

**Authority:** 21 U.S.C. 321(q), 346(a) and 371.

2. Section 180.191 is amended:
  - i. By designating the existing text as paragraph (a) and adding a heading, and alphabetically adding a commodity to the table in newly designated paragraph (a); and
  - ii. By adding and reserving with headings paragraphs (b), (c), and (d) to read as follows:

**§ 180.191 Folpet; tolerances for residues.**  
 (a) *General.* \* \* \*

Commodity	Parts per million
* * *	* * *
Hop, dried cones	120 <sup>1</sup>
* * *	* * *

<sup>1</sup> There are no U.S. registrations on hop, dried cones as of February 14, 2003

- (b) *Section 18 emergency exemptions.* [Reserved]
- (c) *Tolerances with regional registrations.* [Reserved]
- (d) *Indirect or inadvertent residues.* [Reserved]

[FR Doc. 03-5192 Filed 3-4-03; 8:45 am]  
 BILLING CODE 6560-50-S

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Part 73**

**Radio Broadcasting Services; Clarendon, TX**

*CFR Correction*

In Title 47 of the Code of Federal Regulations, Parts 70 to 79, revised as of October 1, 2002, in § 73.202(b), on page 108, the Table of FM Allotments is amended under Texas by adding Clarendon, Channel 257C2.

[FR Doc. 03-55507 Filed 3-4-03; 8:45 am]  
 BILLING CODE 1505-01-D

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**50 CFR Part 17**

**RIN 1080-A117**

**Endangered and Threatened Wildlife and Plants; Final Rule to List the Columbia Basin Distinct Population Segment of the Pygmy Rabbit (*Brachylagus idahoensis*) as Endangered**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), determine endangered status for the Columbia Basin distinct population segment of the pygmy rabbit (*Brachylagus idahoensis*) pursuant to the Endangered Species Act of 1973, as amended (Act). This population consists of fewer than 30 wild individuals in Douglas County, Washington, and a small captive population.

The Columbia Basin pygmy rabbit is imminently threatened by recent decreases in its population size and distribution that have caused it to be susceptible to the combined influence of catastrophic environmental events, habitat degradation and fragmentation, disease, predation, demographic limitations, and loss of genetic heterogeneity. We find that these threats constitute a significant risk to the well-being of the Columbia Basin pygmy rabbit and, as such, make the protective measures afforded by the Act immediately available with publication of this final rule.

**DATES:** This rule becomes effective on March 5, 2003.

**ADDRESSES:** The complete file for this final rule is available for inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Upper Columbia Fish and Wildlife Office, 11103 East Montgomery Drive, Spokane, Washington 99206.

**FOR FURTHER INFORMATION CONTACT:** Christopher Warren, at the address listed above (telephone 509/891-6839; facsimile 509/891-6748; electronic mail: [chris\\_warren@fws.gov](mailto:chris_warren@fws.gov)).

**SUPPLEMENTARY INFORMATION:**

**Background**

The pygmy rabbit (*Brachylagus idahoensis*) is a member of the family Leporidae, which includes hares and rabbits. The species has been placed in a number of genera since it was first classified in 1891 as *Lepus idahoensis* (Washington Department of Fish and Wildlife (WDFW) 1995a). In 1904, it was reclassified and placed in the genus *Brachylagus*. In 1930, it was again reclassified and placed in the genus *Sylvilagus*. More recent examination of dentition (Hibbard 1963) and analysis of blood proteins (Johnson 1968) suggest that the pygmy rabbit differs significantly from species within either the *Lepus* or *Sylvilagus* genera. The pygmy rabbit is now generally considered to be within the monotypic genus *Brachylagus*, and classified as *B. idahoensis* (Green and Flinders 1980a; WDFW 1995a). There are no recognized

subspecies of the pygmy rabbit (Dalquest 1948; Green and Flinders 1980a).

The pygmy rabbit is the smallest Leporid in North America, with mean adult weights from 375 to about 500 grams (0.83 to 1.1 pounds), and lengths from 23.5 to 29.5 centimeters (cm) (9.3 to 11.6 inches (in)) (Orr 1940; Janson 1946; Wilde 1978; Gahr 1993; WDFW 1995a; T. Katzner, Arizona State University, pers. comm. 2002). Females tend to be slightly larger than males. Pygmy rabbits undergo an annual molt. During summer, their overall color is slate-gray tipped with brown. Their legs, chest, and nape (back of neck) are tawny cinnamon-brown, their bellies are whitish, and the entire edges of their ears are pale buff. Their ears are short (3.5 to 5.2 cm (1.4 to 2.0 in)), rounded, and thickly furred outside. Their tails are small (1.5 to 2.4 cm (0.6 to 0.9 in)), uniform in color, and nearly unnoticeable in the wild (Orr 1940; Janson 1946; WDFW 1995a). The pygmy rabbit is distinguishable from other Leporids by its small size, short ears, gray color, small hind legs, and lack of white on the tail.

Pygmy rabbits are typically found in areas of tall, dense sagebrush (*Artemisia* spp.) cover, and are highly dependent on sagebrush to provide both food and shelter throughout the year (Orr 1940; Green and Flinders 1980a; WDFW 1995a). The winter diet of pygmy rabbits is comprised of up to 99 percent sagebrush (Wilde 1978), which is unique among Leporids (White *et al.* 1982). During spring and summer in Utah, their diet consists of roughly 51 percent sagebrush, 39 percent grasses (particularly native bunch-grasses, such as *Agropyron* spp. and *Poa* spp.), and 10 percent forbs (an herb other than grass) (Green and Flinders 1980b). There is evidence that pygmy rabbits preferentially select native grasses as forage during this period in comparison to other available foods. In addition, total grass cover relative to forbs and shrubs may be reduced within the immediate areas occupied by pygmy rabbits as a result of its use as a food source during spring and summer (Green and Flinders 1980b). The specific diets of pygmy rabbit populations likely change depending on the region occupied (T. Katzner, pers. comm. 2002).

The pygmy rabbit is believed to be one of only two Leporids in North America that digs its own burrows (Nelson 1909; Green and Flinders 1980a; WDFW 1995a), the other being the volcano rabbit (*Romerolagus diazi*) found in central Mexico (Durrell and Mallinson 1970). Pygmy rabbit burrows

are typically found in relatively deep, loose soils of wind-borne or water-borne (e.g., alluvial fan) origin. Pygmy rabbits occasionally make use of burrows abandoned by other species, such as the yellow-bellied marmot (*Marmota flaviventris*) or badger (*Taxidea taxus*) (Wilde 1978; Green and Flinders 1980a; WDFW 1995a) and, as a result, may occur in areas of shallower or more compact soils that support sufficient shrub cover (Bradfield 1974). During winter, pygmy rabbits make extensive use of snow burrows, possibly to access sagebrush forage (Bradfield 1974), as travel corridors among their underground burrows, and/or as thermal cover (Katzner and Parker 1997).

Pygmy rabbits, especially juveniles, likely use their burrows as protection from predators and inclement weather (Bailey 1936; Bradfield 1974). The burrows frequently have multiple entrances, some of which are concealed at the base of larger sagebrush plants (WDFW 1995a). Burrows are relatively simple and shallow, often no more than 2 meters (m) (6.6 feet (ft)) in length and usually less than 1 m (3.3 ft) deep with no distinct chambers (Bradfield 1974; Green and Flinders 1980a; Gahr 1993). Burrows are typically dug into gentle slopes or mound/inter-mound areas of more level or dissected topography (Wilde 1978; U.S. Department of Agriculture (USDA) 1991; Gahr 1993). In general, the number of active burrows in an area increases over the summer as the number of juveniles increases. However, the number of active burrows may not be directly related to the number of individuals in a given area because some individual pygmy rabbits appear to maintain multiple burrows, while some individual burrows are used by multiple individuals (Gahr 1993; WDFW 1995a).

Pygmy rabbits begin breeding their second year and, in Washington, breeding occurs from February through July (WDFW 1995a). In some parts of the species' range, females may have up to three litters per year and average six young per litter (Green 1978; Wilde 1978). Breeding appears to be highly synchronous in a given area and juveniles are often identifiable to cohorts (Wilde 1978). No evidence of nests, nesting material, or lactating females with young has been found in burrows (Bradfield 1974; Gahr 1993; WDFW 1995a). Individual juveniles have been found under clumps of sagebrush, although it is not known

precisely where the young are born in the wild or if they may be routinely hidden at the bases of scattered shrubs or within burrows (Wilde 1978).

Current information on captive pygmy rabbits indicates that females may excavate specialized "natal" burrows for their litters in the vicinity of their regular burrows (P. Swenson, Oregon Zoo, pers. comm. 2001; L. Shipley, Washington State University (WSU), pers. comm. 2001). Apparently, females begin to dig and supply nesting material (e.g., grass clippings) to these burrows several days prior to giving birth, and may give birth and nurse their young at the ground surface in a small depression near the burrow's entrance. After nursing, the young return to the burrow and the female re-fills the burrow entrance with loose soil and otherwise disguises the immediate area to avoid detection. Other "dead-end" burrows that females construct nearby are apparently associated with the natal burrows and may be important for providing proper aeration. Females may also alter their defecation and latrine habits while pregnant and nursing (P. Swenson, pers. comm. 2001). Further work with captive and wild pygmy rabbits should shed additional light on the details of their reproductive strategy.

Pygmy rabbits may be active at any time of the day or night and appear to be most active during mid-morning (Bradfield 1974; Green and Flinders 1980a; Gahr 1993). Pygmy rabbits maintain a low stance, have a deliberate gait, and are relatively slow and vulnerable in more open areas. They can evade predators by maneuvering through the dense shrub cover of their preferred habitats, often along established trails, or by escaping into their burrows (Bailey 1936; Severaid 1950; Bradfield 1974).

Pygmy rabbits tend to have relatively small home ranges during winter, remaining within roughly 30 m (98 ft) of their burrows (Orr 1940; Janson 1946; Gahr 1993; Katzner and Parker 1997), although some snow burrows may extend outward up to 100 m (328 ft) (Bradfield 1974). They have larger home ranges during spring and summer (Orr 1940; Janson 1946; Gahr 1993; Katzner and Parker 1997). During the breeding season in Washington, females tend to make relatively short movements within a small core area and have home ranges covering roughly 2.7 hectares (ha) (6.7 acres (ac)); males tend to make longer movements, traveling among a number of females, resulting in home ranges

covering roughly 20.2 ha (49.9 ac) (Gahr 1993). These home range estimates in Washington are considerably larger than for pygmy rabbit populations in other areas of their historic range (WDFW 1995a; Katzner and Parker 1997). Pygmy rabbits may travel up to 1.2 kilometers (km) (0.75 miles (mi)) from their burrows (Gahr 1993), and there are a few records of apparently dispersing individuals moving up to 3.5 km (2.17 mi) (Green and Flinders 1979; Katzner and Parker 1998).

The annual mortality rate of adult pygmy rabbits may be as high as 88 percent, and over 50 percent of juveniles can apparently die within roughly 5 weeks of their emergence (Wilde 1978; WDFW 1995a). However, the mortality rates of adult and juvenile pygmy rabbits can vary considerably between years, and even between juvenile cohorts within years (Wilde 1978). Predation was shown to be the main cause of pygmy rabbit mortality in Idaho (Green 1979). Potential predators include badgers, long-tailed weasels (*Mustela frenata*), coyotes (*Canis latrans*), bobcats (*Felis rufus*), great horned owls (*Bubo virginianus*), long-eared owls (*Asio otus*), ferruginous hawks (*Buteo regalis*), northern harriers (*Circus cyaneus*), and common raven (*Corvus corax*) (Janson 1946; Gashwiler *et al.* 1960; Green 1978; Wilde 1978; WDFW 1995a; D. Hays, WDFW, pers. comm. 2002; M. Hallet, WDFW, pers. comm. 2002).

Population cycles are not known in pygmy rabbits, although local, relatively rapid population declines have been noted in several States (Bradfield 1974; Weiss and Verts 1984; WDFW 1995a). After initial declines, pygmy rabbit populations may not have the same capacity for rapid increases in numbers as other Leporids due to their close association with specific components of sagebrush ecosystems, and the relatively limited availability of their preferred habitats (Wilde 1978; Green and Flinders 1980b; WDFW 1995a).

#### Distribution and Status

The historic distribution of the pygmy rabbit included much of the semi-arid, shrub steppe region of the Great Basin and adjacent intermountain zones of the conterminous western United States (Green and Flinders 1980a), and included portions of Montana, Idaho, Wyoming, Utah, Nevada, California, Oregon, and Washington (Figure 1).

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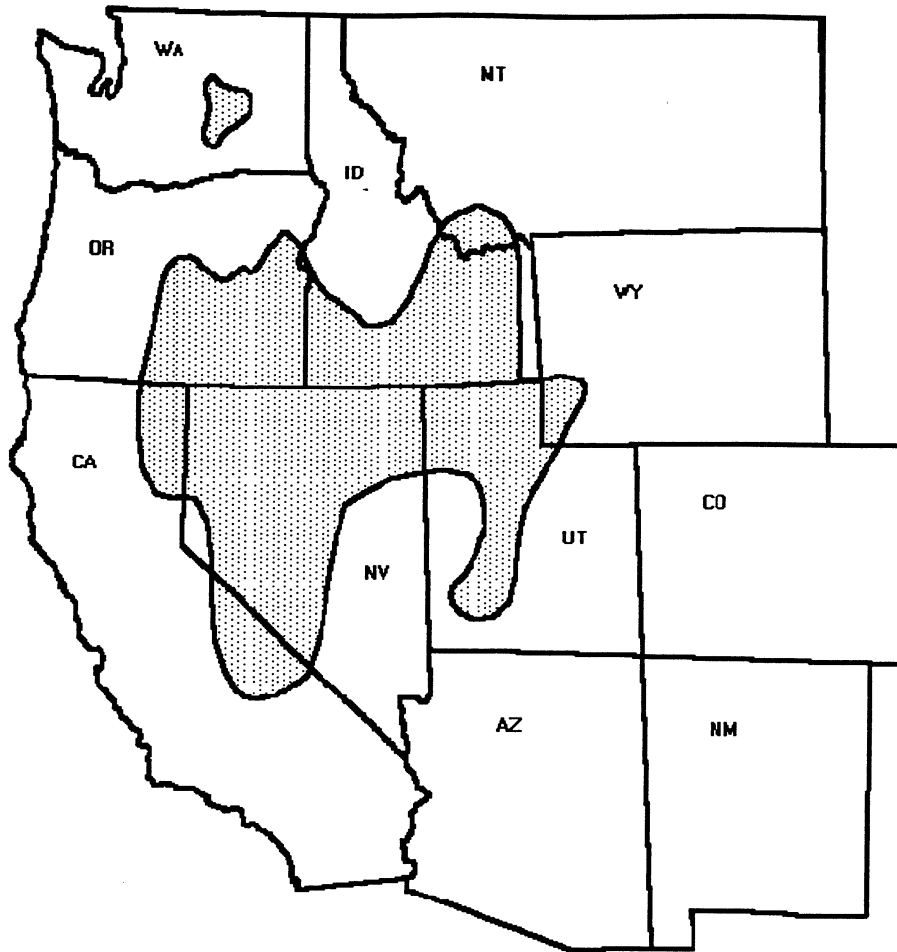


Figure 1. The approximate historic range-wide distribution of the pygmy rabbit (Weiss and Verts 1984; WDFW 1995; T. Katzner, pers. comm., 2002).

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Currently, pygmy rabbits are not distributed continuously across their range, nor were they in the past. Rather, they are found in areas within their

broader distribution where sagebrush cover is sufficiently tall and dense, and soils are sufficiently deep and loose to allow burrowing (Bailey 1936; Green

and Flinders 1980a; Weiss and Verts 1984; WDFW 1995a). The local distribution of these habitat patches, and thus pygmy rabbits, likely shifts

across the landscape in response to various sources of disturbance (*e.g.*, fire, flooding, grazing, crop production) combined with long- and short-term weather patterns. In the past, more dense vegetation along permanent and intermittent stream channels, alluvial fans, and sagebrush plains probably provided travel corridors and dispersal habitat for pygmy rabbits between appropriate use areas (Green and Flinders 1980a; Weiss and Verts 1984; WDFW 1995a). Since European settlement of the western United States, more dense vegetation associated with some human activities (*e.g.*, fence rows, roadway shoulders, crop margins, abandoned fields) may have also acted as avenues of dispersal between local populations of pygmy rabbits (Green and Flinders 1980a; Pritchett *et al.* 1987).

#### *Prehistoric Distribution*

There is very little information currently available regarding the

prehistoric distribution of the pygmy rabbit throughout the majority of its range. However, the pygmy rabbit has been present within the Columbia Basin, a geographic area that extends from northern Oregon through eastern Washington (Quigley *et al.* 1997), for over 100,000 years (Lyman 1991). This population segment, which we refer to as the Columbia Basin pygmy rabbit, is believed to have been disjunct from the remainder of the species' range since at least the early Holocene (10,000 to 7,000 years before present (BP)), as suggested by the fossil record (Grayson 1987; Lyman 1991). This separation is in contrast to the relatively short-term, local patterns of isolation, extirpation, and recolonization that likely occur throughout pygmy rabbit range (see above). The Columbia Basin pygmy rabbit probably had a broader distribution during the mid-Holocene (roughly 7,000 to 3,000 years BP) (Lyman 1991). Gradual climate change

affecting the distribution and composition of sagebrush communities is thought to have resulted in a reduction of the Columbia Basin pygmy rabbit's range during the late Holocene (3,000 years BP to present) (Grayson 1987; Lyman 1991).

#### *Historic and Current Distribution*

Columbia Basin pygmy rabbits have been considered rare with local areas of occurrence within the Columbia Basin for many years (Dalquest 1948), although there is little comprehensive information available regarding their historic distribution and abundance within this region (WDFW 1995a). Museum specimens and reliable sight records indicate that Columbia Basin pygmy rabbits probably occurred in portions of at least five Washington counties during the first half of the 1900s, including Douglas, Grant, Lincoln, Adams, and Benton (Figure 2).

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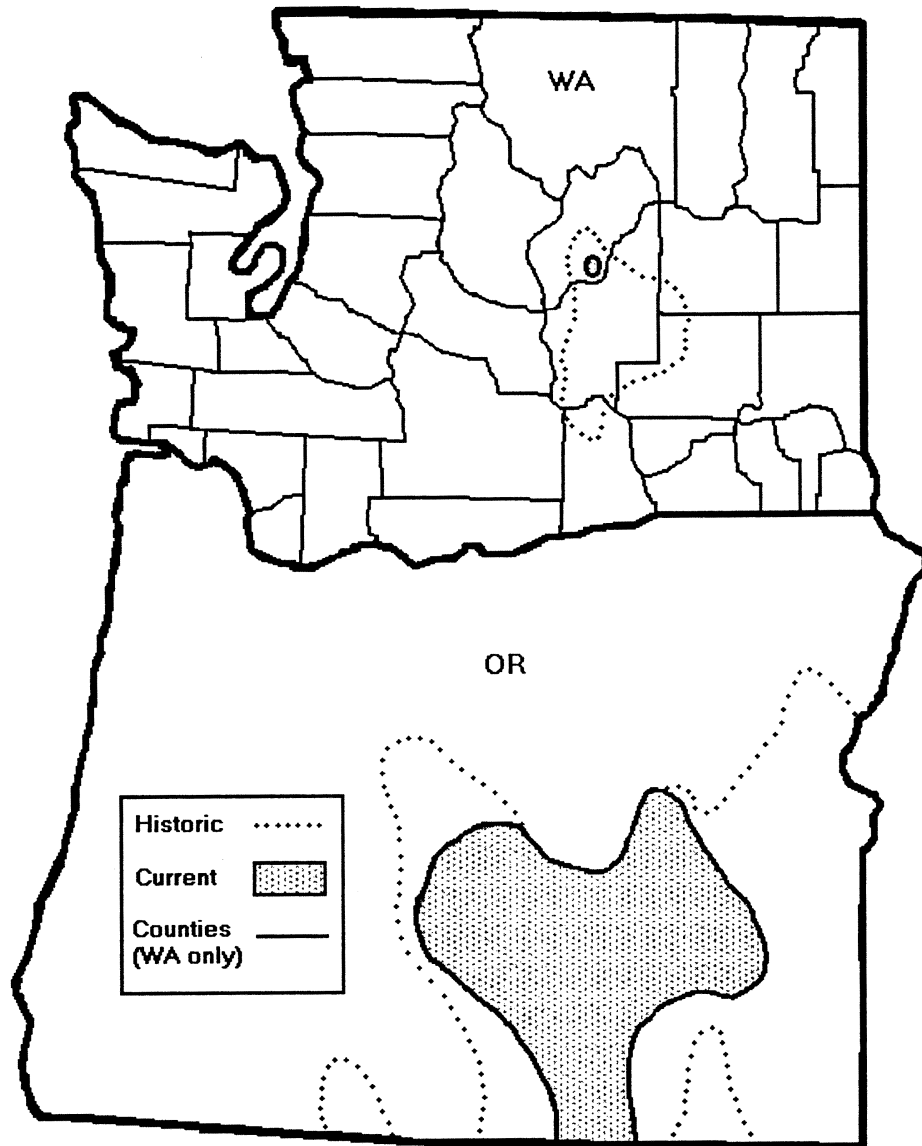


Figure 2. The approximate historic and current distribution of the pygmy rabbit in Washington and Oregon (Weiss and Verts 1984; WDFW 1995).

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Once thought to be extirpated, Columbia Basin pygmy rabbits were again located in Washington in 1979. Intensive surveys in 1987 and 1988 discovered five small subpopulations in southern Douglas County; three occurred on State lands and two on private lands (WDFW 1995a). With the exception of a single site record from

Benton County in 1979, Columbia Basin pygmy rabbits have been found only in southern Douglas and northern Grant counties since 1956 (WDFW 2000a). The Washington Wildlife Commission designated the pygmy rabbit as a State threatened species in 1990, and reclassified it as endangered in 1993 (WDFW 1995a).

The number of Columbia Basin pygmy rabbit subpopulations and active burrows in Washington has declined over the past decade (WDFW 2001a). Four of the five subpopulations located in 1987 and 1988 were very small, with fewer than 100 active burrows (WDFW 1995a); the largest subpopulation (at the State-owned Sagebrush Flat site in

Douglas County) contained roughly 588 active burrows in 1993, when it was estimated to support fewer than 150 rabbits (Gahr 1993). While an additional subpopulation was discovered on private land in northern Grant County in 1997, three of the small subpopulations originally located were extirpated during the 1990s, leaving just three known subpopulations in 1999 (WDFW 2001a).

One of the three remaining sites experienced a catastrophic fire in 1999 and declined to three active burrows, while the newly discovered site in Grant County declined for unknown reasons to two active burrows following the winter of 1999–2000 (WDFW 2001a). These two subpopulations are now thought to be extirpated (WDFW 2001b). In addition, during the winter of 1997–1998, the number of active Columbia Basin pygmy rabbit burrows at the Sagebrush Flat site declined by approximately 50 percent, and has continued to decline each year since (WDFW 2001a). The entire, wild Columbia Basin pygmy rabbit population is now considered to consist of fewer than 30 individuals from just one known subpopulation at the Sagebrush Flat site in Douglas County (D. Hays, pers. comm. 2002).

Although habitat loss and fragmentation have likely played a primary role in the long-term decline of the Columbia Basin pygmy rabbit, it is unlikely that these factors have directly influenced the post-1995 declines at the Sagebrush Flat site and the extirpations of some of the smaller populations (WDFW 2001a). Once populations decline below a certain threshold, they are at risk of extirpation from a number of influences including chance environmental events (e.g., extreme weather), catastrophic habitat or resource failure (e.g., due to fire or insect infestations), predation, disease, demographic limitations, and loss of genetic heterogeneity. The Columbia Basin pygmy rabbit in the wild is currently at such risk and, without intervention, is likely to become extirpated in the near future (WDFW 2001a).

#### Previous Federal Action

We added the pygmy rabbit to our candidate species list on November 21, 1991, as a category 2 species (56 FR 58804). A category 2 species was one for which we possessed information indicating that a proposal to list it as threatened or endangered under the Act was possibly appropriate, but for which sufficient data on biological vulnerability and threats were not available to support a proposed rule. In

a February 28, 1996, notice, we discontinued the designation of category 2 species as candidates for listing under the Act (61 FR 7596). The Columbia Basin pygmy rabbit was not included as a candidate for listing in this notice.

In FY 2001, the Service was nearly faced with a situation where it could not comply with all its court orders. Early in calendar year 2001, it became apparent that the cost of compliance with existing court orders exceeded our FY 2001 listing funding. After more than 6 months of negotiating, the Service was able to reach an agreement with several plaintiffs that allowed us to postpone a few actions previously scheduled for work in FY 2001. This agreement allowed us to reallocate funding to complete court-ordered work as well as some listing actions. On August 28, 2001, we reached an agreement with the Center for Biological Diversity, Southern Appalachian Biodiversity Project, and the California Native Plant Society to complete work on a number of species proposed for listing. Under this agreement, we were required to issue several final listing decisions, propose a number of other species for listing, and review three species for emergency listing, including the Columbia Basin DPS of the pygmy rabbit (Center for Biological Diversity, *et al. v. Norton*, Civ. No. 01–2063 (JR) (D.D.C.), entered by the court on October 2, 2001).

On November 30, 2001, we published an emergency rule to list the Columbia Basin pygmy rabbit as endangered (66 FR 59734). We found that emergency listing action was justified because immediate and significant risks to the well-being of this DPS existed due to its recent decreases in population size and distribution over the past several years. Our November 30, 2001, emergency rule provided Federal protection to the Columbia Basin pygmy rabbit pursuant to the Act for a period of 240 days. Concurrently with the emergency rule, we also published a proposed rule to list this DPS as endangered under our normal listing procedures (66 FR 59769). On February 7, 2002, we published a notice in the **Federal Register** extending the comment period for the proposed rule through February 28, 2002 (67 FR 5780). The comment period was reopened to accommodate requests by State resource agencies and private interests for additional time to provide input. On February 12, 2002, we held a public meeting in East Wenatchee, Washington, to discuss the proposed rule with any interested parties. On July 17, 2002, we published a notice in the **Federal Register** extending the comment period for the

proposed rule through August 1, 2002 (67 FR 46951).

In accordance with section 10(a)(1)(A) of the Act, on December 18, 2001, we issued a recovery permit to the WDFW (TE050644) for their ongoing management actions to protect and conserve the Columbia Basin pygmy rabbit (see Current Management Actions, below). We issued revisions to this permit on January 10, 2002, and March 18, 2002. We also published notices in the **Federal Register** on December 19, 2001, and March 20 and April 3, 2002, describing the emergency circumstances, announcing receipt of permit applications, and issuing public notice exemptions concerning this permit and its revisions (66 FR 65508, 67 FR 15825, 67 FR 13004).

#### Current Management Actions

The WDFW has undertaken a variety of conservation actions for the Columbia Basin pygmy rabbit since 1979 (WDFW 1995a, 2001a). These actions have included population surveys, habitat inventories, land acquisitions, habitat restoration, land management agreements, initiation of studies on the effects of livestock grazing, and predator control. These efforts have been funded by a variety of sources. As funding sources and staffing levels allow, WDFW efforts to conserve the Columbia Basin pygmy rabbit in the wild will continue (D. Hays, pers. comm. 2002).

During the fall of 2000, the WDFW, in cooperation with the Oregon Zoo, initiated a study of husbandry techniques for pygmy rabbits (WDFW 2001a). This study used five pygmy rabbits captured in Idaho and was undertaken to improve the information base for proposed captive propagation and release efforts for the Columbia Basin pygmy rabbit. Due to the continuing decline of pygmy rabbit subpopulations and active burrows in Washington, the WDFW, in cooperation with WSU, expedited their captive propagation efforts for the Columbia Basin pygmy rabbit during the spring of 2001 (WDFW 2001b; D. Hays, pers. comm. 2001).

The main goal of this effort is to capture up to 20 individuals to establish a captive breeding stock. The actual number and type (gender, age, family unit) of pygmy rabbits to be taken from the wild is based partly on information from the ongoing husbandry study of Idaho pygmy rabbits, partly on estimates of what is needed to allow for appropriate manipulation of family lineages to better manage this population's unique genetic profile, and partly on the availability of animals for capture. Any Columbia Basin pygmy

rabbits that are not considered essential to the captive propagation effort will be left in the wild, and ongoing management to protect the wild portion of this population will continue.

Since the spring of 2001, 16 Columbia Basin pygmy rabbits (nine females, seven males) have been captured as an initial source for captive breeding efforts (D. Hays, pers. comm. 2002). In addition, shortly after being captured, one female gave birth to a litter of five offspring (two females, three males) that was conceived in the wild (D. Hays, pers. comm. 2001; L. Shipley, pers. comm. 2001). Of the adult rabbits, two males and one female captured from the wild subsequently died (WDFW 2001c). Full necropsies were conducted on these three specimens, with the following results: One male, which died shortly after being captured, may have had reduced body condition while in the wild; the other male died from unknown causes; and the female died due to complications caused by a fall from a sagebrush plant placed in her cage. Several procedures, developed in coordination with results from the ongoing husbandry study, have been implemented to reduce the risk of capture-related mortality of pygmy rabbits. In addition, in order to reduce the risk of catastrophic loss of a single captive population, a number of Columbia Basin pygmy rabbits have been placed at the Oregon Zoo facility. Appropriate measures have been taken to ensure that the Columbia Basin pygmy rabbits remain completely segregated from the pygmy rabbits captured in Idaho that are being used for the husbandry study.

The remaining 18 captive Columbia Basin pygmy rabbits appear to have adjusted well to the two rearing facilities (WDFW 2001c). As opportunities arise, the intent is to capture additional Columbia Basin pygmy rabbits that will complement the genetic profiles and potential breeding scenarios of those already in captivity (D. Hays, pers. comm. 2002; K. Warheit, WDFW, pers. comm. 2002).

The WDFW's captive propagation program affords an opportunity to protect and maintain the Columbia Basin pygmy rabbit until conditions can be made more favorable for its survival in the wild. Ultimately, the goal of the captive propagation effort is to release captive-bred Columbia Basin pygmy rabbits back into suitable habitats within their historic range where viable subpopulations can become re-established and self-sustained in the wild (WDFW 2001b; D. Hays, pers. comm. 2001). The number and size of the wild subpopulations necessary for

recovery pursuant to the Act have not yet been determined. Columbia Basin pygmy rabbits within captive rearing facilities will not be counted towards recovery of the species. The timing and objectives for the release phase of the program will be further developed as the captive propagation effort becomes established. The WDFW will remain the lead agency for these efforts, and has developed a Science Advisory Group to provide recommendations and technical oversight for the conservation program. The group is currently comprised of State and Federal agency personnel, public zoo, and university experts, representatives from non-governmental organizations, and private individuals with interests in the conservation of the Columbia Basin pygmy rabbit.

The Nature Conservancy (TNC), a non-governmental natural resource advocacy organization, has acquired, or obtained easements on, portions of the remaining shrub steppe habitat in southern Douglas and northern Grant counties, including the acquisition of approximately 6,900 ha (17,000 ac) adjacent to the WDFW's Sagebrush Flat site. As appropriate, TNC lands in central Washington will be managed to support the conservation efforts undertaken for the Columbia Basin pygmy rabbit (C. Warner, TNC, pers. comm. 2001).

Portions of the remaining shrub steppe habitat in southern Douglas and northern Grant counties are under the jurisdiction of the U.S. Bureau of Land Management (BLM) and State resource agencies. Conservation measures for the Columbia Basin pygmy rabbit are considered in the management of these agency lands (D. Hays, pers. comm. 2001; N. Hedges, BLM, pers. comm. 2001). Many of the existing and future land acquisitions and management actions of the TNC, BLM, and State agencies in this area are targeted at sites recently occupied by the Columbia Basin pygmy rabbit and at providing connectivity of appropriate habitats between these sites.

Large areas of privately owned lands in Douglas County are currently withdrawn from crop production and planted to native and non-native cover under the Federal Conservation Reserve Program (CRP), established in 1985 (USDA 1998). These lands, some of which have been set aside since the late 1980s, provide grass and shrub cover that may improve the habitat conditions of areas potentially occupied or used as dispersal corridors by the Columbia Basin pygmy rabbit. New and re-signed program contracts completed in 1998 increased the acreage of CRP lands in Douglas County. However, contracts

extend for just 10 years, and new standards for CRP lands were implemented that required replanting of significant acreage under existing contracts (USDA 1998; M. Schroeder, WDFW, pers. comm. 2001). Presently, it is unclear what effects the CRP lands and current changes to the program may have on the Columbia Basin pygmy rabbit.

Currently, we are assisting private landowners and their conservation districts with development of a county-wide habitat conservation plan (HCP) for agricultural lands in Douglas County, Washington. When completed, the Foster Creek HCP will likely include measures to protect the Columbia Basin pygmy rabbit and may complement other, ongoing conservation efforts in Douglas County.

#### **Distinct Vertebrate Population Segment**

Pursuant to the Act (16 U.S.C. 1531 *et seq.*), we must consider for listing any species, subspecies, or, for vertebrates, any distinct population segment (DPS) of these taxa if there is sufficient information to indicate that such action may be warranted. To implement the measures prescribed by the Act and Congressional direction, the Service and the National Marine Fisheries Service (NMFS) developed a joint policy in 1996 that addresses the recognition of DPS for potential listing actions (61 FR 4722). The policy allows for more refined application of the Act that better reflects the biological needs of the taxon being considered, and avoids the inclusion of entities that do not require its protective measures.

Two elements are used to assess whether a population segment under consideration for listing pursuant to the Act constitutes a DPS. The two elements are: (1) The population segment's discreteness from the remainder of the taxon; and (2) the population segment's significance to the taxon to which it belongs. A systematic application of these elements is appropriate, with discreteness criteria applied first, followed by significance analysis. If we determine that a population segment being considered for listing represents a DPS, then the status of the population and level of threats to the population segment is evaluated based on the five listing factors established by the Act to determine if listing the DPS as either threatened or endangered is warranted.

#### *Discreteness*

Discreteness may be demonstrated by either, or both, of the following: (1) Physical, physiological, ecological, behavioral, morphological, or genetic discontinuity between population

segments; or (2) international governmental boundaries between which differences in regulatory mechanisms exist that are significant with regard to conservation of the taxon. The pygmy rabbit does not occur outside of the lower 48 conterminous United States, so the international boundary criterion does not apply.

The Columbia Basin pygmy rabbit has been physically discrete from the remainder of the taxon for several millennia (see Distribution and Status, above). In addition, there is current evidence that the Columbia Basin pygmy rabbit is genetically and ecologically discrete from the remainder of the taxon (see Significance, below). Based on this information, we find that the Columbia Basin pygmy rabbit population segment is discrete from the remainder of the taxon pursuant to the Act. Physiological, behavioral, or morphological differences between the Columbia Basin pygmy rabbit and populations throughout the remainder of the species' range are not known at this time.

#### Significance

The types of information that may demonstrate the significance of a discrete population segment to the remainder of its taxon include, but are not limited to: (1) Persistence of the population segment in an ecological setting unusual or unique for the taxon; (2) evidence that loss of the population segment would result in a significant gap in the range of the taxon; (3) evidence that the discrete population segment represents the only surviving natural occurrence of the taxon that may be more abundant elsewhere as an introduced population outside its historic range; and (4) evidence that the population segment differs markedly from other population segments in its genetic characteristics. The following significance factors have bearing on the Columbia Basin pygmy rabbit.

*Markedly different genetic characteristics.* Several studies have been initiated to investigate the pygmy rabbit's genetic profile (WDFW 2000c; WDFW 2001a, c; Cegelski and Waits, undated). To date, the genetic analyses

include current (*ca* 1990s to present) samples from Washington, Idaho, and Montana; and museum specimens (*ca* 1910s to 1980s) from Washington, Idaho, Montana, and Oregon, with a median date of 1949 among these States (WDFW 2001c). Analyses have included both mitochondrial DNA (from current samples only) and nuclear DNA markers (WDFW 2001c; K. Warheit, pers. comm. 2001, 2002).

Results from recent genetic analyses indicate that the Columbia Basin pygmy rabbit is markedly different from other pygmy rabbit population segments (WDFW 2001c; K. Warheit, pers. comm. 2001, 2002). These differences are consistent in both mitochondrial DNA and nuclear DNA indices, and between current (Washington versus Idaho and Montana) and museum (Washington versus Idaho, Montana, Oregon) samples. The genetic results suggest that the Columbia Basin pygmy rabbit diverged (*i.e.*, was genetically isolated) from the remainder of the taxon at least 10,000 to 25,000 years BP, and possibly as long as 40,000 to 115,000 years BP (WDFW 2001c; K. Warheit, pers. comm. 2001, 2002). The genetic differences that have so far been identified between the Columbia Basin pygmy rabbit and other pygmy rabbit populations are similar in nature to subspecific differences recognized in other mammal species. However, potential taxonomic reorganization of the pygmy rabbit species will require additional study (WDFW 2001c).

In addition to the genetic differences that likely result from long-term isolation described above, the Columbia Basin pygmy rabbit also exhibits significantly less genetic diversity compared to other pygmy rabbit populations. Furthermore, the level of genetic diversity in this population segment has declined significantly and at an accelerated rate since the mid-1900s (Washington current versus Washington museum specimens). These results suggest a recent and rapid decline in the effective population size (*i.e.*, the number of individuals contributing to reproduction) of the Columbia Basin pygmy rabbit, and that this population segment may be

experiencing a degree of inbreeding depression (WDFW 2001c).

Two conclusions may be drawn from the recent results of the genetic research on the pygmy rabbit—(1) the unique genetic characteristics of the Columbia Basin pygmy rabbit represent an important component in the evolutionary legacy of the species and, therefore, a genetic resource worthy of conservation; and (2) efforts should be undertaken to address the low level of genetic diversity within this population segment (K. Warheit, pers. comm. 2001, 2002).

*Persistence in an unusual or unique ecological setting.* With regard to the historic distribution of the pygmy rabbit, several studies have defined and mapped landscape-level ecosystem components of Washington and Oregon and, to varying degrees, address the management of natural resources within these regional ecosystems (Daubenmire 1988; Franklin and Dyrness 1988; Keane *et al.* 1996; Quigley *et al.* 1997; Wisdom *et al.* 1998). Although there are considerable differences between the studies, the ecosystem mapping units that were developed as a result of these studies are relatively consistent. These ecosystem mapping units are important for determining if the Columbia Basin pygmy rabbit may occupy an unusual or unique ecological setting. In addition, it is important for delineating the boundaries of any potential DPS in the region, as required by our DPS policy. Currently, there is insufficient information available to address the other shrub steppe ecosystems comprising historic pygmy rabbit range outside of Washington and Oregon.

During the early 1900s, the pygmy rabbit populations in Washington and Oregon (Figure 2) occurred in five ecosystems identified by the above studies. For the purposes of this DPS analysis, we refer to these ecosystems as the Columbia Basin, High Lava Plains, Northern Great Basin, Owyhee Uplands, and Modoc Plateau (after Quigley *et al.* 1997). The Columbia Basin occurs in Washington and northern Oregon; the other four ecosystems occur in central and southern Oregon (Figure 3).

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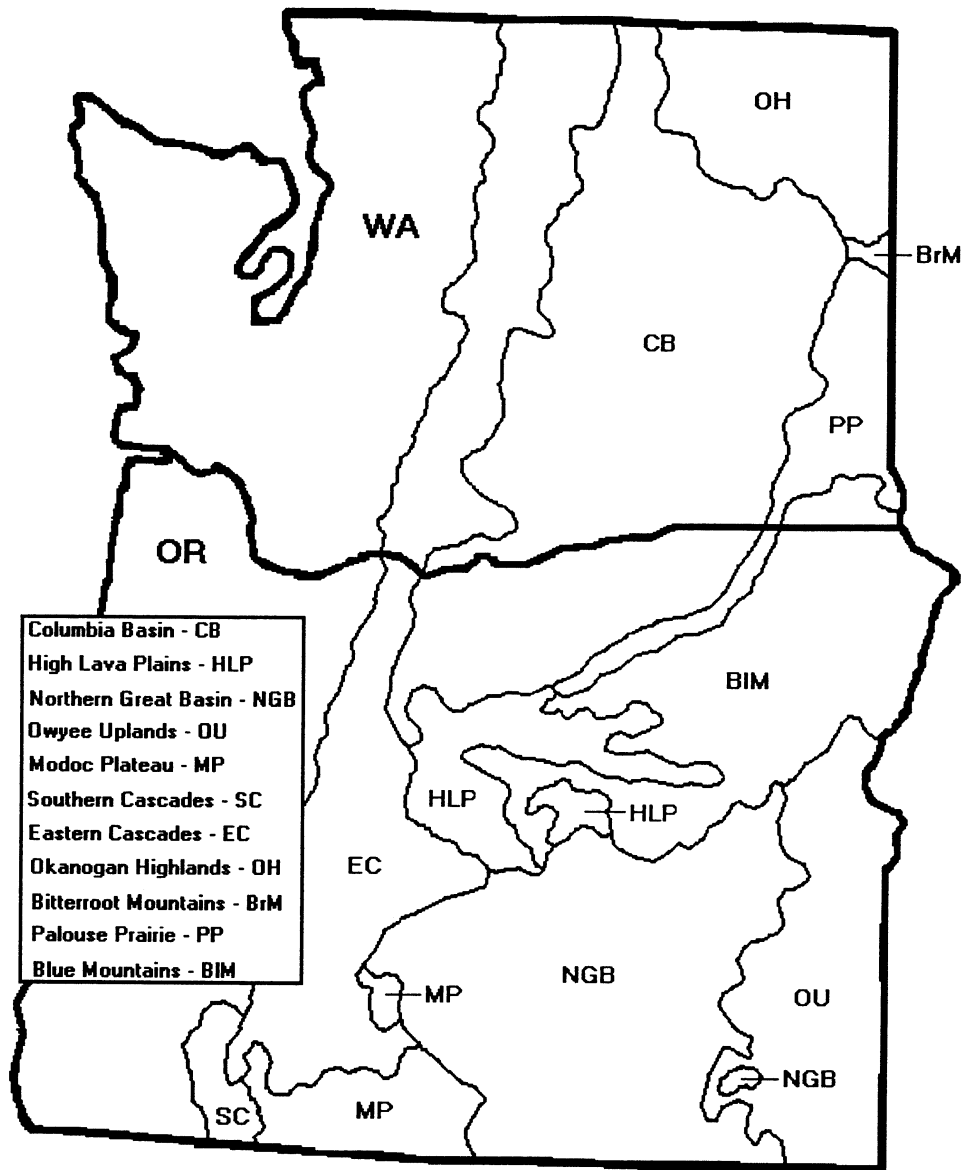


Figure 3. The ecosystems of eastern Washington and Oregon (as modified from Daubenmire 1988; Franklin and Dyrness 1988; Keane et al. 1996; Quigley et al. 1997).

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These ecosystems are interspersed to varying degrees with forested habitats of the Southern and Eastern Cascades ecosystems to the west, Okanogan Highlands to the north, Bitterroot and Blue Mountains to the east, and steppe (grassland) habitats of the Palouse Prairie to the east.

The historic range of the Columbia Basin pygmy rabbit occurred entirely within the Columbia Basin of central Washington, and this population segment has been the only representation of the taxon within this ecosystem for thousands of years. During the early 1900s, the population segment of pygmy rabbits in central and

southern Oregon was apparently locally dispersed across the High Lava Plains, Northern Great Basin, Owyee Uplands, and Modoc Plateau (Figures 2 and 3). The distribution of the pygmy rabbit in Oregon has likely declined during the last century (Weiss and Verts 1984; WDFW 2000b) and, currently, primarily

encompasses areas within the Northern Great Basin ecosystem.

A number of significant differences are found between the Columbia Basin ecosystem and the balance of pygmy rabbit range in central and southern Oregon. In general, the Columbia Basin is lower in elevation, contains soils of varying origin, and has been influenced

by different geological processes. These structural differences, combined with regional climatic conditions, significantly influence the broad plant associations found within each ecosystem (Daubenmire 1988; Franklin and Dyrness 1988). Historically, transitional steppe habitats were much more prevalent in the Columbia Basin

than in the ecosystems of central and southern Oregon. In contrast, juniper (*Juniperus* spp) woodlands and salt-desert shrub habitats were much more common in central and southern Oregon. Finally, there are significant differences in the type and distribution of sagebrush taxa among the ecosystems (Table 1).

TABLE 1. DIFFERENCES IN ECOSYSTEM ELEMENTS BETWEEN REGIONS OCCUPIED BY THE EXTANT POPULATION SEGMENTS OF THE PYGMY RABBIT IN WASHINGTON AND OREGON (AFTER WINWARD 1980; DAUBENMIRE 1988; FRANKLIN AND DYRNESS 1988; MCNAB AND AVERS 1994; DOBLER *et al.* 1996; QUIGLEY *et al.* 1997).

Ecosystem Elements: Geologic, Edaphic, and Transitional Habitats

Population segment	Elevations	Soils	Channeled scablands	Internally-drained playas	Steppe	Juniper woodland	Salt-desert scrub
Columbia Basin .....	<914m (<3,000 ft)	Deep/Loamy Glacial/Eolian.	Prominent (north).	Rare/Absent .....	Abundant (east)	Rare/Absent .....	Rare/Absent.
Central/Southern Oregon.	>1,067 m (<3,500 ft)	Thin/Rocky Volcanic (HLP <sup>1</sup> ) Deep/Alluvial (NGB <sup>1</sup> , OU <sup>1</sup> ).	Rare/Absent .....	Prominent (NGB, OU).	Rare/Absent .....	Abundant (HLP) Present (NGB, OU).	Abundant (NGB, OU).

Ecosystem Elements: Sagebrush (*Artemisia*) Taxa<sup>2</sup>

Population segment	Basin ssp.	Wyoming ssp.	Mountain ssp.	Low	Three-tip	Stiff	Early	Silver	Black
Columbia Basin .....	Dominant .....	Present (west).	Rare/Absent	Rare/Absent	Abundant (north).	Abundant .....	Rare/Absent	Rare/Absent	Rare/Absent.
Central/Southern Oregon	Rare/Absent	Dominant .....	Abundant .....	Abundant .....	Present (OU).	Present .....	Present (HLP).	Present (NGB, OU).	Present (NGB, OU).

<sup>1</sup> Element primarily applies to the ecosystems noted: HLP—High Lava Plains; NGB—Northern Great Basin; OU—Owyhee Uplands.

<sup>2</sup> Big Sagebrush (*A. tridentata*) Subspecies (ssp): Basin—*A. t. tridentata*, Wyoming—*A. t. wyomingensis*, Mountain—*A. t. vaseyana*; Low—*A. arbuscula*; Three-tip—*A. tripartita*; Stiff—*A. rigida*; Early—*A. longiloba*; Silver—*A. cana*; Black—*A. nova*.

There are a number of broad habitat associations in common between the Columbia Basin and the ecosystems of central and southern Oregon (Daubenmire 1988; Franklin and Dyrness 1988). However, even within these common habitat associations, notable differences exist. In general, the composition of forb species differs considerably between the Columbia Basin and the ecosystems in central and southern Oregon (*cf* Daubenmire 1988; Franklin and Dyrness 1988). Even when the same forb species may be present, the two regions typically support different subspecies or varieties of these taxa (Hitchcock and Cronquist 1973).

Currently, it is unclear if the Columbia Basin pygmy rabbit is different in several respects (*i.e.*, physiologically, behaviorally, or morphologically) from other pygmy rabbit populations throughout the remainder of the species' historic range. However, based on the above ecological information, and the pygmy rabbit's close association with sagebrush ecosystems, we conclude that the Columbia Basin represents a unique ecological setting for the taxon due to its different geologic, climatic, edaphic (soil), and plant community

components. In addition, the Columbia Basin ecosystem holds different management implications for the Columbia Basin pygmy rabbit compared to the ecosystems of southern Oregon and the population segment of pygmy rabbits occupying that region (*see* above), and likely also compared to the other sagebrush ecosystems and population segments found throughout the remainder of the species' range (*see* Background, above, and Summary of Factors Affecting the DPS, below).

*Significant gap in the range of the taxon.* The Columbia Basin pygmy rabbit represents an isolated portion of the northern-most extent of the historic distribution of the taxon (Figure 1). Paleontological records indicate that the prehistoric distribution of this population segment (*ca* 150 to 10,000 + years BP) may have encompassed roughly 23 percent of the Columbia Basin (after Lyman 1991). As recently as the early 1900s, this population segment was distributed across approximately 10 percent of the Columbia Basin ecosystem (*cf* Figures 2 and 3). Currently, the Columbia Basin pygmy rabbit occurs in less than 1 percent of its overall historic distribution, and a

small fraction of its potential prehistoric distribution.

A number of studies address the characteristics of peripheral and/or isolated populations and their influences on, and importance to, the remainder of the taxon. These studies indicate that peripheral and isolated populations may experience increased directional selection due to marginal or varied habitats at range peripheries, exhibit adaptations specific to these differing selective pressures, demonstrate genetic consequences of reduced gene flow dependent on varying levels of isolation, and/or have different responses to anthropogenic influences (Levin 1970; MacArthur 1972; Morain 1984; Lacy 1987; Hengeveld 1990; Saunders *et al.* 1991; Hoffmann and Blows 1994; Furlow and Armijo-Prewitt 1995; Garcia-Ramos and Kirkpatrick 1997).

The available information regarding the past distribution and isolation of the Columbia Basin pygmy rabbit demonstrates that this population segment is likely experiencing increased directional selection due to marginal and varied habitats at the periphery of the taxon's range. In addition, this population segment is exhibiting genetic

consequences of long-term isolation from other population segments and is responding, and will continue to respond, to the different anthropogenic influences in the region.

Based on the above information, we conclude that the loss of the Columbia Basin pygmy rabbit would represent a significant gap in the range of the taxon, due to the loss of a conspicuous peripheral and isolated extension of its current and historic range.

#### *Conclusion of DPS Review*

Based on the available information described above, we find that the Columbia Basin pygmy rabbit is discrete from, and significant to, the remainder of the taxon, and thus constitutes a DPS. The discreteness of this population segment is demonstrated by its physical, genetic, and ecological isolation from the remainder of the taxon. The significance of this population segment is demonstrated by: (1) Its genetic characteristics, which differ markedly from other population segments; (2) its long-term persistence in the unique ecological setting of the Columbia Basin; and (3) the significant gap in the current and historic range of the taxon that the loss of this population segment would represent. As required by our DPS policy, we have determined that the bounds of this DPS are coterminous with the historic distribution of the pygmy rabbit within the Columbia Basin ecosystem (Figure 2).

#### **Summary of Comments and Recommendations**

In our November 30, 2001, proposed rule (66 FR 59769) and associated notifications, we requested that all interested parties submit comments, data, or other information that might contribute to development of a final listing decision. The comment period for the proposed rule was originally open from November 30, 2001, through January 29, 2002. During this period, we received a number of requests to extend the comment period and five requests to hold a public hearing to address the proposed rule. On February 7, 2002, we extended the comment period for the proposed rule through February 28, 2002. In addition, after coordinating meeting details with the requesters, on February 12, 2002, we held a public meeting in East Wenatchee, Washington, to present the information we had available on the Columbia Basin pygmy rabbit, to receive input, and to discuss the proposed rule with any interested parties. On July 17, 2002, we extended the comment period for the proposed rule through August 1, 2002.

On November 30, 2001, February 7, 2002, and July 17, 2002, we contacted appropriate Federal, State, tribal, and local resource agencies and governmental offices, scientific organizations, agricultural organizations, outdoor user groups, environmental groups, and other interested parties and requested that they comment on the proposed rule. We established several methods for interested parties to provide comments and other materials, including verbally or in writing at the public meeting, by letter, facsimile, or, during the original and final open comment periods, by electronic mail. Notices of the extended comment period and public meeting announcement were also published in local newspapers on February 7, 2002, including the *Wenatchee World*, *Columbia Basin Herald*, and *Spokesman Review*.

We received a total of 34 letters, facsimiles, comment cards, and electronic mailings from the public with comments and/or questions concerning the proposed rule on the Columbia Basin pygmy rabbit during the three comment periods. We also received 2 letters from the same individual. Of the comments received, 9 were in support of the listing action, 6 were opposed to the listing, and 19 were neutral.

We revised and updated the information contained in this final rule to reflect the additional information we received during the open comment period for the proposed rule. We address substantive comments concerning various aspects of the proposed rule, below. General topics are categorized and comments of a similar nature under each topic are grouped together below, along with our response to each.

#### *Impact of Listing Action*

*Issue 1:* We received a number of requests to explain more fully what the potential effects of listing the Columbia Basin pygmy rabbit would be on private lands, or private management actions on public lands, throughout the population's historic distribution.

*Our Response:* Once a species becomes listed, either through our emergency or normal listing process, section 9 of the Act sets forth a series of general prohibitions that apply to that species. Of primary concern for Columbia Basin pygmy rabbits, the prohibitions make it illegal for any person subject to the jurisdiction of the United States to "take" them. The definition of "take" under the Act includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such

conduct. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to the listed wildlife by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. "Harass" is further defined to include actions that create the likelihood of injury to listed wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Other general prohibitions make it illegal to import or export listed wildlife or its parts or products, transport it in interstate or foreign commerce in the course of commercial activity, or sell it or offer it for sale in interstate or foreign commerce. Section 11 of the Act describes the civil and criminal penalties that may be imposed on any individual or organization that violates these prohibitions.

Section 10 of the Act provides a number of exceptions to the prohibitions against prescribed in section 9. In other words, activities that could result in take of the Columbia Basin pygmy rabbit may be permitted by the Service if certain conditions are met. Under section 10(a)(1)(A), we may permit activities otherwise prohibited by section 9 if they are conducted for scientific purposes or to enhance the propagation or survival of the Columbia Basin pygmy rabbit (recovery permits). Under section 10(a)(1)(B), we may permit activities otherwise prohibited by section 9 if the resulting take is incidental to, and not the purpose of, the otherwise lawful activities (incidental take permits). In order for us to issue an incidental take permit, an applicant must submit an HCP that specifies: (1) The impact that will likely result from such taking; (2) what steps will be taken to minimize and mitigate such impacts, and the funding that will be available to implement such steps; (3) what alternative actions to such taking were considered and the reasons why such alternatives are not used; and (4) other such measures that the Secretary of Interior (Secretary) may require.

With regard to non-Federal property, if pygmy rabbits are not present on the property, the Act's taking prohibition would not apply there. Where non-Federal property is occupied by the Columbia Basin pygmy rabbit, if management activity would not result in take, section 9 would also not apply. Even if non-Federal property is occupied by the pygmy rabbit and management activities are likely to result in take, an incidental take permit may still be available under section

10(a). Service and technical assistance will be available to landowner(s) and/or operator(s) to help them avoid, minimize, or mitigate any adverse impacts to the Columbia Basin pygmy rabbit.

Proposed activities authorized, funded, or carried out by a Federal agency are subject to the consultation requirements Congress prescribed in section 7 of the Act. Circumstances under which a proposed Federal action or Federal nexus may affect the Columbia Basin pygmy rabbit will be handled through consultation with the involved Federal agency and applicant(s), as necessary, on a case-by-case basis, in accordance with section 7 of the Act.

*Issue 2:* Various commenters expressed concern regarding circumstances where landowners or operators of currently unoccupied habitat are adjacent to occupied sites or areas potentially used for reintroduction efforts, and what the consequences of future occupation of these lands by the Columbia Basin pygmy rabbit may be.

*Our Response:* Authorization of take of rabbits incidental to otherwise lawful activities may be available through development of HCPs and issuance of incidental take permits in accordance with section 10(a) of the Act. In addition, landowners or operators may enter into Safe Harbor Agreements that provide regulatory assurances to landowners who manage their properties in such a way as to attract Columbia Basin pygmy rabbits. As with currently occupied habitats, we will continue to work cooperatively with, and provide technical assistance to, landowners and operators to help them avoid, minimize, or mitigate any potential future impacts to the Columbia Basin pygmy rabbit.

#### *Critical Habitat*

*Issue 3:* We received a number of comments concerning critical habitat and how it relates to the emergency, proposed, and final rules for the Columbia Basin pygmy rabbit.

*Our Response:* Neither our emergency, proposed, nor this final rule designates critical habitat for the Columbia Basin pygmy rabbit. We find that designation of critical habitat for the Columbia Basin pygmy rabbit is not determinable at this time because information sufficient to perform the required analyses of the impacts of the designation is lacking (see Critical Habitat, below). We will continue to protect the Columbia Basin pygmy rabbit and its habitat through section 7 consultations on Federal actions that may affect this population segment,

through the recovery process, through HCPs under section 10, and through enforcement of take prohibitions under section 9 of the Act.

#### *National Environmental Policy Act (NEPA)*

*Issue 4:* Several comments suggested the need for NEPA analyses, or requested an explanation of why the NEPA process is not necessary, for this final rule.

*Our Response:* We have determined that environmental assessments (EAs) and environmental impact statements (EISs) developed pursuant to NEPA do not need to be prepared in connection with regulations adopted pursuant to the listing process under section 4(a) of the Act. The Federal Council on Environmental Quality has determined, based on court decisions, that listing actions under the Act are exempt from NEPA review as a matter of law. We published a notice that further describes our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

#### *Determination of Status of Columbia Basin and Other Pygmy Rabbit Populations*

*Issue 5:* We received a number of comments and questions concerning how new information about the presence of additional subpopulations of Columbia Basin pygmy rabbits may affect the status of the population, the listing process, or this final rule.

*Our Response:* If significant new information becomes available regarding additional subpopulations of Columbia Basin pygmy rabbits, the new information could affect the priority of the management actions identified for the captive propagation program and/or the ongoing conservation actions being implemented for the remaining wild portion of the population. The information we currently have available indicates that it is unlikely that a sufficiently large, well distributed "unknown" subpopulation may still occur that would completely remove the need for protection of the species under the Act. No additional information on locations of other subpopulations of Columbia Basin pygmy rabbits was provided during the comment period.

*Issue 6:* We received a number of comments and questions concerning how we determined the historic range of the pygmy rabbit, what the abundance and status of various pygmy rabbit populations are, how abundance estimates are determined, and the causes behind the recent declines in the Columbia Basin pygmy rabbit.

*Our Response:* Information concerning the current, historic, and prehistoric distribution of the Columbia Basin pygmy rabbit population primarily comes from scientific literature, including peer-reviewed journal articles, doctoral dissertations, master's theses, and/or State natural resource agency reports and data. These sources are referenced within the body of the rule, as appropriate. As discussed above (see Distribution and Status), there is very little information currently available regarding the abundance of pygmy rabbits throughout the majority of their current range. Due to the ongoing efforts of the WDFW to monitor and study pygmy rabbits over the last several decades, there is considerably more information available regarding the current abundance and distribution of the Columbia Basin population.

With regard to the past distribution and abundance of the Columbia Basin pygmy rabbit, we assume that this population was more broadly distributed and had a greater abundance of individuals within this region historically. This assumption is based on the available information addressing other pygmy rabbit populations, the population dynamics of other Leporid species, and the general concepts and theory of minimum viable populations. Given this available information, it is unlikely that the Columbia Basin pygmy rabbit would have persisted within this region for thousands of years with such a limited distribution and at such minimum abundance levels.

Nevertheless, the available information only indicates the occurrence of several small subpopulations in portions of five counties in central Washington since the early 1900s. As such, the historic distribution and abundance of the Columbia Basin pygmy rabbit that we report in this final rule represent minimum estimates.

Obtaining precise estimates of wildlife abundance levels is often very difficult. This is because: (1) The abundance of many wildlife populations naturally fluctuates between years, and even between seasons within years; (2) individuals are often difficult to observe; (3) individuals often move between observations or there is an unknown amount of mixing of individuals between observed areas; and (4) observation techniques can affect the behavior of the individuals being observed. Because of these limitations, managers often use a "surrogate", or index, to estimate a probable range of values concerning wildlife abundance levels. With regard to pygmy rabbits, the occurrence of their burrows and estimates of the burrows' ages and/or

activity levels (*e.g.*, active, fresh, old, very old) are typically used to monitor the status of a given population.

We understand that there are limitations in the available information addressing the current and historic distribution and abundance of the Columbia Basin and other pygmy rabbit populations. However, the available information provides several important parameters with regard to our listing determination, including: (1) The distribution of the Columbia Basin pygmy rabbit has declined dramatically from historic levels; (2) five of six known subpopulations remaining in the mid-1990s have been extirpated; and (3) the abundance of active burrows and, by extension, individual pygmy rabbits within the last known occupied site, has declined dramatically over this same recent time period. The estimates of individual Columbia Basin pygmy rabbits known to remain in the wild, as presented in the proposed rule and this final rule, represent maximum estimates and are based on the best professional judgement of recognized experts.

As discussed below (*see* Summary of Factors Affecting the DPS), several factors and their interactions are implicated in the historic and recent declines of the Columbia Basin pygmy rabbit, including habitat conversion and fragmentation, wildfire, predation, livestock grazing, and disease. However, addressing the extremely small size and limited distribution of this population is our primary concern for the immediate conservation and protection measures for the Columbia Basin pygmy rabbit. Measures to address the more general and/or long-term threat factors will be identified as our recovery program is further developed (*see* Captive Propagation and Recovery, below).

#### *Livestock Grazing*

*Issue 7:* We received a large number of comments concerning our interpretation of the available information with regard to livestock grazing and the potential effects it has on the Columbia Basin pygmy rabbit. Some comments suggested that we were overly critical concerning the negative effects of livestock grazing and did not adequately address its potential benefits to the Columbia Basin pygmy rabbit. In contrast, other comments suggested that we down-played the negative effects of livestock grazing and implied that regulatory restrictions should be placed on grazing activities in all areas currently or potentially used by the Columbia Basin pygmy rabbit.

*Our Response:* As with the available information addressing distribution and abundance (see above response), we

understand that there are limitations in the available information concerning the effects of livestock grazing on the Columbia Basin pygmy rabbit. However, with regard to adverse effects of livestock grazing, the one study available found several important characteristics—(1) Male Columbia Basin pygmy rabbits tend to make longer movements and require larger home ranges during the breeding season in recently grazed areas as opposed to areas that have not been grazed for several decades (Gahr 1993); (2) there tend to be fewer burrows available to, or constructed by, Columbia Basin pygmy rabbits in recently grazed areas (L. Shipley, pers. comm. 2001); (3) Columbia Basin pygmy rabbits occupying recently grazed sites tend to have a greater proportion of their summer through winter diets composed of sagebrush as opposed to grasses and forbs (L. Shipley, pers. comm. 2001); (4) the nutritional quality of the available grasses and shrubs tends to be less from fall through spring in recently grazed areas (L. Shipley, pers. comm. 2002); and (5) livestock can directly damage pygmy rabbit burrow systems through trampling (Rauscher 1997; N. Siegel, WSU, pers. comm. 2001; M. Hallet, pers. comm. 2002).

Other, more general, information also suggests the adverse effects on the Columbia Basin pygmy rabbit associated with livestock management activities. These other potential impacts include sagebrush control efforts, effects on predator distribution and density through the use of artificial watering or supplemental nutrition and feeding sources for livestock, structural damage to dense stands of sagebrush by livestock, removal of current herbaceous growth or residual cover of native grasses and forbs by livestock for forage, and increases in the density or distribution of various invasive weed species.

The available information described above suggests there is a potential for take of the Columbia Basin pygmy rabbit to occur, as defined by the Act, in association with some livestock grazing operations. These potential impacts may be in the form of direct take (*e.g.*, injury or mortality due to trampling of occupied burrows or sagebrush eradication efforts), or in the form of indirect take (*e.g.*, harm or harassment due to habitat modification or degradation that significantly impairs normal behavioral patterns associated with the Columbia Basin pygmy rabbit's breeding, feeding, or sheltering activities). Due to the extremely low number and restricted distribution of Columbia Basin pygmy rabbits,

additional mortality resulting from livestock grazing practices currently represents a potentially significant threat to their continued existence.

Pygmy rabbits have coexisted with various levels of livestock grazing activities throughout their historic range for many years. Currently, it is unclear if light or moderate levels of livestock grazing may be compatible with, or even beneficial to, long-term conservation efforts for otherwise secure populations of pygmy rabbits. The effects of livestock grazing that have been identified to potentially benefit the Columbia Basin pygmy rabbit include: (1) Increasing the vigor of grass species through mechanical disturbance by livestock; (2) increasing the abundance of sagebrush cover through altered competitive advantage by removal or reduction of associated shrub steppe vegetation; (3) increasing the biological diversity of wildlife and vegetation species; and (4) creating more open habitats that provide improved security through increased visual line-of-sight for pygmy rabbits.

It is our intention, once the captive propagation program becomes better established and appropriate protection measures are in place to ensure the security of the remaining wild portion of the population, to reinitiate or support future studies to address the potential effects of livestock grazing (both positive and negative) on the Columbia Basin and/or other pygmy rabbit populations. These efforts should attempt to include the evaluation of pygmy rabbits in areas subject to various intensities and timing of livestock grazing, areas where livestock grazing has been discontinued for known periods of time, sites that have historically remained free of livestock grazing, and areas of varying soils and initial ecosystem conditions. These evaluations will help fill the current information gaps regarding the effects of livestock grazing on the Columbia Basin pygmy rabbit and provide a basis for analyzing grazing activities under sections 7 and 10(a) of the Act.

The specific conditions under which livestock grazing activities will be addressed in habitats occupied by the Columbia Basin pygmy rabbit will be further defined as our recovery program is developed (*see* Captive Propagation and Recovery, below).

*Issue 8:* We received several comments concerning the effects of current and historic grazing by native herbivores, such as white-tailed deer (*Odocoileus virginianus*), mule deer (*O. hemionus*), elk (*Cervus elaphus*), and American bison (*Bison bison*), on the Columbia Basin pygmy rabbit. In

addition, some comments expressed concern regarding why this form of grazing is treated differently than the effects of livestock grazing and what management actions we may undertake to address these grazing effects.

*Our Response:* The available information suggests that the shrub steppe habitats of the Columbia Basin evolved in the absence of substantial grazing pressure from large native herbivores since the latest period of glaciation, roughly 12,000 years BP (Mack and Thompson 1982; Daubenmire 1988; Lyman and Wolverton 2002). Deer and elk are also primarily browsing, as opposed to grazing, animals. In addition, the ecological effects of grazing by various livestock (e.g., cattle, horses, sheep) are not typically considered to be comparable to those of native herbivores (Lyman and Wolverton 2002). In relatively large, well distributed pygmy rabbit populations, we would not expect grazing by native herbivores to represent a significant threat to their long-term security.

Historically, central Washington supported extensive livestock grazing operations throughout the shrub steppe habitats potentially used by the Columbia Basin pygmy rabbit (Daubenmire 1988; WDFW 1995a). Excessive livestock grazing pressure can have significant impacts on the shrub steppe ecosystems found throughout the historic range of the Columbia Basin pygmy rabbit (Fleischner 1994), and these impacts may be exacerbated in the Columbia Basin (see above response). Contemporary grazing levels are much reduced from historic levels; however, large livestock operations continue within the shrub steppe habitats of the Columbia Basin to the present. From 1986 to 1993, an average of roughly 280,000 cattle were being supported in the five central Washington counties that historically harbored the Columbia Basin pygmy rabbit (WDFW 1995b).

The available information suggests that the historic and seasonal use patterns and concentrations of native herbivores and their associated grazing effects within the Columbia Basin are considerably different from those of livestock operations. In addition, the available information does not indicate that natural levels of grazing by native herbivores, or their grazing patterns as they may have been altered by contemporary human activities, currently represent a risk to the Columbia Basin pygmy rabbit.

#### *Predation and Disease*

*Issue 9:* We received a number of questions and comments concerning our

interpretation of the available information addressing predation and disease and the potential effects they have on the Columbia Basin pygmy rabbit. In addition, several commenters raised issues and questions concerning our potential future management actions to address these threat factors.

*Our Response:* Information concerning the potential current and historic impacts from predation and disease on the Columbia Basin and other pygmy rabbit populations primarily comes from scientific literature, including peer-reviewed journal articles, doctoral dissertations, master's theses, and/or State natural resource agency reports and data. In addition, the past and current management efforts that the WDFW has undertaken to address these threat factors are presented in the preamble to the rule. The details of planned future Federal management actions to address these threat factors will be further defined as our recovery program is developed (see Captive Propagation and Recovery, below).

The available information suggests that in relatively large, well distributed pygmy rabbit populations, predation and disease are not likely to represent a significant threat to their long-term security. However, due to the extremely small size and localized occurrence of the Columbia Basin pygmy rabbit, the available information suggests that human-altered predation and/or disease patterns, and even natural levels of predation and disease, may significantly impair conservation efforts for the remaining wild and captive portions of this population segment.

#### *Captive Propagation and Recovery*

*Issue 10:* We received a number of comments regarding the captive propagation program established by the WDFW and our potential management activities to address recovery of the Columbia Basin pygmy rabbit. These comments addressed a wide variety of issues and questions, including the health and breeding success of captive pygmy rabbits, impacts to pygmy rabbit populations associated with research or conservation efforts, other potential differences between the various pygmy rabbit populations (e.g., physiological, behavioral, morphological), the survival characteristics of captive bred versus wild individuals, habitat enhancement or restoration standards for mitigation efforts, Federal recovery policy for down-listing or delisting the Columbia Basin pygmy rabbit, and reintroduction protocols and potential release sites for the recovery program.

*Our Response:* The available information we have regarding the biology and ecology of the Columbia Basin pygmy rabbit, impacts to the populations, and mitigation efforts is referenced within the preamble to this final rule.

The WDFW's captive propagation program affords an opportunity to maintain a sufficient number of Columbia Basin pygmy rabbits in captivity until appropriate recovery measures are developed and implemented to ensure the population's survival in the wild. Ultimately, the goal of the captive propagation effort is to release captive-bred Columbia Basin pygmy rabbits back into suitable habitats within their historic range so that viable subpopulations can become re-established. However, the number and size of the wild subpopulations necessary for recovery pursuant to the Act have not yet been determined.

Listing the Columbia Basin pygmy rabbit as endangered will provide for the development of a recovery plan. Such a plan would bring together Federal, State, and local efforts for the conservation of the species to form a recovery planning team. During the Federal recovery planning process, a team develops a plan to establish a framework for agencies to coordinate recovery efforts and cooperate with each other in conservation efforts. A recovery plan will set recovery objectives and priorities, such as habitat enhancement and/or restoration efforts, reintroduction protocols, and potential release sites, assign responsibilities to achieve those goals and objectives, and estimate costs of various tasks necessary to achieve conservation and survival of this species. A recovery plan will also identify goals and objectives that need to be met in order to downlist or delist the species. The following comments may provide further clarification.

*Issue 11:* Concern was expressed regarding possible mixing of Columbia Basin pygmy rabbits being held in captivity with those from the Idaho population being used for the husbandry studies.

*Our Response:* There have been no instances of intermixing between the two source populations of captive pygmy rabbits. The WDFW, WSU, and Oregon Zoo implemented a number of appropriate measures to avoid the possibility of commingling of Columbia Basin and other pygmy rabbits being held in captivity. These, and additional measures, were also made conditions of the December 18, 2001, recovery permit we issued for the captive propagation program (see Previous Federal Action, above). These measures include

maintaining secure and appropriately marked cages, providing discrete holding areas or separation fencing between cages, and developing and adhering to strict transport and handling procedures to minimize any potential for direct contact between the captive pygmy rabbit populations. Furthermore, notification of any instances of commingling of Columbia Basin and other pygmy rabbits will be provided to the Service within 3 working days of the incident, and will include a description of the circumstances under which the commingling occurred and corrective measures to address that and any potential future incidents.

*Issue 12:* Concerns were expressed regarding the potential impacts to the Columbia Basin pygmy rabbit from various ongoing research and conservation activities, and our potential actions to address these concerns.

*Our Response:* We recognize that certain research and conservation activities have the potential to directly and indirectly affect the Columbia Basin pygmy rabbit. The available information addressing the circumstances under which these impacts may be occurring, or have the potential to occur in the future, are referenced in the preamble to the rule, as appropriate.

Research and management activities for the Columbia Basin pygmy rabbit will be regulated under the section 10 permitting process. The WDFW has closely coordinated its management activities to conserve the Columbia Basin pygmy rabbit with us. In addition, in cooperation with the WDFW, WSU, and the Oregon Zoo, we have developed a number of appropriate measures to avoid or reduce the risk of take of the Columbia Basin pygmy rabbit. These measures were made conditions of the December 18, 2001, recovery permit and its revisions that we issued for the captive propagation program and ongoing management activities at the Sagebrush Flat site (see Previous Federal Action, above). We will continue to work cooperatively with interested parties on activities conducted for scientific purposes or to enhance the propagation or survival of the Columbia Basin pygmy rabbit under section 10 of the Act.

*Issue 13:* Concern was expressed regarding our use and incorporation of information from other pygmy rabbit populations in the background biological discussions and other sections of the emergency and proposed listing rules. In addition, questions were raised regarding whether this information is appropriate or applicable to the Columbia Basin pygmy rabbit.

*Our Response:* Wildlife investigations often use information concerning closely related populations, subspecies, species, and even genera when making biological inferences about a given population. It is important that any inferences made from these comparisons recognize the potential differences between the populations (or higher taxa), and that any conclusions are limited to what the available information supports. However, understanding the life history of a closely related population (or higher taxa) is often beneficial, and at times even essential, to a more complete understanding of the population of interest. While the Columbia Basin pygmy rabbit is distinct from other pygmy rabbit populations, we recognize that they share many similarities in their life history characteristics. Recognizing these similarities is critical to our understanding of the Columbia Basin population.

Service policy concerning the consideration of a DPS for listing under the Act requires us to evaluate the discreteness and significance of a given population in comparison to the remainder of its taxon. Considering all of the available information on a species helps determine if significant differences may exist between its discrete populations.

*Issue 14:* Several commenters expressed concern regarding the area affected by the listing, and the potential extent of reintroduction efforts that may be undertaken to address recovery of the Columbia Basin pygmy rabbit.

*Our Response:* This final rule lists as endangered the pygmy rabbit in the Columbia Basin of central Washington (Figure 2). Appropriate sites within this region that could potentially be used for reintroduction efforts will be identified as our recovery program is further developed. Pygmy rabbit populations in other States throughout the species' historic range are not included in this listing action, nor will any areas outside of the historic range of the Columbia Basin pygmy rabbit population be considered for any recovery actions.

#### Peer Review

In accordance with our policy published on July 1, 1994 (59 FR 34270), we sought independent expert review by seven specialists during the comment period on the proposal to list the Columbia Basin pygmy rabbit. The purpose of these reviews is to ensure that listing decisions are based on scientifically sound data, assumptions, and analyses. The seven independent reviewers would provide expertise on pygmy rabbit biology, population

genetics, Columbia Basin shrub steppe ecology and rangeland management. Six of these reviewers submitted comments on the proposed listing, and one did not respond. Experts that provided comments include: Two pygmy rabbit researchers, one from Arizona State University and one from Idaho State University; a research wildlife biologist from the Biological Resources Division of the U.S. Geological Survey; a population geneticist from the University of Denver; a research biologist from the WDFW; and a senior scientist from NMFS. All of the experts concurred that the proposed listing action was justified and appropriate. We have incorporated their comments into this final determination. We address substantive comments raised by the peer reviewers concerning various aspects of the emergency and proposed rules below, and issues of a similar nature are grouped together, along with our response to each.

*Issue 1:* The role of habitat loss and fragmentation in the long-term decline of the Columbia Basin pygmy rabbit should be further emphasized in the final rule. In addition, measures to address habitat protection and restoration, including identifying specific habitat parameters and the control of exotic and/or invasive plant species, should be further addressed in the final rule.

*Our Response:* We recognize that habitat loss and fragmentation have likely played a primary role in the long-term decline of the Columbia Basin pygmy rabbit. In addition, we recognize that habitat protection and restoration will play a central role in future conservation efforts for this population. We will review and further develop specific habitat parameters and criteria, in cooperation with interested parties, at such time as we undertake future Federal conservation or recovery initiatives for the Columbia Basin pygmy rabbit.

*Issue 2:* The biophysical role of habitat (e.g., thermal cover provided by native bunch grasses), and the potential impacts to this role from livestock grazing, should be further emphasized in the final rule.

*Our Response:* We recognize the potential for habitat to play an important biophysical role for the Columbia Basin pygmy rabbit, and that livestock grazing may affect these habitat parameters. However, there is very little additional information available regarding this potential relationship and, until it becomes available, clarification of this issue needs further investigation.

*Issue 3:* An expert comment was made that our use of the terms “prehistoric”, “historic”, and “recent” be further clarified in the final rule.

*Our Response:* In general, use of the identified terms in the final rule is as follows: prehistoric refers to information relating to conditions greater than roughly 200 years BP (*i.e.*, prior to extensive European settlement of the western United States), and recorded largely after the fact (*e.g.*, paleontological records); historic refers to information relating from roughly 200 to 50 years BP, and recorded primarily in the written tradition and at the time of occurrence; and recent refers to recorded information from the previous several decades. We recognize that the use of these terms is not absolute and some overlap between them is inevitable. As possible, we have added clarity to the use of these terms in the final rule, including the use of “past” when referring to all of these time periods combined, and “current” when referring to the contemporary time frame (*i.e.*, roughly the previous decade).

*Issue 4:* It was emphasized that plague is exotic to North American ecosystems and that native species are likely to be poorly adapted to this potential threat factor. In addition, epizootics (an outbreak of disease) in wild animals are often very difficult to detect, and disease can not easily be ruled out as a significant possible risk factor. Finally, the potential occurrence of plague in badgers from Idaho was identified, and it was suggested that disease may be implicated in other mammal declines in the Columbia Basin (*e.g.*, jack rabbits).

*Our Response:* We concur with these clarifications and continue to consider disease a significant potential threat to the Columbia Basin pygmy rabbit.

*Issue 5:* It was emphasized that a successful captive propagation program should be considered extremely important for the conservation and management of the Columbia Basin pygmy rabbit’s unique genetic profile.

*Our Response:* We concur with this clarification. We will continue to support the development of an effective captive propagation program for the Columbia Basin pygmy rabbit in order to release the species into suitable habitats within their historic range so that viable subpopulations can become established and self-sustained in the wild.

*Issue 6:* It was suggested that the reasoning behind identifying threat factors B, C, and D for the Columbia Basin pygmy rabbit (*see* below) was somewhat circular; that is, if the population was not endangered from

other, long-term causal factors (A and E), these other factors (B, C, D) would not represent current threats to the population. In addition, it was presumed that protection for the Columbia Basin pygmy rabbit under the Act could have been considered sooner to lessen the potential influences and complications of any such “secondary” threat factors.

*Our Response:* We are required to fully consider all five threat factors identified by the Act, regardless of whether they may be proximate or ultimate causal factors in the status of a given taxon. In addition, with regard to potential conservation and recovery efforts, identifying and controlling these more immediate threat factors is often critical to the long term security of a taxon, and consideration of longer-term conservation measures needed to ultimately achieve recovery of the taxon is often of a less urgent nature.

It is appropriate to propose a species for listing at the time when sufficient information is available. For the Columbia Basin pygmy rabbit, when we had sufficient information we took the appropriate action.

*Issue 7:* Concern was expressed regarding whether the emergency listing process was needed, whether it was as thorough as the Service’s normal listing process, and whether there are significant differences between the two listing pathways.

*Our Response:* Emergency listing is appropriate when there are significant and imminent risks to the well-being of a taxon. We determined that such risks existed for the Columbia Basin pygmy rabbit primarily due to the population’s extremely small size, ongoing loss and significant decline of its identified subpopulations, genetic indicators suggesting the likelihood of inbreeding depression within the population, and the unproven nature of the proposed captive breeding and subsequent reintroduction efforts for the species.

The principal differences between emergency and normal listing processes are that, under emergency listing, the Secretary may make the protective measures of the Act immediately available to the species, upon a finding of a significant risk posed to its well-being, but the listing is in force for only 240 days, and there are certain exemptions regarding the requirements of public notification and input. The 240-day expiration of an emergency listing is the primary reason we attempt to concurrently, or shortly thereafter, publish a proposed rule to list the species, as was done for the Columbia Basin pygmy rabbit, and finalize the listing as soon as possible.

*Issue 8:* The suggestion was made that the status of the pygmy rabbit as a monotypic genus could be a consideration regarding the potential significance of its discrete populations.

*Our Response:* Currently, we do not consider the status of taxa above the species level in our DPS analyses, nor is it specifically identified in the joint Service/NMFS policy addressing the recognition of DPS. However, we do consider taxonomic delineations above the species level in our priority ranking system to address the status of proposed and candidate species for potential listing actions under the Act.

*Issue 9:* It was emphasized that, during our DPS analyses, careful consideration should be given to the appropriateness of using the same database to address both the discreteness and significance of a population in comparison to the remainder of its taxon, especially with regard to the available genetic data.

*Our Response:* We concur with this clarification and recognize that, in various instances, it may be appropriate to consider the same database to address both DPS criteria. As suggested by the genetic information for the Columbia Basin pygmy rabbit presented above, we recognize that it is important to note whether the available data can be used primarily to address the isolation (*i.e.*, discreteness) of a taxon’s populations, the potential differentiation of a taxon’s discrete populations from one another (*i.e.*, significance), or as the data may relate to both criteria. In addition to the genetic information, we recognize that other sources of data, including behavioral, physiological, morphological, genetic, and ecological, may also apply to a taxon’s discreteness and significance simultaneously. We will continue to address these conservation issues with regard to the pygmy rabbit throughout the species historic range as any additional information may become available.

#### **Additional Information and Evaluations**

Comments and additional data received during the comment periods, as well as further analysis on our part, raised several issues addressed in this final rule. We address these issues more specifically below.

Additional information became available as follows:

(1) The common raven is a significant potential predator of the Columbia Basin pygmy rabbit, and we also discuss WDFW’s past and ongoing management efforts to address this threat factor.

(2) Vandalism has the potential to result in direct or indirect take of



Columbia Basin pygmy rabbits held in captivity, and site security as an important management consideration to address this potential threat. See Summary of Factors Affecting the DPS and Available Conservation Measures sections.

(3) Washington State legislation (HB 1309) provides measures with regard to conservation of the Columbia Basin pygmy rabbit. See Summary of Factors Affecting the DPS section.

(4) Regarding the status and results of ongoing conservation and research efforts for the Columbia Basin pygmy rabbit, there is updated information concerning the WDFW's captive propagation program and research addressing the effects of livestock grazing. See Current Management Actions, Distinct Population Segment Review, and Summary of Factors Affecting the DPS sections.

(5) There is potential for a significant gap in the range of the pygmy rabbit should the Columbia Basin population segment become extirpated. This assessment helps further clarify the concept of significance as it is defined in the Act and our policy addressing the recognition of DPS. See Distinct Population Segment Review section.

(6) Control of exotic plant species is a habitat protection and restoration measure for consideration during management actions and scientific investigations. See Available Conservation Measures section.

#### Summary of Factors Affecting the DPS

After a thorough review and consideration of all available information, we have determined that the Columbia Basin pygmy rabbit warrants classification as an endangered DPS pursuant to the Act. We followed procedures found in section 4 of the Act and regulations promulgated to implement the listing provisions of the Act (50 CFR part 424). We may determine a DPS to be endangered or threatened due to one or more of the five factors described in section 4(a)(1). These factors and their application to the Columbia Basin pygmy rabbit (*Brachylagus idahoensis*) follow.

*A. Present or threatened destruction, modification, or curtailment of habitat or range.* During the first half of the 1900s, large portions of more mesic (moist) shrub steppe habitats on deeper soils within the Columbia Basin were converted for dryland crop production (Daubenmire 1988; Franklin and Dyrness 1988; WDFW 1995a). During the mid-1900s, large-scale irrigation projects led to further conversion of more xeric (dry) shrub steppe habitats on deeper soils within the Columbia

Basin for irrigated agriculture (WDFW 1995a; Franklin and Dyrness 1988; U.S. Department of Interior (USDI) 1998). In addition, urban and rural developments (e.g., housing, industrial facilities, transportation corridors) in central Washington permanently remove native shrub steppe habitats. In 1994, it was estimated that approximately 60 percent of the original shrub steppe habitat in Washington had been converted for human uses (Dobler 1994), and shrub steppe habitats within the Columbia Basin continue to be converted for a variety of human uses. The Columbia Basin pygmy rabbit can not occupy these converted sites. Due to the small home ranges and relatively restricted movements of pygmy rabbits, conversion of native habitats in the Columbia Basin also removes or severely limits their dispersal corridors between suitable habitats.

A number of other, often interacting, influences affect the remaining native shrub steppe habitat within the Columbia Basin, including altered fire frequencies, invasion by non-native species, recreational activities, and livestock grazing. Sagebrush is easily killed by fire and, when it occurs at increased frequencies, it can remove sagebrush from the vegetation assemblage (Daubenmire 1988). In the absence of a sufficient seed source, sagebrush cannot readily reinvade sites where it has been removed, and it may be many years before it can become reestablished (WDFW 1995a). Due to a variety of factors (see below), the fire frequency has increased over portions of the remaining shrub steppe habitat within the Columbia Basin. Because of their close association with tall, dense stands of sagebrush, pygmy rabbits are precluded from occupying frequently burned areas.

Various non-native, invasive plant species, such as cheatgrass (*Bromus tectorum*) and knapweed (*Centaurea* spp.), have become well established throughout the Columbia Basin (Daubenmire 1988; Franklin and Dyrness 1988). Areas with dense cover of cheatgrass are apparently avoided by pygmy rabbits in Oregon (Weiss and Verts 1984), and these newly established plant communities often provide fine fuels that can carry a fire. Combined with widespread unimproved road access and informal recreational activities that provide multiple sources of ignition, the establishment of non-native species increases the risk of fire and further reduces the security of areas that could potentially support the Columbia Basin pygmy rabbit (WDFW 1995a).

Fire was implicated in the loss of the only pygmy rabbit subpopulation ever recorded in Benton County, Washington, in 1979 (WDFW 1995a), and was directly associated with the loss of one of the few remaining subpopulations in Douglas County in 1999 (WDFW 2001b). The WDFW has taken measures to reduce the risk of fire at the Sagebrush Flat site (e.g., constructing firebreaks). However, unimproved road access and informal recreational activities provide a continuing source for ignition of uncontrolled fires in the area (WDFW 1995a). Due to the extremely low number of Columbia Basin pygmy rabbits in the wild, their restriction to one known site, and their reliance on relatively tall, dense stands of sagebrush, natural and human-caused fire represents a significant threat to this portion of the population.

Land managed for livestock grazing is often cleared of sagebrush to increase the production of grasses and forbs as forage for cattle (WDFW 1995a; Rauscher 1997), although this management practice in the Columbia Basin has declined from past levels (L. Hardesty, WSU, pers. comm. 2002). Clearing areas of sagebrush cover removes habitat patches potentially used by the Columbia Basin pygmy rabbit. In addition, it can reduce the value of more marginal stands of sagebrush that may act as dispersal corridors for pygmy rabbits, further fragmenting the remaining suitable habitats. Much of the remaining shrub steppe habitat in the Columbia Basin is managed for livestock grazing (WDFW 1995a; N. Hedges, pers. comm. 2001).

Excessive livestock grazing removes current herbaceous growth and residual cover of native grasses and forbs and can increase the density of various non-native, invasive species and—over several years—young sagebrush stands (Daubenmire 1988; WDFW 1995a). In some instances, this disturbance may eventually result in the growth of tall, dense stands of sagebrush (Daubenmire 1988), potentially improving the shrub forage and cover conditions for pygmy rabbits. However, livestock grazing at these levels potentially reduces the forage base and cover characteristics of grasses and forbs for Columbia Basin pygmy rabbits (Green and Flinders 1980b; Rauscher 1997). Excessive livestock grazing may also cause structural damage to dense stands of older sagebrush. This acts to open the canopies of these sites and potentially makes them less suitable as cover for Columbia Basin pygmy rabbits (Gahr 1993; Rauscher 1997). Currently, it is unclear if light or moderate levels of

livestock grazing may be compatible with pygmy rabbit conservation efforts over the long-term.

There are several past and ongoing studies that have investigated the effects of different livestock grazing strategies on Columbia Basin pygmy rabbits and their habitat (Gahr 1993; WDFW 1995a; Saylor *et al.* 2001; L. Shipley, pers. comm. 2001). Gahr (1993) found that male pygmy rabbits at the Sagebrush Flat site made longer movements during the breeding season, resulting in larger home ranges, in recently grazed areas as opposed to areas that had not been grazed for nearly 40 years. In addition, relative to unit size, there are more pygmy rabbit burrows in the ungrazed areas of Sagebrush Flat than the recently grazed areas (L. Shipley, pers. comm. 2001). Further evaluation of the distribution and availability of appropriate soils across the Sagebrush Flat site will help clarify these results. Nevertheless, they suggest that Columbia Basin pygmy rabbits may be more susceptible to predation in areas used for livestock grazing due to longer movements away from cover and fewer burrows available for escape.

Results of an ongoing study also indicate that Columbia Basin pygmy rabbits occupying grazed sites tend to have a greater proportion of their summer through winter diets composed of sagebrush as opposed to grasses and forbs (L. Shipley, pers. comm. 2001). In addition, the nutritional quality (*e.g.*, less protein and greater fiber content) of the available grasses and shrubs in recently grazed sites tends to be less from fall through spring (L. Shipley, pers. comm. 2002). These results provide support for the contention that livestock may compete directly with pygmy rabbits for available forage during these periods (Green and Flinders 1980b; Rauscher 1997). There is also evidence that cattle can directly damage pygmy rabbit burrow systems through trampling (Rauscher 1997; N. Siegel, WSU, pers. comm. 2001; M. Hallet, pers. comm. 2002). These impacts may be especially critical during the Columbia Basin pygmy rabbits' reproductive period.

Populations of pygmy rabbits have coexisted with various levels of livestock grazing activities throughout their historic range for many years (WDFW 1995a). However, due to the extremely low number and restricted distribution of Columbia Basin pygmy rabbits, any additional mortality or population stress associated with livestock grazing practices represents a significant threat to the security of the wild portion of this population segment.

Due to the combined influences described above, Washington's native shrub steppe habitats, including those considered essential to the long-term security of the Columbia Basin pygmy rabbit, are considered among the least protected areas in the State (Cassidy 1997).

*B. Over-utilization for commercial, recreational, scientific, or educational purposes.* Pygmy rabbits are often difficult to distinguish from species of cottontail rabbits (*Sylvilagus* spp.) (Garber 1993; WDFW 1995a). Because of this, accidental shooting of Columbia Basin pygmy rabbits may occur in association with hunting of other small game species in Washington (WDFW 1979). Due to their extremely low numbers, restricted distribution, and preference for dense habitats, combined with relatively few small game hunters at the Sagebrush Flat site, the risk from accidental shooting of Columbia Basin pygmy rabbits is currently considered relatively low (WDFW 1995a; D. Hays, pers. comm. 2001). However, in such reduced populations, accidental shooting could become a significant source of mortality if it is not carefully controlled.

Investigations that require trapping, handling, and captivity of pygmy rabbits can result in mortality from several causes, including exposure (due to excessively high or low temperatures); direct injury from entanglement in traps, trap predation, and intra-specific fighting; and capture stress (Bailey 1936; Severaid 1950; Wilde 1978; Gahr 1993; Rauscher 1997). Capture-related mortality rates (including recaptures) reported for pygmy rabbits are roughly 3 percent (Gahr 1993), 5 percent (Wilde 1978), and 13 percent (Rauscher 1997). The mortality rate for one study approached 20 percent when the total number of captured animals was considered (11 deaths of 58 individuals), and all of the mortalities in this study occurred in just one portion of the study area (Rauscher 1997). Trapping methods, daily and seasonal timing, study location, holding facilities and site security, and husbandry techniques may all affect the level of capture-related mortality incurred. In addition, vandalism of captive rearing facilities remains a threat following capture (L. Hardesty, pers. comm. 2002).

Currently, the WDFW is leading efforts to establish a captive breeding population of Columbia Basin pygmy rabbits (*see* Current Management Actions, above). To date, three capture-related deaths have occurred in this program. These deaths represent roughly a 14 percent mortality rate for the captured animals (3 of 21

individuals). While the captive propagation program is necessary to help ensure the long-term survival of the Columbia Basin pygmy rabbit, and we support these efforts, the potential for capture-related mortality to significantly affect the success of this program remains.

Some pygmy rabbit burrows are relatively shallow and may collapse when walked on by humans (Wilde 1978). Investigations of pygmy rabbits often entail the destruction of individual burrows, while measuring of the vegetation community and other site characteristics immediately surrounding burrow systems, and/or disturbance to the general area occupied by the pygmy rabbits (Janson 1946; Bradfield 1974; Green 1978; Wilde 1978; Gahr 1993; Gabler 1997; Rauscher 1997). Furthermore, various ongoing management and maintenance activities of the WDFW at the Sagebrush Flat site (*e.g.*, establishment of firebreaks, species and habitat surveys, fencing removal or construction) have the potential to directly or indirectly affect the Columbia Basin pygmy rabbit.

It is unlikely that any of the above activities alone has played a significant role in the long-term population decline and range reduction of the Columbia Basin pygmy rabbit. However, due to the current vulnerability of both the wild and captive portions of this population segment, any additional source of mortality may now play a significant role and could impair efforts to conserve the Columbia Basin pygmy rabbit.

*C. Disease or predation.* Pygmy rabbits often harbor a high parasite load (Gahr 1993; WDFW 1995a). Some of the parasites of pygmy rabbits, including ticks, fleas, and lice, can be vectors of disease. Episodes of plague and tularemia from these vectors have been reported in populations of a number of other Leporid species and are often fulminant (rapidly spreading) and fatal (Quan 1993). Severe disease epidemics have not been reported in pygmy rabbits, and parasites have not been viewed as a significant threat to the species (Green 1979; Gahr 1993). However, evidence of plague was reported in a coyote taken from the site of one of the recently extirpated subpopulations of Columbia Basin pygmy rabbits (WDFW 2001a). The potential occurrence of plague in this subpopulation is being investigated using blood samples obtained prior to its extirpation (D. Hays, pers. comm. 2001). Additional studies have been proposed to investigate the occurrence of plague and other diseases, and their possible control, in wild and captive

populations of pygmy rabbits (C. Brand, National Wildlife Health Center, pers. comm. 2001). Because so few Columbia Basin pygmy rabbits remain, the potential for disease outbreak represents a significant threat to both the wild and captive portions of this population segment.

Predation is thought to be a major cause of mortality among pygmy rabbits (Green 1979; Wilde 1978). However, pygmy rabbits have adapted to the presence of a wide variety of avian and terrestrial predators that occur throughout their historic distribution (Janson 1946; Gashwiler *et al.* 1960; Green 1978; Wilde 1978; WDFW 1995a). In relatively large, well distributed pygmy rabbit populations, predation is not likely to represent a significant threat to their long-term security. In contrast, due to the extremely small size and localized occurrence of the Columbia Basin pygmy rabbit population, altered predation patterns, or even natural levels of predation, currently represent a significant threat to both the wild and captive portions of this population segment and could impair ongoing conservation efforts.

Due to confirmed evidence of coyote predation on the Columbia Basin pygmy rabbit, the WDFW implemented a predator control program during the fall-winter periods of 1998–1999 and 1999–2000 (WDFW 2000a). Numerous coyotes and several long-tailed weasels were removed, by shooting, traps, or snares, over roughly 52 square kilometers (20 square miles) around and including the Sagebrush Flat site. The level of effort to control terrestrial predators varied among years and areas, and the efficacy of this program to protect the Columbia Basin pygmy rabbit is unknown. There are also a variety of avian predators that may occur at the Sagebrush Flat site. In an effort to help control the occurrence of common ravens and other predatory birds, the WDFW recently removed two obsolete windmills from the area that could have potentially been used as perching or nesting sites (M. Hallet, pers. comm. 2002).

Because of the relatively restricted distribution of the Columbia Basin pygmy rabbit, terrestrial and avian predators may also have a reduced search area and/or increased success rate at the Sagebrush Flat site. To further address the threat of predation on the Columbia Basin pygmy rabbit, additional measures are being considered by the WDFW for this area, such as controlling artificial food sources (*e.g.*, spilled grain, trash, carnivore baits), the removal of unnecessary fencing potentially used as

perch sites for avian species, and providing appropriate predator exclusion fencing (M. Hallet, pers. comm. 2002; D. Hays, pers. comm. 2002).

Several measures (*e.g.*, double fencing, monitoring) have been taken to reduce the risk of predation on the captive portion of the Columbia Basin pygmy rabbit population (R. Sayler, WSU, pers. comm. 2001; L. Shipley, pers. comm. 2001). In addition, captive animals are currently being held at multiple facilities, which reduces the risk of catastrophic loss at a single facility (D. Hays, pers. comm. 2002). However, while the risk has been greatly reduced, the potential for certain predators to access cages at the captive rearing facilities remains.

Due to the extremely small size of the Columbia Basin pygmy rabbit population, even low levels of predation represent a significant risk to the immediate security of both the wild and captive portions of this population segment.

*D. Inadequacy of existing regulatory mechanisms.* Washington State classification of the Columbia Basin pygmy rabbit as endangered makes it illegal to attempt to kill, injure, capture, harass, possess, or control individuals of the species (WDFW 1995a). However, illegal or accidental shooting of Columbia Basin pygmy rabbits may occur in association with hunting seasons for other small game species (*see factor C above*). In addition, State designation does not provide regulatory protection of the habitats considered essential to the long-term security of the Columbia Basin pygmy rabbit.

Pursuant to Washington State legislation passed in 1993 (HB 1309), the Washington State Conservation Commission (WSCC) oversaw the development and provided approval of ecosystem standards for State-owned agricultural and grazing lands (WSCC 1995). HB 1309 called for implementation of the ecosystem standards to maintain and restore fish and wildlife habitat within the State by improving overall ecosystem health. The standards developed under HB 1309 are mandated for lands under the jurisdiction of the WDFW and Washington Department of Natural Resources (WDNR). Application of the standards on lands managed by the WDNR must be consistent with the agency's fiduciary obligations.

Currently, we are assisting private landowners with development of a county-wide HCP to protect important plant and animal species on agricultural lands in Douglas County. However, there are no regulatory protections for

unlisted species during development of HCPs. Revegetation standards under the CRP promote the improvement of habitats potentially used by the Columbia Basin pygmy rabbit, and the CRP restricts livestock grazing on contract lands except under severe drought conditions (M. Ruud, Farm Service Agency, pers. comm. 2001).

*E. Other natural or human-caused factors affecting the species' continued existence.* The immediate concerns for the Columbia Basin pygmy rabbit are associated with the population's extremely small size, history of fragmentation and extirpation, and the recent, dramatic decline in its distribution and abundance. Small populations are susceptible to random environmental events (*e.g.*, severe storms, prolonged drought, extreme cold spells, volcanic fallout), abrupt changes in cover and food resources, altered predator or parasite populations, disease outbreaks, and fire. Small populations are also more susceptible to demographic and genetic problems (Shaffer 1981). These threat factors, which may act in concert, include natural variation in survival and reproductive success of individuals, chance disequilibrium of sex ratios, changes in gene frequencies due to genetic drift, and lack of genetic diversity caused by inbreeding.

Genetic indices indicate that the Columbia Basin pygmy rabbit had less genetic diversity historically than the remainder of the taxon. In addition, this population segment has undergone further loss of genetic diversity since roughly the mid-1900s. Severe loss of genetic diversity may make the Columbia Basin pygmy rabbit more susceptible to extinction due to inbreeding depression or, assuming inappropriate introduction of other pygmy rabbit genes, swamping of their unique genetic profile. Reduced genetic diversity, and the relatively few family lineages remaining in the Columbia Basin pygmy rabbit population, may also complicate captive breeding strategies conducted to reestablish a minimum effective population size. Ultimately, an appropriate effective population size will help ensure the maintenance and enhancement of the genetic heterogeneity that is still present within this population segment (K. Wahrheit, pers. comm. 2001, 2002).

In relatively large, well distributed pygmy rabbit populations, the above threats are not likely to represent a significant risk to their long-term security. However, due to the extremely small size and localized occurrence of both the wild and captive portions of the Columbia Basin pygmy rabbit

population, these threats represent a significant risk to the long-term security of this DPS.

#### Conclusion

Due to the combined influence of the above threats, extirpation of the Columbia Basin pygmy rabbit from the wild may occur at any time (WDFW 2001b). In addition, the risks to the captive portion of the population, and the potential for extinction of the Columbia Basin pygmy rabbit, remain high. We have carefully assessed the best scientific and commercial information available regarding the past, present, and potential future threats faced by the Columbia Basin pygmy rabbit. Based on our evaluation of the five threat factors discussed above, we have determined that the Columbia Basin pygmy rabbit is in danger of extinction. As such, we are listing the Columbia Basin pygmy rabbit as endangered.

#### Critical Habitat

Critical habitat is defined in section 3 of the Act as: (i) The specific area within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species, and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, in accordance with the provisions of section 4 of the Act, upon a determination by the Secretary that such areas are essential for the conservation of the species. "Conservation" means the use of all methods and procedures needed to bring the species to the point at which listing under the Act is no longer necessary.

Section 4(a)(3) of the Act, as amended, and its implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, we designate critical habitat at the time the species is determined to be endangered or threatened. Our implementing regulations (50 CFR 424.12(a)) state that critical habitat is not determinable if information sufficient to perform the required analyses of impacts of the designation is lacking, or if the biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat. Section 4(b)(2) of the Act requires us to consider economic and other relevant impacts of designating a particular area as critical habitat on the basis of the best scientific data available.

We may exclude any area from critical habitat if we determine that the benefits of such exclusion outweigh the conservation benefits, unless to do so would result in the extinction of the species.

We find that designation of critical habitat for the Columbia Basin pygmy rabbit is not determinable at this time because information sufficient to perform the required analyses of the impacts of the designation is lacking. We specifically solicited information on potential critical habitat, biological information, and information that would aid our prudence analysis in our proposed rule. We received no comments regarding specific physical or biological features essential to the Columbia Basin pygmy rabbit which provided information that added to our ability to determine critical habitat. In addition, the extent of habitat essential to the conservation of the species has not been identified. When a "not determinable" finding is made, we must, within 2 years of the publication date of the original proposed rule, designate critical habitat, unless the designation is found to be not prudent.

We will continue to protect the Columbia Basin pygmy rabbit and its habitat through section 7 consultations to determine whether Federal actions may affect this population segment, through the recovery process, through HCPs and through enforcement of the Act's "take" prohibitions (*see* 16 U.S.C. 1538; 50 CFR 17.21).

#### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, requirements for Federal protection, prohibitions against certain activities, and development of recovery plans. Recognition through listing results in public awareness and encourages conservation actions by Federal, State, and Tribal agencies, non-governmental conservation groups, and private individuals. The Act provides for possible land acquisition and cooperation with the States, and requires that recovery actions be carried out for listed species. The protection required of Federal agencies, and the prohibitions against certain activities involving listed species are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened, and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision

of the Act are codified at 50 CFR part 402. Section 7(a)(4) requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a species proposed for listing, or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat, if any has been designated. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with us.

Federal agencies, whose actions may require consultation for the Columbia Basin pygmy rabbit include, but are not limited to, those within the jurisdictions of the Service, BLM, Bureau of Reclamation, Natural Resources Conservation Service, and Farm Service Agency. In addition, activities that are authorized, funded, or administered by Federal agencies on non-Federal lands will be subject to section 7 review.

We believe that protection and recovery of the Columbia Basin pygmy rabbit will require reduction of the threats from uncontrolled fire, altered predation patterns, excessive livestock grazing, disease outbreaks, mortality associated with the captive propagation and release programs, and loss of genetic viability. These threats should be considered for management actions in habitats currently and potentially occupied by the Columbia Basin pygmy rabbit, and those deemed important for dispersal between their appropriate use areas. Monitoring should also be undertaken for any management actions or scientific investigations designed to address these threats or their potential impacts.

Listing the Columbia Basin pygmy rabbit as endangered provides for the development and implementation of a recovery plan for the population. This plan will bring together Federal, State, tribal, and local efforts for conservation of the species, and will establish a framework for interested parties to coordinate recovery efforts. The plan will set recovery priorities, assign responsibilities, and estimate the costs of the various tasks necessary to achieve conservation and survival of the species. Additionally, pursuant to section 6 of the Act, we will be able to grant funds to the State of Washington for management actions promoting the protection and recovery of this species.

Considerations for management actions and scientific investigations to

address the above threats to the Columbia Basin pygmy rabbit include, but are not limited to:

(1) *Fire*—implementation of agreements between fire-fighting districts and/or agency departments to provide adequate coverage, construction of fire breaks, availability of fire-fighting equipment, fire-fighting techniques, weed control, use of prescribed fire, and removal or restriction of unimproved road access and informal recreational activities;

(2) *Livestock Grazing*—season(s) of use, stocking rate(s) and type(s), location of supplemental water and salt/minerals, loading and transport facilities, exclusion fencing, and removal;

(3) *Habitat Protection and Restoration*—control of exotic and/or invasive plant species, planting types and techniques, soils and hydrologic analyses, land acquisition and connectivity, and control of unauthorized access.

(4) *Predation*—identification of primary predators and predation patterns, development of protocols for fence removal and/or new fence construction, and predator deterrents and/or lethal control of predators to protect the wild and captive portions of the population;

(5) *Disease*—identification and control of potential disease and disease vectors in wild and captive portions of the population;

(6) *Capture, husbandry, and reintroduction*—development of protocols for survey, capture, handling, and husbandry techniques; maintenance and security of multiple holding facilities for captive stock; inventory and evaluation of appropriate release sites; and development of release and site maintenance protocols; and

(7) *Genetics*—identification of additional genetic markers, implementation of appropriate breeding scenarios, and establishment of a minimum effective population for captive breeding and reintroduction efforts.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. The prohibitions of section 9 of the Act, codified at 50 CFR 17.21, in part, make it illegal for any person subject to the jurisdiction of the United States to take (including harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt any such conduct), import or export, transport in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any

listed species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to our agents and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving listed species under certain circumstances. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, or for incidental take in connection with otherwise lawful activities.

It is our policy, published in the **Federal Register** on July 1, 1994 (59 FR 34272), to identify, to the maximum extent practical, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of the listing on proposed and ongoing activities within the species' range. For the Columbia Basin pygmy rabbit, based upon the best available information, we believe the following actions are unlikely to result in a violation of section 9, provided these activities are carried out in accordance with existing regulations and permit requirements:

(1) Possession, delivery, or movement, including interstate transport and import into or export from the United States of dead specimens of Columbia Basin pygmy rabbits that were collected prior to the date of publication of the emergency listing rule in the **Federal Register**;

(2) Any action authorized, funded, or carried out by a Federal agency that may affect the Columbia Basin pygmy rabbit (e.g., land exchanges, land clearing, prescribed burning, livestock grazing, pest control, utility line or pipeline construction, mineral extraction or processing, housing developments, off-road vehicle use, recreational trail or campground development, road construction, shooting, poisoning, habitat conversion, road construction, water development and impoundment, unauthorized application of herbicides or pesticides in violation of label restrictions) when the action is conducted in accordance with an incidental take statement issued under section 7 of the Act;

(3) Any action carried out for scientific research or to enhance the propagation or survival of the Columbia Basin pygmy rabbit that is conducted in accordance with the conditions of a section 10(a)(1)(A) permit under the Act; and

(4) Any incidental take of the Columbia Basin pygmy rabbit resulting from an otherwise lawful activity

conducted in accordance with the conditions of an incidental take permit issued under section 10(a)(1)(B) of the Act.

Activities that we believe could potentially result in a violation of section 9 include, but are not limited to:

(1) Unauthorized possession, trapping, handling, collecting, or release of pygmy rabbits within the historic range of the Columbia Basin pygmy rabbit. Research efforts involving these activities will require a permit under section 10(a)(1)(A) of the Act;

(2) Other activities that actually kill or injure a Columbia Basin pygmy rabbit by significantly impairing essential behavioral patterns (such as breeding, feeding or sheltering) through significant habitat modification or degradation (e.g., via land clearing, prescribed burning, habitat conversions, over-grazing or trampling by livestock, pest control, minerals extraction or processing, housing developments, off-road vehicle use, recreational trail or campground development, shooting, intentional poisoning, road construction, water development and impoundment, unauthorized application of herbicides or pesticides in violation of label restrictions). Otherwise lawful activities that incidentally take a Columbia Basin pygmy rabbit will require a permit under section 10(a)(1)(B) of the Act.

Questions regarding whether specific activities risk violating section 9 should be directed to our Upper Columbia Fish and Wildlife Office (see **ADDRESSES** section). Requests for copies of the regulations on listed wildlife, including general inquiries regarding prohibitions and issuance of permits under the Act, may be addressed to the U.S. Fish and Wildlife Service, Ecological Services, Endangered Species Permits, 911 NE. 11th Avenue, Portland, Oregon 97232-4181 (telephone 503/231-2063; facsimile 503/231-6243).

#### Immediate Effective Date

The emergency listing that protected the Columbia Basin pygmy rabbit for 240 days expired on July 29, 2002. The threats to the species remain imminent and severe. Because of the extremely small size of the only remaining wild population, and the expiration of its interim protection, we find that good cause exists for this rule to take effect immediately upon publication in accordance with 5 U.S.C. 553(d)(3).

#### National Environmental Policy Act

We have determined that environmental assessments and environmental impact statements, as defined in the National Environmental

Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

**Paperwork Reduction Act**

This rule does not contain any new collections of information that require approval by Office of Management and Budget (OMB) under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). This rule will not impose record keeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The existing OMB control number is 1018-0094 and expires July 31, 2004.

**Executive Order 13211**

On May 18, 2001, the President issued an Executive Order on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires Federal agencies to prepare Statements of Energy Effects when undertaking certain actions. This final rule is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

**References Cited**

A complete list of references cited herein is available upon request from the Upper Columbia Fish and Wildlife Office (*see ADDRESSES* section).

**Author**

The primary author of this final rule is Christopher Warren of the Upper Columbia Fish and Wildlife Office (*see ADDRESSES* section).

**List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

**Regulation Promulgation**

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

**PART 17—[AMENDED]**

1. The authority citation for part 17 will continue to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500, unless otherwise noted.

2. In § 17.11(h), add the following to the List of Endangered and Threatened Wildlife in alphabetical order under MAMMALS:

**§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*  
(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
MAMMALS							
*	*	*	*	*	*	*	*
Rabbit, Columbia Basin pygmy.	<i>Brachylagus idahoensis</i> .	U.S.A. (western conterminous U.S.).	U.S.A. (WA—Douglas, Grant, Lincoln, Adams, Benton Counties).	E	.....	NA	NA
*	*	*	*	*	*	*	*

Dated: February 20, 2003.  
**Steve Williams,**  
 Director, Fish and Wildlife Service.  
 [FR Doc. 03-5076 Filed 3-4-03; 8:45 am]  
 BILLING CODE 4310-55-P