

DEPARTMENT OF THE ARMY
HEADQUARTERS, I CORPS AND FORT LEWIS
Fort Lewis, Washington 98433-9500

FL Regulation
No. 420-5

9 August 2004

Facilities Engineering
PROCEDURES FOR THE PROTECTION OF STATE AND FEDERALLY LISTED
THREATENED, ENDANGERED, CANDIDATE SPECIES, SPECIES OF CONCERN, AND
DESIGNATED CRITICAL HABITAT

1. PURPOSE. To prescribe procedures to protect endangered, threatened, candidate species, species of concern, and the habitat components necessary to support their continued existence on Fort Lewis and sub-Installations.

2. APPLICABILITY.

a. This regulation is applicable to all Active Duty and Reserve Component commands and units (including tenant organizations), civilian agencies, contractors, and individuals (military and civilian) living, visiting, or working at either Fort Lewis or Yakima Training Center (YTC), or other sub-Installations.

b. Commanders at Fort Lewis sub-Installations may further supplement this regulation as appropriate, to include policies and procedures, which address specific sub-Installation conditions and conform to the Endangered Species Act of 1973, as amended. Supplements to this regulation would require review by the Environmental and Natural Resources Division at Fort Lewis, Directorate of Environmental and Natural Resources at YTC, Director of Plans Training, Mobilization, and Security (DPTMS), and the Staff Judge Advocate Office (Civil Law Division) at Fort Lewis.

3. REFERENCES. See Appendix A.

4. DEFINITIONS. See Appendix B.

5. GENERAL. Several threatened, endangered, and candidate species are known to exist on Fort Lewis and YTC (sub-Installation). The Endangered Species Act of 1973, as amended (Citation in Appendix A), requires all Federal agencies, in consultation with, and with the assistance of the Secretaries of the Interior and Commerce, to ensure that their actions are not likely to jeopardize the continued existence of federally listed endangered or threatened species, or result in the destruction or adverse modification of critical habitat of such species. In accordance with Section 7 (c) of the Endangered Species Act, consultation with the U. S. Fish and Wildlife Service (USFWS) should be conducted early in the planning process to ensure that listed

*This regulation supersedes FL Reg 420-5, 2 July 1998

Army is required to work with other agencies in the formulation of proposed actions and alternatives, which have the potential to affect listed species or critical habitat. The impacts of ongoing military activities on listed species and/or designated critical habitat must be addressed through the Section 7 process. Until the required Section 7 consultation is completed, it is imperative that no irreversible commitment of resources are made that would preclude reasonable alternatives to avoid jeopardizing listed species or adversely modifying critical habitat.

a. Failure to comply with the Endangered Species Act (Act) will delay or halt the ongoing or proposed activity and may result in substantial civil and criminal penalties, to include fines of up to \$50,000, and imprisonment for not more than one year for any one violation. The Act also requires Federal agencies to utilize their resources in furtherance of the purposes of the Act by carrying out programs for the conservation of endangered and threatened species. Accordingly, Senior Mission Commanders and Adjutant(s) General will ensure that:

(1) Actions that are federally authorized, funded, or carried out do not jeopardize the continued existence of federally listed endangered or threatened species, or result in the destruction or adverse modification of the habitat of such species, which has been determined through the consultation process to be critical.

(2) Where applicable, an inventory of endangered and threatened species and their designated critical habitat on the Installation will be developed, and a program for monitoring the species status will be developed and implemented.

(3) Consideration will be first given to species protected by both federal and state laws. Proposed actions will be avoided which could result in adverse impacts to these species, or result in the need to list federal candidate species.

(4) All cooperative plans, in accordance with the Sikes Act (Citation in Appendix A), for the conservation and development of fish and wildlife and other natural resources, will include endangered species management requirements where applicable.

(5) Introduction or reintroduction of federally listed endangered and threatened species will be accomplished only after a thorough assessment has been conducted as to the feasibility and impacts of such proposals, and in concurrence with appropriate Federal and State agencies, Installation Management Agency (IMA) Northwest, and the U.S. Army Engineering and Housing Support Center. Introduction or reintroduction proposals will be in accordance with the National Environmental Policy Act.

b. Management plans will be developed for all federally listed species and critical habitat occurring on Fort Lewis and sub-Installations, as required by AR 200-3 (Citation in Appendix A).

6. RESPONSIBILITY.

a. The Senior Mission Commander has overall responsibility for management of the environmental and natural resources of Fort Lewis and Yakima Training Center. This responsibility is manifested through providing adequate financial and personnel support to carry out necessary programs for the protection and management of natural resources, to include listed species.

b. The Director of Public Works (DPW) is the staff director responsible for managing the natural resources on Fort Lewis. These responsibilities include providing necessary financial and personnel support to protect and enhance habitat for listed species, and requiring a review by the Environmental and Natural Resources Division of all activities which have been identified as potentially affecting listed species.

c. The Environmental and Natural Resources Division (ENRD) of Public Works is the Installation environmental office under DPW responsible for the protection and enhancement of habitat for listed species on Fort Lewis. The ENRD will coordinate and manage all aspects of Installation actions regarding the provisions of this regulation to include the following: inventory and manage species addressed in this regulation and the habitat considered essential for their continued existence on the Installation, assist Installation program managers and military trainers in assessing potential impacts to federally listed species, conduct consultation with the U.S. Fish and Wildlife Service as required by Section 7 of the Endangered Species Act of 1973, as amended, and serve as the point of contact for federal, state, and local government agencies in matters dealing with the management and protection of listed species occurring on the Installation.

d. The Environment and Natural Resources Division of Public Works YTC is the sub-Installation environmental office responsible for managing natural resources at YTC, which includes the protection and enhancement of habitat for listed species. These responsibilities involve providing necessary financial and personnel support to protect and enhance habitat for listed species, and includes the review by the YTC ENRD of all activities identified as potentially affecting listed species. The YTC ENRD will coordinate and manage all aspects of sub-Installation actions regarding the provisions of this regulation to include the following: inventory and manage listed species and the habitat considered essential for their continued existence on the sub-Installation, assist sub-Installation program managers and military trainers in assessing potential impacts to federally listed species, conduct consultation with the U.S. Fish and Wildlife Service as required by Section 7 of the Endangered Species Act of 1973, as amended, and serve as the point of contact for federal, state, and local government agencies in matters dealing with the management and protection of listed species occurring on the sub-Installation.

e. Unit Commanders and Activity Directors are responsible for conducting their activities in accordance with the procedures set forth in this regulation.

f. The office of the Staff Judge Advocate (SJA), Civil Law Division, will provide legal advice and assistance to the Command and ENRD in the interpretation of laws and regulations pertaining to the management and protection of federally listed species, to ensure legal and regulatory compliance, and prevent Army liability.

7. PROCEDURES. The following sections prescribe measures to be implemented for the protection of listed species and the habitat necessary to support their continued existence on Fort Lewis and sub-Installations.

8. THREATENED/ENDANGERED AND CANDIDATE SPECIES AT FORT LEWIS. Fort Lewis provides habitat for five federally listed species and six species identified as candidate or species of concern. The Fort Lewis species, discussed in this regulation, include: Bald Eagle (*Haliaeetus leucocephalus*), federal status-threatened, state status-threatened; Water Howellia (*Howellia aquatilis*), federal status-threatened, state status-endangered; Northern Spotted Owl (*Strix occidentalis caurina*)/Designated Critical Habitat, federal status-threatened, state status-endangered; Chinook Salmon (*Oncorhynchus tshawytscha*), federal status-threatened, state status-candidate; Bull Trout (*Salvelinus confluentus*), federal status-threatened, state status-candidate; Mardon Skipper (*Polites mardon*), federal status-candidate, state status-endangered; Taylor's Checkerspot (*Euphydryas editha taylori*), federal status-candidate, state status-candidate; Streaked Horned Lark (*Eremophila alpestris strigata*), federal status-candidate, state status-candidate; Mazama Pocket Gopher (*Thomomys mazama*), federal status-candidate, state status-candidate; Western Gray Squirrel (*Sciurus griseus griseus*), federal status-species of concern, state status-threatened; and White-Topped Aster (*Aster curtus*), federal status-species of concern, state status-sensitive. The following measures provide for the protection of the species and their habitats.

a. Fort Lewis provides habitat for both nesting and wintering populations of Bald Eagles. The Recovery Plan, developed by the USFWS for the bald eagle (Citation in Appendix A), provides guidelines for the protection of this species, and the habitat elements essential for its continued existence. The plan recognizes a primary and secondary zone (400- and 800-meter respectively) around nest sites and communal night roosts, which require specific protection measures to avoid adverse impacts to eagles.

(1) Nesting Bald Eagles. The bald eagle nesting period at Fort Lewis extends from 1 December to 31 August. The following general measures have been implemented to protect nesting bald eagles on the Installation, and apply to both primary and secondary zones around nest sites, unless otherwise specified in nest specific measures (Table 1).

(a) Major land uses such as construction of buildings, roads, power lines, and trails shall be avoided.

(b) No timber harvest shall occur within the primary zone unless designed to enhance stand characteristics for the benefit of nesting eagles (e.g., to assure the dominance of the nest tree). There shall be no cutting in the primary zone without a nest site management plan.

(c) Use of toxic chemicals, which adversely affect eagles, shall be prohibited on the Installation. These include dichlorodiphenyl trichloroethane (DDT) and other persistent organo-chlorine pesticides, polychlorinatedbiphenyls (PCBs), mercury, 2,4,5-Trichlorophenoxyacetic acid (2,4,5-T), and other substances containing tetra chlorodibenzo-p-dioxin (TCDD).

(d) No bivouacs are allowed in the primary zone during the nesting period (see Table 1 for Halverson nest exception).

(e) Military training activities within the primary zone will be avoided during the nesting period. Overflight restrictions are nest specific (Table 1).

(f) Blasting, use of firearms, and recreational activities shall be avoided during the nesting period.

(g) Use of pyrotechnics shall be prohibited from 1 June to 31 October to reduce the possibility of fires.

Table 1: Nest Specific Restrictions

Nest Name	Grid Coordinate	Restrictions*
American Lake North	3270-2060	Aircraft will fly no lower than 365 meters (1,200 feet) MSL over an area extending 400 meters (1,312 feet) in radius from the nest site. Boat landing is prohibited on Picnic Point. A no wake zone has been established, and will be delineated by buoys in the vicinity of Picnic Point (GC 3230-2010).
American Lake South	3175-1830 (Alternate Nest Site 3225-1805)	Aircraft will fly no lower than 365 meters (1,200 feet) MSL over an area extending 400 meters (1,312 feet) in radius from the nest sites. A no wake zone has been established, and is delineated by buoys in the southern portion of American Lake.
American Lake West	3200-1940	Aircraft will fly no lower than 365 meters (1,200 feet) MSL over an area extending

Nest Name	Grid Coordinate	Restrictions*
		400 meters (1,312 feet) in radius from the nest sites.
Nisqually Bluff	2435-1030	Maintain overflight scenario in place at the time of initial nest establishment [Flights no lower than 91 meters at ground level (AGL) within a 400 meter radius of nest].
Nisqually River	2540-0720	Aircraft will fly no lower than 365 meters (1,200 feet) MSL over an area extending 400 meters (1,312 feet) in radius from nest site.
Spanaway Marsh	4130-1570	Any changes in the approach zone to McChord Air Force Base within a 400-meter radius of the nest site will require consultation with the U.S. Fish and Wildlife Service. Recreational activities are prohibited in training area nine, north of grid line 15 from 1 December to 31 August.
Johnson Marsh	3890-1080	Aircraft will fly no lower than 365 meters (1,200 feet) MSL over an area extending 400 meters (1,312 feet) in radius from the nest sites.
Halverson Marsh	6950-4950	Bivouacking within 400 meters of this nest site will be prohibited on the west side of the Burlington Northern Railroad tracks, but will be allowed on the east side of the railroad tracks. This exception to the standard restriction is implemented due to the fact that bivouacking was occurring in the area east of the railroad tracks when the eagles established this nesting territory. Aircraft will fly no lower than 365 meters (1,200 feet) MSL over an area extending 400 meters (1,312 feet) in radius from nest site.

*Restrictions pertain to critical nesting period 1 December to 31 August.

(2) Wintering Bald Eagles: Wintering habitat on Fort Lewis is represented by communal night roosts and primary foraging areas.

(a) There are six identified communal night roosts located on the Installation (Table 2). Protection measures for night roosts will be limited to an area within 400 meters of roosts or 800 meters where eagles have line of sight vision, and will be in effect during the wintering bald eagle period (1 December to 31 March). Specific measures include: no blasting, demolition, or use of firearms (the exception to this is the Muck Creek roost located within the Artillery and South Impact Areas); prohibit bivouacking and recreational activities (camping and picnicking); exclude logging, construction, habitat improvement, and other activities with permanent negative effects on the environment.

(b) If consultation with the USFWS results in a beneficial or no adverse effect determination, these types of activities may proceed outside of the eagle use period.

Table 2: Bald Eagle Communal Night Roost on Fort Lewis

Name of Communal Night Roost	Training Area	Grid Coordinates
Muck Creek	Artillery Impact Area	3100-0550
Carter Woods	3 S	2490-0790
Cabin Creek	3 S	2630-0615
Riverbend	3 S	2580-0625
Yelm	18	2940-0180
Bluff	18	2945-0280

(c) Primary foraging areas on Fort Lewis are located along portions of Muck Creek and the Nisqually River, within the following specific protection zones:
Protection Zone One: A 1,000 meter (3,280 foot) corridor along the Nisqually River between grid line 040 and 090 (from the mouth of Muck Creek to the Clear Creek Hatchery). This corridor will include 500 meters (1,640 feet) on each side of the river; and **Protection Zone Two:** A 1,000-meter (3,280 foot) corridor along Muck Creek from the mouth of the creek to grid line 32 (east slope of Harden Hill). This corridor will include 500 meters (1,640 feet) on each side of the creek.

(d) Activities occurring within protection zones one and two that have a permanent effect on the environment (vegetation removal, construction, logging, etc.), will require review and approval by ENRD. No aircraft will fly lower than 1,300 feet (MSL), within protection zone two, during the primary foraging period from 1 December to 31 March.

b. Several wetlands on the Installation either contain suitable habitat for Water Howellia, or have confirmed populations. Due to the specific habitat requirements of

water howellia, minor changes in wetland substrates, vegetation communities, or hydrology could have detrimental effects to this species. Major activities typically occurring on the Installation that could impact this species include: construction, forest management, wetland management, storm water discharge, and vehicular traffic. General measures to protect water howellia populations on Fort Lewis include:

(1) Construction Activities: All construction activities require review by ENRD for analysis of potential effects to listed species. Any projects, identified as having possible impacts to populations of water howellia or potential habitat, will require consultation with the USFWS.

(2) Forest Management Activities: Forest management activities, within the area of influence for wetlands containing water howellia or potential habitat, will be analyzed for possible impacts. The area of influence is defined as that portion of the landscape that serves as the drainage basin for a particular wetland. Forest management actions identified as having adverse impacts to water howellia populations or potential habitat will be avoided.

(3) Wetland Management Activities: Habitat enhancement projects within wetlands will be analyzed for impacts to existing populations of water howellia and potential habitat. Projects identified as having an adverse impact to either, will be avoided.

(4) Vehicular Traffic: Vehicles not traveling on established roads in the vicinity of wetlands can cause significant siltation to wetlands, resulting in adverse impacts to existing populations of water howellia or adverse modification to potential habitat. The section of Fort Lewis Regulation 200-1 (Citation in Appendix A) restricting vehicular traffic within 50 meters of wetlands and streams to established roads, and not allowing other ground disturbing activities within the 50-meter buffer zone, will provide adequate protection to populations of water howellia and potential habitat. Fort Lewis Regulation 350-33 (Citation in Appendix A) provides additional protection for this species by restricting recreational vehicular traffic to established roads.

(5) Recreational activities identified as having an adverse impact to water howellia populations will be restricted as needed on a case-by-case basis.

c. The northern spotted owl (*Strix occidentalis caurina*) is a federally threatened species. In 1992, approximately 52,000 acres of forested habitat on Fort Lewis was designated critical habitat for the northern spotted owl, as depicted on the Environmental Coordination Map (Citation in Appendix A). Activities affecting the forest structure (e.g., vegetation removal and ground disturbance) within designated critical habitat and not addressed in previous consultations with the USFWS, will require analysis by ENRD. Any actions identified as affecting designated critical habitat will require consultation with the USFWS.

d. Chinook Salmon and Bull Trout reside and spawn in the Nisqually River, but do not occur within streams on the Installation. Restrictions on ground disturbing activities within 50 meters of all bodies of water on the Installation afford adequate protection for the Nisqually River in regards to water quality and potential impacts to Chinook salmon or bull trout. There is one authorized crossing site on the Nisqually River occasionally used during military training exercises. Timing of river crossings is adjusted to avoid spawning activities within the river, providing adequate protection for both species. Proposed river crossing activities will require review and approval from ENRD. Consultation with NOAA Fisheries, concerning the military use of Solo Point, resulted in the following restrictions regarding the use of the Solo Point boat ramp and adjacent shoreline:

(1) Off-loading and deployment of floating bridge bays between 1 March and 30 June of each year should be limited to the existing boat ramp at Solo Point. Deployment from the native beach, or alterations to the native beach material should not be allowed.

(2) Off-loading and deployment of all support vessels between 1 March and 30 June of each year should be limited to the existing boat ramp at Solo Point.

(3) No more than three hours of near shore activity should occur on each of the eight days of launch activity training scheduled between March and July of each year. (Per the Department of the Army letters to NOAA Fisheries dated February 4 and February 9, 1999.)

(4) No vehicles should drive on the native beach substrate between 1 March and 30 June of each year.

e. Off-road vehicle traffic and ground disturbing activities represent the most significant potential impacts from military training to the Mardon Skipper butterfly, both from direct mortality and habitat degradation. Training activities involving off-road vehicular traffic and ground disturbing activities within a significant portion of the prairie ecosystem on Fort Lewis is prohibited. This policy is enforced within Johnson Prairie (279 acres), Upper and Lower Weir Prairies (1,372 acres), and by default is followed over a majority of the Artillery Impact Area (91st Division Prairie 6,960 acres) due to hazards associated with unexploded ordinance. Currently, the only remaining population of this species on the Installation occurs in the Artillery Impact Area (AIA), and by default is protected from most off-road training activities. Occasionally, specialized training events require limited off-road maneuvers within the AIA, but these actions will be assessed and adjusted to avoid impacts to populations of this species. Any re-introduction of this species on Fort Lewis would occur in areas currently afforded protection from off-road vehicle traffic and other ground disturbing activities. Recreational activities, identified as having an adverse impact to mardon skipper populations, will be restricted as necessary on a case-by-case basis.

f. Off-road vehicle traffic and ground disturbing activities represent the most significant potential impacts from military training to the Taylor's Checkerspot butterfly, both from direct mortality and habitat degradation. Training activities including off-road vehicular traffic and ground disturbing activities within a significant portion of the prairie ecosystem on Fort Lewis is prohibited. This policy is enforced within Johnson Prairie (279 acres), Upper and Lower Weir Prairies (1,372 acres), and by default is followed over a majority of the Artillery Impact Area (91st Division Prairie 6,960 acres) due to hazards associated with unexploded ordinance. Currently, the only remaining population of this species on the Installation occurs in the AIA, and by default is protected from most off-road training activities. Occasionally, specialized training events require limited off-road maneuvers within the AIA, but these actions will be assessed and adjusted to avoid impacts to populations of this species. Any re-introduction of this species on Fort Lewis would occur in areas currently afforded protection from off-road vehicle traffic and other ground disturbing activities. Recreational activities, identified as having an adverse impact to Taylor's checkerspot populations, will be restricted as necessary on a case-by-case basis.

g. The Streaked Horned Lark utilizes prairies and open grassland habitat on the Installation. It is a ground nesting bird that is closely associated with prairie habitat or areas that mimic native prairie habitat conditions, which include airfields and areas maintained for sporting events. Currently the only nesting populations occur at Training Area (T.A.) 14 (within the prairie habitat east of Pacemaker Airstrip), Artillery Impact Area (AIA), and Gray Army Airfield. The following restrictions are imposed during the primary nesting period (15 April to 15 July) to help avoid direct mortality and nest failure:

(1) Mowing restrictions are imposed on areas identified as being used by streaked horned larks for nesting habitat within the boundary of Gray Army Airfield. These restrictions are only imposed during the primary nesting period. If at any time during the nesting period vegetation height poses a safety concern to aviation activities, remedial actions will occur to include mowing. Any remedial actions occurring during the nesting period will be coordinated with ENRD to help assure minimal effects to nesting birds.

(2) No recreational activities are allowed in T.A.14 during the primary nesting period.

(3) Military training activities, within areas occupied by nesting birds, will be reviewed by Range Control and ENRD. Impact analysis will be conducted by ENRD and adjustments to training activities will be implemented as necessary to minimize impacts to nesting birds.

(4) Recreational activities, identified as having an adverse impact to streaked horned lark populations, will be restricted as necessary on a case-by-case basis.

h. The Mazama Pocket Gopher occurs in prairie and oak woodland habitat on the Installation. Activities that cause severe soil compaction represent the most significant potential impact to this species. Repeated traversing by heavy equipment, over the same area, usually causes the ground to be compacted to the point where it can no longer support populations of pocket gophers. The other major impact from training activities, that could directly and indirectly impact pocket gopher populations, is major digging exercises. This can result in individuals being killed during the digging activity. The re-distribution of soil layers may render the site uninhabitable for pocket gophers. Training activities including off-road vehicular traffic and ground disturbing activities within a significant portion of the prairie ecosystem on Fort Lewis is prohibited. This policy is enforced within Johnson Prairie (279 acres), Upper and Lower Weir Prairies (1,372 acres), and by default is followed over a majority of the Artillery Impact Area (91st Division Prairie 6,960 acres) due to hazards associated with unexploded ordinance. These restrictions protect the major populations of this species on Fort Lewis. Recreational activities, identified as having an adverse impact to Mazama pocket gopher populations, will be restricted as necessary on a case-by-case basis.

i. The Western Gray Squirrel is closely associated with oak woodland habitat on the Installation and typically resides in or near oak stands occurring in forested areas or prairie edges. Direct mortality from civilian and military vehicular traffic is one of the most significant impacts to this species on the Installation. The section of East Gate road between the East Gate Guard station and Highway 507 has historically been the area exhibiting the highest mortality of western gray squirrels caused by vehicle traffic. Warning signs will be placed at appropriate locations within this section of East Gate road, raising the awareness of drivers as to the presence of a rare species in an effort to reduce future mortality of this species from vehicular traffic. Recreational activities identified as having an adverse impact to western gray squirrel populations will be restricted as necessary on a case-by-case basis.

j. White-topped Aster is a small (4 – 12 inches tall) one stalked perennial; usually with a single compact cluster of heads with nearly rayless, plain flowers which are identifiable from late August through October. This species is found in and around prairies of Pierce and Thurston Counties. Currently no digging, track vehicle use, or other ground disturbance is allowed within Johnson and Weir Prairies in an effort to protect populations of this species.

9. THREATENED/ENDANGERED AND CANDIDATE SPECIES AT YAKIMA TRAINING CENTER. Yakima Training Center provides habitat for one federally listed species and eleven species as having either State status or other Federal designation. The Yakima Training Center species, discussed in this regulation, include: Bald Eagle (*Haliaeetus leucocephalus*), federal status-threatened, state status-threatened; Golden Eagle (*Aquila chrysaetos*), federal status-none, state status-candidate; Sage Grouse (*Centrocercus urophasianus*), federal status-candidate, state status-threatened; Ferruginous Hawk (*Buteo regalis*), federal status-species of concern, state status-

threatened; Burrowing Owl (*Athene cunicularia*), federal status-none, states status-candidate; Columbia Milk-vetch (*Astragalus columbianus*), federal status-none, state status-threatened; Basalt Daisy (*Erigeron basalticus*), federal status-candidate, state status-threatened; Dwarf Evening Primrose (*Camissonia pygmaea*), federal status-none, state status-threatened; Hoover's Desert Parsley (*Lomatium tuberosum*), federal status-none, state status-threatened; Hoover's Tauschia (*Tauschia hooveri*), federal status-none, state status-threatened; Kalm's Lobelia (*Lobelia kalmii*), federal status-none, state status-endangered; and White Eatonella (*Eatonella nivia*), federal status-none, state status-threatened. (Note: All grid coordinate locations are derived from the Yakima Training Center Special Map Series V791S, Edition 4 (Citation in Appendix A) and range control should be contacted for site-specific restrictions.)

a. The Bald Eagle is a winter resident at the YTC. It utilizes the Columbia River and the sub-Installation's eastern boundary for foraging. Four known roost sites on the sub-Installation are used for diurnal and nocturnal roosting: Borden Springs (KB720795), Lower Hanson Creek (GG254856), Middle Hanson Creek (GG235864), and Upper Hanson Creek (GG201871). The following table summarizes restrictions in place to avoid adverse impacts to this species.

Table 3: Bald Eagle Restrictions at YTC

Type of Restriction	Location	Time Period	Restriction
Flight	Hanson Creek Route: Between coordinates GG 190875 and GG280842	8 December to 24 March	Minimum flight level of 300 AGL (above ground level). Maintain a 1 km buffer to the north and south of Hanson Creek road, with traffic moving west remaining 1 km north of Hanson Creek road. The flight route will continue to support two-way traffic.
Flight	Columbia River Route: Between coordinates KB830 and KB690	8 December to 24 March	The flight route will support one-way traffic. Access will be coordinated by the Rattlesnake Flight Following Facility. No minimum flight level. Flights must maintain a 1 km buffer to the west of the railroad right-of-way along the Columbia River.
River Crossing	Priest Rapids Reservoir	8 December to 24 March	No river crossing exercises during this time frame.
Vehicle	Hanson Creek riparian zones	Year-Round	No off road vehicle traffic.
Vehicle	Siber staked roost trees.	Year-Round	No vehicle traffic within the enclosed area.

Vehicle	Hanson Creek road	8 December to 24 March	Traffic along Hanson Creek road is significantly curtailed between 1500 and 0900 hours, between coordinates GG180875 and GG280842. Coordination and prior approval by ENRD and Range Control is required to use this road during this time period.
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b. The Golden Eagle is a year-round resident of the sub-Installation. Four historic nest sites have been identified on YTC. Golden eagles require isolation from human activity during the nesting season, February through June. The species builds its nests on cliffs on the sub-Installation. Military maneuver restrictions (Contact Range Control for site-specific information) include: a 500-meter buffer is maintained between all military activities and all nest sites, a minimum of 300 feet AGL for all over-flights of the nest sites, and no air traffic is allowed below the rim of Selah Canyon between Badger Pocket Road (GG039731) and the I-82 bridge (FG958740).

c. The Sage Grouse is a year-round resident. Several active leks have been documented on the sub-Installation. A lek is an area where males compete with other males to breed with the female sage grouse. Sage grouse begin using leks daily in early February. Their numbers increase through March with peak lek attendance occurring in April. Habitat surrounding lek sites is used during and after the lekking season for feeding, nesting, and raising young. Two habitat components needed by sage grouse are protected from military disturbance at YTC: lek sites and nest/brood rearing areas as presented in the Yakima Training Center Sage Grouse Management Plan (Citation in Appendix A).

(1) Lek site protection (Contact Range Control for site-specific information):

(a) Seasonal restrictions of military training activities and other land use practices are in place between 1 March and 15 May within a 1 km radius of each designated lek. These restrictions are enforced daily between 2400 and 0900 hours. Lek surveys by YTC ENRD staff begin 1 February. If surveys reveal sage grouse are attending leks prior to 1 March, the restriction date is changed to correspond with the earlier date. During this period, access to ranges is restricted to Main Supply Routes (MSR's) and designated roads to ranges.

(b) Over-flights by aircraft, within a 1 km radius of leks, are prohibited during the period of 1 March through 15 May between 2400 and 0900 hours. Again, earlier seasonal restrictions may apply if lek attendance occurs before 1 March.

(2) Nest and brood rearing habitat protection (Contact Range Control for site-specific information):

(a) All off-road military activities are prohibited between 1 March and 15 June (24 hours a day) within the sage grouse protection areas. Exceptions within these areas include the following existing Firing Ranges: 4, 5, 10, 10Z, 16, 26, and 55. Vehicle travel is limited to MSR's and/or designated roads to the above Firing Ranges.

(b) Bivouacs are not permitted at any time of the year in the sage grouse protection area.

(c) Excavations are only permitted in the protection area on existing firebreaks. All excavations within the sage grouse protection areas are coordinated through YTC ENRD, and carried out in accordance with the YTC dig permit process.

d. The Ferruginous Hawk breeds and raises young in the western U.S., and winters in the southwestern U.S. and Mexico. Sixteen historic nest sites have been identified at YTC. In Washington, most ferruginous hawk nests are built on top of rocks, cliffs, and trees and most occur in rock outcroppings. The nesting season is between 1 March and 31 July. Ferruginous hawks are sensitive to human disturbance and require isolation from military activity during the nesting season. When an active nest is detected the following restrictions are enforced:

(1) No military activity within 500 meters of the site.

(2) An over-flight minimum of 1,000 feet AGL of all active nests.

e. Burrowing Owls use abandoned mammal burrows for nesting. Fifteen historic burrow nests have been documented on YTC. The nesting season for this species occurs between March and July. All known active burrowing owl nest sites are protected from vehicle maneuvers by siber stakes.

f. Columbia Milk-vetch is only found within a 100 sq. mile area along the west side of the Columbia River in the Priest Rapids area in Kittitas, Yakima, and Benton counties, Washington. This species is a low, sprawling plant with white flowers and reddish stems. The species has been found at over 16 locations on YTC, with the majority occurring in the eastern region. Designated sensitive plant sites are protected through siber staking.

g. Basalt Daisy is a perennial plant that grows up to four inches tall. It has lobed leaves and numerous (20-30) light lavender to white ray flowers. This species is identifiable from May to mid-October. It is found at YTC on the south side of Selah Creek (Selah Cliffs). Designated sensitive plant sites are protected through siber staking.

h. Dwarf Evening-Primrose is an annual with small white flowers. The leaves are lance shaped to oval, and are sometimes slightly toothed. The one population known

i. Hoover's Desert Parsley is a perennial that grows from a tuber-like root. The leaves are grayish-green and the flowers are typically light purple, sometimes yellow. Three populations are known to occur on YTC. Designated sensitive plant sites are protected through siber staking.


j. Hoover's Tauschia is a low growing perennial with white flowers and few leaves that are divided into linear segments. The species is found in areas of bare rocks and gravel with little soil present. Eight main populations are known to occur on YTC. Designated sensitive plant sites are protected through siber staking.

k. Kalm's Lobelia is a perennial herb with stems that are sometimes branched and reach up to 24 inches in length. The 4 to 15 leaves are borne on the stem and are narrow. The flowers are mostly blue with a white or white and yellow eye, but may be entirely white. One population is known extant on YTC at Borden Springs. Designated sensitive plant sites are protected through siber staking.

l. White Eatonella occurs on poorly developed soils in dry, sandy or volcanic desert areas between 763 and 1,900 meters in elevation. Sites that support the taxon are rather sparsely vegetated, usually with no apparent cryptogam layer. YTC supports 21 acres of this species predominantly on slopes ranging 18 to 45 percent. Designated sensitive plant sites are protected through siber staking.

m. YTC is within the range of three sensitive salmonid species that include the Upper Columbia Spring Chinook Salmon (*Oncorhynchus tshawytscha*) – federally endangered, Upper Columbia Steelhead Trout (*Oncorhynchus mykiss*) – federally endangered, and Mid-Columbia Steelhead Trout – federally threatened. In addition, the Columbia River Bull Trout (*Salvelinus confluentus*) is listed as a federally threatened species. Currently, protection measures in place for riparian areas on YTC provide direct protection for these species, and protect habitat that may be occupied on YTC.

(AFZH-PWE, 967-3474)


JAMES M. COLLINS, JR.
Major General, USA
Deputy Commanding General/
Chief of Staff

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A, B, C, D

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APPENDIX A

REFERENCES

AR 200-3 (Natural Resources-Land, Forest and Wildlife Management) 28 February 1995

FL Reg 200-1 (Environmental Protection and Enhancement) 1 February 2002

FL Reg 350-30 (Fort Lewis Range Regulations) 29 March 2000

Conservation Agreement Western Sage Grouse (*Centrocercus urophasianus phaios*), 1992 and 1994

Endangered Species Act (ESA) as amended 1973

Fort Lewis Endangered Species Management Plan for Bald Eagles, 2000

Fort Lewis Endangered Species Management Plan for Northern Spotted Owl, October 2000

Fort Lewis Endangered Species Management Plan for Water Howellia, 2000

Based on Fort Lewis Special Edition, 4 Series V791S (Environmental Coordination Map) 2004

Sikes Act 16 USC 670, 18 November 1997

U.S. Fish and Wildlife Service (Recovery Plan for the Pacific Bald Eagle) 1986

Based on YTC Special Series V791S, Edition 4-DMA (Yakima Training Center Environmental Coordination Map) 2000

Yakima Training Center Sage Grouse Management Plan, June 1998

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APPENDIX B

DEFINITIONS

Federal Candidate

A plant or animal taxa, native to the U.S., being considered for possible addition to the "List of Endangered and Threatened Wildlife and Plants".

Federal Endangered

A species on the brink of extinction throughout all, or a significant portion, of its range.

Federal Species of Concern

A species, whose conservation standing is of concern to the USFWS, but status information is still needed.

Federal Threatened

A species that is likely to become endangered within the foreseeable future.

Critical Habitat

Areas of land, water, and airspace, occupied by the species at the time of its listing, that are required for its normal needs and survival.

Land Bank Zone

Areas managed for significant and sensitive natural and/or cultural resources. Most forms of training, including all tracked and wheeled vehicle use are prohibited.

Primary Buffer Zone

This is the most critical area immediately around bald eagle nests and communal night roosts (400 meter radius from nests and roosts).

Secondary Buffer Zone

The purpose of this zone is to further minimize disturbance to bald eagle nest sites and communal night roosts (800 meter radius from nests and roosts).

Siber (Seibert) Stake

A stake, with bands of white, red, and yellow coloration that designates areas limited to non-destructive activities.

State Listed Species

Species listed by Washington State Department of Fish and Wildlife as requiring special status designation due to declining populations. Federal agencies are not required to abide by restrictions associated with state listed species.

State Candidate

Species that the Washington State Department of Fish and Wildlife will review for possible listing as State Endangered, Threatened, or Sensitive.

State Endangered

Any species, native to the state of Washington that is seriously threatened with extinction throughout all or a significant portion, of its range within the state.

State Sensitive

Any species, native to the state of Washington, that is vulnerable or declining, and is likely to become endangered or threatened throughout a significant portion of its range within the state without cooperative management or removal of threats.

State Threatened

Any species, native to the state of Washington, that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats.