



## United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Coos Bay District Office

1300 Airport Lane, North Bend, OR 97459

Web Address: <http://www.blm.gov/or/districts/coosbay>

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1792/6700 (ORC030)

DOI-BLM-ORWA-C030-2016-0001-EA

North Spit Snowy Plover Habitat Restoration Environmental Assessment

**October 24, 2016**

Dear Concerned Citizen:

The Umpqua Field Office of the Coos Bay District Bureau of Land Management (BLM) has prepared and posted a **Supplemental Scoping Document** and a new map package for the North Spit Snowy Plover Habitat Restoration project at <http://tinyurl.com/jhxwes7>.

The BLM manages approximately 71 acres of plover critical habitat on the interior of the North Spit as snowy plover habitat restoration areas (HRAs) and approximately 31 acres of critical habitat along the shoreline. The BLM-managed plover areas are between the Army Corps of Engineers'-managed lands at the southern tip of the North Spit to an area north of Vehicle Access Point 3.

The BLM is encouraging all those interested in the management of the western snowy plover habitat restoration areas (HRAs) and the associated public shoreline nesting areas on BLM-managed lands on the Coos Bay North Spit to read the **Supplemental Scoping Document** on the ePlanning project website (<http://tinyurl.com/jhxwes7>) and provide substantive comments on both the proposed actions and the alternatives under development.

Since the initial project scoping in January of 2016, the BLM has refined and clarified the proposed actions and developed several alternatives for analysis. The information presented in the **Supplemental Scoping Document** includes a complete list of proposed actions and compares those actions to the existing management (i.e., the no action). Some examples of the proposed actions include:

- vegetation modifications (reducing noxious European beachgrass with heavy equipment);
- site modifications (reducing the height of the berms adjacent to the Foredune Road between the HRAs with heavy equipment and leveling sand within the HRA nesting areas);
- nesting habitat amendments (adding supplemental oyster shell to the HRAs);
- herbicide use on noxious weeds (invasives), non-native vegetation, and undesired vegetation;
- closure of the Foredune Road between the HRAs *seasonally* or *year round*;
- closure of Vehicle Access Point 3 to the beach during the plover breeding season;
- a 6–10 acre expansion of public shoreline restrictions in critical habitat during plover nesting season;
- and
- restricting HRA and public shoreline access in critical habitat by two additional weeks in March.

The BLM will accept comments through November 23, 2016. Comments helpful to the analysis process are those that identify new scientific or technical information, determine the scope of issues to be addressed, and express concerns related to the proposed actions. Opinions agreeing or disagreeing with established laws and policies are not helpful in refining the proposed actions.

You may send your comments to the Bureau of Land Management, Umpqua Field Office, 1300 Airport Lane, North Bend, OR 97459, Attn: Heather Partipilo. Comments may also be submitted electronically to [BLM\\_OR\\_CB\\_Mail@blm.gov](mailto:BLM_OR_CB_Mail@blm.gov), Attn: Heather Partipilo.

Sincerely,

*/s/ Todd D. Buchholz*

Todd D. Buchholz

Umpqua Field Manager



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1792/6700/6843 (ORC030)

DOI-BLM-ORWA-C030-2016-0001-EA

North Spit Snowy Plover Habitat Restoration Environmental Assessment

## Supplemental Scoping Document

### Introduction

The Coos Bay District Bureau of Land Management (BLM) is preparing the North Spit Snowy Plover Habitat Restoration Environmental Assessment (EA No. DOI-BLM-ORWA-C030-2016-0001-EA) to revise and consolidate multiple outdated NEPA analyses to provide the most up-to-date management tools for future snowy plover management on the North Spit.

The western snowy plover (*Charadrius nivosus* ssp. *nivosus*) is a federally threatened species and a State endangered species. The Coos Bay North Spit snowy plover habitat restoration areas (HRAs) are the most productive snowy plover-nesting grounds on the Oregon Coast. The BLM manages critical habitat within these three snowy plover habitat restoration areas (HRAs) and along the nearby beach on the Coos Bay North Spit. The snowy plover HRAs on the North Spit also include habitat for pink sandverbena (*Abronia umbellata* var. *breviflora*), which is a Federal species of concern, a Bureau Sensitive species, and a State endangered species.

### Project Location

The BLM manages approximately 1,736.8 acres of the 3,536.7 acres of the North Spit of Coos Bay, Oregon, south of the Forest Service/BLM boundary. The BLM-managed snowy plover critical habitat (2012) on the North Spit is a combination of the BLM's HRAs (roughly **71 acres**), and roughly **31 acres** of shoreline, for a total of approximately **102 acres** from the BLM boundary with the Army Corps of Engineers North Jetty parcels to the northernmost boundary of critical habitat in T. 25 S., R. 14 W., Sec. 13 (**Table 1, Map Package**).

**Table 1.** Location of the North Spit BLM-managed snowy plover habitat restoration areas (HRAs) and critical habitat

BLM-managed Snowy Plover Critical Habitat	Township	Range	Section	BLM-managed Areas (Acres*)	Land Use Allocation (2016 RMP)
1995 HRA	25 S.	14 W.	26	26.8	District-Designated Reserves
1998 HRA East	25 S.	14 W.	26	23.7	
1998 HRA West	25 S.	14 W.	23, 24, 25, 26	21.0	
CHU—HRAs	25 S.	14 W.	23, 24, 25, 26	<b>71.0</b>	
CHU—Shoreline	25 S.	14 W.	13, 24, 26	<b>31.0</b>	

\* Shoreline and HRA acres are estimated due to the dynamic nature of the beach and foredune.

## Need for the Project

The BLM needs restore, protect, and maintain plover nesting habitat and the native dune community on the North Spit. To be able to restore, protect, and maintain plover nesting habitat on the North Spit, the BLM needs to analyze management tools for plover habitat restoration and conservation. Some of the management tools available, such as the treatment of noxious weeds and undesirable vegetation are implementable only during the most challenging time of year to treat noxious and undesired vegetation, which is roughly September to March. This is because the HRAs and the critical habitat for nesting have access restrictions during plover breeding season (March to September). The BLM, following the guidance of the U.S. Fish and Wildlife Service, prohibits people and equipment from accessing the nesting areas (i.e., the critical habitat) during breeding season, which is also the best time of year to treat noxious weeds and undesirable vegetation in the HRAs.

The EA would also serve as the ‘foundation’ for new snowy plover consultation with the U.S. Fish and Wildlife Service. This is an opportunity to develop one cohesive and comprehensive NEPA analysis, which would:

- 1) consolidate multiple older NEPA documents;
- 2) update management options for the North Spit plover habitat; and
- 3) analyze specific habitat restoration strategies to achieve habitat goals and objectives.

The BLM is currently managing the snowy plover habitat on the North Spit using multiple, older (1994, 1998, 2005, and 2006), site-specific NEPA documents, including the 1995 Coos Bay Shorelands Plan, as amended in 2005. The Shorelands Plan has not changed. However, other things have changed. First, in 2012, the U.S. Fish and Wildlife Service expanded the designated critical habitat on the North Spit for western snowy plover. Second, the Oregon Biodiversity Information Center (ORBIC) plover monitors have noted that snowy plover on the North Spit are starting to nest earlier in the year. Third, the aggressive growth of European beachgrass perpetuates vertical sand growth both within the HRAs and along the Foredune Road berms between the HRAs. Fourth, new populations of undesired vegetation are appearing within the HRAs that compete with pink sandverbena and camouflage plover predators.

## Project Objectives (Purpose)

Action alternatives must meet the objectives provided in the *Northwestern and Coastal Oregon Record of Decision and Approved Resource Management Plan (ROD/RMP)* (USDI BLM 2016). The ROD/RMP and applicable statutes specify the following objectives to be accomplished in managing the lands in the project area:

- Do not authorize or construct additional discretionary roads and trails within designated critical habitat or within western snowy plover habitat (p. 102).
- Restore snowy plover nesting habitat (p. 102).
- Restrict the timing and location of beach access or activities to avoid disruption of normal snowy plover nesting and nesting behaviors (p. 102).
- Conserve and recover species that are ESA-listed, proposed, or candidates, and the ecosystems on which they depend (p. 95).
- Conserve or create habitat for species addressed by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act and the ecosystems on which they depend (p.95).
- Provide for the conservation of Bureau Special Status plant and fungi species (p. 87).

## Project Summary

The BLM proposes to conduct a variety of snowy plover habitat restoration and management activities in critical habitat on the Coos Bay North Spit (**Map 1**) to meet the purpose and need. As described below,

elements of the project include habitat management actions within the boundaries of the designated HRAs. Other portions of the project relate to habitat management actions along the ocean shoreline plover nesting areas west of the foredune. Please refer to **Table 2** and the maps for further illustration of the spatial setting and timing of alternatives. **Table 2** outlines the BLM's existing actions (i.e., current management or no action), the proposed actions, and the action alternatives. The BLM has assigned map names based on their representation of the existing action (**E**), or the alternatives (**A**, **B**, **C**), or a combination (**A & B**, **A-E**).

### **Proposed Actions—Common To All Alternatives**

#### **Closure Area and Season (Map 2A, Map 2B, Map 2C, Map 2E)**

- Implement seasonal public shoreline access restrictions (dates vary by alternative) to protect nesting plovers
- In the event that plovers nest on BLM-managed lands within the CHU, the BLM would post the immediate area closed and rope around the nest(s) to limit disturbance
- Maintain the pedestrian/equestrian trail to the beach at the FAA Tower

#### **Monitoring (Map 1)**

- Monitor snowy plover populations and habitat within the HRAs and the shoreline
- Monitor pink sandverbena populations within the HRAs outside of the breeding season

#### **Maintenance (Map 2A, Map 2B, Map 2C, Map 2E, Map 4A-E)**

- Maintain approximately 50 foot vegetation width on the foredune for North Spit stability
- Remove, replace, and maintain gate at the intersection between the Foredune Road and the Re-route Road
- Install and maintain fencing around road perimeters (e.g., 1998 HRA east, 1998 HRA west)
- Install, move, and maintain permanent signs
- Install, move, and remove seasonal signs, posts, and boundary ropes (e.g., symbolic fencing, carsonite signs) on the shoreline and in the HRAs

#### **Vegetation Removal/Modification (Map 3C, Map 3E, Map 5A & B, Map 5C, Map 5E)**

- Manual removal (e.g., hand pulling) of undesirable plants within the HRA boundaries
- Manual removal (e.g., hand pulling) of undesirable plants on the Foredune Road berms
- Manual removal (e.g., hand pulling) of undesirable plants on the foredune for plover chick mobility corridors
- Mechanical removal (e.g., bulldozer) of encroaching vegetation within HRAs
- Mechanical reduction (e.g., plowing, disking) of European beachgrass approximately 1–2 times per year within the HRA boundaries

## **Existing Actions (No Action)**

### Closure Area and Season (Map 2E)

- Implement seasonal public shoreline access restrictions on a portion of the CHU area from the shoreline area west of the HRAs extending north to the FAA Tower (March 15–September 15) to protect nesting plovers
- Seasonal closure of the HRAs (including the Foredune Road Gate) (March 15–September 15) to protect nesting plovers

### Habitat Amendments (Map 3E)

- Add and distribute up to 300 cubic yards of oyster shell material within the HRA boundaries annually to provide nesting camouflage

### Site Modifications (Map 3E)

- Reduce, homogenize, contour, and maintain the elevation of the sand within the HRAs as needed (e.g., using bulldozers and tractors with plow or disk attachments)

### Herbicides (Map 4A-E)

- Treat European beachgrass and all other state- and county-listed noxious weeds using BLM-approved herbicides within the HRAs and along the Foredune Road between the HRAs

### Vegetation Removal/Modification (Map 5E)

- Reintroduce native plants (e.g., American dune grass, pink sandverbena, *Camissonia* spp.) within the HRAs, where appropriate
- Conduct prescribed burning on European beachgrass along the Foredune Road berms adjacent to the HRAs
- Conduct prescribed burning on European beachgrass along the western side of the Re-route Road adjacent to the HRAs

## **Proposed Actions—Alternative A**

### **Closure Area and Season (Map 2A)**

- Implement seasonal public shoreline access restrictions within the entire CHU area (updated in 2012) (i.e., expand public shoreline access restrictions north of the FAA Tower by approximately 9.0–10.5 acres) (March 1–September 15) to protect nesting plovers
- Closure of Vehicle Access Point 3 to pedestrian/equestrian and vehicle traffic ) (March 1–September 15) to protect nesting plovers
- Year-round closure of the HRAs (including the Foredune Road Gate) to protect nesting plovers
- Create additional vehicle pull-out areas along the Re-route Road for safety

### **Habitat Amendments (Map 3A & B)**

- Add and distribute up to 300 cubic yards of oyster shell material within the HRA boundaries annually to provide nesting camouflage

### **Site Modifications (Map 3A & B)**

- Reduce, homogenize, contour, and maintain the elevation of the sand within the HRAs as needed (e.g., using bulldozers and tractors with plow or disk attachments)

### **Herbicides (Map 4A-E)**

- Treat European beachgrass and all other state- and county-listed noxious weeds AND non-native vegetation using BLM-approved herbicides within the HRAs and along the Foredune Road between the HRAs

### **Monitoring (Map 1)**

- Conduct aerial photography using drones outside of the breeding season

### **Maintenance (Map 1)**

- Conduct public beach clean-up events 1–6 times per year using ATVs/UTVs between September 16–February 28 as scheduled and coordinated by the BLM in cooperation with adjacent landowners (i.e., ACOE, OPRD)

### **Vegetation Removal/Modification (Map 3A & B, Map 5A & B)**

- Manual and mechanical removal (e.g., hand pulling, hand-tools, chainsaws) of trees over 2.5-feet tall within the HRA boundaries, and within 100 feet of the HRA boundaries (including removal methods such as lop and scatter and pile and burn) to remove predator perches
- Reintroduce native plants (e.g., American dune grass, pink sandverbena, *Camissonia* spp.) within the HRAs, where appropriate
- Conduct prescribed burning on European beachgrass along the Foredune Road berms adjacent to the HRAs
- Conduct prescribed burning on European beachgrass along the western side of the Re-route Road adjacent to the HRAs

## **Proposed Actions—Alternative B**

### Closure Area and Season (Map 2B)

- Implement seasonal public shoreline access restrictions within the entire CHU area (updated in 2012) (i.e., expand public shoreline access restrictions north of the FAA Tower by approximately 9.0–10.5 acres) (March 1–September 15) to protect nesting plovers
- Closure of Vehicle Access Point 3 to pedestrian/equestrian and vehicle traffic (March 1–September 15) to protect nesting plovers
- Seasonal closure of the HRAs (including the Foredune Road Gate) (March 1–September 15) to protect nesting plovers

### Habitat Amendments (Map 3A & B)

- Add and distribute up to 300 cubic yards of oyster shell material within the HRA boundaries annually to provide nesting camouflage

### Site Modifications (Map 3A & B)

- Reduce, homogenize, contour, and maintain the elevation of the sand within the HRAs as needed (e.g., using bulldozers and tractors with plow or disk attachments)

### Herbicides (Map 4A-E)

- Treat European beachgrass and all other state- and county-listed noxious weeds, AND non-native vegetation, AND undesirable native vegetation using BLM-approved herbicides within the HRAs and along the Foredune Road between the HRAs

### Monitoring (Map 1)

- Conduct aerial photography using drones outside of the breeding season

### Maintenance (Map 1)

- Conduct public beach clean-up events 1–6 times per year using ATVs/UTVs between September 16–February 28 as scheduled and coordinated by the BLM in cooperation with adjacent landowners (i.e., ACOE, OPRD)

### Vegetation Removal/Modification (Map 3A & B, Map 5A & B)

- Manual and mechanical removal (e.g., hand pulling, hand-tools, chainsaws) of trees over 2.5-feet tall within the HRA boundaries, and within 100 feet of the HRA boundaries (including removal methods such as lop and scatter and pile and burn) to remove predator perches
- Reintroduce native plants (e.g., American dune grass, pink sandverbena, *Camissonia* spp.) within the HRAs, where appropriate
- Conduct prescribed burning on European beachgrass along the Foredune Road berms adjacent to the HRAs
- Conduct prescribed burning on European beachgrass along the western side of the Re-route Road adjacent to the HRAs

## **Proposed Actions—Alternative C**

### Closure Area and Season (Map 2C)

- Implement seasonal public shoreline access restrictions on a portion of the CHU area from the shoreline area west of the HRAs extending north to Vehicle Access Point #3 (i.e., expand the seasonal public shoreline access restrictions to the north by approximately 4–5 acres) (March 1–September 15) to protect nesting plovers
- Seasonal closure of the HRAs (including the Foredune Road Gate) (March 1–September 15) to protect nesting plovers

### Herbicides (Map 4A-E)

- Treat European beachgrass and all other state- and county-listed noxious weeds using BLM-approved herbicides within the HRAs and along the Foredune Road between the HRAs

### **Public Input**

The BLM invites all interested parties to submit written comments on any issues or concerns regarding the proposed actions by November 23, 2016.

Please mail your comments to the Bureau of Land Management, Coos Bay District Office, 1300 Airport Lane, North Bend, OR 97459, Attn: Heather Partipilo. Comments can also be submitted electronically to [BLM\\_OR\\_CB\\_Mail@blm.gov](mailto:BLM_OR_CB_Mail@blm.gov), Attn: Heather Partipilo.

Comments, including names and street addresses of respondents, will be available for public review at the address listed below during regular business hours (8:00 a.m. to 4:30 p.m.), Monday through Friday, except holidays, and may be published as part of the EA document or other related documents. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publically available at any time.

While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

*/s/ Todd D. Buchholz*

*October 24, 2016*

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Todd D. Buchholz  
Umpqua Field Manager

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Date

**Table 2.** Elements of the proposed action alternatives (Alt. A, Alt. B., Alt. C) as compared to the Existing Actions (i.e., no action)

Proposed Actions				Alt. A	Alt. B	Alt. C	Existing Actions
<b>Closure Area and Season*</b>							
Seasonal Date Restrictions	Seasonal Access	HRA Access	Shoreline Access Restrictions				
March 15–September 15	Implement <b>seasonal</b> public shoreline access restrictions to protect nesting plovers  In the event that plovers nest on BLM-managed lands within the CHU, the BLM would post the immediate area closed and rope around the nest(s) to limit disturbance  Maintain the pedestrian/equestrian trail to the beach at the FAA Tower	<b>Seasonal closure</b> of the HRAs (including the Foredune Road Gate) to protect nesting plovers	Implement <b>seasonal public shoreline access restrictions</b> on a <u>portion</u> of the CHU area from the beach area west of the HRAs extending north to the FAA Tower to protect nesting plovers				E
March 1–September 15		<b>Year-round closure</b> of the HRAs (including the Foredune Road Gate) to protect nesting plovers  Create additional vehicle pull-out areas along the Re-route Road for safety	Implement <b>seasonal public shoreline access restrictions</b> within the <u>entire</u> CHU area (updated in 2012) (i.e., expand public shoreline access restrictions north of the FAA Tower by approximately 9.0–10.5 acres) to protect nesting plovers	A			
		<b>Seasonal closure</b> of the HRAs (including the Foredune Road Gate) to protect nesting plovers	Closure of Vehicle Access Point 3 to pedestrian/equestrian and vehicle traffic to protect nesting plovers  Implement <b>seasonal public shoreline access restrictions</b> on a <u>portion</u> of the CHU area from the shoreline area west of the HRAs extending north to Vehicle Access Point #3 (i.e., expand the seasonal public shoreline access restrictions to the north by approximately 4–5 acres) to protect nesting plovers		B		
<b>Habitat Amendments</b>							
Add and distribute up to 300 cubic yards of oyster shell material within the HRA boundaries annually to provide nesting camouflage				A	B		E
<b>Site Modifications</b>							
Reduce, homogenize, contour, and maintain the elevation of the sand within the HRAs as needed (e.g., using bulldozers and tractors with plow or disk attachments)				A	B		E
Reduce Foredune Road berm heights between the HRAs with heavy equipment <u>AND</u> maintain the reduced berm heights with heavy equipment (e.g., recurring plowing and disking)				A	B		
<b>Herbicides</b>							
Treat <i>European beachgrass</i> and all other state- and county-listed noxious weeds, <u>AND</u> non-native vegetation, <u>AND</u> undesirable native vegetation using BLM-approved herbicides within the HRAs and along the Foredune Road between the HRAs					B		
Treat <i>European beachgrass</i> and all other state- and county-listed noxious weeds <u>AND</u> non-native vegetation using BLM-approved herbicides within the HRAs and along the Foredune Road between the HRAs				A			
Treat <i>European beachgrass</i> and all other state- and county-listed noxious weeds using BLM-approved herbicides within the HRAs and along the Foredune Road between the HRAs						C	E

<b>Proposed Actions</b>	<b>Alt. A</b>	<b>Alt. B</b>	<b>Alt. C</b>	<b>Existing Actions</b>
<b>Monitoring</b>				
Conduct aerial photography using drones outside of the breeding season	A	B		
Monitor snowy plover populations and habitat within the HRAs and the shoreline	A	B	C	E
Monitor pink sandverbena populations within the HRAs outside of the breeding season	A	B	C	E
<b>Maintenance</b>				
Maintain approximately 50 foot vegetation width on the foredune for North Spit stability	A	B	C	E
Remove, replace, and maintain gate at the intersection between the Fore-dune Road and the Re-route Road	A	B	C	E
Install and maintain fencing around road perimeters (e.g., 1998 HRA east, 1998 HRA west)	A	B	C	E
Install, move, and maintain permanent signs	A	B	C	E
Install, move, and remove seasonal signs, posts, and boundary ropes (e.g., symbolic fencing, carsonite signs) on the shoreline and in the HRAs	A	B	C	E
Conduct public beach and shoreline clean-up events 1–6 times per year using ATVs/UTVs between September 16–February 28 as scheduled and coordinated by the BLM in cooperation with adjacent landowners (i.e., ACOE, OPRD)	A	B		
<b>Vegetation Removal/Modification</b>				
Manual removal (e.g., hand pulling) of undesirable plants within the HRA boundaries	A	B	C	E
Manual removal (e.g., hand pulling) of undesirable plants on the Fore-dune Road berms	A	B	C	E
Manual removal (e.g., hand pulling) of undesirable plants on the foredune for plover chick mobility corridors	A	B	C	E
Mechanical removal (e.g., bulldozer) of encroaching vegetation within HRAs	A	B	C	E
Mechanical reduction (e.g., plowing, disking) of European beachgrass approximately 1–2 times per year within the HRA boundaries	A	B	C	E
Manual and mechanical removal (e.g., hand pulling, hand-tools, chainsaws) of trees over 2.5-feet tall within the HRA boundaries, and within 100 feet of the HRA boundaries (including removal methods such as lop and scatter and pile and burn) to remove predator perches	A	B		
Reintroduce native plants (e.g., American dune grass, pink sandverbena, <i>Camissonia</i> spp.) within the HRAs, where appropriate	A	B		E
Conduct prescribed burning on European beachgrass along the Fore-dune Road berms adjacent to the HRAs	A	B		E
Conduct prescribed burning on European beachgrass along the western side of the Re-route Road adjacent to the HRAs	A	B		E

\* Closure area and seasons would not affect administrative access for the scope of this project, which includes Federal, State, or local officers or employees in the scope of their duties; members of any organized rescue or firefighting force in the performance of official duty; and any person authorized in writing by the BLM (69 FR 19220).

ACOE=U.S. Army Corps of Engineers

ATV=All-terrain Vehicle

CHU=Critical Habitat Unit

FAA=Federal Aviation Administration

HRA=Habitat Restoration Area

OPRD=Oregon Parks and Recreation Department

UTV=Utility Task Vehicle

North Spit Snowy Plover Habitat Restoration EA  
DOI-BLM-ORWA-C030-2016-0001-EA

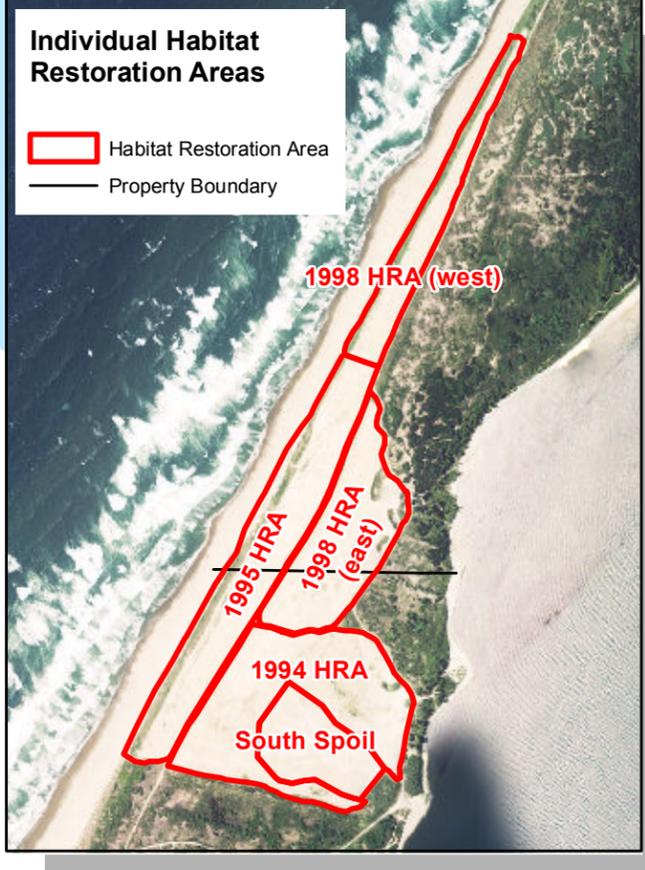
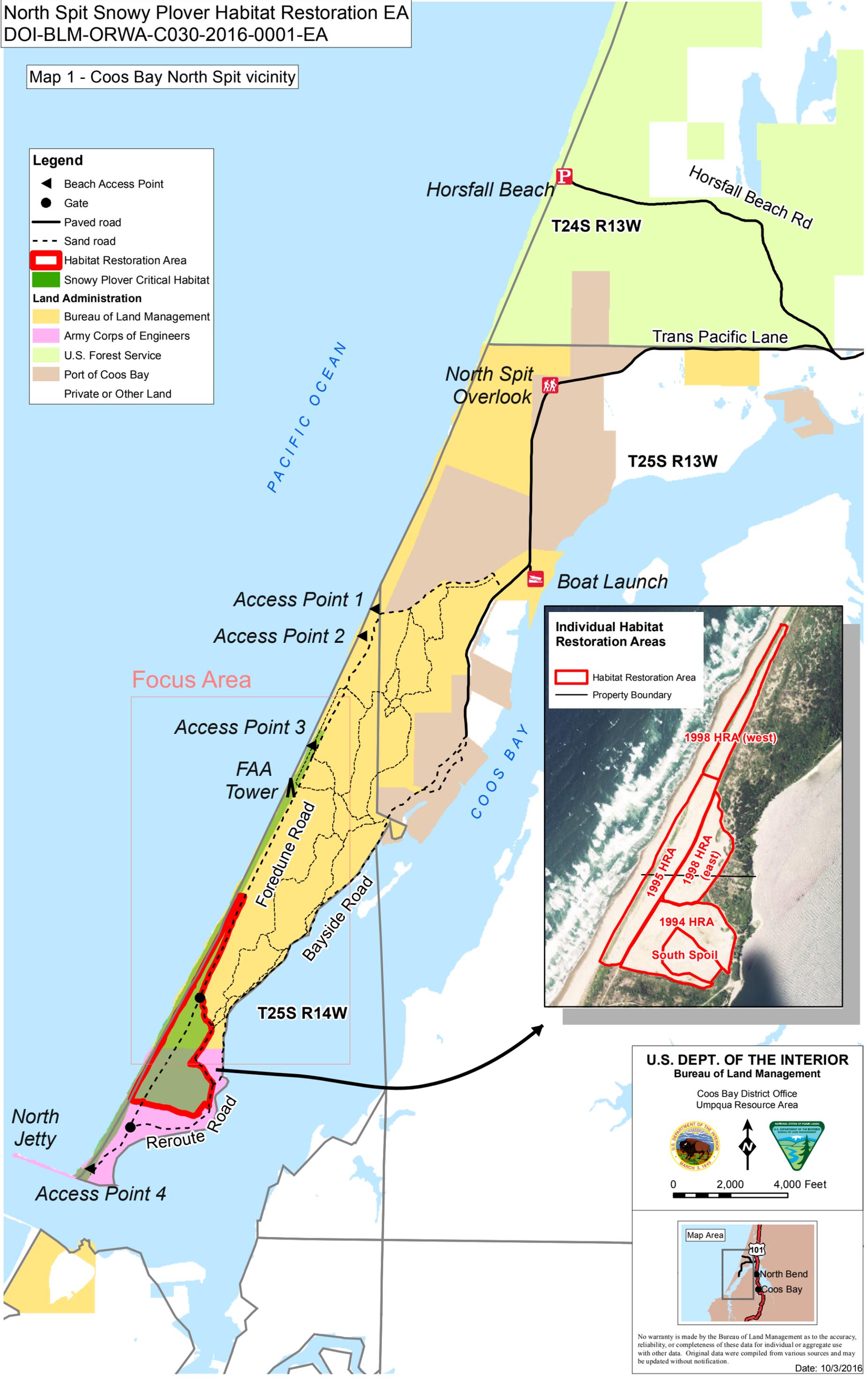
Map 1 - Coos Bay North Spit vicinity

**Legend**

- ◄ Beach Access Point
- Gate
- Paved road
- - - Sand road
- ▭ Habitat Restoration Area
- Snowy Plover Critical Habitat

**Land Administration**

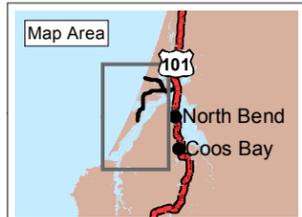
- Bureau of Land Management
- Army Corps of Engineers
- U.S. Forest Service
- Port of Coos Bay
- Private or Other Land



**U.S. DEPT. OF THE INTERIOR**  
Bureau of Land Management

Coos Bay District Office  
Umpqua Resource Area

0 2,000 4,000 Feet



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

Date: 10/3/2016

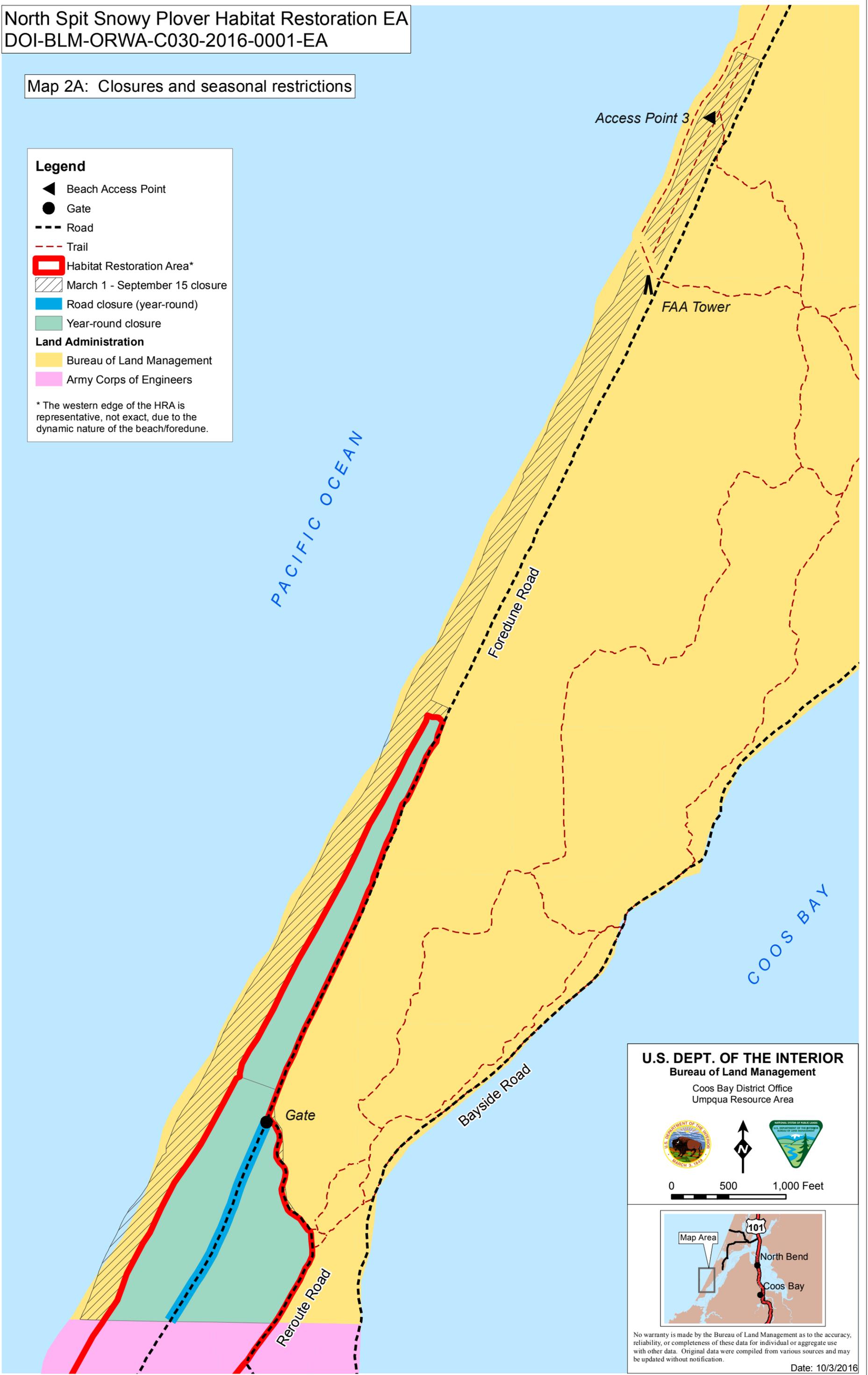
North Spit Snowy Plover Habitat Restoration EA  
 DOI-BLM-ORWA-C030-2016-0001-EA

Map 2A: Closures and seasonal restrictions

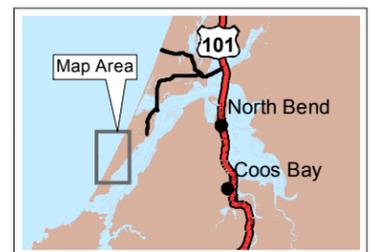
**Legend**

- ▲ Beach Access Point
  - Gate
  - Road
  - - - Trail
  - ▭ Habitat Restoration Area\*
  - ▨ March 1 - September 15 closure
  - Road closure (year-round)
  - Year-round closure
- Land Administration**
- Bureau of Land Management
  - Army Corps of Engineers

\* The western edge of the HRA is representative, not exact, due to the dynamic nature of the beach/foredune.



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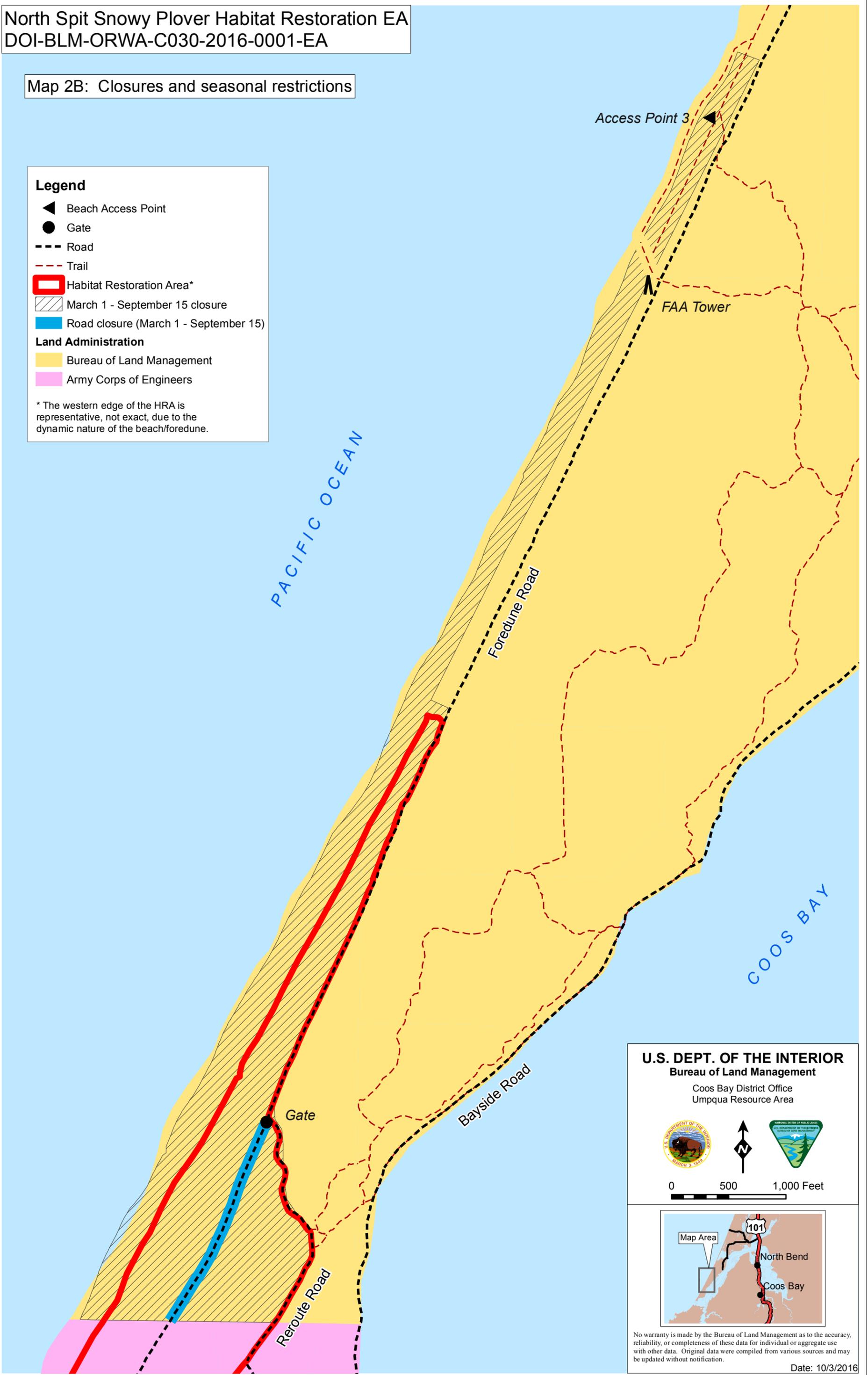
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Map 2B: Closures and seasonal restrictions

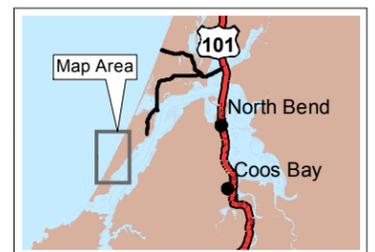
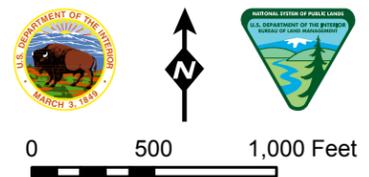
**Legend**

-  Beach Access Point
  -  Gate
  -  Road
  -  Trail
  -  Habitat Restoration Area\*
  -  March 1 - September 15 closure
  -  Road closure (March 1 - September 15)
- Land Administration**
-  Bureau of Land Management
  -  Army Corps of Engineers

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Date: 10/3/2016

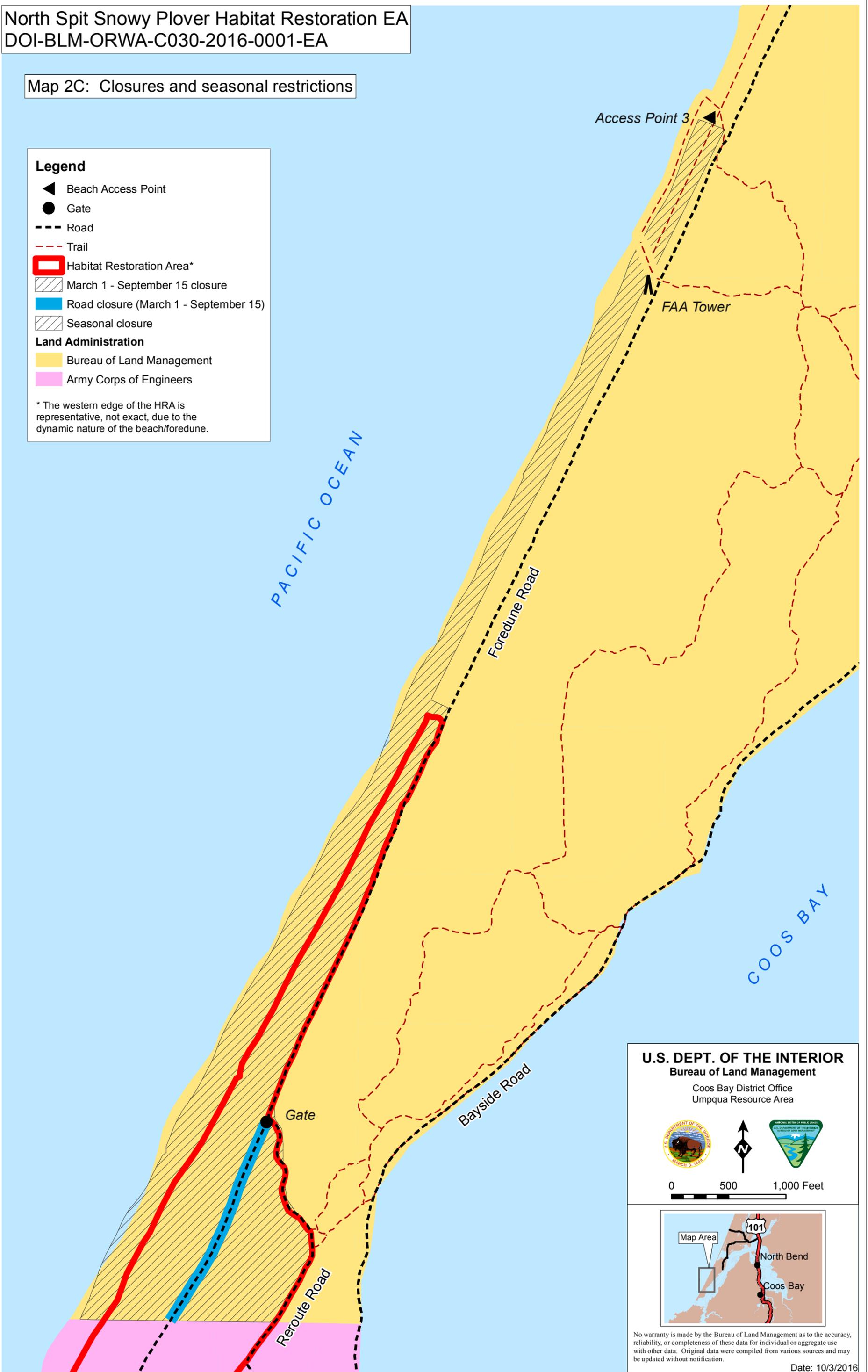
North Spit Snowy Plover Habitat Restoration EA  
 DOI-BLM-ORWA-C030-2016-0001-EA

Map 2C: Closures and seasonal restrictions

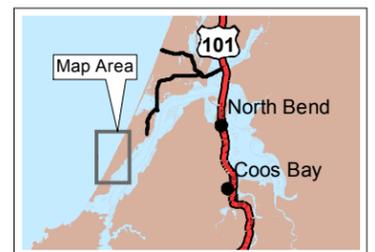
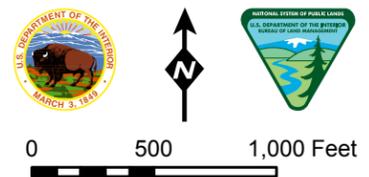
**Legend**

-  Beach Access Point
  -  Gate
  -  Road
  -  Trail
  -  Habitat Restoration Area\*
  -  March 1 - September 15 closure
  -  Road closure (March 1 - September 15)
  -  Seasonal closure
- Land Administration**
-  Bureau of Land Management
  -  Army Corps of Engineers

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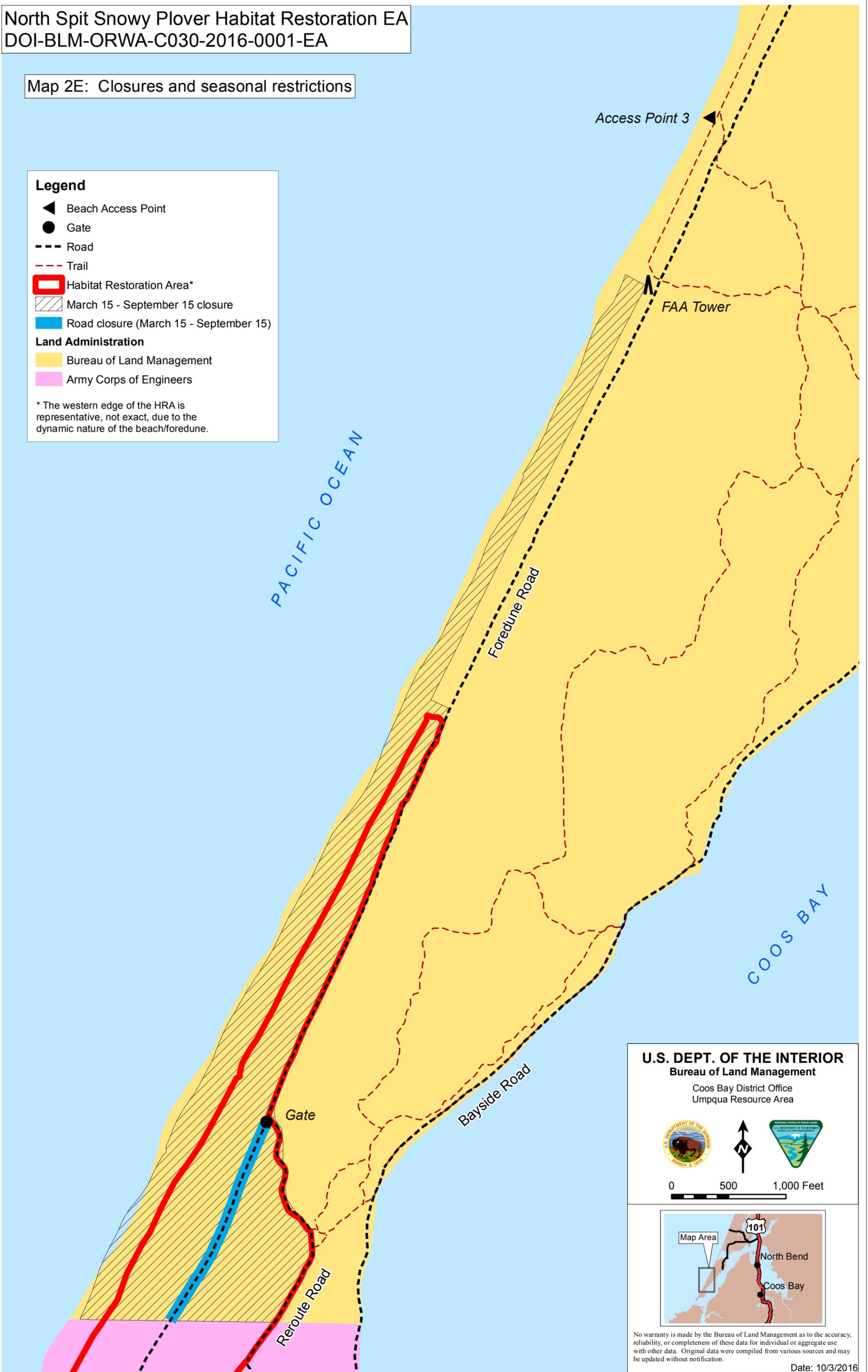
North Spit Snowy Plover Habitat Restoration EA  
DOI-BLM-ORWA-C030-2016-0001-EA

Map 2E: Closures and seasonal restrictions

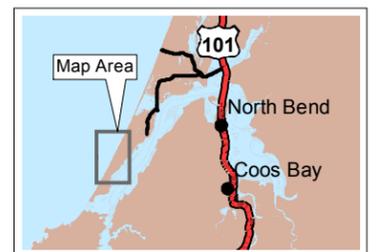
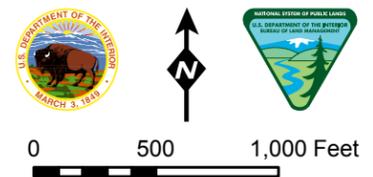
**Legend**

-  Beach Access Point
  -  Gate
  -  Road
  -  Trail
  -  Habitat Restoration Area\*
  -  March 15 - September 15 closure
  -  Road closure (March 15 - September 15)
- Land Administration**
-  Bureau of Land Management
  -  Army Corps of Engineers

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Date: 10/3/2016

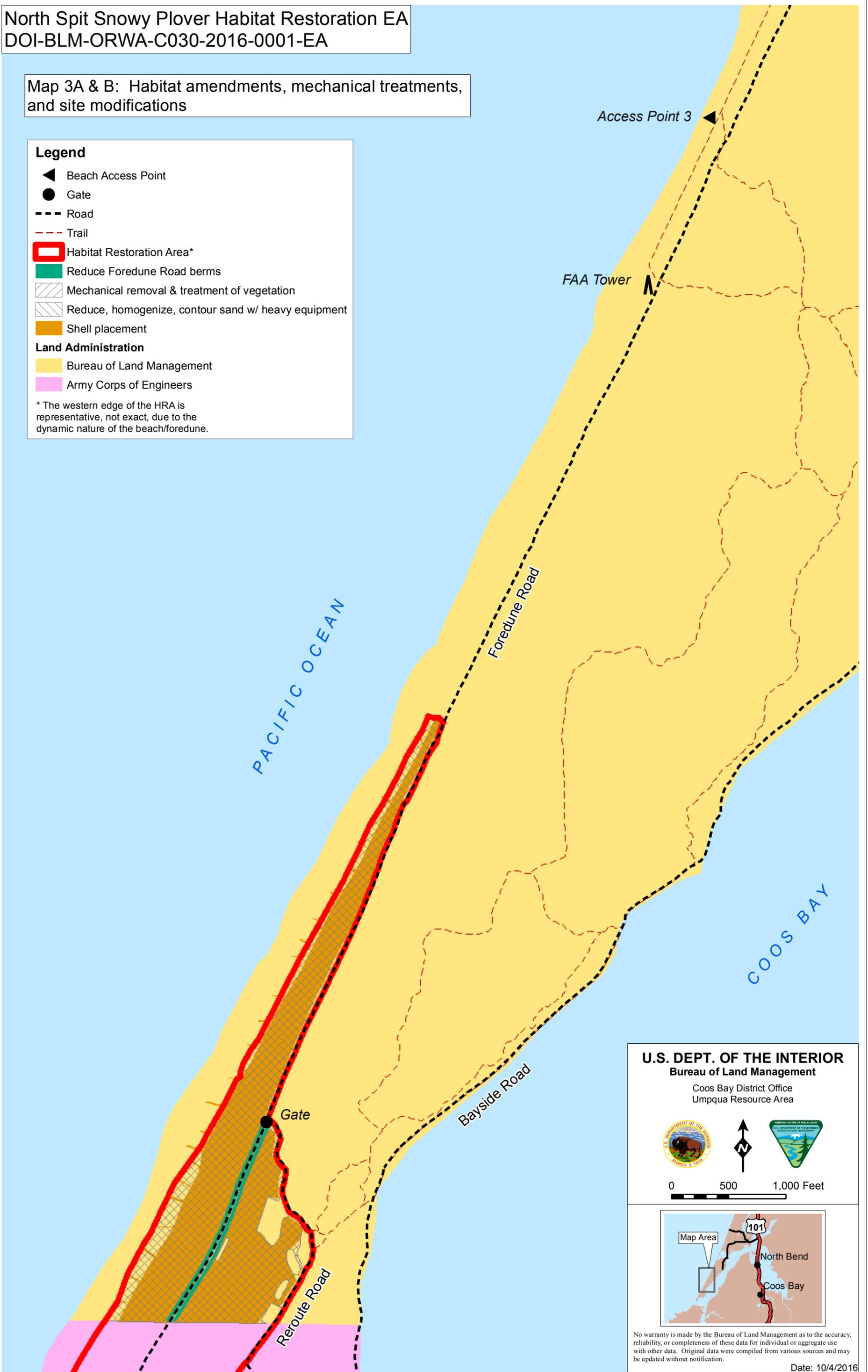
North Spit Snowy Plover Habitat Restoration EA  
 DOI-BLM-ORWA-C030-2016-0001-EA

Map 3A & B: Habitat amendments, mechanical treatments, and site modifications

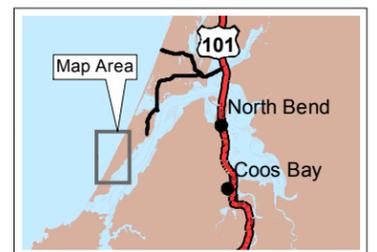
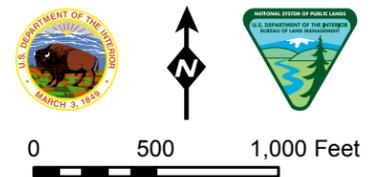
**Legend**

-  Beach Access Point
  -  Gate
  -  Road
  -  Trail
  -  Habitat Restoration Area\*
  -  Reduce Foredune Road berms
  -  Mechanical removal & treatment of vegetation
  -  Reduce, homogenize, contour sand w/ heavy equipment
  -  Shell placement
- Land Administration**
-  Bureau of Land Management
  -  Army Corps of Engineers

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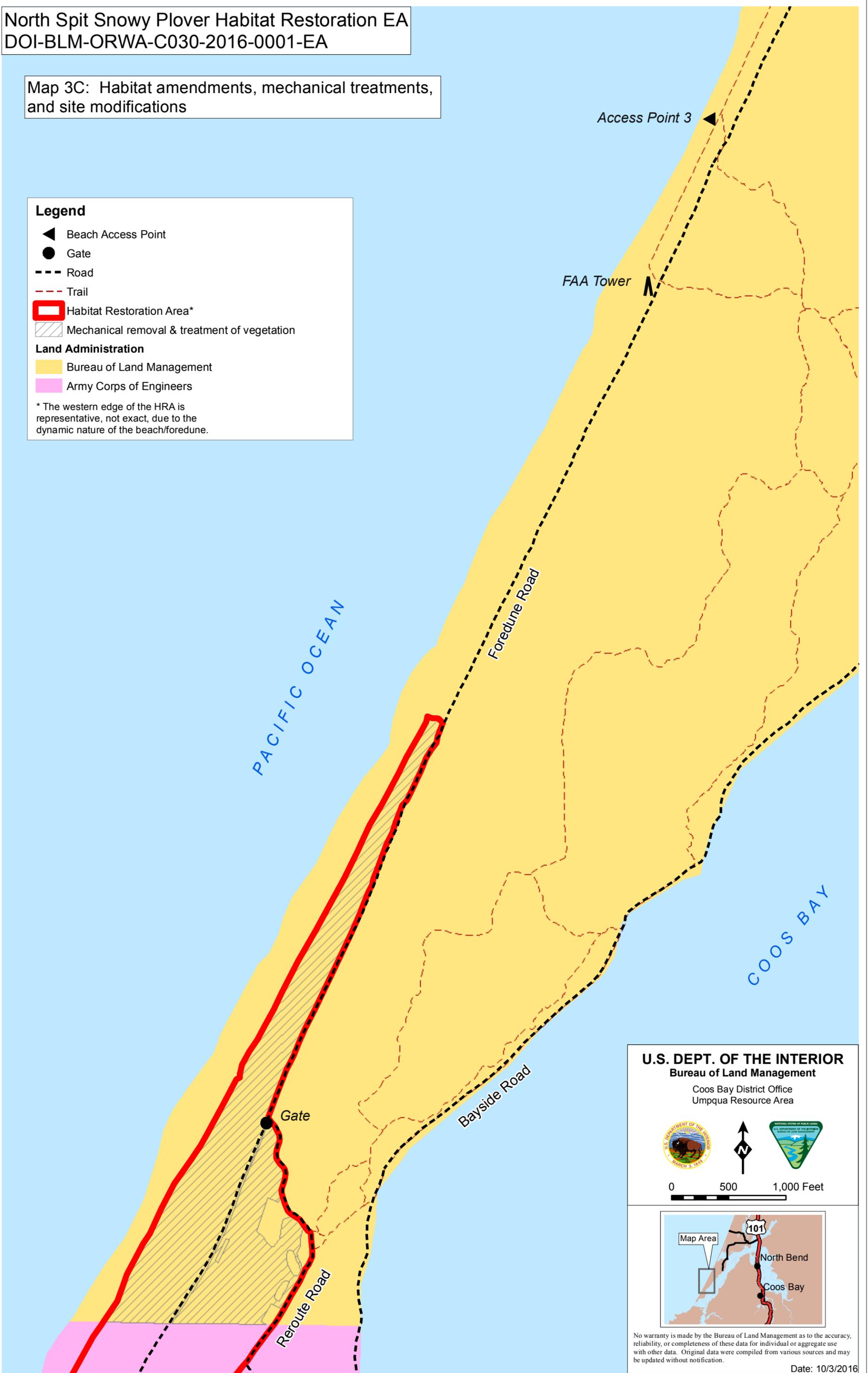
North Spit Snowy Plover Habitat Restoration EA  
 DOI-BLM-ORWA-C030-2016-0001-EA

Map 3C: Habitat amendments, mechanical treatments, and site modifications

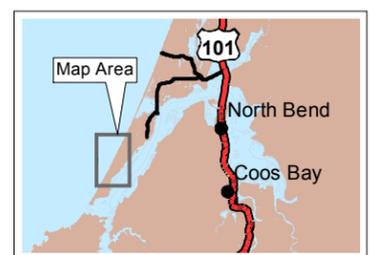
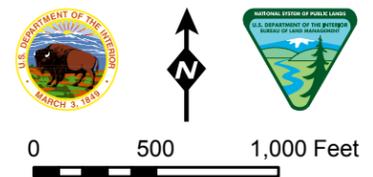
**Legend**

-  Beach Access Point
  -  Gate
  -  Road
  -  Trail
  -  Habitat Restoration Area\*
  -  Mechanical removal & treatment of vegetation
- Land Administration**
-  Bureau of Land Management
  -  Army Corps of Engineers

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Date: 10/3/2016

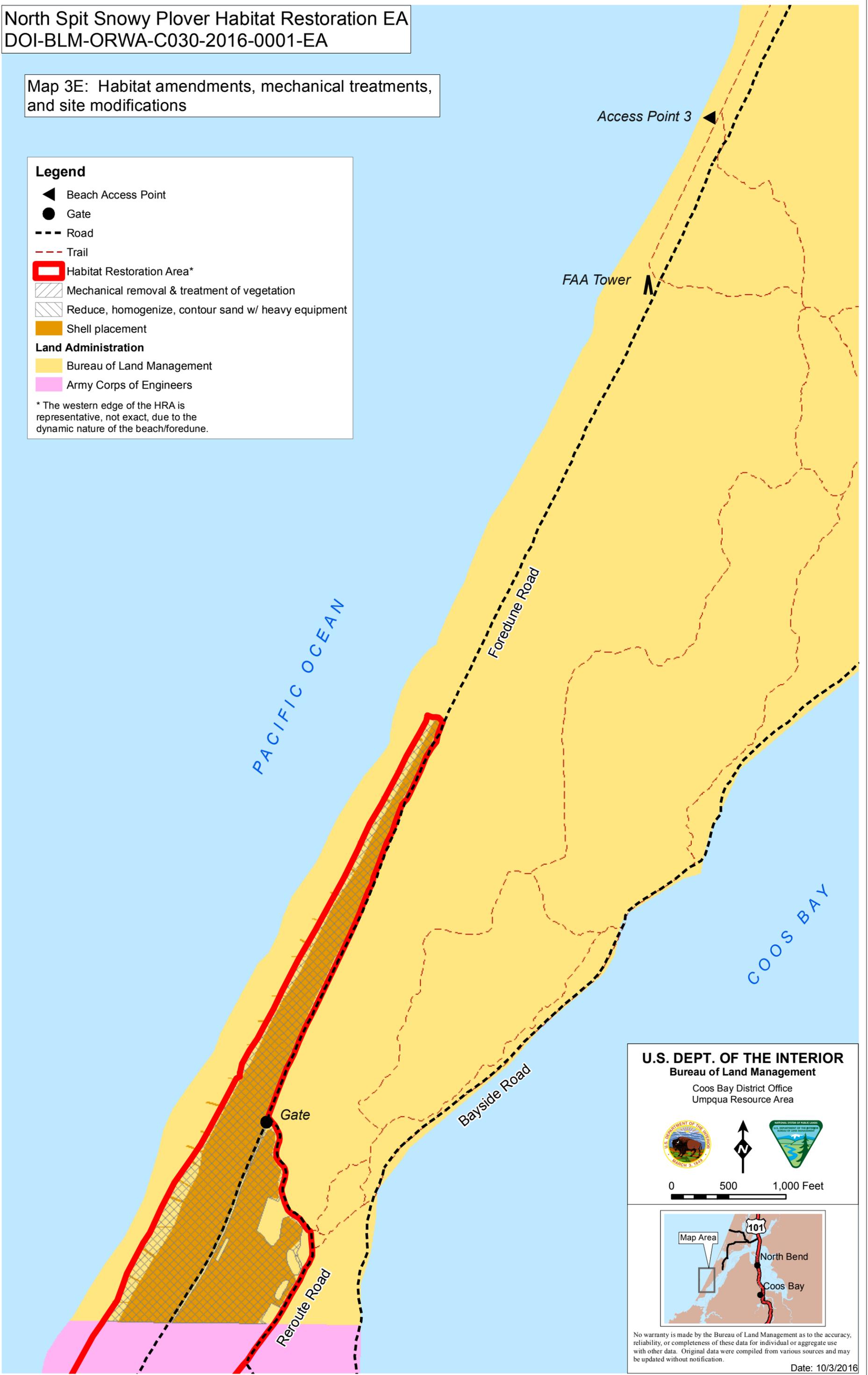
North Spit Snowy Plover Habitat Restoration EA  
 DOI-BLM-ORWA-C030-2016-0001-EA

Map 3E: Habitat amendments, mechanical treatments, and site modifications

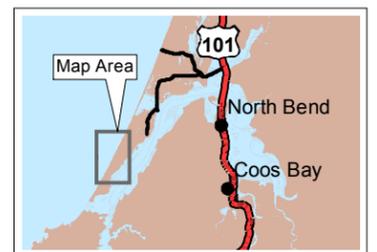
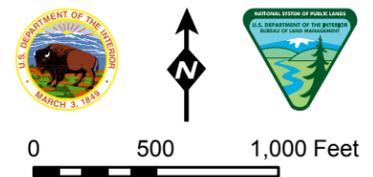
**Legend**

-  Beach Access Point
-  Gate
-  Road
-  Trail
-  Habitat Restoration Area\*
-  Mechanical removal & treatment of vegetation
-  Reduce, homogenize, contour sand w/ heavy equipment
-  Shell placement
- Land Administration**
-  Bureau of Land Management
-  Army Corps of Engineers

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Date: 10/3/2016

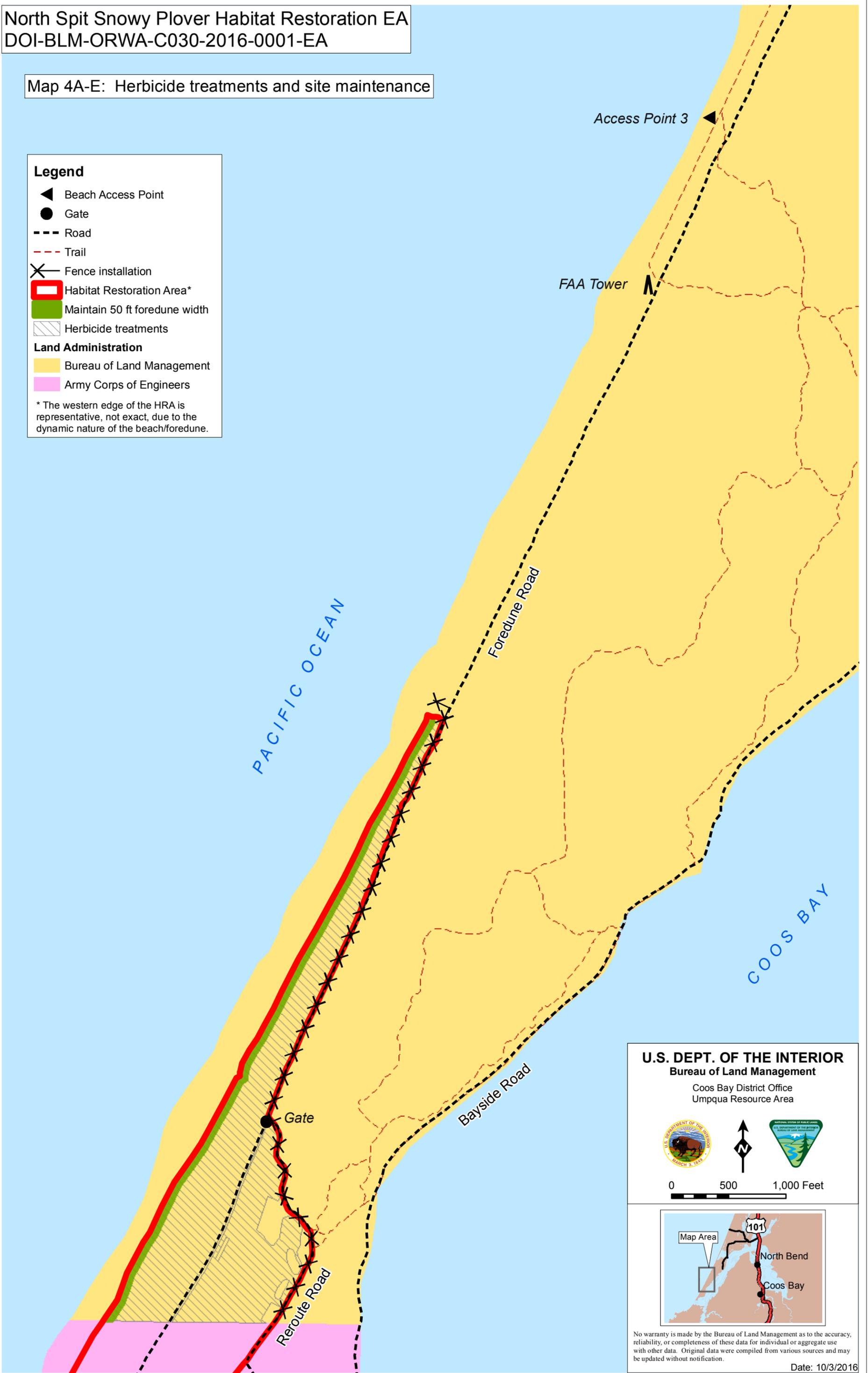
North Spit Snowy Plover Habitat Restoration EA  
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Map 4A-E: Herbicide treatments and site maintenance

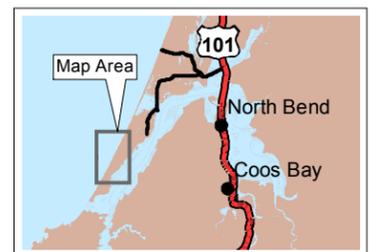
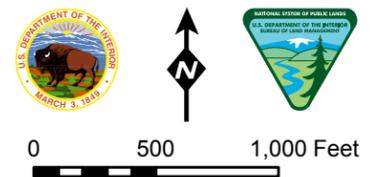
**Legend**

-  Beach Access Point
  -  Gate
  -  Road
  -  Trail
  -  Fence installation
  -  Habitat Restoration Area\*
  -  Maintain 50 ft foredune width
  -  Herbicide treatments
- Land Administration**
-  Bureau of Land Management
  -  Army Corps of Engineers

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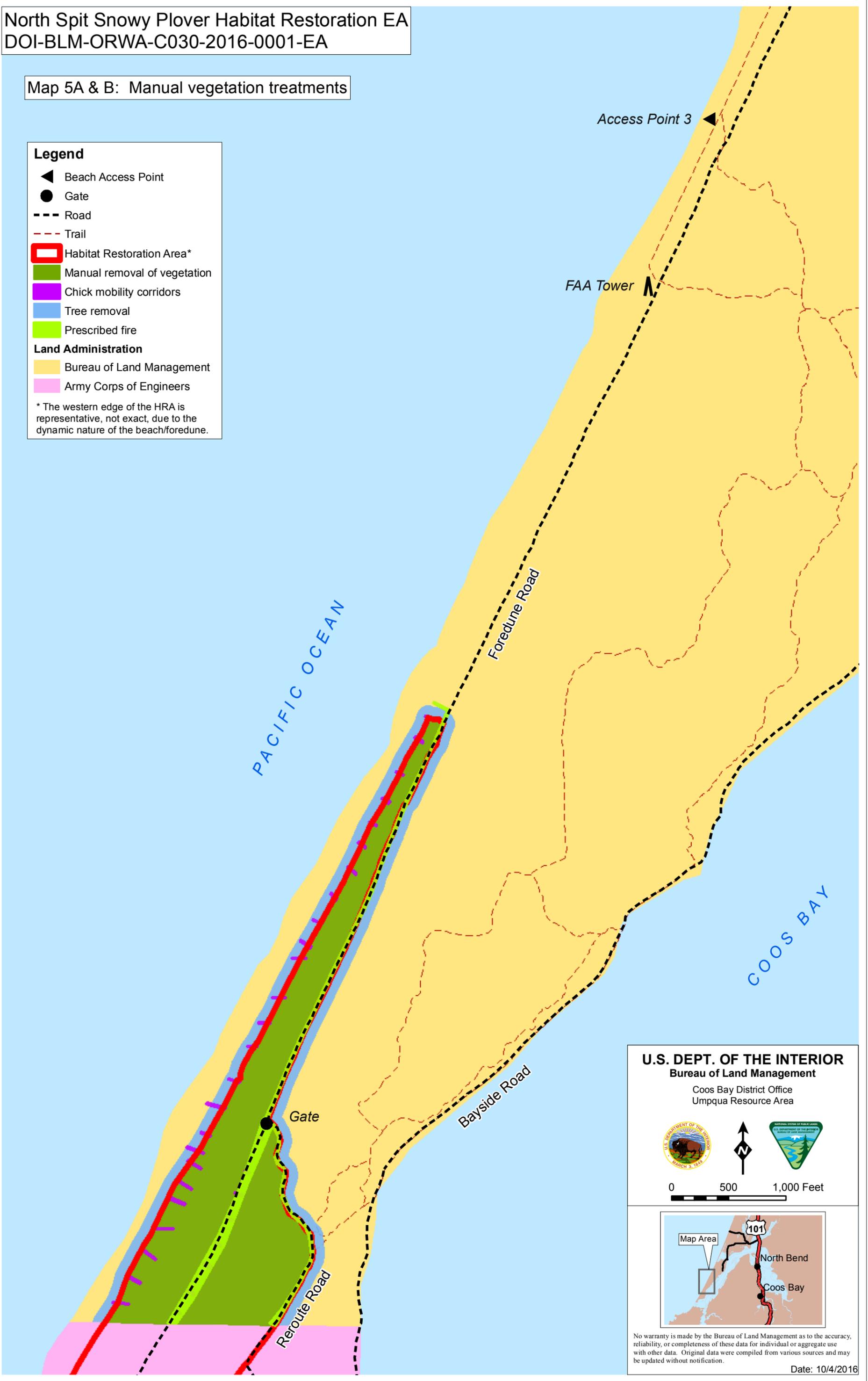
North Spit Snowy Plover Habitat Restoration EA  
 DOI-BLM-ORWA-C030-2016-0001-EA

Map 5A & B: Manual vegetation treatments

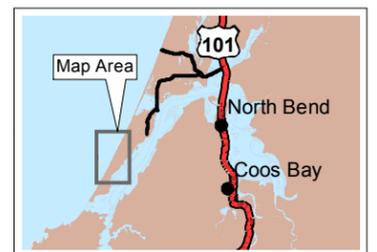
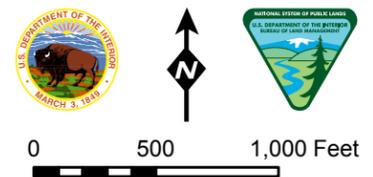
**Legend**

-  Beach Access Point
  -  Gate
  -  Road
  -  Trail
  -  Habitat Restoration Area\*
  -  Manual removal of vegetation
  -  Chick mobility corridors
  -  Tree removal
  -  Prescribed fire
- Land Administration**
-  Bureau of Land Management
  -  Army Corps of Engineers

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Map 5C: Manual vegetation treatments

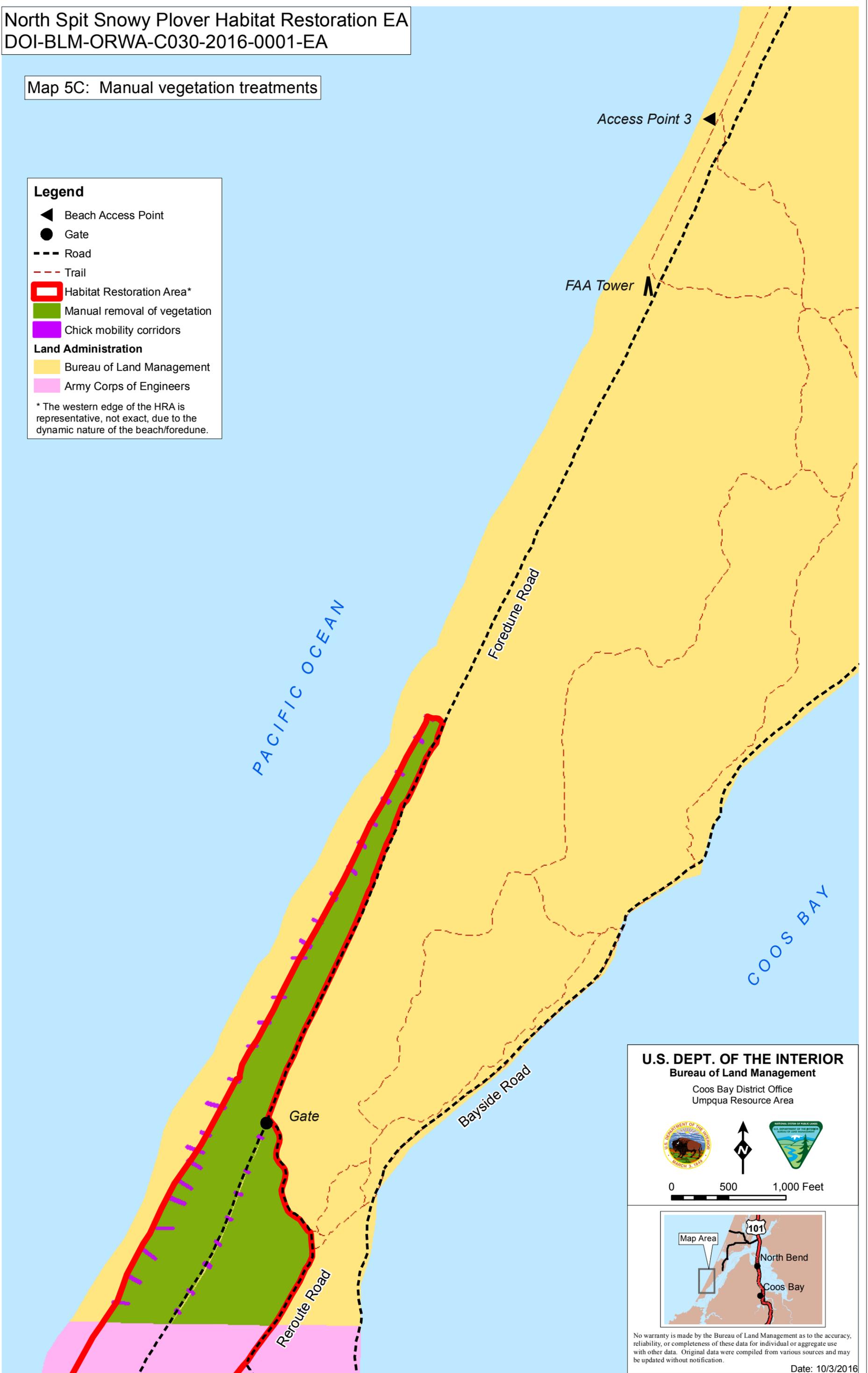
**Legend**

- ◀ Beach Access Point
- Gate
- - - Road
- - - Trail
- ▭ Habitat Restoration Area\*
- Manual removal of vegetation
- Chick mobility corridors

**Land Administration**

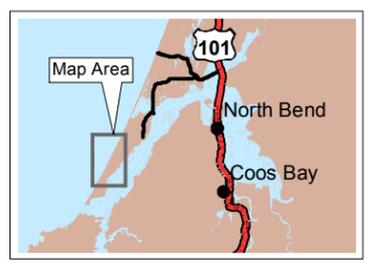
- Bureau of Land Management
- Army Corps of Engineers

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0 500 1,000 Feet



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Map 5E: Manual vegetation treatments

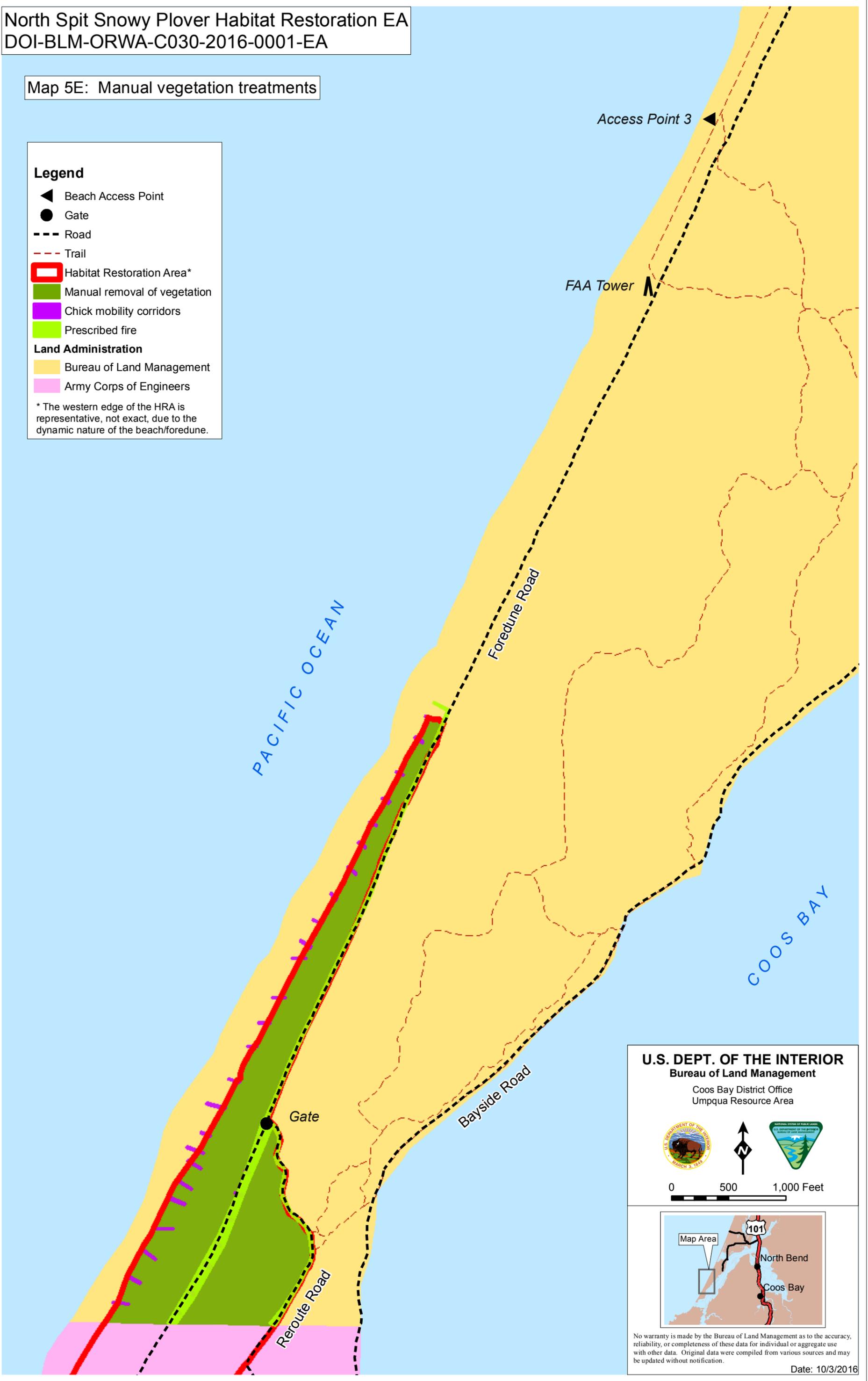
**Legend**

- ◀ Beach Access Point
- Gate
- - - Road
- - - Trail
- ▭ Habitat Restoration Area\*
- Manual removal of vegetation
- Chick mobility corridors
- Prescribed fire

**Land Administration**

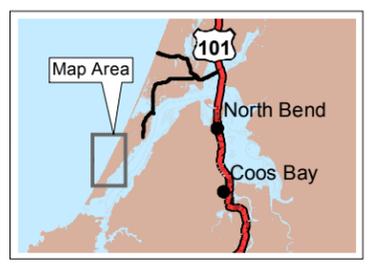
- Bureau of Land Management
- Army Corps of Engineers

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0 500 1,000 Feet



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