

***DRAFT ENVIRONMENTAL ASSESSMENT***

for the

**ISSUANCE OF AN INCIDENTAL TAKE PERMIT  
UNDER SECTION 10(a)(1)(B) OF THE ENDANGERED SPECIES ACT**

for

**ENDANGERED POINT ARENA MOUNTAIN BEAVER AND  
ENDANGERED BEHREN'S SILVERSPOT BUTTERFLY**

on

**Fisher Property, 43400 Hathaway Crossing, Point Arena, Mendocino  
County, California  
APN 27-211-02**

---

Prepared by:

**U.S. Fish and Wildlife Service**

Arcata Fish and Wildlife Office  
1655 Heindon Road  
Arcata, California 95521

**May 7, 2007**

**TABLE OF CONTENTS**

<b>I.</b>	<b>PURPOSE AND NEED FOR THE ACTION .....</b>	<b>1</b>
A.	Background .....	1
B.	Purpose and Need .....	1
C.	Action Area.....	2
D.	Proposed Action and Decisions Needed .....	2
E.	Scoping and Issues Identified .....	3
F.	Regulatory Background.....	4
<b>II.</b>	<b>ALTERNATIVES INCLUDING THE PROPOSED PROJECT .....</b>	<b>6</b>
A.	No Action Alternative.....	6
B.	Alternate Project Layout Alternative .....	6
C.	Proposed Project Alternative.....	6
<b>III.</b>	<b>AFFECTED ENVIRONMENT .....</b>	<b>8</b>
A.	Biological Resources.....	8
B.	Threatened or Endangered Species .....	8
C.	Wetlands and Water Resources.....	10
D.	Physical Environment.....	10
E.	Land Use.....	10
F.	Cultural Resources.....	11
G.	Transportation / Traffic .....	11
<b>IV.</b>	<b>ENVIRONMENTAL CONSEQUENCES .....</b>	<b>12</b>
A.	No Action Alternative.....	12
B.	Alternate Project Layout Alternative .....	12
C.	Proposed Project Alternative.....	14

**TABLE OF CONTENTS (continued)**

**V. DOCUMENT PREPARATION TEAM .....16**

**VI. REFERENCES .....17**

**APPENDIX**

Habitat Conservation Plan for the Point Arena Mountain Beaver and Behren’s Sliverspot Butterfly at the Fisher Property, 43400 Hathaway Crossing, Point Arena, Mendocino County, California



## I. PURPOSE AND NEED FOR THE ACTION

### A. Background

Denise and Andy Fisher (Applicants), are seeking an incidental take permit (ITP) from the U.S. Fish and Wildlife Service (Service) pursuant to Section 10(a)(1)(B) of the Endangered Species Act of 1973, as amended (Act). The permit would authorize the take of Point Arena mountain beaver (*Aplodontia rufa nigra*) and Behren's silverspot butterfly (*Speyeria zerene behrensis*) in association with the construction and permanent occupation of a single family residence and associated improvements on 24.25 acres. The proposed take would be incidental to the development, implementation, and operation of this project. The applicants are seeking an ITP for the duration of 80 years.

The Applicants have submitted a Habitat Conservation Plan (HCP) and an ITP application. The HCP is a statutory requirement of the permit process. Pursuant to Section 10(a)(2)(A), the applicant must submit a conservation plan that specifies the impacts that will likely result from such taking, how the impacts of the taking will be minimized and mitigated, alternative actions to such taking, and other measures that the Secretary may require as being necessary or appropriate for purposes of the plan.

Issuance of an ITP is a Federal action subject to compliance with the National Environmental Policy Act (NEPA). This Environmental Assessment (EA) will evaluate the potential environmental impacts of issuing an ITP and approving the implementation of the proposed HCP.

### B. Purpose and Need

The purpose of the Service's proposed action in this EA is to authorize the incidental take of Point Arena mountain beaver and Behren's silverspot butterfly, (including permanent habitat loss, while undertaking otherwise lawful activities associated with the proposed project) and to provide the best possible conservation for these two endangered species. This take authorization is needed because the Applicant's proposed project would result in the take of both species. Without an ITP, the Applicant could be subject to the enforcement provisions of Section 11 of the Act.

The Applicants have prepared an HCP (Appendix) that discusses the impacts that will likely result from such taking, how the impacts of the taking will be minimized and mitigated, alternative actions to such taking, and other measures that the Service has deemed necessary or appropriate. The Applicants and the Service consider implementation of the HCP in connection with a Section 10(a)(1)(B) permit to be an effective means to reconcile impacts from the proposed project on Point Arena mountain beaver and Behren's silverspot butterfly and their associated habitats with the Section 9 prohibition and other conservation mandates under the Act.

### C. Action Area

---

The proposed project site is located one mile northeast of the town of Point Arena, Mendocino County, California at 43400 Hathaway Crossing in the NW ¼ of section 7, T12N, R16W, MDB&M. The site is located on the USGS – Point Arena, 7.5 Minute Series Quadrangle, and consists of the entire parcel designated as APN 27-211-02 (see Appendix, Figure 1). This 24.25 acre parcel is in an unincorporated part of Mendocino County.

Proposed development on the site includes a single family dwelling, septic system, driveway, livestock pasture, gardens, and other associated improvements and activities on 16.5 acres. It is expected that one acre of these 16.5 acres will be intensively developed. The remaining 7.75 acres are to be protected in perpetuity as they currently exist within two conservation areas intended to benefit both covered species (see Appendix, Figure 2). The entire project site is considered occupied by an estimated 82 to 258 Point Arena mountain beavers and an unknown, but presumably low, number of Behren's silverspot butterflies. The estimated maximum number of Point Arena mountain beaver that may be taken as a result the implementation of this project is 28. It is also estimated that all of the Behren's silverspot butterflies associated with 30 larval host plants may be taken as a result of project implementation.

**D. Proposed Action and Decisions Needed**

The proposed action is the issuance of a permit by the Service to allow for the incidental take of Point Arena mountain beavers and Behren's silverspot butterflies during the construction of the proposed project and subsequent occupation of the site.

Pursuant to Section 10(a)(2)(B) of the Act, decisions to be made by the Service are:

1. Is the proposed take incidental to an otherwise lawful activity?
2. Are the impacts of the proposed taking minimized and mitigated to the maximum extent practicable?
3. Has the applicant ensured that adequate funding for the HCP will be provided to implement the measures proposed and to deal with unforeseen circumstances?
4. Is the proposed take such that it will not appreciably reduce the likelihood of the survival and recovery of the species in the wild?
5. Are there other measures that should be required as necessary or appropriate for the purposes of the HCP?

The Service may choose to (1) issue a permit conditioned on implementation of the HCP as submitted by the Applicants; (2) to issue a permit conditioned on

implementation of the HCP as submitted together with other measures specified by the Service; or (3) to deny the permit.

**E. Scoping and Issues Identified**

In November 2003, the Service mailed out 17 scoping letters (AFWO Correspondence 1-14-TA-2004-2036) regarding this project. The letter identified the Service's intent to gather information necessary to prepare either an EA or an EIS for this proposed HCP and associated ITP. Letters were sent to adjoining neighbors, local Indian tribes, local environmental groups, species experts, and relevant Federal, state, and county agencies. No input was received and no issues were identified during the scoping period. No controversial issues or uncertain or unique risks are known for this project.

Following receipt of a complete ITP application package from the Applicants, the Service will publish a Notice of Availability in the Federal Register noticing interested parties that the permit application, the HCP, and the EA are available for public review. This public comment period will be open for 60 days.

**F. Regulatory Background**

Federal authorization of incidental take is subject to several laws and regulations. In essence, these laws and regulations, which are summarized below, establish what are "otherwise lawful activities" pursuant to which any take that is authorized under the ITP must be incidental. In addition, laws that do not directly control these issues but are related are also summarized below.

a. Endangered Species Act

The Act is administered by the secretaries of the Interior and Commerce through the Service and the National Oceanic and Atmospheric Administration (NOAA), respectively. Species listed as endangered or threatened under the Act are provided protection as described below.

Section 9 of the Act prohibits the "take" of any Federally listed species of wildlife unless authorized under provisions of Section 7, Section 10(a), or Section 4(d) of the Act. Section 3 of the Act defines take as "to harass, harm, pursue, shoot, hunt, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct." Section 10(a)(1)(B) defines "incidental take" as take that is "incidental to and not the purpose of, the carrying out of an otherwise lawful activity." Federal regulations define the terms "harass" and "harm" as follows: Harass means "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering." Harm means "an act which actually kills or injures wildlife" and "may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering."

A Section 10(a) permit constitutes an exception to the taking prohibition of Section 9 of the Act, and allows the Services to authorize taking of endangered and threatened species by non-Federal entities that is incidental to, but not the purpose of, otherwise lawful activities. Under Section 10(a)(1)(B), such authorizations are granted through the issuance of ITPs. Similar provisions are found in Section 7 of the Act, where Federal agencies must ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of designated critical habitat of listed species. Because issuance of an ITP is a Federal action, the Services consult with themselves to ensure that ITP issuance will comply with Section 7 of the Act.

b. National Environmental Policy Act

The NEPA of 1969, as amended, applies to all Federal agencies and most of the activities they manage, regulate, or fund that affect the environment. It establishes environmental policies for the nation, provides an interdisciplinary framework for Federal agencies to assess environmental impacts, and contains “action-forcing” procedures to ensure that Federal agency decision makers take environmental factors into account. The scope of NEPA goes beyond that of the Act by considering the impact of a Federal action on non-wildlife resources such as water resources, cultural resources, and public utilities.

NEPA requires the analysis and full public disclosure of the potential environmental impacts of a proposed major Federal action. Pursuant to NEPA, the environmental consequences of the issuance of Federal incidental take authorization are being analyzed in this EA, which is being prepared by the Service as the lead Federal agency.

c. Clean Water Act

The Clean Water Act of 1977 is the principal Federal legislation designed to protect the quality of the nation’s waters. The purposes of the CWA include “the protection and propagation of fish, shellfish, and wildlife.” The U.S. Environmental Protection Agency is charged with implementing most of the Clean Water Act, including Section 404, which contains provisions for the protection of wetlands.

d. National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966, as amended, requires Federal agencies to take into account the effects of a proposed undertaking on cultural resources listed or eligible for listing on the National Register of Historic Places. The purpose of Section 106 of the NHPA is to ensure that Federal agencies consult with state and local groups before non-renewable cultural resources, such as archaeological sites and historic structures, are affected. Section 106 requires Federal agencies to take into account the effects of their actions on properties that may be eligible for listing or that are listed in the National Register of Historic Places for projects that they finance, permit, or own.

## II. ALTERNATIVES INCLUDING THE PROPOSED PROJECT

This section provides an analysis of three project alternatives including: (A) No Action Alternative, (B) Alternate Project Layout Alternative, and (C) Proposed Project Alternative.

### A. No Action Alternative

With this alternative, the Service would not issue an ITS, and the applicant would not implement their proposed project. No conservation areas would be preserved in perpetuity.

### B. Alternate Project Layout Alternative

This alternative would involve development of fewer acres and construction of fewer improvements on the parcel, done in a manner that results in no take of either listed species. Under this alternative there would be no need for an HCP, and no ITP would be issued. No conservation areas would be preserved in perpetuity.

### C. Proposed Project Alternative

Under this alternative the HCP, as proposed by the Applicants, would be approved and an 80-year ITP would be issued. This alternative assumes that of the 24.25 total acres on the parcel, up to 16.5 acres would be impacted by the proposed construction and other improvements. Construction plans include a 1,493 square foot single family dwelling, a septic system and leach field, a 12-foot wide 175-foot long gravel driveway, and a 10-foot wide 300-foot long gravel road to an existing barn. During all grading, sediment will be controlled by measures such as contouring, mulching, and seeding as described in the approved Grading Plan (see Grading Plan in Appendix). A collapsed barn will be removed and fencing will be constructed as necessary. Other associated improvements proposed include gardens, ornamental plantings, installation of utilities, and other actions related to long-term occupancy of the site. A total of 7.75 acres of suitable habitat would be protected in perpetuity as mitigation in two conservation areas. These conservation areas will be managed by preventing conifer encroachment, livestock trespass, and other sources of habitat degradation. This alternative provides that the Applicants would minimize the impacts to Point Arena mountain beaver on the site by timing construction to avoid the breeding season (breeding season is December 1 through June 30). Impacts to Behren's silverspot butterflies would be minimized by avoidance or transplantation of larval host plants (*Viola adunca*) to one of the conservation areas. In addition, the Applicants would allow Service access to the parcel for additional surveys, monitoring, experimentation, or other research related to the two listed species. See the Appendix for a detailed description of the proposed project alternative.

### **III. AFFECTED ENVIRONMENT**

#### **A. Biological Resources**

Vegetation on the site is comprised of a mosaic of northern coastal scrub, willow riparian forest, closed-cone coniferous forest, and seasonal wetland. Areas of grassland are intermixed within the northern coastal scrub habitats. A total of 117 plant species have been identified on the site; 84 (72%) are native species, and 33 (28%) are non-native. The coniferous forest areas are dominated by Douglas fir (*Pseudotsuga menziesii*). Species found in the grass-scrub mix include Idaho fescue (*Festuca idahoensis*) and sweet vernal grass (*Anthoxanthum odoratum*). No state listed, Federally listed, or otherwise special-status plant species or communities have been found on the site. See the Botanical Survey Report in the Appendix for more information on the vegetation at the site.

Due to the mix of densely vegetated areas and relatively open grassy areas, a wide variety of wildlife species are possible on the parcel. Amphibians present include Pacific tree frog (*Pseudacris regilla*), and reptiles present include western fence lizard (*Sceloporus occidentalis*) and garter snakes (*Thamnophis* spp.). Mammals known to be present in the area include black-tailed deer (*Odocoileus hemionus*) and bobcat (*Lynx rufus*). Numerous resident bird species including California quail (*Callipepla californica*) and red-tailed hawk (*Buteo jamaicensis*), as well as migratory species including Pacific-slope flycatcher (*Empidonax difficilis*) and Wilson's warbler (*Wilsonia pusilla*) also occur on the parcel.

#### **B. Threatened or Endangered Species**

Behren's silverspot butterfly. Rangewide, this butterfly is currently known to occur at only three sites, and there are no data on the total number of butterflies or the acres of suitable breeding or foraging habitat (USFWS 1997, USFWS 2003). There are no records of this Federally endangered species on the project site, and the nearest known occupied site is about 2 miles to the west on Bureau of Land Management lands at Stornetta Ranch. A small population 20 to 30 individuals of the larval host plant *Viola adunca* have been found on the project site. This plant is the only known larval host plant for this butterfly, and this small (<0.10 acres) patch is the only suitable breeding habitat on the parcel. There are approximately 12 acres of potentially suitable foraging habitat on the parcel, which contain potential nectar sources for this butterfly, including yarrow (*Achillea milleformis*), thistle (*Cirsium* spp.), and cat's ear (*Hypochaeris* spp.). Critical habitat has not been designated for this species. See the Appendix for more information on the biology and status of this species.

Point Arena mountain beaver. Rangewide there are a total of 240 known sites occupied by Point Arena mountain beaver, but there are no data on the total amount of suitable or occupied habitat rangewide (USFWS 1998). Detailed surveys were

conducted for this Federally endangered species on the parcel (see the Point Arena Mountain Beaver Biological Survey in the Appendix for additional information). Five distinct burrow areas were determined to be currently occupied by this species. In total, there were an estimated 82 to 258 Point Arena mountain beavers in these five burrow areas. The combined size of all occupied burrow areas combined is 2.24 acres, which constitutes 10.10% of the entire parcel. There are a total of 12 acres of suitable mountain beaver habitat on the parcel. These 12 acres are comprised primarily of northern coastal scrub with dense shrubby or herbaceous vegetation dominated by coyote brush (*Baccharis pilularis*), coffeeberry (*Rhamnus californicus*), cow parsnip (*Heuracleum lanatum*) California blackberry (*Rubus ursinus*) and blue rush (*Juncus patens*). Critical habitat has not been designated for this species. See the Appendix for more information on the biology and status of this species.

There are a number of other threatened or endangered species that occur in the vicinity of the project that were considered but eliminated from further discussion for various reasons. Contra Costa goldfields (*Lasthenia conjugens*) were determined to be absent from the parcel during the botanical survey. California coastal Chinook salmon (*Oncorhynchus tshawytscha*), central California coast coho salmon (*Oncorhynchus kisutch*), and Northern California steelhead (*Oncorhynchus mykiss*) are all known to occur in the lower reaches of Garcia River and are likely to occur in Hathaway Creek. The unnamed perennial creek on the parcel that feeds into Hathaway Creek has a small (about four feet wide and one foot deep) channel with a bed of fine sediment intermixed with small gravel. Few rocks or cobbles are evident in the channel. It is a low gradient stream and has no large woody debris. Due to its small size and absence of suitable spawning and rearing habitat, it does not support anadromous fish. There is no suitable habitat for either marbled murrelet (*Brachyramphus marmoratus*) or Northern spotted owl (*Strix occidentalis caurina*) on the parcel.

### **C. Wetlands and Water Resources**

Areas subject to jurisdiction under Section 404 of the Clean Water Act include those areas that fall at or below the “plane of ordinary water” of a waterway as defined by 33 CFR 323.2. An approximately 0.25 acre seasonal wetland occurs on the site, and meets the definition of a waterway subject to Section 404. Plant species associated with this wetland include horsetail (*Equisetum* sp.), pacific rush (*Juncus effusus*), and paniced bulrush (*Scirpus microcarpus*).

The parcel is bisected by an unnamed tributary to Hathaway Creek which is heavily vegetated with a willow riparian forest averaging 200 feet wide. This perennial creek has a channel about four feet wide and one foot in depth, exhibiting a bed of fine sediment intermixed with small gravel.

Water quality on the project site is good. There are no signs of accelerated erosion in the tributary to Hathaway Creek which exhibits a stable channel bottom, has heavily vegetated banks, and a healthy floodplain. The parcel has never been developed and its historic use as a sheep ranch would indicate that groundwater contamination would be unexpected. There is currently a well on the property that is expected to meet all future domestic water needs of the occupants of this property. This parcel is not in a floodplain; a floodplain is a flat or nearly flat land adjacent to a stream that experiences occasional or periodic flooding.

#### **D. Physical Environment**

Elevation ranges from 10 to 400 feet above sea level. The average annual precipitation is 35 to 45 inches, the average annual air temperature is about 53 degrees Fahrenheit, and the average frost-free period is 250 to 330 days.

Soils on the parcel are characteristic of side slopes of marine terraces, and were formed from material derived from sandstone or shale (Rittiman and Thorson 1988). These soils are shallow to moderately deep and are generally well drained. Localized areas have slopes of 15 to 99 percent, and have variable permeability and water capacity. The effective rooting depth is limited by bedrock at a depth of 10 to 40 inches. In some areas, surface runoff is rapid or very rapid, and the hazard of water erosion is severe or very severe.

#### **E. Land Use**

The parcel is located within the Rollinghills Subdivision, and is zoned by Mendocino County as Remote Residential (RMR20) which allows both open space and low density single family residential. Currently, the land use is open space. The 25 parcels in the subdivision are no smaller than 20 acres and are either undeveloped or used as single family residences. Prior to subdivision in the 1970s, the land was used for sheep and dairy ranching, and has remained largely undisturbed for over 25 years. Currently, there is no livestock grazing on the parcel or on any of the lands adjacent to this parcel, and none is anticipated in the near future since open range grazing is not permitted in the area. There is an old wooden barn from the dairy farming era that is still standing on the property, as well as other wooden outbuildings that have collapsed and lay in plies of debris. This parcel does not contain any farmlands. This parcel does not contain any public recreational, esthetic, or scenic resources.

#### **F. Cultural Resources**

Historic maps and other records were searched, and various groups were contacted to gather information on archeological, historic, or cultural resources that may be affected by this project. This research did not identify any archaeological sites or other cultural resources present in or within ¼ mile of the parcel. In addition, a full on-the-ground survey of the site was conducted on 20 July 2006 by Registered Professional

Archaeologist Heidi Koenig, and is contained in its entirety in the Appendix. A collapsed barn, five intermittent fencelines, and a short, poorly-defined road segment were recorded during the survey, and could be affected by the proposed action. These cultural resources were evaluated and were determined to be ineligible for National Register of Historic Places by Registered Professional Archaeologist Heidi Koenig. Ms. Koenig also meets the Secretary of Interior's Professional Qualification Standards for archaeologist. Therefore, in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, no measures are necessary for their protection. See the Archeological Survey and Evaluation Report in the Appendix for details on the methods and findings of the survey.

**G. Transportation / Traffic**

Access to this parcel from Highway 101 (in the City of Point Arena) is via Riverside Road (Mendocino County) and Hathaway Crossing (private), and is about 1.20 miles driving distance from Highway 101. Highway 101 is a paved, two-lane highway that that is the main transportation route in coastal Mendocino County and receives a high level of commercial and non-commercial traffic. Riverside Road is a paved, two-lane road that gets low to moderate use by mostly non-commercial traffic. Hathaway Crossing is an unpaved, single-lane road that receives a low level of usage from the local residents.

**IV. ENVIRONMENTAL CONSEQUENCES**

**A. No Action Alternative**

a. Biological Resources

The proposed construction would not occur, and therefore there would be no impacts to biological resources.

b. Threatened or Endangered Species

Without any construction on the parcel, the proposed take of the two endangered species, would not occur. As a result, there would be no ITP issued by the Service, and no HCP or provisions for permanent conservation areas set-aside for these two species. Without the establishment of the two conservation areas, there would be no long-term contribution to the recovery of these species.

c. Wetlands and Water Resources

The proposed construction would not occur, and therefore there would be no impacts to wetlands or water resources.

d. Physical Environment

The proposed construction would not occur, and therefore there would be no impacts to the physical environment.

e. Land Use

Actual land use would remain open space, rather than convert to residential. However, the zoning for this parcel (Remote Residential) allows both open space and residential, and that zoning designation would remain unchanged. Therefore, impacts to land use would not be significant.

f. Cultural Resources

The proposed construction would not occur, and therefore there would be no impacts to any of the cultural resources present.

g. Transportation / Traffic

The proposed construction would not occur, and therefore there would be no impacts to transportation/traffic.

h. Cumulative Effects

The Service is not aware of any other similar projects in the area. No other similar HCPs have been developed or are being developed for either Point Arena mountain beaver or Behren's silverspot butterfly. Because the Applicant would not implement their proposed project, no HCP would be implemented, no ITP would be issued, and no impacts would occur to any resources in the project area. Therefore, no cumulative effects would occur with the No Action Alternative.

**B. Alternate Project Layout Alternative**

a. Biological Resources

Under this alternative, fewer than 16.5 acres of wildlife habitat would be altered. Because there are no special status plant species, animal species, or plant communities present on the parcel (other than the two threatened or endangered species, see below), and because none of the non-listed wildlife species present are considered to be limited by habitat availability in this area, there would be no significant impacts on biological resources.

b. Threatened or Endangered Species

Since this design would specifically avoid any endangered species, there would be no ITP issued by the Service and no take of either listed species. As a result, there would be no HCP or provisions for permanent conservation areas set-aside for these two species. Without the establishment of the two conservation areas, there would be no long-term contribution to the recovery of these species.

c. Wetlands and Water Resources

Under this alternative, there would be no draining or filling of the wetland present on the parcel and no riparian vegetation would be removed. All ground breaking activities would be greater than 100 feet from the unmanned creek. During any grading, sediment would be controlled by provisions in the Grading Plan.

Accordingly, there would be no significant impacts on wetlands and water resources.

d. Physical Environment

Other than the potential for erosion during and after ground-breaking activities, there are no other anticipated impacts to the physical environment. Erosion, however, will be controlled by the contouring, mulching, and seeding provisions in a Grading Plan (see Appendix for an example). Mendocino County would require such a grading plan for any development on this site. Accordingly, there would be no significant impacts on the physical environment.

e. Land Use

Actual land use would convert to residential. However, the zoning for this parcel (Remote Residential) allows both open space and low density single family residential, and that zoning designation would remain unchanged. Therefore, although land use will change, consistency with established zoning restrictions indicates that impacts to land use would not be significant.

f. Cultural Resources

Some cultural resources (i.e., the collapsed barn, five intermittent fencelines, and a short road segment) have been located on the parcel, and would be impacted by the implementation of this alternative. However, since none of the cultural resources located on the property were deemed to be significant, there will be no significant impacts on cultural resources under this alternative.

g. Transportation / Traffic

There would be a period of approximately six months of increased traffic on public and private roads during construction. Occupation of the homesite will constitute a minimal increase in traffic on private roads, and no increase on public roads. This increase is not significant.

h. Cumulative Effects

The Service is not aware of any other similar projects in the area. No similar HCPs have been developed or are being developed for either Point Arena mountain beaver or Behren's silverspot butterfly. As discussed above, no significant impacts would occur to any resources for this alternative. Therefore, no significant cumulative effects would occur with the Alternate Project Layout Alternative.

---

**C. Proposed Project Alternative**

a. Biological Resources

No special status plant species, animal species, or plant communities are present on the parcel (other than the two threatened or endangered species, see below) and none be affected by this alternative. A maximum of 16.5 acres of wildlife habitat will be lost but, none of the non-listed wildlife species present are considered to be limited by habitat availability in this area.

b. Threatened or Endangered Species

Approximately 0.39 acres of occupied habitat, and 0.45 acres of unoccupied but suitable Point Arena mountain beaver habitat would be removed. The take resulting from this habitat loss and disturbance will be a maximum of 28 mountain beavers. Within the two conservation areas, 6.75 acres of suitable mountain beaver habitat, including 2.06 acres of currently occupied habitat, will be preserved in perpetuity, representing 86% of all individual mountain beavers and 84% of all occupied habitat on the parcel. The proposed project includes restrictions on the use of rodenticides on the parcel (see Appendix). The two burrow area that would be lost constitutes 0.83% of all the known occupied sites rangewide. No other similar development projects that involve authorized incidental take of Point Arena mountain beavers have been previously approved or are in development by the Service. Due to the small proportion of all mountain beavers that will be taken under this alternative, and that no similar projects have been implemented or are being planned, the effect of this alternative on Point Arena mountain beaver is deemed to be not significant. Outside of the conservation areas, up to 0.10 acres of BSSB breeding habitat containing up to 30 larval host plants, and 5.25 acres of potential foraging habitat for Behren's silverspot butterflies will be lost. Within the conservation areas 6.75 acres of potential foraging habitat for this butterfly will be preserved. No other projects that involve authorized incidental take of Behren's silverspot butterfly have been previously approved or are in development by the Service. Because of this, and due to the exceedingly low number of Behren's silverspot butterflies that may be taken under this alternative, the impacts are not significant with respect to this butterfly. Federally-listed anadromous fish likely occur downstream from the unnamed tributary to Hathaway Creek, although the tributary itself is unsuitable for spawning or rearing. However, along the unnamed tributary no riparian vegetation will be removed, all ground breaking activities are greater than 100 feet from the creek, and during any grading sediment will be controlled by provisions in the Grading Plan, therefore the Service has determined that this alternative would have no effect on anadromous fish.

c. Wetlands and Water Resources

The proposed HCP does not cover any draining or filling of the wetland present on the parcel, and none is planned. In addition, no riparian vegetation will be removed and all ground breaking activities are greater than 100 feet from the unnamed creek. Further, during any grading sediment will be controlled by

provisions in the Grading Plan. Accordingly, there will be no significant impacts on wetlands or water resources.

d. Physical Environment

Other than the potential for erosion during and after ground-breaking activities, there are no other anticipated impacts to the physical environment. Erosion, however, will be controlled by the contouring, mulching, and seeding provisions in the Grading Plan (see Appendix). Accordingly, there will be no significant impacts on the physical environment.

e. Land Use

Actual land use would convert to residential. However, the zoning for this parcel (Remote Residential) allows both open space and low density single family residential, and that zoning designation would remain unchanged. Therefore, although land use will change, consistency with established zoning restrictions indicates that impacts to land use would not be significant.

f. Cultural Resources

Some cultural resources (i.e., the collapsed barn, five intermittent fencelines, and a short road segment) have been located on the parcel, and would be impacted by the implementation of this alternative. However, since none of the cultural resources located on the property were deemed to be significant, there will be no significant impacts on cultural resources under this alternative.

g. Transportation / Traffic

There would be a period of approximately six months of increased traffic on public and private roads during construction. Occupation of the homesite will constitute a minimal increase in traffic on private roads, and no increase on public roads. This increase is not significant.

h. Cumulative Effects

The Service is not aware of any other similar projects in the area. No similar HCPs have been developed or are being developed for either Point Arena mountain beaver or Behren's silverspot butterfly. As discussed above, no significant impacts would occur to any resources for this alternative. Therefore, no significant cumulative effects would occur with the Proposed Project Alternative.

## V. DOCUMENT PREPARATION TEAM

U.S. Fish and Wildlife Service  
Arcata, CA – John Hunter  
Arcata, CA – James Bond

### Persons consulted

Denise Fisher, Applicant, Point Arena, CA  
Eric Shott, NOAA, Santa Rosa, CA  
Kim Fitts, Wildlife Biologist, Santa Rosa, CA  
Susan Holve, Botanist, Occidental, CA  
Heidi Koenig, Registered Professional Archeologist, Inverness, CA  
Mary Grim, California-Nevada Operations Office, Sacramento, CA

## VI. REFERENCES

- Rittiman, Jr., C.A., and T. Thorson. 1988. Soil Survey of Mendocino County, California, Western Part. Natural Resources Conservation Service. Internet website, <http://www/ca.nrcs.usda.gov/mlra02/wmendo/dystopepts.html>
- U.S. Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants: Determination of Threatened Status for the California Red-legged Frog. Federal Register 61(101):25813-25833.
- U.S. Fish and Wildlife Service. 1997. Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for the Callippe Silverspot Butterfly and the Behren's Silverspot Butterfly and Threatened Status for the Alameda Whipsnake: Final Rule. Federal Register 62(234): 64306-64320.
- U.S. Fish and Wildlife Service. 1998. Recovery Plan for the Point Arena Mountain Beaver *Aplodontia rufa nigra* (Rafinesque). U.S. Fish and Wildlife Service, Portland, OR. 71 pp.
- U.S. Fish and Wildlife Service. 2003. Draft Recovery Plan for Behren's Silverspot Butterfly (*Speyeria zerene behrensii*). U.S. Fish and Wildlife Service, Portland, OR. vii + 55 pp.

**Appendix**

Habitat Conservation Plan for the Point Arena Mountain  
Beaver and Behren's Sliverspot Butterfly at the Fisher  
Property, 43400 Hathaway Crossing, Point Arena,  
Mendocino County, California