf with exits to garden	- on and off ramps		- visual impact on scenic byway and conflict with VRM standards
One way loop through garden	Enter garden over culvert, drive along driveway, cross over to e. side with another culvert, and exit down E. side road to hwy.	- 2 <sup>nd</sup> culvert to east-side - wetland mitigation - 2 turn lanes on hwy	- smooth traffic flow - enables public to see both sides of garden - people who are unable to do much walking could see the garden from their car	- NMFS would have difficulty approving another culvert - impact to cultural resource values with large vehicles potentially breaking off plants - regular paving costs and amount of paving; concerns for cleaning after flooding
Pedestrian bridge over hwy	Parking along hwy across from culvert entrance. Pedestrian bridge would connect parking area to main road into garden (over culvert)	- 2 turn lanes on hwy - parking area for 15-20 cars alongside hwy or in enlarged parking area that extends into current pasture area - footbridge for getting across creek if parking area is in pasture - footbridge to access both sides of garden	- view of garden not impacted with vehicles - garden not impacted by people driving in - safe way to cross hwy - emergency vehicles could access using the culvert entrance	- may not be accessible for all (ADA standards) - hwy viewshed concerns, especially during off season - safety issues for vehicle clearance
Cross walk on hwy	Parking along hwy across from culvert entrance. Cross walk would connect parking area to main road into garden (over culvert).  <i>Note: similar situation occurs on coastal hwy at Sea Lion Caves and Cape Perpetua.</i>	- signs on hwy to warn drivers of congested area and pedestrian crossing. Consider flashing lights to warn drivers and possibly lowering speed limit in the Dean Creek corridor. - 2 turn lanes on hwy - parking area for 15-20 cars alongside hwy or in enlarged parking area that extends into current pasture area - footbridge for getting across creek if parking area is in pasture - footbridge access both sides of garden	- view of garden not impacted with vehicles - garden not impacted by people driving in - safe way to cross hwy - emergency vehicles could access using the culvert entrance - smaller foot print on landscape	- overall safety concerns of crossing busy hwy - additional safety concerns for ADA public trying to get across quickly enough - possible traffic delays

<b>Access Idea</b>	<b>Description</b>	<b>Need to Include</b>	<b>+</b>	<b>-</b>
Path from Dean Creek kiosk – elk side	Public parking at Dean Creek kiosk. People would use path along hwy and cross at cross walk to the culvert. Distance approx. ¾ mile to garden.	<ul style="list-style-type: none"> <li>- foot path</li> <li>- guard rail and/or fence for safety</li> <li>- cross walk</li> <li>- footbridge to cross creek</li> <li>- footbridge to E. side</li> <li>- fence between elk and trail</li> <li>- elevate the trail level</li> </ul>	<ul style="list-style-type: none"> <li>- adds active element to the site for walking, jogging</li> <li>- able to watch birds/elk from trail</li> <li>- uses an established parking area w/ restrooms</li> <li>- traffic flow already established</li> <li>- ties the two sites (Dean Creek and SRI) together</li> </ul>	<ul style="list-style-type: none"> <li>- questions about ADA accessible or not</li> <li>- may scare elk having people walking by</li> <li>- next to hwy</li> <li>- safety issues with crossing hwy on foot</li> <li>- car could hit people on path if veered off hwy</li> </ul>
Path from Dean Creek kiosk – island side	Public parking at Dean Creek kiosk. Public would cross hwy by Koepke Slough and use path on island to access garden. Distance approx. ¾ mile to garden.	<ul style="list-style-type: none"> <li>- footbridge on creek?</li> <li>- footbridge on E. end of garden</li> <li>- mitigation needed to raise trail up to avoid flooding</li> <li>- deal with hornet nests</li> <li>- bridge over Koepke Slough</li> </ul>	<ul style="list-style-type: none"> <li>- scenic, enjoyable walk</li> <li>- adds active element to the site for walking, jogging, bird watching</li> <li>- uses an established parking area w/ restrooms</li> <li>- traffic flow already established</li> <li>- ties the two sites (Dean Creek and SRI) together</li> </ul>	<ul style="list-style-type: none"> <li>- trail must be located 100 yd away from marbled murrelet area &amp; no impact</li> <li>- trail may be submerged during bloom or require boardwalk; maintenance work required</li> <li>- may be long distance for ADA accessible</li> </ul>
Parking on W. end of garden	Access garden over culvert. Build a short road to the west of the garden and a parking area.	<ul style="list-style-type: none"> <li>- wetland filling</li> <li>- access by culvert</li> <li>- turn lane</li> <li>- no suitable habitat</li> <li>- tree removed and 100 foot distance from murrelet habitat</li> </ul>	<ul style="list-style-type: none"> <li>- not impinging on garden with vehicles</li> <li>- no walking on hwy and safety concerns</li> <li>- possible heat source for bat house</li> <li>- protects esthetics of garden</li> <li>- bamboo would come out</li> <li>- good location for restroom: visually out of way and convenient for public</li> </ul>	<ul style="list-style-type: none"> <li>- parking lot could be under water when floods</li> <li>- impact on habitat and other special status species</li> <li>- pollution runoff</li> <li>- trash could attract corvids which could impact murrelets</li> </ul>
Organized tours	Issue recreation permit to Umpqua Discovery Ctr or other group to conduct tours using shuttle system established for BLM tours.	<ul style="list-style-type: none"> <li>- footbridge to e. side</li> <li>- MOU/rec permit/ assist agreement</li> <li>- restroom</li> <li>- follow ARS tour guidelines but start in Reedsport</li> </ul>	<ul style="list-style-type: none"> <li>- access during blooming season</li> <li>- no new infrastructure</li> <li>- any fees collected could stay on site</li> <li>- information and interpretation given to public</li> </ul>	<ul style="list-style-type: none"> <li>- liability issues</li> <li>- not as convenient for all public</li> <li>- public may not like fees</li> <li>- couldn't enjoy on your own</li> <li>- can't stop non-tour people from joining tour</li> </ul>

Access Idea	Description	Need to Include	+	-
E. side parking with turn lane – hwy path access	Use the E. side area for parking. Widen the hwy for turn lanes. People would use path along hwy to access garden over culvert	<ul style="list-style-type: none"> <li>- footbridge for people to view E. side of garden</li> <li>- turn lanes</li> <li>- pathway</li> <li>- wetland mitigation</li> <li>- ODOT right of way</li> </ul>	<ul style="list-style-type: none"> <li>- no footbridge</li> <li>- currently the low cost way of access</li> <li>- no flooding on trail</li> <li>- utilitarian</li> <li>- emergency vehicles could access island by culvert</li> <li>- keeps cars out of garden</li> </ul>	<ul style="list-style-type: none"> <li>- not as scenic</li> <li>- pedestrians may be affected by traffic and exposed to risk of injury</li> <li>- disruptive to garden experience</li> <li>- looks like developed facility</li> <li>- ADA access issues</li> <li>- attention called to garden by people seen walking along hwy</li> </ul>
Parking on hwy at culvert	Widen hwy at entrance to culvert for parking. People walk in over culvert.	<ul style="list-style-type: none"> <li>- footbridge</li> <li>- turn lanes</li> <li>- create a 100 yd pullout</li> <li>- caution indicators for hwy (lights, sign, etc.)</li> <li>- wetland mitigation</li> <li>- restraining wall</li> </ul>	<ul style="list-style-type: none"> <li>- not encroaching on garden</li> <li>- easy on/off hwy</li> <li>- no new parking lot created</li> <li>- short walking distance</li> <li>- convenient</li> </ul>	<ul style="list-style-type: none"> <li>- turning off hwy/people walking on hwy safety concerns</li> <li>- bottle neck for traffic: people watching what's going on instead of where driving</li> <li>- constraints on traffic movement</li> </ul>
Over culvert with parking in garden – house gone	Access garden over culvert and park in area where house and garage are currently located. One way loop in and out.	<ul style="list-style-type: none"> <li>- house removal</li> <li>- bat mitigation</li> <li>- footbridge for people to view E. end of garden</li> <li>- turn lanes</li> <li>- 1 way loop</li> <li>- paving road/driveway through garden</li> </ul>	<ul style="list-style-type: none"> <li>- enter garden in manner closer to how intended</li> <li>- get people off of hwy: better safety</li> <li>- close parking to garden is helpful to people with limitations/ADA needs</li> <li>- plan parking around chimney and plants</li> <li>- use same footprint as the house</li> </ul>	<ul style="list-style-type: none"> <li>- cars in garden</li> <li>- cars only: no big RVs; difficult to prevent entering or turning around</li> <li>- missing seeing the house as how it fit in with the garden</li> </ul>
Over culvert with parking in garden – at barn area	Access garden over culvert and park in area where barn is currently located. One way loop in and out.	<ul style="list-style-type: none"> <li>- footbridge for people to view E. end of garden</li> <li>- house and garage still standing.</li> <li>- turn lanes</li> <li>- 1 way loop</li> <li>- paving to driveway/road</li> </ul>	<ul style="list-style-type: none"> <li>- enter garden in manner closer to how intended</li> <li>- get people off of hwy: better safety</li> <li>- park cars out of view of main garden</li> <li>- close parking to garden is helpful to people with limitations/ADA needs</li> </ul>	<ul style="list-style-type: none"> <li>- creation of new road</li> <li>- intrusions into that end of garden</li> <li>- while people are enjoying the garden cars coming through to spoil experience</li> <li>- impact on the plants</li> <li>- impact on visuals</li> <li>- too close to owl and murrelet habitat &amp; may cause disturbance</li> <li>- barn may possibly be unavailable for use by volunteers to store tools &amp; less wildlife disturbance</li> </ul>

<b>Access Idea</b>	<b>Description</b>	<b>Need to Include</b>	<b>+</b>	<b>-</b>
Boat access	Public able to access garden by using personal water craft or through a contractor with a recreation permit. Could be blended with other access options.	<ul style="list-style-type: none"> <li>- docking area</li> <li>- rip rap on river bank</li> <li>- recreation permit to contractor</li> <li>- footbridge to view E. end of garden</li> <li>- stairs down bank</li> <li>- dredging</li> <li>- storage for haz mat items</li> </ul>	<ul style="list-style-type: none"> <li>- part of Umpqua water trail</li> <li>- experience on the river, in tune with nature</li> <li>- no parking concerns from cars</li> <li>- been considered in the past</li> </ul>	<ul style="list-style-type: none"> <li>- not as accessible to all public, especially if don't own boat or not able to pay contractor for ride</li> <li>- fuel issues: oil on water from boats</li> </ul>
Hwy parallel parking	Widen hwy by culvert to create space on both sides of the hwy for people to parallel park along the hwy. Provide a cross walk for people coming from elk side of hwy.	<ul style="list-style-type: none"> <li>- cross walk</li> <li>- footbridge to view E. end of garden</li> <li>- cautionary items (lights, sign, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- keeps cars out of garden</li> <li>- no concern about RVs damaging plants</li> <li>- easy on/off hwy access</li> <li>- short distance to walk</li> </ul>	<ul style="list-style-type: none"> <li>- turning off hwy/people walking on hwy safety concerns</li> <li>- bottle neck for traffic: people watching what's going on instead of where driving</li> <li>- constraints on traffic movement</li> </ul>
Replicate garden at Dean Creek kiosk	Using clippings or actual plants from the Hinsdale garden to make a smaller garden at the Dean Creek kiosk.	<ul style="list-style-type: none"> <li>- plants</li> <li>- information about Hinsdale</li> <li>- interpretive signs</li> <li>- Rhodie web cam</li> <li>- plant identification</li> <li>- still maintain garden</li> </ul>	<ul style="list-style-type: none"> <li>- smaller footprint on the land using existing parking area</li> <li>- emergency vehicle access</li> <li>- restroom on site</li> <li>- no need to widen hwy or add turn lanes</li> <li>- no safety issues of people using cross walk to get across hwy</li> <li>- house left undisturbed</li> <li>- not encroaching on wildlife in any way</li> <li>- maintain integrity of garden</li> <li>- plants are more visible to a larger number of people with easy access and short time to spend</li> <li>- wouldn't need culvert</li> <li>- put plants around entrance to current kiosk/pavilion</li> <li>- could still add special tours to garden during the bloom or to do work on garden</li> <li>- have in addition to the actual garden</li> </ul>	<ul style="list-style-type: none"> <li>- loose sense of place: garden is more than just plants: how arranged, landscape, and context important</li> </ul>

## **Appendix B: Relationship to Bureau of Land Management Planning**

Management actions proposed in this plan are in conformance with the *Dean Creek Elk Viewing Area Activity Management Plan - Coos Bay District BLM* (April 1993) and the *Dean Creek Elk Viewing Area 1998 Amendment to 1993 Management Plan - Coos Bay District BLM* (September 1998).

In addition, the following plans, policies, handbooks and reports have guided the development of this plan:

- Coos Bay District Record of Decision and Resource Management Plan, May 1995
- US Department of the Interior BLM Land Use Planning Handbook (BLM Handbook H-1601-1), March 11, 2005
- The BLM's Priorities for Recreation and Visitor Services, BLM Workplan Fiscal Years 2003 – 2007, May 2003
- Recreation and Visitor Services Bureau of Land Management –A Unified Strategy to Implement “BLM’s Priorities for Recreation and Visitor Services” Workplan (Purple Book), January 9, 2007
- BLM Manual 8323 – Recreation Project Planning
- BLM Policy Manual 6840 – Special Status Species Management, December 2008 revision
- Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl – Standards and Guidelines, April 1994
- Biological Assessment for Spruce Reach Island Culvert Replacement (EA-OR-125-08-05), Coos Bay District BLM, - Pat Olmstead and John Colby, December 1, 2008
- Spruce Reach Island Culvert Environmental Assessment (EA No. OR125-08-05), Coos Bay District BLM, December 2008
- Corridor Plans for the OR 38 and OR 42 Corridors – Volume 1, Oregon Department of Transportation region 3, June 2001
- Spruce Reach Island: Historical Assessment of the O. Howard Hinsdale House, Douglas County, Oregon, Stephen Dow Beckham, Sept. 1996
- Spruce Reach Island: the Oregon Coast’s Secret Rhododendron Garden, The Hinsdale Estate, Dean Creek, Near Reedsport – John M. Hammond and Gordon K. Wylie
- BLM 8100 manual (culture resources)
- Biological Opinion and Concurrence on the FY 2008-2013 Programmatic Suite of Activities Planned by the District and Tribe (FWS Reference Number 13420-2008-F-0118). USDI. US Fish and Wildlife Service. Oct. 8, 2008
- Colorado Canyons National Conservation Area Proposed Resource Management Plan and Environmental Impact Statement (BLM)
- Marbled Murrelet 5-Year Review. U.S. Fish and Wildlife Service. Washington Fish and Wildlife Office. Lacey, WA. June 12, 2009

### **Coordination with Other Agencies, Partners and the Public**

- Oregon Department of Transportation (ODOT) for options on parking locations, highway safety and right of way.
- American Rhododendron Society for options on garden care and maintenance.
- Reedsport City Council, Chamber of Commerce and local citizens for input on recreation outcome benefits, interests and needs.

## Appendix C: Benefits Based Management Tables for Recreation in Public Use Zone

<b>Public Use Zone - O.H. Hinsdale Garden</b>		
<b>Management Objectives</b>	By the year 2012, manage this zone to provide opportunities for visitors to access the site by personal vehicle and/or tours and experience interpretation and/or environmental education, providing no less than 75% of responding visitors at least a ‘moderate’ realization of the benefits described below (i.e., 3.0 on a probability scale where 1 = not at all, 2 = somewhat, 3 = moderate, 4 = total realization).	
<b>Outcomes</b>		
<u>Primary Activities:</u> <ul style="list-style-type: none"> <li>• Garden, wildlife and scenic landscape viewing</li> <li>• Photography &amp; art</li> <li>• Guided interpretive tours</li> <li>• Self-guided interpretation</li> <li>• Group volunteer projects.</li> <li>• Environmental education</li> </ul>	<u>Experiences:</u> <ul style="list-style-type: none"> <li>• Enjoy the total sensory experience of visiting the O.H. Hinsdale Garden.</li> <li>• Experience a quiet wayside setting along the Lower Umpqua River.</li> <li>• Learn about the history and develop an appreciation for this regionally significant rhododendron woodland garden.</li> <li>• Learn about the natural resources of the site.</li> <li>• Have the opportunity to contribute to the management and maintenance of the site through group volunteer projects and physical activity.</li> <li>• Doing something creative in a beautiful setting.</li> <li>• Escaping everyday responsibilities for a while.</li> <li>• Enjoying an escape from crowds of people.</li> <li>• Enjoying easy access to natural landscapes.</li> <li>• Feeling good about how our cultural landscapes are being protected and maintained.</li> <li>• Learn about gardening, landscaping, horticulture, and landscape design.</li> <li>• Learn about life histories and habitat needs of wildlife.</li> </ul>	<u>Benefits</u> <p><u>Personal:</u></p> <ul style="list-style-type: none"> <li>• Better mental health and health maintenance through diminished stress and anxiety from experiencing a peaceful garden and riverside recreation setting.</li> <li>• Personal development and growth through a greater understanding of the regional heritage of the Lower Umpqua River.</li> <li>• Personal appreciation and satisfaction through an improved opportunity to access the garden and the Umpqua River.</li> </ul> <p><u>Household and Community:</u></p> <ul style="list-style-type: none"> <li>• Greater community and household awareness of and appreciation for regional cultural heritage.</li> <li>• Reduced social isolation from participation in group volunteer activities.</li> <li>• Greater community involvement in public land recreation and cultural resource management.</li> </ul> <p><u>Economics:</u></p> <ul style="list-style-type: none"> <li>• Positive contribution to local economic stability.</li> <li>• Enhancement of the community’s distinctive recreation-tourism market niche and/or character leading to increased local tourism revenue.</li> <li>• Increased regional desirability as a place to live or retire.</li> </ul> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• Maintenance of distinctive recreation setting character.</li> <li>• Greater retention of distinctive woodland garden.</li> </ul>

**Public Use Zone - O.H. Hinsdale Garden**

**Setting Prescriptions**

<p><u>Physical:</u></p> <ul style="list-style-type: none"> <li>• A semi-developed English woodland garden along State Highway 38 on the lower Umpqua River with minor developments that provide for access to the site with minimal visitor amenities.</li> <li>• Developments will be designed to harmonize with the historic landscape and the scenic shoreline setting.</li> <li>• The general landscape around the site is rural pastureland, tidally affected wetlands and forest land in various stages of management on the banks and slopes of the lower Umpqua River Valley.</li> </ul>	<p><u>Social:</u></p> <ul style="list-style-type: none"> <li>• Visitors will be encouraged to explore the site on specified trails and viewing areas, creating a setting with a high density of visitors during the peak blooming period.</li> <li>• Group size during bloom season is 5 – 25 people. Group size is 2 – 5 people during non-bloom season.</li> <li>• Access to the site will be limited to the amount of parking available on the island, 10 – 15 spaces.</li> <li>• Expect 50 encounters a day during bloom and 10 during non-bloom seasons.</li> </ul>	<p><u>Administrative:</u></p> <ul style="list-style-type: none"> <li>• The area is regularly patrolled by BLM staff, volunteers and law enforcement.</li> <li>• Fences and gates, posted rules and no trespassing signs are common.</li> </ul>
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**Management and Marketing Actions**

<p><u>Management Actions:</u></p> <ul style="list-style-type: none"> <li>• Maintain and restore for woodland garden setting and interpretive and volunteer project experiences.</li> <li>• Maintain facilities with an emphasis on the rural recreation setting.</li> <li>• Maintain gates across administrative and parking access roads to control vehicle access.</li> <li>• Develop appropriately surfaced trails as needed.</li> <li>• Continue to support the partnership with the American Rhododendron Society to ensure the garden is restored and maintained.</li> <li>• Provide recreation amenities sufficient to facilitate the observation of the garden by visitors of all ages and physical abilities. Amenities would include a 10-15 vehicle parking area; a footbridge across the slough to the main garden; a seasonal restroom; accessible trails, picnic tables and trash receptacles; and minor interpretive enhancements.</li> <li>• Implement alternatives identified in the NEPA analysis on various projects identified in this plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide interpretation on management actions regarding house as appropriate to educate public about what is occurring.</li> </ul> <p><u>Marketing Actions:</u></p> <ul style="list-style-type: none"> <li>• Develop a comprehensive interpretive plan which includes all aspects of interpretation, environmental education, and public outreach to guide actions on site.</li> <li>• Utilize the Coos Bay District website to market garden’s attractions.</li> <li>• Work closely with the American Rhododendron Society and the gateway community of Reedsport and other partners in the region in marketing and outreach efforts.</li> <li>• Strive to involve user groups, volunteers, and other interested public to help maintain resources through partnerships, adoption programs, special events and/or a ‘friends’ group.</li> <li>• Develop an agreement with the Umpqua Discovery Center or concessioner to facilitate guided tours as needed for cost savings to BLM.</li> <li>• Continue to foster a close working relationship with the Umpqua Scenic Byway group to stay abreast of items relating to the byway and ways to partner on marketing.</li> <li>• Develop a list of people to lead guided tours of the garden.</li> </ul>
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**Public Use Zone - O.H. Hinsdale Garden**

**Administrative and Monitoring Actions**

**Administrative Actions:**

- Facility will be open for day use seasonally, March - October. This provides public access during the blooming and recreation season when use is most desired.
- Special use permits will be issued as needed that fit with outcomes and setting, decided on a case by case basis. Limits may be set on group size, number of permits issued, etc. Permits will not be issued for competitive events. Restrictions may be stipulated for high use periods or due to resource and/or safety concerns.
- Contract out for services where possible (garbage pickup, restroom cleaning, delivering of Sanicans, etc.) for cost savings to BLM.
- All dogs need to be on leash for visitor safety.
- Secure picnic tables and garbage cans, and remove Sanicans during winter/low visitor use season to reduce costs. Utilize amenities that withstand impacts from weather and flooding.
- Keep main fireplace in house once house is removed (if possible) for potential interpretive focus.
- All facilities will be designed to blend in with the garden setting and be barrier-free accessible for visitor experiences.
- Hunting, shooting, firearms, fireworks and other explosive devices will continue to be prohibited on the island at any time to limit impacts on wildlife.
- Loud activities within or close to marbled murrelet nesting are prohibited (e.g. music, machines, large groups).
- BLM does not currently plan to charge use fees at the site. If this should change due to federal or bureau-wide

policy decisions, budget shortfalls or any other reason in the future. The decision to implement a fee would be made in accordance with the public process set out in FRLEA.

- Gates will be closed during off season to discourage public access and potential inappropriate behavior (vandalism, theft, etc.).
- All motorized and mechanical use is limited to designated roads and trails for visitor safety and in keeping with desired recreation experiences.
- Activities not addressed within this plan will be analyzed as the need arises.
- All parking facilities will be confined to prevent encroachment on the surrounding wetlands and river bank.

**Monitoring Actions:**

- Monitor visitor satisfaction and attainment of desired visitor outcomes to determine level of success with plan implementation.
- Monitor resource conditions of garden and surrounding area for any impacts to cultural and natural resources from public visitation.
- Monitor for weeds and spread of exotic species so that quick action may be taken.
- Monitor bat presence, populations and habitat use.
- Ensure that setting prescriptions are being met in order to maintain character of the setting.
- Monitor implemented actions and evaluate their effectiveness at achieving desired conditions and outcomes.
- Put in counters to monitor visitor use of the area.



Figure 9. Public use zone with current and proposed facilities

## Appendix D: Marbled Murrelet & Northern Spotted Owl Specifications

The following tables were included in the Coos Bay District's Programmatic Biological Opinion (FWS 13420-2008-F-0118) for projects planned by the District and Coquille Tribe. Habitat boundaries and 100-yard buffer distances are included in Figure 8, on page 46 of this document. Restrictions based on other buffer distances included in the following tables are not expected to be necessary, and would apply only as needed.

**Marbled Murrelet Distances:** Except as stated, proposed activities that would occur within the disruption distances from murrelet nest locations as shown in the following table might disrupt the normal behavior patterns of individual murrelets or breeding pairs. For other activities not specifically listed, but still addressed by the biological assessment, the disruption distance is 100 yards during the critical breeding period, 0 yards during the late breeding period with the application of daily timing restrictions in both cases, and 0 yards during all other times of the year.

<b>Disturbance and Disruption Distances<sup>1</sup> for Marbled Murrelets During the Breeding Period (USFWS 2007a)</b>			
<b>Source of Disturbance/ Disruption</b>	<b>Distance Disturbance</b>	<b>Disruption Distance</b>	
	<b>Entire Breeding Period (March 1 – Sept. 30)</b>	<b>Critical Breeding Period with Daily Timing Restrictions<sup>2</sup>, unless noted otherwise (April 1 – August 5)</b>	<b>Late Breeding Period with Daily Timing Restrictions<sup>2</sup>, unless noted otherwise (August 6 – September 15)</b>
Road brushing and maintenance on all roads	440 yards (0.25 mile)	0 yards with no daily timing restrictions	0 yards with no daily timing restrictions
Hauling on all open roads	440 yards (0.25 mile)	0 yards with no daily timing restrictions	0 yards with no daily timing restrictions
Road repair such as major culvert replacement	440 yards (0.25 mile)	100 yards	0 yards
Heavy equipment	440 yards (0.25 mile)	100 yards	0 yards
Pile driving	440 yards (0.25 mile)	100 yards	0 yards
Chainsaw use	440 yards (0.25 mile)	100 yards	0 yards
Rock crushing	440 yards (0.25 mile)	180 yards	0 yards
Helicopter – Type I	880 yards (0.5 mile)	120 yards	0 yards
Helicopter – Other <sup>3</sup>	440 yards (0.25 mile)	120 yards	0 yards
Use of fixed-wing aircraft	440 yards (0.25 mile)	120 yards	0 yards
Burning	440 yards (0.25 mile)	120 yards	0 yards
Blasting	1,760 yards (1 mile)	1,760 yards (1 mile)	440 yards (0.25 mile)

<sup>1</sup> Noise distances were developed from a threshold of 92 dB (USFWS 2003). Smoke distances are based on a FWS white paper (USFWS 2007b).

<sup>2</sup> Daily timing restrictions: Activities would not begin until 2 hours after sunrise and would end 2 hours before sunset.

<sup>3</sup> Kmax helicopters are considered “other” for the purposes of disturbance. Sound readings from Kmax helicopters logging on the Olympic NF registered 86 dB at 150 yards

**Northern Spotted Owl Distances:** Except as otherwise stated, proposed activities that would occur within the disruption distances from a spotted nest shown in the following table might disrupt the normal behavior patterns of an individual owl or the breeding pair. For other activities not specifically listed, but still addressed by the biological assessment, the disruption distance is 65 yards during the critical breeding period, 0 yards during the late breeding period, and 0 yards during all other times of the year.

<b>Disturbance and Disruption Distances<sup>1</sup> for the Northern Spotted Owl During the Breeding Period (USFWS 2007a)</b>			
<b>Source of Disturbance/ Disruption</b>	<b>Distance Disturbance</b>	<b>Disruption Distance</b>	
	<b>Entire Breeding Period (March 1 – Sept. 30)</b>	<b>Critical Breeding Period (March 1 – June 30)</b>	<b>Late Breeding Period (July 1 – Sept. 30)</b>
Road brushing and maintenance on all roads	440 yards (0.25 mile)	0 yards	0 yards
Hauling on all open roads	440 yards (0.25 mile)	0 yards	0 yards
Heavy equipment	440 yards (0.25 mile)	35 yards	0 yards
Pile driving	440 yards (0.25 mile)	60 yards	0 yards
Chainsaw use	440 yards (0.25 mile)	65 yards	0 yards
Rock crushing	440 yards (0.25 mile)	180 yards	0 yards
Helicopter – Type I	880 yards (0.5 mile)	440 yards (0.25 mile)	440 yards (0.25 mile)
Helicopter – Other <sup>2</sup>	440 yards (0.25 mile)	120 yards	0 yards
Use of fixed-wing aircraft	440 yards (0.25 mile)	120 yards	0 yards
Burning	440 yards (0.25 mile)	440 yards (0.25 mile)	0 yards
Blasting	1,760 yards (1 mile)	1,760 yards (1 mile)	440 yards (0.25 mile)

<sup>1</sup> Noise distances were developed from a threshold of 92 dB (USFWS 2003). Smoke distances are based on a FWS white paper (USFWS 2007b).

<sup>2</sup> Kmax helicopters are considered “other” for the purposes of disturbance. Sound readings from Kmax helicopters logging on the Olympic NF registered 86 dB at 150 yards

Biological Opinion and Concurrence on the FY 2008-2013 Programmatic Suite of Activities Planned by the Coos Bay District and Coquille Tribe (FWS Reference Number 13420-2008-F-0118). USDI. US Fish and Wildlife Service. Oct. 8, 2008



**Figure 10. Owl and murrelet habitat and 100 yard buffer zone**

Due to the barns location near the edge of occupied marbled murrelet habitat, visitor use should not be encouraged. Based on the marbled murrelet 5-year review (USFWS, 2009) and several earlier analyses, human presence near an active nest tree has been known to disrupt the normal activities of murrelets, which may result in harm to a listed species. Safety concerns where public use occurs could result in the altering of suitable habitat which could also harm the species. To protect threatened species and their habitat, we are not recommending public use of the barn area or the suitable habitat.

## Appendix E: Special Status Species Plants in Spruce Reach Area

The following table is on special status plant species suspected in the Spruce Reach area. OR-SEN = means the Bureau Sensitive plant is sensitive in Oregon only. SEN= indicates that the Bureau Sensitive plants are sensitive in both Washington and Oregon.

Scientific Name (Common Name or Group)	Status	Habitat
<b>VASCULAR PLANTS</b>		
<i>Cicendia quadrangularis</i> (timort)	OR-SEN	Coastal wetlands, valley grasslands, northern oak woodlands, foothills, and woodlands.
<i>Hydrocotyle verticillata</i> (Whorled marsh pennywort)	OR-SEN	Perennial vine, forb or herb, swampy ground, lake margins, wetlands, primarily coastal, known from Croft Lake, <100 m.
<i>Lycopodiella inundata</i> (Northern bog clubmoss)	SEN	Perennial subshrub or shrub: rhizomatous fern, coastal wetlands, moist conditions in lake and pond margins, muddy depressions, peat bogs, fens, edge and coastal habitats, known from New River ACEC.
<i>Ophioglossum pusillum</i> (Adder's-tongue)	SEN	Perennial forb or herb, marsh edges, low pastures, grassy roadside ditches, coastal wetlands, 1,000-2,000 m, known from Oregon Dunes NRA.
<b>NONVASCULAR PLANTS</b>		
<i>Bryoria pseudocapillaris</i> (Lichen)	OR-SEN	On tree branches on the coastal region and 16 km inland.
<i>Bryoria spiralifera</i> (Lichen)	OR-SEN	On trees on the North Spit to the Oregon Dunes NRA
<i>Bryoria subcana</i> (Lichen)	OR-SEN	Bark and wood of Sitka spruce, Western hemlock, Douglas-fir, and hardwood forests along coastal bays, streams, and dune forests within 30 miles of ocean, known from Big Creek.
<i>Hypotrachyna revoluta</i> (Lichen)	SEN	Coast Range and immediate coast; usually on bark, rarely on rock at Cape Arago.
<i>Leioderma solediatum</i> (Lichen)	OR-SEN	Thin moss mats on rhododendron and huckleberry branches near coast, documented at Eel Creek Campground at Oregon Dunes NRA.
<i>Limbella fryei</i> (Moss)	OR-SEN	Wet rotting logs, lower trunks, and leaf litter in dense coastal swamps, known from in or near Shore Acres State Park. Site at Floras lake edge.

Scientific Name (Common Name or Group)	Status	Habitat
<i>Phaeocollybia californica</i> (Fungus)	OR- SEN	Associated with the roots of Pacific silver fir, Sitka spruce, Douglas-fir, western hemlock. Three known sites from Coos Bay BLM, in mature and old-growth Douglas-fir forests.
<i>Phaeocollybia gregaria</i> (Fungus)	OR- SEN	Associated with the roots of Sitka spruce and Douglas-fir, known from Siuslaw National Forest at Cascade Head.
<i>Ramalina pollinaria</i> (Lichen)	OR- SEN	Bark of various trees (esp. older trees) on shaded rocks. Found at New River ACEC.
<i>Rhizopogon exiguus</i> (Fungi)	OR- SEN	Coastal, known site at Mapleton, hypogenous fungi in coniferous forests
<i>Teloschistes flavicans</i> (Lichen)	OR- SEN	Coastal forests, shore pine and Sitka spruce.
<i>Thaxterogaster pavelekii</i> (Fungi)	OR- SEN	Coastal forests in Washington, Oregon, and California.

USDI, BLM. 2008. 6840-Special Status Species Management. BLM Manual Supersedes Rel. 6-116. Rel. 6-121, 1/19/01.

## Appendix F: O.H. Hinsdale Garden Operations

The following information is the basis for an operation plan for maintaining the O.H. Hinsdale Garden.

**Regular maintenance tasks** – these will need to be done periodically throughout (at least portions of) the year.

**Garden Restoration Tasks** – these will occur for the next several years (at least). Some of the plants recorded in the garden have been lost, and the American Rhododendron Society (ARS) received a grant to replace many of them. In fall 2009, the first installment of the new plants was added to the garden, but there are more to come in later years. Gravel, mulch and water will need to be available for any replanting.

TASKS	Times a year	Staffing needed	Notes
mowing	4	BLM/vol.	Garden areas and surrounding areas
weeding	4-5	NYC/Cont.	Garden and surrounding areas
watering	10	BLM/vol.	Plants in garden esp. new plant additions to garden
pruning	2-3	BLM/ARS	Plants in garden and surrounding plants (safety issues)
mulching	2	BLM/vol.	Plants in garden
fertilizing	2-3	BLM/ARS	Plants in garden and possibly some around parking areas

Vol. = volunteer

Cont. = contractor

NYC = Northwest Youth Corps

ARS = American Rhododendron Society

[Note: volunteers can be used for mulching and fertilizing, with direction on time of year and amount required]

Mowing – This will be accomplished by riding mower/tractor and the use of string trimmers.

Weeding – Northwest Youth Corps (NYC) crews are typically used for three to four weeks for weeding. During most years, by the time NYC begins work in June the weeds have grown unimpeded for at least several months to a year. If weeds continue to be removed only once a year, the BLM should plan on a minimum of three weeks of an NYC crew. If BLM wishes to restore the lowest layer of plants, the ground cover and small flowering plants, a different approach will be needed. The NYC crews cannot protect the groundcover while removing the blackberries and other weeds: ground cover is removed along with the weeds.

A more effective approach would be to use BLM volunteers to manage the weeds throughout the year. One advantage of having a volunteer groundskeeper is to keep the weed infestation under control and attempt to restore the ground cover at the same time.

Noxious weeds include:

- Blackberry: invasive all through the garden and along the perimeter.
- Purple loosestrife has invaded all the mud flat areas surrounding the garden.

- Yellow flag iris: one main patch on the east edge of the main garden along slough
- Miscellaneous noxious weeds throughout. Some of these weeds are listed on page 31.

Other weeds and problem plants in garden: wisteria, *Lapsana communis*, sow thistle, foxglove, holly, Oregon ash, bitter cherry and possibly laurel seedlings: all from either seedlings or root sprouts.

### **Maintenance options for weeds**

#### 1. Use of herbicide glyphosate

##### **Pros**

- Eliminates most noxious weeds without having to do much more. Consultation with National Marine Fisheries Service (NMFS) on herbicide application has already been completed in the aquatic restoration Biological Opinion for 2007-2012.
- Spraying can be done up to 15 feet from the edge of water with approved herbicides. Wicking and wiping application closer to the water's edge may be done as well without harm to fish and aquatic animals and plants.

##### **Cons**

- Cannot spray around rhododendrons or under them in the garden area where blackberries are present.
- Doesn't eliminate weeds in garden at bloom time April through June.
- The Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians Tribe have gathered bulrushes/tules in one area: no spraying in that area from May to August. Any spraying should be done in the fall. Spraying in the fall would be more beneficial since plants would take herbicide down to roots.

#### 2. Utilize the Northwest Youth Corps (NYC) for removing weeds from garden

##### **Pros**

- They do a good job cleaning up the weeds within garden.

##### **Cons**

- Must compete for use of the Youth Corps each year with other agencies and have sufficient funds to hire and they are only available in the summer.

#### 3. Utilize maintenance staff for mowing among other garden maintenance issues

##### **Pros**

- Maintenance would be done on regular basis once necessary tasks have been established.

##### **Cons**

- Would need to include workload in maintenance scope of work.

#### 4. Utilize volunteers for garden maintenance

##### **Pros**

- May get lots of work done when it's needed in garden.
- Partnerships and involvement with local communities and organizations
- Way to educate people about gardens, landscaping, stewardship, etc.

### **Cons**

- Not necessarily a dependable option and requires staff time to manage.

## **5. Utilize other BLM employees for garden maintenance**

### **Pros**

- Don't have to depend on outside help for upkeep of garden.
- Can get work parties to help on occasion.

### **Cons**

- Staff currently doesn't have enough time allocated to garden to ensure all work is done.

Watering – Currently watering needs are limited to “watering in” newly replanted and moved specimens (13 for fall, 2009). After an initial watering, these plants should not need further water throughout the winter. However, water is needed spring through fall until the rains take over. During their first year at a new location, plants need to be kept well watered so their fine root structure can grow again. A 2,500 gallon water tank has been purchased to provide water with the use of the pressure washer trailer parked off of the highway. For the long-term, BLM should attempt to provide water to all plants in the garden, particularly the azaleas. Although lack of water in summer may not be fatal, the shrubs will certainly grow better if they have water available during the dry season.

Mulching – Mulching plants once each year will be sufficient until there is some removal of mulch (e.g. flooding or high winds) in which case additional mulching would be necessary.

Plant pruning – Pruning should occur shortly after blooming is finished, so pruning will take place during the summer. At this time only the dead limbs on camellias, azaleas and rhododendrons are being pruned. Plant health is the foremost reason for pruning, not plant shape. Pruning should take only a few days of work each year. Pruning in future years should include living branches as well.

**Camellias:** Remove small non-flowering branches, 2 to 4 inches in length, growing on major limbs in the interior of the plant because they are habitat for scale. This reduces future numbers of scale and increases air circulation, which also helps prevent tea scale. Severe infestations of tea scale, found on the underside of the leaves, causes defoliation and loss of plant vigor. Prune younger plants in late May or early June. Older plants prune in late winter.

**Rhododendrons:** Prune after flowering in May or June. Cut back twigs every 1-2 years. The best time to transplant is either March/April or October/November.

**Miscellaneous trees in garden:** The branches were pruned 25 to 50 feet from the ground on mostly spruce and Western red cedar trees that were located in the perimeter of the garden. Other trees in the garden will be pruned appropriately according to the specifications of each species. Trees will be replanted as older ones die or are injured, in keeping with the garden design.

Plant fertilization – Fertilization has not occurred consistently. Relatively frequent fertilization will be required until plants have stabilized/become re-established. Fertilization can take several weeks a year for a single volunteer to accomplish.

**Camellias:** (NPK) 5:1:1 Fertilize ratio: 1 tablespoon per 1 foot of height Cotton seed/Blood meal/iron or other known proven fertilizers when available. Information based on experts.

**Rhododendrons:** (NPK) 12-10-18 *bonemeal/Magnesium sulfate/liquid concentrate iron sequestrate* or other known proven fertilizers when available. Information based on Rhododendron experts.



**Figure 11. Spring blooms**

O.H. Hinsdale Garden Operations & Potential Staffing

Annual Work to Be Done	Times per Year	Units or Time/Job	Calendar Year												WM	Staffing	
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Rhododendron pruning	1	300 ea. x 15 min.															BLM, ARS
Camellia pruning overgrown plants	1	50 ea. X 10min.															BLM, ARS
Azalea pruning	1	200 ea. X 10 min.															BLM, ARS
Fertilizing camellias (MG   5:1:1 Cm/Bm/iron)	9	50 ea. X 10 min.															BLM
Fertilizing rhodies and azaleas	4	500 X 10 min. ea.															BLM
Other shrub pruning	1	100 ea. X 15 min.															BLM, ARS
Mowing parking lot & access trails	5	5 x 60 min. ea.															BLM, Vol.
Weed eating road edge & trails	3	3 x 60 min. ea.															BLM, Vol.
Blackberry/weeds removal	3																NYC
Removal of dead branches from trees/shrubs	1	50 x 5 min. ea.															ARS,BLM, Vol.
Mulching rhodies, camellias, azaleas and others	1	300 x 5 min. ea.															BLM, Vol.
Noxious weed spraying	1	60 min. ea.															BLM, Contract

Semi - Annual Work to Be Done	Times/ Yr.	Units or Time/Job													WM	Staffing	
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Road surface maintenance	1	30 min. ea.															BLM
Trail maintenance	1	60 min. ea.															NYC
Tree condition safety surveys	1	120 min. ea.															BLM

Miscellaneous Work to Be Done	Times/ Yr.	Units or Time/Job													WM	Staffing	
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Interpretive tours	8	120 min. ea.															BLM, ARS, Vol.
Volunteer coordination	Cont/ Int																BLM, ARS
Law enforcement patrols	12	10 min. ea.															BLM
Site management & guidance	Cont/ Int	Site Management & Guidance															BLM

ARS = American Rhododendron Society

Vol. = volunteer

NYC = Northwest Youth Corps

Contract = do work through a contractor

Cont/Int = work done on continuous or intermittent basis

## Appendix G: Engineering Estimates

A BLM engineer provided these rough cost estimates after completing an engineering survey of the garden and surrounding grounds in August 2009:

East-side parking area:

- One-lane road in and out. There is room for two vehicle pull outs on the road shoulder to allow cars to pass. One is before the gate; would need to consider moving the gate. No trees would be impacted. Around \$5,000 for turnout construction and gate moving.
- There is not enough turning radius for RVs or room in parking area. Suggest signs on the highway to keep these vehicles out.
- Excavation work will be needed due to slumps.
- Work still needs to be done on turning radius and parking requirements to determine number of cars that can be parked there.

Driveway to house:

- Turn outs for RV could be put by island area of driveway if needed for about \$5,000.
- All asphalt on driveway should be replaced (about \$15,000) (team suggested paving in concert with the culvert installation).

Water for garden:

- A 6" PVC pipe will be included in the new culvert for water. Not sure if water could come from the Dean Creek east end ranch house or old water tank on the hill. Intersecting with water line from Reedsport is estimated to cost \$50,000.
- Pump of some kind would be needed.
- Consider devising a rainwater collection system using the roof of the barn. A collection system could also be built with a simple roof structure over a 3,000 gallon water tank. Water could then be pumped to waterlines using a solar powered pump system.
- Consider the option of drilling a well on the island and operate with a solar pump and water tank storage system.

Electricity:

- Present at the light pole. Could be used for water pump.

Footbridge:

- Lot of fill would be needed on the abutments; may need to be designed to float due to tides (around \$30,000)

Barn:

- In good condition but on wet ground. Roof and walls look good. Could be remolded for picnic shelter or storage.
- Team comments: would not work for picnic shelter as it is in disturbance distance to threatened and endangered wildlife, but could be used for storage.

House (inspection made of outside only):

- Estimated that house will collapse in 5 – 10 years.
- Roof is bowing on one side and supports are not good; will be better able to see when the skin of the house is off.
- Underneath of house looks okay.
- Would need more work to determine if house could come out in sections; garage could go first.
- Fence around the house for safety could be a split rail fence (around \$5,000). Fence would need to be 10 – 15’ out from house at a minimum. Fence should be about 40’ out to include roof sliding down with wall.
- Imploding the house/making it fall down towards the inside requires more information (around \$10,000 – \$20,000).
- Demolition by a contractor who would also salvage wood would cost \$25,000 – \$30,000.
- Lattice can be put around bottom for safety; team suggested not having lattice rest on the ground due to flooding, and to install it with screws and during the winter months so as not to affect bats.
- Fallen window on back of house can be put back up with new wood support.



**Figure 12. Location of proposed footbridge to connect the west and east-sides of the garden**

## Appendix H: Planning Team

Sharon Cawley	Team Lead/Interpretive Specialist
David Wash	District Recreation Lead
John Colby	Hydrologist
Jennie Sperling	Botanist
Steve Samuels	District Archeologist
Bob Golden	Dean Creek Park Ranger
John Chatt	Wildlife Biologist
Megan Harper	Public Affairs Officer

### Specialists:

Glenn Harkleroad	Fish Biologist
Jeanne Standley	District Noxious Weed Coordinator
Todd Hicks	Engineer
Nancy Zepf	Recreation Planner
Steve Fowler	District Planning and Environmental Coordinator