

Appendix B: Port Blakely Habitat Conservation Plan

Summary of Conservation Program Measures

	Forest Management Activity	Port Blakely HCP Conservation Measures	Habitat Element Protected/Provided	Species Benefiting from Conservation Measure	Avoidance, Minimization, or Mitigation Measure
1	Upland habitat patches	<ul style="list-style-type: none"> `A minimum of 25% of required leave trees will be retained in the uplands. `Habitat patches will be 1/4 acre to 1-acre in size (but may be larger) and located around ecologically sensitive or unique habitats where they exist. `Patches may be variable shaped. `Patches are no-harvest leave areas, all trees and understory vegetation will remain intact. `If no upland sensitive habitats exist, place variable sized clumps in locations that consider habitat connectivity, species known to occur in the area and operational efficiency. `Consider 500' distance requirement (see below 'distance between wildlife trees'). `Upland habitat patches will be mapped and function as Special Management Areas for the life of the HCP. 	perching, foraging, roosting, nesting habitat, predator evasion	all terrestrial wildlife	avoidance, minimization
2	Wildlife trees (green and snag) at regeneration harvest	<ul style="list-style-type: none"> `Retain 4 wildlife trees ($\geq 11"$ DBH and $\geq 30'$ tall) per harvested acre (wildlife trees may be alive or dead) `Retain all safe snags, and `Create snags (topped: $\geq 15"$ DBH and $\geq 12'$ tall, girdled: $\geq 15"$ DBH and $\geq 30'$ tall) at a rate of 1 per 10 acres harvested, at least 50% of which will be conifer, representative of the stand. `All retained trees meeting the size criteria count towards the 4 tree commitment `Leave trees will not be available for harvest for the life of the plan, if standing and determined safe. 	perching, foraging, roosting, nesting habitat, avoidance habitat	avian species, tree climbing mammals, bats	avoidance, minimization, mitigation
3	Wildlife trees (green and snag) at commercial thin	<ul style="list-style-type: none"> `Retain 2 defective trees or snags of largest size class, or create 2 snags, or combination of both, per acre. `Created snags will be $\geq 12'$ in height. `Leave trees will not be available for harvest for the term of the plan, if standing and determined safe. 	nesting, foraging, and roosting habitat	NSO prey species, salamanders, avian and mammal species	mitigation
4	Legacy trees and snags	<ul style="list-style-type: none"> `Retain biological legacies from previous harvests if safe and operationally feasible, retain at site if felled. 	nesting, foraging and roosting habitat	NSO prey species, salamanders, avian and mammal species	avoidance
5	Distance between wildlife trees at regeneration harvest	<ul style="list-style-type: none"> `Wildlife trees and created snags will be placed throughout the unit such that no point within the harvest area will be more than 500' away from a wildlife tree (wildlife trees will be no farther than 1000' apart). 	perching, foraging	avian species	minimization
6	Understory tree retention (< 10" DBH) at regeneration harvest	<ul style="list-style-type: none"> `In addition to wildlife trees mentioned above, retain understory trees where they exist, if operationally feasible, in clumps or within harvest units at the edge, adjacent to non-buffered streams or aquatic areas and within ~25' of stream buffers. `Western Red Cedar may be scattered throughout unit. 	perching, foraging, nesting habitat	song birds, bats	avoidance, minimization
7	Legacy downed logs (Coarse Woody Debris)	<ul style="list-style-type: none"> `Retain existing downed trees $\geq 30"$ in diameter that are relics of past forests. `Do not disturb during ground operations if feasible. 	foraging and denning habitat	amphibians, prey species, denning fisher, wolves or other mammals	avoidance

8	Downed logs and/or woody debris piles at regeneration harvest (Coarse Woody Debris)	<p>Provide ≥ 30 cu ft CWD per acre by retaining individual pieces or creating piles such that,</p> <p>a) individual pieces will be > 10 cu ft each (~6' long X 17" diameter), whereas pieces containing >20 cu ft count as the volume of 2 pieces, and pieces containing >30 cu ft count as the volume of 3 pieces; or</p> <p>b) woody debris piles will be created that are at least 10 cu ft in volume, located on slopes <35%, and that are 5-10 ft in diameter, comprised of piece sizes that average 10" diameter (but with a 20" diameter target) and are 1-3 ft long, which also contain an abundance of smaller wood, whereas piles containing >20 cu ft count as the volume of 2 piles, and piles containing >30 cu ft count as the volume of 3 piles; or</p> <p>c) a combination of both a) and b) above.</p>	foraging and denning habitat, nutrient cycling	amphibians, prey species, denning fisher, wolves or other mammals	minimization, mitigation
9	Downed logs at commercial thin (Coarse Woody Debris)	Retain or create two downed pieces per acre, defective or of largest diameter class.	foraging and denning habitat, nutrient cycling	amphibians, prey species, denning fisher, wolves or other mammals	mitigation
10	Slash retention post-harvest	<p>After regeneration harvest, the banks and streambeds of classified streams will be generally free of logging slash and as such will provide no potential to increase the rate of debris movement.</p> <p>Some debris will recruit naturally and provide in-stream function.</p> <p>Slash will be distributed or piled throughout the unit for retention to the extent possible.</p>	soil productivity and moisture retention, nutrient cycling, ground cover	amphibians and small mammals	avoidance, minimization
11	Regeneration harvest size	Average 60 ac (averaged over a 10- year harvest plan), not to exceed 100 contiguous acres unless via an approved plan from ODF for an alternative practice in response to extraordinary environmental events.	decreased habitat fragmentation	open-space shy mammals (fisher), birds,	minimization
12	Reforestation	<p>Reforest with ~435 seedlings per acre depending on best management practices and site class, tree species and tree size planted and local climatic conditions, within 2 years of completion of the operation.</p> <p>Four years post-planting all units will have a minimum of 250 trees free to grow.</p>	terrestrial habitat	all wildlife	mitigation
13	RMA small fish	<p>At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width, maintain 30' ELZ, horizontal distance.</p> <p>At regeneration harvest: 75' minimum no-harvest (unmanaged) buffer on both sides of stream, horizontal distance, variable width will include a 50' no-harvest buffer around sensitive sites (wetlands, seeps, potentially unstable slopes).</p> <p>Protects all native fish species (including sculpin and other resident fish species)</p> <p>At regeneration harvest, where LWD is minimal or does not exist in the stream, placement of up to 1 tree per 300', on average, rounding up to 4 per 1000' each side of stream, from within the riparian buffer.</p>	stream and riparian functions, water quality protections, temperature and sediment reductions, LWD input, biological corridor	fish and stream-associated amphibians, pond turtle, all wildlife species	minimization, mitigation
14	RMA medium fish	<p>At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width, maintain 30' ELZ, horizontal distance.</p> <p>At regeneration harvest: 90' minimum no-harvest (unmanaged) buffer on both sides of stream, horizontal distance, variable width will include a 50' no-harvest buffer around sensitive sites (wetlands, seeps, potentially unstable slopes).</p> <p>Protects all native fish species (including sculpin and other resident fish species).</p> <p>At regeneration harvest, where LWD is minimal or does not exist in the stream, placement of up to 1 tree per 300', on average, rounding up to 4 per 1000' each side of stream, from within the riparian buffer.</p>	stream and riparian functions, water quality protections, temperature and sediment reductions, LWD input, biological corridor	fish and stream-associated amphibians, pond turtle, all wildlife species	minimization, mitigation

15	RMA large fish	<p>`At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width, maintain 30' ELZ, horizontal distance.</p> <p>`At regeneration harvest: 100' minimum no-harvest (unmanaged) buffer on both sides of stream; horizontal distance; variable width will include 50' no-harvest buffer around sensitive sites (wetlands, seeps, potentially unstable slopes).</p> <p>`Protects all native fish species (including sculpin and other resident fish species).</p>	stream and riparian functions, water quality protections, temperature and sediment reductions, LWD input, biological corridor	fish and stream-associated amphibians, pond turtle, all wildlife species	minimization
16	RMA small non-fish seasonal	<p>`Disturbance to soil will be minimized, maintain 30' ELZ, horizontal distance.</p> <p>`Retain understory trees and shrubs ≤10" diameter where they exist along the stream and where feasible.</p>	water quality	amphibians	minimization
17	RMA small non-fish Domestic	<p>`At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width; maintain 30' ELZ, horizontal distance.</p> <p>`At regeneration harvest: 50' minimum buffer, horizontal distance.</p> <p>`Buffer will consist of a 25' no-harvest zone and a 25' managed zone for the entire length of domestic use.</p> <p>`Managed buffer will include 50% relative retention of original live trees by DBH class, representative of stand and well-distributed to outer edge.</p> <p>`Buffer will be wider where necessary to retain sensitive sites undisturbed (wetlands, seeps, potentially unstable slopes).</p> <p>`Understory trees and shrubs ≤10" dbh, snags of any size and coarse woody debris will be retained where they exist.</p> <p>`PB will contact municipality or resident prior to commercial harvest operations or road building.</p>	stream and riparian functions, water quality, temperature and sediment reductions, LWD input	amphibians, all wildlife species	minimization
18	RMA small non-fish perennial	<p>`At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width, maintain 30' ELZ, horizontal distance.</p> <p>`At regeneration harvest: 50' minimum buffer on both sides of stream, horizontal distance.</p> <p>`Buffer will consist of a 25' no-harvest zone and a 25' managed buffer for the entire length of perennial flow.</p> <p>`Managed buffer will include 50% relative retention of original live trees by DBH class, representative of stand and well-distributed to outer edge.</p> <p>`Buffer will be wider where necessary to retain sensitive sites undisturbed (wetlands, seeps, potentially unstable slopes).</p> <p>`Understory trees and shrubs ≤10" dbh, snags of all sizes and coarse woody debris will be retained where they exist.</p>	stream and riparian functions, water quality protections, temperature and sediment reductions, LWD and deitritus input	fish, amphibians, pond turtle, all wildlife species	minimization

19	RMA medium non-fish or Domestic	<p>`At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width, maintain 30' ELZ, horizontal distance.</p> <p>`At regeneration harvest: 80' buffer on both sides of stream, horizontal distance.</p> <p>`Buffer will consist of a 55' no-harvest zone and a 25' managed buffer.</p> <p>`Managed buffer will include 50% relative retention of original live trees by DBH class, representative of stand and well-distributed to outer edge.</p> <p>`Variable width will include a 50-ft no-harvest buffer around stream-associated sensitive sites (wetlands, seeps, potentially unstable slopes).</p> <p>`Understory trees and shrubs ≤10" dbh, snags of any size and coarse woody debris will be retained where they exist.</p> <p>`For domestic water supplies, PB will contact municipality or resident prior to commercial harvest operations or road building.</p>	stream and riparian functions, water quality protections, temperature and sediment reductions, LWD input, biological corridor	fish, amphibians, pond turtle, all wildlife species	Minimization
20	RMA large non-fish or Domestic	<p>`At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width; maintain 30' ELZ.</p> <p>`At regeneration harvest: 80' buffer on both sides of stream; horizontal distance.</p> <p>`Buffer will consist of a 55' no-harvest zone and a 25' managed buffer.</p> <p>`Managed buffer will include 50% relative retention of original live trees by DBH class, representative of stand and well-distributed to outer edge.</p> <p>` Variable width will include a 50-ft no-harvest buffer around stream-associated sensitive sites (wetlands, seeps, potentially unstable slopes).</p> <p>`Understory trees and shrubs ≤10" dbh, snags of any size and coarse woody debris will be retained where they exist.</p> <p>`For domestic water supplies, PB will contact municipality or resident prior to commercial harvest operations or road building.</p>	stream and riparian functions, water quality protections, temperature and sediment reductions, LWD input, biological corridor	fish, amphibians, pond turtle, all wildlife species	minimization
21	Channel migration zone/ side channel	<p>`Same buffers and management prescriptions as its associated stream, measured from the edge of the braid or side-channel.</p>	stream and riparian functions, water quality protections, temperature and sediment reductions, LWD input, biological corridor	fish and stream-associated amphibians, pond turtle, all wildlife species	minimization
22	RMA- lakes and stream-associated wetlands >8 acres, Type F and Type N, and bogs of any size	<p>`At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width, maintain 30' ELZ, horizontal distance.</p> <p>`At regeneration harvest: 100' minimum buffer width, horizontal distance.</p> <p>`Buffer will consist of a 50' no-harvest zone and 50' managed zone, horizontal distance.</p> <p>`Managed buffer will include 50% relative retention of original live trees by DBH class, representative of stand and well-distributed to outer edge.</p> <p>`Understory trees and shrubs ≤10" dbh, snags of any size and coarse woody debris will be retained where they exist.</p>	stream and riparian functions, water quality protections, temperature and sediment reductions, LWD input	fish and stream-associated amphibians, pond turtle, all wildlife species	minimization

23	RMA- lakes >1/2 - <8 acres (non-fish)	<p>`At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width, maintain 30' ELZ, horizontal distance.</p> <p>`At regeneration harvest: 50' minimum buffer width, horizontal distance.</p> <p>`Buffer will consist of a 25' no-harvest zone and 25' managed buffer, horizontal distance.</p> <p>`Managed buffer will include 50% relative retention of original live trees by DBH class, representative of stand and well-distributed to outer edge.</p> <p>`Understory trees and shrubs ≤10" dbh, snags of any size and coarse woody debris will be retained where they exist.</p> <p>`Applies to natural lakes only (not mill ponds).</p>	riparian function, water quality and biodiversity retention	amphibians, pond turtle, all wildlife species	minimization
24	RMA- lakes <8 acres and stream-associated wetlands < 8 acres (fish bearing)	<p>`At commercial thin harvest when overstocked (>240 TPA) and uniform conditions: no removal of trees leaning over the channel or within 20' of the bank full width, maintain 30' ELZ, horizontal distance.</p> <p>`At regeneration harvest: retain 50' minimum no-harvest buffer around lake or wetland; horizontal distance, measured from the wetland or lake edge.</p>	stream and riparian functions, water quality protections, temperature and sediment reductions, LWD input, biological corridor	fish and stream-associated amphibians, pond turtle, all wildlife species	minimization
25	RMA- lakes >1/4 - < 1/2 acres, stream associated seeps and wetlands < 8 acres, and isolated seeps and wetlands > 1/4 acre - < 8 acres (all non-fish)	<p>`At regeneration harvest: no disturbance of feature, include in variable width stream buffer if stream-associated.</p> <p>`Preferential area for additional leave trees.</p> <p>`Maintain 30' ELZ, horizontal distance.</p>	riparian function, water quality and biodiversity retention	amphibians, all wildlife species	minimization
26	Equipment limitation zone (ELZ) - streams, lakes, and wetlands	<p>`Maintain 30' - 100' ELZ depending on stream/lake/wetland type with minimal disturbance to soils, coarse woody debris, snags and understory vegetation; horizontal distance.</p>	riparian function and water quality	pond turtle and amphibians	minimization
27	Riparian zone Large Woody Debris (LWD)	<p>`At regeneration harvest: where LWD is minimal or does not exist in medium and small fish streams, placement of up to 1 tree per 300', on average, rounding up to 4 per 1000' each side of streams, from within the riparian buffer.</p> <p>`Trees will be pushed in with equipment where possible (otherwise hand-felled), singly or in a group, based on the ODFW 2010 Guide to Placement of Wood.</p> <p>`Equipment will not enter the 30' ELZ or push over/cut trees from within 20' of the stream edge.</p> <p>`Placement of riparian trees as LWD will not be conducted if it compromises other riparian functions including shade and bank stability.</p>	fish cover habitat and fish prey habitat, pond turtle basking sites	fish and stream-associated amphibians, pond turtle	mitigation
28	Special Management Areas (SMAs) (ecologically sensitive and unique habitats)	<p>`At regeneration harvest: isolated potentially high hazard slopes, isolated seeps, wetlands and other unique or ecologically sensitive habitats will be protected to the extent possible; these SMAs will be priority sites for placement of leave trees.</p>	protection of diversity	all wildlife, water quality, air quality	avoidance, minimization

29	Potentially unstable slopes	<p>`At regeneration harvest: bedrock hollows, convergent headwalls or inner gorge features with >70% slopes adjacent to fish streams will be protected with a 50' no-harvest buffer from edge of feature; horizontal distance.</p> <p>`Similar conditions along non-fish streams will be protected with retention of trees within feature plus trees along feature where the crown drips within the feature.</p> <p>`Similar conditions along disconnected streams will be prioritized for upland leave trees retention.</p> <p>`Deep-seated landslides with slopes >65% slopes and convex or planar slopes >80% will be evaluated in consultation with a licensed geotech to develop management options.</p> <p>`Quarries will not be developed within 100' of these features and road construction will be avoided, unless via an ODF approved plan for an alternate practice.</p>	water quality, biological corridor, protection of diversity,	all wildlife, water quality, air quality	avoidance
30	Road construction	<p>`Year round road construction best management practices are designed to prevent sediment entry to streams which include clearing and grubbing, sub-grade construction, stream crossing designs, road surfaces, drainage management and ditch construction.</p> <p>`Sensitive sites (SMAs) and aquatic features are avoided to the extent possible.</p>	water quality	fish and aquatic life	minimization
31	Road maintenance	<p>`Year round road maintenance best management practices are designed to prevent sediment entry to streams which include cross drains site selection, energy dissipaters, installation, water bars, drivable dips, water bars, berms, ditch-outs and erosion control.</p> <p>`Sensitive sites (SMAs) and aquatic features are avoided to the extent possible.</p> <p>`Road abandonment and deactivation plans are designed to prevent sediment delivery to streams.</p>	water quality	fish and aquatic life	minimization
32	Culverts - general	<p>`All culverts will be designed and installed to pass all life-stages of all native fish, and capable of accommodating 100-year peak flow return intervals.</p>	water quality, fish distribution, watershed processes	fish and aquatic life	minimization
33	Fish passage at road crossings	<p>`All streams are surveyed for fish presence and culverts are assessed for fish passage capability prior to road construction or road reconstruction. All structures installed, reconstructed, or maintained within streams that are classified as 'fish use' will provide for fish passage.</p> <p>`Culverts are designed to pass all native fish species and preclude blockage or establishment of fish passage barriers.</p> <p>`Existing known fish passage barriers will be fixed within the first 5 years of permit issuance.</p> <p>`New artificial fish passage barriers discovered during forest management operations or acquired will be fixed within 3 years of discovery/acquisition.</p>	restore fish distribution potential	fish and aquatic life	mitigation
34	Culvert size - non-fish perennial (Np) and non-fish seasonal (Ns)	<p>`Culverts facilitating non-fish perennial (Np) flow will be 24" minimum diameter.</p> <p>`Culverts facilitating non-fish seasonal (Ns) flow will be 18" minimum diameter.</p> <p>`All Np and Ns crossing designs will be capable of accommodating 100-year peak flow return intervals.</p>	water quality	fish and aquatic life	minimization, mitigation
35	Culvert size - cross-drain	<p>`Cross-drain culvert size will be a minimum diameter of 18".</p> <p>`Cross-drain culverts will be located as close to the stream crossing as possible while still allowing the outfall to deposit sediment on, and absorb water into, the forest floor.</p>	water quality	fish and aquatic life	mitigation
36	Stream-Adjacent Parallel Roads (SAPR)	<p>`Stream-Adjacent Parallel Roads (SAPR), i.e., those located within the buffer of a stream and that are generally aligned parallel to the stream, are evaluated to determine feasibility for removal.</p> <p>`Remove or relocate 1.9 miles of SAPR within the first 5 years of permit issuance.</p>	water quality	fish and aquatic life	minimization, mitigation
37	Quarrying and rock pits	<p>`All rock pits and quarrying activities will be located outside of stream channels and riparian management areas to prevent delivery of sediment into water, and to prevent erosion or landslides.</p>	water quality	fish and aquatic life	minimization

38	Spotted owl	<p>^Nest site protection: protect up to 3 active nest sites and/or pairs as long as occupied; no harvest will occur within 70 acres of highest quality habitat around the nest/pair.</p> <p>^Defer harvest around nest sites and pairs for 5 years after a pair is last observed.</p> <p>^Foraging/dispersal habitat: ensure at least 7500 acres (or 26% of ownership) of foraging/dispersal habitat is available across the Plan area.</p> <p>^Disturbance restrictions: implement 1/4 mile seasonal noise disturbance restrictions March 1 to September 30 for specified activities.</p> <p>^Riparian habitat: a variable width riparian buffer can extend an additional 50' to provide a safety zone for the protection of legacy snags in areas within the Provincial median annual home range (1.2 miles for the Oregon Cascades) of owl nest trees and activity centers.</p> <p>^Landscape habitat mosaic: At regeneration harvest, implement prescriptions during harvest operations that will benefit multiple species including owls and their prey by: creating and retaining snags and legacy trees/features; retaining 4 wildlife trees per acre; retaining understory trees <10"; retaining upland habitat patches, CWD and slash; retaining wider buffers along streams and protecting sensitive sites such as seeps, wetlands and potentially unstable slopes.</p> <p>^Regeneration harvest age will be extended to 50 years and harvest unit size will be 60 acres, on average.</p> <p>^Invasive plant species will be treated to the extent possible.</p> <p>^Additional spotted owl recovery activities – coordinate and participate with USFWS on agency-proposed recovery actions including consideration of the HCP lands for spotted owl research projects and addressing spotted owl threats.</p>	nest protections, disturbance restrictions, dispersing, roosting, and foraging habitat	spotted owl	avoidance, minimization, mitigation
39	Pacific fisher	<p>^Implement provisions consistent with the Oregon Fisher CCAA.</p> <p>^Disturbance restrictions: implement 0.25 mile seasonal noise disturbance restrictions around den sites March 15 to September 30 for specified activities.</p> <p>^Restrict animal control & trapping activities within 2.5 miles of occupied dens.</p> <p>^Cover man-made structures that could trap fishers.</p> <p>^Support recovery efforts.</p> <p>^Create and retain down wood and/or CWD 'biodens' as described above.</p>	den protections, disturbance restrictions, foraging habitat	fisher	avoidance, minimization
40	Gray wolf	<p>^Den site protection: protect up to two active den sites, for a minimum of 3 years but for as long as occupied.</p> <p>^Disturbance restriction: implement 0.5 mile seasonal noise disturbance restrictions around den sites March 15 to July 30 for specified activities</p> <p>^Create a landscape-wide habitat mosaic with suitable early-seral and edge habitat favored by prey species.</p> <p>^Retain legacy down wood and create 'biodens' as described above.</p> <p>^Restrict motorized public access.</p> <p>^Coordinate with USFWS to develop priorities and management plans if additional active den sites are located.</p>	den protections, disturbance restrictions, foraging habitat	gray wolf	avoidance, minimization
41	Northern goshawk	<p>^Nest site protection: protect 30 acres of forest habitat around up to two active nest sites for a minimum 3 years but as long as occupied.</p> <p>^Disturbance restriction: implement 0.5 mile seasonal noise disturbance restrictions around nest sites March 1 to August 31 for specified activities.</p> <p>^Create a landscape-wide habitat mosaic with suitable early-seral and edge habitat favored by prey species.</p> <p>^Coordinate with USFWS to develop priorities and management plans if additional active nest sites are located.</p>	nest protections, disturbance restrictions, roosting and foraging habitat	goshawk	avoidance, minimization

42	Bats	<ul style="list-style-type: none"> ` Retain live and dead trees distributed acrosss the landscape, plus create additional snags during regeneration harvest. ` Conservation strategy to protect streams and wetlands. ` Conservation strategy to protect caves. ` Bridges that are replaced will be equipped with structures suitable for roosting bats. 	roosting and foraging habitat	bats	avoidance, minimization
43	Cascades and coastal tailed frogs, cascades torrent salamander	<ul style="list-style-type: none"> ` Conservation strategy to protect streams and wetlands. 	breeding and foraging habitat	cascades and tailed frogs, cascades torrent salamander	avoidance, minimization
44	Oregon slender salamander	<ul style="list-style-type: none"> ` Conservation strategy to retain/ create coarse woody debris. 	breeding and foraging habitat	Oregon slender salamander	avoidance, minimization
45	Western pond turtle	<ul style="list-style-type: none"> ` Conservation strategy to protect streams and wetlands. 	breeding and foraging habitat	pond turtle	avoidance, minimization
46	Public access	<ul style="list-style-type: none"> ` Motorized vehicle access: all roads will be closed to unauthorized motorized traffic with authorized road use relegated to primary access roads and shared roads only. ` Walk-in access: open to public in limited capacity. 	landscape human disturbances from recreational access	all wildlife	mitigation
47	Restoration	<ul style="list-style-type: none"> ` Contribute to watershed restoration projects through in-kind, product or monetary support at a minimum rate of \$10,000 per year and a maximum rate of \$25,000 per year. ` The restoration commitment will increase at thresholds based on increases in ownership acres as described below, not to exceed 25% based on initial HCP acres. ` Annual restoration contribution will increase based on ownership acres. <ul style="list-style-type: none"> 30,000-32,999 acres = \$25,000/ annually 33,000-35,999 acres = \$27,500/ annually 36,000-37,500 acres = \$31,250/ annually 	watershed health, salmon recovery, aquatic species conservation, water quality protection	fish and aquatic life	mitigation